

**SEARS**

# **CRAFTSMAN<sup>®</sup>**

**MODEL NUMBER 917.254860 OWNER'S MANUAL**

**3one<sup>™</sup>**  
**Convertible**



- **Assembly**
- **Operation**
- **Customer Responsibilities**
- **Service**
- **Adjustments**
- **Repair Parts**

**Caution:**  
**Read and Follow**  
**all Safety Rules**  
**and Instructions**  
**Before Operating**  
**This Equipment**

**Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.**



# 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.**

**CONGRATULATIONS** on your purchase of a Sears 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 Sears Service Center/Department. We have competent, well-trained technicians and the proper tools to service or repair this unit.

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

MODEL NUMBER	917.254860
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.	

## PRODUCT SPECIFICATIONS

HORSEPOWER:	18.0
GASOLINE CAPACITY AND TYPE:	3.5 GALLONS UNLEADED REGULAR
OIL TYPE (API-SG):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	3.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RJ-19LM STD361458
VALVE CLEARANCE:	INTAKE: .004" - .006" EXHAUST: .007" - .009"
GROUND SPEED (MPH):	FORWARD: 1st 0.77 2nd 1.46 3rd 3.41 4th 4.34 5th 5.57 REVERSE: 1.07
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	5 AMPS BATTERY 3 AMPS HEADLIGHTS
BLADE BOLT TORQUE:	30-35 FT. LBS.

## MAINTENANCE AGREEMENT

A Sears maintenance agreement is available on this product. Contact your nearest Sears store for details.

## CUSTOMER RESPONSIBILITIES

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

**WARNING:** This unit 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. A spark arrester for the muffler is available through your nearest Sears Authorized Service Center (See REPAIR PARTS section of this manual).

## LIMITED TWO YEAR WARRANTY ON ELECTRIC START RIDING EQUIPMENT

For two (2) years from the date of purchase, if this riding equipment is maintained, lubricated and tuned up according to the instructions in the owner's manual, Sears will repair or replace, free of charge, any parts found to be defective in material or workmanship.

This Warranty does not cover:

- Expendable items which become worn during normal use, such as blades, spark plugs, air cleaners and belts.
- Tire replacement or repair caused by punctures from outside objects, such as nails, thorns, stumps, or glass.
- Repairs necessary because of operator abuse, negligence, improper storage or accident or the failure to maintain the equipment according to the instructions contained in the owner's manual.
- Riding equipment used for commercial or rental purposes.

## LIMITED 90 DAY WARRANTY ON BATTERY

For 90 days from date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge.

WARRANTY SERVICE IS AVAILABLE BY RETURNING THE RIDING EQUIPMENT TO THE NEAREST SEARS SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.

This Warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

SEARS, ROEBUCK AND CO., HOFFMAN ESTATES, IL 60179 U.S.A.

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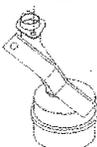
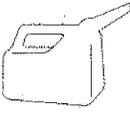
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# ACCESSORIES AND ATTACHMENTS

These accessories and attachments were available when the unit was purchased. They are also available at most Sears retail outlets, catalog and service centers. Most Sears stores can order these items for you when you provide the model number of your tractor.

## ENGINE

SPARK PLUG	MUFFLER	AIR FILTER	GAS CAN	ENGINE OIL	STABILIZER
					

## MAINTENANCE

BLADES	BELTS
	

## PERFORMANCE

Sears offers a wide variety of attachments that fit your vehicle. Many of these are listed below with brief explanations of how they can help you. This list was current at the time of publication; however, it may change in future years - more attachments may be added, changes may be made in these attachments, or some may no longer be available or fit your model. **Contact your nearest Sears store for the accessories and attachments that are available for your unit.**

Most of these attachments do not require additional hitches or conversion kits (those that do are indicated) and are designed for easy attaching and detaching.

**AERATOR** promotes deep root growth for a healthy lawn. Tapered 2.5-inch steel spikes mounted on 10-inch diameter discs puncture holes in soil at close intervals to let moisture soak in. Steel weight tray for increased penetration.

**BAGGER** lets you collect grass clippings and leaves for a healthier, neater looking lawn. Two Permanex containers hold 30-gallon plastic bags.

**BUMPER** protects front end of tractor from damage.

**CARTS** make hauling easy. Variety of sizes available, plus accessories such as side panel kits, tool caddy, cart cover, protective mat and dolly.

**CORING AERATOR** takes small plugs out of soil to allow moisture and nutrients to reach grass roots. 36-inch swath. 24 hardened steel coring tips. 150 lb. capacity weight tray.

**EASY OIL DRAIN VALVE** makes oil changes easier, faster.

**FRONT NOSE ROLLER** canters in front of mower deck to reduce chances of "scalping" on uneven terrain.

**GANG HITCH** lets you tow 2 or 3 pull-behind attachments at once, such as sweepers, dethatchers, aerators (not for use with rollers, carts or other heavy attachments).

**GAUGE WHEELS** on both sides of the mower deck reduce chances of "scalping" on uneven terrain. For mower decks not so equipped.

**MULCH RAKE/DETHATCHER** loosens soil and flips thatch and matted leaves to lawn surface for easy pickup. Twenty spring tine teeth. Useful to prepare bare areas for seeding. Available on front or rear mounting.

**HIGH PERFORMANCE REEL-ACTION SPRING TINE DETHATCHER** covers 36-inch wide path and tosses thatch into large hopper. Mounts behind tractor.

**MULCHING KIT**, once installed, lets you mulch, discharge or bag clippings (bagger optional) without changing blades. For models not equipped as 3-in-1 Convertible mowers.

**RAMP TOPS AND FEET** let you load and unload tractor from a pickup truck. Use with 2 x 8 or 2 x 10 lumber.

**ROLLER** for smoother lawn surface. 36-inch wide, 18-inch diameter water-tight drum holds up to 390 lbs. of weight. Rounded edges prevent harm to turf. Adjustable scraper automatically cleans drum.

**SNOW BLADE** for snow removal only. 14-inch high, 42-inch wide blade clears 38-inch path when angled left or right. Raises, lowers with side lever. Adjustable skids; replaceable, reversible scraper bar. (Use with tire chains and wheel weights and/or rear drawbar weight.)

**SNOWTHROWER** has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arrangement. Discharge chute adjusts from tractor seat. 6-inch diameter spout discharges snow 10 to 50 feet. Lift controlled at tractor seat. (Use with chains and wheel weights and/or rear drawbar weight.)

**SPRAYERS** use 12-volt DC electric motor that connects to the tractor battery or other 12-volt source. Includes booms for automatic spraying and hand held wand for spot spraying. Wand has adjustable spray pattern. For applying herbicides, insecticides, fungicides and liquid fertilizers.

**SPREADER/SEEDERS** make seeding, fertilizing, and weed killing easy. Broadcast spreaders are also useful for granular deicers and sand.

**SWEEPERS** let you collect grass clippings and leaves.

**TILLER** has 5 hp engine and 36-inch swath to prepare seed beds, cultivate and compost garden residue. Tiller has its own built-in lift and depth control system and does NOT require a sleeve hitch. Fits any lawn, yard or garden tractor. Simply hook up to the tractor drawbar and go! **Optional accessories** convert unit for dethatching, aerating, hilling...without tools.

**TIRE CHAINS** are heavy duty; closely spaced extra-large cross links give smooth ride, outstanding traction.

**TRACTOR CAB** has heavy duty vinyl fabric over tubular steel frame, ABS plastic top; clear plastic windshield offers 360 degree visibility. Hinged metal doors with catch. Keeps operator warm and dry. Remove vinyl sides and windshields for use as sun protector in summer. **Optional accessories include:** tinted/tempered solid safety glass windshield with hand operated wiper; 12-volt amber caution light for mounting on cab top.

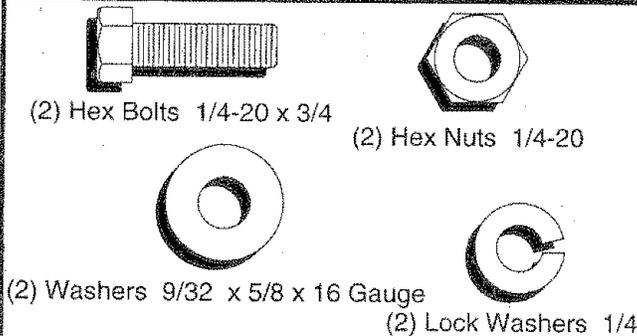
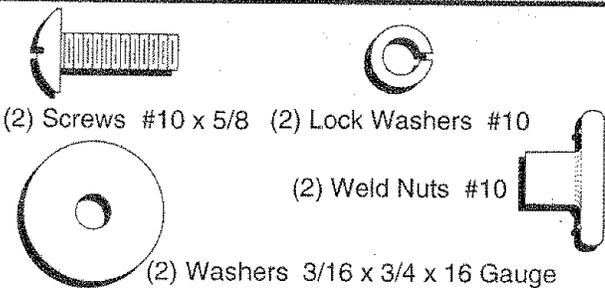
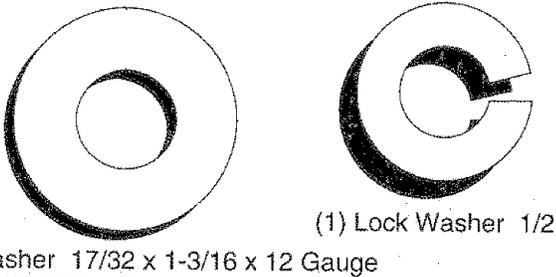
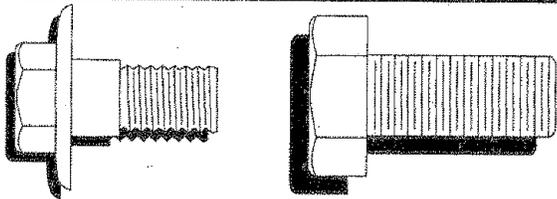
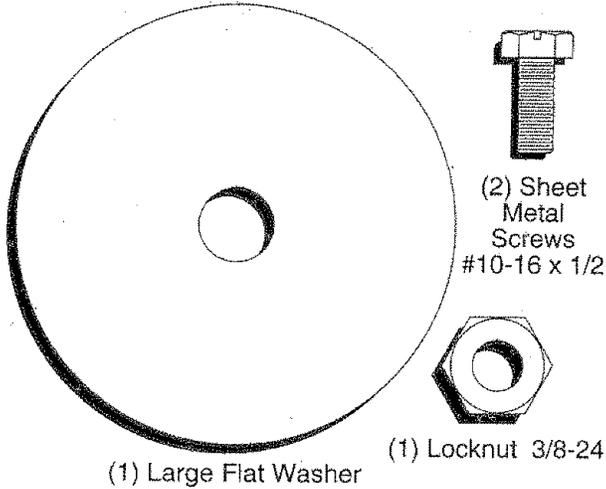
**VACS** for powerful collection of heavy grass clippings and leaves. **Optional wand attachment** to pick up debris in hard-to-reach places. **VAC/CHIPPER** includes a chipper-shredder.

**WEIGHT BRACKET** for drawbar for snow removal applications. Uses (1) 55 lb. weight.

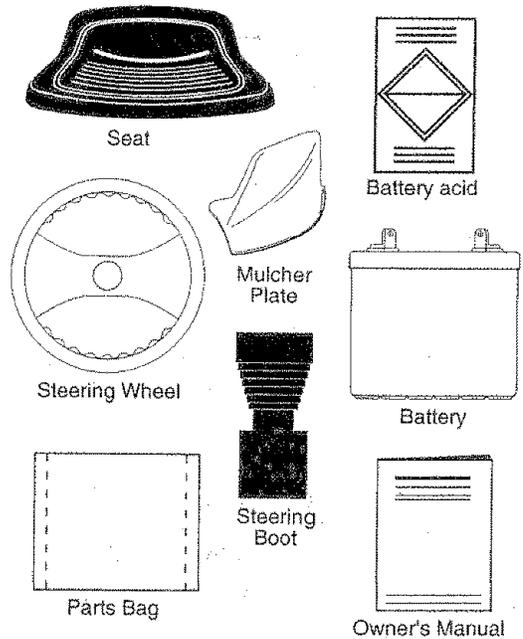
**WHEEL WEIGHTS** for rear wheels provide needed traction for snow removal or dozing heavy materials.

# CONTENTS OF HARDWARE PACK

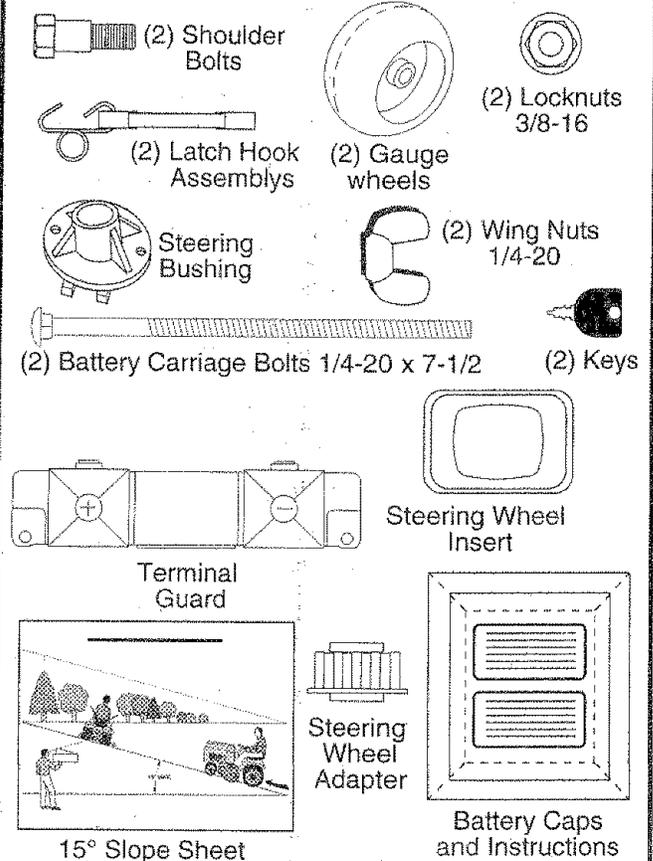
## Parts Bag contents shown full size



## 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) 5/16" wrench   | 9/16" wrench        |
| (2) 7/16" wrenches | Screwdriver         |
| (1) 1/2" wrench    | Utility knife       |
| (1) 3/4" wrench    | Tire pressure gauge |

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

## TO REMOVE UNIT FROM CARTON

### UNPACK CARTON

- Remove all accessible loose parts and parts cartons from carton (See page 6).
- 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 UNIT OFF SKID

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

- Slide the steering bushing over the steering shaft.
- Raise steering shaft forward until screw holes in dash line up with steering bushing. Install two (2) sheet metal screws and tighten securely.
- Position steering boot over steering shaft.
- Place tabs of steering boot over tab slots in dash and push down to secure.
- Slide steering wheel adapter onto upper steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto adapter.
- Assemble large flat washer and 3/8-24 locknut and tighten securely.

Snap steering wheel insert into center of steering wheel.

Remove protective plastic from tractor hood and grill.

Raise hood. Remove any packing material from engine. Close hood.

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

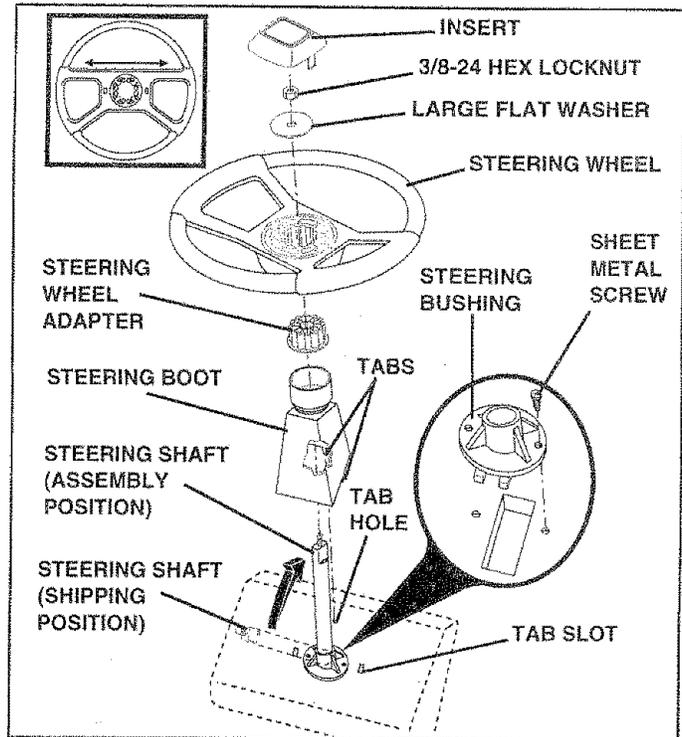


FIG. 1

### TO ROLL UNIT OFF SKID (See Fig. 7)

- Raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in "NEUTRAL" position.
- Roll unit backwards off skid.
- Remove banding holding discharge guard up against tractor.

# ASSEMBLY

## HOW TO SET UP YOUR TRACTOR PREPARE BATTERY (See Fig. 2)

**CAUTION: Wear eye and face shield.**

Wash hands or clothing immediately if accidentally in contact with battery acid.

Do not smoke. Fumes from charged battery acid are explosive.

Read the instructions included with the battery vent caps. Always wear gloves, clothing and goggles to protect your hands, skin and eyes.



Your unit 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.

- See instructions packed with vent caps in parts bag.
- Fill battery with acid. Fill each cell until it reaches the bottom of the vent wells. Do not overfill.
- Allow battery to stand and settle for at least thirty minutes. After standing, check the level of acid. If below the vent wells, add more acid until the correct level is reached.

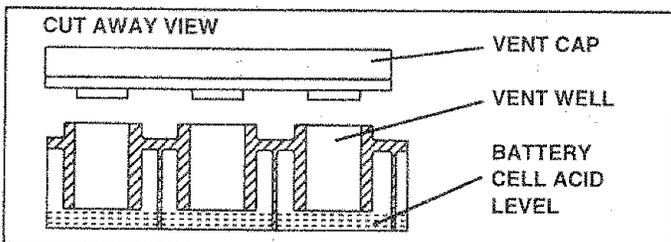


FIG. 2

While battery is standing (after adding acid) and later, while battery is being charged, continue with assembly of unit.

**IMPORTANT: TO MAXIMIZE THE LIFE OF YOUR BATTERY, IT IS NECESSARY THAT THE BATTERY BE CHARGED BEFORE USE. FAILURE TO CHARGE BATTERY CAN RESULT IN A SHORTENED BATTERY LIFE.**

- Charge battery at a rate of 6 amperes for 1 hour. Observe all safety precautions required for battery charging.
- Check the acid level after the battery is charged. If the acid has fallen below the correct level, add distilled or iron free water.
- Install the vent caps to cover the vent wells. Wash the top of the battery with water to remove any acid, then wipe dry.
- Check battery case for leakage to make sure that no damage has occurred in handling.
- Dispose of excess battery acid. Neutralize acid for disposal by adding it to four inches of water in a five gallon plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.
- Follow instructions on how to install battery.

## INSTALL SEAT (See Fig. 3)

Adjust seat before tightening adjustment bolt.

- Remove cardboard packing on seat pan.
- Place seat on pan and assemble shoulder bolt.
- Assemble adjustment bolt, lock washer and flat washer loosely. Do not tighten.
- Tighten shoulder bolt securely.
- 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 (See Fig. 6).
- Get off seat without moving its adjusted position.
- Raise seat and tighten adjustment bolt securely.

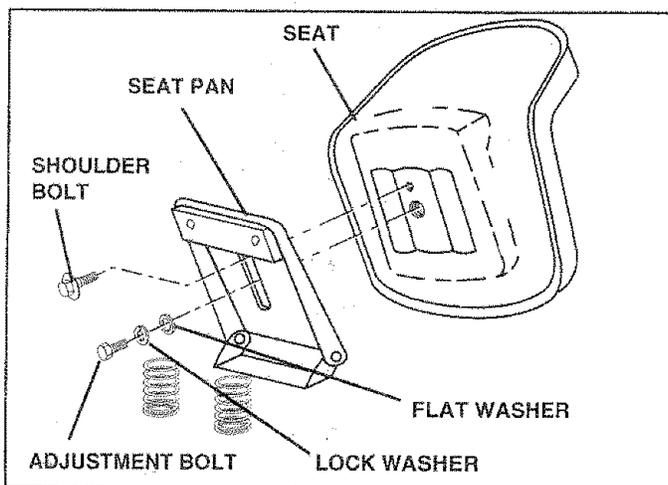


FIG. 3

## CHECK TIRE PRESSURE

The tires on your unit 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 3 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.

# ASSEMBLY

## INSTALL BATTERY (See Figs. 4A & 4B)



**CAUTION:** Do not short battery terminals. Before installing battery, remove metal bracelets, wristwatch bands, rings, etc.

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

**NOTE:** For ease of battery installation, the heat shield between engine and battery compartment may be removed. Before removing heat shield, note position and routing of all cables and wires. If you remove the shield, be sure it is reassembled properly after installing battery.

- Make sure drain tube is fastened to drain hole in battery tray and battery tray is positioned in hole of battery support.
- Place battery in plastic tray, battery terminals to front of tractor.
- 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.
- Slide the two battery bolts through the terminal guard and start the wing nuts onto the threads.
- Position terminal guard over the battery as shown, lower bolts into key holes and slide square shafts of bolts into slots of key holes.
- Tighten wing nuts by hand making sure battery bolts remain in slots of the key holes in the battery support.
- Be sure terminal access doors are closed.

Use terminal access doors for:

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

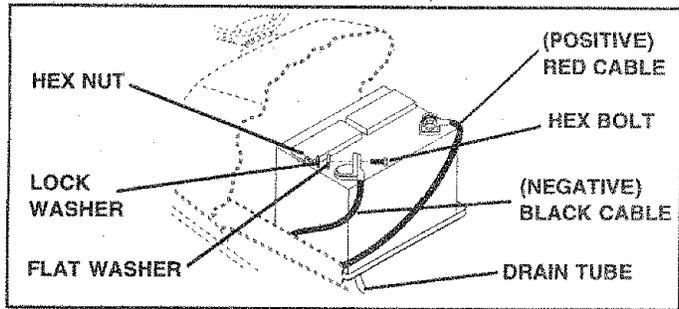


FIG. 4A

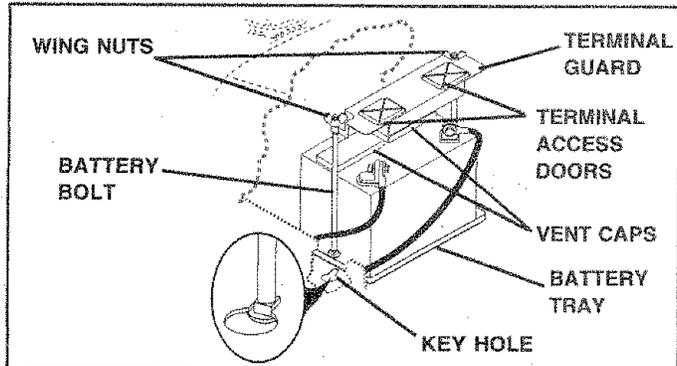


FIG. 4B

## ASSEMBLE GAUGE WHEELS TO MOWER DECK (See Fig. 5)

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 and locknut and tighten securely.
- Repeat for opposite side installing gauge wheel in same adjustment hole.

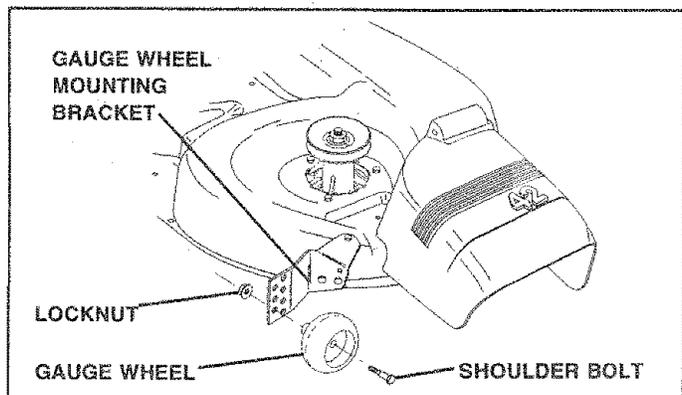


FIG. 5

# ASSEMBLY

## INSTALL MULCHER PLATE (See Figs. 6A & 6B)

- 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.

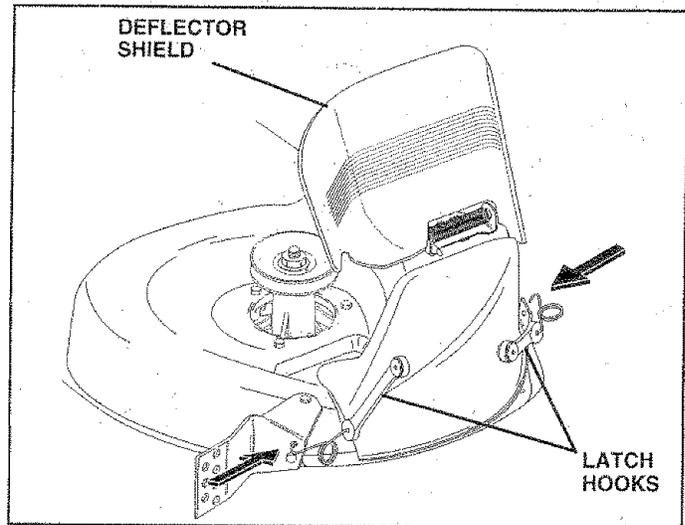


FIG. 6B

## TO CONVERT TO BAGGING OR DISHCHARGING

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

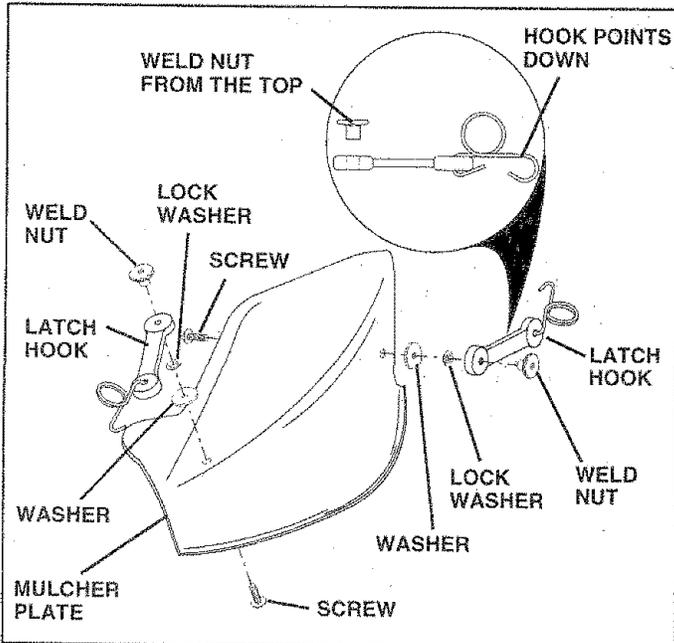


FIG. 6A

## ✓ 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.

*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.

# 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.

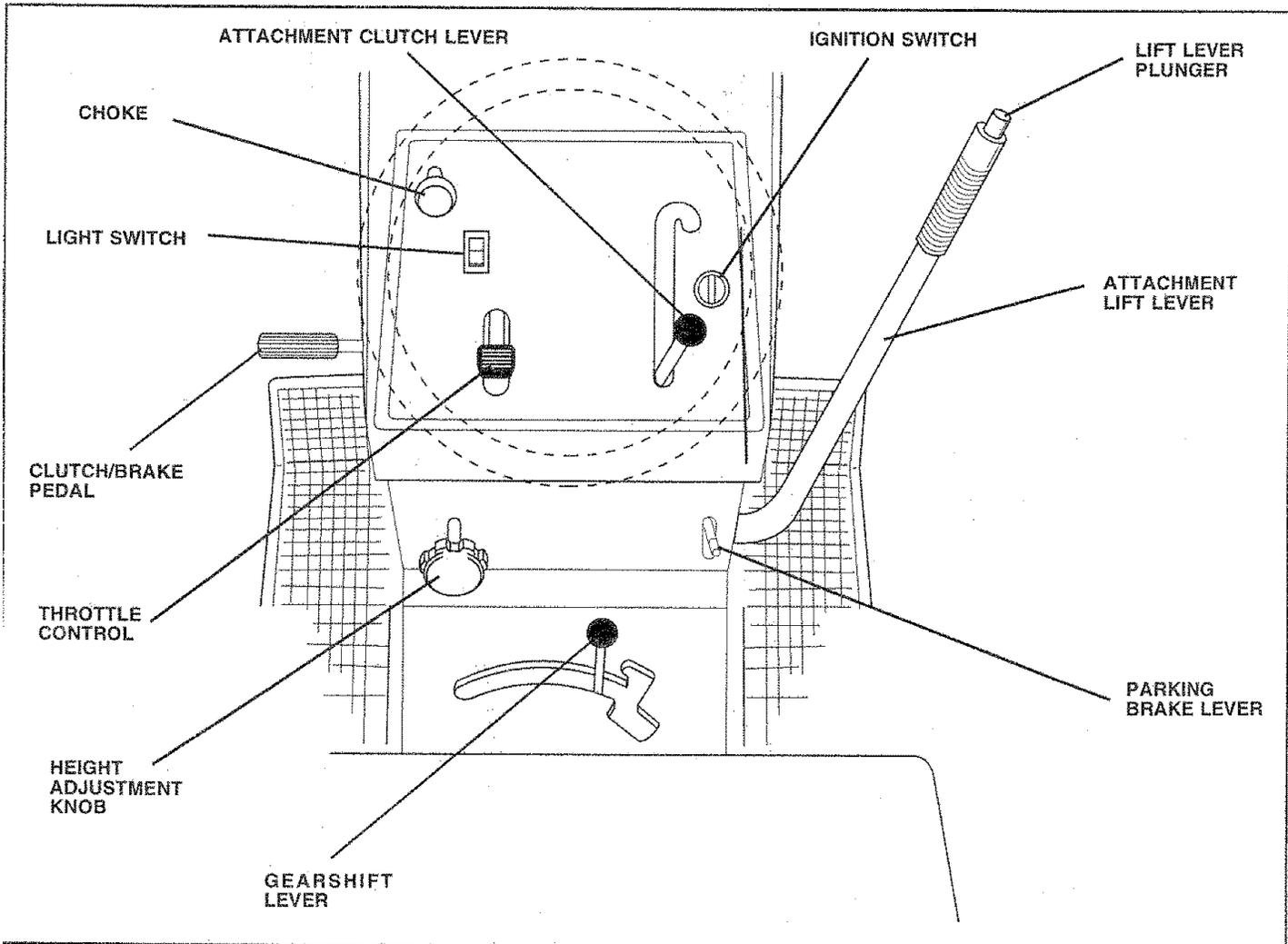


FIG. 7

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

**THROTTLE CONTROL:** Used for starting and controlling engine speed.

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

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

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

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

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

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

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

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

**PARKING BRAKE LEVER:** Locks Clutch/Brake Pedal into the brake position.

**GEARSHIFT LEVER:** Selects the speed and direction of tractor.

# 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 wide vision safety mask for over the spectacles or standard safety glasses, available at Sears Retail or Catalog stores.

## HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE (See Fig. 8)

- 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 vehicle secure.

## STOPPING (See Fig. 8)

### MOWER BLADES -

- Move attachment clutch lever to "DISENGAGED" position.

### GROUND DRIVE -

- Depress clutch/brake pedal into full "BRAKE" position.
- Move gearshift lever to "NEUTRAL" position.

### 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 vehicle to prevent unauthorized use.
- Never use choke to stop engine.

**NOTE:** Under certain conditions when unit 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 unit on grass areas.



**CAUTION:** Always stop unit 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 gearshift lever.

- Start tractor with clutch/brake pedal depressed and gearshift lever in "NEUTRAL" position.
- Move gearshift lever to desired position.
- Slowly release clutch/brake pedal to start movement.

**IMPORTANT:** BRING TRACTOR TO A COMPLETE STOP BEFORE SHIFTING OR CHANGING GEARS. FAILURE TO DO SO WILL SHORTEN THE USEFUL LIFE OF YOUR TRANSAXLE.

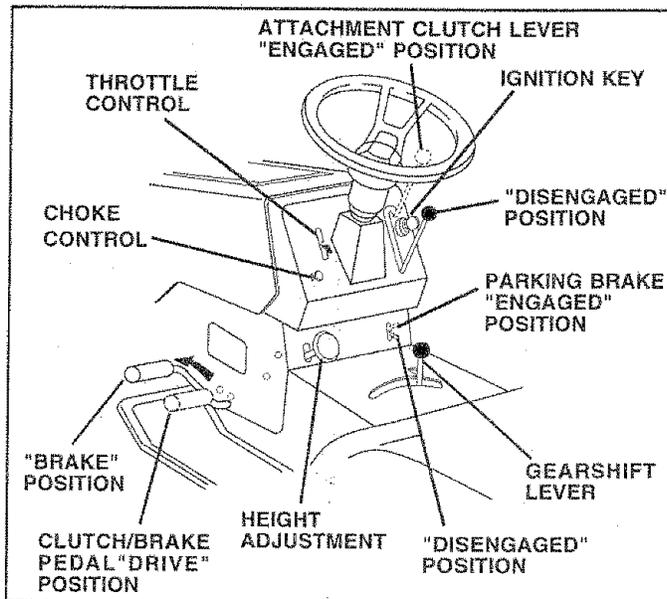


FIG. 8

## TO ADJUST MOWER CUTTING HEIGHT (See Fig. 8)

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 unit 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.



**CAUTION:** Do not operate the mower without either the entire grass catcher, on mowers so equipped, or the discharge guard in place.

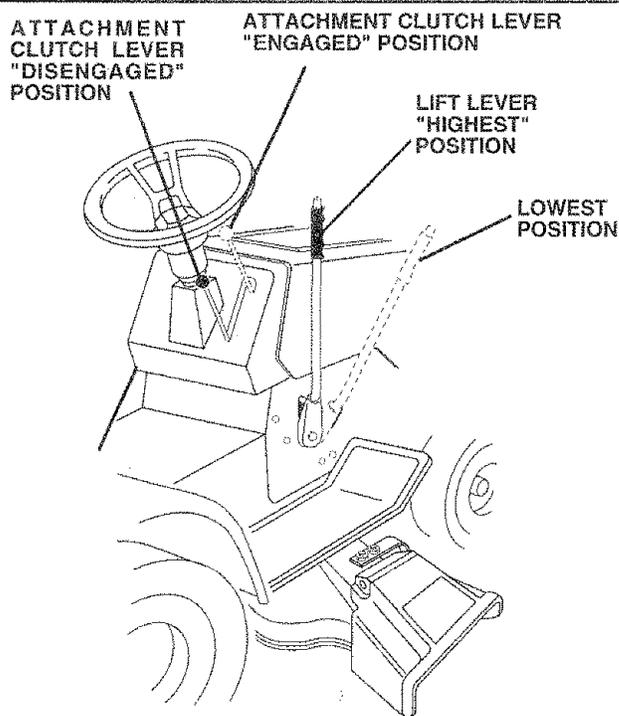


FIG. 9

## TO OPERATE ON HILLS



**CAUTION:** Do not drive up or down hills with slopes greater than 15° and do not drive across any slope.

- 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 gearshift lever to 1st gear and be sure you have allowed room for tractor to roll slightly as you restart movement.
- To restart movement, slowly release parking brake and clutch/brake pedal.
- Make all turns slowly.

## TO TRANSPORT

- Raise attachment lift control to highest position.
- When pushing or towing your unit, be sure gearshift lever is in "NEUTRAL" position.
- Do not push or tow unit at more than five (5) MPH.

**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.).

## BEFORE STARTING THE ENGINE

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

- The engine in your unit has been shipped, from the factory, already filled with summer weight oil.
- Check engine oil with unit on level ground.
- Remove oil fill dipstick and wipe clean, replace 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. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life).

**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.



**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.



# CUSTOMER RESPONSIBILITIES

MAINTENANCE SCHEDULE FILL IN DATES AS YOU COMPLETE REGULAR SERVICE		SERVICE INTERVALS					SERVICE DATES					
		BEFORE EACH USE	FIRST 2 HOURS	EVERY 8 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY SEASON	BEFORE STORAGE			
TRACTOR	Check Brake Operation	✓		✓								
	Check Tire Pressure	✓		✓								
	Check for Loose Fasteners	✓						✓				
	Sharpen/Replace Mower Blades				✓ <sub>4</sub>							
	Lubrication Chart				✓			✓				
	Check Battery Level/Recharge				✓							
	Clean Battery and Terminals				✓			✓				
	Check Transmission Cooling				✓							
	Adjust Blade Belt(s) Tension						✓ <sub>5</sub>					
	Adjust Motion Drive Belt(s) Tension						✓ <sub>5</sub>					
	ENGINE	Check Engine Oil Level	✓		✓							
Change Engine Oil			✓		✓ <sub>1,2,3</sub>			✓				
Clean Air Filter					✓ <sub>2</sub>							
Clean Air Screen					✓ <sub>2</sub>							
Inspect Muffler/Spark Arrester						✓						
Replace Oil Filter (If equipped)							✓ <sub>1,2</sub>					
Clean Engine Cooling Fins							✓ <sub>2</sub>					
Replace Spark Plug							✓	✓				
Replace Air Filter Paper Cartridge							✓ <sub>2</sub>					
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.

## GENERAL RECOMMENDATIONS

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

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

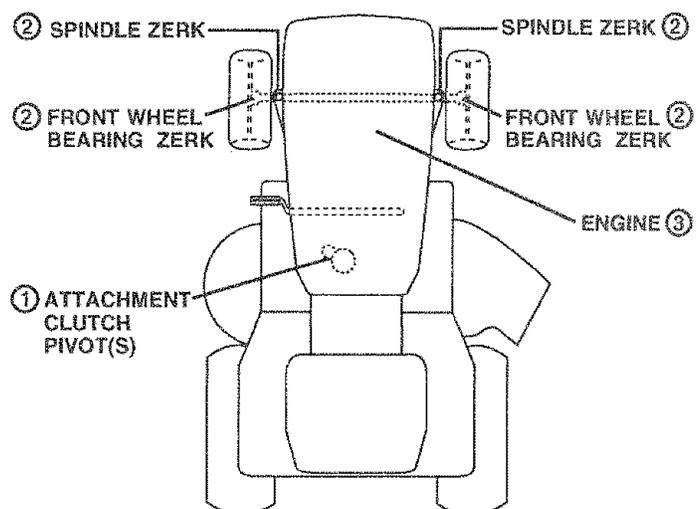
All adjustments in the Service and Adjustments section of this manual should be checked at least once each season.

- 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 API - SG

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 unit requires more than six (6) feet stopping distance at high speed in highest gear, then brake must be adjusted. (See "TO ADJUST BRAKE" in 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.

## BLADE CARE

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

## BLADE REMOVAL (See Fig. 12)

- 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.
- Reassemble hex bolt, lock washer and flat washer in exact order as shown.
- Tighten bolt securely (30-35 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.

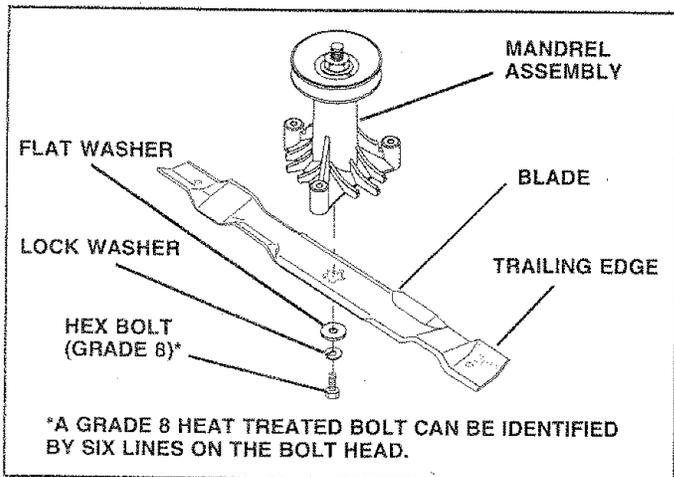


FIG. 12

## TO SHARPEN BLADE (See Fig. 13)

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 cone balancer. (When using a cone balancer, follow the instructions supplied with the balancer).
- Slide blade on to an unthreaded portion of the steel bolt or pin parallel with 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.

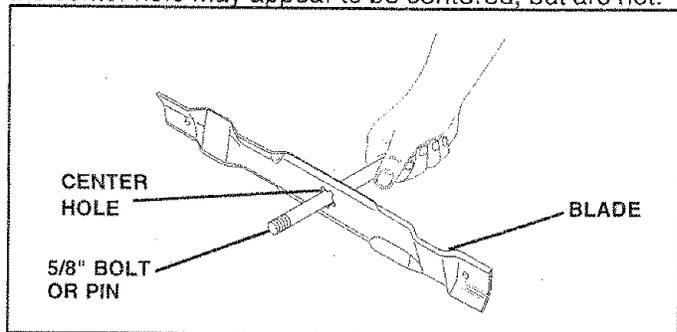


FIG. 13

## BATTERY (See Fig. 14)

Your unit 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.

- Acid solution level in each battery cell should be even with bottoms of vent wells. Add only distilled or iron free water if necessary. Do not overfill.
- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep vent caps tight and small vent holes in caps open.
- Recharge at 6 amperes for 1 hour.

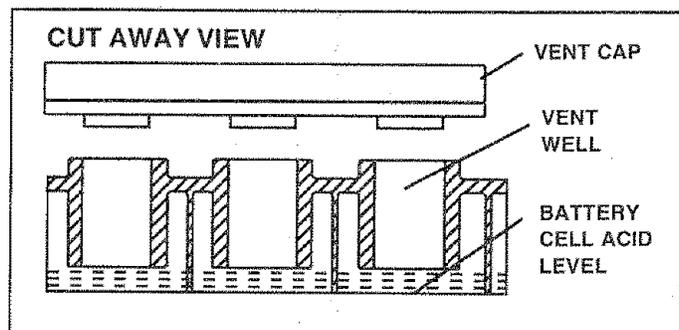


FIG. 14

# CUSTOMER RESPONSIBILITIES

## 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.
- Wash battery with solution of four tablespoons of baking soda to one gallon of water. Be careful not to get the soda solution into the cells.
- 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 "INSTALL BATTERY" in Assembly section of this manual).

## V-BELTS

Check V-belts for deterioration and wear after 100 hours and replace if necessary. The belts are not adjustable. Replace belts if they begin to slip from wear.

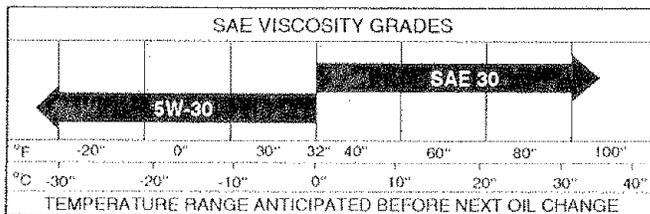
## TRANSAXLE COOLING

Keep transaxle free from build-up of dirt and chaff which can restrict cooling.

## ENGINE

### LUBRICATION

Only use high quality detergent oil rated with API service classification SG. Select the oil's SAE viscosity grade according to your expected operating temperature.



**NOTE:** Although multi-viscosity oils (5W30, 10W30 etc.) improve starting in cold weather, these multi-viscosity oils will result in increased oil consumption when used above 32°F. Check your engine oil level more frequently to avoid possible engine damage from running low on oil.

Change the oil after the first two hours of operation and every 25 hours thereafter or at least once a year if the tractor is not used for 25 hours in one year.

Check the crankcase oil level before starting the engine and after each eight (8) hours of continuous use. Tighten oil fill cap/dipstick securely each time you check the oil level.

### TO CHANGE ENGINE OIL (See Fig. 15)

- Be sure vehicle is on level surface.
- Oil will drain more freely when warm.
- Catch oil in a suitable container.
- Remove oil fill dipstick. Be careful not to allow dirt to enter the engine when changing oil.

- Remove drain plug.
- After oil has drained completely, replace oil drain plug and tighten securely.
- Refill engine with oil through oil fill dipstick tube. Pour slowly. Do not overfill. For approximate capacity see Product Specifications on page 3 of this manual.
- Use gauge on oil fill dipstick for checking level. Be sure dipstick cap is tightened securely for accurate reading. Keep oil at "FULL" line on dipstick.

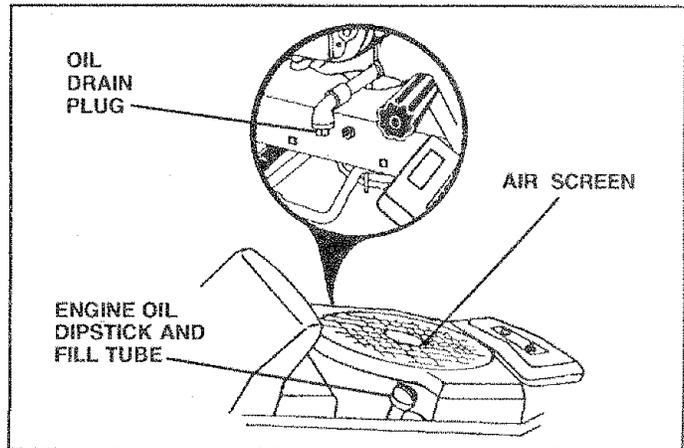


FIG. 15

### AIR SCREEN (See Fig. 15)

The engine 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 removed dirt and stubborn dried gum fibers.

### AIR FILTER (See Fig. 16)

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

Service air cleaner more often under dusty conditions.

- Remove knob(s) and cover.

### TO SERVICE PRE-CLEANER

- Slide foam pre-cleaner off cartridge.
- 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.
- Reinstall pre-cleaner over cartridge.
- Reinstall cover and secure with knob(s).

### TO SERVICE CARTRIDGE

- Remove wing nuts and cartridge plate.
- Remove cartridge and clean by tapping gently on flat surface.
- If very dirty, replace or wash in a nonsudsing detergent and warm water solution. Rinse thoroughly with water from inside out until water runs clear. Let cartridge dry thoroughly before using.
- Reinstall cartridge plate, wing nuts, precleaner, cover and secure with knob(s).

# CUSTOMER RESPONSIBILITIES

**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.

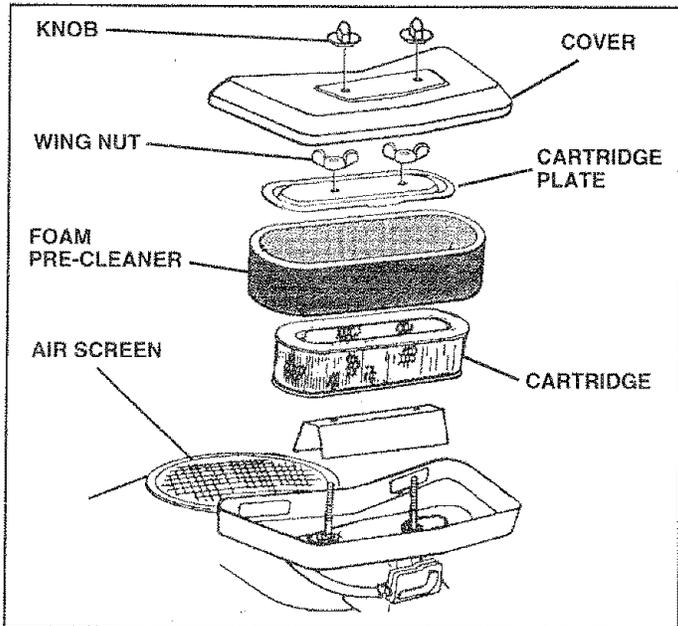


FIG. 16

## ENGINE COOLING FINS (See Fig. 17)

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating. Air guide covers must be removed. Remove side panels and hood (See "TO REMOVE HOOD AND GRILL ASSEMBLY" in the Service and Adjustments section of this manual).

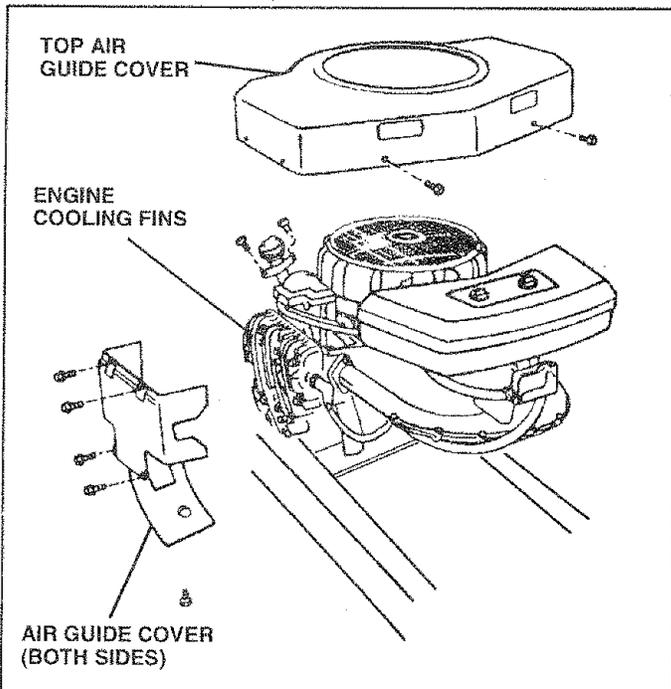


FIG. 17

## 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 use, whichever comes first. Spark plug type and gap setting is shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

## IN-LINE FUEL FILTER (See Fig. 18)

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.
- Be sure there are no fuel line leaks and clamps are properly positioned.
- Immediately wipe up any spilled gasoline.

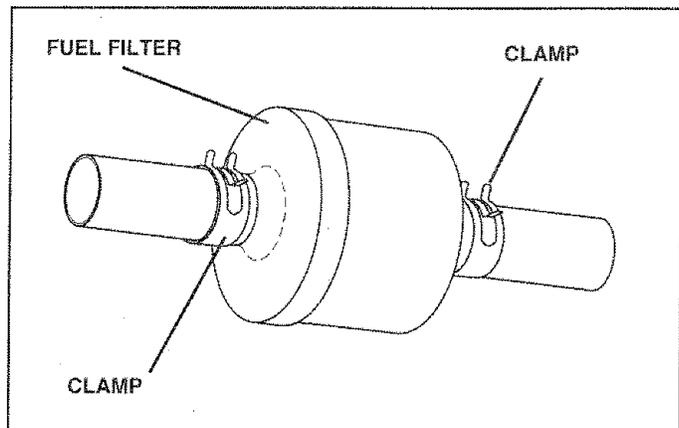


FIG. 18

## 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 unit 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 gearshift lever in "NEUTRAL" 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. 19)

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 IS TO BE MOUNTED TO THE TRACTOR, BOTH SUSPENSION ARMS MUST BE REMOVED FROM TRACTOR.

### TO INSTALL MOWER (See Fig. 19)

- 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.

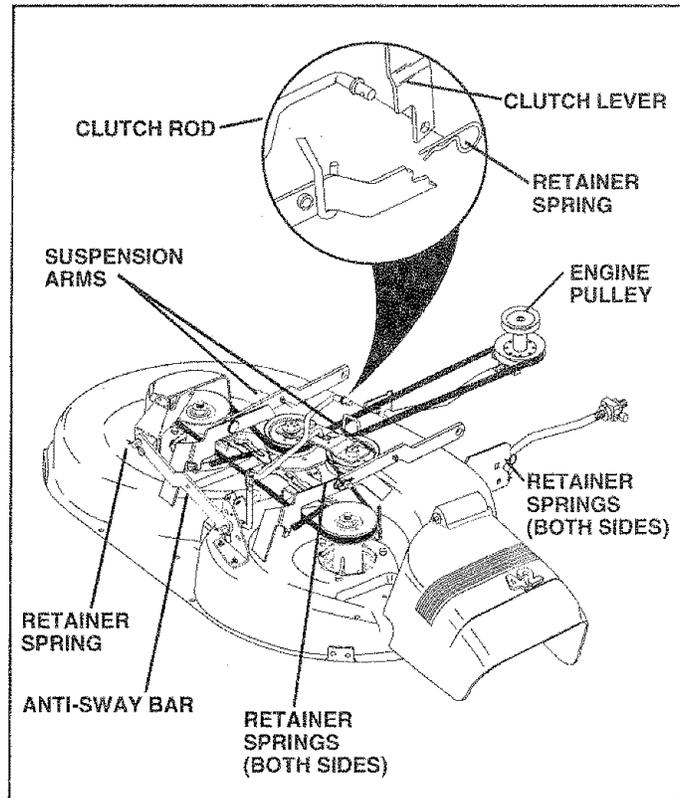


FIG. 19

# 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 3). If tires are over or under inflated, you will not properly adjust your mower.

### SIDE-TO-SIDE ADJUSTMENT (See Figs. 20 and 21)

You will need two (2) standard 2 x 4 short pieces of wood to make the following adjustment. Similar blocks measuring 1-1/2" thick may also be used.

- Raise mower with attachment lift control to allow two (2) 1-1/2" thick blocks to be placed under rear edge of mower.
- Place one block directly behind the left mandrel. Place the remaining block under the stamped ridge on the right rear edge of mower deck.
- Lower mower deck to its lowest height of cut position (See "TO ADJUST MOWER CUTTING HEIGHT" in Operation section of this manual).
- On both sides of tractor, loosen, but do not remove, the fasteners securing the adjustable pivot brackets to frame. Both brackets must be loose enough to move freely.
- Pull down firmly on suspension arm to remove any slack in pivot bracket and hold while tightening rear fastener first to secure. Tighten remaining fastener.
- Repeat procedure on other side of tractor.
- Raise mower with attachment lift control and remove blocks from under mower.

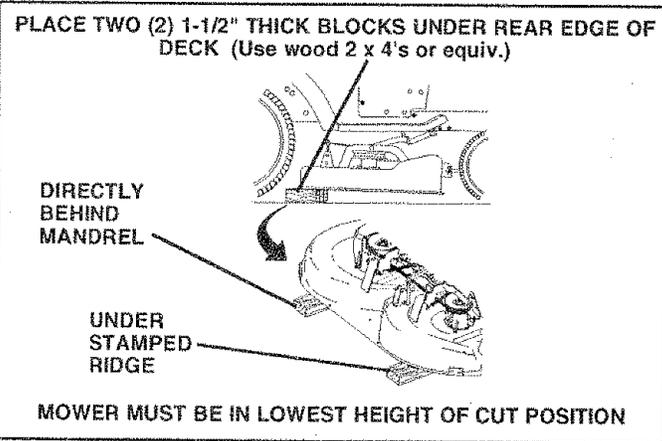


FIG. 20

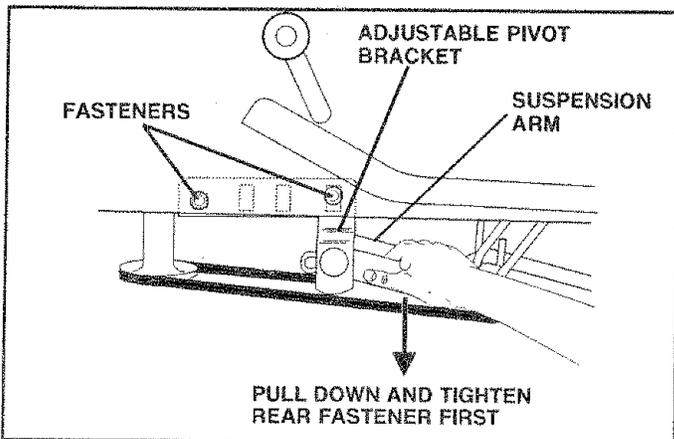


FIG. 21

FRONT-TO-BACK ADJUSTMENT (See Figs. 22 and 23) - **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 1/4" to 3/4" 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 1/4" to 3/4" 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 1/4" to 3/4" lower at front than rear, tighten nut "F" against trunnion on both front links.
- Recheck side-to-side adjustment.

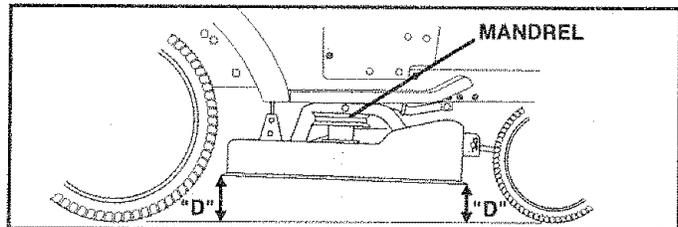


FIG. 22

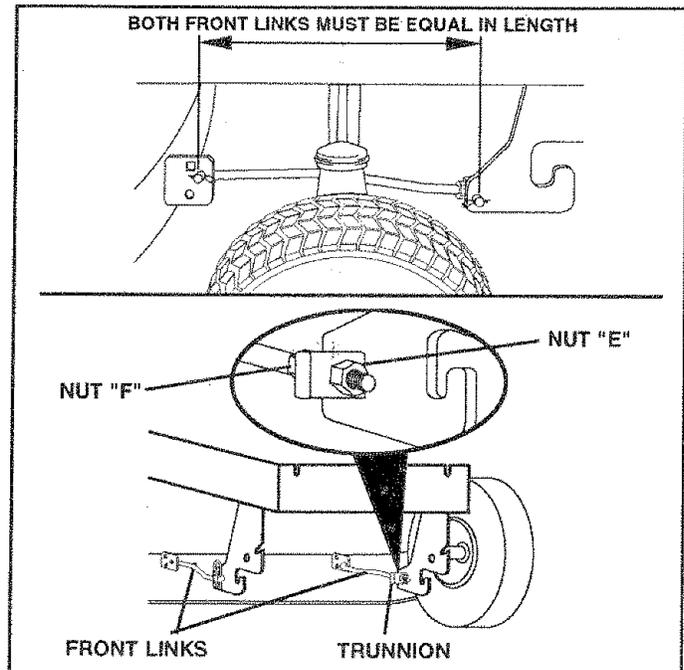


FIG. 23

# SERVICE AND ADJUSTMENTS

## TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 24)

The mower blade drive belt may be replaced without tools. Park the tractor on level surface. Engage parking brake. For assistance, there is a belt installation guide decal on the mower housing.

### BELT REMOVAL -

- Place attachment clutch in "DISENGAGED" position.
- Move attachment lift lever forward to lower mower to its lowest position.
- Roll belt off engine pulley.
- 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.

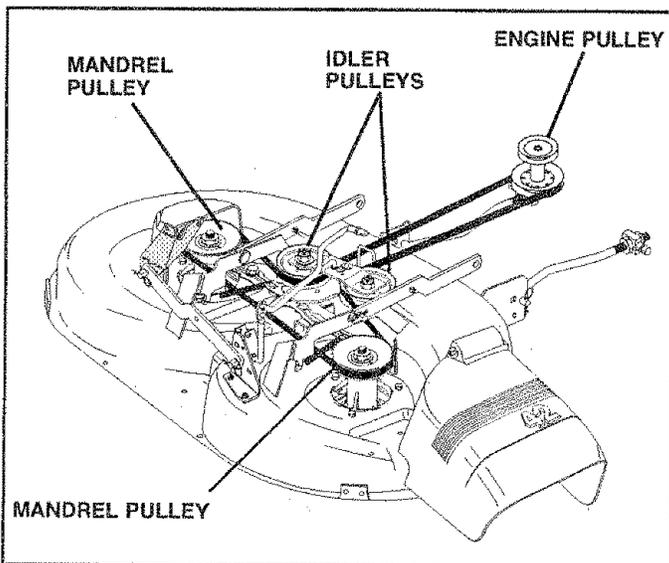


FIG. 24

## TO ADJUST BRAKE (See Fig. 25)

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

If unit 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 1-1/2", disengage parking brake, loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Engage parking brake and recheck distance.
- Road test unit 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.

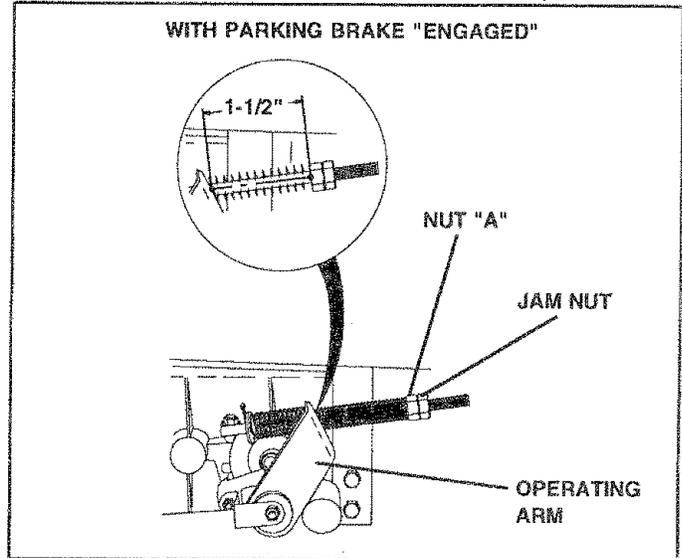


FIG. 25

## TO REPLACE MOTION DRIVE BELT (See Fig. 26)

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 upper belt keeper.
- Remove belt from stationary idler and clutching idler.
- Pull belt slack toward rear of tractor. Remove belt upwards from transaxle pulley by deflecting belt keepers.
- Pull belt toward front of tractor and remove downwards from around engine pulley.
- Install new belt by reversing above procedure.

**IMPORTANT: MAKE SURE UPPER BELT KEEPER IS POSITIONED PROPERLY BETWEEN LOCATOR TABS.**

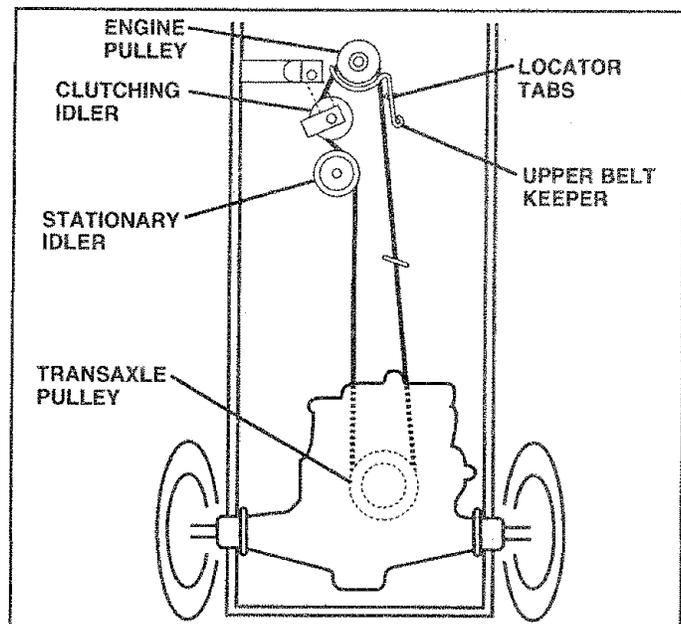


FIG. 26

# SERVICE AND ADJUSTMENTS

## 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/CAMBER

The front wheel toe-in and camber are not adjustable on your unit. If damage has occurred to affect the front wheel toe-in or camber, contact your nearest authorized service center.

## TO REMOVE WHEEL FOR REPAIRS (See Fig. 27)

- 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.

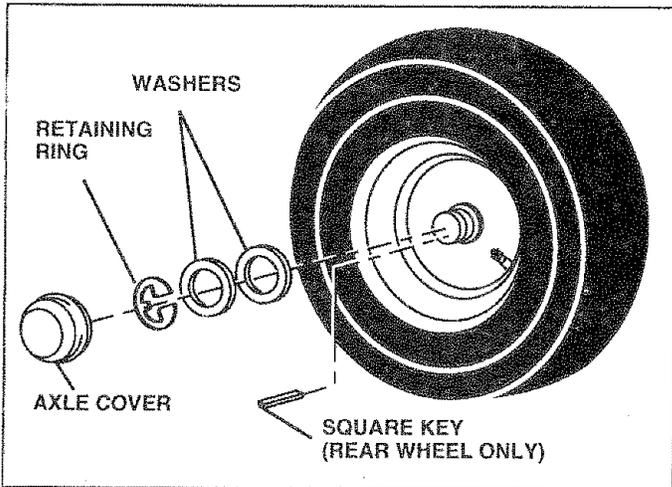


FIG. 27

## TO START ENGINE WITH A WEAK BATTERY (See Figs. 28 & 29)



**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 UNIT IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED 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 a panel bolt on the left side of the chassis, away from fuel tank and battery.

To remove cables, reverse order -

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

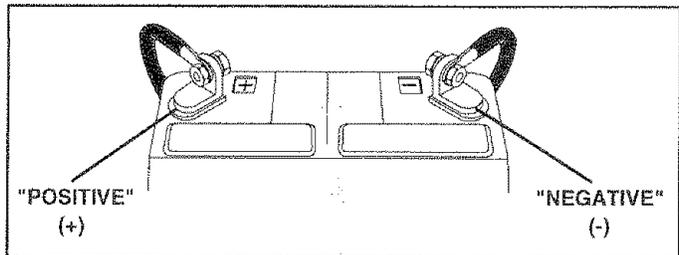


FIG. 28

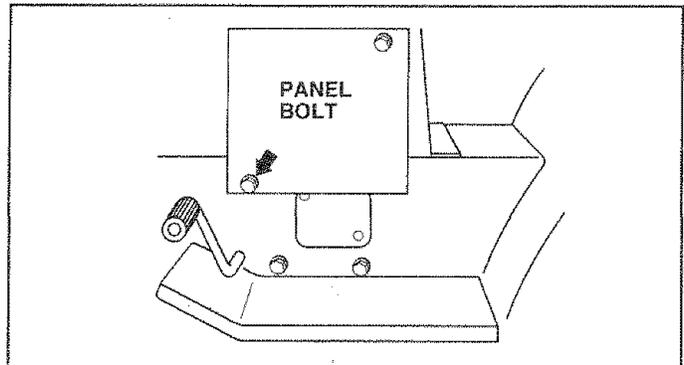


FIG. 29

# SERVICE AND ADJUSTMENTS

## TO REPLACE FUSE

Replace with 30 amp automotive-type plug-in fuse. The fuse holder is located in the engine compartment, directly in front of the dash.

## 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 Repair Parts section of this manual.

## TO REMOVE HOOD AND GRILL (See Fig. 30)

- Raise hood.
- Unsnap headlight wire connector.
- Stand in front of tractor. Grasp hood at sides, tilt forward and lift off of tractor.
- To reinstall, slide hood pivot brackets into slots in frame.
- Reconnect headlight wire connector and close hood.

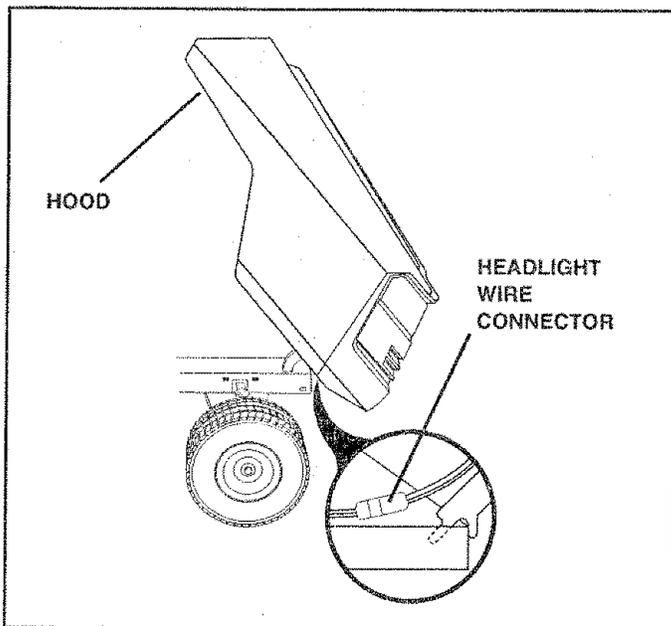


FIG. 30

## ENGINE

### TO ADJUST THROTTLE CONTROL CABLE (See Fig. 31)

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 side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle. Tighten cable clamp screw securely.

### TO ADJUST CHOKE CONTROL (See Fig. 32)

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.
- Remove air cleaner cover, filter and spitback plate to expose carburetor choke (see "AIR FILTER" in the Customer Responsibilities section of this manual).
- 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.
- Reassemble air cleaner.

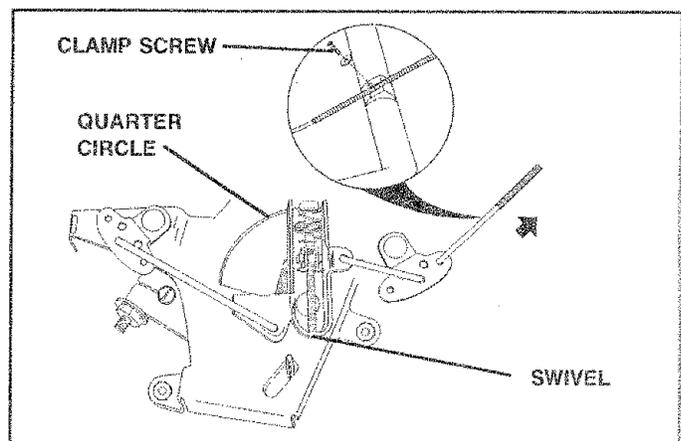


FIG. 31

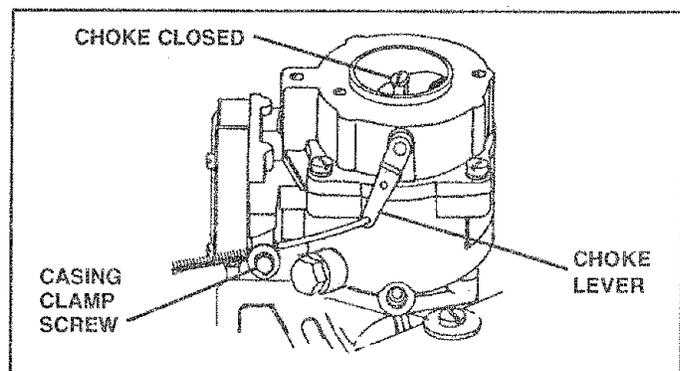


FIG. 32

# SERVICE AND ADJUSTMENTS

## TO ADJUST CARBURETOR (See Fig. 33 & 34)

The carburetor has been preset at the factory and adjustment should not be necessary. However, minor adjustment may be required to compensate for differences in fuel, temperature, altitude or load. If the carburetor does need adjustment, proceed as follows:

In general, turning the mixture screw **in** (clockwise) decreases the supply of fuel to the engine giving a leaner fuel/air mixture. Turning the mixture screw **out** (counterclockwise) increases the supply of fuel to the engine giving a richer fuel/air mixture.

**IMPORTANT:** DAMAGE TO THE NEEDLES AND THE SEATS IN CARBURETOR MAY RESULT IF SCREW IS TURNED IN TOO TIGHT.

### PRELIMINARY SETTING -

- Be sure you have a clean air filter, and the throttle control cable and choke are adjusted properly (see above).
- With engine off turn idle mixture screw **in** (clockwise) closing it finger tight and then turn **out** (counterclockwise) 1-1/4 to 1-1/2 turns.

### FINAL SETTING -

- Start engine and allow to warm for five minutes. Make final adjustments with engine running and shift/ motion control lever in "NEUTRAL" position.
- With throttle control lever in "SLOW" position, hold throttle lever against idle speed screw and adjust idle speed screw to obtain 1200 to 1400 RPM.
- While still holding throttle lever against idle speed screw, turn idle mixture screw **in** (clockwise) until engine begins to die and then turn **out** (counterclockwise) until engine runs rough. Turn screw to a point midway between those two positions.
- Continue to hold throttle lever against idle speed screw and adjust idle speed screw to obtain 900 to 1200 RPM. Release throttle lever.

### ACCELERATION TEST -

- Move throttle control lever from "SLOW" to "FAST" position. If engine hesitates or dies, turn idle mixture screw **out** (counterclockwise) 1/8 turn. Repeat test and continue to adjust, if necessary, until engine accelerates smoothly.

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, WHICH HAS PROPER EQUIPMENT AND EXPERIENCE TO MAKE ANY NECESSARY ADJUSTMENTS.

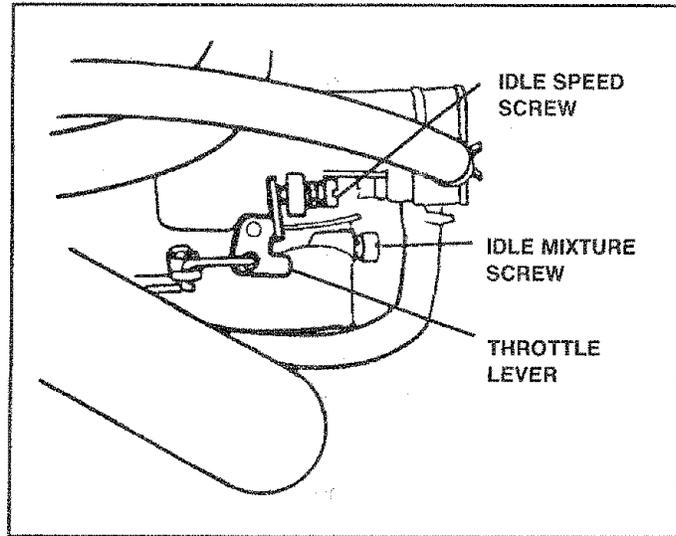


FIG. 33

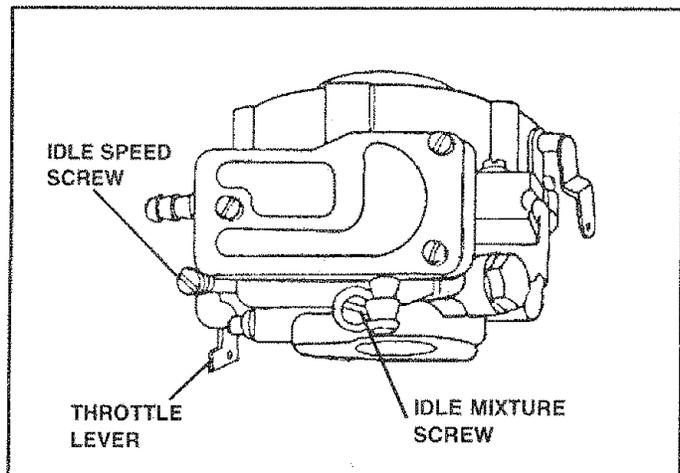


FIG. 34

# STORAGE

Immediately prepare your tractor for storage at the end of the season or if the unit 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.

## 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).

### CYLINDERS

- 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 unit indoors and cover it to give protection from dust and dirt.
- Cover your unit 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 unit to rust.

**IMPORTANT:** NEVER COVER TRACTOR WHILE ENGINE AND EXHAUST AREAS 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. Contact an authorized service center/department.</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. Contact an authorized service center/department.</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. Contact an authorized service center/department.</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>
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>

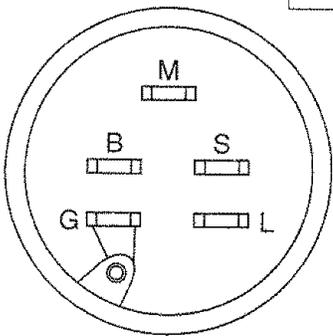
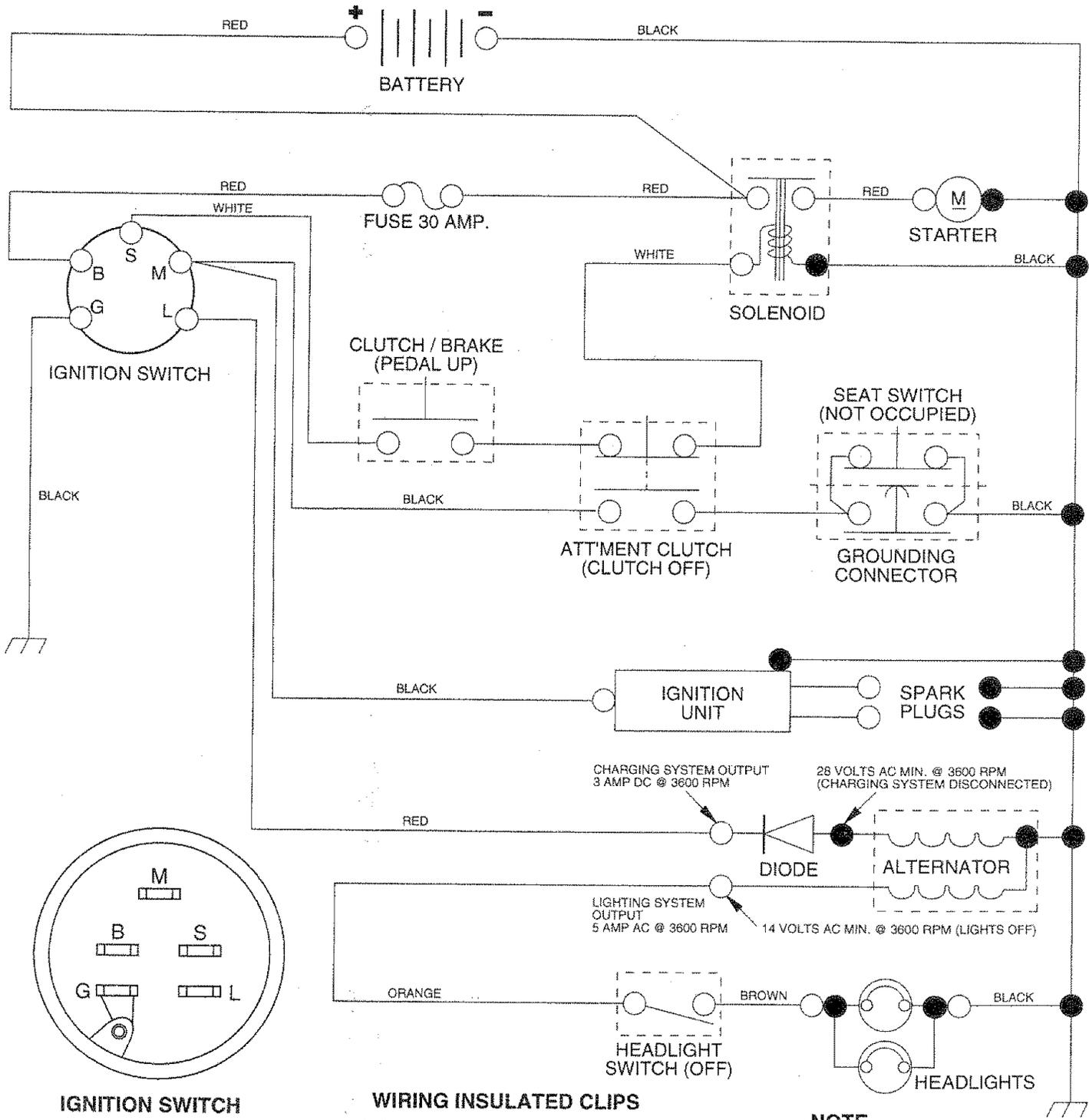
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# SERVICE NOTES

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# 18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## SCHEMATIC



**IGNITION SWITCH**

POSITION	CIRCUIT
OFF	M + G
ON	B + L
START	B + S

**WIRING INSULATED CLIPS**

**NOTE:** IF WIRING INSULATED CLIPS WERE REMOVED FOR SERVICING OF UNIT, THEY SHOULD BE REPLACED TO PROPERLY SECURE YOUR WIRING

**NOTE**

YOUR TRACTOR IS EQUIPPED WITH A SPECIAL ALTERNATOR SYSTEM. THE LIGHTS ARE NOT CONNECTED TO THE BATTERY, BUT HAVE THEIR OWN ELECTRICAL SOURCE. BECAUSE OF THIS, THE BRIGHTNESS OF THE LIGHTS WILL CHANGE WITH ENGINE SPEED. AT IDLE THE LIGHTS WILL DIM. AS THE ENGINE IS SPEEDED UP, THE LIGHTS WILL BECOME THEIR BRIGHTEST.

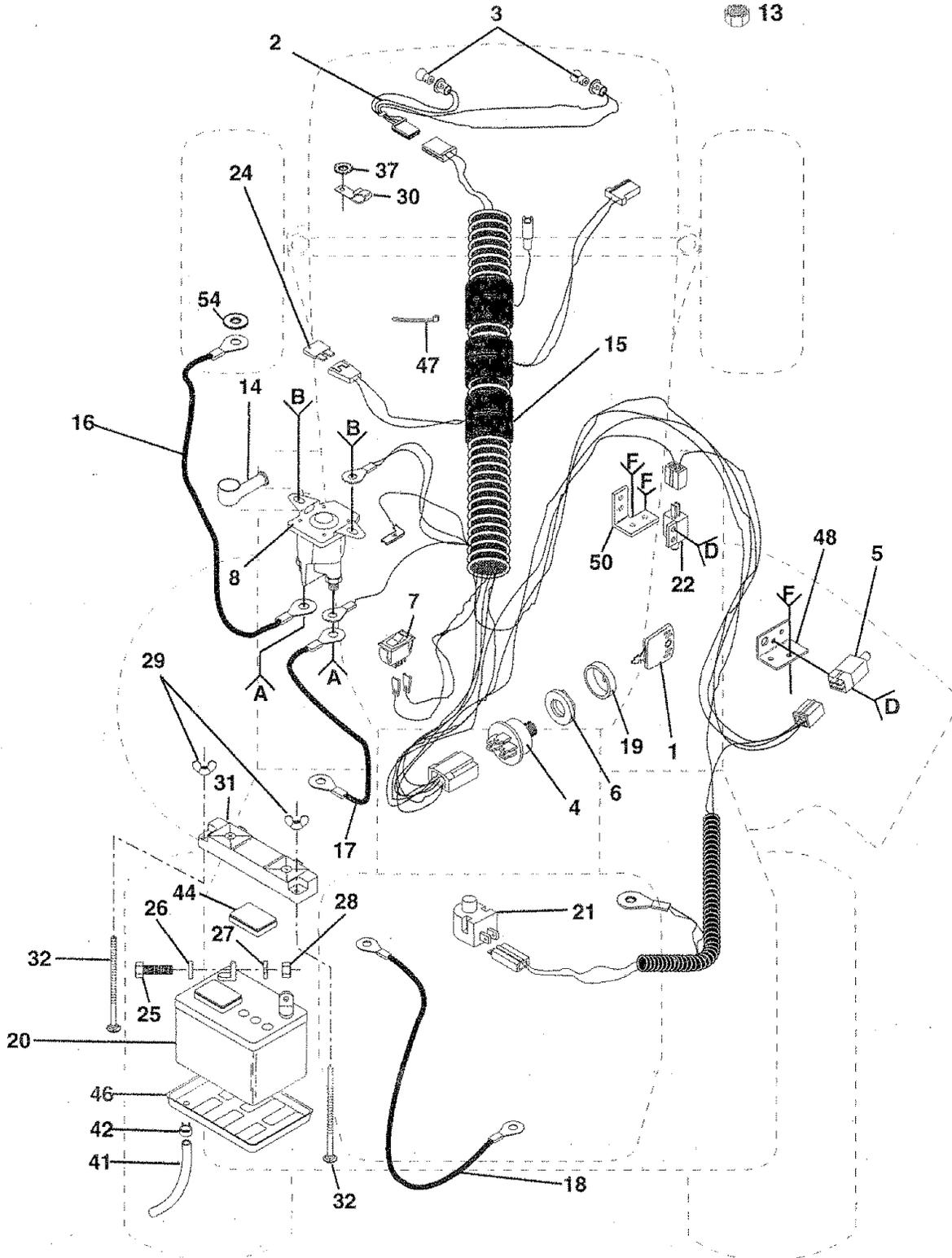


# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## ELECTRICAL

- |  |  |  |  |
|--|--|--|--|
| <b>A</b>   | <b>B</b>   | <b>D</b>   | <b>F</b>   |
|  9  |  39 |  23 |  49 |
|  10 |  13 |  |  |



# REPAIR PARTS

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## ELECTRICAL

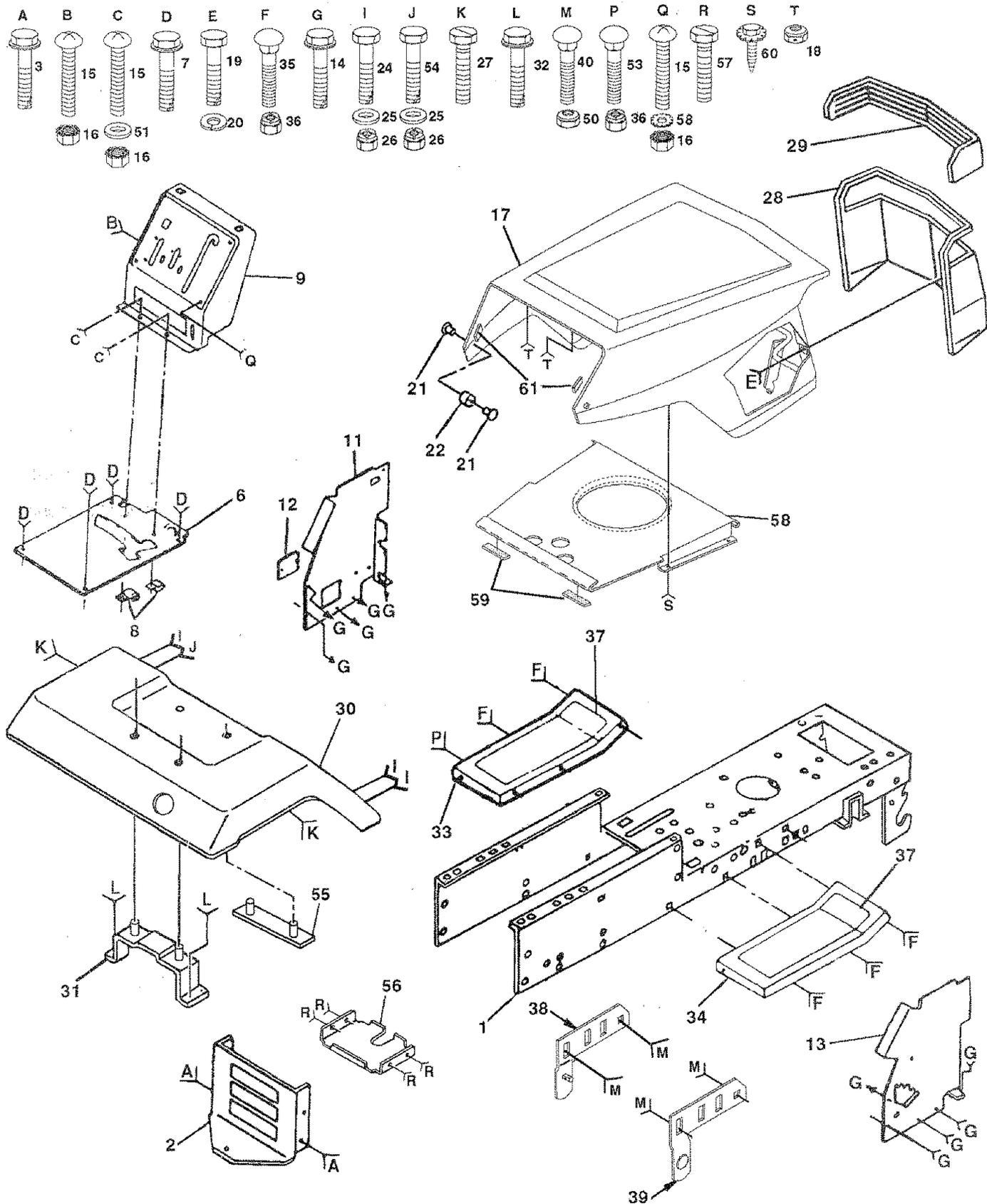
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	109310X	Key, Molded	25	74760412	Bolt, Hex 1/4-20 x 3/4
2	136849	Harness, Light Socket (With Bulbs)	26	19091016	Washer 9/32 x 5/8 x 16 Gauge
3	4152J	Light Bulb	27	10040400	Washer, Lock 1/4
4	4406R	Switch, Ignition	28	73220400	Nut, Hex 1/4-20
5	109553X	Switch, Interlock, Attachment Clutch	29	123198X	Nut, Wing 1/4-20
6	124211X	Nut, Ignition	30	2751R	Clip, Fuel Line
7	110712X	Switch, Light	31	102476X	Guard, Terminal
8	138406	Solenoid	32	72240460	Bolt, Carriage 1/4-20 x 7-1/2
9	10090400	Washer, Lock 1/4	37	11050600	Washer, Lock External Tooth 3/4
10	73350400	Nut, Hex, Jam 1/4-20	39	71110408	Bolt, Hex 1/4-20 x 1/2
13	73640400	Nut, Keps 1/4-20	41	7697J	Tube
14	131563	Cover, Terminal	42	109596X	Clamp, Hose
15	138547	Harness, Ignition	44	121264X	Caps, Battery
16	108423X	Cable, Battery	46	7603J	Tray, Battery
17	4206J	Cable, Battery	47	7192J	Cable, Tie
18	4207J	Cable, Ground	48	108236X	Bracket, Switch
19	123620X	Cover, Key Switch	49	17021008	Screw, Hex, Tapping #10-24 x 1/2
20	121537X	Battery (Includes Electrolyte)	50	130890	Bracket, Switch Interlock
21	121305X	Switch, Seat	54	11150400	Washer, Lock Internal Tooth 1/4
22	104445X	Switch, Interlock, Clutch			
23	17021008	Screw, Hex, Tapping #10-24 x 1/2			
24	108824X	Fuse			

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

# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## CHASSIS AND ENCLOSURES



# REPAIR PARTS

## 18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

### CHASSIS AND ENCLOSURES

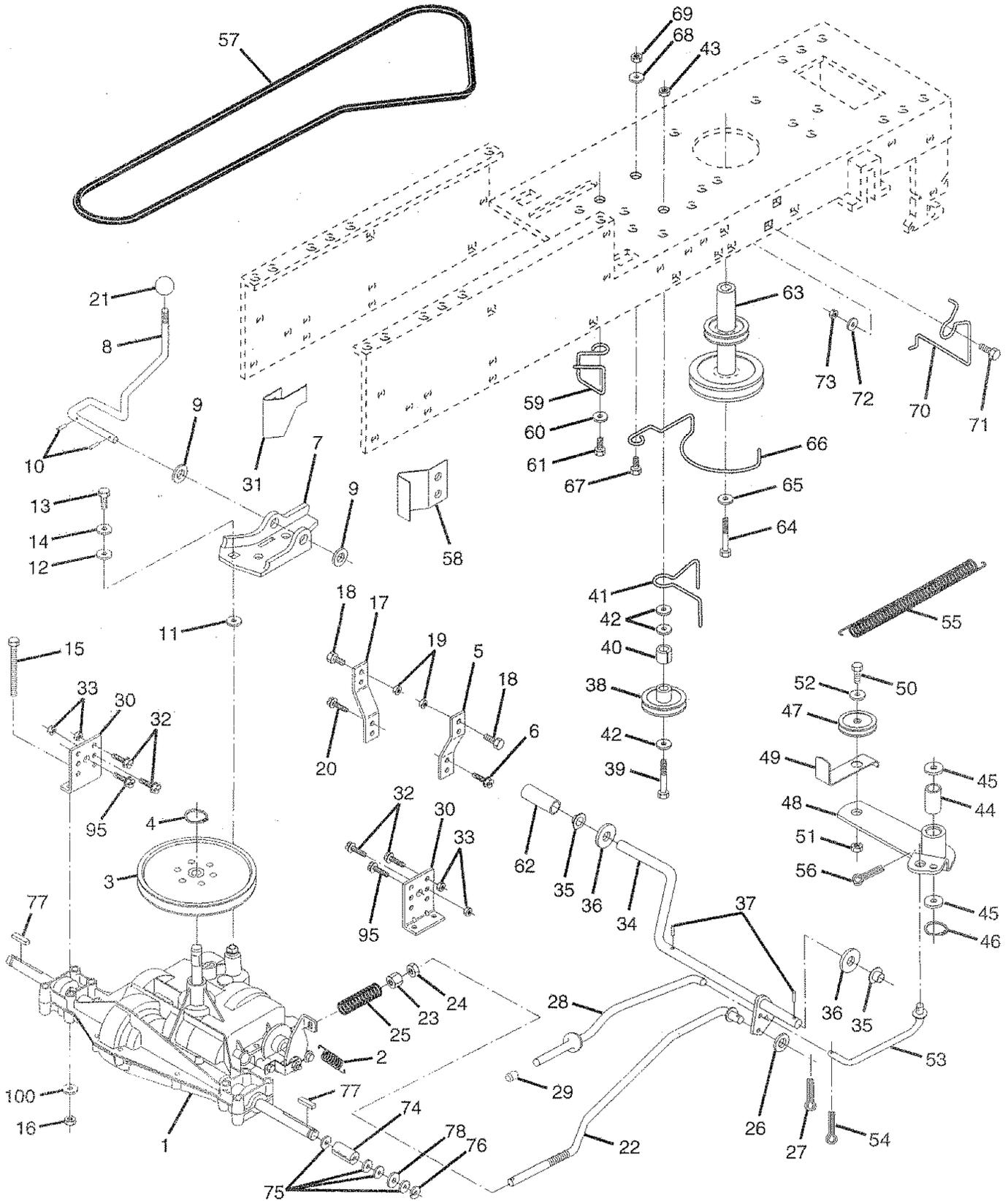
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	135034	Chassis Weldment 12ga 38/42	29	124029X	Lens Headlight Bar Clear
2	137275	Drawbar, Stretch	30	121642X417	Fender Pnt
3	17490612	Screw Thdrol 3/8-16x3/4 Ty-tt	31	137113	Bracket Pnt Fender
6	137136X013	Saddle Silkscreen 5 Sp	32	17490612	Screw Thdrol 3/8-16x3/4 Ty-tt
7	17490608	Screw Thdrol 3/8-16x1/2 Ty-tt	33	105465X417	Footrest Pnt Lh (silver)
8	126471X	Clip Line Fuel 13/32 Mtg Hole	34	105464X417	Footrest Pnt Rh (silver)
9	137411X018	Dash Silkscreened	35	STD533707	Bolt Rdhd Sht Sqnk 3/8-16 X3/4
11	122795X	Panel Pnt Dash Lh	36	STD541437	Nut Crownlock 3/8-16 Unc
12	121794X	Cover Access Black Square	37	105466X	Pad Footrest Rbr Sq Craftsman
13	126276X	Panel Dash Rh Weldment	38	134774	Bracket, Asm. Pivot, L.H., Mower Rear
14	17490608	Screw Thdrol 3/8-16x1/2 Ty-tt	39	134775	Bracket, Asm. Pivot, R.H., Mower Rear
15	74180512	Screw Mach Trhd 5/16-18uncx3/4	40	STD533710	Bolt, Carriage 3/8-16 x 1
16	STD541431	Nut Keps 5/16-18 Unc	50	STD541437	Locknut Hex W/Washer 3/8-16
17	137386X417	Hood Asm Pnt Weldment GT Slope	51	STD551025	Washer 13/32 x 3/4 x 16 Ga.
18	108067X	Nut Pal	53	STD533710	Bolt Carriage 3/8-16 x 1
19	STD512505	Bolt Fin Hex 1/4-20unc X 1/2	54	STD523708	Bolt Fin Hex 3/8-16 x 7/8
20	STD551125	Washer Lock Hvy Helical 1/4	55	105511X	Strap Asm. Fender
21	122933X	Rivet Ratchet Nylon	56	108171X	Support Battery
22	124479X	Washer Nylon Blk 28x 75x 19	57	17490512	Screw Thdrol. 5/16-18 x 3/4
24	STD523707	Bolt Fin Hex 3/8-16unc X 3/4	58	137357	Shield Heat Hood GT
25	19131312	Washer 13/32 X 13/16 X 12 Ga	59	109227X	Pad Idler
26	STD541437	Nut Crownlock 3/8-16 Unc	60	17030808	Screw Spiderloc Hex Hd. #8 x 1/2 AB
27	17490608	Screw Thdrol 3/8-16x1/2 Ty-tt	61	126938X	Hood Bumpers
28	123915X	Grille Grey			

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1 inch = 25.4 mm

# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

DRIVE



# REPAIR PARTS

## 18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

### DRIVE

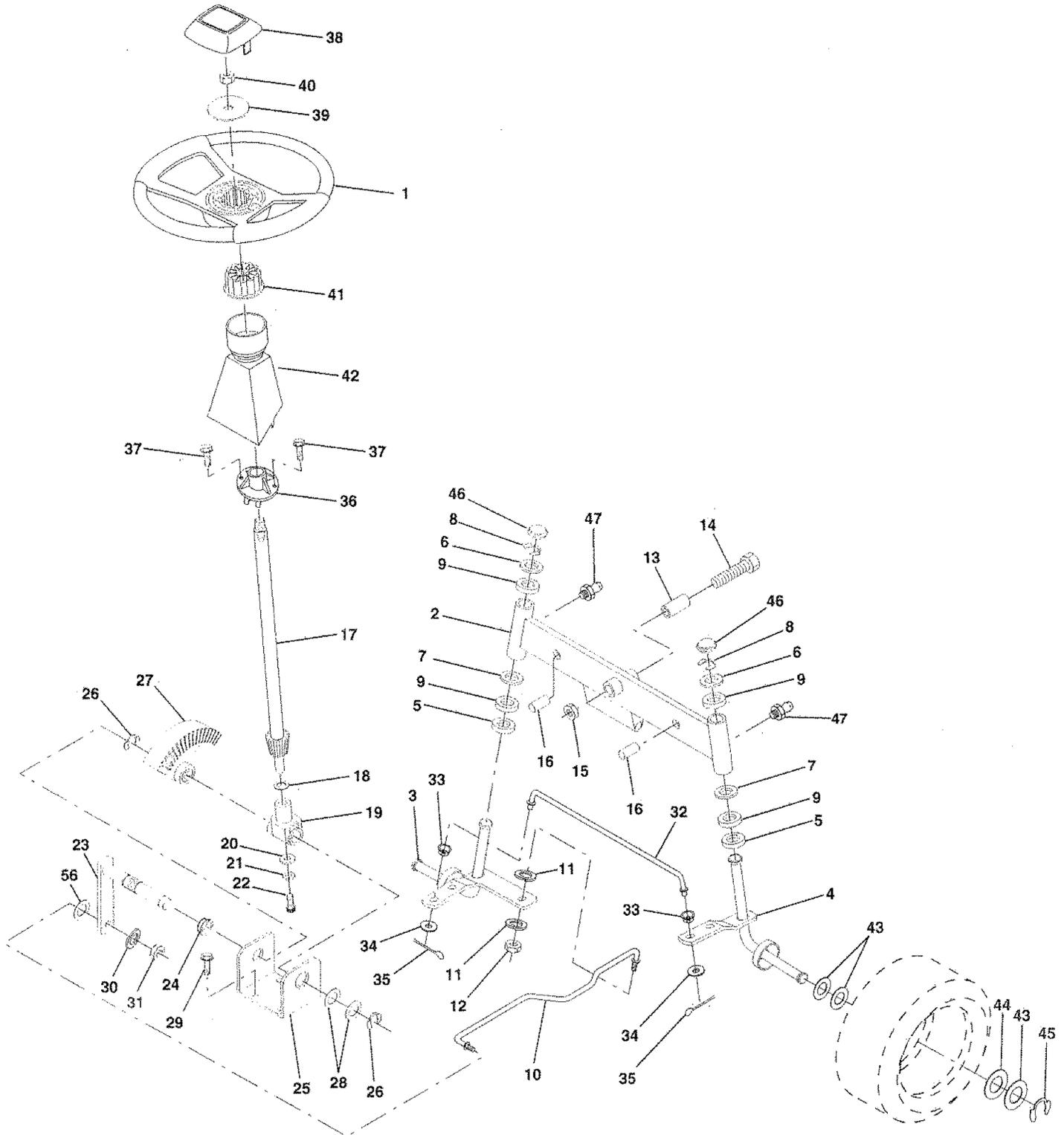
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	137371	Transaxle 5sp Std Dana, Model No. 4360-56	41	109070X	Keeper Belt Retainer
2	110422X	Spring Return Brake T/a Zinc	42	19131312	Washer 13/32 X 13/16 X 12 Ga
3	123667X	Pulley Transaxle Alum	43	STD541437	Nut Crownlock 3/8-16 Unc
4	12000028	Ring Retainer # 5100-62	44	105706X	Bearing Nyl 503 X 628 X 1 25
5	121520X	Strap Pnt Torque 30 Deg Blk	45	110812X	Washer Hardened
6	17490512	Screw Thdrol 5/16-18 X 3/4 Tyt	46	12000039	Ring Klip #t5304-50
7	130802	Plate Pnt Rod Shift T/a (blk)	47	127783	Pulley Idler V Groove Plastic
8	131679	Rod Shifter Blk (dana)	48	123789X	Bellcrank Asm
9	19151216	Washer 15/32 X 3/4 X 16ga	49	123205X	Retainer Belt Style Spring
10	STD561210	Pin Cotter 1/8 X 1 Cad	50	STD523715	Bolt Hex Hd 3/8-16unc X 1-1/2
11	105701X	Washer Plate Shf 388 Sq Hole	51	STD541437	Nut Crownlock 3/8-16 Unc
12	19091210	Washer 9/32 X 3/4 X 10 Ga	52	STD551037	Washer 13/32 X 13/16 X 16 Ga
13	71040412	Bolt Fin Hex 1/4-28unfx3/4 Gr8	53	105710X	Link Clutch 7 66
14	STD551125	Washer Lock Hvy Helical 1/4	54	STD561210	Pin Cotter 1/8 X 3/4 Cad
15	74760540	Bolt Fin Hex 5/16-18 X 2-1/2	55	105709X	Spring Return Clutch 6 75
16	STD541431	Nut Crownlock 5/16-18	56	STD561210	Pin Cotter 1/8 X 3/4 Cad
17	121520X	Strap Pnt Torque 30 Deg Blk	57	131006	V-belt Ground Drive 98 25
18	STD523707	Bolt Fin Hex 3/8-16unc X 3/4	58	127290	Keeper Belt Rh
19	STD541437	Nut Crownlock 3/8-16 Unc	59	136715	Retainer Belt Chassis Lh Zinc
20	17490512	Screw Thdrol 5/16-18 X 3/4 Tyt	60	19131312	Washer 13/32 X 13/16 X 12 Ga
21	106933X	Knob Rd 1/2-13 Plstc Thds Blk	61	17490612	Screw Thdrol 3/8-16x3/4 Ty-tt
22	130804	Rod Brake Lt	62	8883R	Cover Pedal Blk Std
23	STD541437	Nut Lock Hex W/wsh 3/8-16unc	63	140186	Pulley Engine
24	STD541237	Nut Hex Jam 3/8-16 Unc	64	71170764	Bolt Finhex 7/16-20 x 4 g5
25	106888X	Spring Rod Brake 2 00 Zinc	65	STD551143	Washer Lock Hvy Hlcl Spr 7/16
26	STD551037	Washer 13/32 X 13/16 X 16 Ga	66	129921	Keeper Belt Engine Lh Lt
27	STD561210	Pin Cotter 1/8 X 3/4 Cad	67	STD523710	Bolt Fin Hex 3/8-16unc X 1
28	128904	Rod Brake Parking Lt	68	19131312	Washer 13/32 X 13/16 X 12 Ga
29	124236X	Cap Parking Brake Red	69	STD541437	Nut Crownlock 3/8-16 Unc
30	130807	Bracket Transmission	70	134683	Guide Belt Dr Mower Rh
31	127289	Keeper Belt Lh	71	STD523710	Bolt Fin Hex 3/8-16unc X 1
32	STD523107	Bolt Fin Hex 5/16-18 X 3/4	72	19132012	Washer 13/32 X 1-1/4 X 12 Ga
33	STD541431	Nut Crownlock 3/8-18	73	STD541437	Nut Crownlock 3/8-16 Unc
34	122424X	Shaft Asm Pedal Foot 1 930	74	109502X	Spacer Split .80x1.94
35	120183X	Bearing Nylon Blk 629 ld	75	121749X	Washer 25/32 X 1 1/4 X 16 Ga
36	STD551062	Washer 21/32 X 1 X 16 Ga	76	STD581075	Ring E #5133-75
37	STD571810	Pin Roll 3/16 X 1"	77	123583X	Key Square 2 0 X 1845/ 1865
38	123674X	Pulley Idler Flat	78	121748X	Washer 25/32 X 1 5/8 X 16ga
39	STD523727	Bolt Fin Hex 3/8-16unc X 2-3/4	83	17490612	Screw Thdrol 3/8-16 x 3/4
40	4470J	Spacer Split 395 X 59 Bzp			

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1 inch = 25.4 mm

# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## STEERING ASSEMBLY



# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## STEERING ASSEMBLY

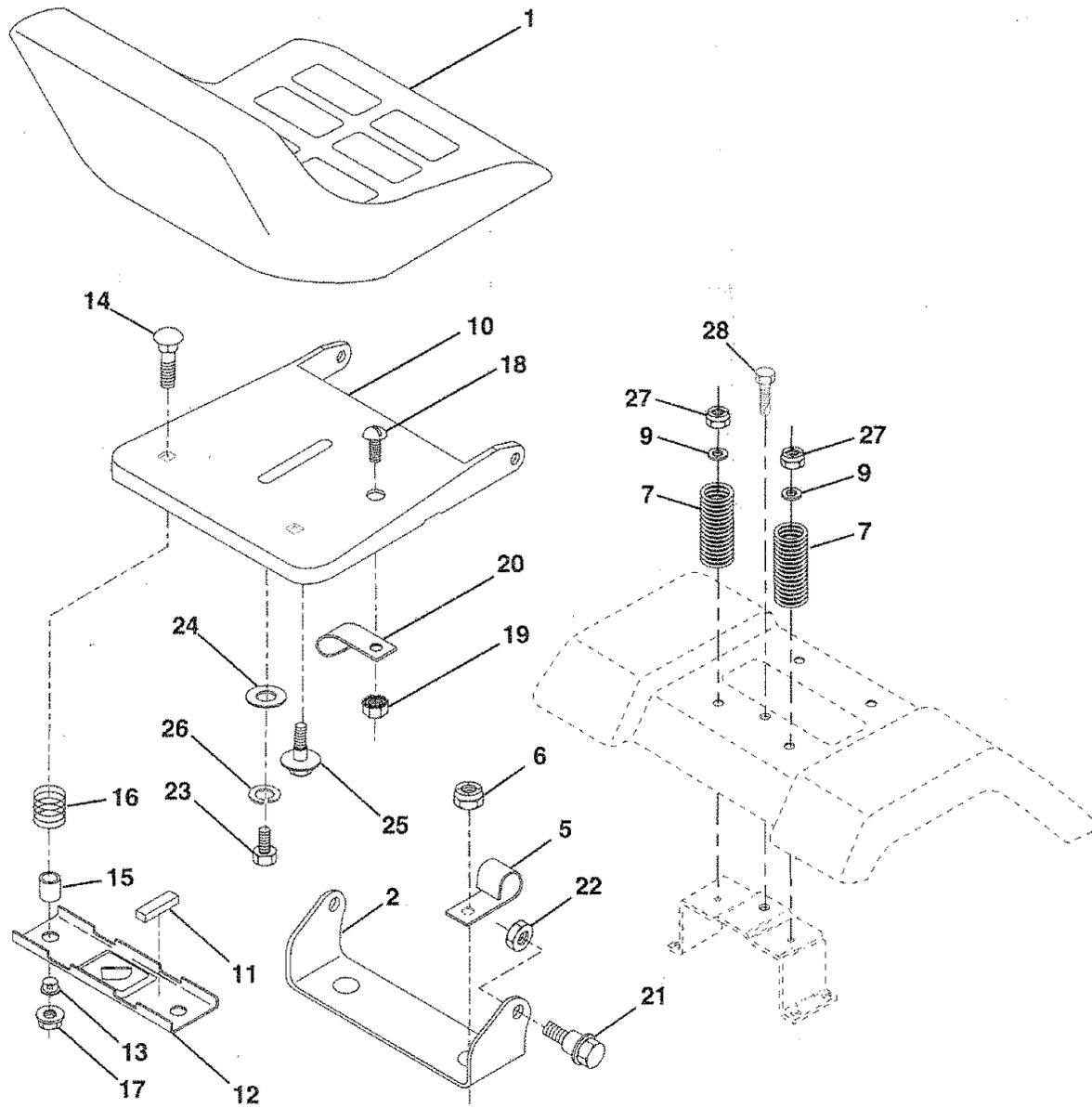
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	133741	Wheel Steering Std Black	25	124036X	Bracket Steering
2	133988	Axle Asm Front	26	12000029	Ring Klip #t5304-75
3	135227	Spindle Asm Lh	27	136874	Gear Sector
4	135228	Spindle Asm Rh	28	6266H	Bearing Race Thrust Harden
5	6266H	Bearing Race Thrust Harden	29	17490612	Screw Thdrol 3/8-16x3/4 Ty-tt
6	121748X	Washer 25/32 X 1 5/8 X 16ga	30	STD551137	Washer Lock Hvy Hlcl Spr 3/8
7	19272016	Washer 27/32 X 1 1/4 X 16 Ga	31	73610600	Nut Fin Hex 3/8-24 Unf
8	12000029	Ring Klip #t5304-75	32	130465	Rod Tie Wire Form 19 75 Mech
9	3366R	Bearing Col Strg Blk	33	126847X	Bushing Rod Tie Blk Lt
10	130468	Link Drag Sol Ball Jt 20 064	34	19131416	Washer 13/32 X 7/8 X 16ga
11	STD551137	Washer Lock Hvy Hlcl Spr 3/8	35	STD561210	Pin Cotter 1/8 X 3/4 Cad
12	73610600	Nut Fin Hex 3/8-24 Unf	36	132196	Bushing Strg 5/8 Id Dash
13	110438X	Spacer Bearing Axle Front	37	STD611005	Screw Slftp #10-16 X 1/2 Ty-b
14	74011056	Bolt Hex 5/8-11 Unc X 3-1/2	38	133742	Insert Cap Strg Wheel Std Blk
15	73901000	Locknut Flange 5/8-11 Unc	39	19133808	Washer 13/32 X 2-3/8 X 8 Ga
16	132624	Pin Axle 5/8 X 1 55/1 54 Lg	40	STD541537	Nut Lock Center 3/8-24unf
17	132614	Shaft Asm Strg 5/8 X 15 19 Lt	41	104820X	Adaptor Wheel Strg 640/ 635id
18	57079	Washer Thrust 515x 750x 033	42	124417X	Boot Shaft Steering
19	124035X	Support Shaft	43	121749X	Washer 25/32 X 1 1/4 X 16 Ga
20	126684X	Washer Shim 1/4 X 5/8 X 062	44	121748X	Washer 25/32 X 1 5/8 X 16ga
21	STD551125	Washer Lock Hvy Helical 1/4	45	12000029	Ring Klip #t5304-75
22	71070410	Screw Hex Socket 1/4-20 X 5/8	46	121232X	Cap Spindle Fr Top Blk
23	127501	Shaft Asm Pittman	47	6855M	Fitting Grease
24	109816X	Nyliner Snap In	56	19131210	Washer

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1 inch = 25.4 mm

# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## SEAT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION
1	127437	Seat V350 Blk/red Craftsman
2	126656X	Bracket Pnt Pivot Seat (blk )
5	2751R	Clip Line Fuel 13/32 Mtg Hole
6	STD541437	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	131451	Pan Pnt Seat (blk )
11	121251X	Strip Foam Gray Or Black
12	121246X	Bracket Pnt Mounting Switch
13	121248X	Bushing Snap Blk Nyl 50 Id
14	72050411	Bolt Rdhd Sht Nk 1/4-20x1-3/8
15	134300	Spacer Split 28 X 96 Zinc

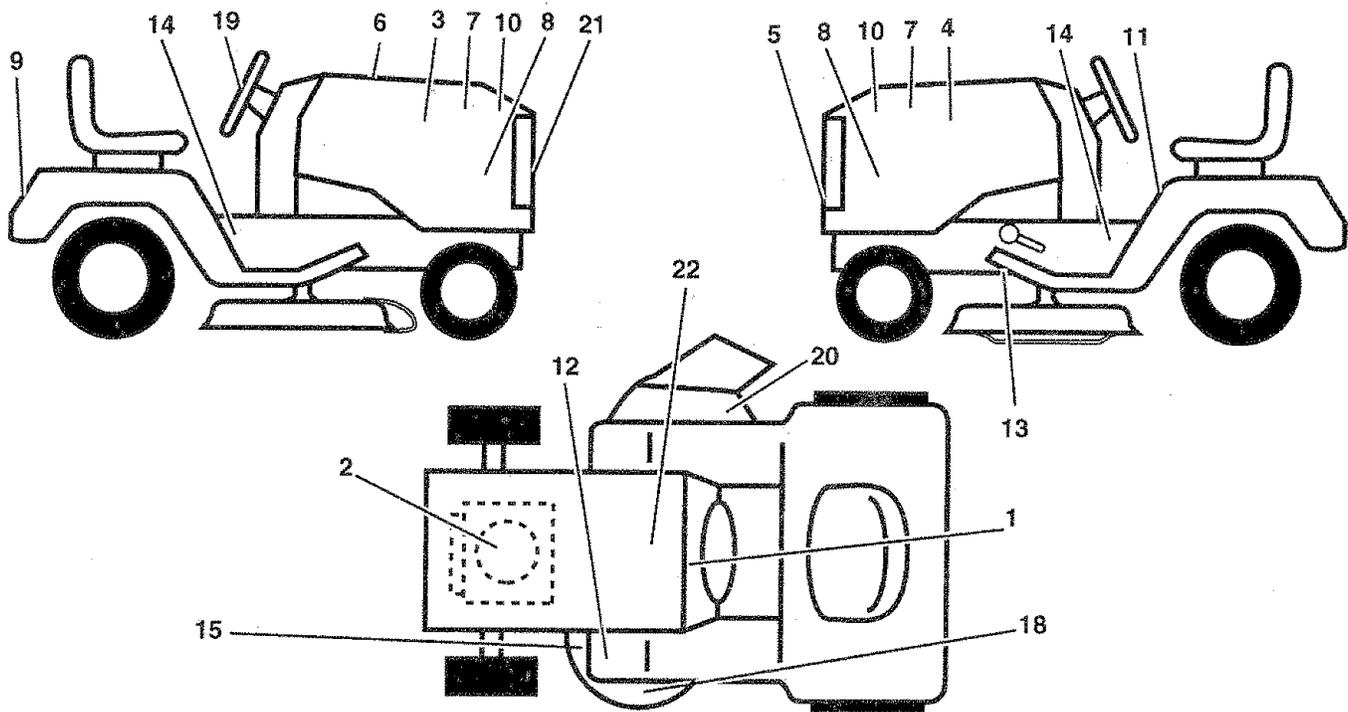
KEY NO.	PART NO.	DESCRIPTION
16	121250X	Spring Cprsn 1 27 Blk Pnt
17	123976X	Nut Lock 1/4 Lge Flg Gr 5 Zinc
18	STD511005	Screw Sltd Pan Hd #10-32 X 1/2
19	73951000	Nut Keps #10-32 Unf
20	4171R	Clip Insulated 11/32 Mtg Hole
21	105529X	Bolt Shoulder 5/16-18 Unc Blkz
22	STD541431	Nut Crown Lock 5/16-18
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	STD551150	Washer Lock Hvy Hlcl Spr 1/2
28	17490608	Screw Thdrol. 3/8-16 x 1/2

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# REPAIR PARTS

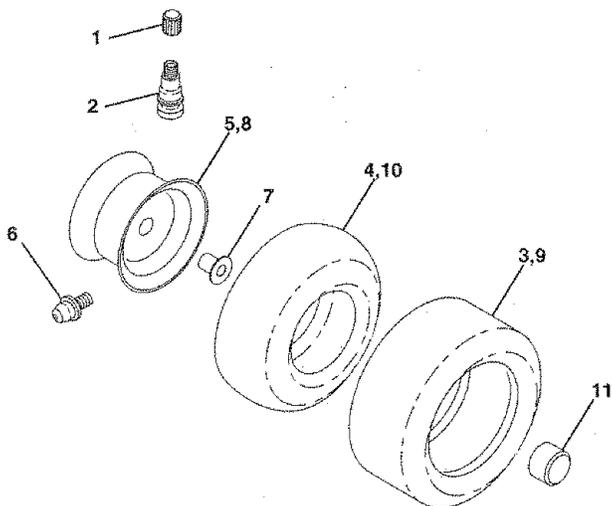
18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## DECALS



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	136794	Decal Instruction Operat Eng	13	109199X	Decal V-belt Dr Sch Tractor E
2	136128	Decal Engine 18 hp B&S	14	133139	Decal Chassis 5 Sp 42"
3	124489X	Decal Hood Slope Rh Craftsman	15	136832	Decal Mower Drive Schematic 42
4	124490X	Decal Hood Slope Lh Craftsman	18	133179	Decal Mower Qc System
5	132674	Decal Grille Lt4000 Craft Usa	19	132267	Decal Insr Wh Strg Crafts Usa
6	133644	Decal Maint Customer Sears Dom	20	133178	Decal Mower 3 in One Conv.
7	138139	Decal Panel Side l/c Gold/blk	21	131265	Decal Lightbox
8	108631X	Decal(Die Cut)	22	138047	Decal Battery
9	125880X	Decal Fender Craftsman Red	--	138311	Decal Lift Handle
10	138049	Decal Side Panel Die Hard	--	138836	Decal, 1 Pc. Dash LT
11	137537	Decal Caution English/Spanish	--	138476	Manual, Owner's (English)
12	4900J	Decal Clutch/brake English	--	138477	Manual, Owner's (Spanish)

## WHEELS & TIRES



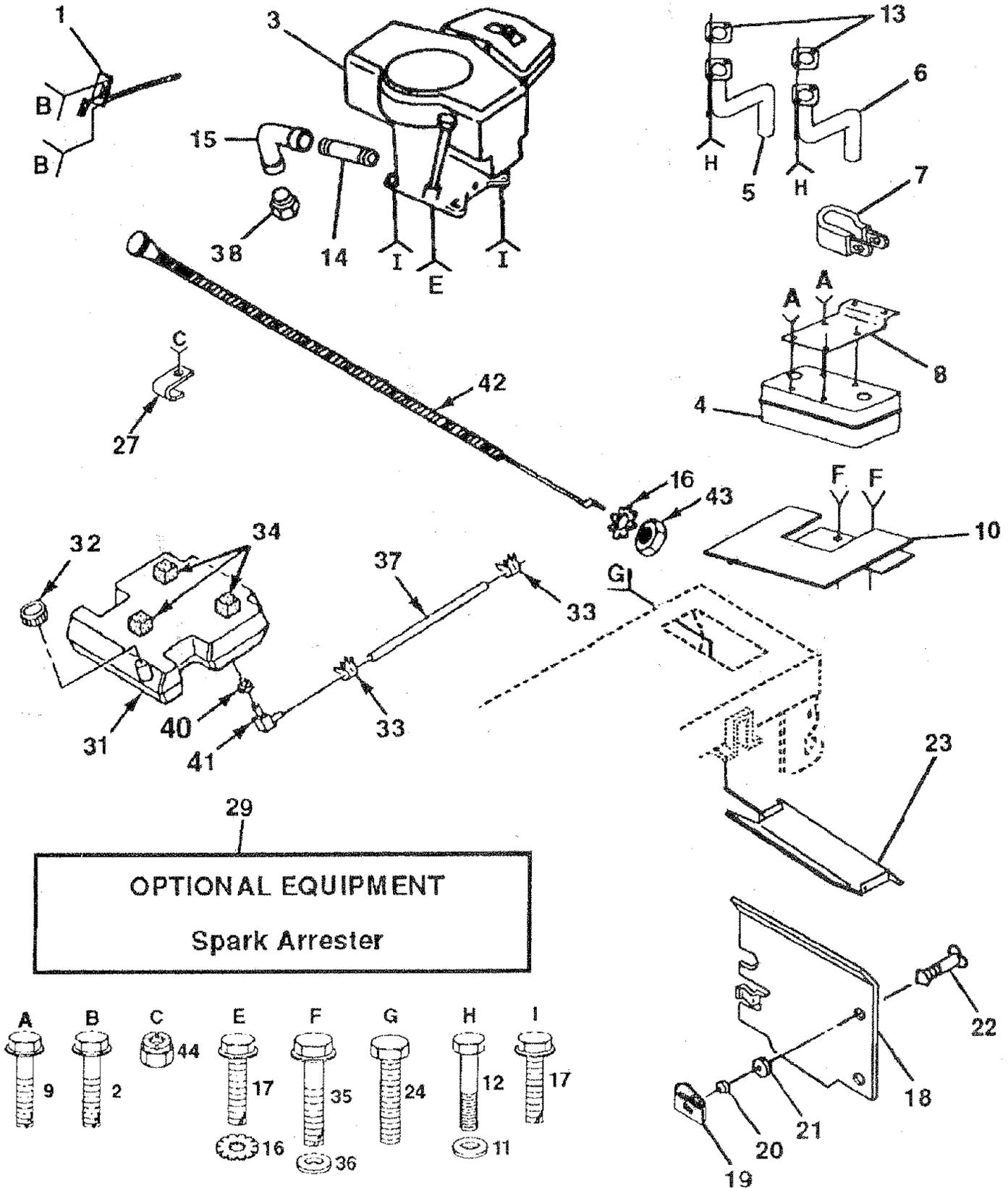
KEY NO.	PART NO.	DESCRIPTION
1	59192	Cap Value Tire
2	65139	Stem Value
3	106222X	Tire F Ts 15 X 6 0 - 6 Service
4	59904	Tube Inner Front #35060
5	106732X361	Rim Asm 6"front Silver Service
6	278H	Fitting Grease
7	9040H	Bearing Flange
8	106108X361	Rim Asm 8"rear Silver Service
9	124632X	Tire R Ts 20 x 10-8.5 Service
10	7152J	Tube Rear 9 5 X 8 Service
11	104757X	Cap Axle Blk 1 50 X 1 00

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# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

## ENGINE



# REPAIR PARTS

## 18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

### ENGINE

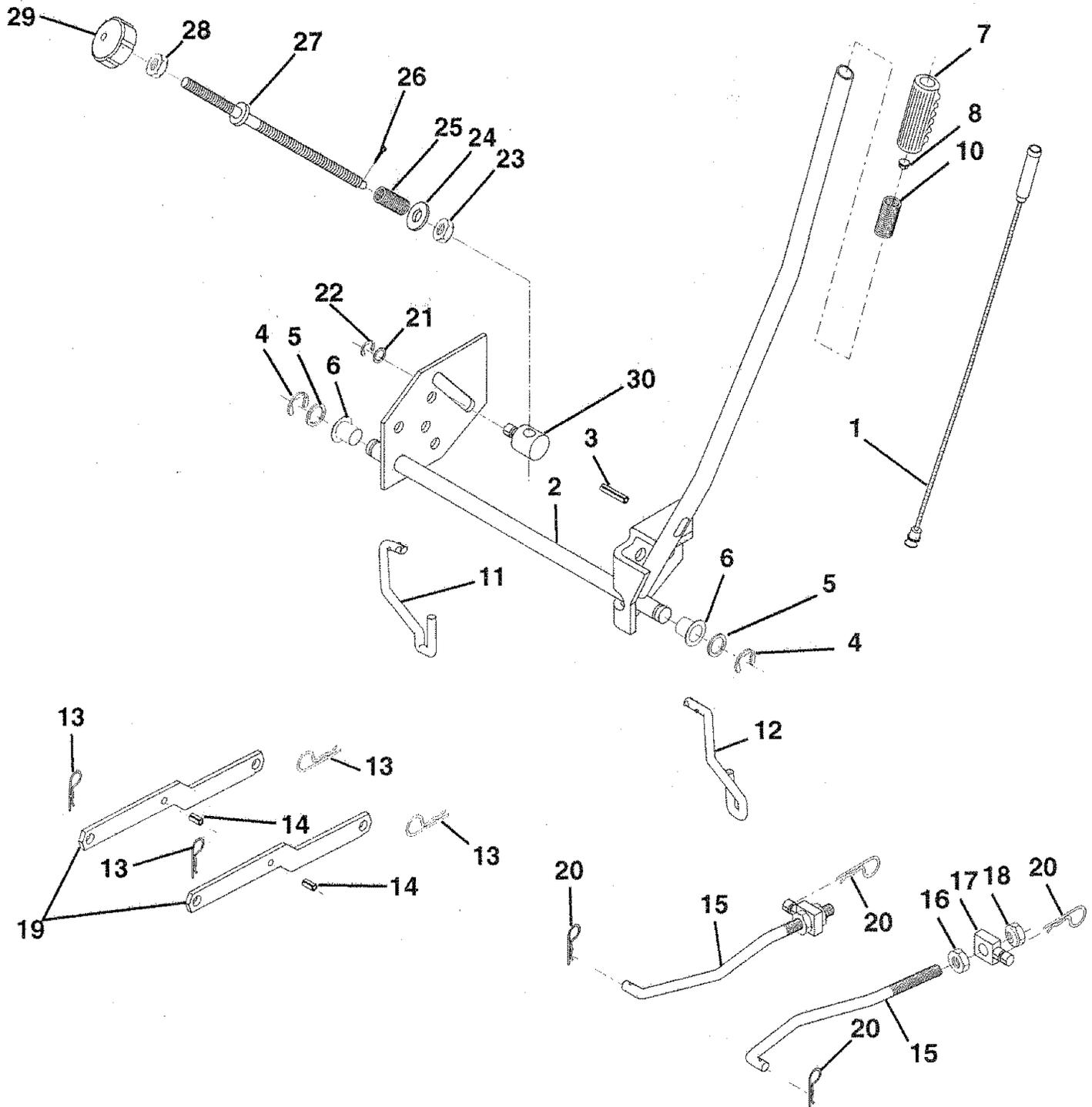
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	132755	Control Throt Rh Blk Pdl 15 10	22	123650X	Stud 1/4 Turn (replaces 105751
2	17720410	Screw Hex Thd Cut 1/4-20x5/8 T	23	128953	Shield Pnt Heat Browning Grass
3	137518	Engine B&s 18hp, Model No. 422707, Type No. 1522-01	25	137357	Shield Pnt Heat Hood Gt
4	137978	Muffler Exhaust	27	126471X	Clip Insulator
5	136989	Exhaust Asm. Left	29	137180	Arrestor Spark
6	136988	Exhaust Asm. Right	31	127334X	Tank Fuel 3 50 Rear
7	138129	Clamp Tube Double Engine	32	123549X	Cap Asm Fuel W/sym Vented
8	122439X	Bracket Muffler Mounting	33	123487X	Clamp Hose Blk
9	17190408	Screw Hex Whs Thdcut 1/4-20 Unc	34	106082X	Spacer Pad
10	128199	Heat Shield Lt	35	17490512	Screw Hexwsh Thdrol 5/16-18 x 3/4
11	STD551125	Washer Lock Hvy. Helical 1/4	36	19132012	Washer 13/32 x 1-1/4 x 12 Ga.
12	STD522707	Bolt Fin Hex 1/4-20 x 3/4	37	5277J	Line Fuel
13	8545J	Gasket Muffler	38	-----	Plug Oil Drain (Order From Engine Manufacturer)
14	13280336	Nipple Pipe 4-1/2"	40	3645J	Bushing
15	13200300	Elbow Std 90 Degree 3/8-18 Npt	41	139227	Stem Tank Fuel
16	STD551237	Washer Lock Ext Tooth 3/8	42	138127	Control Choke
17	17490624	Screw Thdrol 3/8-16x1-1/2 Tytt	43	73610600	Nut Hex 3/8-24 Unf
18	137358	Shield Pnt Heat	44	73680600	Nut Crownlock 3/8-16
19	105839X	Receptacle 1/4 Turn Dacrotized			
20	105838X	Retainer 1/4 Turn 365odx 222id			
21	STD551025	Washer 9/32 X 5/8 X 16 Ga			

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# REPAIR PARTS

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LIFT



# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

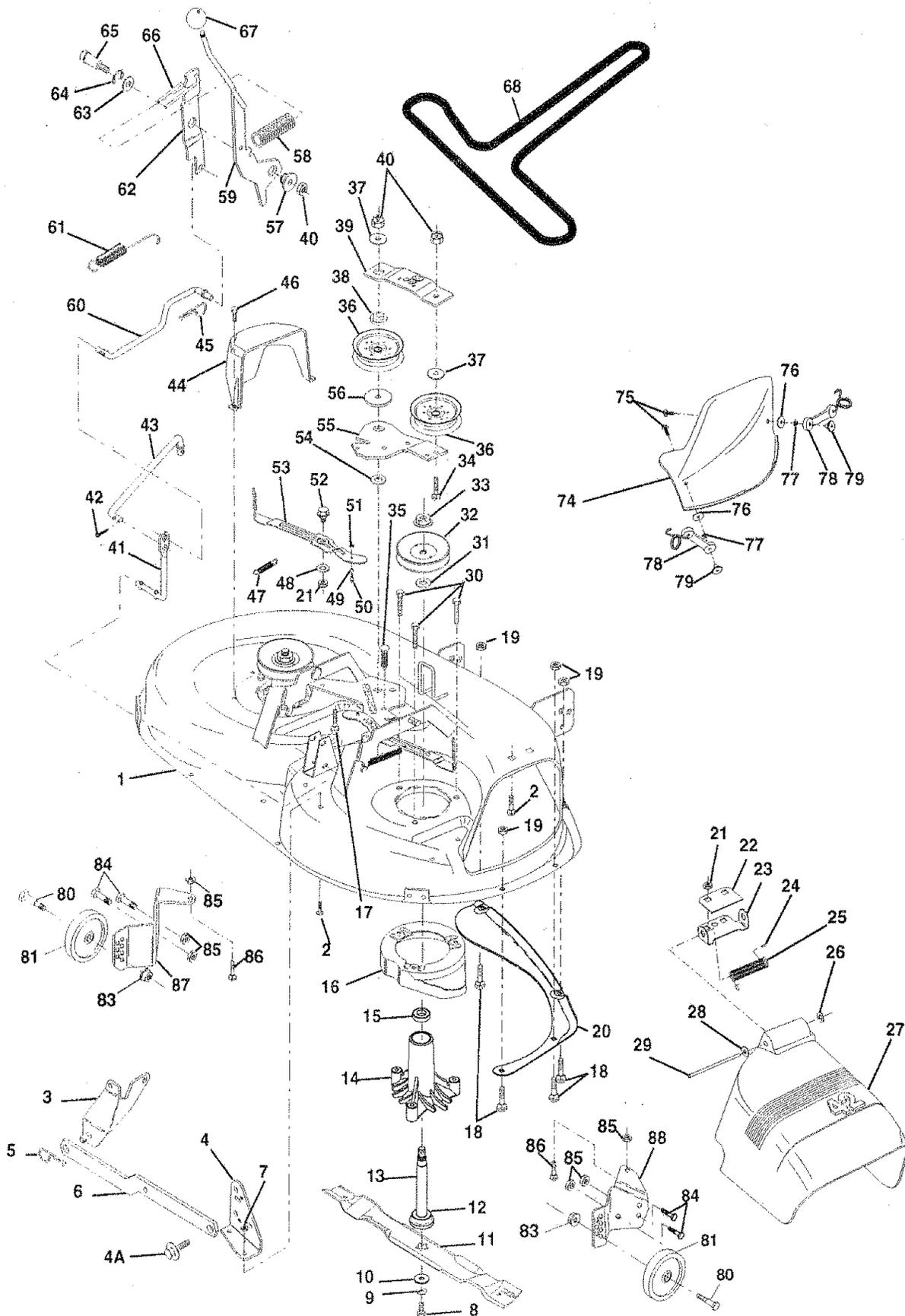
## LIFT

KEY NO.	PART NO.	DESCRIPTION
1	136973	Rod Asm. Lever
2	122507X	Shaft Asm. Lift
3	105767X	Pin Groove
4	12000002	E Ring #5133-62
5	19211621	Washer 21/32 x 1 x 21 Ga.
6	120183X	Bearing Nylon
7	125631X	Grip Handle Fluted
8	122365X	Button Plunger Read
10	122512X	Spring Cprsn
11	134619	Link Lift Lh Fixed Length
12	135388	Link Lift Rh Fixed Length
13	4939M	Retainer Spring
14	135563	Pin Roll Slit 5/16 x 1.25
15	127218	Link Front
16	73350800	Nut Jam Hex 1/2-13 Unc
17	130171	Trunnion Blk Zinc
18	73800800	Nut Lock W/Wsh 1/2-13 Unc
19	130832	Arm Suspension Rear
20	3146R	Retainer Spring
21	19151216	Washer 15/32 x 3/4 x 16 Ga.
22	12000037	Ring Klip #T5304-37
23	110807X	Nut Spring
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
28	73350600	Nut Hex Jam 3/8-16
29	138057	Knob Inf. 3/8-16
30	110810X	Trunnion Dp. Stop

# REPAIR PARTS

18 HP 42" TRACTOR -- MODEL NUMBER 917.254860

## 42" MOWER DECK



# REPAIR PARTS

## 18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

### 42" MOWER DECK

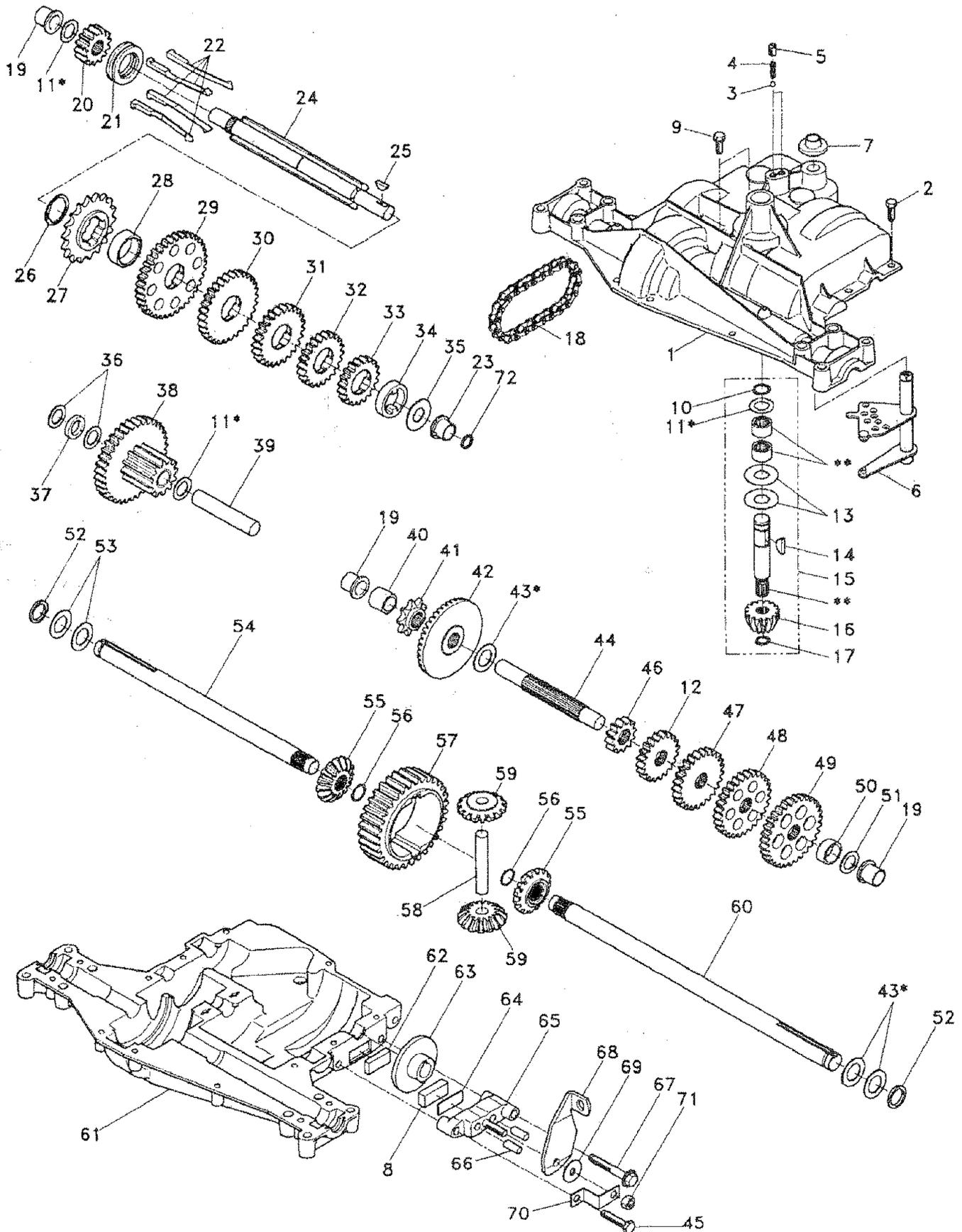
KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 138024	Mower Deck Assembly, 42"	43 133504	Rod, Clutch, Secondary, with Nibs
2 STD533107	Bolt	44 134236	Guard, Mandrel, LH
3 138017	Bracket Asm Fr. Sway Bar	45 STD624003	Retainer
4 138440	Bracket Asm Deck 42" Sway Bar	46 17720410	Screw, Hex Head, Thread Cutting 1/4-20 x 5/8
4A 132827	Shoulder Bolt 5/16-18 Thd. Form	47 131335	Spring, Extension
5 STD624008	Retainer Spring	48 133944	Washer, Hardened
6 130832	Arm, Suspension, Rear	49 133940	Roller Assembly, Cam Follower
7 73800500	Locknut 5/16-18	50 131340	Bolt, Shloulder #10-24 Grade 5
8 850857	Bolt 3/8-24 x 1.25 Grade 8	51 STD541410	Locknut
9 STD551137	Washer, Lock	52 105529X	Bolt, Shoulder 5/16-18 UNC
10 129962	Washer, Hardened	53 131845	Arm Assembly, Pad, Brake
11 134149	Blade, Mulching, 42" Mower Deck	54 133943	Washer, Hardened
12 129895	Bearing, Ball	55 133844	Arm, Idler
13 137645	Shaft Assembly, Mandrel, Vented (Includes Key Number 12)	56 122052X	Spacer, Retainer
14 128774	Housing, Mandrel, Vented	57 127498	Bushing, Large, Brass
15 110485X	Bearing, Ball, Mandrel	58 128759	Spring, Mower Clutch
16 136929	Stripper, Vented Mower Deck	59 133573	Arm, Clutch, Primary
17 72110618	Bolt, Carriage 3/8-16 x 2-1/4	60 134666	Rod, Clutch, Primary, with Nibs
18 72140505	Bolt, Carriage 5/16-18 x 5/8	61 131870	Spring, Extension, Return
19 73800500	Locknut 5/16-18	62 127847	Arm, Clutch, Secondary
20 136888	Baffle, Vortex	63 121748X	Washer 25/32 x 1-5/8 x 16 Gauge
21 STD541431	Nut	64 12000029	Ring, Klip
22 134753	Stiffener Bracket	65 128903	Bolt, Shoulder 3/8-16 UNC x 1.44
23 131267	Bracket, Deflector	66 127845	Keeper, Spring
24 105304X	Cap, Sleeve	67 106932X	Knob Rd. 3/8-16 Plstc.
25 123713X	Spring, Torsion, Deflector	68 130969	V-Belt, 42" Mower
26 110452X	Nut, Push	74 136420	Mulcher Cover
27 130968	Shield, Deflector	75 71161010	Screw
28 19111016	Washer 11/32 x 5/8 x 16 Gauge	76 19061216	Washer #10
29 131491	Rod, Hinge	77 STD551110	Washer, Lock
30 78158	Bolt 5/16-18 x 1.25	78 130758	Latch Assembly, Bagger
31 129963	Washer, Spacer	79 2029J	Nut, Weld
32 129861	Pulley, Mandrel	80 133814	Bolt, Shoulder
33 137266	Nut, Flanged, Toplock 9/16	81 133957	Wheel, Gauge, Donut
34 STD533717	Bolt	83 73930600	Nut, Lock 3/8-16
35 133835	Fastner, Christmas Tree	84 74760512	Bolt, Hex Head 5/16-18 UNC x 3/4
36 131494	Pulley, Idler, Flat	85 73510500	Nut, Keps 5/16 - 18 UNC
37 19131612	Washer 13/32 x 1 x 12 Gauge	86 72110504	Bolt, Carriage 5/16 UNC x 1/2
38 133502	Spacer, Idler Arm, Upper	87 132263	Bracket, Gauge, Wheel LH
39 133503	Stiffner, Idler Arm, Upper, Hardened	88 132262	Bracket, Gauge, Wheel RH
40 STD541437	Nut	-- 130794	Mandrel Assembly (Includes Key Numbers 8-10, 12-15, 31 and 33)
41 133551	Rod, Pivot, with Nibs	-- 138357	Mower Deck, Complete (Std. Deck, Order separately mulcher blade, mulcher plate and gauge wheel components Key Nos. 11, 74-88)
42 STD560907	Cotter Pin		

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

# REPAIR PARTS

18 HP 42" TRACTOR - MODEL NUMBER 917.254860

DANA TRANSAXLE - MODEL NUMBER 4360-56



# REPAIR PARTS

18 HP 42" TRACTOR - MODEL NUMBER 917.254860

DANA TRANSAXLE - MODEL NUMBER 4360-56

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
1 138248	Housing, Upper	41 105928X	Sprocket, 9 Teeth
2 2274J	Screw, Self-Tapping, Large 1/4-20 x .734	42 106605X	Gear, Bevel, 42 Teeth
3 134400	Ball, Detent	43 134394	* Assembly, Kit, Shim, .750 Shaft
4 105904X	Spring, Detent	44 120473X	Shaft, Drive
5 105905X	Screw, Set	45 106596X	Screw, Self-Tapping, Large 5/16-18 X 1.44
6 134788	Kit, Shifter Assembly	46 105933X	Gear, Spur, 12 Teeth
7 134399	Boot, Shifter	47 106589X	Gear, Spur, 25 Teeth
8 120951X	Puck, Friction	48 120408X	Gear, Spur, 28 Teeth
9 134791	Screw, Self-Tapping, with Sealer	49 105937X	Gear, Spur, 31 Teeth
10 2267J	Ring, Retaining	50 105936X	Spacer .781 x 1.00 x .375
11 134793	* Assembly, Kit, Shim .625 Shaft	51 2226J	Washer, Plain .632 x 1.00 x .060
12 120407X	Gear, Spur, 20 Teeth	52 134401	Washer, Neoprene
13 120415X	Washer, Plain .632 x 1.38 x .046	53 2264J	Washer, Plain .758 x 1.25 x .031
14 2257J	Key, Woodruff, #9	54 120474X	Axle, L.H.
15 106846X	Assembly, Kit, Input Shaft	55 120409X	Gear, Miter, 15 Teeth
16 106095X	Pinion, Bevel, 14 Teeth	56 105941X	Ring, Retaining
17 105909X	Ring, Retaining	57 110071X	Gear, Spur, 32 Teeth
18 105910X	Chain, 24 Pitches	58 120952X	Shaft, Cross
19 105911X	Bearing, Flange	59 106592X	Gear, Miter, 15 Teeth
20 138242	Gear, Spur, 14 Teeth	60 120475X	Axle, R.H.
21 138246	Collar, Clutch	61 138247	Housing, Lower
22 138238	Assembly, Kit, Clutch Keys	62 120961X	Puck, Friction
23 138240	Bearing, Flange	63 7294J	Disc, Brake
24 138245	Shaft, Intermediate	64 108989X	Spacer
25 2244J	Key, Woodruff, #61	65 120953X	Jaw, Brake
26 105916X	Ring, Retaining	66 120954X	Pin, Dowel
27 120470X	Sprocket, 18 Teeth	67 134799	Screw, Self-Tapping, Large 5/16-18 x 2.25
28 110070X	Spacer	68 138244	Lever, Actuating
29 108977X	Gear, Spur, 37 Teeth	69 108996X	Washer, Plain .321 x 1.00 x .055
30 124644X	Gear, Spur, 30 Teeth	70 120956X	Bracket, Anti-Rotation
31 108980X	Gear, Spur, 25 Teeth	71 73810500	Locknut 5/16-24
32 120406X	Gear, Spur, 22 Teeth	72 138241	Square Ring
33 134796	Gear, Spur, 19 Teeth	73 120416X	Grease
34 134797	Spacer 1.133 x 1.50 x .375		
35 105925X	Washer, Plain .640 x 1.37 x .061		
36 2232J	Washer, Plain .632 x 1.00 x .026		
37 108978X	Spacer .630 x 1.00 x .169		
38 110079X	Assembly, Gear, Combination of 12 Teeth and 35 Teeth		
39 124639X	Shaft, Idler		
40 120472X	Spacer .633 x .87 x .755		

\* Use in combinations to maintain proper clearances

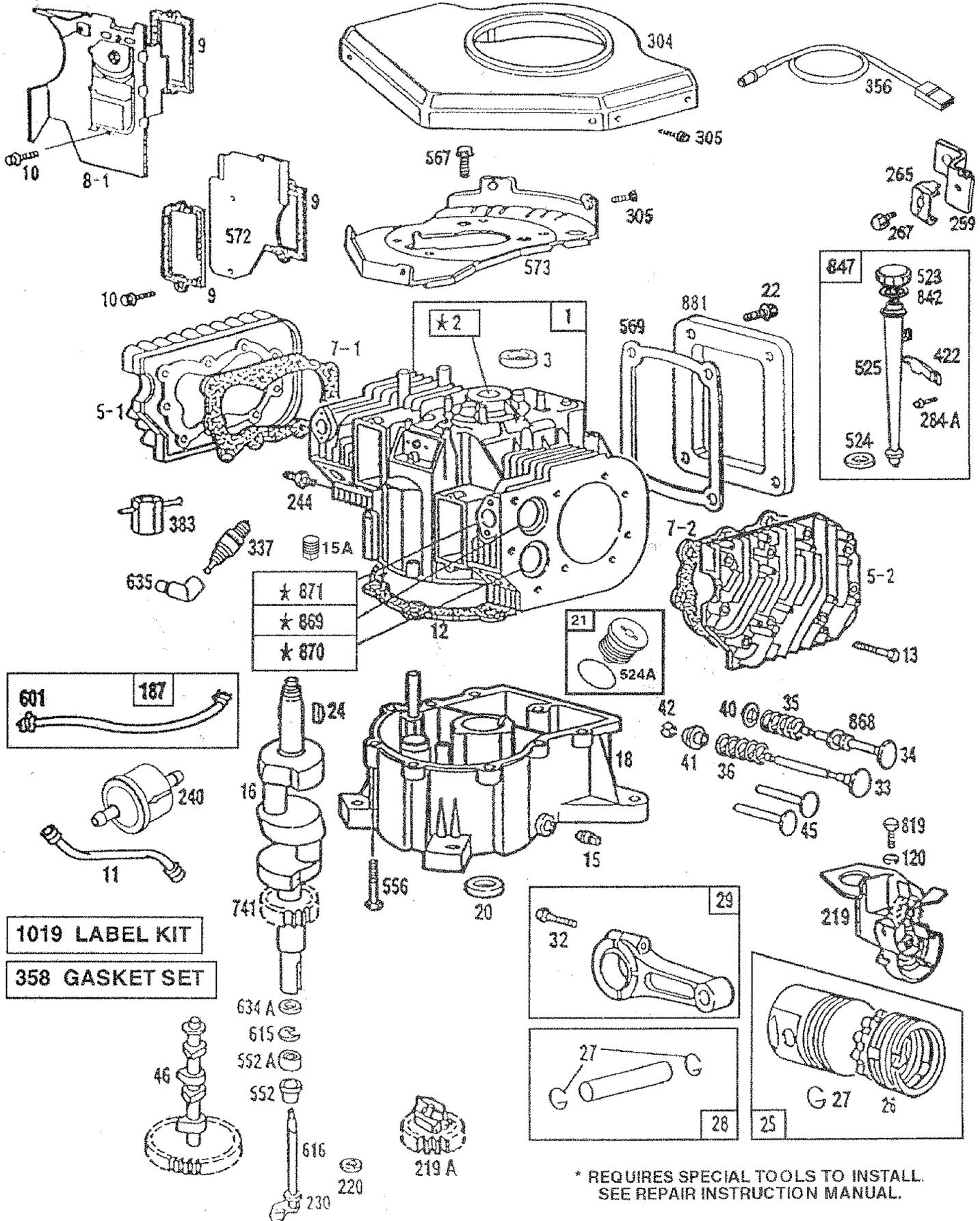
\*\* Order Key No. 15

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

# REPAIR PARTS

18 HP 42" TRACTOR -- MODEL NUMBER 917.254860

BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1522-01



1019 LABEL KIT

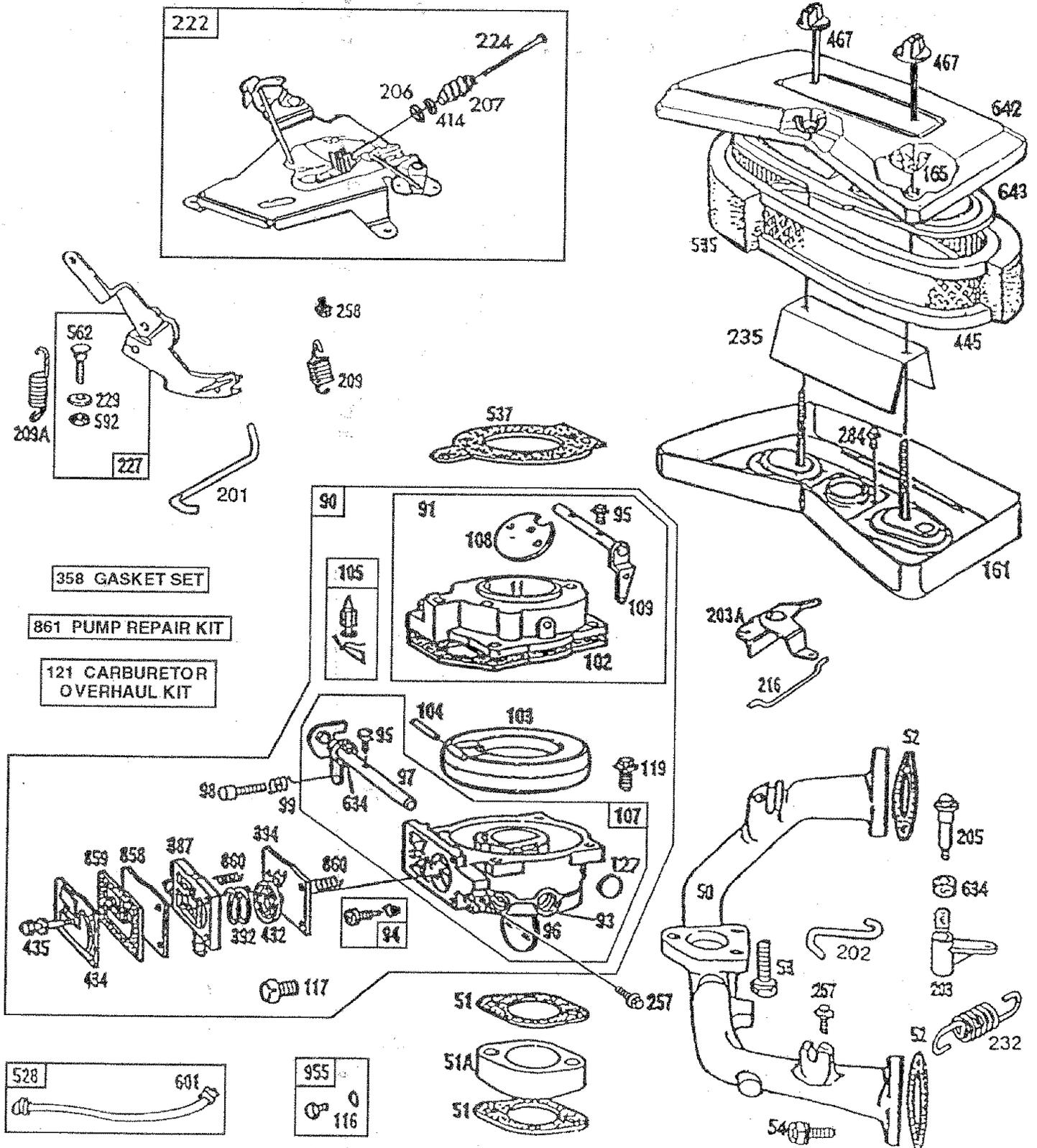
358 GASKET SET

\* REQUIRES SPECIAL TOOLS TO INSTALL.  
SEE REPAIR INSTRUCTION MANUAL.

# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

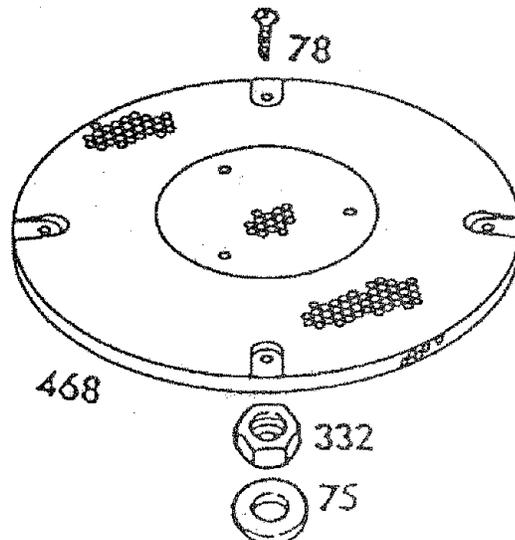
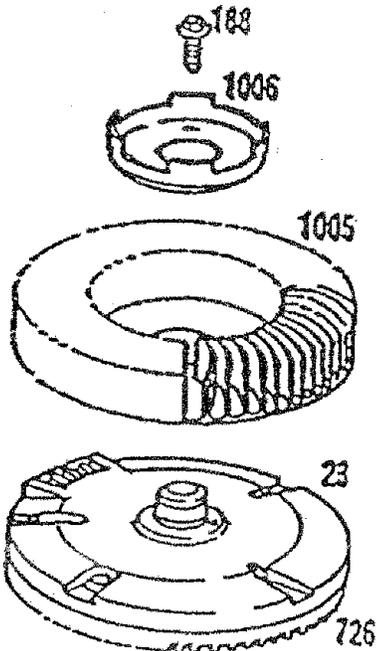
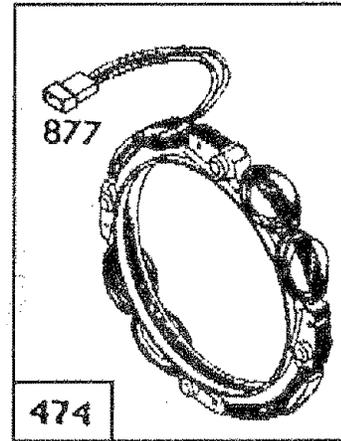
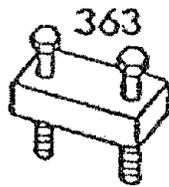
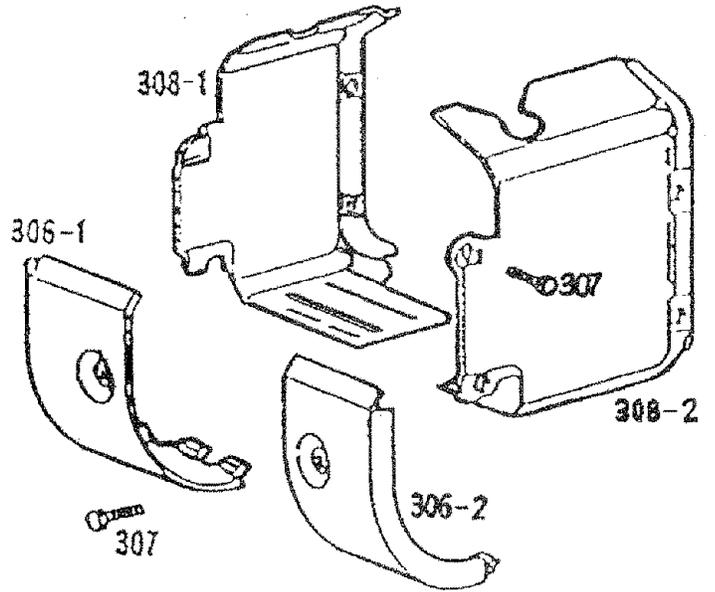
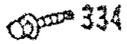
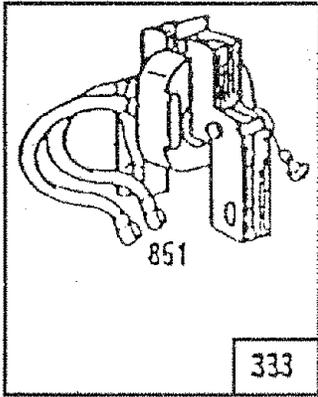
BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1522-01



# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

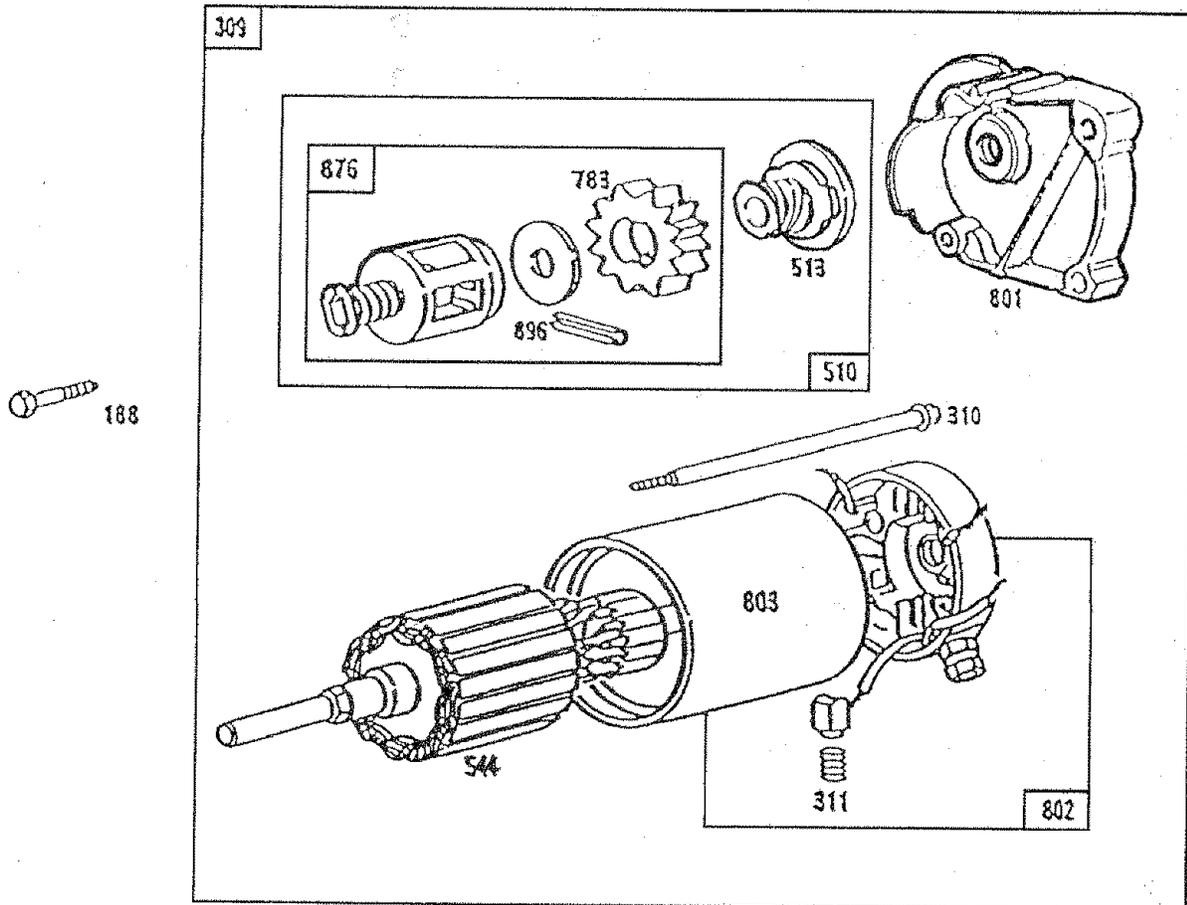
BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1522-01



# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1522-01



Reference Number		309	310	311	544	801	802	803
Manufacturer		Motor and Drive Ass'y.	Thru Bolt Assembly	Brush Assembly	Armature Assembly	Drive End Cap Assembly	End Cap Ass'y. Commutator	Housing Assembly
Briggs & Stratton	Housing Length							
12V	3-5/8"	394808	94003	395538	390837	394860	395537*	398159

\*Includes Brush Set

Reference Number		510	513	783	876	896
Starter Motor Mfr.		Starter Drive Group	Clutch Assembly	Gear	Pinion Spring Kit	Roll Pin
Briggs & Stratton						
12V		490421	398003	280104	490467	94288(Copper)

# REPAIR PARTS

18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1522-01

KEY PART NO.	NO.	DESCRIPTION	KEY PART NO.	NO.	DESCRIPTION
1	494533	Cylinder Assembly	45	261368	Tappet, Valve
2	399265	Bearing, Cylinder	46	213520	Gear, Cam
3	391086	Seal, Oil	50	213290	Manifold, Intake
5-1	493457	Head, Cylinder Number 1	51	271412	*** Gasket, Carburetor & Intake Elbow
5-2	493458	Head, Cylinder Number 2	51A	280319	Spacer, Carburetor
7-1	271867	* Gasket, Cylinder Head Number 1	52	270884	* Gasket, Intake Manifold Mounting
7-2	271868	* Gasket, Cylinder Head Number 2	53	93970	Screw, Sems, Carburetor Mounting
8-1	398065	Breather Assembly Number 1	54	93208	Screw, Sems, Intake Manifold Mnt.
8-2	222892	Cover, Breather, Cylinder Number 2 (Use with Key Number 572, Air Baffle with Mounting Holes)	75	222511	Washer, Spring
9	27803	* Gasket, Valve Cover	78	94326	Screw, Sems
10	94382	Screw, Sems	81	223016	Lock, Muffler Screw
11	280225	Tube, Breather	90	495181	Carburetor Assembly
12	271703	* Gasket, Crankcase Cover 1/64"	91	495035	Body Assembly, Upper Carburetor
	271188	* Gasket, Crankcase Cover .005"	93	231209	Bushing, Throttle Shaft
	271189	* Gasket, Crankcase Cover .009"	94	491538	** Valve Assembly, Carburetor Idle
13	94565	Screw, Cylinder Head	95	93499	Screw, Sems, Throttle and Choke Valve Mounting
15	94239	Plug, Oil Drain	96	221939	Valve, Throttle
15A	94497	Plug, Pipe	97	392672	Shaft and Lever, Throttle
16	394028	Crankshaft	98	91920	Screw, Machine, Fillister Head
	94196	Key, Timing Gear	99	26157	Spring, Throttle Adjustment
18	493304	Base Assembly, Crankcase	102	271607	** Gasket, Carburetor Body
20	291675	Seal, Oil	103	298514	Float, Carburetor
21	399195	Seal Assembly, Cylinder Plug	104	230896	** Pin, Float Hinge
22	94724	Screw, Sems, Crankcase Cover Mounting	105	394683	** Valve, Fuel Inlet
23	491180	Flywheel and Ring Gear Assembly, Magneto	107	491543	Body, Lower Carburetor
24	222698	Key, Flywheel	108	223534	Valve, Choke
25	394955	Piston Assembly, Standard	109	392673	Shaft and Lever, Choke
	394956	Piston Assembly .010" Oversize	116	280474	O-Ring
	394957	Piston Assembly .020" Oversize	117	231338	Jet, Needle Valve
	394958	Piston Assembly .030" Oversize	119	94152	Screw, Sems, Hex Head
26	394959	Ring Set, Piston, Standard	120	92290	Washer, Lock
	394960	Ring Set, Piston .010" Oversize	121	491539	Carburetor Overhaul Kit
	394961	Ring Set, Piston .020" Oversize	127	223472	Plug, Welch
	394962	Ring Set, Piston .030" Oversize	161	398826	Body, Air Cleaner
27	260924	Lock, Piston Pin	165	94289	Nut, Wing
28	299691	Pin Assembly, Piston, Standard	187	299146	Line, Fuel, 28" (Cut to Suit)
	391286	Pin Assy., Piston .005" Oversize	188	93535	Screw, Hex Head
29	394306	Rod Assembly, Connecting	201	262683	Link, Governor
	397158	Rod Assembly, Connecting, .020" Undersize Crankpin Bore	202	262684	Link, Throttle
32	94671	Screw, Connecting Rod	203	280997	Crank, Bell
33	390420	Valve, Exhaust	203A	490207	Crank, Bell
34	261528	Valve, Intake	205	93971	Screw, Shoulder
		Uses: 393606 Seal Assembly and Retainer (Key Number 868)	206	94298	Nut, Square
35	65906	Spring, Intake Valve	207	262337	Spring, Compression
36	26828	Spring, Exhaust Valve	209	262352	Spring, Governor
40	221596	Retainer, Intake Valve	209A	261563	Spring, Governor Idle
41	292260	Rotocoil, Exhaust Valve			
42	93630	Retainer, Exhaust Valve Rotocoil(2)			

\* Included in Gasket Set (491856)  
 \*\* Included in Carburetor Overhaul Kit (491539)  
 \*\*\* Included in both Gasket Set (491856), and  
 Carburetor Overhaul Kit (491539)

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

# REPAIR PARTS

## 18 HP 42" TRACTOR - - MODEL NUMBER 917.254860

### BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1522-01

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
216 262375	Link	525 495348	Tube, Oil Filler
219 393415	Oil Slinger Assembly	528 393815	Impulse Line and Clamp Assembly
219A 394348	Gear, Governor	535 271271	Element, Air Cleaner
220 222773	Washer, Thrust	537 271411	*** Gasket, Air Cleaner
222 491282	Plate Assembly, Governor Control	552 262332	Lower Bushing, Governor
224 94297	Screw, Pan Head	552A 262331	Upper Bushing, Governor
227 491297	Lever Assembly, Governor	556 93585	Screw, Sems, Hex Head
229 62199	Washer	562 93853	Bolt, Governor Lever
230 223882	Washer, Governor Crank, Inside	567 93777	Screw, Hex Head, Back Plate to Cylinder
232 262539	Spring, Governor Control	569 276062	* Gasket, Crankcase
235 224039	Shield, Spitback	572 224580	Baffle, Air, Cylinder Number 2
240 493629	Filter, Fuel (In Fuel Line to Tank)	573 491304	Back Plate Assembly
244 230318	Connector, Impulse Pump	592 92278	Nut, Hex
257 93897	Screw, Sems	601 93053	Clamp, Fuel Line
258 93949	Screw, Sems	615 94296	Retainer, E-Ring
259 223890	Bracket, Cable	616 491530	Crank, Governor
265 221535	Clamp, Casing	634 271013	** Washer, Throttle Shaft
267 93496	Screw, Hex Head	634A 491287	Seal, Governor Shaft
284 94264	Screw, Hex Head	635 66538	Elbow, Spark Plug
284A 93469	Screw, Hex Head	642 223579	Cover, Air Cleaner
304 492656	Housing, Blower	643 223714	Cartridge Plate, Air Cleaner
305 94608	Screw, Sems 1/2	726 391362	Gear, Flywheel Ring (Includes Mounting Parts)
305 94513	Screw, Sems 3/4	741 262694	Gear, Timing
306-1 222846	Shield, Cylinder	819 94675	Screw, Hex Head
306-2 223734	Shield, Cylinder	842 271170	Seal, Oil Filler Cap
307 94386	Screw, Sems	847 394394	Dipstick and Tube Assembly
308-1 222848	Cover, Air Guide	851 221798	Terminal, Ignition Cable
308-2 222849	Cover, Air Guide	858 270989	**** Diaphragm, Damping
309 - - -	Motor, Starting (See Chart on Illustrated Pages for Part Numbers)	859 271025	**** Gasket, Carburetor Pump
319 394988	Armature Assembly	860 261358	**** Spring (2)
332 230674	Nut, Hex	861 393397	Repair Kit, Pump
333 394891	Armature Group, MAGNETRON® Ignition	868 393606	Seal Assembly and Retainer
334 93381	Screw, Sems, Armature Mounting	869 261463	Seat, Intake Valve, Standard
337 802592	Plug, Spark, Resistor (with Gasket)	870 213316	Seat, Exhaust Valve, Standard
356 494705	Wire, Ground	871 261961	Guide, Exhaust Valve
358 491856	Gasket Set	231218	Guide, Intake Valve (See Manual)
363 19203	Puller, Flywheel (Optional Accy.)	877 393456	Connector Assembly
383 89838	Wrench, Spark Plug	881 212455	Cover Plate, Crankcase
387 280197	Body, Pump	955 397882	Plug and Seal, Solenoid
392 261395	**** Spring, Pump	1005 280815	Fan, Flywheel
394 270988	**** Diaphragm	1006 224413	Retainer, Fan
414 223882	Washer	1019 491262	Decal Kit
422 222875	Clamp, Oil Filler		
432 221377	**** Cap, Spring		
434 223688	Cover, Diaphragm		
435 93829	Screw, Diaphragm Cover		
445 394019	Cartridge, Air Cleaner		
467 493903	Knob, Air Cleaner		
468 224521	Screen, Flush Rotating		
474 393474	Stator, Alternator, Dual Circuit		
482 93621	Screw, Sems		
523 494927	Cap and Dipstick, Oil Filler		
524 271157	Seal, Filler Tube		
524A 271485	Seal, Tube		

RPM Settings: Low: 1200-1600, High: 3200-3400

- \* Included in Gasket Set (491856)
- \*\* Included in Carburetor Overhaul Kit (491539)
- \*\*\* Included in both Gasket Set (491856), and Carburetor Overhaul Kit (491539)
- \*\*\*\* Included in both Carburetor Overhaul Kit (491539), and Pump Repair Kit (393397)

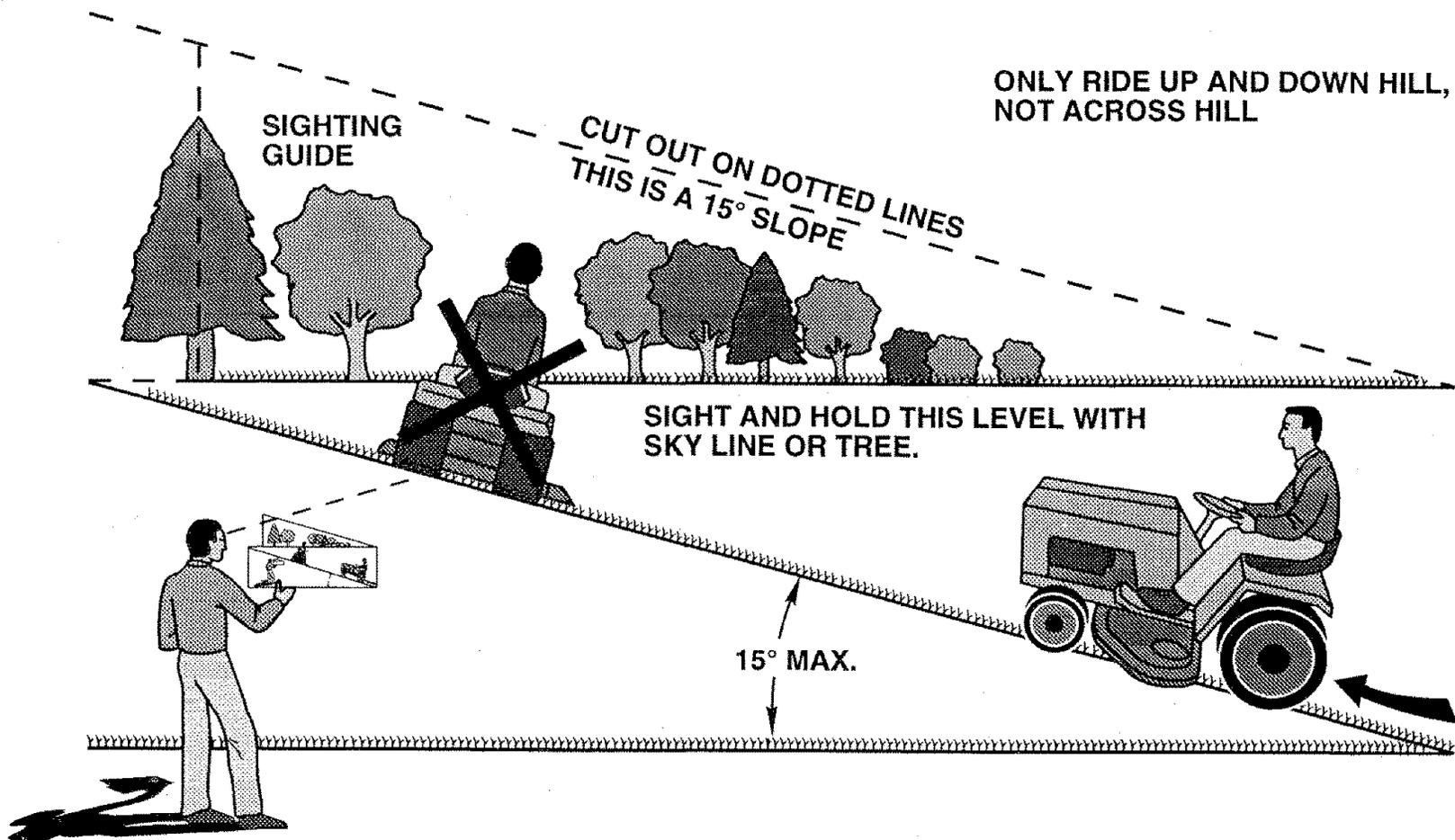
**NOTE:** All component dimensions given in U.S. inches  
1 inch = 25.4 mm

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# SERVICE NOTES

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# 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.

**SEARS**

**OWNER'S  
MANUAL**

**MODEL NO.  
917.254860**

**HOW TO ORDER  
REPAIR PARTS**

**CRAFTSMAN®**

**18 HP TWIN CYLINDER  
ELECTRIC START  
3 in One Convertible  
42" MOWER  
5 SPEED TRANSAXLE  
LAWN TRACTOR**

Each tractor has its own model number. Each engine has its own model number.

The model number for your tractor will be found on the model plate located under the seat.

The model number for your engine will be found on the blower housing of the engine.

All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Center/Department and most Retail Stores.

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE  
FOLLOWING INFORMATION:**

- **PRODUCT - LAWN TRACTOR**
- **MODEL NUMBER - 917.254860**
- **ENGINE MODEL NO. - 422707, TYPE NO. 1522-01**
- **PART NUMBER**
- **PART DESCRIPTION**

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians... professional technicians specifically trained to insure that we meet our pledge to you, we service what we sell.