

# CRAFTSMAN®

### MODEL NUMBER 917.256660 OWNER'S MANUAL

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





CAUTION: Read and follow all safety rules and instructions before operating this equipment. FOR CONSUMER ASSISTANCE HOT LINE, CALL THIS TOLL FREE NUMBER: 1-800-659-5917

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

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### 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.

### A WARNING A

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. **CONGRATULATIONS** on your purchase of a 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 Authorized Service Center/Department. We have competent, welltrained technicians and the proper tools to service or repair this tractor.

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

MODEL	
NUMBER	917.256660
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.

### 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 tractor.
- Follow the instructions under "Customer Responsibilities" and "Storage" sections of this owner's manual.

WARNING: This tractor is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws

### PRODUCT SPECIFICATIONS

HORSEPOWER:	19.0
GASOLINE CAPACITY AND TYPE:	3.5 GALLONS UNLEADED REGULAR
OIL TYPE (API-SF/SG):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
OIL CAPACITY:	3.0 PINTS
SPARK PLUG: (GAP: .030")	CHAMPION RJ19LM STD361458
VALVE CLEARANCE:	INTAKE: .004"006" EXHAUST: .007"009"
GROUND SPEED (MPH):	FORWARD: 1st 1.1 2nd 1.5 3rd 2.3 4th 3.5 5th 4.4 6th 5.7 REVERSE: 1.7
TIRE PRESSURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	5 AMPS BATTERY 5 AMPS HEADLIGHTS
BATTERY:	AMP/HR: 30 MIN_CCA: 240 CASE SIZE: U1R
BLADE BOLT TORQUE:	30-35 FT. LBS.

(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/ Department (See REPAIR PARTS section of this manual).

### LIMITED TWO YEAR WARRANTY ON CRAFTSMAN RIDING EQUIPMENT

For two (2) years from the date of purchase, if this Craftsman 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, belts, etc.
- · 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 ninety (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.

IN-HOME WARRANTY SERVICE ON YOUR CRAFTSMAN RIDING EQUIPMENT IS AVAILABLE AT NO-CHARGE FOR 30 DAYS FROM THE DATE OF PURCHASE. PLEASE CONTACT YOUR NEAREST SERVICE CENTER. AFTER 30 DAYS FROM THE DATE OF PURCHASE, WARRANTY SERVICE IS AVAILABLE BY TAKING YOUR CRAFTSMAN RIDING EQUIPMENT TO YOUR NEAREST SEARS SERVICE CENTER. (IN-HOME WARRANTY SERVICE WILL STILL BE AVAILABLE AFTER 30 DAYS FROM THE DATE OF PURCHASE BUT A STANDARD TRIP CHARGE WILL APPLY.) THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS 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., D/817 WA, HOFFMAN ESTATES, IL 60179

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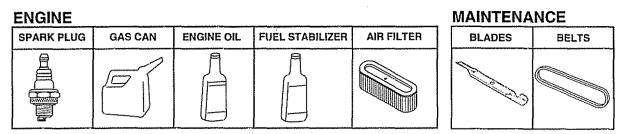
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# ACCESSORIES AND ATTACHMENTS

These accessories and attachments were available through most Sears retail outlets and service centers when the tractor was purchased. Most Sears stores can order these items for you when you provide the model number of your tractor.



#### PERFORMANCE

Sears offers a wide variety of attachments that fit your tractor. 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 tractor.

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 for 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 CLOSE-OUT PLATE 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. See "MOWER" in the Repair Parts section of this manual.

**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, 48-inch wide blade clears 42-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 gol **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 packed separately in carton Parts Bag contents shown full size (1) Hex Bolt 3/8-16 x 1 Mulcher Plate Seat <u>A)</u> () Steering Video Wheel Cassette Steering (1) Large Flat Washer Boot (1) Lockwasher 3/8 (1) Hex Bolt 5/16-18 x 1-1/4 Manual Parts Bag (1) Locknut 5/16-18 (1) Shoulder Bolt (1) Hex Bolt 1/2-13 x 1 5/16-18 Parts bag contents not shown full size (2) Gauge Wheels Ô (2) Shoulder (2) Washers 3/8 Bolts x 7/8 x 14 Gauge (1) Washer 17/32 x 1-3/16 x 12 Gauge Steering Wheel Steering Insert Extension Θ Shaft (1) Lock Washer 1/2 (2) Screws #10 x 5/8 (2) Center-O(2) Lock Washers #10 0 lock Nuts Steering Wheel Adapter (2) Weld Nuts #10 $\bigcirc$ 2) Washers 3/16 x 3/4 x 16 Gauge 7 (2) Latch Hook (2) Hex Nuts 1/4-20 and the second s Assemblys ÷., (2) Hex Bolts 1/4-20 x 3/4 (2) Keys (2) Washers Slope Sheet 9/32 x 5/8 x 16 Gauge (2) Lock Washers 1/4

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
- (1) 9/16" wrench
- (2) 7/16" wrenches
- (1) Phillips screwdriver Utility knife
- (2) 1/2" wrenches(1) 3/4" wrench
  - Tire pressure gauge

(1) 3/4" socket with drive ratchet

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 TRACTOR 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.
- Remove mower and packing materials.
- Check for any additional loose parts or cartons and remove.

### **BEFORE ROLLING TRACTOR OFF SKID**

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

ASSEMBLE EXTENSION SHAFT AND BOOT

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

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

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

INSTALL STEERING WHEEL

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

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

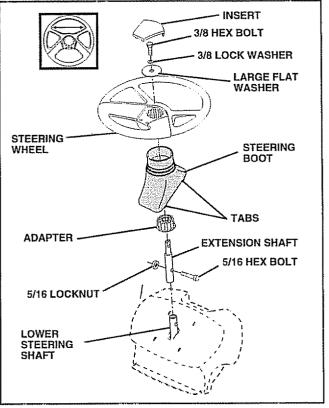


FIG. 1

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

- Press lift lever plunger and raise attachment lift lever to its highest position.
- Release parking brake by depressing clutch/brake pedal.
- Place gearshift lever in neutral (N) position.
- Roll tractor backwards off skid.

#### **CONNECT BATTERY (See Fig. 2)**



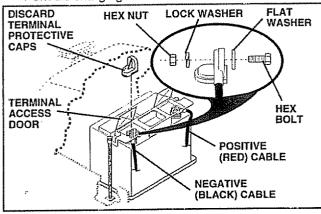
CAUTION: Do not short battery terminals. Before connecting battery, remove metal bracelets, wristwatch bands, rings, etc.

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

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

Use terminal access doors for:

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





#### **INSTALL SEAT (See Fig. 3)**

Adjust seat before tightening adjustment bolt.

- Remove cardboard packing on seat pan.
- Place seat on seat pan and assemble shoulder bolt.
- 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.
- Get off seat without moving its adjusted position.

 (+) battery sher and he
 tive (-) batvasher, lock
 CHECK TIRE PRESSURE
 The tires on your tractor were overinflated at the factory for shipping purposes. Correct tire pressure is important for best cutting performance.
 Reduce tire pressure to PSI shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

ADJUSTMENT

BOLT

#### CHECK DECK LEVELNESS

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

**FIG. 3** 

LARGE FLAT WASHER

LOCK WASHER

SEAT

SEAT PAN

SHOULDER

BOLT

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

Assemble gauge wheels with tractor on a flat level surface.

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

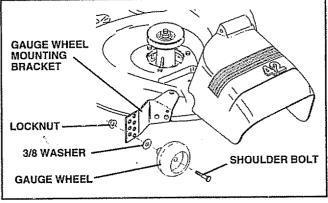


FIG. 4

Raise seat and tighten adjustment bolt securely.

#### INSTALL MOWER AND DRIVE BELT (See Figs. 5 and 7)

Be sure tractor is on level surface and mower suspension arms are raised with attachment lift control. Engage parking brake.

- Cut and remove ties securing anti-sway bar and belts. ø Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with discharge guard to right side of tractor.

**IMPORTANT: CHECK BELT FOR PROPER ROUTING IN** ALL MOWER PULLEY GROOVES. INSTALL BELT INTO ELECTRIC CLUTCH PULLEY GROOVE.

- Install one front link in top hole of the R.H. front mower bracket and R.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Install second front link in L.H. front suspension bracket only and retain with single loop retainer spring as shown.
- Turn height adjustment knob counterclockwise until it stops.
- Lower mower linkage with attachment lift control.
- Place the L.H. suspension arm on outward pointing deck pin. If necessary, rock and raise front of mower to align deck pin with the hole in suspension arm. Retain with double loop retainer spring with loops down as shown.
- Slide left side of mower back and install the unattached front link in top hole of the L.H. front mower bracket. Retain with single loop retainer spring as shown.

- Place the R.H. suspension arm on outward pointing deck pin. If necessary, rock and raise front of mower to align deck pin with the hole in suspension arm. Retain with double loop retainer spring with loops down as shown.
- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- Turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise mower to highest position.
- Assemble gauge wheels (See "TO ADJUST GAUGE WHEELS" in the Operation section of this manual).

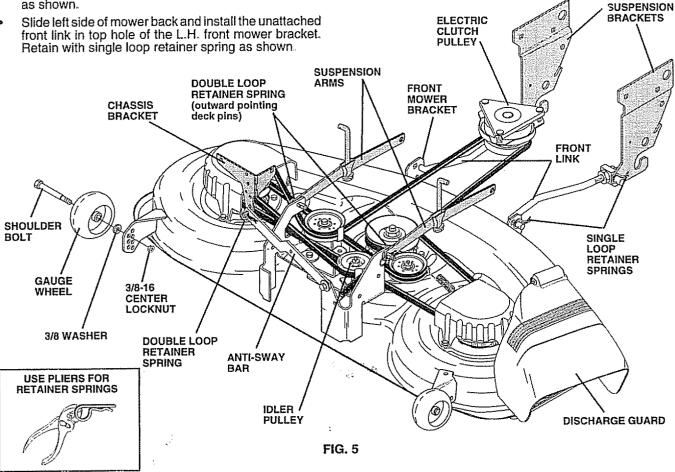
#### CHECK MOWER LEVELNESS

For best cutting results, mower 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, mower drive, and mower blade drive belts in the Service and Adjustments section of this manual. Verify that the belts are routed correctly.

FRONT



### INSTALL MULCHER PLATE (See Figs. 6A and 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.

#### TO CONVERT TO BAGGING OR DISCHARGING

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

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

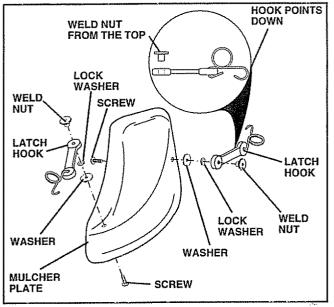


FIG. 6A

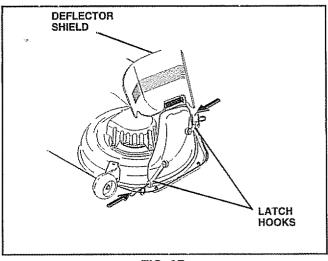


FIG. 6B

### ✓ 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.

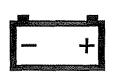
PLEASE REVIEW THE FOLLOWING CHECKLIST:

- 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.

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



BATTERY





CAUTION OR WARNING





REVERSE







SLOW



FAST



ENGINE ON

ENGINE OFF

**OIL PRESSURE** 

CLUTCH

LIGHTS ON

LIGHTS OFF







MOWER HEIGHT



DIFFERENTIAL

LOCK

PARKING BRAKE

LOCKED



UNLOCKED



REVERSE

NEUTRAL

HIGH

LOW



**PARKING BRAKE** 



MOWER LIFT

ATTACHMENT **CLUTCH ENGAGED** 



DANGER, KEEP HANDS AND FEET AWAY

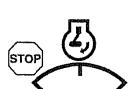


ATTACHMENT CLUTCH DISENGAGED





HYDROSTATIC FREE WHEEL (Hydro Models only)

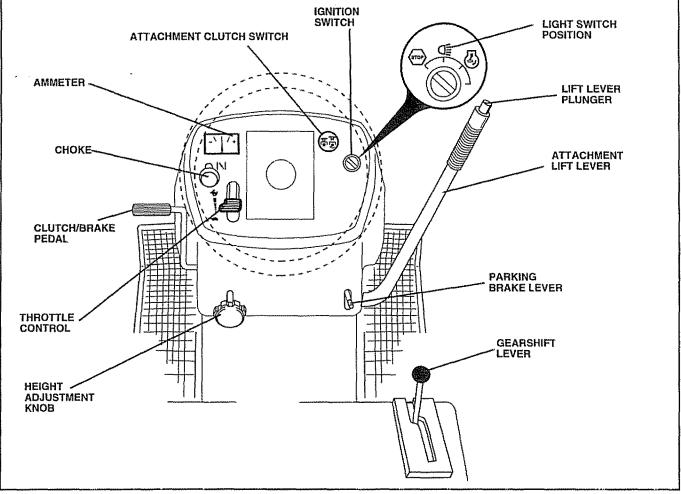


**IGNITION** 

### **KNOW YOUR TRACTOR**

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

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



**FIG.** 7

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

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.

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

ATTACHMENT CLUTCH SWITCH: 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.

WEAR YOUR	
BAFETY GLASSES	
FORESIGHT IS BETTER THAN NO SIGHT	

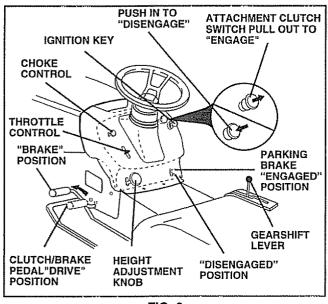
The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields while operating your tractor or performing any adjustments or repairs. We recommend a wide vision safety mask over the spectacles or standard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

### HOW TO USE YOUR TRACTOR

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

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

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





#### STOPPING (See Fig. 8)

#### MOWER BLADES -

- Move attachment clutch switch to "DISENGAGED" position.
- **GROUND DRIVE -**
- Depress clutch/brake pedal into full "BRAKE" position.
- Move gearshift lever to neutral (N) position.
- ENGINE -

- Turn ignition key to "OFF" position and remove key. Always remove key when leaving tractor to prevent unauthorized use.
- Never use choke to stop engine.

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



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

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

Always operate engine at full throttle.

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

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

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

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

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

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

- Start tractor with clutch/brake pedal depressed and gearshift lever in neutral (N) 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.

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

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

- Turn knob counterclockwise (m) to lower cutting height.

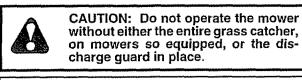
The cutting height range is approximately 1-1/2" to 4". The heights are measured from the ground to the blade tip with the engine not running. These heights are approximate and may vary depending upon soil conditions, height of grass and types of grass being mowed.

- 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.

#### TO OPERATE MOWER (See Fig. 9)

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

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



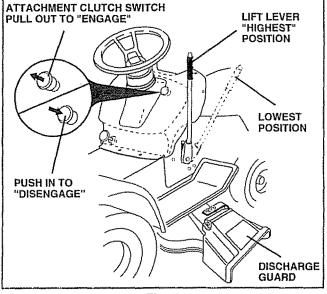


FIG. 9

#### TO OPERATE ON HILLS



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

#### ADD GASOLINE

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

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

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



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

#### TO START ENGINE (See Fig. 8)

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

- 1 Depress clutch/brake pedal and set parking brake.
- 14

- Place gear shift lever in neutral (N) position.
- Move attachment clutch to "DISENGAGED" position.
- Move throttle control to fast (-) position
- Pull choke control out for a cold engine start attempt. For a warm engine start attempt the choke control may not be needed.

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

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

WARM WEATHER STARTING (50° F and above)

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

COLD WEATHER STARTING (50° F and below)

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

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

#### **MOWING TIPS**

- Tire chains cannot be used when the mower housing is attached to tractor.
- Mower should be properly leveled for best mowing performance. See "TO LEVEL MOWER HOUSING" in the Service and Adjustments section of this manual.
- The left hand side of mower should be used for trimming.
- Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- When mowing large areas, start by turning to the right so that clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished (See Fig. 10).

- If grass is extremely tall, it should be mowed twice to reduce load and possible fire hazard from dried clippings. Make first cut relatively high; the second to the
- desired height.
   Do not mow grass when it is wet. Wet grass will plug mower and leave undesirable clumps. Allow grass to dry before mowing.
- Always operate engine at full throttle when mowing to assure better mowing performance and proper discharge of material. Regulate ground speed by selecting a low enough gear to give the mower cutting performance as well as the quality of cut desired.
- When operating attachments, select a ground speed that will suit the terrain and give best performance of the attachment being used.

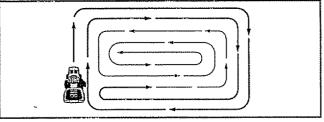
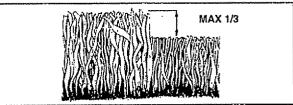


FIG. 10

#### **MULCHING MOWING TIPS**

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

- The special mulching blade will recut the grass clippings many times and reduce them in size so that as they fall onto the lawn they will disperse into the grass and not be noticed. Also, the mulched grass will biodegrade quickly to provide nutrients for the lawn. Always mulch with your highest engine (blade) speed as this will provide the best recutting action of the blades.
- Avoid cutting your lawn when it is wet. Wet grass tends to form clumps and interferes with the mulching action. The best time to mow your lawn is the early afternoon. At this time the grass has dried and the newly cut area will not be exposed to the direct sun.
- For best results, adjust the mower cutting height so that the mower cuts off only the top one-third of the grass blades (See Fig. 11). For extremely heavy mulching, reduce your width of cut on each pass and mow slowly.
- Certain types of grass and grass conditions may require that an area be mulched a second time to completely hide the clippings. When doing a second cut, mow across or perpendicular to the first cut path.
- Change your cutting pattern from week to week. Mow north to south one week then change to east to west the next week. This will help prevent matting and graining of the lawn.



CUSTOMER RESPONSIBILITIES														
FIL	AINTENANCE SCHEDULE L IN DATES YOU COMPLETE GULAR SERVICE		EFORE	EACH!	HOURS HOURS EVERY 8	HOURS	SHOUR SHOURS	3 HOUR VERY 1	S HOUS	ASON ASON	SEP	(GF	E DA	TES
	Check Brake Operation	V		V								1		
	Check Tire Pressure	V		V	]						1		<u> </u>	
T	Check for Loose Fasteners	V					17		V					
R	Sharpen/Replace Mower Blades			1	14									
Ĉ	Lubrication Chart				V				1		T	1		
ĬŤ	Check Battery Level/Recharge				VG							1		
Ō	Clean Battery and Terminals		1		V				V		1	T		
R	Check Transaxle Cooling	ľ		1	V						T			
	Adjust Blade Belt(s) Tension	Ι					Vs							
	Adjust Motion Drive Belt(s) Tension	I	1				1/5		1	1	I			
	Check Engine Oll Level	~		V										
	Change Engine Oil		2		1,2,3		].		2					
E	Clean Air Filter				1/2									
N	Clean Air Screen				V2									
G	Inspect Muffler/Spark Arrester					5					ļ			
	Replace Oil Filter (If equipped)						1,2					1		
N E	Clean Engine Cooling Fins						V 2	1						
15	Replace Spark Plug	[	-	1			V	V			1			
	Replace Air Filter Paper Cartridge			T	T		<b>V</b> 2							
	Replace Fuel Filter							V						

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 soll

### **GENERAL RECOMMENDATIONS**

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

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

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

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

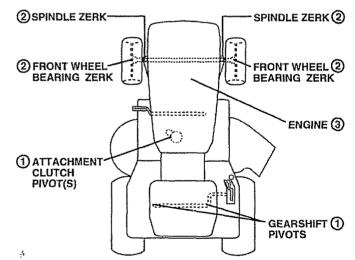
#### **BEFORE EACH USE**

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

5 - If equipped with adjustable system

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

#### LUBRICATION CHART



SAE 30 OR 10W30 MOTOR OIL

**②GENERAL PURPOSE GREASE** 

**③REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION** 

**IMPORTANT:** DO NOT OIL OR GREASE THE PIVOT POINTS WHICH HAVE SPECIAL NYLON BEARINGS. VISCOUS LUBRI-CANTS 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, POW-DERED GRAPHITE TYPE LUBRICANT SPARINGLY.

# **CUSTOMER RESPONSIBILITIES**

### TRACTOR

Always observe safety rules when performing any maintenance.

#### **BRAKE OPERATION**

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

#### TIRES

- Maintain proper air pressure in all tires (See "PROD-UCT 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.

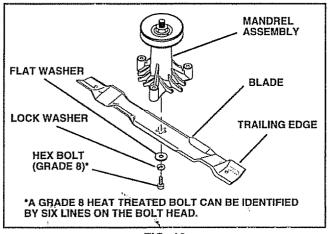


FIG. 12

#### 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 a cone balancer. (When using a cone balancer, follow the instructions supplied with balancer).
- Slide blade on to an unthreaded portion of the steel bolt or pin and hold the bolt or pin parallel with the ground. If blade is balanced, it should remain in a horizontal position. If either end of the blade moves downward, sharpen the heavy end until the blade is balanced.

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

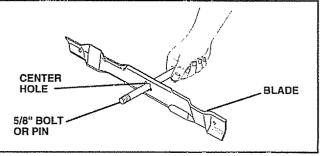


FIG. 13

#### BATTERY

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

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

#### TO CLEAN BATTERY AND TERMINALS

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

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

# **CUSTOMER RESPONSIBILITIES**

#### **V-BELTS**

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

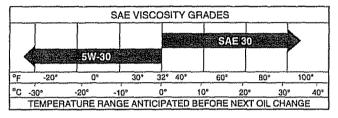
#### TRANSAXLE COOLING

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 SF or 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 operation. Tighten oil fill cap/dipstick securely each time you check the oil level.

TO CHANGE ENGINE OIL (See Fig.15)

Determine temperature range expected before oil change. All oil must meet API service classification SF or SG.

- Be sure tractor 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.

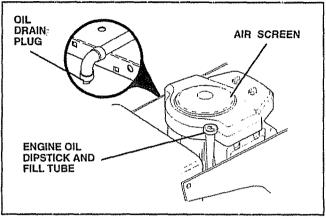


FIG. 14

#### **CLEAN AIR SCREEN (See Fig. 14)**

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

#### AIR FILTER (See Fig. 15)

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.
- If very dirty or damaged, replace pre-cleaner.
- Reinstall pre-cleaner over cartridge.
- Reinstall cover and secure with knob(s).

#### TO SERVICE CARTRIDGE

- Remove wing nuts and cartridge plate.
- Carefully remove cartridge to prevent debris from entering carburetor.
- Clean cartridge by tapping gently on flat surface. If very dirty or damaged, replace cartridge.
- 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.

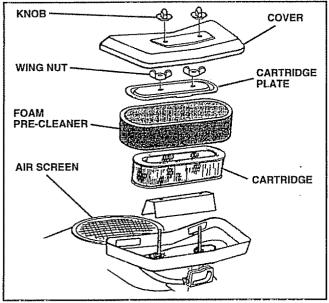


FIG. 15

#### ENGINE COOLING FINS (See Fig. 16)

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).

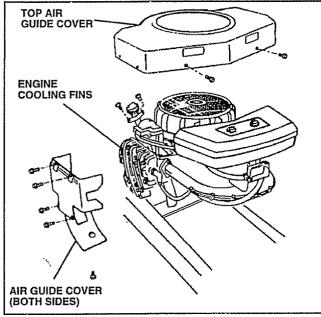


FIG. 16

#### 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 "PROD-UCT SPECIFICATIONS" on page 3 of this manual.

#### IN-LINE FUEL FILTER (See Fig. 17)

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

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

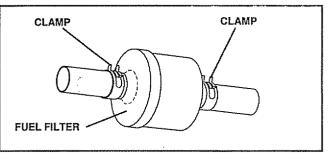


FIG. 17

### CLEANING

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

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

#### CAUTION: BEFORE PERFORMING ANY SERVICE OR ADJUSTMENTS:

- Depress clutch/brake pedal fully and set parking brake.
  - Place gearshift lever in neutral (N) position.
  - Place attachment clutch in "DISENGAGED" position.
- Turn ignition key "OFF" and remove key. 4
- 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.

#### TO REMOVE MOWER (See Fig. 18)

- Place attachment clutch in "DISENGAGED" position.
- Turn height adjustment knob to lowest setting.
- Lower mower to its lowest position.
- Remove retainer spring holding anti-swaybar to chassis bracket and disengage anti-swaybar from bracket.
- Remove retainer springs from suspension arms at deck and disengage arms from deck.
- Raise attachment lift to its highest position.
- Remove two retainer springs from each front link and remove links.
- Slide mower forward and remove belt from electric clutch pulley.
- Slide mower out from under right side of tractor. .

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

#### TO INSTALL MOWER

Follow procedure described in "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual.

#### **TO LEVEL MOWER HOUSING**

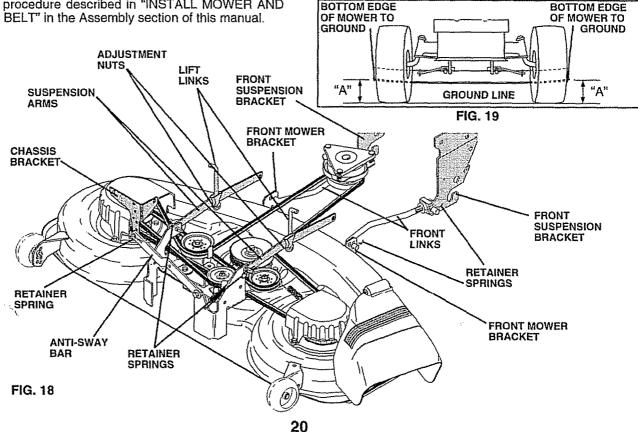
Adjust the mower while tractor is parked on level ground or driveway. Make sure tires are properly inflated (See "PRODUCT SPECIFICATIONS" on page 3 of this manual). If tires are over or underinflated, you will not properly adjust your mower.

SIDE-TO-SIDE ADJUSTMENT (See Figs. 19 and 20)

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

NOTE: Each full turn of adjustment nut will change mower height about 1/8".

Recheck measurements after adjusting.



BOTTOM EDGE

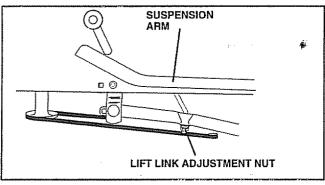


FIG. 20

FRONT-TO-BACK ADJUSTMENT (See Figs. 21 and 22) 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.

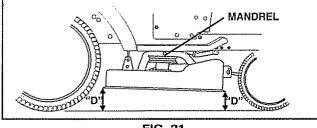
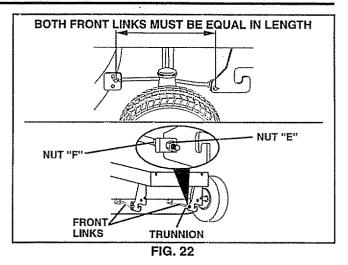


FIG. 21



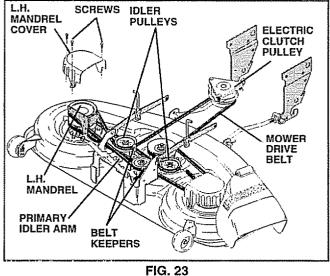
#### **TO REPLACE MOWER DRIVE BELT**

MOWER DRIVE BELT REMOVAL (See Fig. 23) -

- Park tractor on a level surface. Engage parking brake.
- Remove four screws from L.H. mandrel cover and remove cover.
- Roll belt over the top of L.H. mandrel pulley.
- Remove belt from electric clutch pulley.
- Remove belt from idler pulleys.
- Remove any dirt or grass clippings which may have accumulated around mandrels and entire upper deck surface.
- Check primary idler arm and two idlers to see that they rotate freely.
- Be sure spring is securely hooked to primary idler arm and bolt in mower housing.

MOWER DRIVE BELT INSTALLATION (See Fig. 23) -

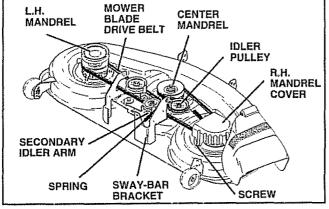
- Install belt in both idlers. Make sure belt is in both belt keepers at the idlers as shown.
- Install new belt onto electric clutch pulley.
- Roll belt into upper groove of L.H. mandrel pulley.
- Carefully check belt routing making sure belt is in the grooves correctly and inside belt keepers.
- Reassemble L.H. mandrel cover.



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

Park the tractor on level surface. Engage parking brake.

- Remove mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- Remove mower (See "TO REMOVE MOWER" in this section of this manual).
- Remove four screws from R.H. mandrel cover and remove cover. Unhook spring from bolt on mower housing.
- Carefully roll belt off R.H. mandrel pulley.
- Remove belt from center mandrel pulley, idler pulley, and L.H. mandrel pulley.
- Remove any dirt or grass which may have accumulated around mandrels and entire upper deck surface.
- Check secondary idler arm and idler to see that they rotate freely.
- Be sure spring is hooked in secondary idler arm and sway-bar bracket.
- Install new belt in lower groove of L.H. mandrel pulley, idler pulley, and center mandrel pulley as shown.
- Roll belt over R.H. mandrel pulley. Make sure belt is in all grooves properly.
- Reconnect spring to bolt in mower housing and reinstall R.H. mandrel cover.
- Reinstall mower to tractor (See "INSTALL MOWER AND DRIVE BELT" in the Assembly section of this manual).
- Reassemble mower drive belt (See 'TO REPLACE MOWER DRIVE BELT' in this section of this manual).





# TO ADJUST ATTACHMENT CLUTCH (See Fig. 25)

- The electric clutch should provide years of service. The clutch has a built-in brake that stops the pulley within 5 seconds. Eventually, the internal brake will wear which may cause the mower blades to not engage, or, to not stop as tequired. Adjustments should be made by your nearest authorized service center/department.
  - Make sure attachment clutch and ignition switches are in "OFF" position.

• Adjust the three nylon locknuts until space between clutch plate and rotor measures .012" at all three slot locations cut in the side of brake plate.

**NOTE:** After installing a new electric clutch, run tractor at full throttle and engage and disengage electric clutch 10 cycles to wear in clutch plate.

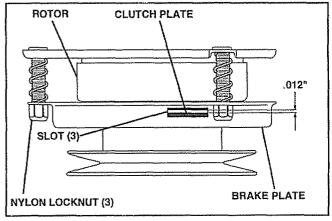


FIG. 25

#### TO ADJUST BRAKE (See Fig. 26)

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

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

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- If distance is other than 1-1/2", loosen jam nut and turn nut "A" until distance becomes 1-1/2". Retighten jam nut against nut "A".
- Road test tractor for proper stopping distance as stated above. Readjust if necessary. If stopping distance is still greater than six (6) feet in highest gear, further maintenance is necessary. Contact your nearest authorized service center/department.

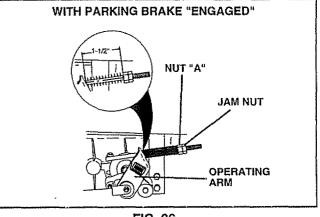


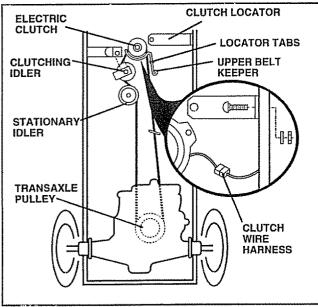
FIG. 26

#### TO REPLACE MOTION DRIVE BELT (See Fig. 27)

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.)
- Disconnect clutch wire harness.
- Remove clutch locator.
- 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 electric clutch.
- Install new belt by reversing above procedure.

IMPORTANT: MAKE SURE UPPER BELT KEEPER IS POSITIONED PROPERLY BETWEEN LOCATOR TABS AND ELECTRIC CLUTCH WIRE CONNECTION IS SECURE.

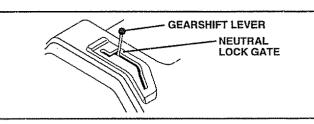




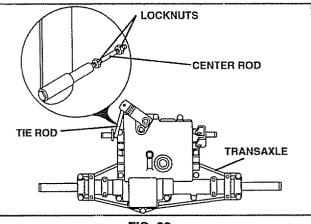
#### TRANSAXLE SHIFTER LINKAGE AND AD-JUSTMENT (See Figs. 28 and 29)

The transaxle should be in neutral when the gear shift lever is in the neutral (N) (lock gate) position. The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:

- Make sure transaxle is in neutral (N).
- Loosen two locknuts on tie rod.
- Turn center rod until gearshift lever falls into neutral lock gate on fender console.
- Tighten locknuts securely.









#### TO ADJUST STEERING WHEEL ALIGNMENT

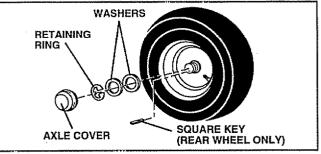
If steering wheel crossbars are not horizontal (left to right) when wheels are positioned straight forward, remove steering wheel and reassemble per instructions in the Assembly section of this manual.

#### FRONT WHEEL TOE-IN/CAMBER

The front wheel toe-in and camber are not adjustable on your tractor. 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. 30)

- 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.



### TO START ENGINE WITH A WEAK BATTERY (See Fig. 31)



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

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

**IMPORTANT:** YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE 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 NEGA-TIVE (-) terminal of fully charged battery.
- Connect the other end of the BLACK cable to good CHASSIS GROUND, away from fuel tank and battery.
- TO REMOVE CABLES, REVERSE ORDER -
- BLACK cable first from chassis and then from the fully charged battery.

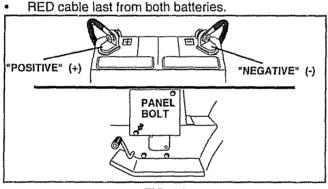


FIG. 31

#### 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 REPLACE FUSE

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

#### TO REMOVE HOOD AND GRILL (See Fig. 32)

- 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.

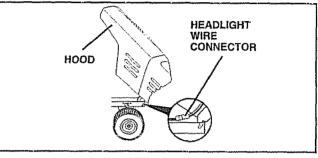


FIG. 32

#### ENGINE

# TO ADJUST THROTTLE CONTROL CABLE (See Fig. 33)

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 (4) 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.

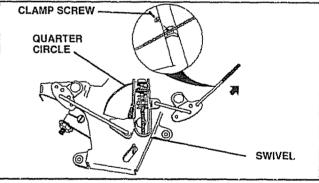
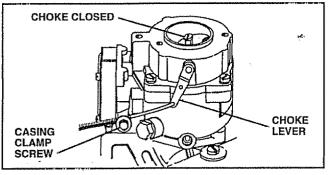


FIG. 33

#### TO ADJUST CHOKE CONTROL (See Fig. 34)

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 (
- Remove air cleaner cover, filter and cartridge 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.
- 24 Reassemble air cleaner.





# TO ADJUST CARBURETOR (See Figs. 35 and 36)

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 (N) position.
- 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 -

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

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

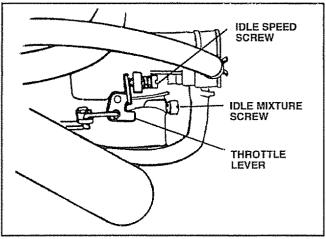


FIG. 35

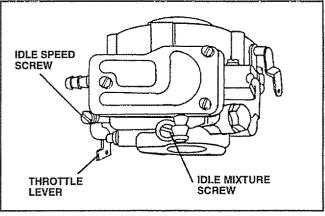


FIG. 36

# STORAGE

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



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

### TRACTOR

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

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

#### BATTERY

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

#### ENGINE

#### **FUEL SYSTEM**

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

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

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

#### **ENGINE OIL**

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

#### **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 tractor indoors and cover it to give protection from dust and dirt.
- Cover your tractor with a suitable protective cover that does not retain moisture. Do not use plastic. Plastic cannot breathe which allows condensation to form and will cause your tractor to rust.

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

# **TROUBLESHOOTING POINTS**

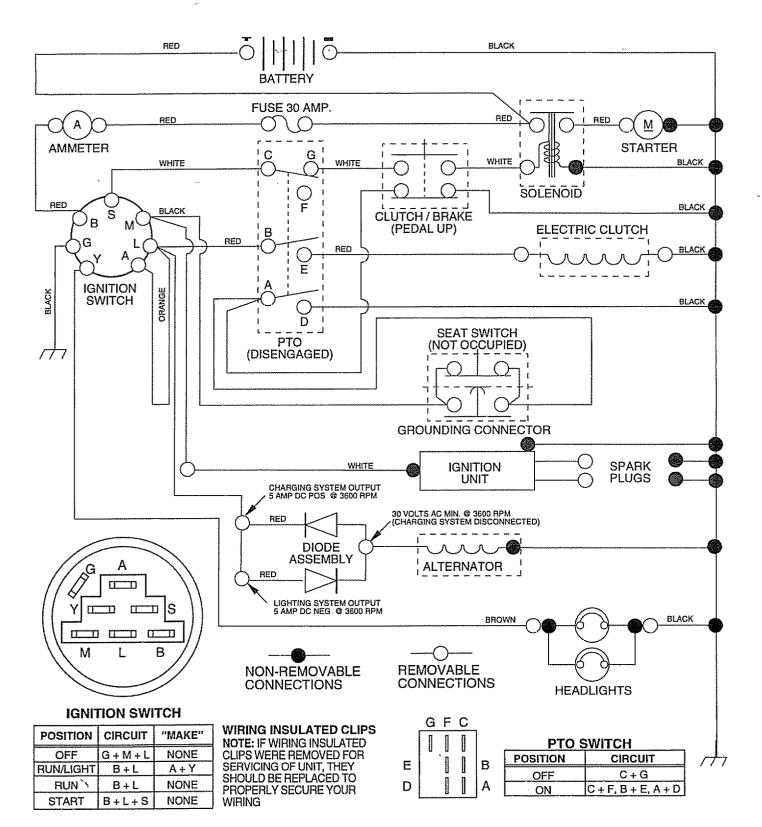
PROBLEM	CAUSE	CORRECTION				
Will not start	<ol> <li>Out of fuel.</li> <li>Engine not "CHOKED" properly.</li> <li>Engine flooded.</li> <li>Bad spark plug.</li> <li>Dirty air filter.</li> <li>Dirty fuel filter.</li> <li>Water in fuel</li> <li>Loose or damaged wiring</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <li>Fill fuel tank.</li> <li>See "TO START ENGINE" in Operation section.</li> <li>Wait several minutes before attempting to start.</li> <li>Replace spark plug.</li> <li>Clean/replace air filter.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and carburetor, refill tank with fregasoline and replace fuel filter.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustmer section.</li> <li>Contact an authorized service center/departmen</li> </ol>				
Hard to start	<ol> <li>Dirty alr filter.</li> <li>Bad spark plug</li> <li>Weak or dead battery.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> <li>Engine valves out of adjustment.</li> </ol>	<ol> <li>Clean/replace air filter.</li> <li>Replace spark plug</li> <li>Recharge or replace battery.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>				
Engine will not turn over	<ol> <li>Clutch/brake pedal not depressed.</li> <li>Attachment clutch is engaged.</li> <li>Weak or dead battery.</li> <li>Blown fuse.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty ignition switch.</li> <li>Faulty solenoid or starter</li> <li>Faulty operator presence switch(es).</li> </ol>	<ol> <li>Depress clutch/brake pedal.</li> <li>Disengage attachment clutch.</li> <li>Recharge or replace battery.</li> <li>Replace fuse.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace ignition switch.</li> <li>Check/replace solenoid or starter.</li> <li>Contact an authorized service center/department.</li> </ol>				
Engine clicks but will not start	<ol> <li>Weak or dead battery.</li> <li>Corroded battery terminals.</li> <li>Loose or damaged wiring.</li> <li>Faulty solenoid or starter.</li> </ol>	<ol> <li>Recharge or replace battery.</li> <li>Clean battery terminals.</li> <li>Check all wiring.</li> <li>Check/replace solenoid or starter.</li> </ol>				
Loss of power	<ol> <li>Cutting too much grass/too fast</li> <li>Throttle in "CHOKE" position.</li> <li>Build-up of grass, leaves and trash under mower.</li> <li>Dirty air filter.</li> <li>Low oil level/dirty oil.</li> <li>Faulty spark plug.</li> <li>Dirty fuel filter.</li> <li>Stale or dirty fuel.</li> <li>Water in fuel.</li> <li>Spark plug wire loose.</li> <li>Dirty engine air screen/fins</li> <li>Dirty/clogged muffler.</li> <li>Loose or damaged wiring.</li> <li>Carburetor out of adjustment.</li> </ol>	<ol> <li>Set in "Higher Cut" position/reduce speed.</li> <li>Adjust throttle control.</li> <li>Clean underside of mower housing.</li> <li>Clean/replace air filter.</li> <li>Check oil level/change oil.</li> <li>Clean and regap or change spark plug.</li> <li>Replace fuel filter.</li> <li>Drain fuel tank and refill with fresh gasoline.</li> <li>Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter.</li> <li>Connect and tighten spark plug wire.</li> <li>Clean engine air screen/fins.</li> <li>Clean/replace muffler.</li> <li>Check all wiring.</li> <li>See "To Adjust Carburetor" in Service Adjustments section.</li> <li>Contact an authorized service center/department.</li> </ol>				
Excessive vibration	<ol> <li>Worn, bent or loose blade.</li> <li>Bent blade mandrel.</li> <li>Loose/damaged part(s).</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Replace blade mandrel.</li> <li>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	1. Faulty operator-safety presence control system.	1. Check wiring, switches and connections. If not corrected, contact an authorized service center/ department				
Poor cut - uneven	<ol> <li>Worn, bent or loose blade.</li> <li>Mower deck not level.</li> <li>Buildup of grass, leaves, and trash under mower.</li> <li>Bent blade mandrel.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels</li> </ol>	<ol> <li>Replace blade. Tighten blade bolt.</li> <li>Level mower deck.</li> <li>Clean underside of mower housing.</li> <li>Replace blade mandrel.</li> <li>Clean around mandrels to open vent holes.</li> </ol>				
Mower blades will not rotate	<ol> <li>Obstruction in clutch mechanism.</li> <li>Worn/damaged mower drive belt.</li> <li>Frozen idler pulley.</li> <li>Frozen blade mandrel.</li> </ol>	<ol> <li>Remove obstruction.</li> <li>Replace mower drive belt.</li> <li>Replace idler pulley.</li> <li>Replace blade mandrel.</li> </ol>				
Poor grass discharge	<ol> <li>Engine speed too slow.</li> <li>Travel speed too fast.</li> <li>Wet grass.</li> <li>Mower deck not level.</li> <li>Low/uneven the air pressure.</li> <li>Worn, bent or loose blade.</li> <li>Bulldup of grass, leaves and trash under mower.</li> <li>Mower drive belt worn.</li> <li>Blades improperly installed.</li> <li>Improper blades used.</li> <li>Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.</li> </ol>	<ol> <li>Place throttle control in "FAST" position.</li> <li>Shift to slower speed.</li> <li>Allow grass to dry before mowing.</li> <li>Level mower deck.</li> <li>Check tires for proper air pressure.</li> <li>Replace/sharpen blade. Tighten blade bolt.</li> <li>Clean underside of mower housing.</li> <li>Replace mower drive beit.</li> <li>Replace with blades sharp edge down.</li> <li>Replace with blades listed in this manual.</li> <li>Clean around mandrels to open vent holes.</li> </ol>				
Headlight(s) not working       1. Switch is "OFF".         (if so equipped)       2. Bulb(s) burned out.         3. Faulty light switch.         4. Loose or damaged wiring.         5. Blown fuse.		<ol> <li>Turn switch "ON".</li> <li>Replace bulb(s).</li> <li>Check/replace light switch.</li> <li>Check wiring and connections.</li> <li>Replace fuse.</li> </ol>				
Battery will not charge 1. Bad battery cell(s). 2. Poor cable connections. 3. Faulty regulator (if so equipped). 4. Faulty alternator.		<ol> <li>Replace battery.</li> <li>Check/clean all connections.</li> <li>Replace regulator.</li> <li>Replace alternator.</li> </ol>				
Engine "backfires" when turning engine 'OFF''	<ol> <li>Engine throttle control not set at "SLOW" position for 30 seconds before stopping engine.</li> </ol>	<ol> <li>Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.</li> </ol>				

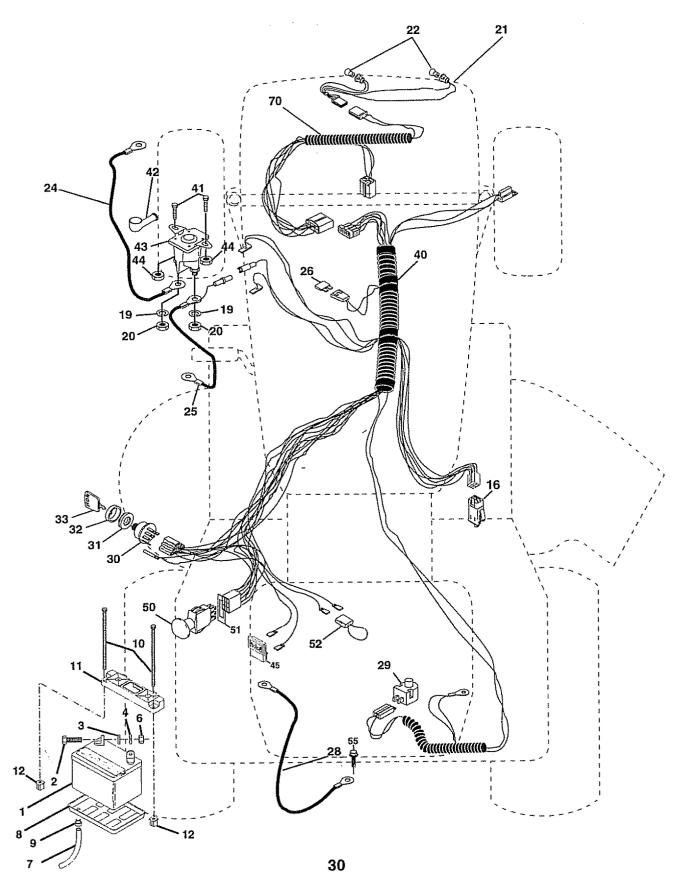
#### TRACTOR - - MODEL NUMBER 917.256660

#### SCHEMATIC



TRACTOR - - MODEL NUMBER 917.256660

#### ELECTRICAL



#### TRACTOR - - MODEL NUMBER 917.256660

#### ELECTRICAL

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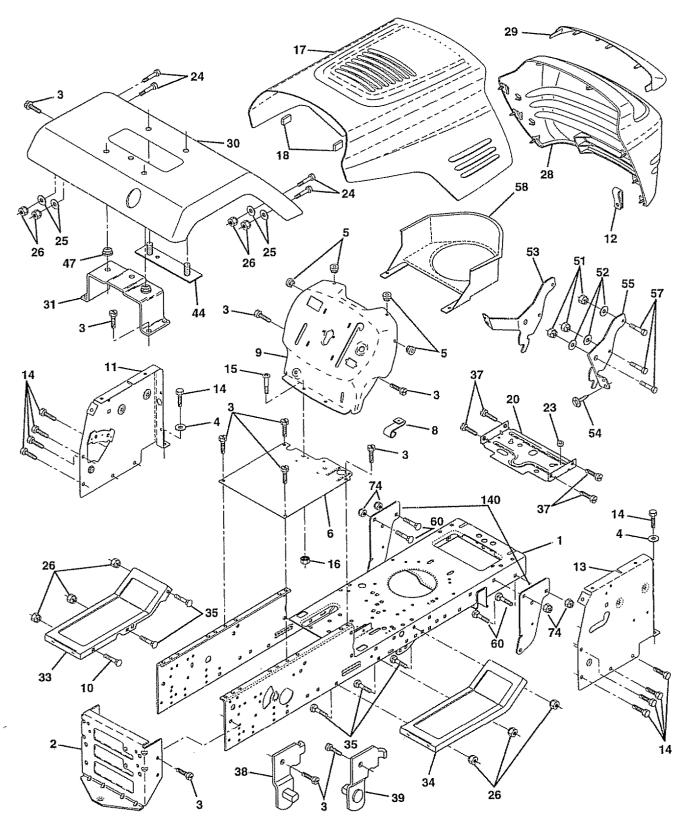
KEY NO.	PART NO.	DESCRIPTION
16 19 21 22 25 22 29 31 23 34 41 23 44 55 52	145209 145769 153664 10090400 73350400 147430 4152J 4799J 146148 108824X 145491 121305X 140301 124211X 141226 109310X 151215 71110408 131563 145673 73640400 121433X 154963 140405 141940 17490508	Battery Bolt, Hex 1/4-20 x 3/4 Washer 9/32 x 5/8 x 16 Gauge Washer, Lock 1/4 Nut, Hex 1/4-20 Tube Tray, Battery Clamp, Hose Bolt, Btr Front 1/4-20 x 7-1/2 Holddown Battery Dash Mount Nut, Push Nylon Battery Front 1/4 Switch Interlock Push-In Washer, Lock 1/4 Nut, Hex, Jam 1/4-20 Harness, Light Socket (w/4152J) Light Bulb Cable, Battery Cable, Battery Cable, Battery Fuse Cable, Ground Switch, Seat Switch, Ignition 4 Position Nut, Ignition Cover, Ignition Switch Key, Molded, Craftsman Harness, Ignition Bolt Blk Fin Hex 1/4-20 UNC x 1/2 Cover, Terminal Solenoid Nut Keps Blk Hex 1/4-20 UNC x 1/2 Cover, Terminal Solenoid Nut Keps Blk Hex 1/4-20 UNC Ammeter Rectangular 6 Amp Switch PTP 3POT Red Delta 96 Ring Retainer PTO Protection Wire Loop (Hour Meter) Screw Thdrol 5/16-18 x 1/2 Harness, Engine Lt Private Label

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

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TRACTOR - - MODEL NUMBER 917.256660

### CHASSIS AND ENCLOSURES



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### TRACTOR - - MODEL NUMBER 917.256660

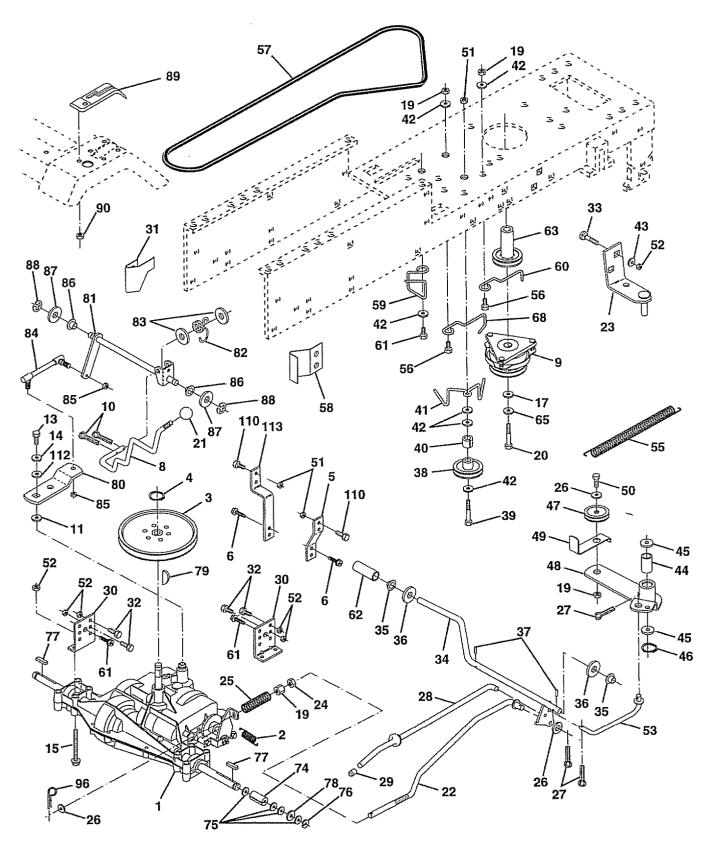
#### CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 8 9 0 11 2 3 4 5 6 8 9 0 11 2 3 4 5 6 8 9 0 11 2 3 4 5 6 8 9 10 12 3 4 5 6 8 9 10 12 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 2 3 4 5 6 8 9 10 11 12 10 10 11 10 10 10 10 10 10 10 10 10 10	151169 140356 17490612 STD551025 146077 145206 126471X 154587X010 STD533710 146956 145660 146962 17490608 74180512	Chassis Drawbar Screw, Thd., Roll. 3/8-16 x 3/4 Type TT Washer 13/32 x 3/4 x 16 Gauge Bumper Snap-In Saddle Clip, Fuel Line Dash, Silkscreened Bolt, Carriage 3/8-16 x 1 Panel, Dash, LH Clip Tinnerman Grille P/L Panel, Dash, RH Screw, Thd., Roll. 3/8-16 x 1/2 Type TT Screw, Machine, Thd., Roll. 5/16-18 UNC x 3/4
16 17 18 20 23 24	STD541431 144983X574 126938X 145210 124028X STD523710	Nut, Hex, Keps 5/16-18 UNC Hood Assembly Bumper Hood Plate Mtg Battery Fuel Tank 95 Bushing, Snap, Nylon, Fuel Line Bolt, Hex Head, Fin. 3/8-16 UNC x 1 Grade 5
25 28 29 31 34 57 89 447 55 55 55 56 640 140	19131312 STD541437 145198X459 145199 140002X574 137113 145244X574 145243X574 STD533707 17490508 139886 139887 140675 105531X 73800400 19091416 145201 17030814 145202 74780412 140547 STD533707 STD541437 150556 5479J	Washer 13/32 x 13/16 x 12 Gauge Locknut, Hex, with Insert 3/8-16 UNC Grille, W/Clips MS-459 Lens, Grille Fender Bracket, Fender Footrest, LH Footrest, RH Bolt Rdhd Sht Sqnk 3/8-16 x 3/4 Screw, Thdrol. 5/16-18 x 1/2 TYT Pivot Bracket Assembly, LH, Mower, Rear Pivot Bracket Assembly, LH, Mower, Rear Strap Assembly, Fender Nut, Push, Nylon Nut Lock W/Insert 1/4 - 20 UNC Washer 9/32 X 7/8 X 16 Ga. Bracket Grille Pickoff LH Screw, Hex Head, Spiderlock #8 x 7/8 AB Bracket Grille Pickoff RH Bolt FinHex 1/4 -20 UNC X.75 Air Duct P/L 18HP B&S Opp. Twin Bolt Rdhd Sqnk 3/8-16 UNC Bracket Chassis Front Plug Btn Blk

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

**TRACTOR - - MODEL NUMBER 917.256660** 

DRIVE



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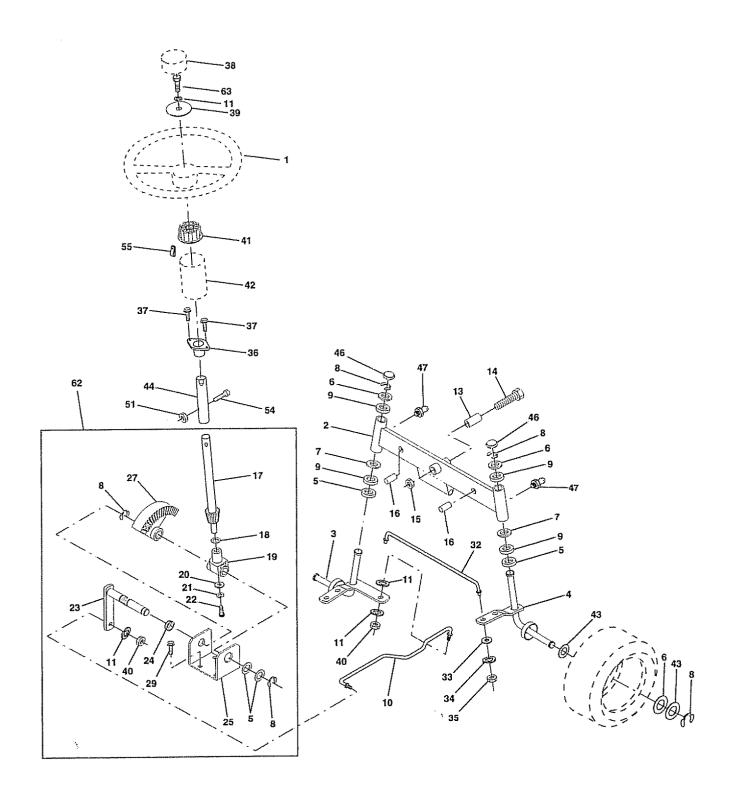
### TRACTOR - - MODEL NUMBER 917.256660

#### DRIVE

KEY NO.	PART NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
$1  2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 8 \\ 9 \\ 0 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 2 \\ 2$	145602 146682 123666X 1200028 121520X 17490512 141002 137140 76020416 105701X 74550412 STD551125 74490544 126197X STD541437 150280 106933X 130804 137141 STD541237 106888X STD551037 STD551037 STD551037 STD551037 STD551037 STD551057 STD523107 72140506 151128 120183X STD551062 STD571810 123674X STD551062 STD571810 123674X STD551062 STD571810 123674X STD553027 4470J 153399 19131312 19111012 105706X 110812X	Transaxle, Peerless, 6 Speed, Model Number 930-057A Spring, Return, Brake Pulley, Transaxle Ring, Retainer Strap, Torque Screw, Thd., Roll. 5/16-18 x 3/4 Lever, Shift Clutch Electric Pin, Cotter Washer, Shift Plate Bolt 1/4-28 UNF W/Patch Grade 8 Washer Bolt Hex Flghd 5/16-18 Gr. 5 Washer Nut Bolt Hex 7/16-20 x 4-1/4 Knob Rod, Brake Bracket Asm Mtg Cl Nut Spring, Brake Rod Washer Pin Rod, Parking Brake Cap, Parking Brake, Red Bracket, Transaxle Keeper, Belt, L.H. Bolt Bolt Rdhd Sqnk 5/16-18unc x 3/4 Shaft Assembly, Foot Pedal Bearing, Nylon Washer Roll Pin Pulley, Idler, Flat Bolt Spacer, Split .395 x .59 Keeper, Belt, Idler Washer 13/32 x 13/16 x 12 Gauge Washer 11/32 x 5/8 x 12 Ga. Bearing, Nylon	46       12000039         47       127783         48       123789X         49       123205X         50       STD523715         51       STD541437         52       STD541431         53       105710X         55       105709X         56       STD523712         57       130801         58       127274X         59       140312         60       105730X         61       17490612         62       8838R         63       140189         65       STD551143         68       121218X         74       137057         75       121749X         76       STD581075         77       123583X         78       121748X         79       2228M         80       145092         82       123782X         83       19171216         84       145643         85       150360         86       71208         87       19212016         88       12000008         89       139991	Ring, Klip Pulley, Idler, V-Groove, Plastic Bellcrank Assembly Retainer, Belt Bolt Nut Crown Lock 3/8-16 UNC Nut Crown Lock 5/16-18 UNC Link, Clutch Spring, Clutch Return Bolt Fin Hex 3/8-16 x 1-1/4 V-Belt, Ground Drive Keeper, Belt, R.H. Keeper, Belt, Center Span Keeper, Belt Engine Screw, Thd., Roll. 3/8-16 x 3/4 Cover, Pedal Pulley, Engine Washer Keeper, Belt Engine LH Spacer, Axle Washer 25/32 x 1-1/4 x 16 Gauge E-Ring Key, Square 2.0 x .1845/.1865 Washer 25/32 x 1-5/8 x 16 Gauge Key Woodruff #9 3/16 x 3/4 Arm, Shift Shaft Assembly Spring, Torsion Washer 17/32 x 3/4 x 16 Gauge Tie Rod Nut, Lock Center 1/4-28 FNTHD Bushing, Pivot Washer E-Ring Console, Shift, 6 Speed, N/Ignition Nut, Self-Threading, Washer Hd 1/4 Retainer Spring 1" Zinc Cad Bolt, Fin Hex 3/8-16 UNC x 3/4 Washer 9/32 x 3/4 x 10 Gauge Strap Torque LT nent dimensions given in U.S. inches.
			1  inch = 2	0.4 18.8

**TRACTOR - - MODEL NUMBER 917.256660** 

#### STEERING ASSEMBLY



#### TRACTOR - - MODEL NUMBER 917.256660

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KEY PART

#### STEERING ASSEMBLY

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NŌ.	NO.	DESCRIPTION
1	139768	Wheel Steering Std Black
2	142033	Axle Asm Front
3	135227	Spindle Asm Lh
4	135228	Spindle Asm Rh
5	6266H	Bearing Race Thrust Harden
6 7	121748X	Washer 25/32 X 1 5/8 X 16ga
8	19272016	Washer 27/32 X 1 1/4 X 16 Ga
9	12000029 3366R	Ring Klip #t5304-75 Bearing Col Strg Blk
10	130468	Link Drag Sol Ball Jt 20 064
11	STD551137	Washer Lock Hvy Hlcl Spr 3/8
13	110438X	Spacer Bearing Axle Front
14	74011056	Bolt Hex 5/8-11 Unc X 3-1/2
15	73901000	Locknut Flange 5/8-11 Unc
16	132624	Pin Axle 5/8 X 1 55/1 54 Lg
17	140176	Shaft Asm Strg Private Label
18	57079	Washer Thrust 515x 750x 033
19	124035X	Support Shaft
20	126684X	Washer Shim 1/4 X 5/8 X 062
21 22	STD551125	Washer Lock Hvy Helical 1/4 Screw Cap Sckt Hd Phos & Oil
23	71100410 127501	Shaft Asm Pittman
24	109816X	Nyliner Snap In
25	124036X	Bracket Steering
27	136874	Gear Sector
29	17490612	Screw Thdrol 3/8-16x3/4 Ty-tt
32	130467	Rod Tie Ball Jt Sol 19 75 Élec
33	19111216	Washer 11/32 x 3/4 x 16 Ga.
34	10040500	Washer Lock Hvy Hicl Spr 5/16
35	73810500	Locknut 5/16-24unf 3847
36	132196	Bushing Strg 5/8 Id Dash
37 38	152927 139769	Screw Insert Cap Strg Wheel Std Blk
39	19133808	Washer 13/32 X 2-3/8 X 8 Ga
40	7810H	Nut Lock Center 3/8-24 Unf
41	100711L	Adaptor Wheel Strg 640/ 635id
42	145054	Boot Shaft Steering
43	121749X	Washer 25/32 X 1 1/4 X 16 Ga
44	153720	Extension Shaft Steering LR/LT
46	121232X	Cap Spindle Fr Top Blk
47	6855M	Fitting Grease
51	73800500	Nut Lock Hex W/Ins 5/16 -18 UNC
54	74780520	Bolt Fin Hex 5/16 - 18 UNC X 1 -1/4
62 63	149686 74780616	Kit, Sterring Assembly Bolt, Fin Hex 3/8-16 UNC x 1
00	14100010	

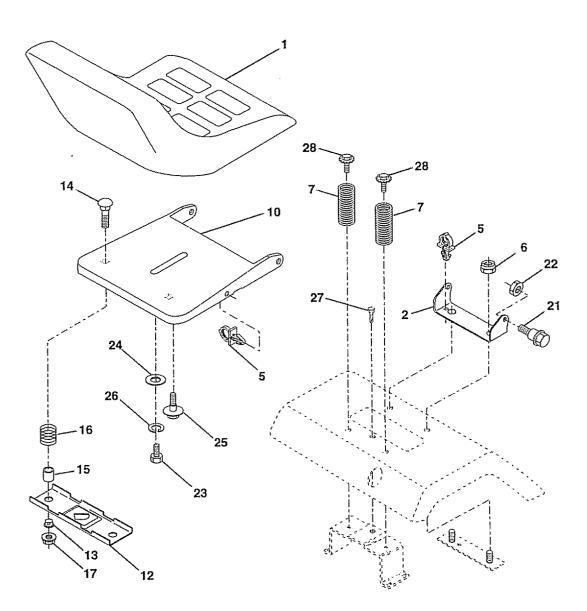
NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

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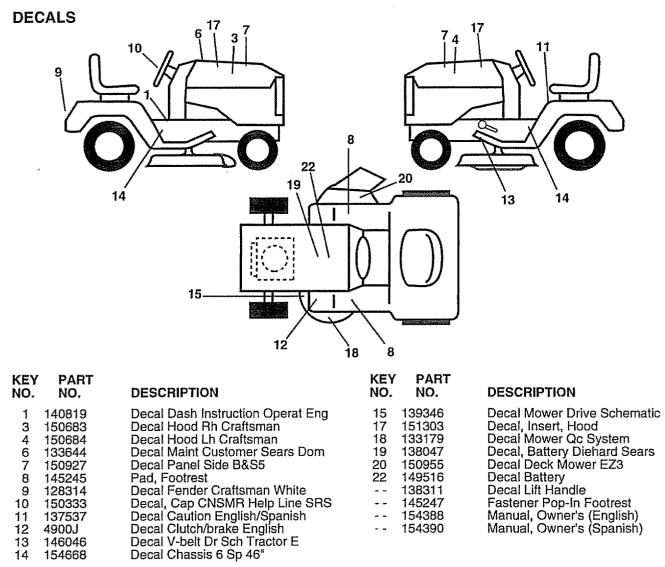
TRACTOR - - MODEL NUMBER 917.256660

SEAT ASSEMBLY

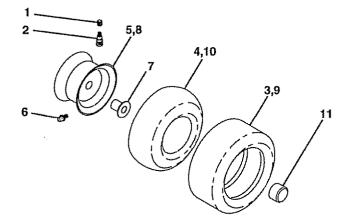


KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 5 6 7 10 12 13 14 15 16	140123 140551 145006 STD541437 124181X 140552 121246X 121246X 72050411 134300 121250X	Seat Bracket Pnt Pivot Seat (blk) Clip Push-In Nut Lock Hex W/Ins 3/8 -16 UNC Spring Seat Cprsn 2 250 Blk Zi Pan Pnt Seat (blk) Bracket Pnt Mounting Switch Bushing Snap Blk Nyl 50 Id Bolt Rdhd Sht Nk 1/4-20x1-3/8 Spacer Split 28 X 96 Zinc Spring Cprsn 1 27 Blk Pnt	17 21 22 23 24 25 26 27 28 NOT	123976X 153236 STD541431 74780814 19171912 127018X STD551150 17490608 150176 <b>E:</b> All compor 1 inch = 25	Nut Lock 1/4 Lge Flg Gr 5 Zinc Bolt Shoulder 5/16-18 Unc Blkz Nut Lock Hex W/Ins 5/16-18 Bolt Fin Hex 1/2-13 X 7/8 Gr 5 Washer 17/32 X 1-3/16 X 12 Ga Bolt Shoulder 5/16-18 X 62 Washer Lock Hvy HIcl Spr 1/2 Screw Thdrol. 3/8-16 x 1/2 Bolt 5/16 -18 UNC X 3/4 W/Sems ment dimensions given in U.S. inches. 5.4 mm

#### TRACTOR - - MODEL NUMBER 917.256660



#### WHEELS & TIRES



KEY NO.	PART NO.	DESCRIPTION
1 2 3 4 5 6 7 8 9 10 11	59192 65139 106222X 59904 106732X427 278H 9040H 106108X427 122082X 7152J 104757X 144334	Cap Value Tire Stem Value Tire F Ts 15 X 6 0 - 6 Service Tube Inner Front #35060 Rim Asm 6"front White Service Fitting Grease Bearing Flange Rim Asm 8"rear White Service Tire R Ts 20 x 10-8 Service Tube Rear 9 5 X 8 Service Cap Axle Blk 1 50 X 1 00 Sealant, Tire (10 oz. Tube)

21

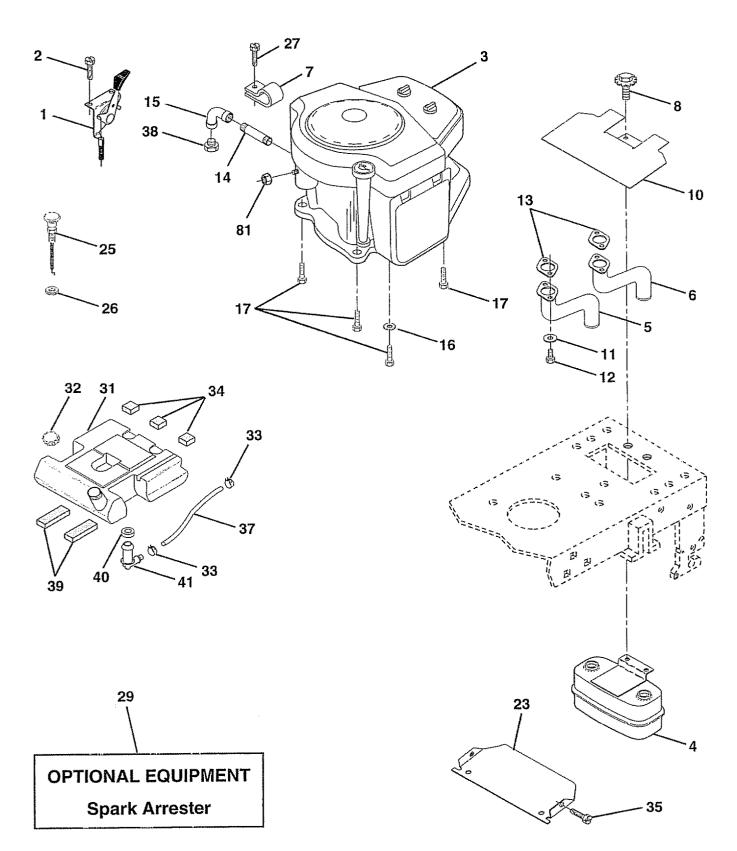
**NOTE:** All component dimensions given in U.S. inches. 1 inch = 25.4 mm

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**TRACTOR - - MODEL NUMBER 917.256660** 

ENGINE



#### TRACTOR - - MODEL NUMBER 917.256660

#### ENGINE

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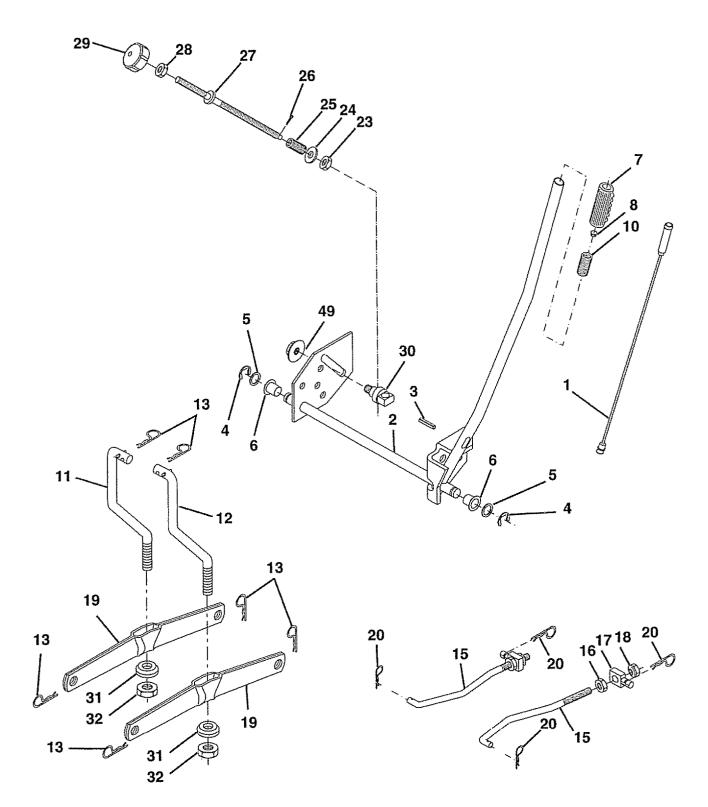
KEY NO.	PART NO.	DESCRIPTION
1	151273 17720410	Control Throt Paddle 32 22 Screw Hex Thd Cut 1/4-20x5/8 T
2 3	154546	Engine B&s 19hp, Model No. 42A707, Type No. 1625 -01
4	149723	Muffler Exhaust
4 5 6 7	144069	Exhaust Asm. Left
6	144068	Exhaust Asm. Right
7	138129	Clamp Tube Double Engine
8	150176	Bolt 5/16 - 18 UNC X 3/4 W/Sems
10 11	145552 STD551105	Heat Shield Lt
12	STD551125 STD522507	Washer Lock Hvy. Helical 1/4 Bolt Fin Hex 1/4-20 x 3/4
13	272250	Gasket Muffler
14	13280336	Nipple Pipe 4-1/2"
15	13200300	Elbow Std 90 Degree 3/8-18 Npt
16	STD551237	Washer Lock Ext Tooth 3/8
17	17490624	Screw Thdrol 3/8-16x1-1/2 Tytt
23	150554	Shield Browning
25	145996	Control Choke
26	73920600 152927	Nut Hex 3/8-24 Unf
	137180	Screw Arrestor Spark
	151346	Tank Fuel 3 50 Rear
	152334	Cap Asm Fuel W/Guage
	123487X	Clamp Hose Blk
	106082X	Spacer Pad
	17490512	Screw Thdrol 5/16-18 x 3/4
	8543R	Line Fuel
38	** ** **	Plug Oil Drain (Order From Engine Manufacturer)
39	109227X	Pad Idler 1.75 x .75 x .06
	3645J	Bushing
41	139277	Stem Tank Fuel
81	128861	Nut, Flange 1/4-20 Starter Nut

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

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TRACTOR - - MODEL NUMBER 917.256660

**MOWER LIFT** 



#### **TRACTOR - - MODEL NUMBER 917.256660**

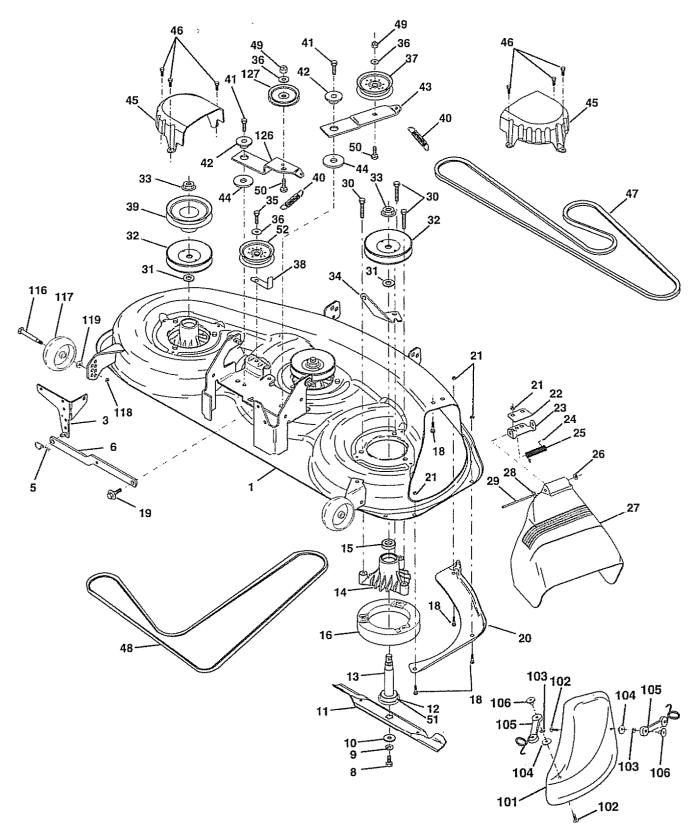
**MOWER LIFT** 

KEY NO.		DESCRIPTION
16 17 18 23 24 25 26 27 28 29 30 31	139865 139866 4939M 127218 73350800 130171 73800800 139868 110807X 19131016 2876H 76020308 126971X 73350600 138057 150233 140302 73540600	Wire Assy., Inner, with Plunger Shaft Asm. Lift Pin Groove E Ring #5133-62 Washer 21/32 x 1 x 21 Ga. Bearing Nylon Grip Handle Fluted Button Plunger Read Spring Oprsn Link Lift Lh Fixed Length Link Lift Rh Fixed Length Retainer Spring Link Front Nut Jam Hex 1/2-13 Unc Trunnion Blk Zinc Nut Lock W/Wsh 1/2-13 Unc Arm Suspension Rear Nut Spring Washer 13/32 x 5/8 x 16 Ga. Spring 2-1/8" Pin cotter 3/32 x 1/2 Rod Adj. Lift Nut Hex Jam 3/8-16 Knob Inf. 3/8-16 Trunnion Inf. Hgt. Bearing, Pivot, Lift, Special Nut, Crownlock 3/8-24 Nut, Flange Lock

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

**TRACTOR - - MODEL NUMBER 917.256660** 

#### MOWER DECK



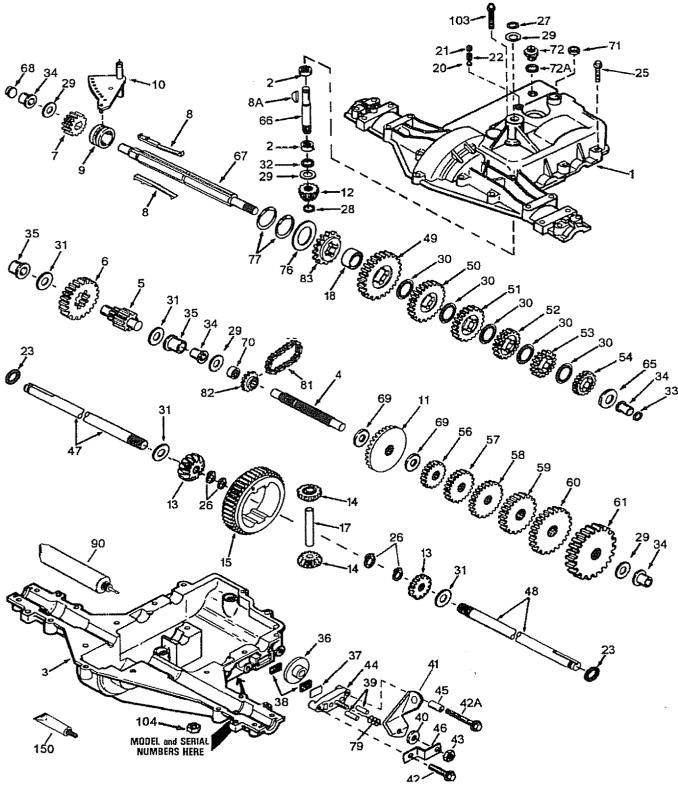
#### TRACTOR - - MODEL NUMBER 917.256660

#### **MOWER DECK**

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KEY NO.		DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	153125	Deck Asm., Mower 46"	38	137554	Keeper, Belt, Idler
3	138457	Bracket Asm., Sway Bar	39	144917	Pulley, Idler, Driven
5	STD624008	Retainer Spring	40	137273	Spring, Secondary 44/46/50 Vent
6	130832	Arm, Suspension, Rear (Sway Bar)	41	17490620	Screw, Thdroll 3/8-16 x 1-1/4 Tytt
8	850857	Bolt, Patched 3/8-24 x 1-1/4 Gr. 8		122052X	Spacer, Retainer
.9	STD551137	Washer, Lock Hvy., Unplated 3/8	43	144949	Arm, Idler Secondary
10	140296	Washer, Hard Blade, Mower Vented	44	133943	Washer, Hardened
11	152443	Blade, 46" Mower Deck	45 46	145059 137729	Cover, Mandrel Deck
12	129895	Bearing, Ball, Mandrel #6204	40	144959	Screw, Thdroll. 1/4-20 x 5/8 V-Belt, Mower, Secondary
13	137553	Shaft Asm. w/Lower Bearing		148763	V-Belt, Mower, Primary
	107000	(Includes Key No. 12)		STD541437	Nut, Crownlock 3/8-16 UNC
14	137152	Housing, Mandrel		72110612	Bolt, Carriage 3/8-16 x 1-1/2 Gr. 5
15	110485X	Bearing, Ball, Mandrel		153390	Felt Washer
16	140329	Stripper, Mower Round		155191	Pulley Idler Flat
18	STD533106	Bolt, Carriage 5/16-18 x 5/8		145579	Cover, Mulching
19	132827	Bolt, Hex Head, Shoulder 5/16-18		71161010	Screw
20	145055	Baffle, Vortex Mower 46"		STD551110	Washer, Lock #10
21	STD541431	Nut, Crownlock 5/16-18 UNC		19061216	Washer
22	134753	Stiffiner, Bracket		130758	Latch Asm. Bagger
23	131267	Bracket, Deflector		2029J	Nut, Weld
24 25	105304X 123713X	Cap, Sleeve Spring, Tarpion, Deflector		137644	Bolt, Shoulder
26	110452X	Spring, Torsion, Deflector Nut, Push		133957 STD541437	Gauge Wheel, Wide
27	145325	Shield, Deflector Mower	110	STD551037	Nut, Centerlock 3/8-16 UNC Washer 3/8 x 7/8 x 14 Ga.
28	19111016	Washer 11/32 x 5/8 x 16 Ga.	126	144948	Arm, Idler, Primary Deck 46"
29	131491	Rod, Hinge		146763	Pulley, Idler, V-Groove Dim. 4.25
30	138776	Screw, Hex Head, Thdroll		143651	Mandrel Asm (Includes Key nos.
31	129963	Washer, Spacer Mower Vented		, , , , , , , , , , , , , , , , , , , ,	8-10, 12-15, 31 and 33)
32	153531	Pulley, Mandrel		151775	Deck Complete (Std. Deck-Order
33	137266	Nut, Flg. Top Lock Cntr. 9/16			separately mulcher plate and gauge
34	144945	Anchor, Spring Deck 46"			wheel components Key Nos. 101-
35	17490628	Screw, Thdroll 3/8-16 x 1-3/4 Tytt			106 and 116-118)
36	STD551037	Washer 13/32 x 13/16 x 16 Ga.	NOT	E: All compor	nent dimensions given in U.S. inches
37	131494	Pulley, Idler, Flat		1 inch = 25	i.4 mm

TRACTOR - - MODEL NUMBER 917.256660 PEERLESS TRANSAXLE - MODEL NUMBER 930-057A

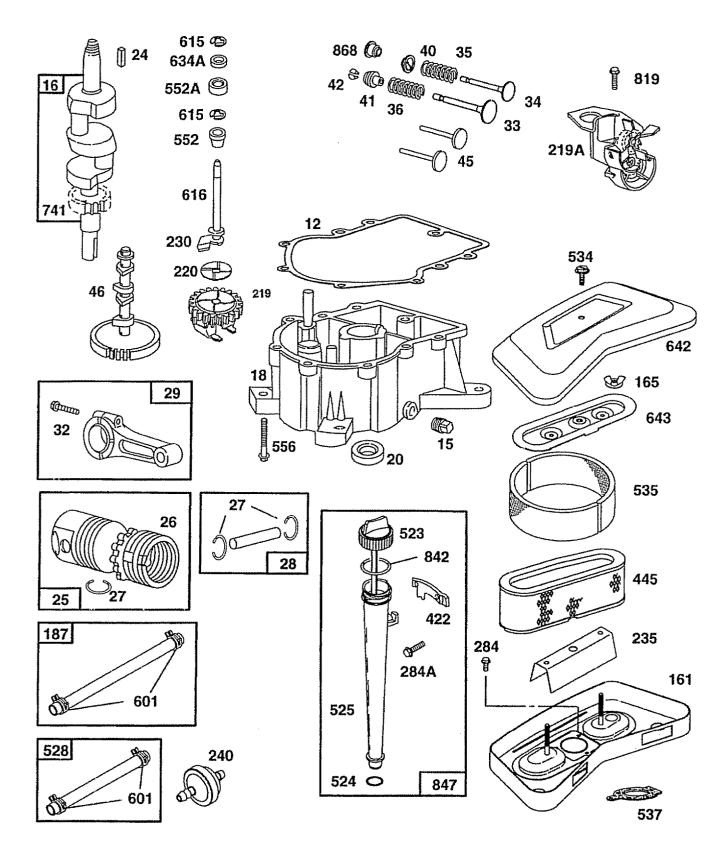


#### TRACTOR - - MODEL NUMBER 917.256660

PEERLESS TRANSAXLE - MODEL NUMBER 930-057A

REF NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	772108A	Cover, Transaxle	43	792075	Locknut 5/16-24
2 3	780086	Bearing, Needle	44	790025	Holder, Brake Pad
3	770102A	Case, Transaxle	45	786066	Spacer
4	776260	Shaft, Counter	46	786086	Bracket, Brake Lever
5	776219B	Shaft and Pinion Assembly, Output	47 48	774690 774691	Axle 11-5/16" long Axle 16-1/2" long
6 7	778139 778136	Gear, Output, 35 Teeth Gear, Spur, 15 Teeth, Steel	40 49	778215	Gear, Spur, 37 Teeth, Steel (1-)
8	792136A	Key, Shift	50	778125	Gear, Spur, 35 Teeth (2-)
8Ă	792047	Key, Woodruff	51	778124A	Gear, Spur, 30 Teeth (3-)
9	784352	Collar, Shifter		778123A	Gear, Spur, 25 Teeth (4-)
10	784355	Rod and Fork Assembly, Shift	53	778122A	Gear, Spur, 22 Teeth (5)
11	778229	Gear, Bevel, 42 Teeth		778273	Gear, Spur, 19 Teeth, Steel (6)
12	778113A	Bevel Pinion, Input		778230	Gear, Spur, 12 Teeth, Steel (1)
13	778221	Gear, Bevel, 16 Teeth		778151	Gear, Spur, 15 Teeth (2-)
14	778068	Gear, Bevel Pinion	58	778126A	Gear, Spur, 20 Teeth (3-)
15	778260	Gear, Ring		778127A 778128A	Gear, Spur, 25 Teeth (4-) Gear, Spur, 28 Teeth (5-)
17 18	786139 786102	Pin, Drive Spacer, Neutral	61	778163	Gear, Spur, 31 Teeth (6-)
	792077	Ball, Steel 5/16" diameter		780109	Washer, Thrust
21	792078	Set Screw 3/8-16 x 3/8		776135	Shaft, Input
22	792079	Spring	67	776315A	Shaft, Brake, 4 Keyed
23	788061	Ring, Seal		786116A	Plug
25	792073	Screw, Flanged Hex Head, Thread		780051	Washer, Thrust
		Forming 1/4-20 x 1-1/4		786118	Spacer
26	792125	Ring, Retainer		788069 792165	Square Cut Ring
07	792035	(4 Required, Package of 2)		788091	Plug, Threaded 9/16-18 "O" Ring
27 28	792035 788040	Ring, Retainer Ring, Retainer	76	780090	Washer, Thrust
29	780072	Washer, Thrust	77	788078A	Ring, Retaining, Inverted
30	780108	Washer, Thrust			(Package of 2)
31	780001	Washer	79	792144	Spring, Brake
32	792001	"O" Ring	81	786081	Chain, Roller
33	788095	Seal, Square Cut			(Number 41 Chain, 24 Links)
34	780105A	Bushing, Flanged	82	786082	Sprocket, 9 Teeth (Reverse)
35	780118A	Bushing, Flanged		786123	Sprocket, 18 Teeth (Reverse) Grease, Bentonite, 32 Ounce Bottle
36	790003	Disk, Brake		788067B 792166	Screw 1/4-20 x 2
37 38	790007 799021	Plate, Brake Pad Pad, Brake (Package of 2)		792167	Locknut 1/4-20
30 39	786026	Pin, Dowel		510334	Gasket Eliminator (Loctite #515)
40	792076A	Washer, Flat			
41	790079	Lever, Brake	NOT	'E: All compon	ent dimensions given in U.S. inches
42	792073	Screw, Flanged Hex Head, Thread		1 inch = 25	
42A	792085A	Forming 1/4-20 x 1-1/4 Screw 1/4-20 x 2-1/4	Part	s must be orde	red from Tecumseh Products Co.

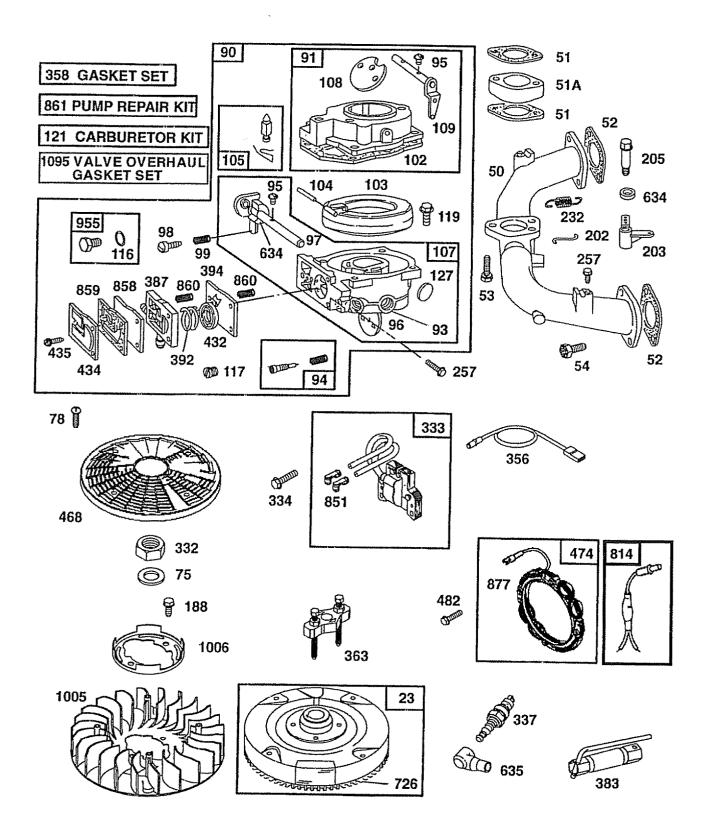
TRACTOR - - MODEL NUMBER 917.256660 BRIGGS & STRATTON ENGINE - MODEL NUMBER 42A707, TYPE NUMBER 1625-01



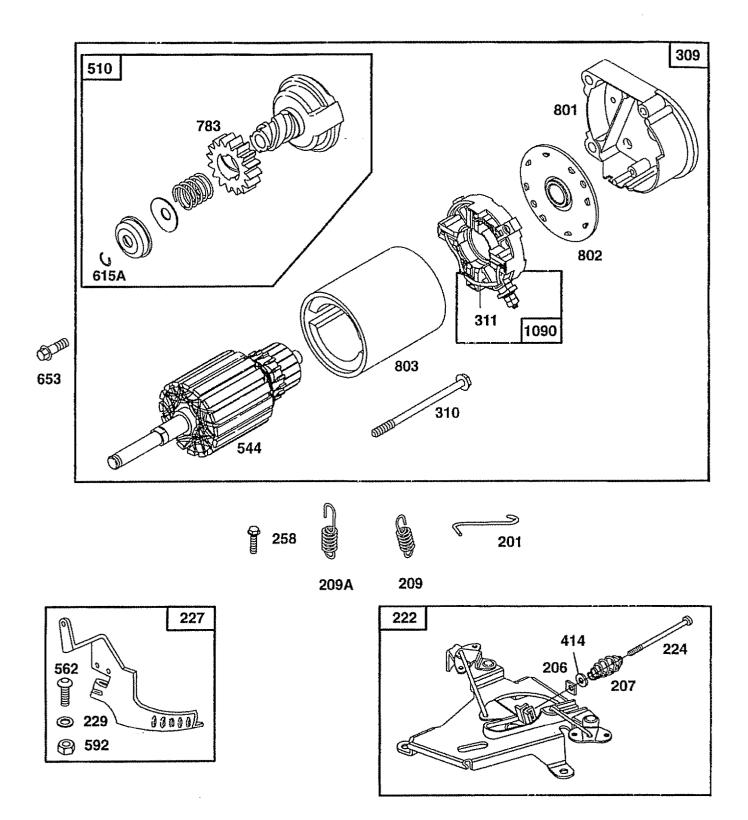
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#### TRACTOR - - MODEL NUMBER 917.256660

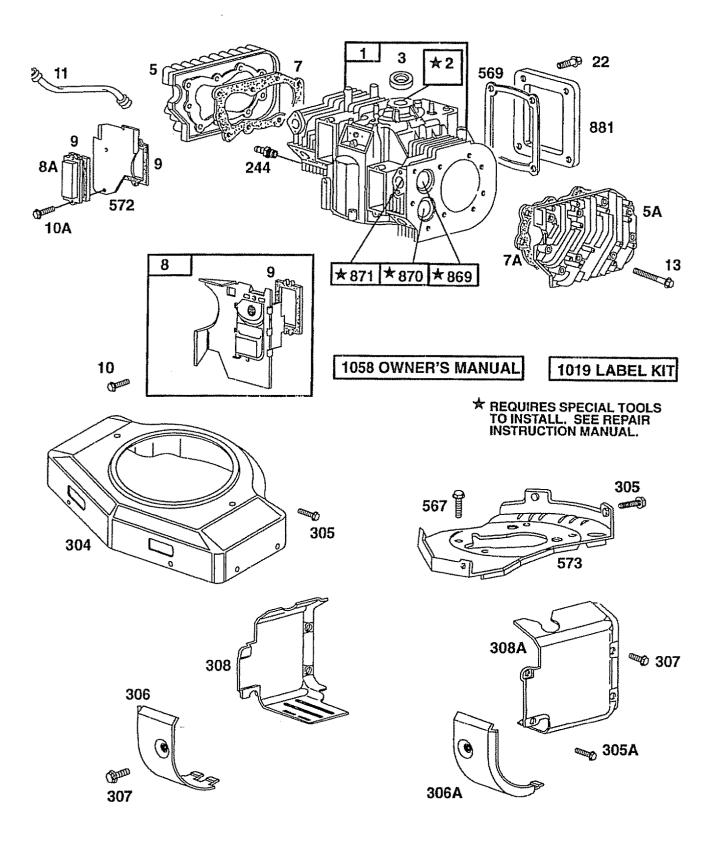
BRIGGS & STRATTON ENGINE - MODEL NUMBER 42A707, TYPE NUMBER 1625-01



TRACTOR - - MODEL NUMBER 917.256660 BRIGGS & STRATTON ENGINE - MODEL NUMBER 42A707, TYPE NUMBER 1625-01



#### TRACTOR - - MODEL NUMBER 917.256660 BRIGGS & STRATTON ENGINE - MODEL NUMBER 42A707, TYPE NUMBER 1625-01



#### TRACTOR - - MODEL NUMBER 917.256660

#### BRIGGS & STRATTON ENGINE - MODEL NUMBER 42A707, TYPE NUMBER 1625-01

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	497074	Cylinder Assembly	54	94764	Screw, Sems
2	399265	Bushing	75	222511	Washer, Spring
3	391086	* Seal, Oil	78	94326	Screw, Sems
5	493457	Head, Cylinder #1	90	495181	Carburetor
5A	493458	Head, Cylinder #2	91	495035	Body Assembly, Upper
7	271867	** Gasket, Cylinder Head #1	93	231209	Bushing, Throttle Shaft
7A	271868	* Gasket, Cylinder Head #2	94	491538	** Valve, Idle Adjust
8	495754	Disamon Assembly #1	95	93499	Screw, Sems
8A	222892	Cover, Breather Cylinder #2	96	221939	Valve, Throttle
		(Used Only on Key #572,	97	392672	Shaft, Throttle
~	07000	Air Baffle with Holes for Mounting)	98	91920 26157	Screw, Fillister Head
9	27803	* Gasket, Breather	99	271607	Spring, Throttle Adjust ** Gasket, Carburetor Body
10	94382 94830	Screw, Sems		298514	Float, Carburetor
11	280225	Screw, Sems Tube, Breather		230896	** Pin, Float Hinge
12	271703	* Gasket, Crankcase, .015" Thick		394683	** Valve, Needle
16	271188	* Gasket, Crankcase, .005" Thick		491543	Body Assembly, Lower
	271189	* Gasket, Crankcase, .009" Thick		223534	Valve, Choke
13	94565	Screw, Cylinder Head		392673	Shaft, Choke
15	94239	Plug, Oil Drain		280474	* O-Ring
16	394028	Crankshaft	117	231338	Jet, Needle Valve, Fixed
	94196	Timing Gear Key		231333	Jet, Needle Valve, Fixed,
18	493304	Sump, Engine			High Altitude
20	291675	* Seal, Oil		94152	Screw, Hex Head
22	94724	Screw, Sems		491539	Carburetor Kit
23	491180	Flywheel		223472	** Plug, Welch
24	222698	Key, Flywheel		496599	Base, Air Cleaner
25	498584	Piston Assembly, Standard Size		94289 299146	Nut, Wing Line, Fuel, 28" Long (Cut to Suit)
	498585 498586	Piston Assembly, .010" Oversize Piston Assembly, .020" Oversize		94627	Screw
	498587	Piston Assembly, .020 Oversize		262683	Link
26	394959	Ring Set, Standard Size		262684	Link
~~ U	394960	Ring Set, .010" Oversize		280997	Crank, Bell
	394961	Ring Set, .020" Oversize		93971	Screw, Hex Head
	394962	Ring Set, .030" Oversize		94298	Nut, Square
27	263129	Lock, Piston Pin	207	262337	Spring, Control Rod
28	299691	Pin, Piston, Standard Size		262352	Spring, Governor
	391286	Pin, Piston, .005" Oversize		261563	Spring, Governor Idle
29	394306	Rod, Connecting, Standard Size	219	394348	Gear, Governor
~~	397158	Rod, Connecting, .020" Undersize	219A		Oil Slinger
32	94671	Screw, Connecting Rod	220	222773	Washer, Thrust
33	390420	Valve, Exhaust	222 224	491282 94297	Bracket, Control
34 35	261528	Valve, Intake Spring, Valve, Intake	224	491297	Screw, Pan Head Lever Assembly, Governor
36	65906 26828	Spring, Valve, Exhaust	229	62199	Washer
40	221596	Retainer, Valve, Intake		02,00	
41	292260	Retainer, Valve, Exhaust	*	Included in (	Gasket Set (495868)
	494553	Keeper, Valve			
45	261368	Tappet, Valve	**	Included in (	Carburetor Kit (491539)
	213520	Gear, Cam			
50	213290	Manifold, Intake	***	Included in (	Carburetor Kit (491539),
51	271412	**** Gasket, Carburetor Mounting		and Pump F	Repair Kit (393397)
	281411	Spacer, Carburetor	****	والمتعامر والمتعاد	Contrat Cat (405000)
	270884	A* Gasket, Intake Manifold Mounting			Gasket Set (495868),
53	93970	Screw, Hex Head, Carburetor to Manifold		and Caroure	etor Kit (491539)
			*	Included in V	Valve Overhaul Gasket Set (498047)
					and a commence and the contraction of the contracti

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

#### TRACTOR - - MODEL NUMBER 917.256660

### BRIGGS & STRATTON ENGINE - MODEL NUMBER 42A707, TYPE NUMBER 1625-01

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
232       262539         235       224995         240       394358         244       230318         257       93897         258       94623         284       94674         284       94674         284       94674         284       94674         284       94674         284       94674         284       94674         305       94786         305       94786         305       94786         306       222846         306A       223734         307       94386         308       224774         308A       224775         309       497596         310       94003         311       497608         332       230674         333       394891         334       94731         337       802592         356       494705         358       491856         363       19203         383       89838         387       280197         392       261395	Washer, Governor Crank, Inside Spring, Link Shield, Fuel Spray Filter, Fuel Connector, Fuel Line Screw, Sems Screw, Sems Screw, Hex Head Housing, Blower, Red Screw, Sems Screw, Sems Screw, Sems Screw, Sems Screw, Sems Screw, Sems Screw, Sems Screw, Sems Screw, Self-Tapping Cover, Air Guide Cover, Air Guide Cover, Air Guide Motor, Starter Bolt, Thru Brush Set Nut, Hex Armature, Magneto Screw, Sems Plug, Spark Wire, Stop Gasket Set Flywheel Puller Wrench, Spark Plug Body, Pump Spring, Diaphragm Diaphragm, Carburetor Washer Bracket, Oil Fill Cap, Spring Cover, Diaphragm Screw, Diaphragm Cover Filter, Air Screen, Rotating Alternator, Dual Circuit Screw, Sems Drive, Starter Cap, Oil Fill Seal, Fill Tube Tube, Oil Fill (Includes Seals) Line, Vacuum Screw, Air Cleaner Filter, Air Gasket, Air Cleaner Armature, Starter Lower Bushing, Governor Upper Bushing, Governor Upper Bushing, Governor Screw, Hex Head Bolt, Governor Lever Screw, Hex Head, Back Plate to Cylinder	634A 491287 635 66538 642 225008 643 496700 653 93585 726 391362 741 262989 783 280104 801 394860 802 497607 803 497604 814 392606 819 94675 842 270920 847 495715 851 493880 858 270989 859 271025 860 261358 861 393397 868 497212 869 261463 870 213316 871 261961 231218 877 393537 881 495901 955 397882 1005 281053 1006 224413 1019 496726 1058 272112 1090 497605 1095 498047 RPM Setting * Included in C *** Included in C	<ul> <li>* Gasket, Base Baffle, Air, Cylinder #2 Plate, Back Nut, Hex. Clamp, Hose Retainer, E-Ring Retainer Crank, Governor</li> <li>** Washer, Throttle Shaft</li> <li>* Seal, Governor Shaft Boot, Spark Plug Cover, Air Cleaner Plate, Air Cleaner</li> <li>Plate, Air Cleaner Screw, Hex Head Gear, Ring (Includes Mounting Parts) Gear, Timing Gear, Starter Cap, End Housing, Starter Wire, Alternator Screw, Hex Head</li> <li>* Seal, Cap Tube Assembly, Oil Terminal, Cable</li> <li>*** Diaphragm, Carburetor</li> <li>*** Gasket, Pump</li> <li>*** Seal, Valve, Intake Seat, Valve, Intake Seat, Valve, Exhaust Bushing, Guide (Exhaust Only) Bushing, Guide (Intake, Brass) Wire, Alternator Plate, Cover Plug and Seal, Solenoid Fan, Flywheel Retainer, Fan Label Kit Owner's Manual Retainer, Brush</li> <li>* Gasket Set (495868)</li> <li>Carburetor Kit (491539)</li> <li>Carburetor Kit (491539), Repair Kit (491539)</li> </ul>

- Included in Valve Overhaul Gasket Set (498047)
- NOTE: All component dimensions given in U.S. inches 1 inch = 25.4 mm

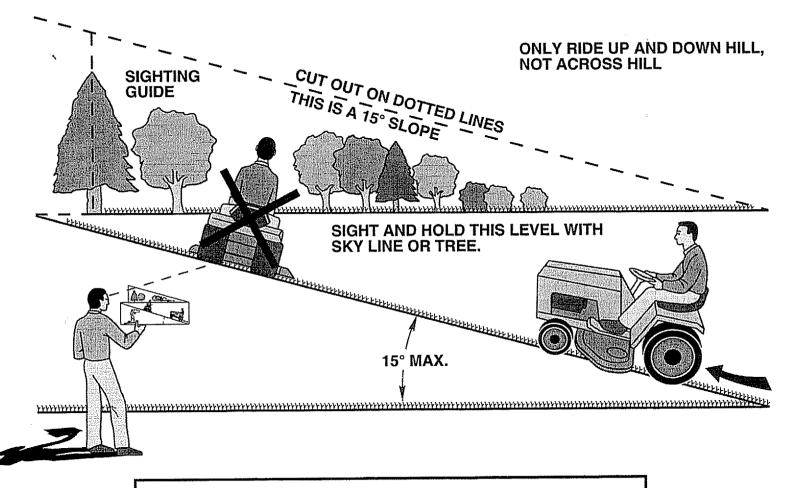
# **SERVICE NOTES**

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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	<b>CRAFTSMAN</b> 19.0 HP TWIN CYLINDER ELECTRIC START 46" MOWER 6 SPEED TRANSAXLE LAWN TRACTOR
MODEL NO. 917.256660	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.
IF YOU NEED REPAIR SERVICE OR PARTS: FOR REPAIR SERVICE, CALL THIS TOLL FREE NUMBER: <b>1-800-4-REPAIR</b> (1-800-473-7247) FOR REPLACEMENT PARTS INFORMATION AND ORDERING, CALL THIS TOLL FREE NUMBER: <b>1-800-FON-PART</b> (1-800-366-7278) FOR CONSUMER ASSISTANCE HOT LINE, CALL THIS TOLL FREE NUMBER: <b>1-800-659-5917</b>	All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Center/Department and most Re- tail Stores. WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION: • PRODUCT - TRACTOR • MODEL NUMBER - 917.256660 • ENGINE MODEL NO 42A707, TYPE NO. 1625-01 • 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.
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