

**OWNER'S MANUAL** 



Dear Client,

Thank you for choosing Alfa Romeo.

Your **Alfa 147** has been designed to guarantee the safety, comfort and driving pleasure typical of Alfa Romeo.

This booklet will help you to get to know the characteristics and operation of your car.

The following pages contain all the indications necessary for you to be able to maintain the high standards of performance, quality, safety and respect for the environment which characterize this **Alfa 147**.

The Warranty Booklet also containes the regulations, the warranty certificate and a guide to the services offered by Alfa Romeo.

Services which are essential and precious because, when you purchase an Alfa Romeo, you are not only acquiring a car, but the tranquillity that comes from knowing that an efficient, willing and widespread organisation is at your service for any assistance problems you may have.

Nature benefits in two ways: there's no pollution from waste disposal and the demand for raw materials is reduced.

Enjoy the reading and have a good trip.

This booklet describes all the versions of the **Alfa 147**, so you should only consider the information concerning the trim level, engine and version purchased by you.

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# VERY IMPORTANT!

#### **FUEL CAPACITY**



**Petrol engines:** only refuel with unleaded petrol with octane rating (RON) no less than 95.

**Diesel engines:** only refuel with diesel fuel conforming to the European specification EN590. The use of other products or mixtures may irreparably damage the engine with invalidation of the warranty due to the damage caused. **NOTE** The use of Eurodiesel fuel is recommended only for markets/versions where required. In case it is not available, use

fuel conforming to EN590 European Specification.

#### **STARTING THE ENGINE**



**Petrol engines with mechanical transmission:** make sure that the handbrake is engaged; set the gearshift lever to neutral, fully depress the clutch without pressing the accelerator, then turn the ignition key to **AVV** and release it as soon as the engine has started.

**Petrol engine with Selespeed transmission:** keep the brake pedal fully depressed, turn the ignition key to **AVV** and release it as soon as the engine has started; the transmission sets to neutral automatically (the display shows position **N**).

**JTD engines:** make sure that the handbrake is engaged; set the gearshift lever to neutral, fully depress the clutch without pressing the accelerator, then turn the handbrake is engaged; set the gearshift lever to neutral, fully depress the clutch without pressing the accelerator, then turn the ignition key to **MAR** and wait for the set of warning lights to go off; turn the ignition key to **AVV** and release it as soon as the engine starts.

#### **PARKING ON FLAMMABLE MATERIAL**



While working, the catalyst develops a very high temperature. Do not park the car over grass, dry leaves, pine needles or any other inflammable materials: risk of fire.

#### **RESPECTING THE ENVIRONMENT**



The car is fitted with a system that allows continuous diagnosis of the components correlated with emissions to ensure better respect for the environment.

#### **ACCESSORY ELECTRICAL DEVICES**



If after purchasing the car you wish to install accessories that need an electrical supply (with the risk of gradually draining the battery), contact Alfa Romeo Authorised Services who will assess the overall electrical absorption and check whether the car system is able to withstand the load required.

#### CODE CARD (for versions/markets where applicable)



Keep it in a safe place, not in the car. It is advisable to always keep the electronic code on the CODE card with you in case emergency starting is necessary.

#### SCHEDULED SERVICING



Correct maintenance makes it possible to preserve car performance levels and safety, respect for the environment and low running costs unaltered over the course of time.

#### THE OWNER HANDBOOK...



...you will find important information, advice and warnings for correct use, driving safety and car maintenance over time. Pay particular attention to the symbols  $\Delta$  (personal safety)  $\mathbb{R}$  (protecting the environment)  $\Delta$  (car safety).



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Any queries concerning servicing should be forwarded to the showroom from which the car was purchased, the subsidiary company or to our branch offices or any point of the Alfa Romeo Network.

# Warranty Booklet

The Warranty Booklet is delivered together with every new car and contains the regulations tied to the services given by Alfa Romeo Services and to the warranty conditions.

Correctly carrying out the scheduled services specified by the manufacturer is the best way to maintain the performance, safety characteristics and low running costs of your car. It is also necessary to maintain warranty cover.

## "Service" guide

This contains Alfa Romeo Authorised Services. The Services can be recognised by the presence of the Alfa Romeo badge and logo.

The Alfa Romeo organisation in Italy can be found in the telephone directory under the letter "A" Alfa Romeo.

Not all of the models described in this booklet are available in all countries. Only some of the fittings described in this booklet are fitted as standard to the car. The list of available accessories should be requested from the Alfa Romeo Dealers.

# THE SYMBOLS USED IN THIS BOOKLET

The symbols illustrated in these pages show the subjects which should, in particular, be closely studied.



Warning. Partially or fully ignoring these rules may lead to serious injury.



This indicates the correct procedures to be followed to prevent the car from damaging the environment.



Warning. Partially or fully ignoring these rules may lead to serious damage being caused to the car which, in some circumstances, may cause forfeiture of the warranty cover.

The texts, illustrations and specifications given in this booklet refer to the car at the time of going to press. As part of our ongoing striving to improve our products, Alfa Romeo may introduce technical changes during production, therefore the specifications and fittings may be altered without prior notice. For details on this subject, please apply to the manufacturer's sales network.

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# **GETTING TO KNOW YOUR CAR**

# SYMBOLS

**GETTING TO KNOW YOUR CAR** 

Special coloured labels have been attached near to or actually on some of the components making up your **Alfa 147**. These labels bear symbols that remind you of the precautions to be taken as regards that particular component. A summary list of the symbols (**fig.1**) is to be found under the bonnet.



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# THE ALFA ROMEO CODE SYSTEM

To increase protection against attempted theft, the car is fitted with an electronic engine lock system (Alfa Romeo CODE) which is activated automatically when the key is removed from the ignition. In fact the grip of each key contains an electronic device which modulates the radio frequency signal transmitted when the engine is started by a special aerial incorporated in the ignition switch. This modulated signal is the "password" by which the control unit recognises the key and only in this condition can the engine be started.

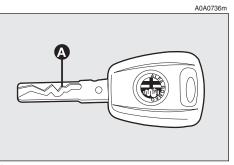


fig. 2

# KEYS

The car is delivered with a key with metal insert (upon request for models/markets where required) and a key with remote control. For models/markets where required two keys with remote control can be provided.

#### KEY WITHOUT REMOTE CONTROL (for versions/markets where applicable)

The fixed metallic insert **A-fig. 2** operates:

- the ignition switch;
- the driver's door lock;

 the passenger's Air bag deactivation (upon request for versions/markets where applicable);

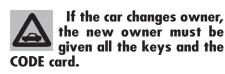
- the fuel filler cap lock.

**IMPORTANT** In order to ensure perfect efficiency of the electronic devices contained inside the keys, they should never be directly exposed to the rays of the sun.

Together with the keys the CODE card is provided (for versions/markets where applicable) (**fig. 3**), bearing in print the key codes (both mechanical and electronic for emergency start up).

The code numbers on the CODE card must be kept in a safe place, not in the car.

The driver should always keep the electronic CODE card with him/her in the event of having to carry out emergency starting.



#### **KEY WITH REMOTE CONTROL**

For versions/markets where applicable, the key is fitted with (**fig. 4**:

— a metal insert  $({\bf A})$  that can be enclosed in the key grip

- button (**B**) for remote opening of the doors and turning the electronic alarm off

- button (C) for remote closing of the doors and turning the electronic alarm on

- button (**D**) for remote boot opening

- tow hook ring (E)

- button ( ${\rm F})$  for power-assisted opening of the metallic insert.

The metal insert (A) of the key operates:

- the ignition switch
- the driver's door lock

- the passenger's Air bag deactivation switch (on request for versions/markets where applicable)

- the fuel filler cap lock.

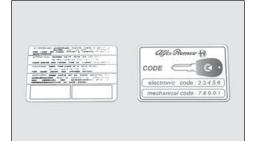
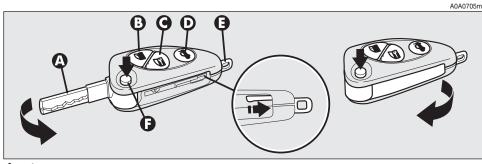


fig. 3





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WARNING

When button **(F)** is pressed, take the utmost care to prevent the metal insert from causing injury or damage when it comes out. Button (F) must only be pressed when the key is away from the body, in particular the eyes, and from objects that coul be spoilt (e.g. clothes). Never leave the key unattended to prevent anyone, especially children, from holding it and pressing button (F) inadvertently.

To insert the metallic insert in the key grip, press the button ( $\mathbf{F}$ ) to release the insert and turn it in the direction of the arrow until it clicks. Once it clicks into position, release the button ( $\mathbf{F}$ ).

To open the doors by remote control, press the button (**B**), the doors will unlock and the direction indicators will flash twice. To close the doors by remote control, press the button (**C**), the doors will lock and the direction indicators will flash once. By pressing button (**B**) the doors unlock, if in the next 60 seconds neither a door or the boot open, the system will automatically lock them.

On cars fitted with electronic alarm system, pressing button ( $\mathbf{B}$ ) turns the alarm off, pressing button ( $\mathbf{C}$ ) turns the alarm on while the transmitter sends the code to the receiver. This rolling code changes at each transmission.

#### **OPENING THE TAILGATE**

The boot can be opened by remote control from outside pressing button ( $\mathbf{D}$ ), also when the electronic alarm is on. The boot opening is accompanied by a double flashing of the direction indicators; the boot closing is accompanied by a single flashing of the direction indicators.

If the electronic alarm is fitted, when the tailgate is opened the alarm system switches off volumetric protection and the tailgate control sensor, the system (with the exception of versions for certain markets)"beeps" twice.

Closing the tailgate again, the control functions are restored, the system (with the exception of versions for certain markets) "beeps" twice.

#### **OPERATION**

Each time the ignition key is turned to the **STOP** position the Alfa Romeo CODE system deactivates the functions of the engine electronic control unit.

Each time the car is started turning the ignition key to **MAR**, the Alfa Romeo CODE control unit sends a recognition code to the engine control unit to deactivate the inhibitor. The code is crypted and variable between over four billion possible combinations, and it is sent only if the system control unit has recognised the code transmitted from the key which contains an electronic transmitter, through an aerial wound around the ignition switch. If the code has not been recognised correctly, the Alfa Romeo CODE warning light ( $\Im$ ) on the cluster turns on.

In this case, the key should be moved to the **STOP** position and then back to **MAR**; if the lock continues, possibly try again with the other key provided with the car. If it is still not possible to start the car, follow the instructions given in the "In an emergency" chapter and then contact Alfa Romeo Authorised Services.

**IMPORTANT** Every key has its own code, which must be memorised by the system control unit. To memorise new keys, up to a maximum of eight, apply solely to Alfa Romeo Authorised Services taking with you all the keys in your possession, the CODE card, a personal identity document and the car's ownership documents.

**IMPORTANT** Turning on of the Alfa Romeo CODE warning light (2) when travelling with the ignition key at **MAR**:

sure that any lost or stolen keys

cannot be used to start the engine.

1) If the warning light turns on, this means that the system is running a self-test (for example for a voltage drop). At the first stop, it will be possible to test the system: switch off the engine turning the ignition key to **STOP**; then turn the ignition key to **MAR**: the warning light turns on and should go off in about one second. If the warning light stays on, repeat the procedure described previously leaving the key at **STOP** for over 30 seconds. Should the inconvenience persists, contact Alfa Romeo Authorised Services.

2) For versions without the reconfigurable multifunction display, the flashing of the warning light means that the car is not protected by the engine inhibitor device. This condition for cars with reconfigurable multifunction display is shown by the turning on of the warning light together with the display of the message: "CODE SYSTEM NOT PRO-GRAMMED". Contact Alfa Romeo Authorised Services immediately to have all the keys memorised.

If after about 2 seconds with the ignition key at MAR, for versions without reconfigurable multifunction display, the Alfa Romeo CODE warning light (🛍) turns on again flashing, or for versions with reconfigurable multifunction display, the warning light turns on again together with the message "Code system not programmed", this means that the code of the keys has not been stored, therefore the car is not protected by the Alfa Romeo CODE system against attempted theft. In this case contact Alfa Romeo Authorised Services to have the key codes stored.

#### **KEY BATTERY REPLACEMENT**

If when the button (B C or D-fig. 4) is pressed, the command is rejected or not carried out, the battery may be replaced with other of an equivalent type available from normal outlets.

Dead batteries are harmful for the environment. They must be disposed of in special containers as specified by current regulations. Avoid exposure to naked flames and high temperatures. Keep out of reach of children.

To change the battery:

- press button (A-fig. 5) and move the metal insert (B) to the open position;

- using a finely-tipped screwdriver, turn the opening device (C) and pull out the battery holder (**D**);

- replace the battery (**E**) making sure that the bigs is correct:

- insert the holder back in the key and lock it, turning the device (**C**).

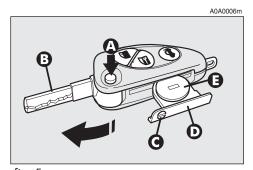


fig. 5

# ELECTRONIC ALARM

#### DESCRIPTION

The system comprises: a transmitter, receiver, control unit with siren and volumetric sensors. The electronic alarm is controlled by the receiver incorporated in the instrument cluster and it is turned on and off by the remote control in the key which sends the crypted and variable code. The electronic alarm controls: the unlawful opening of doors, bonnet and boot (perimetral protection), operation of the ignition key, battery cable cutting, the presence of moving bodies in the passenger compartment (volumetric protection), any abnormal raising/sloping of the car (for versions/markets where applicable) and central door locking. It also makes it possible to cut off the volumetric protection.

**IMPORTANT** The engine inhibitor function is guaranteed by the Alfa Romeo CODE system which is activated automatically when the ignition key is removed.

#### REQUEST FOR ADDITIONAL KEYS WITH REMOTE CONTROL

The receiver can recognise up to 5 keys with incorporated remote control. Should a new key with remote control be necessary for any reason during the life of the car, contact directly Alfa Romeo Authorised Services, taking with you the CODE card, a personal identity document and the car's ownership documents.

#### **ACTIVATING THE ALARM**

With the doors, bonnet and boot shut and the ignition key in the **STOP** or **PARK** position (key removed), point the key with the remote control in the direction of the car, then press and release the button (**C-fig. 6**).

With the exception of certain markets, the system sounds a "beep" and the doors are locked.

Engagement of the alarm is preceded by a self-diagnosis phase characterised by a change in the frequency at which the deterrent led (**A-fig. 7**) on the dashboard flashes. If an anomaly is detected the system gives off a furter beep.

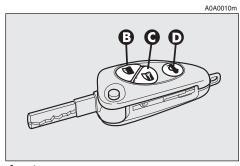


fig. 6



#### Surveillance

After switching on, the flashing of the deterrent led (**A-fig. 7**) on the dashboard indicates the system surveillance mode. The led flashes throughout this period.

**IMPORTANT** Operation of the electronic alarm is adapted at the origin to the rules of the different countries.

#### Self-diagnostic functions and door, bonnet, boot control

If, after engaging the alarm, a second "beep" is sounded, switch off the system pressing the button (**B-fig. 6**), check that the doors, bonnet and tailgate are properly shut, then switch the system on again pressing the button (**C**).

Otherwise, the door, bonnet or tailgate that is not shut properly will be excluded from the alarm system control.

If the doors, bonnet and boot are shut correctly and the control signal is repeated, the system self-diagnostic has detected a system operating fault. It is therefore necessary to contact Alfa Romeo Authorised Services.

#### HOW TO DEACTIVATE THE ALARM

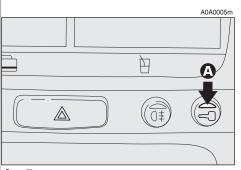
To deactivate the alarm press the button (**B-fig. 6**) of the key with remote control. The system will react as follows (with the exception of certain markets):

 $-\ensuremath{\mathsf{two}}$  brief flashes of the direction indicators

- two brief "beeps" of the system

- door unlocking.

**IMPORTANT** If when the system is turned off the deterrent led (**A-fig. 7**) on the dashboard stays on (maximum 2 minutes or until the ignition key is set to **MAR**) the following should be borne in mind:



**12** fig. 7

- if the led continues flashing, but at different intervals than normal, this means that different attempts to break in have occurred. Through the number of flashes it is possible to identify the type of attempt:

1 flash:	one or more doors
2 flashes:	tailgate
3 flashes:	bonnet
4 flashes:	ultrasounds
5 flashes:	abnormal car lifting/slop- ing (for versions/markets where applicable)
6 flashes:	tampering with car starting cables
7 flashes:	tampering with battery ca- bles or cutting emergency key cables
8 flashes:	connection line to sensors and siren
9 flashes:	at least three causes of alarm.

#### WHEN THE ALARM IS TRIGGERED

When the system is on, the alarm comes into action in the following cases:

- opening of one of the doors, bonnet or tailgate;

 disconnection of the battery or sectioning of electric cables;

 intrusion in the passenger compartment, for example breakage of windows (volumetric protection);

attempt to start the engine (key in MAR position);

abnormal car lifting/sloping (for versions/markets where applicable).

Depending on the markets, the cutting in of the alarm causes operation of the siren and hazard warning ligths (for about 26 seconds). The ways of operating and the number of cycles may vary depending on the markets.

A maximum number of cycles is however envisaged.

Once the alarm cycle has ended, the system resumes its normal control function.

#### **VOLUMETRIC PROTECTION**

To make sure that the protection system works correctly the side windows and sunroof (if fitted) must be properly shut.

The function can be cut off (if, for example, leaving animals in the car) carrying out the following operations in rapid succession: starting from the condition with the ignition key at **MAR**, move the key to **STOP**, then immediately back to **MAR** and then to **STOP** again, then remove the ignition key.

The deterrent led (**A-fig. 7**) on the dashboard lights up for about 2 seconds to confirm that the function has been cut off.

To restore volumetric protection, move the and keep the ignition key at **MAR** for over 30 seconds.

If, with the volumetric protection function deactivated, an electric control controlled by the ignition key at **MAR** (e.g. power windows) turn the ignition key to **MAR**, operate the control and move the key to **STOP** in a maximum time of 30 seconds. This way volumetric protection is not restored.

#### HOW TO CUT OFF THE ALARM SYSTEM

To deactivate the alarm system completely (for instance during prolonged inactivity of the car) simply lock the car turning the key in the lock.

#### **MINISTERIAL CERTIFICATION**

In accordance with the law in force in each country, on the subject of radio frequency, we wish to point out that for the markets in which the transmitter needs to be marked, the certification number is given on the component.

Depending on the versions/markets, the code may also be given on the transmitter and/or on the receiver.

# **IGNITION DEVICE**

#### SWITCH (fig. 8)

The key can be turned to one of four positions:

- **STOP**: engine switched off, key can be removed, engine inhibitor engaged, steering lock engaged, services excluded apart from those supplied directly (e.g. hazard warning lights).

 MAR: drive position. The engine lock is deactivated and all electrical devices are powered.

**IMPORTANT** Do not leave the key in this position when the engine is stopped.

 $-\,{\rm AVV}$  : unstable position for starting the engine.

**IMPORTANT** If the engine fails to start move the key back to **STOP** and repeat.

The ignition switch has a safety device which prevents passage to **AVV** when the engine is running.

- **PARK**: engine switched off, key can be removed, engine lock engaged, steering lock engaged, sidelights switched on automatically.

**IMPORTANT** To turn the key to the **PARK** position, button (**A**) on the switch must be pressed first.

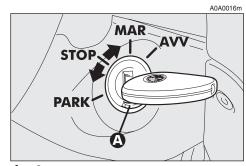


fig. 8





#### WARNING

When leaving the car, always remove the key from the ignition to prevent any passenger in the car from inadvertently activating the controls. Never leave children unattended in the car. Remember to engage the handbrake and if the car is facing uphill, first gear and if the car is facing downhill, reverse.

If the ignition device is tampered with (for example during an attempted break-in) have it checked over by Alfa Romeo Authorized Services before travelling again.

#### **STEERING LOCK**

#### **Engaging:**

— move the key to STOP or PARK, then remove the key and turn the steering wheel slightly to facilitate the locking action.

#### **Disengaging:**

- turn the key to the **MAR** position and gently rock the steering wheel.

WARNING Never remove the key with the car on the move. The steering wheel would lock automatically the first time the steering wheel is turned. This also occurs if the car is towed.

#### WARNING

It is absolutely forbidden to carry out aftermarket operations on the car which would tamper with the steering wheel or column (for example the installation of the antitheft system) and might cause not only the system and warranty decay, but also serious safety problems and alter the car typeapproval compliance.

# DOORS



#### WARNING Before opening a door, al-

ways make sure that it can be done safely.

#### OPENING/CLOSING FROM OUTSIDE

#### Front door on driver's side

— To open the driver's door turn the key clockwise and then remove the key and pull the handle (**A-fig. 9**).

- To close the door turn the key counterclockwise.

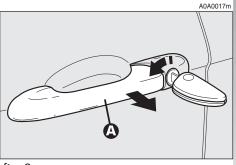


fig. 9

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#### Front door on passenger's side

- To open the door, deactivate the centralized locking and pull the handle.

— To close the door, push the flap.

#### Rear doors (5-door versions)

To open the door, deactivate the centralized locking and pull the handle (A-fig. 10).

- To close the door, push the flap.

#### OPENING/CLOSING FROM INSIDE

#### **Front doors**

— To open the door, pull the handle (**A-fig. 11**).

— To close the door, pull the flap. To prevent the door from being opened from outside press the button (**A-fig. 12**) on the dashboard, the deterrent led (**B**) on the button will turn on with a yellow light to confirm locking.

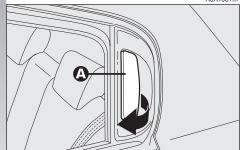
#### Rear doors (5-door versions)

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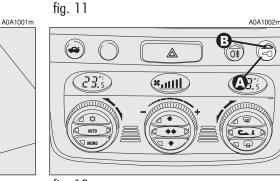
The rear doors can only be opened if the child safety lock has been released.

— To open the door pull the handle (A-fig. 13).

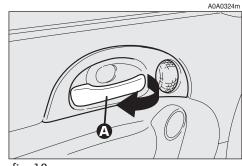
- To close the door pull the flap.



**16** fig. 10









**GETTING TO KNOW YOUR CAR** 

#### **CENTRAL LOCKING**

This allows central locking of the door locks.

To engage central locking, the doors must be perfectly shut, otherwise locking is denied.

**IMPORTANT** With central locking engaged, pulling the inside lever for opening one of the front doors causes the unlocking of all the doors.

In the event of a power cut off (blown fuse, battery disconnected, etc.) it is still possible to work the lock by hand.

#### **CHILD SAFETY LOCK** (5-door versions)

The rear doors are equipped with a special device (fig. 14) which prevents the door being opened from inside.

**IMPORTANT** Each device only acts on the door on which it is installed.

The device can only be engaged with the doors open:

**position 1** – device engaged (door locked):

**position 2** – device released (door can be opened from inside).



# WARNING

Always use this device when carrying children.



#### WARNING

After activating the safety device on both rear doors, check that it is working correcttly by pulling on the inner lever used to open the door.

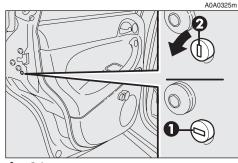
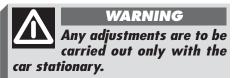


fig. 14



# FRONT SEATS



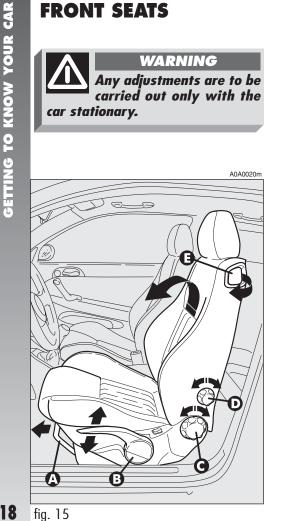
The car upholstery can resist wear resulting from the normal use of the car. However, it is necessary to avoid excessive and/or prolonged friction with clothing accessories such as metal buckles, studs, velcro and similar material, as this friction, acting locally and with a high pressure over the knitted fabric, may cause some threads to break and thus damage the seat cover/lining.

#### **LENGTHWISE ADJUSTMENT** (fig. 15)

Raise the lever (A) and push the seat backwards or forwards; in the driving position the arms should be slightly flexed and the hands should rest on the rim of the steering wheel.

# WARNING

After releasing the adjustment lever, always check that the seat is locked on the runners, trying to move it to and fro. The lack of this clamping action could cause the seat to move unexpectedly and cause loss of car control.



#### ADJUSTING THE HEIGHT (fig. 15) (upon request for versions/markets where applicable)

To raise the seat, pull the lever (**B**) upwards, then work the lever (up and down) until reaching the required height, then release it. To lower the seat, push the lever (**B**) downwards, then work the lever (up and down) until reaching the required height.

**IMPORTANT** Adjustment must be carried out only seated in the driver's seat.

#### BACK REST ANGLE ADJUSTMENT (fig. 15)

This can be done by turning the knob (**C**) until the desired position is reached.

#### BACK REST TILTING (fig. 15)

To gain access to the rear seats, pull the handle  $(\mathbf{E})$ , the back rest folds and the seat is free to run forwards.

A recovery mechanism with memory makes it possible to take the seat back to its previous position.

Once the seat back has been returned to the travelling condition, make sure that it is correctly clamped, checking that the "red band" on the upper part of the handle ( $\mathbf{E}$ ) is concealed. In fact, this "red band" indicates that the seat back is not clamped.

Also check that the seat is firmly locked on the runners, trying to move it to and fro.

#### **DRIVER'S SEAT LUMBAR ADJUSTMENT** (fig. 15)

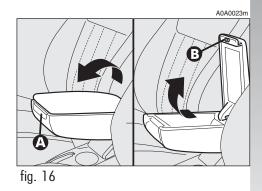
Adjustment is done by turning the knob (**D**) until reaching the most comfortable position.

#### **CENTRAL ARMREST** (fig. 16) (upon request for versions/markets where applicable)

The armrest can be adjusted, raised and lowered.

To adjust, slightly raise the armrest, then press the the release device (**A**).

Inside the armrest there is an oddments compartment, to use it, raise the cover, pressing the device  $(\mathbf{B})$ .



#### SEAT WARMING (fig. 17)

Seat warming, fitted on certain versions, is turned on and off through the switch  $(\mathbf{A})$ on the outer side of the seat.

Switching on is shown by the lighting up of the led (**B**) on the switch itself.

#### **HEADREST ADJUSTMENT** (fig. 18)

To increase passengers' safety, the headrests are adjustable in height.

To adjust, press the button (A) and move the headrest up or down until it clicks into place.

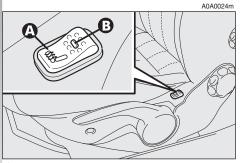
**IMPORTANT** The configuration of the headrest cushion may vary depending on the versions and markets. The purpose of the illustration is only to show how it is adjusted.

#### WARNING

Remember that the head restraints must be positioned so that they are supporting the back of the head and not the neck. They will only be able to provide effective protection in the event of a collision if they are in this position.

#### **REAR POCKET** (fig. 19) (for versions/markets where applicable)

The front passenger's seat is provided with a pocket in the rear of the seat back.



20 fig. 17

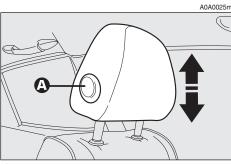
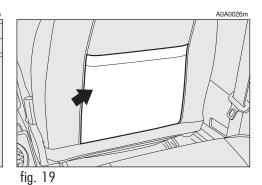


fig. 18





# **REAR SEATS**

The car upholstery can resist wear resulting from the normal use of the car. However, it is necessary to avoid excessive and/or prolonged friction with clothing accessories such as metal buckles, studs, velcro and similar material, as this friction, acting locally and with a high pressure over the knitted fabric, may cause some threads to break and thus damage the seat cover/lining.

#### EXTENDING THE LUGGAGE COMPARTMENT

The split of rear seat makes it possible to extend the luggage compartment totally or partially, acting separately on one of the two parts, thereby offering different possibilities of load depending on the number of rear passengers.

WARNING If a particularly heavy load is placed in the boot, when travelling at night, it is wise to check the height of the high beams (see "Headlamps" paragraph).

#### Removing the rear parcel shelf

Proceed as follows:

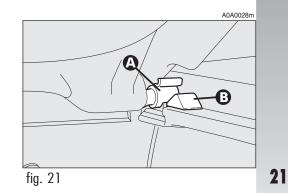
free the ends of the two rods (A-fig.
20) supporting the parcel shelf (B) pulling the eyelets (C) off the pins (D);

- release the pins (**A-fig. 21**) at the outside of the shelf from their housings (**B**) obtained in the side supports, then remove the shelf pulling it outwards.

Once the shelf beneath the rear window has been removed, it can be arranged in two ways:

across in the luggage compartment as illustated in fig. 22;

- across between the front seat backs and the tilted cushions of the rear seats when the luggage compartment is completely extended (see **fig. 26**).



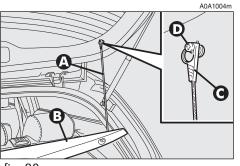


fig. 20

#### **Total extension**

Proceed as follows:

fit the buckles of the seat belts (A-fig.23) in their housings (B) on the cushion;

- pull the handles in the centre of the cushions, then tilt them forwards; raise the headrests to the maximum height and then press both the buttons (A-fig. 24) on the two supports side, then pull the headrests upwards and remove them;

 move the seat belts to the side extending them correctly without twisting;

- raise the levers (**A-fig. 25**) retaining the back rests and tilt them forwards to obtain a single loading surface (**fig. 26**).

#### **Partial extension**

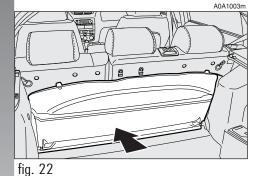
For partial extension, proceed as follows:

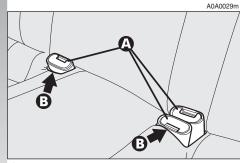
- tilt the cushion required pulling the handle at the centre of the cushion, then tilting the actual cushion;

 raise the headrest to the maximum height and then press both the buttons on the two supports side, then pull the headrest upwards and remove them;

 move the seat belt to the side extending it correctly without twisting;

 raise the lever (A-fig. 25) retaining the back rest and tilt.





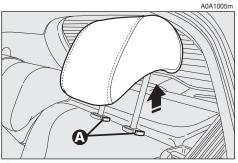


fig. 24

fig. 25



#### To restore the seat normal position

Proceed as follows:

- move the seat belts to one side extending them correctly without twisting;

- raise the back rests and push them backwards until you hear them click into position, then check that they are locked correctly by making sure that the "red band" (B-fig. 25) on the lever top side is no longer visible. If this "red band" is still visible it means that the seat is not locked correctly;

- put the cushions back into horizontal position keeping the central seat belt raised;

- refit the headrests in their housings.

#### **HEADREST ADJUSTMENT** (fig. 27)

The car is fitted with headrests for the side and central seats.

The headrests can be set in 2 positions (high/low) according to the passenger's height.

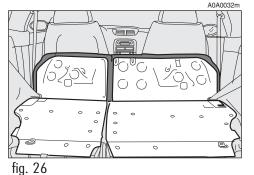
If needed, it is possible to remove the headrests operating as described above (see "Extension of luggage compartment").

WARNING

Remember that the head restraints must be positioned so that they are supporting the back of the head and not the neck. They will only be able to provide effective protection in the event of a collision if they are in this position.

#### **CENTRAL ARMREST** (fig. 28)

To use the armrest (**A**), present only on certain versions, lower it as illustrated.



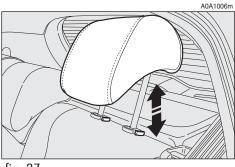


fig. 27

fig. 28

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# LUGGAGE RETAINING NET

Fitted only on some versions, the luggage retaining net is useful for the correct positioning of the load and/or the transport of light materials. The following **figures 29**, 30, 31 illustrate the different net fastening solutions in the luggage compartment.

A0A0326m

# STEERING WHEEL ADJUSTMENTS

The driver can adjust the steering wheel position in rake and height.

To do this, release the lever (A-fig. 32) pulling it towards the steering wheel.

After moving the steering wheel to the most suitable position, lock it pushing the lever fully forwards.

#### WARNING

The steering wheel position must only be adjusted with the car stationary.



#### WARNING

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It is absolutely forbidden to carry out aftermarket operations on the car which would tamper with the steering wheel or column (for example the installation of the antitheft system) and might cause not only the system and warranty decay, but also serious safety problems and alter the car typeápproval compliance.

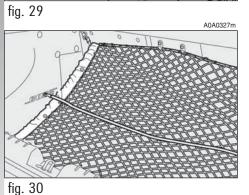




fig. 31

 $\bigcirc$ 

fig. 32

24

0/6

0

# REAR-VIEW MIRROR ADJUSTMENT

#### INNER

The mirror, fitted with a safety device that causes it to be released in the event of a violent crash, can be moved using the lever (**A-fig. 33**) to two different positions, normal or antiglare.

On some versions/markets the mirror is automatically set in the position for the day/night use.

#### OUTER

#### Electric adjustment (fig. 34)

- use the switch ( $\mathbf{A}$ ) to select the mirror required (right or left);

- pressing the button (**B**) in one of the four directions, move the mirror selected previously;

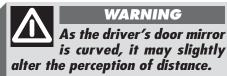
 position the switch (A) in the intermediate locking position.

**IMPORTANT** Adjustment is possible only with the ignition key at **MAR**.

#### Folding (fig. 35)

- If necessary (for example when the size of the mirror causes difficulty in narrow spaces) the door mirror can be folded in towards the car from position (**A**) to position (**B**).





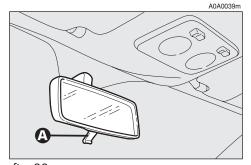


fig. 33

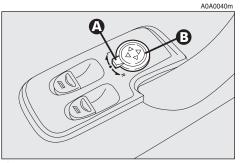




fig. 35

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### Defrosting/demisting (fig. 36)

The electric mirrors are fitted with heating coils which come into operation with rearscreen heating pressing the button (A) thereby defrosting and/or demisting the mirrors.

**IMPORTANT** The function is timed and automatically switched off after a few minutes.

# POWER WINDOWS

**IMPORTANT** With the ignition key at **STOP** or removed, the power windows can be opened for about 3 minutes and immediately deactivate at opening of one of the doors.

#### **3-DOOR VERSIONS**

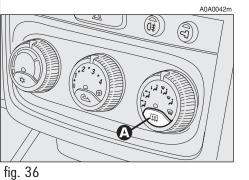
#### Driver' side (fig. 37)

The driver's door panel contains the buttons that control the following windows, with the ignition key at **MAR**:

- A left front window
- **B** right front window.

Press the button to lower the window. Pull to raise it.

**IMPORTANT** The driver's power window is fitted with the "continuous automatic operation" device for both lowering and raising the window. A brief press on the upper or lower part of the button will cause it to move and continue automatically: the window stops in the required position by pressing either the upper or lower part of the button again.



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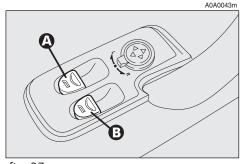


fig. 37

#### Passenger's side (fig. 38)

The button (A) controls the passenger's side window.

**IMPORTANT** The passenger's window is fitted with a device for "continuous automatic operation" only for lowering it.



Do not keep the button pressed when the window completely raised or is lowered.



# WARNING

Incorrect use of the power windows can be dangerous. Before and during operation of them always make sure that the passengers are not exposed to the risk of harm caused either directly by the windows in motion or by personal objects drawn or knocked by them. When leaving the car always remove the ignition key to prevent passengers (especially children) from being injured by the power windows inadvertently operated.

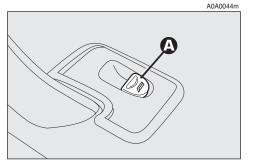


fig. 38

**IMPORTANT** On some versions after unlocking the doors, keeping the relevant button on the remote control pressed for about 2 seconds will cause the windows to open. It is necessary to keep the remote control button pressed until the windows have reached the full travel; releasing the button before the windows reach the limit switch, they will stop in the position they are at that moment.

#### **5-DOOR VERSIONS**

#### Front door on driver's side (fiq. 39)

The driver's door panel plate contains the buttons which, with the ignition key at **MAR**, operate the following windows:

A – left front/rear window

**B** – right front/rear window.

Press the button to lower the window. Pull to raise it.

**IMPORTANT** The driver's power window is fitted with the "continuous automatic operation" device for both lowering and raising the window. A brief press on the upper or lower part of the button will cause it to move and continue automatically: the window stops in the required position by pressing either the upper or lower part of the button again.



Fitted only on some versions:

C – rear door window control inhibitor (with the inhibitor activated the button led is on, press again to renable the rear buttons).

**D** – (**REAR**) front/rear window control switch (with the button led on, the buttons (A) and (B) operate the rear windows, with the led off, they operate the front windows).

#### Front door on passenger's side and (on some versions) rear doors (fig. 38)

On each door panel plate there is a button (A) which controls the related window.

**IMPORTANT** The passenger's window is fitted with a device for "continuous automatic operation" only for lowering it.

# SEAT BELTS

#### **USING THE SEAT BELTS**

The belt should be worn keeping the chest straight and rested against the seat back.

Fasten the belt by inserting the tab (A-fig. 40) into the clip (B), until hearing the locking click.

At removal, if it jams, let it rewind for a short stretch, then pull it out again without jerking.

To unfasten the seat belts, press button (C). Guide the seat belt with your hand while it is rewinding, to prevent it from twisting.

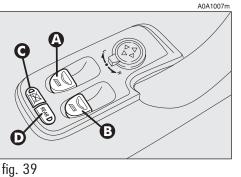


Through the reel, the belt automatically adapts to the body of the passenger wearing it, allowing freedom of movement.

When the car is parked on a steep slope the reel mechanism may block; this is normal. The reel mechanism prevents the weebing coming out when it is jerked or if the car brakes sharply, in a collision or when cornering at high speed.

Rear seat belts shall be worn as shown in fig. 41.

**IMPORTANT** The centre rear seatbelt is installed on request only for versions/markets on which it is required.



28

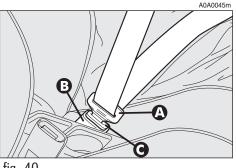
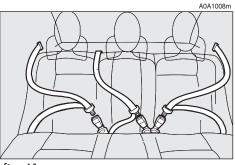


fig. 40







WARNING

To offer the highest level of protection, the rear seat belts should be fastened as shown in fig. 41.

## WARNING

After putting the backrest into its normal position after tilting, make sure the seat belts are positioned correctly for use.

# **A** Check

WARNING

Check that the backrest is correctly locked on both side ("red bands" (B-fig. 42) not visible) to prevent the backrest from tilting and injuring passengers.



# WARNING

The correct locking of the backrest is ensured by the disappearance of the "red band" (B-fig. 42) on the backrest tilting levers (A). If the "red band" is still visible it means that the backrest is not correctly locked. When restoring its normal using position make sure you hear the backrest click into position.



#### WARNING Remember that in the event

of an accident, any passengers occupying the rear seats who are not wearing a seat belt not only subject themselves to great personal risk, but constitute a danger to the occupants of the front seats.

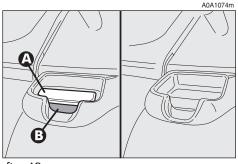


fig. 42

When the rear seats are not occupied the appropriate spaces between the backrest and cushion should be used to stow the seat belt clips neatly.

#### FRONT SEAT BELT HEIGHT ADJUSTMENT (upon request for versions/markets where applicable)

The height of the seat belt attachment should always be adjusted to suit the height of the person wearing the seat belt. This precaution makes it possible to improve the efficiency of the seat belt which greatly reduces the risk of injury in the event of an accident.

The correct adjustment is obtained when the belt passes about half way between the tip of the shoulder and the neck. The ring attached to the front seat belts can be moved to several positions allowing the belts to be adjusted.

To adjust the attachment, raise or lower the grip (**A-fig. 43**) of the locking device, at the same time moving the ring (**B**) to the most appropriate of the allowed positions.

WARNING

After adjustment, always

check that the slider (B-fig.

43) is anchored in one of the po-

sitions provided. To do this, with

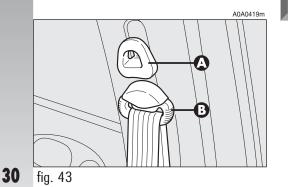
the grip (A-fig. 43) released, exert a further pressure to allow the anchor device to catch if release did not take place at one of the pre-

set positions.

WARNING The height of the seat belts shall always be adjusted with the car stationary.

# LOAD LIMITERS

To increase passive safety, the front seat belt reels contain a load limiter which allows controlled sag in such a way as to dose the force acting on the shpulder during the belt restraining action.



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#### **PRE-TENSIONING DEVICES**

To increase the efficiency of the front seat belts, the car is fitted with pre-tensioning devices. These devices "feel" that the car is being subject to a violent impact by way of a sensor and rewind the seat belts a few centimetres. In this way they ensure that the seat belt adheres to the wearer before the restraining action begins.

The seat belt locks to indicate that the pretensioner has intervened: the seat belt cannot be drawn back up even when guiding it manually.

**IMPORTANT** The pretensioner will give maximum protection when the seat belt adheres snugly to wearer's chest and hips.

A small amount of smoke may be produced. This smoke is in no way toxic and presents no fire hazard.

The pretensioner needs no maintenance or lubrication. Any modification to its original features will nullify the retractor's effectiveness. If, due to unusual natural events (floods, high waves, etc.), the device has been affected by water and mud, it must be replaced.

WARNING **Pre-tensioning devices can** only be used once. After they have been triggered contact Alfa Romeo Authorised Services to have them replaced. The validity of the device is shown on the plate fitted on the front left door near the lock; the pretensioners should be changed at an Alfa Romeo Authorised Service as this date approaches.

**Operations** involvina banging, vibrations or heating (above 100°C for a maximum of 6 hours) in the area of the pretensioners may damage or trigger off the device. Vibrations from rough road surfaces or accidental jolting caused by mounting pavements etc. do not have any effect on the pretensioner. If, however, you need assistance, go to Alfa Romeo Authorised Services.

#### WARNING

Never disassemble or tamper with the pretensioner components. All interventions must be carried out by qualified and authorised personnel. Always contact Alfa Romeo Authorised Services.

#### GENERAL INSTRUCTIONS FOR THE USE OF THE SEAT BELTS

All the occupants of the car are obliged to respect the local traffic laws regarding the wearing of seat belts.

Always fasten the seat belts before starting off.

## WARNING

The seat belt must not be twisted and should cling tightly to the body. The upper part must pass over the shoulder and diagonally across the chest. The lower part must rest across the pelvis (fig. 44) and not across the stomach. Do not use devices (clips, stoppers, etc.) which keep the belts away from the body. WARNING

Under no circumstances should the components of the seat belts and pretensioner be tampered with or removed. Any operation should be carried out by qualified and authorised personnel. Always contact an Alfa Romeo Authorised Service.



# WARNING

To ensure the highest degree of protection, you are recommended to keep the seat backrest in the straightest position possible, and the belt adhering well to the chest and pelvis.

Seat belts should always be worn in both the front and rear positions! Travelling without seat belt increases the risk of serious injury or death in the case of accident.



fig. 44

# WARNING

If the seat belt has been subjected to shock, for example during an accident, it must be completely replaced together with the attachments and their screws, and the pretensioning devices, even if visible defects are not detected as the belt may have lost its resilience.



WARNING

Each seat belt must be worn by one person only; do not carry children on your knee using a single seat belt for both (fig. 45). Do not fasten other objects to the body. Seat belts are also to be worn by expecting mothers: the risk of injury in the case of accident is greatly reduced for them and the unborn child if they are wearing a seat belt.

Pregnant women must of course position the lower part of the belt very low down so that it passes under the abdomen (**fig. 46**).

#### HOW TO KEEP THE SEAT BELTS ALWAYS IN EFFICIENT CONDITIONS

- Always use the belts with the tape well taut and never twisted; make sure that it is free to run without impediments.

— After a serious accident, replace the belt being worn at that time, even if it does not appear damaged. Always replace the seat belts if pretensioners have been activated.

— To clean the belts, wash by hand with natural soap, rinse and leave to dry in the shade. Never use strong detergents, bleach or dyes or any other chemical substance that might weaken the fibres.

- Prevent the reels from getting wet: correct operation of them is only guaranteed if water does not get inside.

Replace the seat belt if it shows significant wear or cut signs.



fig. 45



fig. 46

# CARRYING CHILDREN SAFELY

WARNING Never place cradle child's seats on the front passenger's seat of cars equipped with passenger's air bag since the air bag activation could cause serious injuries, event mortal. You are advised to cary children always on the rear seat, as this is the most protected position in the case of a crash.



#### WARNING SERIOUS DANGER! If it is necessary to car-

ry a child on the front passenger's seat with the cradle child's seat facing opposite the travelling direction, the passenger's air bag must be deactivated through the key switch and its deactivation must be checked through the related warning light  $\forall^{*} \otimes$  on the instrument panel (see paragraph "Front passenger's air bag"). In addition, the front passenger's seat shall be adjusted in the most backward position to prevent any contact between the child's seat and the dashboard. For the best level of protection in the event of a crash, all occupants must travel seated and secured by suitable restraint systems.

This is even more important for children.

This prescription is mandatory, according to directive 2003/20/EC, in every country of the European Union.

Compared with adults, a child's head is proportionately larger and heavier than the rest of the body, while muscles and bone structure are not completely developed. Therefore, in order to restrain them correctly in the event of a crash, different systems are needed than adult seat belts.

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**34** fig. 47

> The results of research on the best protection for a child are summarised in European Standard ECE-R44, which in addition to making them compulsory, subdivides restraint systems into five groups:

Group O	- until 10 kg in weight
Group 0+	- until 13 kg in weight
Group 1	9-18 kg in weight
Group 2	15-25 kg in weight
Group 3	22-36 kg in weight

As it may be noted, the groups partially overlap and in fact, in commerce it is possible to find devices that cover more than one weight group (fig. 47).

All the restraint devices must bear the homologation data, together with the control brand, on a solidly fixed label which must absolutely not be removed.

Over 1.50 m in height, from the point of view of restraint systems, children are considered as adults and wear belts normally.

The Lineaccessori Alfa Romeo includes seats for each weight group, which are the recommended choice because they have been designed and specifically experimented for Alfa Romeo cars.

#### **GROUP 0 and 0+**

Babies up to 13 kg must be carried facing behind (fig. 48) on a cradle seat, which supprting the head, does not induce strain on the neck in the event of sharp deceleration.

The cradle is restrained by the car safety belts, as illustrated, and it should in turn restrain the child with the belts incorporated on it.

WARNING

The illustration is indicative

only for assembly. Assem-

ble the seat according to the com-

pulsory instructions provided with

#### **GROUP 1**

Starting from 9 to 18 kg in weight, children may be carried facing forwards with seats fitted with front cushion (fig. 49), through which the car seat belts restrains both child and seat.



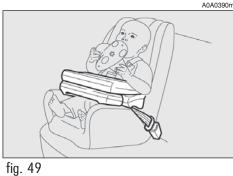
The illustration is indicative

only for assembly. Assemble the seat according to the compulsory instructions provided with it.



fig. 48

it.





### WARNING

Seats exist which are suitable for covering weight groups 0 and 1 with a rear connection to the car belts and its own belts to restrain the child. Because of their mass, they can be dangerous if installed incorrectly fastened to the car belts with a cushion. Strictly adhere to the assembly instructions provided.

### **GROUP 2**

Starting from 15 to 25 kg in weight, children may be restrained directly by the car seat belts. Child seats only have the function of positioning the child correctly in relation to the belts, so that the diagonal part adheres to the chest and never to the neck and that the horizontal part adheres to the child's pelvis and not to the abdomen (fig. **50**).

### **GROUP 3**

For children from 22 up to 36 kg the child's chest is thick enough not to need the spacer back rest any more.

Fig. 51 shows proper child's seat positioning on the rear seat.

Over 1.50 m in height, children may wear seat belts like adults.



WARNING

The illustration is indicative only for assembly. Assemble the seat according to the compulsory instructions provided with



### WARNING

The illustration is indicative only for assembly. Assemble the seat according to the compulsory instructions provided with it.

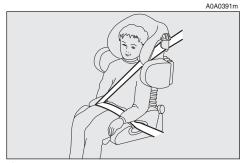


fig. 50



fig. 51

### **PASSENGER'S SEAT COMPLIANCE WITH REGULATIONS ON CHILD'S SEAT USE**

Vehicle complies with the new EC Directive 2000/3 regulating child's seat assembling on the different car seats according to the following table:

### Rear seat for 3 and 5-door versions

Group	Range of weight	SEAT		
		Front passenger	Rear passenger side	Rear passenger centre (inertial seat belt with three anchor points)
Group 0,0+	up to 13 kg	L	U	U
Group 1	9 -18 kg	L	U	U
Group 2	15 - 25 kg	L	U	U
Group 3	22 - 36 kg	L	U	U

### Key:

**U** = suitable for child's restraint systems of the "Universal" category, according to European Standard ECE-R44 for the specified "Groups"

L = suitable for certain child's restraint systems at Lineaccessori Alfa Romeo for the specified group

### Below is a summary of the safety rules to be observed when carrying children:

1) The recommended position for installing a child's seat is on the rear seat, as it is the most protected in the event of a crash;

2) If the passenger's Air bag is deactivated (upon request for versions/markets where applicable) **always** check the warning light 🖉 on the cluster to make sure that it has actually been deactivated.

**3)** Carefully follow the instructions provided with the child's seat, which the supplier is obliged to attach. Keep them in the car together with the documents and this booklet. Do not use used seats without the instructions for use.

**4)** Always pull the tape to check that the belts are buckled.

**5)** All restraint systems are strictly for one child only: never use for two children at the same time.

**6)** Always make sure that the belts do not rest on the child's neck.

7) During the journey, do not allow the child to stay in abnormal positions or release the belts.

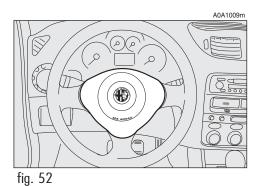
**8)** Do not carry children in your arms, not even small babies. No-one, however strong, can keep hold of them in a crash.

**9)** In the case of accidents, replace the child's seat with a new one.

### WARNING If the passenger's Air bag is activated, children should never travel on the front seat. The activation of the air bag in the event of a crash may cause mortal injuries to the child regardless of the crash severity. Therefore you are recommended to carry children always on the child's restraint system on the rear seat, as it is the most protected in the event of a crash.

## FRONT AND SIDE AIR BAGS

The car is fitted with front Air bags for the driver (**fig. 52**, for the passenger (**fig. 53**, side bags (**fig. 54**) and window bags (**fig. 55**).



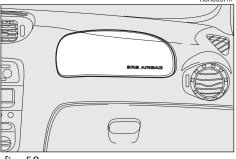


fig. 53

### FRONT AIR BAGS

### **Description and operation**

The front Air bag (driver's and passenger's) is a safety device that comes into action in the event of a head-on collision.

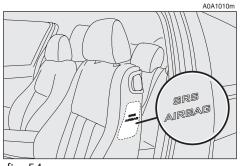


fig. 54

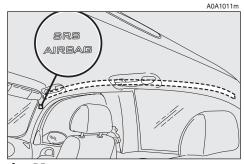


fig. 55

It is formed of an instantly-inflating cushion contained in a special recess:

- in the centre of the steering wheel for the driver;

- in the dahsboard and with a larger-sized cushion for the passenger.

The front Air bag (driver's and passenger's) is a device designed to protect the occupants in the event of a head-on collision of medium-high severity by the interposition of the cushion between the occupant and the steering wheel or dashboard.

In the event of a crash, the electronic control unit processes the signals leading from a deceleration sensor and when necessary triggers inflation of the cushion.

The cushion inflates instantly as a protective barrier between the occupants' bodies and the structures which could cause injury. The cushion deflates immediately afterwards.

The front Air bag (driver's and passenger's) does not replace but is complementary to the use of belts, which should always be worn, as specifed by law in Europe and most non-European countries.

In the event of a crash a person that is not wearing the seat belt moves forwards and may come into contact with the cushion while it is still opening. Under these circumstances the protection offered by the cushion is reduced. Front Air bags are designed to protect car's occupants in front crashes and therefore nonactivation in other types of collisions (side collisions, rear-end shunts, roll-overs, etc...) is not a system malfunction.

In collisions against highly deformable or mobile objects (road signposts, heaps of ice or snow, etc.), rear collisions (hit from behind by another car), side collisions, wedging under other cars or protective barriers (for example under a lorry or guard rail) cutting in of the air bag is not activated as it does not offer any more protection than the seat belts, therefore activaton would be inappropriate.

Therefore the failure to be triggered does not mean that the system is not working.

### WARNING

Never put stickers or other objects on the steering wheel, on the cover of the passenger's Air bag or on the right side cover of the roof. Never put objects on the dashboard in front of the passenger (for example mobile phones) which might interfere with the correct inflation of the passenger's Air bag and therefore injure the car's occupants.

### PASSENGER'S FRONT AIR BAG

The passenger's front Air bag has been designed to improve the protection of a person wearing a seat belt. Its volume at maximum inflation fills most of the space between the dashboard and the passenger.



WARNING SERIOUS DANGER:

The car is fitted with front passenger's air bag. Never place cradle child's seats on the front passenger's seat of cars equipped with passenger's air bag since the air bag activation could cause serious injuries, even mortal. In the case of need, always deactivate the passenger's air bag when a child's seat is placed on the front seat. The front passenger's seat shall be adjusted in the most backward position to prevent any contact between child's seat and dashboard. Even if not ruled by law, for better protection of adults you are recommended to reactivate the air bag immediately as soon as a child transport is no longer necessary.

### MANUAL DEACTIVATION OF PASSENGER'S FRONT AIR BAG

### (upon request for versions/ markets where applicable)

Should it be absolutely necessary to carry a child on the front seat, the passenger's front air bag can be deactivated.

Deactivation/reactivation takes place with ignition key at **STOP** and operating it in the special key switch on the right-hand side of the dashboard (**fig. 56**). Access to the switch is only possible with the door open.

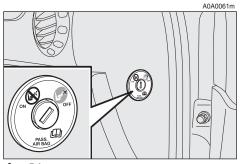


fig. 56

WARNING Use the switch only with the engine off and the ignition key removed.

The key switch (**fig. 56**) has two positions:

1) Passenger's front Air bag active: (**ON** position **(Q)**) warning light on check panel off; it is absolutely prohibited to carry children on the front seat.

2) Passenger's front Air bag deactivated: (**OFF** position ⊌ (♥) warning light on check panel on; it is possible to carry children protected by special restraint systems on the front seat.

The warning light 🖋 on the check panel glows steadily until the passenger's Air bag is reactivated.

Deactivation of the front passenger's Air bag does not prevent operation of the side Air bags.

With the door open the key can be inserted and removed in both positions.

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**GETTING TO KNOW YOUR CAR** 

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### SIDE AIR BAGS (SIDE BAG - WINDOW BAG)

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The side bag and window bag have the task of increasing protection of the occupants in the event of a side crash of medium-high severity.

They are formed of two types of instantaneously-inflating cushions:

 the side bag is housed in the back rest of the front seats; with this solution it is always possible to have the cushion in the optimum position in relation to the passenger, regardless of the adjustment of the seat;

- the window bags, which are "curtain" cushions, are housed in the side roof lining covered by a special trim, which makes it possible to extend the cushion downwards. This solution, designed to protect the head, makes it possible to offer the highest degree of protection to the front and rear occupants in the event of side crash, thanks to the wide cushion inflation surface.

In the event of a side crash, an electronic control unit processes the signals leading from a deceleration sensor and activates, when necessary, inflation of the bags. The bags inflate instantaneously, setting themselves between the body of the front passengers and the car door. The bags deflate immediately afterwards.

In the event of minor side crashes (for which the restraining action of the seat belts is sufficient), the air bags are not deployed. Also in this case it is of vital importance to wear the seat belts since in case of side crash they guarantee proper positioning of the occupant and prevent the occupant to be pitched out of the car in case of violent crashes.

Therefore the side air bags do not replace but are complementary to the use of belts, which you are recommended to always wear, as specified by law in Europe and most non-European countries.

Operation of the side air bags and window bags is not disabled by the front air bag deactivation switch, as described in the previous paragraphs.

**IMPORTANT** In the event of side crash, you can obtain the best protection by the system keeping a correct position on the seat, thus allowing correct window bag unfolding.

WARNING Never rest head, arms and

elbows on the door, on the windows and in the window bag area to prevent possible injuries during the inflation phase.

**IMPORTANT** The front and/or side air bags may be activated if the car is subjected to heavy shocks or accidents that involve the underbody area, such as for example violent bumps against steps, pavements or fixed obstacles on the ground, falling into big holes or bumpy roads.

**IMPORTANT** The triggering of air bags releases a small amount of powder. This powder is not harmful and does not indicate a start of fire; also the surfaces of the deployed bag and the car interior may be covered with dusty residue: this may irritate the skin and eyes. In the event of exposure, wash with neutral soap and water.



WARNING

Never lean head, arms and elbows out of the window.

The deadlines concerning the pyrotechnical charge and the twisted contact are shown on the label placed on the front doors (lock area). As these deadlines approach go to Alfa Romeo Authorized Services to have them replaced.

**IMPORTANT** If an accident has triggered the air bag, Alfa Romeo Authorized Services must be contacted to have the devices activated replaced and to have the whole system checked.

All operations involving checking, repairing and replacing components concerning the Air bag must be carried out by Alfa Romeo Authorized Services. If the car is to be demolished, Alfa Romeo Authorized Services should be contacted beforehand to have the system deactivated.

If the car changes ownership, the new owner must be informed of the instructions for use and of the above warnings and be given this "Owner's Manual".

**IMPORTANT** The triggering of the pretensioners, front air bags and side bags is decided by the electronic control unit in a differentiated manner depending on the type of crash. The failure to trigger one or more of them does not necessarily indicate a system malfunction.

### **GENERAL CAUTIONS**



If warning light 💐 does not come on turning the ignition key to MAR or stays on while travelling, there might be a failure in the restraining systems; in this case the air bags or pretensioners may not activate in the event of a crash or, in a more limited number of cases, may activate by mistake. Before going on, ask Alfa Romeo Authorized Services to check the whole system immediately.

WARNING Do not cover the back rest of the front and rear seats with trims or covers whose use is not compatible with Side-bags.

WARNING Never travel with objects on your lap, in front of the chest or with a pipe, pencil, etc. between your lips. Serious injury may result in the case of the air bag being triggered.

### WARNING

Always keep your hands on the steering wheel rim when driving, so that if the Air bag is triggered, it can inflate without meeting any obstacles. Do not drive with the body bent forwards, keep the seat back rest in the erect position and lean your back well against it.



### WARNING

If the car has been stolen or an attempt to steal it has been made, if it has been subjected to vandals or floods, have the Air bag system checked by Alfa Romeo Authorized Services.



### WARNING

Never put stickers or other

objects on the steering wheel, on the cover of the passenger's Air bag or on the right side cover of the roof. Never put objects on the dashboard in front of the passenger (for example mobile phones) which miaht interfere with the correct inflation of the passenger's Air bag and therefore injure the car's occupants.



## WARNING

Your are reminded that when the igntion key is engaged and in the MAR position, the Air bags can be triggered also on a stationary car, if it is bumped by another moving car. Therefore, even with the car stationary, never allow children on the front seat. You are also reminded that with the car stationary, without the key engaged and turned, the Air bags are not triggered in the event of an impact; in this case the failure to trigger the air bags should not be considered a system failure.

### WARNING

Turning the ignition key to MAR the warning light 🖉 🕷 (with the passenger's front Air bag deactivation switch at ON) turns on for about 4 seconds, and then flashes for another 4 seconds to remind that the passenger's Air bag and corresponding side Air bags will be activated in the event of a crash, then it goes off.

WARNING Do not wash the seat back with pressurised water or steam (by hand or at automatic seat washing stations).

WARNING

Do not hook rigid objects to the coat hooks and to the support handles.



### WARNING The air bag does not replace

the seat belts, but increases their effectiveness. Additionally, as the front air bags are not triggered for head-on collision at low speed, side crashes, crashes from behind or overturning, in these cases the occupants are protected only by the seat belts, which must, therefore, always be fastened.



### WARNING

The front Air bags are designed to be triggered for heavier crashes than the pretensioners. It is therefore normal for the pretensioners only to be triggered for crashes within the two activation thresholds.

### STEERING WHEEL LEVERS

The devices and services controlled by the levers on the steering wheel can only be activated with the ignition key at **MAR**.

### **LEFT-HAND LEVER**

The left-hand lever controls the outer lights except for the fog lamps and rear fog guards.

When the outer lights are switched on, the various controls on the dashboard are illuminated.

Only with the ignition key at **PARK**, regardless of the position of the knurled ring, the sidelights and number plate lights stay on.

Position (1 or 2-fig. 62) of the lever causes the turning on only of the sidelights (front and rear), on the right or left respectively.

### Lights switched off (fig. 57)

When the pointer in the knurled ring is opposite the symbol **O**, the outer lights are switched off.

### Sidelights (fig. 58)

The sidelights are switched on by turning the knurled ring from  ${\bm 0}$  to  $\dot{\mathcal{P}}$  .

The ≥005 warning light on the instrument cluster will come on at the same time.

### Dipped-beam headlights (fig. 59)

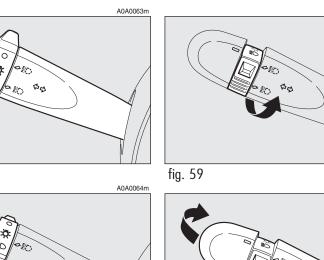
These are switched on by turning the knurled ring from  $\overset{\circ}{\sim}$  to  $\mathbb{P}^{\mathbb{O}}$ .

### Main beams (fig. 60)

To turn the main beams on, set the knurled ring to position  $\mathbb{S}^{O}$  and push the lever towards the dashboard (stable position); warning light  $\mathbb{E}^{O}$  on the instrument panel will turn on.

To set dipped-beams back pull the lever towards the steering wheel.

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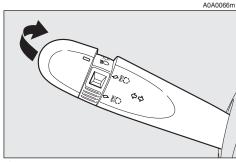


fig. 58

fig. 57

fig. 60

When the dipped beam headlights and the fog lamps are switched on, the outer light control unit (integrated in the Body Computer) works according to the following logics:

 turning on the main beams, the dipped beams turn off while the fog lamps stay on, when restoring the starting condition at dipped beam setting;

or

- turning on the main beams, the fog lamps turn off and then turn on again automatically as the main beams are switched off.

Therefore, in the event of Body Computer replacement, the outer light operating logic may be different.

### Flashing (fig. 61)

The headlights are flashed pulling the lever towards the steering wheel (instable position) regardless of the position of the knurled ring. The  $\equiv \mathbb{O}$  warning light on the cluster will come on at the same time.

**IMPORTANT** Only the main-beam lights are flashed. To avoid penalties follow local regulations.

# Direction indicators (fig. 62)

Regardless of the position of the knurled ring, moving the lever to the stable position will:

up, position (1) - engage the right-hand direction indicators.

down, position (**2**) - engage the left-hand direction indicators.

One of the warning lights ( $\Leftarrow$  or  $\Rightarrow$ ) will come on on the instrument cluster at the same time.

The lever is returned to its position automatically and the indicators are switched off when the steering wheel is straightened.

**IMPORTANT** If you wish to signal a rapid change of direction involving only a minimal movement of the steering wheel, the lever can be removed up or down without it clicking (unstable position). When released, the lever will return to its home position.

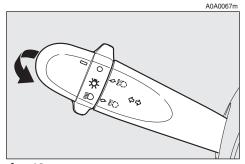


fig. 61

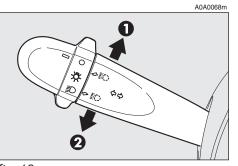


fig. 62





### "Follow me home" device (fig. 63)

This function allows the illumination of the space in front of the car for the length of time set, and is activated with the ignition key at **STOP** or removed, pulling the left-hand lever towards the steering wheel.

This function is activated pulling the lever within 2 minutes from when the engine is turned off. At each single movement of the lever, the staying on of the dipped beams and sidelights is extended by 30 seconds up to a maximum of 3.5 minutes; the lights switch off automatically after the time set.

Each time the lever is operated, the  $\equiv O$  warning light on the cluster turns on.

This function can be interrupted by keeping the lever pulled towards the steering wheel for more than 2 seconds.

### **RIGHT-HAND LEVER**

The right-hand lever is used to operate the windscreen wiper and windscreen washer. The control used to activate the windscreen washers also activates the headlight washers, if fitted.

# Windscreen wiper - Windscreen washer (fig. 64-65)

The lever can be moved to five different positions, corresponding to:

- A Windscreen wiper off.
- **B** Intermittent.

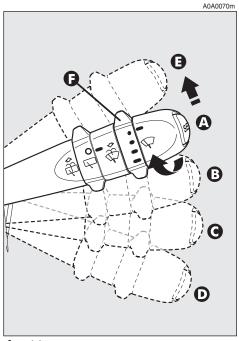


fig. 64

With the lever in position  $(\mathbf{B})$ , turning the ring  $(\mathbf{F})$  four possible intermittent speeds are obtained:

- = intermittent slow.
- = intermittent medium.
- = intermittent medium-fast.
- $\blacksquare$  = intermittent fast.
- **C** Continuous, slow.
- **D** Continuous, fast.
- **E** Fast, temporary (unstable position).

Operation in position (**E**) is limited to the time the lever is held in this position. When the lever is released, it returns to position (**A**) automatically stopping the wiper.

**IMPORTANT** When the wiper is on, engaging reverse gear automatically turns on the rearscreen wiper.

### "SMART WASHING" FUNCTION

Pulling the lever towards the steering wheel (unstable position) operates the windscreen washer.

Keeping the lever pulled, with only one movement it is possible to operate the washer jet and the wiper at the same time; indeed, the latter comes into action automatically if the lever is pulled for more than half a second.

The wiper stops working a few strokes after releasing the lever; a further "cleaning stroke" after a few seconds completes the wiping operation.

### Rain sensor (fig. 66)

The rain sensor  $(\mathbf{A})$ , fitted only on certain versions, is an electronic device combined with the windscreen wiper which has the purpose of automatically adjusting the number of wipes during intermittent operation to the intensity of the rain.

All the other functions controlled by the right-hand lever remain unchanged.

The rain sensor is activated automatically moving the right-hand lever to position (**Bfig. 64**) and it has a range of adjustment that gradually varies between wiper stationary (no wiping) when the windscreen is dry, to wiper at first continuous speed (continuous, slow) with heavy rain. Turning the knurled ring (**F-fig. 64**) it is possible to increase the sensitivity of the rain sensor, obtaining a quicker change from stationary, when the windscreen is dry, to first continuous speed (continuous, slow).

Operating the windscreen washer with the rain sensor activated (lever at position  $\mathbf{B}$ ) the normal washing cycle is performed at the end of which the rain sensor resumes its normal automatic function.

Turning the ignition key to **STOP** the rain sensor is deactivated and the next time the engine is started (**MAR** position) it will not be reactivated even if the lever has remained in position (**B**). In this case to activate the rain sensor, simply move the lever to (**A**) or (**C**) and then back to (**B**).

When the rain sensor is reactivated in this way, the wiper performs at least one stroke, even if the windscreen is dry, to indicate that reactivation has occurred.

The rain sensor is located behind the inner rear-view mirror in contact with the windscreen and inside the area cleaned by the wiper and it controls an electronic control unit which in turn controls the wiper motor.

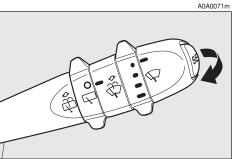


fig. 65

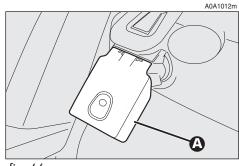


fig. 66

At each start, the rain sensor automatically stabilises at a temperature of about 40°C to eliminate any condensation from the control surface and prevent the formation of ice.

The rain sensor is able to detect and automatically adapt to the presence of the following particular conditions which require different sensitivity:

- impurities on the control surface (salt, dirt, etc.);

streaks of water caused by worn wiper blades;

- difference between day and night (the human eye is more disturbed during the night by the wet glass surface).

# Rearscreen wiper - washer (fig. 67-68)

Pushing the lever towards the dashboard (unstable position) operates the rearscreen washer jet and continous operation of the rearscreen wiper. Operation ends when the lever is released.

Turning the knurled ring (**A**) from position **O** to position  $\square$  operates the rearscreen wiper intermittently.

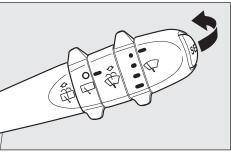
The activation of the rear windshield wiper occurs also with the front windshield wipe on and reverse gear inserted.

### Headlamp washers (fig. 69)

These come into operation when the windscreen washer is turned on with the dipped/main beam headlights on.

**IMPORTANT** On certain versions when the headlamp washer is operating, the climate control system automatically engages inside air re-circulation, to prevent the smell of liquid detergent from entering the passenger compartment.

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**48** fig. 67

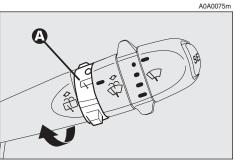


fig. 68

fig. 69



### **CRUISE CONTROL**

### GENERAL

The speed regulator (**CRUISE CON-TROL**), with electronic control, makes it possible to drive the car at the required speed without pressing the accelerator pedal. This reduces driving fatigue during long journeys because the speed memorised is automatically maintained.

**IMPORTANT** The device can only be engaged at speeds between 30 and 190 km/h. The device is disengaged automatically in any of the following cases:

- pressing the brake pedal;
- pressing the clutch pedal;

- if the ASR, MSR OR VDC systems cut in;

- with Selespeed transmission if a gear is changed;

- inadvertently moving the Selespeed gear control lever to  $\mathbf{N}$ .

### **CONTROLS** (fig. 70)

Cruise Control is controlled by the **ON/OFF** knurled ring (**A**), by the +/- ring(**B**) and by the **RES** button (**C**).

Ring (A) has two positions:

 OFF in this position the device is deactivated; **– ON** is the normal operating position of the device. When the ring (**A**) is in this position, the warning light  $\Im$  on the instrument cluster turns on.

Ring (**B**) serves for memorising and maintaining the car sped or for increasing or lowering the speed memorised.

Turn the ring  $(\mathbf{B})$  to  $(\mathbf{+})$  to memorise the speed reached or increase the speed memorised.

Turn the ring (**B**) to (—) to lower the speed memorised.

Each time the ring is actuated (**B**) the speed increases or lowers by about 1.5 km/h.

Keeping the ring turned the speed changes continuously. The new speed reached will be maintained automatically.

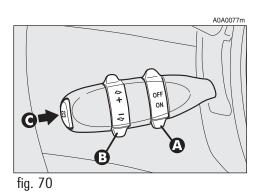
The **RES** button (**C**) resets the memorised speed.

**IMPORTANT** Turning the ignition key to **STOP** or the ring (**A**) to **OFF**, the speed memorised is cleared and the system is switched off.



### WARNING

Cruise Control must be activated only when the route and traffic allow a constant speed for a sufficiently long distance completely safely.



### TO MEMORISE THE SPEED

Move the ring (**A**) to **ON** and take the car to the required speed normally. Turn the ring (**B**) to (+) for at least three seconds, then release it. The car speed is memorised and it is therefore possible to release the accelerator pedal.

The car will continue to travel at the memorised constant speed until one of the following conditions takes place:

- pressing the brake pedal;

- pressing the clutch pedal;

- if the ASR, MSR or VDC systems cut in;

– with Selespeed transmission if a gear is changed;

 inadvertent movement of the Selespeed gear control lever to position N.

**IMPORTANT** In the case of need (when overtaking for instance) acceleration is possible simply pressing the accelerator pedal; later, releasing the accelerator pedal, the car will return to the speed memorised previously.

### TO RESET THE MEMORISED SPEED

If the device has been disengaged for example pressing the brake or clutch pedal, the memorised speed can be reset as follows:

accelerate gradually until reaching a speed approaching the one memorised;

 engage the gear selected at the time of speed memorising (4th, 5th or 6th speed);

- press the **RES** button (**C**).

### TO INCREASE THE MEMORISED SPEED

The speed memorised can be increased in two ways:

1) pressing the accelerator and then memorising the new speed reached (turning the ring to (**B**) for more than three seconds);

### or

2) momentaneously turning the ring (**B**) to (+): each pulse of the ring will correspond to a slight increase in speed (about 1.5 km/h), while pressing continuously wull correspond to a continuous speed increase. Releasing the ring (**B**) the new speed will be memorised automatically.

### TO REDUCE THE MEMORISED SPEED

The speed memorised can be reduced in two ways:

1) disengaging the device (for instance pressing the brake pedal) and then memorising the new speed (turning the ring (**B**) to (+) for at least three seconds);

2) keeping the ring pressed (**B**) at (-) until reaching the new speed which will be memorised automatically.

# RESETTING THE MEMORISED SPEED

The memorised speed is automatically reset turning off the engine or moving the ring (**A**) to **OFF**.



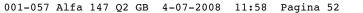
### WARNING

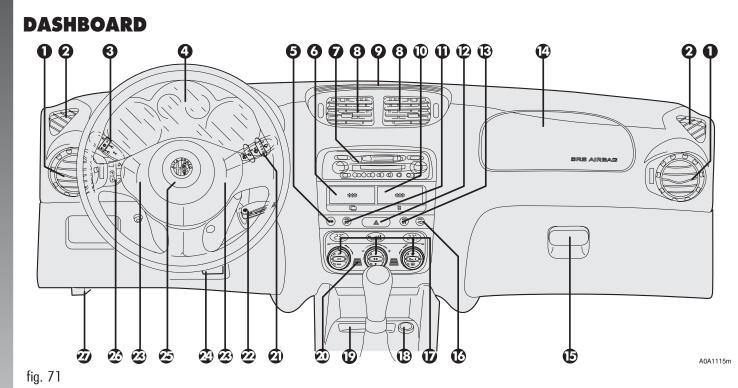
When travelling with the cruise control on, do not move the gearshift lever to neutral and do not move the Selespeed selector to N.

It is advisable to engage the cruise control only when the conditions of the traffic or roads so permit under completely safe conditions, i.e.: straight and dry roads, dual carriage ways or motorways, flowing traffic and smooth road surface. Do not engage the device in town or in heavy traffic conditions. WARNING Cruise control may only be engaged at speeds between 30 and 190 km/h.

The device may only be engaged in 4th, 5th or 6th gear, depending on the speed of the car. Travelling downhill with the device engaged the car speed may increase more that the memorised one, due to the change in the engine load.

WARNING If the device is faulty or not working, turn the ring (A) to OFF and contact Alfa Romeo Authorised Services after checking that the protection is intact. The ring (**A**) may be left constantly at **ON** without damaging the device. You are, however, advised to switch the device off when not in use, turning the ring to **OFF**, to avoid memorising speeds by accident.





1. Side swivel air vents - 2. Fixed side window air vents - 3. Outer light control lever - 4. Instrument panel - 5. Tailgate release button - 6. Card holder (upon request for versions/markets where applicable) - 7. Radio (upon request for versions/markets where applicable) - 8. Centre swivel air vents - 9. Fixed upper vent - 10. Glass holder (upon request for versions/markets where applicable) - 11. Fog lamp button (upon request for versions/markets where applicable) - 12. Hazard warning light switch - 13. Rear fog guard button - 14. Passenger's front Air bag - 15. Glove compartment - 16. Door locking button - 17. Controls for heating, ventilation and climate control - 18. Cigar lighter - 19. Ashtray - 20. Temperature sensor - 21. Windscreen/rearscreen wiper control lever - 22. Ignition key and switch - 23. Horn - 24. Steering wheel locking/release lever - 25. Driver's front Air bag - 26. Set of controls - 27. Bonnet openining lever.

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### INSTRUMENT PANEL

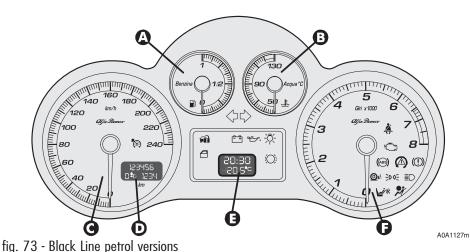
### Versions with digital multifunction display

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Odometer display (mileage recorder, trip recorder with headlamp position display) - E. Clock/outside temperature display - F. Rev counter

**NOTE** On JTDM versions the scale bottom is at 6000 revs.

A. Fuel level gauge with reserve warning light - **B**. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Odometer display (mileage recorder, trip recorder with headlamp position display) - E. Clock/outside temperature display - F. Rev counter

NOTE On Q2 diesel versions the scale bottom is at 6000 revs.



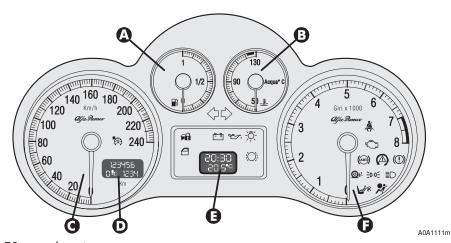


fig. 72 - petrol versions

# Versions with reconfigurable multifunction display

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge warning light - C. Speedometer - D. Odometer display (mileage recorder, trip recorder with headlamp position display) - E. Reconfigurable multifunction display - F. Rev counter

**NOTE** On JTDM versions the scale bottom is at 6000 revs.

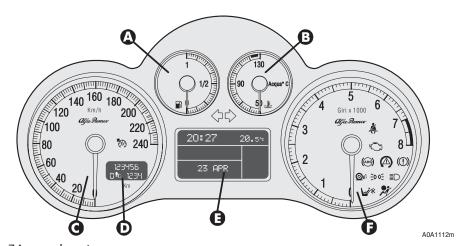


fig. 74 - petrol versions

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge warning light - C. Speedometer - D. Odometer display (mileage recorder, trip recorder with headlamp position display) - E. Reconfigurable multifunction display
 F. Rev counter

**NOTE** On Q2 diesel versions the scale bottom is at 6000 revs.

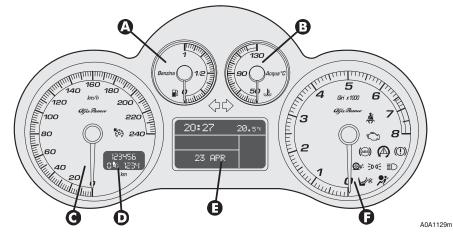


fig. 75 - Black Line petrol versions

**GETTING TO KNOW YOUR CAR** 

# Versions with reconfigurable multifunction display

**A.** Fuel level gauge with reserve warning light - **B.** Engine coolant fluid temperature gauge warning light - **C.** Speedometer - **D.** Odometer display (mileage recorder, trip recorder with headlamp position display) - **E.** Reconfigurable multifunction display - **F.** Rev counter

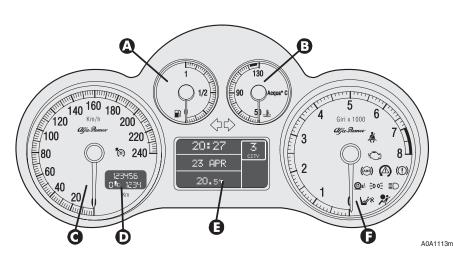


fig. 75a - 2.0 T. SPARK Selespeed versions

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge warning light - C. Speedometer - D. Odometer display (mileage recorder, trip recorder with headlamp position display) - E. Reconfigurable multifunction display - F. Rev counter

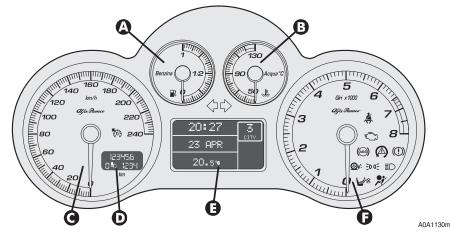


fig. 75b - 2.0 T. SPARK Selespeed Black Line versions

### **MILEAGE RECORDER**

Odometer display with double meter (total and trip) and headlamp position display.

The display shows:

- the mileage on the first line (6 figures)

- the trip meter on the second line (4 figures)

- the position relating to the headlamp aiming device.

To reset the trip meter, keep the button (A-fig. 76) on the plate at the side of the steering column pressed for a few seconds.

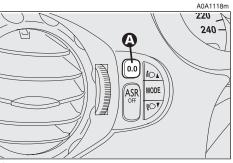
**IMPORTANT** If the battery is disconnected the trip meter reading is not stored.

### **REV COUNTER**

The danger zone (red, or white on certain versions) indicates excessively high engine speed. Do not drive for long periods with the pointer in this area.

**IMPORTANT** The electronic injection control system gradually shuts off the flow of fuel when the engine is "over-revving" resulting in a gradual loss of engine power.

When the engine is idling, the rev counter may indicate a gradual or sudden highering of the speed, this is normal as it takes place during normal operation, for example when engaging the climate control system or the fan. In particular a slow change in the speed preserves the battery charge.



56 fig. 76

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### FUEL LEVEL GAUGE WITH RESERVE INDICATOR

This shows the amount of fuel left in the fuel tank.

The warning light  $\mathbb{R}$  turns on to indicate that approx. 7 litres of fuel are left in the tank.

**IMPORTANT** Under certain conditions (heavy slopes, for instance), the reading on the gauge may differ from the actual amount of fuel in the tank and changes in level may be indicated late.

This condition falls within the operation logics of the electronic control circuit to avoid highly unstable readings due to swaying of the fuel when travelling.

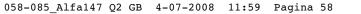
**IMPORTANT** Refuelling shall always be performed with engine off and ignition key at **STOP**. If the engine is off but the key is at **MAR**, a wrong fuel level could temporarily be indicated. This is due to the internal system control logic and cannot be considered as a system malfunctioning.

### ENGINE COOLANT FLUID TEMPERATURE GAUGE WITH MAXIMUM TEMPERATURE WARNING LIGHT

This shows the temperature of the engine coolant fluid and begins when the fluid temperature exceeds approx. 50°C.

Normally the pointer should be towards the middle of the scale. If the pointer reaches the higher temperatures of the scale (red section, or white on certain versions) the request for car performance should be decreased.

The turning on of the & warning light (versions with digital multifunction display) or of the message + symbol (versions with reconfigurable multifunction display) indicates that the coolant fluid temperature is too high; in this case, stop the engine and contact Alfa Romeo Authorized Services. **IMPORTANT** The temperature of the engine coolant may rise towards the maximum values (red section, or white on certain versions) when the car is driven at low speeds, especially when the ambient air temperature is high. In this case it is advisable to stop the car and switch off the engine for a few minutes, after which the journey can be resumed, preferably at a higher speed.

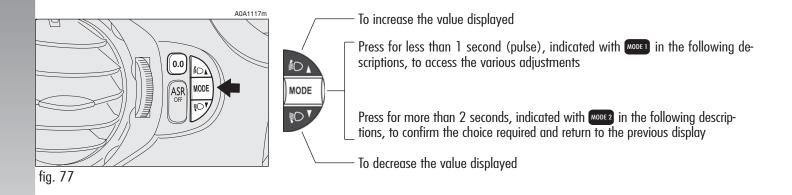


# DIGITAL MULTIFUNCTION DISPLAY

The digital multifunction display shows the following: clock, outside temperature, buzzer setting (buzzer on/off), rheostat (light adjustment), condition of the inertial fuel cut-off switch (**FPS on**) and engine oil level (for JTD versions).

### CONTROL BUTTONS (fig. 77)

To make use of the information the digital display (with the ignition key at **MAR**) is able to give, you should firstly familiarise with the control buttons on the plate at the side of the steering column, using them as described in the following paragraphs. Before doing anything at all, you are advised to read this chapter in full.



### **CLOCK** (fig. 78)

### Adjusting the hours

Press the MODE button in MODE 1, the hours will flash. Set the hour required using button  $\blacktriangle$  or  $\blacktriangledown$ .

Every press on the button will increase by one unit.

Keeping the button pressed obtains automatic fast increase or decrease.

When you are near the value required, release the control and complete adjustment with single presses.

Then press the MODE button in MODE 2 to store.

A0A0009m

clock and outside temperature display



fig. 78

### Adjusting the minutes

Press the MODE button twice in MODE 1, the minutes will flash. Set the minutes required using button  $\blacktriangle$  or  $\blacktriangledown$ .

Every press on the button will increase by one unit.

Keeping the button pressed obtains automatic fast increase or decrease.

When you are near the value required, release the control and complete adjustment with single presses.

Then press the MODE button in MODE 2 to store.

### **OUTSIDE TEMPERATURE** (fig. 79)

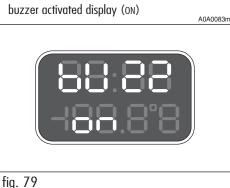
Outside temperature can be viewed on the display lower side, under the hour indication. When the outside temperature is below or  $3^{\circ}$  C, the indicator starts flashing together with the buzzer, to warn the driver about the possible presence of ice on the road. The acoustic signal lasts about 2 seconds, while the outside temperature indicator flashes for about 10 seconds. The signal of possible presence of ice on the road is repeated only if the outside temperature is over  $6^{\circ}$  C and then reaches again  $3^{\circ}$  C.

### **BUZZER** (fig. 79-80)

The buzzer which accompanies the controls may be activated (**ON**) or deactivated (**OFF**); proceed as follows:

Press the MODE button 3 times MODE 1, then use button  $\blacktriangle$  or  $\mathbf{\nabla}$  to turn the buzzer on or off.

The press the MODE button in MODE 2 to store the condition chosen.



### LIGHT RHEOSTAT (fig. 81-82)

This function makes it possible to adjust the lighting (dimming/increasing) of the instrument cluster, odometer display (total and trip meter, headlamp aiming device display) of the clock/outside temperature display and of the radio display.

To access the light rheostat, open the menu by pressing button MODE, select "IL-LU" (first option displayed) by pressing again button MODE and then set the required level using buttons  $\blacktriangle$  or  $\blacktriangledown$ ).

"ILLU" function is available when at least the side/taillights on.

### **Partial lighting**

Keeping the  $\checkmark$  button pressed (on the plate at the side of the steering column) for more than 4 seconds the instrument cluster

buzzer deactivated display (OFF)



**60** fig. 80

is turned off with the exception of the speedometer.

Keeping the **A** button pressed (on the plate at the side of the steering column) for more than 4 seconds the compelte cluster lighting is turned on again.

### display

with minimum brightness



### INERTIAL FUEL CUT-OFF SWITCH ON DISPLAY (fig. 83) (for versions/markets where applicable)

The display shown appears automatically when the inertial fuel cut-off switch cuts in, following a crash of a certain magnitude.

The switch shuts off the supply of fuel.

**IMPORTANT** See the description in the Controls paragraph under the Inertial fuel cut-off switch.

### fig. 81

display

with maximum brightness



fig. 82

inertial fuel cut-off switch on display



fig. 83

A0A0013m

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### Engine oil level check (JTD versions)

Turning the ignition key to **MAR** the digital multifunction display shows the writing "**OIL**" for about 10 seconds.

Then, the engine oil level is detected for some seconds, during which the display shows six bars. At the end of this operation, the display will show the oil quantity (**fig. 84**) and then the information concerning the partial and total kilometres travelled.

**Fig. 84** refers to the correct engine oil display. As the oil level gradually falls, the full bars go off.

**IMPORTANT** To make sure that the engine oil level displayed is correct, carry out the check with the car on the level ground.

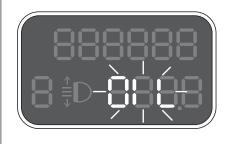
**Fig. 85** refers to the display with an oil level below the foreseen minimum. In this condition the display shows the flashing bars and the message "**OIL**" for about 10 seconds.

**IMPORTANT** In this case the correct engine oil level should be restored as soon as possible, see "Checking levels" in the "car maintenance" chapter.

In case of fuel system failure, after turning the ignition key to **MAR**, the display shows only the message "**OIL**" flashing for about 10 seconds (**fig. 86**). **Fig. 87** refers to the display with an oil level above the foreseen maximum. In this condition the display shows the message "**HIGH OIL**".

**IMPORTANT** In this case, contact Alfa Romeo Authorised Services who will restore the correct engine oil level.

### A0A0713m





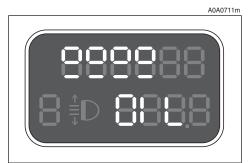


fig. 84







A0A0714m





### RECONFIGURABLE MULTIFUNCTION DISPLAY

The reconfigurable multifunction display is able to display all the useful and necessary information when driving, in particular:

### **INFORMATION ON STANDARD DISPLAY**

- Clock (A-fig. 88);
- Outside temperature (B);
- Date (**C**).

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### **INFORMATION ABOUT CAR CONDITION**

- Trip computer;
- Lighting adjustment (rheostat);
- Display of failure messages with corresponding symbol;
- Display of warning messages with corresponding symbol (e.g.: possible ice on road);
- Gear selected (only for 2.0 T.SPARK Selespeed versions);
- Engine oil level (only JTDM versions).

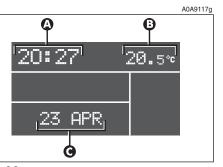
### **CONTROL BUTTONS fig. 89**

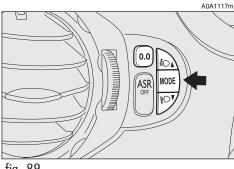
### MODE

Short pressing of button to confirm the choice required and/or move to the next screen;

Long pressing of button to confirm the choice required and return to the standard screen:

▲/▼ to scroll up/down the "Setup menu" options or increase/decrease the value displayed.



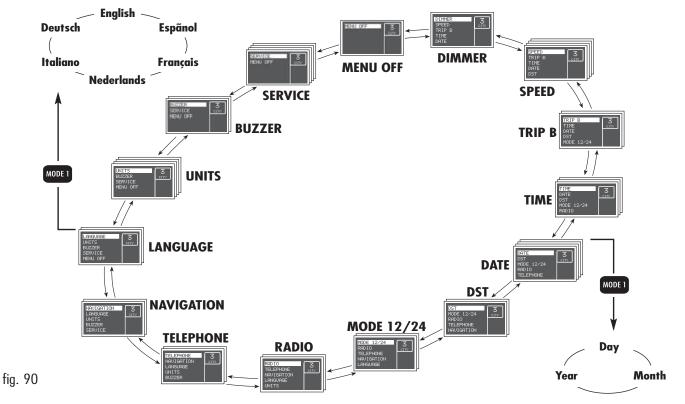






### "SETUP MENU"

In addition there is a "Setup Menu" which makes it possible, through the **MODE** and  $\blacktriangle/\checkmark$  (see **fig. 89**) buttons, to carry out the adjustments and/or setting described on the following pages. It can be activated by pressing shortly **MODE** and comprises a series of functions arranged in a "circular fashion" **fig. 90**.



From the standard screen to access navigation press the button **MODE** for a short time. To navigate inside the menu press the buttons  $\blacktriangle$  or  $\blacktriangledown$ . For safety reasons, when the car is moving, it is possible to access only the limited menu (adjustment of instrument panel lighting on "DIMMER" and setting at "SPEED"). When the car is stationary it is possible to access the extended menu.

### Engine oil level check (JTDM versions)

Turning the ignition key to **MAR** the display shows the engine oil level for some seconds. During this phase, to clear the display and move to next screen, press the **MODE** button shortly.

**IMPORTANT** To make sure that the engine oil level displayed is correct, carry out the check with the car on a level ground.

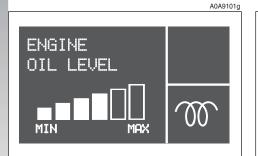
**Fig. 91** refers to the correct engine oil level display. As the oil level gradually falls, the full bars go off leaving room for the empty ones.

**Fig. 92** refers to the display with an oil level below the foreseen minimum. In this condition the bars are all empty.

**IMPORTANT** In this case the correct engine oil level should be restored as soon as possible, see "Checking levels" in the "Car Maintenance" chapter. **Fig. 93** refers to the display with an oil level above the foreseen maximum. In this condition the bars are all full.

**IMPORTANT** In this case, contact Alfa Romeo Authorised Services who will restore the correct engine oil level.

A0A9103g



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MINIMUM OIL LEVEL

MAXIMUM

OIL LEVEL

MAX

fig. 93



press the MODE button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

To cancel the set value:

play shows **OFF**;

OFF;

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### DIMMER

With this function it is possible to adjust the lighting (dimming/brightening) of the instrument cluster, odometer display (total and trip meter), headlamp aiming display, radio display, radio-navigator display (if fitted) and two-zone climate control (if fitted).

- To adjust, proceed as follows:
- press the **MODE** button briefly: the display shows a graduated scale;
- $\Box$  press the buttons  $\blacktriangle/\nabla$  to carry out adjustment.
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

### **Partial lighting**

Keeping the  $\mathbf{\nabla}$  button pressed for more than 4 seconds, the rev counter lighting is turned off.

Keeping the **button** pressed for more than 4 seconds, the complete instrument cluster lighting is turned on again.

**IMPORTANT** In the event of any faults, lighting adjustment (rheostat) is not possible and the display is shown at its maximum brightness.

### SPEED

With this function it is possible to set the car speed limit (km/h) (or mph) which, if exceeded, automatically sounds a buzzer and displays a specific message (see chapter "Warning lights and indications").

To set the limit speed, proceed as follows:

- press the **MODE** button briefly: the display shows **ON**;
- press the **MODE** button briefly and then use the  $\blacktriangle/ \nabla$  buttons to set the speed required (during setting operation, the value flashes on the screen).
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

**IMPORTANT** The possible setting is between 30 and 250 km/h or between 20 and 150 mph depending on the unit set previously (see paragraph "UNITS" described later). Every press (pulse) of the  $\blacktriangle/\Psi$  button increases or decreases by one unit. Keeping the  $\blacktriangle$ / $\nabla$  button pressed obtains fast increase or decrease. When you are near the required setting, release the button and complete adjustment with single presses.

### TRIP B

With this option it is possible to turn **ON/OFF** the TRIP B function (partial trip) which displays the figures relating to: AVERAGE CONSUMPTION B, AVERAGE SPEED B, TRAVEL TIME B and TRAVEL DISTANCE B during a "partial mission" contained in the "general mission" (for further information see "Trip Computer").

To turn on/off this function, proceed as follows:

- press the MODE button briefly: the display shows ON;
- $\Box$  use buttons  $\blacktriangle/ \mathbf{\nabla}$  to select activation or deactivation;
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

### TIME

With this function it is possible to adjust the clock (hours - minutes).

Proceed as follows:

- press the MODE briefly: the display shows the hour;
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;
- press the **MODE** button briefly to adjust the minutes (instead pressing the button for a longer time you return to the standard screen);
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

**IMPORTANT** Each press on the  $\triangle/\nabla$ button increases or decreases by one unit. Keeping the  $\triangle/\nabla$  button pressed obtains the automatic fast increase or decrease.

When you are near the required value, release the button and complete adjustment with single presses.

### DATE

With this function it is possible to adjust the date (day - month - year).

- Proceed as follows:
- press the **MODE** button briefly: the display shows the date;
- press the **A**/**V** buttons to adjust the day;
- press the **MODE** button briefly to adjust the month (or press the button for a longer time to return to the standard screen);
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;
- press the **MODE** button briefly to adjust the year (or press the button for a longer time to return to the standard screen);
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

To activate / deactivate this function, proceed as follows:

RADIO

strument cluster display.

- □ press the **MODE** button briefly: the display shows **ON**;
- $\Box$  use the  $\blacktriangle/ \nabla$  buttons to select activation/deactivation;
- □ press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

Selecting and activating the "RADIO **DISPLAY ON**" function, when the radio is turned on, the dispay repeats the display on the front panel of the radio itself.

**NOTE** For versions with CD MP3 sound system only, if the active radio source is "MP3", the RADIO function is disabled even if **ON**.

### **MODE 12/24**

This function is used to set the clock in the 12h or 24h mode.

To adjust proceed as follows:

- press the **MODE** button briefly: the display shows **12h**:
- $\Box$  press the  $\blacktriangle/ \nabla$  buttons to set (12h or 24h);
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

### **DST (SUMMER TIME)**

With this option it is possible to turn **ON/OFF** the summer time function (which corresponds to + 1 hour in relation to the daylight time).

11:59

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Proceed as follows:

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- press the **MODE** button briefly: the display shows **ON**;
- $\Box$  use the  $\blacktriangle/\nabla$  buttons to select activation or deactivation;
- □ press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

Selecting and activating the "DST ON" function, the display switches from daylight time and vice versa, with no need to intervene manually on the "TIME" function described previously.

### TELEPHONE

With this option it is possible to turn **ON/OFF** the function which shows the name (if listed) and phone number of the caller on the instrument panel display.

To activate/deactivate this function, proceed as follows:

- press the MODE button briefly: the display shows ON;
- □ use the ▲/▼ buttons to select activation/deactivation;
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

Selecting and activating the **"TELE-PHONE DISPLAY ON**" function, when a phone call arrives, the display shows the name (if listed) and phone number of the caller.

### NAVIGATION

With this option it is possible, during use of the radionavigator, to turn **ON/OFF** the function to view the pictograms shown on the radionavigator display on the instrument cluster display.

To activate/deactivate proceed as follows:

- press the MODE button briefly: the display shows ON;
- □ use the ▲/▼ buttons to select activation;
- press the MODE button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

Selecting and activating the "**NAVIGA-TION DISPLAY ON**" function, the instrument cluster display repeats the display (pictograms) on the radionavigator display itself.

### LANGUAGE

With this function it is possible to select the language required for the texts and messages shown on the display.

Proceed as follows:

press the **MODE** button briefly: the display shows the "language" set previously;

 $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;

press the MODE button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

n it is possible to a

With this function it is possible to adjust the volume of the buzzer which accompanies the controls in the car and any failure signals shown on the display.

BUZZER

To adjust the volume, proceed as follows:

- press the **MODE** button briefly: the display shows the "level" of the volume previously set;
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

**IMPORTANT** In the buzzer **OFF** condition any buzzer failure warnings are maintained.

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### UNITS

With this function it is possible to set the unit of measurement for the travel distance (km or mi), the fuel consumption (I/100 km, km/l or mpg) and the temperature (°C or °F).

To set the units, proceed as follows:

- press the MODE button briefly, the display shows "km" or "mi" (depending on what set previously);
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to adjust;
- press the MODE button briefly to select the temperature unit (or press the button for a longer time to return to the standard screen): the display shows °C or °F (depending on what set previously);

 $\Box$  press the  $\blacktriangle/ \nabla$  buttons to adjust;

- press the **MODE** button briefly to select the fuel consumption unit (or press the button for a longer time to return to the standard screen);
- ☐ if the travel distance unit is "km", the display shows "l/100km" or "km/l": press the ▲/▼ buttons to adjust. Instead, if the travel distance unit is "mi" the display shows "mpg";
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

**IMPORTANT** The temperature unit (°C or °F) set on the display is also shown on the bi-zone display (if fitted) and on the radion-avigator display (if fitted).

### SERVICE

With this function it is possible to view the information connected with the correct car maintenance.

To consult this information, proceed as follows:

- press the MODE button briefly: the display shows the deadline in "km" or "mi" depending on what set previously (see paragraph "UNITS");
- $\Box$  press the  $\blacktriangle/\nabla$  buttons to view the required information on the display;
- press the **MODE** button briefly to return to the menu screen or press the button for a longer time to return to the standard screen.

**IMPORTANT** The programmed Maintenance Schedule includes car maintenance every 20,000 km; this is shown automatically, with the ignition key at **MAR**, starting from 2,000 km (or miles) from this deadline and it is shown again every 200 km. This display can only be reset by Alfa Romeo Authorised Services.

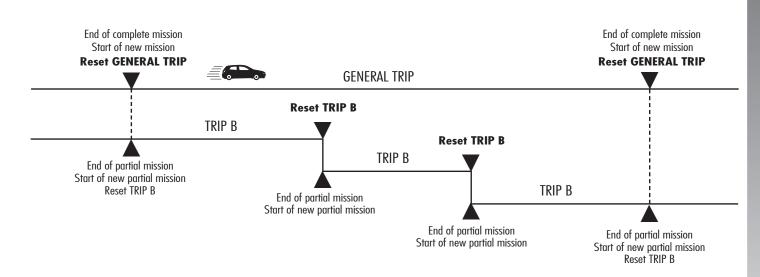
### **MENU OFF**

Selecting this function you return to the standard screen.

### **TRIP COMPUTER**

### General

The "Trip computer" function gives information relating to the operating status of the car on the display. This function comprises the GENERAL TRIP concerning the complete mission of the car and TRIP B concerning the the partial car mission. This function (as shown in the graph below) is contained within the complete mission. Both functions are resettable (reset - start of a new mission).



The GENERAL TRIP displays the figures relating to:

- $\hfill\square$  Average consumption
- □ Actual consumption
- □ Average speed
- □ Travel time
- 🗆 Range

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□ Travel distance

TRIP B displays the figures relating to:

- □ Average consumption B
- □ Average speed B
- □ Travel time B
- □ Travel distance B

#### **Displayed figures**

#### Average consumption

Represents the indicative average of consumptions from the beginning of the new mission.

#### Actual consumption

It shows the variation of the fuel consumption updated constantly. If parking with engine running, the display will show "----".

#### Average speed

It shows the car average speed according to the overall time elapsed from the start of the new mission.

#### Travel time

Time elapsed from the start of the new mission (travel time).

#### Range

It shows the distance the car can still cover before needing fuel if keeping the same driving conditions.

The display shows "----" when the following conditions occur:

- range value below 50 km (or 30 mi);
- car left parked with engine running for long.

**IMPORTANT** The variation of the autonomy value can be influenced by different factors: driving style (see what is described in paragraph "Driving style" in the chapter "Correct use of the car"), type of route (highways, urban, mountain, etc...), use conditions of the car (load transported, tire pressure, etc...). What was described previously must be taken in consideration when planning a trip.

#### Travel distance

It shows the distance travelled by the car from the start of a new mission.

At the beginning of a new mission, due to battery reconnection (reset), the display shows value "0.0".

#### New mission

It starts when the reset operation is carried out:

- "manually" by the user, through prolonged pressure of the SET button;
- "automatically" when the "travel distance" is equal to 9999.9 km (or mi), when the "travel time" is 99:59 (99 hours and 59 minutes) or after reconnecting the battery.

#### **SET BUTTON**

The button fitted on the right lever (**fig. 94**) makes it possible, with the ignition key at **MAR**, to access the GENER-AL TRIP and TRIP B functions.

The **SET** button also makes it possible to reset the GENERAL TRIP and TRIP B functions to start a new mission:

- short pressing: to go to next screen view;
- long pressing: to reset and start a new journey.

## Start of journey procedure (reset)

To start a new journey monitored by the GENERAL TRIP, with the ignition key at **MAR**, press the **SET** button for more than 2 seconds.

The reset operation (pressing the **SET** button for more than 2 seconds) in the presence of the screens concerning the GENERAL TRIP also makes it possible to reset TRIP B.

The reset operation (pressing the **SET** button for more than 2 seconds) in the presence of the screens concerning the TRIP B also makes it possible to reset only the information associated with this function.

**IMPORTANT** The RANGE and ACTUAL CONSUMPTION information cannot be reset.

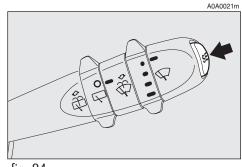


fig. 94



### WARNING LIGHTS AND INDICATIONS

**IMPORTANT** The presence or absence of the warning lights depends on the type of engine and equipment with which the car is fitted.



LOW BRAKE FLUID (red) HANDBRAKE ON (red)

Turning the ignition key to **MAR** the warning light turns on, but it should go off after a few seconds.

#### Low brake fluid

The warning light turns on (on some versions together with the message + symbol shown on the display) when the level of the brake fluid in the reservoir falls below the minimum level, due to a possible leak in the circuit.

#### Handbrake on

The warning light turns on when the handbrake is engaged.





#### HIGH ENGINE COOLANT FLUID TEMPERATURE (red)

Turning the ignition key to **MAR** the warning light (if fitted) turns on, but it should go off after a few seconds.

The warning light turns on (on some versions together with the message + symbol shown on the display) when the engine is overheated. If it turns on when travelling, stop the car leaving the engine on and slightly accelerated to further activate the circulation of the coolant fluid.

If the warning light (on some versions together with the message + symbol shown on the display) does not go off within the next 2 or 3 minutes, stop the engine and contact Alfa Romeo Authorised Services.

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# AIR BAG FAILURE (red)

Turning the ignition key to **MAR** the warning light turns on, but it should go off after a few seconds.

The warning lights stays on glowing steadily if there is an operating failure in the Air bag system.



WARNING

If the *X* warning light does not switch on turning the ignition key to MAR or stays on when the car is travelling there might be a failure in the restraining systems; in this case the air bags or pretensioners may not activate in case of accident or, in a limited number of cases, they may activate by mistake. Before carrying on the journey, contact Alfa Romeo Authorised Services to have the system checked. The failure of the 💐 warning light (warning light off) is also indicated by the flashing for more than 4 seconds of the air bag warning light 🕅.



### LOW ENGINE OIL PRESSURE (red)

Turning the ignition key to **MAR** the warning light (if fitted) turns on, but it should go off after a few seconds.

WARNING If the A warning light turns on when the car is travelling (on some versions there also the message + symbol shown on the display), stop the engine immediately and contact Alfa Romeo Authorised Services.



### LOW BATTERY CHARGE (red)

Turning the ignition key to **MAR** the warning light (if fitted) turns on, but it should go out as soon as the engine is started (with the engine running at idle speed a brief delay in going out is allowed).

If the warning light (on some versions there is also the message + symbol shown on the display) stays on, contact immediately Alfa Romeo Authorised Services.



#### SEAT BELTS NOT FASTENED (red)

The warning light turns on glowing steadily when, with the ignition key at **MAR**, the driver's seat belt is not correctly fastened.



# DOOR CLOSING (red)

The warning light (if fitted) turns on (on some versions there is also the message + symbol shown on the display) when one or more doors or the tailgate are not properly shut.



### BRAKE PAD WEAR (red)

The warning light (if fitted) turns on with the brake pedal pressed (on some versions there is also the message + symbol shown on the display) if the front brake pads are worn; in this case have them changed as soon as possible.

**IMPORTANT** As the car is fitted with wear sensors for the front brake pads, when changing them, also check the rear brake pads





#### **Transmission failure**



The message is shown on the display in case of transmission failure. In this case contact Alfa Romeo Authorised Services as soon as possible.

#### **Reduction of gearshifting**



The message is shown on the display to signal a transmission overuse by the driver.

The irregular use (by the driver) may start automatically a procedure for the protection of the system.



WARNING

If the message remains on the display, contact Alfa Romeo Authorised Services.

#### Manual mode not available



The message is shown on the display when, with the engine running, it is not possible to select the **MANUAL** mode.



#### **Automatic mode** not available



The message is shown on the display when, with the engine running, it is not possible to select the AUTO mode.



WARNING

If the message remains on the display, contact Alfa Romeo Authorised Services.

#### Clutch overheating



overheating.

Press the brake -**Delayed start-up** 



The message is shown on the display accompanied by a buzzer when there is clutch STARTUP

**IMPORTANT** The messages are shown only if start-up is carried out with any gear engaged but neutral (N).



If parking or stopping the car uphill (e.g. at the traffic lights), do not use the accelerator to keep the car stopped, to prevent overheating and thus damaging the clutch. Instead, use the brake pedal and press the accelerator pedal only when about to leave off. If the message remains on the display, contact Alfa Romeo Authorised Services.

WARNING

The messages are alternatively shown on the display, accompanied by a buzzer, when, during start up, the system recognises that the brake pedal is operating.

Under this condition, keep the key in the **AVV** position for at least 6 seconds, with the brake held down: the engine will start. The system is now in the recovery mode (maximum gear allowed: **2**<sup>nd</sup>).

#### Gear not available



The message is shown on the display, accompanied by a buzzer, in the following cases:

 when, because of a system failure, it is not possible to change gear;

or

when, because of a system failure, it is possible only to engage 1<sup>st</sup> (1), 2<sup>nd</sup> (2) or reverse (R).



WARNING

If the message remains on the display, contact Alfa Romeo Authorised Services.

#### **Operation not allowed**



The message is shown on the display, accompanied by a buzzer, when the system does not accept the gearshift by the control lever as the necessary conditions for accepting the gearshift are not present.

## Press the brake pedal - repeat operation



The message is shown on the display, accompanied by a buzzer, when in some conditions, due to safety reasons, there is an attempt to change gear without pressing the brake pedal first.



#### **Engage N (neutral)**



The message is shown on the display, accompanied by a buzzer, when the system asks the driver to carry out the manoeuvre.

Shifting the gear to  $(\mathbf{N})$  the message on the display must go off.





#### EOBD ENGINE CONTROL SYSTEM FAILURE (amber) (for versions/ markets where applicable)

In normal conditions, turning the ignition key to **MAR**, the warning light turns on, but it should go off when the engine has started. The initial turning on indicates that the warning light is working properly.

If the warning light stays on or turns on when travelling (on some versions the message + symbol are shown on the display):

**glowing steadily** - means a fault in the supply/ignition system which could cause high emissions at the exhaust, possible lack of performance, poor handling and high consumption levels. In these conditions it is possible to continue driving without however demanding heavy effort or high speeds. Prolonged use of the car with the warning light on may cause damage. Contact Alfa Romeo Authorised Services as soon as possible. The warning light goes off if the fault disappears, but it is still stored by the system; **a flashing** - indicates the possibility of damage to catalyst (see "EOBD system" in this chapter). If the warning light flashes, it is necessary to release the accelerator pedal to lower the speed of the engine until the warning light stops flashing; continue the journey at moderate speed, tyring to avoid driving conditions that may cause further flashing and contact Alfa Romeo Authorised Services as soon as possible.

If, turning the ignition key to MAR, the <sup>(C)</sup> warning light does not turn on or if it turns on glowing steadily or flashing when travelling, contact Alfa Romeo Authorised Services as soon as possible.



Turning the ignition key to **MAR** the warning light (if fitted) flashes only once and then go off. If, with the ignition key at **MAR**, the warning light stays on, this indicates a possible failure (see "Alfa Romeo CODE system").

**IMPORTANT** The turning on at the same time of the C and C warning lights indicates a failure of the Alfa Romeo CODE system.

For the versions equipped with reconfigurable multifunction display: if with the engine running the message + symbol are shown on the display, contact Alfa Romeo Authorised Services.

If, with the engine running, the R warning light flashes (on some versions together with the message + symbol on the display), this means that the car is not protected by the engine inhibitor device (see "Alfa Romeo CODE system" in this chapter). Contact Alfa Romeo Authorised Services to have all the keys memorised.



**GLOW PLUGS** WARMING (diesel versions) (amber)

#### **GLOW PLUGS WARNING FAILURE (diesel versions)** (amber)

#### Glow plug warming

Turning the ignition key to **MAR**, the warning light turns on (on some versions it is shown on the reconfigurable multifunction display). The warning light turns off when the glow plugs have reached the pre-established temperature. Start the engine as soon as the warning light goes off.

**IMPORTANT** With a high environment temperature, the warning light may turn on for an imperceptible length of time.

#### Glow plug warming failure

The warning light (if fitted) turns on (on some versions the message + symbol are shown on the display) when there is a failure in the glow plug warming system. Contact Alfa Romeo Authorised Services as soon as possible to have the fault eliminated.



#### WATER IN FUEL **OIL FILTER** (diesel versions) (amber)

The warning light (if fitted) turns on (on some versions the message + symbol are shown on the display) when there is water in the fuel oil filter.



The presence of water in the supply circuit may cause serious damage to the entire injection system and cause irregular engine operation. If the 🚔 warning light turns on (or, on some versions, the message + symbol are shown on the reconfigurable multifunction display) contact Alfa Romeo Authorised Services as soon as possible to have the system relieved. If the same warning is shown after refuelling, maybe some water was introduced in the reservoir: in this case turn the engine off immediately and contact Alfa Romeo Authorised Services.



#### DIESEL PARTICULATE FILTER CLOGGED (diesel versions) (amber)

The warning light (if fitted) turns on (on some versions the message + symbol are shown on the display) when the particulate filter is clogged and the driving profile does not make it possible to start automatically the regeneration procedure.

To allow the regeneration procedure and to clean the filter, it is advisable to keep the car travelling until the warning light goes off (or, on some versions, the symbol goes off on the display).



#### INERTIAL FUEL CUT-OFF SWITCH (for versions/markets where applicable)

The message on the display is shown when the inertial fuel cut-off switch is triggered, on some versions together with the warning light  $\Im$ ).

WARNING If, after the display of the message, the smell of fuel or leaks from the supply system are noted, do not re-engage the switch to avoid the risk of fire.





Turning the ignition key to **MAR** the warning light (if fitted) turns on, but it should go off after a few seconds.

The warning light turns on (on some versions the message + symbol are shown on the display) when the system is inefficient. In this case, the braking system keeps its effectiveness unchanged, but without the potential offered by the ABS system.

Caution is advisable, particularly in all cases of less than perfect grip. It is also necessary to contact Alfa Romeo Authorised Services as soon as possible.



#### **INEFFICIENT EBD** (red) (amber)

The turning on at the same time of the (1) and (1) warning lights (on some versions the message + symbol are shown on the display) with the engine

running indicates an EBD system failure: in this case heavy braking may cause rear wheels to lock before time, with the possibility of skidding.

Driving extremely carefully, immediately contact the nearest Alfa Romeo Authorised Service to have the system checked.



#### **PASSENGER'S FRONT AIR BAG** DEACTIVATED (amber) (upon request for versions/

markets where applicable)

With the passenger's Air bag engaged, turning the ignition key to **MAR** the warning light turns on, but it should go off after approximately 4 seconds.

The warning light turns on when the passenger's front Air bag is deactivated.

WARNING The warning light \∠ \* also shows a failure of the 🛪 warning light. This condition is signalled by the flashing of the  $\bigvee^{\mathbb{Z}^{k}}$ warning light over the normal 4 seconds. In this case the 🏋 warning light may fail to signal possible faults in the restraining systems. Before going on, contact Alfa Romeo Authorised Services to have the system checked.



Turning the ignition key to **MAR** the warning light turns on, but it should go off after a few seconds.

If the warning light does not go out or stays on when travelling (on some versions together with the message + symbol shown on the display), contact Alfa Romeo Authorised Services.

The flashing of the warning light when travelling indicates the cutting in of the VDC system.



#### ASR SYSTEM (WHEEL ANTISKID SYSTEM) (if fitted) (amber)

Turning the ignition key to **MAR**, the warning light turns on, but it should go off after a few seconds.

The warning light turns on when the system is switched off. The warning light flashes when the system cuts in, to alert the driver that the system is adapting to the road surface grip conditions.

The turning on of the warning light (on some versions together with the message + symbol shown on the display) also indicates a failure of the ASR system. In this case contact Alfa Romeo Authorised Services as soon as possible.



#### LIGHT FAILURE (amber)

Turning the ignition key to **MAR**, the warning light (if fitted) turns on, but it should go off after a few seconds.

The warning light turns on (on some versions together with the message + symbol shown on the display) when a fault to anyone of the following lights is detected:

- sidelights
- braking lights and corresponding fuse
- rear fog lights
- number plate lights.

The failure referring to these lights could be: one or more blown bulbs, a blown protection fuse or a cut-off electric connection.



FUEL RESERVE (amber)

The the warning light turns on (on some versions together with the message + symbol shown on the display) when about 7 litres of fuel are left in the tank and on certain versions when autonomy is below 50 km.



The warning light turns on when the direction indicator control lever is moved downwards or, together with the right indicator, when the hazard warning light button is pressed.



The warning light turns on when the direction indicator control lever is moved upwards or, together with the left indicator, when the hazard warning light button is pressed.

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SIDE/TAILLIGHTS (green)

The warning light turns on when side/taillights or low beams are turned on.



#### CRUISE CONTROL (where provided) (green)

The warning light turns on when turning the Cruise Control knurled ring to ON.



MAIN BEAMS (blue)

The warning light turns on when the sidelights or dipped beams are turned on.



#### POSSIBLE PRESENCE OF ICE ON THE ROAD

On some versions the message + symbol are shown on the display x to warn the driver of the possible presence of ice on the road, together with a buzzer which sounds when the outside temperature reaches or falls below 3° C.

The buzzer sounds for about 2 seconds while the message is shown for about 10 seconds; after this time, only the symbol remains until the temperature exceeds 6°C or the engine turns off.

If, during travelling, after the displayed warning about the possible presence of ice on the road, the temperature exceeds 6°C, the symbol 🗱 will go off and, if the temperature reaches again 3°C, a new message will be shown (with the outside temperature flashing) + symbol 🗱 accompanied by a buzzer.

#### WARNING LIGHT FAILURE

On some versions the display shows a message when a fault is detected to one the following warning lights: ABS warning light, EBD warning light, ASR warning light, VDC warning light.

#### **ENGINE OIL SENSOR FAILURE**

On some versions the display shows a message when a fault is detected to one the following warning lights: ABS warning light, EBD warning light, ASR warning light, VDC warning light.

#### **SPEED LIMIT EXCEEDED**

On some versions the warning light turns on, together with the message + symbol on the display and the sounding of the buzzer, when the vehisle exceeds the speed limit set previously (see "Reconfigurable multifunction display").

#### **RANGE (Trip Computer)**

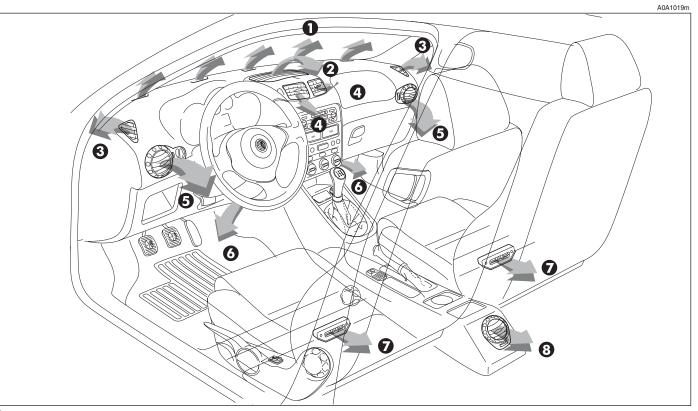
On some versions the message + symbol are shown on the display when range is below 50 km.

#### **SCHEDULED MAINTENANCE**

On some versions the message + symbol are shown on the display 2000 km from the deadline given in the Scheduled Maintenance Programme.

The message is shown again at timed intervals, turning the ignition key to **MAR** every 200 km.

### **CLIMATE CONTROL SYSTEM**



### fig. 95

1 Upper stationary vent for defrosting or demisting windscreen - 2 Upper centre adjustable vent - 3 Stationary vents for defrosting or demisting side windows - 4 Adjustable centre, swivel vents - 5 Side adjustable and swivel outlets - 6 Front feet area fixed vents - 7 Rear feet area fixed vents - 8 Rear adjustable swivel outlet (upon request for versions/markets where applicable).

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#### **UPPER CENTRE VENT ADJUSTMENT** (fig. 96)

The vent (1) has an opening/closing control ( $\bf{A}$ ).

- $\bullet$  = Completely closed.
- = Completely open

#### CENTRE SWIVEL VENT ADJUSTMENT (fig. 96)

Each vent (2) has a lever (B) which makes it possible to direct the flow of air (in the 4 directions: up/down, right/left).

To adjust the air flow, use control  $(\mathbf{C})$ :

- = Completely closed.
- = Completely open

#### SIDE SWIVEL OUTLET ADJUSTMENT (fig. 97)

To direct the flow of air, turn the knurled ring  $(\mathbf{A})$  and/or directly use control  $(\mathbf{B})$  as required.

To adjust the air flow, use control  $(\mathbf{C})$ :

- = Completely closed.
- Partially open.
- II = Completely open

**D** - fixed vent for defrosting or demisting side windows.

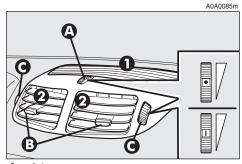
#### REAR SWIVEL OUTLET ADJUSTMENT

(fig. 98) (upon request for versions/markets where applicable)

To direct the flow of air, turn the knurled ring  $(\mathbf{A})$  and/or directly use control  $(\mathbf{B})$  as required.

To adjust the air flow, use control (C):

- $\bullet$  = Completely closed.
- Partially open.
- **II** = Completely open





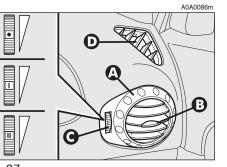
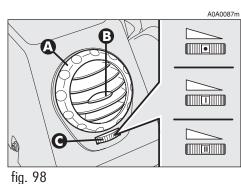


fig. 97



### MANUAL CLIMATE CONTROL SYSTEM (upon request for versions/markets where applicable)

**GETTING TO KNOW YOUR CAR** 

Below is a brief description of the heating and manual climate control system (upon request for versions/markets where applicable). The only difference between the two systems is the climate control compressor button  $\mathbf{x}$ , fitted only on the versions with manual climate control system. To obtain the maximum functions of both systems in the different conditions of use, set the pointer on the rings of the corresponding knobs as illustrated.



**IMPORTANT** An important feature of the manual climate control system is airdehumification. It is always advisable to turn the climate control

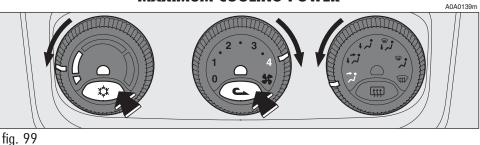
compressor on to prevent possible misting.



WARNING

With low external temperature the climate control compressor is unable to work. It is therefore inadvisable to use the inside air recirculation function C with low outside temperature as windows may mist over quickly.

#### **MAXIMUM COOLING POWER**



**MAXIMUM COOLING POWER** 

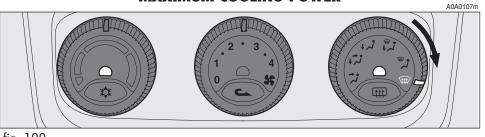


fig. 100



MAXIMUM COOLING POWER



For more detailed information about the system and how to make the best use of it, read the instructions given in the following pages.

#### **CONTROLS** (fig. 102)

- 1 Air temperature adjustment knob
- 2 Fan speed adjustment knob
- **3** Air distribution selector knob

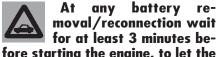
4 - Climate control compressor on/off button 🗱 (only versions with manual climate control system)

- **5** Inside air re-circulation on /off button **C**
- **6** Rearscreen heating on/off button **[ttt]**.

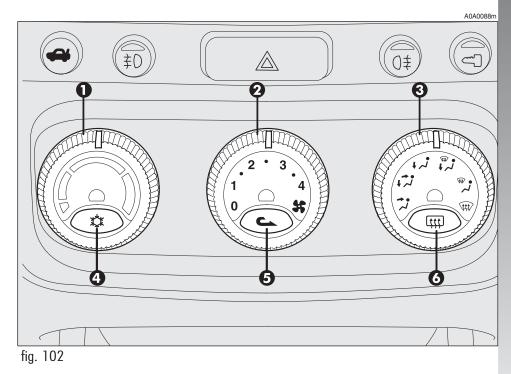


The coolant used for the climate control system is R134a which meets current regulations and does not harm the environment in the event of accidental spillage.

Absolutely avoid the use of other fluids which are incompatible with the system components.



moval/reconnection wait for at least 3 minutes before starting the engine, to let the climate control unit reset the position of the electrical actuators controlling the temperature and the air distribution.



#### **AIR TEMPERATURE ADJUSTMENT KNOB**

Turn the ring of knob (1-fig. 102) clockwise or counter-clockwise respectively to higher or lower the temperature of the gir admitted to the passenger compartment.

#### FAN SPEED ADJUSTMENT **KNOB**

Turning th ring of knob (2-fig. 102) it is possible to select one of the fan speeds to personalise the amount of air admitted to the passenger compartment.

Position **0** turns off the fan and automatically engages inside air re-circulation (shown by the lighting up of the led next to the button 5 () thereby shutting off the inlet of outside air to the car.

To switch off inside air re-circulation, press button (5) C.

If the fan is at **O** air recirculation will turn on automatically. When switching the engine off, at next restarting if the fan is at **0** yet, air recirculation will turn on again although previously turned off.

#### **AIR DISTRIBUTION KNOB**

Turning the knob ring (3-fig. 102), the following positions are selected in sequence:

Air flow towards the upper centre, front cen-

tre vents and from the front and rear -*i* outlets (if fitted) with the possibili-

ty of adjustment using the controls on the actual vents.

Splitting of air flow between the previous vents and the lower part of the pas-÷ senger compartment.

Air flow to the lower part of the passenger نر ا compartment (front and rear).

Splitting of air flow between the windscreen/front side windows and

the lower part of the passenger compartment.

Air flow towards the windscreen and front side windows for demisting/de-Ŵ frostina.

Flow air to allow auick demisting/defrosting of the windscreen and front side

windows, turning on rearscreen heating for defrosting/demisting (function called MAX-DEF)

#### **CLIMATE CONTROL COMPRESSOR ON/OFF** BUTTON 🎞 (only versions with manual climate control system)

The climate control compressor is engaged pressing button (4-fig. 102) 🇱 and the fan is also operated automatically at first speed even if the knob (2) is at position **0**. When the system is operating the corresponding led next to the button turns on. The climate control compressor can only work with the engine running and external temperature not very low. If the climate control compressor is turned off, air re-circulation is engaged automatically, turning off the corresponding led, to prevent the windows from misting. Inside air re-circulation may also be engaged pressing the button (5)  $\bigcirc$ . If the fan is at **0** the climate control system compressor will not turn on.



#### WARNING

**Operation of the climate** control compressor is necessary for cooling and dehumidifying the air; it is advisable to keep this function always on, to prevent window misting problems.

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#### INSIDE AIR RE-CIRCULATION ON/OFF BUTTON

Pressing button (**5-fig. 102**)  $\frown$  activates inside air re-circulation and the led next to the button lights up.

In this case the climate control system directly treats the air contained in the passenger compartment, the fan is on.

To switch the air re-circulation feature off and withdraw air from outside, press the button again.

### WARNING

The inside air re-circulation system makes it possible to reach the required "heating" or "cooling" conditions faster. It is however inadvisable to use it on rainy/cold days as it would considerably increase the possibility of the windows misting inside, especially if the climate control system is off.

#### WARNING

#### WARNING

It is advisable to turn on the inside air re-circulation system in queues or tunnels to avoid admitting polluted air from outside. The prolonged use of this function should however be avoided, especially with several people on board, to avoid the possibility of the windows mistinginside. **IMPORTANT** The condition and operating mode of the climate control compressor and inside air re-circulation, shown by the turning on of the leds next to the buttons (4)  $\pm$  and (5) -, are also stored when the engine is off. Therefore, when the engine is started the selectionschosen before turning off are resumed.

#### REARSCREEN HEATING ON/OFF BUTTON [ttt]

Pressing the button (**6-fig. 102**) [ttt] turns on the demisting/defrosting of the rearscreen, and if present, the wing mirror heating coils; simultaneously the led next to the button turns on. This function is timed and switched off automatically after 20 minutes. To turn off earlier, press the button again.

**IMPORTANT** The system automatically turns on rearscreen heating if the temperature is below 3°C.

**IMPORTANT** Do not apply stickers on the inside of the rearscreen over the heating filaments to avoid damage which might cause it to stop working properly.



**GETTING TO KNOW YOUR CAR** 

When cleaning the inside of the rearscreen, take care not to damage the heating filaments.

#### **AIR COOLING AND DEHUMIDIFYING** (fig. 102/a)

To cool and dehumidify the air with the engine running and the windows shut, proceed as follows:

- temperature adjustment knob (1), pointer on blue sector.

- air quantity adjustment (2), knob pointer on the speed required to personalise the amount of air admitted

- air distribution (3), knob pointer at the required symbol.

- air vents completely open.

- compressor on enable button(4) pressed \$\$\$ (for versions/markets where applicable) (led next to button on) (only for versions with manual climate control system).

Wishing to moderate the cooling action, increase the temperature turning the knob ring (1) towards the red sector, until obtaining the required temperature.

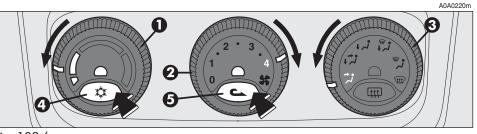


fig. 102/a

Proceed as follows to obtain the maximum cooling power:

- set the pointer of knob (1) as far as it will go counter-clockwise (minimum temperature blue sector);

- set the pointer of knob (2) to the maximum fan speed.

- press the inside air re-circulation on button (5) C.

- set the pointer of the air distribution knob (3) to the required position (position  $\vec{r}$  is recommended).

- air vents completely open.

- compressor on enable button (4) 🌣 pressed (led next to button on) (only for versions with manual climate control system).

The use of the climate control system at minimum temperature should be restricted to short lengths of time and very hot climates, to avoid over-cooling the passenger compartment.

#### DEMISTING AND/OR DEFROSTING THE WINDSCREEN AND FRONT SIDE WINDOWS, REARSCREEN AND WING MIRRORS (\(\tt) MAX-DEF function) (fig. 103)

Proceed as follows:

- turn the ring of the air distribution knob (3) to the  $\Im$  symbol.

The climate control activates all the functions necessary to quicken demisting/defrosting of the windscreen and side windows with timing (switching off automatically after **3** minutes), as follows:

it turns on the climate control compressor (only for versions with manual climate control system);

- switches off air re-circulation, if engaged;

- sets the maximum air temperature;

- operates the fan at a predefined speed;

 directs the flow of air towards the windscreen and front side window vents;

 turns on rearscreen heating and, if present, the wing mirror coils.

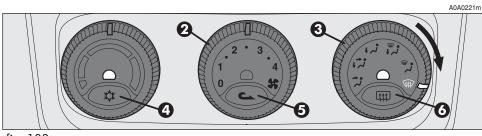


fig. 103

**IMPORTANT** If the engine is not hot enough, the function does not immediately engage the pre-established fan speed, to restrict the inlet of air to the passenger compartment that is not warm enough to demist the windows.

After demisting/defrosting, simply use the controls to maintain the optimum conditions of vision and comfort.

**IMPORTANT** The hotter the engine the more effective defrosting will be.

**IMPORTANT** In cases of heavy damp and/or rain and/or big differences in temperature between inside the car and outside, it is advisable to proceed as follows to demist the windows:

- air re-circulation off, led next to button  $(5) \subset$  off;

- pointer of knob (2) at fan second speed at least;

- pointer of knob (3) on symbol  $\tilde{\mathcal{V}}$  with the possibility of passing to position  $\tilde{\mathcal{V}}$  if more misting is noted;

- climate control compressor button (4) pressed, led next to button on (only for versions with manual climate control system).

To defrost/demist the rearscreen, press button (**6**) [<u>ttt</u>], led next to button on.

#### HEATING (fig. 104)

To obtain the temperature required, proceed as follows:

- temperature adjustment knob pointer (1) on the red sector as required;

- air augntity adjustment knob pointer (2) on the fan speed required to personalise the amount of air admitted:

- air distribution knob pointer (3) on the required position.

To obtain the maximum heating power proceed as follows:

- knob pointer (1) as far as it will go clockwise (maximum temperature red sector);

- knob pointer (2) on maximum fan speed;

- air distribution knob pointer (3) on the required position (position  $\checkmark$ ) is recommended.

To keep the air in the passenger compartment dehumidified, you are recommended to press the climate control compressor enable button (4) (for versions/markets where applicable) 🇱 (only for versions with manual climate control system).

**IMPORTANT** To be able to obtain satisfactory passenger compartment warming, the engine should have reached normal operating temperature.

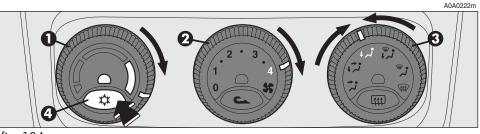


fig. 104

#### **POLLEN FILTER** (for versions/markets where applicable)

The filter has the specific capability of filtering external air, thus admitting to the passenger compartment purified air, free from particles such as dust, pollen, etc.

In addition to the above mentioned functions, is also reduces the concentration of pollutants.

The filtering action is active in all air inlet conditions and it is clearly more effective with the windows closed.

Have the conditions of the filter checked at least once a year, preferably at the onset of summer by Alfa Romeo Authorised Services.

If the car is habitually used in dusty or polluted areas, the filter should be checked and replaced at shorter intervals than those specified in the Programmed Maintenance Schedule.



If the filter is not replaced the efficiency of the climate control system may be seriously compromised up to blocking the air flow at the outlets and vents.

**GETTING TO KNOW YOUR CAR** 

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### AUTOMATIC TWO-ZONE CLIMATE CONTROL SYSTEM (upon request for

#### versions/markets where applicable)

#### To start the system (fig. 105):

- turn the knob rings to set the required temperatures (driver's side - passenger's side).

- press the AUTO button.

**IMPORTANT** The climate control system makes it possible to personalise the temperatures required on the two side with a maximum difference of 7°C between the driver's side and the passenger's side.

**IMPORTANT** The climate control compressor only works with the engine running and an outside temperature above 4°C.



WARNING With low external tem-

perature the climate control compressor is unable to work. It is therefore inadvisable to use the inside air recirculation function with low outside temperature as windows may mist over quickly

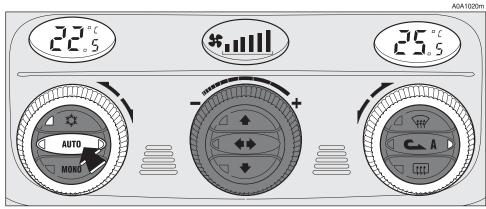


fig. 105

For more detailed information about the system and how to make the best use of it, read the instructions given in the following pages.

The coolant used for the climate control system is R134a which meets current regulations and does not harm the environment in the event of accidental spillage. Absolutely avoid the use of other fluids which are incompatible with the system components. At any battery removal/reconnection wait for at least 3 minutes before starting the engine, to let the climate control unit reset the position of the electrical actuators controlling the temperature and the air distribution.

#### GENERAL

**GETTING TO KNOW YOUR CAR** 

The car is fitted with a two-zone climate control system, controlled by an electronic control unit which makes it possible to separately adjust the air temperature on the driver's side and on the passenger's side. To obtain optimum temperature control in the two areas of the passenger's compartment, the system has an outside sensor, a passenger's compartment sensor and a two-zone sun ray sensor. On some versions the system is integrated with an incipient misting sensor installed behind the inside rear-view mirror, capable of "controlling" a predefined area of the windscreen inner surface which can automatically act on the system to prevent or reduce misting through a series of operations such as: opening air re-circulation, enabling the compressor, air flow to the windscreen, fan speed sufficient for demisting; in the case of heavy misting, enabling the **MAX-DEF** function.



To ensure correct operation of the incipient misting sensor, stickers must not be applied (road licence holder, time card, etc.) in the "control" area between the sensor and the windscreen. Care should also be given to cleaning the windscreen and the actual sensor, avoiding the accumulation of dust and other substances.

**IMPORTANT** The demisting procedure is enabled each time the ignition key is turned to MAR or pressing the AUTO button. When this procedure is working it can be turned off pressing one of the following buttons: compressor, air recirculation, air flow, air capacity. This operation inhibits the incipient misting sensor signal until the AU-**TO** button is pressed again or the next time the ignition key is turned to MAR.

On certain versions, the system is integrated by an antipollution sensor capable of automatically switching on inside air re-circulation to lessen the harmful effects of polluted air in cities, gueues, tunnels and operation of the windscreen washer (with the typical smell of spirit).

**IMPORTANT** The function of the antipollution sensor is subordinate to safety conditions; therefore disabling the climate control compressor or with low external temperature, the sensor is disabled. In any case, the sensor can be re-enabled pressing the recirculation button C until taking it to the automatic mode.

Air quality control is also entrusted to a combined particle and activated carbon filter. The climate control system automatically controls and adjusts the following parameters and functions:

- inside temperature (separately on driver's side and passenger's side)

- fan speed
- air distribution
- inside air re-circulation on/off

- climate control compressor on/off enable.

It is possible to change the setting of the following functions manually:

- fan speed
- air distribution
- inside air re-circulation on/off

- climate control compressor on/off enable.

The control of functions not changed manually remains automatic and in any case the temperature of the air admitted to the passenger compartment is controlled automatically according to the temperatures set on the driver's and passenger's displays.

**IMPORTANT** Manual selections prevail over automatic ones and remain in storage until the user decides to resume automatic control. The settings selected manually are stored when the engine is switched off and resumed the next time it is started.

#### CONTROLS (fig. 106)

1 - Inside temperature set display (driver's side)

**2** - Inside temperature adjustment knob (driver's side)

**3** - Fan speed set and system off display (**OFF**)

**4** - Knob for adjusting the fan speed and switching the system off

**5** - Inside temperature set display (passenger's side)

**6** - Inside temperature adjustment knob (passenger's side)

7 - Maximum defrosting/demisting on/off button for windscreen and front side windows, rearscreen heating and wing mirror coils (**MAX-DEF** function (**W**))

**8** - Inside air re-circulation on/off button (manual/automatic)

**9** - Rearscreen heating and wing mirror defrosting on/off button [ttt]

**10** - Air distribution selection buttons

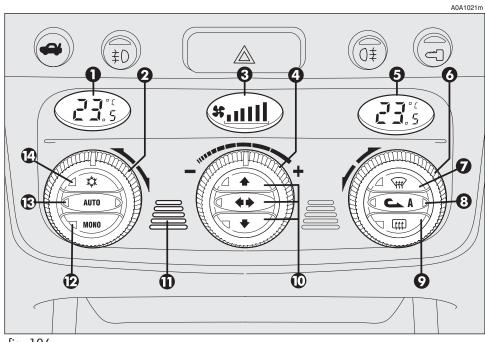


fig. 106

**11** - Inside air temperature sensor

**12** - Button for aligning the temperature set on the passenger's side with that on the driver's side **mono** 

**13** - Button for selecting the system automatic mode **AUTO** 

14 - Climate control compressor on/off enable button  $\clubsuit$ 

#### HOW TO USE THE AUTOMATIC TWO-ZONE CLIMATE CONTROL SYSTEM (fig. 106)

**IMPORTANT** The knob rings do not have a mechanical stopper therefore, once the maximum or minimum value has been reached, they are free to turn in both directions.

The system can be started in different ways, but it is advisable to set the temperatures required on the displays; then press the (**13**) **AUTO** button.

This way the system will start working completely automatically to reach the temperatures set as quickly as possible and then maintain them.

During completely automatic system operation, the temperatures set can be changed at any time; the system will automatically change its settings to adjust to the new requirements. **IMPORTANT** To be able to be accepted by the system, the difference in the temperature between the driver's and passenger's side must be within a range of 7°C.

It is possible to personalise the choices made automatically by the system interveningmanually on the following controls:

- fan speed adjustment knob (4)

- air distribution selection buttons (10)

inside air re-circulation on/off button (8)

- climate control on enable button (14)

Manually selecting one or more of these functions turns off the right led on the button (13) AUTO.

With one or more functions engaged manually, the adjustment of the temperature of the air admitted to the passenger compartment continues to be controlled automatically by the system (left led on button **13 AUTO** on) except with the climate control compressor off.

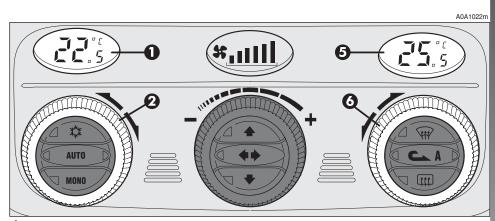
In fact, in this condition the air admitted to the passenger compartment cannot have a lower temperature than the outside air; this condition is indicated by the turning off of the two leds on button (13) AUTO and flashing on the display (1) and/or (5) related with the temperature rate that cannot be obtained.

#### AIR TEMPERATURE ADJUSTMENT KNOBS (fig. 107)

Turning the rings of knobs (2 or 6), clockwise or counter-clockwise, respectively highers or lowers the temperature of the air required respectively in the left zone (knob 2) or right zone (knob 6) of the passenger compartment. The temperatures set are shown on the displays (1) and (5) above the knobs.

Separate operation of the temperatures set is restored automatically using knob (**6**).

Turning the knob rings clockwise or counter-clockwise until they reach the extreme selections **HI** or **LO**, the maximum heating or cooling functions are respectively engaged:





#### HI function (highest heating power - fig. 108)

This is turned on setting on the display a temperature above 32.5°C, and can be activated independently from the driver's or passenger's side or both; this setting brings the system to the "monozone" mode and is shown on both displays.

This function can be engaged when requiring to heat the passenger compartment as quickly as possible, exploiting the maximum potential of the system.

This function uses the maximum temperature of the coolant fluid, while air distribution and fan speed are controlled according to the system settings.

#### This function is unadvisable with the engine cold to prevent admitting air that is not warm enough to the passenger compartment.

All manual settings are possible with this function on.

To switch the system off, simply turn the ring of knob (2) or (6) of the temperature set to a value below 32.5°C; the opposite display will show 32.5°C.

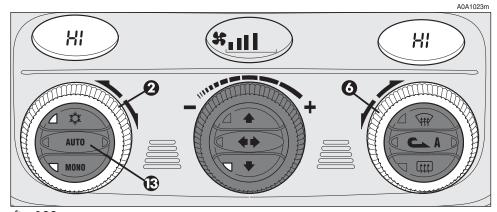


fig. 108

Pressing key (**13**) **Auto** the display will show a temperature of 32.5°C and returns to an operating condition with automatic temperature adjustment.

#### LO function (highest cooling power - fig. 109)

This is turned on setting on the display a temperature below 16.5°C; this setting is shown on both displays.

This function can be engaged when requiring to cool the passenger compartment as quickly as possible, exploiting the maximum potential of the system.

The function cuts off air heating, engages inside air re-circulation (to prevent admitting hot air to the passenger compartment) and the climate control compressor, takes air distribution to  $\bigstar$  and the fan speed as set by the system.

All manual settings are possible with this function on.

To switch the function off, simply turn the ring of knob (2) or (6) of the temperature set on a value above 16.5°C; the opposite display will show 16.5°C.

Pressing key (**13**) **Auto** the display will show a temperature of 16.5°C and returns to an operating condition with automatic temperature adjustment.

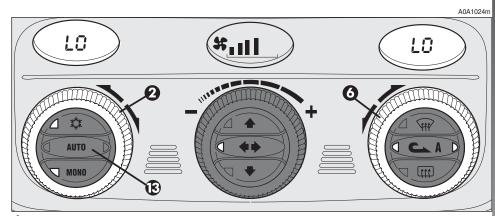


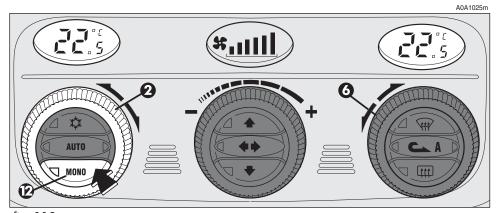
fig. 109

#### MONO BUTTON FOR ALIGNMENT OF THE TEMPERATURE SET (fig. 110)

Pressing button (12) **MONO** automatically aligns the temperature on the passenger's side with that on the driver's side, therefore it is possible to set the same temperature between the two zones simply turning the ring of knob (2) on the driver's side.

This function is provided to simplify temperature adjustment of the whole passenger compartment when only the driver is on board.

Separate operation of the temperatures set is automatically restored when the passenger uses the ring on knob (6) or presses button (12) **MONO**.





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#### **FAN SPEED ADJUSTMENT KNOB** (fig. 111-112)

Turning the ring of knob(**4**), clockwise or counter-clockwise, increases or decreases the speed of the fan, thus the amount of air admitted to the passenger compartment; the 16 selectable speeds are shown on a bar (in steps of 3), up to a maximum of 6 bars lit:

- maximum fan speed = all bars lit;
- minimum fan speed = one bar lit.

The fan can be cut off (all bars off) only if the climate control compressor has been switched off pressing button (14) 🇱. To restore automatic fan speed control, after a manual adjustment, press button (13) AU-**TO**. Completely turning the ring of knob (**4**) counter-clockwise switches the system off, with the following situation: display (1) off; display (5) off; centre display (3) with litdisplay **OFF** and left led on inside air re-circulation button (8) 📥 on.

**IMPORTANT** Pressing the inside air recirculation button  $(8) \frown$  it is possible to obtain the inlet of untreated outside air to the passenger compartment.

To turn the system on again, simply turn the ring of knob (4) clockwise, or press any one button, except the inside air re-circula-

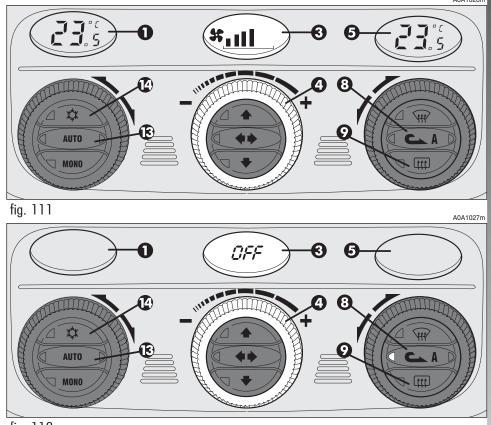


fig. 112

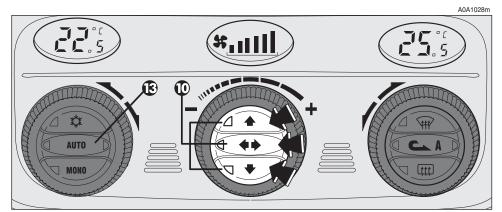
tion (8) and rearscreen (9) buttons; this operation restores all the operating conditions stored previously.

**IMPORTANT** On leaving the **OFF** condition, inside air re-circulation **C** returns to the condition prior to switching off.

#### **AIR DISTRIBUTION SELECTION BUTTONS** (fig. 113)

Pressing one or more buttons (**10**) it is possible to manually choose one of the 5 possible air distributions to the passenger compartment:

- Flow of air to the dashboard centre and side outlets and rear outlet (if fitted).
- Splitting of the air flow between the vents to the lower part of the passenger's compartment (warmest air) and the dashboard centre and side outlets and the rear outlet (if fitted) (coolest air). The air flow distribution is particularly useful in spring and autumn, when the sun is shining.
- Air flow towards the front and rear lower parts of the passenger's compartment. Due to the natural tendency of heat to spread upwards, this type of distribution allows heating of the passenger's compartment in the shortest time, also giving a prompt feeling of warmth to the coldest parts of the body.



#### fig. 113

- Splitting of the air flow between the windscreen and side window defrosting/demisting vents and the lower part of the car. This type of air distribution allows satisfactory heating of the passenger's compartment while preventing possible misting of the windows.
- Air flow to the windscreen and front side window vents to demist or defrost them.

**IMPORTANT** Pressing one of these buttons turns on (led on button itself on) or off (led on button off) the associated functions if the combination chosen is among the 5 possible ones; if not it only activates the main function of the button pressed, without the possibility of turning off with another press (at least in one distribution the air flow should be spread in the passenger compartment).

To restore automatic air distribution control after a manual selection, press button (13)AUTO.

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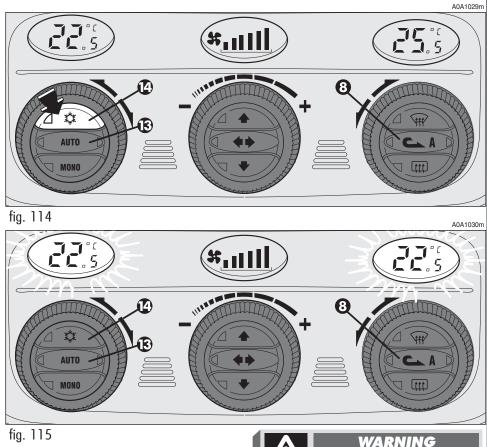
#### CLIMATE CONTROL COMPRESSOR ON/OFF ENABLE BUTTON 🂢 (fig. 114)

Pressing button (14) x enables the turning on of the climate control compressor. This condition is shown by the lighting up of the led on the button itself.

When the climate control compressor is turned off, the leds on buttons (13) AUTO and (14) X go off; automatic inside air recirculation control is also excluded (both leds off on button 8 ) which always stays off to prevent misting the windows; even if unadvisable, it is still possible to restore automatic operation of inside air re-circulation pressing button (8) .

With the climate control compressor off, it is not possible to admit air to the passenger compartment with a temperature below the outside temperature; in this case, the value flashes on the display concerning the temperature that cannot be reached and the left led on button (**13 AUTO - fig. 115**) goes off.

The switching off of the climate control compressor remains in storage even when the engine has been stopped. To restore automatic control for switching on the climate control compressor, press button (14) ‡ again, the led on the button turns on, or



press button (**13**) **AUTO**; in which case, however, the other manual settings set will be cancelled.

WARNING

Operation of the climate control compressor is necessary for cooling and dehumidifying the air; it is advisable to keep this function always on, to prevent window misting problems.

### INSIDE AIR RE-CIRCULATION ON/OFF BUTTON (fig. 116)

Inside air re-circulartion is controlled according to three operating logics:

- automatic control, indicated by the turning on of the right led on the button;

- forced engagement (inside air re-circulation always on), indicated by the turning on of the left led on the button (and by the right led going off at the same time);

- forced switching off (inside air re-circulation always off with air inlet from outside), indicated by the turning off of both leds.

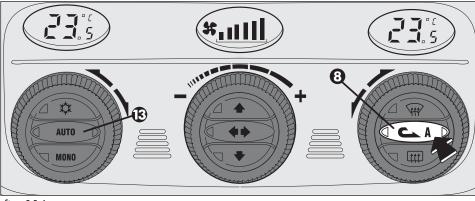
These operating conditions are obtained pressing in sequence the inside air re-circulation button (8)

When inside air re-circulation is controlled automatically by the system, the right led on the air re-circulation button (8) stays on all the time and the left led shows the air re-circulation condition:

**on** = air re-circulation operating;

**off** = air re-circulation off.

If inside air re-circulation has been turned on or off manually, the led on button (13) **AUTO** turns off.



#### fig. 116

In automatic operation , inside air re-circulation is turned automatically when the antipollution sensor detects the presence of polluted air, for example in cities, queues, tunnels and operation of the windscreen washer (with the typical smell of spirits).

### WARNING

With low external temperature the climate control compressor is unable to work. It is therefore inadvisable to use the inside air recirculation function with lzow outside temperature as windows may mist over quickly. WARNING

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The inside air re-circulation system makes it possible to reach the required "heating" or "cooling" conditions faster. It is however inadvisable to use it on rainy/cold days as it would considerably increase the possibility of the windows misting inside, especially if the climate control system is off.



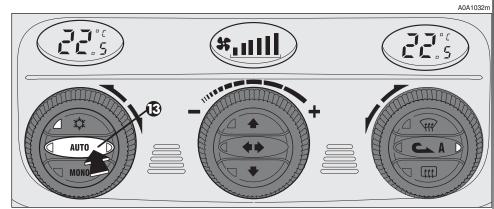
### WARNING

It is advisable to turn on the inside air re-circulation system in queues or tunnels to avoid admitting polluted air from outside. The prolonged use of this function should however be avoided, especially with several people on board, to avoid the possibility of the windows misting.



### WARNING

In certain weather conditions (e.g.: outside temperature around 0°C) and with automatic air re-circulation control on, mist may form on the windows. In this case press the inside air re-circulation button (8) , to switch off re-circulation (led on button off) and if necessary increase the flow of air to the windscreen.





#### **AUTOMATIC OPERATION AUTO BUTTON** (fig. 117)

Pressing the (13) **AUTO** button the system automatically adjusts the amount and distribution of the air admitted to the passenger compartment, cancelling all the previous manual adjustments.

This condition is indicated by the lighting up of both leds on the button itself. When the right led, on button (13) Auto is off, this means that one or more manual operations have been carried out and therefore automatic control is not complete (except temperature control which is always automatic) indicated by the left led on, or that the system is in the **OFF** condition.

### QUICK FRONT WINDOW DEMISTING/DEFROSTING BUTTON

### (WAX-DEF function) (fig. 118)

Pressing button (7)  $\overleftarrow{\mu}$  the climate control automatically activates timed operation of all the functions needed to quicken demisting/defrosting of the windscreen and front side windows, i.e.:

- it turns on the climate control compressor;

- switches off inside air re-circulation, if on (both leds off);

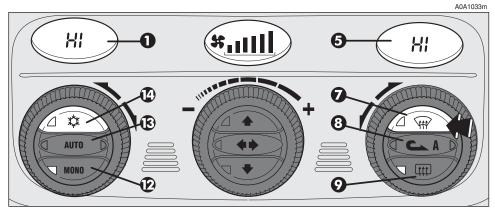
- sets the maximum air temperature (**HI**) on both displays (**1**) and (**5**);

- operates the fan at a predefined speed;

- directs the flow of air towards the windscreen and front side window vents;

- turns on rearscreen heating and, if present, the wing mirror coils.

When the maximum demisting/defrosting feature is on, the led on button (7) ( $\gamma$ ), the led on the rearscreen heating button (9) ( $\gamma$ ) (and the led on button (14) ( $\chi$ ) turn on; at the same time the leds on button (8)



#### fig. 118

**IMPORTANT** If the engine is not hot enough, the function does not immediately engage the pre-established fan speed, to restrict the inlet of air to the passenger compartment that is not warm enough to demist the windows.

When the maximum demisting/defrosting function is on, the only manual operation possible are manual adjustment of the fan and switching rearscreen heating off. Pressing one of the following buttons again: (7) (12) MONO, (13) AUTO or (14) the system switches off the maximum demisting/defrosting function, restoring the operating conditions of the system prior to turning it on, in addition to activating the last function required, if any.

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### WING MIRROR AND REARSCREEN **DEFROSTING/DEMISTING** BUTTON [ttt] (fig. 119)

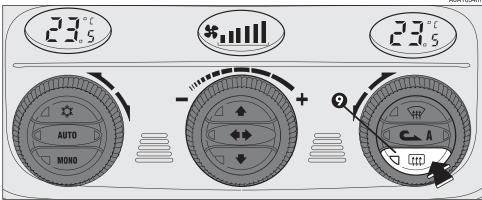
Pressing button (9) [ttt] (turns on demisting/defrosting of the rearscreen and, if present, the wing mirror coils.

The turning on of this function is shown by the turning on of the led on the button.

This function is timed and switches off automatically after 20 minutes, or pressing the button again: the function is also switched off when the engine is stopped and will not be switched on again the next time the engine is started.

**IMPORTANT** The system automatically turns on rearscreen heating if the temperature is below 3°C.

**IMPORTANT** Do not apply stickers on the inside of the rearscreen over the heating filaments to avoid damage that might cause it to stop working properly.



#### fig. 119

### **POLLEN FILTER**

The filter has the specific capability of filtering external air, thus admitting to the passenger compartment purified air, free from particles such as dust, pollen, etc.

In addition to the above mentioned functions, is also reduces the concentration of pollutants.

The filtering action takes place under all air inlet conditions and it is clearly most effective with the windows shut.

Have the conditions of the filter checked by Alfa Romeo Authorised Services at least once a year, preferably at the onset of summer.

If the car is used mainly in dusty or polluted areas it should be checked and, if necessary, replaced at shorter intervals.



The failure to replace the filter may considerably reduce the effectiveness of the climate control system up to blocking the air flow from the outlets and vents.

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## ADDITIONAL HEATER

(upon request for versions/markets where applicable)

The car is fitted with an additional heater which supports the engine during cold or winter weather to quickly reach a comfortable temperature in the passenger's compartment.

The heater works with the engine running when the outside temperature is below 20°C and the engine has not yet reached normal operating temperature.

## CONTROLS

#### TAILGATE OPENING (fig. 120)

Electric tailgate release is only allowed with the ignition key in the ignition switch at **MAR** car stationary, at **STOP** or **PARK** for 3 minutes without opening/closing a door. To release the tailgate, press button (**A**) on the centre console panel.

# **HAZARD WARNING LIGHTS** (fig. 120)

These are switched on by pressing button  $(\mathbf{C})$ , on the centre console panel, regardless of the position of the ignition key.

When the hazard warning lights are switched on, the switch itself begins to flash together with the direction indicators and the direction indicator warning lights on the instrument cluster. This function is switched off by pressing the button again.



#### FOG LIGHTS (fig. 120) (upon request for versions/markets where applicable)

These are turned on pressing button (**B**), on the centre console panel, when the outer lights are already on, at the same time the led on the button itself turns on.

Press button (**B**) again to switch off.

**IMPORTANT** The front foglights should be used in compliance with local traffic laws.

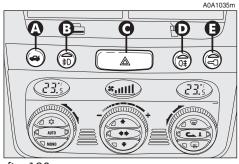


fig. 120

#### **REAR FOG GUARDS** (fig. 120)

These are turned on, with the dipped beam headlights or fog lights on, pressing button  $(\mathbf{D})$  on the centre console panel, at the same time the warning light on the button itself turns on.

Turning the ignition key to **STOP** the fog guards are automatically turned off and they do not come on the next time the engine is started unless button (**D**) is pressed. To turn them off press button (**D**).

**IMPORTANT** Always use the rear fog guards in compliance with local regulations.

# **DOOR LOCKING SYSTEM** (fig. 120)

To lock the doors simultaneously, press button (**E**), on the centre console panel, regardless of the position of the ignition key.

The deterrent led turns on as follows:

- with the ignition key at **MAR** glowing steadily with a yellow light;

- with the ignition key at **STOP** flashing with a red light (deterrence condition).

#### INERTIAL FUEL CUT-OFF SWITCH (fig. 121) (for versions/markets where applicable)

This is an automatic safety switch, to be found on the floor next to the driver's door pillar, which is triggered in the event of a crash of a certain magnitude to interrupt the flow of fuel.

The cutting in of the inertial switch is shown on the display of the instrument cluster. WARNING If a smell of fuel is noted following an accident, or the fuel system is leaking, to avoid the risk of fire do not reset the switch.

If no leaks are found the car can be restarted. Press button (**A**) to activate the fuel supply system again.

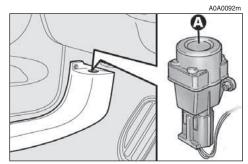


fig. 121



# **HEADLIGHT AIMING DEVICE** (fig. 122)

The headlights should be aimed correctly depending on the car load.

To do this (only with dipped beams turned on) use the buttons  $\blacktriangle/\nabla$ :

- press the button to increase by one position (e.g.:  $0 \rightarrow 1 \rightarrow 2 \rightarrow 3$ );

- press the button to lower by one position (e.g.:  $\mathbf{3} \rightarrow \mathbf{2} \rightarrow \mathbf{1} \rightarrow \mathbf{0}$ );

The display (**A**), in the tachometer, shows the positions during adjustment.

For correct adjustment, bear in mind the following conditions:

- position  ${\bf 0}:$  one or two people occupying the the front seats

- position 1: five people;

- position  $\mathbf{2}$ : five people + load in the boot;

- posizione **3**: driver + 350 kg in luggage compartment

#### HAND BRAKE (fig. 123)

The hand brake lever is located between the two front seats.

To operate the brake when the car is stationary, pull lever (**A**) upwards, until the required braking action is obtained.

When the ignition key is at **MAR**, the warning light on the instrument cluster (①) will come on.

WARNING Check the positioning of the headlight beams every time you change the load to be carried. WARNING The wheels should be locked after a few clicks of the hand brake. If it does not occur contact Alfa Romeo Authorised Services to have the hand brake adjusted.

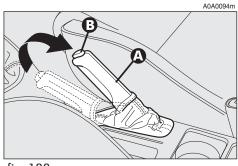
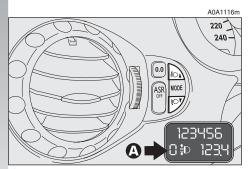


fig. 123



**112** fig. 122

To release the hand brake:

- slightly lift the lever (**A**) and press therelease button (**B**);

 keeping the button pressed lower the lever, the warning light (1) on the instrument cluster will go out.

To prevent the car from moving accidentally, keep the brake pedal pressed when engaging the hand brake.

**IMPORTANT** The hand brake lever (**A**) is fitted with a safety device which prevents the brake from being released when, with the lever pulled, button (**B**) is pressed. Therefore, to release the brake, in addition to pressing button (**B**), it is also necessary to pull lever (**A**) further upwards to release the safety device, then lower the lever completely.

**IMPORTANT** On certain versions a buzzer sounds to alert the driver if the car is moved with the hand brake engaged.

# **GEARSHIFT LEVER** (fig. 124-125)

The position of the single gears is shown by the pictogram on the gearshift lever knob.

When shifting gear, always fully depress the clutch pedal. Before engaging reverse gear  $(\mathbf{R})$  wait for the car to be stationary.

For the versions with 6 gears, to engage reverse (**R**) lift (with the fingers of the same hand holding the lever) the ring (**A-fig. 125**) positioned under the lever.

After engaging the reverse, release the ring. To change from reverse to another gear, it is not necessary to lift the ring on the lever.

**IMPORTANT** Reverse gear may only be engaged with the car completely at a standstill. With the engine running, before engaging reverse gear it is necessary to wait for at least 3 seconds with the clutch pedal fully depressed to prevent clashing and the possibility of damaging the gears.

#### WARNING

To change gear smoothly, the clutch pedal must be fully depressed. Therefore, there should be no obstacles on the floor under the pedal unit: make sure that any mats are well laid and do not interfere with the pedals.

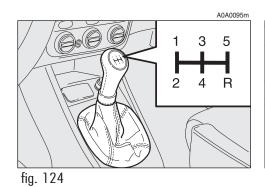


fig. 125

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3 5

2 4 6 R

### SELESPEED TRANSMISSION (on request for versions/markets where applicable)

The 2.0 T.SPARK version can be supplied with a mechanical gearbox with electronic control, called "Selespeed".

The Selespeed considerably simplifies use of the car, reducing the fatigue of city driving or when frequent gearshifting is required, at the same time offering brilliant performance.

**IMPORTANT** To be able to use the Selespeed correctly, this chapter should be read in full to understand the correct, permissible operations to be carried out right from the start.

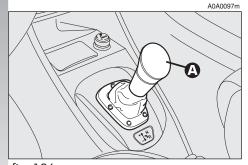
This device comprises a conventional mechanical gearbox to which an electronically-operated electro-hydraulic device has been added which automatically controls the clutch and gear engagement. The clutch pedal has been eliminated and the car moves off using only the accelerator pedal.

Gearshifting takes place through the control lever (**A-fig. 126**) which is of the floating type with a "single central stable position". Using the lever it is possible to request an increase/decrease of the gear ratio engaged and/or reverse gear engagement (**R**) or neutral (**N**). There are also two levers on the steering wheel spokes (**fig. 127**) through which it is possible to shift gear up or down (also with the car stationary).

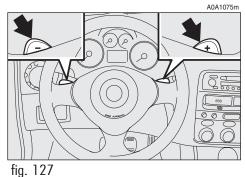
The gearbox can work in two operating modes:

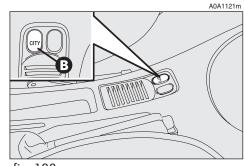
- the first is semiautomatic (then called **MANUAL**), in which the driver directly requests gearshifting through the lever on the centre console or the levers on the steering wheel spokes;

 the second i automatic, called CITY (mode selectable with the special button Bfig. 128, the word CITY is shown on the display fig. 130). With this mode the system decides directly when to shift gear.



**114** fig. 126







With gearshift to **CITY** gears can still be shifted manually using the gearshift lever or the steering wheel controls. Geashift stays in **CITY**.

The gear engaged (**fig. 129**) is shown on the display regardless of the mode selected.

- $\mathbf{N} =$ neutral;
- 1 = first gear;
- **2** = second gear;
- $\mathbf{3} = \text{third gear};$
- $\mathbf{4} =$ fourth gear;
- **5** = fifth gear;
- $\mathbf{R} = reverse.$

In the **CITY** mode the selected position is shown.

A warning light connected with the corresponding failure message ("GEARBOX FAIL-URE") (**fig. 130**) and a buzzer attract the attention of the driver in the event of a fault of the Selespeed transmission.

#### SYSTEM ACTIVATION

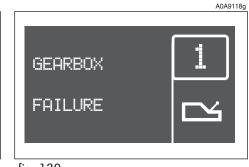
**IMPORTANT** Opening the driver's door the Selespeed starts the hydraulic part of the system to prepare it for when the engine is started.

Turning the ignition key to **MAR**, all the segments of the gear display (**fig. 129**), the gearbox failure warning light (**fig. 130**) and the word **CITY** light up. After about one second, the display indicates the gear engaged (**N**, **1**, **2**, **3**, **4**, **5**, **R**).

**IMPORTANT** If after 10 seconds the display segments do not display the gear engaged or the failure warning light stays on, turn the ignition key to **STOP** and wait for the display to go off, then repeat the system activation procedure. If the fault presists, contact Alfa Romeo Authorised Services.

20:27 3 <u>CITY</u> <u>CITY</u> <u>CITY</u> <u>GEARBOX</u> FAILURE

fig. 129







#### **OPERATION WITH ENGINE OFF**

**IMPORTANT** Before operating the gearshift control lever, always check the gear engaged on the display (**N**, **1**, **2**, **3**, **4**, **5**, **R**).

With the engine off and the car stationary it is possible to engage all the gears.

With the car stationary and with the brake pedal pressed, requests to shift gear are accepted both if they are carried out through the control lever on the central console and the levers on the steering wheel.

To request gearshifting, in addition to keeping the brake pedal pressed:

- to increase gear (+) (**fig. 131**) push the lever "forwards" (if the car is in first gear this shifts to second, if it is in second gear it goes to third and so on up to fifth). If the system is in neutral (**N**) or reverse (**R**) the forward movement on the lever causes engagement of first gear (1).

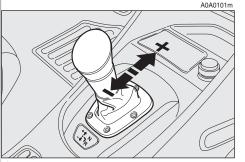
- to shift down (-) (**fig. 131**) push the lever backwards (if the car is in fifth gear it moves to fourth, if fourth is engaged it shifts to third and so on down to first).

To put the gearbox in neutral (**N**), starting from the condition with the car stationary and the brake pedal pressed, it is necessary to move the gearshift control lever to the right (**fig. 132**).

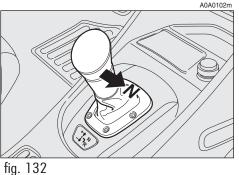
From any gear (**N**, **1**, **2**, **3**, **4**, **5**) and with the car practically at a standstill, it is possible to request engagement of reverse gear, pushing the lever to the right and then backwards (**fig. 133**). If the car is on the move, the request is accepted if, within 3 seconds from the request, the car speed is below 3 Km/h: if the request is not carried out, the system will engage neutral  $(\mathbf{N})$  and the manoeuvre will be repeated.

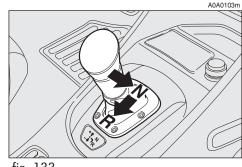
**IMPORTANT** Once a gear has been changed it is necessary to immediately release the gearshift control lever after making the request. A manoeuvre prolonged (over 10 seconds) makes the system automatically switch to **CITY** mode; everything stops releasing the gearshift lever.

**IMPORTANT** If wanting to leave the car parked on a sloping road with a gear engaged to keep it braked, it is necessary to check that the display shows the new gear engaged and then wait for 1 or 2 seconds before releasing the brake pedal to allow complete clutch engagement.



**116** fig. 131







#### **STARTING THE ENGINE**

The engine can be started with the gear engaged or in neutral  $(\mathbf{N})$ , provided that the brake pedal is pressed down.

**IMPORTANT** Keep the brake pedal pressed during the starting operation. As the brake pedal stiffens if it is pressed repeatedly with the engine off, in this situation, to allow the engine to be started, it is necessary to increase the pressure exerted on the pedal itself.

After starting, the gearbox sets to neutral automatically, the display shows the letter  $(\mathbf{N})$  and the system selects the operating mode memorised before switching off.

**IMPORTANT** If the engine is started with the gearbox in a position different from **N** and without the brake pedal pressed, the display shows a dedicated message. In this case repeat the starting operation and press the brake pedal.

**IMPORTANT** Should the starting-up procedure be executed with the gearbox not in working order, carry out the "Delayed start-up" procedure (see also the relative messages): keeping the key in the **AVV** position for at least 10 seconds, with the brake held down, the engine will start. The system will remain in the recovery mode (maximum gear allowed: **2<sup>nd</sup>**, Auto mode is not available). Should the engine not start, seek assistance from the Alfa Romeo Authorised Services.

WARNING If the engine fails to start with the gear engaged, the driver is alerted of the potentially dangerous situation due to the fact that the gearbox has automatically set to neutral by the buzzer and the display.

#### SWITCHING OFF THE ENGINE AND SYSTEM DEACTIVATION

Turning the ignition key to **STOP** the engine turns off and the gear selected before switching off the engine remains engaged.

If the engine is stopped with the gearbox in neutral  $(\mathbf{N})$ , the buzzer and the flashing of  $(\mathbf{N})$  call the driver's attention so that the car can be put in safety conditions engaging first gear (1) or reverse  $(\mathbf{R})$ . In this case, the ignition key should be turned to **MAR** and with the brake pedal pressed, engage first gear (1) or reverse  $(\mathbf{R})$ .



WARNING NEVER leave the car with the gear in neutral (N).



#### WARNING Never remove the ignition

key when the car is moving. In addition to the fact that the Selespeed system would not work properly up to stopping the car, the steering wheel would lock automatically the first time it is turned.

WARNING It is absolutely necessary to turn off the engine and then turn off the Selespeed system keeping the brake pedal pressed: ONLY release the pedal when the display on the cluster has gone out.

#### **MOVING OFF THE CAR**

With the engine on and the car stationary, the gears that can be engaged for moving off are only first (1), second (2) or reverse  $(\mathbf{R})$ .

To engage them it is possible, keeping the brake pedal pressed, to use the gearshift lever on the centre console as well as the levers on the steering wheel.

**IMPORTANT** Reverse gear (**R**) can be engaged from any of the following other ratios: neutral (**N**), first (**1**) or second (**2**). If the car is moving, the request will be accepted and carried out if, within 3 seconds from the request, the car speed is below 3 Km/h: if the request is not accepted, the system will engaged neutral (**N**) and the manoeuvre will be repeated.

The driver is informed of the reverse gear engaged condition by the display and the intermittent sound of a buzzer.

**IMPORTANT** If when shifting from reverse  $(\mathbf{R})$ /first (1) or neutral  $(\mathbf{N})$ /first (1) sticking occurs on first gear, the system automatically engages second gear (2).

This is not to be considered as a fault as it is part of the operating logic. For the same reason, in the case of sticking on reverse gear, the system partially closes the clutch to allow gear engagement; in this case the engagement of reverse gear ( $\mathbf{R}$ ) will not be as smooth as usual.

Moving off the car is obtained:

1) releasing the brake pedal;

**2**) gradually pressing the accelerator pedal.

The more the accelerator is pressed the higher the pickup torque.

WARNING After a request to shift gear with the car stationary, before pressing the accelerator pedal to make the car move, the driver must always check the display to see that the gear engaged is the one required.

#### WARNINGS

 With the car stopped and a gear engaged always keep the brake pedal pressed until deciding to move off;

 during prolonged halts with the engine running it is advisable to keep the gearbox in neutral;

 when the car is parked facing uphill, do not use the moving off manoeuvre to keep the car still; use the brake pedal and press the accelerator pedal only when deciding to move off;

use second gear **only** when more control is needed for moving off manoeuvres at low speed;

 if, in reverse gear, first gear is engaged or vice versa, shift gear only when the car is stopped completely and with the brake pedal pressed.

Though highly unadvisable, if when travelling downhill for some unexpected reason the car is set to neutral  $(\mathbf{N})$ , when the engagement of a gear is requested, the system automatically engages the best gear in relation to the speed of the car to allow the correct transmission of torque to the wheels.

When travelling downhill with a gear engaged and the accelerator released (if the car is moving), beyond a pre-established speed, the system engages the clutch automatically to give the car adequate engine braking.

For safety reasons the Selespeed system activates the buzzer when:

— clutch overheating occurs while the car is being started; in this case it is necessary to "force" starting avoiding hesitation or, if the car is on a slope, release the accelerator and use the brake pedal to stop the car; Still due to safety reasons, with the car stationary, the engine running and gear (1), (2) or  $(\mathbf{R})$  engaged, the system activates the buzzer and automatically shifts to neutral  $(\mathbf{N})$  when:

 no action is made on the accelerator and/or brake pedals for at least 3 minutes;

- the brake is pressed for over 10 minutes;

- the driver's door is opened and the accelerator and brake are not touched for at least 1.5 seconds.

#### **STOPPING THE CAR**

To stop the car, simply release the accelerator pedal and, if necessary, press the brake pedal.

Regardless of the gear engaged and the operating mode activated (**MANUAL** or **CITY**) the system automatically disengages the clutch and shifts to a lower gear.

If deciding to move off again without having stopped the car completely, the most suitable ratio will be available for accelerator again.

Stopping the car the system automatically engages first gear (1).

#### **OPERATING MODES**

The gearbox can work in two operating modes:

- the first is semiautomatic (**MANU-AL**), in which the driver directly decides when to shift gear;

- the second is completely automatic (**CITY**), in which the system decides directly when to shift gear according to the driving style.

The **CITY** mode is selected by pressing the **CITY** button on the gearshift lever knob; when the automatic mode is selected the word **CITY** is shown on the display.

# SEMIAUTOMATIC OPERATION (MANUAL)

In the **MANUAL** operating mode, the display shows the gear engaged.

In this operating mode, the decision to change gear is left to the driver who decides the most appropriate moment.

The requests to change gear may take place through:

- the control lever on the centre console (**A-fig. 134**);

- the levers on the steering wheel (fig. 135).

If the gearshifting request compromises the correct engine and gearbox operation, the system will not allow gearshifting but will automatically shift down the gears to let the engine run idle (e.g. during decelerations).

In these cases the system informs the driver about the impossibility of shifting gears through a dedicated message on the display and a buzzer.

The **MANUAL** operating mode is set when, with the **CITY** mode selected, the **CITY** (**B-fig. 136**) button is pressed again, thereby cutting out the previously selected mode. When changing gear it is not necessary to release the accelerator pedal because the Selespeed system directly controls the engine in such a way as to:

- reduce and then increase engine torque;

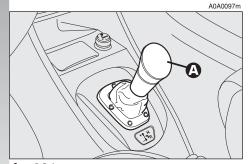
- adapt the engine speed to the latest gear engaged.

When downshifting, the engine is accelerated automatically to bring it to the speed necessary with the new gear ratio.

The neutral command (**N**) is accepted at any car speed.

Reverse  $(\mathbf{R})$  is only accepted and engaged with the car almost stationary.

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**120** fig. 134

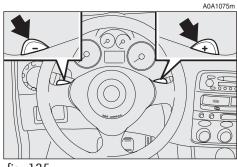


fig. 135

fig. 136



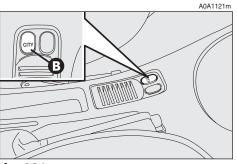
buzzer.

**FAILURE WARNING** 

### WARNING

If the warning light 🗠 and the message are shown on the display contact Alfa Romeo Authorised Services as soon as possible to have the fault eliminated.

In the case of a fault to the gearshift control lever, the system automatically engages the automatic operating mode **CITY** to make it possible to reach the nearest Alfa Romeo Authorised Service to have the fault eliminated.



**AUTOMATIC OPERATION (CITY)** 

The automatic operating mode **CITY** is se-

In addition to the gear, the display shows

The system decides directly when to

Releasing the accelerator pedal quickly, the

system does not engage a higher gear in or-

der to maintain an adequate level of engine

change gear depending on the engine rpm

lected pressing the button (A-fig. 137)

at the base of the gearshift lever.

the word **CITY**.

brake.

and the driving style.

fig. 136

12:02 Pagina 121

110-185 Alfa147 O2 GB 4-07-2008

which simplify driving:

(1);

in neutral.

With the accelerator pedal pressed to over

60% of its stroke and an engine speed

above 5000 rpm, gearshifting becomes

quicker. In the **MANUAL** operating mode

there are certain automatic/security devices

- when slowing down the clutch is opened

and the transmission ratio is automatically

reduced to be ready for picking up again;

otherwise, when the car is stopped, the

gearbox will automatically be in first gear

- requests to change gear that would take

- if jamming occurs during gear engage-

ment, the system firstly tries to engage the

gear required again and, if it is still not pos-

sible, it automatically engages the imme-

diately higher one to avoid leaving the car

**IMPORTANT** It is advisable to wait for the end of a gear shifting operation before requesting another one, to avoid multiple

requests in rapid succession.

the engine to above maximum speed or be-

low minimum speed are not accepted;

A0A9118g GEARBOX FAILURE

fig. 137/a

121

In the case of a fault to other gearbox components, the system only allows the engagement of certain gears: first gear (1), second gear (2) and reverse (R).



#### WARNING

In the event of a gearbox fault (to any component), contact Alfa Romeo Authorised Services as soon as possible to have the system checked over.

#### **BUZZER WARNINGS**

The buzzer is activated when:

- reverse gear is engaged (**R**);

 the car is parked with the gearbox in neutral (N); signal that can be noted turning the ignition key to STOP;

clutch overheating takes place during pick-up;

- the system has automatically engaged neutral  $(\mathbf{N})$  after:

there is no action on the accelerator and/or brake pedal for at least 3 minutes;

or the brake is pressed for over 10 minutes;

or the driver's door is opened and no action is made on the accelerator and brake for at least 1.5 seconds;

or detection of a gearbox fault;

- in the event of gearbox failure.

#### **PARKING THE CAR**

To park the car safely it is absolutely necessary to engage first gear (1) or reverse  $(\mathbf{R})$  and also the hand brake if the road is on a slope.

Turning off the engine with the car on an uphill slope and a gear engaged, it is absolutely necessary to wait for the display to go off before releasing the brake pedal, so that the clutch is completely closed.

If the gearbox is in neutral ( $\mathbf{N}$ ) and wanting to engage a parking gear, the system should be activated and with the foot on the brake pedal it is necessary to engage first gear ( $\mathbf{1}$ ) or ( $\mathbf{R}$ ).

**IMPORTANT NEVER** abandon the car with the gear in neutral (**N**).

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#### **TOWING THE CAR**

**IMPORTANT** For towing the car follow local regulations. Make sure that the gearbox is in neutral (**N**) (checking that the car moves if pushed) and tow as for a car with normal mechanical gearbox following the instructions given in the chapter "In an emergency".

Should it be impossible to set to neutral, do not tow the car; contact Alfa Romeo Authorised Services.



## **INTERIOR FITTINGS**

#### **GLOVEBOX**

On the dashboard there is a glovebox with lid and light.

To open use handle (A-fig. 138).

When the glovebox is opened with the key at **MAR** an inside courtesy light turns on (**A-fig. 139**).



The fitting is completed by device  $(\mathbf{B})$ , on the lid, for inserting a pen or pencil.

**IMPORTANT** Turning the ignition key to **STOP**, opening the glovebox, the light inside can only be turned on for 15 minutes; after which the system turns it off to avoid draining the battery.

#### **GRAB HANDLES**

Suitable grab handles are fitted above the rear side windows.

For versions/markets where applicable there is also a grab handle above the front passenger's door.

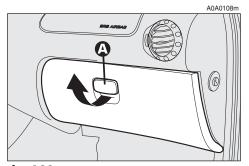


fig. 138

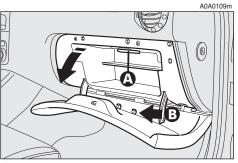


fig. 139



# **FRONT ROOF LIGHT** (fig. 140)

The roof light comprises two courtesy lights with corresponding control switch.

**IMPORTANT** When a door is opened, the roof light turns on and timing of about 3 minutes is activated automatically, after which it goes off; closing the doors (within the 3 minutes) a second timing of about 7 seconds is activated to allow car starting.

Unlocking the doors using the remote control, the roof light turns on gradually and timing is activated automatically for about 15 seconds. Locking the doors with the remote control the roof light turns off gradually.

The lights are turned off moving the ignition key to **MAR** (with the doors closed).

With switch (**A**) in the central position (**1**), both lights are turned on when a door is opened.

Pressing switch (**A**) to the left (position **0**), the lights stay off (**OFF** position).

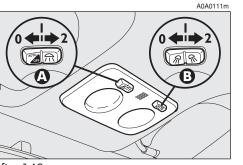
Pressing switch (**A**) to the right (position **2**) both lights stay on.

Switch (**B**) turns the lights on individually.

Pressing switch (**B**) to the left (position **O**) the left light is turned on. Pressing the switch to the right (position **2**) the right light is turned on.

With switch (**B**) in the central position (position **1**) the lights stay off. **IMPORTANT** Turning the ignition key to **STOP**, turning the roof light on is only possible for 15 minutes; after which the system turns it off to avoid draining the battery.

**IMPORTANT** Before leaving the car, make sure that both switches are in the central position. By so doing, the roof lights will turn off when the doors are closed. Forgetting a door open the lights will turn off automatically after a few seconds.



**124** fig. 140

**GETTING TO KNOW YOUR CAR** 

#### **COURTESY LIGHTS** (fig. 141) (for versions/markets where applicable)

On the back of the driver's or passenger's sun visor, opening the cover (**A**), with the ignition key at **MAR**, the roof lights turn on (**B**). These lights allow use of the courtesy mirror when the light is poor.

**IMPORTANT** Turning the ignition key to **STOP** the lights can be activated only for 15 minutes; after which the system turns them off to avoid draining the battery.

#### **REAR ROOF LIGHT** (fig. 142)

**IMPORTANT** When a door is opened, the roof light turns on and timing of about 3 minutes is activated automatically, after which it goes off; closing the doors (within the 3 minutes) a second timing of about 7 seconds is activated to allow car starting.

Unlocking the doors using the remote control, the roof light turns on gradually and timing is activated automatically for about 15 seconds. Locking the doors with the remote control the roof light turns off gradually.

The light turns off in any case turning the ignition key to **MAR** (with the door closed).

On the light there is a switch with three positions.

When switch (**A**) is in the central position (**0**) the light turns on automatically when a door is opened.

Moving the switch to the right (position 1) the light stays off.

Moving the switch to the left (position **2**) the light stays on.

**IMPORTANT** Turning the ignition key to **STOP** the roof light can be turned on for only 15 minutes; after which it is turned off to avoid draining the battery.

**IMPORTANT** Before leaving the car, make sure that the switch (**A**) is in the central position (**0**), so that the roof light turns off when the doors are closed.

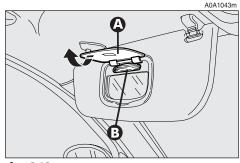


fig. 141

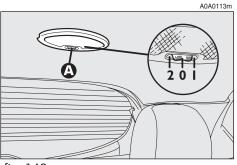


fig. 142

125

#### **PUDDLE LIGHTS** (fig. 143) (for versions/markets where applicable)

The light (A) housed in the doors turns on when the associated door is opened, regardless of the position of the ignition key.

#### **DETERRENT LED** (fig. 144)

The led (A) on the instrument cluster comes into operation when the doors are locked (ignition key at STOP or removed) and it remains in the "deterrence" condition, flashing with a red light until the next time the doors are unlocked.

**IMPORTANT** If a door or the tailgate are not closed perfectly, the deterrent led flashes at a higher frequency for 4 seconds and then flashes at normal frequency again.

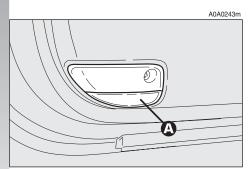
#### FRONT ASHTRAY AND CIGAR LIGHTER (fig. 145)

To use the ashtray open the lid  $(\mathbf{A})$ .

To use the cigar lighter, with the key at MAR, press button (B); after a few seconds the button will return automatically to its initial position and the cigar lighter is ready for use.

Remove the tray to empty and clean the ashtray (**C**).

The position of the cigar lighter in relation to the ashtray and viceversa, may vary depending on the trim level.



126 fig. 143

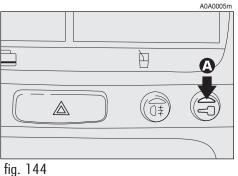


fig. 145

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# **REAR ASHTRAYS** (fig. 146)

For the rear passengers there are two concealed ashtrays.

To use or remove pull in the direction of the arrow.

#### GLOVEBOX

(fig. 147) (for versions/markets where applicable)

To use the glovebox push it as shown by the arrow.



Always ensure that the cigar lighter has turned off.

# $\land$

WARNING

Do not use the ashtray as waste paper basket: it might set on fire in contact with cigarette stubs.

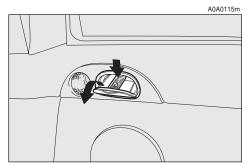


fig. 146

fig. 147

127

#### CARD HOLDER AND GLASS HOLDER (fig. 148) (upon request for versions/markets where applicable)

The interior fittings are completed by the removable card holder recess ( $\mathbf{A}$ ) and glass holder ( $\mathbf{B}$ ) located on the centre of the dashboard. To use them, press as shown.

#### **ODDMENT COMPARTMENT ON DASHBOARD** (fig. 149)

An oddment recess (**A**) is provided on the left of the dashboard, on the cover of the fuse box.

#### **ODDMENT COMPARTMENT ON CENTRE CONSOLE** (fig. 150)

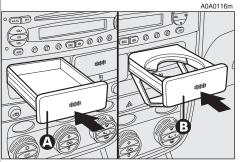
On the centre console, at the side of the hand brake lever, depending on the versions, the following recesses are provided:

- oddment recess (A);
- can holder (B);
- magnetic card or toll ticket holder (C);

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- pen or pencil holder (**D**);
- coin holder (E).





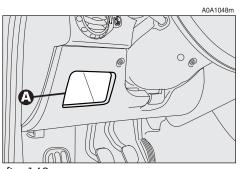


fig. 149

fig. 150

C

#### POCKETS ON FRONT DOORS (fig. 151)

Each front door has an oddment pocket  $({\bf A}).$ 

## **REAR POCKETS** (fig. 152)

These are at the side of the rear seats in the side trim  $({\boldsymbol{A}}).$ 

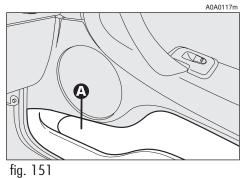
### SUN VISORS (fig. 153)

The visors can be directed at the front and side.

For versions/markets where applicable, behind the visors there is a courtesy mirror with a light at the side  $(\mathbf{B})$ . To use, open the cover  $(\mathbf{A})$ .

The lights allow use of the mirrors with dim light.

:



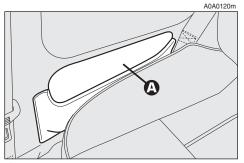


fig. 152

fig. 153

129

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### SUNROOF



WARNING Improper use of the sunroof can be dangerous. Before and while operating it, always make sure that the passengers are not exposed to the risk of harm caused either directly by the sunroof in motion or by personal items drawn or knocked by it.



#### **SLIDING FORWARDS**/ **BACKWARDS**

With the ignition key at **MAR** turn the control knob (A-fig. 154) in the direction of the arrow, choosing one of the 6 opening positions available.

To close the roof, take the control knob (A) to the centre position.

The sunroof is fitted with a sliding curtain below, which prevents sun radiation and is drawn by hand using a catch.

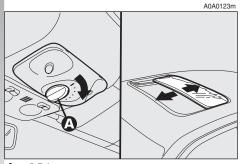
The curtain is drawn by the roof when it opens and is pushed completely inside the roof panel when the sunroof is opened completely. With the closing movement, it will come out partially so that the hand catch is accessible (fig. 155).





### WARNING

When leaving the car the ignition key should be removed to prevent the sunroof from being operated inadvertently and harming anyone remaining in the car.



130 fig. 154

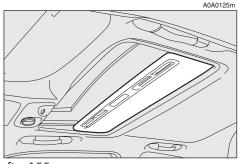


fig. 155

#### **RAISING AT THE REAR**

With the ignition key at **MAR** turn the control knob (**A-fig. 156**) in the direction of the arrow, choosing one of the three opening positions available.

To close the roof, move the control knob  $({\bf A})$  to the centre position.

#### **EMERGENCY OPERATION**

If the electrical control device does not work, the sunroof can be operated manually as follows:

apply leverage in the points shown by the arrows and remove the plate (A-fig. 157);

insert a special Allen wrench in the seat(B) with hexagon slot;

- then turn the wrench clockwise to open the roof or counter-clockwise to close.

## LUGGAGE COMPARTMENT

The tailgate can be opened:

from the outside of the car - by a remote control impulse;

from the inside of the door - by depressing the button (A-fig. 158).

**IMPORTANT** If the boot is not properly shut, the  $\bigcirc$  warning light will come on (on certain versions accompanied by the message on the reconfigurable multifunction display).

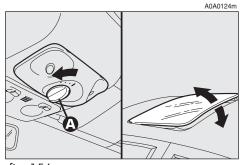


fig. 156

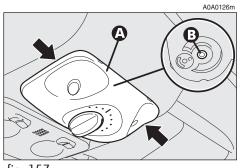


fig. 157

A0A1050m

# **OPENING FROM INSIDE** (fig. 158)

Tailgate is released electrically and this can be performed only when the ignition key is in position **MAR** with car at a standstill or in **STOP** or **PARK** position for 3 minutes without unlocking/locking one of the doors.

To unlock the tailgate, press button (**A**) on the centre console panel.

Tailgate raising is facilitated by the gas shock springs.

#### **OPENING WITH REMOTE CONTROL** (fig. 159)

The tailgate can be opened by remote control from outside pressing the button  $(\mathbf{A})$ , also when the electronic alarm is engaged. Opening of the tailgate is accompanied by a double flash of the direction indicators; closing is accompanied by a single flash.

If an electronic alarm is fitted, with the opening of the tailgate, the alarm system switches off volumetric protection and the tailgate control sensor, the system "beeps" twice (with the exception of certain markets).

Closing the tailgate again, the control functions are restored, the system "beeps" twice (with the exception of certain markets).

#### **TAILGATE CLOSING**

To lock, push in correspondence with the Alfa Romeo badge to lower tailgate, until you feel the click of the lock.

The gas springs are calibrated to ensure correct tailgate raising with the weights foreseen by the manufacturer. The arbitrary addition of items (such spoilers, etc.) may compromise the correct operation and safety of the actual tailgate.

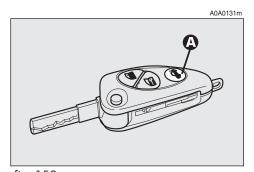


fig. 159



#### **BOOT LIGHT** (fig. 160)

When the tailgate is opened the light turns on automatically (**A**) in the right-hand side of the boot. Closing the tailgate, the light turns off automatically.

**IMPORTANT** Turning the ignition key to **STOP**, opening the tailgate, turning on the light will only be possible for 15 minutes; after which the system turns it off to avoid draining the battery.

#### AEMERGENCY OPENING OF TAILGATE

To succeed in opening the tailgate from the inside, should the car battery be flat, or because of a defect of the electric lock of the tailgate itself, proceed as follows (refer to "Extending the luggage compartment" in the chapter "Getting to know your car"):

- remove the rear headrests;
- tilt the rear seat cushions;
- tilt the backrests;

 operate the lever (A-fig. 161) as shown to achieve the tailgate mechanical release, operating from the inside of the luggage compartment;

- for versions/markets where applicable unlock the lock by pulling the string (**A-fig. 161/a**) (the string is located inside the right recess in the tailgate).

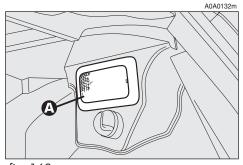


fig. 160

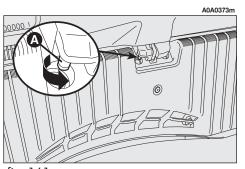


fig. 161

fig. 161/a

133

A0A0734m

#### **SECURING THE LOAD** (fig. 162)

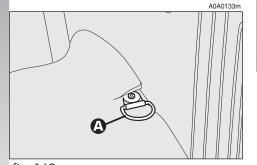
The loads carried may be secured with straps hooked to the special rings (A) in the boot.

The rings also serve for fastening the luggage restrainer, if present (in any case available c/o Alfa Romeo Authorised Services).

#### **CAUTIONS FOR CARRYING** LUGGAGE

Travelling at night with a load in the boot it is necessary to adjust the height of the low beam headlights (see next paragraph "Headlights" in this chapter). For correct use of the aiming device, also make sure that the load does not exceed the values given in the same paragraph.





WARNING Do not load the boot above the permitted maximum (see "Technical specifications"). Also make sure that the objects contained in the boot are well secured to prevent them from being thrown forward, causing harm to the passengers.



WARNING

If you want to carry reserve fuel in a can, follow legal regulations, only using a cer-tified can, suitably fastened to the load securing eyelets. Even in this way the risk of fire is increased in the case of an accident.

**134** fig. 162

## BONNET

The bonnet opening lever is under the left end of the dashboard.

To open:

- pull the lever (**A-fig. 163**) until the bonnet clicks open.

- press the safety lever (**A-fig. 164**) upwards.

- raise the bonnet.

**IMPORTANT** Bonnet raising is aided by two gas springs. Do not tamper with these springs and accompany the bonnet while raising it.

WARNING

Do this only with the car

stationary.

To close: lower the bonnet until approx. 20 cm from the engine compartment and then let it drop, ensuring that it is fully closed and not just held in position by the safety catch.

If the bonnet does not close properly do not push it down but open it again and repeat the above procedure.

# WARNING

For safety reasons the bonnet must always be closed when the car is travelling. For this reason always check that the bonnet is closed properly making sure that the catch is engaged. If during travelling you realise that the catch is not perfectly engaged, stop immediately and close the bonnet in the correct way.

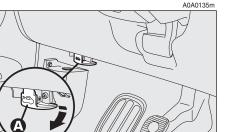


fig. 163

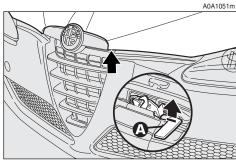


fig. 164

135

# ROOF RACK PROVISION

#### **3-door versions**

The front hooks are in points (**A-fig. 165**).

The rear hooks are located in the points  $(\mathbf{B})$  shown by the serigraph  $(\mathbf{\nabla})$  on the side rear windows.

#### **5-door versions**

The front hooks are in points (A-fig. 166).

The rear hooks are located in points (B).

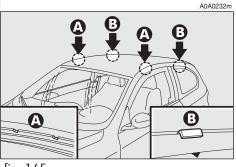


Follow the regulations in force concerning maximum clearances.

**IMPORTANT** Closely follow the assembly instructions provided in the kit. Assembly must be carried out by skilled personnel.

WARNING After a few kilometres, check that the fastening screws are firmly tightened.

WARNING Distribute the load evenly and when driving, bear in mind the increased sensitivity to side wind.





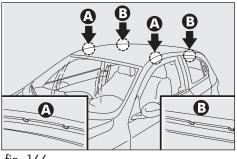


fig. 166





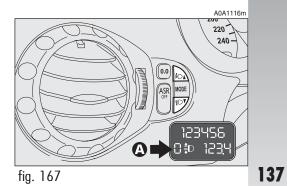
Never exceed the maximum permissible loads (see "Technical specifications" chapter).

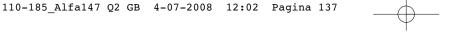
- press the button to increase by one position (e.g.:  $\mathbf{0} \rightarrow \mathbf{1} \rightarrow \mathbf{2} \rightarrow \mathbf{3}$ );

▲/▼:

- press the button to decrease by one position (e.g.:  $3 \rightarrow 2 \rightarrow 1 \rightarrow 0$ );

The display (**A**), in the tachometer, shows the positions while adjustment is being made.





Pagina 137

12:02

## HEADLIGHTS

The adjustment of the headlights is vital to your safety and comfort and to that of other road users.

The adjustment of the headlights is also governed by precise regulations.

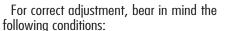
Contact Alfa Romeo Authorised Services to have the headlights correctly adjusted.

**IMPORTANT** A slight layer of steam (fogging) can appear on the inside surface of the beam transparent cover: this is not a defect. The presence of condensate traces in beams is a natural phenomenon, due to a low temperature and to the degree of humidity in the air. These traces will disappear when the beams are turned on. Drops of water inside the headlight indicate instead water infiltration: contact Alfa Romeo Authorised Services.

### **COMPENSATION FOR TILT** (fig. 167)

When the car is loaded, the beam from the headlights is raised due to the backwards tilt of the car.

In this case the headlights must be adjusted correctly.

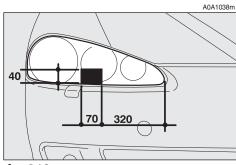


- position **0**: one or two people occupying the the front seats
- position **1**: five people;
- position 2: five people + load in the boot;
- position 3: driver + 350 kg stowed in luggage compartment

#### HEADLIGHT ADJUSTMENT ABROAD (fig. 168-169)

The dipped-beam headlights are adjusted for circulation in the country in which the car is marketed. In countries with opposite circulation, to avoid glaring oncoming cars it is necessary to cover the areas of the headlight as shown below; this is done using nontransparent sticker tape. The illustration refers to passng from righthand drive to left-hand drive.





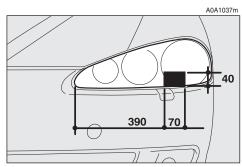


fig. 168

fig. 169

**GETTING TO KNOW YOUR CAR** 

## PARKING SENSORS

#### (upon request for versions/ markets where applicable)

These sensors are located in the car rear bumper (fig. 170); their function is to detect and warn the driver, through an intermittent buzzer, about the presence of obstacles in the car rear area.

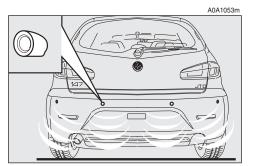


fig. 170

#### **ACTIVATION**

The sensors are activate automatically when reverse gear is engaged.

As the distance from the obstacle behind the car diminishes, the buzzer frequency will increase.

#### BUZZER

Engaging reverse gear an intermittent buzzer is automatically activated.

The buzzer:

- increases as the distance between the car and the obstacle diminishes;

- becomes continuous as the distance between the car and the obstacle is below approx. 30 cm and stops immediately if the distance increases.

- remains constant if the distance between the car and the obstacle is the same, while, if this situation occurs for the side sensors, the signal is interrupted after about 3 seconds to avoid, for example, signalling in the event of manoeuvres along the walls.

#### **TOWING TRAILERS**



sensors is automatically deactivated as soon as the electric cable plug of the trailer is inserted in the car tow hook outlet.

The operation of the rear

The rear sensors are automatically re-activated when the trailer cable plug is removed.

## ABS

The car is fitted with an ABS braking system, which prevents the wheels from locking when braking, makes full use of the grip and within the limits of the grip available, keeps the car controllable also in emergency braking. When braking a slight pulsing accompanied by noise may be felt on the brake pedal due to the action of the ABS system.

This should not be interpreted as a braking malfunction. It is the signal to the driver that the ABS has come into action: it is the warning that the car is travelling at the limit of its grip and therefore the speed should be adapted to the type of road.

The ABS system is an additional part of the braking system; in the event of a failure it disabled, leaving the braking system in the same conditions as a car without ABS. In the case of failure, the anti-lock action is no longer present, the braking capacity of the car is not adversely affected at all.

If you have never previously used cars fitted with ABS, it is advisable to practice a little on a slippery surface, naturally in safety conditions and in accordance with the local Highway Code; you are also advised to read the following instructions carefully.

The advantage of the ABS over a conventional system is that it makes it possible to obtain the highest degree of handling also when braking completely under limited grip conditions, preventing the wheels from locking.

However, with the ABS do not expect the braking distance to always shorten: for example, on soft surfaces like gravel or fresh snow or a slippery surface, the space might increase. To better exploit the possibilities of the antilock system in the case of need, the advice given below should be followed.

WARNING The ABS better exploits the grip available, but cannot increase it; caution is therefore necessary on slippery surfaces, without taking unnecessary risks.

WARNING If the ABS cuts in it means that the limit of the grip is being reached between the tyre and the road surface: it is therefore necessary to slow down to adapt driving to the grip grailable.

WARNING

When the ABS cuts in, and you feel the pulsing on the pedal, do not lighthen the pressure, but keep the pedal firmly pressed with no fear; this way you will stop in the least space possible, compatibly with the conditions of the road surface.

Always take due care when braking on bends, even with the help of the ABS.

The most important advice of all, however, is this:



WARNING

In the event of a system failure, with the turning on of the (iii) warning light on the instrument cluster, have the car checked immediately by Alfa Romeo Authorised Services driving slowly, to be able to have the system restored to fully efficient conditions.

Following these instructions you will be in the best braking condition under all circumstances.

**IMPORTANT** Cars fitted with ABS may only be fitted with the wheel rims, tyres and brake linings of type and brand approved by the Manufacturer.

The system is completed by the EBD (Electronic Brake Distributor) which distributes the braking action through the control unit and the ABS system sensors.



WARNING

The car is fitted with an electronic braking distributor (EBD). If the (a) and (1) warning lights turn on simultaneously with the engine running, this indicates an EBD system failure; in this case with sharp braking the rear wheels might lock too early, with the possibility of skidding. Driving extremely carefully, go to the nearest Alfa Romeo Authorised Service to have the system checked. **IMPORTANT** If the battery is run down the () and () warning lights might turn on when starting the engine and go off after starting. This should not be considered as a fault but as a warning that during starting the ABS is not active. The turning off of the warning lights ensures normal system operation.

If the low brake fluid level (1) warning light turns on, stop the car immediately and contact the nearest Alfa Romeo Authorised Service. Any loss of fluid from the hydraulic system will negatively affect the operation of the braking system be it of the conventional type or of the type with ABS.

WARNING

WARNING The turning on of only the (m) warning light with the engine running normally indicates a fault to the ABS system only. In this case the braking system is still efficient, though without the aid of the anti-lock device. Under these conditions performance of the EBD system may be reduced. In this case too, you are advised to go immediately to the nearest Alfa Romeo Authorised Service to have the system checked over, driving in such a way as to avoid sharp brakina.

#### VERSIONS WITH VDC SYSTEM EXCLUDED



WARNING

After using the spare wheel and refitting the standard wheel, it is necessary to travel for approx. 30 km (20 minutes) on a mixed road or approx. 15 km (10 minutes) on a highway until the software of the ABS/ASR control unit recognises the size of the "normal" wheel; in this period of time the car may slightly go adrift on a side during brakig and the ASR warning light (if fitted) may come on. Therefore it is recommended to travel carefully and to avoid, where possible, sharp braking. On cars fitted with ASR travel for the above mentioned distance with the ASR turned off through the suitable button.

### VDC SYSTEM

(Vehicle Dynamics Control) (upon request for versions/markets where applicable)

It is an electronic system that controls the car stability and, in the lack of grip, it helps to bring the car back to the correct direction.

The action of the VDC system is particularly useful when the road grip conditions change.

WARNING The performance of the system should not induce the driver to take pointless and unnecessary risks. The style of driving must in any case always be adapted to the conditions of the road surface, visibility and traffic. The responsibility for road safety is always and in any case the driver's.

#### HOW THE VDC SYSTEM WORKS

The VDC system is engaged automatically when the car is started and cannot be switched off.

#### CUTTING IN OF THE VDC SYSTEM

The cutting in of the VDC system is indicated by the flashing of the (2) warning light on the instrument cluster, to inform the driver that the car is in critical conditions of stability and grip.

#### **VDC SYSTEM FAILURE** WARNING

In the event of a failure of the VDC system disengages automatically and the @ warning light on the instrument cluster turns on glowing steadily, together with the message on the reconfigurable multifunction display.

In the event of a VDC system failure the car behaves like a car not fitted with this system: in any case it is advisable to contact Alfa Romeo Authorised Services as soon as possible.

WARNING

During use of the compact spare wheel, the VDC system continues working. It should be borne in mind that the spare wheel is smaller than a normal tyre, therefore its grip is lower than that of the other tyres of the car.

WARNING For the VDC system to work correctly, the tyres must be of the same brand and

type on all wheels, in perfect conditions and above all of the specified type, brand and size.

 $-\phi$ 

ASR SYSTEM (Antislip Regulation) (upon request for versions/markets where applicable)

The ASR function controls the car drive and cuts in automatically every time one or both driving wheels slip.

In slipping conditions, tow different control systems are activated:

1) if slipping involves both driving wheels, being caused by excessive power transmitted, the ASR device cuts in reducing the power transmitted by the engine.

2) if slipping involves only one driving wheel, the ASR system cuts in automatically braking the wheel that is slipping, with an effect similar to that of a self-locking differential. The action of the ASR is particularly helpful in the following circumstances:

- slipping of the inner wheel on a bend, due to the effect of dynamic load changes or excessive acceleration.

 too much power transmitted to the wheels also in relation to the conditions of the road surface.

- acceleration on slippery, snowy or frozen surfaces.

- in the case of loss of grip on a wet surface (aquaplaning).

## WARNING

The performance of the system in terms of active safety should not induce the driver to take pointless and unnecessary risks. The style of driving must in any case be adapted to the conditions of the road surface, visibility and traffic. Road surface is always the driver's responsibility.

## SWITCHING ON THE ASR FUNCTION

The ASR function switches on automatically each time the engine is started.

When travelling the device can be switched off and on again pressing switch (**A-fig. 171**).

When the function is turned off, the instrument panel warning light (@∉:) turns on.

If the function is switched off when travelling, it will turn on again automatically the next time the engine is started.



During use of the compact spare wheel, the ASR function is cut off and the @# warning light on the instrument cluster turns on glowing steadily together with the message on the reconfigurable multifunction display.

WARNING For correct operation of the ASR system the tyres must absolutely be of the same brand and type on all wheels, in perfect conditions and, above all, of the specified type, brand and size.

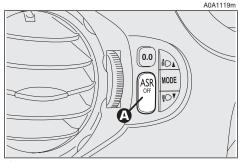


fig. 171

**IMPORTANT** When travelling on snow with snow chains, it may be helpful to turn the ASR device off: in fact, in these conditions, slipping of the driving wheels when moving off makes it possible to obtain better drive.

# ASR SYSTEM FAILURE

In the event of a fault, the ASR system switches off automatically and the @ : warning light on the instrument cluster turns on, together with the message on the reconfigurable multifunction display.

In the event of an ASR system operating failure, the car behaves in the same way as a car that is not fitted with this system: in any case, it is advisable to contact Alfa Romeo Authorised Services as soon as possible.

# **EOBD SYSTEM** (for versions/markets where applicable)

The EOBD system (European On Board Diagnosis) allows continuous diagnosis of the components on the car correlated with emissions; it also alerts the driver, by turning on the warning light con some versions together with the message + symbol on the reconfigurable multifunction display) on the instrument panel when these components are no longer in peak conditions.

The objective is:

- to keep the system efficiency under control;

 warn when a fault causes emission levels to increase over the threshold established by European law;

- warn of the need to replace deteriorated components. The system also has a diagnostic connector that can be interfaced with appropriate tools, which makes it possible to read the error codes stored in the control unit, together with a series of specific parameters for engine operation and diagnosis. **IMPORTANT** After eliminating the inconvenience, to check the system completely, Alfa Romeo Authorised Services are obliged to run a bench test and, if necessary, road tests which may also call for a long journey.

If, turning the ignition key to MAR, the warning light to MAR, the warning light to does not turn on or if, while travelling it turns on glowing steadily or flashing (on some versions together with the message + symbol on the reconfigurable multifunction display), contact Alfa Romeo Authorised Services as soon as possible.

## SOUND SYSTEM PRESETTING (for versions/markets where applicable)

The car, if requested without radio, is fitted with a glove compartment on the dashboard (**fig. 172**).

The radio system presetting consists of:

- cables for sound system power supply;

cables for front and rear loudspeaker power supply;

- cable for aerial power supply;

- housing for sound system;

- aerial on car roof.

The radio is to be fitted in the housing located in the glove compartment which can be removed pressing the two retaining catches in the compartment: here it is possible to find the power cables. If you wish to fit the radio system after purchasing the car, first it is necessary to contact Alfa Romeo Authorised Services who will be able to advise you on how to preserve the battery charge. The excessive useless power asboption may damage the battery and make the battery warranty null.

## **TECHNICAL INFORMATION**

## **Speakers**

In the cars fitted with radio presetting the, sound system consists of:

 No. 4 tweeters: 2 front and 2 back (on markets where applicable) with 30W power;

- No. 4 speakers with a diameter of 165 mm (2 front and 2 back) and 40W power.

## Aerial

The aerial is located on the car roof. You are recommended to slacken and remove the aerial from the roof to avoid damaging it when washing the car in automatic system.



fig. 172

# **SOUND SYSTEM** (for versions/markets where applicable)

The car sound system, fitted with CD player (radio with Compact Disc player) or MP3 CD player (radio with MP3 CD player) has been designed in accordance with the special features of the passenger compartment, with a personalised design that blends with the style of the dashboard. The sound system cannot be adapted to other vehicles and for this reason it cannot be removed. The radio is installed in a user-friendly position for the driver and passenger and the graphics on the front panel make location of the controls quick, facilitating use.

The CD Changer is available at Lineaccessori Alfa Romeo.

In the following pages you will find the instructions for use, which you are advised to read through carefully. The instructions also contain the procedure for controlling the CD Changer (if provided) through the radio. For the instructions for use of the CD Changer refer to the specific manual.

## ADVICE

## **Road safety**

You are advised to learn how to use the various radio functions (e.g.: storing stations) before starting to drive.

## **Reception conditions**

Reception conditions change constantly when driving. Reception may be disturbed by the presence of mountains, buildings or bridges particularly when far away from the station being listened to.

**IMPORTANT** When receiving traffic information, the volume may be higher than normal.



## WARNING

Too high a volume when driving can put the driver's life at risk and that of other people. Therefore the volume should always be adjusted in such a way that it is always possible to hear the noises of the surrounding environment (e.g.: horns, ambulance, police sirens, etc.).

## **Care and maintenance**

The radio structure ensures long operation with no need for particular maintenance. In the event of a fault, contact Alfa Romeo Authorized Services.

To clean the front panel only use a soft, antistatic cloth. Cleaning and polishing products might spoil the surface.

## **Compact Disc**

Remember that dirt, marks or distortion on Compact Disc can cause skipping. To obtain optimum playing conditions we give the following advice:

- Only use Compact Discs which have the following brand:



- Carefully clean all Compact Discs of fingerprints and dust using a soft cloth. Support Compact Discs from the outer circumference and clean from the centre outwards;

Never use chemical products for cleaning (e.g.: spray cans, antistatic or thinners) as they might damage the surface of Compact Discs;

 After use, put Compact Discs back in their container, to avoid marks or scratches that may cause skipping when playing;

 Do not expose Compact Discs to direct sunlight, high temperatures or damp for prolonged lengths of time to prevent them from bending;

- Do not stick labels or write on the recorded surface of Compact Discs. To remove a Compact Disc from its container, press the centre and raise the disc carefully, holding it by the outer circumference.

Always hold Compact Discs by the outer circumference. Never touch the surface.

To remove fingerprints and dust, use a soft cloth starting from the centre of the Compact Disc outwards.

Do not use highly scratched, cracked, or distorted discs, etc. The use of these discs will involve malfunctioning or damage to the player. For optimal playing use original CDs only. Regular operation is not guaranteed if using R/RW CDs not properly mastered and/or CDs with max. capacity higher than 650 MB.

**IMPORTANT** Do not use the protective sheets for CD in commerce or discs with stabilisers, etc. as they might get stuck in the internal mechanism and damage the disc. **IMPORTANT** Should copy-protected CDs be used, then, few seconds may be required for playing them. Moreover, due to the proliferation of always new and different protection methods, it is not guaranteed that the CD player can play whatever protected disc. Copy protection is often indicated on the CD cover in small letters or hard to read characters. Usually it is indicated by writings like: "COPY CONTROL", "COPY PROTECT-ED", "THIS CD CANNOT BE PLAYED ON A PC/MAC", or it is identified by symbols like:



Protected discs (and their cover) very often are not marked with the audio CD identification symbol:



**IMPORTANT** The CD player can read most of the compression systems currently on sale (e.g.: LAME, BLADE, XING, FRAUN-HOFER) however, due to the evolution of these systems, reading of all compression formats is not guaranteed.

**IMPORTANT** When loading a multi-session CD, only the first session will be played.

## **TECHNICAL DATA**

## Radio

Maximum power: 4 x 30W.

## Aerial

The aerial is located on the car roof. You are recommended to slacken and remove the aerial from the roof to avoid damaging it when washing the car in automatic system.

## **Speakers**

The sound system is formed of a system comprising:

4 tweeters: 2 front and 2 rear (for versions/markets where applicable) with 30W power

- 4 speakers with a diameter of 165 mm (2 front and 2 rear) with 40W power.

## **Protection fuse**

The radio has a 10A fuse located in the rear part of the set. To replace the fuse, the radio needs to be pulled out: therefore contact Alfa Romeo Authorised Services.

## HI-FI BOSE SYSTEM (optional for versions/ markets where applicable)

The HI-FI BOSE system installed on your car has been accurately designed to offer outstanding sound quality and reproduce the musical realism of a live concert, for all the seats in the passenger compartment.

The system's features include outstanding faithful reproduction of crystalline treble tones and full, rich basses which among other things, make the Loudness function superfluous. In addition, the complete range of the sounds is reproduced in the whole passenger compartment enveloping the occupants with the natural spatial sensation that is felt when listening to live music.

The components adopted are patented and are the result of the most sophisticated technology, but at the same time they are easy and intuitive to use, so that even less expert people can use the system.

## **Technical information**

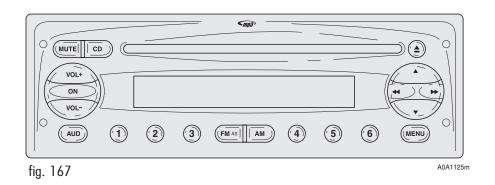
System comprises:

 No. 4 high efficiency woofers with diameter 165 mm, two at the front and two at the back, each having a coaxial tweeter inside;

 No. 1 bass box with a volume of 12 dm<sup>3</sup> housed on the left-hand side of the boot;

 No. 1 high power HI-FI amplifier (150W) with 6 channels, analogue equalising in amplitude signal phase and with 130 mm diameter sub-woofer.

## **CONTROLS ON FRONT PANEL**



## **Radio** section

- Traffic information reception (TA)
- Automatic storage of 6 stations in the
- dedicated FM band FMT (AS Autostore)

## **Audio section**

- Loudness function (excluding versions with Bose HI-FI system)

- Standard equalization (excluding versions with Bose HI-FI system)

- Personal equalization (excluding versions with Bose HI-FI system)

- Automatic volume changing according to car speed

- MUTE function

## CD / CD MP3 section

— Play / Pause

- Previous / next track selection
- FF / FR
- Previous / next directory selection

Button	GENERAL FUNCTIONS	Mode
ON	On	Short push on button
	Off	Long push on button
VOL+	Volume up	Press button
VOL	Volume down	Press button



Button	GENERAL FUNCTIONS	Mode
FM as	Radio band selection FM1, FM2, FM Autostore	Brief cyclic button pressing
AM	Radio band selection MW, LW	Brief cyclic button pressing
CD	Audio source selection (radio/CD/CD-Changer)	Brief cyclic button pressing
MUTE	Volume on/off (MUTE / PAUSE)	Brief button pressing
AUD	Audio settings: bass (BASS), treble (TREBLE), right/left sound adjustment (BALANCE), front/rear sound adjustment (FADER)	Menu activation: brief button pressing Adjustment selection: press button ▲ or ▼ Value adjustment: press button ◀ ◀ or ▶ ▶
MENU	Advanced functions adjustment	Menu activation: brief button pressing Adjustment selection: press button ▲ or ▼ Value adjustment: press button ◀◀ or ►►

Button	RADIO FUNCTIONS	Mode
	Radio station tuning: • Automatic tuning • Manual tuning	Automatic tuning: press button ◀ ◀ or ► ► (long pressing for fast forward) Manual tuning: press button ▲ or ▼ (long pressing for fast forward)
123456	Current radio station storage	Long button pressing respectively for preset/memories from 1 to 6
	Stored station recall	Brief button pressing respectively for preset/memories from 1 to 6

Button	CD FUNCTIONS	Mode
	CD ejection	Brief button pressing
<b></b>	Previous/next track playback	Brief pressing on buttons ◀◀ or ►►
	CD track fast forward/backward	Long pressing on buttons $\blacktriangleleft \blacktriangleleft$ or $\blacktriangleright \blacktriangleright$
	Previous/next CD playback (for CD Changer)	Brief pressing on buttons $\blacktriangle$ or $\blacktriangledown$
▼	Previous/next directory playback (for MP3 CD)	Brief pressing on buttons $\blacktriangle$ or $\blacktriangledown$

# Ψ

# **STEERING WHEEL CONTROLS** (where provided)

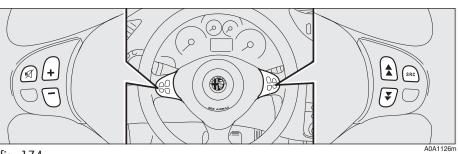


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Button	FUNCTION	Mode
Ø	Audio Mute on/off (with sound system on)	Brief button pressing
+	Volume up	Press button
-	Volume down	Press button
SRC	Radio frequency (FM1, FM2, FMT, MW, LW) and audio source (Radio - CD - MP3 - CD Changer) selection button	Press button
*	Radio: recall preset stations (1 to 6) MP3: select next directory CD Changer: select next CD in the CD Changer	Press button
¥	Radio: recall preset stations (6 to 1) MP3: select previous directory CD Changer: select previous CD in the CD Changer	Press button

## GENERAL

ETTING TO KNOW YOUR CAR

The set possesses the following functions:

## **Radio** section

 PLL tuning with FM/AM/MW/LW frequency bands;

- RDS (Radio Data System) with TA (traffic announcements) - TP (Program Type) -EON (Enhanced Other Network) - REG (Regional programmes);

AF: alternative frequency search selection in RDS mode;

- emergency alarm presetting;

- automatic/manual station tuning;

- FM Multipath detector;

 manual storage of 36 stations: 18 in the FM band (6 in FM1, 6 in FM2, 6 in FMT), 6 in the MW band and 6 in the LW band;

 – automatic storage (Autostore function) of 6 stations in FM band;

 SVC function (excluding versions with Bose HI-FI system): automatic volume adjustment with car speed;

- automatic Stereo/Mono switching.

## **CD** section

- Direct disc selection;
- Track selection (forward/backward);
- Fast forward/backward;
- CD Display function: displaying CD
- name/time elapsed from start of track;
- Playing audio CDs and R/RW CDs.

On multimedia CDs in addition to sound tracks also data tracks are recorded. Playing one of these CDs may cause rustling and such a volume as to compromise road safety, as well as causing damage to the final stages and speakers.

## **CD MP3 section**

- Directory selection (previous/next);
- Track selection (forward/backward);
- Fast forward/backward;

 MP3 DISP function: directory name, ID3tag info, time elapsed from start of track, file name);

- Playing audio CDs and R/RW CDs.

## **Audio section**

- Mute/Pause function;

- Soft Mute function;

Loudness function (excluding versions with Bose HI-FI system);

7 band graphic equalizer (excluding versions with Bose HI-FI system);

- Separate bass/treble adjustment;
- Right/left channel balancing.

If the volume level is changed during the broadcast of a traffic bulletin, the new setting is maintained only until the end of the bulletin.

Volume adjustment

buttons.

## **SVC function** (excluding versions with HI-FI Bose system)

The SVC function makes it possible to automatically adapt the volume level to the speed of the car, increasing it as the speed increases to maintain the ratio with the noise level inside the passenger compartment.

See section MENU for activating/deactivating this function.

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## FUNCTIONS AND **ADJUSTMENTS**

## Turning the sound system on

The set is switched on pressing button ON.

When turning the sound system on, the volume level will be brought to 20 if it was set to over.

If the radio is turned on when the key is not fitted into the ignition device, it will turn off automatically after about 20 minutes. After automatic switching off, it is however possible to turn the radio on again for other 20 minutes by pressing button ON (see paragraph "IGN TIME function").

## Turning the sound system off

Keep button ON pressed.

## Selecting radio functions

Pressing briefly and repeatedly button FMAS it is possible to select the following functions in sequence:

- TUNER ("FM1", "FM2", "FMT");

Pressing briefly and repeatedly button AM it is possible to select the following functions in sequence:

- TUNER ("MW", "LW").

## Selecting CD/CD Changer functions

Pressing briefly and repeatedly button CD it is possible to select the following audio sources in sequence:

- CD (only if the Compact Disc is inserted);

- CHANGER (only if the CD Changer is connected).

## Audio source memory function

If while listening to a CD another function is selected (e.g.: the radio), playing is stopped and when the CD mode is resumed. it starts again from the point in which it was stopped.

If while listening to the radio another function is selected, when the Radio mode is resumed, it is tuned to the last station selected.

## Mute /pause function (turning off the volume completely)

To switch on the Mute function, briefly press the button MUTE. Volume will gradually lower and the display will show the word "MUTE" (when in radio mode) or "PAUSE" (when in CD or CD-Changer mode).

To switch off the Mute function, press the button MUTE again. Volume will gradually become louder returning to the value set before switching on the Mute function.

Changing volume will deactivate the Mute function and the volume will be set to the new level selected.

With the Mute function on:

— if an emergency alarm or a traffic bulletin arrives with the TA function on, the message ignores the Mute function. The Mute function will be resumed at the end of the traffic announcement.

## **Audio adjustments**

The options proposed by the audio menu differ according to the audio source selected: AM/FM/CD/CDC.

To change Audio functions, press briefly button AUD. The display will show "BASS".

To scroll the Menu options, use buttons  $\blacktriangle$  or  $\blacktriangledown$ . To change the setting of the option selected, press buttons  $\blacktriangleleft \blacktriangleleft$  or  $\blacktriangleright \triangleright$ .

The display will show the current status of the function selected.

The functions controlled by the menu are the following:

- BASS (bass adjustment);

- TREBLE (treble adjustment);

BALANCE (right/left balance);

 – FADER (excluding versions with Bose HI-FI system) (front/rear balance);

LD (excluding versions with Bose HI-FI system) (Loudness on/off);

 PRESET (excluding versions with Bose HI-FI system) (standard equalization activation and selection);

- XX USER (personal equalization setting).

## Tone adjustment (bass/treble)

Proceed as follows:

 Use button ▲ or ▼ to select "BASS" or "TREBLE" in the AUDIO menu;

 press button ◀◀ or ▶▶ to increase/decrease the basses or trebles.

Pressing the buttons briefly the change is gradual by steps. Pressing longer, changing is faster.

## **Balance adjustment**

Proceed as follows:

- Use button  $\blacktriangle$  or  $\blacktriangledown$  to select "BAL-ANCE" in the AUDIO menu;

- press button  $\blacktriangleleft \blacklozenge$  to increase the sound from the right speakers or button  $\triangleright \triangleright$  to increase the sound from the left speakers.

Pressing the buttons briefly the change is gradual by steps. Pressing longer, changing is faster.

Select " $\blacktriangleleft \blacklozenge 0 \triangleright \flat$ " to set the same value for both right and left speakers.

## Fader adjustment

Proceed as follows:

- Use button  $\blacktriangle$  or  $\blacktriangledown$  to select "FADER" in the AUDIO menu;

- press button  $\blacktriangleleft \blacklozenge$  to increase the sound from the rear speakers or button  $\triangleright \triangleright$  to increase the sound from the front speakers.

Pressing the buttons briefly the change is gradual by steps. Pressing longer, changing is faster.

Select " $\blacktriangleleft \blacklozenge \lor \lor$ " to set the same value for both front and rear speakers.

## LD function (excluding versions with Bose HI-FI system)

The Loudness function improves the sound volume when listening at low level, increasing the basses and trebles.

To switch the function on/off, use button  $\blacktriangle$  or  $\blacktriangledown$  to select "LD" in the AUDIO menu. The function condition (on or off) is shown on the display for few seconds by "LD ON" or "LD OFF".

## PRESET/XX EQ SET\*/CLASSIC/ ROCK/JAZZ functions (equalizer on/off) (excluding versions with Bose HI-FI system)

The integrated equalizer can be turned on or off. With the equalizer off, it is possible to change the sound settings only adjusting the bass ("BASS") and treble tones ("TREBLE"), while activating the function makes it possible to adjust the sound curves.

To turn the equalizer off, select "PRESET" by means of button  $\blacktriangleleft \blacklozenge$  or  $\triangleright \triangleright$ .

To turn the equalizer on, use button  $\blacktriangleleft \blacksquare$  or  $\blacktriangleright \triangleright$  to select one of the following options:

- "USER" (adjustment of the 7 equalizer bands that can be changed by the user);

 - "CLASSIC" (predefined equalizer adjustment for best playing of classic music);

"ROCK" (predefined equalizer adjustment for best playing of rock and pop music);

- "JAZZ" (predefined equalizer adjustment for best playing of jazz music).

When one of the equalizer settings is on, the display shows "EQ".

## \*XX EQ SET function (only if the USER equalizer setting has been selected) (excluding versions with Bose HI-FI system)

To set a personal equalizer adjustment, use button  $\blacktriangle$  or  $\blacktriangledown$  to select USER and then press button  $\blacktriangledown$  for long.

The display will show for about 2 seconds "XX EQ SET" and then a graph with 7 bars, where each bar represents a frequency. Choose the bar to be adjusted using button  $\blacktriangleleft \blacklozenge$  or  $\triangleright \triangleright$ ; the bar chosen starts to flash and it is possible to adjust it using button  $\blacktriangle$  or  $\blacktriangledown$ .

To store the new settings, press button AUD again or wait for about 10 seconds. The display will show the word "MEN" together with the graph with 7 bars.

## **Antitheft protection**

Refer to paragraph "CD Player".

## **RADIO (TUNER)**

## Introduction

When the set is turned on the last function selected before turning off is played (Radio, CD or CD Changer).

To select the Tuner source while listening to another audio source, press briefly buttons FMAs or AM, according to the required frequency band.

When Tuner is on, the display will show the selected station name (RDS stations only) (or frequency), the frequency band (e.g.: FM1) and the preselection button number (e.g.: P1).

## Selecting the frequency band

If in the Tuner mode, briefly and repeatedly press button FMAs or AM to select the required frequency band.

Every time the button is pressed the following bands are selected in sequence:

— Pressing button FMAs: "FM1", "FM2", "FMT";

- Pressing button AM: "MW" and "LW".

Each band is shown by the respective wording on the display.

The last station selected in the respective frequency band will be tuned.

The FM band is divided into sections: FM1, FM2 and FMT. The FMT reception band is reserved to the stations stored automatically with the Autostore function.

## **Presetting buttons**

The buttons with symbols from 1 to 6 make it possible to set the following presettings:

- 18 in the FM band (6 in FM1, 6 in FM2, 6 in FMT);

-6 in the MW band;

-6 in the LW band;

To call a preset station, choose the required frequency band and then press briefly the corresponding preset button (from 1 to 6).

Pressing the respective preset button for longer than 2 seconds will store the tuned station. Storing is confirmed by a beep.

#### Storing the last station heard

The radio automatically keeps in storage the last station heard for each reception band, which is then tuned when the radio is turned on or the reception band is changed.

## **Automatic tuning**

Briefly press button  $\blacktriangleleft \blacklozenge$  or  $\triangleright \triangleright$  to start automatically searching the tuning for the next station that it is possible to receive in the direction chosen.

If button  $\blacktriangleleft \blacklozenge$  or  $\blacktriangleright \triangleright$  is pressed for longer, quick searching takes place. When the button is released, the tuner stops on the next receivable station.

If the TA function is on (traffic information), the tuner only searches stations which broadcast traffic bulletins.

## Manual tuning

This allows manual station searching in the chosen band.

Select the required frequency band and then press briefly and repeatedly button  $\blacktriangle$ or  $\blacktriangledown$  to start searching in the chosen band. Pressing one of the buttons  $\blacktriangle$  or  $\blacktriangledown$  longer obtains fast forward searching, which is stopped when the button is released.

## A-STORE function (automatic station storage)

To switch on the A-STORE function, keep button FMAs pressed until receiving the confirmation beep. With this function the radio automatically stores the six stations with the strongest signal in decreasing order of intensity of the FMT frequency band.

**IMPORTANT** Activating the A-STORE function cancels the stations stored previously in the FMT band.

If the TA function is on (traffic information), only the stations that send traffic information will be stored.

During automatic storage the display shows "A-STORE".

To interrupt A-STORE press button FMAS again: the radio will automatically tune to the station heard before activation of the AutoSTore function.

At the end of the A-STORE function the radio automatically tunes on the first preset station in the FMT band stored on preset button 1.

On buttons numbered from 1 to 6, the stations are automatically stored that give a strong signal in that moment in the present band.

Activating the A-STORE function in MW or LW bands will automatically select the FMT band where the function is then run.

**IMPORTANT** Sometimes the A-STORE function is unable to find 6 stations with a strong signal. In this case the previous stations will be stored on the free preset buttons.

## **Emergency alarm reception**

In the RDS mode the radio is set to receive emergency announcements in the case of exceptional circumstances or events that may cause general danger (earthquakes, floods, etc.), if they are broadcast by the station tuned.

This function is activated automatically and cannot be deactivated.

During emergency announcement the display will show the message "ALARM". During this announcement the volume will change as described for traffic announcements (see paragraph "TA function").

## EON function (Enhanced Other Network)

Certain countries have circuits which group together several stations enabled to broadcast traffic information. In this case the programme of the station being heard will be interrupted temporarily:

- to receive traffic information (only with TA function on);

 to listen to regional programmes every time these bulletins are given by one of the stations of the same circuits.

## **Stereophonic stations**

If the signal received is weak, the device switches automatically from Stereo to Mono.

## MENU

## **MENU button functions**

To activate the menu function, briefly press button MENU. The display shows the word "MENU".

To scroll the menu functions use button  $\blacktriangle$  or  $\blacktriangledown$ . To change the setting of the selected function use button  $\blacktriangleleft \blacktriangleleft$  or  $\blacktriangleright \triangleright$ .

The display will show the current status of the function selected.

The functions controlled by the menu are the following:

- AF (alternative frequency search);

- TA (traffic information);

- REG (regional programmes);

- MP3 DISP (MP3 CD data display);

SVC (automatic volume control in relation to speed);

EXT VOL (external audio sources control);

 IGN TIME (System power off mode radio);

- DEFAULT (reset original settings).

To exit the menu function, press button MENU again.

## AF function (alternative frequency search)

Within the RDS system the radio can work in two different modes:

- "AF ON": alternative frequency search on (the display shows "AF");

- "AF OFF": alternative frequency search off.

With "AF ON", the radio is automatically tuned to the station with the strongest signal that is broadcasting the same programme. During the journey it will thus be possible to continue listening to the station chosen without having to change the frequency when changing area.

Of course, the station being listened to must be receivable in the area the car is crossing.

To turn the AF function on/off, press button MENU, and then select "AF ON" or "AF OFF". If the AF function has been turned on the display shows "AF".

If the radio is working in the AM band, when the AF function is activated, it passes to the FM1 band on the last station selected.

## TA function (traffic information)

Certain stations in the FM band (FM1, FM2 and FMT) are enabled to also broadcast information about traffic conditions. In this case the display shows "TP".

To turn the TA (traffic announcement) function on/off, briefly press button MENU and then select "TA ON" or "TA OFF".

**IMPORTANT** If the TA function (traffic information) is on, with CD, CD Changer (if installed), Telephone or Mute/Pause active: automatic station tuning will start.

With the TA function it is possible:

 to search only RDS stations that transmit in the FM band, enabled to broadcast traffic information;

- to receive traffic information although CD player or CD Changer are being used;

- to receive traffic information at a predefined minimum volume even with the radio volume off. **IMPORTANT** In certain countries radio stations exist which, even if the TP function is on (the display shows "TP"), do not transmit traffic information.

If the radio is working in the AM band, when TA is activated, it passes to the FM1 band on the last station heard.

The volume with which the traffic bulletin is transmitted varies depending on the listening volume:

listening volume below 20: traffic bulletin volume = 20 (fixed value);

- listening volume above 20: traffic bulletin volume = listening volume +1.

If the volume is changed during a traffic bulletin the value is not shown on the display and the new value is kept only for the bulletin in progress.

The TA function is interrupted by pressing any sound system button.

## REG function (regional broadcast reception)

Certain national broadcasters, at determinate times of the day, transmit regional programmes which differ from region to region. This function makes it possible to tune in only on local stations (regional) (see "EON function").

Activate this function if you want to tune automatically to regional stations broadcasting in the selected band.

To turn the function on/off use button  $\blacktriangleleft \blacklozenge$  or  $\triangleright \triangleright$ .

- The display will show the current status of the function:
- "REG ON": function on.
- "REG OFF": function off.

If the function is off and a regional programme is tuned that works in a determinate area and the car enters a different area, the regional station of the new area is received.

**IMPORTANT** If AF and REG are both active, when passing from one region to another the radio could not tune properly to a valid alternative frequency.

## MP3 DISP function (CD MP3 data display)

With this function it is possible to choose the information shown on the display, when listening to a MP3 CD.

This function can be selected only if a MP3 CD is loaded: in this event the display shows "MP3 DISP".

To change the function use buttons  $\blacktriangleleft \blacklozenge$  or  $\triangleright \triangleright$ .

The display shows the setting among the six possible:

- TITLE (track title, if ID3-TAG available)

- AUTHOR (track author, if ID3-TAG available)

— ALBUM (album title, if ID3-TAG available)

- DIR (directory name);
- FILENAME (MP3 file name);
- TIME (time elapsed from start of track).

## SVC function (volume changing with speed) (excluding versions with Bose HI-FI system)

This function makes it possible to automatically adapt the volume level to the speed of the car, increasing it as the speed increases to maintain the ratio with the noise level inside the passenger compartment.

To turn the function on/off use button  $\blacktriangleleft \bullet$  or  $\triangleright \triangleright$ . The display will show the current status of the function:

- SVC OFF: function off

- SVC LOW: function on (low sensitivity)

- SVC HIGH: function on (high sensitivity).

## EXT function (external audio source control)

With this function it is possible to adjust (setting from 0 to 40) or exclude (OFF) external audio sources.

To turn this function on/off, use button  $\blacktriangleleft \bullet$  or  $\triangleright \triangleright$ .

The display will show the current status of the function:

- "EXT VOL": function on.

- "EXT OFF": function off.

- "EXT 23": function on with volume level 23.

## IGN TIME function (system power on/off mode radio)

This function enables to switch off the sound system according to two different modes. To turn the function on use button  $\blacktriangleleft \blacklozenge$  or  $\triangleright \triangleright$ .

The display will show "IGN TIME" and then:

 "00 MIN": deactivation dependent on ignition key. Sound system will switch off automatically when turning the ignition key to STOP;

- "20 MIN": deactivation independent of ignition key. After having turned the ignition key to STOP the sound system will stay on for 20 minutes max.



**IMPORTANT** When the sound system is switched off automatically after turning the ignition key to STOP (for both immediate or 20-minute delayed power off), it will switch on automatically turning the ignition key to MAR. If the sound system has been switched off pressing button ON, when turning the key to MAR it will stay off.

## **RESTORE** function

This function enables to restore default settings. Options available are the following:

- NO: no restore;

- YES: restore default settings. During this operation the display will show the message "RESTORE". At the end of this operation, the audio source will not be changed and the previous situation is displayed. **GETTING TO KNOW YOUR CAR** 

## **COMPACT DISC PLAYER**

## Introduction

This section only describes CD player operation variants: as concerns sound system operation, refer to paragraph "Functions and adjustments".

## Selecting the compact disc player

To turn on the Compact Disc player integrated in the set, proceed as follows:

- insert a CD with the set on: the first track will be played;

or

— if a CD is already inserted, turn the set on and press briefly button CD to select "CD": the last heard track will be played.

For optimal playing use only original CDs. When using R/RW CDs, use top quality CDs mastered at the as low as possible speed.

## Inserting/ejecting a CD

To insert the CD set it gently in place to activate the powered loading system, which will position it correctly.

Press button  $\blacktriangle$ , with the device on, to operate the powered CD eject system. After ejection, the source heard before playing the CD will return.

If CD is not ejected, the device will reload it automatically after about 20 seconds and then will set to Tuner (Radio).

CD cannot be ejected if the device is off.

Inserting the ejected CD without fully removing it from the slot, the tuner will not change the source to CD.

## Possible error messages

If the CD inserted is illegible (e.g.: CD-ROM inserted, CD not inserted properly or reading error), the display will show the message "CD ERROR" for about 2 seconds.

The CD is then ejected and the previous source before CD was selected returns.

## **Display information**

When the CD player is working, the display shows the following information which means:

"T05": shows the number of the track on the CD;

"03:42": shows the time elapsed since the start of the track (if the corresponding Menu function is on);

## Select track (forward/backward)

Briefly press button  $\blacktriangleleft$  to play the previous track and button  $\blacktriangleright$  to play the next one. Tracks are played in sequence: after the last track, the first one will be played and vice versa.

If playing the track started more than 3 seconds ago, pressing briefly button  $\blacktriangleleft$  the track is played again from the start. In this case if wanting to play the previous track, press the button twice consecutively.

## Fast forward/backward

Keep button ►► pressed to move the track selected forward at high speed and keep button ◄ < pressed to move it quickly backward. Fast forward/backward is stopped once the button is released.

## **Pause function**

To pause the CD player, press button MUTE. The display will show "PAUSE".

To resume playing the track, press button MUTE again.

The pause function is deactivated changing the sound source.

## Antitheft protection

The radio is fitted with an antitheft protection system based on the exchange of information between the radio and the electronic control unit (Body Computer) installed on the car.

This system warrants the highest level of security and prevents entry of the secret code every time the radio supply is disconnected.

If the result of the check is positive, the set starts working, whereas if the comparison codes are not the same or if the electronic control unit (Body Computer) is replaced, the device informs the user of the need to enter the secret code according to the procedure described in the following paragraph.

## Entering the secret code

When turning the sound system on (in the event of code request), the display will show the word "CDC CODE" for about 2 seconds, followed by four dashes "----".

The secret code comprises four figures from 1 to 6, each corresponding to one of the dashes.

To enter the first digit of the code, press the corresponding key of the preset stations (from 1 to 6). Enter the other code digits in the same way.

If the four figures are not entered within 20 seconds, the display shows the word "CDC CODE" for 2 seconds and then fours dashes "----". This is not to be considered as an incorrect code entry.

After entering the fourth digit (within 20 seconds), the radio starts working.

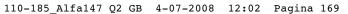
If a wrong code is entered, the radio sounds a beep, the display shows the word "CDC CODE" for 2 seconds and then fours dashes "----" to warn the user that it is necessary to enter the correct code. Every time the user enters a wrong code, the waiting time increases gradually (1 min, 2 min, 4 min, 8 min, 16 min, 30 min, 1h, 2h, 4h, 8h, 16h, 24h) until reaching a maximum of 24 hours. The waiting time will be shown on the display with the word "CDC WAIT". When this goes off it is possible to start the new code entry procedure.

## **Code Card**

This the document that certifies possession of the radio. The Code Card contains the radio model, serial number and secret code.

**IMPORTANT** Keep the Code Card carefully to be able to give the related data to the competent authorities in the event of theft.

**GETTING TO KNOW YOUR CAR** 



## MP3 CD PLAYER (where provided)

## Introduction

This section only describes MP3 CD player operation variants: as concerns sound system operation, refer to paragraph "Functions and adjustments".

**NOTE** MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

## MP3 mode

In addition to standard audio CDs, the sound system can also play audio files in MP3 format. Sound system will operate as described in "Compact Disc player" paragraph when inserting a conventional audio CD.

For optimal playing use only top quality CDs mastered at a speed as low as possible.

MP3 CD files are structured by directories, with sequential lists of all directories containing MP3 tracks (directories and sub-directories are all brought to the same level), directories not containing MP3 tracks cannot be selected. Technical data and operating conditions for MP3 files are as follows:

- adopted CD-ROM shall be mastered according to ISO9660 Standard;

 music files shall be renamed as ".mp3" otherwise they cannot be played;

 sampling frequencies are: 44.1 kHz, stereo (96 to 320 kbit/s) - 22.05 kHz, mono or stereo (32 to 80 kbit/s);

- it is possible to play variable bit-rate tracks (files).

**IMPORTANT** Characters: blank, ' (apostrophe), (and) (open and closed brackets) are not admitted in MP3 track names. When sampling MP3 CD you must not use these characters to name files otherwise the sound system will not be able to play it.

## **DISPLAY INFORMATION**

## ID3-tag info display (track informations)

In addition to time elapsed, directory name and file name, also ID3-tag info relevant to track Title, Artist, Author (see "MP3 disp function") are displayed.

The MP3 directory name shown on the display corresponds to the name with which the directory is stored on the CD, followed by an asterisk.

Example of full MP3 directory name: BEST OF  $\star$ .

If you want to display one ID3-tag info (Title, Artist, Album) and the track being played has no ID3-tag info then, the file name will be displayed.

## Select next/previous directory

Press button  $\blacktriangle$  to select the next directory or press button  $\blacktriangledown$  to select the previous one. The name of the new selected directory will be shown on the display.

Directories are selected in cyclic sequence: after the last directory the first one is selected and vice versa.

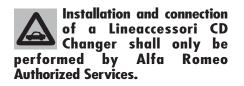
If no other directory/track is selected in the following 2 seconds, the first track in the new directory will be played.

If the last track in the currently selected directory is played, the next will then be played.

## **Antitheft protection**

Refer to paragraph "Compact Disc player".

## CD CHANGER (CDC)



## Introduction

This section only describes CD Changer (where provided) operation variants: as concerns sound system operation, refer to paragraph "Functions and adjustments".

## Selecting the CD changer

Turn on the set, then press briefly and repeatedly button CD until selecting "CHANG-ER".

#### **Possible error messages**

Error messages will be displayed in the following cases:

 no CD in the CD Changer: the display will show "CD ERROR" until changing the sound source;

— selected CD is illegible (CD not in the selected position or CD not inserted properly): the display shows "CD ERROR" after the number of the selected CD. The next CD will be selected; if there are no other CDs or if they are also illegible the display will show the wording "NO CD" until the sound source is changed;

— error in CD reading: the display shows "CD ERROR". The next CD will be selected; if there are no other CDs in the CD Changer (after the last CD search will restart from the first one) or they are also illegible, if the sound source is not changed, the display will show the following:

□ "CD Changer" for about 2.5 seconds;

□ "CD Error" for about 5 seconds;

□ plays next source for other 5 seconds;

a CD-ROM is inserted: next CD will be selected.

## Selecting the CD

Press button  $\blacktriangle$  to select the next CD and button  $\blacktriangledown$  to select the previous CD. If the loader does not contain a disc in the position selected, the display briefly shows the wording "CD ERROR", and the next CD is played automatically.

## TROUBLESHOOTING

## **Overview**

## Low volume

The Fader function shall only be set to "F" (front), to prevent sound system output power reduction and volume muting if the Fader level set is = R+9.

# Required source cannot be selected

No CD loaded. Load the CD or the MP3 CD you want to play.

## **Compact disc player**

## CD not played

Loaded CD is dirty. Clean the CD. Loaded CD is scratched. Try to play another CD.

## Required CD cannot be loaded

Another CD is already loaded. Press button **a** and remove the CD.

## MP3 file reading

## Skipping when reading MP3 files

Loaded CD is scratched or dirty. Clean the CD as described in paragraph "CD" in "Advice" paragraph.

# MP3 track length not displayed correctly

In certain cases (due to recording) MP3 track length can be displayed incorrectly.

## MOBILE TELEPHONE PROVISION

The car may be fitted with a provision for installing a cell phone.

The mobile phone provision consists of:

- radio + cell phone dual-purpose antenna;

- connection and supply cables with specific connector for connecting hands-free kit. The voice kit should be purchased by the customer as it must be compatible with the customer's phone.

For the installation of a cell phone and connection to the provision in the car, contact only Alfa Romeo Authorised Services; this will guarantee first-rate results with no possibility of any inconvenience that may compromise the safety of the car.

## ACCESSORIES PURCHASED BY THE OWNER

If after buying the car, you decide to install electrical accessories that require a permanent electric supply (alarm, voice feature, radionavigator with satellite antitheft, etc.) or accessories that in any case burden the electric supply, contact Alfa Romeo Authorised Services, whose qualified personnel, besides suggesting the most suitable devices belonging to Lineaccessori Alfa Romeo, will also evaluate the overall electric absorption, checking whether the car electric system is able to withstand the load required, or whether it needs to be integrated with a more powerful battery.

## INSTALLATION OF ELECTRIC/ELECTRONIC DEVICES

Electric/electronic devices installed after buying the car or in aftermarket shall bear the and marking:

e (e

Fiat Auto S.p.A. authorizes the installation of transceivers provided that installation is carried out at a specialized shop, workmanlike performed and in compliance with manufacturer's specifications. **IMPORTANT** Installation of devices resulting in modifications of car characteristics may cause driving license seizing by traffic agents and also the lapse of the warranty as concerns defects due to the abovementioned modification or traceable back to it directly or indirectly.

Fiat Auto S.p.A. declines all responsibility for damages caused by the installation of non-genuine accessories or not recommended by Fiat Auto S.p.A. and installed not in compliance with the specified requirements.

## RADIO TRANSMITTERS AND CELLULAR TELEPHONES

Mobile phones and other radio transceiver equipment (e.g.: HAM radio systems and the like) shall not be used inside the car unless a separate aerial is mounted.

**IMPORTANT** The use of mobile phones, HAM radio systems or other similar devices inside the passenger compartment (without separate aerial) may cause electronic systems equipping the car to malfunction. This could compromise safety in addition to constituting a potential hazard for the passengers.

In addition, transmission and reception of these devices may be affected by the shielding effect of the car body.

As concerns the use of mobile phones (GSM, GPRS, UMTS) with  $\mathbf{C}\mathbf{\epsilon}$  homologation, keep strictly to the mobile phone manufacturer's specifications.

**GETTING TO KNOW YOUR CAR** 

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## HANDSFREE SYSTEM WITH VOICE COMMANDS AND Bluetooth<sup>®</sup> TECHNOLOGY

## GENERAL

The **Bluetooth**<sup>®</sup> technology allows dialogue without electrical connections (wireless) between your cellular telephone and the handsfree system in the car.

Communication is based on the transmission of short-radius radio waves which exchanges data and voice at a speed of about 1 Mb (Megabyte) per second in a range of 10 metres.

The radio frequency used by the **Bluetooth**<sup>®</sup> technology is not subject to any restrictions and is completely free.

The handsfree system with voice commands makes it possible to make telephone calls safely, freely and comfortably in any driving situation, receiving and making telephone calls without taking the hands off the steering wheel, as prescribed by the law. The system installed on the car includes the following functions:

- radio sound cut off during telephone calls
- handsfree conversation

- transmission of conversation through the car speakers, with optimal sound quality

 possibility of connecting up to three cellular telephones with the activation of one cellular at a time (the setting of the connection priority will be described later)

- voice recognition (according to the type of cellular phone)

- automatic storing of telephone numbers in the directory

- storing of more telephone numbers for each single contact (e.g. home, work, cellular depending on the type of cellular phone) - forwarding/accepting/rejecting calls with voice command (depending on the type of cellular phone)

- volume control with the cellular telephone menu and the radio volume control buttons (see the Radio paragraph)

- "confidential" conversation mode, to transfer the sound from the handsfree system directly to the cellular phone (depending on the type of cellular phone)

- reduction of echo and background noise.

## SYSTEM COMPONENTS

The main components of the system are:

- electronic control unti
- microphone
- button control panel

The electronic control unit is housed in the dashboard, and contains the transmitter with the **Bluetooth**<sup>®</sup> technology, the microprocessor for the signals and the software.

The microphone located in the front panel is a high-quality component, designed to ensure the optimum communication in every condition. The button control panel (**fig. 175**) is on the central console and has two buttons, one green (**A**) and one red (**B**), which make it possible to activate all the functions of the system.

Press the green button (A) to:

- activate the voice recognition
- accept the call or double call
- dial the last number called
- turn on the "confidential" mode.

Press the red button (B) to:

- end a call
- refuse a call.

## Pressing simultaenously the green (A) and red (B) buttons for at least 2 seconds clears the memory.

**IMPORTANT** Clearing the memory implies the disconnection of all the telephones memorised, the clearing of all the numbers stored in the memory of the handsfree system and then calls for a new connection procedure to use the system again.

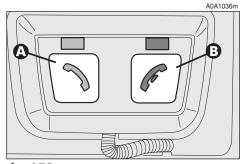


fig. 175



## COMPATIBLE CELLULAR TELEPHONES

The cellular phones compatible with the system are shown in the following table:

Model
7100, 7290
R520, T39m, T68m
V3, V500, V501, V525, V547, V551, V555, V600, V635, V80, E398, E1000, MPX 220, E680, A779, A780, SLVR L7 o V8, KRZR K1, RAZR2 V8, RIZR Z3, RIZR Z8
3110, 3650, 3660, 6131, 6230, 6230i, 6233, 6234, 6260, 6288, 6300, 6310, 6310i, 6600, 6650, 6670, 6680, 6230, 6810, 6820, 6630, 7280, 7600, 7610, 8800, 8910, 8910i, 9300, N-Gage, N-Gage QD, N73, N90, X5700
X700
SPV M1000, XDA2
Fisio 820, Fisio 825
SGH-D500, SGH-E730, SGH-E640, SGH-E370, SGH-E950, SGH-U700
GX15, GZ 15, GZ-100, GX30, GX31, GX32, TM200
S55, S56, S65, S66, SL75, SK65, SX1
SPV E200, SPV C500, M1000
T68i, P800, P900, P910i, T606, T610, Z600, Z608, V800, K750i, K800i, T630, T650i, W850i, W880i
NeoFone
E200, C500
8020, S100

## SYSTEM ACTIVATION

To activate the system after the first connection, turn the ignition key to **MAR**. When the system is active, the two leds on the buttons light on. To connect your cellular telephone to the system after the first connection it is necessary to get inside car with the cellular phone on and the **Bluetooth**<sup>®</sup> function activated.

## FIRST CONNECTION OF THE CELLULAR TELEPHONE TO THE SYSTEM

To carry out the first connection between the cellular telephone and the handsfree system it is necessary to activate the **Bluetooth**<sup>®</sup> function on your phone, following the related instructions (see your cellular telephone user's handbook). When the function is on, the related icon is displayed.

When connecting for the first time to the system, you will hear the instruction "Please, pair device". Now connect the cellular phone to the system (see your cellular telephone user's handbook.

**IMPORTANT** If wanting to use the **Bluetooth**<sup>®</sup> handsfree system, it is possible to avoid repeating the message ""Please, pair device" setting the minimum value of the radio PHONE function (see Radio paragraph). To hear the message "Please, pair device" it is necessary to turn the radio on.

# **GETTING TO KNOW YOUR CAR**

## During the connection procedure, the cellular telephone display will show a message to enter the connection code; enter code "1234" and then confirm.

Afterwards the connection will be carried out automatically, provided that the two sets are at very close distance. A beep will communicate that the connection has been established. Below are some examples of the operations to make for the first connection on some of the most known cellular telephones.

**IMPORTANT** The system works **only** when the ignition key is turned to **MAR**. The connecting procedure must be carried out only the first time the cellular phone is matched to the system. If at the first connection, the handsfree system does not say "Please, pair device", reset the system pressing (**A**) and (**B**) simultaneously for at least 2 seconds.

## CONNECTION OF OTHER TELEPHONES

To connect another cellular phone, repeat the procedure carried out for the first connection, up to a maximum of 3 cellular phones. For the connection of other cellular phones it will be necessary to clear the system (see following paragraph).

## **CLEARING THE SYSTEM**

To clear the system memory press the green (**A**) and red (**B**) buttons for at least 2 seconds.

**IMPORTANT** Clearing the memory implies the disconnection of all the telephones memorised, the clearing of all the numbers stored in the memory of the handsfree system and then calls for a new connection procedure to use the system again.

## **CONNECTION PRIORITY**

If at least 2 cellular phones have been connected, the first one to be connected (in time) will be that with the highest priority. It means that when getting inside the car, with the system active (ignition key at **MAR**), it will be the first one to be searched and, if present, connected. If it is not found, the system will search for the other cellular phones.

## **MANAGING TELEPHONE CALLS**

Below are the general procedures for managing telephone calls, generally applied to all cellular telephones.

# To make a telephone call manually

Dial the required number on the cellular telephone keyboard

- press enter on the phone to start the telephone call

- the telephone call will be automatically switched over to the handsfree mode (on some cellular telephone models it is necessary to press the green button (**A**) to switchover to the handsfree mode).

## To make a telephone call with the voice commands (after matching voice samples to the numbers in the phone directory)

- press the green button (A)

 wait for the beep and/or the word "PHONE" to be shown on the radio display

- pronounce the name of the person you wish to call

 the system will repeat the pronounced name to confirm it and then make the telephone call

— if the name pronounced by the system for confirmation is different from the wished one, press the red button  $(\mathbf{B})$  and repeat the procedure.

The telephone call made with the voice commands is possible only for the names in the directory matched to a voice sample.

The handsfree system can recognise all the voice samples recorded on the cellular phone, thus making it possible to call with the voice command all the numbers matched to the voice samples.

Anyway, it is possible to memorise (depending on the type of cellular telephone) the voice samples directly in the handsfree system directory, but, in this case, the handsfree system will recognise only these voice samples.

**IMPORTANT** To be recognised by the system the voice commands must be pronounced keeping a natural tone, articulating the words well and clearly.

For an optimal result, it is suggested to associate the voice samples in the following conditions:

- with doors and windows closed

- with ventilation and engine off (ignition key at  $\boldsymbol{\mathsf{MAR}})$ 

- from the driver's seat

 preferably using long names (for example: "Mario Rossi" instead of "Mario"); the system records a voice sample for max 2 seconds.

**IMPORTANT** Before using the voice commands make sure that on the cellular phone the following functions are on: **Bluetooth**<sup>®</sup>, "Voice commands" and "Wordspotting" (according to the type of cellular phone). The performance of the voice recognition are variable and depend on the model of the cellular phone used.

#### **To accept a telephone call** Press the green button (**A**).

## To reject a telephone call

Press the red button (**B**).

#### To end a call

Press the red button (**B**).

#### To dial the last number called

Press and keep the green button (A) pressed until the number is dialled.

To manage a second telephone call (depending on the type of cellular phone)

- To refuse the second oncoming call press the red button  $(\mathbf{B})$ .

- To communicate with the new caller press the green button  $(\mathbf{A})$  once.

- To go back to the first telephone call press the green button  $(\mathbf{A})$  again.

- To end communication, press the red button  $({\bf B})$  once.

**IMPORTANT** The system can manage the second call only if the "Call notice" function is active on the cellular phone.

For additional information about the association between vocal samples and numbers in the address book, calls by means of keywords, and other settings, refer to the cell phone manual. 110-185\_Alfa147 Q2 GB 4-07-2008 12:02 Pagina 181

## **PROBLEM SOLVING**

PROBLEM	SOLUTION		
The system is not operative	Make sure that the ignition key is turned to <b>MAR</b>		
The system signals a connection problem with the <b>Bluetooth</b> ®	Turn off the cellular phone and then on again (if the handsfree system does not respond to commands		
The telephone does not detect the handsfree system	Turn off the cellular phone and then on again Check that the Bluetooth® function of the cellular phone is on (if necessary, see the instructions of your cellular phone)		
The cellular telephone is not detected	Repeat the connection phase		
The interlocutor complains about the bad audio quality during communication	Speak clearly towards the microphone		
The interlocutor complains about the echo during communication	Lower the cellular telephone volume. If necessary, lower also the volume of the radio PHONE function (see Radio paragraph)		
The interlocutor's voice cannot be heard	Adjust the cellulat telephone volume and, if needed, check the volume of the radio PHONE function (see Radio paragraph)		
After entering the code "1234" no connection can be established	Return to the main menu and repeat the connection phase		
The cellular telephone is detected too much slowly by the system	Set the user's priority (see the "Connection priority" paragraph)		
When trying to make a telephone call with the voice command, the system says that the name is not recorded	Check that the name has been associated to a voice sample Repeat the name clearly in the microphone direction		
The system does not make it possible to manage the double call	Check that the "Call notice" function has been activated on the cellular telephone		
Some numbers in the telephone directory are not copied in the system memory	Check that these numbers are present in the cellular telephone directory and not only in the memory of the SIM card		
The system does not recognise the voice commands	Check that the Bluetooth®, "Voice commands" and "Wordspotting" functions have been activated on the cellular phone		

**IMPORTANT** For the checks, service or possible repairing of the system, contact only Alfa Romeo Authorised Services.

## REFUELLING

#### **PETROL ENGINES**

The antipollution devices on the car oblige the use of only four-star unleaded petrol with octane number (R.O.N.) of 95 or over.

Never use leaded petrol, as this would irreversibly damage the exhaust gas catalyst. If leaded fuel is added to the fuel tank, no matter how small the quantity, DO NOT START THE ENGINE. Do not attempt to dilute the fuel in the tank, completely drain the fuel circuit and tank. To prevent accidentally filling with leaded petrol, the diameter of the fuel tank filler is of such a size as not to accept the nozzle of this type of petrol

An inneficient catalyst leads to harmful emission at the exhaust, thus environment pollution.

#### **JTD ENGINES**

The car must only be filled with fuel oil for motor vehicles, in compliance with **European Specification EN590.** The use of other products or mixtures may irreparably damage the engine with invalidation of the warranty due to the damage caused. In the event of accidentally filling with another type of fuel, do not start the engine and empty the tank. If the engine has been run even for only a very short time, in addition to the tank, it is also necessary to empty the whole supply circuit.

If the outside temperature is very low, the diesel thickens due to the formation of paraffins and could clog the diesel fuel filter.

In order to avoid these problems, different types of diesel are distributed according to the season: summer type, winter type arctic type (mountains/cold areas).

If refuelling with diesel fuel not suitable for the current temperature, mix diesel fuel with **TUTELA DIESEL ART** additive in the proportions stated on the can, putting first the antifreeze in the tank and then the diesel fuel.

**TUTELA DIESEL ART** shall be added to diesel fuel before the due to cold take place. Adding it later will be worthless. If driving or parking the vehicle for a long period in cold areas/mountains, refuel with the diesel fuel available at local filling stations. In this situation you are also recommended to have in the tank an amount of fuel 50% higher than usable capacity.

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## FUEL CAP (fig. 176)

The fuel cap ( $\mathbf{A}$ ) is key-lockable and has a catch to prevent misplacing it ( $\mathbf{B}$ ) that fastens it to the flap ( $\mathbf{C}$ ); to gain access to it, open the flap then use the ignition key to turn counter-clocwise and remove the cap.

When refuelling, hook the cap to the device on the inner flap, as illustrated. **IMPORTANT** The sealing of the tank may cause light pressurising. A little breathing off, while slackening the cap, is absolutely normal.

After refuelling, turn the cap clockwise until one or more clicks are heard; then turn the key clockwise to lock. Close the flap.

**IMPORTANT** For your safety, before starting the engine, also make sure that the fuel nozzle is correctly inserted in the fuel distributor.

WARNING

Do not go near the fuel filler with naked flames or lit cigarettes: danger of fire. Avoid going too near the fuel filler with your face, to avoid inhaling harmful vapours.

In the case of need, only replace the cap with another genuine one, or the efficiency of the fuel vapour recovery system could be adversely affected.

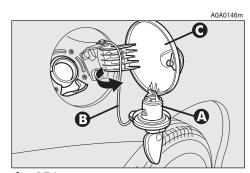


fig. 176



## ENVIRONMENTAL PROTECTION

The devices used to reduce petrol engine emissions are:

- Trivalent catalytic converter (catalytic silencer);

- Lambda sensors;

- Anti-evaporation system.

Do not run the engine, even for a test, with one or more glow plugs disconnected.

- The emission reducing devices are:
- Oxidising catalyst;
- Exhaust gas re-circulation system (E.G.R.);
- Particulate filter (DPF) (only for versions/markets where applicable).

# WARNING

Due to the high temperatures reached during operation of the catalytic silencer and the particulate filter (DPF) (only for versions/markets where applicable) the car should not be parked over inflammable materials (grass, dry leaves, pine needles, etc.): danger of fire.

## DPF (Diesel Particulate Filter) (only for versions/ markets where applicable)

It is a mechanical filter, fitted in the exhaust system, which traps the carbon particles present in the exhaust gases of diesel engines.

The filter function is to eliminate almost completely the emissions of carbon particles, in accordance with the current/future regulations.

During normal use of the car, the engine control unit records a series of data concerning the use (time, type of road, temperature reached, etc.) and calculates the quantity of particulate in the filter. As this filter is an accumulating system which must be regenerated (cleaned) burning the carbon particles, the regeneration procedure is managed automatically by the engine control unit according to the filter conditions and the car using conditions. During the filter regeneration the following phenomena may occur: raising of idling, activation of electric fan, limited growth of smoke level, high temperature at the exhaust.

These situations must no be considered as faults and do not affect the car performance and the environment.

#### Particulate filter clogged

# $-\phi$

# **CORRECT USE OF THE CAR**

STARTING THE ENGINE

**IMPORTANT** The car is fitted with an electronic engine lock device. If the engine fails to start, see the "Alfa Romeo CODE system".

We recommend that during the initial period you do not drive to full car performance (for example excessive acceleration, long journeys at top speed, hard braking, etc.). ATTENZIONE

Running the engine in confined areas is extremely dangerous. The engine consumes oxygen and produces carbon monoxide which is a highly toxic and lethal gas.

The ignition switch is fitted with a safety device which obliges the driver to return the key to the **STOP** position before repeating the starting operation if the engine does not start immediately.

Similarly, when the engine is running, the device prevents the key being moved from the **MAR** to the **AVV** position.

When the engine is switched off never leave the ignition key in the MAR position to prevent pointless current absoption from draining the battery.

CORRECT USE OF THE CAR

cut off automatically during starting. If the engine does not start at the first attempt, move the ignition key to **STOP** before repeating starting.

If starting is difficult (with the Alfa Romeo CODE system working properly), do not insist with prolonged attempts.

Only use an auxiliary battery if the cause is due to low battery charge. Never use a battery charger to start the engine.

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## STARTING PROCEDURE FOR JTD VERSIONS

**IMPORTANT** It is important never to press the accelerator before the engine has started.

1) Make sure the handbrake is engaged.

2) Move the gear lever to neutral.

3) Fully depress the clutch pedal, so that the starter motor is not forced to crank the gears.

4) Ensure that the electric systems and devices, especially if they absorb high quantities of energy (e.g. heated rearscreen), are switched off.

5) Turn the ignition key to the **AVV** position and release it as soon as the engine starts.

6) If the engine does not start, return the key to **STOP**, then repeat the procedure.

**IMPORTANT** If it is difficult to start the engine do not insist with extended attempts which may damage the catalyst, but contact Alfa Romeo Authorised Services.

## STARTING PROCEDURE FOR PETROL VERSIONS

1) Make sure the handbrake is engaged.

2) Set the gearshift lever to neutral.

3) Turn the ignition key to **MAR**. The reconfigurable multifunction display will show the  $\sigma\sigma$  warning light.

4) Wait for the  $\infty$  to turn off, which takes place sooner, the warmer the engine. With the engine very warm the light might stay on for such a short time as to pass unnoticed.

5) Fully depress the clutch pedal.

6) Turn the ignition key to **AVV** as soon as the  $\overline{00}$  warning light has gone out. Waiting too long, makes the warming work of the glow plugs useless.

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## WARMING THE ENGINE

- Drive off slowly, at medium revs without accelerating abruptly.

- Do not drive at full performance for the initial kilometres of the journey. Wait until the engine coolant temperature reaches 50-60 °Č.

## **SWITCHING OFF**

 Release the accelerator pedal and wait until the engine reaches idle speed.

- Turn the ignition key to the STOP position and switch off the engine.

**IMPORTANT** After a tiring journey it is advisable to let the engine "get its breath back" allowing it to idle a while to lower the temperature in the engine compartment.

For cars with turbocharger in particular, but for all cars in general, sharp accelerating should be avoided before switching the engine off. A "kick" on the accelerator serves no purpose, consumes fuel pointlessly and may cause serious damage to the turbocharger impeller bearings.

**IMPORTANT** If the engine turns off with the car on the move, the next time it is started, the Alfa Romeo CODE warning light may turn on (2). In this case, check that switching off and starting the engine again with the car stationary, the warning light stays off. If not, contact Alfa Romeo Authorised Services.

## **EMERGENCY STARTING**

If the Alfa Romeo CODE system does not recognise the code transmitted by the ignition key (warning light 🕫 on the instrument cluster glowing on steadily) emergency starting may be carried out using the code of the CODE card.

For the correct procedure see the chapter "In an emergency".



Never bump, tow, or coast start the car as this would cause fuel to flow into the catalyst causing irreversible damage.



Remember that the servobrake and power steering are not operational until the engine has been started, therefore much more effort than usual is required on the brake pedal and steering wheel.

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## PARKING

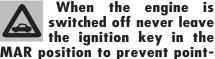
When the car is parked, proceed as follows:

- Switch off the engine.

- Engage the handbrake.

- Engage first gear if the car is faced uphill or reverse if the car is facing downhill.

- Turn the front wheels so that the carwill immediately come to a halt if the handbrake slips.



the ignition key in the MAR position to prevent pointless current absorption from draining the battery.



WARNING

children Never leave unattended in the car. Always remove the ignition key when leaving the car and take it with you.

## FUEL ECONOMY

By following a few simple guidelines, it is possible to save car running costs and reduce harmful emissions.

## **GENERAL CONSIDERATIONS**

## **Car maintenance**

To take care of the car maintenance have the checks and adjustments carried out in accordance with the "Scheduled Maintenance Programme".

## **Tyres**

Check the pressure of the tyres routinely at an interval of no more than 4 weeks: if the pressure is too low consumption levels increase as resistance to rolling is higher.

## **Useless** loads

Never travel with an overload in the boot. The weight of the car (especially in urban traffic), and its geometry heavily affect consumption levels and stability.

#### **Electric services**

Use electric devices only for the amount of time needed. Rearscreen heating, additional headlights, windscreen wipers and heater fan need a considerable amount of energy, therefore increasing the requirement of current fuel consumption (up to +25% in the urban cycle).

#### **Climate control system**

The climate control system is a further load bearing heavily on the engine inducing higher consumption levels (up to +20% on average). Outside temperature permitting, preferably use the air vents.

## **Aerodynamic items**

The use of non-certified aerodynamic items may adversely affect air drag and consumption levels.

## DRIVING STYLE

## Starting

Do not warm the engine with the car at a standstill or at idle or high speed: under these conditions the engine warms up much more slowly, increasing electrical consumption and emissions. It is therefore advisable to move off immediately, slowly, avoiding high speeds. This way the engine will warm faster.

## **Pointless manoeuvres**

Avoid accelerating when waiting at traffic lights or before switching off the engine. This and also double declutching is absolutely pointless on modern cars and also increase consumption and pollution.

#### Gearshifting

As soon as the conditions of the traffic and road allow, use a higher gear.

Using a low gear to obtain brilliant performance increases consumption.

In the same way improper use of a high gear increases consumption, emissions and engine wear.

## **Top speed**

Fuel consumption considerably increases with speed. Maintain an even as possible speed, avoiding superfluous braking and accelerating, which cost in terms of both fuel and emissions.

## Acceleration

Accelerating heavily taking the engine to a high speed has a considerably adverse effect on consumption and emission levels; it is wise to accelerate gradually and not exceed the maximum torque.

#### **CONDITIONS OF USE**

## **Cold starting**

Short journeys and frequent cold starts do not allow the engine to reach optimum operating temperature. This results in a significant increase in consumption levels (from +15 to +30% on the urban cycle) and emission of harmful substances.

# Traffic situations and road conditions

Rather high consumption levels are tied to situations with heavy traffic, for example in queues with frequent use of the lower gears or in cities with many traffic lights. Also winding mounting roads and rough road surfaces adversely affect consumption.

## Stopping in the traffic

During prolonged stops (e.g. level crossings) it is advisable to switch the engine off.

**CORRECT USE OF THE CAR** 

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## COMFORT SUSPENSIONS

# (for versions/markets where applicable)

The car can be fitted with a particular type of suspension trim, able to increase the comfort during travelling.

## WINTER TYRES

Use winter tyres of the same size as the normal tyres provided on the car.

Alfa Romeo Authorised Services will be pleased to advise you on the choice of the tyre most suited to the use the Customer intends to make of it.

For the type of tyre to be used, inflation pressures and specifications of winter tyres, follow the instructions given in the "Technical Specifications" chapter.

The winter features of these tyres are reduced considerably when the tread depths is below 4 mm. In this case they should be replaced.

Due to the winter features, under normal conditions of use or long motorway journeys, the performance of these tyres is lower than that of normal tyres.

It is necessary therefore to limit their use to the purposes for which they are certified. **IMPORTANT** When winter tyres are used with a maximum speed index below the one that can be reached by the car (increased by 5%), place a notice in the passenger's compartment, plainly in the driver's view, which states the maximum permissible speed of the winter tyres (as per CE Directive).

Fit the same type of tyre on all four wheels (brand and profile) to ensure higher driving safety when braking and good handling.

Remember that it is inappropriate to change the direction of rotation of tyres.

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## **SNOW CHAINS**

Use of snow chains should be in compliance with local regulations.

Use snow chains with reduced size with maximum protrusion beyond the tyre profile of 12 mm.

Snow chains may not be used on tyres type 205/ 55 R16" 91V - 205/55 R16" 91W or 215/45 R17" 87W due to interference with the front suspension strut.

# Snow chains should only be applied to the drive wheels (front).

Before purchasing or using snow chains, you are recommended to contact Alfa Romeo Authorised Services.

Check the tensions of the chain after the first few metres have been driven.

With snow chains fitted it is advisable to turn off the ASR system. Press the ASR-OFF button, led on button on.

Snow chains cannot be fitted to the compact spare wheel. So, if a front (drive) wheel is punctured and chains are needed, a rear wheel should be fitted to the front of the car (inflate the tyres to the specified pressure as soon as possible) and the spare wheel should be fitted to the rear. This way, with two normal drive wheels, snow chains can be fitted to them to solve an emergency.



Keep your speed down when snow chains are fitted.

Do not exceed 50 km/h. Avoid potholes, steps and pavements to prevent damaging the tyres, suspension and steering.

## WARNINGS

For towing caravans or trailers the car must be fitted with a certified tow hook and an adequate electric system. Installation should be carried out by specialised personnel who release a special document for circulation on the road.

Install any specific and/or additional rearview mirrors as specified by law. Remember that when towing a trailer, steep hills are harder to climb, the braking spaces increase and overtaking takes longer depending on the overall weight.

Engage a low gear when driving downhill, rather than constantly using the brake.

The weight the trailer exerts on the car tow hook reduces by the same amount the actual car loading capacity.

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## **CAR INACTIVITY**

If the car is to be left inactive for long periods, the following precautions should be noted:

 house the car under acover in a dry and possibly ventilated place;

- engage a gear;

check that the handbrake is not engaged;

 disconnect the battery negative terminal from the battery and check the battery charge. This check should be repeated every three months during stowage. Charge the battery if the indicator shows (where provided) a dark colour in the central green area;

clean and protect the paintwork by protective wax;

- clean and protect the metal polished parts with marketed products;

 cover the rubber windscreen and rearscreen wiper blades with talcum powder and raise them off the glass;

- open the windows slightly;

 cover the car with a fabric or perforated plastic cover. Do not use compact plastic covers which prevent the humidity on the surface on the car from evaporating;

 inflate the tyres to a pressure of +0.5 bars above normal and check it periodically;

 if the battery is not disconnected from the electric system, check its charge every thirty days and if the indicator shows a dark colour in the green area, charge the battery;

- do not empty the engine cooling system.

CORRECT USE OF THE CAR

To make sure the maximum towable weight is not exceeded (given in the log book) account should be taken of the fully laden trailer, including accessories and personal belongings.

Drive within the specific speed limit in every country for car trailers. In any case the maximum speed should never exceed 100 km/h.

## WARNING

The ABS system with which the car may be fitted does not control the trailer braking system. Particular care is therefore necessary on slippery surfaces.

## WARNING

Under no circumstances should the car brake system be altered to control the trailer brake. The trailer braking system must be fully independent of the car's hydraulic system.

## INSTALLING THE TOW HOOK

The towing device should be fastened to the body by specialised personnel according to the following instructions and any additional and/or integrative information supplied by the Manufacturer of the device itself.

The towing device must meet current regulations with reference to Directive 94/20/CEE and subsequent amendments.

For any version the towing device used must match the towable weight of the car on which it is to be installed.

For the electric connection a unified connector should be used which is generally placed on a special bracket normally fastened to the towing device itself.

For the electric connection a 7 or 13 pole 12VDC connection must be used (CUNA/UNI and ISO/DIN standards) following any reference instructions given by the car Manufacturer and/or towing device Manufacturer.

Any electric brake should be supplied directly by the battery through a cable with a cross-section of no less than 2.5 mm<sup>2</sup>. In addition to the electrical branches, the car electric system can only be connected to the supply cable for an electric brake and to the cable for an internal light, though not above 15W.

# **INSTALLATION LAYOUT** (fig. 2)

The tow hook structure must be fastened in the points shown by the symbol € using 8 M10 screws and 4 M12 screws.

The counter-plates (1), (2) should have a minimum thickness of 6 mm.

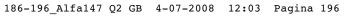
The counter-plates (**3**), (**4**) should have a minimum thickness of 5 mm.

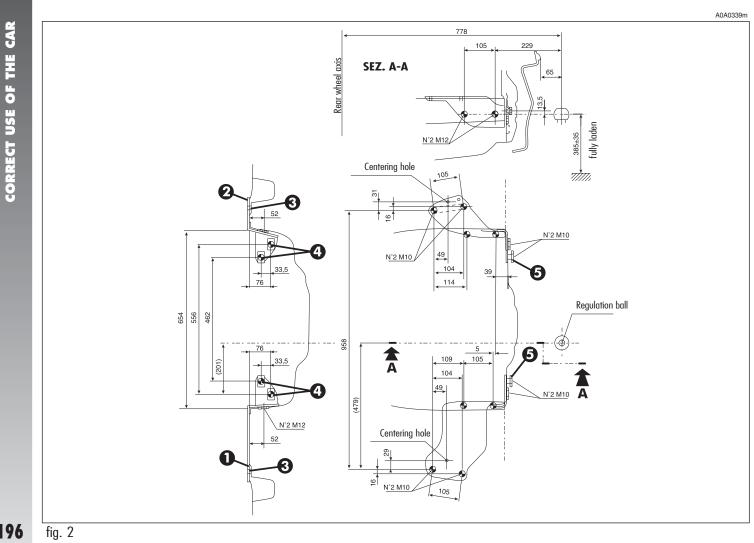
The fastening points (**5**) should be fitted with  $\emptyset$  20 x 4.5 mm spacers.

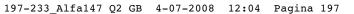
The hook should be fastened to the body avoiding any type of drilling and trimming of the rear bumps that remains visible when the hook is removed.

**IMPORTANT** It is compulsory to fasten a label (plainly visible) of suitable size and material with the following wording:

MAX LOAD ON BALL 60 kg.







## IN AN EMERGENCY

In an emergency we recommend that you call the freephone number found in the Warranty Booklet. You can also consult www.alfaromeo.com to find Alfa Romeo Authorised Services your nearest

## EMERGENCY STARTING

If it is not possible to deactivate the engine inhibitor with the Alfa Romeo CODE system, the  $\Im$  and  $\Im$  warning lights stay on and the engine will not start. Emergency starting is needed to start the engine.

**IMPORTANT** You are advised to carefully read the entire procedure before carrying it out.

If a mistake is made during the emergency procedure, the ignition key should be turned to **STOP** and the operations must be repeated from the start (point 1).

1) Read the 5-figure electronic code on the CODE card.

2) Turn the ignition key to **MAR**.

3) Fully depress the accelerator pedal and keep it pressed. The C warning light will come on for eight seconds and then go off, now release the accelerator pedal.

4) The C warning light begins to flash: after it has flashed the same number of times as the first digit on the CODE card, press the accelerator pedal and keep it pressed until the C warning light turns on (for four seconds) and then goes off; now release the accelerator pedal.

5) The C warning light starts to flash: after the number of flashes corresponding to the second digit on the CODE card, press the accelerator pedal and keep it pressed.

6) Repeat this procedure for the remaining digits on the CODE card.

7) After entering the last figure, keep the accelerator pedal pressed. The C warning light turns on (for four seconds) and then goes off; now release the accelerator pedal.

8) A quick flash of the " warning light (for about four seconds) confirms that the operation has been carried out correctly.

9) Start the engine turning the ignition key from **MAR** to **AVV** without returning the key to the **STOP** position.

Conversely, if the  $\bigcirc$  warning light stays on, turn the key to **STOP** and repeat the procedure starting from point 1).

**IMPORTANT** After emergency starting it is advisable to contact Alfa Romeo Authorised Services, because the emergency procedure must be repeated each time the engine is started.

## STARTING WITH AN AUXILIARY BATTERY

If the battery is flat (for battery with optical hydrometer: dark colour without green area in the centre), it is possible to start the engine using an auxiliary battery with the same capacity or a little higher than the flat one.

Proceed as follows (**fig. 1**):

1) Remove the protective cover on the positive battery post pressing on the opening catches (front), then connect the positive terminals (+ sign next to the terminal) of the two batteries using a special cable.

2) Connect the end of the second jump lead to the negative terminal (-) of the auxiliary battery with an earth point  $\underline{\downarrow}$  on the engine or gearbox of the car to be started.

**IMPORTANT** Do not directly connect the negative terminals of the two batteries: any sparks may ignite the detonating gas which could come out of the battery. If the auxiliary battery is installed on another car, avoid metal parts touching accidentally between this car and the one with the flat battery.

3) Start the engine.

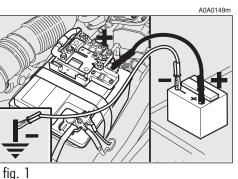
4) When the engine has started, remove the cables, reversing the sequence followed for connection.

If after a few attempts the engine does not start, do not insist but contat the nearest Alfa Romeo Authorised Service.

## WARNING

This starting procedure must be carried out by qualified personnel because incorrect operations may cause electrical discharge of considerable intensity. The liquid contained in the battery is poisonous and corrosive. Avoid contact with the skin and eyes. Keep naked flames and lighted cigarettes away from the battery and do not cause sparks.

Never use a battery charger to start the engine as this could damage the electronic systems of your car, particularly the ignition and fuel supply control units.



IN AN EMERGENCY

IN AN EMERGENCY

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Never push, tow or coast

start the car. This could

cause fuel to flow into the

catalyst damaging it irreversibly

## **STARTING BY INERTIA**

## IN THE EVENT OF A PUNCTURE

**IMPORTANT** If the car is equipped with "Kit for tyre quick repair Fix&Go", see the instructions contained in the following chapter.

## **GENERAL INSTRUCTIONS**

Wheel changing and correct use of the jack and compact spare wheel (for versions/markets where applicable) call for some precautions as listed below.



WARNING

Remember that the engine brake and power steering are not operational until the engine is started, therefore, much greater effort than usual is needed on the brake pedal and steering wheel.

## WARNING

Signal the presence of the stationary car according to current regulations: hazard warning lights, reflecting triangle etc..

Any passengers should leave the car and wait for the wheel to be changed out of harm of the traffic.

If parked on a slope or rough surface, chock the wheels with wedges or other suitable devices to prevent the car from rolling.

## WARNING

Never start the engine with the car jacked. When driving with a trailer, disconnect the trailer before raising the car. The compact spare wheel is specific to your car, do not use it on other models, or use the spare wheel of other models on your cars.

Should the type of wheels used be changed (alloy rims instead of steel), it is also necessary to change the whole set of fastening bolts with others of suitable size. The compact spare wheel is narrower than normal wheels, it should be used only for the distance necessary to reach a service point to have the punctured tyre repaired and during its use, the car speed must not exceed 80 km/h.



## WARNING

The spare wheel has a sticker that summarises the main cautions for use and limitations. Ths sticker should never be removed or covered. Th sticker contains the following in four languages:

CAUTION! FOR TEMPORARY USE ONLY! MAX 80 km/h! REPLACE BY NORMAL WHEEL AS SOON AS POSSIBLE. DO NOT COVER THIS LABEL IN USE.

Never fit a wheel cap on a compact spare wheel.

The car will handle differently with the spare wheel fitted: avoid heavy braking and accelerating, sharp corners and a bends.

## WARNING

The life of the spare wheel is approx. 3000 km, after this distance it should be replaced with another of the same type. Never attempt to fit a conventional tyre on a rim designed for use as a compact spare wheel. Have the punctured wheel repaired and refitted as soon as possible. Two or more compact spare wheels should never be used together. Do not grease the threads of bolts before installing them; they might slip out. The jack only serves for changing the wheels on the car with which it is provided or on cars of the same model. It must not be used for other purposes such as for instance raising cars of other models. In no case should it be used for repairs under the car. Incorrect positioning of the jack may cause the jacked car to fall. Do not use the jack for higher capacities than stated on its label.

#### WARNING

Snow chains cannot be fitted on the compact spare wheel, so, if a front wheel is punctured and chains need to be fitted, the front axle should be fitted with normal wheels and the compact spare wheel fitted to the rear. This way, with two normal wheels at the front, snow chain can be fitted thereby solving the emergency situation. Never tamper with the inflation valve.

Do not insert tools of any kind between the rim and the tyre. Check, and if necessary, restore the pressure of the tyres and of the compact spare wheel to the values given in the "Technical Specifications" chapter.

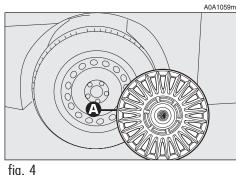
- Using the wrench provided (A-fig. 5), loosen the fastening bolts by about one turn.

ly versions with steel rims)

- Set the jack under the car, near the wheel to be changed taking care not to damage the plastic streamlined guard.

- Work the jack crank (A-fig. 6), to extend it until the groove (**B**) on the upper part of jack is correctly inserted on the lower profile of the body (C) approx. 40 cm from the profile of the wheelhouse.

- Work the jack and raise the car until the wheel is a few centimetres from the ground.



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# CHANGING A WHEEL

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Please be informed that:

- the jack mass is 2.100 kg.

- the jack requires no adjustment.

- the jack cannot be repaired. In the event of breakage, it must be replaced by another original one.

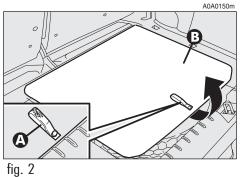
- no tools other than its operating crank can be fitted to the jack.

To change a wheel, proceed as follows:

- Stop the car in such a position that it is not dangerous for the traffic, where it is possible to change the wheel safely. Where possible, park on a level, compact surface.

- Switch off the engine and engage the handbrake.

- Engage first gear or reverse.



- Use the handle (**A**) to remove the piece of stiff cover (**B**).

- Loosen the clamping device (A-fig. 3).

- Take out the tool container (**B**) and take it near the wheel to be changed.

- Take the spare wheel (**C**).

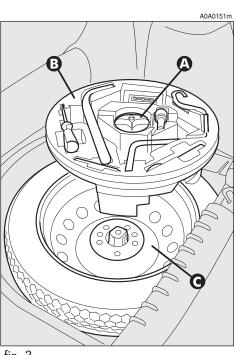


fig. 3

fig. 4

- Completely unscrew the fastening bolts and remove the wheel.

— Make sure that the contact surfaces of the spare wheel with the hub are clean and free of impurities which may later cause the fastening bolts to slacken.

Install the spare wheel matching the hole (A-fig. 7) with the corresponding pin (B).

- Using the wrench provided, fasten the five bolts.

- Lower the car and remove the jack.

- Using the wrench provided, fully tighten the bolts in the sequence shown in **fig. 8**.

## REFITTING A NORMAL WHEEL

- Following the procedure described previously, raise the car and remove the spare wheel.

## For versions with steel rims:

- Fit the normal wheel matching the hole (**A-fig. 7**) with the corresponding pin (**B**).

 Make sure that the contact surfaces of the wheel with the hub are clean and free of impurities which may later cause the fastening bolts to slacken.

- Using the wrench provided, tighten the fastening bolts.

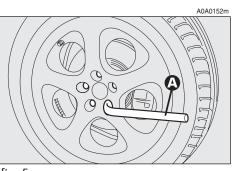
- Lower the car and remove the jack.

 Using the wrench provided, fully tighten the bolts in the sequence shown previously for the compact spare wheel **fig. 8**.

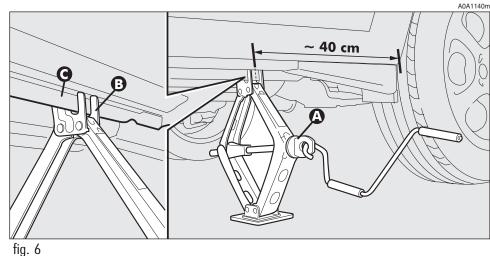
- Place the cap near the wheel so that the inflation valve can come through the slot provided on the cap.

 Press the circumference of the cap, starting from the parts nearest to the inflation valve until it is inserted completely.

**IMPORTANT** Incorrect fitting may cause the wheel cap to come off when the car is travelling



**202** fig. 5





02 fig

## For versions with alloy rims:

- Tighten the pin (**A-fig. 9**) in one of the fastening bolt holes on the wheel hub.

- Insert the wheel on the pin and, using the wrench provided, tighten the four bolts available. This is facilitated by the extension provided  $(\mathbf{B})$ .

- Remove the pin (**A-fig. 9**) and tighten the last fastening bolt.

- Lower the car and remove the jack.

- Using the wrench provided, tighten the bolts in the sequence shown previously for the compact spare wheel **fig. 8**.

After refitting a wheel:

 stow the spare wheel in the space provided in the boot - insert the jack in its container forcing it lightly to prevent it from vibrating when travelling

 place the tools used in the housings in the container

 stow the container complete with tools on the spare wheel and secure every thing with the clamping device (A-fig. 3)

- correctly re-position the stiff cover.

## Versions with VDC excluded

WARNING After using the spare wheel and refitting the standard wheel, it is necessary to

#### WARNING

travel for approx. 30 km (20 minutes) on a mixed road or approx. 15 km (10 minutes) on a highway until the software of the ABS/ASR control unit recognises the size of the "normal" wheel; in this period of time the car may slightly go adrift on a side during brakig and the ASR warning light (if fitted) may come on. Therefore it is recommended to travel carefully and to avoid, where possible, sharp braking. On cars fitted with ASR travel for the above mentioned distance with the ASR turned off through the suitable button.

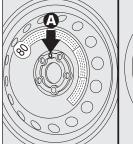
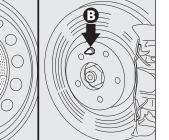


fig. 7



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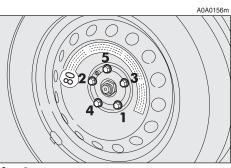


fig. 8

fig. 9

## FIX&GO KIT FOR QUICK TYRE REPAIRING

# (for versions/markets where applicable)

The car can be equipped with a tyre quick repairing kit called FIX&GO, replacing the tools and the compact spare wheel provided with the car.

The quick repairing kit **fig. 10** is placed in the boot inside the appropriate container, which includes also the screwdriver and the tow ring. The quick repairing kit includes:

- a bottle **A-fig. 10** containing sealer and fitted with:

□ filling pipe **B** 

 $\Box$  a sticker **C** bearing the notice "max. 80 km/h", to be placed in a position visible to the driver (on the instrument panel) after fixing the tyre;

a compressor **D** with pressure gauge and fittings;

— a leaflet with the instructions fig. 11 for a correct use of the quick repairing kit; this leaflet shall be delivered to the personnel who will handle the tyre treated with the quick repairing kit;

 a pair of protective gloves in the side compartment of the compressor;

- adapters for inflating different elements.

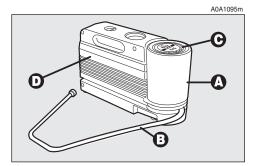


fig. 10

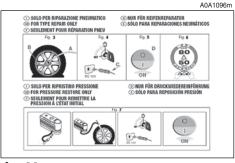


fig. 11



WARNING

Give the leaflet to the personnel who will handle the type treated with the quick repaiting kit.



The sealer included in the quick repairing kit is good for temperatures between  $-20^{\circ}$ C and  $+50^{\circ}$ C.





In the event of a puncture caused by foreign bodies, it is possible to fix tyres having cracks with maximum diameter up to 4 mm.

WARNING It is not possible to fix cracks on the tyre sides. Do not use the quick repairing kit if the tyre is damaged due to driving with the wheel flattened.

## WARNING

In case of damages to the wheel rim (the deformation is such that there is an air leakage) fixing is not possible. Do not remove foreign bodies (screws or nails) which have penetrated the tyre.

#### WARNING

The bottle contains ethylene glycol. It contains latex which might cause an allergy reaction. This substance is toxic: do not swallow it and avoid contact with the eyes. It may provoke sensitisation due to inhalation and contact. Avoid contact with the eyes, the skin and the clothes. In case of contact, rinse with abundant water. If swallowed do not induce vomit, rinse the mouth, drink a lot of water and contact a medical doctor immediately. Keep the bottle away from children. The product must not be used by asthmatic subjects. Do not inhale the vapours during fitting and suction operations. If any allergy reaction should take place call a medical doctor. Keep the bottle in the suitable compartment and keep away from heat. The sealer has expiry date.



WARNING Do not operate the compressor for more than 20 minutes: risk of overheating. The quick repairing kit is not suitable for a final repairing, therefore

repaired tyres must be used only

Do not disperse the bot-

tle and the sealer in the environment. Dispose of

it according to the national and

temporarily.

local regulations.

#### **INFLATING PROCEDURE**

WARNING Wear the protective gloves provided with the quick repairing kit.

Proceed as follows:

place the wheel with the valve A-fig.
12 in the position illustrated in the figure, engage the handbrake, then remove the quick repairing kit and place it on the ground next to the wheel;

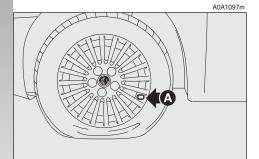
- unscrew the tyre valve plug, take off the filling pipe **A-fig. 13** and screw the ring nut **B-fig. 14** on the tyre valve;

— make sure that the compressor switch A-fig. 15 is in position 0 (off), start the engine, insert the plug G-fig. 16 in the socket/lighter on the front tunnel and start the compressor by taking the switch to A-fig. 15 position I (on);

inflate the tyre to the correct pressure value. You are advised to check the tyre pressure value on the pressure gauge B-fig. 15 with the compressor off, in order to have a more accurate reading;

В

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**206** fig. 12

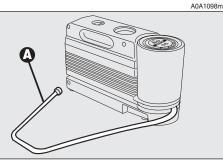


fig. 13

fig. 14



- if in 5 minutes a pressure of at least 1.5 bars is not obtained, disengage the compressor from the valve and the socket; then move the car forwards by about 10 metres to distribute the sealer inside the tyre and repeat the inflating procedure;

- if, also in this case, in 5 minutes from the compressor turning on a pressure of at least 1.8 bars is not obtained, do not travel any further: the quick repairing kit cannot guarantee proper hold because the tyre is too much damaged. Contact Alfa Romeo Authorised Services;

- once the correct tyre pressure has been reached, start driving immediately;



Place the sticker in a position where it can be clearly seen by the driver as a notice that the tyre has been treated with the quick repairing kit. Drive carefully especially in a bend. Do not overcome 80 km/h. Avoid sudden acceleration or braking.

- after about 10 minutes, stop and check the tyre pressure once again; remember to engage the hzandbrake;

- if at least 1.8 bars are detected, restore the correct pressure (with the engine running and the handbrake engaged) and start driving the car;

- drive the car with great care to Alfa Romeo Authorised Services.

WARNING

If the pressure is below 1.8 bars, do not travel any further: the quick repairing kit cannot guarantee proper hold because the tyre is too much damaged. Contact Alfa Romeo Authorised Services.

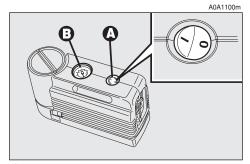
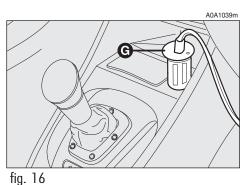


fig. 15



## WARNING

It is absolutely necessary to communicate that the tyre has been repaired with the quick repairing kit. Give the leaflet to the personnel who will handle the tyre treated with the quick repairing kit.

## **ONLY FOR PRESSURE CHECKING AND RESTORING**

The compressor can also be used only for restoring the tyre pressure. Disengage the quick coupling **A-fig. 17** and connect it directly to the valve of the tyre to be inflat-ed **fig. 18**; this way the bottle will not be connected to the compressor and no sealer will be injected.

## **PROCEDURE FOR CHANGING** THE BOTTLE

Proceed as follows:

- disengage the coupling A-fig. 19 and disconnect the pipe **B**;

- turn the bottle to be changed counterclockwise and raise it;

- fit the new bottle and turn it clockwise;

- fit the coupling **A** or connect the pipe **B** into its housing.

WARNING

It is absolutely necessary to communicate that the tyre has been repaired with the quick repairing kit. Give the sticker to the personnel who will carry out the restoring operations.

208 fig. 17

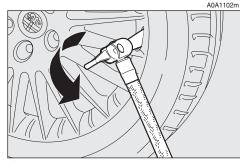


fig. 18

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fig. 19



## WHEN NEEDING TO CHANGE A BULB



WARNING

Alterations or repairs to the electric system not carried out correctly and without taking account of the system specifications may cause failures and the risk of fire.

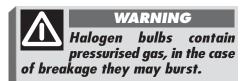
## WARNING

Halogen bulbs must be handled touching only the metallic part. If the transparent bulb is touched with the fingers, its lighting intensity is reduced and the life of the bulb may be compromised. If touched accidentally, rub the bulb with a cloth moistened with methylated spirit and allow to dry. WARNING Because of the high supply voltage, possi-

ble replacement of Xenon lamps must be carried out by skilled personnel only: danger of death! Contact Alfa Romeo Authorised Services.

## WARNING

Where possible, it is advisable to have bulbs changed c/o Alfa Romeo Authorised Services. The correct operation and aiming of the outer lights are vital to the safety of the car and its passengers and the subject to specific laws.



## **GENERAL INSTRUCTIONS**

- When a light is not working, check that the corresponding fuse is intact before changing a bulb.

- For the location of fuses, refer to the paragraph "In the event of a burnt fuse" in this chapter.

- Before changing a bulb check the contacts for oxidation.

- Burnt bulbs must be replaced by others of the same type and power.

- Always check headlight aiming after changing a bulb to ensure they are safe.

## **TYPES OF BULBS** (fig. 20)

Various types of bulbs are fitted to your car:

## A. All glass bulbs

These are pressed on. Pull to remove.

**B. Bayonet type bulbs** Press the bulb, turn counter-clockwise to remove this type of bulb from its holder.

## C. Tubular bulbs

Free them from their contacts to remove.

## D.-E. Halogen bulbs

To remove, free it from the clip on its housing.

## F. Xenon lamps

To remove the bulb, slacken the fastening ring nut and release the retaining ring.

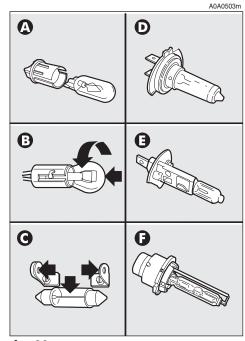


fig. 20

BULBS	FIGURE 20	ТҮРЕ	POWER
High beam	D	H1	55W
Low beam	D	H7	55W
Anabbaglianti a scarica di gas Xenon	F	DS2	35W
Front sidelights	В	H6W	6W
Foglights	E	H1	55W
Front direction indicators	В	PY21W	21W
Side direction indicators	А	W5W	5W
Rear direction indicators	В	P21W	21W
Rear sidelights - braking lights	В	P21/5W	5W/21W
Third stop (additional braking lights)	А	W2.3W	2.3W
Reversing light	В	P21W	21W
Rear foglights	В	P21W	21W
Number plate light	А	W5W	5W
Puddle lights	С	C5W	5W
Front roof light	С	C10W	10W
Rear roof light	С	C10W	10W
Courtesy mirror light	Α	W1.2W	1.2W
Glovebox light	Α	W5W	5W
Boot light	C	C5W	5W

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## IF AN EXTERIOR LIGHT GOES OUT

## REPLACEMENT OF XENON LIGHTS

Xenon lights have a very long life, therefore breakdowns are unlikely.

The front light units contain the side light, dipped beam, main beam and fog light bulbs.



WARNING

Because of the high supply voltage, possible replacement of Xenon lamps must be carried out by skilled personnel only: danger of death! Contact Alfa Romeo Authorised Services.

## **HALOGEN HEADLIGHTS**

WARNING Alterations or repairs to the electric system not carried out correctly and without taking account of the system specifications may cause failures and the risk of fire.

**IMPORTANT** See the previous chapter "When needing to change a bulb" for the type of bulb and power rating.

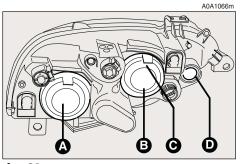


fig. 21



The front light units contain the side light, dipped beam, main beam and front direction indicator bulbs.

The bulbs are arranged inside the light unit as follows (**fig. 21**):

- (A) Dipped beam headlights
- (B) Main beam headlights
- (C) Sidelights
- (D) Front direction indicators.

**IMPORTANT** A slight layer of steam (fogging) can appear on the inside surface of the beam transparent cover: this is not a defect. The presence of condensate traces in beams is a natural phenomenon, due to low temperature and to the degree of humidity in the air. These traces will disappear when the beams are turned on. Instead the presence of drops inside the beam indicates water infiltration: in ths case contact Alfa Romeo Authorised Services.

# **Dipped beam headlights** (fig. 22-23)

To change the bulb, proceed as follows:

- Remove the protective rubber cover.
- Disconnect the electric connector ( $\mathbf{A}$ ).
- Release the bulb catch  $(\mathbf{B})$ .
- Remove the bulb and replace it.

- Fit a new bulb, making the tabs on the metallic part coincide with the grooves on the reflector, then hook the bulb holder catch **(B)**.

- Re-connect the electric connector (**A**).
- Refit the protective cover correctly.

## Front side lights (fig. 24)

To change the bulb, proceed as follows:

- Remove the protective rubber cover.

 $-\operatorname{Press}$  the clips (  ${\rm A}{\rm )}$  and remove the bulb holder.

- Withdraw the bult holder  $({\bf B})$  which is snap-fitted and change it.

- Refit the bulb holder making sure that the retaining clips click into place  $(\mathbf{A})$ .

- Refit the protective cover correctly.

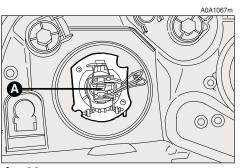


fig. 22

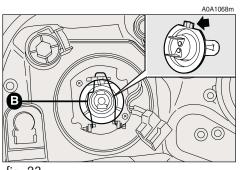


fig. 23

fig. 24

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# Main beam headlights (fig. 25-26)

To change the bulb, proceed as follows:

- Remove the protective rubber cover.
- Disconnect the electric connector ( $\mathbf{A}$ ).
- Release the bulb catch (**B**).
- Remove the bulb and replace it.

- Fit a new bulb, making the tab of the metal part coincide with the one on the lamp unit, then hook the bulb holder catch  $(\mathbf{B})$ .

- Re-connect the electric connector (A).
- Refit the protective cover correctly.

# **Front direction indicators** (fig. 27)

To change the bulb (orange), proceed as follows:

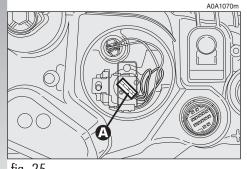
- Turn the bulb holder counterclockwise (**A**) and remove it.

- Remove the bulb pushing lightly and turning counterclockwise.

- Fit the new bulb pushing lightly and turning clockwise .

- Refit the bulb holder turning clockwise, checking that it is secured correctly.

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fig. 26

fig. 27



IN AN EMERGENCY

- Push the transparent cover (**A**) towards the rear of the car to compress the catch. Release the front part and remove this unit.

(fig. 29)

- Turn the bulb holder  $({\bf B})$  counter-clockwise and remove it from the cover.

- Remove the snap-fitted bulb and replace it.

- Insert the bulb holder (**B**) in the transparent cover (**A**), then position the unit making sure the catch clicks into place.

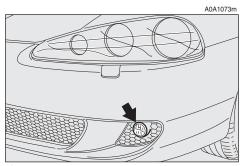
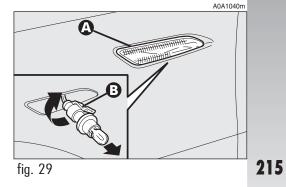


fig. 28



# WARNING

The efficiency of the lights will be decreased and may cause incovenience to other road users if the light units are not correctly adjusted. If in doubt contact Alfa Romeo Authorised Services to have them checked and adjusted if necessary.

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## FOG LIGHTS (fig. 28)

**IMPORTANT** To replace the front foglight bulbs and adjust the headlights contact Alfa Romeo Authorised Services.

#### REVERSING LIGHT AND REAR FOG GUARDS (fig. 30-31)

The reversing light and rear fog guard are in the tail light until fastened to the tailgate; they are to be found respectively one on the right and the other on the left of the car facing forwards.

To change the bulb, proceed as follows:

- Open the tailgate.

Remove the cap (A) then, using the extension with the screwdriver provided (working as illustrated), loosen the fastening nuts
(B) of the light unit concerned.

- Withdraw the light unit outwards.
- Slacken the electric connector (**C**).
- Slacken the screws (  ${\rm D}),$  and remove the bulb holder.

- Remove the bulb pushing gently and turning counterclockwise.

- Replace the bulb, then refit the bulb holder and tighten the screws  $(\mathbf{D})$ .

- Re-tighten the electric connector (**C**).

- Refit the light unit on the tailgate tightening the nuts  $(\mathbf{B})$ , then refit the cap  $(\mathbf{A})$ pressing it on.

#### REAR DIRECTION INDICATORS AND REAR SIDELIGHTS-BRAKING LIGHTS (fig. 32-33)

The rear direction indicators and the side lights-braking lights are in the tail light unit fastened to the body.

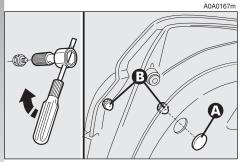
To change the bulb, proceed as follows:

- From inside the boot, open the preformed trim (**A**) then, using the extension and the screwdriver provided (working as illustrated), slacken the nuts (**B**) fastening the light unit.

- Withdraw the light unit outwards.

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**216** fig. 30

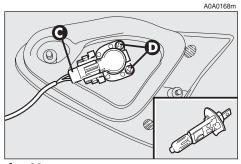


fig. 31

fig. 32

IN AN EMERGENCY

- Disconnect the electric connector (**C**).

- Slacken the screw (**D**), and remove the bulb holder.

- Remove the bulb to be changed pushing gently and turning counterclockwise:

(E) - bulb for rear sidelight/braking light. (F) - bulb for rear direction indicator.

- Replace the bulb, then refit the bulb holder and tighten the screw (**D**).

- Re-connect the electric connector (**C**).

- Refit the light unit on the body tightening the screws (**B**).

- Close the preformed trim (**A**).

#### NUMBER PLATE LIGHTS (fig. 34)

To change the bulbs, proceed as follows:

- Work on the transparent cover frame, in the point shown by the arrow to compress the catch (**B**). Free the opposite end and remove the unit.

- Turn the bulb holder counter-clockwise (A) and remove it from the transparent cover.

- Remove the snap-fitted bulb and replace it.

- Insert the bulb holder (A) in the transparent cover then refit the unit checking that the catch clicks into place (**B**).

#### **ADDITIONAL BRAKING LIGHT** (THIRD STOP) (fig. 35-36)

To change the bulbs, proceeed as follows:

- Open the tailgate, slacken the screws (A) then disconnect the electric connection (**B**).

- Remove the transparent cover- bulb holder (**C**) from the support (**D**).

- Working on the side catches (E), release the bulb holder.

- Remove the bulb to be changed.

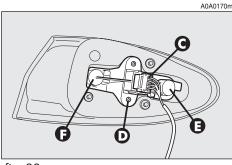


fig. 33

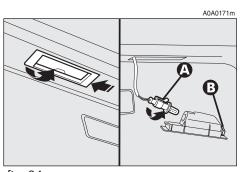


fig. 34

fig. 35

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- Insert the bulb holder making sure the side catches click into place  $(\mathbf{E})$ .

- Refit the transparent cover-bulb holder  $(\mathbf{C})$  in the support  $(\mathbf{D})$ .

- Re-connect the electric connector (**B**).

- Refit the unit on the tailgate tightening the screws  $(\mathbf{A})$ .

#### **PUDDLE LIGHT** (fig. 37) (for versions/markets where applicable)

To change the bulb, proceed as follows:

Open the door and slacken the screw
 (A) fastening the transparent covers.

— Remove the unit composed of the two transparent covers then change the bulb, releasing it from the side contacts making sure that the new bulb is correctly clamped between the contacts.

- Realign the two transparent covers and tighten the fastening screw  $(\mathbf{A})$ .

## IF AN INTERIOR LIGTH GOES OUT

# FRONT ROOF LIGHT (fig. 38-39)

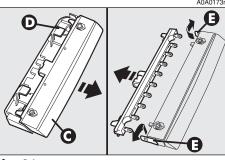
To change the bulbs, proceed as follows:

- Remove the light unit ( $\mathbf{A}$ ) levering in the points shwon by the arrow (in correspondence with the retainer catches).

- Open the protective cover (**B**).

- Replace the bulb concerned releasing it from the side contacts making sure that the new bulb is correctly clamped between the contacts.

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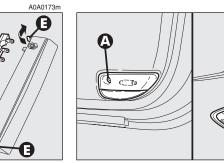


fig. 37

fig. 38

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- Close the protective cover (**B**).

- Refit the light unit pressing gently in correspondence with the retainer catches, until hearing the click.

# **REAR ROOF LIGHT** (fig. 40-41)

To change the bulb, proceed as follows:

- Remove the light unit (  $\pmb{\mathsf{A}})$  levering in the point shown by the arrow.

 Replace the bulb releasing it from the side contacts making sure that the new bulb is correctly clamped between the contacts. - Refit the light unit in the correct position inserting first the side with the connector, then pressing the other side until the catch clicks into place  $(\mathbf{B})$ .

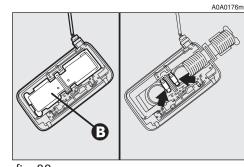


fig. 39

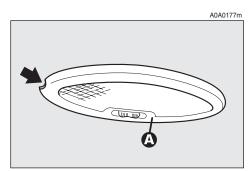


fig. 40

fig. 41

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### **GLOVEBOX LIGHT** (fig. 42-43)

To change the bulb, proceed as follows:

- Open the glovebox, then remove the light unit (A) levering in the point shown by the arrow.

- Open the protection (**B**) and change the snap-fitted bulb.

- Close the protection (B) on the transparent cover.

Refit the light unit inserting it in its correct position firstly on one end and then on the other until it clicks into place.

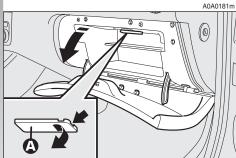
#### **BOOT LIGHT** (fig. 44-45)

To change the bulb, proceed as follows:

- Open the tailgate.

- Remove the light unit (A) levering in the point shown by the arrow.

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IN AN EMERGENCY

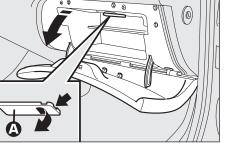


fig. 43

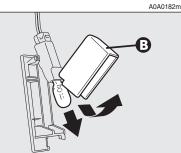


fig. 44

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IN AN EMERGENCY

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> - Open the the protective cover (**B**) and replace the bulb releasing it from the side contacts, making sure that the new bulb is correctly clamped between the contacts.

- Close the protective cover (**B**).

- Refit the light unit inserting it in its correct position firstly on one end and then on the other until it clicks into place.

# IN THE EVENT OF A BLOWN FUSE

#### GENERAL

The fuse is a protective device for the electric system: it comes into action (i.e. it cuts off) mainly due to a fault or improper action on the system.

When a device does not work, check the efficiency of its fuse. The conductor element(A-fig. 46) must be intact; if not, replace the fuse with one of the same amp rating (same colour).

- (B) Undamaged fuse
- (C) Fuse with damaged filament.

Remove the blown fuse using the pincer provided  $(\mathbf{D})$ , in the control box.



Never replace a fuse with metal wires or anything else. Always use an intact fuse of the same colour.

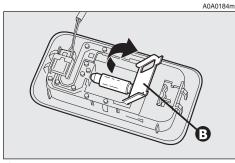


fig. 45

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fig. 46





WARNING Never replace a fuse with another with a higher amp rating; DANGER OF FIRE.

# WARNING

Before replacing a fuse, make sure the ignition key has been removed and that all the other services are switched off and/or disengaged. Fuses of the car are grouped in three control boxes, to be found respectively on the dashboard, on the battery positive pole and next to the actual battery.

Access is gained to the control box on the dashboard by slackening the two retainers (**A-fig. 47**) and removing the protective trim (**B**).

To gain access to the fuses in the fusebox on the battery post, remove the protective cover pressing the opening catches (front).



WARNING

If a general fuse (MAXI-FUSE or MEGA-FUSE) cuts in, do not attempt any repair and contact Alfa Romeo Authorised Services. WARNING If a fuse blows again, contact an Alfa Romeo Authorised Service.

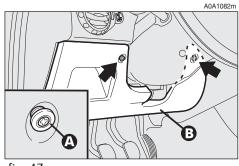


fig. 47

Access is gained to the control box next to the battery releasing the perimetral catches (**A-fig. 48**) and removing the protective cover (**B**).

To locate the protection fuses, consulting the summary table on the following pages, refer to the following illustrations **fig. 49**, **fig. 50** and **51**.

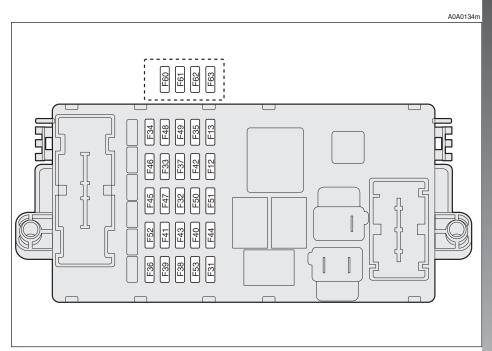


fig. 49 - Control box on dashboard

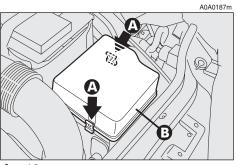
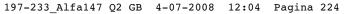


fig. 48



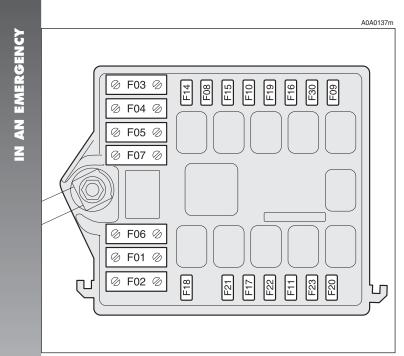


fig. 50 - Control box next to battery

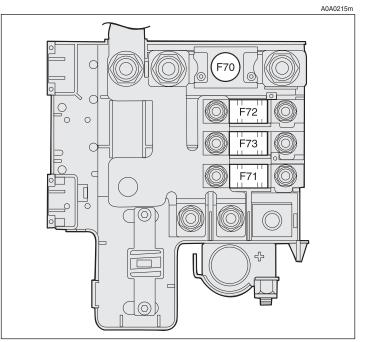


fig. 51 - Control box on battery positive pole

#### **FUSE SUMMARY TABLE**

LIGHTS	FIGURE	FUSE	AMPERES
Hazard lights	49	F53	10
Right dipped-beam headlight	49	F12	10
Left dipped-beam headlight	49	F13	10
Right main-beam headlight	50	F14	10
Left main-beam headlight	50	F15	10
Foglights	50	F30	15
Braking light	49	F37	10
Reversing light	49	F35	7.5
+30 direction indicators	49	F53	10

SERVICES	FIGURE	FUSE	AMPERES
Selespeed transmission pump	50	F03 (MAXI-FUSE)	30
Additional heater	51	F73 (MAXI-FUSE)	30
Headlight aiming device	49	F13	10
Climate control system	49	F31	7.5
Climate control system	49	F39	15
Climate control compressor	50	F19	7.5
Heater unit relay coils	49	F31	7.5

IMPORTANT Strictly observe the fuse amp: in case of doubt contact Alfa Romeo Authorised Services



SERVICES	FIGURE	FUSE	AMPERES
Key-operated +30	49	F32	15
Selespeed transmission	49	F32	15
Selespeed transmission	49	F51	7.5
Radio	49	F39	15
Navigator	49	F39	15
Rearscreen wiper	49	F52	15
Rear left power window	49	F33	20
Rear right power window	49	F34	20
Rearscreen heating	49	F40	30
Windscreen - rearscreen washer (two-way pump)	49	F43	30
Cigar lighter	49	F44	20
Seats with electric heating	49	F45	15
Heated wing mirrors — heated nozzles	49	F41	7.5
Cruise control	49	F35	7.5
Central door locking	49	F38	20
Headlight washer	50	F09	20
Services + 30	49	F39	15
Primary services (electronic injection)	50	F17	7.5
Secondary services (electronic injection)	50	F11	15
Secondary services	49	F49	7.5

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SERVICES	FIGURE	FUSE	AMPERES		
Volumetric sensors	49	F39	15		
VDC system sensor	49	F42	7.5		
Steering angle sensor	49	F42	7.5		
EOBD system diagnosis socket	49	F39	15		
Cell phone provision	49	F39	15		
Driver's door control unit supply	49	F47	20		
Passenger's door control unit supply	49	F48	20		
Control lighting	49	F49	7.5		
Climate control system control lighting	49	F35	7.5		
Instrument cluster	49	F37	10		
Instrument cluster	49	F53	10		
Driver's door control unit	49	F39	15		
ABS control unit	49	F42	7.5		
ABS control unit	50	F04 (MAXI-FUSE)	50		
Dashboard control unit	50	F02 (MAXI-FUSE)	50		
Boot control unit	49	F39	15		
Air - bag control unit	49	F50	7.5		
Electronic injection control unit +30	50	F18	7.5		
Engine compartment control box (petrol versions)	51	F70 (MEGA-FUSE)	125		
Dashboard control unit	51	F71 (MAXI-FUSE)	70		
Trailer control unit	49	F36	10		

SERVICES	FIGURE	FUSE	AMPERES
Climate control fan	50	F05 (MAXI-FUSE)	40
Radiator fan (first speed - petrol versions)	50	F06 (MAXI-FUSE)	30
Radiator fan (second speed - petrol versions)	50	F07 (MAXI-FUSE)	50
Horn	50	F10	15
Fuel pump	50	F21	15
Injectors (petrol versions)	50	F22	15
Ignition coils	50	F21	15
Tailgate electric unlocking	49	F60 (*)	25
Electronic injection system	50	F16	7.5
Bose system	49	F61 (*)	15
Bose system	49	F62 (*)	15
Sunroof	49	F63 (*)	20
Sunroof	49	F46	15
Additional heater	50	F08	30
Ignition switch	51	F72 (MAXI-FUSE)	30
Glow plug warming (diesel versions)	50	F01 (MAXI-FUSE)	50
Heated fuel oil filter (diesel versions)	50	F20	20
Engine compartment control box (diesel versions)	51	F70 (MEGA-FUSE)	150
Radiator fan (first speed — diesel versions)	50	F06 (MAXI-FUSE)	40
Radiator fan (second speed — diesel versions)	50	F07 (MAXI-FUSE)	60
Injectors (diesel versions)	50	F22	20

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(\*) Fuse behind dashboard control box on an auxiliary bracket.

#### **STARTING WITH AN AUXILIARY BATTERY**

See "Starting with an auxiliary battery" in this chapter.



# WARNING

Never attempt to charge a frozen battery: it must firstly be thawed, otherwise it may burst. If freezing has occurred, the battery should be checked before charging by specialised personnel, to make sure that the internal elements are not damaged and that the body is not cracked, with the risk of leaking poisonous and corrosive acid.

WARNING

The liquid contained in the battery is poisonous and corrosive. Avoid contact with the skin or eyes. The battery should be charged in a well ventilated place, away from naked flames or possible sources of sparks: danger of explosion and fire.

Strictly avoid using a battery charger to start the engine: you may damage the electronic systems, in particular the ianition and fuel supply control units.

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# IN THE EVENT OF A FLAT BATTERY

Before anything else, you are advised to read the precautions for preventing the battery from draining and for ensuring long life in the "Car maintenance" chapter.

#### **CHARGING THE BATTERY**

**IMPORTANT** The battery charging procedure is described only for information purposes. This operation should be carried out by Alfa Romeo Authorised Services.

Charging should be slow at a low amp rating for 24 hours. Charging for a longer time may damage the battery.

# Charge the battery as follows:

- Disconnect the battery negative terminal (—).

- Connect the charger cables to the battery terminal ensuring that the bias is correct.

- Turn on the charger.

- After charging, turn off the charger before disconnecting it from the battery.

- Re-connect the battery negative terminal (-).

IN AN EMERGENCY

# IF THE CAR IS TO BE TOWED

The tow ring supplied with the car is housed in the tool box under the boot mat.

To install the tow ring, proceed as follows:

- Take the tow ring from the tool box.

Remove the cover (A) snap-fitted on the front (fig. 52) or rear bumper (fig. 53). To do this, if using the flat-bladed screwdriver provided, protect the tip with a soft cloth to avoid damaging the car.

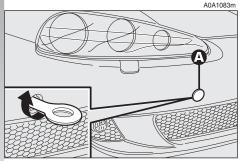
- Firmly screw the ring in its housing.



Before tightening the ring carefully clean the threaded housing. Before beginning to tow the car, make sure that the ring is firmly tightened in its threaded housing.

#### WARNING

Before starting to tow, turn the ignition key to MAR and back to STOP again without removing it. Removing the key automatically engages the steering lock resulting in the impossibility to steer the wheels. When towing remember that without the help of the engine brake and power steering greater effort is required on the pedal and steering wheel. Do not use flexible cables for towing and avoid jerks. During towing operations make sure that fastening the joints does not damage the components in contact with it. When towing the car, it is compulsory to follow specific traffic regulations concerning both the towing device and behaviour on the road.



**230** fig. 52

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fig. 53





WARNING Do not start the engine when towing the car.

**IMPORTANT** For versions with Selespeed transmission, make sure that the gears are in neutral (**N**) (checking that the car moves if pushed) and then proceed as for towing a normal car with mechanical transmission, following the instructions given previously.

Should it be impossible to set the gears to neutral, do not tow the car and contact Alfa Romeo Authorised Services.

# IF THE CAR IS TO BE LIFTED

#### **USING THE JACK**

See paragraph "In the event of a puncture" in this chapter.

Please be informed that:

- Ithe jack mass is approx. 2.100 kg;

- the jack requires no adjustment;

 the jack cannot be repaired and in the event of a fault it must be replaced by another original one;

- no tool other than its crancking device may be fitted on the jack.

#### WARNING

The purpose of the jack is only for replacing wheels on the car with which it is provided or on cars of the same model. It must never be used for other purposes such as for example raising cars of other models. In no case must it be used for repairs under the car.

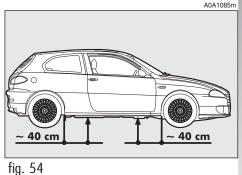


#### WARNING

The car may fall if the jack is not positioned correctly. Never use the jack for higher capacities than the one stated on the label.

#### USING AN ARM LIFT OR WORKSHOP LIFT

The car should be lifted only at the side setting the ends of the arms of the work-shop lift in the area shown in **fig. 54-55**.





Take care when positioning the arms of the lift or workshop lift to avoid damaging the side strips.

# IN THE EVENT OF AN ACCIDENT

- It is important to keep calm.

 If you are not directly involved, stop at least a few dozen metres away from the accident.

- On motorways, stop without blocking the emergency lane.

- Turn the engine off and the hazard warning lights on.

- At night, illuminate the place of the accident with the headlights.

- Take care, do not risk being run over.

- Signal the accident placing the triangle at regulation distance in a clearly visible place.

 Call the emergency organisation, giving the most accurate information possible.
 On motorways use the special phones provided.  In motorways pileups, especially with poor visibility, the risk of being involved in other crashes is high. Leave the car immediately and go beyond the guard-rail.

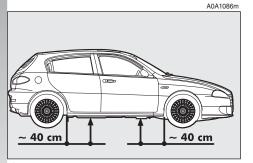
 If doors are blocked, do not try to get out of the car breaking the windscreen which is stratified. The windows and rear screen are easier to break.

- Remove the ignition key of the cars involved.

 If you note a smell of fuel or other chemical product, do not smoke and have cigarettes stubbed out.

 To put out fires, even small ones, use the extinguisher, blankets, sand, or earth. Never use water.

 If use of the lighting system is not necessary, disconnect the battery negative terminal (-).



**232** fig. 55

#### **IF PEOPLE ARE INJURED**

- An injured person must never be abandoned. Helping is compulsory also for persons not directly involved in the accident.

- Do not crowd around injured people.

- Reassure the injured person that help is on the way, and stay near to overcome any panic.

- Release or cut the seat belt restraining injured persons.

- Do not give injured persons anything to drink.

- An injured person should never be moved except in the following circumstances.

— Remove an injured person from the car only in danger of fire, sinking or falling. When removing an injured person: do not pull the limbs or bend the head and keep the body as horizontal as possible.

#### FIRST AID KIT

In addition to the first-aid kit, it is also wise to keep an extinguisher and a blanket in the car.

# VEHICLE MAINTENANCE

# VEHICLE MAINTENANCE

## SCHEDULED SERVICING

Correct maintenance is determined in ensuring long car life under the best conditions.

This is why Alfa Romeo has programmed a series of checks and maintenance operations every 20,000 km.

**IMPORTANT** On versions fitted with reconfigurable multifunction display, at 2000 km from the maintenance deadline, the display will show "REFER TO SERVICE MANU-AL" which is shown again turning the ignition key to **MAR**, every 200 km. For further details, see "Service" in the "Reconfigurable multifunction display". It is however wise to remember that Programmed Maintenance does not completely cover all the car's requirements: also in the initial period before the 20,000 km service coupon and later, between one coupon and another, ordinary care is still necessary such as for example routinely checking and topping up the level of fluids, checking the tyre pressure, etc...

**IMPORTANT** The Programmed Maintenance coupons are specified by the Manufacturer. The failure to have them carried out may invalidate the warranty.

The Programmed Maintenance service is carried out by all Alfa Romeo Authorised Services, at pre-established times. If during each operation, in addition to the ones programmed, the need arises for further replacements or repairs, these may be carried out only with the explicit agreement of the customer.

**IMPORTANT** You are advised to contact Alfa Romeo Authorised Services in the event of any minor operating faults, without waiting for the next service coupon.

# SCHEDULED MAINTENANCE PROGRAMME

Thousands of km	20	40	60	80	100	120	140	160	180
Check tyre conditions/wear and adjust pressure if necessary	•	•	•	•	•	•	•	•	•
Check operation of lighting system (headlights, direction indicators, hazard warning lights, boot, passenger compartment, glovebox lights, warning lights, etc)	•	•	•	•	•	•	•	•	•
Check operation of windscreen washer system, adjust spray jets	•	•	•		•	•	•	•	•
Check position/wear of windscreen/rearscreen wiper blades	•	•	•	•	•		•	•	•
Check operation of front disk brake pad wear indicator	•	•	•	•	•			•	•
Check wear conditions of rear disk brake pads		•		•					
Sight check the conditions of: body exterior, underbody protection, stiff pipes and hoses (exhaust - fuel supply - brakes), rubber parts (boots - sleeves - bushes etc.)	•	•	•	•	•	•	•	•	•
Sight check boot and bonnet lock cleaning conditions, lever cleaning and lubrication	•	•							•
Sight check for accessory drive belt conditions									•
Check handbrake lever stroke adjustment		•		•					
Change air cleaner cartridge (petrol versions)		•		•					
Change air cleaner cartridge (JTD versions)	•	•		•					•
Top up fluid levels (engine coolant, brakes, windscreen washer, battery, etc)	•	•		•					•
Check and if necessary top up the automatic transmission oil level (versions with Selespeed transmission)	•	•	•	•	•		•		•

Thousands of km	20	40	60	80	100	120	140	160	180
Sight check for conditions of timing gear drive toothed belt (diesel versions)			•						•
Check operation of engine control system (through diagnosis socket)		•							
Check valve clearance (JTDM 120HP versions)									
Check mechanical transmission oil level									
Check emissions/smoke at the exhaust (diesel versions)									
Change counter-rotating shaft drive belt (2.0 T.SPARK versions)									
Change timing gear drive belt (T.SPARK versions) (*)									
Change timing gear drive belt (diesel versions) (*)									
Change accessory poly-V drive belt									
Change spark plugs (petrol versions)									
Change spark plugs (1.6 T.SPARK 105HP versions)									
Change engine oil and oil filter (petrol versions) (or every 24 months) 🛕	•								
Change engine oil and oil filter (diesel versions without DPF)(**) (or every 24 months)	•	•	•	•	•	•	•	•	•
Change engine oil and oil filter (diesel versions with DPF)(**) (or every 24 months)									
Change brake fluid (or every 24 months)			•						
Change fuel filter (diesel versions)	•	•							
Change pollen filter (or every year)									

(\*) Regardless of the km covered, the timing belt shall be replaced every 4 years for particularly demanding use (cold climates, driving in the city, idling for a long time) or in any case every 5 years. (\*\*) The engine oil and oil filter should be changed depending on their actual condition, which is indicated by a warning light/message on the control panel or at least every 2 years.

If the car is used mainly on urban routes or if the yearly kilometres travelled are less than 10,000 km, the engine oil and filter must be changed every 12 months.

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# ANNUAL INSPECTION PROGRAMME

#### For cars with an annual mileage of below 20,000 km (for example about 10,000 km) the following yearly inspection programme is advised:

 Check tyre conditions/wear and if necessary adjust the pressure (including spare wheel)

 Check operation of lighting system (headlights, direction indicators, hazard warning lights, boot, passenger compartment, glovebox lights, warning lights, etc.)

 Check operation of windscreen wiper system, spray jet adjustment

 Check position/wear of windscreen/ rearscreen wiper blades

 Check front disk brake pad conditions and wear

 Check boot and bonnet lock cleaning conditions, lever cleaning and lubrication  Sight check for conditions of: engine, gearbox, transmission, pipes (exhaust - fuel supply - brakes), rubber parts (boots sleeves - bushes etc..), brake and fuel supply system hoses

- Check battery charge

Sight check for conditions of various drive belts

Check and if necessary top up fluid levels (engine coolant, brakes, windscreen washer, battery etc.)

- Change engine oil and filter

- Change pollen filter.

# ADDITIONAL OPERATIONS

Every **1000 km** or before long journeys, check and if necessary top up:

- engine coolant fluid level

brake/hydraulic clutch control fluid level

- power steering fluid level

 windscreen/rearscreen and headlamp washer fluid level

- tyre pressure and conditions.

Every **3000 km** check and if necessary top up the engine oil level.

The use of **FL Selenia** products is recommended which have been designed and made expressly for Alfa Romeo cars (see "Refuelling" in the "Technical Specifications" chapter).



#### IMPORTANT Engine oil

Should prevailing use of the car be under one of the following specially heavy conditions:

- trailer or caravan towing
- dusty roads

 short distances (less than 7-8 km) repeated and with external temperatures below zero

- frequently idling engines or long distance low speed driving (e.g. taxis or door-to-door deliveries) or in case of a long term inactivity.

Replace engine oil more frequently than required on Service Schedule.

#### IMPORTANT Diesel filter

The different grades of purity in diesel fuel normally available might make it necessary to replace the filter more frequently than indicated in the Service Schedule. If the engine misfires it shows the filter needs changing.

#### IMPORTANT Air cleaner

Using the car on dusty roads change the air cleaner more frequently than specified in the Schedule Maintenance Programme.

For any doubts concerning the intervals between the engine oil and air cleaner replacement in relation to how the car is used, contact Alfa Romeo Authorised Services.

#### IMPORTANT Battery

It is advisable to check the battery charge, preferably at the onset of winter, to prevent the possibility of the electrolyte freezing.

This check should be carried out more frequently if the car is used mainly for short trips, or if it is fitted with accessories that permanently absorb electricity even with the ignition key removed, especially in the case of after market accessories.

If the car is used in hot climates or particularly harsh conditions it is wise to check the level of the battery fluid (electrolyte) more frequently than specified in the Scheduled Maintenance Programme.

#### IMPORTANT Pollen filter

If the car is used frequently in dusty or heavily polluted environments it is advisable to replace the filtering element more frequently; in particular it should be replaced if a reduction of the amount of air admitted to the passenger compartment is noted.

Car maintenance should be entrusted to Alfa Romeo Authorised Services. For routine and minor maintenance operations you wish to carry out yourself, always make sure you have the proper equipment, genuine Alfa Romeo spares and the necessary fluids; do not however carry out these operations if you have no experience.

# **CHECKING LEVELS**



WARNING Never smoke while working in the engine compartgas and inflammable ment; vapours may be present, with the risk of fire.

When topping up take care not to confuse the various types of fluids: they are all incompatible with one another and could seriously damage the car.

1 Engine oil - 2 Battery - 3 Brake fluid -4 Windscreen/rearscreen/headlamp washer fluid - 5 Engine coolant fluid - 6 Power steering fluid - 7 Selespeed transmission oil

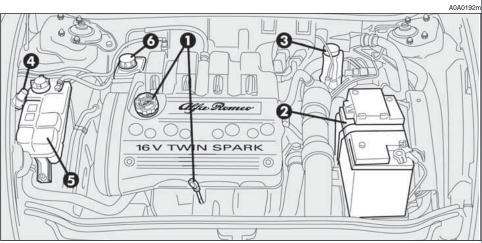


fig. 1 - Versions 1.6 T.SPARK (105HP) - 1.6 T.SPARK (120HP) - 2.0 T.SPARK

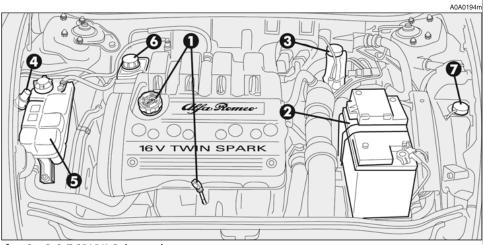


fig. 2 - 2.0 T.SPARK Selespeed versions

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1 Engine oil - 2 Battery - 3 Brake fluid -4 Windscreen/rearscreen/headlamp washer fluid - 5 Engine coolant fluid - 6 Power steering fluid

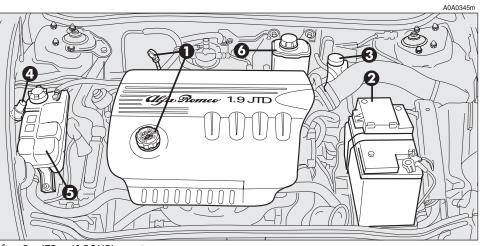
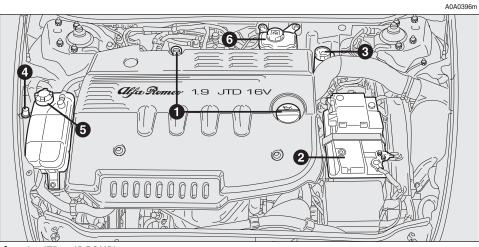


fig. 3 - JTDM (120HP) versions



1 Engine oil - 2 Battery - 3 Brake fluid -4 Windscreen/rearscreen/headlamp washer fluid - 5 Engine coolant fluid - 6 Power steering fluif

fig. 4 - JTDM (150HP) versions

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#### ENGINE OIL (fig. 5-6-7)

The engine oil should be checked with the car on a level surface a few minutes (about 5) after the engine has been switched off.

Remove the dipstick (A), clean it, put it back in completely, remove it and check that the level is within the MIN and MAX marks on the dipstick. The interval between the **MIN** and **MAX** marks correspond to about one litre of oil.



WARNING

When the engine is hot, take care when working inside the engine compartment to avoid burns. Remember that when the engine is hot, the fan may cut in: danger of injury.



Do not add oil with specifications (classification, viscosity) other than those of the oil already in the engine.

If the oil level is near or even below the **MIN** mark, add oil through the filter neck (**B**), until reaching the **MAX** mark.

**IMPORTANT** If a routine check reveals that the level is above the **MAX** mark, contact Alfa Romeo Authorised Services to have the correct level restored.

**IMPORTANT** After topping up the oil, before checking the level again, run the engine a few seconds and wait for a few minutes ater stopping it.

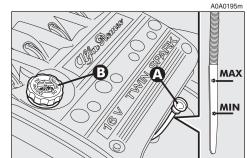


fig. 5 - T.SPARK versions

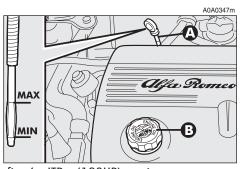
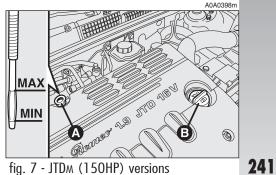


fig. 6 - JTDM (120HP) versions





#### **Engine oil consumption**

Max engine oil consumption is usually 400 grams every 1000 km.

During the initial period of use the engine settles, therefore engine oil consumption may be considered stabilised only after the first  $5000 \div 6000$  km.

**IMPORTANT** Engine oil consumption depends on the way of driving and the conditions of use of the car.

Used engine oil and filter contain harmful substances for the environment. Contact Alfa Romeo Authorised Services to have the oil and the filter changed, as they are equipped to dispose of the waste oil and filters respecting nature and the law.

# **SELESPEED GEARBOX OIL** (fig. 8)

The Selespeed transmission oil should be checked with the car on a level surface and with the engine stopped and cold.

To check the level, proceed as follows:

- turn the ignition key to **MAR**;

disconnect the breather tube and remove the cap (A) checking that the level corresponds with the MAX mark on the dipstick integrated with the cap;

- if the oil is below the **MAX** mark, top up to reach the correct level;

- after refitting the cap, insert the breather tube firmly on the housing on the cap and turn the ignition to **STOP**.



Do not add oil with specifications other than that already in the gearbox.

Used gearbox oil contains dangerous substances for the environment. For changing the oil we advise contacting Alfa Romeo Authorised Services who are equipped for disposing of used oil respecting nature and the law.

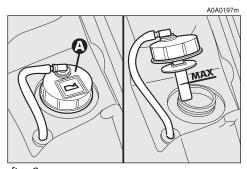


fig. 8

WARNING

Be very careful working inside the engine compartment if the engine is hot: danger of burns. Remember that the fan may cut in if the engine is very hot: danger of injury.

ENGINE COOLANT FLUID (fig. 9)



The level of the coolant in the header tank (reservoir) should be checked with the engine cold and the car on a level surface and it should be between the **MIN** and **MAX** marks on the tank. If the level is low, loosen the header tank cap (**A**) and slowly pour through the filler the fluid specified in the "Fluids and Lubricants" table in the "Technical Specifications" chapter until nearing the **MAX** mark; for this operations contact Alfa Romeo Authorised Services.

The antifreeze mixture contained in the cooling circuit guarantees protection down to  $-40^{\circ}$ C.

For particularly hard climate conditions, we recommend use of a 60% **PARAFLU UP** and 40% demineralized water mixture.

The cooling system is pressurised. If necessary, replace the cap only with another genuine one, otherwise system efficiency could be compromised.

# ADAD240m

For topping up use fluids of the same type contained in the cooling system.

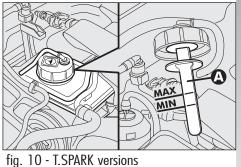


**POWER STEERING FLUID** 

voir is at maximum.

This operation should be carried out with the car on a level surface and the engine switched off and cold.

Check that the level reaches the **MAX** mark on the reservoir or coincides with the upper notch (maximum level) on the dipstick (**A**) integral with the reservoir cap.



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A0A0216m



If the oil level in the reservoir is below the specified one, top up only with one of the products listed in the "Fluids and Lubricants" table in the "Technical Specifications" chapter proceeding as follows:

- Start the engine and wait for the oil level in the reservoir to stabilise.

- With the engine running, turn the steering wheel lock to lock a few times.

- Top up to the **MAX** level notch, then refit the cap.



Oil consumption is very low, if topping up again is needed shortly afterwards, have the system checked for possible leaks by Alfa Romeo Authorised Services.

#### BRAKE AND HYDRAULIC CLUTCH FLUID (fig. 12)

Check that the fluid level in the reservoir is at maximum. Top up with the brake fluid specified in the table "Fluids and lubricants" (see section "Technical Specifications"). **NOTE** Clean accurately the tank cap **A** and the surrounding surface. When opening the cap take the utmost care to prevent impurities entering the tank. When topping up, always use a funnel with built-in filter with mesh equal to or lower than 0.12 mm.

**IMPORTANT** For this operation it is however recommended to contact Alfa Romeo Authorised Services.

Make sure that the highly corrosive brake fluid does not drip onto the paintwork. If it does, wash it off immediately with water.

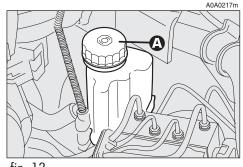
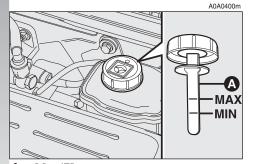


fig. 12



244 fig. 11 - JTDM versions



#### WARNING

Brake and clutch fluid is poisonous and highly corrosive. In the event of accidental contact, wash the parts concerned immediately with neutral soap and water, then rinse thoroughly. See a doctor at once if the fluid is swallowed.



#### WARNING

The <sup>(i)</sup>, symbol on the container indicates synthetic brake fluid, distinguishing it from the mineral kind. Using mineral fluids irreversibly damages the special braking system rubber seals.

**IMPORTANT** Brake and hydraulic clutch fluid is hygroscopic (i.e. it absorbs moisture). For this reason, if the car is mainly used in areas with a high degree of atmospheric humidity, the fluid should be replaced at more frequent intervals than specified in the Scheduled Maintenance Programme.

#### WINDSCREEN/ **REARSCREEN/HEADLIGHT** WASHER FLUID (fig. 13)

Open the cap (A) and check the level in the reservoir.

If necessary top up using a mixture of water and TUTELA PROFESSIONAL SC 35 fluid as follows:

- 30% of TUTELA PROFESSIONAL SC 35 and 70% water in summer;

- 50% of TUTELA PROFESSIONAL SC 35 and 50% water in winter;

- in the case of temperatures below -20°C use TUTELA PROFESSIONAL SC 35 fluid neat.



#### WARNING

Some commercial additives for windscreen washers are inflammable. The engine compartment contains hot components which may set it on fire.

#### WARNING

Do not travel with the windscreen/rearscreen washer reservoir empty: the action of the windscreen washer is fundamental for improving vision.



A0A0242m

To avoid damaging the pump motor, do not use the windscreen/rearscreen washers when the reservoir is empty.

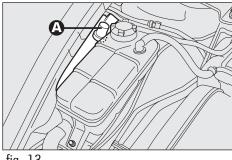


fig. 13

# AIR CLEANER

The air cleaner is connected to the temperature and air flow sensors which send to the control unit the electric signals needed for correct operation of the injection and ignition system.

It must therefore always be in perfect conditions, to ensure correct operation of the engine, low consumption and exhaust emission levels.



If the operations concerning cleaner replacement described below are not carried out correctly and with the due precautions, they may compromise the travelling safety of the car. You are recommended to have this operation carried out by Alfa Romeo **Authorised Services.** 

If the car is habitually used in dusty areas, the cleaner should be replaced at shorter intervals than those specified in the Programmed Maintenance Schedule.

Any attempt to clean the cleaner may damage it, leading to serious engine damage.

#### DIESEL FUEL FILTER

(diesel versions)

#### **DRAINING CONDENSATION** WATER

The presence of water in the supply circuit may cause serious damage to the entire injection system and cause irregular running of the engine. If the 🚔 warning light turns on (or, on some versions, symbol + message are shown on the reconfigurable multifunction display) contact Alfa Romeo Authorised Services as soon as possible to have the system relieved. If the same warning appears immediate-ly after refuelling, some water could have been introduced in the reservoir: in this case turn off the engine immediately and contact Alfa Romeo Authorised Services.

# POLLEN FILTER

This has a mechanical/electrostatic air filtering action, provided that the windows and the doors are shut.

Have the pollen filter checked once a year by Alfa Romeo Authorised Services, preferably at the onset of summer.

If the car is mainly used in dusty or heavily polluted areas, the filter should be changed at more frequent intervals than ispecified in the Scheduled Maintenance Proaramme.

**IMPORTANT** The failure to replace the filter can considerably reduce the effectiveness of the climate control system.

# BATTERY

The battery is of the "Limited maintenance" type: under normal conditions of use the electrolyte does not need topping up with distilled water.

Contact Alfa Romeo Authorised Services to have the battery checked/replaced.



Batteries contain harmful substances for the environment. To change the battery we advise contacting Alfa **Romeo Authorised Services who** are equipped for disposal respecting nature and the law.

The incorrect installation of electric accessories may cause seiour damage to the car. If after buying the car you wish to install accessories (alarm, radio, radiotelephone, etc.) contact Alfa **Romeo Authorised Services who** will be able to suggest the most suitable devices and above all advise about the need to use a more powerful batterv.



If the car is to remain inactive for a long time in very cold conditions, re-

move the battery and take it to a warm place, otherwise it may freeze.

At any battery removal/refitting wait for at least 3 minutes before starting the enigne, to allow the climate control unit to reset the position of the electric actuators which control the air temperature and distribution.

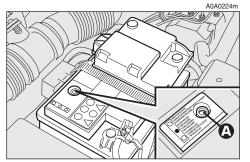


fig. 14



WARNING When working on the battery or close to it, always protect the eyes with goggles.

WARNING

The liquid contained in the

battery is poisonous and

corrosive. Avoid contact with the

skin or eyes. The battery should be

charged in a well ventilated place

away from naked flames or pos-

sible sources of sparks: danger of

explosion and fire.

WARNING

Working with a low fluid level may damage the battery irreversibly, even causing it to burst.

#### **CHECKING THE CHARGE**

The battery charge may be checked through the indicator **A-fig. 14** (where required) set on the battery cover and acting according to the colour the indicator shows.

Should the battery be not fitted with battery charge inspection device (optical electrolyte indicator), inspection operations shall be carried out by skilled personnel only.

Refer to the table below or to the label (**fig. 15**) on the battery itself.

#### **CHARGING THE BATTERY**

**IMPORTANT** The battery charging procedure is described only for information purposes. This operation should be carried out by Alfa Romeo Authorised Services. Charging should be slow at a low amp rating for 24 hours. Charging for a longer time may damage the battery.

Charge the battery as follows:

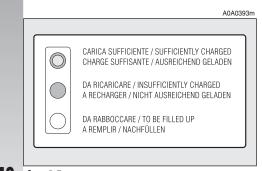
- Disconnect the battery negative terminal (-).

 Connect the charger cables to the battery terminal ensuring that the bias is correct.

- Turn on the charger.

- After charging, turn off the charger before disconnecting it from the battery.

- Re-connect the battery negative terminal (-).



Brilliant white colour	Top up the electrolyte	Contact Alfa Romeo Authorised Services
Dark colour without green area in the centre	Low charge level	Charge the battery (you are advised to contact Alfa Romeo Authorised Services)
Dark colour with green area in the centre	Sufficient electrolyte level and charge	No action



#### WARNING

Never attempt to charge a frozen battery: it must firstly be thawed, otherwise it may burst. If freezing has occurred, the battery should be checked before charging by specialised personnel, to make sure that the internal elements are not damaged and that the body is not cracked, with the risk of leaking poisonous and corrosive acid.

**IMPORTANT** If the battery is kept with a charge of below 50% it is damaged by suphation, its starting capability is reduced and it is also more subject to the possibility of freezing (this may occur already at -10 °C). In the event of a prolonged inactivity, refer to the paragraph "car inactivity", in the chapter "Correct use of the car".

#### **CHANGING THE BATTERY**

When changing the battery it should be replaced with another original one with the same characteristics. If it is replaced by a battery with different characteristics, the maintenance intervals given in the Scheduled Maintenance Programme in this chapter are no longer valid and for maintenance it will be necessary to follow the battery Manufacturer's instructions.

#### USEFUL HINTS TO EXTEND THE LIFE OF YOUR BATTERY

To avoid rapidly draining the battery and ensure that it continues to work correctly, the following should be noted:

The terminals must always be firmly tightened.

Within reason, avoid using electrical devices for a long time when the engine is switched off (radio, hazard warning lights, parking lights, etc.).

— When the car is parked in a garage, ensure that the doors, bonnet, boot and inner lids are closed properly so that the lights do not stay on permanently.

- Before carrying out any work on the electric system, disconnect the negative cable from the battery.

- If after buying the car, you wish to install electric accessories which require a permanent electric supply (alarm, voice feature, radionavigator with satellite antitheft function etc.) or accessories that burden the electric system, contact Alfa Romeo Authorised Services whose qualified personnel, in addition to suggesting the most suitable devices belonging to Lineaccessori Alfa Romeo, will evaluate the overall electric absorption, checking whether the car's electric system is capable of withstanding the load required, or whether it should be integrated with a more powerful battery. In fact, as some of these devices continue absorbing energy even when the ignition key is off (car stationary, engine off), they gradually drain the battery.

The maximum absorption of all the accessories (standard and fitted afterwards) should be 0,6 mA x Ah (of the battery), as shown in the following table:

Battery	Maximum permissible loadless absorption					
50 Ah	30 mA					
60 Ah	36 mA					
70 Ah	42 mA					

You are also reminded that services with high current absorption switched on by the user, such as for example: baby bottle warmers, vacuum cleaner, mobile phone, mini fridge, etc., **quicken the battery drain**ing process if they are turned on with the engine off or running at idle speed.

**IMPORTANT** When installing additional systems on the car, bear in mind that improper branches on connections of the car wiring are dangerous, particularly if safety devices are involved.

# ELECTRONIC CONTROL UNITS

With normal use of the car, no particular precautions need to be taken.

In the event of work on the electric system or emergency starting, the instructions given below must absolutely be adhered to:

 Always switch off the engine before disconnecting the battery from the electric system.

 If it is necessary to charge the battery, always disconnect it from the electric system.

 When starting in an emergency, only use an auxiliary battery and not a battery charger.

 Check that the bias is correct and that the connections between the battery and the electric system are in efficient conditions.

- Before disconnecting or connecting the terminals of electronic units, ensure that the ignition key is not in the **MAR** position.

- Do not check for current in the cables by short-circuiting the ends.

- If electric welding is to be carried out on the body, remember to disconnect the electronic control units, or remove them if the work involves high temperatures.



Alterations or repairs to the electric system carried out incorrectly and without taking account of the specifications of the system, may cause operating faults with the risk of fire.

kerbs, potholes or obstacles of various kinds. Prolonged driving on rough roads may damage the tyres. Routinely check the tyres for cuts on the sides, swelllings or uneven tread wear. If necessary contact Alfa Romeo Authorised Serrvices.

Avoid overloading the car when travelling: this may cause serious damage to the wheels and tyres.

If a tyre is punctured, stop immediately and change it to avoid damage to the tyre itself, the rim, suspensions and steering system. Tyres age even if they are not used much. Cracks in the tread rubber are a sign of aging. In any case, if the tyres have been on the car for 6 years, they should be checked by specialised personnel, to see if they can still be used. Also remember to check the compact spare wheel.

In the case of replacement, always fit new tyres, avoiding those of dubious origin.

WARNINGS

Where possible, avoid sudden braking, tyre squealing starts, etc.

Particularly avoid violent bumps against

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# WHEELS AND TYRES

#### **TYRE PRESSURE**

Check the tyre pressure of every wheel, including the spare, every two weeks and before a long journey.

The pressure should be checked with the tyre rested and cold.

It is normal for the pressure to increase when the car is in use. For the correct tyre inflation pressure, see "Wheels" in "Technical specifications" section.



WARNING

Remember that car road holding also depends on correct tyre inflation pressure.

Incorrect pressure causes abnormal tyre wear (fig. 16):

A - Normal pressure; tread evenly worn.

**B** - Low pressure: tread particularly worn at edges.

**C** - High pressure: tread particularly worn in the centre.

WARNING

**Excessively low pressure** causes overheating of tyre with the possibility of serious damage to it.

Tyres should be changed when the tread thickness is reduced to 1.6 mm. In any case follow local regulations.

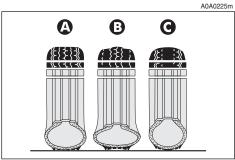


fig. 16

The **Alfa 147** uses Tubeless tyres. Never use an inner tube with these tyres.

If a tyre is changed, also change the inflation valve.

To allow even wear between the front and rear tyres it is advisable to change over every 10-15 thousand kilometres, keeping them on the same side of the car so as not to reverse the direction of rotation (fig. 17).

WARNING Do not cross switch the tyres, moving them from the right of the car to the left and

vice versa.

WARNING

Alloy rim painting involving temperatures exceeding 150°Č should be avoided since wheel mechanical characteristics could be impaired.

### **RUBBER HOSES**

As far as the brake system and fuel supply rubber hoses are concerned, carefully follow the Scheduled Maintenance Programme. Indeed, ozone, high temperatures and the prolonged lack of fluid in the system may cause hardening and cracking of the hoses, with possible leaks. Careful control is therefore necessary.

## WINDSCREEN/ REARSCREEN WIPERS

#### BLADES

Periodically clean the rubber part using special products; TUTELA PROFESSIONAL SC 35 is recommended.

If the rubber blades are bent or worn they should be replaced. In any case they should be changed once a year.

A few simple notions can reduce the possibility of damage to the blades:

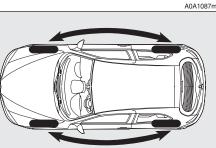
- If the temperature falls below zero make sure that ice has not frozen the rubber against the glass. If necessary, thaw using an antifreeze product.

- Remove any snow from the glass: in addition to protecting the blades, this prevents effort on the motor and overheating.

- Do not operate the windscreen and rearscreen wipers on dry glass.

### WARNING

Driving with worn wiper blades is a serious hazard, because visibility is reduced in bad weather.





## Changing the windscreen wiper blade (fig. 18)

#### Instructions to remove the blade

Proceed as follows:

- raise the windscreen wiper arm  $(\mathbf{A})$ ;

- turn the blade (**B**) by 90° around the tab (**C**) fitted on the arm final part;

- remove the blade from the tab (C).

#### Instructions to fit the blade

Proceed as follows:

- fit the tab (C) in the hole on the blade central part (B);

- refit the arm with the blade on the windscreen.

## Changing the rearscreen blade (fig. 19)

- Raise the cover (**A**) and remove the arm from the car, slackening the nut (**B**) that fastens it to the pivot pin.

- Correctly position the new arm and firmly tighten the nut.

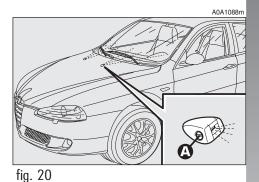
- Lower the cover.

#### SPRAY JETS (fig. 20-21)

If the jet of fluid is inadequate, firstly check that there is fluid in the reservoir: see "Checking levels" in this chapter.

Then check that the nozzle holes are not clogged, if necessary use a needle.

If necessary, direct the jet of fluid working on the adjustment screw (A).



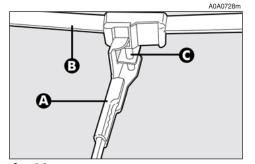


fig. 18

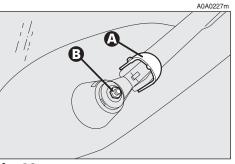
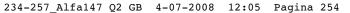


fig. 19

fig. 21

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A0A1089m



## HEADLIGHT WASHERS

Regularly check that the spray jets are intact and clean (**fig. 22**).

If it is necessary to direct the jet, contact an Alfa Romeo Authorised Service.

### BODYWORK

#### PROTECTION FROM ATMOSPHERIC AGENTS

The main causes of corrosion are:

- atmospheric pollution

— salty air and humidity (coastal areas, or hot humid climates)

- seasonal environment conditions.

Not to be underestimated is also the abrasive action of wind-borne atmospheric dust and sand and mud and gravel raised by other cars.

On your **Alfa 147**, Alfa Romeo has implemented the best manufacturing technologies to effectively protect the bodywork against corrosion. These include:

 Painting products and systems which give the car particular resistance to corrosion and abrasion.

- Use of galvanised (or pretreated) steel sheets, with high resistance to corrosion.

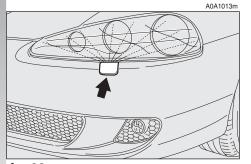
- Spraying of the underbody, engine compartment, wheel arches and other parts with highly protective wax products.

- Spraying of plastic parts, with a protective function, in the more exposed points: underdoor, inner wheel arch linings, etc.

- Use of "open" boxed sections to prevent condensation and pockets of moisture from triggering rust inside.

#### CAR EXTERIOR AND UNDERBODY WARRANTY

The **Alfa 147** is guaranteed against perforation due to rust of any original element of the structure or body. For the general terms of this warranty, refer to the Warranty booklet.



**254** fig. 22

#### ADVICE FOR PRESERVING THE BODYWORK

#### Paint

The paintwork does not only serve an aesthetic purpose but also protects the underlying sheet metal. In the case of deep scrapes or scores, you are advised to have the necessary touching up carried out immediately to avoid the formation of rust. Only original products should be used for touching up paint (see "Body paint identification plate" in the "Technical Specifications" chapter).

Normal paint maintenance consists in washing at intervals depending on the conditions and environment of use. For example, in highly polluted areas, or if the roads are sprayed with salt, it is wise to wash the car more frequently.



**Detergents cause water** pollution. Therefore the engine compartment should be washed in areas equipped for collecting and purifying the liquid used in the washing process.

To correctly wash the car:

1) Spray the car with a low pressure jet of water.

2) Pass a sponge moistened with a light detergent solution, rinsing the sponge frequently.

3) Rinse well with water and drv with a iet of air or chamois leather.

f the vehicle is washed in an automatic car wash, follow these recommendations:

- remove the antenna from the roof to avoid damages;

 water with a cleansing solution must be used for washing;

 rinse accurately to avoid cleansing solution residues which may remain on the body or hidden parts.

Some automatic systems provided with old generation and/or not correctly maintained brushes may damage the varnish, easing the creation of micro-scratches, especially on dark colours. To remove those scratches, slightly polish with a specific product.

When drying, take particular care with the less visible parts like door surrounds, bonnet and around the headlights where water may stagnate. The car should not be taken to a closed area immediately, but left in the open so that residual water can evaporate.

Do not wash the car after it has been left in the sun or with the bonnet hot: this may alter the shine of the paintwork.

Exterior plastic parts must be cleaned in the same way as the rest of the car.

Where possible, do not park under trees; the resinous substance many species release give the paint a dull appearance and increase the possibility of triggering rust processes.

**IMPORTANT** Bird droppings must be washed off immediately and thoroughly as the acid they contain is particularly aggressive.

#### Windows

VEHICLE MAINTENANCE

Use specific products to clean the windows. Use clean cloths to avoid scratching or altering the transparency of the glass.

**IMPORTANT** The inside of the rearscreen should be wiped gently with a cloth in the direction of the filaments to avoid damaging the heating device.

#### **Engine compartment**

At the end of the winter the engine compartment should be carefully washed, without directing the jet against electronic control units. Contact a specialised workshop to have this done.



Detergents pollute water. The car should therefore be washed in areas equipped for the collection and purification of the liquid used in the washing process.

**IMPORTANT** The car should be washed with the engine cold and the ignition key at **STOP**. After washing, make sure that the various protections (e.g. rubber caps and various covers) have not been damaged or removed.

### INTERIOR FITTINGS

Periodically check that water is not trapped under the mats (due to water dripping off shoes, umbrellas, etc.) which could cause oxidisation on the sheet metal.

WARNING Never use inflammable products like fuel oil ether or rectified petrol for cleaning inside the car. The electrostatic charges generated when rubbing to clean may cause fire.

#### **CLEANING SEATS AND FABRIC** AND VELVET PARTS

 Use a soft brush or a vacuum cleaner to remove dust. Velvet is cleaned better if the brush is moistened.

 Rub the seat with a sponge moistened with a solution of water and neutral detergent.

#### **CLEANING LEATHER SEATS**

- Remove dried on dirt with a lightly moistened chamois leather or cloth without pressing too hard.

- Remove liquid and grease stains with a dry absorbent cloth without rubbing. Then wipe with a soft cloth or chamois leather with water and neutral soap. If the stain persists, use specific products, carefully following the instructions for use.

**IMPORTANT** Never use spirit or alcoholbased products, even at low concentrations.



The car upholstery can resist wear resulting from

the normal use of the car. However, it is necessary to avoid excessive and/or prolonged friction with clothing accessories such as metal buckles, studs, velcro and similar material, as this friction, acting locally and with a high pressure over the knitted fabric, may cause some threads to break and thus damage the seat cover/lining.

#### **INTERIOR PLASTIC PARTS**

Use appropriate products designed to preserve the appearance of components.

**IMPORTANT** Never use spirit or petroleum to clean the instrument cluster.

#### WARNING

Do not keep aerosol cans in the car. They might explode. Aerosol cans must never be exposed to a temperature above 50°C. The temperature inside the car exposed to the sun may go well beyond that figure.

#### STEERING WHEEL/GEARBOX LEVER KNOB COVERED WITH TRUE LEATHER

These components must be cleaned only with water and neutral soap. Never use spirit or alcohol-based products.

Before using specific products for cleaning interior fittings, read the instructions on the label carefully to make sure that the product does not contain spirit and/or alcohol-based substances.

If, when cleaning the windscreen with specific products for glass, some drops fall on the leather of the steering wheel/gerabox lever knob, it is necessary to remove them immediately and then to wash the involved area with water and neutral soap.

**IMPORTANT** It is advisable, in the event of steering wheel locking device, to operate with great care to avoid damaging the covering leather.

## TECHNICAL SPECIFICATIONS

### **IDENTIFICATION DATA**

You are advised to note the identification codes. The identification datastamped and given on the labels and their position are the following (**fig. 1**):

- 1 Identification label
- 2 Body label

*<b>TECHNICAL SPECIFICATIONS* 

- **3** Bodywork paint identification label
- 4 Engine label.

#### **IDENTIFICATION LABEL**

This (**fig. 2**) is to be found on the front crossmember of the engine compartment. It contains the following information:

- (A) Space for details of national homologation
- **(B)** Space for punching the consecutive chassis number
- (C) Space available for maximum weights authorised by various national regulations
- (D) Space for version and any supplementary indications to those specified

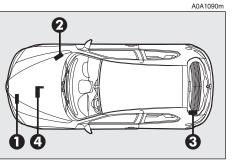
- (E) Space for smoke coefficient (JTDM versions)
- (F) Space for punching manufacturer's name.

#### **BODYWORK LABEL**

This is located in the engine bay, to one side of the upper right shock absorber (**fig. 3**) and contains:

- Type of vehicle: ZAR 937000

- Manufacturer's serial number (chassis number).



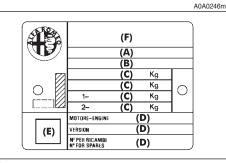
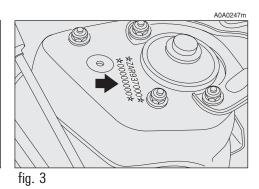


fig. 2



#### BODYWORK PAINT IDENTIFICATION LABEL

The label (**fig. 4**) is on the inner left edge of the tailgate. It contains the following information:

- **A**. Paint manufacturer.
- **B**. Name of colour.
- C. Colour code.

#### **ENGINE STAMP**

Theengine marking is stamped on the gearbox side of the crankcase, in correspondence with the exhaust manifold.

ENGINE CODES - BO	ODY VERSIONS
-------------------	--------------

	Code type	Body version 3 doors   5 doors			
1.6 T.SPARK (105HP)	AR37203	937AXA1A 00G 937AXA1A 00H (*)	937BXA1A 05G 937BXA1A 05H (*)		
1.6 T.SPARK (120HP)	AR32104 AR32103 (*)	937AXB1A 01G 937AXB1A 01H (*)	937BXB1A 06G 937BXB1A 06H (*)		
2.0 T.SPARK	AR32310	937AXC1A 03G 937AXC1A 03E (*)	937BXC1A 09G 937BXC1A 09H (*)		
2.0 T.SPARK Selespeed	AR32310	937AXC11 02G 937AXC11 02H (*)	937BXC11 07G 937BXC11 07H (*)		
JTDm (120HP)	937A3000	937AXU1A 32B	937BXU1A 33B		
JTDm (115HP)	939A7000 (*)	937AXV1A 34 (*)	937BXV1A 35 (*)		
JTDm (150HP)	937A5000	937AXN1B 30C	937BXN1B 31C		
JTDm (136HP)	192B1000 (*)	937AXS1B 27C (*)	937BXS1B 28C (*)		

(\*) For specific markets

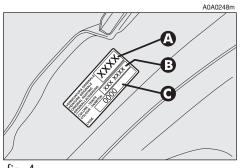


fig. 4

### ENGINE

**TECHNICAL SPECIFICATIONS** 

		1.6 T.SPARK (105HP)	1.6 T.SPARK (120HP)	2.0 T.SPARK	JTDм (120HP)	JTDm (115HP) (**)	JTDm (150HP)	JTDm (136HP) (**)
Code type		AR37203	AR32104	AR32310	937A3000	939A7000	937A5000	192B1000
Cycle		Otto	Otto	Otto	Diesel	Diesel	Diesel	Diesel
Number and position of cylinders		4 in line	4 in line	4 in line	4 in line	4 in line	4 in line	4 in line
Piston bore and stroke	mm	82 x 75.65	82 x 75.65	83 x 91	82 x 90.4	82 x 90.4	82 x 90.4	82 x 90.4
Total displacement	cm <sup>3</sup>	1598	1598	1970	1910	1910	1910	1910
Compression ratio		10.3	10.3	10.0	18	18	17.5	17.5
Maximum horsepower (EEC): at	kW HP rpm	77 105 5600	88 120 6200	110 150 6300	88 120 4000	85 115 4000	110 150 4000	100 136 4000
Maximum torque (EEC): at	Nm kgm rpm	140 14.3 4200	146 14.9 4200	181 18.5 3800	280 28.5 2000	280 28.5 2000	305 31 2000	305 31 2000
Spark plugs (*)		NGK BKUR6ETB (central) NGK CR7EKC (side)	NGK BKR6EKPA (central) NGK PMR7A (Side)	NGK BKR6EKPA (central) NGK PMR7A (side)	_	_	_	_
Fuel		Unleaded pre- mium petrol 95 RON (Specification EN228)	Unleaded pre- mium petrol 95 RON (Specification EN228)	Unleaded pre- mium petrol 95 RON (Specification EN228)	Diesel fuel for motor vehicles (Specification EN590)	Diesel fuel for motor vehicles (Specification EN590)	Diesel fuel for motor vehicles (Specification EN590)	Diesel fuel for motor vehicles (Specification EN590)

(\*\*) Version for specific markets (\*) There are two different spark plugs for each cylinder, one per type

To change plugs contact Alfa Romeo Authorized Services.

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The use of Eurodiesel fuel is recommended only for markets/versions where required. In case it is not avail-able, use fuel conforming to EN590 European Specification.

## **FUEL SUPPLY**

	1.6 T.SPARK (105HP)	1.6 T.SPARK (120HP)	2.0 T.SPARK	JTDm
Supply	Multi Point electric injection	Multi Point electric injection	Multi Point electric injection	Multijet direct injection with supercharging

WARNING

Alterations or repairs to the fuel supply system carried out incorrectly and without taking account of the technical features of the system, may cause operating faults with the risk of fire.

## TRANSMISSION

	1.6 T.SPARK (105HP-120HP) 2.0 T.SPARK	2.0 T.SPARK Selespeed	JTDm (120HP)	JTDm (136HP-150HP)
Gearbox	Five forward gears plus reverse with synchronisers for forward speeds	Five forward gears plus reverse with electronic control	Six forward gears plus reverse all synchronised	Five forward gears plus reverse all synchronised
Clutch	Dry single disk with hydraulic control	Dry single disk with electrohydraulic control	Dry single disk with hydraulic	Dry single disk with hydraulic control
Drive	Front	Front	Front	Front

# FRONT WHEEL DRIVE WITH SELF-LOCKING DIFFERENTIAL (optional for versions/markets where applicable)

Alfa Q2 characteristics are such as to guarantee top performance with whatever road condition. Alfa Q2 features front wheel drive with front mechanical self-locking differential LSD (Limited Slip Differential). Torque level between right and left wheel is modulated according to the **TORSEN B** front differential grip. Mechanical modulation is continuous and gradual thus optimizing drive under whatever running condition and guaranteeing smooth drive, high stability and keeping top comfort conditions. This type of differential enables to exploit the tyre-road grip at the best even under poor grip conditions: the driver is however charged with observing common safety rules since road safety is always the driver's responsibility.

## BRAKES

	1.6 T.SPARK (105HP-120HP) - 2.0 T.SPARK - JTDm
Service brakes: — front	Disk
— rear	Disk
Parking brake	Controlled by hand lever, acting on the rear brakes

## **SUSPENSION**

	1.6 T.SPARK (105HP-120HP) - 2.0 T.SPARK - JTDm
Front	quadrilateral system with stabiliser bar
Rear	Mc Pherson type

## **STEERING SYSTEM**

	1.6 T.SPARK (105HP-120HP) - 2.0 T.SPARK - JTDm
Туре	rack and pinion with hydraulic power steering
Turning radius (between pavements) m	11.5

### WHEELS

		1.6 T.SPARK IMPRESSION - PROGRESSION (105HP - 120HP) - JTDM IMPRESSION - PROGRESSION (120 HP) - JTDM PROGRESSION	1.6 T.SPARK DISTINCTIVE (105HP - 120HP) - JTDm DISTINCTIVE	2.0 T.SPARK - 2.0 T.SPARK Selespeed - JTDm DISTINCTIVE	For versions/markets where applicable		
<b>Standard fi</b> Rims	ittings	6J x 15″ (steel)	6.5J x 15″ (alloy)	6.5J x 16" (alloy)	7J x 17" (alloy)		
Tyres	185/65 R15″ 88H		185/65 R15″ 88H		195/60 R15″ 88V	205/55 R16″ 91V (∆) 205/55 R16″ 91W (∆)	215/45 R17″ 87W (•)
Compact	— rim	4J x 15″	4J x 15″	4J x 15″	4J x 15″		
spare wheel: — tyre		125/80 R15″ 95M	125/80 R15″ 95M	125/80 R15″ 95M	125/80 R15″ 95M		
<b>Optional it</b> Rims	ems	6.5J x 15″ (alloy) 6.5J x 16″ (alloy) 7J x 17″ (alloy)	6.5J x 16″ (alloy) 7J x 17″ (alloy)	6.5J x 15″ (alloy) 7J x 17″ (alloy)	7J x 18" (alloy)		
Tyres		195/60 R15″ 88V 205/55 R16″ 91V (●) 215/45 R17″ 87W (●)	205/55 R16″ 91V (•) 215/45 R17″ 87W (•)	195/60 R15″ 88V 215/45 R17″ 87W (•)	215/40 ZR18″ 89W (•) Reinforced		
Winter tyre	es	185/65 R15″ 88Q (M+S) 205/55 R16″ 91T (M+S)	195/60 R15″ 88Q (M+S) 205/55 R16″ 91T (M+S)	205/55 R16″ 91T (M+S) 215/45 R17″ 87H (M+S)	215/45 R17″ 87H (M+S)		

(•) Unchainable tyres - ( $\Delta$ ) Alternative tyres. Unchainable tyres

#### **TYRE INFLATION PRESSURES COLD (bar)**

TYRE INFLATION PRESSURES COLD (bar)									Ty	res	
		res <b>5 R15″</b>   rear	Tyr <b>195/6</b> front		Tyr <b>205/5</b> front	res 5 R16″ rear		res <b>5 R17″</b> rear	215/40 Reinf	<b>D ZR18″</b> forced	Compact spare wheel 125/80 R15″
reduced load	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.4	2.4	
full loadr	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.6	2.7	2.7	4.2

With the tyre hot the inflating pressure should be +0.3 bar compared with the specified rating With winter tyres the inflation pressure should be +0.2 bar compared with the specified rating

Inflate tyres to full load pressures if driving at continuous speed exceeding 160 km/h.

#### **RIMS AND TYRES**

Pressed steel or alloy rims.

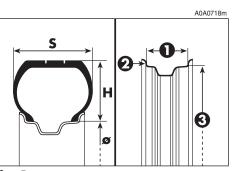
Radial tubeless tyres.

The log book shows all the homologated tyres.

**IMPORTANT** In the event of any discrepancies between this Handbook and the car Log Book, only the latter should be considered.

While the specified dimensions remain the same, for driving safety, the car must be fitted with tyres of the same brand and type on all wheels.

**IMPORTANT** Do not use inner tubes with Tubeless tyres.



## **264** fig. 5

#### **CORRECT TYRE READING** (fig. 5)

Below, please find the instructions needed to understand the meaning of the code stamped on the tyre.

The code may be in one of the ways given in the example.

Example: 205/55 R 16 91 W or 205/55 ZR 16

- **205** = Nominal width (**S**, distance in mm between sides).
- **55** = Percentage height/width (**H/S**) ratio.
- **R** = Radial tyre.
- **ZR** = Radial tyre, with speed over 240 km/h.
- **16** = Rim diameter in inches (Ø).

**91** = Load index (capacity), e.g. 91 = 615 kg. Not present in ZR tyres.

W, Z = Maximum speed index. In ZR tyres the speed index Z is before the R.

#### Load index (capacity)

<b>60</b> = 250 kg	<b>84</b> = 500 kg
<b>61</b> = 257 kg	<b>85</b> = 515 kg
<b>62</b> = 265 kg	<b>86</b> = 530 kg
<b>63</b> = 272 kg	<b>87</b> = 545 kg
<b>64</b> = 280 kg	<b>88</b> = 560 kg
<b>65</b> = 290 kg	<b>89</b> = 580 kg
<b>66</b> = 300 kg	<b>90</b> = 600 kg
<b>67</b> = 307 kg	<b>91</b> = 615 kg
<b>68</b> = 315 kg	<b>92</b> = 630 kg
<b>69</b> = 325 kg	<b>93</b> = 650 kg
<b>70</b> = 335 kg	<b>94</b> = 670 kg
<b>71</b> = 345 kg	<b>95</b> = 690 kg
<b>72</b> = 355 kg	<b>96</b> = 710 kg
<b>73</b> = 365 kg	<b>97</b> = 730 kg
<b>74</b> = 375 kg	<b>98</b> = 750 kg
<b>75</b> = 387 kg	<b>99</b> = 775 kg
<b>76</b> = 400 kg	<b>100</b> = 800 kg
<b>77</b> = 412 kg	<b>101</b> = 825 kg
<b>78</b> = 425 kg	<b>102</b> = 850 kg
<b>79</b> = 437 kg	<b>103</b> = 875 kg
<b>80</b> = 450 kg	<b>104</b> = 900 kg
<b>81</b> = 462 kg	<b>105</b> = 925 kg
<b>82</b> = 475 kg	<b>106</b> = 950 kg
<b>83</b> = 487 kg	

#### Maximum speed index

- $\mathbf{Q} = \text{up to 160 km/h.}$
- $\mathbf{R}$  = up to 170 km/h
- $\mathbf{S} = \mathbf{up} \text{ to } 180 \text{ km/h}.$
- $\mathbf{T} = \mathbf{u}\mathbf{p}$  to 190 km/h.
- $\mathbf{U} = \text{up to } 200 \text{ km/h}.$
- $\mathbf{H} = \mathbf{u}\mathbf{p}$  to 210 km/h.
- $\mathbf{V}$  = over 210 km/h.
- $\mathbf{ZR} = \text{over } 240 \text{ km/h}.$
- $\mathbf{W} = \text{up to } 270 \text{ km/h}.$
- $\mathbf{Y} = \mathbf{up} \text{ to } 300 \text{ km/h.}$

## Maximum speed index for snow tyres

**Q M** + **S** = up to 160 km/h. **T M** + **S** = up to 190 km/h. **H M** + **S** = up to 210 km/h.

#### **COMPACT SPARE WHEEL**

Pressed steel rim.

Tubeless tyre.

For specific markets normally-sized spare wheel.

#### **CORRECT RIM READING**

Below, please find the instructions needed to understand the meaning of the code stamped on the rim, as shown in (**fig. 5**).



- **6.5** = rim width in inches (1)
- J = rim drop centre outline (side projection where the tyre bead rests) (2)
- 16 = rim nominal diameter in inches(corresponds to diameter of thetyre to be mounted) (3 = Ø)
- **H2** = "hump" shape and number (relief on the circumference holding the Tubeless tyre bead on the rim).
- **ET 43** = camber angle (distance between disk/rim line and wheel rim centre line)

*<b>TECHNICAL SPECIFICATIONS* 

#### WHEEL GEOMETRY

		All versions
	— camber	-0° 48′ ± 20′
Front wheels:	— caster	+ 3° 55′ ± 30′
	— toe-in	$-1 \pm 0.6 \text{ mm} (*)$ (-9 ± 5')
	— camber	- 44' ± 20'
Rear wheels:	— toe-in	+ 3 ± 1 mm (+ 27' ± 9')

(\*) The toe-in values, conversion from ' to mm, is calculated considering a 15" rim, regardless of the rims actually used; if it is not possible to fit a 15" rim on the check stand, make reference to the value in. Also remember that the tow-in value including tolerance must be equally subdivided between the two wheels.

## PERFORMANCE

	Maximum speed	Acceleration from 0-100 km/h	Kilometer with standing start	
	km/h	sec.	sec.	
1.6 T.SPARK (105HP)	185	11.3	33	
1.6 T.SPARK (120HP)	195	10.6	31.8	
2.0 T.SPARK	208	9.3	30.2	
2.0 T.SPARK Selespeed	208	9.3	30.2	
JTDm (120HP)	193	9.6	32.2	
JTDm (150HP)	208	8.8	30.0	

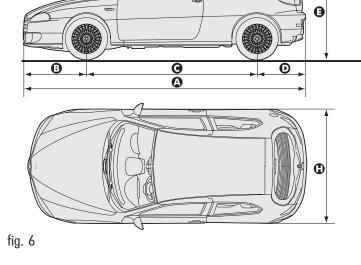
## DIMENSIONS

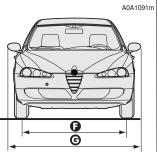
LThe sizes are in mm and refer to the car fitted with standard tyres.

Slight changes with optional tyres.

Height with unladen car.

#### LUGGAGE COMPARTMENT VOLUME







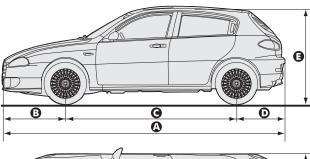
3-door versions	Α	В	C	D	E	E	G	н	L I
1.6 T.SPARK IMPRESSION - PROGRESSION (105HP - 120HP) - JTDM IMPRESSION - PROGRESSION (120HP) - JTDM PROGRESSION	4223	946	2546	731	1442 (•)	1518 (•)	1892	1729	1502 (•)
1.6 T.SPARK DISTINCTIVE (105HP - 120HP) - JTDM DISTINCTIVE - JTDM DISTINCTIVE	4223	946	2546	731	1442 (=)	1509 (=)	1892	1729	1494 (∎)
2.0 T.SPARK - 2.0 T.SPARK Selespeed	4223	946	2546	731	1421 (🔺)	1509 (🔺)	1892	1729	1494 (🔺)
(•) With 185/65 R15" tyres	( <b>■</b> ) With 195	/60 R15″ tyr	es (▲) With	n 205/55 R10	6″ tyres				

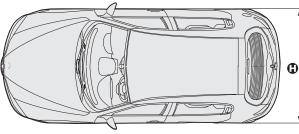
The sizes are in mm and refer to the car fitted with standard tyres.

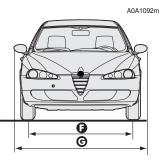
Slight changes with optional tyres.

Height with unladen car.

#### LUGGAGE COMPARTMENT VOLUME









5-door versions	A	В	C	D	E	F	G	H	
1.6 T.SPARK IMPRESSION - PROGRESSION (105HP - 120HP) - JTDM IMPRESSION - PROGRESSION (120HP) - JTDM PROGRESSION	4223	946	2546	731	1442 (•)	1518 (•)	1892	1729	1502 (•)
1.6 T.SPARK DISTINCTIVE (105HP - 120HP) - JTDM DISTINCTIVE - JTDM DISTINCTIVE	4223	946	2546	731	1442 (■)	1509 (∎)	1892	1729	1494 ( <b>=</b> )
2.0 T.SPARK - 2.0 T.SPARK Selespeed	4223	946	2546	731	1421 (🔺)	1509 (🔺)	1892	1729	1494 (🔺)

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(•) With 185/65 R15" tyres (•) With 195/60 R15" tyres

res (**A**) With 205/55 R16" tyres



WEIGHTS
---------

		(10	SPARK 5HP)   5 doors	(12	SPARK OHP)   5 doors		SPARK   5 doors	Sele	.SPARK speed   5 doors	(12	DM OHP) 5 doors		DM -150HP) 5 doors
Kerb weight (with fuel oil and fluids, spare wheel, tools and accessories)	kg	1190	1210	1200	1220	1250	1270	1250	1270	1270	1290	1290	1310
Payload (*) including driver	kg	520	520	520	520	520	520	520	520	520	520	520	520
Max permissible weights(**): — front axle	kg	980	980	980	980	980	980	980	980	980	980	990	990
— rear axle	kg	980	980	980	980	980	980	980	980	980	980	980	980
— total	kg	1710	1730	1720	1740	1770	1790	1770	1790	1790	1810	1810	1830
Towable weights: — braked trailer	kg	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
— trailer without brake	kg	400	400	400	400	400	400	400	400	400	400	400	400
Maximum load on roof	kg	50	50	50	50	50	50	50	50	50	50	50	50
Maximum load on ball (braked trailer)	kg	60	60	60	60	60	60	60	60	60	60	60	60

(\*) With special equipment (sunroof, trailer towing device, etc.) the loadless weight increases, thereby reducing the payload, with regard to the maximum permissible loads.

**IMPORTANT** If only the luggage compartment is used for storing the goods, the maximum load in the compartment must not exceed 350 kg in the load condition with just one person onboard.

(\*\*) Loads not to be exceeded. It is the driver's responsibility to place goods in the boot and/or on the loading surface in accordance with the maximum permissible loads.

### REFILLING

		1.6 T.SPARK (105HP)	1.6 T.SPARK (120HP)	2.0 T.SPARK	2.0 T.SPARK Selespeed	JTDM (120HP)	JTDm (136HP - 150HP)	Specified fuels and original lubricants
Fuel tank: — including a reserve of	litres litres	60 ● 7 ●	60 ● 7 ●	60 ● 7 ●	60 ● 7 ●	60 O 7 O	60 O 7 O	<ul> <li>Unleaded Premium petrol with no less than 95 R.O.N (Specification EN228)</li> </ul>
								• Diesel fuel for motor vehicles (Specification EN228)
Engine cooling system	litres	6.8	7	7.2	7,2	7.2	7.2	Mixture of distilled water and <b>PARAFLU UP</b> at 50% (▲)
Oil sump and filter	litres	4.4 ■	4.4 ■	4.4 O	4.4 O	4.4 🗅	4.5 🗅	<ul> <li>SELENIA 20K for Alfa Romeo</li> <li>SELENIA RACING</li> <li>SELENIA WR</li> </ul>
Mechanical transmission/ differential	litres	2.01	2.01	2.01	2.01	2.01	2.1	TUTELA CAR TECHNYX
Selespeed transmission		_	_	-	0.6	_	_	TUTELA CAR CS SPEED
Hydraulic power steering	litres	1.2	1.2	1.2	1.2	1.2	1.2	TUTELA GI/A
Hydraulic brake circuit with ABS	litres	0.52	0.52	0.52	0.5	0.52	0.52	TUTELA CAR TOP 4 for Alfa Romeo
Windscreen and rearscreen washer reservoir: — with headlamp washer	litres litres	3.2 6.4	3.2 6.4	3.2 6.4	3.2 6.4	3.2 6.4	3.2 6.4	Mixture of water and fluid TUTELA PROFESSIONAL SC 35

(A) For particularly hard climate conditions, we recommend use of a 60% **PARAFLU UP** and 40% demineralized water mixture.

The use of Eurodiesel fuel is recommended only for markets/versions where required. In case it is not available, use fuel conforming to EN590 European Specification.

## LUBRICANT AND FLUID SPECIFICATIONS

#### **USABLE PRODUCTS AND THEIR SPECIFICATIONS**

Use	Quality features of fluids and lubricants for correct car operation	Recommended fluids and lubricants original	Applications	
Lubricants for petrol engines 2.0 T.SPARK, 2.0 T.SPARK Selespeed	Synthetic-based engine oil, grade SAE 10W-60. <b>FIAT 9.55535-H3</b> qualification	SELENIA RACING	- As per Service Schedule	
Lubricants for petrol engines 1.6 T.SPARK	Synthetic-based engine oils, grade SAE 10W-40 that pass ACEA A3 and API SL specifications. <b>FIAT 9.55535-G2</b> qualification	SELENIA 20K for Alfa Romeo		
Lubricants for diesel engines	Synthetic-based engine oils, grade SAE 5W-40 that pass ACEA B3 and API CF specifications <b>FIAT 9.55535-N2</b> qualification	SELENIA WR	As per Service Schedule	

For regular operation of Multijet versions fitted with DPF, use the genuine lubricant only. In the event of an emergency, lacking the genuine lubricant, top up just once with max. 0.5 I and go to Alfa Romeo Authorized Services as soon as possible.

In case not original SAE 5W-40 products are used, with the same viscosity degree with minimum performance ACEA C3 for gasoline engines and ACEA B4 for Diesel engines are accepted; in this case, the best engine performance is not ensured.

Using low-quality products, not compliant with ACEA A3 and ACEA B4 properties and specifications could cause engine damages not covered by warranty.

For very cold temperatures, consult Alfa Romeo Authorized Services for the proper Selenia product to use.

Use	Quality features of fluids and lubricants for correct car operation	Recommended fluids and lubricants	Applications
	Synthetic-based lubricant, SAE 75W-85 grade. Pass API GL-4 PLUS, FIAT 9.55550 specifications	TUTELA CAR TECHNYX	Mechanical gearbox and differential
Lubricants and greases for transmissions	Specific fluid for gear selector electrohydraulic actuators	TUTELA CAR CS SPEED	Selespeed transmission electrically-operated electrochydraulic drive
	Automatic transmission lubricant Exceeding the "ATF DEXRON II D LEV" specification.	TUTELA GI/A	Hydraulic power steering
Brake fluid	Synthetic oil F.M.V.S.S. n. 116, DOT 4, ISO 4925, SAE J1704, CUNA NC 956-01	TUTELA CAR TOP 4 for Alfa Romeo	Hydraulic brakes and clutches
Protective agent for radiators	Protective with antifreeze action (red colour) based on inhibited monoethylene glycol with organic formulation based on O.A.T. technology that meets CUNA NC 956-16, ASTM D 3306 specifications	PARAFLU UP (*)	Radiator antifreeze proportion: 50% distilled water and 50% PARAFLU UP (□)
Additive for diesel fuel	Additive for fuel oil with protective action for Diesel engines	TUTELA DIESEL ART	To be mixed with the fuel oil (25 cc per 10 litres)
Windscreen/rearscreen/ headlamp washer fluid	Mixture of spirits and surfactants CUNA NC 956-II	TUTELA PROFESSIONAL SC35	To be used neat or diluted

(\*) **IMPORTANT** Do not top up or mix with fluids having characteristics different from those specified.

() For particularly hard climate conditions, we recommend use of a 60% **PARAFLU UP** and 40% demineralized water mixture.

## **FUEL CONSUMPTION**

The fuel consumption figures given in the table below are determined on the basis of the homologation tests set down by specific European directives.

The procedures below are followed for measuring consumption:

- **urban cycle**: cold starting followed by driving that simulates urban use of the car;

 extraurban cycle: frequent accelerating in all gears, simulating extraurban use of the car; the speed varies between 0 and 120 km/h;

- **combined consumption**: is calculated weighing about 37% of urban cycle consumption and about 63% of extraurban consumption.

IMPORTANT The type of route, traffic situations, weather conditions, driving style, general conditions of the car, trim level/equipment/accessories, load, presence of a roof rack, use of the climate control system, other situations that affect air drag may lead to different fuel consumption levels than those measured (see "Reducing running costs and environment pollution" in the chapter "Correct use of the car").

## **CO<sub>2</sub> EMISSIONS**

The  $CO_2$  emission levels shown in the following tables are measured on a mixed cycle.

CO <sub>2</sub> emissions according to directive 2004/3/CE (g/km)						
1.6 T.SPARK (105HP)	192 - 196 (*)					
1.6 T.SPARK (120HP)	194 - 197 (*)					
2.0 T.SPARK	211 - 211 (*)					
2.0 T.SPARK Selespeed	211 - 211 (*)					
JTDm (120HP)	153/145 (**)					
JTDm (150HP)	157/151 (**)					

(\*) EURO4 versions (for specific markets)

(\*\*) For versions/markets where applicable

Fuel consumption according to Directive 2004/3/CE (litres x 100 km)	1.6 T.SPARK (105HP)	1.6 T.SPARK (105HP) (*)	1.6 T.SPARK (120HP)	2.0 T.SPARK	2.0 T.SPARK Selespeed	JTDM (120HP)	JTDm (150HP)
Urban	11.1	11.3	11.2	12.1	12.1	7.4	7.8
Extraurban	6.3	6.4	6.4	7.0	7.0	4.4	4.5
Combined	8.1	8.2	8.2	8.9	8.9	5.5	5.7

(\*) EURO 4 versions (for specific markets)

### INSTRUMENT PANEL

## Digital multifunction display versions

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Display mileage recorder, trip meter with headlamp position -E. Clock/outside temperature display -F. Rev counter

**NOTE** JTDM versions are fitted with warning lights  $\mathfrak{T}$  and  $\mathfrak{T}$  and the rev counter end scale value is at 6000 rpm.

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Display mileage recorder, trip meter with headlamp position - E. Clock/outside temperature display - F. Rev counter

**NOTE** JTDM versions are fitted with warning lights  $\mathfrak{T}$  and  $\mathfrak{T}$  and the rev counter end scale value is at 6000 rpm.

ß A 130 160 100 140 160 180 5 120 · , 210 200 Giri x 1000 (þť <sup>7</sup>100 ¹²ଃ<sup>≈</sup> ,220 3 A rez. Ř 80 240 8 Ċ ٨ Ó 60 20 **\***@) @#: 30 05 ≣D G F Þ A0A1122m

fig. 1 - Petrol versions

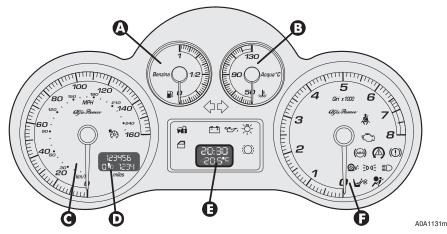


fig. 2 - Black Line and Q2 versions

## Reconfigurable multifunction display versions

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Display mileage recorder, trip meter with headlamp position - E. Reconfigurable multifunction display - F. Rev counter

**NOTE** JTDM versions are fitted with warning lights **50** and **and** the rev counter end scale value is at 6000 rpm.

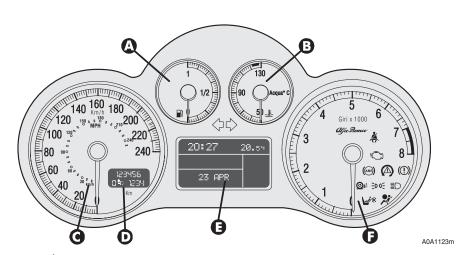


fig. 3 - Petrol versions

A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Display mileage recorder, trip meter with headlamp position - E. Reconfigurable multifunction display - F. Rev counter

**NOTE** JTDM versions are fitted with warning lights  $\overline{OO}$  and  $\cong$  and the rev counter end scale value is at 6000 rpm.

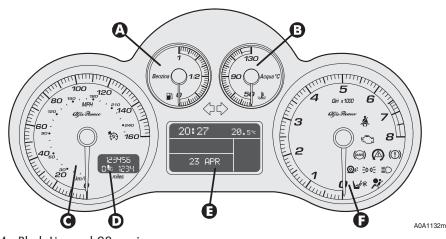
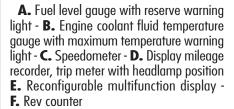


fig. 4 - Black Line and Q2 versions



A. Fuel level gauge with reserve warning light - B. Engine coolant fluid temperature gauge with maximum temperature warning light - C. Speedometer - D. Display mileage recorder, trip meter with headlamp position
 E. Reconfigurable multifunction display - F. Rev counter

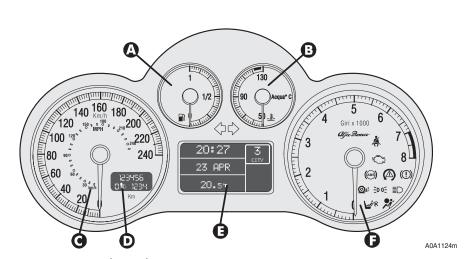


fig. 5 - 2.0 T.SPARK Selespeed

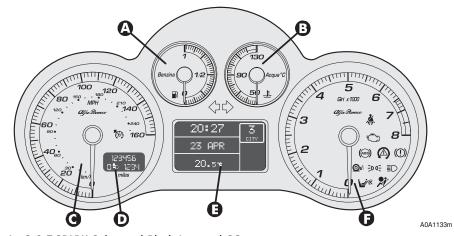


fig. 6 - 2.0 T.SPARK Selespeed Black Line and Q2



#### 00 3 6 6 $\mathbf{\overline{D}}$ 1999 ß (A) DA1104m fig. 7 23 ${}^{\textcircled{\sc black B}}$ 2)23 $\odot$ Ð 26Ð 22 21 20 (2)

DASHBOARD

1. Side swivel air vents - 2. Fixed side window air vents - 3. Passenger's air bag - 4. Tailgate release button - 5. Card holder (for versions/markets where applicable) - 6. Sound system (for versions/markets where applicable) - 7. Centre swivel air vents - 8. Fixed upper vent - 9. Glass holder (for versions/markets where applicable) - 10. Front fog light button - 11. Hazard light switch - 12. Rear fog light button - 13. Outside light control lever - 14. Speedometer with display for mileage recorder, trip meter and headlamp aiming device - 15. Fuel level gauge with reserve warning light - 16. Multifunction display - 17. Engine coolant temperature gauge - 18. Rev. counter - 19. Wind-screen wiper control lever - 20. Bonnet opening lever - 21. Set of controls: trip meter reset, headlamp aiming device, trip computer - 22. Ignition key and switch - 23. Horn - 24. Steering wheel locking/release lever - 25. Driver's air bag - 26. Door locking button - 27. Controls for heating, ventilation and climate control - 28. Cigar lighter/ashtray housing door - 29. Temperature sensor - 30. Glove box.

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**ALPHABETICAL INDEX** 

## PROVISIONS FOR THE PROCESSING OF A VEHICLE AT THE END OF ITS LIFE-CYCLE

For years now Alfa Romeo has been developing its global commitment towards the safeguarding and protection of the Environment through the continuous improvement of its production processes and the making of increasingly more "eco friendly" products. With a view to guaranteeing the best possible service to clients in full observance of environmental standards and in response to the obligations imposed by European Directive 2000/53/EC on end-of-life vehicles, Alfa Romeo offers its clients the possibility to hand in their vehicle\* at the end of its life span without additional costs.

The European Directive, in fact, provides for the take-back of the vehicle without the last holder or owner of the same incurring expenses due to the fact that the market value of the vehicle is zero or negative. In particular, in almost all of the countries of the European Union, up until 1st January 2007, take-back of the vehicle free of charge only applies to vehicles registered from 1 July 2002 on, while, from 2007 on, take-back will be carried out free of charge, independently of the year of registration, provided that the vehicle still contains all its essential component parts (especially engine and body) and is free from additional waste materials.

Our contracted network of authorised treatment facilities has been carefully selected in order to provide a quality service to our customers by de-polluting and recycling "End of Life Vehicles" to approved environmental standards. To find out the location of your nearest authorised treatment facility, offering free of charge take-back, simply contact one of our dealers or refer to the Alfa Romeo web site or call the toll free number 00800 2532 0000.

\* Passenger transportation vehicles to seat a max. of nine persons, having a total admissible weight of 3.5 t



# In the heart of those who race. At the heart of your engine.



Always ask your mechanic for



#### Your car is factory filled with Selenia

The engine of your car is factory filled with **Selenia.** This is an engine oil range which satisfies the most advanced international specifications. Its superior technical characteristics allow **Selenia** to guarantee the **highest performance** and **protection of your engine**.

#### The Selenia range includes a number of technologically advanced products:

#### **SELENIA STAR**

High performance lubricant developed to protect the engine even when operated at the most extreme temperatures generated during sports style driving. Its unique formulation maximizes the performance of high specific power engines, improves cold starting and maintains constant viscosity levels during oil change intervals. Specific Selenia formulation for Alfa Romeo.

#### SELENIA 20K Alfa Romeo

It guarantees maximum wear protection and performance of aspirated, turbo charged and multivalve engines. Specific Selenia formulation for Alfa Romeo.

#### SELENIA RACING

This lubricant has been developed as a result of Selenia's extensive experience in track and rally competitions, it maximises engine performance in all kinds of competition use.

#### SELENIA DIGITECH

Fully synthetic lubricant for petrol and diesel engines. Its advanced technology guarantees maximum protection, a reduction of consumption and reliability in extreme climate conditions.

#### SELENIA WR

Oil specifically designed for common rail and Multijet engines. Particularly effective during cold starts, it guarantees maximum wear protection and hydraulic tappets control, reduction in consumption and stability at high temperatures.

The range also includes Selenia 20K, Selenia TD, Selenia Performer Multipower and Selenia Performer 5W-40.

For further information on Selenia products visit the web site www.flselenia.com.

#### **COLD TYRE INFLATION PRESSURES**

COLD IT RE INFLATION PRESSURES											
		res 5 R15″ rear		rres <b>0 R 1 5 ″</b> rear		rres <b>R 1 6″ (•)</b> rear		rres <b>R17″ (●)</b> rear		ZR18" (•) forced	Compact spare wheel 125/80 R15″
reduced load	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.4	2.4	4.2
full loadr	2.5	2.5	2.5	2.5	2.6	2.6	2.7	2.6	2.7	2.7	

(•) Unchainable tyres

With the tyre hot the inflating pressure should be +0.3 bar compared with the specified rating.

With winter tyres the inflation pressure should be +0.2 bar higher than the rating specified for standard tyres.

Inflate tyres to full load pressures if driving at continuous speed exceeding 160 km/h.

#### **ENGINE OIL REPLACEMENT**

Oil sump and filter ..... litres 4.4 (4.5 for JTD<sub>M</sub> versions)

Do not discard used oil in the environment.

#### REFUELLING

Fuel tank capacity	litres 60
Reserve	litres 7

For cars with petrol engine, only use unleaded petrol with over 95 R.O.N. (Specification EN228).

For cars with diesel engine, only use Diesel fuel for motor vehicles (Specification EN590).



#### **CUSTOMER SERVICES**

**TECHNICAL SERVICES - SERVICE ENGINEERING** Largo Senatore G. Agnelli, 5 - 10040 Volvera - Torino (Italia) Fiat Group Automobiles S.p.A. Pubblication no. 60431857 - 1st Edition - 06/2008 All rights reserved. Reproduction, even in part, is prohibited without written permission from Fiat Group Automobiles S.p.A.



