SEARS OWNERS MANUAL

MODEL NO. 917.254244





ERAFTSMAN

LT 12 HP ELECTRIC START 6 SPEED - 38" MOWER LAWN TRACTOR

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

SAFETY RULES

- Know the controls and how to stop quickly. READ THIS OPERATOR'S MANUAL and instructions furnished with attachmants.
- 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.
- 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 seat.
- 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. Disengage all attachment clutches before attempting to start the angine.
- 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°l; never across the face. Refer to page 47.
- 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
- 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 moving around fixed objects in order to prevent the blades from striking them. Never deliberately run tractor or mower into or over any foreign
- 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 manual.
- 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 vehicle 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 gasoline.
 - 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
- 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 place.
- 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 mower.
- 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.

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 AGREEMENT

A Sears Maintenance Agreement is available on this product. See the nearest Sears store or service center for details.

SERIAL NUMBER	
	PURCHASE
	AL NUMBER WILL BE FOUND ON
	EL PLATE UNDER THE SEAT.
YOU SHOU	JLD RECORD THESE NUMBERS
AND KEEP	FOR FUTURE REFERENCE.

CUSTOMER RESPONSIBILITIES

Read and retain this manual. Study and observe the safety rules. Always use care when using your tractor. Always keep your 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.

LIMITED TWO YEAR WARRANTY ON ELECTRIC START RIDING EQUIPMENT

For two years 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(s) 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

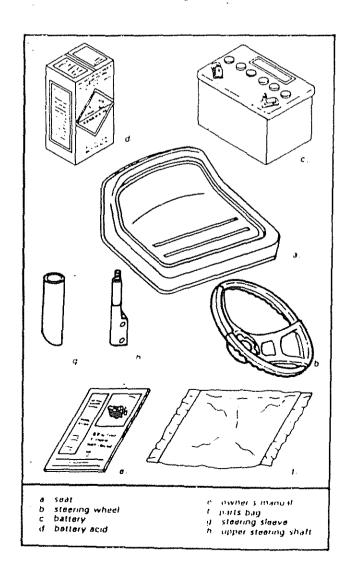
1. Unpack Tractor

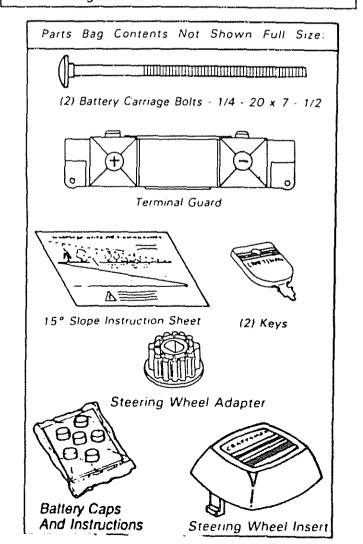
- Take items out of box. The box contains the items shown below.
- b. Cut down four corners of the carton with a utility knife and fold down sides.
- c. Disengage Parking Brake.
- d. Install Steering Wheel
 - 1. Slide upper steering shaft over lower steering shaft until bolt holes line up with slots 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.
 - 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
- 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.
- e Remove plastic on tractor hood.
- f Raise attachment lift handle.



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

ASSEMBL	
ASSEMBLY LOCATION	PARTS BAG CONTENTS SHOWN FULL SIZE
BATTERY	SENS ()
	(2) Lackwasher, 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) Hex Bolt, 1/2 - 13 x 1 (1) Lockwasher 1/2 Grade 5 (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

(1) 3/4" wrench

Utility Knife

(2) 9/16" wrenches

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.



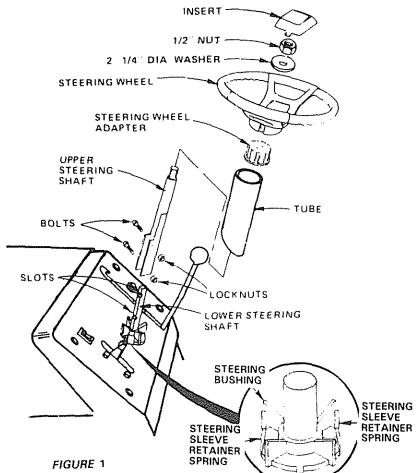
DO NOT SMOKE; FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE

READ THE INSTRUCTIONS INCLUDED WITH THE BATTERY VENT CAPS IN THE BAG OF PARTS. ALWAYS 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 dry.
- 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.
- f. Use a 12 volt battery charger. Charge battery a rate of 6 amperes for 1 hour. NOTE: OBSERVE SAFETY PRECAUTIONS, LISTED INBOX 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

- c. Tighten machine screw, lockwasher and flat washer using a 1/2" wrench.
- d. 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
- e. 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.

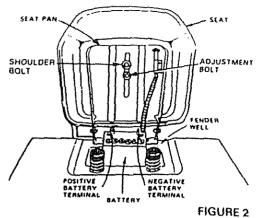


POSITIVE TERMINAL MUST BE CONNECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING.

- 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).

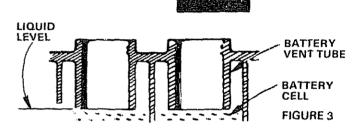
NOTE: KEEP TERMINAL ACCESS DOORS CLOSED WHEN NOT IN USE.

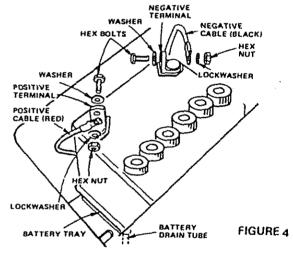
CAUTION: DO NOT START ENGINE UNTIL YOU HAVE REVIEWED THE OPERATION SECTION OF THIS MANUAL.

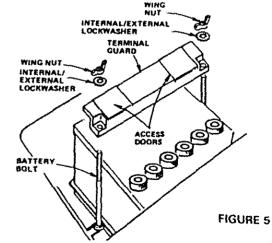


CUT AWAY VIEW

VENT CAP





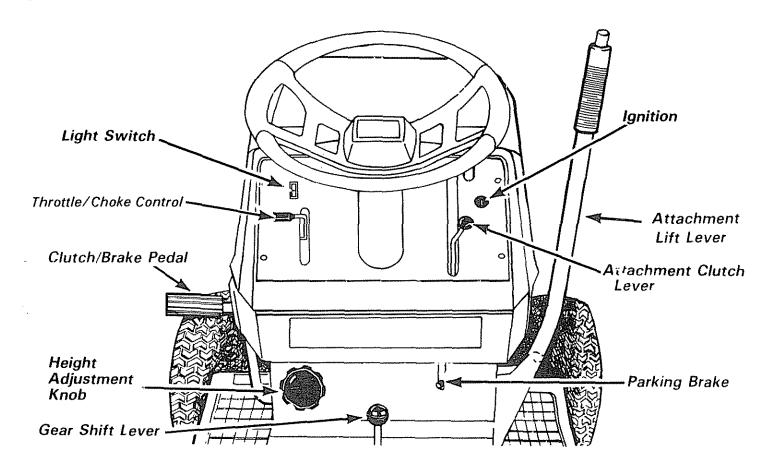


6. Maintenance After First 2 Hours (Two Mowings)
Changing oil after the first two hours (or two mowings) will
help eliminate break-in residue which might be damaging to
your engine.

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.

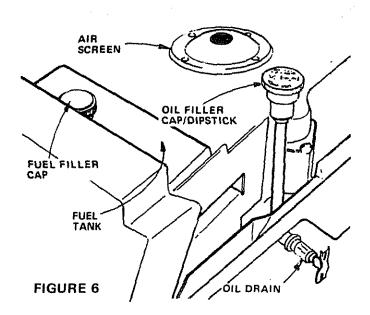
IGNITION: Place key in ignition and turn to the right to start. The switch spring returns from the start position.

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



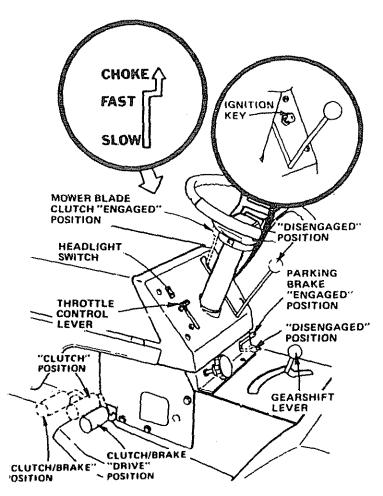


FIGURE 7

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.
- 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

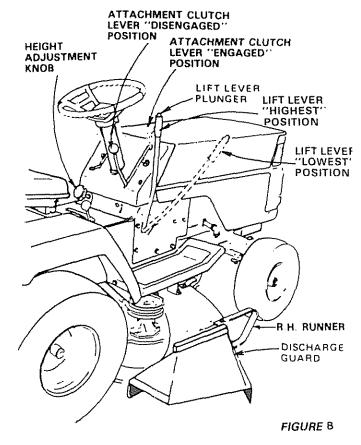
- 1. Read owner's manual.
- 2. Know location and function of all controls.
- 3. Keep guards, safety shield and switches in place and working.
- 4 Remove objects that can be thrown by blades.
- 5. Do not mow when children and others are around.
- 6. Never carry children or passengers
- 7. Always look behind machine before backing
- 8 Do not mow where machine can tip or slip
- 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.
- Slowly release clutch brake pedal and proceed to the mowing area.
- e. Stop the unit, then select a moving 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

- g. 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.

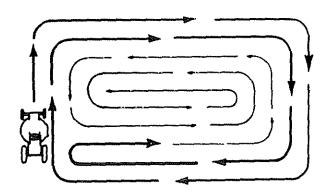


FIGURE 9

SPEED SELECTION GUIDE						
FUNCTION	THROTTLE					
Normal Mowing	2 or 3	6				
Heavy Mowing	leavy Mowing 1 or 2					
Snow Blowing 1		FAST				
Snow Blade	2	4				
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 mowing performance. Refer to REPAIR AND ADJUSTMENT section (page 22).
- b. 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.
- 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 47.

- 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.

MAINTENANCE

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).

BEFORE MAKING ANY INSPECTION, ADJUSTMENT, OR REPAIR:

- 1. PUSH CLUTCH/BRAKE PEDAL COMPLETELY DOWN.
- 2. MOVE GEAR SHIFT CONTROL LEVER TO NEUTRAL POSITION.
- 3. PLACE PARKING BRAKE IN "EN-GAGED" 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 WIRE FROM THE SPARK PLUG AND KEEP WIRE AWAY FROM THE SPARK PLUG TO PREVENT INJURY FROM ACCIDENTAL STARTING BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS.



SERVICE RECORD

(Enter Date Maintenance Performed)

SERVICE RECORD Fill in dates as you complete regular service		s					
		EVERY 5 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS		
Blades - sharpen			v				
Brake Adjustment			✓				
Check Battery				v			······································
Change Engine Oil				٧			
Check Engine Oil level		✓					
Clean Air Cleaner Element	[[
Check Muffler				v			······································
Clean Air Screen				✓		-	
Clean Front Griji	1			✓			
Lubricate Tractor				✓		***************************************	
Replace Spark Plug					v		
Replace Air Cleaner Element					✓		
Check Tire Pressure			V			<u> </u>	

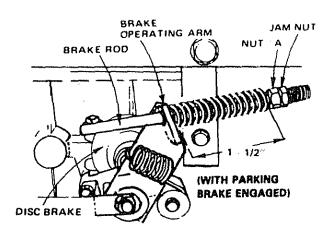
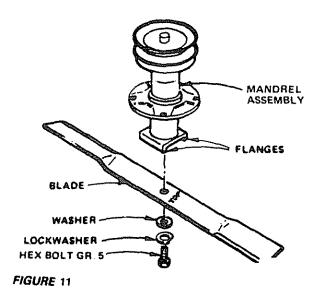


FIGURE 10





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.

- a. Depress clutch/brake pedal and engage parking brake.
- b. 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.

- 1. 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.

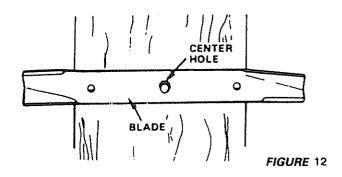
Clean Battery and Terminals

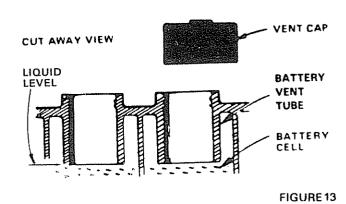
Corrosion and dirt on the battery and terminals cause the battery to "leak" power and hinders the operation of the charger.

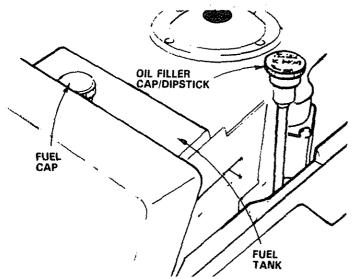


LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS SHIELD YOUR EYES AROUND BATTERIES.

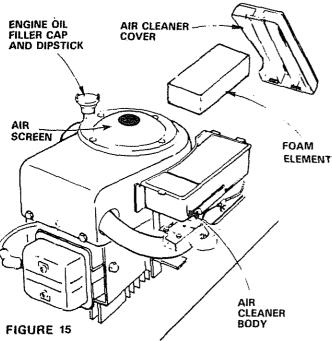
- a. Remove terminal guard.
- Disconnect BLACK battery cable, then RED battery cable, and remove battery from tractor.
- c. Wash battery with four tablespoons of baking soda to one gallon of water. NOTE: BE CAREFUL NOT TO GET THE SODA SOLUTION INTO THE CELLS.
- d. Rinse the battery with plain water, 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.

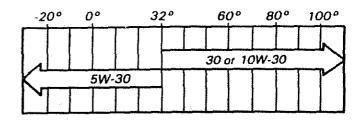
Capacity is 1-1/2 quarts. NOTE: DO NOT OVERFILL. Dipstick assembly must be securely tightened into tube at all times when engine is operating.

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. Snap off air cleaner cover.
- c. Remove foam element from air cleaner body.
- d. Wash foam element in liquid detergent and water to remove dirt.
- e. Wrap foam element in cloth and squeeze dry.
- f. Saturate foam in clean engine oil. Squeeze to remove excess oil.
- g. Replace foam element and snap cover on air cleaner body.

NOTE: NEVER RUN ENGINE WITH AIR CLEANER REMOVED.

8. Clean Air Screen and Engine Cooling Fins



ALWAYS WEAR EYE AND FACE PROTECTION WHEN USING COMPRESSED AIR.

Air screen and cooling fins (Figs. 15 and 16) 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 dried gum fibers.

- a Remove hood (page 20).
- b. Snap off air cleaner cover (Fig. 15)
- c. Remove 3 screws securing air cleaner body (Figs. 15 and 16) and remove. (Cover carburetor to prevent entry of dirt)
- Remove oil dipstick and cover opening to prevent entry of dirt.
- e. Remove 3 screws from blower housing and lift housing off engine (Fig. 16).
- f. Use compressed air or stiff bristle brush to thoroughly clean engine cooling fins (Fig. 16) and air screen (Fig. 15).
- g. To reassemble, reverse above procedure.
- h. Be certain carburetor tube, breather tube, and gaskets are in place (Fig. 16).

Be certain carburetor tube, breather tube, and gaskets are in place (Fig. 16).

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.

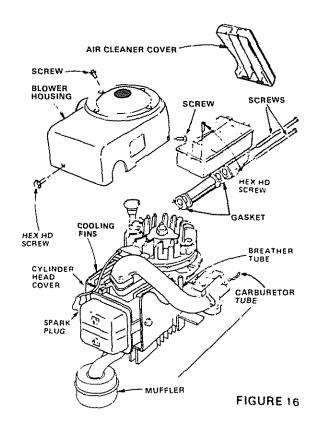


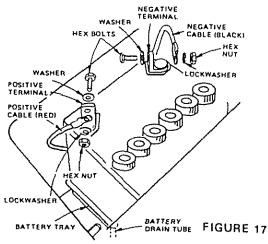
LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS WEAR EYE PROTECTION WHEN AROUND BATTERIES.

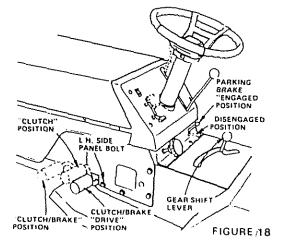
- a. Connect each end of the RED cable to the POSI-TIVE (+) terminals of each battery (taking care not to short against chassis). (Fig. 17)
- b. Connect one end of the BLACK cable to the NEGATIVE (-) terminals of fully charged battery.
- Connect the other end of the cable to the L.H. side panel bolt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



DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.







12. Throttle Control Cable Adjustment

DO NOT MAKE UNNECESSARY ADJUSTMENTS. FACTORY SETTINGS ARE SATISFACTORY FOR MOST APPLICATIONS AND CONDITIONS. IF ADJUSTMENTS ARE NEEDED, PROCEED AS FOLLOWS:

- a. Make sure air cleaner is clean (see page 18).
- b. With engine not running, place throttle control in "FAST" detent (not in "CHOKE" position).
- c. Check that hole in throttle lever and hole in plate line up (Fig. 27 - Inset). If holes "A" are not aligned, loosen clamp screw and move throttle cable until holes are aligned. 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.

- a. With engine not running, turn mixture screw clockwise () LIGHTLY to seat. CAUTION: FORCING WILL CAUSE DAMAGE, Turn mixture screw counterclockwise () one turn.
- b. Start engine and allow to idle for five minutes.



REFER TO "STARTING THE ENGINE" PAGE 10.

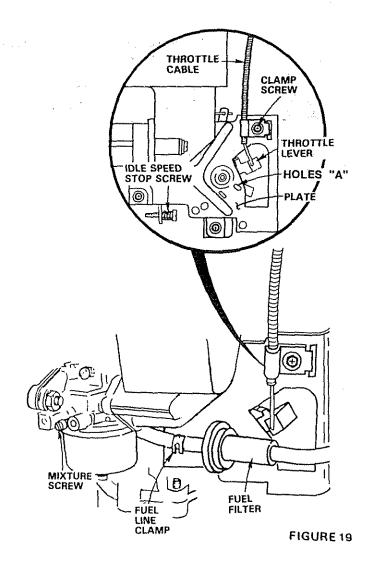
- c. Turn mixture screw clockwise () until the engine speed drops. NOTE THE SCREW POSITION.
- d. Turn mixture screw counterclockwise () until the engine begins to run rough. Set mixture screw between the two positions.
- e Push throttle lever to "FAST" detent (not "CHOKE"). If engine runs rough make small adjustments on mixture screw until engine runs smoothly.
- f. If engine idles too fast or too slow, adjust idle with idle speed stop screw.
- g. High speed stop is factory adjusted. DO NOT AD-JUST - DAMAGE MAY RESULT.

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).

15. Adjust Valves on Engine

After approximately 200 hours of operation, the engine valves will require adjustment. It is suggested that a Sears Service Center do this work. Correct settings are: Intake - .002, Exhaust - .004.



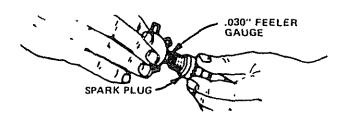


FIGURE 20

16. 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 page 20).
- 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.

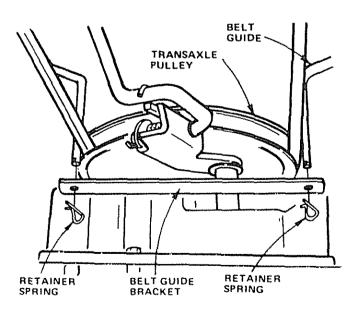
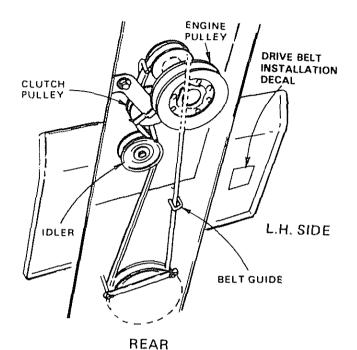


FIGURE 21



VIEWED FROM BOTTOM OF TRACTOR

FIGURE 22

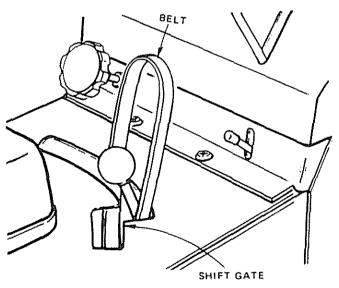
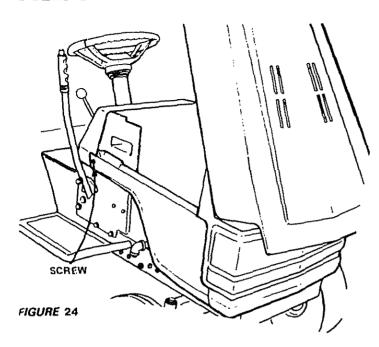
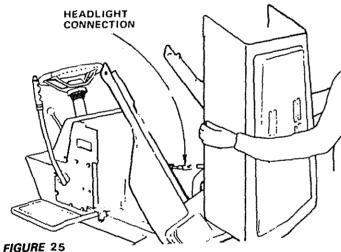
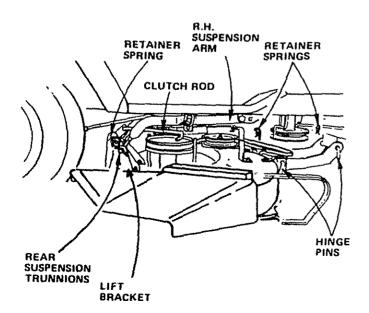


FIGURE 23







17. Fuse Replacement

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

18. Hood Removal

- a. 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.

19. 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.(Fig. 26)
- 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.(Fig. 26)
- 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.

20. 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)...

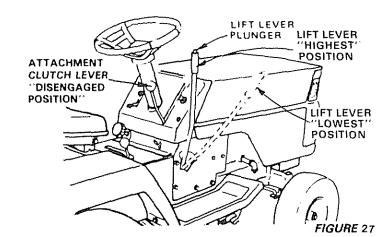
- a. Slide Mower under tractor, discharge guard to R.H. Side.
- b. Install front hinge pin through axle and parallel link (Fig. 29). Secure with retainer spring.
- c. Install rear hinge pin through mower lift brackets and parallel link (Fig. 29). Secure with retainer spring.
- d. Install clutch rod in 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 (Fig. 28)

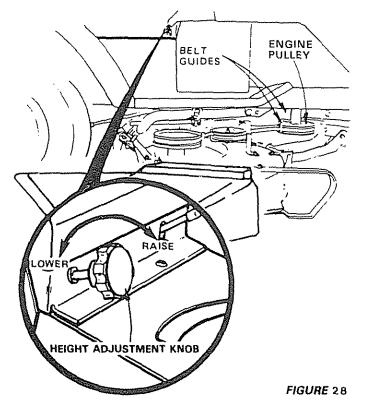
21. Mower Drive Belt Removal

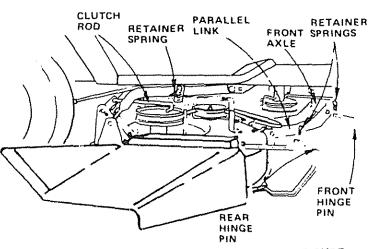
NOTE: MOWER BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

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 belt off both mandrels.
- e. Spring belt guide away form idler pulley and pull belt off idler pulley.
- Slide belt from under extension spring.







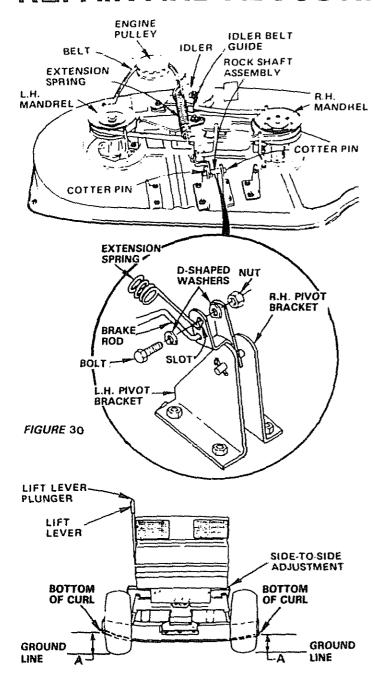
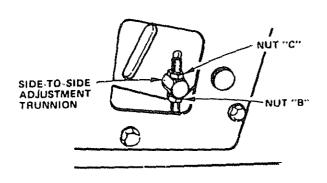


FIGURE 31



22. 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.

23. 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 THE HIGHEST POSITION.

- a. Lower the mower deck for easier access.
- b. Using (2) 1/2 wrenches, remove the bolt, nut & D-shaped 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.
- d. 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.

24. 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

- a. Depress lift lever plunger and use lift lever to raise mower to maximum cutting height.
- 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.

25. Storage

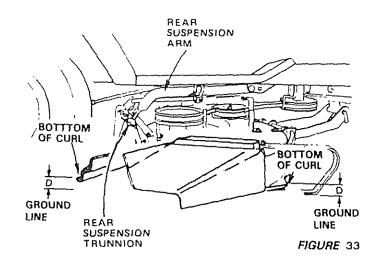
Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Give blades and underside of housing a good coat of grease or rust preventative. Store in a clean dry area.

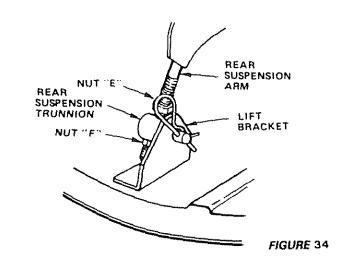
A. Fuel System

NOTE: GASOLINE STORAGE STABILIZER (SUCH AS STA-BIL) MUST BE ADDED TO GASOLINE WHEN STORING UNIT. SUCH AN ADDITIVE WILL MINIMIZE FUEL GUM DEPOSITS PREVENTING A CLOGGED FUEL SYSTEM.

Run engine 10 minutes after adding STA-BIL to gasoline to allow additive to reach carburetor.

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 engine oil, (See chart page 16).

C. Cylinder

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

D. Battery

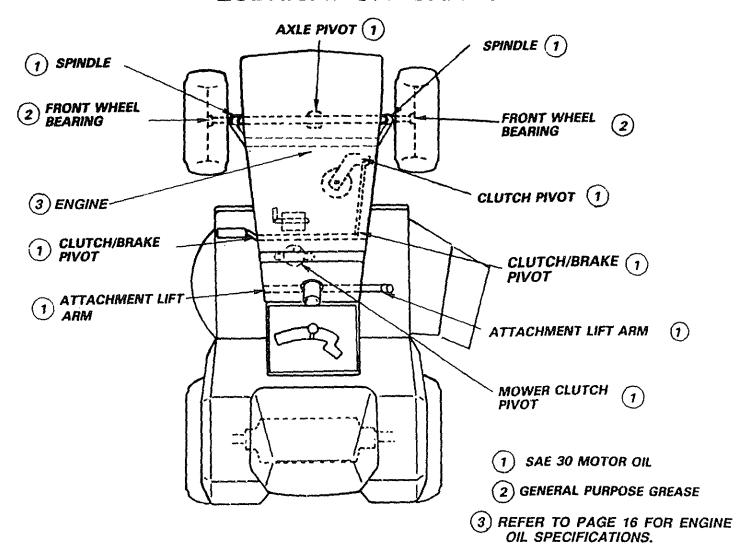
1. Prior to storage, clean terminals and top of battery.

E. General Cleaning

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

F. Store in a clean, dry area.

LUBRICATION CHART

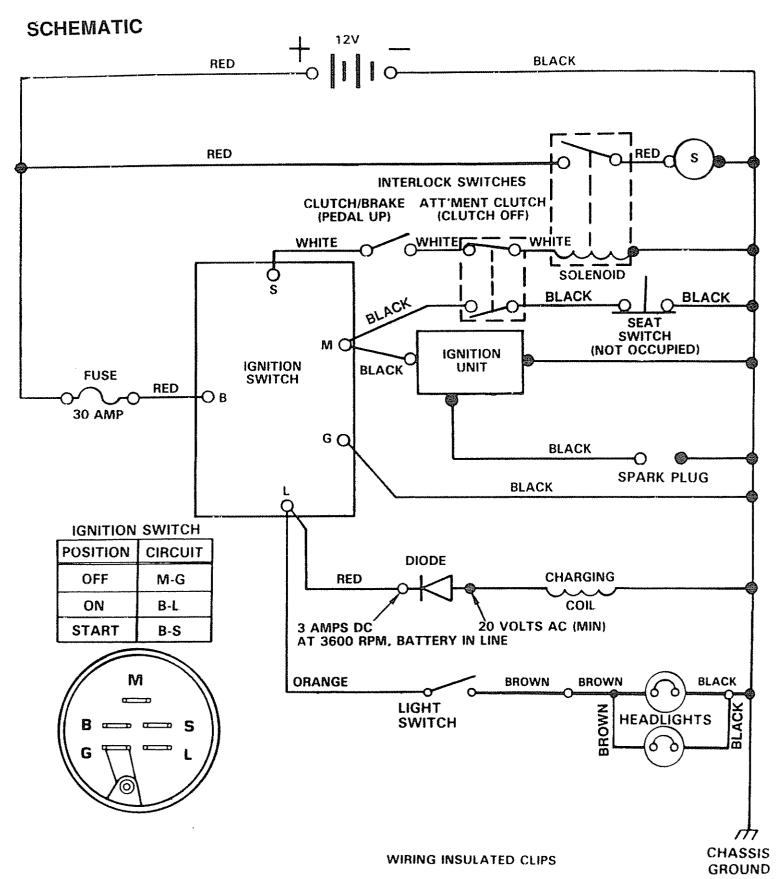


TROUBLESHOOTING

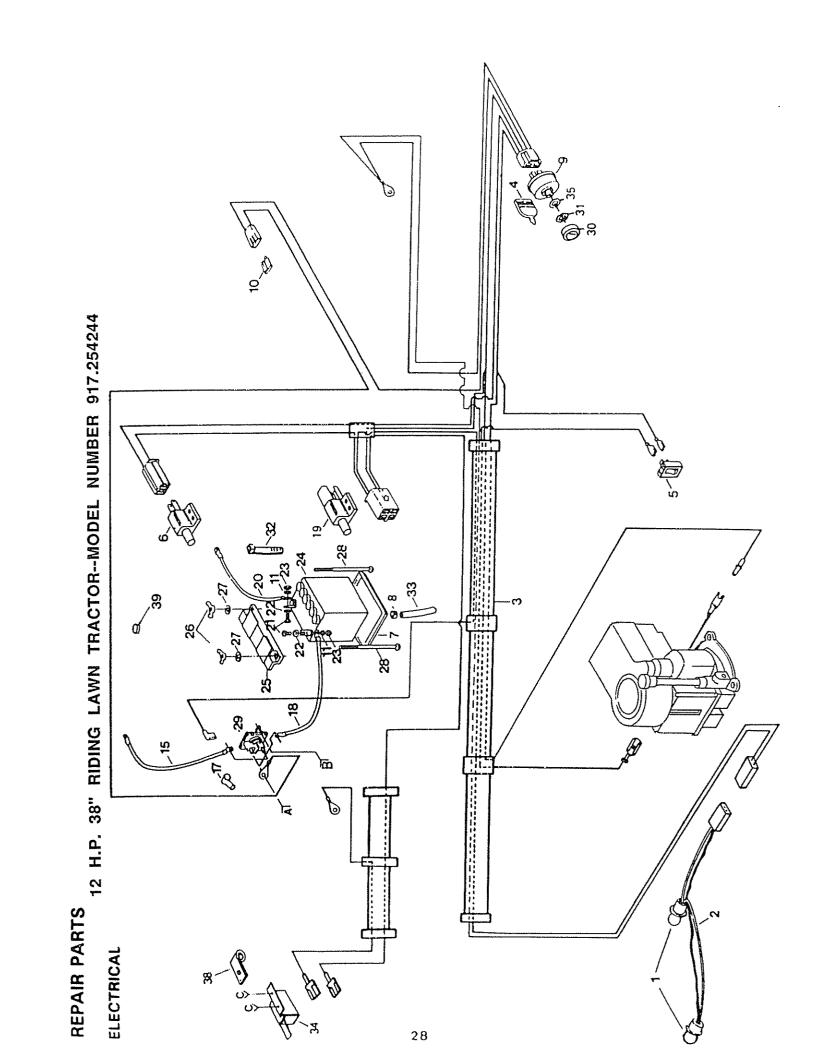
PROBLEM	CAUSE/REMEDY (SEE INDEX)
WILL NOT START	Push Clutch/Brake Pedal into Brake Position. Move Attachment Clutch Lever to "Disengaged Position Fill Fuel Tank with Gasoline. Check Fuel Line and Carburetor (clean if necessary) Replace Fuel Filter Check fuse for fault and replace Recharge or replace Battery Check Wiring Replace Spark Plug and adjust gap Adjust valves.
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 lines. Replace Fuel Filter Remove Air Filter and clean Replace Spark Plug and adjust gap Replace Battery Check the wiring and Spark Plug Drain Fuel Tank and Carburetor, use fresh fuel and replace Spark Plug Make necessary adjustments to Carburetor Adjust valves 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 Adjust valves
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 Regulato r 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 beit
MOWER BLADES WILL NOT ROTATE	Install new Mower Drive Belt Reinstall Mower Drive Belt Adjust Mower Drive Belt Replace Frozen Mandrel Replace 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

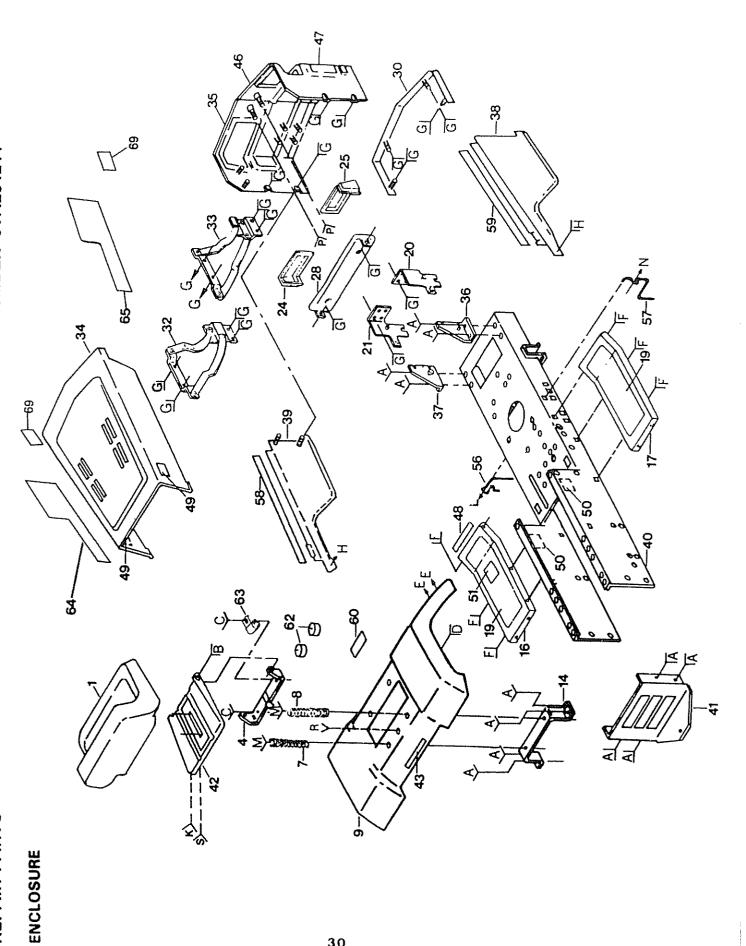


12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

ELECTRICAL

DESCRIPTION	719J Cover, Terminal 5114J Cable, Battery 709553X Switch-Interlock 4207J STD522507 *Bolt, Hex, 1/4 · 20 x 3/4 STD551025 *Washer 9/32 x 5/8 x 16 Ga. STD541025 *Nut, Hex 1/4 · 20 9272R 102476X STD541625 *Wing Nut 1/4-20 11030400 Int/Ext. Tooth Lockwasher 1/4 7-1/2 Ferminal Guard STD541625 *Wing Nut 1/4-20 11030400 Int/Ext. Tooth Lockwasher 1/4 Port 11030400 Int/Ext. Tooth Lockwasher 1/4 Solenoid 109787X Botel - Ignition 7192J Cable Tie 105687X Switch - Seat 19221616 Washer 11/16 x 1 x 16 Ga. 74641008 Screw - Slotted Pan Hd. #10-32 x 1/2 Nut - Keps #10-32 x 1/2 120586X Owners Manual **STANDARD HARDWARDPURCHASE LOCALLY**
PART NO.	719J 5114J 109553X 4207J STD521025 STD541025 9272R 102476X STD541625 11030400 72240460 109787X 120687X 120687X 120586X 120586X
KEY NO.	118 119 120 121 122 123 123 123 133 133 133 133 133
PART DESCRIPTION NO.	7662J Bulb, Light 10859X Harness, Light Socket 120309X Harness, Ight Socket 10710X Harness, Ighition 10710X Switch, Light 10445X Switch, Interlock 7603J Tray, Battery 109596X Clamp, Hose STD365402 Switch, Ignition 108824X Fuse, 30 Amp. STD551125 Washer, Lock, 1/4 STD55125 Nut, Hex Jam 1/4 - 20 STD55125 Nut, Hex Jam 1/4 - 20 STD522505 Bolt, Hex, 1/4 - 20 STD541225 Nut, Keps 1/4 - 20 STD541225 Nut, Hex Jam 1/4 - 20 STD541
KEY NO.	+ ეღ4ოდ გ დ ი ე <u>ნ ე ი გ გ ტ</u> ტე

12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

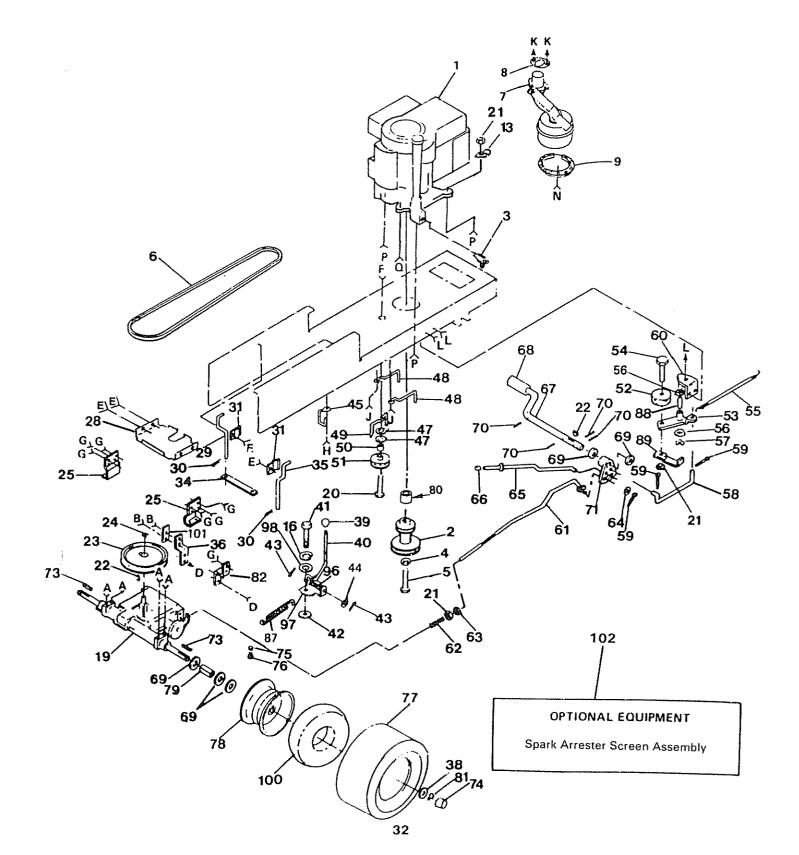


12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

ENCLOSURE

PART DESCRIPTION NO.	105792X Hinge, Hood, R.H. 105682X Hood Assembly 105678X Grill Assembly 108501X Bracket, Frame, Pivot, R.H. 108201X Bracket, Frame, Pivot, R.H. 106929X Side Panel, R.H. 106929X Side Panel, L.H. 106929X Side Panel, R.H. 102481X Drawbar 121069X Pan - Seath Control Decal, Chill Graftsman 105801X Decal, Grill Graftsman 105807X Decal, Grill Stripe 10010X Decal, Grill, Stripe 10010X Decal, Grill, Stripe 100109X Decal, Grill, Stripe 100109X Decal, Grill, Stripe 100109X Decal, Grill, Stripe 100109X Decal, Chill, Stripe 100109X Decal, Stripe, Side Panel, R.H. 106301X Guide - Belt, Lower, Eng. Pulley, L.H. 106301X Decal - Stripe, Side Panel, R.H. 106812X Decal - Stripe, Stripe, R.H. 106802X Decal, Stripe, R.H. 105802X Decal, Stripe, R.H. 105803X Decal, Stripe, R.H. 106831X Decal	55 H 3 S S 15 10 S 6 5 5 S S S S S S S S S S S S S S S S
KEY NO.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0€
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		22
		G 22
	Rolling 12 Ga. Ga.	ு ⊕ 85 52 73
	asher Thd. Ro sasher Thd. Ro Seat 5/16-18 -18 ession L.H. ession R.H. x 13/16 x 12 16 x 3/4 16 asher Thd. Rc r syle x 10 Ga. t t x3/4 x 10 Ga. t y - Grill y Grill	п (Д=====⊕ +; 54
NOI	x Washe x Washe yot, Sea yot, Sea der, 5/16 3/8-16 x Washe ander der 5/16 - H. H. H. H. A. 32 x 3/4 32 x 3/4 der, Grillight cot, Grillight der, Cot, Grillight der	a Ø⇒ £
DESCRIPTION	Seat Screw, Hex Washer Thd. Roll 3/8-16 x 3/4 Type TT Screw, Hex Washer Thd. Rolling 3/8-16 x 1 Bracket - Pivot, Seat Bort, Shoulder, 5/16-18 Nut, Lock, 5/16-18 Spring - Compression L.H. Spring - Compression L.H. Spring - Compression R.H. Fender Washer 13/32 x 13/16 x 12 Ga. Nut. Lock 3/8-16 Screw, Hex Washer Thd. Roll 3/8 16 x 1/2 Bracket. Fender Bott - Shoulder 5/16-18 Footrest, R.H. Footrest, R.H. Footrest, R.H. Footrest, 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, R.H. Washer 13/32 x 3/4 x 10 Ga. Clip Bezel, Headlight Bott, Hex 1/2 - 13 x 1 Strap Assembly - Grill Washer Hinge, Hood, L.H.	ა წლდა ა 13 წ 1
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PART NO.	17490612 17490616 17490616 105529X 105529X 121062X 121067X 121067X 121067X 121067X 121067X 121067X 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490608 17490611X 176911X 176911X 176911X 176911X 176911X 176911X 176911X 176911X 176911X 176911X 176911X 176911X 176911X	< Ø़==
KEY NO.	$-\alpha \omega \text{Approx} \text{Colored} \text{Approx} \text{Colored} \text{Approx} \text{Colored} \text{Colored}$	

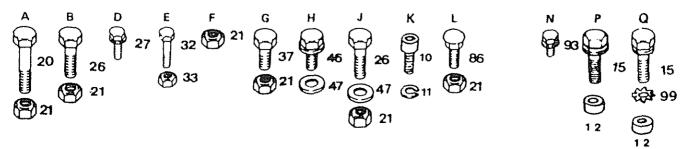
12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244



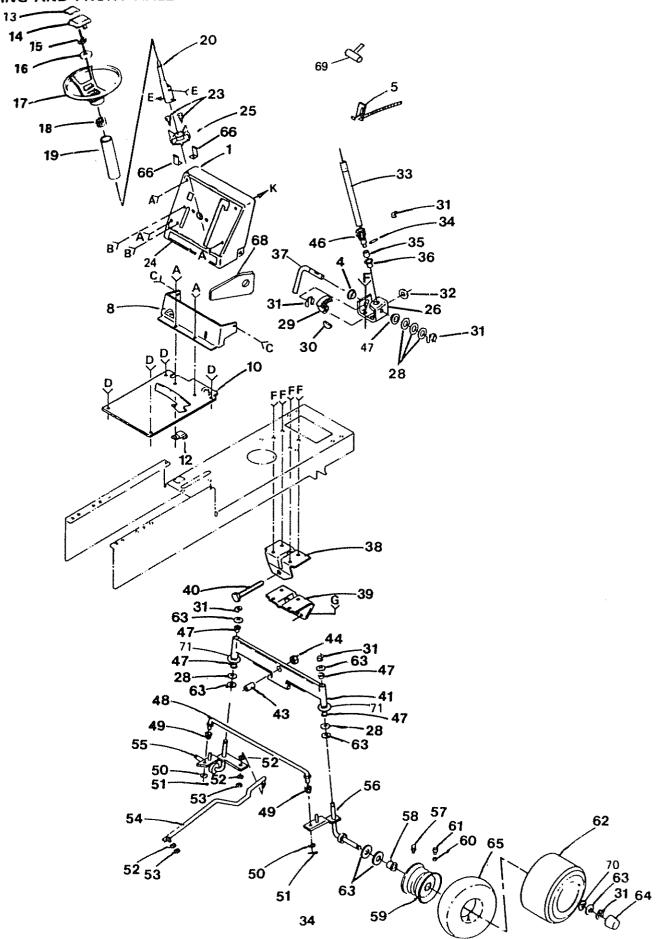
12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

DRIVE

KEY NO.	PART NO.	DESCRIPTION	KE No	EY O.	PART NO	DESCRIPTION
			49	10	09070X	Retainer Belt
1	120358X	Engine, 12 H.P. Tecumseh	50		470J	Spacer
		Model No. 143.386012	51	48	859J	ldler, Flat
2	105731X	Pulley, Engine	52		06298X	Pulley, Idler
3	120374X	Valve, Drain Oil	53		05705X	Belicrank Assembly (Inc. Key No. 88)
4	STD551143	*Washer, Lock 7/16	54		TD523715	*Bolt, Hex 3/8 - 16 x 1 - 1/2
			<i>55</i>		05709X	Spring, Return, Clutch
5	74770728	Bolt, Hex 7/16 - 20 x 1-3/4	56 57		10812X	Washer, Hardened
6 7	120302X	V-Belt, Drive	57 58		2000039 25710X	Ring, Klip Link, Clutch
	108835X	Muffler	59		5020412	Pin, Cotter 1/8 x 3/4
8	2949R	Gasket	60		05724X	Bracket, Clutch
9	101326L	Deflector, Muffler	61		09127X	Rod, Brake
10	71070510 STD551131	Hex Hd. Cap Screw 5/16-18 x 5/8	62		06888X	Spring, Rod, Brake
11 12	101200K	Washer, Lock 5/16	63	73	3350600	Nut - Jam 3/8 - 16
13	2751R	Spacer Clip	64		9131316	Washer 13/32 x 13/16 x 16 Ga.
15	17490628	Screw, Hex Washer Thd. Rolling	<i>65</i>)5758X	Rod, Brake, Parking
,,,		3/8-16x1-3/4	66		1673	Cap - Plunger
16	STD551125	*Washer, Lock 1/4	67		09037X	Shaft, Foot Pedal
••	4.4.04.057	Turney Trate Comment Mandal No.	68		3 <i>83R</i>	Cover - Pedal
19	110195X	Transaxle Foote, 6 Speed, Model No. 4150-40 (see pages 40 and 41 for	<i>69</i>		9252016	Washer 25/32 x 1 - 1/4 x 16 Ga.
		parts breakdown)	70 71		TD571810 D6918X	*Pin, Roll, 3/16 x 1 Arm, Brake
20	STD523727	*Bolt, Hex 3/8 - 16 x 2 - 3/4	73		D580105	*Key, Square 3/16 x 2
21	73680600	Nut, Lock 3/8 - 16	74 74		0380703 04757X	Cap, Hub, Rear
22	STD580025	*Key, Woodruff #9 3/16 x 3/4	75		1192	Cap, Valve
23	105703X	Pulley, Transaxle	76		139	Stem, Valve
24	12000028	Ring, Retainer	77		6268X	Tire, Rear - 18 x 9.50 x 8
25	109167X	Bracket, Transaxle	78	10	6108X	Rim Assembly, Rear
26	STD523710	*Bolt, Hex 3/8 - 16 x 1	7 <i>9</i>		9502X	Spacer
27	17490512	Screw, Hex Washer Thread Rolling	80		104J	Spacer, Engine Pulley
20	1001717	5/16 - 18 x 3/4	81		2000001	E-Ring
28 29	108171X 109368X	Support, Battery	82	10	5842X	Strap, Torque, Transaxle
30	4921H	Keeper, Belt, L.H. Retainer, Spring				
31	106190X	Clamp				
32	STD523107	*Bolt, Hex 5/16 - 18 x 3/4	86	ST	D533707	*Bolt, Carriage 3/8 - 16 x 3/4
33	73680500	Nut, Lock 5/16 - 18	87		0422X	Spring - Brake
34	109370X	Strap, Locator	88		5706X	Bearing
35	109369X	Keeper, Belt, R.H.	89	10	6499X	Retainer - Belt
36	106157X	Strap, Torque, Transaxle				
<i>37</i>	STD523707	*Bolt, Hex 3/8 - 16 x 3/4				
38 39	19252616 106933X	Washar 25/32 x 1 - 5/8 x 16 Ga. Knob, Shift	93	17	450808	Screw - Spider Lock #8 x 1/2 1/2 AB
40	110458X	Rod, Shift				
41	71040412	Bolt - Hex 1/4-28 x 3/4	96	10	5700X	Spring
42	105701X	Washer - Shift, Plate	97		6919X	Plate, Shift
43	STD561210	*Cotter Pin, 1/8 x 1	98		091210	Washer 9/32 x 3/4x 10 Ga.
44	19151216	Washer 15/32 x 3/4 x 16 Ga.	99		050600	Washer, Lock, Ext. Tooth 3/8
45	104777X	Retainer, Belt	100		52J	Tube, Tire (not furnished with tractor)
46	17490612	Screw, Hex Washer Thd. Rolling 3/8	101		6157X	Plate - Torque Strap
4 ***	1012121	16 x 3/4	102	67	7V1	Spark Arrester Screen Assembly
47	19131312	Washer 13/32 x 13/16 x 12 Ga.				•
48	105730X	Keeper, Belt, Engine	*sT	AN	DARD HAR	DWARE-PURCHASE LOCALLY



12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244 STEERING AND FRONT AXLE

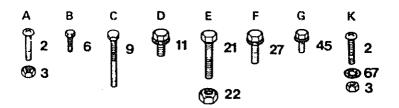


12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

STEERING AND FRONT AXLE

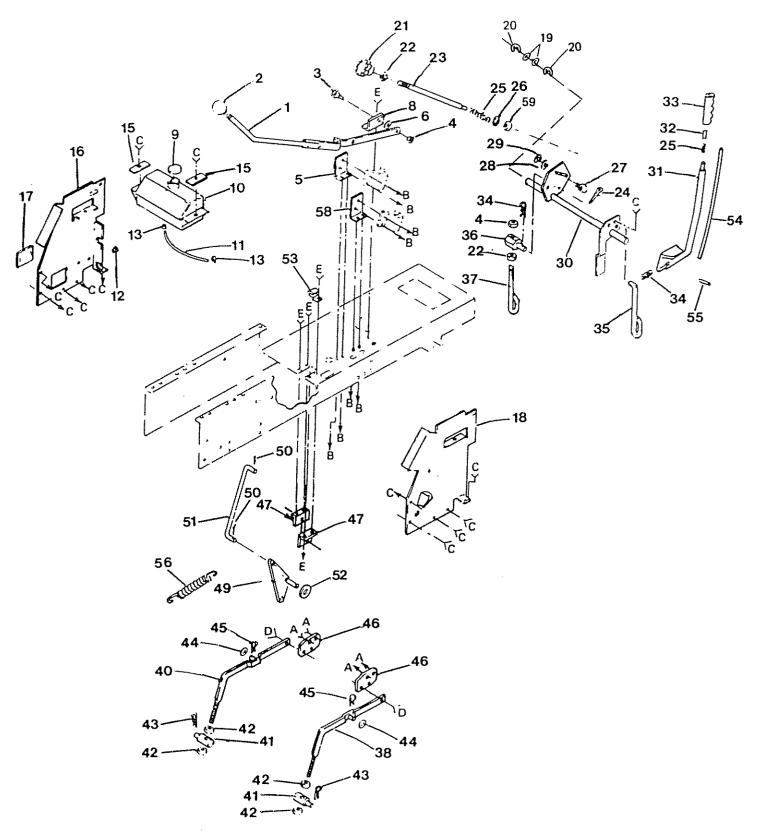
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	109283X012	Dash	34	2882J	Pin - Drive 3/16 x 1
2	74180512	Screw - Truss Hd. Cross Recess	35	74580	Spacer .627 x .88 x .695
		5/16 - 18 x 3/4	<i>36</i>	71208	Bushing
3 4 5	73510500	Nut - Keps 5/16 - 18	37	108683X	Rod - Šteering
4	109816X	Nyliner, Snap In	38	105663X	Support - Saddle, Rear
5	120139X	Control - Throttle	39	105664X	Support - Saddle, Front
6	17720408	Screw - Hex Thread Cut.	40	74761060	Bolt - Hex 5/8 - 11 x 3 - 3/4
		1/4 - 20 x 1/2	41	105669X	Axle - Front
8	105621X	Dash - Lower	43	110438X	Spacer, Bearing, Front Axle
9	17190508	Screw - Hex Washer Hd. Thread Cut.	44	73901000	Nut - Lock, Flange 5/8 - 11
		5/16 - 18 x 1/2	45	17490508	Screw - Hex Washer Thread Rolling
10	110657X012	Saddle			5/16 - 18 x 1/2 Type TT
11	17490608	Screw - Hex Washer Hd. Thread	46	108685X	Gear, Pinion
		Rolling 3/8 - 16 x 1/2	47	3366R	Bearing
12 13	2751Fl	Clip - Insulated	48	10571 <i>5X</i>	Rod - Tie
13	105810X	Decal - Cap, Steering Wheel	49	120382X	Bushing
14	100710L	Insert - Steering Wheel	50	19131416	Washer 13/32 x 7/8 x 16 Ga.
15	73940800	Nut - Hex Jam Lock 1/2 - 20	51	76020412	Pin - Cotter 1/8 x 3/4
16	100712K	Washer	<i>52</i>	STD551137	"Washer - Lock 3/8
17	100713N	Wheel - Steering	53	STD541137	° Nut - Hex 3/8 - 24
18	100711L	Adapter - Steering Wheel	54	105727X	Link - Drag
19	109285X	Sleeve - Steering	<i>55</i>	105656X	Spindle - L.H.
20	105643X	Shaft - Steering Upper	56	105654X	Spindle - R.H.
21	STD523712	*Bolt - Hex 3/8 - 16 x 1 - 1/4	<i>57</i>	278H	Fitting - Grease
22	73680600	Nut - Lock 3/8 - 16	58	9040H	Bearing - Flange
23	98000165	Screw - Hex Self Tap. No.	59	106732X	Rim - 6'' - Front
	400456\/	10 - 16 x 1/2	60	59192	Cap - Valve
24	108456X	Decal - Instruction, Operating	61	65139	Stem - Valve
25	109284X	Bushing - Steering	62	106222X	Tire - Turf
26	109432X	Bracket - Steering	63	19252016	Washer 25/32 x 1-1/4 x 16 Ga.
27	17490612	Screw - Hex Washer Thread Rolling	64	104757X	Cap - Hub, Front
	000011	3/8 - 16 x 3/4 Type TT	65	59904	Tube - Front (Not furnished with
28	6266H	Bearing - Thrust			tractor)
29	108684X	Gear - Sector	66	110130X	Retainer, Steering
30	106126X	Key - Woodruff	67	11150500	Washer, Lock, Int. Tooth 5/16
31	12000029	Klip Ring	68	110307X	Stop - Mower, Clutch Lever
32	101930X	Washer, Hardened	69	61159	Knob - Throttle Control
33	109068X	Shaft - Steering, Lower	70	19252616	Washer 25/32 x 1-5/8 x 16 Ga.
			71	19272016	Washer 27/32 x 1-1/4 x 16 Ga.

^{*}STANDARD HARDWARE-PURCHASE LOCALLY



12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

LIFT ADJUSTMENT

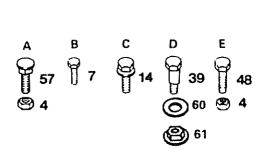


12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244

LIFT ADJUSTMENT

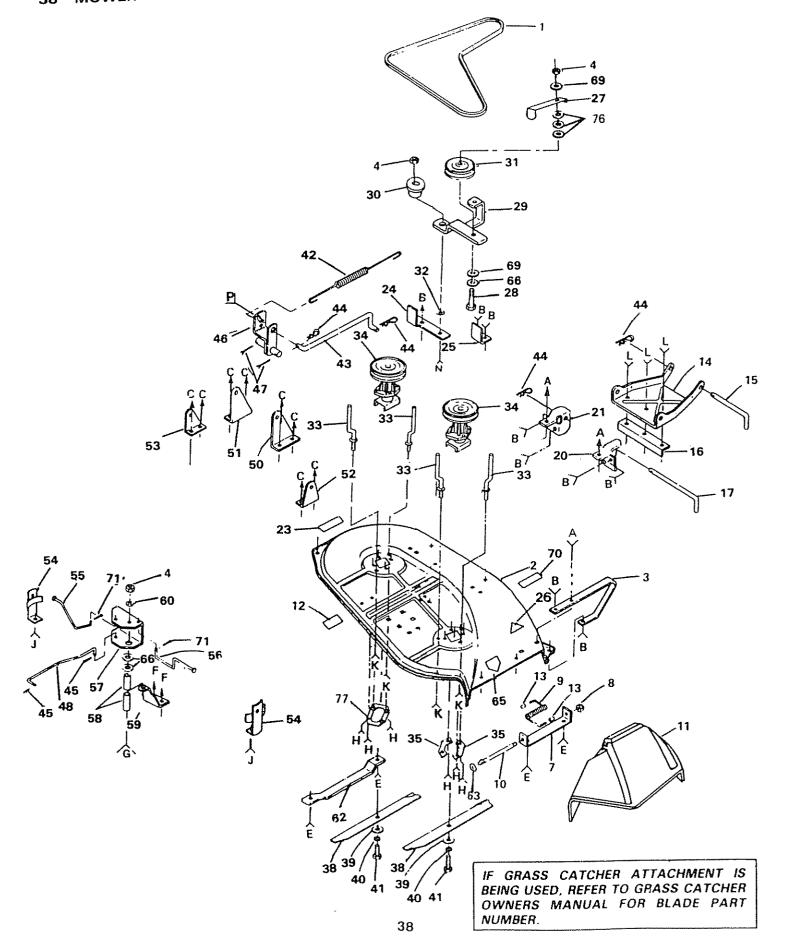
KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	106448X	Lever, Clutch, Mower	31	105768X	Lever, Assembly
2	106932X	Knob	32	105723X	Plunger
3	106451X	Bolt, Shoulder	33	109413X	Grip, Handle
4	73680600	Nut, Lock, 3/8 - 16	34	4939M	Retainer, Spring
5	106452X	Bracket, Switch, Interlock	35	110029X	Link, Lift
6	19171713	Washer 17/32 x 1 - 1/16 x 13 Ga.	36	106204X	Trunnion, Lift
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
ğ	109462X	Cap, Fuel	40	105863X	Arm, Suspension, L.H.
10	109202X	Tank, Fuel	41	106308X	Trunnion, Lift, Lower
11	101335K	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	52	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	<i>56</i>	106810X	Spring - Extension
26	19131016	Washer 13/32 x 5/8 x 16 Ga.	<i>57</i>	72140606	Screw 3/8-16 x 3/4
26 27	110810X	Trunnion - Depth Stop	58	108236X	Bracket - Switch
28	19151216	Washer 15/32 x 3/4 x 16 Ga.	59	110807X	Nut - Special
29	12000037	Klip Ring	60	110739X	Washer - Spring
30	120420X	Shaft,Lift	61	73980600	Nut - Flangelock 3/8 - 16

^{*}STANDARD HARDWARE--PURCHASE LOCALLY



REPAIR PARTS

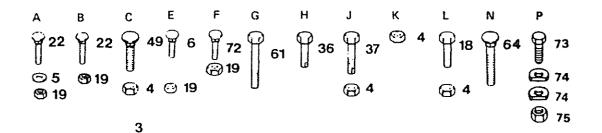
12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244



12 H.P. 38" RIDING LAWN TRACTOR--MODEL NUMBER 917.254244 38" MOWER

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
123456789011231456789012222222222233333333333333333333333333	106085X 105689X 8417J 73680600 19111216 72140505 105896X 110452X 106735X 106735X 105736X 105814X 105304X 105662X 105744X 105872X 105743X STD523707 73680500 109598X 109597X STD523707 3713J 109503X 109503X 109504X 109504X 109504X 109504X 109503X 109504X 109503X 109504X 109503X 109504X 109503X 109504X 109503X 109503X 109503X 109503X 109503X 109503X 106513X 106668L 100668L 17490612	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 Hod - 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 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 Screw, Hex Washer Hd. 3/8 - 16 x 3/4	390 4123 4444 445 555 555 555 566 666 667 777 777 75	106634X 19132012 STD551137 STD623715 108250X 108235X 4921H STD560907 109892X 76020616 108247X 72140606 108243X 108241X 105857X 1068673X 106456X 106456X 100672K 100673L 191131614 74760684 7631J 19111016 72140610 78850 STD551037 19132012 106679X 76020308 72110506 STD5522507 109893X 73680400	**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. Brake Assembly Rod, Brake, Secondary L.H. Rod, Brake, Secondary, R.H. 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 Washer, Special Nut, Lock 1/4-20
37	17490620	Screw, Hex Washer Hd. 3/8 - 16 x 1 - 1/4	76 77	19131407 110445X	Washer 13/32 x 7/8 x 7 Ga. L.H. Mandrel Support

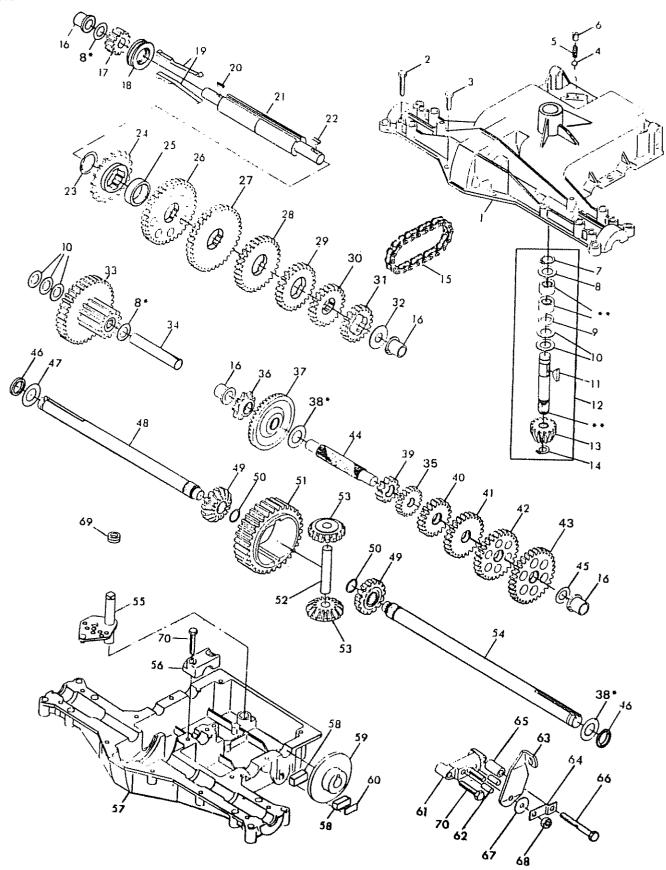
*STANDARD HARDWARE--PURCHASE LOCALLY



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

12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 917.254244 TRANSAXLE FOOTE - MODEL NUMBER 4150-40

TRANSAXLE

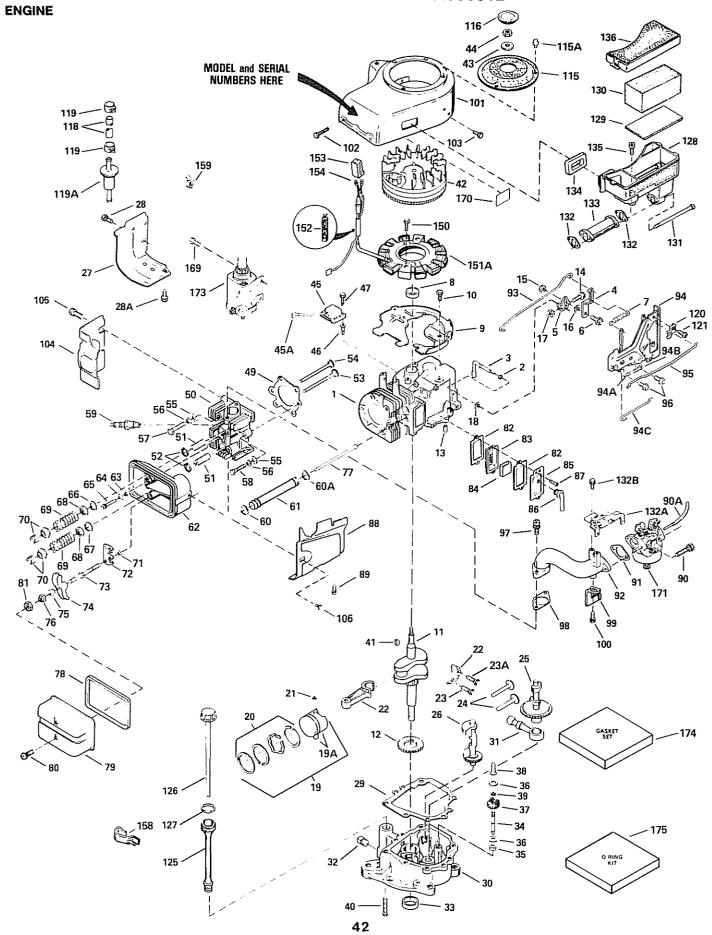


12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 917.254244 TRANSAXLE FOOTE - MODEL NUMBER 4150-40

TRANSAXLE

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
NO. 12345678888888888901234567890123222222223333		Housing, Upper Screw, Tapping, 1/4-20 x 1.31 Lg. Screw, Tapping, 1/4-20 x 875 Lg. Ball, Detent Spring, Detent Spring, Detent Screw, Set Ring, Retaining 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 .041 Washer, Plain, 632 x 1.00 x .046 Washer, Plain, 632 x 1.00 x .050 Washer, Plain, 632 x 1.00 x .060 Washer, Plain, 632 x 1.00 x .060 Washer, Plain, 632 x 1.00 x .082 O-Ring Washer, Plain, 632 x 1.00 x .046 Key, Woodruff, #9 Ass'y, Kit, Input Shaft Pinion, Bevel, 16T. Ring, Retaining Chain, 24 Pitches Bearing, Flange Gear, Spur, 13T Collar, Clutch Key, Woodruff, #3, Special Shaft, Intermediate Key, Woodruff #61 Ring, Retaining Sprocket, 18T Spacer Gear, Spur, 37T Gear, Spur, 35T Gear, Spur, 35T Gear, Spur, 25T Gear, Spur, 25T Gear, Spur, 22T Gear, Spur, 19T Washer, Plain, 640 x 1.37 x .061			Washer, Plain, .758 x 1.25 x .025 Washer, Plain, .758 x 1.25 x .031 Washer, Plain, .758 x 1.25 x .035 Washer, Plain, .758 x 1.25 x .040 Washer, Plain, .758 x 1.25 x .045 Washer, Plain, .758 x 1.25 x .055 Washer, Plain, .758 x 1.25 x .055 Washer, Plain, .758 x 1.25 x .062 Gear, Spur, 12T Gear, Spur, 20T Gear, Spur, 25T Gear, Spur, 25T Gear, Spur, 28T Gear, Spur, 31T Shaft, Drive Washer, Plain, .640 x 1.00 x .060 Seal, Felt Washer, Plain, .758 x 1.25 x .031 Axle, L.H. Gear, Miter, 15T. Ring, Retaining, Spirolox Gear, Spur, 32T Shaft, Cross Gear, Miter, 15T Axle, R.H. Ass'y., Shifter Cap, Support Housing, Lower Puck, Friction Disc, Brake Spacer Ass'y., Jaw, Brake Pin, Dowel Lever, Actuating Bracket, Anti-Rotation Spacer, .323 x .563 x 1 00 Lg. Screw, Tapping. 5/16-18 x 2 50 Lg Washer. Plain, .321 x 1 00 x .055 Nut, Lock, 5/16-24 V-Ring
32	105925X	Washer, Plain, 640 x 1.37 x .061			Screw, Tapping, 5/16-18 x 1.44 Lg
33 34	110468X 105927X	Ass'y , Gear, Comb , 12T. & 37T.			_
35 36 37 38 38 38 38	105927X 106151X 105928X 110478X 108983X 105930X 105931X 105932X	Shaft, Idler Gear, Spur, 15T. Sprocket, 9T. Gear, Bevel, 42T. Washer, Plain, 758 x 1 12 x .010 Washer, Plain, 758 x 1.12 x .015 Washer, Plain, .758 x 1.12 x .020 Washer, Plain, .758 x 1.12 x .025			oinations to maintain proper clearances . y - Order Key No. 12
38	3417J	Washer, Plain, 758 x 1.25 x .020			

12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 917.254244 ENGINE TECUMSEH - MODEL NUMBER 143.386012

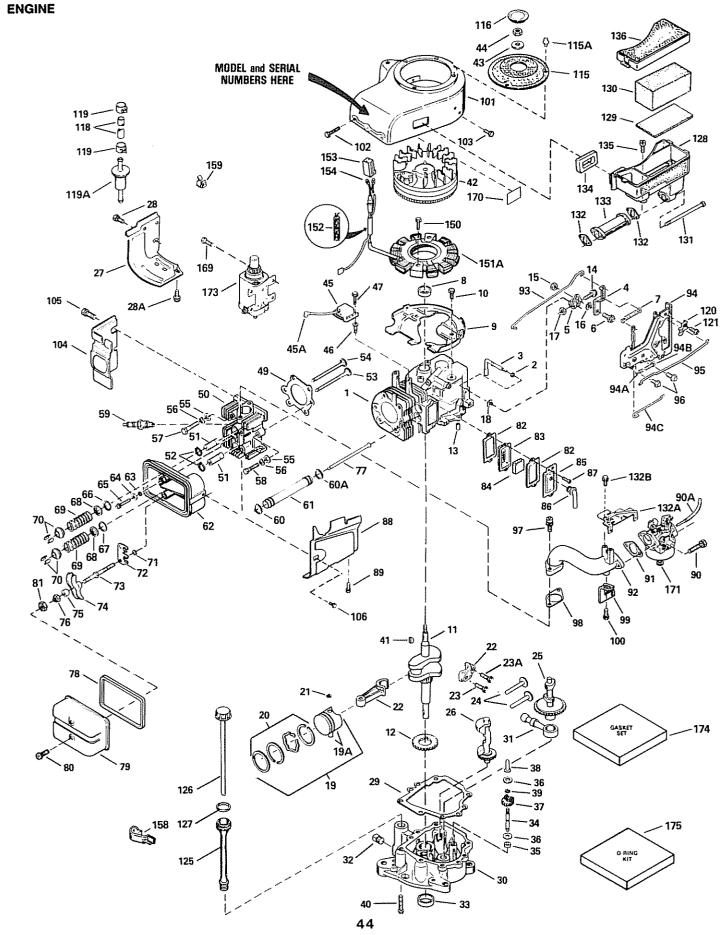


12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 917.254244 ENGINE TECUMSEH - MODEL NUMBER 143.386012

ENGINE

Ref.	Part		Ref.	Part	
No.	No.	Part Name	No.	No.	Part Name
1	35323A	Cylinder Assy. (Incl. Nos. 8 & 13)	53	35308	Valve, Exhaust (Std.)
2	28277	Washer, Flat	53	35433	Valve, Exhaust (1/32" oversize)
3	35324	Rod, Governor	54	35309	Valve, Intake (Std.)
4 5	35520 29916	Lever, Governor Clamp, Governor lever	54 55	35432 650691	Valve, Intake (1/32" oversize)
6	650548	Screw, Hex washer hd., 8-32 x 5/16	56	650690	Washer, Flat Washer, Belleville
7	35521	Spring, Control	57	650746	Screw, Hex hd., 5/16-18 x 1-3/8
8	35319	Seal, Öil	58	650692	Screw, Hex hd., 5/16-18 x 1-3/4
9	35326	Baffle, Blower housing	59	34046	Resistor Spark Plug (Champion RL-
10	650561	Screw, Hex washer hd. Durlok, 1/4-20	00	+*00404	86C or equivalent)
11	35336A	x 5/8 Crankshaft Assy.	60 60A	†*33481 †*33481	"O" Ring "O" Ring
12	35327	Gear, Counterbalance	61	35475	Tube, Push rod
13	27652	Pin, Dowel	62	35310	Housing, Rocker arm
14	29826	Screw, Hex washer hd., 10-32 x 3/4	63	1*33484	("O" Ring
15 16	30322 29918	Locknut, Hex "Keps", 8-32	64	650168	Washer, Flat
17	29216 29216	Washer, E.T. Lock #8 Locknut, Hex "Keps", 10-32	65	32610A	Screw, Flanged hex hd., 1/4-20 x
18	29642	Ring, Retaining	66	†*33509	29/32 "O" Ring (Intake)
19	35339	Piston, Pin & Ring Assy. (Std.) (Incl.	67	1*34410	"O" Ring (Exhaust)
		Nos. 19A, 20 & 21)	68	33510	Cap, Valve spring
19	35340	Piston, Pin & Ring Assy. (.010 over-	69	33507	Spring, Valve
19	35341	size) (Incl. Nos. 19A, 20 & 21)	70	33508	Keeper valve retainer & cap set
19	30341	Piston, Pin & Ring Assy. (.020 over- size) (Incl. Nos. 19A, 20 & 21)	71 72	†*35295 35296	"O" Ring
19A	35329	Piston & Pin Assy. (Std.) (Incl. No. 21)	73	650878	Guide, Push rod Stud, Rocker arm
19A	35430	Piston & Pin Assy. (.010 oversize)	74	35297	Arm, Rocker
1		(Incl. No. 21)	75	35298	Bearing, Rocker arm
19A	35431	Piston & Pin Assy (020 oversize)	76	†*28264	Nut Assy. (Incl. No. 81)
20	34866	(Incl. No. 21) Ring Set, Piston (Std.)	77 78	35466	Rod, Push
20	34867	Ring Set, Piston (310.)	78 79	†*35299A 35300	"O" Ring Cover, Rocker arm housing
20	34868	Ring Set, Piston (-020 oversize)	80	†*650879	Screw, Truss hd. w/sealing
21	31919	Ring, Piston pin retaining			Lockwasher, 8-32 x 1/2
22	35330A	Rod Assy., Connecting (Incl. No. 23 &	81	†*650903	Nut, Hex jam
23	650908	23A) Screw, Connecting rod	82	*27896	Gasket, Valve cover
23A	650882	Screw, Connecting rod	83 84	28423 28424	Body, Breather Element, Breather
24	35313	Lifter, Valve	85	28425	Cover, Valve spring box
25	35314A	Camshaft Assy (Mech Compression	86	35350	Tube, Breather
20	2021	Release) (Incl. No. 24)	87	650128	Screw, Fil. hd. Sems, 10-24 x 1/2
26 27	35315 35316	Weight Assy., Counterbalance Extension, Blower housing	88 89	35301	Extension, Blower housing
28	650128	Screw, Fil. hd. Sems, 10-24 x 1/2	90	650128 650517	Screw, Fil. hd. Sems, 10-24 x 1/2 Screw, Fil. flex hd., 1/4-20 x 7/8
28A	30063	Screw, Hex hd. Sems, 1/4-20 x 1/2	90A	35043	Tube, Carburetor
29	*35317	Gasket, Mounting flange	91	*33263	Gasket, Carburetor to intake pipe
30	35318	Flange, Mounting (Incl. Nos. 28A, 32,	92	35304	Pipe, Intake
31	31356	33 & 34) Pump Assy., Oil	93 94	35522	Link, Governor
32	31927	Plug, Oil drain (square hd., 3/18-18)	34	35524	Bracket Assy., Control (Incl. Nos. 94A & 94B)
33	35319	Seal, Oil	94A	33802	Spring, Compression
34	35320	Shaft, Governor	94B	650777	Screw, Fil. hd., 6-32 x 21/32
35 36	31707A	Spacer Assy., Governor	94C	35525	Link, Control bracket
37	35479 35321	Washer, Flat Gear Assy., Governor	95 96	35523	Link, Governor spring
38	35322	Spool, Governor	30	650902	Screw, Hex washer hd. Sems, 10-32 x 7/16
39	29193	Ring, Retaining	97	792028	Screw, Hex hd. Sems, 5/16-18 x 7/8
40	650833	Screw, Hex washer hd. Powerlok,	98	*33515	Gasket, Intake pipe
44	20500	1/4-20 x 1-3/16	99	35288	Brace, Intake pipe
41 42	32589 611093	Key, Flywheel Flywheel	100	650738	Screw, Hex washer spinlock hd.
43	650880	Washer, Lock	101	35338A	thread forming, 1/4-20 x 5/8
44	650881	Nut, Flywheel (Hex, 5/8-18)	102	30688	Housing, Blower Screw, Hex hd. Sems, 1/4-20 x 1/2
45	35135	Solid State Assy	103	29747B	Screw, Hex hd. Sems, 5/16-24 x 21/32
45A	610118	Cover, Spark plug			The second of th
46 47	650872 650814	Stud, Solid state assy.			
49	*35306	Screw, Hex hd. Sems, 10-24 x 1 Gasket, Cylinder head			
50	35307	Head Assy., Cylinder			
51	730218	Valve Guide Kit (Incl. 2 of No. 52)			*Indicates Parts Included in
52	792035	Ring, Retaining			Gasket Set, Ref. No. 174.
L		A			

12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 517.254244 ENGINE TECUMSEH - MODEL NUMBER 143.386012

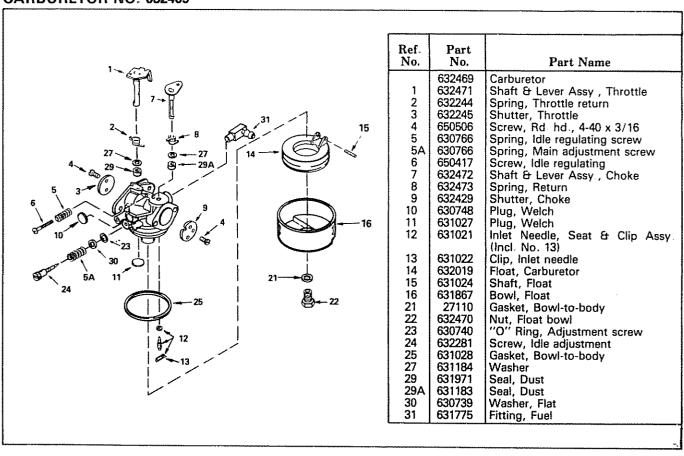


12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 917.254244 ENGINE TECUMSEH - MODEL NUMBER 143.386012

ENGINE

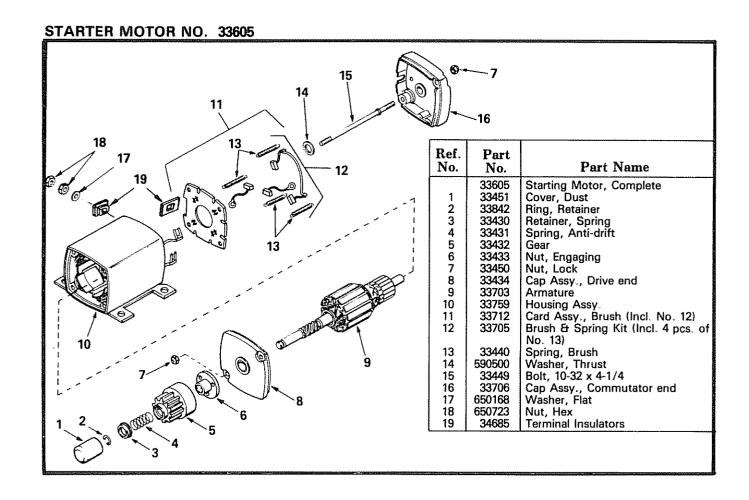
Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
104 105 106 115 115A 116 118 119 119A 120 121 125 126 127 128 129 130 131 132 132A 132B	35290 650273 30688 35411 34113 29774 26460 34279A 27793 28942 35574 35576 35499 34909 35108 34910 650875 *33629 35516 30200 35286	Cover, Cylinder head Screw, Fil. hd. Sems, 5/16-18 x 1/2 Screw, Hex hd. Sems, 1/4-20 x 1/2 Screen, Starter Pop Rivet (Can be purchased locally) Plug, Blower housing Line, Fuel Clamp, Fuel line Filter, Fuel (Incl. No. 119) Clip, Conduit Screw, Hex washer hd. Sems, 10-32 x 3/8 Tube, Oil fill Dipstick, Oil "O" Ring Body, Air cleaner Filter, Air cleaner (Flocked) Element, Air cleaner Screw, Fil. hd. Sems, 10-32 x 5-1/4 Gasket, Air cleaner elbow Bracket Screw, Hex washer hd., self-tap Sems, 10-24 x 9/16 Adapter, Air cleaner	134 135 136 150 151A 152 153 154 159 169 170 171 173 174 175	*34912 650784 34911 650873 611113 610935 610921 610922 35437 27275 30688 34346 632469 33605 35331 35332	Gasket, Air cleaner Screw, Hex hd. taptite, w/flatwasher, 10-24 x 11/16 Cover, Air cleaner Screw, Hex hd. Sems, 1/4-20 x 3/4 Coil Assy, Alternator (3 Amp D.C.) (Incl. Nos. 152, 153 & 154) Diode Connector Body Terminal, Female Clip, Oil fill tube Clip, Wire Screw, Hex hd. Sems, 1/4-20 x 1/2 Decal, Instruction Carburetor (Incl. No. 91) Starter Motor (12 Volt) Gasket Set (Incl. items marked *) "O" Ring Kit (Incl. items marked †) RPM Settings: Low Speed, 1700; High Speed, 3500. *Indicates Parts Included in Gasket Set, Ref. No. 174. *Indicates Parts Included in Gasket Set, Ref. No. 175.

CARBURETOR NO. 632469

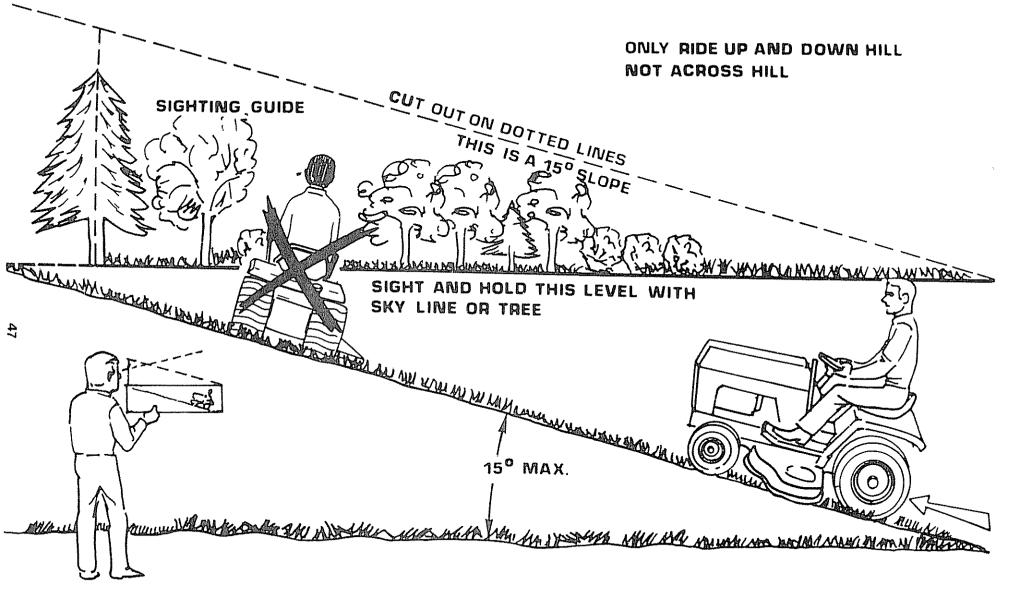


12 H.P. 38" RIDING LAWN TRACTOR - MODEL NUMBER 917.254244 ENGINE TECUMSEH - MODEL NUMBER 143.386012

ENGINE



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

OWNERS MANUAL

MODEL NO. 917.254244

HOW TO ORDER REPAIR PARTS

CRAFTSMAN

LT 12 HP ELECTRIC START 6 SPEED - 38" MOWER LAWN TRACTOR

The Model Number will be found on the Model Plate attached to the Fender. 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 FOLLOW-ING 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".