Diagnostics – Parking Light Flash Table

Flashes	Description	
1	• Doors locked, Alarm and starter kill armed. • Run time has expired. • **TRUNK** button pressed.	• Start signal received by the module. • Cold weather mode cancelled.
2	• Remote start attempt cancelled by remote. • Doors unlocked, starter kill disarmed. • Exiting ignition valet	• Exiting remote valet • Power-up reset.
3	• Entering cold weather mode • Entering ignition valet • Entering or exiting Ready Mode	• Entering remote valet. • Entering extended run time.
4	• +12 V detected on the brake input wire either while cranking or during run time. • Entering multi-speed tach programming.	
5 Slow	• Start attempt failed because no tach signal has been programmed.	
5 Fast	• Tach signal programmed. • New transmitter programmed.	
6	• A remote start was attempted while a tach-before-crank signal was detected before cranking.	
8	• Unit reset see “Resetting the Module” (p.1)	
10	• A ground (-) signal was detected on the hood pin input wire.	
1 – pause – 2	• There was a remote start attempt while the vehicle was in valet mode. • Failed start: vehicle’s low battery voltage.	
2 – pause – 2	• There was an attempt to start the vehicle while the module was in valet mode.	
ON SOLID for 3 seconds….	…followed by 1 flash	**ON SOLID for 3 seconds….**
	…followed by 3 flashes	
ON continuously	• **Idle mode:** Idle mode is engaged • **Run time:** The vehicle has been remote started and is in run time.	
ON continuously	While the brake pedal is pressed.	**ON continuously**
ON 2 seconds	• The hood has been opened and a ground (-) signal has been detected on the hood pin input wire.	
ON 4 seconds	• Locking or unlocking a door (with Door pulses configured to 4 sec.)	
ON 20 seconds	• The hood pin has been flashed and you now have access to the programming options.	
ON 25 SEC.	• The Hood Pin-switch has been pressed twice: the Unit went into step 1 of the Programming Centre procedure, and no Transmitter activity was detected for 20 seconds. • Or the Unit went into step 1 of the Transmitter Programming procedure and no activity was detected for a few seconds. The Unit has exited the Transmitter Programming procedure.	
IRREGULAR	• If the unit gives irregular signals (1 to 10 flashes followed by a pause, followed by further flashes), the system is playing back Start Failure Codes. This occurs when the Hood Pin-switch is pressed three times.	
CONSTANT FLASHES UP TO 60 SEC.	• In Siren or Horn Mode: Alarm condition generated by an intrusion, by Panic Mode or when the System is powered up.	

Internet Explorer Firefox Netscape

To obtain a copy of the installation guide, please visit the http://www.autostart.ca website and click on the « Download » tab.

Quick Installation Guide

Internet Explorer Firefox Netscape

To obtain a copy of the installation guide, please visit the http://www.autostart.ca website and click on the « Download » tab.

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How to Flash the Hood Pin

THE INSTALLER …	THE MODULE …
• Press and hold the hood pin for 4 seconds. • Release the hood pin. • While the parking lights are on, press down the hood pin once more and release the hood pin immediately. • You now have 20 seconds to select one of the sub-menus	Parking Lights “ON” “ON” for 20 seconds

Resetting the Module

WARNING! By resetting the module, all programmed values are erased — i.e.: tach, transmitter as well as programming options. The programming options are returned to their default values.

1. **Flash the hood pin (see above)**
2. Once having reached the programming mode, the system will grant 10 seconds to complete the next step:
   a) Press and release the break pedal ***6 times*** (within 10 seconds from entering programming mode).

The parking lights will flash 8 times to confirm the module is reset.

Transmitter Programming Procedure

1. **Flash the hood pin (see p.1)** — the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, turn the ignition key to the **IGNITION ON (RUN)** position and immediately to the **OFF** position.
3. Press and hold the **LOCK** button and keep it down until the siren or horn chirps twice and the parking lights flash 5 times quickly.
4. The transmitter has been stored in memory.
5. To exit: close the hood.

Notice

The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of the product, be that either damage to the vehicle itself or to the unit. This unit must be installed by a certified technician using all safety devices supplied. Please note that this guide has been written for properly trained Autostart technicians: a certain level of skills and knowledge is therefore assumed. Please review the installation guide carefully before beginning any work.

Warning

Before installing the unit, if installing on a vehicle with a **manual** transmission, test that the OEM Door Switch contacts of the vehicle work well, and that the Parking Brake system operates properly. If installing on a vehicle with an automatic **transmission**, test that the vehicle does not start when the gearshift lever is in the “Drive” position. If it starts in gear, install a manual-transmission remote starter system instead.

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To program a transmitter on the second vehicle for multi-car operation, you must press the **TRUNK** button (instead of **LOCK** or **UNLOCK**) in step 3 of the transmitter programming procedure:

Entering Programming Options

1. **Flash the hood pin switch (see p.1) —** the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, press and hold the brake pedal and then press one of the following buttons:
   LOCK ..... to access mode 1; **TRUNK** ..... to access mode 3; or
   UNLOCK..... to access mode 2; **START/STOP**..... to access mode 4.
3. The parking lights will flash and the horn will honk (if programmed) once, twice or three times to confirm entry into a mode.
4. Release the brake pedal.

After selecting the function, press one of the corresponding buttons to select the option.

LOCK	for	Option 1,	**TRUNK**	for	Option 3;
UNLOCK	for	Option 2,	**START/STOP**	for	Option 4;

Programming Options

MODE 1 ** INDICATES DEFAULT SETTING*

FUNCTION 1 – Ignition-controlled door locks

OPTION 1*	**Ignition lock disabled**
OPTION 2	Ignition lock enabled
OPTION 3	Ignition unlock ONLY
OPTION 4	Ignition lock ONLY

FUNCTION 2 – Secure lock

OPTION 1*	**Secure lock disabled (1-sec. disarm pulse)**
OPTION 2	Secure lock enabled in standard mode
OPTION 3	Smart secure lock enabled in smart mode

FUNCTION 3 – Door lock pulse timing

OPTION 1*	**7/10-sec. lock/unlock pulses**
OPTION 2	4-sec. lock/unlock pulses
OPTION 3	7/10-sec. lock pulse and two ¼ -sec. unlock pulses
OPTION 4	1/10-sec. lock/unlock pulses

FUNCTION 4 – AUX 3 Programming

OPTION 1*	**Constant while the TRUNK button is pressed, disarm and passive rearm after 30 sec**
OPTION 2	1-sec. Trunk (-) output when **TRUNK** button is pressed for 3 sec. while ignition off and data output. Disarm and passive rearm after 30 sec.

FUNCTION 5 – AUX 2 Programming

OPTION 1*	**Priority door/Car Finder**
OPTION 2	AUX Toggle with 30-sec. timeout — Using **FUNCTION** then **LOCK** button.
OPTION 3	AUX constant while pressed — Using **FUNCTION** then **LOCK** buttons.

Testing

Before putting back the vehicle together, it is recommended to check that the system operates properly. The following testing procedures should be used to verify proper installation and operation of the system. Before testing, make sure that all connections are soldered and that the unit is plugged in.

- ❑ **Make sure the system properly enters and exits ready mode:**
  Ready mode is a sequence of steps that must be followed in order to allow manual transmission vehicles to be remote started. To get in to ready mode:
  1. Ensure that all the doors are closed and that the gear shift lever is in the **NEUTRAL** position.
  2. With the engine already running, apply the parking brake and release the brake pedal.

  Make sure to release the brake pedal.

  3. Within 20 sec. press **LOCK**, **UNLOCK**.or **START/STOP**

  The parking lights will flash 3 times quickly and remain lit.

  4. Remove the key: the engine will go on running.
  5. Exit the vehicle and close the door.
  6. Press and hold either:

  a. **LOCK** to lock the doors arm the alarm and shut down the engine or enter turbo mode ;
  b. **UNLOCK** to unlock the doors and shut down the engine or enter turbo mode ;
  c. **START/STOP** to shut down the engine without affecting the doors.

  The system will exit ready mode if a door, the hood or the trunk is opened, if the brake pedal is pressed, if the parking brake is disengaged or if the ignition key is turned to the **IGNITION ON (RUN)** position.
- ❑ **Remote-start the engine and listen for starter drag.** If the starter cranks for too long, carry out another tach programming procedure.
- ❑ **Hood switch shutdown.** With the vehicle running under the remote car starter, open the hood; the vehicle should shut down. If it does not shut down, check the hood pin-switch and its connector.
- ❑ **Brake shutdown circuit.** With the vehicle running under the remote car starter, press and release the brake pedal. The engine should shut down immediately. If it continues to run, check the brake switch connection.
- ❑ **Parking brake shutdown circuit.** With the vehicle running under the system, disengage the parking brake. The engine should shut down immediately. If the engine continues to run, check the parking brake switch connection.
- ❑ **OEM alarm control.** Make sure the module is able to arm and disarm the oem alarm (if applicable).
- ❑ **Door locks and trunk testing.** Make sure each of these options respond to the transmitter (if installed).
- ❑ **Door pin shutdown circuit.** Make sure the system exits ready mode when each door is opened. (Test each door.)
- ❑ **Starter kill option.** Sit inside the vehicle with all doors closed. Arm the vehicle, then try to start the engine with the key. The engine should not start. If the engine starts, rewire the starter kill to reach proper operation.
- ❑ **Valet mode.** Make sure the remote car starter is able to properly enter and exit valet mode. When setting the remote car starter into valet mode, pressing the lock button will lock the doors without activating the starter kill. (Refer to the user guide for further information on valet mode.)
- ❑ **Idle mode.** Make sure the vehicle properly enters and exits idle mode.
- ❑ **Door and Trunk trigger.** Make sure that when the system is armed, opening any door or opening the trunk will trigger the alarm (if installed).
- ❑ **Hood trigger.** Make sure that when the system is armed, opening the hood should trigger the alarm.
- ❑ **Shock and warn-away trigger.** Make sure that the shock works well and is not too sensitive so that it unnecessarily triggers the alarm.
- ❑ **Most comebacks are the result of misunderstandings about how a product works or performs. Take the time to properly explain all functions and features to the customers before they leave the premises. Doing this will save time and money.**

Multi-speed Tach Programming

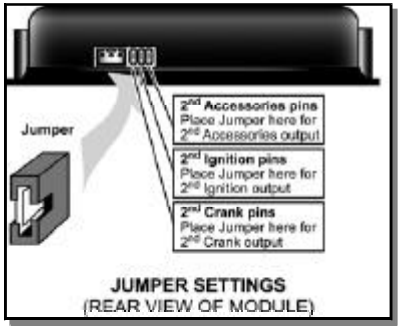
1. **Flash the hood pin (see p.1)** — the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, press and hold the brake pedal and press the **LOCK** and **UNLOCK** buttons simultaneously — the parking lights will flash 4 times and the siren or horn will chirp 4 times. At that point, release the brake pedal.
3. Start up the engine and allow the vehicle to reach regular engine idle speed.
4. Once the engine is running idle, press the brake pedal and keep it down until you hear the parking lights output click 5 times.
5. Release the brake pedal—the tach programming is now complete.

Siren/Horn Honk Timing

Follow these steps to program horn confirmation:

1. Ensure that the hood is up and that the ignition is off.
- Hold the hood pin down for 4 seconds.
- Release the hood pin. The parking lights will come on.
- While the parking lights are on, immediately push and release the hood pin again. — The parking lights will stay on for up to 20 seconds.
2. Press and hold the brake pedal, then simultaneously press the **UNLOCK** and **START/STOP** buttons — the horn will chirp 5 times.
3. Release the brake pedal.
4. To change the timing:
    1. To increase the Horn pulse by 3 ms, press the **LOCK** button.
    2. To decrease the pulse by 3 ms, press the **UNLOCK** button.
    3. To increase the pulse by 10 ms, press the **START/STOP** button.
    4. To decrease the pulse by 10 ms, press the **TRUNK** button.
5. To save the new settings: press **LOCK** and **UNLOCK**. If 3 chirps are returned the new settings have been saved.

Supplementary Information
Fifth Relay Output (2nd IGN, ACC or CRANK)

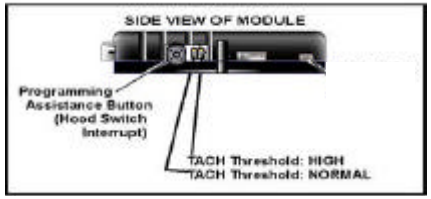


Remote car starters of this series are equipped with an on-board high-current programmable 5th relay that can be used to power a second ignition, accessory or crank wire. The unit uses 3 sets of pins; each set corresponds to a specific function of the output. In order to activate one of the three possible functions, you must place the jumper (supplied) on one of the three sets of pins and connect the 14 AWG wire to the second **IGN. / ACC. / CRANK** wire of the vehicle.

Caution!
Only one set of pins can be used at one time. Using more than one jumper may result in serious damage to the vehicle. The relay output rating on this unit is 25 a at most. Defective oem solenoid switches can sometimes draw up to 50 or 60 a, causing the 30 a fuse to blow. Always verify your circuit with an appropriate measuring device.

Tach jumper settings

Some new vehicles have a higher TACH voltage threshold, which would fall out of the normal TACH trigger circuit of the remote car starter. Changing the jumper to TACH Threshold HIGH will allow the module to properly detect the TACH signal.



MODE 2 ** INDICATES DEFAULT SETTING*

FUNCTION 1 – Home Valet ™		
	OPTION 1	Home Valet™ enabled
	OPTION 2*	**Home Valet™ disabled**
FUNCTION 2 – Safe start.		
	OPTION 1	Safe start enabled
	OPTION 2*	**Safe start disabled**
	OPTION 3	"Swap Start" – enhanced safe start mode with extended safety: To start the engine: press the **FUNCTION** button then the **LOCK** button. To trigger **AUX 2**: press **START/STOP**
FUNCTION 3 – Engine Run Time		
	OPTION 1	Run time = 3 minutes in gas mode / 8 minutes diesel mode
	OPTION 2*	**Run time = 15 minutes in gas mode / 20 minutes diesel mode**
	OPTION 3	Run time = 25 minutes in gas mode / 30 minutes diesel mode
FUNCTION 4 –Idle/Turbo Mode		
	OPTION 1	Idle mode enabled/Turbo mode enabled
	OPTION 2*	**Idle mode enabled/Turbo mode disabled**
FUNCTION 5 – Engine Type and Cold Weather Mode		
	OPTION 1	Diesel mode with 20-minute run time in cold weather mode with 30sec delay
	OPTION 2*	**Gas mode with 3-minute run time in cold weather mode**
	OPTION 3	Diesel mode with 8-minute run time in cold weather mode with 18sec delay
	OPTION 4	Diesel mode with 8-minute run time in cold weather mode with 7sec delay

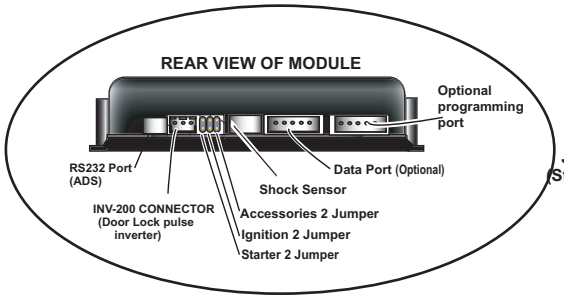
MODE 3 * INDICATES DEFAULT SETTING

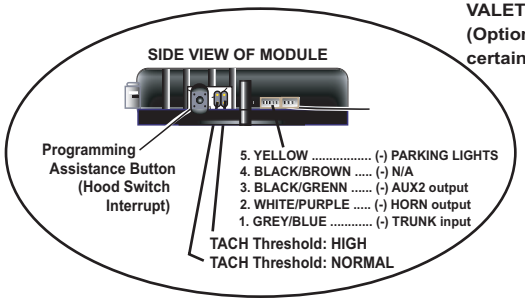
FUNCTION 1– Siren Chirps		
	OPTION 1	Warning chirps only; Lock Confirmation if the Lock button is pressed a 2nd time.
	OPTION 2*	**Chirp enabled.**
	OPTION 3	Chirp enabled with Open-Zone notification (Siren warning 10 sec. after arming if a door is left open) (Also used for vehicles with Dome Light Delay)
	OPTION 4	Chirps disabled with Lock Confirmation if the LOCK button is pressed a 2nd time
FUNCTION 2– Passive or active arming		
	OPTION 1	ACTIVE arming.
	OPTION 2*	**Passive arming (30 sec.)**
	OPTION 3	Passive arming (30 sec.) / no TWO-STAGE DISARM
	OPTION 4	Active arming with disarmed notification.
FUNCTION 3 – Ignition Monitoring: Siren Mode / Horn Mode		
	OPTION 1	Siren Mode: Ignition Monitoring — disabled
	OPTION 2*	**Siren Mode: Ignition Monitoring — enabled**
	OPTION 3	Horn Mode: Ignition Monitoring — disabled
	OPTION 4	Horn Mode: Ignition Monitoring —enabled
FUNCTION 4 – Shock Sense / Warn-away		
	OPTION 1	Shock Sense — ignored / Warn-away — ignored
	OPTION 2*	**Shock Sense monitored / Warn-away monitored**
	OPTION 3	Shock Sense monitored / Warn-away ignored
	OPTION 4	Shock Sense ignored / Warn-away monitored
FUNCTION 5 – Ignition Valet		
	OPTION 1	Ignition Valet — DISABLED
	OPTION 2*	**Ignition Valet — ENABLED**

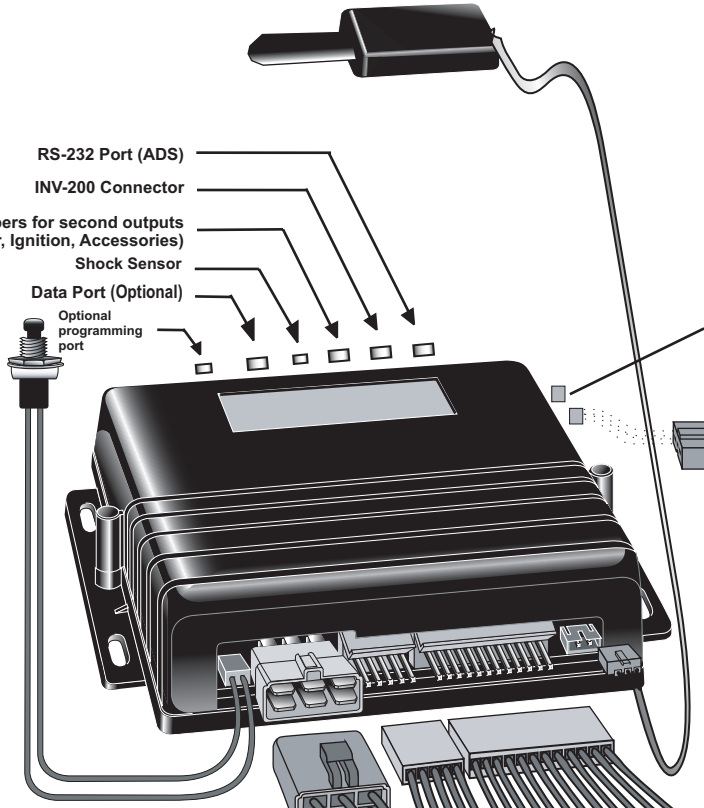
MODE 4 * INDICATES DEFAULT SETTING

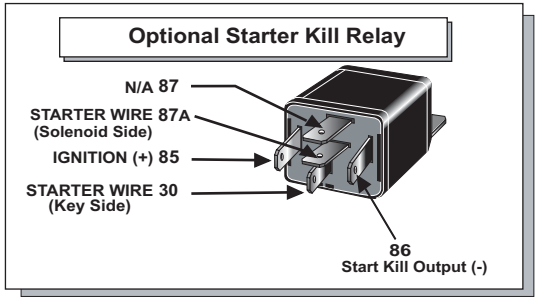
FUNCTION 1 – MULTI-LEVEL FEATURES		
	OPTION 1	Multi-car Features, Basic Features, Customized Features
	OPTION 2*	**Basic Features, Multi-car Features, Customized Features**
	OPTION 3	Customized Features, Multi-car Features, Basic Features
	OPTION 4	Basic Features, Customized Features, Multi-car Features
FUNCTION 2 – RELOCK		
	OPTION 1	Relock Mode: Disabled
	OPTION 2*	**Relock Mode: Enabled**
FUNCTION 3 – STOP/AUXILIARY Button		
	OPTION 1	**STOP/AUXILIARY** Button is enabled
	OPTION 2*	**STOP/AUXILIARY Button is disabled**
FUNCTION 4 – Pager Option (Pager sold separately)		
	OPTION 1	Enabled
	OPTION 2*	**Disabled**

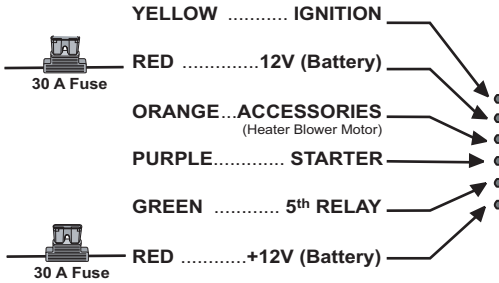
WIRING SCHEMATIC

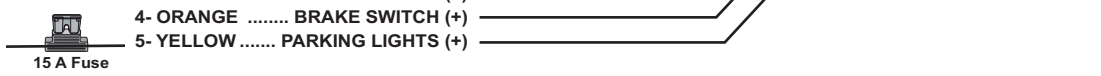


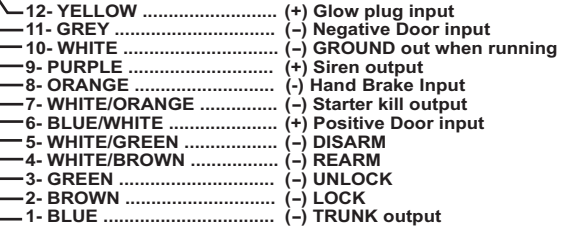












V5.0 TL - October 3, 2006