SEARS

# 

MODEL NUMBER 917.255970 OWNER'S MANUAL

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

# Caution:

Read and Follow all Safety Rules and Instructions Before Operating This Equipment





# SAFETY RULES

# Safe Operation Practices for Ride-On Mowers



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

#### I. GENERAL OPERATION

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

#### II. SLOPE OPERATION

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

### DO:

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

#### DO NOT:

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

#### III. CHILDREN

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

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

#### IV. SERVICE

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



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



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

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

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

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

	i	
	MODEL NUMBER	917.255970
	SERIAL NUMBER	
	DATEOFPU	RCHASE
1	D/11 = O/ 1 O	
		AND SERIAL NUMBERS WILL BE FOUND E UNDER THE SEAT.
	DATE OF PU	D RECORD BOTH SERIAL NUMBER AND JRCHASE AND KEEP IN A SAFE PLACE E REFERENCE.

# **MAINTENANCE AGREEMENT**

A Sears maintenance agreement is available on this tractor. 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 manual.

# PRODUCT SPECIFICATIONS

HORSEPOWER:	18.0
GASOLINE CAPACITY:	3.5 GALLONS UNLEADED REGULAR
OIL (3.0 PINTS):	SAE 30 (above 32°F) SAE 5W-30 (below 32°F)
SPARK PLUG (GAP.025 IN.):	CHAMPION RJ-19LM STD361458
VALVE CLEARANCE:	INTAKE .004006 IN EXHAUST .007009 IN
GROUND SPEED:	(MPH): LO HI 1st .8 4 1.8 2nd 1.4 5 3.4 3rd 2.4 ( 5.5 Rev9 2.1
TRANSAXLE OIL (4 QUARTS)	NON-DETERGENT SAE 30 (ISO 100)
TIRE PRESȘURE:	FRONT: 14 PSI REAR: 10 PSI
CHARGING SYSTEM:	5 AMPS BATTERY 5 AMPS HÉADLIGHTS
BLADE BOLT TORQUE:	30-35 FT. LBS.

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

In the state of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest Sears authorized service center (See the REPAIR PARTS section of this manual).

# LIMITED TWO YEAR WARRANTY ON ELECTRIC START RIDING EQUIPMENT

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

This Warranty does not cover:

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

### LIMITED 90 DAY WARRANTY ON BATTERY

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

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

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

SEARS, ROEBUCK AND CO., D/817 WA, HOFFMAN ESTATES, ILLINOIS 60179

# TABLE OF CONTENTS

SAFETY RULES	3 OPERATION 3,15-18 SERVICE AND A STORAGE 4 TROUBLE SHOOL REPAIR PARTS-	SCHEDULE
INDEX		
A  Adjustments:     Attachment Lift Spring	Tire Care	Oil:     Cold Weather Conditions
Brake Adjustment       21         C       C         Carburetor, Adjustment       25         Controls, Tractor       11         Customer Responsibilities       15-18         Engine:       18         Air Filter       18         Air Screen       18         Cooling Fins       18         Oil       17         Fuel Filter       18         Spark Plugs       18         Tractor:       18         Battery       17         Blade       16         Lubrication Chart       15         Maintenance Schedule       15	L Leveling Mower Deck 19-20 Lubrication Chart 15  M  Maintenance Schedule 15 Mower: Adjustment: Front-To-Back 20 Side-To-Side 19 Blade Replacement 16 Blade Sharpening 16 Cutting Height 12 Installation 9 Operation 13 Removal 19 Mowing Tips 14 Muffler 18 Spark Arrester 3,18,34	Spark Plugs       18         Specifications       3         Starting the Engine       14         Steering Wheel       7,22         Stopping the Tractor       12         Storage       26         T       Throttle Control Cable:         Adjustment       24         Tires       8,16,22         Troubleshooting       28-29         W         Wheels       31         Wiring Schematic       30

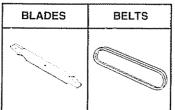
# **ACCESSORIES AND ATTACHMENTS**

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

#### **ENGINE**

SPARK PLUG	MUFFLER	AIR FILTER	GAS CAN	ENGINE OIL	STABILIZER
		6			

### MAINTENANCE



#### 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.

LAWN SWEEPERS let you collect grass clippings and leaves.

LAWN VACS for powerful collection of heavy grass clippings and leaves. Wand attachment to pick up debris in hard-to-reach places.

CARTS make hauling easy. Variety of sizes available.

**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.

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

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.

**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.

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

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

**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, wheel weights, or rear drawbar weight.)

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

WHEEL WEIGHTS for rear wheels provide needed traction for snow removal or dozing heavy materials. (55 lbs. each.)

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 and windshields for use as sun protector in summer. (Catalog only.)

Optional accessories for tractor cab: tinted/tempered solid safety glass windshield with hand operated wiper; 12-volt amber caution light for mounting on cab top. (Catalog only.)

TRACTOR COVER protects tractor from weather. Made of Evolution 3 fabric (water-repellent, extremely breathable, light weight, soft, non-abrasive, pliable in all temperatures, durable, stain/tear/puncture resistant, will not shrink or stretch). (Catalog only.)

**TILLER** has 8 hp engine to prepare seed beds, cultivate, and compost garden residue. Chain-drive transmission. Six 11-inch diameter one piece heat-treated steel tines. Tills 30-inch path. (Requires sleeve hitch.)

TILLER has 5 hp engine and 36-inch swath to prepare seed beds, cultivate, and compost garden residue. Tiller has its own built-in lift and depth control system and does NOT require a sleeve hitch. Fits any lawn, yard, or garden tractor. Simply hook up to the tractor drawbar and go!

DOZER BLADE removes snow; grades dirt, sand and gravel. 48 inches wide, 17 inches high, clears 44-inch path when angled. Master lift control lever for operator ease. Spring trip for snow removal on uneven pavement; built-in float for blade to follow ground contour. Reversible, replaceable scraper bar. (Use with tire chains, wheel weights or rear drawbar weight.)

**REAR BLADE** is 42 inches wide and operated from driver's seat. Reversible steel blade can be angled at 30 degrees for grading. Reverses for snow plowing. (Requires sleeve hitch.)

SLEEVE CULTIVATOR is 43 inches wide. Prepares ground for seeding, helps weed control. Steel frame holds 5 adjustable sweeps. Adjusts vertically, horizontally. (Requires sleeve hitch.) Optional accessory for cultivator: steel furrow opener for wider openings for potatoes, corn, and other deep-seeded crops.

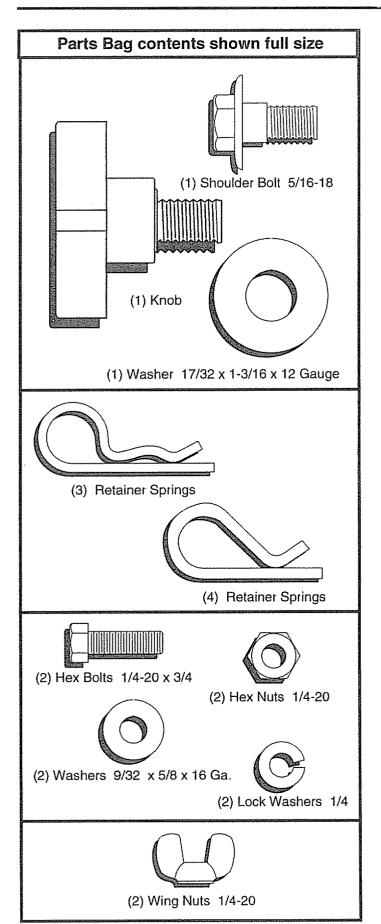
**PLOW** turns soil 6 inches deep, cuts 10-inch furrow. Crank adjustment controls depth, 3-position yoke sets width. Heavy steel landslide for straight furrowing. (Requires sleeve hitch.)

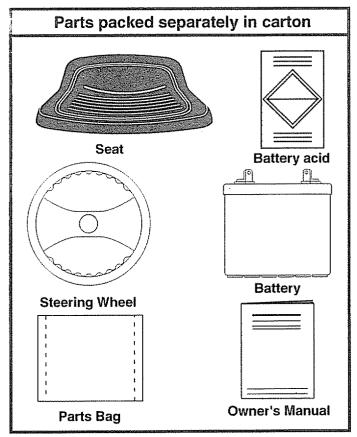
DISC HARROW has 2 gangs of 4 steel blades that angle from 10 to 20 degrees, 40 inches wide. Can hook 2 units in tandem. (Requires sleeve hitch.)

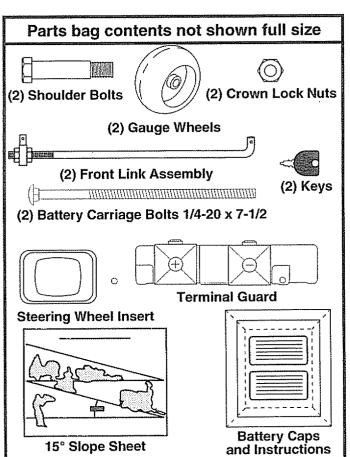
WEIGHT BRACKET for drawbar for snow removal applications. Can be mounted on front of tractor for plowing applications. Uses (1) 55 lb. weight.

SLEEVE HITCH for use with master lift system. Single pin couples/uncouples.

# CONTENTS OF HARDWARE PACK







Your new tractor has been assembled at the factory with the 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.

- (2) 7/16" wrenches
- (1) Tire pressure gauge
- (1) 9/16" wrench
- (1) Utility knife
- (1) Adjustable wrench

When right and left hand are 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 from carton (See page 6).
- Cut along lines on the carton, from top to bottom, all four corners of carton and lay panels flat.
- Remove mower deck from skid.
- Check for any additional loose parts or cartons and remove.

# BEFORE ROLLING TRACTOR OFF SKID ATTACH STEERING WHEEL (See Fig. 1)

- Remove hex bolt, lock washer and large flat washer from steering shaft.
- Position front wheels of the tractor so they are pointing straight forward.
- Position steering wheel so cross bars are horizontal (left to right) and slide onto adapter.
- Secure steering wheel to steering shaft with hex bolt, lock washer and large flat washer previously removed. Tighten securely.
- Snap 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.

# TO ROLL TRACTOR OFF SKID (See Fig. 2)

- Raise attachment lift lever to its highest position.
- Place gearshift lever in "NEUTRAL" position.
- Release parking brake by depressing clutch/brake pedal.
- Roll tractor backwards off skid.

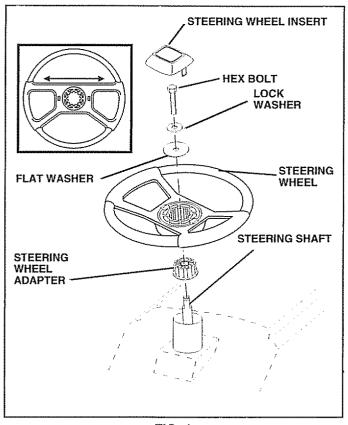


FIG. 1

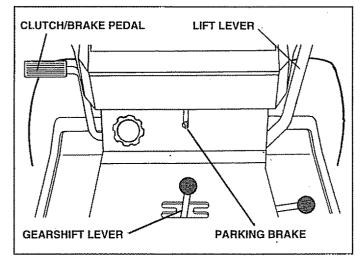


FIG. 2

# HOW TO SET UP YOUR TRACTOR PREPARE BATTERY (See Fig. 3)

CAUTION: Wear eye and face shield.

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



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

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

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

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

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

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

- Charge battery at a rate of 6 amperes for 1 hour. Use a 12 volt battery charger. Observe all safety precautions required for battery charging.
- Check the acid level after the battery is charged. If the acid has fallen below the correct level, add distilled or iron free water.
- Install the vent caps to cover the vent wells. Wash the top of the battery with water to remove any acid, then wipe dry.
- Check battery case for leakage to make sure that no damage has occurred in handling.
- Dispose of excess battery acid. Neutralize acid for disposal by adding it to four inches of water in a five gallon plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.
- Follow instructions on how to install battery.

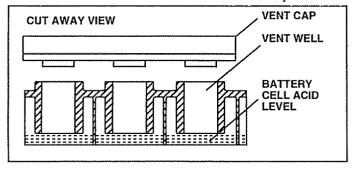


FIG. 3

## **INSTALL SEAT (See Fig. 4)**

Adjust seat before tightening adjustment knob.

- · Remove cardboard packing on seat pan.
- Place seat on pan and assemble shoulder bolt.
- Assemble adjustment knob 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.
- Raise seat and tighten adjustment knob securely.

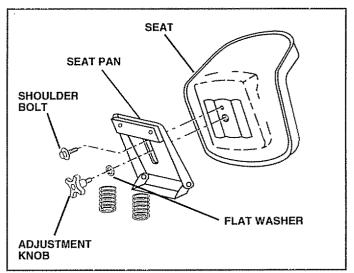


FIG. 4

#### 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.

### **CHECK BRAKE SYSTEM**

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

# INSTALL MOWER AND DRIVE BELT (See Fig. 5 and 8)

Be sure tractor is on level surface. Engage parking brake.

- Cut and remove tie down wire between anti-sway bar and R.H. gauge wheel bracket. Swing anti-sway bar to left side of mower deck.
- Slide mower under tractor with discharge guard to right side of tractor.
- Install one front link in L.H. front mower bracket and L.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Slide right side of mower deck forward, toward R.H. front tire.
- Check belt for proper routing in all mower pulley grooves. Install belt into engine pulley groove.
- Install second front link in R.H. front mower bracket and R.H. front suspension bracket. Retain with two single loop retainer springs as shown.
- Turn height adjustment knob counterclockwise until it stops. Lower mower linkage with attachment lift lever.
- Place the suspension arms on deck pins and retain with double loop retainer springs.

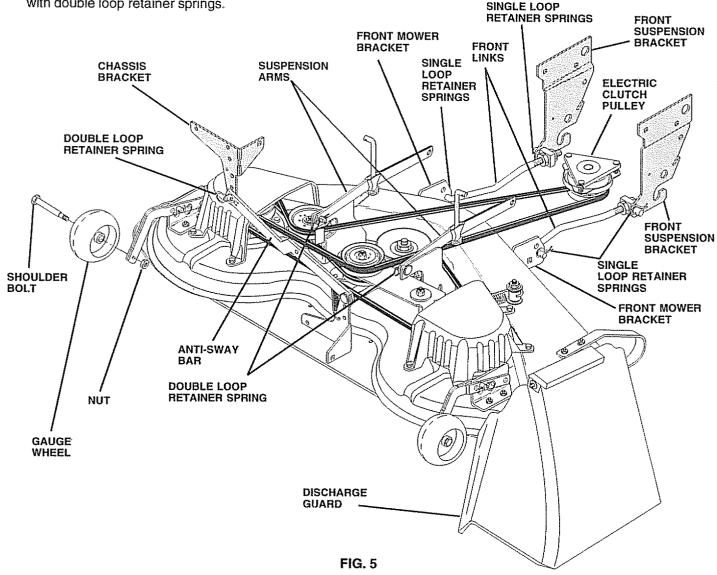
- Connect anti-sway bar to chassis bracket under left footrest and retain with double loop retainer spring.
- Turn height adjustment knob clockwise to remove slack from mower suspension.
- Raise deck to highest position.
- Insert gauge wheels as shown using long shoulder bolts and nuts. Tighten securely.

### CHECK DECK LEVELNESS

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

# CHECK FOR PROPER POSITION OF ALL BELTS

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



# **INSTALL BATTERY (See Figs. 6 and 7)**



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

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

- Raise hood.
- Make sure drain tube is fastened to drain hole in battery tray and battery tray is positioned in hole of battery support.
- Place battery in plastic tray, battery terminals to front of tractor
- First connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lock washer and hex nut as shown. Tighten securely.
- Connect BLACK grounding cable to negative (-) battery terminal with remaining hex bolt, flat washer, lock washer and hex nut. Tighten securely.
- Slide the two battery bolts through the terminal guard and start the wing nuts onto the threads.
- Position terminal guard over the battery as shown, lower bolts into key holes and slide square shafts of bolts into slots of key holes.
- Tighten wing nuts by hand making sure battery bolts remain in slots of the key holes in the battery support.
- Be sure terminal access doors are closed.

Use terminal access doors for:

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

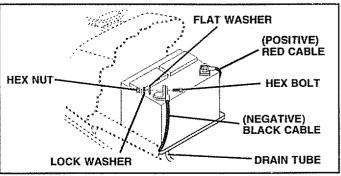


FIG. 6

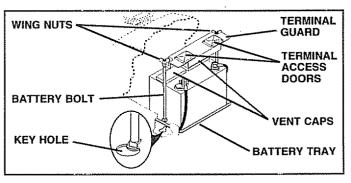


FIG. 7 **√ CHECKLIST** 

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.

# **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 location of various controls and adjustments. Save this manual for future reference.

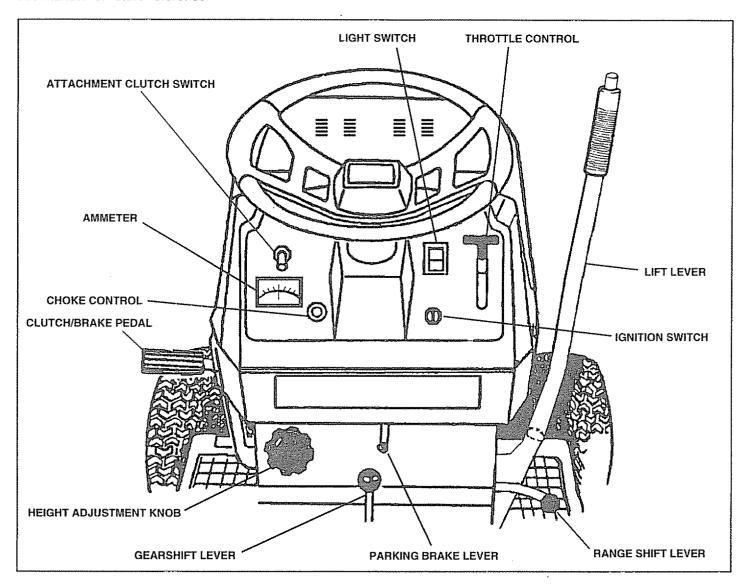


FIG. 8

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

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

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

**CLUTCH/BRAKE PEDÁL -** Used for declutching and braking the tractor and starting the engine.

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

THROTTLE CONTROL - Used to control engine speed.

**RANGE SHIFT LEVER** - Allows "HI" or "LO" speed for all forward and reverse gears.

IGNITION SWITCH - Used to start and stop the engine.
AMMETER - Indicates battery charging (+) or discharging

LIGHT SWITCH - Turns the headlights on and off.
PARKING BRAKE LEVER - Locks clutch/brake pedal into the brake position.

CHOKE CONTROL - Used when starting a cold engine. HEIGHT ADJUSTMENT KNOB - Used to adjust the mower height.



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

# HOW TO USE YOUR TRACTOR TO SET PARKING BRAKE (See Fig. 9)

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

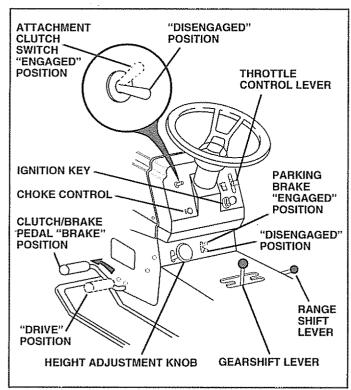


FIG. 9

# STOPPING (See Fig. 9)

MOWER BLADES -

Move attachment clutch switch to "DISENGAGED" position.

#### GROUND DRIVE -

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

#### **ENGINE -**

Move throttle control to "SLOW" position.

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

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

**NOTE:** Under certain conditions when tractor is standing idle with the engine running, hot engine exhaust gasses 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 CHOKE CONTROL (See Fig. 9)

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 USE THROTTLE CONTROL (See Fig. 9)

Always operate engine at full throttle.

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

# TO MOVE FORWARD AND BACKWARD (See Fig. 9)

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

- Start tractor with clutch/brake pedal depressed and gearshift lever in "NEUTRAL" position.
- Move gearshift and range shift levers 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. 9)

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

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

The cutting height range is approximately 1-1/2" to 4-1/2". 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 type 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 ADJUST GAUGE WHEELS (See Fig. 10)

- · Adjust mower to desired cutting height.
- Lower mower with lift control. Remove rear retainer spring and clevis pin which secure each gauge wheel.
- Lower gauge wheels to ground. Raise gauge wheels slightly to align holes in bracket and gauge wheel bar and insert clevis pins. Gauge wheels should be slightly off the ground.
- Replace retainer springs into clevis pins.

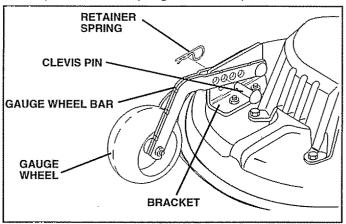


FIG. 10

# TO OPERATE MOWER (See Figs. 8 and 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 mower clutch engaged will shut off the engine.

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



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

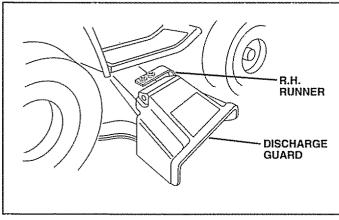


FIG. 11

### 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 "NEUTRAL" position.
- To restart movement, move gearshift lever to 1st gear and range shift lever to "LO" position. Be sure you have allowed room for tractor to roll slightly as you restart movement.
- Slowly release parking brake and clutch/brake pedal.
- · Make all turns slowly.

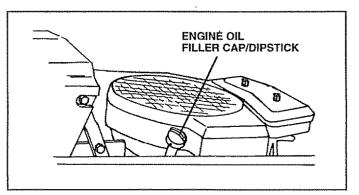
### TO TRANSPORT

- Raise attachment to highest position with lift control.
- When pushing or towing your tractor, be sure gearshift lever is in "NEUTRAL" 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. 12)

- 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. (Use of leaded gasoline will increase carbon and lead oxide deposits and reduce valve life).

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

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



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

# TO START ENGINE (See Fig. 9)

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

- Depress the clutch/brake pedal and set the parking brake.
- Place gearshift lever in "NEUTRAL" position.
- Move attachment clutch to "DISENGAGED" position.
- Pull choke control out to "CHOKE" position for cold engine start. For warm engine start do not use choke control.
- Move throttle control to midway between "FAST" and "SLOW" positions.
- Turn ignition 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 engine does not start after several attempts, move throttle control to "FAST" position, wait a few minutes and try again.
- When engine starts, slowly push choke control in.
- Move throttle control to "FAST" position.
- Allow engine to warm up for a few minutes before engaging clutch/brake pedal or attachment clutch switch.

**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.
- Use the runner on the right hand side of mower as a guide. The blade cuts approximately an inch outside the runner (See Fig. 11).
- 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 tractor. 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. 13).
- 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.

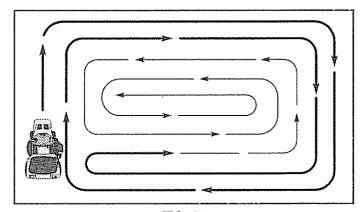


FIG. 13

FIL AS	AINTENANCE SCHEDULE L IN DATES YOU COMPLETE GULAR SERVICE		EFORE	EACH L	SE HOURS WERY 8	HOURS VERY?	S HOUR	S HOUP O HOUP	S HOUS OD HOUS VERY B	EASON EASON	STOP! SEF	GE IVICE	E DA	TES
	Check Brake Operation	<b>W</b>		4								T		
	Check Tire Pressure	000		8/										
I	Check for Loose Fasteners	Queen 1					***************************************		6					
R	Sharpen/Replace Mower Blades				<b>V</b> 4									
C	Lubrication Chart				4				4					
ĬŤ	Check Battery Level/Recharge				8									
0	Clean Battery and Terminals				8/				6/					
R	Check Transmission Cooling				0.00									
	Adjust Blade Belt(s) Tension						<b>6</b> /5							
	Adjust Motion Drive Belt(s) Tension						<b>6</b> 5							
	Check Engine Oil Level	9/		Barra .										
	Change Engine Oil		6/		1,2,3				0					
E	Clean Air Filter				W 2									
N	Clean Air Screen				<b>1</b> /2									
G	Inspect Muffler/Spark Arrester					Grand .								
	Replace Oil Filter (If equipped)						1,2			·				
N E	Clean Engine Cooling Fins						<b>V</b> 2							
	Replace Spark Plug						1	Ber						
	Replace Air Filter Paper Cartridge						<b>1</b> /2							
	Replace Fuel Filter							6/						

- 1 Change more often when operating under a heavy load or in high ambient temperatures
- 2 Service more often when operating in dirty or dusty conditions

- 3 If equipped with oil filter, change oil every 50 hours
- 4 Replace blades more often when mowing in sandy soil
- 5 If equipped with adjustable system

### GENERAL RECOMMENDATIONS

The warranty on this 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.

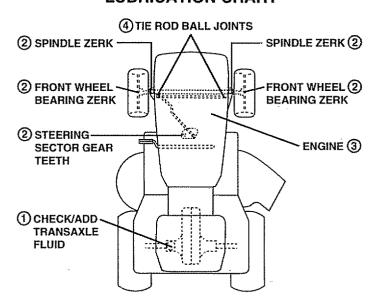
 Once a year you should replace the spark plug, clean or replace air filter, and check blades and belts for wear. A new spark plug and clean air filter assure proper air-fuel mixture and help your engine run better and last longer.

#### **BEFORE EACH USE**

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

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

### **LUBRICATION CHART**



- (1) SAE 30 MOTOR OIL NON-DETERGENT (ISO 100)
- (2) GENERAL PURPOSE GREASE
- 3 REFER TO CUSTOMER RESPONSIBILITIES "ENGINE" SECTION
- (4) SPRAY SILICONE LUBRICANT (MOVE BOOTS TO LUBRICATE)

### 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. 14)**

- 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.

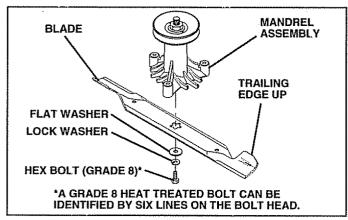


FIG. 14

# TO SHARPEN BLADE (See Fig. 15)

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.

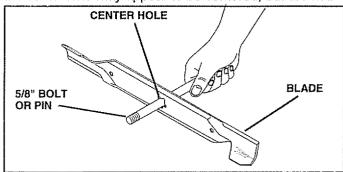


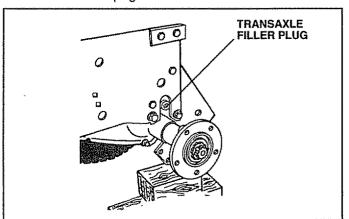
FIG. 15

### TRANSAXLE COOLING

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

# CHECK TRANSAXLE OIL LEVEL (See Fig. 16)

- Block up rear axle securely or use a tractor jack.
- Remove left rear wheel by removing hub bolts.
- Remove filler plug from transaxle. Oil level must be even with plug threads. If necessary, fill with SAE 30 non-detergent oil (ISO 100). Replace filler plug.
- Reassemble wheel to hub.
- For approximate capacity see "PRODUCT SPECIFI-CATIONS" on page 3 of this manual.



# **BATTERY (See Fig. 17)**

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

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

#### TO CLEAN BATTERY AND TERMINALS -

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

- Remove terminal guard.
- Disconnect BLACK battery cable first then RED battery cable and remove battery from tractor.
- Wash battery with solution of four tablespoons of baking soda to one gallon of water. Be careful not to get the soda solution into the cells.
- Rinse the battery with plain water and dry.
- Clean terminals and battery cable ends with wire brush until bright.
- Coat terminals with grease or petroleum jelly.
- Reinstall battery (See "INSTALL BATTERY" in Assembly section of this manual).

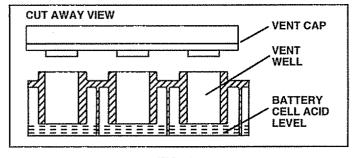


FIG. 17

### V-BELTS

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

# **ENGINE**

# LUBRICATION

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

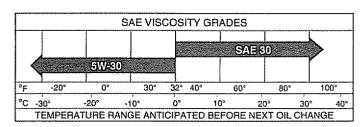


FIG. 18

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

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

Check the crankcase oil level before starting the engine and after each eight (8) hours of continuous use.

## TO CHANGE ENGINE OIL (See Figs. 18 and 19)

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

- Be sure tractor is on level surface.
- · Oil will drain more freely when warm.
- · Catch oil in a suitable container.
- Remove oil filler cap. 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 filler tube. Pour slowly. Do not overfill. For approximate capacity see "PROD-UCT SPECIFICATIONS" on page 3 of this manual.
- Use gauge on dipstick for checking level. Be sure dipstick is in all the way for accurate reading. Keep oil at "FULL" line on dipstick.

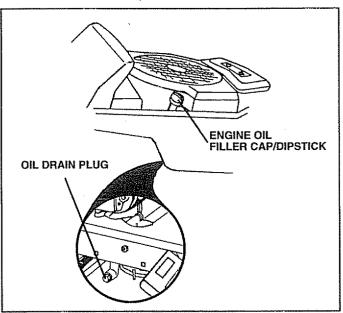


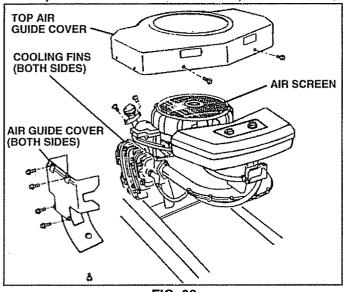
FIG: 19

## **CLEAN AIR SCREEN (See Fig. 20)**

The 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.

# CLEAN ENGINE COOLING FINS (See Fig. 20)

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. 20 AIR FILTER (See Fig. 21)

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

Service air cleaner more often under dusty conditions.

Remove knob(s) and cover.

#### TO SERVICE PRE-CLEANER

- Slide foam pre-cleaner off cartridge.
- · Wash it in liquid detergent and water.
- Squeeze it dry in a clean cloth.
- Saturate it in engine oil. Wrap it in clean, absorbent cloth and squeeze to remove excess oil.
- Reinstall pre-cleaner over cartridge.
- Reinstall cover and secure with knob(s).

### TO SERVICE CARTRIDGE

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

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.

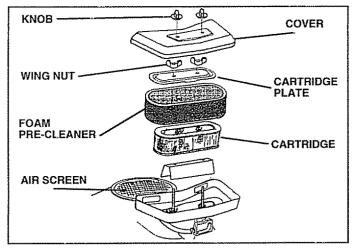


FIG. 21

### MUFFLER

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

### SPARK PLUGS

Replace spark plugs at the beginning of each mowing season or after every 100 hours of operation, whichever comes first. Spark plug type and gap setting are shown in "PRODUCT SPECIFICATIONS" on page 3 of this manual.

# IN-LINE FUEL FILTER (See Fig. 22)

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.

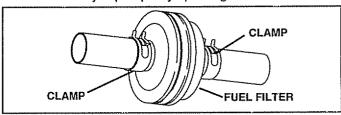


FIG. 22

### **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" position.
Place attachment clutch in "DISENGAGED" position.
Turn ignition key "OFF" and remove key.
Make sure the blades and all moving parts have completely stopped.
Disconnect spark plug wire from spark plug and place wire where it cannot come in contact with plua.

# TRACTOR

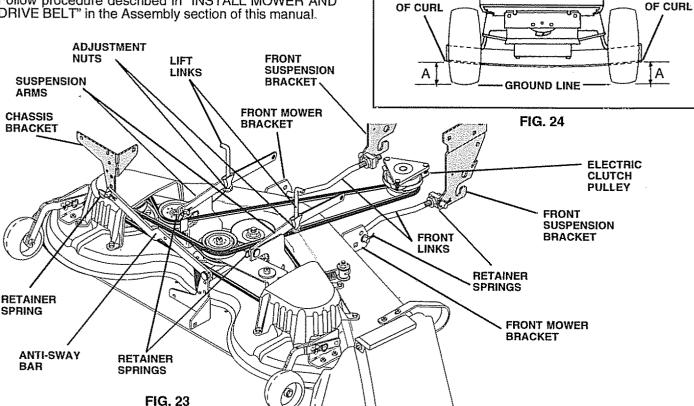
# TO REMOVE MOWER (See Fig. 23)

- 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** DECKISTOBE 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. 23 and 24)

- Raise mower to its highest position.
- Measure height from bottom of deck curl to ground level at front corners of mower. Distance "A" should be the same.
- If distance "A" needs to be changed, make adjustment on one side of mower only.
- Raise one side of mower by tightening lift link adjustment nut on that side.
- Lower one side of mower by loosening lift link adjustment nut on that side.

**NOTE**: Each half turn of adjustment nut will change deck level about 1/4".

**BOTTOM** 

Recheck level after adjusting.

**BOTTOM** 

FRONT-TO-BACK ADJUSTMENT (See Figs. 25 and 26) -

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 the front is approximately 1/8" to 1/2" lower than the rear when the mower is in its highest position.

Check adjustment on right side of tractor. Measure distance "F" directly in front of 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.
- If links are not equal in length, adjust one link to same length as other link.
- To lower front of mower housing, loosen nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.
- To raise front of mower housing, loosen nut "H" from trunnion on both front links. Tighten nut "G" on both front links an equal number of turns.
- When distance "F" is 1/8" to 1/2" lower at front than rear, tighten nut "H" against trunnion on both front links.

**NOTE:** Each full turn of nut "G" will change dim. "F" by approximately 3/8".

· Recheck side-to-side adjustment.

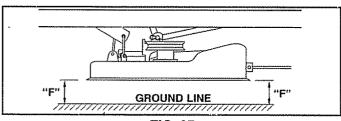
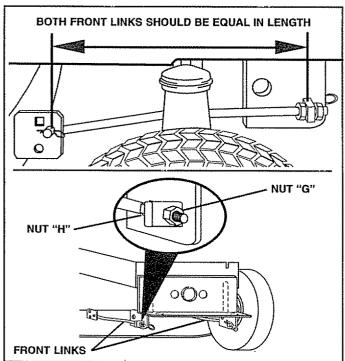


FIG. 25



TO REPLACE MOWER DRIVE BELT

MOWER DRIVE BELT REMOVAL (See Fig. 27) -

- 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. 27) -

- 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.

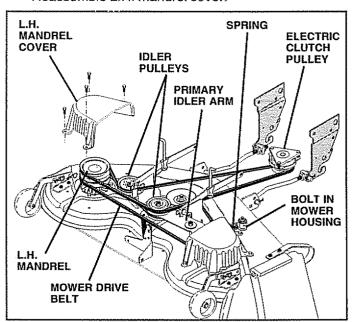


FIG. 27

# TO REPLACE MOWER BLADE DRIVE BELT (See Fig. 28)

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.
- Remove belt from center mandrel, idler pulley, and L.H. mandrel.
- 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, idler, and center mandrel as shown.
- Roll belt over R.H. mandrel. 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 "TO INSTALL MOWER" in the Assembly section of this manual).
- Reassemble mower drive belt (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).

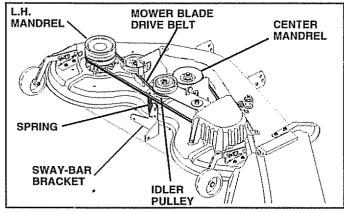


FIG. 28

# TO ADJUST ATTACHMENT CLUTCH (See Fig. 29)

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 required. Adjustments should be made by an authorized service technician.

- 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 inside 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.

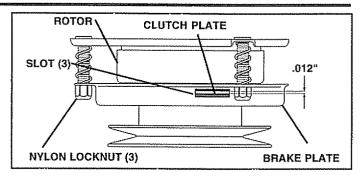


FIG. 29

# TO ADJUST BRAKE (See Fig. 30)

Your tractor is equipped with an adjustable brake system which is mounted on the left 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.

IMPORTANT: DO NOT OVER TIGHTEN BRAKE. WHEN DEPRESSING CLUTCH BRAKE PEDAL, THE MOTION DRIVE BELT MUST STOP MOVING (DECLUTCH FROM ENGINE PULLEY) BEFORE BRAKE ENGAGES. IMPROPER ADJUSTMENT WILL CAUSE HARD SHIFTING AND EXCESSIVE WEAR TO BRAKE LINING.

- Park and turn off the tractor on a level surface. Place gear shift lever in "N" (neutral) position. Disengage parking brake and be sure tractor does not roll in either direction.
- Lower mower deck (if installed on tractor).
- Snap out access hole cover on left side of tractor above footrest.
- Loosen jam nut at clevis which will allow brake rod to be rotated.
- With pliers, from underside of chassis, unscrew brake rod from clevis four (4) to six (6) full turns.
- Start tractor with gearshift lever in "N" (neutral) position.
- Slowly depress clutch/brake pedal to the point where the motion drive belt stops moving. Hold clutch/brake pedal in this position and engage parking brake. If belt begins to move after engaging parking brake, reset parking brake by depressing clutch/brake pedal slightly to next notch on parking brake.
- Stop engine. Screw brake rod back into clevis until clevis pin is against rear edge of slot in brake arm. Do not over tighten (see "IMPORTANT" above).
- Tighten jam nut against clevis.
- Replace access hole cover.
- Test tractor for proper stopping distance and declutching as stated above. Readjust if necessary. If proper adjustment cannot be attained, further maintenance is necessary. Contact your nearest authorized service center.

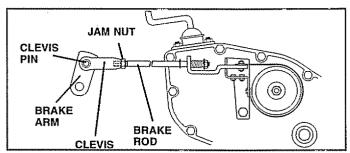


FIG. 30

# TO REPLACE MOTION DRIVE BELT (See Fig. 31)

Park the tractor on level surface. Engage parking brake. For ease of service there is a belt installation guide decal on bottom of left footrest. It is not necessary to remove mower.

#### **BELT REMOVAL -**

- Raise hood and disconnect BLACK (grounding) battery cable.
- Set parking brake (to get belt slack).
- Remove mower drive belt from electric clutch pulley only (See "TO REPLACE MOWER DRIVE BELT" in this section of this manual).
- Roll belt off transaxle pulley.
- Roll belt off clutching idler pulleys, then off engine pulley and front V-idler pulley.
- Pull belt out of all beltkeepers.

#### **BELT INSTALLATION -**

- Place V part of belt into grooves on engine pulley and front V-idler, making sure to route belt inside of beltkeepers.
- Put belt coming from V-idler above midspan beltkeeper, then onto clutching idler pulleys as shown.
- Make sure "V" part of belt engages "V" idler.
- Place belt around transaxle pulley, beginning at top.
   "V" part of belt should engage transaxle pulley.
- Place long lower section of belt through loop in midspan beltkeeper.
- Check to be sure belt is on proper side of all beltkeepers.
- Release parking brake.

IMPORTANT: CHECK BRAKE ADJUSTMENT.

# **CLUCHING ABOVE** - IDLER KEEPER **CLUCHING ENGINE** PULLEY **FLAT IDLER** BELT KEEPER V-IDLER BELT **KEEPERS** BELT ENGINE **TWISTS** PULLEY V-IDLER **TRANSAXLE** PULLEY AS VIEWED FROM BOTTOM TRACTOR V-BELT DRIVE SCHEMATIC VIEW FROM LEFT SIDE OF TRACTOR

### TO ADJUST STEERING WHEEL ALIGNMENT

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

### FRONT WHEEL TOE-IN ADJUSTMENT

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

TO CHECK TOE-IN (See Fig. 32) -

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

TO ADJUST TOE-IN (See Figs. 32 and 33) -

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

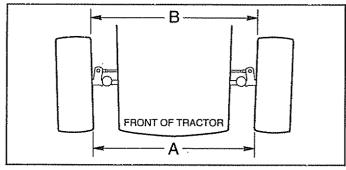


FIG. 32

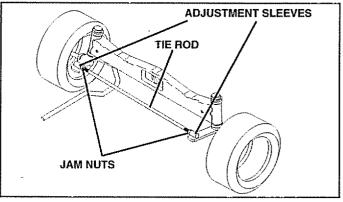


FIG. 33

### FRONT WHEEL CAMBER

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

### TO REMOVE WHEEL FOR REPAIRS

FRONT WHEEL (See Fig. 34) -

- Block up axle securely.
- Remove axle cover, retaining ring and washers to allow wheel removal.
- Repair tire and reassemble.
- Replace washers and snap retaining ring securely in axle groove.
- Replace cover.

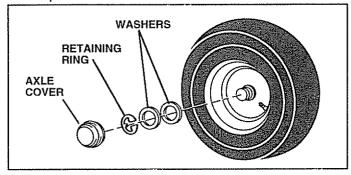


FIG. 34

#### **REAR WHEEL-**

- · Block rear axle securely.
- · Remove five (5) hub bolts to allow wheel removal.
- Repair tire and reassemble. Replace and tighten hub bolts securely.

# TO START ENGINE WITH A WEAK BATTERY (See Figs. 35 and 36)



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 a panel bolt on the left side of the tractor, away from fuel tank and battery.

### TO REMOVE CABLES, REVERSE ORDER -

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

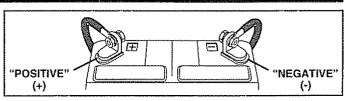


FIG. 35

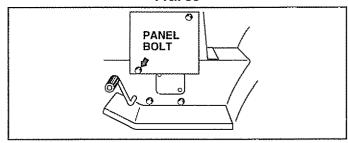


FIG. 36

### TO REPLACE HEADLIGHT BULB

- Raise hood.
- Pull bulb holder out of the hole in the backside of the arill.
- 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.

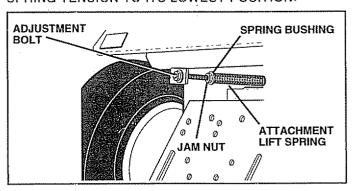
#### TO REPLACE FUSE

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

# TO ADJUST ATTACHMENT LIFT SPRING (See Fig. 37)

- While holding spring bushing with wrench, loosen jam nut.
- Turn adjustment bolt clockwise to extend spring and reduce lift effort (for heavier attachments).
- Turn adjustment bolt counterclockwise (for lighter attachments).
- Retighten jam nut against spring bushing.

  IMPORTANT: DO NOT ADJUST FOR MAXIMUM SPRING
  TENSION WHEN USING LIGHT ATTACHMENTS SUCH
  AS A MOWER. ADJUST LIFT LEVER SPRING TO AID IN
  LIFTING ATTACHMENT. DO NOT OVERPOWER SPRING.
  WHEN REMOVING ATTACHMENT, ALWAYS ADJUST TO
  SPRING TENSION TO ITS LOWEST POSITION.



# TO REMOVE HOOD AND GRILL ASSEMBLY (See Fig. 38)

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

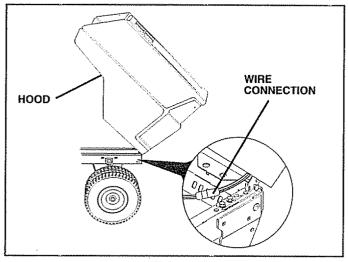


FIG. 38

# **ENGINE**

# TO ADJUST THROTTLE CONTROL CABLE (See Fig. 39)

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

- With engine not running, move throttle control lever to "FAST" position.
- Check that swivel is against side of quarter circle. If it is not, loosen cable clamp screw and pull cable back until swivel is against quarter circle. Tighten cable clamp screw securely.

# TO ADJUST CHOKE CONTROL (See Fig. 40)

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

- With engine not running, move choke control (located on dash panel) to full "CHOKE" position.
- Remove air cleaner cover, filter and spitback plate to expose carburetor choke (see "AIR FILTER" in maintenance section).
- Choke should be closed. If it is not, loosen casing clamp screw and move choke cable until choke is completely closed. Tighten casing clamp screw securely.
- Reassemble air cleaner.

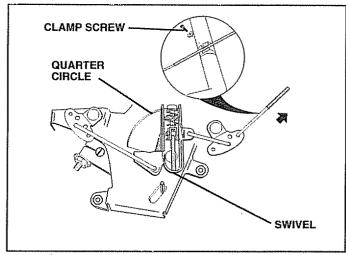


FIG. 39

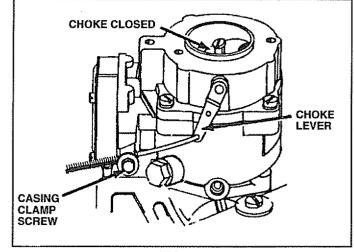


FIG. 40

# TO ADJUST CARBURETOR (See Figs. 41 and 42)

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

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

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

#### PRELIMINARY SETTING -

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

#### FINAL SETTING -

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

### **ACCELERATION TEST -**

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

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

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

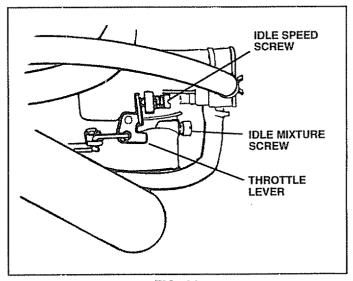


FIG. 41

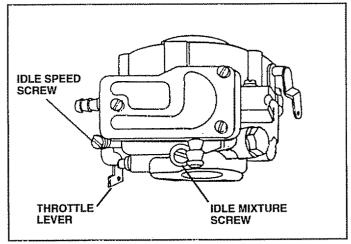


FIG. 42

# 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.

# SERVICE NOTES

# TROUBLESHOOTING POINTS

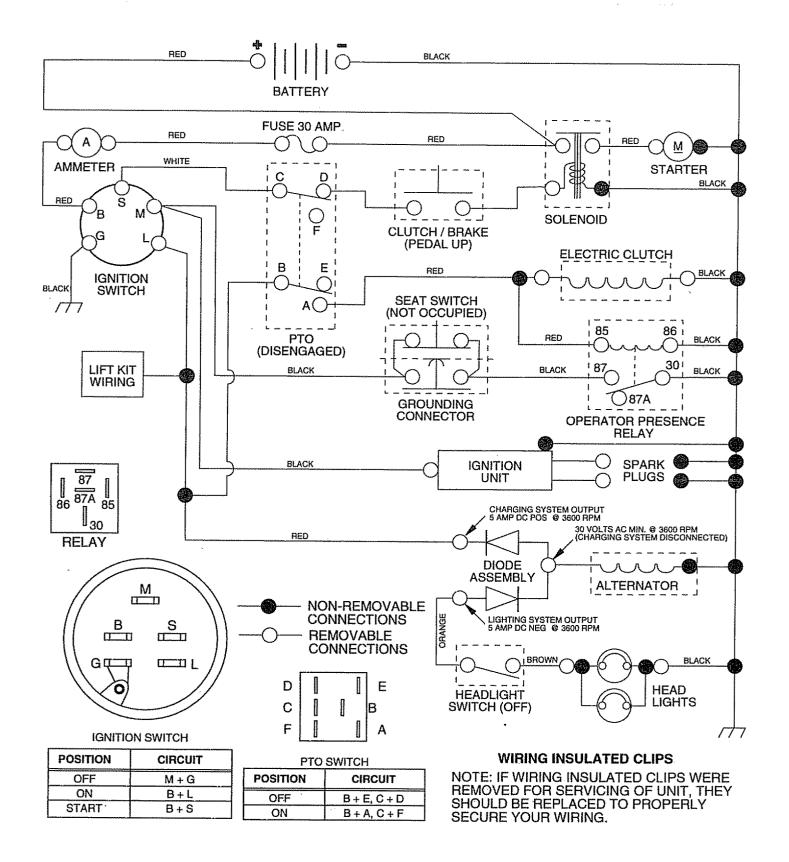
PROBLEM	CAUSE	CORRECTION			
Will not start	1. Out of fuel 2. Engine not "CHOKED" properly. 3. Engine flooded. 4. Bad spark plug. 5. Dirty air filter. 6. Dirty fuel filter. 7. Water in fuel  8. Loose or damaged wiring. 9. Carburetor out of adjustment. 10. Engine valves out of adjustment.	1. Fill fuel tank. 2. See "TO START ENGINE" in Operation section. 3. Wait several minutes before attempting to start. 4. Replace spark plug. 5. Clean/replace air filter. 6. Replace fuel filter. 7. Drain fuel tank and carburetor, refill tank with fresh gasoline and replace fuel filter. 8. Check all wiring. 9. Contact an authorized service center/department. 10. Contact an authorized service center/department.			
Hard to start	<ol> <li>Dirtý air 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>	Clean/replace air filter. Replace spark plug. Recharge or replace battery. Replace fuel filter. Drain fuel tank and refill with fresh gasoline. Check all wiring Contact an authorized service center/department. Contact an authorized service center/department.			
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>	Depress clutch/brake pedal.     Disengage attachment clutch.     Recharge or replace battery.     Replace fuse.     Clean battery terminals.     Check all wiring.     Check/replace ignition switch.     Check/replace solenoid or starter.     Contact an authorized service center/department.			
Engine clicks but will not start	Weak or dead battery.     Corroded battery terminals.     Loose or damaged wiring.     Faulty solenoid or starter.	Recharge or replace battery.     Clean battery terminals.     Check all wiring.     Check/replace solenoid or starter.			
Loss of power	1. Cutting too much grass/too fast. 2. Throttle in "CHOKE" position. 3. Build-up of grass, leaves and trash under mower. 4. Dirty air filter. 5. Low oil level/dirty oil. 6. Faulty spark plug. 7. Dirty fuel filter. 8. Stale or dirty fuel. 9. Water in fuel.  10. Spark plug wire loose 11. Dirty engine air screen/fins. 12. Dirty/clogged muffler 13. Loose or damaged wiring. 14. Carburetor out of adjustment. 15. Engine valves out of adjustment.	<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>Contact an authorized service center/department.</li> <li>Contact an authorized service center/department.</li> </ol>			
Excessive vibration	Worn, bent or loose blade.     Bent blade mandrel.     Loose/damaged part(s).	Replace blade. Tighten blade bolt     Replace blade mandrel.     Tighten loose part(s), Replace damaged parts.			

# TROUBLESHOOTING POINTS

PROBLEM	CAUSE	CORRECTION			
Engine continues to run when operator leaves seat with attachment clutch engaged	Faulty operator-safety presence control system.	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	Obstruction in clutch mechanism.     Worn/damaged mower drive belt.     Frozen idler pulley.     Frozen blade mandrel	Remove obstruction.     Replace mower drive belt.     Replace idler pulley.     Replace blade mandrel.			
Poor grass discharge	1. Engine speed too slow. 2. Travel speed too fast. 3. Wet grass. 4. Mower deck not level. 5. Low/uneven tire air pressure. 6. Worn, bent or loose blade. 7. Buildup of grass, leaves and trash under mower. 8. Mower drive belt worn 9. Blades improperly installed. 10. Improper blades used 11. Clogged mower deck vent holes from buildup of grass, leaves, and trash around mandrels.	1. Place throttle control in "FAST" position 2. Shift to slower speed. 3. Allow grass to dry before mowing. 4. Level mower deck. 5. Check tires for proper air pressure 6. Reptace/sharpen blade. Tighten blade bolt. 7. Clean underside of mower housing. 8. Replace mower drive belt. 9. Reinstall blades sharp edge down. 10. Replace with blades listed in this manual. 11. Clean around mandrels to open vent holes.			
Headlight(s) not working (if so equipped)	1. Switch is "OFF". 2. Bulb(s) burned out 3. Faulty light switch. 4. Loose or damaged wiring. 5. Blown fuse.	Turn switch "ON"     Replace bulb(s)     Check/replace light switch     Check wiring and connections     Replace fuse			
Battery will not charge	Bad battery cell(s).     Poor cable connections     Faulty regulator (if so equipped)     Faulty alternator	1 Replace battery 2 Check/clean all connections 3 Replace regulator. 4 Replace alternator			
Engine "backfires" when turning engine "OFF"	Engine throttle control not set at "SLOW"     position for 30 seconds before stopping engine.	Move throttle control to "SLOW" position and allow to idle for 30 seconds before stopping engine.			

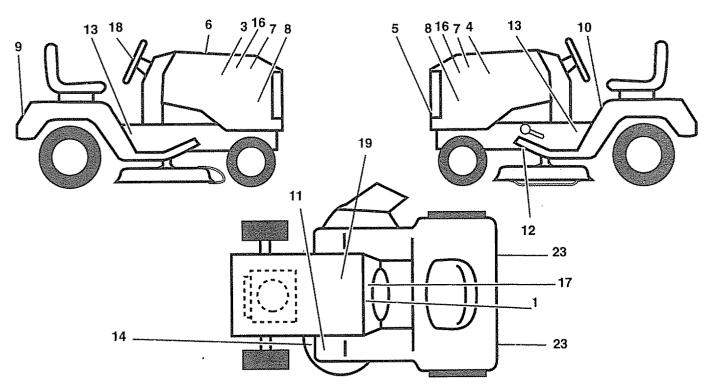
# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

## **SCHEMATIC**



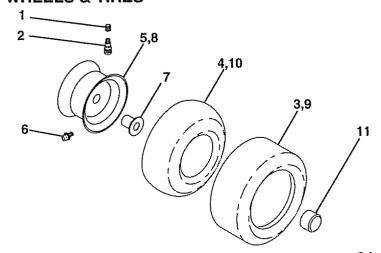
# 18 HP 44" TRACTOR - - MODEL NUMBER 917.255970

# **DECALS**



	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 3 4 5 6 7 8 9 10 11 12	136794 138279 138280 138264 133644 138049 138262 125880X 137537 4900J 138435	Decal, Operating Instruction Decal, Hood, Craftsman, RH Decal, Hood, Craftsman, LH Decal, Grille, Craftsman Decal, Maintenance Decal, Side Panel Decal, Side Panel Decal, Fender, Craftsman Decal, Caution Decal, Clutch/Brake Decal, V-Belt Drive Schematic	13 14 16 17 18 19 23	105567X 139346 108631X 138834 132267 138047 106202X 138190 138191	Decal, Chassis, 6 Speed/44" Decal, V-Belt Schematic Decal II Decal, Dash Decal, Insert Strg Decal, Battery Reflector, Taillight Manual, Owner's (Eng) Manual, Owner's (Span)

# **WHEELS & TIRES**



# KEY PART NO. NO. DESCRIPTION

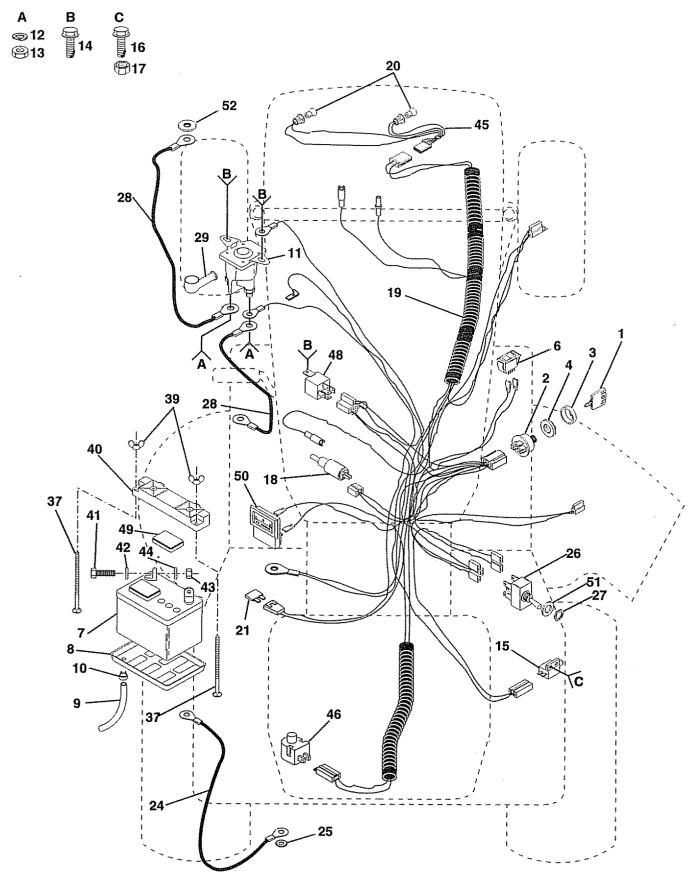
	E0400	Con Value Tire
1	59192	Cap, Valve, Tire
2	65139	Stem, Valve
3	106230X	Tire, Front
4	8134H	Tube, Front (Service Item Only)
5	106228X361	Rim Assembly, Front
6	278H	Fitting, Grease (Front Wheel Only)
7	9040H	Bearing, Flange (Front Wheel Only)
8	106277X361	Rim Assembly, Rear
9	105588X	Tire, Rear
10	7154J	Tube, Rear (Service Item Only)
11	104757X	Cap, Axle (Front Wheel Only)
11	136327	Cover, Axle (Rear Wheel Only)

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

31

# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

# ELECTRICAL



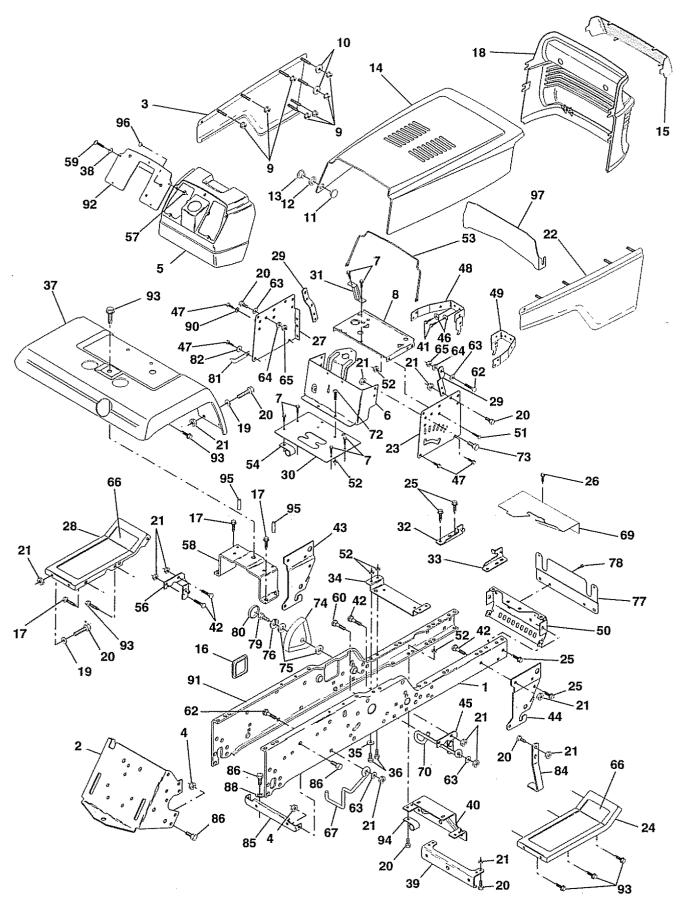
# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

# **ELECTRICAL**

KEY NO.	PART NO.	DESCRIPTION
1	109310X	Key, Ignition
2	4406R	Switch, Ignition
3	123620X	Cover, Switch Key
4 6	124211X 110712X	Nut, Ignition Switch, Light
7	121537X	Battery
8	7603J	Tray, Battery
9	7697J	Tube, Drain
10	109596X	Clamp, Hose
11	138406	Solenoid
12	10090400 STD541225	Washer, Lock 1/4
13 14		Nut, Hex Jam 1/4-20 Screw, Hex Washer Head, Thread
14	17720400	Cutting 1/4-20 x 1/2
15	104445X	Switch, Intlk Cl Grd Gry 2 Term
16		Screw, Hex Washer Head
		#10-32x1/2
17	73951000	Nut, Keps #10-32
18	135665	Diode Asm., Heavy Duty
19 20	138319	Harness, Ignition
20	4152J 108824Y	Bulb, Headlight Fuse
24	108824X 121080X	Cable, Ground
25	11050600	Washer, Lock External Tooth 3/8
26	4021J	Switch, P.T.O.
27	4022J	Nut, Hex 1/2-28 Unef
28		Cable, Battery Cover, Terminal
29 37	131563	Cover, Terminal
30	72240460	Bolt, Carriage 1/4-20 x 7-1/2 Nut, Wing 1/4-20
40	123198X 102476X	Guard, Terminal
41	STD522507	Bolt, Hex 1/4-20 x 3/4
42 43		Washer 9/32 x 5/8 x 16 Ga.
		Nut, Hex 1/4-20
44		Washer, Lock 1/4
45 46 48	127441X	Harness, Light Socket
40 40	121305X 109748X	Switch, Plunger Relay, Operator Presence
		Caps, Battery
50	121264X 121433X	Ammeter
51	19171216	Washer 17/32 x 3/4 x 16 Ga.
52	11150400	Washer, Int. Tooth

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

# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970 CHASSIS AND ENCLOSURES

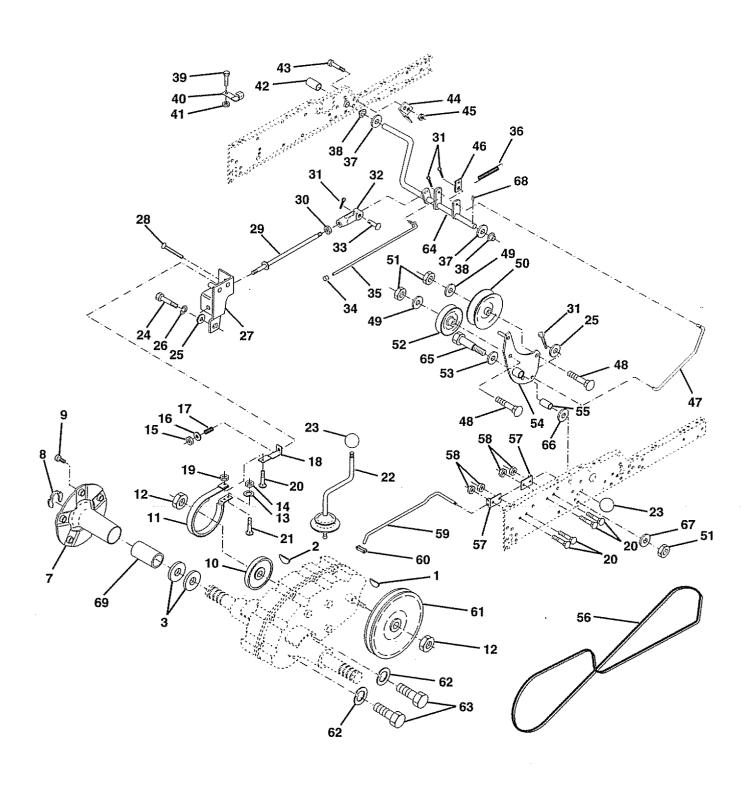


# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970 CHASSIS AND ENCLOSURES

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
NO. 1234567891011231456789201123456789011123145678922222222233323345637899404142	NO.  138597 7982J 136671X417 73800700 136696 137251 17720408 137563 108067X 19092016 137270 137269 137271 136673X417 136374 121794X 17490612 136373x440 19131312 74760616 73800600 136670X417 121045X 105464X417 17490512 121046X 105465X417 138193 137143X013 137556 136742 136963 19111116 74780512 121642X417 19091216 136963 19111116 74780512 121642X417 19091216 136961 136962 74760408 72140608	Rail, Frame RH Drawbar, Gt Panel Asm., Side LH Nut, Lock Hex 7/16 Unc Dash, Plastic Black Dash Asm., Lower Screw, Thd Cut 1/4-20 x 1/2 Support, Battery Nut, Pal Washer 9/32 x 1-1/4 x 16 Ga. Rivet, Ratchet Male Washer, Nylon Rivet, Ratchet Female Hood Asm., Pnt Lens, Bar Clear Cover, Access Screw, Thdrol 3/8-16 x 3/4 Grille Washer 13/32 x 13/16 x 12 Ga. Bolt, Fin Hex 3/8-16 x 1 Nut, Lock Hex W/Wsh 3/8-16 Unc Panel Asm., Side RH Panel, Dash Side RH Footrest, RH Screw, Thdrol 3/8-16 x 3/4 Screw, Thdrol 5/16-18 x 3/4 Panel, Dash Side LH Footrest, LH Bracket, Support Dash Saddle, Slkscr Vgt Brace, Support Steering Bracket Asm., Frame Pivot Lh Bracket Asm., Frame Pivot Rh Bracket, Engine Support Rear Washer 11/32 x 11/16 x 16 Ga. Bolt, Fin Hex 5/16-18 x 3/4 Fender, Pnt. Washer 9/32 x 3/4 x 16 Ga. Bracket, Axle Front Bracket, Support Axle/Engine Bolt, Fin Hex 1/4-20 Unc x 1/2 Bolt, Carriage 3/8-16 x 1	NO. 4564789015346678902344567777777898124856889919394	NO.  138460 10040400 17490608 136814 136813 136575 72140506 73800500 137304 126490X 138461 73510400 137113 74180412 72140610 72110608 19131614 10040600 73220600 105466X 137157 139213 137159 74180512 74780616 123934X 19112410 10040500 137308 17720408 74780516 123935X 123933X505 120529X 138952 120404X 74760716 10040700 11050600 110893X 124557X022 17490608 100207K	Bracket Asm., Susp Chassis Rh Washer, Lock Hvy Helical 1/4 Screw, Thdrol 3/8-16 x 1/2 Bracket Asm., Pivot Hood Lh Bracket, Chassis Front Bolt, Carriage 5/16-18 x 3/4 Locknut, Hex W/Ins 5/16-18 Unc Rod, Support Hood Clip, Insulated Bracket Asm., Susp Chassis Lh Nut, Keps Hex 1/4-20 Bracket Asm., Fender Screw, Mach Cr 1/4-20 x 3/4 Bolt, Carriage 3/8-16 x 1-1/4 Bolt, Carriage 3/8-16 x 1 Gr. 5 Washer 13/32 x 1 x 14 Ga. Washer, Lock Hvy Hlcl Spr 3/8 Nut, Fin Hex 3/8-16 Unc Pad, Footrest Guide, Belt T/A Shield, Heat Guide, Belt Mid Span Screw, Mach Trhd 5/16-18 x 3/4 Bolt, Fin Hex 3/8-16 x 1 Gr. 5 Scale, Indicator Height Washer, Lock Hvy Hlcl Spr 5/16 Shield, Front Screw, Thd. Cut 1/4-20 x 1/2 Bolt, Fin Hex 5/16-18 x 1 Plug, Hole Pointer, Pnt Height Indicator Washer, Nylon Stop, Over Center Mower Bracket, Support Transaxle Bolt, Fin Hex 7/16-14 Unc x 1 Washer, Lock Hvy Hlcl Spr 7/16 Washer, Lock External Tooth 3/8 Rail, Frame Lh Plate, Silkscreen Dash Screw, Thdrol 3/8-16 x 1/2 Clip, Fuel Line
43 44	136939 136940	Bracket, Spinsn Front Lh Bracket, Spinsn Front Rh	95 96	105531X 8022J	Push Nut, Nylon Plug, Hole

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

# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970 GROUND DRIVE

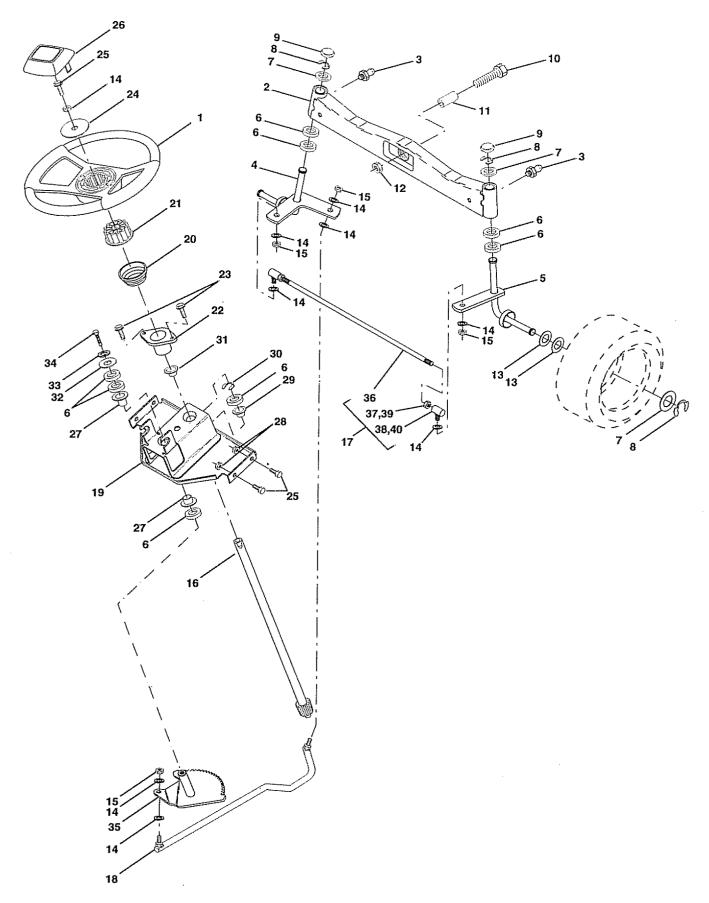


#### 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

#### **GROUND DRIVE**

	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
12378901123456789011223456278 29031333456	9858M1 2228M 7563R 135758 12000034 1304H 214J 101122M 9204H STD551125 STD541025 73530600 19131614 7241J 7229J 1685H STD533107 72140405 633A109 106932X 74760614 19131316 STD551137 677A637 74370612 5308J 73610600 STD560907 100604K 5102J 124236X 137255 138364	Key, Woodruff Key, Woodruff Washer, Thrust, Axle Wheel Hub Assembly Klip Ring Bolt, Hub Drum, Brake Band, Brake Locknut 1/2-20 Washer, Lock 1/4 Nut, Hex 1/4-20 Locknut 3/8-24 Washer 13/32 x 1 x 14 Gauge Spring, Compression Guide, Brake Rod Locknut 5/16-18 Bolt, Carriage 5/18-18 x 3/4 Bolt, Carriage 1/4-20 x 5/8 Gearshift Lever Assembly Knob Bolt, Hex Head 3/8-16 x 7/8 Washer 13/32 x 13/16 x 16 Gauge Washer, Lock 3/8 Bracket, Brake Screw, Machine, Flat Head 3/8-16 x 3/4 Brake Rod Nut, Hex 3/8-24 Pin, Cotter 3/32 x 3/4 Yoke Pin, Clevis Cap, Plunger Rod, Parking Brake Spring, Extension, Clutch	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 55 55 55 55 55 56 66 66 66 66 66 66 66	121749X 110895X 74321016 5304J STD541410 8883R STD522507 104601X 73800400 121358X 138228 72140614 19131413 131494 73800600 139123 207J 138390 105706X 137153 105598X 73800500 122253X 122268X 137524 STD551143 74760720 104375X 67609 129962 19131312 5142H	Washer 25/32 x 1-1/4 x 16 Gauge Nyliner Screw, Fin. #10-24 x 1 Actuator, Interlock Switch Locknut #10-24 Cover, Clutch/Brake Pedal Bolt, Hex 1/4-20 x 3/4 Bracket, Interlock Locknut, Hex, with Washer Insert 1/4-20 Retainer, Spring Clutch Rod Bolt, Hex Head 3/8-16 x 1-3/4 Washer 13/32 x 7/8 x 13 Gauge Idler, Flat Locknut, Hex 3/8-16 Idler, Grooved Washer, Hardened Clutch Arm Assembly Bearing, Idler V-Belt Bracket, Shift Rod, Hi-Lo Locknut, Hex, with Washer Insert 5/16-18 Shift Rod, Hi-Lo Spring Clip, Connecting Link Pulley, Transaxle Washer, Lock 7/16 Bolt, Hex Head 7/16-14 x 1-1/4 Shaft, Clutch/Brake Pedal Bolt, Shoulder Washer, Hardened Washer Flat Pin, Roll
			69	136327	Hub, Cover

# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970 STEERING ASSEMBLY

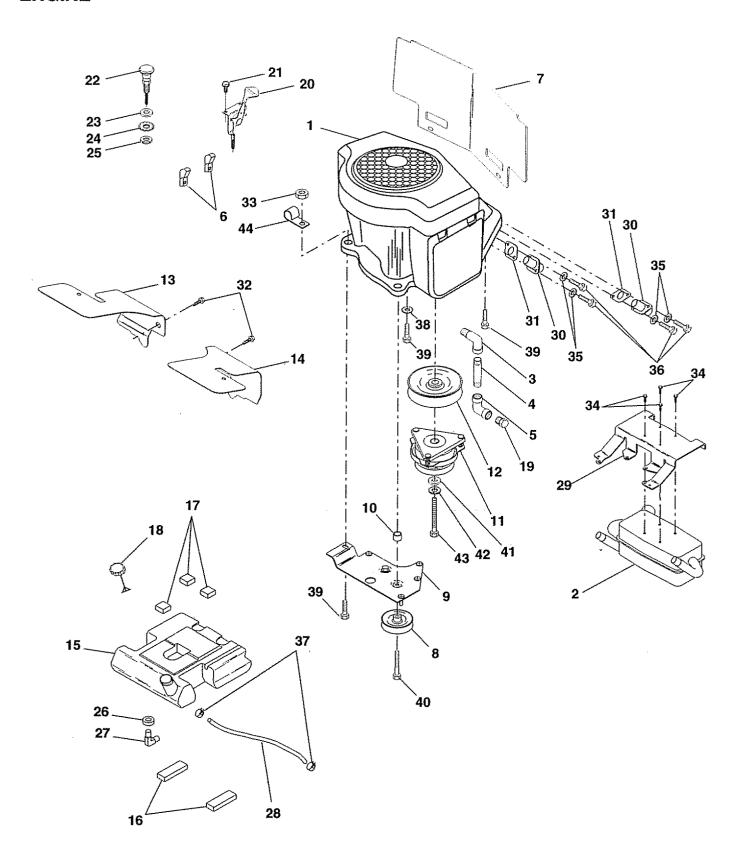


# 18 HP 44" TRACTOR - MODEL NUMBER 917.255970 STEERING ASSEMBLY

KEY PAR' NO. NO.		SCRIPTION
1 1337		eel, Steering
2 674A	243 Axl	e Asm., Front
3 6855		ing, Grease
4 1369 5 1369	ou opi so sni	ndle Asm, LH ndle Asm., RH
6 6266	us Opi H Rea	aring, Race Thrust Harden
7 1217	48X Wa	sher 25/32 x 1-5/8 x 16 Ga.
		g, Klip #T5304-75
9 1212	32X Ca	p, Spindle
10 7478	1044 Bol	t, Fin Hex 5/8-11 x 2-3/4
11 1365	18 Spa	acer, Brg. Axle Front
12 7390	1000 Nu	t, Lock Flange 5/8-11 Unc
13 1217 14 1004	49A Wa	isher 25/32 x 1-1/4 x 16 Ga. isher, Lock Hvy Hicl Spr 3/8
	0600 Nu	t, Fin Hex 3/8-24 Unf
16 1024	58X Sh	aft Asm., Steering
17 1373	47 Ro	d Asm., Tie Ball J Ball Vgt (Inc.
	Ke'	y No. 36-40)
18 1371	55 Dra	aglink, Ball Joint Solid Vgt
19 1380	53 Su	pport Asm., Steering Vgt
20 1210 21 1007		lumn, Steering apter, Wheel Steering
22 1554	.i Au	shing, Strg. Blk
	1008 Sci	rew, Slftp #10-16 x 1/2 Ty-b
	3808 Wa	isher 13/32 x 2-3/8 x 8 Ga.
25 7478	10616 Bo	It, Fin Hex 3/8-16 x 1 Gr. 5
26 1337	'42 Ca	p , Wheel Steering
27 3366	iH Be	aring, Col. Strg. t, Lock Hex W/Wsh 3/8-16 Unc
28 7380 29 1042		aring, Flange
		ng, Klip Truarc #5304-75
31 1381	36 Bu	shing, Nyliner Snap
32 1911	1610 Wa	asher 11/32 x 1 x 10 Ga.
		asher, Lock Hvy Hicl Spr 5/16
		It, Hex Hd 5/16-18 x 3/4
35 1380 36 1371		ear, Sector Steering Rod
		m Nut RH Thread
	350X Joi	int Asm. Ball RH Thread
	00600 Ja	m Nut LH Thread
40 1098	351X Jo	int Asm. Ball LH Thread

#### 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

#### **ENGINE**



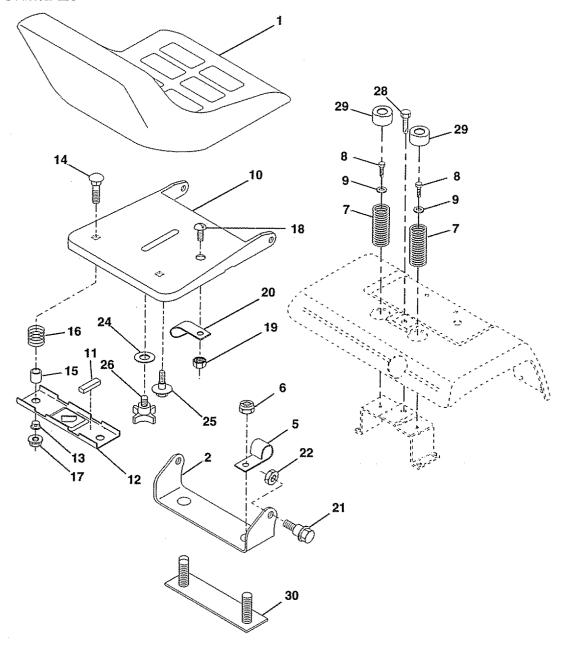
#### 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

#### **ENGINE**

KEY	PART			PART	
	NO.	DESCRIPTION	NO.	NO.	DESCRIPTION
				4.4050000	M
1	138161	Engine B7S 18 IC Gold Vert	24	11050600	Washer Ext Tooth 3/8
2	139217	Muffler Asm Briggs (Inc. Key No. 29	25	73610600	Nut Fin Hex 3/8 - 24 UNF
_	1001000	& 34)	26	3645J	Bushing Standard Table Total
3	13240300	Elbow Street 3/8 NPT	27	139227	Stem Tank Fuel
4	13280328	Nipple Pipe 3/8NPT X 3 - 1/2	28	7834R	Fuel Line
5	13200300	Elbow STD 90 Degree 3/8 - 18 NPT	29	139364	Muffler Mounting Brkt
6	138129	Clamp Tube Double Engine	30	139365	Port Liner
7	139211	Baffle Engine B&S VGT	31	139367	Gasket
8	121361X	Pulley V-Idler	32	17490508	Screw Thdrol 5/16 - 18 X 1/2
9	138559	Stop Keeper Asm VGT	33	73800600	Nut Lock Hex W/Wash 3/8 - 16
10	105432X	Bushing			UNC
11	137140	Clutch Electric	34	17190408	Screw Hex Whs Thd Cut 1.4 - 20
12	136907	Pulley Engine VGT Elect Clutch			UNC
13	138486	Baffle Air LH Koh VGT	35	10040500	Washer Lock 5/16
14	138487	Baffle Air RH Koh VGT	36	74570512	Screw Hex 5/16 - 16 UNC X 3/4
15	127334X	Tank Fuel W/Sym Vented	37	123487X	Clamp Hose
16	109227X	Pad Spacer	38	11050600	Lockwasher Ext Tooth 3/8
17	106082X	Pad Spacer	39	17490624	Screw Thdrol 3/8 - 16 X 1 - 1/2 TT
18	123549X	Cap Asm Fuel W/Sym Vented	40	17490652	Screw Thdrol 3/8 - 16 X 3 - 1/4
19	13290300	Plug Oil Drain (Order From Engine	41	126197X	Washer 1 - 1/2 OD X 15/32 ID X
		Manufacturer)			.250
20	133439	Control Throttle	42	10040700	Washer Lock 7/16
21	17720410	Screw Hex Thd Cut 1/4 - 20 X 5/8	43	71170768	Bolt Hex 7/16 - 20 X 4 - 1/4 Ga 5
22	132779	Control Choke	44	2751R	Clip Fuel Line
23	19132616	Washer 13/32 X 1 - 5/8 X 16 Ga			•
_			RICT	TE. All aamaaa	ant dimensions sites in U.C. inches

## 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

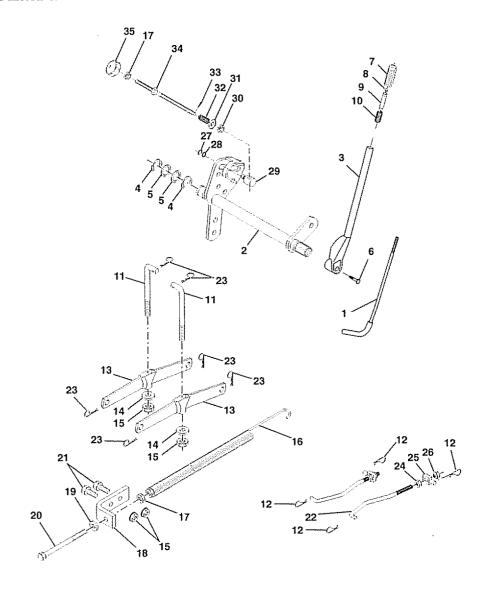
## **SEAT ASSEMBLY**



	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1 2 5 6 7 8 9 10 11 12 13 14 15	127438X 126656X 2751R 73680600 124181X 17490508 19131614 131451 121251X 121246X 121246X 121248X 72050411 134300	Seat Bracket, Pivot Seat Clip, Line Fuel Nut, Crownlock 3/8-16 Unc Spring, Seat Cprsn Screw, Thdrol 5/16-18 X 1/2 Washer 13/32 X 1 X 14 Ga. Pan, Seat Strip, Foam Bracket, Mounting Switch Bushing, Snap Bolt, Carriage 1/4-20 X 1-3/8 Spacer, Split	16 17 18 19 20 21 22 24 25 26 28 29 30	19171912 127018X 120068X 17490608 124238X	Spring, Cprsn Nut, Lock 1/4 Lge Flg Gr. 5 Screw, Sitd Pan Hd #10-32 X 1/2 Nut, Keps #10-32 Unf Clip, Insulated Bolt, Shoulder 5/16-18 Unc Nut, Crownlock 5/16-18 Unc Washer 17/32 X 1-3/16 X 12 Ga. Bolt, Shoulder 5/16-18 X .62 Knob, Seat 1/2-13 Unc Screw, Thdrol 3/8-16 x 1/2 Cap, Spring Seat Strap, Fender

## 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

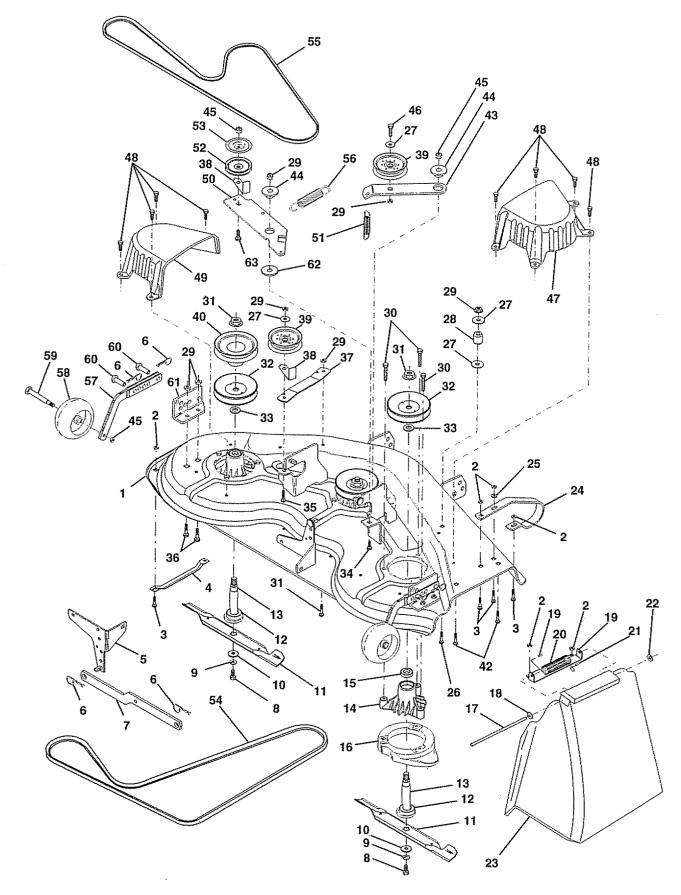
#### LIFT ASSEMBLY



KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	121006X	Rod Asm., Lever	19	19131316	Washer 13/32 x 13/16 x 16 Ga.
2	137295	Shaft Asm., Lift Vgt	20	5328J	Bolt, Adjust Spring Assist
3	121002X	Lever Asm., Lift Rh	21	74760616	Bolt, Fin Hex 3/8-16 x 1
4	12000022	E-Ring Truarc #5133-87	22	127218	Link, Front
5	19292016	Washer 29/32 x 1-1/4 x 16 Ga.	23	4939M	Retainer, Spring
6	74780624	Bolt, Fin Hex 3/8-16 x 1-1/2	24	73350800	Nut, Jam Hex 1/2-13 Unc
7	125631X	Grip, Handle Fluted	25	130171	Trunnion
8	122365X	Button, Plunger	26	73800800	Nut, Lock W/Wsh 1/2-13 Unc
9	122364X	Plunger, Lever Lift	27	12000037	Ring, Klip #T5304-37
10	2876H	Spring 2-1/8"	28	19151216	Washer 15/32 x 3/4 x 16 Ga.
11	138020	Link Lift	29	110810X	Trunnion, Dp Stop Dbl Thds Plt
12	3146R	Retainer, Spring	30	110807X	Nut, Special
13	138023	Arm, Suspension Vgt	31	19131016	Washer 13/32 x 5/8 x 16 Ga.
14	19131611	Washer 13/32 x 1 x 11 Ga.	32	137150	Spring, Compression Inf Hgt
15	73800600	Nut, Lock Hex W/Wsh 3/8-16 Unc	33	76020308	Pin, Cotter 3/32 x 1/2
16	674A247	Spring Asm., Assist Lift	34	137167	Rod, Adj Lift
17	73350600	Nut, Hex Jam 3/8-16 Unc	35	138057	Knob, Inf 3/8-16 Unc
18	5329J	Bracket, Spring Assist			ent dimensions given in U.S. inche

## 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

#### **44" MOWER DECK**



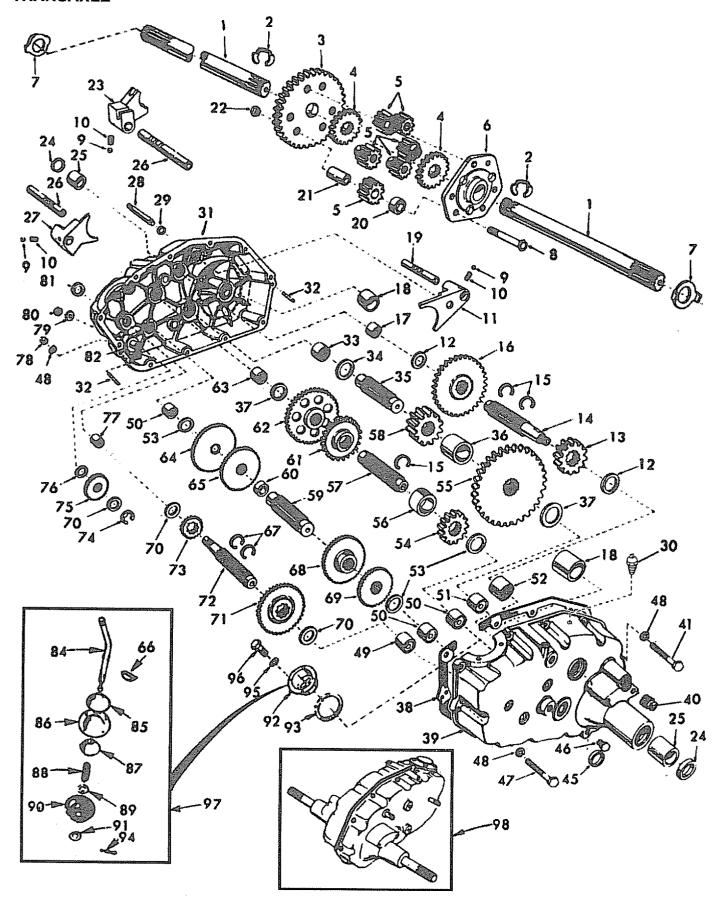
#### 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

#### 44" MOWER DECK

KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1 2	136471 73800500	Deck Asm., Mower 44" Vented Locknut, Hex W/Ins 5/16-18 Unc	33 34	129963 72140610	Washer, Spacer Mower Vented Bolt, Carriage 3/8-16 x 1-1/4
3	72110506	Bolt, Carriage 5/16-18 x 3/4	35	72110616	Bolt, Carriage 3/8-16 x 2
4	7631J	Runner, Mower LH	36	72110608	Bolt, Carriage 3/8-16 x 1 Gr. 5
5	138457	Bracket Asm., Sway Bar	37	137166	Stiffener, Arm Idler
6	4939M	Retainer, Spring	38	137554	Keeper, Belt Idler
7	130832	Arm Suspension, Rear	39	131494	Pulley, Idler Flat
8	850857	Bolt 3/8-24 x 1.25 Gr. 8 Patched	40	136572	Pulley, Driven
9 10	10030600 129962	Washer, Lock Hvy 3/8 Unplated Washer, Hard Blade Mower Vented	42	72140506	Bolt, Carriage 5/16-18 Unc x 3/4
11	130652	Blade	43	136460 122052X	Arm, Idler Secondary Spacer, Retainer
12	129895	Bearing, Ball #6204 (Mandrel)	44 45	73680600	Nut, Crownlock 3/8-16 Unc
13	137553	Shaft Asm., W/Lower Brg (Includes	46	74760628	Bolt, Fin Hex 3/8-16 Unc x 1-3/4
. •		Key No. 12)	47	137200	Cover, Mandrel RH
14	137152	Housing, Mandrel 44" Vent	48	137729	Screw, Thd Holl 1/4-20 x 5/8
15	110485X	Bearing, Ball Mandrel	49	136574	Cover, Mandrel LH
16	136929	Stripper, Mower Vented	50	137272	Arm, Idler Primary
17	106735X	Rod, Hinge	51	137273	Spring, Secondary
18	19111016	Washer 11/32 x 5/8 x 16 Ga.	52	139245	Pulley, Idler V Groove
19	105304X	Cap, Sleeve	53	137789	Shield, Idler
20	123713X	Spring, Torsion Deflector	54	131264	V-Belt, Mower Primary
21 22	137607 110452X	Bracket, Deflector Nut, Push	55	131290	V-Belt, Mower Secondary
23	10452A 109785X	Shield, Deflector Mower	56 57	138687 136577	Spring, Primary Bar Asm., Wheel Gauge
24	136321	Runner, RH	57 58	133957	Wheel, Gauge
25	19111216	Washer 11/32 x 3/4 x 16 Ga.	59	137644	Bolt, Shoulder
26	72110614	Bolt, Carriage 3/8-16 x 1-3/4 Gr. 5	60	139031	Pin, Clevis
27	19131316	Washer 13/32 x 13/16 x 16 Ga.	61	136573	Bracket, Wheel Gauge
28	132823	Spacer, Spring Stop Idler	62	133943	Washer Hardened
29	73800600	Nut, Lock Hex W/Wsh 3/8-16 Unc	63	72110612	Bolt, Carriage 3/8-16 x 1-1/2
30	78158	Bolt 5/16-18 x 1.25	NIOT	F. All compon	ent dimensions given in U.S. inches
31	137266	Nut, Flg Top Lock Cntr 9/16	14()	1 inch = 25	
32	129861	Pulley, Mandrel		i iiiQii	x T 114443

## 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

#### **TRANSAXLE**



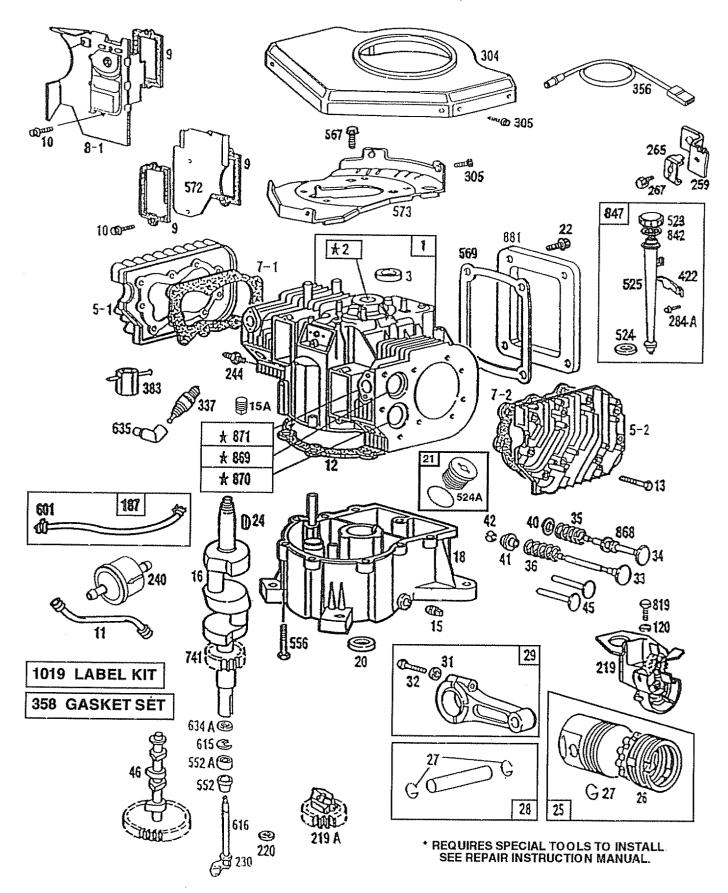
## 18 HP 44" TRACTOR - MODEL NUMBER 917.255970

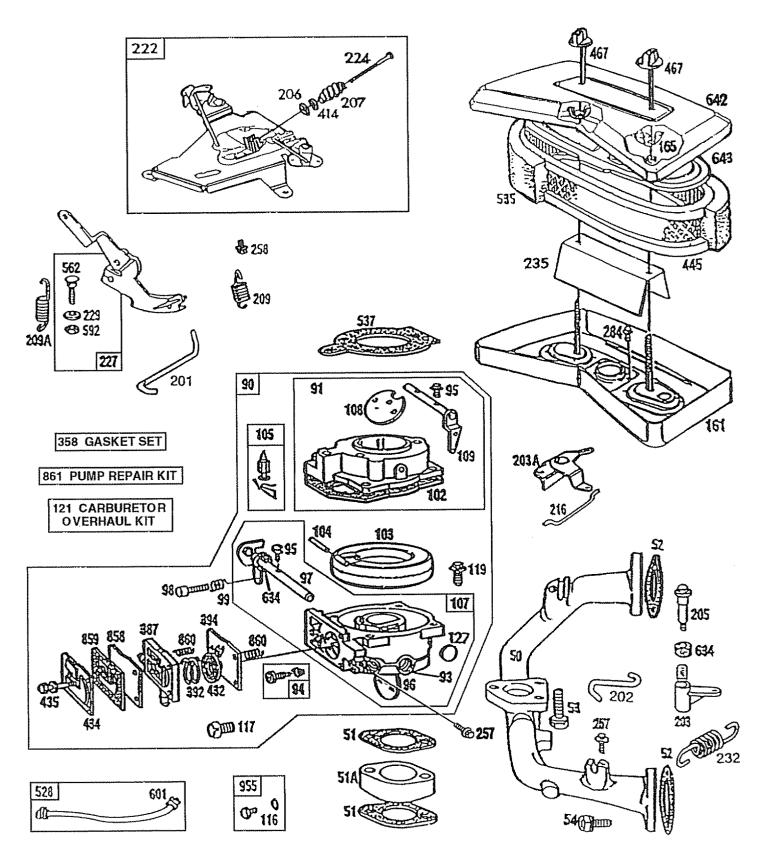
#### **TRANSAXLE**

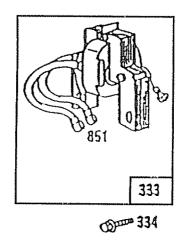
1 4197R         Axle Shaft         51         1529R         Needle Bearing           2 12000034         Retaining Ring         52         8119M         Needle Bearing           3 4199R         Final Drive (Gear         53         4220R         Thrust Bearing Race           5 4215R         Differential Pinion         55         4213R         4th Reduction Pinion, Low           6 4217R         Differential Pinion         55         4213R         4th Reduction Gear           7 6256H         Axle Thrust Washer         57         4195B         3rd Reduction Pinion Pinion Spacer           7 6256H         Axle Thrust Washer         57         4195B         2nd Reduction Pinion Pinion Spacer           8 74020652         Bolt, Hex Head 3/8-24 x 3-1/4         58         4214B         1st Reduction Pinion           10 137251         Spring Shift Fork Detent         61         4208B         3rd Reduction Shaft Spacer           11 4985R         Shift Fork, High-Low Range         62         4207R         Alede Bearing           12 6268H         Thrust Bearing Race         63         7398H         Low Speed Gear and 2nd           12 6278G         3rd Reduction Gear Shaft         4218         4196H         Shift Fork Shaft         4203R         A204R         Houction Gear S	KEY NO.	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
3 4199R	1	4197R	Axle Shaft			
3 4199R         Final Drive Gear         53         4220R         Thrust Bearing Hace         4219R         Jifferential Pinion         55         4219R         Jifferential Pinion         55         4219R         Jifferential Pinion         56         4219R         Jifferential Carrier         56         4412R         Jifferential Carrier         56         4412R         3rd Reduction Gear         3rd Reduction Gear Shaft         3rd Reduction Gear Shaft         3rd Reduction Gear Shaft         57         4198R         4214R         Final Drive Pinion         4194R         1st Reduction Gear Shaft         5728R         1st Reduction Gear Shaft         5728R         1st Reduction Shaft Spacer         1st Reduction Gear Shaft         5728R         1st Reduction Gear Shaft         5728R         1st Reduction Gear Shaft         5739BH         5739BH         1st Reduction Gear Shaft         5739BH         5739BH         5739BH         1st Reduction Gear         62         2407R         2407B			Retaining Ring		8119M	
5 4215R         Differential Pinion         55 4213R         4th Reduction Gear           6 4217R         Differential Carrier         56 4442R         3rd Reduction Pinion Spacer           7 6256H         Ayle Thrust Washer         57 4195R         2nd Reduction Pinion Spacer           9 7392M         Steel Ball         60 7528R         1st Reduction Gear Shaft           10 137261         Spring Shift Fork Detent         61 4208R         1st Reduction Shaft Spacer           11 49887         Shift Fork, High-Low Range         62 4207R         2nd Reduction Gear Shaft           12 6266H         Thrust Bearing Race         63 7398H         1st Reduction Pinion High           14 4196R         ard Reduction Pinion         64 4203R         Needle Bearing           15 6276H         Snap Ring, Crescent Type         65 4204R         Reverse Gear           17 8118M         Needle Bearing         67 4926H         Snap Ring, Crescent Type           18 6740H1         Sintered Inon Bearing         67 4926H         Snap Ring, Crescent Type           24 218R         Differential Pinion Spacer         70 1370H         Thrust Bearing Race           25 29211         Differential Pinion Spacer         70 1370H         Thrust Bearing Race           26 2211         Shiff Fork, R.H.         72 208J         I		4199R	Final Drive Gear			
6 4217F		4216R	Differential Gear			
7 6256H         Axle Thrust Washer         57 4195R         2nd Reduction Gear Shaft           9 7392M         Steel Ball         60 7528R         1st Reduction Gear Shaft           10 137261         Spring Shift Fork Detent         61 4208R         3rd Reduction Flnion High           11 4985R         Shift Fork, High-Low Range         62 4207R         2rd Reduction Plnion High           14 4985R         Shift Fork, High-Low Range         63 7398H         Needle Bearing           14 4196R         3rd Reduction Gear Shaft         4203R         Needle Bearing           15 6276H         Snap Ring, Crescent Type         65 4204R         Reduction Pinion Cluster           16 833A63         High-Low Range Gears         66 298B.J         Key, Hi-Pro 1/8 x 17/32           17 8118M         Needle Bearing         67 4926H         Snap Ring, Crescent Type           19 122238X         Shift Fork Shaft, High-Low Range         69 4205R         High Speed Gear           21 6252H1         Differential Pinion Spacer         70 1370H         Thust Bearing Race           26 622H3         Shift Fork, R.H.         72 208J         Intermediate and High Speed Clast           28 6252H         Shift Fork, R.H.         72 208J         Needle Bearing           29 6259H         Shift Fork, L.H.         73 4201R	5	4215R				4th Reduction Gear
8   74020652   Bolt, Hex Head 3/8-24 x 3-1/4   58   4214R   Final Drive Pinion						
1			Axle Thrust Washer			
9 7392M Šteel Ball 60 7528R 1st Reduction Shaft Spacer 11 14985R Shift Fork Detent 61 4208R 3rd Reduction Pinion High 2028R 3rd Reduction Pinion High 2495R 156 2276H Shaft Fork, High-Low Range 62 4207R 2nd Reduction Gear And 4196R 3rd Reduction Pinion 64 4203R 2078 2nd Reduction Pinion Cluster 156 2676H Shap Ping, Crescent Type 65 4204R Reduction Pinion Cluster 16833A63 High-Low Range Gears 66 2898J Key, Hi-Pr 1/8 x 17/32 Shap Ping, Crescent Type 65 4204R Reduction Pinion Cluster 179 18118M Reduction Bearing 68 4205R High Speed Gear 1818M Needle Bearing 71 633A69 Shift Fork Shaft 1818M Needle Bearing 71 633A69 Shift Fork Shaft 71 633A69 Sh	8	74020652				
197261	_	700011				1st Poduction Shaft Spacer
11			Steel Ball Caring Chiff Fork Dotont			
12   12   12   12   13   14   12   13   14   12   18   14   16   16   16   16   16   16   16			Chiff Early High-Law Range			
1212  1212						
14   196R						Low Speed Gear and 2nd
15 6276H				04	720011	Reduction Pinion Cluster
16   633   633   63   633   63   63				65	4204R	
17   18   15   16   16   17   17   18   15   18   18   18   18   18   19   12   18   18   18   18   18   18   18						Key, Hi-Pro 1/8 x 17/32
18   8740H1   Sintered Iron Bearing   68   4205R   Intermediate Speed Gear     19   122238X   Shift Fork Shaft, High-Low Range   69   4206R   High Speed Gear     10   122238X   Shift Fork Shaft, High-Low Range   70   1370H     12   137976   Gearcase, Reverse Idler Shaft and Bearings R. H. (Includes Key No.'s 17, 18, 25, 33, 50, 63, 76, 77 & 82)     13   137976   Gearcase and Bearing Race   80   4205R   Intermediate Speed Gear     13   13   13   13   13   14   15   16   16   16   16   16   16   16						
192238X						
20			Shift Fork Shaft, High-Low Range	69		High Speed Gear
21   6252H1   Differential Pinion Bushing   71   633A69   Intermediate and High Speed   Cluster Pinions   Cluster Pinions   Input Shaft   Low Speed Pinion   Low Sp				70		Thrust Bearing Race
23 6262H Shift Fork, R.H. 72 208J Input Shaft Low Speed Pinion Parish Programment Shaft Sh	21	6252H1	Differential Pinion Bushing	71	633A69	
24         7393R         Oil Seal         73         4201R         Low Speed Pinion           25         992R1         Sintered Iron Bearing         74         120000002         E-Ring           26         6216H         Shift Fork Shaft         75         1153R         Reverse Idler Gear           27         4986R         Shift Fork, L.H.         76         7392H         Reverse Idler Thrust Washer           28         122254X         Shift Shaft, High-Low Range         77         3990H         Needle Bearing           29         6269H         Oil Seal         78         73220500         Nut, Hex 5/16-18           30         5855H         Pressure Relief Valve         79         1167R         Sealing Washer           31         137976         Gearcase, Reverse Idler Shaft and Bearings, R.H. (Includes Key No.'s 17,18, 25, 33, 50, 63, 76, 77 & 82)         81         6270H         Oil Seal           32         6277H         Dowel Pin         84         5384J         Gearshift Lever, Bent           33         4225R         Needle Bearing         85         2978J         Gearshift Cap           34         4198R         4th Reduction Gear Shaft         87         8739H1         Shift Lever Guide Ball, Keyed           35						
25   992R1   Sintered Iron Bearing   74   12000002   E-Ring   Reverse Idler Gear   75   1153R   Reverse Idler Gear   76   7392H   Reverse Idler Thrust Washer   78   73220500   Nut, Hex 5/16-18   Nut, H						Input Shart
26 6216H Shift Fork Shaft 75 1153R Reverse Idler Gear 76 7392H Reverse Idler Gear 76 7392H Reverse Idler Thrust Washer Needle Bearing Needle Bearing Needle Bearing Nut, Hex 5/16-18 Needle Bearing Nut, Hex 5/16-18 Sealing Washer Needle Bearing Nut, Hex, Jam 7/16-20 Oil Seal 73860700 Nut, Hex, Jam 7/16-20 Oil Seal 73860700 Nut, Hex, Jam 7/16-20 Oil Seal 73860700 Nut, Hex, Jam 7/16-20 Oil Seal 7384H Reverse Idler Shaft Sealing Washer 7360700 Nut, Hex, Jam 7/16-20 Oil Seal 7384H Reverse Idler Shaft Sealing Washer Oil Seal Reverse Idler Shaft Reverse Idler Shaft Sealing Washer Oil Seal Reverse Idler Shaft Net Reverse Idler Shaft Reverse Idler Shaft Net Reverse Idler Shaft Revers						Low Speed Finion
27         4986R         Shift Fork, L.H.         76         7392H         Reverse Idler Thrust Washer           28         122254X         Shift Shaft, High-Low Range         77         3990H         Needle Bearing           29         6269H         Oil Seal         78         73220500         Nut, Hex 5/16-18           30         5855H         Pressure Relief Valve         79         1167R         Sealing Washer           31         137976         Gearcase, Reverse Idler Shaft and Bearings, R.H. (Includes Key No.'s 17,18, 25, 33, 50, 63, 76, 77 & 82)         81         6270H         Oil Seal           32         6277H         Dowel Pin         84         5384J         Gearshift Lever, Bent           33         4225R         Needle Bearing         85         2978J         Gearshift Cap           34         7396H         Thrust Bearing Race         86         633A85         Gearshift Lever, Bent           36         4200R         4th Reduction Gear Spacer         88         4924H         Shift Lever Guide Ball, Keyed           37         7395H         Thrust Bearings, L.H.         91         19181511         Washer 15/32 x 15/16 x 16 Gauge           38         121878X         Gearcase Gasket         90         110542X         Shift Mechanism Seal </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
122254X						
29 6269H Oil Seal 30 5855H Pressure Relief Valve 31 137976 Gearcase, Reverse Idler Shaft and Bearings, R.H. (Includes Key No.'s 17,18, 25, 33, 50, 63, 76, 77 & 82) 32 6277H Dowel Pin 33 4225R Needle Bearing 34 7396H Thrust Bearing Race 35 4198R 4th Reduction Gear Shaft 36 4200R 4th Reduction Gear Spacer 37 7395H Thrust Bearing Race 38 121878X Gearcase Gasket 39 137974 Gearcase and Bearings, L.H. (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52) 40 13320400 Pipe Plug 1/2-14 N.P.T. 40 13320400 Pipe Plug 1/2-14 N.P.T. 41 74780526 Bolt, Hex 5/16-18 UNC x 1-5/8 42 10140500 Washer, Lock, Extra Heavy 5/16 49 4895H Needle Bearing			Shift Chaft Wigh Low Range			
Sester   Pressure Relief Valve   79   1167R   Sealing Washer   73360700   Nut, Hex, Jam 7/16-20   Sealing Washer   Seal						
137976   Gearcase, Reverse Idler Shaft and Bearings, R.H. (Includes Key No.'s 17,18, 25, 33, 50, 63, 76, 77 & 82)   81 6270H   Reverse Idler Shaft   Gearshift Lever, Bent   Gearshift Lever, Gearshift Lever   Gearshift   Gearshift Lever   Gearshift   Gear						
Bearings, R.H. (Includes Key No.'s 17,18, 25, 33, 50, 63, 76, 77 & 82)  32 6277H Dowel Pin 84 5384J Gearshift Lever, Bent 9278J Gearshift Lever, Bent 9278J Gearshift Lever and Pin 9278J Gearshift Lever and Pin 9278J Gearshift Lever Guide Ball, Keyed 9278J Gearshift Lever Guide Ball, Keyed 928 110542X Shift Mechanism Seal 9278J Washer 15/32 x 15/16 x 16 Gauge 9278J Washer 916 x 12 Gauge 9278J Gearcase and Bearings, L.H. (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52) 93 6274H Shift Ball Cover Guide Ball, Keyed 92 75J Gearshift Gate and Reinforcement 94 76020412 Shift Mechanism Seal 95 10040500 Washer, Lock 5/16 Solt, Hex 5/16-18 UNC x 1-5/8 95 10040500 Washer, Lock 5/16-18 UNC x 7/8 97 633A109 Gearshift Lever Assembly Transaxle Assembly (Less Brake Drum and Shift Lever)			Gearcase, Reverse Idler Shaft and			Nut. Hex. Jam 7/16-20
17,18, 25, 33, 50, 63, 76, 77 & 82) 32 6277H 33 4225R 34 7396H 35 7396H 36 4200R 37 7395H 37 7395H 38 121878X 39 137974  40 13320400 40 13320400 41 74780526 40 13060200 41 74780524 41 10140500 42 895H 43 6277H 44 895H  17,18, 25, 33, 50, 63, 76, 77 & 82) 42 7384H 44 5384J 44 5384J 44 5384J 45 384J 45 384J 46 5334B5 46 633A85 47 7397J 47 6633A85 48 66 633A85 49 24H 49 7399H 49 7395H 40 13320400 40 13320400 41 74780526 42 10140500 43 20140 44 13060200 45 12 12 14 18 N.P.T. 46 13060200 47 74780524 48 10140500 49 4895H  17,18, 25, 33, 50, 63, 76, 77 & 82) 48 2 7384H 48 5384J 48 5384J 48 5384J 49 384 49 5278 49 52978J 49 633A85 69 633A85 69 633A85 69 633A85 69 633A85 69 69 739H1 89 4924H 89 4924H 89 19151516 89 19151516 89 19181511 89 6274H 89 6274H 89 76020412 89 19181511 80 6274H 80 74760514 80 7476051	01	10/0/0	Bearings, R.H. (Includes Key No.'s			
32         6277H         Dowel Pin         84         5384J         Gearshift Lever, Bent           33         4225R         Needle Bearing         85         2978J         Gearshift Cap           34         7396H         Thrust Bearing Race         86         633A85         Gearshift Lever, Bent           35         4198R         4th Reduction Gear Shaft         87         8739H1         Shift Lever Guide Ball, Keyed           36         4200R         4th Reduction Gear Spacer         88         4924H         Spring           37         7395H         Thrust Bearing Race         89         19151516         Washer 15/32 x 15/16 x 16 Gauge           38         121878X         Gearcase Gasket         90         110542X         Shift Mechanism Seal           39         137974         Gearcase Gasket         91         19181511         Washer 9/16 x 15/16 x 12 Gauge           40         13320400         Pipe Plug 1/2-14 N.P.T.         94         76020412         Cotter Pin 1/8 x 3/4           41         74780526         Bolt, Hex 5/16-18 UNC x 1-5/8         95         10040500         Washer, Lock 5/16           45         6271H         Oil Seal         96         74760514         Bolt, Hex beat of the control of the control of the control of the contro			17.18, 25, 33, 50, 63, 76, 77 & 82)			Reverse Idler Shaft
33         4225R         Needle Bearing         85         2978J         Gearshift Cap           34         7396H         Thrust Bearing Race         86         633A85         Gearshift Ball Cover and Pin           35         4198R         4th Reduction Gear Shaft         87         8739H1         Shift Lever Guide Ball, Keyed           36         4200R         4th Reduction Gear Spacer         88         4924H         Spring           37         7395H         Thrust Bearing Race         89         19151516         Washer 15/32 x 15/16 x 16 Gauge           38         121878X         Gearcase Gasket         90         110542X         Shift Mechanism Seal           39         137974         Gearcase and Bearings, L.H.         91         19181511         Washer 9/16 x 15/16 x 12 Gauge           40         13320400         Pipe Plug 1/2-14 N.P.T.         94         76020412         Thift Ball Cover Gasket           41         74780526         Bolt, Hex 5/16-18 UNC x 1-5/8         95         10040500         Washer, Lock 5/16           46         13060200         Pipe Plug 1/4-18 N.P.T.         97         633A109         Gearshift Lever Assembly           47         10140500         Washer, Lock, Extra Heavy 5/16         98         137973         Transa	32	6277H			5384J	Gearshift Lever, Bent
34       7396H       Thrust Bearing Race       86       633A85       Gearshift Ball Cover and Pin Shift Lever Guide Ball, Keyed         35       4198R       4th Reduction Gear Shaft       87       8739H1       Shift Lever Guide Ball, Keyed         36       4200R       4th Reduction Gear Spacer       88       4924H       Spring         37       7395H       Thrust Bearing Race       89       19151516       Washer 15/32 x 15/16 x 16 Gauge         38       121878X       Gearcase Gasket       90       110542X       Shift Mechanism Seal         39       137974       Gearcase and Bearings, L.H.       91       19181511       Washer 9/16 x 15/16 x 12 Gauge         40       13320400       Pipe Plug 1/2-14 N.P.T.       92       75J       Gearshift Gate and Reinforcement         41       74780526       Bolt, Hex 5/16-18 UNC x 1-5/8       95       10040500       Washer, Lock 5/16         45       6271H       Oil Seal       96       74760514       Bolt, Hex Head 5/16-18 UNC x 7/8         46       13060200       Pipe Plug 1/4-18 N.P.T.       97       633A109       Gearshift Lever Assembly         47       74780524       Bolt, Hex 5/16-18 x 1-1/2 Grade 5       98       137973       Transaxle Assembly (Less Brake         48				85		Gearshift Cap
36       4200R       4th Reduction Gear Spacer       88       4924H       Spring         37       7395H       Thrust Bearing Race       89       19151516       Washer 15/32 x 15/16 x 16 Gauge         38       121878X       Gearcase Gasket       90       110542X       Shift Mechanism Seal         39       137974       Gearcase and Bearings, L.H.       91       19181511       Washer 9/16 x 15/16 x 12 Gauge         (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52)       93       6274H       Shift Ball Cover Gasket         40       13320400       Pipe Plug 1/2-14 N.P.T.       94       76020412       Cotter Pin 1/8 x 3/4         41       74780526       Bolt, Hex 5/16-18 UNC x 1-5/8       95       10040500       Washer, Lock 5/16         45       6271H       Oil Seal       96       74760514       Bolt, Hex Head 5/16-18 UNC x 7/8         46       13060200       Pipe Plug 1/4-18 N.P.T.       97       633A109       Gearshift Lever Assembly         47       74780524       Bolt, Hex 5/16-18 x 1-1/2 Grade 5       98       137973       Transaxle Assembly (Less Brake Drum and Shift Lever)         49       4895H       Needle Bearing       Needle Bearing       Needle Bearing			Thrust Bearing Race			Gearshift Ball Cover and Pin
37         7395H         Thrust Bearing Race         89         19151516         Washer 15/32 x 15/16 x 16 Gauge           38         121878X         Gearcase Gasket         90         110542X         Shift Mechanism Seal           39         137974         Gearcase and Bearings, L.H. (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52)         91         19181511         Washer 9/16 x 15/16 x 12 Gauge Gearshift Gate and Reinforcement Shift Ball Cover Gasket           40         13320400         Pipe Plug 1/2-14 N.P.T. 94         76020412         Shift Ball Cover Gasket Cotter Pin 1/8 x 3/4 Washer, Lock 5/16           41         74780526         Bolt, Hex 5/16-18 UNC x 1-5/8 95         95         10040500 Washer, Lock 5/16 Bolt, Hex Head 5/16-18 UNC x 7/8 Gearshift Lever Assembly Transaxle Assembly (Less Brake Drum and Shift Lever)           47         74780524 74780524 Bolt, Hex 5/16-18 x 1-1/2 Grade 5 Washer, Lock, Extra Heavy 5/16 Needle Bearlng         98         137973         Transaxle Assembly (Less Brake Drum and Shift Lever)		4198R				
38 121878X Gearcase Gasket 90 110542X Shift Mechanism Seal Washer 9/16 x 15/16 x 12 Gauge (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52) 93 6274H Shift Ball Cover Gasket 41 74780526 Bolt, Hex 5/16-18 UNC x 1-5/8 45 6271H Oil Seal 96 74760514 Gearshift Lever Assembly 41 13060200 Pipe Plug 1/4-18 N.P.T. 97 633A109 Gearshift Lever Assembly 137973 Transaxle Assembly (Less Brake Drum and Shift Lever)						Spring
39 137974 Gearcase and Bearings, L.H. (Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52)  40 13320400 Pipe Plug 1/2-14 N.P.T. 94 76020412 Shift Ball Cover Gasket 41 74780526 Bolt, Hex 5/16-18 UNC x 1-5/8 95 10040500 Washer, Lock 5/16 45 6271H Oil Seal 96 74760514 Bolt, Hex 5/16-18 N.P.T. 97 633A109 Gearshift Lever Assembly Transaxle Assembly (Less Brake Drum and Shift Lever) 47 74780524 Bolt, Hex 5/16-18 x 1-1/2 Grade 5 98 137973 Transaxle Assembly (Less Brake Drum and Shift Lever)						
(Includes Key Numbers 18, 25, 49, 50 (2), 51 and 52)  40 13320400 Pipe Plug 1/2-14 N.P.T. 94 76020412 Cotter Pin 1/8 x 3/4 41 74780526 Bolt, Hex 5/16-18 UNC x 1-5/8 95 10040500 Washer, Lock 5/16 45 6271H Oil Seal 96 74760514 Bolt, Hex 6/16-18 UNC x 7/8 46 13060200 Pipe Plug 1/4-18 N.P.T. 97 633A109 Gearshift Lever Assembly Transaxle Assembly (Less Brake Drum and Shift Lever)  47 74780524 Bolt, Hex 5/16-18 x 1-1/2 Grade 5 98 137973 Transaxle Assembly (Less Brake Drum and Shift Lever)			Gearcase Gasket			
50 (2), 51 and 52) 93 6274H Shift Ball Cover Gasket Cotter Pin 1/8 x 3/4 Pipe Plug 1/2-14 N.P.T. 94 76020412 Cotter Pin 1/8 x 3/4 Washer, Lock 5/16 Bolt, Hex 5/16-18 UNC x 1-5/8 Pipe Plug 1/4-18 N.P.T. Pipe Plug 1/4-18 UNC x 7/8 Pipe Plug 1/4-18 UNC x 1-5/8 Pipe Plug 1/2-14 N.P.T. Pipe Plug 1/	39	137974	Gearcase and Bearings, L.H.			
40       13320400       Pipe Plug 1/2-14 N.P.T.       94       76020412       Cotter Pin 1/8 x 3/4         41       74780526       Bolt, Hex 5/16-18 UNC x 1-5/8       95       10040500       Washer, Lock 5/16         45       6271H       Oil Seal       96       74760514       Bolt, Hex Head 5/16-18 UNC x 7/8         46       13060200       Pipe Plug 1/4-18 N.P.T.       97       633A109       Gearshift Lever Assembly         47       74780524       Bolt, Hex 5/16-18 x 1-1/2 Grade 5       98       137973       Transaxle Assembly (Less Brake Drum and Shift Lever)         49       4895H       Needle Bearing						
41 74780526 Bolt, Hex 5/16-18 UNC x 1-5/8 95 10040500 Washer, Lock 5/16 Bolt, Hex Head 5/16-18 UNC x 7/8 46 13060200 Pipe Plug 1/4-18 N.P.T. 97 633A109 Gearshift Lever Assembly Transaxle Assembly (Less Brake Drum and Shift Lever) 47 74780524 Bolt, Hex 5/16-18 x 1-1/2 Grade 5 98 137973 Transaxle Assembly (Less Brake Drum and Shift Lever)	40	10000400	50 (2), 51 and 52)			
45 6271H Oil Seal 96 74760514 Bolt, Hex Head 5/16-18 UNC x 7/8 46 13060200 Pipe Plug 1/4-18 N.P.T. 97 633A109 Gearshift Lever Assembly 47 74780524 Bolt, Hex 5/16-18 x 1-1/2 Grade 5 48 10140500 Washer, Lock, Extra Heavy 5/16 49 4895H Needle Bearing			Polt Hoy 5/16-18 LINC v 1-5/8			
46 13060200 Pipe Plug 1/4-18 N.P.T. 97 633A109 Gearshift Lever Assembly 47 74780524 Bolt, Hex 5/16-18 x 1-1/2 Grade 5 98 137973 Transaxle Assembly (Less Brake 48 10140500 Washer, Lock, Extra Heavy 5/16 49 4895H Needle Bearing						Bolt, Hex Head 5/16-18 UNC x 7/8
47 74780524 Bólt, Hex 5/16-18 x 1-1/2 Grade 5 98 137973 Transaxle Assembly (Less Brake 48 10140500 Washer, Lock, Extra Heavy 5/16 Drum and Shift Lever) 49 4895H Needle Bearing			Pine Plug 1/4-18 N.P.T.			
48 10140500 Washer, Lock, Extra Heavy 5/16 Drum and Shift Lever) 49 4895H Needle Bearing			Bolt. Hex 5/16-18 x 1-1/2 Grade 5			Transaxle Assembly (Less Brake
49 4895H Needle Bearing						Drum and Shift Lever)
and a comparison to the state of the state o			Needle Bearing			
50 4222R Needle Bearing NOTE: All component dimensions given in U.S. inches	50	4222R	Needle Bearing	NO	TE: All compor	nent dimensions given in U.S. inches

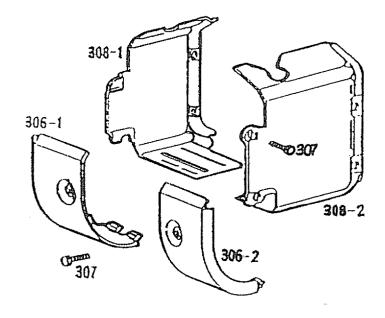
1 inch = 25.4 mm

18 HP 44" TRACTOR - MODEL NUMBER 917.255970 BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1243-01

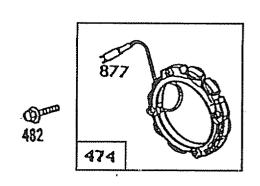


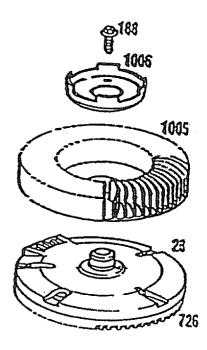


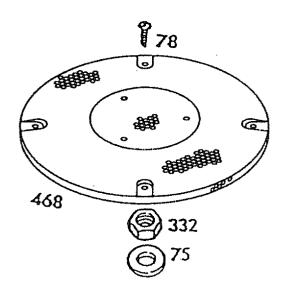


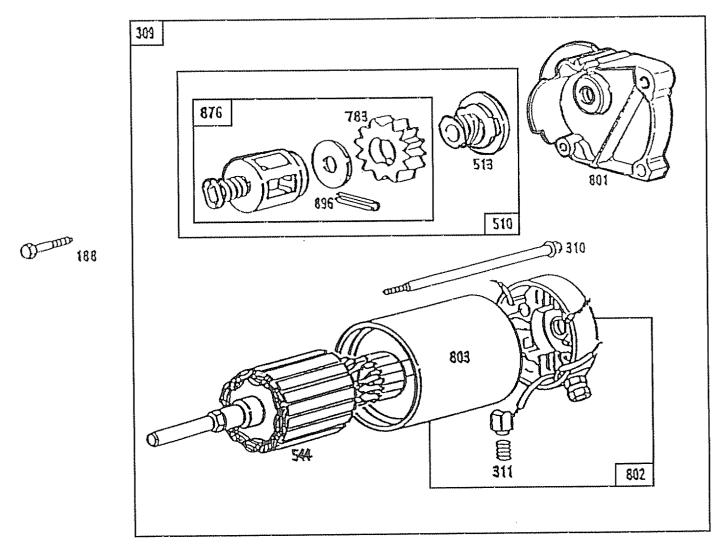












Reference	Number	309	310	311	544	801	B02	603
		Motor and	Thru Bolt	Brush	Armature	Drive End Cap	End Cap Ass'y.	Housing
Manufac	turer	Drive Ass'y.	Assembly	Assembly	Assembly	Assembly	Commutator	Assembly
Briggs &	Housing							ţ
Stratton	Length							
12V	3-5/8"	394808	94003	395538	390837	394860	395537•	398159

<sup>\*</sup>Includes Brush Set

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

	PART NO.	DESCRIPTION		PART NO.	DESCRIPTION
1	494533	Cylinder Assembly	42	93630	Retainer, Exhaust Valve Rotocoil(2)
2	399265	Bearing, Cylinder	45	261368	Tappet, Valve
3 5-1	391086	Seal, Oil		213421	Gear, Cam
5-2	493457 493458	Head, Cylinder Number 1	50	213290	Manifold, Intake
7-1	271867	Head, Cylinder Number 2 * Gasket, Cylinder Head Number 1	51	271412	*** Gasket, Carburetor & Intake Elbow
7-2	271868	* Gasket, Cylinder Head Number 2	51A 52	280319 270884	Spacer, Carburetor
8-1	398065	Breather Assembly Number 1	53	93970	* Gasket, Intake Manifold Mounting Screw, Sems, Carburetor Mounting
8-2	222892	Cover, Breather, Cylinder Number 2		93208	Screw, Sems, Intake Manifold Mnt.
		(Use with Key Number 572, Air	75	222511	Washer, Spring
0	07000	Baffle with Mounting Holes)		94326	Screw, Sems
9 10	27803 94382	* Gasket, Valve Cover	81	223016	Lock, Muffler Screw
11	280225	Screw, Sems Tube, Breather	90	495181	Carburetor Assembly
12	271703	* Gasket, Crankcase Cover 1/64"	91 03	495035 231209	Body Assembly, Upper Carburetor
	271188	* Gasket, Crankcase Cover .005"	94	491538	Bushing, Throttle Shaft  ** Valve Assembly, Carburetor Idle
	271189	* Gasket, Crankcase Cover .009"	95	93499	Screw, Sems, Throttle and Choke
13	94565	Screw, Cylinder Head		00,00	Valve Mounting
15	94239	Plug, Oil Drain	96	221939	Valve, Throttle
15A	94497	Plug, Pipe	97	392672	Shaft and Lever, Throttle
10	394028 94196	Crankshaft Key, Timing Gear		91920	Screw, Machine, Fillister Head
18	493304	Base Assembly, Crankcase	99	26157 271607	Spring, Throttle Adjustment
20	291675	Seal, Oil	102	298514	** Gasket, Carburetor Body Float, Carburetor
21	399195	Seal Assembly, Cylinder Plug	104	230896	** Pin, Float Hinge
22	90887	Screw, Sems, Crankcase Cover	105	394683	** Valve, Fuel Inlet
		Mounting	107	491543	Body, Lower Carburetor
23	491180	Uses: 92268 Washer, Lock		223534	Valve, Choke
20	431100	Flywheel and Ring Gear Assembly, Magneto	109	392673 280474	Shaft and Lever, Choke
24	222698	Key, Flywheel	117	231338	O-Ring Jet, Needle Valve
25	394955	Piston Assembly, Standard	119	94152	Screw, Sems, Hex Head
	394956	Piston Assembly .010" Oversize	120	92290	Washer, Lock
	394957	Piston Assembly .020" Oversize		491539	Carburetor Overhaul Kit
26	394958 394959	Pision Assembly .030" Oversize	127	223472	Plug, Welch
20	394960	Ring Set, Piston, Standard Ring Set, Piston .010" Oversize	161	398826	Body, Air Cleaner
	394961	Ring Set, Piston .020" Oversize		94289 299146	Nut, Wing
	394962	Ring Set, Piston .030" Oversize	188	93535	Line, Fuel, 28" (Cut to Suit) Screw, Hex Head
	260924	Lock, Piston Pin	201	262683	Link, Governor
28	299691	Pin Assembly, Piston, Standard		262684	Link, Throttle
29	391286 394306	Pin Assy., Piston .005" Oversize		280997	Crank, Bell
25	397158	Rod Assembly, Connecting Rod Assembly, Connecting,		490207	Crank, Bell
	007100	.020" Undersize Crankpin Bore		93971 94298	Screw, Shoulder
31	220863	Washer	207	262337	Nut, Square Spring, Compression
	92909	Screw, Connecting Rod	209	262352	Spring, Governor
	390420	Valve, Exhaust		261563	Spring, Governor Idle
34	261528	Valve, Intake			,
		Uses: 393606 Seal Assembly and	*	Included in G	Basket Set (491856)
35	65906	Retainer (Key Number 868) Spring, Intake Valve	**	Included in C	Carburetor Överhaul Kit (491539)
	26828	Spring, Exhaust Valve		Carburetor C	oth Gasket Set (491856), and É Overhaul Kit (491539)
	221596	Retainer, Intake Valve		Valuatelli C	vernaul Nit (45 1005)
41	292260	Rotocoil, Exhaust Valve	NOTE	≣: All compo	nent dimensions given in U.S. inches
				1 inch = 2	5.4 mm

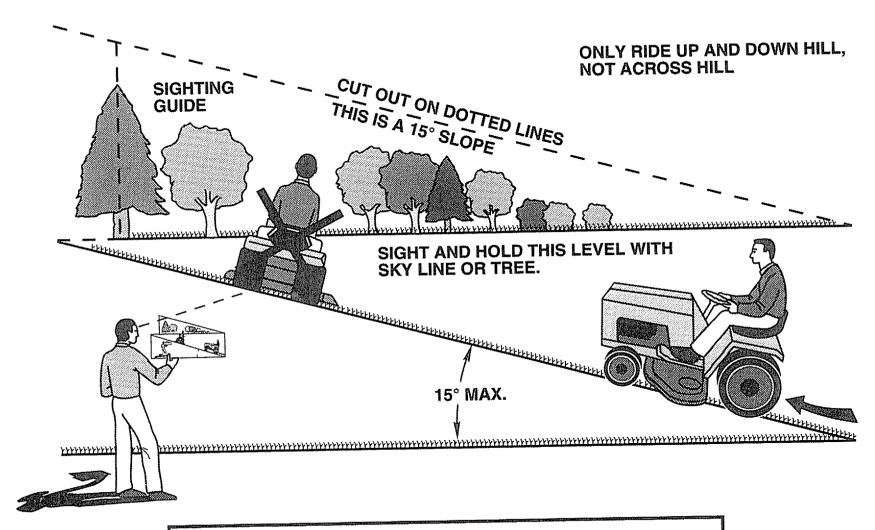
## 18 HP 44" TRACTOR - MODEL NUMBER 917.255970 BRIGGS & STRATTON ENGINE - MODEL NUMBER 422707, TYPE NUMBER 1243-01

KEY PART NO. NO.	DESCRIPTION	KEY PART NO. NO.	DESCRIPTION
216	Link Oil Slinger Assembly Gear, Governor Washer, Thrust Plate Assembly, Governor Control Screw, Pan Head Lever Assembly, Governor Washer Washer, Governor Crank, Inside Spring, Governor Control Shield, Spitback Filter, Fuel (In Fuel Line to Tank) Connector, Impulse Pump Screw, Sems Screw, Sems Screw, Sems Screw, Hex Head Screw, Hex Head Screw, Hex Head Housing, Blower Screw, Sems 1/2 Screw, Sems 1/2 Screw, Sems Cover, Air Guide Cover, Air Guide Cover, Air Guide Cover, Air Guide Motor, Starting (See Chart on Illustrated Pages for Part Numbers) Armature Assembly Nut, Hex Armature Group, MAGNETRON® Ignition Screw, Sems, Armature Mounting Plug, Spark, Resistor (with Gasket) Wire, Ground Gasket Set Puller, Flywheel (Optional Accy.) Wrench, Spark Plug Body, Pump ***** Spring, Pump ***** Spring, Pump ***** Spring, Pump ***** Diaphragm Washer Clamp, Oil Filler ***** Cap, Spring	552 262332 552A 262331 556 93585 562 93853 567 93777 569 270981 572 224580 573 491304 592 92278 601 93053 615 94296 616 491530 634 271013 634A 491287 635 66538 642 223579 643 223714 726 391362 741 262694 819 94675 842 271170 847 394394 851 221798 858 270989 ***	Seal, Tube Tube, Oil Filler Impulse Line and Clamp Assembly Element, Air Cleaner **Gasket, Air Cleaner Lower Bushing, Governor Upper Bushing, Governor Screw, Sems, Hex Head Bolt, Governor Lever Screw, Hex Head, Back Plate to Cylinder *Gasket, Crankcase Baffle, Air, Cylinder Number 2 Back Plate Assembly Nut, Hex Clamp, Fuel Line Retainer, E-Ring Crank, Governor **Washer, Throtte Shaft Seal, Governor Shaft Elbow, Spark Plug Cover, Air Cleaner Cartridge Plate, Air Cleaner Gear, Flywheel Ring (Includes Mounting Parts) Gear, Timing Screw, Hex Head Seal, Oil Filler Cap Dipstick and Tube Assembly Terminal, Ignition Cable ***Diaphragm, Damping ***Gasket, Carburetor Pump ***Spring (2) Repair Kit, Pump Seal Assembly and Retainer Seat, Intake Valve, Standard Guide, Exhaust Valve, Standard Guide, Exhaust Valve Guide, Intake Valve (See Manual) Connector Assembly, Tri-Circuit Cover Plate, Crankcase Plug and Seal, Solenoid Fan, Flywheel Retainer, Fan Decal Kit
434 223688 435 93829 445 394019 467 493903 468 224521 474 392595 482 93621	Cover, Diaphragm Screw, Diaphragm Cover Cartridge, Air Cleaner Knob, Air Cleaner Screen, Flush Rotating Stator, Alternator, Tri-Circuit Screw, Sems	** Included in 6  *** Included in 6  Carburetor 6  **** Included in 1  and Pump F	Gasket Set (491856) Carburetor Overhaul Kit (491539) both Gasket Set (491856), and Overhaul Kit (491539) both Carburetor Overhaul Kit (491539), Repair Kit (393397)
523 494927 524 271157	Cap and Dipstick, Oil Filler Seal, Filler Tube	NOTE: All compo	onent dimensions given in U.S. inches 25.4 mm

RPM Settings: Low 1200-1600 High 3200-3400

## **SERVICE NOTES**

## SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION





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

## SEARS

# OWNER'S MANUAL

MODEL NO. 917.255970

## HOW TO ORDER REPAIR PARTS

# CRAFTSMAN®

#### 18.0 HP TWIN CYLINDER ELECTRIC START 44" MOWER 6 SPEED TRANSAXLE GARDEN TRACTOR

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

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

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

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

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

- PRODUCT GARDEN TRACTOR
- MODEL NUMBER 917.255970
- ENGINE MODEL NO. 422707, TYPE NO. 1243-01
- 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 self.

138190 Rev. 2 1.11,93

Printed in U.S.A.