

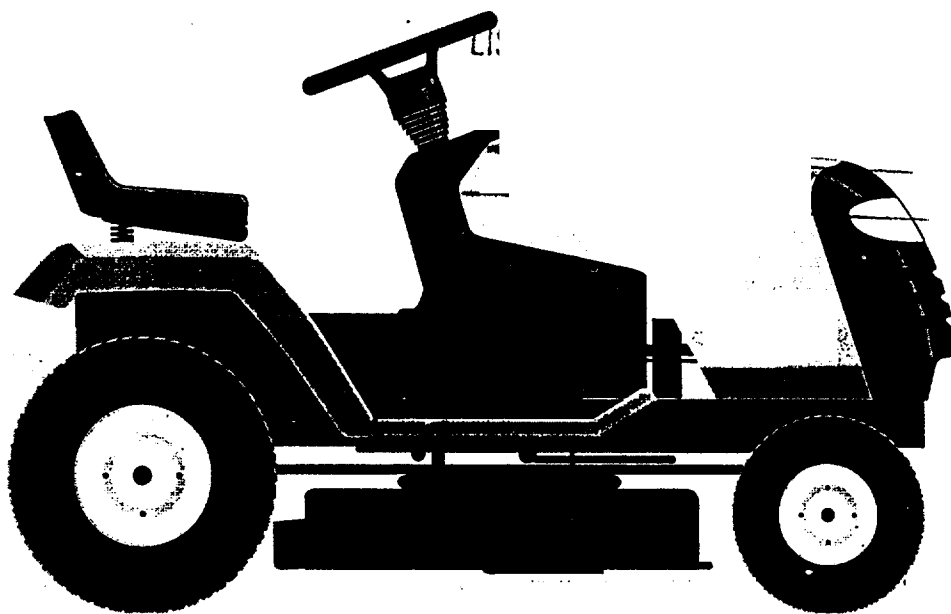
# Western Auto.

## Operation and Service Instructions Wizard Lawn Tractor

Stock Number  
93-9187-1

Model Number  
AYP9187B89 ADV.

Factory Number  
9187B89



Thank you for purchasing an American-built product.



# SAFETY RULES



## Safe Operation Practices for Ride-On Mowers

**IMPORTANT: THIS CUTTING MACHINE IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS. FAILURE TO OBSERVE THE FOLLOWING SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.**

### I. GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the machine before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the machine.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Do not mow in reverse unless absolutely necessary. Always look down and behind before and while backing.
- Be aware of the mower discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the guard in place.
- Slow down before turning.
- Never leave a running machine unattended. Always turn off blades, set parking brake, stop engine, and remove keys before dismounting.
- Turn off blades when not mowing.
- Stop engine before removing grass catcher or unclogging chute.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck.

### II. SLOPE OPERATION

Slopes are a major factor related to loss-of-control and tipover accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it.

#### DO:

- Mow up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine. *Tall grass can hide obstacles.*
- Use slow speed. Choose a low gear so that you will not have to stop or shift while on the slope.
- Follow the manufacturer's recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.
- Keep all movement on the slopes *slow* and *gradual*. Do not make sudden changes in speed or direction.
- Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly *straight* down the slope.

#### DO NOT:

- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches, or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.

### III. CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. *Never* assume that children will remain where you last saw them.

- Keep children out of the mowing area and under the watchful care of another responsible adult.
- Be alert and turn machine off if children enter the area.
- Before and when backing, look behind and *down* for small children.
- Never carry children. They may fall off and be seriously injured or interfere with safe machine operation.
- Never allow children to operate the machine.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

### IV. SERVICE

- Use extra care in handling gasoline and other fuels. They are flammable and vapors are explosive.
  - Use only an approved container.
  - Never remove gas cap or add fuel with the engine running. Allow engine to cool before refueling. Do not smoke.
  - Never refuel the machine indoors.
  - Never store the machine or fuel container inside where there is an open flame, such as a water heater.
- Never run a machine inside a closed area.
- Keep nuts and bolts, especially blade attachment bolts, tight and keep equipment in good condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep machine free of grass, leaves, or other debris build-up. Clean oil or fuel spillage. Allow machine to cool before storing.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- Never make adjustments or repairs with the engine running.
- Grass catcher components are subject to wear, damage, and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves, and use extra caution when servicing them.
- Check brake operation frequently. Adjust and service as required.



Look for this symbol to point out important safety precautions. It means **CAUTION!!! BECOME ALERT!!! YOUR SAFETY IS INVOLVED.**



**CAUTION:** Always disconnect spark plug wire and place wire where it cannot contact spark plug in order to prevent accidental starting when setting up, transporting, adjusting or making repairs.

## WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

**CONGRATULATIONS** on your purchase of a new Tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance.

Should you experience any problem you cannot easily remedy, please contact your nearest authorized service center. We have competent, well-trained technicians and the proper tools to service or repair this tractor.

Please read and retain this manual. The instructions will enable you to assemble and maintain your tractor properly. Always observe the "SAFETY RULES".

## PRODUCT SPECIFICATIONS

HORSEPOWER:	18.0
GASOLINE CAPACITY AND TYPE:	3.5 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG/SH):	See "ENGINE" in Customer Responsibilities Section
OIL CAPACITY:	W/FILTER: 3.5 PINTS W/O FILTER: 3.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RJ19LM
VALVE CLEARANCE:	INTAKE: .004" - .006" EXHAUST: .007" - .009"
GROUND SPEED (MPH):	Forward: 0-5.7 Reverse 0-2.5
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	3 AMPS Battery 5 AMPS Battery
BATTERY:	AMP/HR: 30 MIN. CCA: 240 CASE SIZE: U1R
BLADE BOLT TORQUE:	27-35 FT. LBS.

MODEL NUMBER	AYP9187B89
SERIAL NUMBER	_____
DATE OF PURCHASE	_____
THE MODEL AND SERIAL NUMBERS WILL BE FOUND ON A PLATE UNDER THE SEAT.	
YOU SHOULD RECORD BOTH SERIAL NUMBER AND DATE OF PURCHASE AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.	

## CUSTOMER RESPONSIBILITIES

- Read and observe the safety rules.
- Follow a regular schedule in maintaining, caring for and using your tractor.
- Follow the instructions under the "Customer Responsibilities" and "Storage" sections of this owner's manual.

**WARNING:** This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands.

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## WESTERN AUTO TRACTOR LIMITED WARRANTY AYP9187B89

Western Auto Supply Company warrants to the original retail purchaser that this product is free from defects in material or workmanship and agrees to repair this product free of charge within these time periods from the date of purchase:

- 2 years, if the product is used for personal, family, or household use;
- 90 days, if the product is used for any other purpose such as commercial or rental use.

Excluded from this warranty are normal wear, maintenance, or mechanical adjustments which are not due to defects in material or workmanship. Consult your owner's manual for help to maintain your product or make mechanical adjustments. Products which have been altered, misused, abused, or repaired by other than a Western Auto-authorized or manufacturer-authorized service facility are also excluded.

A rider or tractor battery which proves defective within 90 days will be replaced without charge. After 90 days but within 1 year from the date of purchase, Western Auto will replace the battery for a charge of 1/12 of the current retail price of the battery for each full month between the date of purchase and the date of return.

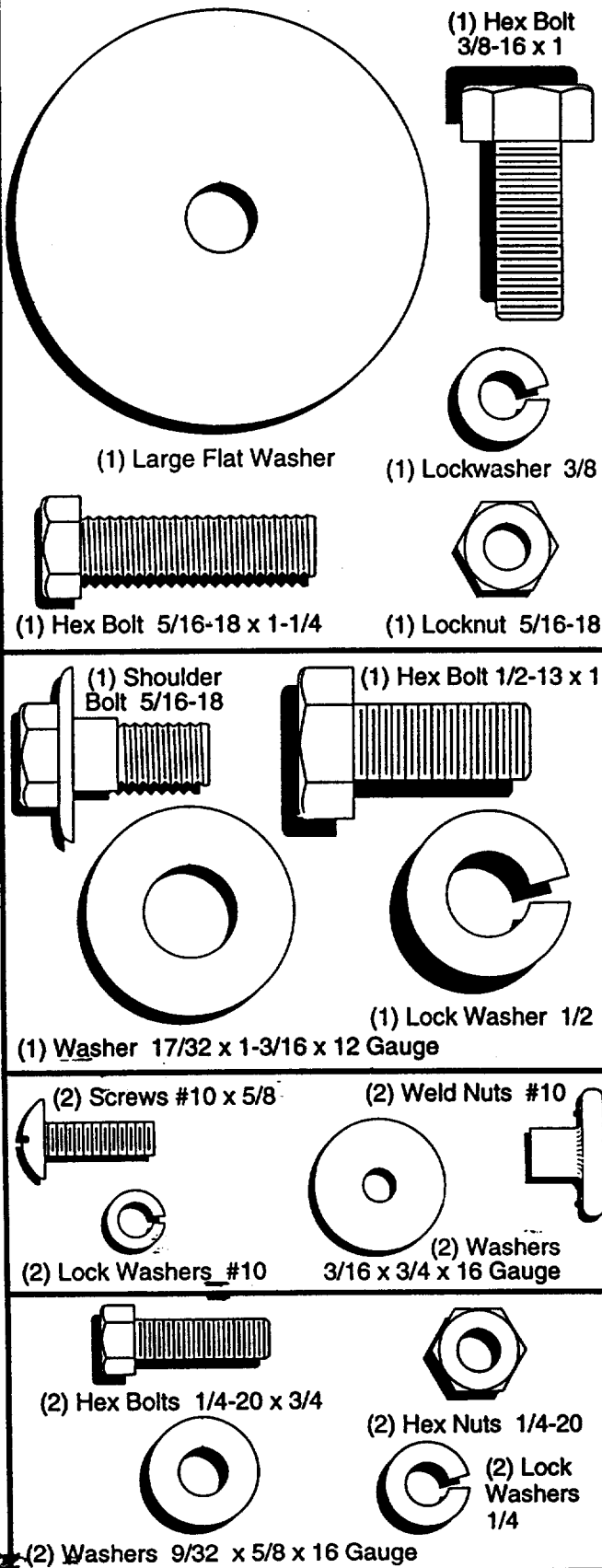
Engines or transaxles are warranted by the engine or transaxle manufacturer which gives its own 2 year warranty and provides service through its authorized service facilities. See the engine or transaxle warranty for details. Repair may be arranged through participating Western Auto stores.

For repair service return this product with proof of purchase date to a participating Western Auto store. This warranty gives you specific legal rights and you may have other rights that vary from state to state. If difficulty is encountered in having this warranty honored, contact:

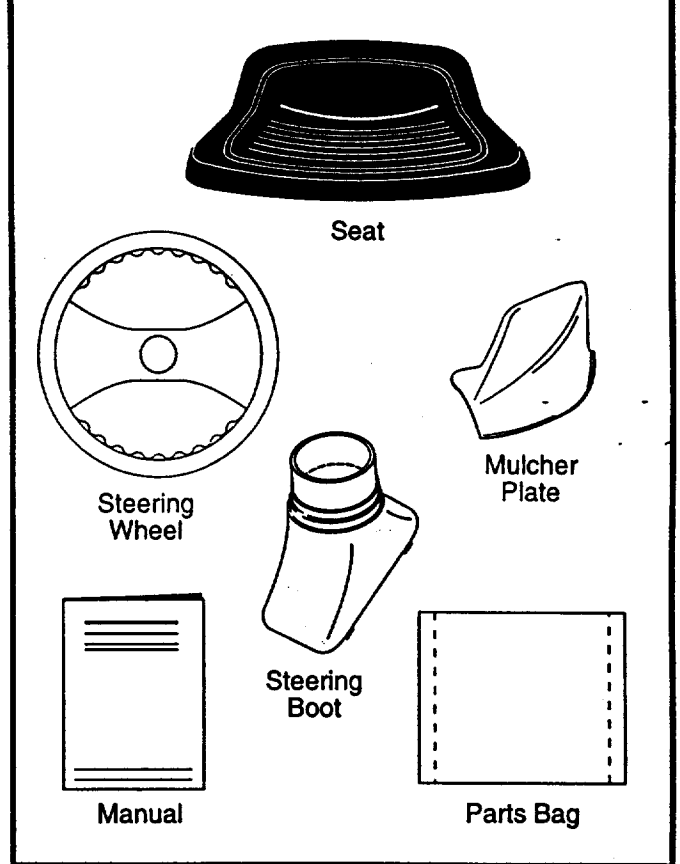
Western Auto Supply Company  
Consumer Affairs Section of the General Service Department  
2107 Grand Avenue, Kansas City, Missouri 64108  
Telephone: 816 346-4411

# CONTENTS OF HARDWARE PACK

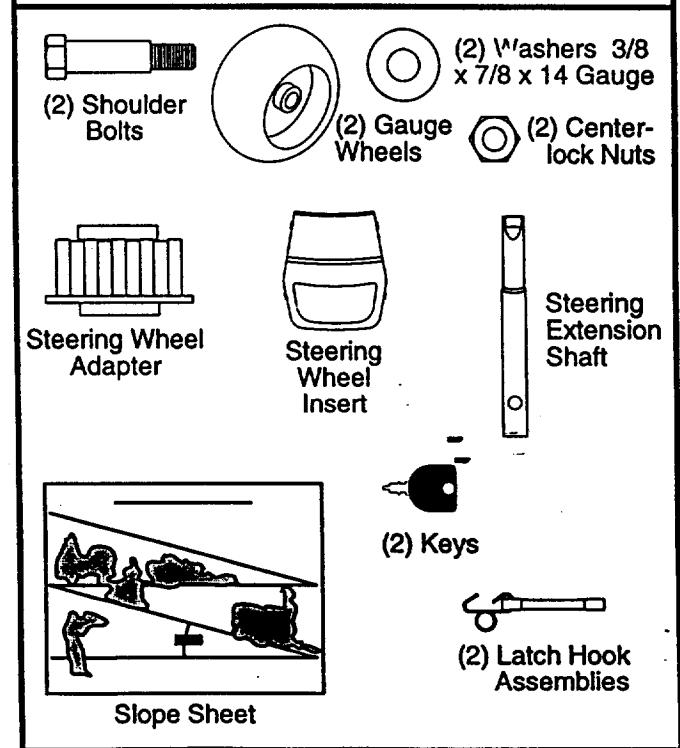
## Parts Bag contents shown full size



## Parts packed separately in carton



## Parts bag contents not shown full size



# ASSEMBLY

Your new tractor has been assembled at the factory with exception of those parts left unassembled for shipping purposes. To ensure safe and proper operation of your tractor all parts and hardware you assemble must be tightened securely. Use the correct tools as necessary to insure proper tightness.

## TOOLS REQUIRED FOR ASSEMBLY

A socket wrench set will make assembly easier. Standard wrench sizes are listed.

- (1) 3/4" Socket w/drive ratchet      Utility knife
- (2) 7/16" wrenches                      Tire pressure gauge
- (2) 1/2" wrenches                        Phillips Screwdriver
- (1) 9/16" wrench

When right or left hand is mentioned in this manual, it means when you are in the operating position (seated behind the steering wheel).

## TO REMOVE TRACTOR FROM CARTON

### UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton (See page 5).
- Cut, from top to bottom, along lines on all four corners of carton, and lay panels flat.
- Check for any additional loose parts or cartons and remove.

## BEFORE ROLLING TRACTOR OFF SKID

### ATTACH STEERING WHEEL (See Fig. 1)

#### ASSEMBLE EXTENSION SHAFT AND BOOT

- Slide extension shaft onto lower steering shaft. Align mounting holes in extension and lower shafts and install 5/16 hex bolt and locknut. Tighten securely.

**IMPORTANT: TIGHTEN BOLT AND NUT SECURELY TO 18-22 FT. LBS TORQUE.**

- Place tabs of steering boot over tab slots in dash and push down to secure.

#### INSTALL STEERING WHEEL

- Position front wheels of the tractor so they are pointing straight forward.
- Slide steering wheel adapter onto steering shaft extension.
- Position steering wheel so cross bars are horizontal (left to right) and slide inside boot and onto adapter.
- Assemble large flat washer, 3/8 lock washer, 3/8 hex bolt and tighten securely.
- Snap steering wheel insert into center of steering wheel.
- Remove protective materials from tractor hood and grill.

**IMPORTANT: CHECK FOR AND REMOVE ANY STAPLES IN SKID THAT MAY PUNCTURE TIRES WHERE TRACTOR IS TO ROLL OFF SKID.**

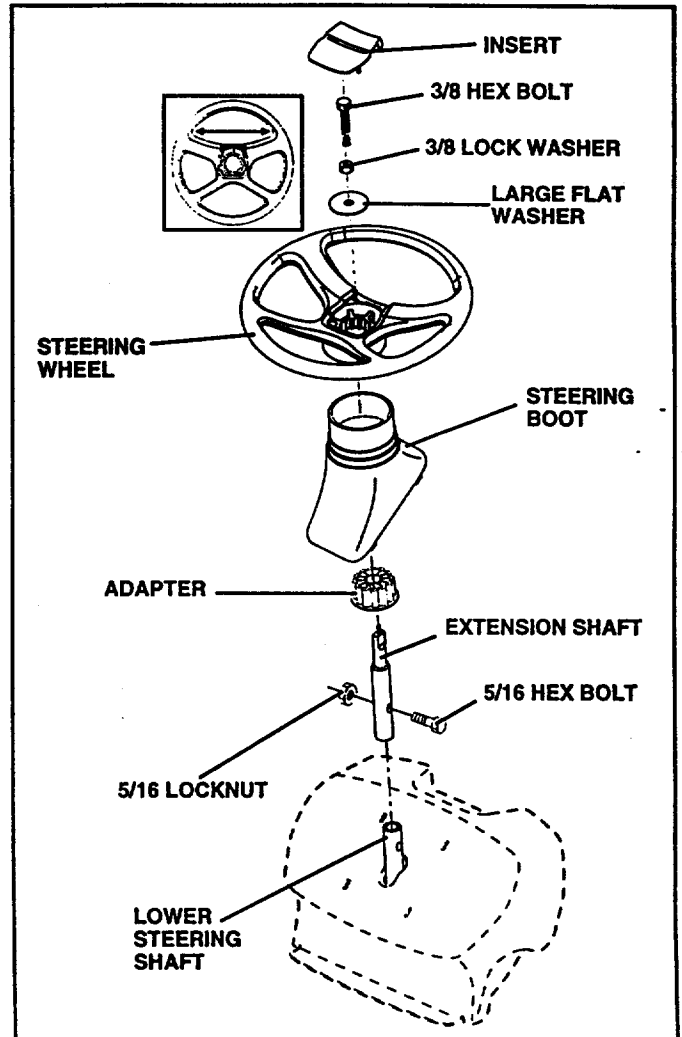


FIG. 1

## TO ROLL TRACTOR OFF SKID (See Operation section for location and function of controls)

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place freewheel control in freewheeling position to disengage transmission (See "TO TRANSPORT" in the Operation section of this manual).
- Roll tractor forward off skid.
- Remove banding holding discharge guard up against tractor.

# ASSEMBLY

## HOW TO SET UP YOUR TRACTOR

### CONNECT BATTERY (See Fig. 2)



**CAUTION:** Do not short battery terminals by allowing a wrench or any other object to contact both terminals at the same time. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc.

Positive terminal must be connected first to prevent sparking from accidental grounding.

- Lift hood to raised position.
- Open terminal access doors, remove terminal protective caps and discard.
- If this battery is put into service after month and year indicated on label (label located between terminals) charge battery for minimum of one hour at 6-10 amps.
- First connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lock washer and hex nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt, flat washer, lock washer and hex nut. Tighten securely.
- Close terminal access doors.

Use terminal access doors for:

- Inspection for secure connections (to tighten hardware).
- Inspection for corrosion.
- Testing battery.
- Jumping (if required).
- Periodic charging.

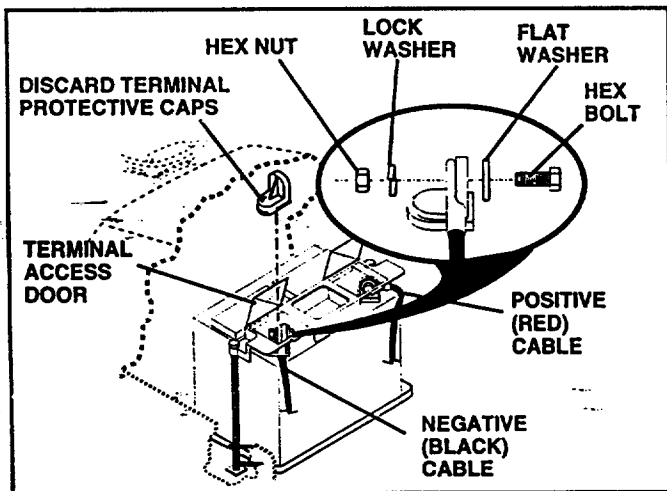


FIG. 2

### INSTALL SEAT (See Fig. 3)

Adjust seat before tightening adjustment bolt.

- Remove cardboard packing on seat pan.
- Place seat on seat pan and assemble shoulder bolt. Tighten shoulder bolt securely.
- Assemble adjustment bolt, lock washer and flat washer loosely. Do not tighten.
- Lower seat into operating position and sit on seat.
- Slide seat until a comfortable position is reached which allows you to press clutch/brake pedal all the way down.
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment bolt securely.

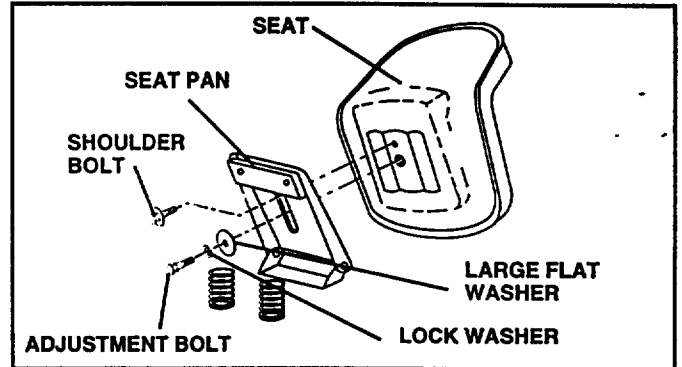


FIG. 3

### ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 4)

The gauge wheels are designed to keep the mower deck in proper position when operating mower. Be sure they are properly adjusted to ensure optimum mower performance.

- Assemble gauge wheels with tractor on a flat level surface.
- Adjust mower to desired cutting height (See "TO ADJUST MOWER CUTTING HEIGHT" in the Operation section of this manual).
- With mower in desired height of cut position, gauge wheels should be assembled so they are slightly off the ground. Install gauge wheel in appropriate hole with shoulder bolt, 3/8 washer, and 3/8-16 locknut and tighten securely.
- Repeat for opposite side installing gauge wheel in same adjustment hole.

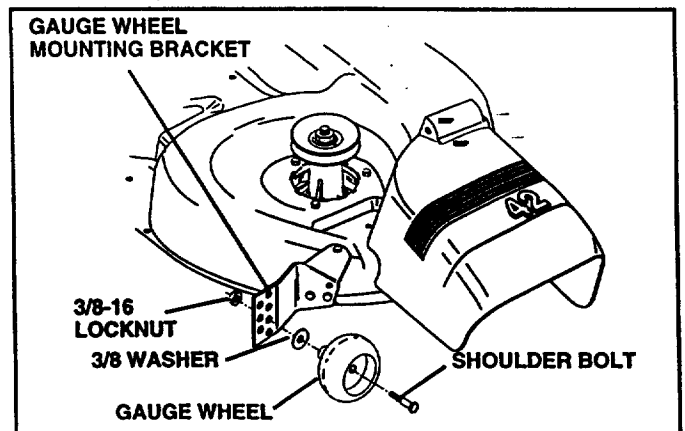


FIG. 4

# ASSEMBLY

## INSTALL MULCHER PLATE (See Figs. 5 and 6)

- Install two latch hooks to mulcher plate using screw, washer, lock washer, and weld nut as shown.

**NOTE:** Pre-assemble weld nut to latch hook by inserting weld nut from the top with hook pointing down.

- Tighten hardware securely.
- Raise and hold deflector shield in upright position.
- Place front of mulcher plate over front of mower deck opening and slide into place, as shown.
- Hook front latch into hole on front of mower deck.
- Hook rear latch into hole on back of mower deck.



**CAUTION:** Do not remove discharge guard from mower. Raise and hold guard when attaching mulcher plate and allow it to rest on plate while in operation.

## TO CONVERT TO BAGGING OR DISCHARGING

Simply remove mulcher plate and store in a safe place. Your mower is now ready for discharging or installation of optional grass catcher accessory.

**NOTE:** It is not necessary to change blades. The mulcher blades are designed for discharging and bagging also.

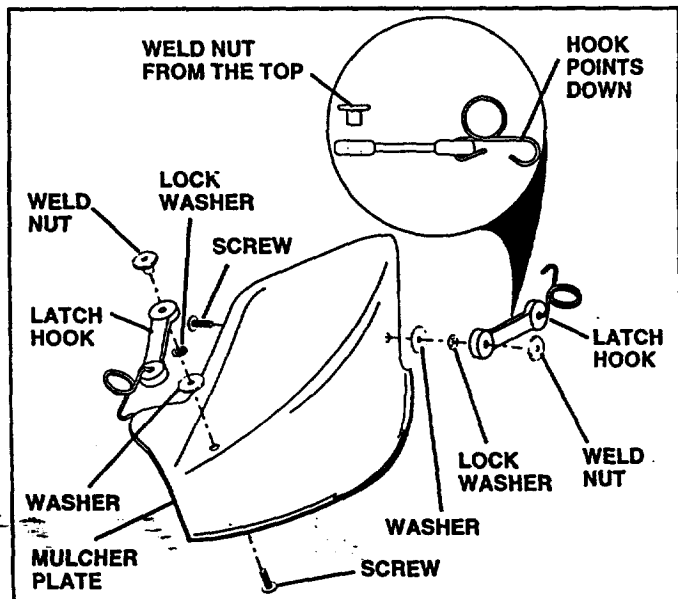


FIG. 5

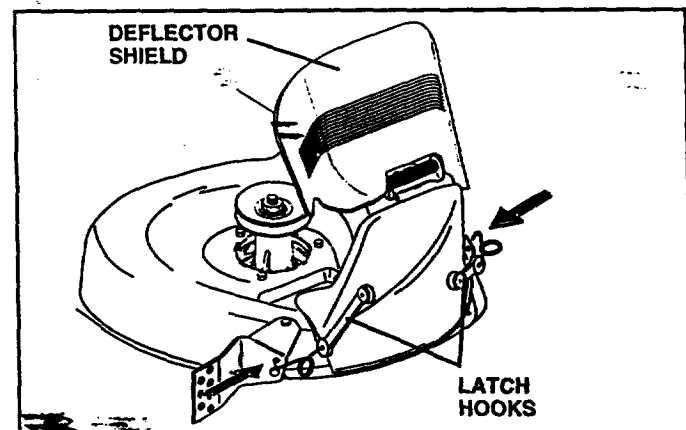


FIG. 6

## CHECK TIRE PRESSURE

The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.

- Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" on page 2 of this manual.

## CHECK DECK LEVELNESS

For best cutting results, mower housing should be properly leveled. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.

## CHECK FOR PROPER POSITION OF ALL BELTS

See the figures that are shown for replacing motion and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

## CHECK BRAKE SYSTEM

After you learn how to operate your tractor, check to see that the brake is properly adjusted. See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual.

## ✓ CHECKLIST

*BEFORE YOU OPERATE AND ENJOY YOUR NEW TRACTOR, WE WISH TO ASSURE THAT YOU RECEIVE THE BEST PERFORMANCE AND SATISFACTION FROM THIS QUALITY PRODUCT.*

*PLEASE REVIEW THE FOLLOWING CHECKLIST:*

- ✓ All assembly instructions have been completed.
- ✓ No remaining loose parts in carton.
- ✓ Battery is properly prepared and charged. (Minimum 1 hour at 6 amps).
- ✓ Seat is adjusted comfortably and tightened securely.
- ✓ All tires are properly inflated. (For shipping purposes, the tires were overinflated at the factory).
- ✓ Be sure mower deck is properly leveled side-to-side/front-to-rear for best cutting results. (Tires must be properly inflated for leveling).
- ✓ Check mower and drive belts. Be sure they are routed properly around pulleys and inside all belt keepers.
- ✓ Check wiring. See that all connections are still secure and wires are properly clamped.
- ✓ Before driving tractor, be sure freewheel control is in drive position.

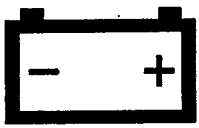
*WHILE LEARNING HOW TO USE YOUR TRACTOR, PAY EXTRA ATTENTION TO THE FOLLOWING IMPORTANT ITEMS:*

- ✓ Engine oil is at proper level.
- ✓ Fuel tank is filled with fresh, clean, regular unleaded gasoline.
- ✓ Become familiar with all controls - their location and function. Operate them before you start the engine.
- ✓ Be sure brake system is in safe operating condition.
- ✓ It is important to purge the transmission before operating your tractor for the first time. Follow proper starting and transmission purging instructions (See "TO START ENGINE" and "PURGE TRANSMISSION" in Operation section of this manual).



# OPERATION

These symbols may appear on your tractor or in literature supplied with the product. Learn and understand their meaning.



BATTERY



CAUTION OR WARNING



REVERSE



FORWARD



FAST



SLOW



ENGINE ON



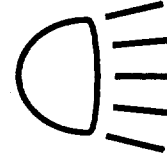
ENGINE OFF



OIL PRESSURE



CLUTCH



LIGHTS ON



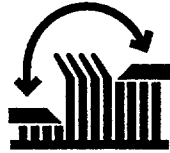
OVER TEMP LIGHT



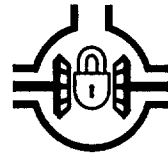
FUEL



CHOKE



MOWER HEIGHT



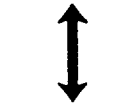
DIFFERENTIAL LOCK



PARKING BRAKE LOCKED



UNLOCKED



MOWER LIFT

R

REVERSE

N

NEUTRAL

H

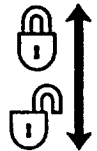
HIGH

L

LOW



PARKING BRAKE



ATTACHMENT CLUTCH ENGAGED



ATTACHMENT CLUTCH DISENGAGED



KEEP AREA CLEAR

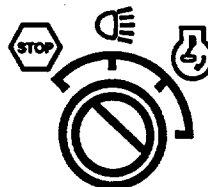


SLOPE HAZARDS

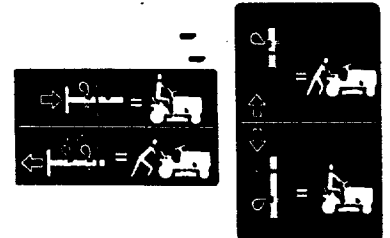
(SEE SAFETY RULES SECTION)



DANGER, KEEP HANDS AND FEET AWAY



IGNITION



FREE WHEEL (Automatic Models only)

# OPERATION

## KNOW YOUR TRACTOR

### READ THIS OWNER'S MANUAL AND SAFETY RULES BEFORE OPERATING YOUR TRACTOR

Compare the illustrations with your tractor to familiarize yourself with the locations of various controls and adjustments. Save this manual for future reference.

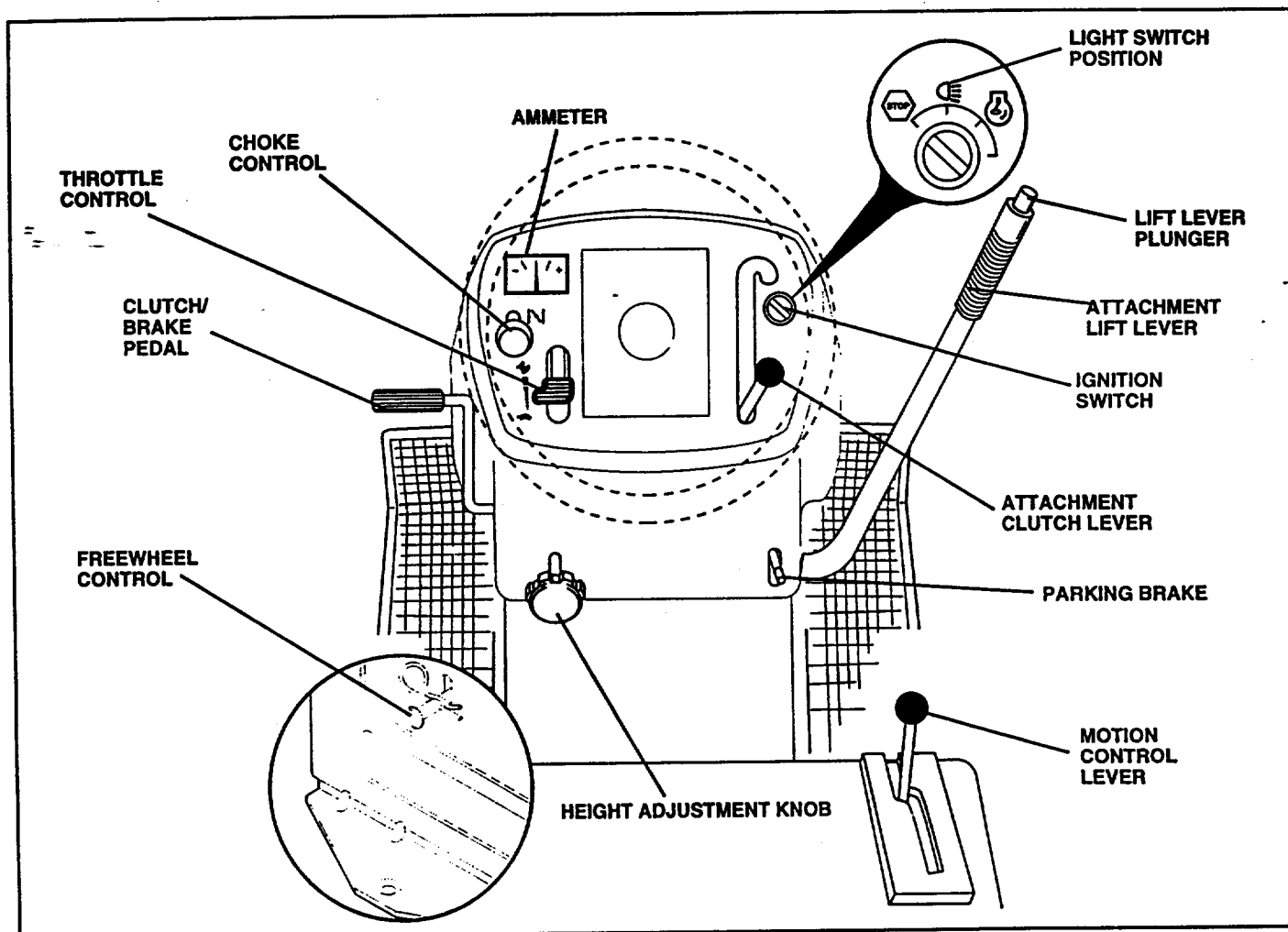


FIG. 7

Our tractors conform to the safety standards of the American National Standards Institute.

**ATTACHMENT CLUTCH SWITCH:** Used to engage the mower blades, or other attachments mounted to your tractor.

**LIGHT SWITCH:** Turns the headlights on and off.

**THROTTLE CONTROL:** Used to control engine speed.

**CLUTCH/BRAKE PEDAL:** Used for declutching and braking the tractor and starting the engine.

**PARKING BRAKE:** Locks clutch/brake pedal into the brake position.

**MOTION CONTROL LEVER:** Selects the speed and direction of tractor.

**ATTACHMENT LIFT LEVER:** Used to raise and lower the mower deck or other attachments mounted to your tractor.

**LIFT LEVER PLUNGER:** Used to release attachment lift lever when changing its position.

**IGNITION SWITCH:** Used for starting and stopping the engine.

**FREEWHEEL CONTROL:** Disengages transmission for pushing or slowly towing the tractor with the engine off.

**HEIGHT ADJUSTMENT KNOB:** Used to adjust the mower height.

**AMMETER:** Indicates charging (+) or discharging (-) of battery.

**CHOKE CONTROL:** Used when starting a cold engine.

# OPERATION



The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over the spectacles or standard safety glasses.

## HOW TO USE YOUR TRACTOR

### TO SET PARKING BRAKE (See Fig. 8)

Your tractor is equipped with an operator presence sensing switch. When engine is running, any attempt by the operator to leave the seat without first setting the parking brake will shut off the engine.

- Depress clutch/brake pedal into full "BRAKE" position and hold.
- Place parking brake lever in "ENGAGED" position and release pressure from clutch/brake pedal. Pedal should remain in "BRAKE" position. Make sure parking brake will hold tractor secure.

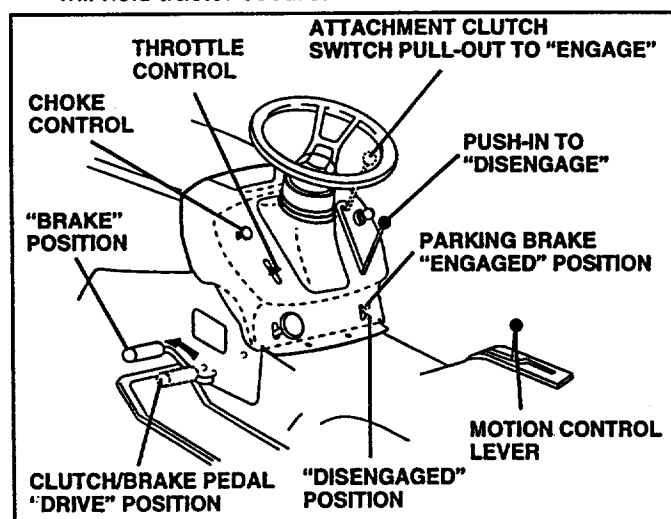


FIG. 8

### STOPPING (See Fig. 8)

#### MOWER BLADES -

- Move attachment clutch lever to "DISENGAGED" position.

#### GROUND DRIVE -

- Depress clutch/brake pedal into full "BRAKE" position.
- Move motion control lever to neutral (N) position.

**IMPORTANT:** THE MOTION CONTROL LEVER DOES NOT RETURN TO NEUTRAL (N) POSITION WHEN THE CLUTCH/BRAKE PEDAL IS DEPRESSED.

#### ENGINE -

- Move throttle control to slow position.

**NOTE:** Failure to move throttle control to slow position and allowing engine to idle before stopping may cause engine to "backfire".

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.

**Never** use choke to stop engine.

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gases may cause "browning" of grass. To eliminate this possibility, always stop engine when stopping tractor on grass areas.



**CAUTION:** Always stop tractor completely, as described above, before leaving the operator's position; to empty grass catcher, etc.

### TO USE THROTTLE CONTROL (See Fig. 8)

Always operate engine at full throttle.

- Operating engine at less than full throttle reduces the battery charging rate.
- Full throttle offers the best bagging and mower performance.

### TO USE CHOKE CONTROL (See Fig. 8)

Use choke control whenever you are starting a cold engine. Do not use to start a warm engine.

- To engage choke control, pull knob out. Slowly push knob in to disengage.

### TO MOVE FORWARD AND BACKWARD (See Fig. 8)

The direction and speed of movement is controlled by the motion control lever.

- Start tractor with motion control lever in neutral (N) position.
- Release parking brake and clutch/brake pedal.
- Slowly move motion control lever to desired position.

### TO ADJUST MOWER CUTTING HEIGHT (See Fig. 7)

The cutting height is controlled by turning the height adjustment knob in desired direction.

- Turn knob clockwise (↻) to raise cutting height.
- Turn knob counterclockwise (↺) to lower cutting height.

The cutting height range is approximately 1-1/2" to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- The average lawn should be cut to approximately 2-1/2 inches during the cool season and to over 3 inches during hot months. For healthier and better looking lawns, mow often and after moderate growth.
- For best cutting performance, grass over 6 inches in height should be mowed twice. Make the first cut relatively high; the second to desired height.

# OPERATION

## TO OPERATE MOWER (See Fig. 9)

Your tractor is equipped with an operator presence sensing switch. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut off the engine.

- Select desired height of cut.
- Lower mower with attachment lift control.
- Start mower blades by engaging attachment clutch control.
- TO STOP MOWER BLADES - disengage attachment clutch control.

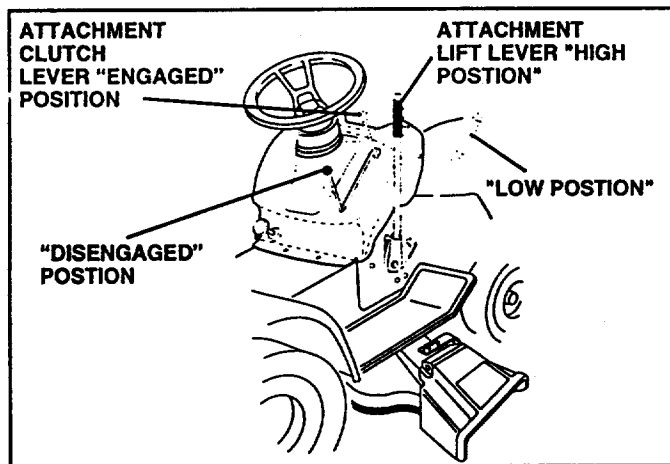
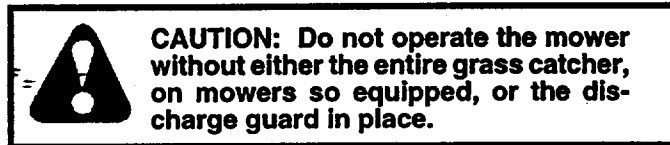
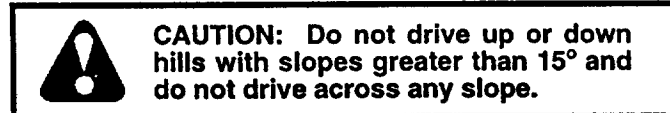


FIG. 9

## TO OPERATE ON HILLS



- Choose the slowest speed before starting up or down hills.
- Avoid stopping or changing speed on hills.
- If slowing is necessary, move throttle control lever to slower position.
- If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.

- Move motion control lever to neutral (N) position.

**IMPORTANT:** THE MOTION CONTROL LEVER DOES NOT RETURN TO NEUTRAL (N) POSITION WHEN THE CLUTCH/BRAKE PEDAL IS DEPRESSED.

- To restart movement, slowly release parking brake and clutch/brake pedal.
- Slowly move motion control lever to slowest setting.
- Make all turns slowly.

## TO TRANSPORT (See Fig. 10)

When pushing or towing your tractor, be sure to disengage transmission by placing freewheel control in freewheeling position. Free wheel control is located at the rear drawbar of tractor.

- Raise attachment lift to highest position with attachment lift control.
- Pull freewheel control knob out and hold in position by inserting retainer spring into forward hole of control rod.
- Do not push or tow tractor at more than two (2) MPH.
- To reengage transmission, reverse above procedure.

**NOTE:** To protect hood from damage when transporting your tractor on a truck or a trailer, be sure hood is closed and secured to tractor. Use an appropriate means of tying hood to tractor (rope, cord, etc.).

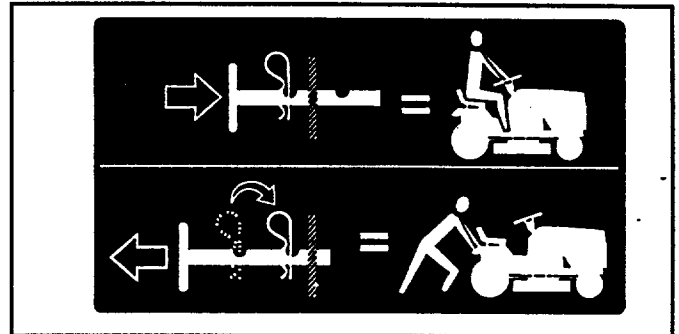


FIG. 10

## BEFORE STARTING THE ENGINE

### CHECK ENGINE OIL LEVEL (See Fig. 15)

- The engine in your tractor has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with tractor on level ground.
- Remove oil fill cap/dipstick and wipe clean, reinsert the dipstick and screw cap tight, wait for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark on dipstick is reached. Do not overfill.
- For cold weather operation you should change oil for easier starting (See "OIL VISCOSITY CHART" in the Customer Responsibilities section of this manual).
- To change engine oil, see the Customer Responsibilities section in this manual.

### ADD GASOLINE

- Fill fuel tank. Use fresh, clean, regular unleaded gasoline with a minimum of 87 octane. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life). Do not mix oil with gasoline. Purchase fuel in quantities that can be used within 30 days to assure fuel freshness.

**IMPORTANT:** WHEN OPERATING IN TEMPERATURES BELOW 32°F (0°C), USE FRESH, CLEAN WINTER GRADE GASOLINE TO HELP INSURE GOOD COLD WEATHER STARTING.

**WARNING:** Experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer. Drain the gas tank, start the engine and let it run until the fuel lines and carburetor are empty. Use fresh fuel next season. See Storage Instructions for additional information. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

# OPERATION



**CAUTION:** Fill to bottom of gas tank filler neck. Do not overfill. Wipe off any spilled oil or fuel. Do not store, spill or use gasoline near an open flame.

## TO START ENGINE (See Fig. 8)

When starting the engine for the first time or if the engine has run out of fuel, it will take extra cranking time to move fuel from the tank to the engine.

- Be sure freewheel control is in the transmission engaged position.
- Sit on seat in operating position, depress clutch/brake pedal and set parking brake.
- Place motion control lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to fast position
- Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

**NOTE:** Before starting, read the warm and cold starting procedures below.

- Insert key into ignition and turn key clockwise to "START" position and release key as soon as engine starts. Do not run starter continuously for more than fifteen seconds per minute. If the engine does not start after several attempts, push choke control in, wait a few minutes and try again. If engine still does not start, pull the choke control out and retry.

### WARM WEATHER STARTING (50° F and above)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly.
- The attachments and ground drive can now be used. If the engine does not accept the load, restart the engine and allow it to warm up for one minute using the choke as described above.

### COLD WEATHER STARTING (50° F and below)

- When engine starts, slowly push choke control in until the engine begins to run smoothly. Continue to push the choke control in small steps allowing the engine to accept small changes in speed and load, until the choke control is fully in. If the engine starts to run roughly, pull the choke control out slightly for a few seconds and then continue to push the control in slowly. This may require an engine warm-up period from several seconds to several minutes, depending on the temperature.

### AUTOMATIC TRANSMISSION WARM UP

- Before driving the unit in cold weather, the transmission should be warmed up as follows:
  - Be sure the tractor is on level ground.
  - Place the motion control lever in neutral. Release the parking brake and let the clutch/brake slowly return to operating position.
  - Allow one minute for transmission to warm up. This can be done during the engine warm up period.

The attachments can be used during the engine warm-up period after the transmission has been warmed up and may require the choke control be pulled out slightly.

**NOTE:** If at a high altitude (above 3000 feet) or in cold temperatures (below 32 F) the carburetor fuel mixture may need to be adjusted for best engine performance. See "TO ADJUST CARBURETOR" in the Service and Adjustments section of this manual.

## PURGE TRANSMISSION



**CAUTION:** Never engage or disengage freewheel lever while the engine is running.

To ensure proper operation and performance, it is recommended that the transmission be purged before operating tractor for the first time. This procedure will remove any trapped air inside the transmission which may have developed during shipping of your tractor.

**IMPORTANT:** SHOULD YOUR TRANSMISSION REQUIRE REMOVAL FOR SERVICE OR REPLACEMENT, IT SHOULD BE PURGED AFTER REINSTALLATION BEFORE OPERATING THE TRACTOR.

- Place tractor safely on level surface with engine off and parking brake set.
- Disengage transmission by placing freewheel control in freewheeling position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to slow position. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- Move motion control lever to full forward position and hold for five (5) seconds. Move lever to full reverse position and hold for five (5) seconds. Repeat this procedure three (3) times.

**NOTE:** During this procedure there will be no movement of drive wheels. The air is being removed from hydraulic drive system.

- Move motion control lever to neutral (N) position. Shut-off engine and set parking brake.
- Engage transmission by placing freewheel control in driving position (See "TO TRANSPORT" in this section of manual).
- Sitting in the tractor seat, start engine. After the engine is running, move throttle control to half (1/2) speed. With motion control lever in neutral (N) position, slowly disengage clutch/brake pedal.
- Slowly move motion control lever forward, after the tractor moves approximately five (5) feet, slowly move motion control lever to reverse position. After the tractor moves approximately five (5) feet return the motion control lever to the neutral (N) position. Repeat this procedure with the motion control lever three (3) times.
- Your tractor is now purged and now ready for normal operation.

# OPERATION

## MOWING TIPS

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 11).
- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the desired height.
- Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

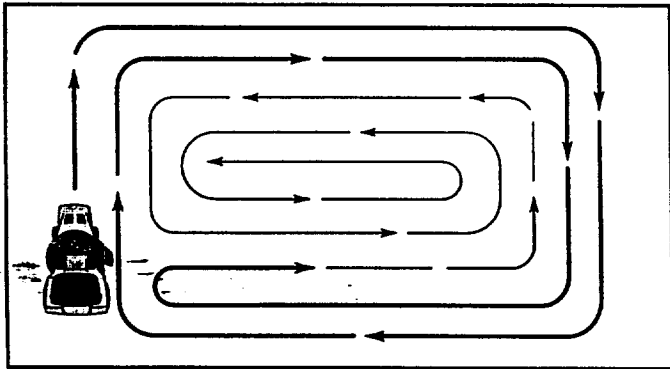


FIG. 11

## MULCHING MOWING TIPS

**IMPORTANT: FOR BEST PERFORMANCE, KEEP MOWER HOUSING FREE OF BUILT-UP GRASS AND TRASH. CLEAN AFTER EACH USE.**

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 12). For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.

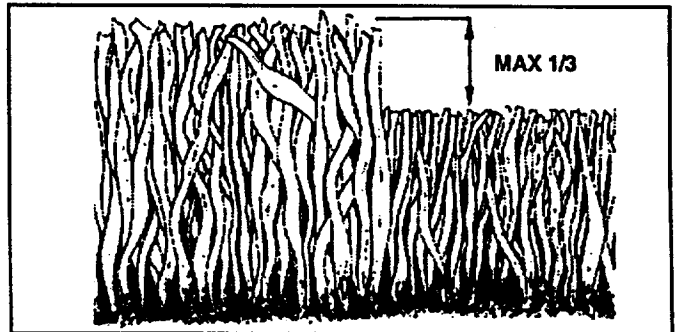


FIG. 12

# CUSTOMER RESPONSIBILITIES

MAINTENANCE SCHEDULE		SERVICE INTERVALS							SERVICE DATES				
		BEFORE EACH USE	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE					
TRACTOR	Check Brake Operation	✓	✓										
	Check Tire Pressure	✓	✓										
	Check Operator Presence and Interlock Systems	✓											
	Check for Loose Fasteners	✓				✓ <sup>7</sup>	✓						
	Sharpen/Replace Mower Blades			✓ <sup>4</sup>									
	Lubrication Chart			✓			✓						
	Check Battery Level			✓ <sup>6</sup>									
	Clean Battery and Terminals/Recharge			✓				✓					
	Check Transaxle Cooling			✓									
	Adjust Blade Belt(s) Tension					✓ <sup>5</sup>							
Adjust Motion Drive Belt(s) Tension					✓ <sup>5</sup>								
ENGINE	Check Engine Oil Level	✓	✓										
	Change Engine Oil			✓ <sup>1,2,3</sup>			✓						
	Clean Air Filter			✓ <sup>2</sup>									
	Clean Air Screen			✓ <sup>2</sup>									
	Inspect Muffler/Spark Arrester				✓								
	Replace Oil Filter (If equipped)					✓ <sup>1,2</sup>							
	Clean Engine Cooling Fins					✓ <sup>2</sup>							
	Replace Spark Plug					✓	✓						
	Replace Air Filter Paper Cartridge					✓ <sup>2</sup>							
	Replace Fuel Filter						✓						

- 1 - Change more often when operating under a heavy load or in high ambient temperatures.  
 2 - Service more often when operating in dirty or dusty conditions.  
 3 - If equipped with oil filter, change oil every 50 hours.  
 4 - Replace blades more often when mowing in sandy soil.

- 5 - If equipped with adjustable system.  
 6 - Not required if equipped with maintenance-free battery.  
 7 - Tighten front axle pivot bolt to 35 ft.-lbs. maximum.  
 Do not overtighten.

## GENERAL RECOMMENDATIONS

The warranty on this tractor does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain tractor as instructed in this manual.

Some adjustments will need to be made periodically to properly maintain your tractor.

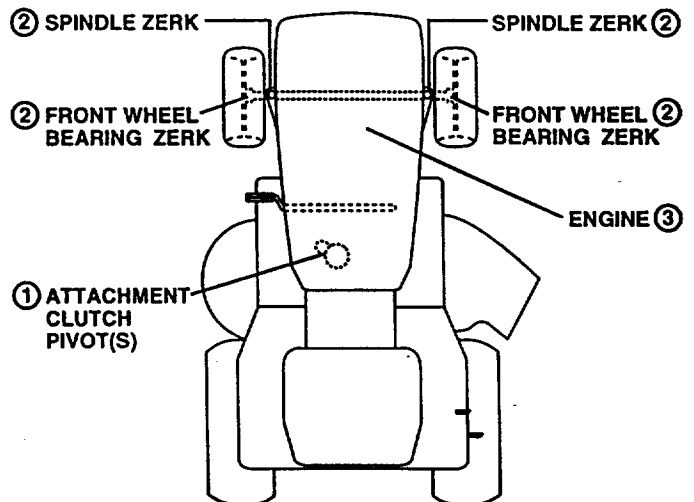
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

## BEFORE EACH USE

- Check engine oil level.
- Check brake operation.
- Check tire pressure.
- Check for loose fasteners.

## LUBRICATION CHART



① SAE 30 OR 10W30 MOTOR OIL

② GENERAL PURPOSE GREASE

③ REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION

**IMPORTANT: DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRICANTS WILL ATTRACT DUST AND DIRT THAT WILL SHORTEN THE LIFE OF THE SELF-LUBRICATING BEARINGS. IF YOU FEEL THEY MUST BE LUBRICATED, USE ONLY A DRY, POWDERED GRAPHITE TYPE LUBRICANT SPARINGLY.**

# CUSTOMER RESPONSIBILITIES

## TRACTOR

Always observe safety rules when performing any maintenance.

## BRAKE OPERATION

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted. (See "TO ADJUST BRAKE" in the Service and Adjustments section of this manual).

## TIRES

- Maintain proper air pressure in all tires (See "PRODUCT SPECIFICATIONS" on page 3 of this manual).
- Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.
- Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

## BLADE CARE

For best results mower blades must be kept sharp. Replace bent or damaged blades.

## BLADE REMOVAL (See Fig. 13)

- Raise mower to highest position to allow access to blades.
- Remove hex bolt, lock washer and flat washer securing blade.
- Install new or resharpened blade with trailing edge up towards deck as shown.

**IMPORTANT:** TO ENSURE PROPER ASSEMBLY, CENTER HOLE IN BLADE MUST ALIGN WITH STAR ON MANDREL ASSEMBLY.

- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (27-35 Ft. Lbs. torque).

**IMPORTANT:** BLADE BOLT IS GRADE 8 HEAT TREATED.

**Note:** We do not recommend sharpening blade - but if you do, be sure the blade is balanced.

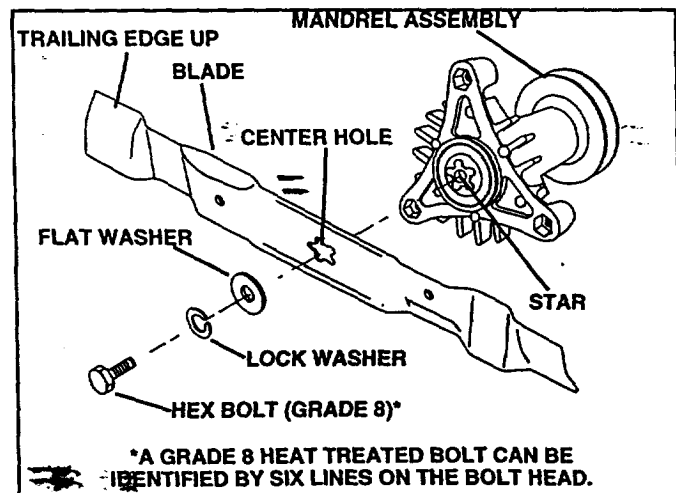


FIG. 13

## TO SHARPEN BLADE (See Fig. 14)

Care should be taken to keep the blade balanced. An unbalanced blade will cause excessive vibration and eventual damage to mower and engine.

- The blade can be sharpened with a file or on a grinding wheel. Do not attempt to sharpen while on the mower.
- To check blade balance, you will need a 5/8" diameter steel bolt, pin, or a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer).
- Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

**NOTE:** Do not use a nail for balancing blade. The lobes of the center hole may appear to be centered, but are not.

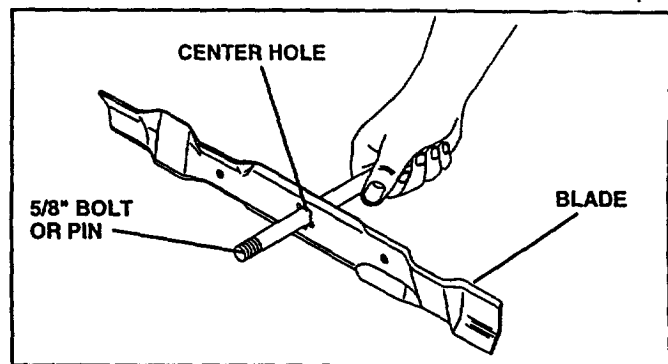


FIG. 14

## BATTERY

Your tractor has a battery charging system which is sufficient for normal use. However, periodic charging of the battery with an automotive charger will extend its life.

- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.
- Recharge at 6-10 amperes for 1 hour.

## TO CLEAN BATTERY AND TERMINALS

Corrosion and dirt on the battery and terminals can cause the battery to "leak" power.

- Remove terminal guard.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "CONNECT BATTERY" in the Assembly section of this manual).





# CUSTOMER RESPONSIBILITIES

## AIR FILTER (See Fig. 16)

Your engine will not run properly using a dirty air filter. Clean the foam pre-cleaner after every 25 hours of operation or every season. Service paper cartridge every 100 hours of operation or every season, whichever occurs first.

Service air cleaner more often under dusty conditions.

- Remove knobs and cover.

### TO SERVICE PRE-CLEANER

- Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.
- If very dirty or damaged, replace pre-cleaner.

### TO SERVICE CARTRIDGE

- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- Reinstall pre-cleaner cartridge cover and secure with knobs.

**IMPORTANT:** PETROLEUM SOLVENTS, SUCH AS KEROSENE, ARE NOT TO BE USED TO CLEAN THE CARTRIDGE. THEY MAY CAUSE DETERIORATION OF THE CARTRIDGE. DO NOT OIL CARTRIDGE. DO NOT USE PRESSURIZED AIR TO CLEAN OR DRY CARTRIDGE.

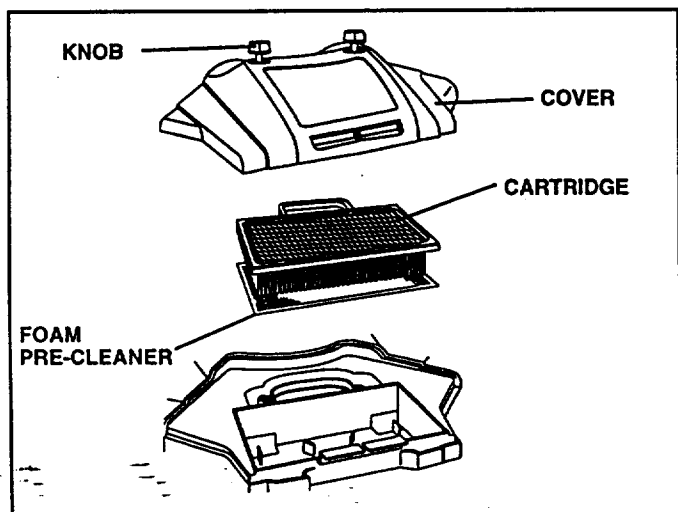


FIG. 16

## CLEAN AIR SCREEN (See Fig. 17)

Air screen must be kept free of dirt and chaff to prevent engine damage from overheating. Clean with a wire brush or compressed air to remove dirt and stubborn dried gum fibers.

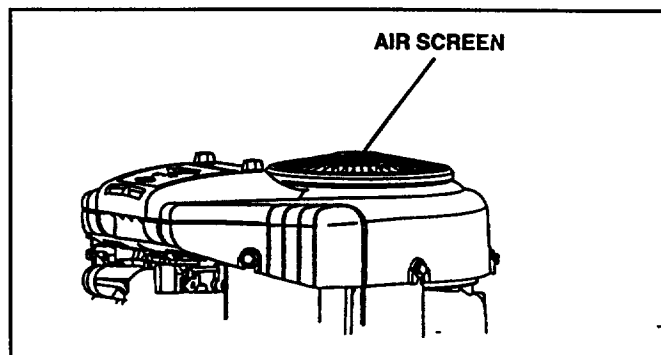


FIG. 17

## CLEAN AIR INTAKE/COOLING AREAS

To insure proper cooling, make sure the grass screen, cooling fins, and other external surfaces of the engine are kept clean at all times.

Every 100 hours of operation (more often under extremely dusty, dirty conditions), remove the blower housing and other cooling shrouds. Clean the cooling fins and external surfaces as necessary. Make sure the cooling shrouds are reinstalled.

**NOTE:** Operating the engine with a blocked grass screen, dirty or plugged cooling fins, and/or cooling shrouds removed will cause engine damage due to overheating.

## MUFFLER

Inspect and replace corroded muffler and spark arrester (if equipped) as it could create a fire hazard and/or damage.

## SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever occurs first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" on page 2 of this manual.

# CUSTOMER RESPONSIBILITIES

## ENGINE OIL FILTER (See Fig. 18)

Replace the engine oil filter every season or every other oil change if the tractor is used more than 100 hours in one year.

- Unscrew old filter by turning counterclockwise. Use a suitable container to catch oil.
- Apply a thin coating of new engine oil to rubber gasket on replacement oil filter.
- Install replacement oil filter by turning clockwise until rubber gasket contacts mounting surface, then tighten filter an additional 1/2 to 3/4 turn.
- Fill crankcase with new oil (See "TO CHANGE ENGINE OIL" in this section of this manual). For approximate capacity see "PRODUCT SPECIFICATIONS" on page 3 of this manual.
- Start engine and check for oil leaks. Correct any leaks before placing engine into full operation.

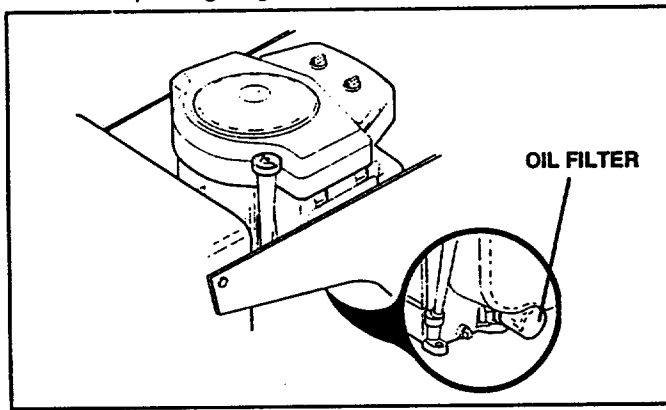


FIG. 18

## IN-LINE FUEL FILTER (See Fig. 19)

The fuel filter should be replaced once each season. If fuel filter becomes clogged, obstructing fuel flow to carburetor, replacement is required.

- With engine cool, remove filter and plug fuel line sections.
- Place new fuel filter in position in fuel line with arrow pointing towards carburetor.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

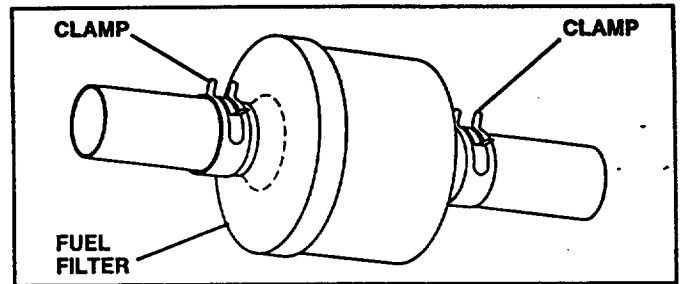


FIG. 19

## CLEANING

- Clean engine, battery, seat, finish, etc. of all foreign matter.
- Keep finished surfaces and wheels free of all gasoline, oil, etc.
- Protect painted surfaces with automotive type wax.

We do not recommend using a garden hose to clean your tractor unless the electrical system, muffler, air filter and carburetor are covered to keep water out. Water in engine can result in a shortened engine life.

# SERVICE AND ADJUSTMENTS

## CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:



- Depress clutch/brake pedal fully and set parking brake.
- Place motion control lever in neutral (N) position.
- Place attachment clutch in "DISENGAGED" position.
- Turn ignition key "OFF" and remove key.
- Make sure the blades and all moving parts have completely stopped.
- Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plug.

## TRACTOR

### TO REMOVE MOWER (See Fig. 20)

Mower will be easier to remove from the right side of tractor.

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- Disconnect clutch rod from clutch lever by removing retainer spring.
- Disconnect anti-sway bar from chassis bracket by removing retainer spring.
- Disconnect suspension arms from rear deck brackets by removing retainer springs.
- Disconnect front links from deck by removing retainer springs.
- Raise lift lever to raise suspension arms. Slide mower out from under tractor.

**IMPORTANT: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, REMOVE THE FRONT LINKS.**

### TO INSTALL MOWER (See Fig. 20)

- Raise attachment lift lever to its highest position.
- Slide mower under tractor with discharge guard to right side of tractor.
- Lower lift lever to its lowest position.
- Install mower in reverse order of removal instructions.

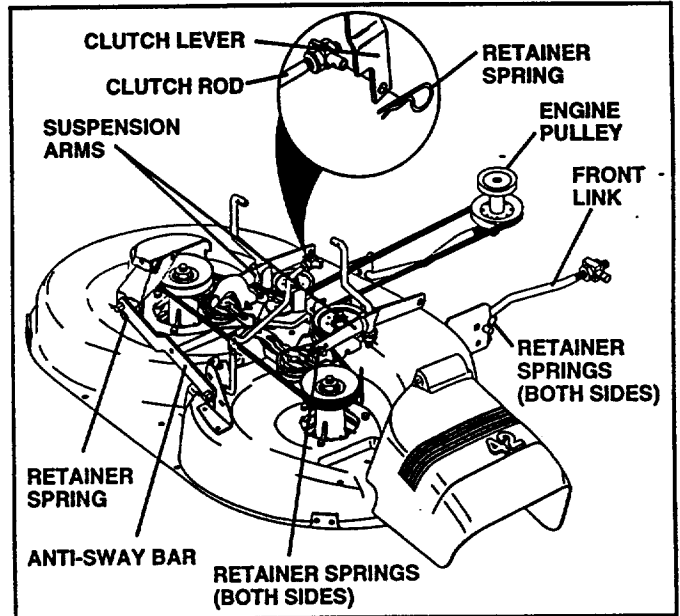


FIG. 20

# SERVICE AND ADJUSTMENTS

## TO LEVEL MOWER HOUSING

Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" on page 2 of this manual). If tires are over or underinflated, you will not properly adjust your mower.

### SIDE-TO-SIDE ADJUSTMENT (See Figs. 21 and 22)

- Raise mower to its highest position.
- At the midpoint of both sides of mower, measure height from bottom edge of mower to ground. Distance "A" on both sides of mower should be the same or within 1/4" of each other.
- If adjustment is necessary, make adjustment on one side of mower only.
- To raise one side of mower, tighten lift link adjustment nut on that side.
- To lower one side of mower, loosen lift link adjustment nut on that side.

**NOTE:** Three full turns of adjustment nut will change mower height about 1/8".

- Recheck measurements after adjusting.

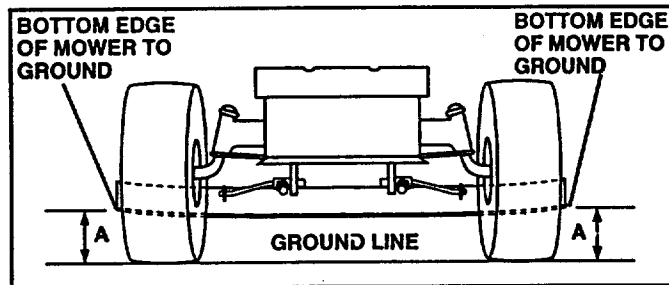


FIG. 21

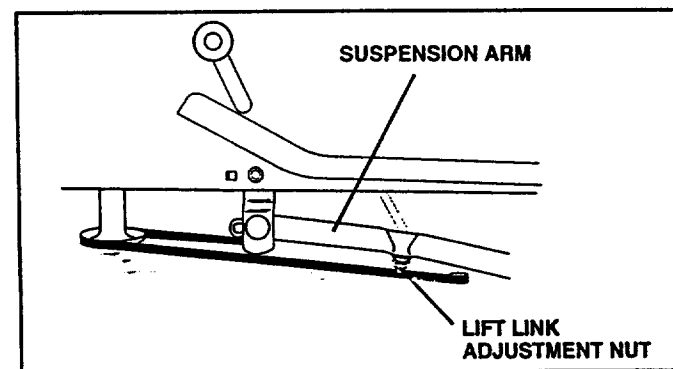


FIG. 22

### FRONT-TO-BACK ADJUSTMENT (See Figs. 23 and 24)

**IMPORTANT:** DECK MUST BE LEVEL SIDE-TO-SIDE. IF THE FOLLOWING FRONT-TO-BACK ADJUSTMENT IS NECESSARY, BE SURE TO ADJUST BOTH FRONT LINKS EQUALLY SO MOWER WILL STAY LEVEL SIDE-TO-SIDE.

To obtain the best cutting results, the mower housing should be adjusted so that the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "D" directly in front and behind the mandrel at bottom edge of mower housing as shown.

- Before making any necessary adjustments, check that both front links are equal in length. Both links should be approximately 10-3/8".
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower loosen nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nuts "F" against trunnion on both front links.
- To raise front of mower, loosen nut "F" from trunnion on both front links. Tighten nut "E" on both front links an equal number of turns.
- When distance "D" is 1/8" to 1/2" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

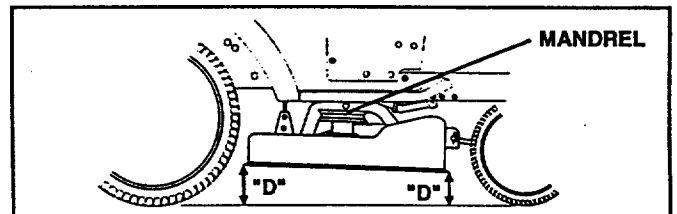


FIG. 23

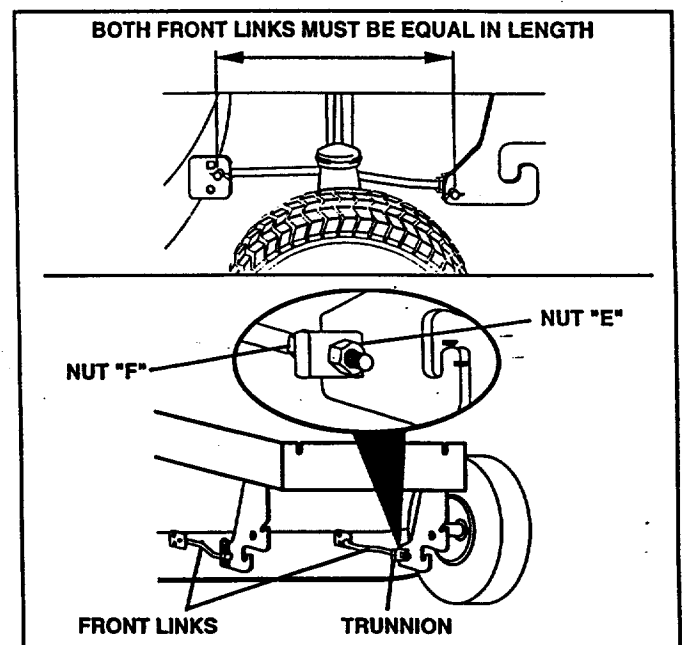


FIG. 24

# SERVICE AND ADJUSTMENTS

## TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 25)

The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake.

### BELT REMOVAL -

- Remove mower from tractor (See "TO REMOVE MOWER" in this section of this manual).
- Work belt off both mandrel pulleys and idler pulleys.
- Pull belt away from mower.

### BELT INSTALLATION -

- Install new belt in reverse order of removal.
- Make sure belt is in all pulley grooves and inside all belt guides.
- Install mower in reverse order of removal instructions.

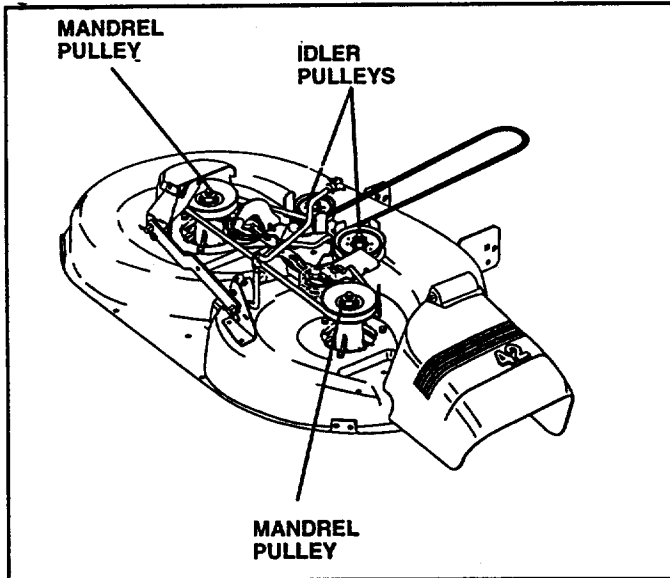


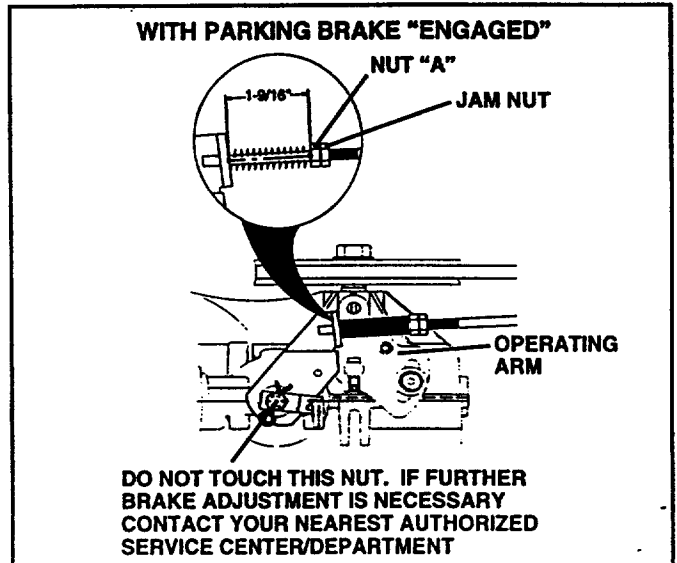
FIG. 25

## TO ADJUST BRAKE (See Fig. 26)

Your tractor is equipped with an adjustable brake system which is mounted on the side of the transaxle.

If tractor requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-9/16", loosen jam nut and turn nut "A" until distance becomes 1-9/16". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.



DO NOT TOUCH THIS NUT. IF FURTHER BRAKE ADJUSTMENT IS NECESSARY CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT

FIG. 26

## TO REPLACE MOTION DRIVE BELT (See Fig. X)

Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on bottom side of left footrest.

- Remove mower (See "TO REMOVE MOWER" in this section of this manual.)
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Carefully remove belt upwards from transmission input pulley and over cooling fan blades.
- Pull belt toward front of tractor and remove downward from around engine pulley.
- Install new belt by reversing above procedure.

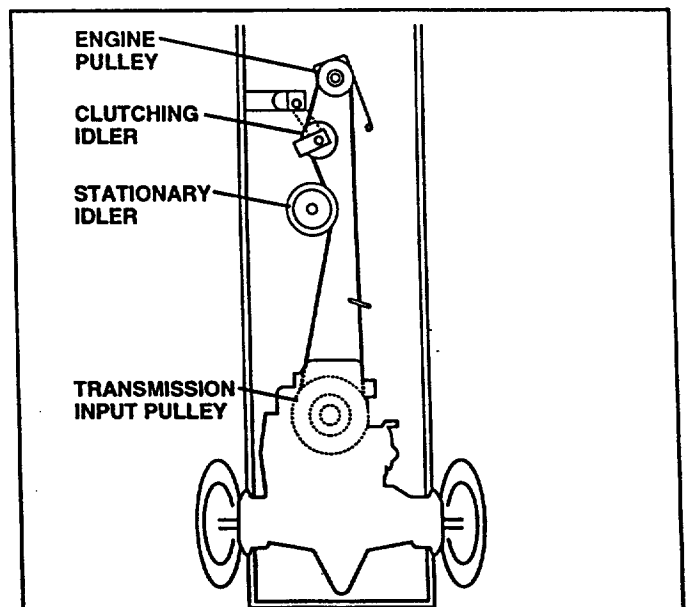


FIG. 27

# SERVICE AND ADJUSTMENTS

## TO ADJUST MOTION CONTROL LEVER (See Fig. 28)

The motion control lever has been preset at the factory and adjustment should not be necessary.

If for any reason the motion control lever will not hold its position while at a selected speed, it may be adjusted at the friction pack located on the right side of transmission.

- Park tractor on level surface. Stop tractor by turning ignition key to "OFF" position, and engage parking brake.
- Adjust motion control lever by tightening adjustment locknut one half (1/2) turn.

**NOTE:** If for any reason the effort to move the motion control lever becomes too excessive, reverse the above adjustment procedure by loosening locknut 1/4 to 1/2 turn.

Road test tractor after adjustment and repeat procedure if necessary.

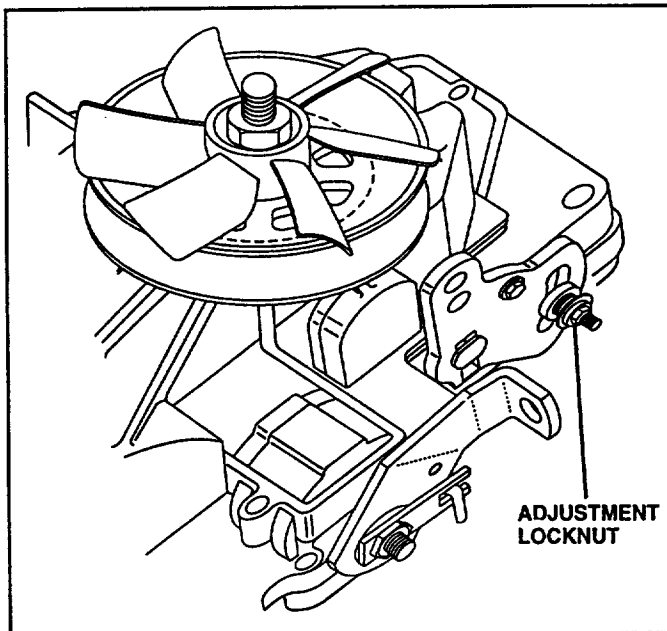


FIG. 28

## TRANSMISSION REMOVAL/REPLACEMENT

Should your transmission require removal for service or replacement, it should be purged after reinstallation before operating the tractor. See "PURGE TRANSMISSION" in Operation section of this manual.

## TO ADJUST STEERING WHEEL ALIGNMENT

If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble per instructions in the Assembly section of this manual.

## FRONT WHEEL TOE-IN ADJUSTMENT

Front wheel toe-in is required for proper steering operation. Toe-in was set at the factory and adjustment should not be necessary. If parts in the front axle or steering mechanism have been replaced or damaged, check toe-in and adjust if necessary.

## TO CHECK TOE-IN (See Fig. 29)

- Position front wheels straight ahead.
- Measure distance between wheels at front and rear of tires (dimensions "A" and "B").
- Front dimension "A" should be 1/8" to 1/4" less than rear dimension "B".

## TO ADJUST TOE-IN (See Figs. 29 and 30)

- Loosen jam nuts at adjustment sleeves on tie rod.
- Adjust tie rod until dimension "A" is 1/8" to 1/4" less than dimension "B".
- Tighten jam nuts securely.

## FRONT WHEEL CAMBER

The front wheel camber is not adjustable on your tractor. If damage has occurred to affect the front wheel camber, contact your nearest authorized service center/department.

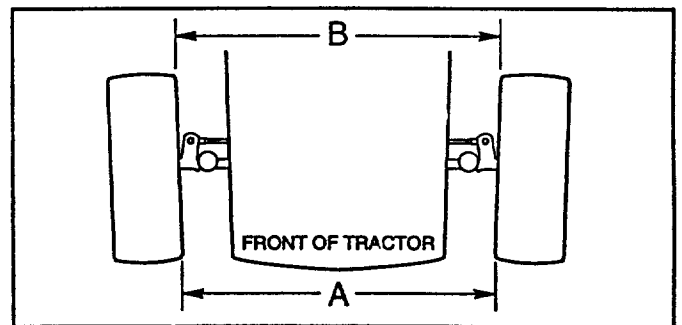


FIG. 29

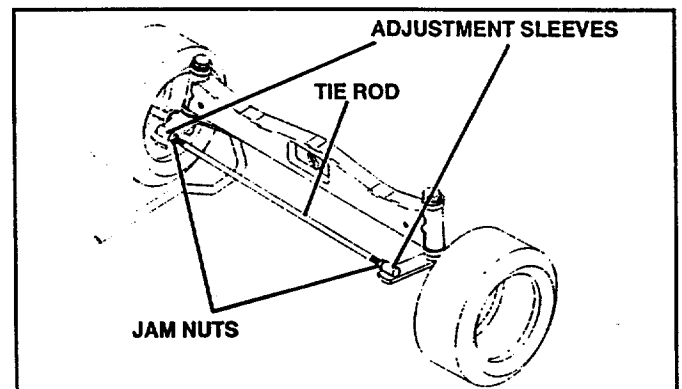


FIG. 30

## TO REMOVE WHEEL FOR REPAIRS (See Fig. 31)

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal (rear wheel contains a square key - Do not lose).
- Repair tire and reassemble.
- On rear wheels only: align grooves in rear wheel hub and axle. Insert square key.
- Replace washers and snap retaining ring securely in axle groove.
- Replace axle cover.

**NOTE:** To seal tire punctures and prevent flat tires due to slow leaks, tire sealant may be purchased from your local parts dealer. Tire sealant also prevents tire dry rot and corrosion.

# SERVICE AND ADJUSTMENTS

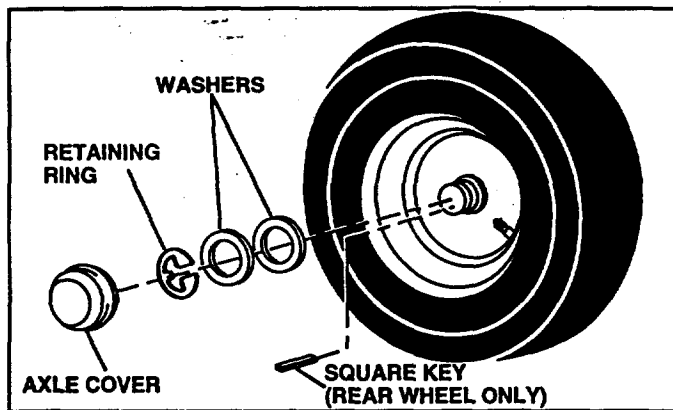


FIG. 31

## TO START ENGINE WITH A WEAK BATTERY (See Fig. 32)



**CAUTION:** Lead-acid batteries generate explosive gases. Keep sparks, flame and smoking materials away from batteries. Always wear eye protection when around batteries.

If your battery is too weak to start the engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:

**IMPORTANT:** YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUND SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUND SYSTEM. DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

### TO ATTACH JUMPER CABLES -

- Connect each end of the RED cable to the POSITIVE (+) terminal of each battery, taking care not to short against chassis.
- Connect one end of the BLACK cable to the NEGATIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to good CHASSIS GROUND, away from fuel tank and battery.

### TO REMOVE CABLES, REVERSE ORDER -

- BLACK cable first from chassis and then from the fully charged battery.
- RED cable last from both batteries.

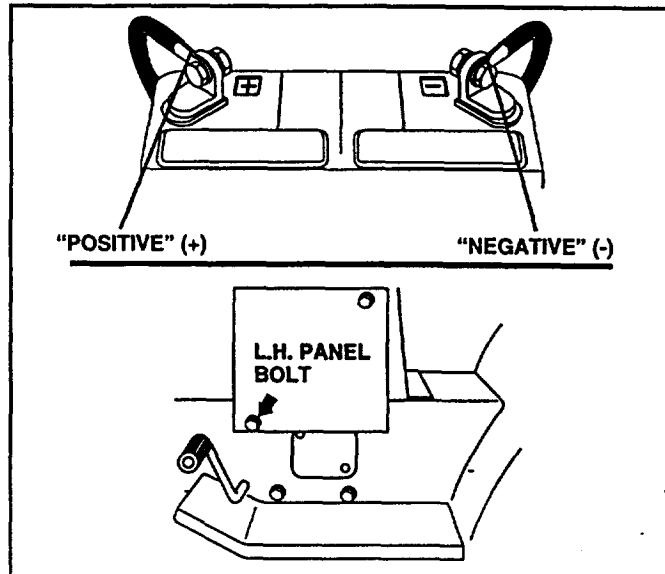


FIG. 32

## TO REPLACE HEADLIGHT BULB

- Raise hood.
- Pull bulb holder out of the hole in the backside of the grill.
- Replace bulb in holder and push bulb holder securely back into the hole in the backside of the grill.
- Close hood.

## INTERLOCKS AND RELAYS

Loose or damaged wiring may cause your tractor to run poorly, stop running, or prevent it from starting.

- Check wiring. See electrical wiring diagram in the Repair Parts section of this manual.

## TO REPLACE FUSE

Replace with 30 amp automotive-type plug-in fuse. The fuse holder is located behind the dash.

## TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 33)

- Raise hood.
- Unsnap headlight wire connector.
- Stand in front of tractor. Grasp hood at sides, tilt toward engine and lift off of tractor.
- To replace, reverse above procedure.



# SERVICE AND ADJUSTMENTS

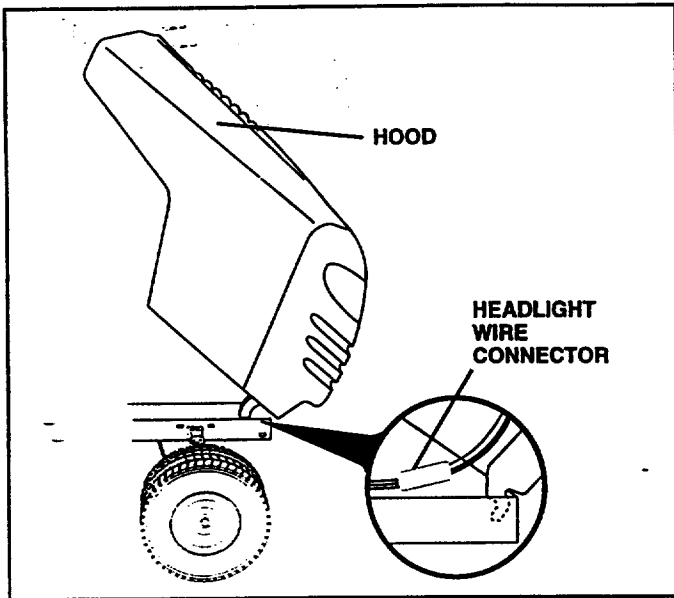


FIG. 33

## ENGINE

### TO ADJUST THROTTLE CONTROL CABLE (See Fig. 34)

The throttle control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- With engine not running, move throttle control lever to fast position.
- Check that swivel is against stop. If it is not, loosen cable clamp screw and pull cable back until swivel is against stop. Tighten cable clamp screw securely.

### TO ADJUST CHOKE CONTROL (See Fig. 35)

The choke control has been preset at the factory and adjustment should not be necessary. Check adjustment as described below before loosening cable. If adjustment is necessary, proceed as follows:

- With engine not running, move choke control (located on dash panel) to full choke position.
- Loosen knob and remove cover assembly from air cleaner.
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- Replace air cleaner cover assembly and tighten knob.

### TO ADJUST CARBURETOR

Your carburetor is not adjustable. If your engine does not operate properly due to suspected carburetor problems, take your tractor to an authorized service center for repair and/or adjustment.

High speed stop is factory adjusted. Do not adjust - damage may result.

**IMPORTANT: NEVER TAMPER WITH THE ENGINE GOVERNOR, WHICH IS FACTORY SET FOR PROPER ENGINE SPEED. OVERSPEEDING THE ENGINE ABOVE THE FACTORY HIGH SPEED SETTING CAN BE DANGEROUS. IF YOU THINK THE ENGINE-GOVERNED HIGH SPEED NEEDS ADJUSTING, CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTER/DEPARTMENT, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.**

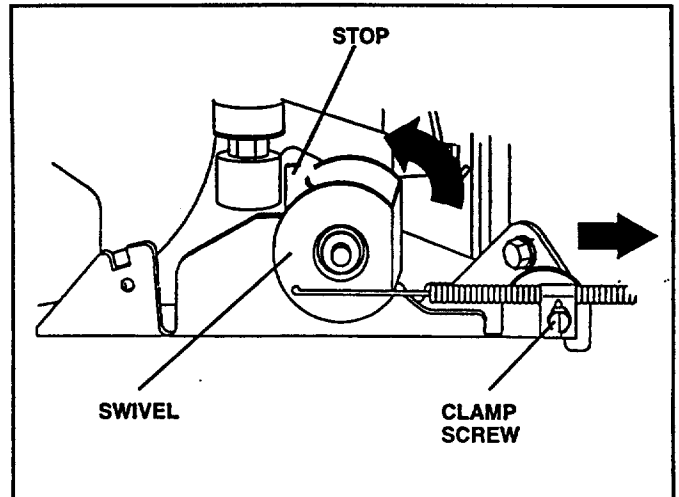


FIG. 34

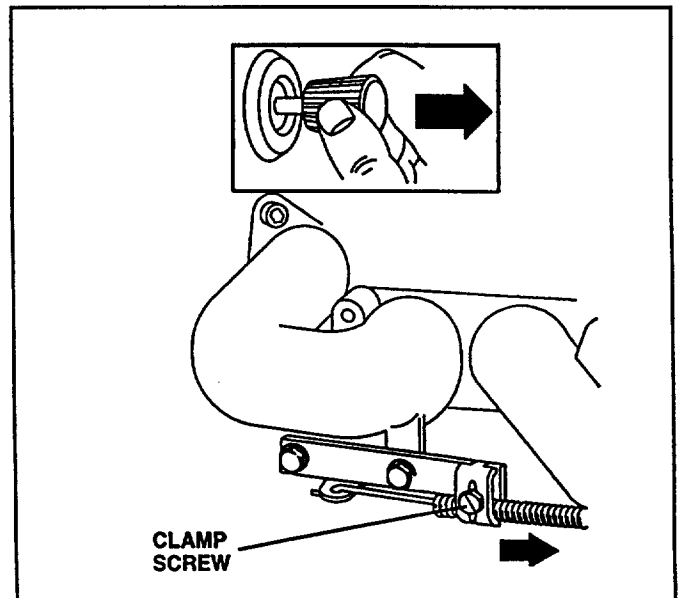


FIG. 35

# STORAGE

Immediately prepare your tractor for storage at the end of the season or if the tractor will not be used for 30 days or more.



**CAUTION:** Never store the tractor with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.

## TRACTOR

Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Store in a clean, dry area.

- Clean entire tractor (See "CLEANING" in the Customer Responsibilities section of this manual).
- Inspect and replace belts, if necessary (See belt replacement instructions in the Service and Adjustments section of this manual).
- Lubricate as shown in the Customer Responsibilities section of this manual.
- Be sure that all nuts, bolts and screws are securely fastened. Inspect moving parts for damage, breakage and wear. Replace if necessary.
- Touch up all rusted or chipped paint surfaces; sand lightly before painting.

## BATTERY

- Fully charge the battery for storage.
- After a period of time in storage, battery may require recharging.
- To help prevent corrosion and power leakage during long periods of storage, battery cables should be disconnected and battery cleaned thoroughly (see "TO CLEAN BATTERY AND TERMINALS" in the Customer Responsibilities section of this manual).
- After cleaning, leave cables disconnected and place cables where they cannot come in contact with battery terminals.
- Be sure battery drain tube is securely attached.
- If battery is removed from tractor for storage, do not store battery directly on concrete or damp surfaces.

## ENGINE

### FUEL SYSTEM

**IMPORTANT:** IT IS IMPORTANT TO PREVENT GUM DEPOSITS FROM FORMING IN ESSENTIAL FUEL SYSTEM PARTS SUCH AS CARBURETOR, FUEL FILTER, FUEL HOSE, OR TANK DURING STORAGE. ALSO, EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF AN ENGINE WHILE IN STORAGE.

- Drain the fuel tank.
- Start the engine and let it run until the fuel lines and carburetor are empty.
- Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.
- Use fresh fuel next season.

**NOTE:** Fuel stabilizer is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow the mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow the stabilizer to reach the carburetor. Do not drain the gas tank and carburetor if using fuel stabilizer.

### ENGINE OIL

Drain oil (with engine warm) and replace with clean engine oil. (See "ENGINE" in the Customer Responsibilities section of this manual).

### CYLINDER(S)

- Remove spark plug(s).
- Pour one ounce of oil through spark plug hole(s) into cylinder(s).
- Turn ignition key to "START" position for a few seconds to distribute oil.
- Replace with new spark plug(s).

## OTHER

- Do not store gasoline from one season to another.
- Replace your gasoline can if your can starts to rust. Rust and/or dirt in your gasoline will cause problems.
- If possible, store your tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your tractor to rust.

**IMPORTANT:** NEVER COVER TRACTOR WHILE ENGINE AND EXHAUST ARE STILL WARM.

# TROUBLESHOOTING POINTS

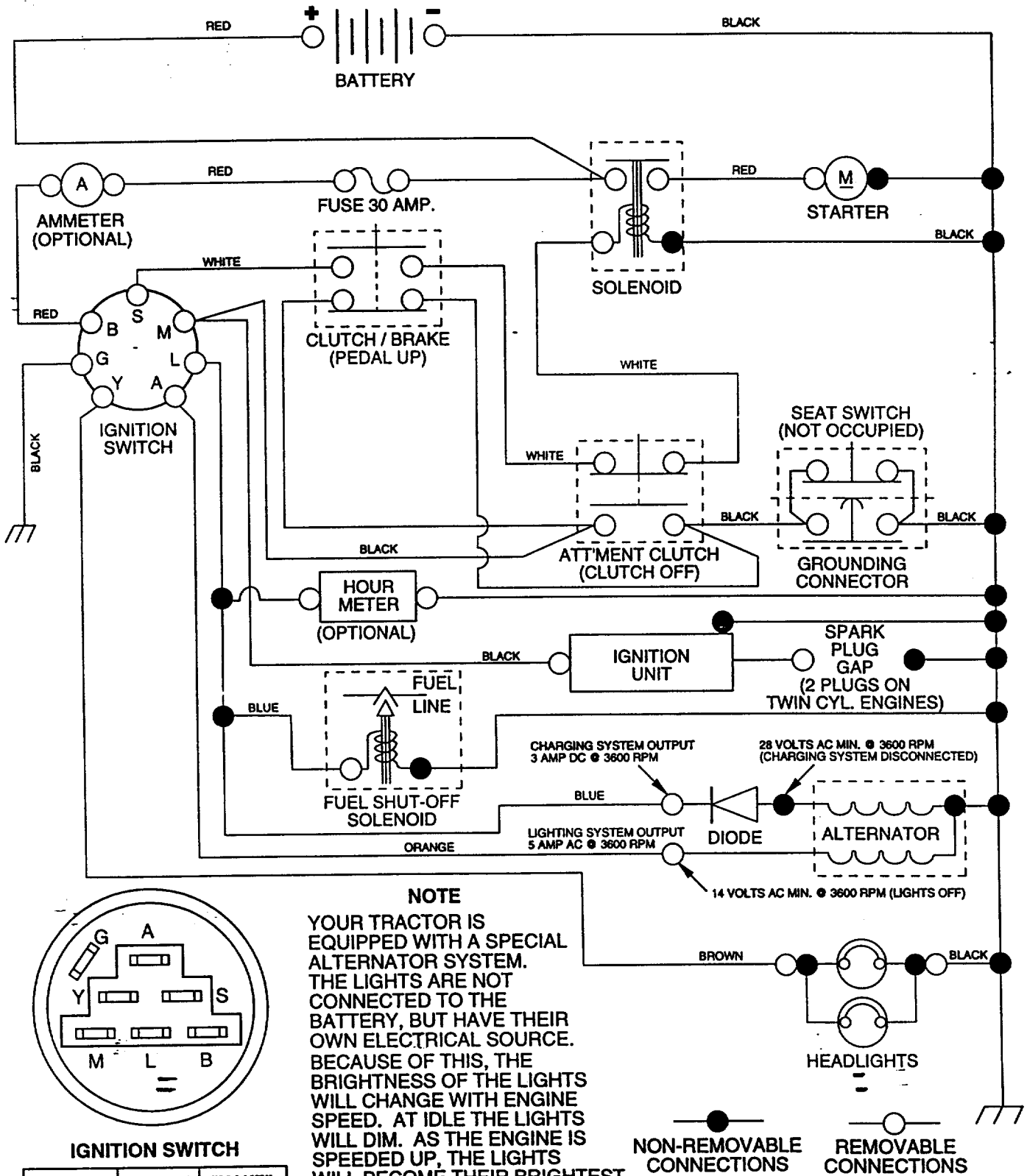
PROBLEM	CAUSE	CORRECTION
Will not start	<ol style="list-style-type: none"> <li>1. Out of fuel.</li> <li>2. Engine not "CHOKED" properly.</li> <li>3. Engine flooded.</li> <li>4. Bad spark plug.</li> <li>5. Dirty air filter.</li> <li>6. Dirty fuel filter.</li> <li>7. Water in fuel.</li> <li>8. Loose or damaged wiring.</li> <li>9. Carburetor out of adjustment.</li> <li>10. Engine valves out of adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill fuel tank.</li> <li>2. See "TO START ENGINE" in Operation section.</li> <li>3. Wait several minutes before attempting to start.</li> <li>4. Replace spark plug.</li> <li>5. Clean/replace air filter.</li> <li>6. Replace fuel filter.</li> <li>7. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>8. Check all wiring.</li> <li>9. See "To Adjust Carburetor" in Service Adjustments section.</li> <li>10. Contact an authorized service center/department.</li> </ol>
Hard to start	<ol style="list-style-type: none"> <li>1. Dirty air filter.</li> <li>2. Bad spark plug.</li> <li>3. Weak or dead battery.</li> <li>4. Dirty fuel filter.</li> <li>5. Stale or dirty fuel.</li> <li>6. Loose or damaged wiring.</li> <li>7. Carburetor out of adjustment.</li> <li>8. Engine valves out of adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean/replace air filter.</li> <li>2. Replace spark plug.</li> <li>3. Recharge or replace battery.</li> <li>4. Replace fuel filter.</li> <li>5. Drain fuel tank and refill with fresh gasoline.</li> <li>6. Check all wiring.</li> <li>7. See "To Adjust Carburetor" in Service Adjustments section.</li> <li>8. Contact an authorized service center/department.</li> </ol>
Engine will not turn over	<ol style="list-style-type: none"> <li>1. Clutch/brake pedal not depressed.</li> <li>2. Attachment clutch is engaged.</li> <li>3. Weak or dead battery.</li> <li>4. Blown fuse.</li> <li>5. Corroded battery terminals.</li> <li>6. Loose or damaged wiring.</li> <li>7. Faulty ignition switch.</li> <li>8. Faulty solenoid or starter.</li> <li>9. Faulty operator presence switch(es).</li> </ol>	<ol style="list-style-type: none"> <li>1. Depress clutch/brake pedal.</li> <li>2. Disengage attachment clutch.</li> <li>3. Recharge or replace battery.</li> <li>4. Replace fuse.</li> <li>5. Clean battery terminals.</li> <li>6. Check all wiring.</li> <li>7. Check/replace ignition switch.</li> <li>8. Check/replace solenoid or starter.</li> <li>9. Contact an authorized service center/department.</li> </ol>
Engine clicks but will not start	<ol style="list-style-type: none"> <li>1. Weak or dead battery.</li> <li>2. Corroded battery terminals.</li> <li>3. Loose or damaged wiring.</li> <li>4. Faulty solenoid or starter.</li> </ol>	<ol style="list-style-type: none"> <li>1. Recharge or replace battery.</li> <li>2. Clean battery terminals.</li> <li>3. Check all wiring.</li> <li>4. Check/replace solenoid or starter.</li> </ol>
Loss of power	<ol style="list-style-type: none"> <li>1. Cutting too much grass/too fast.</li> <li>2. Throttle in "CHOKE" position.</li> <li>3. Build-up of grass, leaves and trash under mower.</li> <li>4. Dirty air filter.</li> <li>5. Low oil level/dirty oil.</li> <li>6. Faulty spark plug.</li> <li>7. Dirty fuel filter.</li> <li>8. Stale or dirty fuel.</li> <li>9. Water in fuel.</li> <li>10. Spark plug wire loose.</li> <li>11. Dirty engine air screen/fins.</li> <li>12. Dirty/clogged muffler.</li> <li>13. Loose or damaged wiring.</li> <li>14. Carburetor out of adjustment.</li> <li>15. Engine valves out of adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Set in "Higher Cut" position/reduce speed.</li> <li>2. Adjust throttle control.</li> <li>3. Clean underside of mower housing.</li> <li>4. Clean/replace air filter.</li> <li>5. Check oil level/change oil.</li> <li>6. Clean and regap or change spark plug.</li> <li>7. Replace fuel filter.</li> <li>8. Drain fuel tank and refill with fresh gasoline.</li> <li>9. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>10. Connect and tighten spark plug wire.</li> <li>11. Clean engine air screen/fins.</li> <li>12. Clean/replace muffler.</li> <li>13. Check all wiring.</li> <li>14. See "To Adjust Carburetor" in Service Adjustments section.</li> <li>15. Contact an authorized service center/department.</li> </ol>
Excessive vibration	<ol style="list-style-type: none"> <li>1. Worn, bent or loose blade.</li> <li>2. Bent blade mandrel.</li> <li>3. Loose/damaged part(s).</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade. Tighten blade bolt.</li> <li>2. Replace blade mandrel.</li> <li>3. Tighten loose part(s). Replace damaged parts.</li> </ol>

# TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION
Engine continues to run when operator leaves seat with attachment clutch engaged	<ol style="list-style-type: none"> <li>1. Faulty operator-safety presence control system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring, switches and connections. If not corrected, contact an authorized service center/department.</li> </ol>
Poor cut - uneven	<ol style="list-style-type: none"> <li>1. Worn, bent or loose blade.</li> <li>2. Mower deck not level.</li> <li>3. Buildup of grass, leaves, and trash under mower.</li> <li>4. Bent blade mandrel.</li> <li>5. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade. Tighten blade bolt.</li> <li>2. Level mower deck.</li> <li>3. Clean underside of mower housing.</li> <li>4. Replace blade mandrel.</li> <li>5. Clean around mandrels to open vent holes.</li> </ol>
Mower blades will not rotate	<ol style="list-style-type: none"> <li>1. Obstruction in clutch mechanism.</li> <li>2. Worn/damaged mower drive belt.</li> <li>3. Frozen idler pulley.</li> <li>4. Frozen blade mandrel.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove obstruction.</li> <li>2. Replace mower drive belt.</li> <li>3. Replace idler pulley.</li> <li>4. Replace blade mandrel.</li> </ol>
Poor grass discharge	<ol style="list-style-type: none"> <li>1. Engine speed too slow.</li> <li>2. Travel speed too fast.</li> <li>3. Wet grass.</li> <li>4. Mower deck not level.</li> <li>5. Low/uneven tire air pressure.</li> <li>6. Worn, bent or loose blade.</li> <li>7. Buildup of grass, leaves and trash under mower.</li> <li>8. Mower drive belt worn.</li> <li>9. Blades improperly installed.</li> <li>10. Improper blades used.</li> <li>11. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol style="list-style-type: none"> <li>1. Place throttle control in "FAST" position.</li> <li>2. Shift to slower speed.</li> <li>3. Allow grass to dry before mowing.</li> <li>4. Level mower deck.</li> <li>5. Check tires for proper air pressure.</li> <li>6. Replace/sharpen blade. Tighten blade bolt.</li> <li>7. Clean underside of mower housing.</li> <li>8. Replace mower drive belt.</li> <li>9. Reinstall blades sharp edge down.</li> <li>10. Replace with blades listed in this manual.</li> <li>11. Clean around mandrels to open vent holes.</li> </ol>
Headlight(s) not working (if so equipped)	<ol style="list-style-type: none"> <li>1. Switch is "OFF".</li> <li>2. Bulb(s) burned out.</li> <li>3. Faulty light switch.</li> <li>4. Loose or damaged wiring.</li> <li>5. Blown fuse.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn switch "ON".</li> <li>2. Replace bulb(s).</li> <li>3. Check/replace light switch.</li> <li>4. Check wiring and connections.</li> <li>5. Replace fuse.</li> </ol>
Battery will not charge	<ol style="list-style-type: none"> <li>1. Bad battery cell(s).</li> <li>2. Poor cable connections.</li> <li>3. Faulty regulator (if so equipped).</li> <li>4. Faulty alternator.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace battery.</li> <li>2. Check/clean all connections.</li> <li>3. Replace regulator.</li> <li>4. Replace alternator.</li> </ol>
Loss of drive	<ol style="list-style-type: none"> <li>1. Freewheel control in "disengaged" position.</li> <li>2. Motion drive belt worn, damaged, or broken.</li> <li>3. Air trapped in transmission during shipment or servicing.</li> </ol>	<ol style="list-style-type: none"> <li>1. Place freewheel control in "engaged" position.</li> <li>2. Replace motion drive belt.</li> <li>3. Purge transmission.</li> </ol>
Engine "backfires" when turning engine "OFF"	<ol style="list-style-type: none"> <li>1. Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.</li> </ol>	<ol style="list-style-type: none"> <li>1. Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.</li> </ol>

# TRACTOR -- MODEL NUMBER AYP9187B89

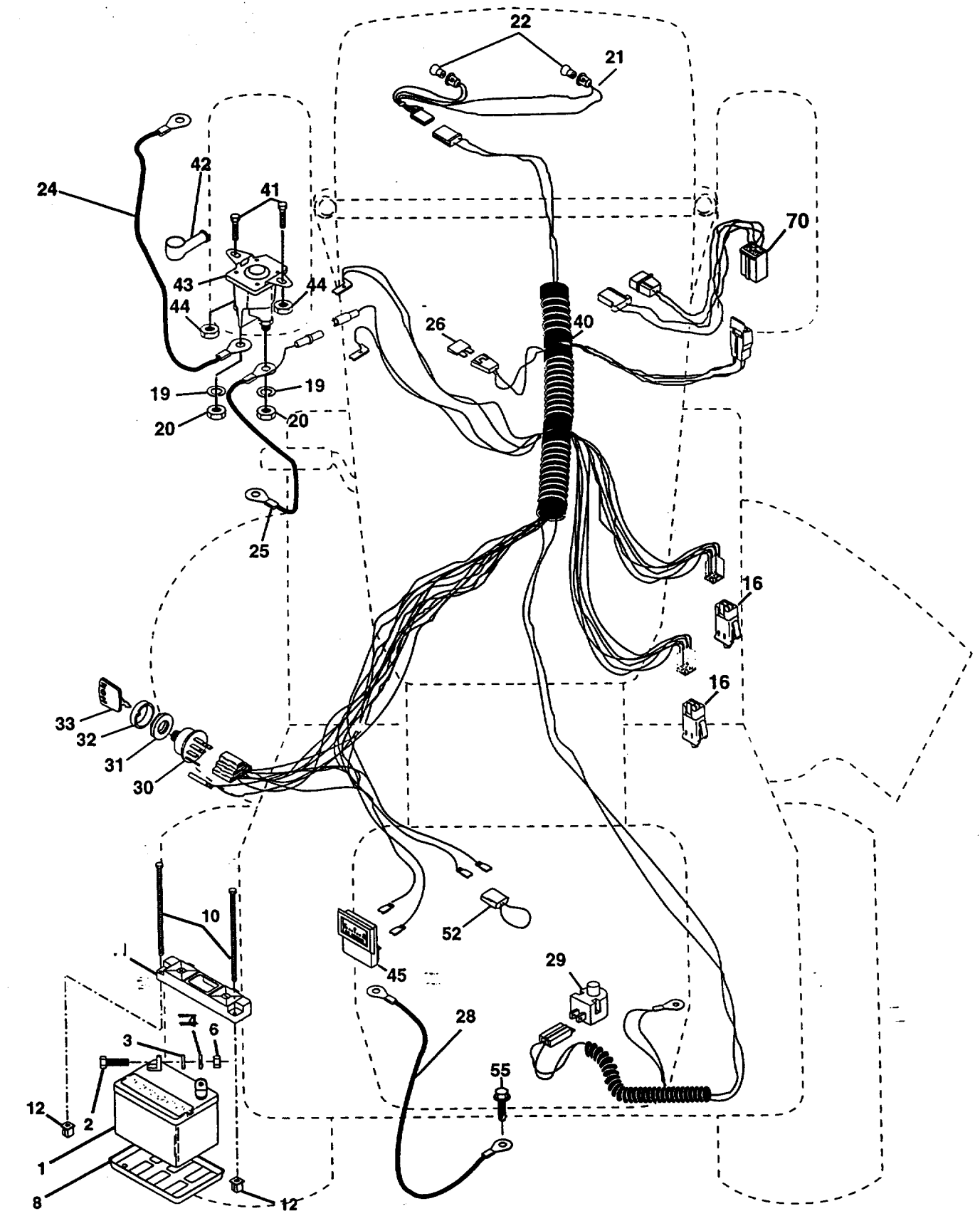
## SCHEMATIC



# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

## ELECTRICAL



# REPAIR PARTS

## TRACTOR - - MODEL NUMBER AYP9187B89

### ELECTRICAL

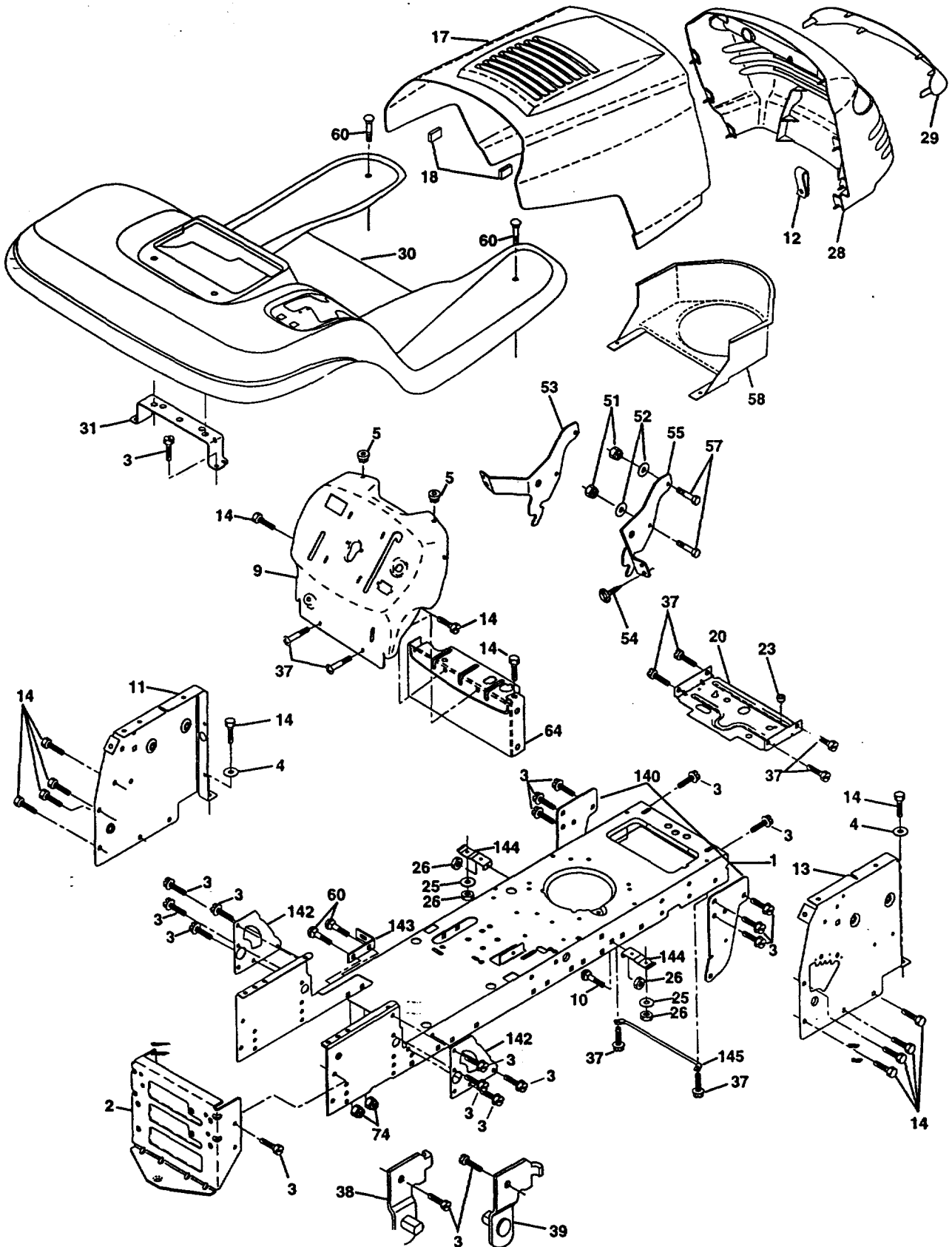
KEY PART NO. NO.	DESCRIPTION
1 163465	Battery 12 Volt 28 Amp w/acid
2 74760412	Bolt Hex Hd 1/4-20unc X 3/4
3 19091016	Washer 9/32 X 5/8 X 16 Ga
4 10040400	Washer Lock Hvy Helical 1/4
6 73220400	Nut Fin Hex 1/4-20 Unc
8 7603J	Tray Battery
10 145211	Bolt Batry. Front
11 150109	Hold Down Battery Front
12 145769	Nut Push Nylon 1/4"
16 153664	Switch Interlock Push-In
19 10090400	Washer Lock 1/4
20 73350400	Nut Jam Hex 1/4-20 Unc
21 136850	Harness Socket Light w/4152J
22 4152J	Bulb, Light # 1156
24 4799J	Cable Battery 6ga 11" Red
25 146148	Cable Battery 6 Ga Red w/16 wire
26 108824X	Fuse 30 Amp Auto Green
28 145491	Cable Ground 6ga 21"black
29 121305X	Switch Plunger Nc Gray
30 140301	Switch Ign 4 Pos W/L P/L
31 124211X	Nut Ignition
32 141226	Cover Sw Key
33 122147X	Key Ign Molded Generic
40 156442	Harness Ign
41 71110408	Bolt Fin Hex 1/4-20uncx 1/2
42 131563	Cover Terminal Red
43 145673	Solenoid
44 73640400	Nut Keps Blk 1/4-20 Unc
45 121433X	Ammeter Rectangular 6 Amp
52 141940	Protection Loop
55 17490508	Screw Thrdol. 5/16-18 x 7.5
70 140422	Harness Eng B&S 14 OHV Dual

**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### CHASSIS AND ENCLOSURES





# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### CHASSIS AND ENCLOSURES

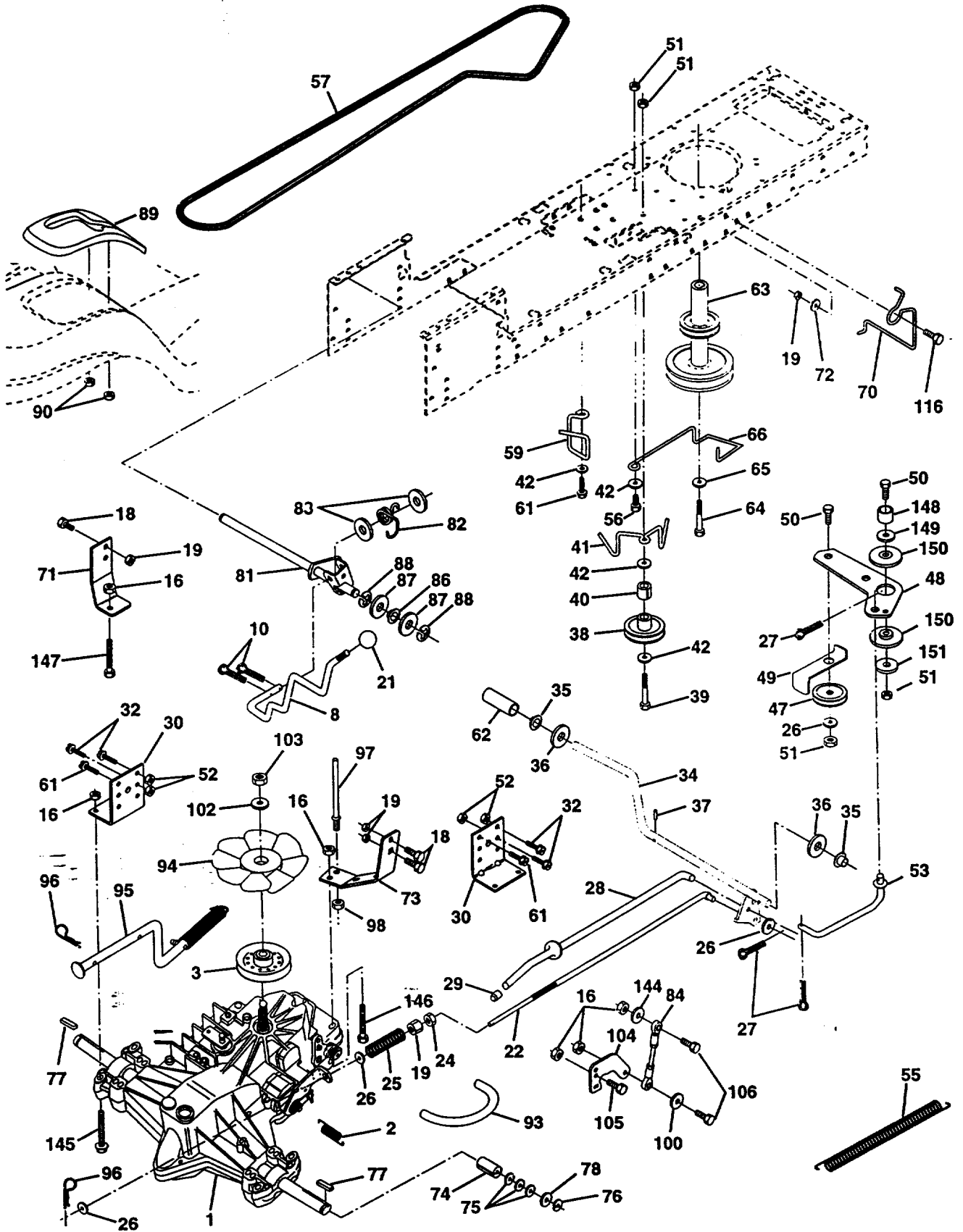
KEY NO.	PART NO.	DESCRIPTION
1	160392	Chassis Assembly
2	140356	Drawbar
3	17490612	Screw Thdrol. 3/8-16 x 3/4 Ty-Tt
4	19131216	Washer 13/32 x 3/4 x 16 Ga.
5	155272	Bumper Hood/Dash
9	161917X012	Dash
10	72140608	Bolt Carriage 3/8-16 x 3/4
11	155927	Panel Asm. Dash Lh Private label
12	145660	Clip Tinnerman Grile P/L
13	155936	Panel Dash Rh Lt Private label
14	17490608	Screw Thdrol. 3/8-16 x 1/2 Ty-Tt
17	159639X418	Hood Pnt Steel Private Label
18	126938X	Bumper Hood
20	156437	Plate Mtg Battery/Fuel Tank
23	124028X	Bushing Snap Nyl. Blk Fuel Line
25	19131312	Washer 13/32 x 13/16 x 12 Ga.
26	73800600	Nut Lock Hex w/Insert 3/8-16 UNC
28	157428	Grill Private Lable Euro
29	146654	Lens Grille Private label Euro
30	151287X418	Fender/Footrest
31	139976	Bracket Fender Support
37	17490508	Screw Thdrol. 5/16-18 x 1/2 Tyt
38	139886	Bracket Asm. Pvt. Lh Mwr. Rear
39	139887	Bracket Asm. Pvt. Rh Mwr. Rear
51	73800400	Nut Lock Hex W/Ins. 1/4-20
52	19091416	Washer 9/32 x 7/8 x 16 Ga.
53	144697	Lh Grille Bracket
54	161464	Screw Hex 8-18 x 7/8
55	144696	Bracket, Grill Rh
57	74780412	Bolt Fin Hex 1/4-20 x .75
58	162266	Air Duct Intake B&S Intek Twin
60	72140606	Bolt, Rdhd Sqnk 3/8-16 UNC x 3/4
64	154798	Dash Lower STLT
74	73680600	Nut Crownlock 3/8-16 unc
140	158418	Bracket Suspension Front
142	156095	Plate Reinforcement STLT
143	154966	Bracket Swaybar Chassis
144	154207	Bracket Pnt Footrest STLT
145	156524	Rod Pivot Chassis/Hood

NOTE: All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

## DRIVE



# REPAIR PARTS

## TRACTOR - - MODEL NUMBER AYP9187B89

### DRIVE

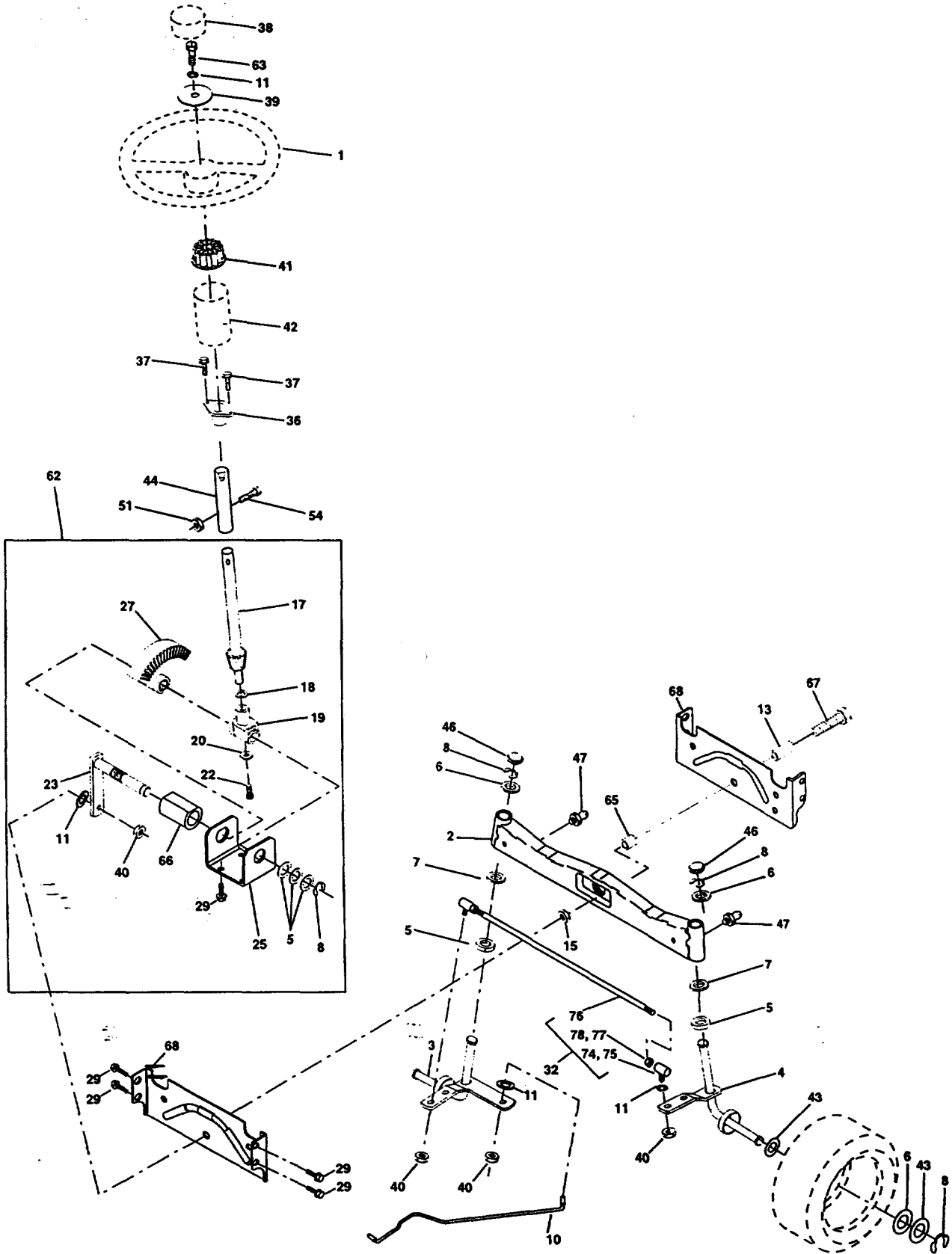
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	150071	Transaxle (See Breakdown) Hydro Gear Model 319-0650	64	71170764	Bolt, Hex
2	142431	Spring, Return, Brake	65	10040700	Washer
3	143995	Pulley, Transaxle	66	154778	Keeper Belt Engine
8	154792	Rod Shift Hydro LT	70	134683	Keeper Belt Engine
10	76020416	Pin Cotter 1/8 x 1 CAD	71	140158	Strap Torque Lh Hydro
16	73800500	Nut Lock Hex W/Ins 5/16-18 Unc P	72	19132012	Washer 13/32 x 1-1/4 x 12 Gauge
18	74780616	Bolt Fin Hex 3/8-16 Unc x 1 Gr. 5	73	156347	Strap Torque Rh Hydro
19	73800600	Nut Lock Hex W/Wsh 3/8-16 Unc	74	121199X	Spacer, Split
21	106933X	Knob, Round 1/2-13	75	121749X	Washer 25/32 x 1-1/4 x 16 Gauge
22	145627	Rod, Brake Hydro	76	12000001	E-Ring
24	73350600	Nut	77	123583X	Key, Square
25	106888X	Spring, Brake Rod	78	121748X	Washer 25/32 x 1-5/8 x 16 Gauge
26	19131316	Washer	81	156046	Shaft Asm. Cross Hydro
27	76020412	Pin Cotter 1/8 x 3/4 CAD.	82	123782X	Spring Torsion T/A
28	145204	Rod, Parking Brake	83	19171216	Washer 17/32 x 3/4 x 16 Ga.
29	124236X	Cap, Parking Brake Red	84	161901	Rod, Tie
30	130807	Bracket, Transaxle	86	157480	Bushing
32	74760512	Bolt Hex Hd 5/16-18 Unc x 3/4	87	19212016	Washer 21/32 x 1-1/4 x 16 Ga.
34	155071	Shaft, Foot Pedal	88	12000008	Ring Klip #5304-62
35	120183X	Bearing, Nylon	89	158388	Console, Hydro
36	19211616	Washer	90	124346X	Nut Self Thd Wshd 1/4
37	1572H	Pin, Roll	93	142564	Line Fuel Hydro 4"
38	123674X	Pulley, Idler, Flat	94	140462	Fan, Hydro 7"
39	74760644	Bolt	95	144643	Control Asm Bypass Hydro
40	4470J	Spacer, Split	96	4497H	Retainer Spring 1" Zinc/Cad
41	154777	Keeper, Belt Idler	97	140469	Keeper Belt Rh Hydro 0750. 18/20"
42	19131312	Washer 13/32 x 13/16 x 12 Gauge	98	73510600	Nut Keps Hex 3/8-16 Unc
47	127783	Pulley, Idler, V-Groove	100	19111216	Washer 11/32 x 3/4 x 16 Ga.
48	154407	Bellcrank Clutch	102	141322	Washer Belville .501D x 1.50D
49	123205X	Retainer, Belt	103	73940800	Nut, Hex, Jam Toplock 1/2-20 UNF
50	74760624	Bolt	104	140156	Arm, Control Hydro
51	73680600	Nut Crownlock 3/8-16 UNC	105	71070516	Screw Cap Hex 5/16 x 18 x 1
52	73680500	Nut Crownlock 5/16-18 UNC	106	74780520	Bolt Fin Hex 5/16-18 Unc x 1-1/4
53	105710X	Link, Clutch	116	72110610	Bolt Rdhd Sq Neck 3/8-16 x 1.25
55	105709X	Spring, Return, Clutch	144	19111016	Washer
56	74760620	Bolt Fin Hex 3/8-16 UNC x 1-1/4	145	74490540	Bolt Hex Flghd 5/16-18 x Gr. 5
57	140294	V-Belt, Ground Drive	146	74490536	Bolt Hex Flghd
59	140312	Keeper, Center Span	147	74490524	Bolt Hex Flghd
61	17490612	Screw Thdrol. 3/8-16 x 3/4 Ty. TT	148	159103	Spacer
62	8883R	Cover, Pedal	149	122052X	Spacer Retainer
63	140186	Pulley, Engine	150	150935	Bushing Nylon Collered
			151	19133210	Nut Self Thd Wshd

**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

## STEERING ASSEMBLY



# REPAIR PARTS

## TRACTOR - - MODEL NUMBER AYP9187B89

### STEERING ASSEMBLY

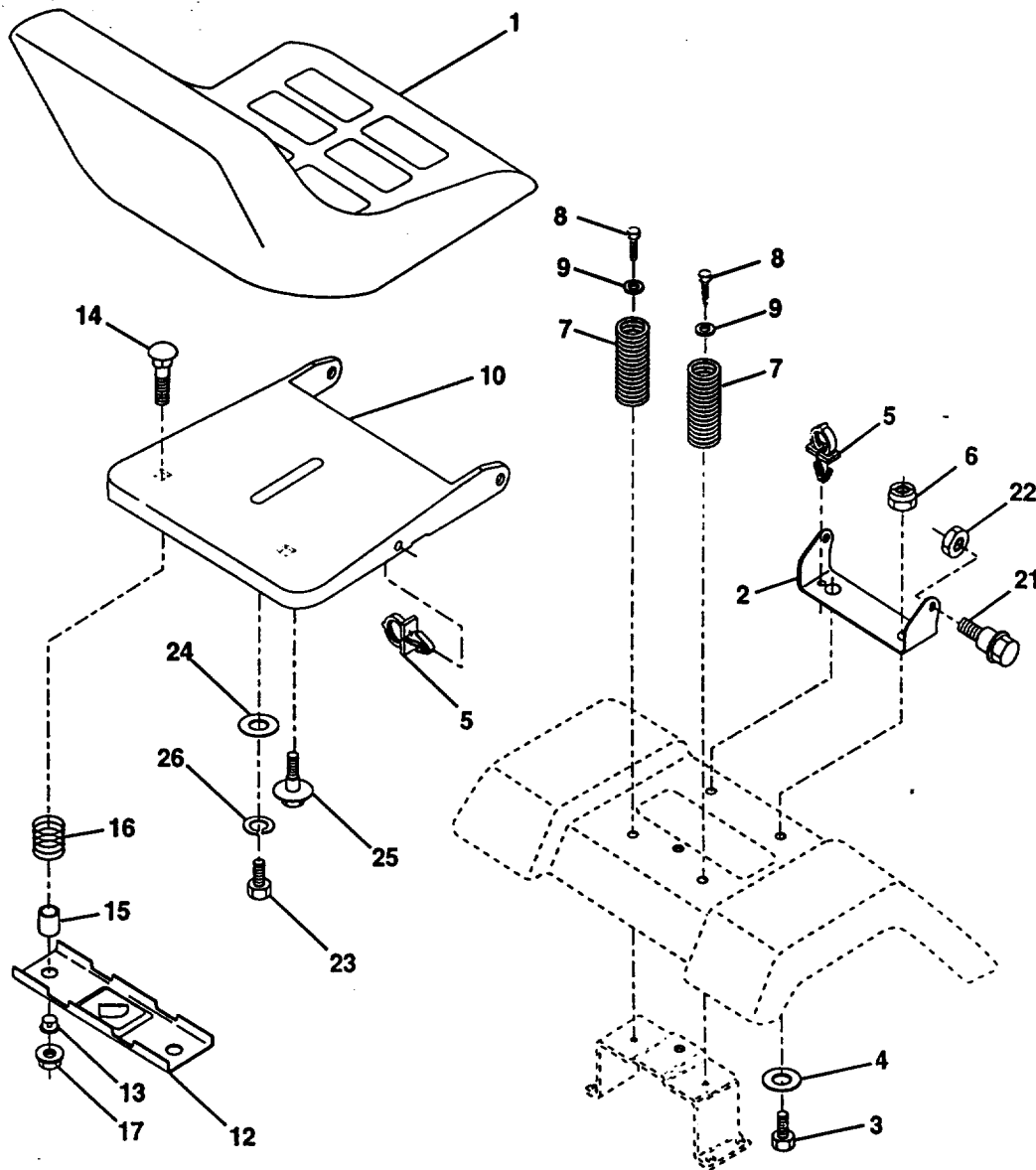
KEY NO.	PART NO.	DESCRIPTION
1	140044	Wheel Steering Ayp/kelch Blk
2	137094	Axle Front Cast
3	157479	Spindle Asm LH
4	157478	Spindle Asm RH
5	6266H	Bearing Race Thrust Harden
6	121748X	Washer 25/32 X 1-5/8 X 16 Ga
7	19272016	Washer 27/32 X 1-1/4 X 16 Ga
8	12000029	Ring Klip #15304-75
10	154432	Link Drag Extended Cast
11	10040600	Washer Lock Hvy Hlcl Spr 3/8
13	154779	Spacer Bearing Axle Front
15	73901000	Nut Lock Flange 5/8-11 Unc
17	156546	Shaft Asm Strg
18	57079	Washer Thrust 515x 750x 033
19	124035X	Support Shaft
20	126684X	Washer Shim 1/4 X 5/8 X 062
22	71200410	Screw Hex Socket 1/4-20 x 5/8
23	127501	Shaft Asm Pittman
25	154406	Bracket Steering
27	136874	Gear Sector 22 Teeth
29	17490612	Screw Thdrol 3/8-16x3/4 Ty-tt
32	137347	Rod Asm Tie Ball Jt Adj
36	155099	Bushing Steering
37	152927	Screw
38	140045	Cap Wheel Steer Ayp
39	19133808	Washer 13/32 x 2-3/8 x 8 Ga
40	7810H	Nut Lock Center 3/8-24 Unf
41	100711L	Adapter Wheel Strg .640/.635
42	145054	Boot Shaft Steering
43	121749X	Washer 25/32 X 1 1/4 X 16 Ga
44	153720	Shaft Extension Steering Non Adjust.
46	121232X	Cap Spindle Fr Top Blk
47	6855M	Fitting Grease
51	73800500	Nut Lock Hex W/Ins. 5/16-18 Unc P
54	74780520	Bolt Fin Hex 5/16-18 Unc P
62	156594	Kit, Steering Assembly
63	74780616	Bolt Fin Hex 3/8-16unc x 1
65	154780	Spacer Axle
66	154404	Bearing Arm Pittman
67	74781044	Bolt Fin Hex 5/8-11 Unc x 2-3/4
68	154429	Brace Axle
74	109850	Joint Asm Ball Rh
75	109851	Joint Asm Ball Lh
76	137156	Rod Tie Ball J Adj
77	73700600	Nut Hex Jam 3/8-24 Unf Lh
78	73360600	Nut Hex Jam 3/8-24 Unf

NOTE: All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### SEAT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	140117	Seat
2	140551	Bracket Pivot Seat 8 720
3	74760616	Bolt Fin Hex 3/8-16 Unc x 1
4	19131610	Washer Flat 13/32 x 1 x 10 Ga
5	145006	Clip Push In Hinged
6	73800600	Nut Crownlock 3/8-16 Unc
7	124181X	Spring Seat Cprsn 2 250 Blk Zi
8	17490616	Screw Thdrol 3/8-16 X 1 Ty-tt
9	19131614	Washer 13/32 X 1 X 14 Ga
10	155925	Pan Seat
12	121246X	Bracket Mounting Switch
13	121248X	Bushing Snap Blk Nyl 50 Id

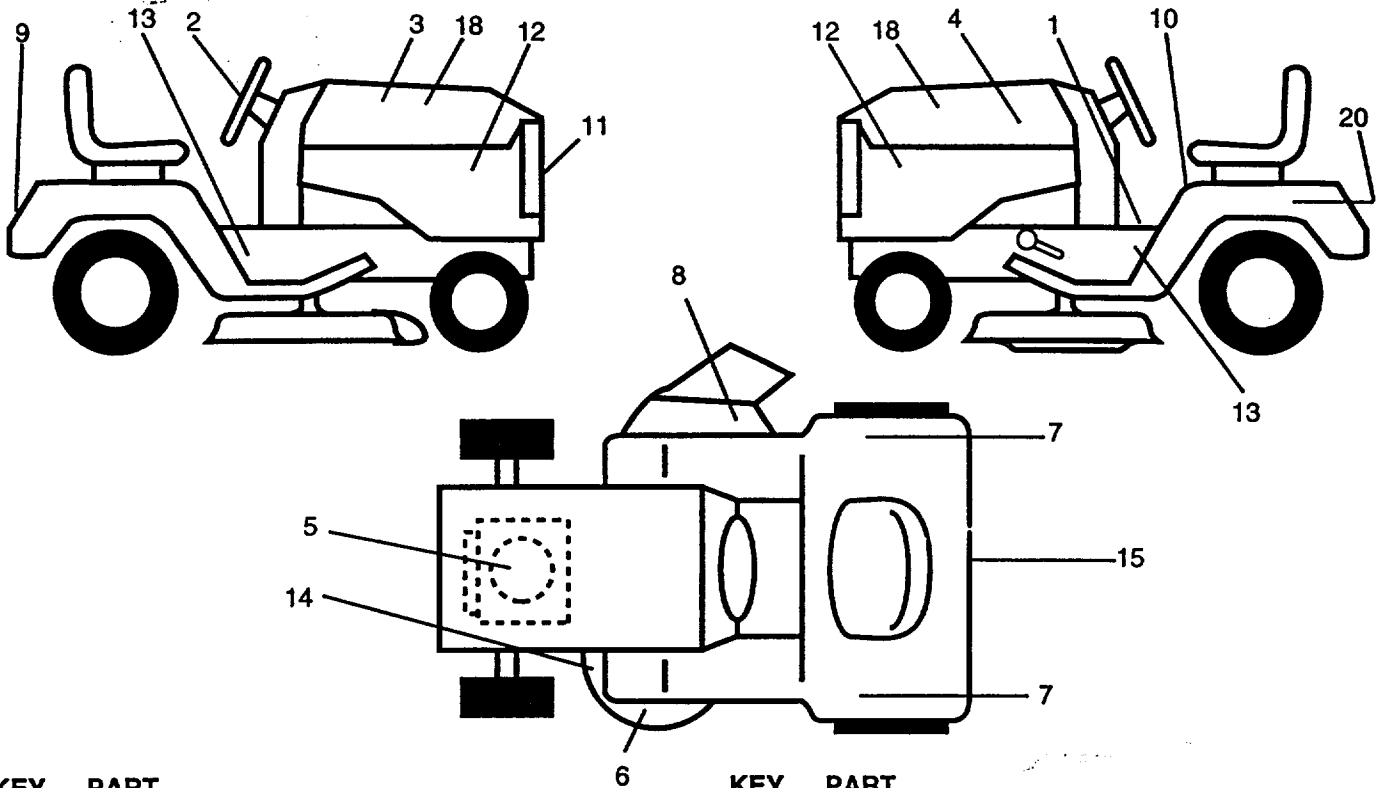
KEY NO.	PART NO.	DESCRIPTION
14	72050412	Bolt Carriage 1/4-20x1-1/2
15	134300	Spacer Split 28x 96 Yel Zinc
16	121250X	Spring Cprsn 1 27 Blk Pnt
17	123976X	Nut Lock 1/4 Lge Ftg Gr.5 Zinc
21	153236	Bolt Shoulder 5/16-18 Unc Blkz
22	73800500	Nut Lock Hex w/lns 5/16-18 Unc
23	74780814	Bolt Fin Hex 1/2-13 X 7/8 Gr 5
24	19171912	Washer 17/32 X 1-3/16 X 12 Ga
25	127018X	Bolt Shoulder 5/16-18 X 62
26	10040800	Washer Lock Hvy Hlcl Spr 1/2

**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

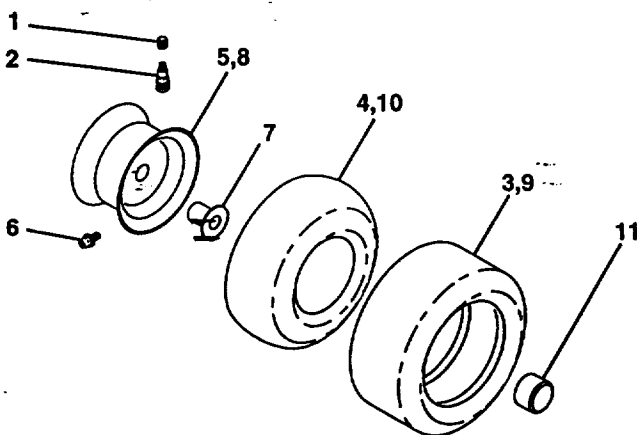
## TRACTOR -- MODEL NUMBER AYP9187B89

### DECALS



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	156811	Decal, Oper. Instr. Fend STLTH	10	157002	Decal, Fender Danger
2	143470	Decal, Insert Strg Wizard Plus	11	150218	Decal, Lens Logo
3	141579	Decal, Hood, R.H.	12	162550	Decal, Pnl Sd B&S Intek 18 Wiz
4	141580	Decal, Hood, L.H.	13	143349	Decal, Wiz Hyd 42"
5	273727	Decal, HP Engine	14	160396	Decal, V-Belt Schematic
6	141583	Decal, Deck Mulching Wizard Plus	15	142341	Decal, Drawbar Control Mvt Hyd
7	162700	Decal, Fender Auto Rad Wiz	18	143388	Name plate Hood Wizard Large
8	141517	Decal, Mower Vented Wizard Plus	20	145005	Decal, Battery Dngr/Psn PI Sym
9	127520	Decal, USA White	--	138311	Decal, Lift Handle
			--	154515	Pad Footrest LH STLT
			--	154516	Pad Footrest RH STLT
			--	165113	Owner's Manual

### WHEELS AND TIRES



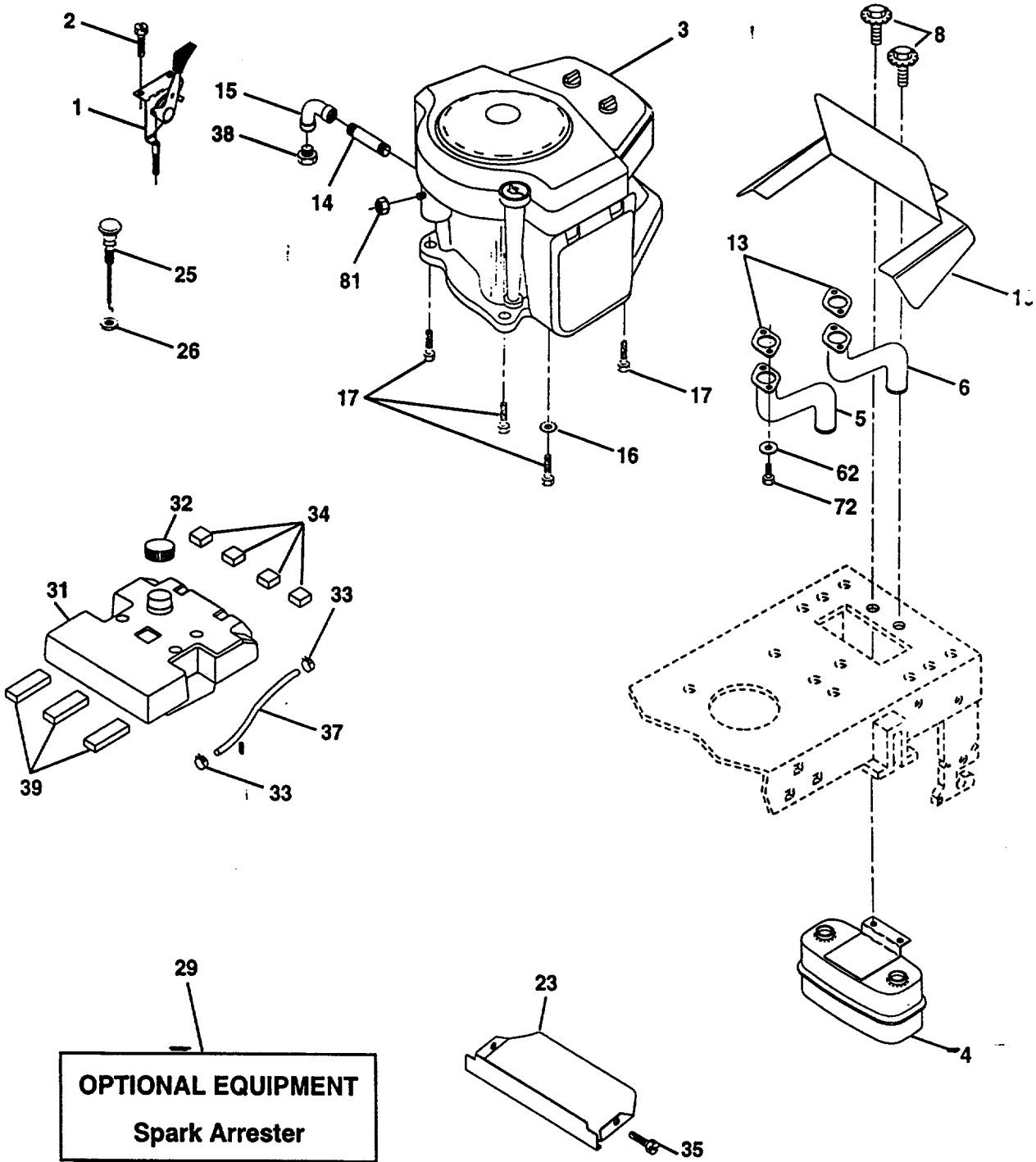
KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap Valve Tire
2	65139	Stem Valve
3	106222X	Tire F Ts 15 X 6 0 - 6 Service
4	59904	Tube Front (Service Item Only)
5	106732X427	Rim Asm 6" front White Service
6	278H	Fitting Grease (Front Wheel Only)
7	9040H	Bearing Flange (Front Wheel Only)
8	106108X427	Rim Asm 8" rear White Service
9	122082X	Tire R Ts 20 X 10-8 C Service
10	7152J	Tube Rear (Service Item Only)
11	104757X	Cap Axle Blk 1 50 X 1 00
--	144334	Sealant, Tire (10 oz. Tube)

**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

## ENGINE



**OPTIONAL EQUIPMENT**  
**Spark Arrester**



# REPAIR PARTS

TRACTOR - - MODEL NUMBER AYP9187B89

## ENGINE

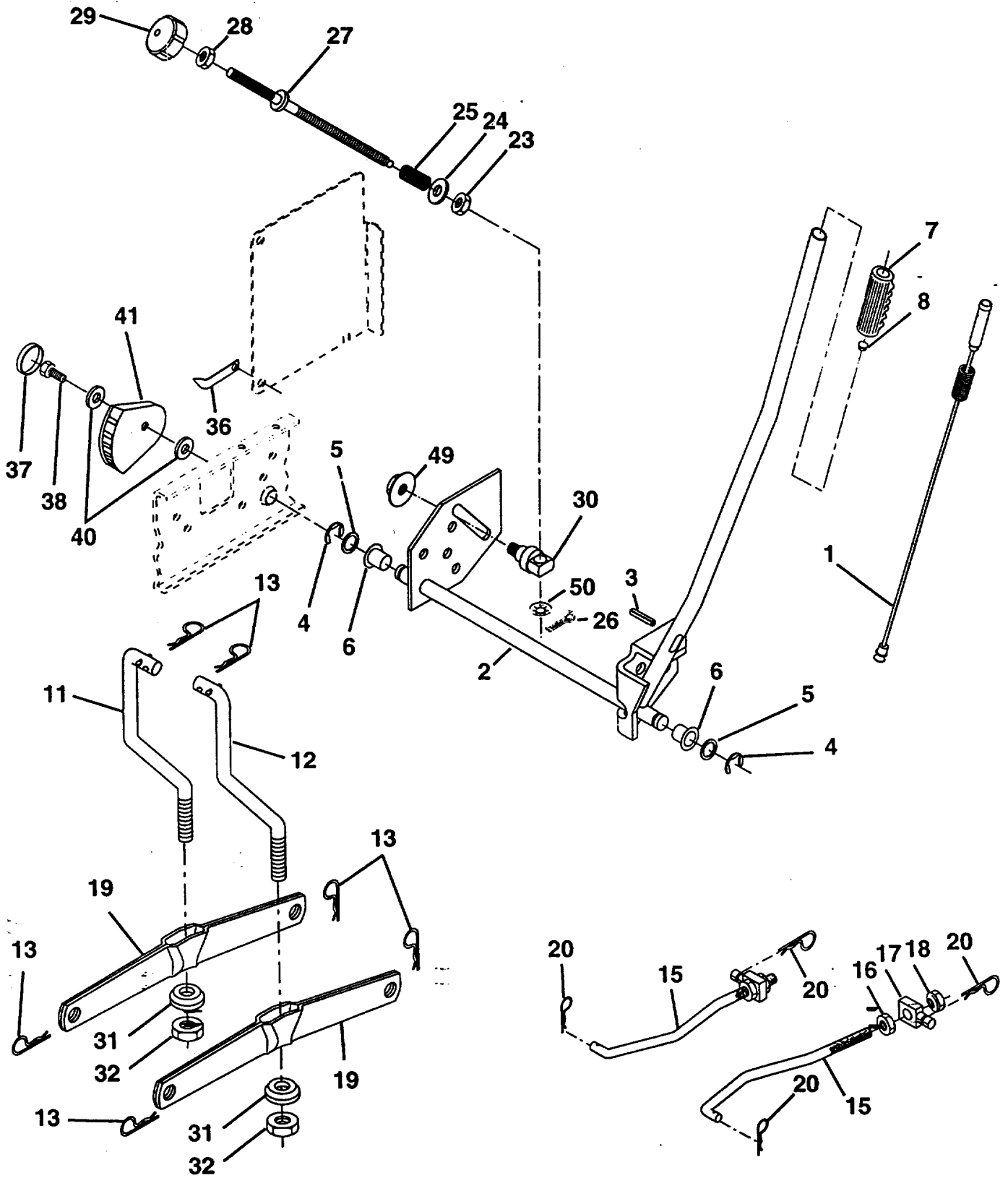
KEY NO.	PART NO.	DESCRIPTION
1	148875	Control Throt 36 LH Flag
2	17720410	Screw Hex Thd Cut 1/4-20x5/8 T
3	-----	Engine, Briggs Model No. 407777
4	149723	Muffler Asm Twin Lo-Tone
5	160589	Exhaust Asm RH B&S 20 HP Vert Intek
6	159955	Exhaust Asm LH B&S 20 HP Vert Intek
8	150176	Bolt 5/16-18 UNC x 3/4 w/ Sems
10	162797	Shield Heat
13	273485	Gasket Muffler
14	132803CJ	Nipple Pipe 4-1/2"
15	13200300	Elbow Std 90 Degree 3/8-18 Npt
16	11050600	Washer Lock Ext Tooth 3/8
17	17490624	Screw Thdrol 3/8-16 X 1-1/2 Tt
23	159880	Shield Browning
25	145996	Control Choke
26	73920600	Nut Keps 3/8-24 Unf
29	137180	Kit Spark Arrestor
31	157103	Tank Fuel
32	140527	Cap Asm Fuel
33	123487X	Clamp Hose Blk
34	106082X	Pad Spacer
35	17490512	Screw Thdrol 5/16-18 x 3/4
37	8543R	Line Fuel 54"
38	-----	Plug Oil Drain (Order From Engine Manufacturer)
39	109227X	Pad Idler
62	10040500	Washer Lock Hvy Helical 5/16
72	71070512	Screw Hex Hd Cap
81	128861	Nut Flange 1/4-20 Starter Nut

**NOTE:** All component dimensions given in U. S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

LIFT



# REPAIR PARTS

## TRACTOR - - MODEL NUMBER AYP9187B89

### LIFT

KEY NO.	PART NO.	DESCRIPTION
1	159460	Wire Asm Inner W/Plunger
2	159471	Shaft Asm Lft RH
3	105767X	Pin Groove
4	12000002	E-ring Truarc #5133-62
5	19211621	Washer Pltd 21/32 X 1 X 21 Ga
6	120183X	Bearing Nylon
7	125631X	Grip Handle Fluted
8	122365X	Button Plunger Red
11	139865	Link Lift LH -
12	139866	Link Lift RH
13	4939M	Retainer Spring
15	127218	Link Front
16	73350800	Nut Jam Hex 1/2-13 Unc
17	130171	Trunnion Blk Zinc
18	73680800	Nut Crownlock 1/2-13 Unc
19	139868	Arm Suspension Rear
20	163552	Retainer Spring
23	110807X	Nut Special
24	19131016	Washer 13/32 X 5/8 X 16 Ga
25	2876H	Spring 2-1/8"
26	76020308	Pin Cotter 3/32 X 1/2
27	126971X	Rod Adj Lift Zinc 7.49 Wrk Lg
28	73350600	Nut Hex Jam 3/8-16 Unc
29	138057	Knob Inf 3/8-16 Unc Blk W/sym
30	150233	Trunnion Dp Stop Dbl Thds PLT
31	140302	Bearing Pvt. Lift Spherical
32	73540600	Nut Crownlock 3/8-24
36	155097	Pointer Height Indicator
37	123935X	Plug Hole Blk 1.485 / 1.515 Dia.
38	17490512	Screw Thdrol 5/16-18 x 3/4
40	19112410	Washer 11/32 x 1-1/2 x 10 Ga.
41	155096	Indicator Height STLT
49	145212	Nut Hex Flange Lock
50	110452X	Nut Push Phos & Oil

**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm



# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### MOWER DECK

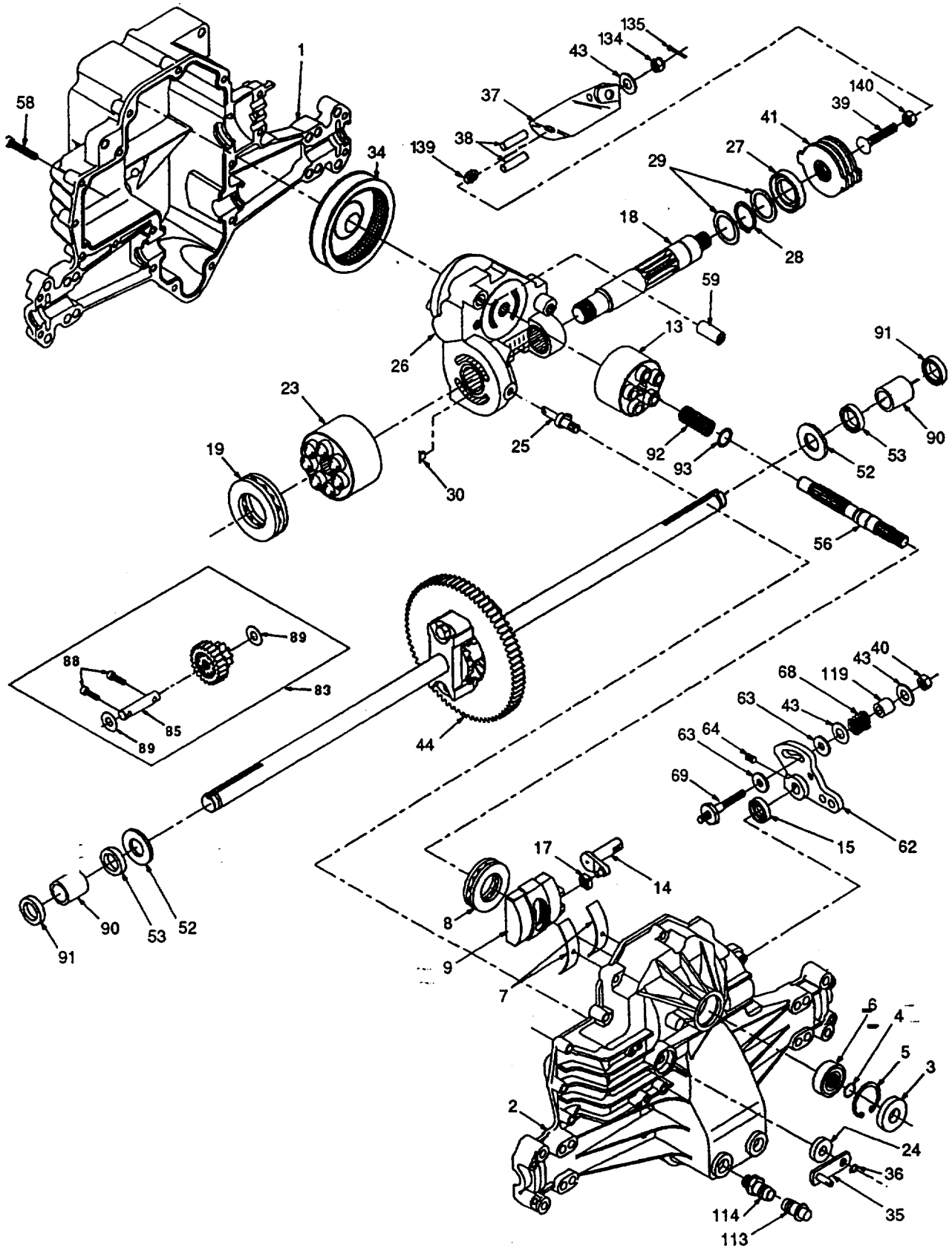
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	164961	Mower Housing	58	140086	Spring Torsion Brakes 42"
2	72140506	Bolt Rdhd Sqnk 5/16-18unc X 3/4	59	141043	Guard TUV Idler
3	138017	Bracket Asm Fr Sway Bar 38/42	67	162132	Knob Rd
4	138440	Bracket Asm Deck 42" sway Bar	68	144200	V-Belt Mower
5	4939M	Retainer Spring	71	142427	Rod Clutch Primary 38/42
6	130832	Arm Suspension Rear	72	131870	Spring Return
8	850857	Bolt 3/8-24 X 1 1/4	73	127847	Arm Clutch Secondary
9	10030600	Washer Lock Hvy 3/8	74	121748X	Washer 25/32 X 1-5/8 X 16 Ga
10	140296	Washer Hard Blade Mower Vented	75	12000029	Ring Klip #t5304-75
11	134149	Blade Mulching 42"	76	128903	Bolt Shoulder 3/8-16 Unc 1 44
12	129895	Bearing Ball	77	127845	Keeper Spring 4 000
13	137645	Shaft Asm W/lower Bearing	78	160570	Lever Asm Clutch Primary P/L
14	128774	Housing Mandrel Vented	79	127498	Bushing 747 Od X 794 Lg Brass
15	110485X	Bearing Ball Mandrel	80	153701	Spring Clutch Mower 2 750 Zinc
16	140329	Stripper Mower Vented	81	73350600	Nut Hex Jam 3/8-16 Unc
17	72110610	Bolt Rdhd Sqnk 3/8-16 X 1-1/4	82	142028	Trunnion Adj
18	72140505	Bolt Rdhd Sqnk 5/16-18 X 5/8	83	120958X	Washer Sintered
19	132827	Bolt Shoulder	84	156084	Keeper Belt Idler
20	159770	Baffle Vortex 42	85	72140620	Bolt Carriage 3/8-16 x 2-1/2
21	73680500	Nut Crownlock 5/16-18 UNC	92	73800600	Nut Lock Hex w/lns 3/8-16 Unc
22	134753	Stiffener Bracket 42" deck	101	136420	Cover Mulching 42" Black
23	131267	Bracket Deflector Mower 42"	102	71161010	Screw
24	105304X	Cap Sleeve 80x 112 Blk Mower	103	19061216	Washer #10
25	123713X	Spring Torsion Deflector 2 52	104	10071000	Washer Lock #10
26	110452X	Nut Push Phos & Oil	105	160793	Latch Asm Bagger
27	130968	Shield Deflector Mower 42" Blk	106	2029J	Nut Weld
28	19111016	Washer 11/32 X 5/8 X 16 Ga	111	155197	Bracket Gauge Wheel LH 42" deck
29	131491	Rod Hinge 42" 6 75 Wlg	112	155198	Bracket Gauge Wheel RH 42" deck
30	157722	Screw Thdrol Washer Head	113	17490512	Screw Thdrol 5/16-18 X 3/4 Tyt
31	129963	Washer Spacer Mower Vented	114	73510500	Nut Keps 5/16-18 Unc
32	153535	Pulley Mandrel 42"	115	72110504	Bolt Carr 5/16-unc X 1/2
33	137266	Nut 9/16 Top Lock Fing	116	137644	Bolt Shoulder
34	72110614	Bolt Rdhd 3/8-16uncx1-3/4 Gr5	117	133957	Wheel Gage
35	133835	Fastner Christmas Tree	118	73930600	Nut Crownlock 3/8-16 Unc
36	131494	Pulley Idler Flat 3 060	119	19121414	Washer 12/32 x 14/16 x 12 Ga.
37	19131316	Washer 13/32 x 13/16 x 16 Ga	121	143723	Bracket Extruded Gauge Wheel
40	73680600	Nut Crownlock 3/8-16 UNC	128	153390	Washer, Felt
41	133551	Rod Pivot W/nibs	129	19131312	Washer 13/32 x 13/16 x 12 Ga.
43	140083	Rod Clutch Secondary W/nibs	130	74780616	Bolt Fin Hex 3/8-16 UNC x 1 Gr. 5
44	140088	Guard Mandrel LH Black	131	72140608	Bolt, RdHd Sqnk 3/8-16 UNC x 1
45	4497H	Spring Retainer 1" Zinc/cad	132	19132203	Washer 13/32 x 1-3/8 x 3 Ga.
46	137729	Screw Hex Thd Cut	141	6266H	Washer Thrust .75 x 1.230
48	133944	Washer Hardened Smaller	--	130794	Mandrel Asm Service (Includes Key
49	155066	Roller Asm Cam Follower 42" dec			Nos. 8-10, 12-15, 31 and 33)
50	131340	Bolt Shldr 10-24 Zinc Gr 5 42"	--	164963	Mower Deck Complete (Std. Deck -
51	69180	Nut Lock #10-24 Unc			Order seperately Mulcher Plate and
52	139888	Bolt Shoulder 5/16-18 Unc Blkz			Gauge Wheel components and
53	131845	Arm Asm Pad Brake			mulch components, Key Nos. 101-
54	133943	Washer Hardened			106 and 111-121.)
55	155046	Arm Idler 42" mower LT/YT			
56	122052X	Spacer Retainer Pm Mower			

**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

HYDRO TRANSAXLE - MODEL NUMBER 319-0650



# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### HYDRO TRANSAXLE - MODEL NUMBER 319-0650

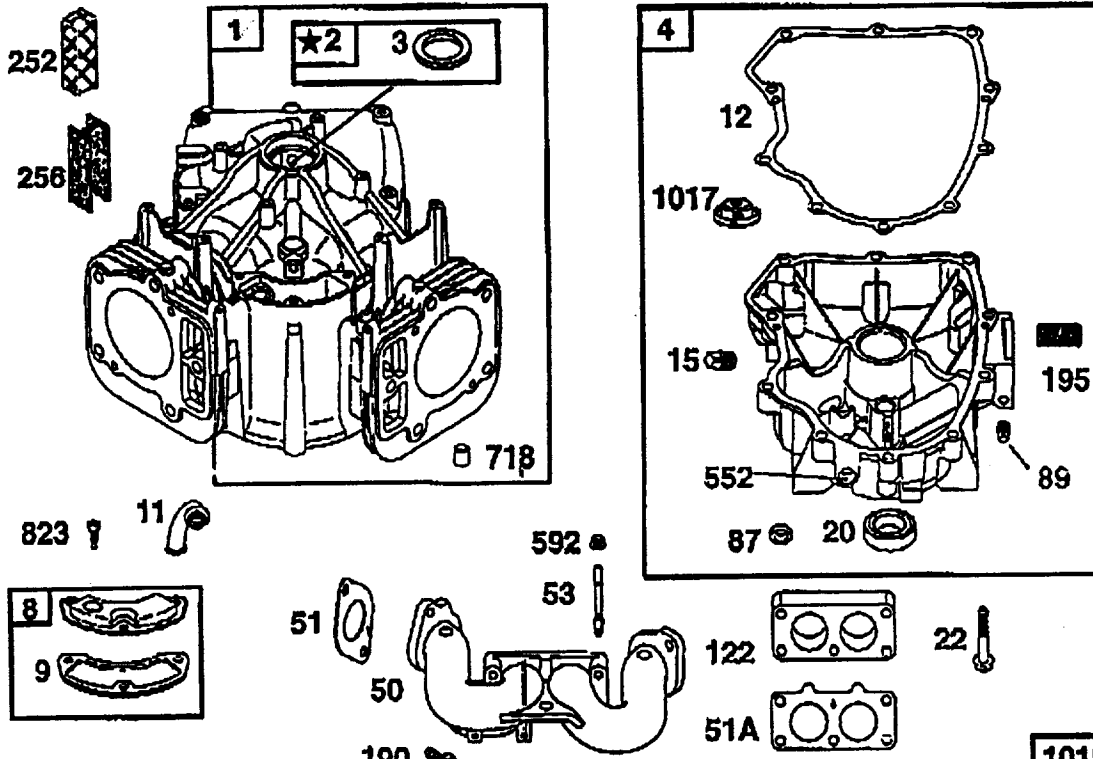
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 142930	Housing, Lower	43 142884	Washer 7/16 x 7/8 x .060
2 142931	Assembly, Upper Housing	44 150829	Differential Assembly
3 142932	Seal, Lip	52 142991	Washer 3/4 x 1.5 x .13
4 142928	Ring, Wire Retaining	53 142961	Seal .75 x 1.25 x .250
5 142933	Ring, Retaining	56 142963	Shaft, Input
6 142934	Bearing, Shaft Ball	58 142964	Bolt 1/4-20 x 1.38
7 142935	Bearing, Cradle	59 142965	Pin .5 OD x .43 ID x .750
8 150771	Bearing, Thrust 30 x 52 x 13	62 142966	Arm, Control
9 142937	Swashplate, Variable	63 142967	Puck, Dampener
13 142938	Block, Cylinder Assembly	64 142920	Set Screw
14 142939	Arm, Trunnion	68 142969	Spring
15 142940	Seal, Lip	69 144610	Stud 5/16-24
17 142941	Guide, Slot	83 142971	Jackshaft Assembly
18 150772	Shaft, Motor	85 150806	Jackshaft
19 150773	Bearing, Thrust 42 x 68 x 16	88 142973	Screw, Cap
23 142944	Block, Cylinder Assembly	89 142974	Washer 7/16 x 1 x 1/2
24 142945	Seal, Lip 10 x 25 x 7	90 142975	Sleeve Bearing
25 142946	Actuator, Bypass	91 142976	Seal, Wiper
26 150774	Center Section Assembly Kit	92 142977	Spring, Block
27 142948	Seal, Lip 26 x 42 x 8	93 142978	Washer, Block Thrust
28 142949	Ring, Retaining	113 142917	Cap, Vent Assembly
29 142950	Washer 26 x 35 x 1	114 142918	Fitting, O-Ring Assembly
30 150787	Plate, Bypass	119 142980	Spacer
34 142951	Oil Filter Element	134 144607	Nut, Castle 5/16-24
35 142952	Arm, Bypass	135 144608	Pin, Cotter
36 142953	Ring, Retaining	139 150775	Spring, Compression
37 142954	Arm, Actuating	140 150776	Nut, Hex 5/16-24
38 142955	Pin, Actuating		
39 150777	Bolt 5/16-24 x 1-3/4		
40 150778	Locknut, Hex 5/16-24 UNJC		
41 142958	Brake Rotor/Stator Kit		

NOTE: All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1

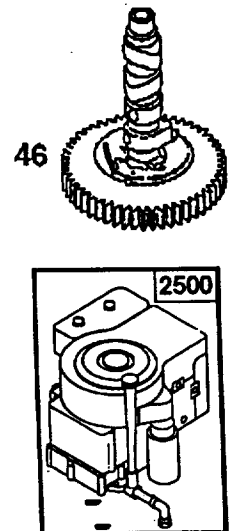
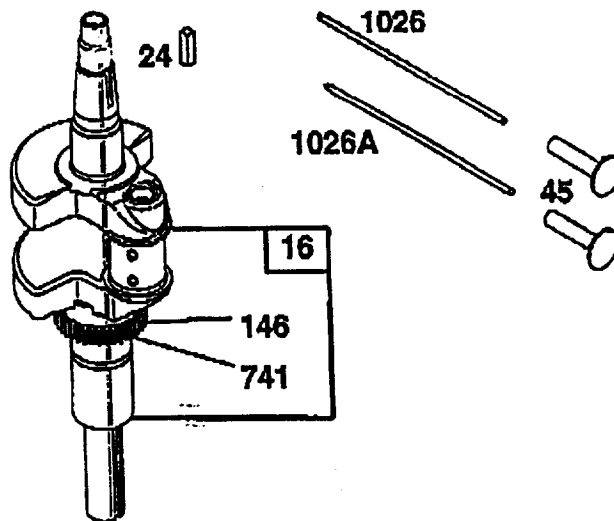
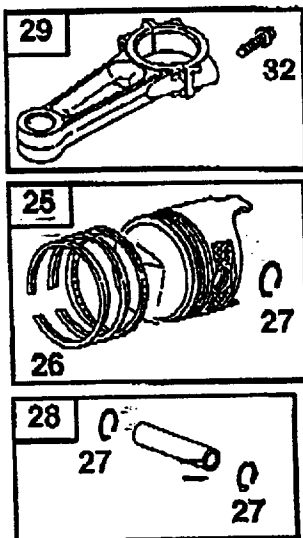


★ REQUIRES SPECIAL TOOLS TO INSTALL. SEE REPAIR INSTRUCTION MANUAL.

1036 LABEL KIT-EMISSION

1019 LABEL KIT

1058 OWNER'S MANUAL

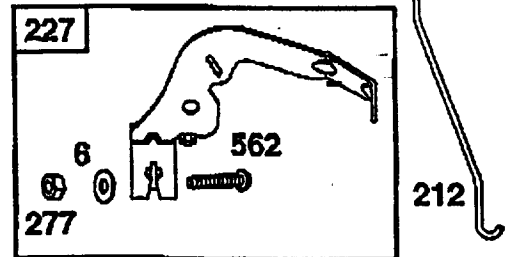
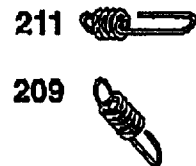
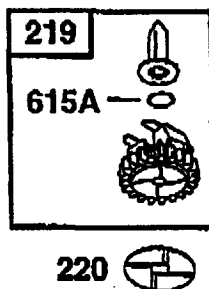
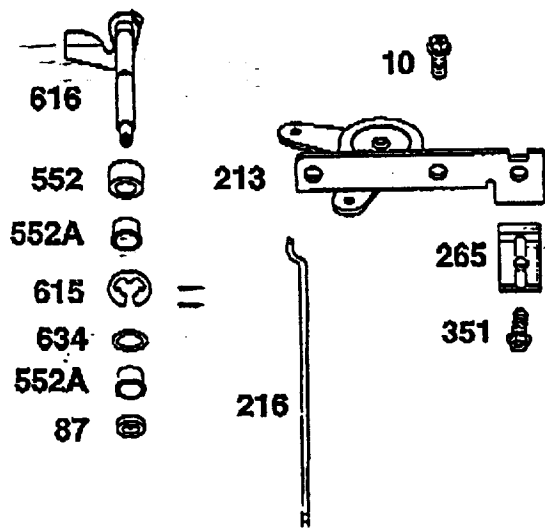
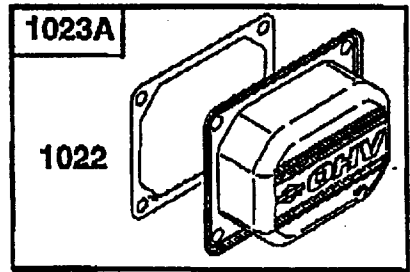
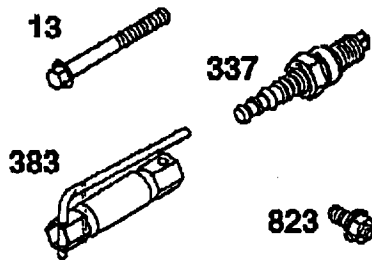
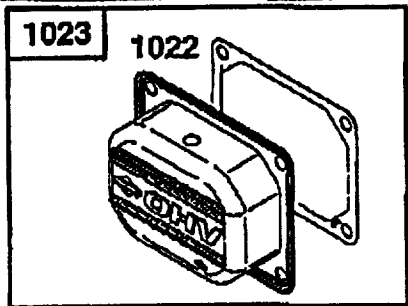
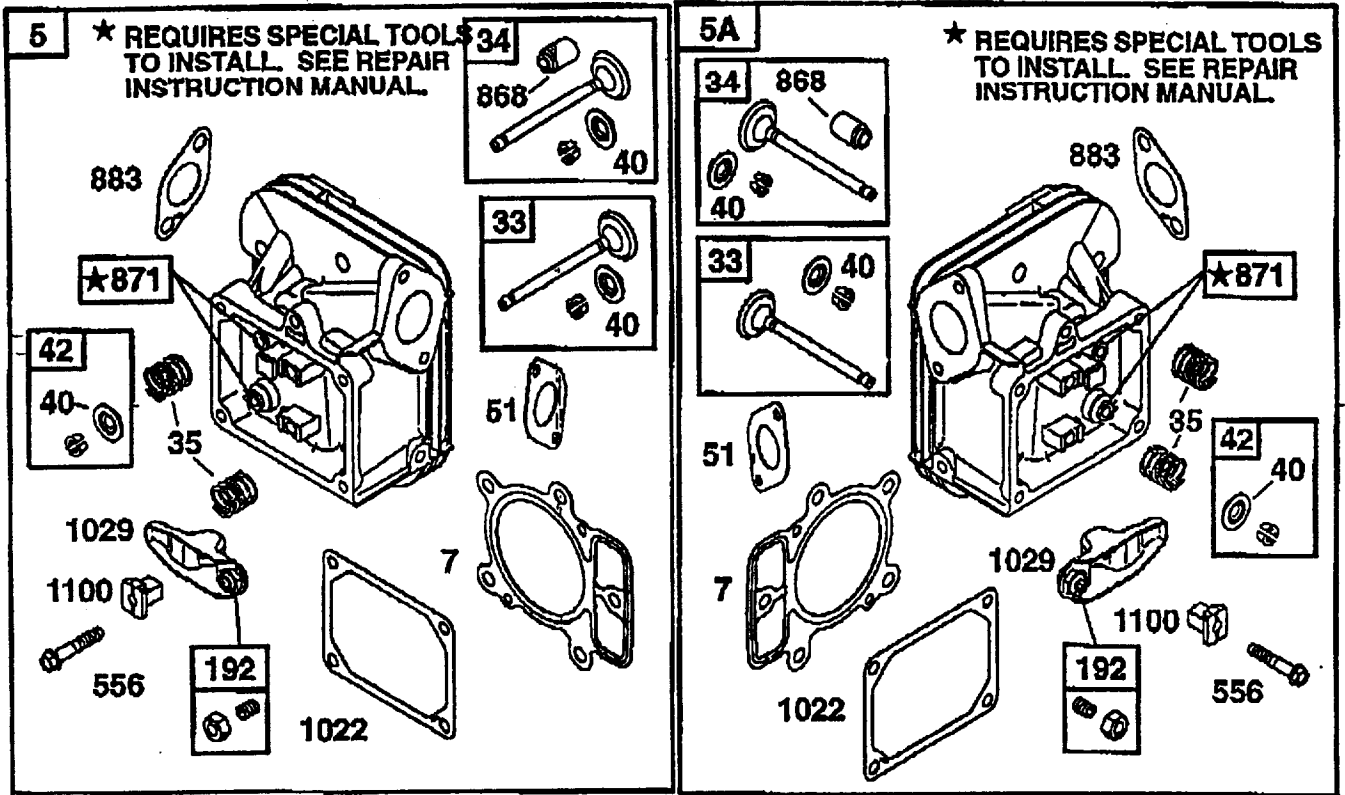




# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

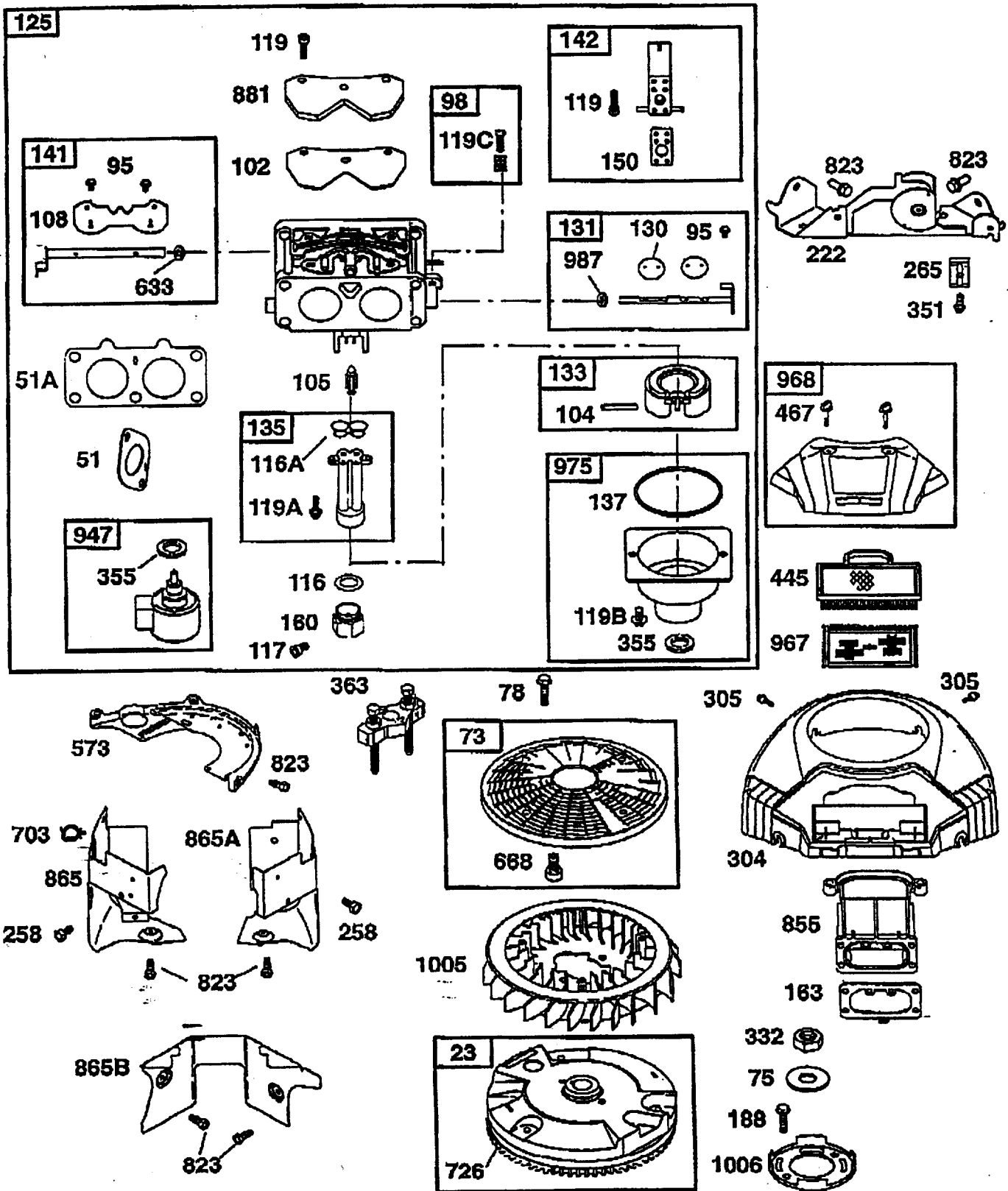
BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1



# REPAIR PARTS

TRACTOR -- MODEL NUMBER AYP9187B89

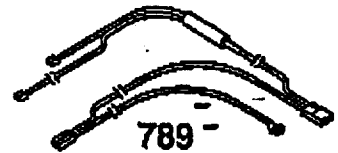
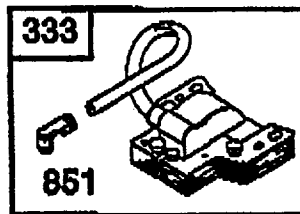
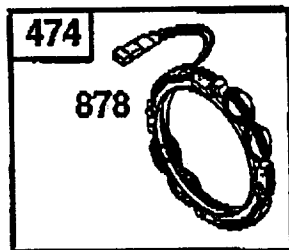
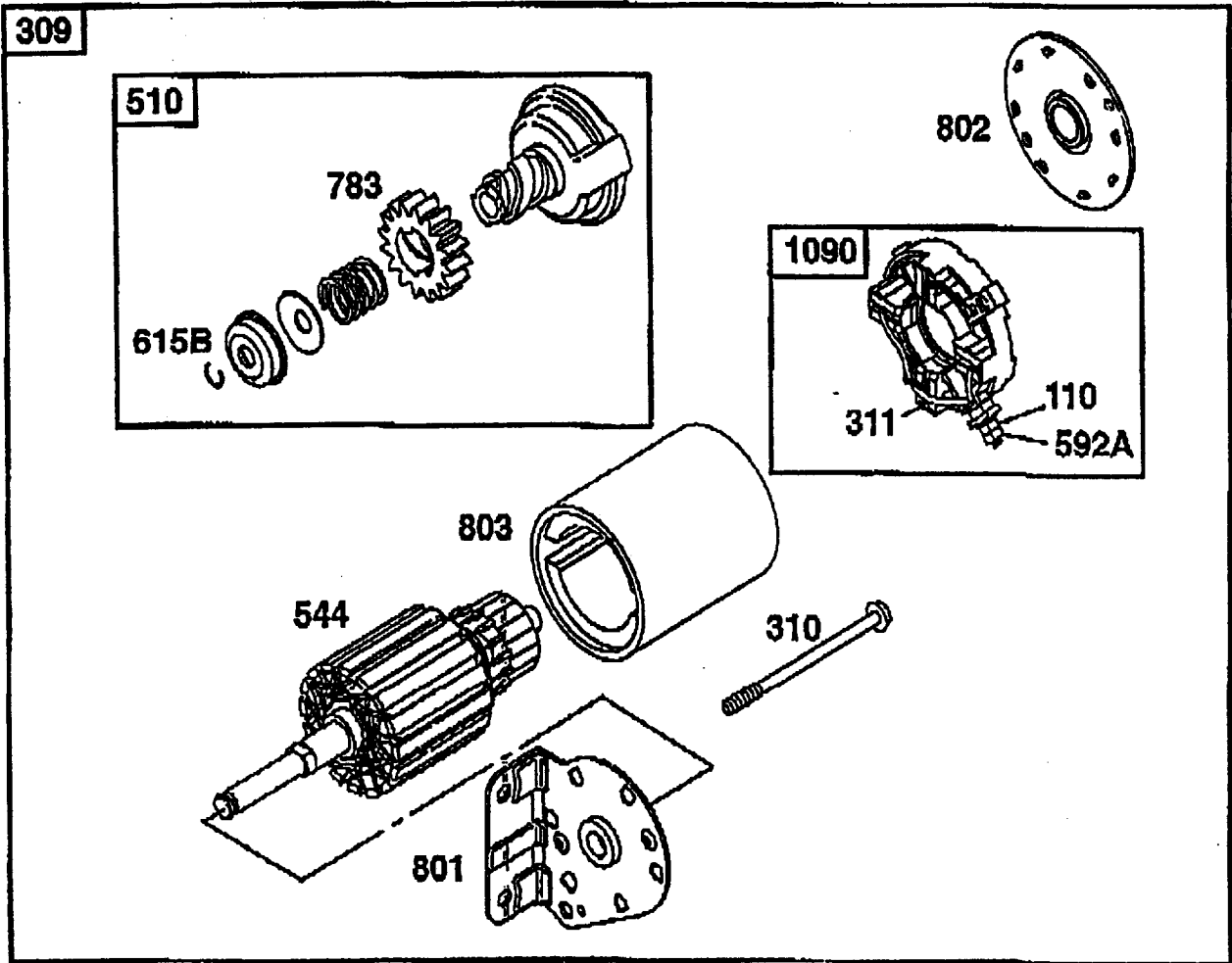
BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1



# REPAIR PARTS

TRACTOR - - MODEL NUMBER AYP9187B89

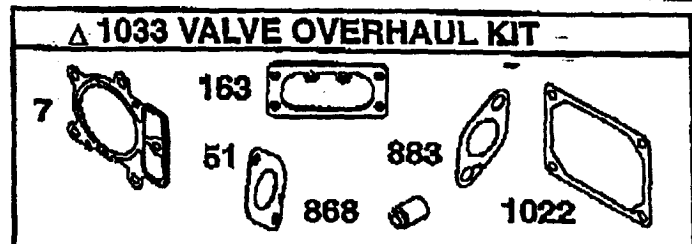
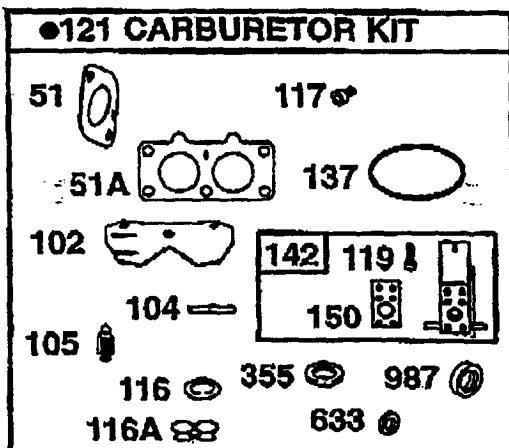
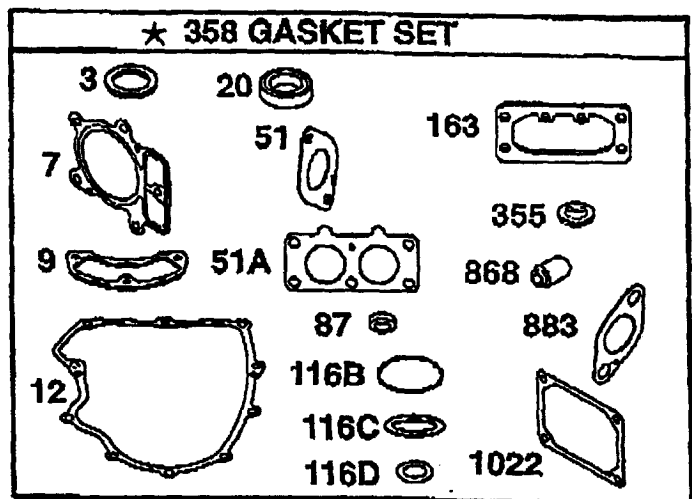
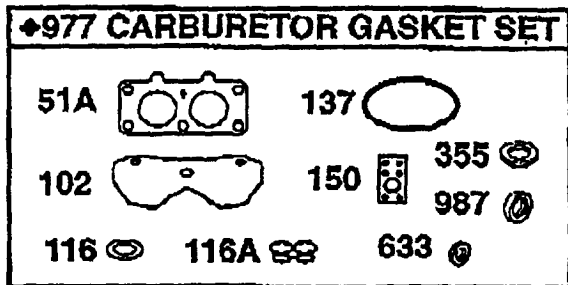
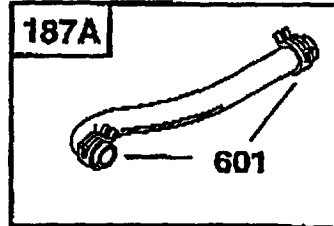
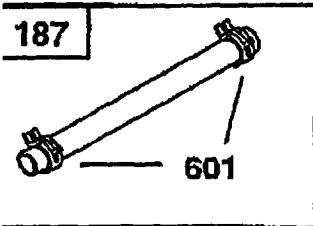
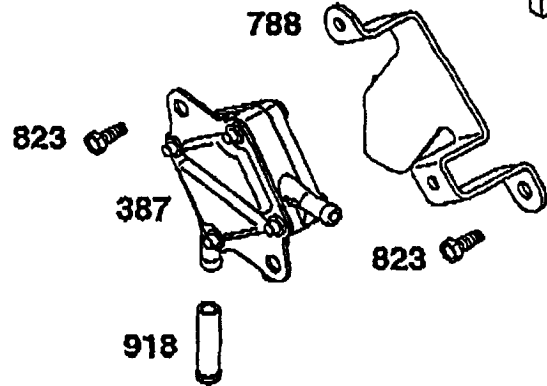
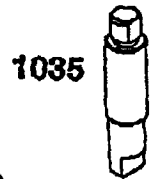
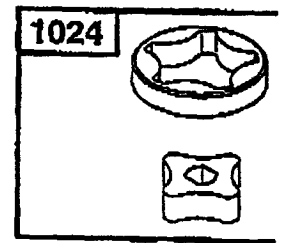
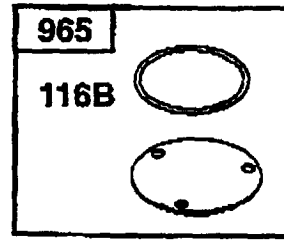
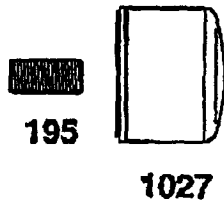
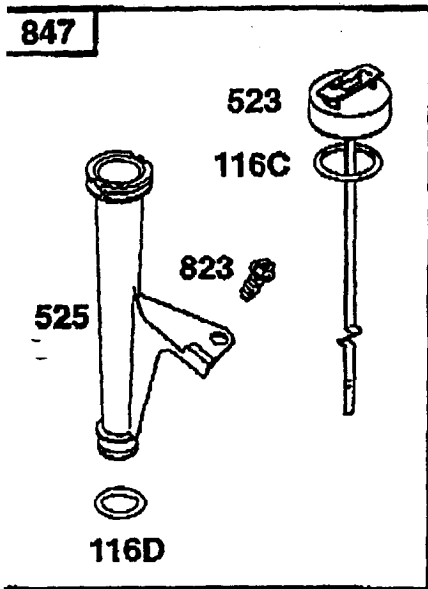
BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1



# REPAIR PARTS

TRACTOR - - MODEL NUMBER AYP9187B89

BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1



# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 499584	Cylinder Assembly	116 690987	◇ O-Ring, Solenoid Retainer
2 499585	Bushing, Cylinder	116A 690988	◇ O-Ring, Fuel Transfer Tube
3 690926	* Seal, Oil	116B 690589	* Seal, O-Ring (Oil Pump Cover)
4 690069	Sump, Engine	116C 691031	* Seal, O-Ring (Dipstick)
5 499587	Head, Cylinder No. 1	116D 691032	* Seal, O-Ring (Oil Fill Tube)
5A 499595	Head, Cylinder No. 2	117 690232	• Jet, Main (Standard)
6 690097	Washer, Flat	119 690990	• Screw, Phillips
7 690962	Ø* Gasket, Cylinder Head	119A 690991	Screw, Phillips
8 499601	Breather Assembly	119B 690992	Screw, Phillips
9 690937	* Gasket, Breather	119C 690720	Screw, Phillips
10 691003	Screw, Hex	121 499811	Carburetor Overhaul Kit
11 690942	Tube, Breather		
12 690945	* Gasket, Crankcase	122 690952	Spacer, Carburetor
13 690360	Screw, Cylinder Head (3-9/16")	125 499804	Carburetor
15 690946	Plug, Oil Drain	130 690993	Valve, Throttle
16 691046	Crankshaft	131 499805	Shaft, Throttle
20 690947	* Seal, Oil	133 499806	Float, Carburetor
22 690308	Screw, Crankcase Cover	135 499803	Tube, Fuel Transfer
23 691054	Flywheel	137 690994	◇ Gasket, Float Bowl
24 690974	Key, Flywheel	141 499807	Shaft, Choke
25 499588	Piston Assembly (Std.)	142 499808	• Nozzle, Carburetor
499589	Piston Assembly (.010" O.S.)	146 94388	Key, Timing
499590	Piston Assembly (.020" O.S.)	150 281767	◇ Gasket, Nozzle
499591	Piston Assembly (.030" O.S.)	160 690996	Retainer, Solenoid
26 499604	Ring Set, Piston (Std.)	163 691001	Ø* Gasket, Air Cleaner
499605	Ring Set, Piston (.010" O.S.)	176 691033	Screw, T-30
499606	Ring Set, Piston (.020" O.S.)	187 691050	Line, Fuel
499607	Ring Set, Piston (.030" O.S.)		(Cut To Required Length)
27 690975	Lock, Piston Pin	187A 691049	Line, Fuel
28 499582	Pin Assembly, Piston	188 691058	Screw, Hex
29 499583	Rod Assembly, Connecting	190 690953	Screw, Torx Hex
32 690976	Screw, Connecting Rod	192 690083	Adjuster, Rocker Arm
33 499596	Valve, Exhaust	195 690954	Nipple, Oil Filter
34 499597	Valve, Intake	209 690018	Spring, Governor
35 690963	Spring, Valve	211 690019	Spring, Governed Idle
40 690964	Retainer, Valve	212 691020	Link, Throttle
42 499586	Keeper Valve	213 691021	Bracket, Choke Control
45 690977	Tappet, Valve	216 691022	Link, Choke
46 690978	Gear, Cam	219 394348	Gear, Governor
50 690948	Manifold, Intake	220 690412	Washer, Thrust
51 690949	*Ø Gasket, Carb. Mounting	222 691023	Plate, Governor Control
51A 690950	** Gasket, Intake Manifold	227 691048	Lever Assembly, Governor
53 690951	Stud, Carb. Mounting		
73 691055	Screen, Rotating		
75 691056	Washer, Spring		
78 691057	Screw, Torx		
87 690657	* Seal, Governor Shaft		
89 690238	Plug, Oil		
95 690718	Screw, Slotted		
98 499802	Screw, Idle Speed		
102 690234	◇ Gasket, Plate		
104 690984	• Pin, Float Hinge		
105 690985	• Valve, Needle		
108 690986	Valve, Choke		
110 691261	Washer		

NOTE: All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# REPAIR PARTS

## TRACTOR -- MODEL NUMBER AYP9187B89

### BRIGGS & STRATTON ENGINE - MODEL NUMBER 407777, TYPE NUMBER 0119-E1

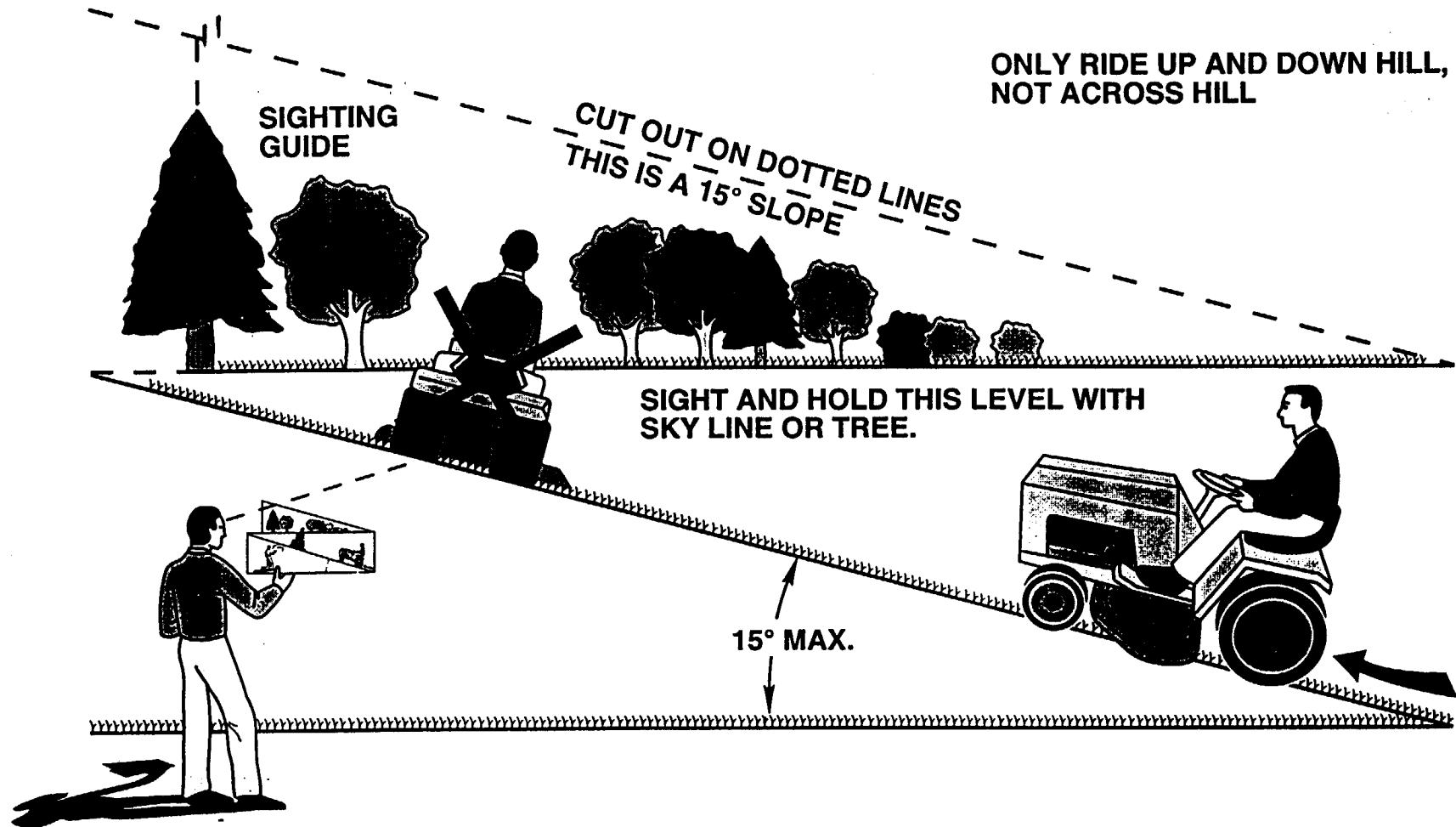
KEY PART NO.	NO.	DESCRIPTION	KEY PART NO.	NO.	DESCRIPTION
240	691035	Filter, Fuel	823	690960	Screw, Hex
252	690956	Element, Breather	847	499602	Dipstick/Tube Assembly
256	690957	Retainer, Element	851	691234	Terminal, Ignition Cable
258	691003	Screw, Hex	855	691011	Adapter, Air
265	691024	Clamp, Casing	865	691012	Cover, Air Guide
277	691029	Nut, Hex	865A	691013	Cover, Air Guide
304	691004	Housing, Blower	865B	691015	Cover, Air Guide
305	691005	Screw, Hex			
309	691262	Motor, Starter	868	690968	*Ø Seal, Valve
310	691263	Screw, Hex	871	690969	Bushing, Guide
311	691264	Brush Set	878	691237	Wire, Alternator
332	690059	Nut, Flywheel	881	690999	Plate, Cover
333	691060	Armature, Magneto	883	690970	*Ø Gasket, Exhaust
334	691061	Screw, Armature Mounting	918	691040	Hose, Vacuum
337	690965	Spark Plug	947	499809	Solenoid, Fuel
351	691044	Screw, Hex	965	499613	Cover, Oil Pump
355	690997	*Ø Washer, Seal	967	691016	Filter, Pre-Cleaner
358	499889	Gasket Set	968	499788	Cover, Air Cleaner
363	691062	Flywheel, Puller	975	499810	Bowl, Float
383	690966	Wrench, Spark Plug	977	499812	Gasket Set, Carburetor
387	691034	Pump, Fuel	987	691000	♦ Seal, Throttle Shaft
445	691007	Cartridge, Air Cleaner	1005	691243	Fan, Flywheel
467	691008	Nut, Air Cleaner	1006	691247	Retainer, Fan
474	691063	Alternator	1017	690770	Screen, Oil Pump
482	691183	Screw, Hex	1019	690103	Label Kit
510	497606	Drive, Starter	1022	690971	*Ø Gasket, Rocker Cover
523	691036	Dipstick, Oil	1023	499599	Cover, Rocker (Cyl. No. 1)
525	691037	Tube, Oil Fill	1023A	499600	Cover, Rocker (Cyl. No. 2)
544		Armature, Starter (Service with 499529 Starter Motor)	1024	499054	Pump, Oil
552	690552	Bushing, Governor Crank	1026	690981	Rod, Push (Steel)
552A	690553	Bushing, Governor Crank	1026A	690982	Rod, Push (Aluminum)
556	690967	Screw, Hex	1027	690041	Filter, Oil
562	690311	Bolt, Carriage	1029	690972	Arm, Rocker
573	691009	Plate, Black	1033	499890	Valve Overhaul Kit
592	690958	Nut, Hex	1035	691042	Shaft, Oil Pump
592A	691029	Nut, Hex	1036	499783	Label Kit, Emission
601	691038	Clamp, Fuel Line	1058	273694	Owner's Manual
615	690328	Retainer, Governor	1090	691293	Retainer, Brush
615A	690317	Retainer, Governor	1100	690973	Pivot, Rocker Arm
615B	691265	Retainer	2500	407777,0027	Replacement Engine
616	691045	Crank, Governor			
633	690998	♦ Seal, Choke Shaft			
634	690442	Washer, Flat			
635	691210	Boot, Spark Plug			
668	691215	Spacer			
703	690010	Clip, Hose			
718	690959	Dowel, Sleeve			
726	499612	Gear, Ring			
728	690372	Screw, Torx®			
741	690980	Gear, Timing			
783	691280	Gear, Starter			
788	691039	Bracket, Pump			
789	691220	Harness, Wiring			
801	691283	Cap, Drive			
802	691286	Cap, End			
803		Housing, Starter (Service with 499529 Starter Motor)			


RPM Settings: Low: 1750-1950  
High: 3200-3400

- \* Included in Gasket Set, Part Number 499889
- Included in Carburetor Lit, Part Number 499811
- ♦ Included in Carburetor Gasket Set, Part Number 499890
- Ø Included in Valve Overhaul Gasket Set, Part Number 499890

NOTE: All component dimensions given in U.S. inches  
1 inch = 25.4 mm

# SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



 Operate your Tractor up and down the face of slopes (not greater than 15°), never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.

# HOW AND WHERE TO ORDER PARTS

You can identify your product correctly by looking at its model number label which is located under the seat.

1. A. Name the product that needs a part, for example: tractor.  
B. State the product's model number and factory number. These numbers appear on a label on the product.
2. List the description and part number of the part you want. This manual shows drawings, descriptions, and part numbers.
3. You may order from a participating Western Auto store. If you cannot do that, please order direct from:

Telephone: 1-800-633-8434

Western Auto National Parts Center  
2107 Grand Avenue  
Kansas City, MO 64108