SEARS
OWNERS
MANUAL

MODEL NO. 917.254232

FILE SOPY

Caution:
Read and Follow
All Safety Rules
And Instructions
Before Operating
This Equipment

Possibly the same as a 944.605110. USE CAUTION WHEN ORDERING PARTS FROM THIS IPL

FILE GOPY



CRAFTSMAN

LT 11 HP ELECTRIC START 5 SPEED - 38" MOWER LAWN TRACTOR

- Assembly
- Operation
- Maintenance
- Repair and Adjustment
- Repair Parts

SAFETY RULES

- 1. Know the controls and how to stop quickly. READ THIS OPERATOR'S MANUAL and instructions furnished with attachments.
- 2. Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
- 3. Do not carry passengers. Do not mow when children and others are around.
- 4. Always wear substantial footwear. Do not wear loose fitting clothing that could get caught in moving parts.

 5. Keep your eyes and mind on your tractor, mower and the
- area being cut. Do not let other interests distract you.
- 6. Do not attempt to operate your tractor or mower when not in the drivers seet.
- 7. Always get on or off your tractor from the operator's left hand side.
- 8. Clear the work area of objects (wire, rocks, etc.) which might be picked up and thrown.
- 9. Disangage all attachment clutches before attempting to start the engine.
- 10. Disengage power to attachments and stop the engine before leaving the operator's position.
- 11. Disengage power to mower, stop the engine and disconnect spark plug wire(s) from spark plug(s) before cleaning, making an adjustment or repair. Be careful to avoid touching hot muffler or engine components.
- 12. Disengage power to attachments when transporting or not in use.
- 13. Take all possible precautions when leaving the vehicle unattended. Disengage the power-take-off, lower the attachments, shift into neutral, set the parking brake, stop the engine and remove the key.
- 14. Do not stop or start suddenly when going, uphill or downhill. Mow up and down the face of slopes (not greater than 15°); never across the face. Refer to page 51.
- 15. Reduce speed on slopes and make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
- 16. While going up or down slopes, place Gear Shift Control Lever in 1st gear position to negotiate the slope without stopping.
- 17. Never mow in wet or slippery grass, when traction is unsure or at a speed which could cause a skid.
- 18. Stay alert for holes in the terrain and other hidden hazards. Keep away from drop-offs.
- 19. Do not drive too close to creeks, ditches and public highways.
- 20. Exercise special care when mowing around fixed objects in order to prevent the blades from striking them. Never deliberately run tractor or mower into or over any foreign obiects.
- 21. Never shift gears until tractor comes to a stop.
- 22. Never place hands or feet under the mower, in discharge chute or near any moving parts while tractor or mower are running. Always keep clear of discharge chute.

- 23. Use care when pulling loads or using heavy equipment.
 - a. Use only approved drawbar hitch points.
 - b. Limit loads to those you can safely control. c. Do not turn sharply. Use care when backing.
 - d. Use counterweight or wheel weights when suggested in the owner's menual.
- 24. Watch out for traffic when crossing or near roadways.
- 25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vahicle while in operation.
- 26. Handle gasoline with care it is highly flammable.
 - a. Use approved gasoline containers .
 - b. Never remove the fuel cap of the fuel tank or add gasoline to a running or hot engine or an engine that has not been allowed to cool for several minutes after running. Never fill tank indoors, always clean up spilled gasolina.
 - c. Open doors if the engine is run in the garage exhaust fumes are dangerous. Do not run the engine indoors.
- 27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place and working.
- 28. Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- 29. Never store the equipment 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.
- 30. To reduce fire hazard, keep the engine free of grass, leaves or excessive grease. Do not clean product while engine is runnina.
- 31. Except for adjustments; DO NOT operate Engine if air cleaner or cover directly over carburetor air intake is removed. Removal of such part could create a fire hazard.
- 32. Do not operate without a muffler or tamper with exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically and replace if necessary,
- 33. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object and the damage should be repaired before restarting and operating the equipment.
- 34. Do not change the engine governor settings or overspeed the engine; severe damage or injury may result.
- 35. When using the vehicle with mower, proceed as follows: a. Mow only in daylight or in good artificial light.
 - b. Shut the engine off when unclogging chute.
 - c. Check the blade mounting bolts for proper tightness at frequent intervals.
- 36. Do not operate the mower without the deflector shield in
- 37. Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mowar.
- 38. Under normal usage the grass catcher bag material is subject to deterioration and wear. It should be checked frequently for bag replacement. Replacement bags should be checked to ensure compliance with the original manufacturer's recommendations or specifications.



LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS--ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

CAUTION: LOOK FOR THIS WORD TO POINT OUT IMPORTANT EQUIPMENT PRECAUTIONS.



THIS UNIT IS EQUIPPED WITH AN INTERNAL COMBUSTION ENGINE AND SHOULD NOT BE USED ON OR NEAR ANY UNIMPROVED FOREST COVERED, BRUSH COVERED, OR GRASS COVERED LAND UNLESS THE ENGINE'S EXHAUST SYSTEM IS EQUIPPED WITH A SPARK ARRESTER MEET-ING 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. Refer to the Repair Parts Section, page 32. CONGRATULATIONS on your purchase of a Sears Lawn 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 Department. We have competent, well-trained technicians and the proper tools to service or repair this unit.

MAINTENANCE AGREEMEN	N	AE.	N	E	F	R	G	Δ	CE	N	Δ	N	ΤE	N	11	Δ	M
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A Sears Maintenance Agreement is available on this product. See the nearest Sears store or service center for details.

SERIAL NUMBER
DATE OF PURCHASE
THE SERIAL NUMBER WILL BE FOUND ON THE MODEL PLATE UNDER THE SEAT.
YOU SHOULD RECORD THESE NUMBERS AND KEEP FOR FUTURE REFERENCE.

NAMES CONTROL CONTROL

CUSTOMER RESPONSIBILITIES

Read and retain this manual. Study and observe the safety rules. Always use care when using your tractor. Always keep you tractor and mower clean. Follow a regular schedule in maintaining, caring for, and using your tractor. A well cared for tractor will run better and last longer.

ATTACHMENTS

This unit can use many attachments now available at your Sears store. It cannot use attachments that engage the ground like a plow, harrow, cultivator, or tiller. See page 50 for a list of available attachments.

LIMITED ONE YEAR WARRANTY ON ELECTRIC START RIDING EQUIPMENT

RECONNECTION CONTRACTOR CONTRACTO

For one year from date of purchase, when this riding equipment is maintained, lubricated, and tuned up according to the operating and maintenance instruction in the owner's manual, Sears will repair free of charge any defect in material or workmanship in this electric start riding equipment.

This warranty excludes blade(s), blade adapter(s), spark plug(s), air cleaner and belt(s), which are expendable and become worn during normal use.

This warranty does not cover:

- Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass); and
- repairs necessary because of operator abuse or negligence, including the failure to maintain the equipment according to instructions contained in the owner's manual; and
- riding equipment used for commercial or rental purposes.

FULL 90-DAY WARRANTY ON BATTERY

For 90 days from the 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 CONTACTING THE NEAREST SEARS SERVICE CENTER/DEPART-MENT IN THE UNITED STATES. This warranty applies only while this product is in use 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/698-731A, Sears Tower, Chicago, II 60684

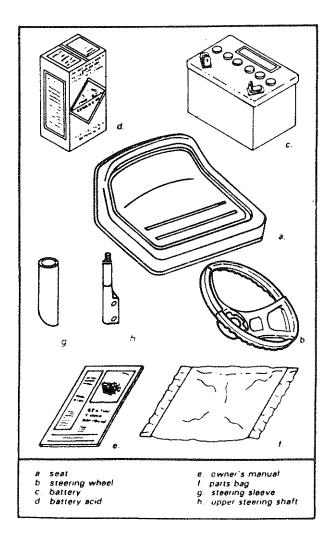
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ASSEMBLY

1. Unpack Tractor

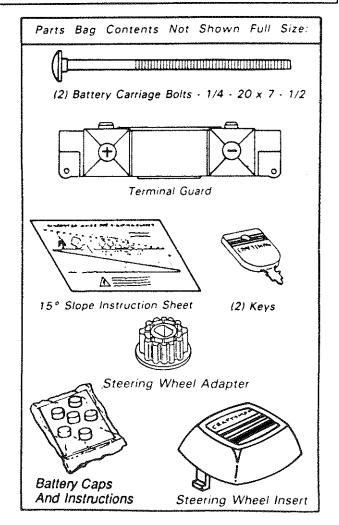
- Take items out of box. The box contains the items shown below.
- b. Cut down four corners of the carton with a utility knife and fold down sides.
- c. Disengage Parking Brake.
- d. Install Steering Wheel
 - Slide upper steering shaft over lower steering shaft until bolt holes line up with slots in lower steering shaft (Fig. 1).
 - 2. Use two hex bolts 3/8 16 x 1-1/4 and two locknuts 3/8 16 to retain upper steering shaft to lower steering shaft. Tighten securely.
 - 3. Position Steering Sleeve over steering shaft assembly.
 - For easier assembly, tilt tube towards front of tractor.
 - 5. Place bottom of Steering Sleeve over two front prongs on steering bushing.
 - Squeeze the two steering sleeve retainers inward to allow Steering Sleeve to pass over retainers.



- 7. Push Steering Sleeve down aligning notch on Steering Sleeve with tab on steering bushing.
- 8. Place steering wheel adapter on upper steering shaft.
- With front wheels pointed straight ahead, place steering wheel on steering wheel adapter. Bars of steering wheel should point straight across tractor.
- Place 2 1/4" diameter washer on upper steering shaft and install a 1/2" locknut (washer and locknut found in bag of parts). Tighten securely.
- 11. Snap insert into steering wheel.
- Remove plastic on tractor hood.
- f. Raise attachment lift handle.
- g. Roll Tractor off skid. Be careful of staples in skid.



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 before starting your tractor and while moving. We recommend Wide Vision Safety Mask for over the spectacles or standard safety glasses, available at Sears Retail or Catalog Stores.



ASSEMBLY

ASSEMBLY LOCATION	PARTS BAG CONTENTS SHOWN FULL SIZE
BATTERY	(2) Lockwasher, 1/4 Int/Ext Tooth (2) Wing Nut - 1/4 - 20
BATTERY TERMINALS	(2) Hex Bolt, 1/4 - 20 x 3/4 (2) Lockwasher 1/4 (2) Washer 9/32 x 5/8 x 16 Ga. (2) Hex Nut, 1/4 - 20
SEAT	(1) Hex Bolt, 1/2 - 13 x 1 (1) Lockwasher 1/2 (1) Washer 17/32 x 1-3/16 x 12 Ga. (1) Washer 15/32 x 1 x 16 Ga.
UPPER STEERING SHAFT	(2) Hex Bolt 3/8 - 16 x 1 - 1/4 (2) Hex Locknut 3/8 - 16
STEERING WHEEL	(1) Locknut, 1/2-20

To assemble tractor you will need:

(2) 7/16" Wrenches

Tire Pressure Gauge

(1) 1/2" Wrench

Screwdriver

(2) 9/16" wrenches (1) 3/4" wrench

Utility Knife

NOTE: RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION

WHILE SEATED ON THE TRACTOR.

WEAR EYE AND FACE SHIELD.

WASH HANDS OR CLOTHING IM-MEDIATELY IF ACCIDENTALLY IN CONTACT WITH BATTERY ACID.



DO NOT SMOKE; FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE.

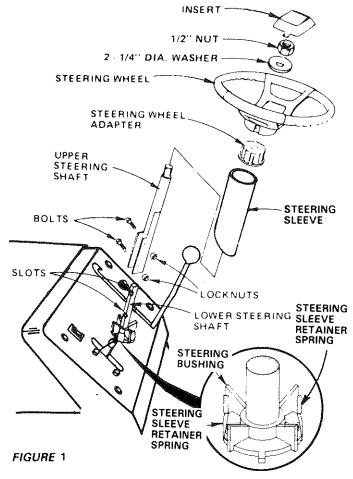
READ THE INSTRUCTIONS INCLUD-ED WITH THE BATTERY VENT CAPS IN THE BAG OF PARTS. AL-WAYS WEAR GLOVES, CLOTHING AND GOGGLES TO PROTECT YOUR HANDS, SKIN AND EYES.

2. Prepare Battery

Fill and charge battery (before installing). NOTE: SEE DETAILED INSTRUCTIONS PACKAGED WITH BATTERY VENT CAPS FOUND IN BAG OF PARTS.

- a. Fill each cell with battery acid. Add the acid until it reaches the bottom of the vent tubes (Fig. 3). Do not add the acid beyond this level or the additional acid can come out when the battery is charged.
- b. After cells are filled, tilt battery from side to side to release air bubbles.
- c. Allow battery to stand and settle for at least thirty minutes. If the level of acid falls below the point described in step (a), add more acid until the correct level is reached. Install the battery caps, found in the bag of parts, to cover the vent tubes. Wash the top of the battery with water to remove any acid, then wipe
- d. Check battery case for leakage to make sure that no damage has occured in handling.
- e. Neutralize excess battery 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.
- Use a 12 volt battery charger. Charge battery at a rate of 6 amperes for 1 hour. NOTE: OBSERVE SAFETY PRECAUTIONS, LISTED IN BOX ABOVE, 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.

ASSEMBLY



3. Install Seat.

Seat position should be adjusted forward or backward so that the operator can comfortably reach Clutch/Brake Pedal and safely operate tractor.

- a. Place seat on seat pan. Screw hex head machine screw, lockwasher and flat washer into seat (Fig. 2). Screw shoulder bolt and flat washer into seat (Fig. 2). Machine screw, shoulder bolt and flat washers found in bag of parts (shown full size on page 6).
- Tighten shoulder bolt and flat washer using a 1/2" wrench.
- Tighten machine screw, lockwasher and flat washer using a 1/2" wrench.
- Place seat in operating position. Sit on the seat and press clutch/brake pedal all the way down. If operating position is not comfortable, adjust seat.
- To adjust: Raise seat. Loosen machine screw. Slide seat to desired position. Tighten machine screw securely.



MACHINE SCREW-LOCKWASHER-FLAT WASHER MUST BE TIGHTENED SECURE-LY TO PREVENT MOVEMENT OF SEAT.

ASSEMBLY

4. Check Tires

Check the air pressure in the tires. Tires with too much air pressure will cause the unit to ride rough. The wrong air pressure will also keep the mower from cutting level. The correct air pressure is shown on the side of the tires. If the air pressure is not shown, set to pressures shown in the REPAIR AND ADJUSTMENT section (page 14).

5. Install Battery



BEFORE INSTALLING BATTERY, REMOVE METAL BRACELETS, WRISTWATCH BANDS, RINGS, ETC. FROM YOUR PERSON. TOUCHING THESE ITEMS TO BATTERY TERMINALS COULD RESULT IN BURNS.

- a. Lift seat (Fig. 2).
- b. Lower battery into fender well with battery terminals toward front of tractor (Fig. 4). Make sure battery rests in battery tray (Fig. 4).

NOTE: BE SURE BATTERY DRAIN TUBE IS SECURELY ATTACHED TO BATTERY TRAY DRAIN.

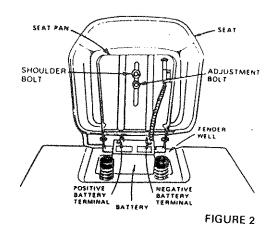


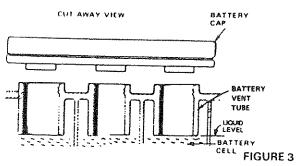
POSITIVE TERMINAL MUST BE CON-NECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING.

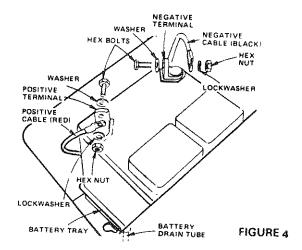
- c. Connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lockwasher and hex nut (shown full size on pg. 6) found in bag of parts. Tighten securely with two 7/16" wrenches. (Fig. 4)
- d. Connect BLACK ground cable to negative (-) battery terminal with remaning hex bolt, flat washer, lockwasher and hex nut (shown full size on pg. 6) found in bag of parts. Tighten securely. (Fig. 4)
- e. To prevent corrosion, apply grease to the battery terminals after installing cables.
- f. Using the key hole on one side of the battery support (Fig. 5) slide battery bolt into frame key hole (head of bolt down). Fasten the battery bolt to the terminal guard using internal/external lockwasher, wing nut, (shown full size on pg. 6) as shown in Fig. 5.
- g. Assemble the remaining battery bolt to other side of battery support and fasten terminal guard to it with remaining internal/external lockwasher and wing nut, (Shown full size on pg. 6). Tighten wing nuts securely by hand (Fig. 5).

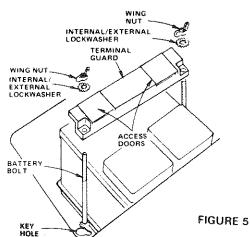
NOTE: KEEP TERMINAL ACCESS DOORS CLOSED WHEN NOT IN USE.

CAUTION: DO NOT START ENGINE UNTIL YOU HAVE REVIEWED THE OPERATION SECTION OF THIS MANUAL.







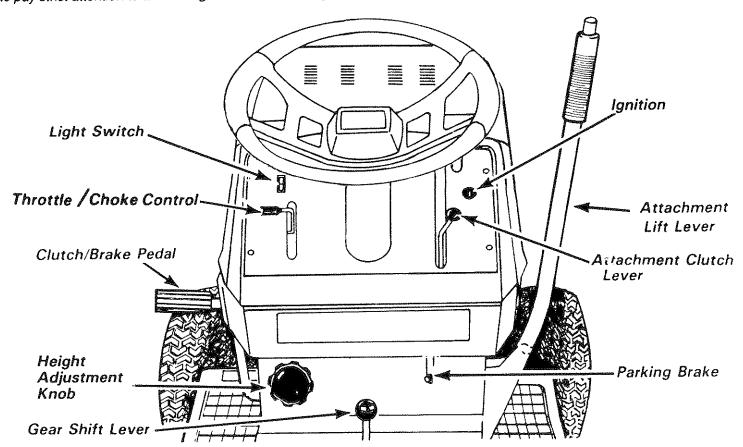


6. Maintenance After First 2 Hours (Two Mowings) Changing oil after the first two hours (or two mowings) will help eliminate break-in residue which might be damaging to your engine.

OPERATION

KNOW YOUR TRACTOR

READ THIS OWNER'S MANUAL BEFORE OPERATING YOUR LAWN TRACTOR. If you understand the unit and its operation, you will achieve efficient and peak performance. While reading the manual, compare the illustrations with your Lawn Tractor to familiarize yourself with the location of various controls and adjustments. Study the operating instructions and safety precautions thoroughly to insure proper functioning of your Lawn Tractor and to prevent injury to yourself and others. Be sure to pay strict attention to all warnings and cautions: they are included for your safety. Save this manual for future reference.



ATTACHMENT CLUTCH LEVER: Push lever up to engage attachment. There will be an engine hesitation as the clutch engages.

ATTACHMENT LIFT LEVER: Use the attachment lift lever to raise and lower the attachment mounted to your tractor. Pull lever back slightly and push button, then move the lift lever forward to lower attachment.

CLUTCH/BRAKE PEDAL: The pedal has 2 functions; a clutch and a brake. To engage the brake push the pedal completely down.

ATTACHMENT HEIGHT ADJUSTMENT KNOB: Use the height adjustment knob to adjust the mower height. With the attachment lift lever in the "up" position, turn knob clockwise () to raise cutting height and counterclockwise () to lower cutting height.

GEARSHIFT: Press the clutch/brake pedal down firmly and move gear shift lever to desired speed.

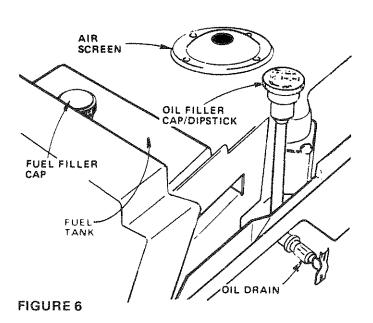
IGNITION: Place key in ignition and turn to the right to start. The switch spring returns from the start position.

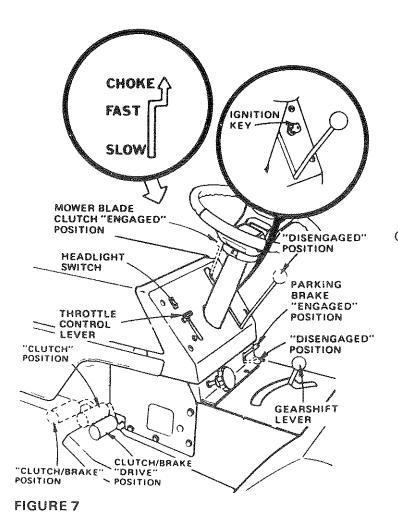
LIGHT SWITCH: Turns the headlights on and off.

PARKING BRAKE: To set the parking brake, push the clutch/brake pedal completely down. Hold the parking brake lever in "Engaged" position and release pressure from pedal. Clutch/brake pedal will remain in brake position.

THROTTLE/CHOKE CONTROL: Use the throttle control to increase or decrease the speed of the engine, and to choke the engine for starting. Push lever to the right and forward to choke.

OPERATION





1. Stopping Your Tractor

NOTE: REMOVE KEY WHEN LEAVING TRACTOR TO PREVENT UNAUTHORIZED USE.

- a. Push clutch-brake pedal into full "BRAKE" position. Keep your foot on pedal.
- b. Place attachment clutch lever in "DISENGAGED" Position.
- c. Move gear shift lever to "NEUTRAL" position.
- d. Place parking brake in "ENGAGED" position and release pressure from clutch/brake. Pedal should remain in "BRAKE" position.
- e. Move throttle control to "S" (slow) position.
- f. Turn ignition key to "OFF" position. Never use choke to stop engine.

2. Preparing The Engine



LEARN TO START, STOP AND RE-VERSE YOUR TRACTOR IN A LARGE, OPEN AREA.

- a. This engine has been shipped filled with summer weight oil (For cold weather operation see chart page 16). Check engine oil level. Refer to REPAIR AND ADJUSTMENT section (page 16).
- b. Fill fuel tank (Fig. 6). Use fresh, clean, regular unleaded gasoline. Capacity is 5 quarts.



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.

CAUTION: 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 FOR 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.

3. Starting The Engine

- a. Move throttle control lever (Fig. 7) past "FAST" to the "CHOKE" position.
- b. Turn ignition key to "START" and release key as soon as engine starts.

CAUTION: DO NOT RUN STARTER CONTINUOUSLY
FOR MORE THAN FIFTEEN SECONDS PER
MINUTE.

- c. If engine does not start after four or five tries, move throttle control lever to "FAST" position, wait a few minutes and try again. If the engine does not start after four or five more tries, see the TROU-BLESHOOTING Chart (page 25).
- d. After the engine starts move throttle control lever slowly to the "SLOW" position.
- e. To start a hot engine move the throttle control lever to a position between "FAST" and "SLOW".



READ THE "RULES FOR SAFE OPERATION" CAREFULLY BEFORE OPERATING YOUR MOWER.

CAUTION: DO NOT ADD ADDITIONAL WEIGHT TO THE TRACTOR OTHER THAN THE OPTIONAL WHEEL WEIGHTS. EXCESSIVE WEIGHT MAY OVERLOAD AND DAMAGE THE TRANSMISSION.



ALWAYS WEAR SUBSTANTIAL FOOT-WEAR AND AVOID LOOSE FITTING CLOTHING THAT COULD GET CAUGHT IN MOVING PARTS.



CAUTION TO AVOID INJURY

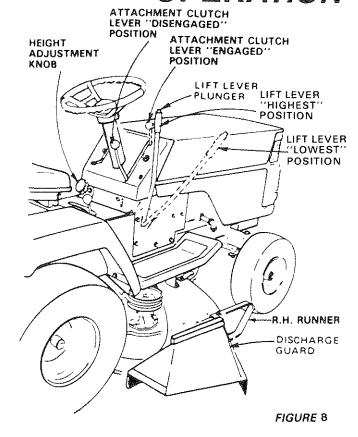
- 1. Read owner's manual.
- 2. Know location and function of all controls.
- Keep guards, safety shield and switches in place and working.
- 4. Remove objects that can be thrown by blades.
- 5. Do not mow when children and others are around.
- 6. Never carry children or passengers.
- 7. Always look behind machine before backing.
- 8. Do not mow where machine can tip or slip.
- 9. If machine stops going uphill, stop blades and back slowly down.
- 10. Be sure blades and engine have stopped before placing hands or feet near the blades.
- 11. Remove key when leaving machine.

MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.



NEVER PLACE YOUR HANDS OR FEET IN OR UNDER ANY POWERED ATTACHMENT OR NEAR ANY MOVING PART WHILE TRACTOR OR ANY POWERED ATTACHMENT IS RUNNING.

OPERATION



4. Operating Your Lawn Tractor & Mower



DO NOT OPERATE THE MOWER WITHOUT THE DEFLECTOR SHIELD (DISCHARGE GUARD) IN PLACE.

NOTE: THIS TRACTOR IS EQUIPPED WITH AN OPERATOR PRESENCE SENSING SWITCH. ANY ATTEMPT BY THE OPERATOR TO LEAVE THE SEAT WITH THE ENGINE RUNNING AND THE ATTACHMENT CLUTCH LEVER ENGAGED WILL SHUT OFF THE ENGINE.

- a. Move the attachment lift lever to the high position and adjust height of cut to mid range. See Fig 8.
- b. Start the engine. (See Starting the Engine)
- c. Move the throttle lever to mid range position. Select a low (1st or 2nd) gear until you become more familiar with the operation of the unit.
- d. Slowly release clutch brake pedal and proceed to the mowing area.
- e. Stop the unit, then select a mowing speed. (See Speed Selection Guide, page 12).
- f. Move throttle lever to half throttle and slowly move attachment clutch lever to engaged position, Fig. 8.

OPERATION

- Slowly release clutch brake pedal.
- h. Move throttle lever to fast position.
- i. Observe height of cut and readjust as desired.

CAUTION: BEFORE YOU MOVE THE GEAR SHIFT LEVER, COME TO A COMPLETE STOP. FAIL-URE TO DO SO CAN RESULT IN GEAR BOX DAMAGE.

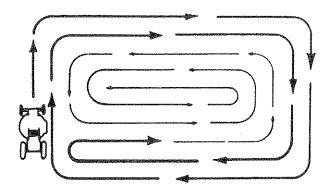


FIGURE 9

SPEED SELECTION GUIDE							
FUNCTION	THROTTLE						
Normal Mowing	2 or 3						
Heavy Mowing	1 or 2						
Snow Blowing	q	FAST					
Snow Blade	2	eg S					
Transport	4-6	SLOW - FAST					

5. Mowing Tips

NOTE: TIRE CHAINS CANNOT BE USED WITH THE MOWER ATTACHED.

- a. Mower should be adjusted properly front to back and side to side for good moving performance. Refer to REPAIR AND ADJUSTMENT section (page 22).
- Use the runner on the R.H. side as a guide; the blade cuts approximately an inch outside the runner (Fig. 8).
- c. Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.
- d. When mowing large areas (Fig. 9), start by turning to the right so that the clippings will discharge away from shrubs, fences, driveways, etc. After two or three rounds, mow in the opposite direction making left hand turns until finished
- e. If grass is extremely tall, it should be mowed twice. The first time cut relatively high; the second time to the desired height.
- f. The left hand side of mower should be used for trimming.
- g. See Speed Selection Chart.
- 6. Operating The Tractor On Hills



DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15° AND DO NOT DRIVE ACROSS ANY SLOPE. REFER TO PAGE 51.

- a. Move gear shift lever to "1st" gear before starting up or down hills.
- b. AVOID STOPPING OR SHIFTING ON HILLS.
- c. If slowing is necessary, move throttle control lever to slower position.



LEAVE ENOUGH ROOM WHEN STOP-PING AND STARTING TO ALLOW SLIGHT TRACTOR ROLL DOWNHILL AS CLUTCH-BRAKE PEDAL MOVES THROUGH CLUTCH POSITION.

- d. If stopping is absolutely necessary, push clutch/ brake pedal quickly to brake position.
- e. To restart tractor movement, make sure tractor is in the lowest speed range ("1st" Gear) and release clutch-brake pedal SLOWLY.
- f. Make all turns gradually.

To keep your tractor running better, longer, perform necessary service using the following maintenance schedule:

With Every Mowing

- 1. Make sure all nuts on bolts are tight and cotter pins and retainer springs are secure.
- 2. Observe all safety precautions.
- 3. Keep tractor well lubricated (refer to page 17).

MAINTENANCE

BEFORE MAKING ANY INSPECTION, ADJUSTMENT, OR REPAIR:

- PUSH CLUTCH/BRAKE PEDAL COMPLETELY DOWN.
- 2. MOVE GEAR SHIFT CONTROL LEVER TO NEUTRAL POSITION.
- 3. PLACE PARKING BRAKE IN "ENGAGED" POSITION. REMOVE FOOT FROM PEDAL.
- 4. DISENGAGE ATTACHMENT CLUTCH LEVER.
- 5. SHUT OFF THE ENGINE.
- 6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED.
- 7. DISCONNECT THE SPARK PLUG SPARK WIRE FROM THE PLUG AND KEEP WIRE FROM THE SPARK AWAY PLUG TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TO AVOID TOUCH-ING HOT ENGINE OR MUFFLER COMPONENTS.



SERVICE RECORD

(Enter Date Maintenance Performed)

SERVICE RECORD		S	CHEDU	LE			
Fill in dates as you complete regular service	FIRST 2 HOURS	EVERY 5 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS		
Blades - sharpen			¥			ATTOCK OF THE PROPERTY OF THE	
Brake Adjustment			V			Anna San Anna Anna Anna Anna Anna Anna A	
Check Battery			THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRESS O	4	Andreas Andrea	Radar Carzas Religionalis and a second	
Change Engine Oil	y 			4			
Check Engine Oli level		ď	W. W				
Clean Air Cleaner Element				4			
Check Muffler			200 (100 ft)	V			1
Clean Air Screen				4		**************************************	
Clean Front Grill				V			
Lubricate Tractor				4			
Replace Spark Plug					₹	CONTRACTOR AND STATE OF THE STA	
Replace Air Cleaner Element			ALL CONTROL OF THE PROPERTY OF	ACCOUNTS OF THE PROPERTY OF TH	V	Р	
Check Tire Pressure			8	дение и подавания в подавания в под		Service Control of the Control of th	1

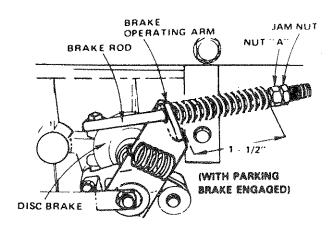
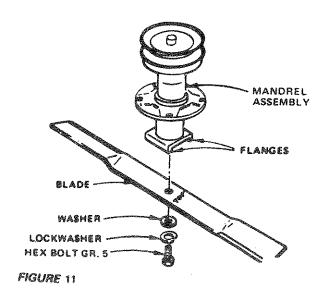


FIGURE 10





A GRADE 5 HEAT TREATED BOLT CAN BE IDENTIFIED BY THREE LINES ON THE BOLT HEAD AS SHOWN AT LEFT.

1. Brake Adjustment

This tractor is equipped with an adjustable brake system mounted on the right side of the transaxle (Fig. 10).



IF TRACTOR REQUIRES MORE THAN SIX FEET STOPPING DISTANCE IN HIGHEST GEAR, THEN BRAKE MUST BE ADJUSTED.

- Depress clutch/brake pedal and engage parking brake.
- Measure distance between brake operating arm and nut "A" on brake rod.
- c. If distance is other than 1-1/2", disengage parking brake, loosen jam nut (Fig. 10) and turn nut "A" until distance becomes 1-1/2", Retighten jam nut against Nut "A".

Road test tractor for proper stopping distance as stated above. Readjust if necessary.

2. Tire Care

Maintain tire pressure in front at 14 PSI and rear tires at 12 PSI.

3. Blade Care

For best results mower blades must be kept sharp. The blades can be sharpened with a few strokes of a file, or on a grinding wheel. We suggest they be sharpened after every 25 hours of mowing. Do not attempt to sharpen while on mower. If you mow in sandy soil check the blades after each two mowings. The sand wears the blade away rapidly.

a. Blade Replacement

Raise mower to highest position to permit access to blades.

- Remove the hex head bolt, lockwasher and flat washer (Fig. 11) (turn counterclockwise) (
- 2. Remove and discard old blade.
- 3. Clean top and bottom of mower housing.
- 4. Install new blade with SHARP EDGE DOWN and secure with flat washer, lockwasher and hex head bolt. TIGHTEN SECURELY.



ALWAYS USE GRADE 5 HEAT TREATED BOLTS TO ATTACH BLADES. DO NOT USE PLATED BOLTS. CHECK BOLTS IN BLADES OCCASIONALLY TO MAKE SURE BOLTS ARE TIGHT. TORQUE BOLTS TO 30 - 35 FT.- LBS.

b. When grinding, care should be taken to maintain blade balance and the blade should be checked for proper balance before reinstallation on mower. An unbalanced or bent blade will cause excessive vibration when running, and eventual damage to mower or engine. Replace bent or damaged blades.

c. To check blade balance, drive a nail into a beam or wall. Leave about one inch of the straight nail exposed. Place center hole of clean blade over the head of the nail (Fig. 12). NOTE: CENTER HOLE OF BLADE ON NAIL, IF BLADE IS PROPERLY BALANCED, BLADE SHOULD REMAIN IN POSITION SHOWN IN FIG. 12. IF EITHER END OF THE BLADE MOVES DOWNWARD, BLADE IS NOT BALANCED. SHARPEN THE HEAVY END UNTIL BLADE IS BALANCED.

4. BATTERY CARE

Check Battery

- a. Battery acid solution level in each battery cell should be even with bottoms of vent tubes in cells (Fig. 13). Add ONLY distilled or iron free water if necessary. NOTE: DO NOT OVERFILL.
- b. Keep battery and terminals clean.
- c. Keep battery bolts tight.
- d. Keep vent caps tight and small vent holes in caps open.
- e. Recharge at 6 amperes for 1 hour if necessary.

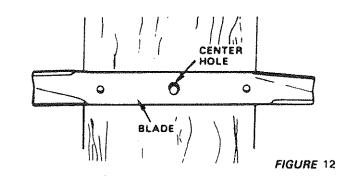
Clean Battery and Terminals

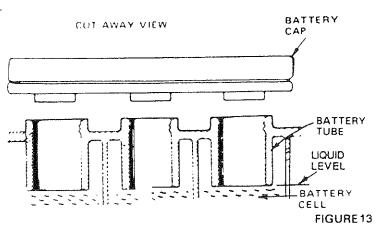
Corrosion and dirt on the battery and terminals cause the battery to "leak" power and hinders the operation of the charger.

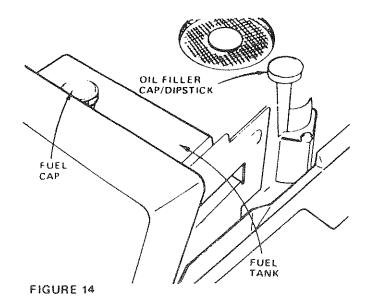


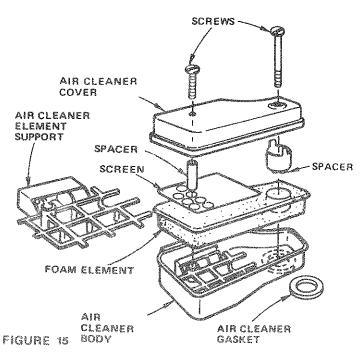
LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS SHIELD YOUR EYES AROUND BATTERIES.

- a. Remove terminal quard.
- b. Disconnect BLACK battery cable, then RED battery cable, and remove battery from tractor.
- c. Wash battery with four tablespoons of baking soda to one gallon of water. NOTE: BE CAREFUL NOT TO GET THE SODA SOLUTION INTO THE CELLS.
- d. Rinse the battery with plain water, dry and reinstall on tractor.
- e. Clean terminals and battery cable ends with wire brush until bright.
- f. Replace battery cables, connecting RED battery cable to positive terminal first, then BLACK battery cable to negative terminal. Coat terminal connections with vasoline after installation of cables.
- g. Replace terminal guard.









5. Change Engine Oil

The best time to change engine oil is at the end of a day's operation when all dirt and foreign materials are suspended in the hot oil.

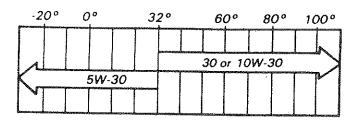
Capacity is 1-1/2 quarts. NOTE: DO NOT OVERFILL. Dipstick assembly must be securely tightened into tube at all times when engine is operating.

IMPORTANT:

TO AVOID DAMAGE TO THE STARTING SYSTEM, USE SAE 5W30 OIL WHEN THE TEMPERATURE FALLS BELOW 32°.

Recommended SAE Viscosity Grades

Determine temperature range expected before next oil change. All oil must meet A.P.I. service classification SD, SE or SF.



6. Check Engine Oil Level

NOTE: DO NOT CHECK ENGINE OIL LEVEL WITH ENGINE RUNNING.

Several minutes after stopping engine, check engine oil level with tractor on level ground. Wipe dipstick (Fig. 14) clean, screw it down tight for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark is reached. (See chart above). NOTE: DO NOT OVERFILL.

7. Clean Air Cleaner Element (Fig. 15)

- a. Open hood.
- b. Remove two screws from air cleaner cover. Lift off air cleaner (Fig. 15).
- c. Remove screen spacers from foam element.
- d. Remove foam element from air cleaner body.
- e. Wash foam element in liquid detergent and water to remove dirt.
- f. Wrap foam element in cloth and squeeze dry.
- g. Lightly coat foam with engine oil. Squeeze in rag or towel to remove excess oil. Do not saturate.
- h. Replace foam element and replace cover on air cleaner body.

extends over edge of the air cleaner body. The foam element lip will form a protective seal.

NOTE: NEVER RUN ENGINE WITH AIR CLEANER RE-MOVED.

8. Clean Air Screen and Engine Cooling Fins



ALWAYS WEAR EYE AND FACE PROTECTION WHEN USING COMPRESSED AIR.

Keep Engine Cooling Fins free of dust, dirt and oil to prevent Engine damage from overheating, (Fig. 16).

- a. Remove four Bolts from Blower Housing.
- b. Remove Screws from Starter Housing.
- c. Pull Oil Filler/Dipstick out of crankcase if clearance is required. Cover opening to prevent entry of dirt.
- d. Pull blower housing up and away from starter.

NOTE: LEAVE AIR CLEANER IN PLACE TO PREVENT DEBRIS FROM GETTING INTO CARBURETOR.

- e. Use compressed air or stiff bristle brush to thor oughly clean Engine Fins.
- f. To reassemble, reverse above procedure.

9. Check Muffler

Inspect and replace damaged muffler and/or deflector as it could create a fire hazard and/or damage.



DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.

10. Lubricate Pivot Points

Place several drops of SAE 30 oil at points where parts move against each other, especially:

- a. Front axle pivot
- b. Hood hinges
- c. Foot pedal shaft (both ends)
- d. Lift shaft (both ends)

See Lubrication Chart page 24.

11. Starting your Tractor With a Weak Battery

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:

NOTE: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM.

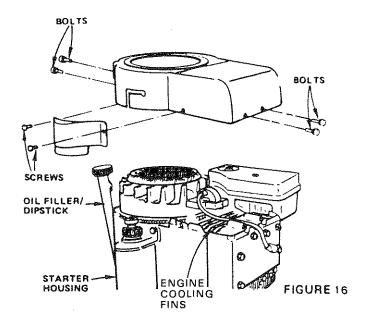


LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS WEAR EYE PROTECTION WHEN AROUND BATTERIES.

- a. Connect each end of the RED cable to the POSI-TIVE (+) terminals of each battery (taking care not to short against chassis). (Fig. 17)
- b. Connect one end of the BLACK cable to the NEGATIVE (-) terminals of fully charged battery.
- C. Connect the other end of the cable to the L.H. side panel bolt (Fig. 18) NOTE: KEEP AWAY FROM GAS TANK AND BATTERY.
- d. Disconnect cables in reverse order:
 - 1. L.H. Side Panel Bolt (Fig. 18)
 - Negative terminals of fully charged battery
 - 3. Positive terminals



DO NOT USE YOUR TRACTOR BAT-TERY TO START OTHER VEHICLES.



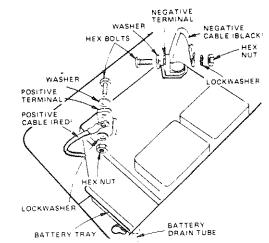
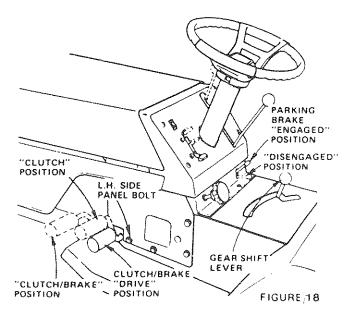


FIGURE 17



12. Throttle Control Cable Adjustment

Never attempt to change maximum engine speed. This is preset at the factory and should only be changed by a qualified service technician who has the necessary equipment. CAUTION: BEFORE ANY ENGINE ADJUST-MENT, MAKE SURE AIR CLEANER IS CLEAN. Remove Air Cleaner Assembly, while making adjustments.

- a. With engine off, place Throttle Control in "FAST" position.
- b. Loosen Clamp Screw (Fig. 19). Adjust Throttle Cable until holes "A" are aligned in governor control plate and slide plate.
- c. Tighten clamp screw.
- d. If holes do not align, repeat steps in throttle cable adjustment.

13. Carburetor Adjustment

NOTE: ADJUST THROTTLE CONTROL CABLE BEFORE MAKING ANY ADJUSTMENT TO CARBURETOR.

With engine off turn high speed mixture screw clockwise () closing finger tight ONLY, and turn counterclockwise () 1-1/2 turns (Fig. 19)

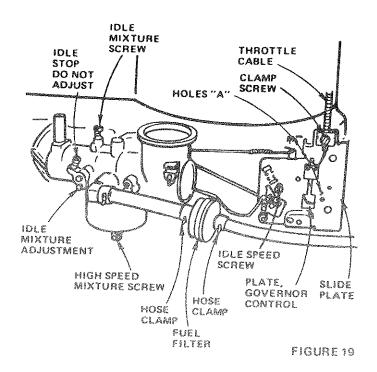
NOTE: THE SCREW SEAT MAY BE DAMAGED BY TURN-ING IT TOO FAR CLOCKWISE.

b. Turn idle mixture screw clockwise () closing finger tight only, and turn counterclockwise () 1-1/2 turns (Fig. 19).



REFER TO "STARTING THE ENGINE" PAGE 10.

- c. Start engine and allow to warm for five minutes. Make final adjustment with engine running and Gear Shift lever in "NEUTRAL" position.
- d. With throttle control lever in "FAST" position, turn high speed mixture screw counterclockwise () until engine runs "rough" then turn clockwise () until engine begins to miss. Turn screw to a point midway between these positions.
- e. With throttle control lever in "SLOW" position, hold throttle lever so that idle stop screw is against carburetor, turn idle mixture Screw counterclockwise (") until engine runs "rough" and then turn clockwise (") until engine begins to die. Turn idle mixture screw to a point midway between these positions.
- f. With throttle control lever in "SLOW" position, engine should idle at 1750 RPM. If engine idles too slow, push throttle control lever above idle and turn idle speed screw one turn clockwise (). Set throttle control lever at "SLOW". Repeat until satisfactory idle is attained.



g. If engine idles too fast with throitie control lever in "SLOW" position push throitie control lever above idle and turn idle speed screw one turn counterclockwise (
). Set throitie control lever at "SLOW".
Repeat until satisfactory idle is attained.

14. Replace Spark Plug

Replace spark plug at the beginning of each mowing season or every 100 hours, whichever comes first. Gap should be set at 0.030 inch (Fig. 20).

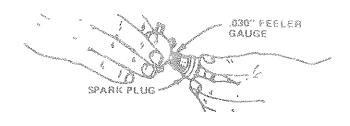


FIGURE 20

15. Motion Drive Belt Removal

The tractor drive belt may be replaced without tools. Park the tractor on level area. Engage parking brake. NOTE: A BELT INSTALLATION DECAL IS UNDER LEFT FOOTREST.

- a. Remove mower. (See mower section, Following pages).
- b. Remove two retainer springs from belt guide bracket below transaxle pulley. Remove bracket (Fig. 21).
- c. Swing belt guides away from belt, toward rear of tractor (Fig. 21).
- d. Roll belt over top of transaxle pulley.
- e. Roll belt over engine pulley and off idler (Fig. 22).
- f. Release parking brake. Pull belt as far as possible over top of clutch pulley.
- g. Reset parking brake. Pull belt over top of clutch pulley (Fig. 22).
- h. Pull belt out through shift gate to remove from tractor (Fig. 23).

Install belt by reversing above procedure.

NOTE: REPLACE ONLY WITH BELT LISTED IN MANUAL.

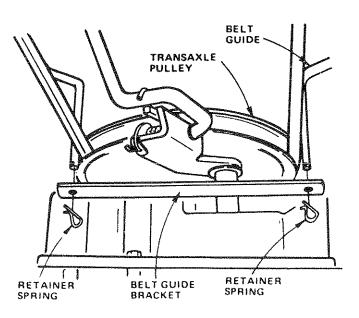
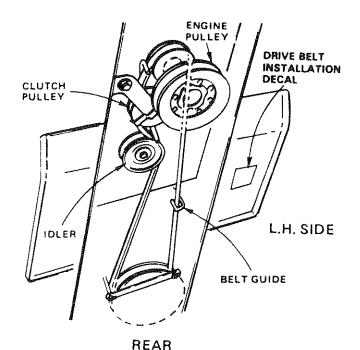
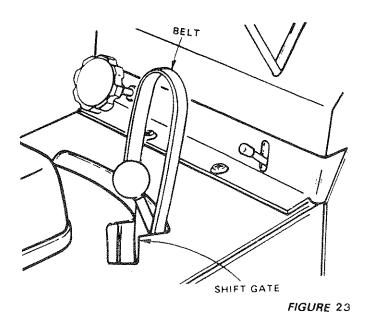


FIGURE 21

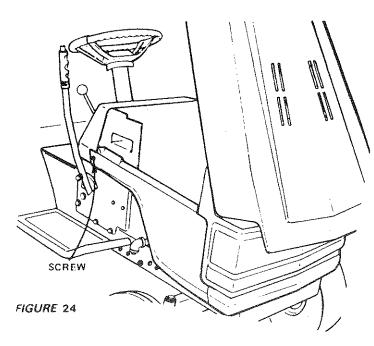


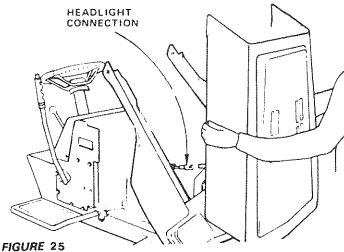
VIEWED FROM BOTTOM OF TRACTOR

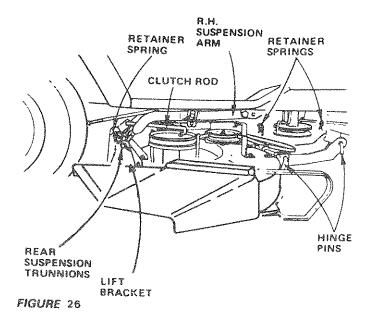
FIGURE 22



19







16. Fuse Replacement

Replace with 30 amp automotive - type plug-in fuse.

17. Hood Removal

- To raise hood, lift at rear of hood.
- b. To remove hood, grill and side panels, raise hood and loosen one screw on each side panel. (This screw remains in the side panel) (Fig. 24).
- c. Unsnap headlight connection (Fig. 25).
- d. Stand in front of tractor. Grasp hood and tilt forward and lift off (Fig. 25).
- e. To reinstall, reverse above procedure.

18. Mower Removal

- a. Remove mower belt per instructions under "Mower Drive Belt Removal" through step(c)
- b. Remove retainer spring from clutch rod; pull clutch rod out of clutch bracket.
- c. Pull retainer springs out of rear suspension trunnions. Remove rear suspensions trunnions from lift brackets (Fig. 26).
- d. Pull retainer spring out of rear hinge pin. Remove rear hinge pin.
- e. Pull retainer spring out of front hinge pin. Remove front hinge pin (Fig.26).
- Use lift lever to raise suspension arms. Slide mower out from under tractor.

NOTE: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, THE L.H. AND R.H. SUSPENSION ARMS (FIG. 26) SHOULD BE REMOVED FROM TRACTOR.

19. Mower installation

Your Mower installs without the use of tools. Raise Attachment Lift Lever (Fig. 27) to its highest position. Turn height adjustment knob to lowest position (Fig. 28).

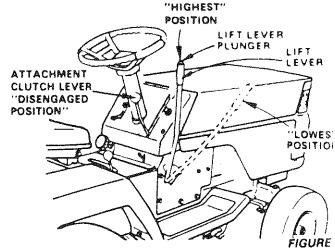
- a. Slide Mower under tractor, discharge guard to R.H. Side.
- b. Install front hinge pin through axle and parallel link (Fig. 29). Secure with retainer spring.
- c. Install rear hinge pin through mower lift brackets and parallel link (Fig. 29). Secure with retainer spring.
- d. Install clutch rod in clutch lever (Fig. 29).
- e. Move Attachment lift lever (Fig. 27) forward to lower suspension arms. Slide trunnions through lift bracket holes and secure with retainer springs (Fig. 26).
- f. Roll belt over engine pulley. Make sure belt is inside belt guides (Fig. 28). See belt drive schematic decal on mower housing.
- g. Use Attachment lift lever (Fig. 27) to raise mower.
- h. Turn height adjustment knob clockwise (to the middle of its travel, or to desired cut height.

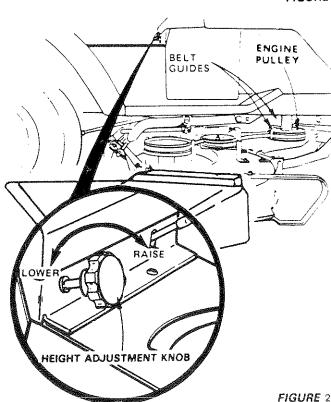
20. Mower Drive Belt Removal

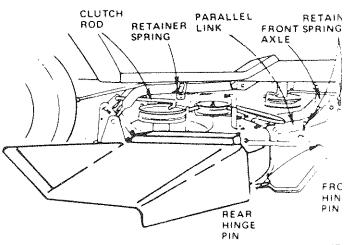
NOTE: MOWER BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

REPLACE ONLY WITH THE BELTS SPECIFIED IN THIS MANUAL.

- a. Place attachment clutch lever in "Disengaged" position (Fig. 27).
- b. Turn height adjustment knob to lowest position. Move Attachment lift lever (Fig. 27) forward to lower mower to its lowest position.
- c. Roll belt off engine pulley (Fig. 28)
- d. Pull bett off both mandrels.
- e. Spring belt guide away form idler pulley and pull belt off idler pulley.
- f. Slide belt from under extension spring.







FIGUR

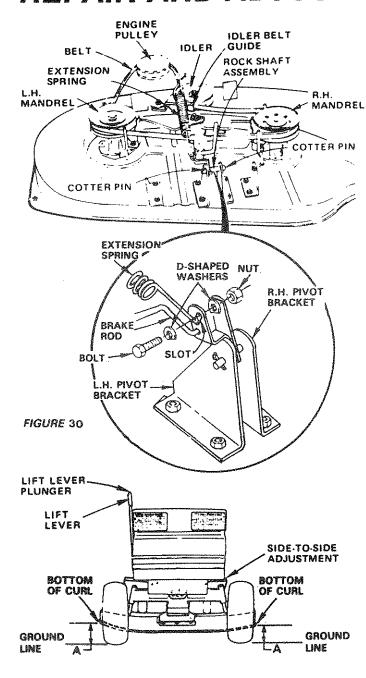


FIGURE 31

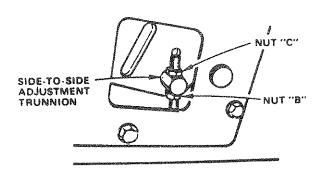


FIGURE 32

21. Mower Drive Belt Replacement

- a. Slide belt under extension spring (Fig. 30).
- b. Place belt on rear side of both mandrels.
- c. Spring idler belt guide down and place belt around rear side of idler pulley.
- d. Roll belt over engine pulley.
- e. Make sure belt is inside all belt guides.

22. Mower Drive Belt Adjustment

Your tractor has been manufactured with the ability to readjust the mower belt drive to provide you with longer belt life.

If the attachment clutch lever travels 3-1/2" up the slot in the dash before spring resistance is evident, adjustment is necessary. NOTE: CHECK FOR PROPER SPRING TENSION WITH THE ENGINE OFF AND THE LIFT LEVER IN THRE HIGHEST POSITION.

- a. Lower the mower deck for easier access.
- Using (2) 1/2 wrenches, remove the bolt, nut & Dshaped washers (Fig. 30 - Inset).
- c. Move extension spring from lower end of slot to upper end in rock shaft assembly and install bolt, nut & the D-shaped washers.
- Tighten bolt and nut to secure the D-shaped washers (flat side down).

NOTE: WHEN INSTALLING A NEW BELT, EXTENSION SPRING MUST BE RETURNED TO LOWER END OF SLOT (ORIGINAL POSITION) ON ROCK SHAFT ASSEMBLY.

23. Level Mower Housing

Adjust the mower while tractor is parked on level ground or driveway. Make sure tire pressures are 14 PSI in front tires and 12 PSI in rear tires. If tires are over or under inflated, you will not properly adjust your mower.

Side-to-Side Mower Adjustment

- Depress lift lever plunger and use lift lever to raise mower to maximum cutting height.
- b. Measure height from bottom of curl to ground line at front of mower. Distance "A" should be the same on both sides (Fig. 31).
- c. If distance "A" needs to be changed, snap out access hole cover on L.H. side above footrest. Use 9/16" wrench on nuts "B" and "C" at side-to-side adjustment trunnion (Fig. 32).
- d. To raise left side of mower, loosen nut "B" and tighten nut "C".
- To lower left side of mower, loosen nut "C" and tighten nut "B".

NOTE: ONE ROTATION OF ADJUSTMENT NUTS IS EQUIVALENT TO APPROXIMATELY 3/16" HEIGHT CHANGE.

- f. Be sure all nuts are securely tightened.
- g. Replace cover.

Front-To-Rear Mower Adjustment

- a. To obtain the best cutting results, your mower housing should be adjusted so the front and rear flange distance "D" (Fig. 33) is 1/2" lower in front when the mower is positioned in the highest cutting position. NOTE: MEASURE DISTANCE "D" FROM GROUND LINE TO BOTTOM OF CURL ON RIGHT REAR FLANGE AND COMPARE TO DISTANCE "D" AT BOTTOM OF CURL ON RIGHT FRONT FLANGE.
- b. To raise rear of mower, loosen nut "E" on both rear suspension arms. Screw both nuts "F" up EQUAL NUMBER OF TURNS (Fig. 34).
- c. When distance "D" is 1/2" lower at front than rear tighten nuts "E".
- d. To lower rear of mower, loosen nut "F" on both rear suspension arms an EQUAL NUMBER OF TURNS (Fig. 34).
- e. When distance "D" is 1/2" lower at front than rear, retighten nuts "E".

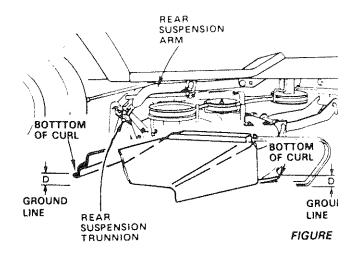
NOTE: WHEN ADJUSTING REAR SUSPENSION TRUN-NIONS, ALWAYS ADJUST BOTH EQUALLY SO MOWER WILL STAY LEVEL.

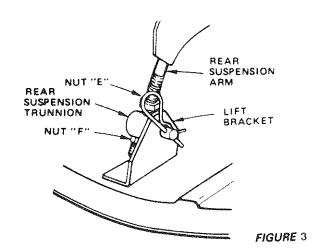
24. Storage

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. Give blades and underside of housing a good coat of grease or rust preventative. Store in a clean dry area.

A. Fuel System

It is important to prevent gum deposits from forming in essential fuel system parts such as the 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. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer.





B. Engine Oil

Drain (with engine warm) and replace with clean engir. oil, (See chart page 16).

C. Cylinder

- 1. Remove spark plug.
- 2. Pour one ounce of oil through spark plug hole into cylinder.
- 3. Turn ignition key to "START" position for a fe seconds to distribute oil.
- 4. Replace with new spark plug.

D. Battery

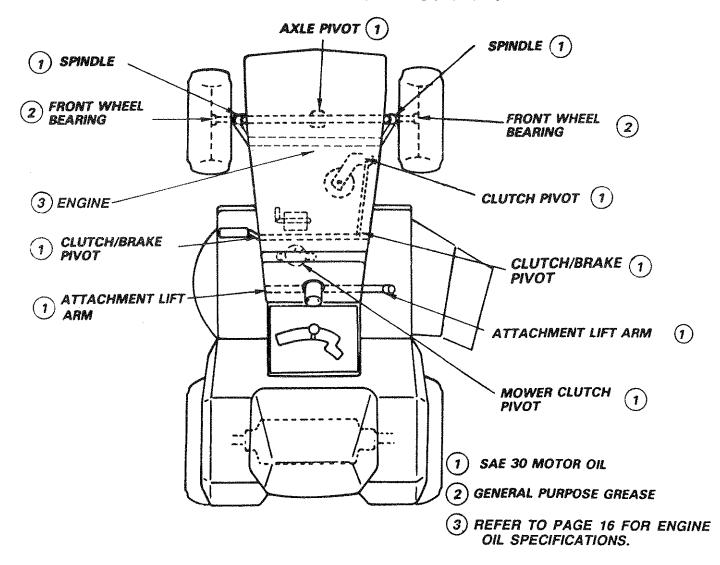
1. Prior to storage, clean terminals and top of batter

E. General Cleaning

Clean engine, battery, seat, finish, etc. of all feeign matter.

F. Store in a clean, dry area

LUBRICATION CHART

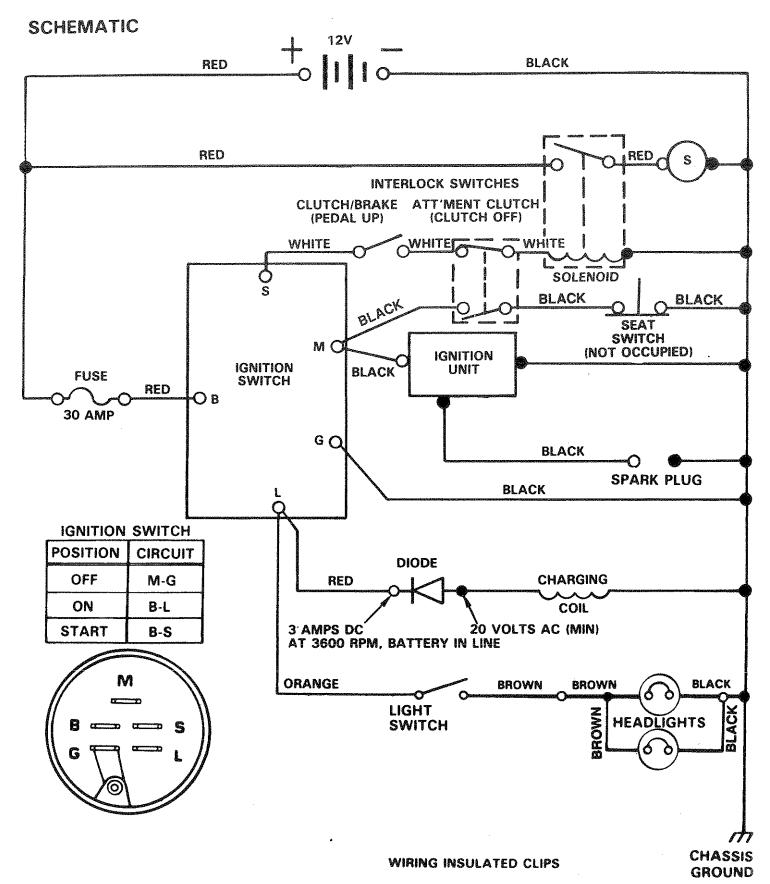


TROUBLESHOOTING

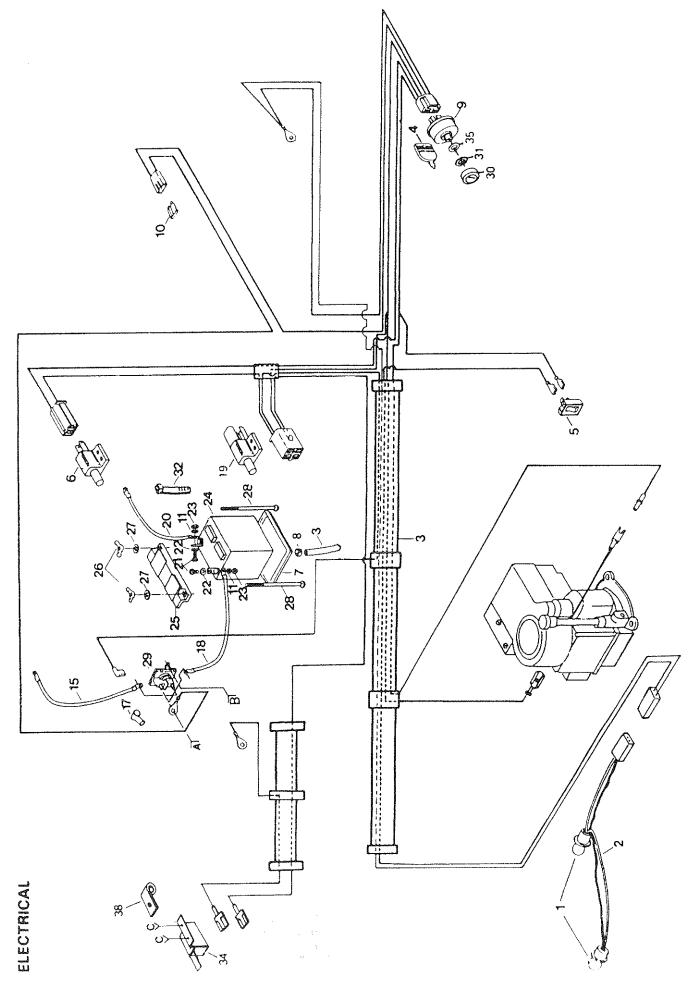
PROBLEM	CAUSE/REMEDY (SEE INDEX)
WILL NOT START	Push Clutch/Breke Pedal into Brake Position. Move Attachment Clutch Lever to ''Disengaged Position Fill Fuel Tank with Gasoline. Check Fuel Line and Carburetor (clean if necessary) Replace Fuel Filter Check fuse for fault and replace Recharge or replace Battery Check Wiring Replace Spark Plug(s) and adjust gap
WILL NOT TURN OVER	Charge Battery Replace Ignition Switch Depress Clutch/Brake Pedal Disengage Attachment Clutch Lever Replace Interlock Switch Replace Solenoid Replace Fuse Check All Wire Connections
ENGINE CLICKS BUT WON'T START	Replace Starter Charge or Replace Battery
HARD TO START	Place Throttle Control in "FAST" position and run starter several times to clear out gas Remove and clean Fuel Tank and Ilnes. Replace Fuel Filter Remove Air Filter and clean Replace Spark Plug(s) and adjust gap Replace Battery Check the wiring and Spark Plug(s) Drain Fuel Tank and Carburetor, use fresh fuel and replace Spark Plug(s) Make necessary adjustments to Carburetor Major Engine Overhaul
ENGINE MISSES OR LACKS POWER	Shift to a lower gear or reduce load Remove and clean Fuel Tank; replace Fuel Filter Remove and clean Air Cleaner Make necessary carburetor adjustments Clean Air Screen Add or change oil Replace Spark Plug Check Spark Plug and check for loose wires Major Engine overhaul Drain Fuel Tank and Carburetor and refill
ENGINE OVERHEATS	Clean Air Screen Add or change oil Clean Engine Cooling Fins Remove and clean Muffler or replace Remove and clean Air Filter Use fresh fuel and adjust Carburetor
NO LIGHTS	Check Fuse, Switch and wire connections. Replace Headlight Bulbs
WON'T CHARGE	Check Fuse and replace Replace Battery Replace Regulator Replace Alternator
OPERATOR PRESENCE SYSTEM WILL NOT SHUT DOWN WHEN OPERATOR LEAVES SEAT. Note: This tractor is equipped with an operator presence sensing system. Any attempt by the operator to leave the seat with the enigne running and the attchment clutch engaged will shut down the engine.	Engage attachment clutch Check all wire connections Check seat switch Check operator presence relay. Check PTO Switch.

TROUBLESHOOTING

UNSATISFACTORY MOWER PERFORMANCE UNEVEN DISTRIBUTION OF CLIPPINGS	Check air pressure in tires Check front to rear and side to side mower adjustment Use a slower ground speed Check engines RPM's (refer to Carburetor Adjustment) Replace mower blades Reinstall mower blades with top of blade up Replace with proper mower blades Re-adjust mower drive belt
MOWER BLADES WILL NOT ROTATE	Install new Mower Drive Belt Reinstall Mower Drive Belt Adjust Mower Drive Belt Replace Frozen Mandrel Raplace Frozen Idler Pulley
EXCESSIVE MOWER VIBRATION	Replace Bent or Unbalanced Blades Replace Mandrel, Straighten Deck or replace
WIND ROWING STRIPPING OR DROPPING OF GRASS CLIPPINGS	Let grass dry out Clean underside of Mower Deck Readjust Mower
UNEVEN CUT OR SCALPING	Readjust Mower



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



11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

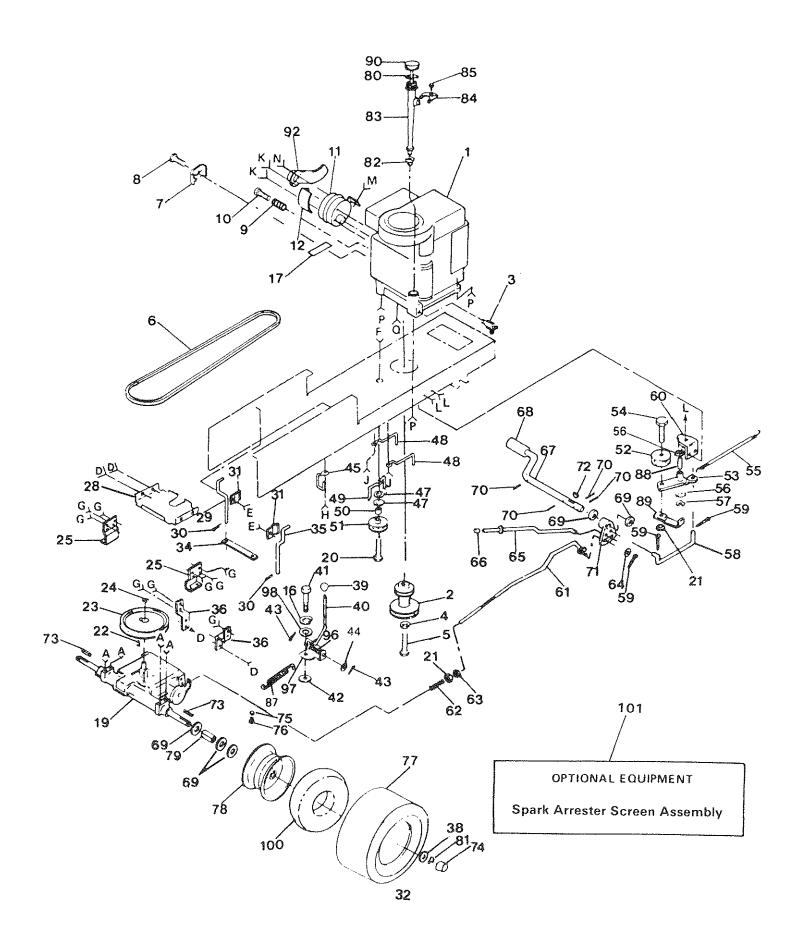
ELECTRICAL

11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

ENCLOSURE

DESCRIPTION	105592X Hinge, Hood, R.H. 105682X Hood Assembly 106578X Grill Assembly 108500X Bracket, Frame, Pivot, R.H. 106927X Side Panel, R.H. 106927X Side Panel, R.H. 106927X Side Panel, L.H. 102481X Chassis Assembly 102481X Drawbar 121069X Decal, Grill Craftsman 105805X Decal, Grill, Stripe 105805X Decal, Stripe 105805X Decal, Stripe, Side Panel, L.H. 106301X Guide - Belt, Lower, Eng. Pulley. R.H. 106301X Decal - Stripe, Side Panel, R.H. 106302X Decal - Stripe, Side Panel, R.H. 106802X Decal - Stripe, Side Panel, R.H. 106802X Decal - Stripe, R.H. 105802X Decal, Stripe, R.H. 105803X Screw - Sperial 121093X Cap - Spring 121093X Decal, Stripe, R.H. 105803X Washer 13/32 x 12/16 a. 19131312 Washer 13/32 x 13/16 x 12 Ga	55 @ 22 @ 23
E .	105792X 105682X 105678X 106950X 1069501X 106927X 106927X 106927X 105801X 105801X 105805X 105805X 105805X 105805X 105805X 105805X 105805X 105805X 105805X 106301X 106301X 106974X 106974X 106903X 106903X 105802X 105802X 105802X 105802X 105802X 105802X 105803X 10580	≥ (2) (0) (3) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
à Ŝ	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	× (1) (0) (1) (2) (2) (2) (3) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
		G H C 22 C 61 C 31 C 31
TION	Seat Screw, Hex Washer Thd. Roll 3/8-16 x 3/4 Type TT Screw, Hex Washer Thd. Rolling Blot, Shoulder, 5/16-18 Spring - Compression L.H. Spring - Compression R.H. Fender Washer 13/32 x 13/16 x 12 Ga. Bolt, Hex, 3/8-16 Nut, Lock 3/8-16 Screw, Hex Washer Thd. Roll 3/8-16 Nut, Lock 3/8-16 Screw, Hex Washer Thd. Roll 3/8-16 Footrest, Fender Bolt, Carr. 3/8-16 x 3/4 Footrest, R.H. Bolt, Carr. 3/8-16 x 3/4 Pad, Footrest Bracket, Pivot, Grill, R.H. Bracket, Pivot, Grill, L.H. Pal Nut 1/4-20 Washer 15/32 x 1 x 16 Ga. Lens, L.H. Lens, L.H. Bolt, Headlight Bezel, Headlight Bott, Hex 1/2-13 x 1 Strap Assembly - Grill Washer Hinge, Hood, L.H.	13 11 18 12 12 12 12 12 12
DESCRIPTION	•	60 = 12
NOS.	121075X 17490612 17490616 105513X 105529X 73680500 121068X 121067X 19131312 STD523707 73680600 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490607 17490607 17490607 17490607 17490607 1749060910X 1769910X 1769910X 1769910X	
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11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

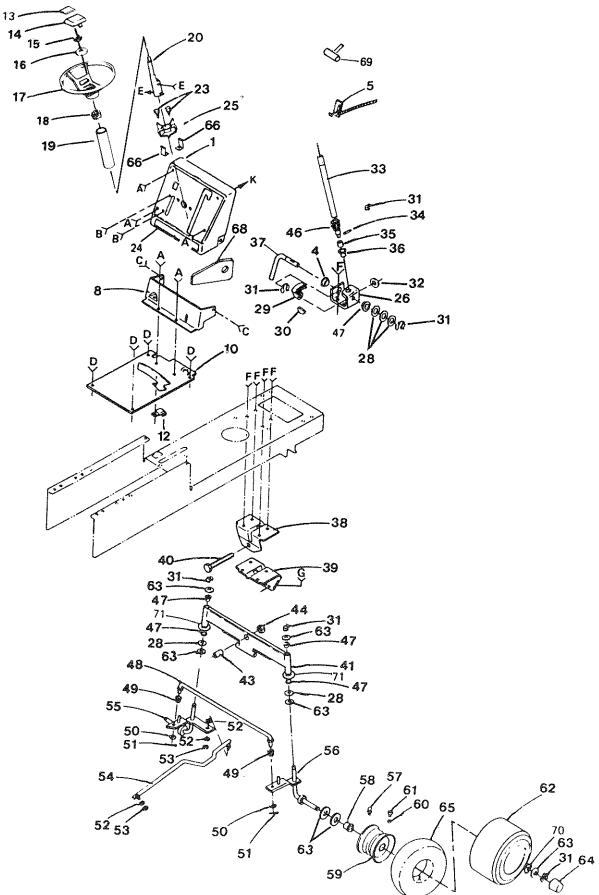


11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

DRIVE

KEY NO.	PART NO.	DESCRIPTION	K E		DESCRIPTION
1	120215X	Engine, 11HP, Briggs & Stratton Model No. 252707, Type No.	49 50	109070X 4470J	Retainer Belt Spacer Idles Flat
2 3 4 5 6 7 8 9 10 11 12 13 14 15	105731X 120374X STD551143 74770720 120302X 7204J 14121010 108746X 108747X 120359X 101159L 74780552 STD522505 17490620 STD551125	O621-03 Pulley, Engine Valve, Drain Oil *Washer, Lock 7/16 Bolt, Hex 7/16 - 20 x 1 - 1/4 V-Belt, Drive Clamp - Casing Screw - slotted, Hex Mach. #10 Spring Compression Screw - Machine, Fill. Hd. 8-32 x 5/8 Muffler Shield, Heat Bolt, Hex Hd. 5/16-18 x 3 - 1/4 Gr. 5 Bolt, Hex 1/4-20 x 1/2 Gr.5 Screw, Hex Washer Thd. Rolling 3/8-16 x 1-1/4 *Washer, Lock 1/4	51 52 53 54 55 55 55 55 55 66 66 66 66 66 67	4859J 106298X 105705X STD523715 105709X 110812X 12000039 105710X 76020412 105724X 109127X 106888X 73350600 1913131316 105758X 71673 109037X	Idler, Flat Pulley, Idler Bellcrank Assembly (Inc. Key No. 88) *Bolt, Hex 3/8 - 16 x 1 - 1/2 Spring, Return, Clutch Washer, Hardened Ring, Klip Link, Clutch Pin, Cotter 1/8 x 3/4 Bracket, Clutch Rod, Brake Spring, Rod, Brake Nut - Jam 3/8 - 16 Washer 13/32 x 13/16 x 16 Ga. Rod, Brake, Parking Cap - Plunger Shaft, Foot Pedal
17 19	1 08756X 120897X	Label - Engine Maintenance Transaxle Foote, 5 Speed, Model No. 4360-6 (see pages 40 and 41 for	68 69 70 71	8883R 19252016 STD571810 106918X	
20 21 22 23 24 25 26 27 28 29 31 32 33 34 35 37 38 39 41 42 43 44 45 46 47	STD523727 73680600 STD580025 105703X 12000028 109167X STD523710 17490512 108171X 109368X 4921H 106190X STD523107 73680500 109370X 109369X 106360X STD523707 19252616 106933X 110458X 71040412 105701X STD561210 19151216 104777X 17490612	*Bolt, Hex 3/8 - 16 x 2 - 3/4 Nut, Lock 3/8 - 16 *Key, Woodruff #9 3/16 x 3/4 Pulley, Transaxle Ring, Retainer Bracket, Transaxle *Bolt, Hex 3/8 - 16 x 1 Screw, Hex Washer Thread Rolling 5/16 - 18 x 3/4 Support, Battery Keeper, Belt, L.H. Retainer, Spring Clamp *Bolt, Hex 5/16 - 18 x 3/4 Nut, Lock 5/16 - 18 Strap, Locator Keeper, Belt, R.H. Strap, Torque, Transaxle *Bolt, Hex 3/8 - 16 x 3/4 Washer 25/32 x 1 - 5/8 x 16 Ga. Knob, Shift Rod, Shift Bolt - Hex 1/4-28 x 3/4 Washer - Shift, Plate *Cotter Pin, 1/8 x 1 Washer 15/32 x 3/4 x 16 Ga. Retainer, Belt Screw, Hex Washer Thd. Rolling 3/8 - 16 x 3/4 Washer 13/32 x 13/16 x 12 Ga.	77 73 74 75 76 77 78 79 80 81 82 84 85 86 87 88 99 97 98 99 101	TOOSTION STD580105 104757X 59192 65139 106268X 106108X 109502X 108754X 12000001 108753X 108750X 108751X 108752X STD533707 110422X 105706X 106499X 108767X 17450808 105700X 106919X 19091210 11050600 7152J 677V1	Cap, Hub, Rear Cap, Valve Stem, Valve Tire, Rear - 18 x 9.50 x 8 Rim Assembly, Rear Spacer Seal - Oil Filler Cap E-Ring Grommet - Oil Filler Tube Tube - Oil Filler Clamp - Oil Filler tube Screw - Clamp Mtg.
48	105730X A	Keeper, Belt, Engine D E F G H	J	Κ į.	O HARDWAREPURCHASE LOCALLY M N P Q
	20	27 32 21 37 37 37 33 33 32 21 0 4		6 13	86 14 93 15 15 21 16 99

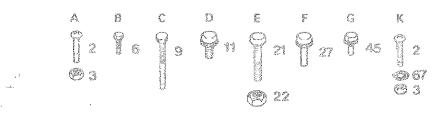
11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 STEERING AND FRONT AXLE



11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 STEERING AND FRONT AXLE

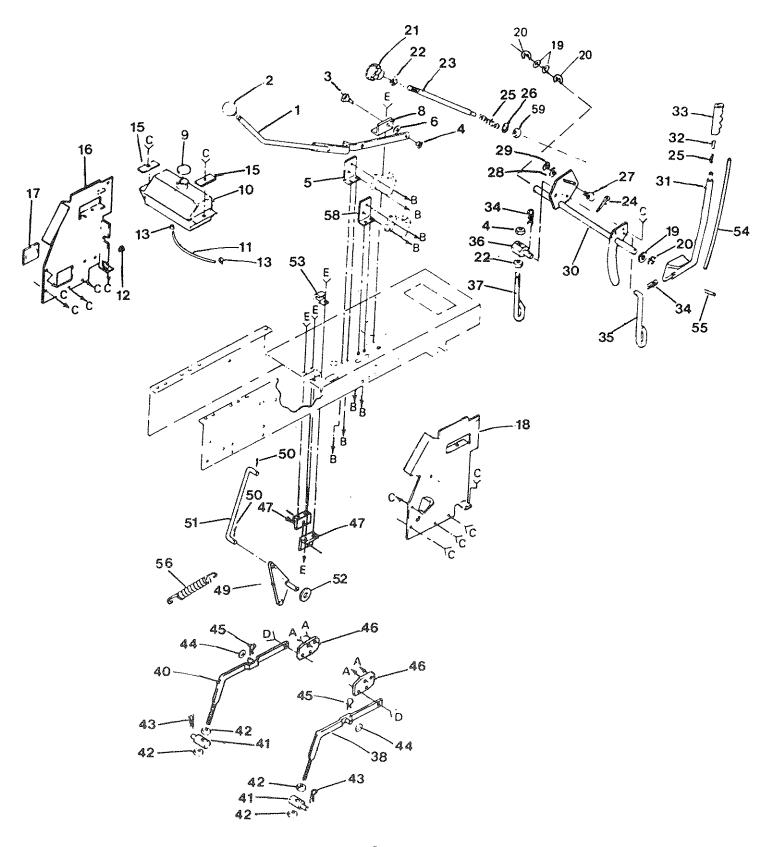
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1 2	109283X015 7 4180512	Dash Screw - Truss Hd. Cross Recess 5/16 - 18 x 3/4	34 35 36	2882J 74580 71208	Pin - Drive 3/16 x 1 Spacer .627 x .88 x .695 Bushing
3	73510500 109816X	Nut - Keps 5/16 - 18 Nyliner, Snap In	37 38	108683X 105663X	Rod - Steering Support - Seddle, Reer
4 5	120139X	Control - Throttle	<i>39</i>	105664X	Support - Saddle, Front
8	17720408	Screw - Hex Thread Cut.	40 41	74761060	Bolt - Hex 5/8 - 11 x 3 - 3/4
		1/4 - 20 x 1/2	43	105669X 110438X	Axle - Front Spacer, Bearing, Front Axle
8	105621X	Dash - Lower	44	73901000	Nut - Lock, Flange 5/8 - 11
9	17190508	Screw - Hex Washer Hd. Thread Cut.	45	17490508	Screw - Hex Washer Thread Rolling
10	120089X012	5/16 - 18 x 1/2 Saddie	46	108585X	5/16 - 18 x 1/2 Type TT Gear, Pinion
11	17490608	Screw - Hex Washer Hd. Thread	40 47	3366R	Bearing
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Rolling 3/8 - 16 x 1/2	48	105715X	Rod - Tie
12	27518	Clip - Insulated	49	120382X	Bushing
13 14	105810X 100710L	Decal - Cap, Steering Wheel Insert - Steering Wheel	50 51	19131416	Washer 13/32 x 7/8 x 16 Ga.
15	73940800	Nut - Hex Jam 1/2 - 20	51 52	76020412 STD551137	Pin - Cotter 1/8 x 3/4 *Washer - Lock 3/8
16	100712K	Washer	53	STD541137	*Nut - Hex 3/8 - 24
17	100713N	Wheel - Steering	54	105727X	Link - Drag
18	100711L	Adapter - Steering Wheel	55	105656X	Spindle - L.H.
19 20	109285X 105643X	Sleeve - Steering Shaft - Steering, Upper	56 57	105 6 54X 278H	Spindle - R.H. Fitting - Grease
21	ST0523712	*Bolt - Hex 3/8 - 16 x 1 - 1/4	58	9040H	Bearing - Flange
22	73680600	Nut - Lock 3/8 - 16	59	106732X	Rim - 6" - Front
23	98000165	Screw - Hex Self Tap. No.	60	59192	Çap - Valve
24	108456X	10 - 16 x 1/2 Decal - Instruction, Operating	61 62	65139 106222X	Stem - Valve
25	109284X	Bushing - Steering	63	19252016	Tire - Turf - Washer 25/32 x 1-1/4 x 16 Ga.
26	109432X	Bracket - Steering	64	104757X	Cap - Hub. Front
27	17490612	Screw - Hex Washer Thread Rolling	65	59904	Tube - Front (Not furnished with
28	6266H	3/8 - 16 x 3/4 Type TT	era vera	4 4 4 4 4 4 4 4 4	tractor)
20 29	108684X	Bearing - Thrust Gear - Sector	66 67	110130X 11150500	Retainer, Steering
30	106126X	Key - Woodruff	68	110307X	Washer, Lock, Int. Tooth 5/16 Stop - Mower, Clutch Lever
31	12000029	Klip Ring	69	61159	Knob - Throttle Control
32	101930X	Washer, Hardened	70	19252616	Washer 25/32 x 1-5/8 x 16 Ga.
33	109068X	Shaft - Steering, Lower	71	19272016	Washer 27/32 x 1-1/4 x 16 Ga.

[&]quot;STANDARD HARDWARE-PURCHASE LOCALLY



11 H.P. 38" RIDING LAWN TRACTOR--MODEL-NUMBER 917.254232

LIFT ADJUSTMENT

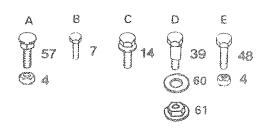


11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

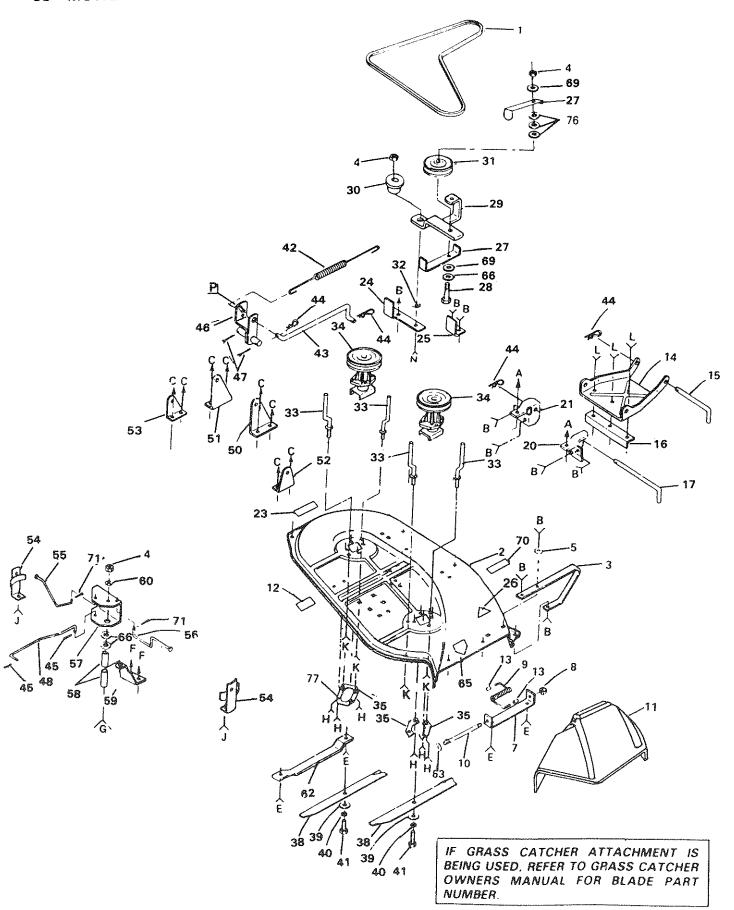
LIFT ADJUSTMENT

KEY NO.	PART NO.	DESCRIPTION	KEY NO.		DESCRIPTION
1	106448X	Lever, Clutch, Mower	31	105768X	Lever, Assembly
	106932X	Knob	32	105723X	Plunger
2 3	106451X	Bolt, Shoulder	33	109413X	Grip, Handle
4	73680600	Nut, Lock, 3/8 - 16	34	4939M	Retainer, Spring
5	106452X	Bracket, Switch, Interlock	35	110029X	Link, Lift
6	19171713	Washer 17/32 x 1 - 1/16 x 13 Ga.	36	106204X	Trunnion, Lift
6 7	17021008	Screw, Hex, Tapping, No. 10 - 24 x	37	105855X	Link, Lift, Adjustable
-	.,	1/2	38	105862X	Arm, Suspension, R.H.
8	106447X	Support, Lever, Clutch	39	105848X	Bolt, Shoulder, 3/8 - 16
9	109462X	Cap, Fuel	40	105863X	Arm, Suspension, L.H.
10	109202X	Tank, Fuel	41	106308X	Trunnion, Lift, Lower
11	7119J	Line, Fuel	42	STD541250	*Nut - Hex 1/2 - 13
12	9151R	Grommet	43	9135R	Retainer, Spring
13	6999R	Clamp - Hose	44	19171516	Washer 17/32 x 15/16 x 16 Ga.
14	17490612	Screw, Hex Washer Thd. Rolling	45	4921H	Retainer, Spring
		3/8 - 16 x 3/4	46	105864X	Bracket, Suspension
15	106901X	Clamp - Tank, Fuel	47	106444X	Bracket, Bellcrank
16	106920X	Panel, Dash, L.H.	48	STD523707	* Bolt, Hex 3/8 - 16 x 3/4
17	105505X	Cover, Access	49	109728X	Bellcrank Assembly
18	106921X	Panel, Dash, R.H.	50	76020412	Pin, Cotter, 1/8 x 3/4
19	19292016	Washer 29/32 x 1 - 1/4 x 16 Ga.	51	106446X	Rod, Clutch, Primary
20	12000022	E Ring	5 <i>2</i>	19131410	Washer 13/32 x 7/8 x 10 Ga.
21	100734K	Knob	53	5320R	Clip - Insulated
22	STD541237	*Nut, Hex Jam 3/8 - 16	54	105764X	Rod Assembly - Lever, Lift
23	110809X	Rod, Adjust, Lift			(Includes Key 32)
24	76020308	Pin, Cotter 3/32 x 1/2	55	105767X	Pin - Groove
25	2876H	Spring	56	106810X	Spring - Extension
26	19131016	Washer 13/32 x 5/8 x 16 Ga.	57	72140606	Screw 3/8-16 x 3/4
27	110810X	Trunnion - Depth Stop	5 <i>8</i>	108236X	Bracket - Switch
.28	19151216	Washer 15/32 x 3/4 x 16 Ga.	59	110807X	Nut - Special
58	12000037	Klip Ring	60	110739X	Washer - Spring
30	120420X	Shaft, Lift	61	73980600	Nut - Flangelock 3/8 - 16

^{*}STANDARD HARDWARE-PURCHASE LOCALLY



11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

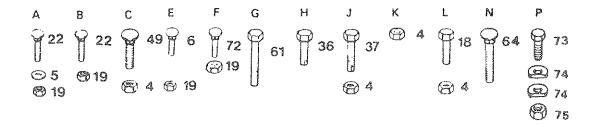


11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232

38" MOWER

KEY NO.	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
		V-Belt Housing Runner, R.H. Nut, Lock, 3/8 - 16 Washer 11/32 x 3/4 x 16 Ga. Bolt, Carr., 5/16 - 18 x 5/8 Bracket, Deflector Pushnut Spring, Deflector Rod - Hinge Deflector - Shield Decal Cap Link, Parallel Pin - Hinge, Front Stop, Link Pin - Hinge, Rear *Bolt 3/8 - 16 x 3/4 Nut, Lock 5/16 - 18 Bracket, Lift, R.H. Bracket, Lift, R.H. Bracket, Lift, L.H. *Bolt, Carr. 5/16 - 18 x 3/4 Instruction - Caution Decal Support, Arm Stop, Deck, Front Decal - Safety Standard - Not Serviced Guide Belt Bolt Hex 3/8 - 16 x 2-1/4 Arm, Idler Spacer - Retainer Pulley - Idler Washer, Wear, 1/16 Keeper, Belt Mandrel Assembly Plate, Support, Mandrel	NO. 389 401 423 445 467 849 551 23 45 56 66 66 66 67 71 23	NO. 106634X 19132012 STD551137 STD623715 108250X 108250X 108235X 4921H STD560907 109892X 76020616 108247X 72140606 108241X 105857X 106578X 106453X 106453X 106453X 106453X 106453X 106673L 19131614 74760684 7631J 19111016 72140610 78850 STD551037 19132012 106679X 76020308 72110506 STD522507	** Blade Washer 13/32 x 1 - 1/4 x 12 Ga. * Washer, Lock 3/8 * Bolt, Hex, 3/8 - 24 x 1 - 1/2 Gr. 5 Spring, Extension Rod - Clutch, Mower Spring - Retainer * Pin, Cotter 3/32 x 3/4 Rock Shaft Assembly Pin, Cotter, 3/16 x 1 Rod, Brake, Primary * Bolt, Carr. 3/8 - 16 x 3/4 Bracket, Pivot, R.H. Bracket, Pivot, L.H. Bracket, Suspension, Rear, R.H. Bracket, Suspension, Rear, L.H. Rod, Brake, Secondary L.H. Rod, Brake, Secondary L.H. Rod, Brake, Secondary, R.H. Bracket, Brake, Pivot Spacer, Brake Bracket, Support Washer 13/32 x 1 x 14 Ga. Bolt, 3/8 - 16 x 5 - 1/4 Runner, L.H. Washer 11/32 x 5/8 x 16 Ga. Bolt, Carr. 3/8 - 16 x 1 - 1/4 Decal - Warning *Washer 13/32 x 13/16 x 16 Ga. Washer 13/32 x 1-1/4 x 12 Ga. Decal - Warning Pin, Cotter, 3/32 x 1/2 Bolt, Carriage 5/16-18 x 3/4 *Bolt Hex 1/4-20 x 3/4
36 37	17490612 17490620	Screw, Hex Washer Hd. 3/8 - 16 x 3/4 Screw, Hex Washer Hd. 3/8 - 16 x 1 - 1/4	74 75 76 77	109893X 73680400 19131407 110445X	Washer, Special Nut, Lock 1/4-20 Washer 13/32 x 7/8 x 7 Ga. L.H. Mandrel Support

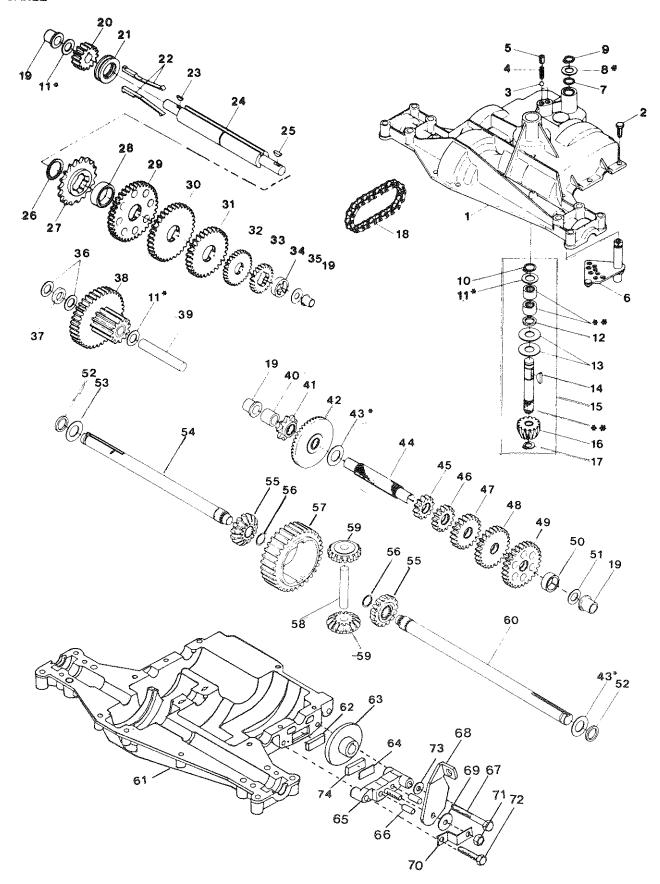
*STANDARD HARDWARE--PURCHASE LOCALLY



IF GRASS CATCHER ATTACHMENT IS BEING USED, REFER TO GRASS CATCHER OWNERS MANUAL FOR BLADE PART NUMBER.

11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 TRANSAXLE FOOTE - MODEL NUMBER 4360-6

TRANSAXLE



11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 TRANSAXLE FOOTE - MODEL NUMBER 4360-6

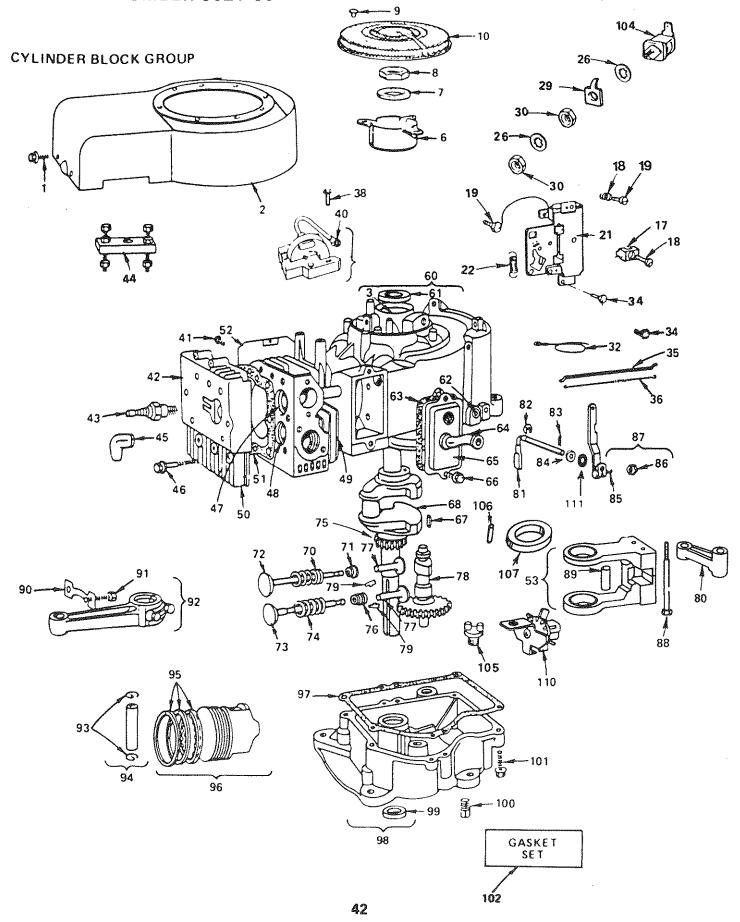
TRANSAXLE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
12 345678888888901111111111111111111123456789012345678	120458X 2274J 68003 105904X 105905X 120460X 120461X 120462X 120465X 120466X 83818 120467X 2286J 2267J 3413J 2230J 2230J 2230J 2230J 2229J 2229J 2229J 2228J 2227J 2226J 105906X 6725J 110077X 110078X 105910X 105923X 105925X 2232J 108978X 10979X	Housing, Upper Screw, Tapping, 1/4–20 x .734 Lg. Ball, Detent Spring, Detent Screw, Set Ass'y., Shifter O-Ring 'Washer, Plain, .505 x .942 x .006 'Washer, Plain, .505 x .942 x .010 'Washer, Plain, .505 x .942 x .015 'Washer, Plain, .505 x .942 x .020 'Washer, Plain, .505 x .942 x .040 Ring, Retaining Ring, Retaining Ring, Retaining Ring, Retaining Washer, Plain, .632 x 1.00 x .020 Washer, Plain, .632 x 1.00 x .020 Washer, Plain, .632 x 1.00 x .031 Washer, Plain, .632 x 1.00 x .031 Washer, Plain, .632 x 1.00 x .041 Washer, Plain, .632 x 1.00 x .044 Washer, Plain, .632 x 1.00 x .046 Washer, Plain, .632 x 1.00 x .040 Washer, Plain, .632 x 1.00 x .082 O-Ring Washer, Plain, .632 x 1.38 x .046 Key, Woodruff, #9 Ass'y., Kit, Input Shaft Pinion, Bevel, 14T. Ring, Retaining Chain, 24 Pitches Bearing, Flange Gear, Spur, 14T. Collar, Clutch Key, Woodruff, #3 Shaft, Intermediate Key, Woodruff, #3 Shaft, Intermediate Key, Woodruff, #61 Ring, Retaining Sprocket, 18T. Spacer Gear, Spur, 37T. Gear, Spur, 25T. Gear, Spur, 25T. Gear, Spur, 22T. Gear, Spur, 19T Spacer, 1.13 x 1.50 x .375 Washer, Plain, .640 x 1.37 x .061 Washer, Plain, .630 x 1.00 x .169 Ass'y., Gear, Combo., 12T. & 35T.	39 40 41 42 43 43 43 43 43 43 43 43 43 43 43 43 43	120471X 120472X 105928X 110084X 108983X 105930X 105931X 105932X 3417J 106097X 2264J 106586X 106587X 106588X 2263J 120473X 105933X 120407X 106589X 120407X 105936X 2263J 120474X 110081X 105937X 105936X 2226J 2272J 2263J 120474X 110081X 1100952X 110082X 120475X 120476X 120955X 120955X 120955X 120956X 73810500 106596X 120993X 120993X 120993X 1209951X 1209951X 120993X 1209951X 1209951X 120993X 1209951X 1209951X 120993X 1209951X 1209951X 1209951X 1209951X 1209951X 1209951X 1209951X 1209951X 1209951X 1209951X	Shaft, Idler Spacer, .635 x .875 x .755 Sprocket, 9T Gear, Bevel. 42T. 'Washer, Plain, .758 x 1.12 x .010 'Washer, Plain, .758 x 1.12 x .020 'Washer, Plain, .758 x 1.12 x .020 'Washer, Plain, .758 x 1.12 x .025 'Washer, Plain, .758 x 1.25 x .020 'Washer, Plain, .758 x 1.25 x .025 'Washer, Plain, .758 x 1.25 x .031 'Washer, Plain, .758 x 1.25 x .031 'Washer, Plain, .758 x 1.25 x .040 'Washer, Plain, .758 x 1.25 x .040 'Washer, Plain, .758 x 1.25 x .050 'Washer, Plain, .758 x 1.25 x .050 'Washer, Plain, .758 x 1.25 x .062 Shaft, Drive Gear, Spur, 12T. Gear, Spur, 20T. Gear, Spur, 28T. Gear, Spur, 31T. Spacer, .781 x 1.00 x .375 Washer, Plain, .632 x 1.00 x .060 Seal, Felt Washer, Plain, .758 x 1.25 x .062 Axle, L.H. Gear, Miter, 15T. Ring, Retaining Gear, Spur, 32T. Shaft, Cross Gear, Miter, 15T. Axle, R.H. Housing, Lower Puck, Friction Disc, Brake Spacer Ass'y, Jaw, Brake Pin, Dowel Screw, Tapping, 5/16 - 18 x 2.25 Lever, Actuating Washer, Plain, .321 x 1.00 x .055 Bracket, Anti-Rotation Nut, Lock 5/16-24 Screw, Tapping, 5/16 - 18 x 1.44 Lg. Washer, Plain, .343 x .81 x .059 Puck, Friction Grease

^{*}Use in various combinations to maintain proper clearances.

^{**}Order Key No. 15.

11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 ENGINE BRIGGS AND ATRATTON - MODEL NUMBER 252707 TYPE NUMBER 0621-03



11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 ENGINE BRIGGS AND ATRATTON - MODEL NUMBER 252707 TYPE NUMBER 0621-03

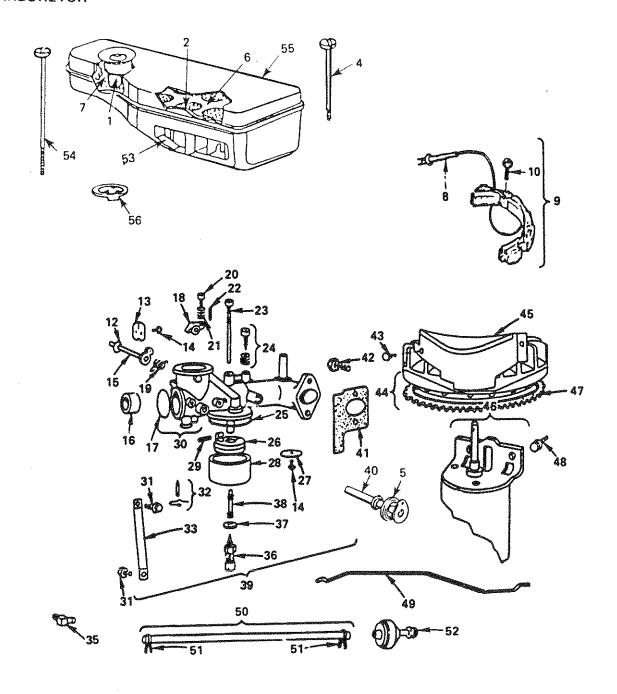
CYLINDER BLOCK GROUP

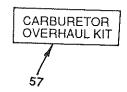
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	93158	Screw - Blower Hsg. Mtg. Sem	71	221596	Retainer - Intake Valve
2	391556	Housing - Blower	72	261462	Valve - Intake
3	261623	Bushing - Cylinder	73	261185	Valve - Exhaust
		NOTE: Requires Special Tools	74	26828	Spring - Exhaust Valve
		For Installation	75	262135	Gear - Timing
6 7	222561	Cup - Screen Mtg.	76	292260	Rotocoil - Exhaust Valve
7	220865	Washer - Spring	77	261183	Tappet - Valve
8	92284	Nut - Hex	78 70	212897	Gear - Cam
9	93805	Screw - Sem	79 80	93630 212359	Retainer - Exhaust Valve Rotocoil (2)
10	222562	Screen - Flush Rotating	81	231058	Link - Counterweight Crank - Governor
17	221535	Clamp - Casing	82	93307	Retainer - E-Ring
18 19	93496	Screw - Sem	83	93306	Cotter - Hairpin
20	93572	Screw - Control Brkt, Mtg.	84	222450	Washer - Governor Crank
21	231039 390784	Spacer - Control Brkt. Mtg. Plate - Gov. Control	85	92613	Bolt - Governor Lever
22	260695	Spring - Governor	86	231082	Nut - Hex 10 - 24
26	92791	Washer - Lock - Shakeproof	87	490927	Lever Assy Governor (Inc. Key
29	93722	Terminal - Spade			No.'s 85 & 86)
30	90576	Nut - Hex 8 - 32	88	93875	Screw - Counterweight
32	398808	Wire - Ground	89	298909	Pin - Counterweight
34	93572	Screw	90	222299	Lock - Conn. Rod Screw
35	262348	Link - Governor	91	92909	Screw - Conn. Rod
36	260584	Spring - Governor Link	92	391775	Rod Assy Conn. (Inc. Key No's
38	93381	Screw - Armature Mtg. Sem			90 & 91)
39	398265	Armature - Magneto			NOTE: For Connecting Rod With .020" Undersize Crank Pin Bore - Order No.
40	221798	Terminal - Ignition Cable			393712
41	93163	Screw - Cylinder Shield Mtg. Sem.	93	260924	Lock - Piston Pin
42	223985	Cover - Cylinder Head	94	299691	Pin Assy Piston - Std. (Inc. Key
43 44	298809 19203	Plug - Spark Flywheel Pullor			No. 93) ´
45	66538	Elbow - Spark Plug	94	391286	Pin Assy Piston .005" O.S.
46	93723	Screw - Cylinder Head	95	391780	Ring Set - Piston - Std.
47	261463	+Seat - Intake Valve	95	391781	Ring Set - Piston .010" O.S.
48	210940	+Seat - Exhaust Valve	95	391782	Ring Set - Piston .020" O.S.
49	231218	+Guide - Exhaust or Intake Valve	95	391783	Ring Set - Piston .030" O.S.
50	212914	Head - Cylinder	96	391285	Piston Assy Std. (Inc. Key No's
51	271075	*Gasket - Cylinder Head	96	391287	93 & 95)
52	222744	Shield - Cylinder	96	391288	Piston Assy010" O.S. Piston Assy020" O.S.
53	391373	Counterweight Assembly	96	391289	Piston Assy030" O.S.
60	000004	(Inc. Key No. 89)	97	270808	*Gasket - Crankcase Cover 1/64" thick :
60 61	396324	Cylinder Assy. (Inc. Key No. 61)	97	270915	*Gasket - Crankcase Cover .005" thick
62	391086 491986	Seal - Oil Bushing - Gov. Crank	97	270916	*Gasket - Crankcase Cover .009" thick
63	27803	*Gasket - Valve Cover	98	391784	Sump - Oil (Inc. Key No.s 97 & 99)
64	280100	Tube - Breather	99	291675	Seal - Oil
65	391406	Breather Assembly	100	91084	Plug - Oil Drain
66	93394	Screw - Sem	101	93585	Screw - Sump Mtg, Sem
67	222698	Key - Flywheel	102	393411	Gasket Set
68	392299	Crankshaft to replace Crankshaft	104	398525	Insulator Assembly
-		Gear Key, Order Part No. 94196	105 106	66768 94160	Plug - Oil Filler
70	65906	Spring - Intake Valve	106	261242	Pin Eccentric Eccentric - Crankshaft
			110	490815	Oil Slinger, Gov. Gear & Bracket Assy.
			111	491323	
				マションたび	Seal-Oil

⁺Special Tools Required to Install
*Included in gasket Set - Part No. 393411

11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 ENGINE BRIGGS AND ATRATTON - MODEL NUMBER 252707 TYPE NUMBER 0621-03

CARBURETOR





11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 ENGINE BRIGGS AND ATRATTON - MODEL NUMBER 252707 **TYPE NUMBER 0621-03**

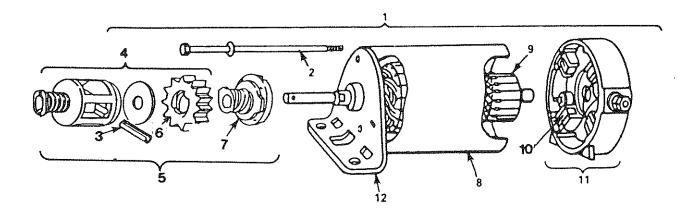
CARBURETOR

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
	_	Over Ale Oleanau Comand	NO.	_	
1	222380	Cup - Air Cleaner Support	29	230896	+Pin - Float Hinge
2	222495	Air Cleaner, Spacer Screw - Air Cleaner	30	391787	Body Assembly Carburetor (Inc.
4	93622 398970	Seal - Throttle Shaft			Key No. 17)
2 4 5 6 7	222382	Plate - Air Cleaner Cartridge	31	93572	Screw
7	270843	Air Cleaner - Element	32	394681	*Valve - Fuel Inlet
8	393814	Diode & Connector	33	222311	Bracket - Carburetor
9	391529	Stator - Alternator (Inc. Key No.'s.	35	67218	Connector - Fuel Pipe
9	391329	8 & 10)	36	396568	+ Valve · Needle
10	93621	Screw · Sem	37	222014	+Washer - Float Bowl
11	94018	Screw - Sem	38	231323	+Screw - Nozzle
		Washer - Choke Shaft	39	491026	Carburetor Assy. (Inc. Key No.'s 12,
12	270382				13, 14, 15, 16, 17, 18, 19, 20, 21, 22,
13	222010	Valve - Choke			23, 24, 25, 26, 27, 28, 29, 30, 31, 32,
14	93499	Screw - Throttle & Choke Valve			33, 36, 37 & 38) (Choke-A-Matic)®
		Mtg. Sem	40	491006	Shaft & Lever - Throttle
15	390684	Shaft & Lever - Choke	41	270872	*Gasket - Carburetor Mounting
16	211960	Venturi - Carburetor	42	93357	Screw - Carburetor Mounting
17	221997	+Plug - Welch	43	93984	Screw - Sem
18	211712	Stop · Throttle	44	391988	Flywheel & Ring Gear Assy Magneto
19	261116	Spring - Choke Return	4-4	331330	(Inc. Key No. 47)
20	91920	Screw - Machine, Fill. Hd. 8 - 32 x 5/8	45	395405	Cover & Shield - Starter
21	26157	Spring - Throttle Adjustment	46	394805	Motor - Starting
22	93043	Pin - Throttle Stop	47	392134	Gear - Ring (Inc. Mounting parts)
23	299740	+Nozzle - Carburetor	48	93523	Screw - Sem
24	292681	+ Valve Assembly - Carburetor Idle	49	93323 261610	Link - Choke
25	270511	+Gasket - Float Bowl	50	393815	Line - Fuel (Inc. Key No. 51)
26	299707	Float - Carburetor	50	393613	(11" Long)
27	222433	Valve - Throttle	· ·	93053	Clamp - Fuel Pipe
28	221995	Bowl - Float	51		Filter - Fuel
			52	298090	Command Air Clannor Floment
			53	280118	Support - Air Cleaner Element Screw - Air Cleaner
			54	93323	Change Air (log key No 's 1 2 4 6 7
			55	391786	Cleaner - Air (Inc. key No.'s 1, 2, 4, 6, 7, 53 & 54)
			56	270853	Gasket - Air Cleaner
			57	394698	Carburetor Overhaul Kit

⁺Included in Carburetor Overhauf Kit - Part No. 394698 *Included in Gasket Set - Part No. 393411

11 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254232 ENGINE BRIGGS AND ATRATTON - MODEL NUMBER 252707 TYPE NUMBER 0621-03

STARTER - MOTOR



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION	
1	394805	Motor - Starting (Inc. Key No's, 2, 3,	7	391135	Clutch Assembly	
		4, 5, 6, 7, 8, 9, 10, 11 & 12)	8	393825	Housing Assembly	
2	94003	Thru Bolt Assembly	9	392747	Armature Assembly	
3	93754	Roll Pin	10	395538	Brush Assembly	
4	393254	Retainer Kit (Inc. Key No.'s 3, 4 & 6)	11	395537	End Cap Assy, Commutator (Inc. Key	
5	396865	Drive Assembly (Inc. Key No's 3,			No. 10)	
		4.6 & 7)	12	394856	End Cap Assy, Drive	
6	280104	Gear				

SERVICE NOTES

SERVICE NOTES

SERVICE NOTES

Attachments That Add to the Usefulness of Your Craftsman Lawn Tractor

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 (including changes in the stock number) may be made in these attachments, or some may no longer be available.

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. You may order these attachments at most Sears retail stores, catalog sales offices, and through the catalog.

PERMANEX BAGGER lets you collect grass clippings and leaves for a healthier neater-looking lawn. Two Permanex containers hold 30-gallon plastic bags. Stock number 71-24939.

LAWN SWEEPERS let you collect grass clippings and leaves.

71-24030	30-in.	6.5 cu. ft.
71-24032	32-in.	10.0 cu, ft.
71-24038	38-in.	12.5 cu. ft.

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

	71-2455 71-2452	3HP 3HP	8 bu. 12 bu.	71- 26471 chute 71- 26471 chute
CARTS make	hauling easy.			
	71-24354 71-24355	10 cu. ft.	1,000 lb.	Hauling cart
	71-24356	10 cu. ft. 14 cu. ft.	1,000 lb. 1,250 lb.	Dump cart Dump cart

ROLLER for smoother lawn surface. 36-inch wide, 18 inch diameter water-tight drum holds up to 390 lb. of weight. Rounded edges prevent harm to turf. Adjustable scraper automatically cleans drum. Stock No. 71-24084.

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

71-24194	Drop type, 36 inch. 12-in. semi-pneumatic wheels. 100 lb. capacity steel hopper.
71–24394	Broadcasts over a 5 to 8 foot swath. 70 lb. capacity steel hopper. Non-corrosive spreading spinner, nylon gear box, stainless steel shaft.
71–24395	Broadcasts 8 to 10 foot swath. 160 lb. capacity (covers 40,000 sq. ft.) No-rust polypropylene hopper and impeller. Vinyl hopper cover.

AERATOR promotes deep root growth for a healthy lawn. Tapered 2.5" steel spikes mounted on 10-in. diameter discs puncture holes in soil at close intervals to let moisture soak it. Steel weight box for increased penetration. Stock No. 71-2435.

DETHATCHER loosens and flips thatch and matted leaves to lawn surface for easy pick up. Two rows of five double tooth spring tines dethatch 36-inch swath. Useful to prepare bare areas for reseeding and for seed bed preparation after tilling. Rear mount. Stock No. 71-24303.

SPRAYERS use 12-volt DC electric motor that connects to 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,

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71-2458
              50 psi maximum pressure with 20 foot wand length
71-24398
              25 psi maximum pressure with 10 foot wand length
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SNOW BLADE for snow removal only. 14 inch high, 42 inch wide blade clears 38 inch path when angled left or right. Raises, lowers with side lever. Adjustable skids; replaceable, reversible scraper bar. (Use with tire chains, wheel weights, or rear drawbar weight). Stock No. 71-24407.

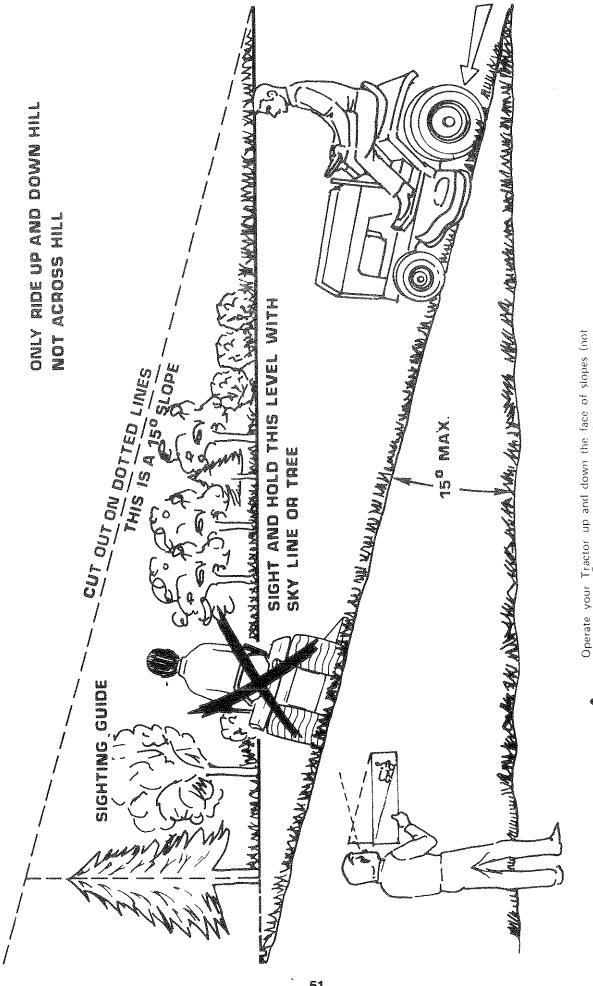
SNOWTHROWER has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arrangement. Discharge chute adjusts to 240 degree arc from tractor seat. 6-inch diameter spout discharges snow 10 to 50 ft. Lift controlled at tractor seat. (Use with tire chains, wheel weights, or rear drawbar weight). Stock No. 71- 24072

TIRE CHAINS are heavy duty; closely spaced extra-large cross links give smooth fide, outstanding traction. Stock No. 71-26943

WHEEL WEIGHTS for rear wheels provide needed traction for snow removal or dozing heavy materials. In pairs. Stock No. 71-24434 (30 lb.)

TRACTOR CAB has heavy-duty vinyl fabric over tubular steel frame, fiberglass top; clear plastic windshield offers 360 degree visability. Hinged metal frame doors with catch. Keeps operator warm and dry. Remove vinyl, and windshield for use as sun protector in summer. Stock No. 71-24171

Optional accessories for tractor cab: tinted/tempered solid safety glass windshield with hand-operated wiper (Stock No. 71-26168); 12- volt amber flashing caution light for mounting on cab top (Stock No. 71-26169).



ally to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes. greater than 150); never across the face. Make turns gradu-

SEARS

OWNERS MANUAL

MODEL NO. 917.254232

HOW TO ORDER REPAIR PARTS

CRAFTSMAN

LT 11 HP ELECTRIC START 5 SPEED - 38" MOWER LAWN TRACTOR

The Model Number will be found on the Model Plate located under the seat. Always provide the Model Number when requesting service or repair parts for your Lawn Tractor.

All parts listed herein may be ordered from any Sears Service Center/Departments and most Sears Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- THE PART NUMBER
- THE PART DESCRIPTION
- THE MODEL NUMBER
- THE NAME OF MERCHANDISE

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians having the parts, tools and the equipment to insure that we meet our pledge to you,"We Service What We Sell".