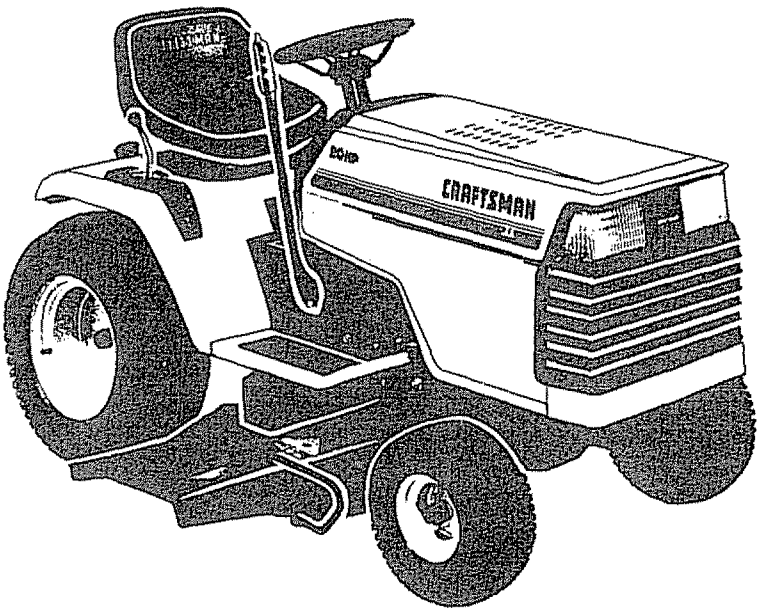
SEARS

OWNER'S MANUAL

MODEL NO.
917.254460

MODEL NO.
917.250040
(without
Mower Deck)

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



CRAFTSMAN®
20.0 HP TWIN ELECTRIC START 44" MOWER DECK 6 SPEED TRANSAXLE GARDEN TRACTOR

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

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.

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.

NOTE: LOOK FOR THIS WORD TO POINT OUT IMPORTANT INFORMATION ABOUT THE OPERATION AND PERFORMANCE OF YOUR TRACTOR.

RULES FOR SAFE OPERATION

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

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.

1. Know the controls and how to stop quickly. READ THIS OWNER'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 driver's 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 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 55.
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 objects.
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 is 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 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 is running.
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 entire grass catcher, on mowers so equipped, or 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.

CONGRATULATIONS *on your purchase of a Sears Garden 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 _____

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.

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. See pages 53-54 for a list of available attachments.

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 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 DEPARTMENT 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/731CR-W, Sears Tower, Chicago, IL 60684

DO NOT OVERLOAD TRACTOR BY TOWING WEIGHTS GREATER THAN 150 POUNDS (68 kg).

INDEX

ASSEMBLY

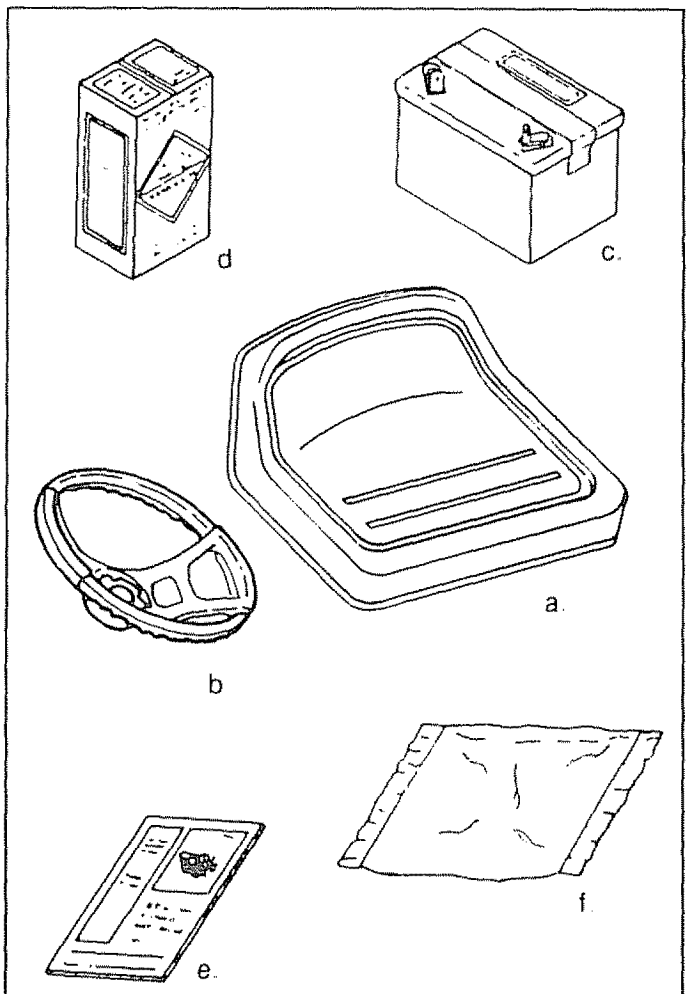
To assemble and adjust your tractor you will need:

(2) 7/16" Wrenches	*Ratchet wrench*
(1) 3/4"" Wrench	*Tire Pressure Gauge*
(1) 9/16" Wrench	*Screwdriver*
(1) 1/2" Wrench	*Utility Knife*
(1) 3/4" Socket	*(2) 11/16 wrench*

NOTE: RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION WHILE SEATED ON THE TRACTOR.

UNPACKING INSTRUCTIONS

1. Remove box from carton. The box contains the items shown below.
2. Cut down four corners of the carton with a utility knife and fold down sides.
3. Remove mower deck from skid.
4. Disengage Parking Brake
5. Carefully guide the tractor backwards off the skid

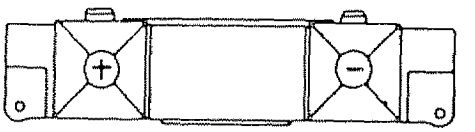


a. Seat	d. Battery Acid
b. Steering Wheel	e. Owner's Manual
c. Battery	f. Parts Bag

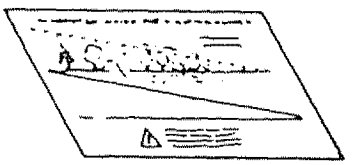
The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting your tractor and while mowing. We recommend Wide Vision Safety Mask for over the spectacles or standard safety glasses, available at Sears Retail or Catalog Stores.

Parts Bag Contents Not Shown Full Size

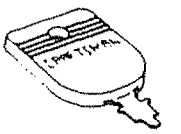
(2) Battery Carriage Bolts - 1/4 - 20 x 7 1/2



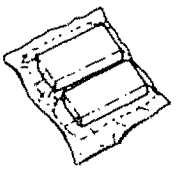
Terminal Guard



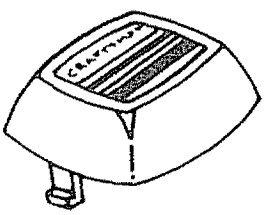
15° Slope Instruction Sheet



(2) Keys

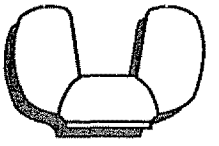
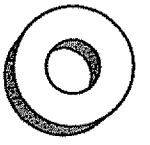
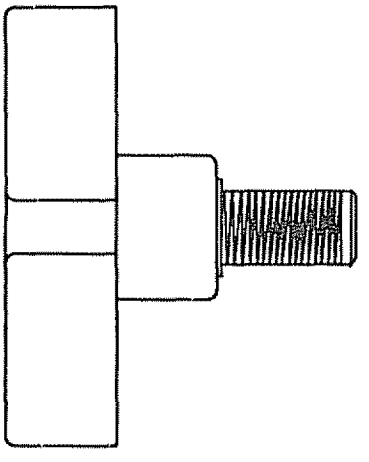
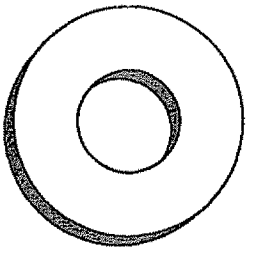
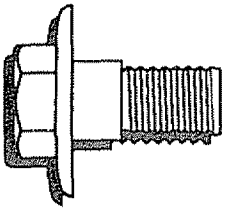


(6) Battery Caps



Steering Wheel Insert

ASSEMBLY

ASSEMBLY LOCATION	PARTS BAG CONTENTS SHOWN FULL SIZE
BATTERY	 (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) Adjustment Knob 1/2  (1) Washer 17/32 x 1 3/16 x 12 Ga  (1) Shoulder Bolt 5/16 - 18

WEAR EYE AND FACE SHIELD.
WASH HANDS OR CLOTHING IMMEDIATELY IF ACCIDENTALLY IN CONTACT WITH BATTERY ACID.
DO NOT SMOKE, FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE.

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 ATTACHMENT CLUTCH ENGAGED WILL SHUT OFF THE ENGINE.

1. Prepare Battery

READ INSTRUCTIONS INCLUDED WITH THE BATTERY VENT CAPS FOUND IN BAG OF PARTS. ALWAYS WEAR GLOVES, CLOTHING AND GOGGLES TO PROTECT YOUR HANDS, SKIN AND EYES.

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

NOTE: OVERCHARGING WILL SHORTEN BATTERY LIFE.

b. *Fill battery with battery acid to bottoms of tubes in cells (Fig 1).* DO NOT OVERFILL. OVERFILLING WILL RESULT IN DAMAGE TO TRACTOR.

c. *Check level of battery acid after 30 minutes. Add additional battery acid if necessary.* NOTE: PRESS VENT CAPS INTO BATTERY UNTIL FASTENED SECURELY.

NOTE: OBSERVE SAFETY PRECAUTIONS, LISTED IN BOX ABOVE, REQUIRED FOR BATTERY CHARGING.

d. *Charge battery at a rate of six amperes for one hour.*

e. *Neutralize excess battery acid (from filling battery) for disposal by adding it to 7.4 litres (2 gallons) of water in a 19 litres (5 gallon) plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.*

2. Install Seat

Seat position should be adjusted forward or backward so that the operator can comfortably reach Clutch/Brake Pedal and safely operate the tractor (Fig. 14).

a. *Remove cardboard from seat pan.*

b. *Place seat on seat pan. Screw adjustment knob and flat washer into seat (Fig. 2) Screw shoulder bolt into seat (Fig. 2). Adjustment knob, shoulder bolt and washer found in bag of parts.*

CUT AWAY VIEW

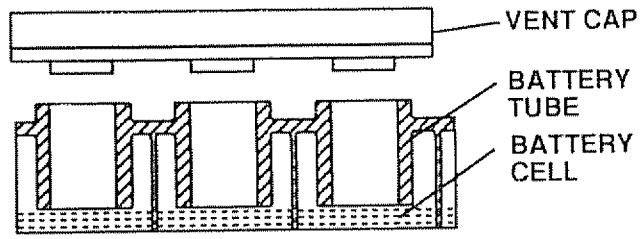


FIGURE 1

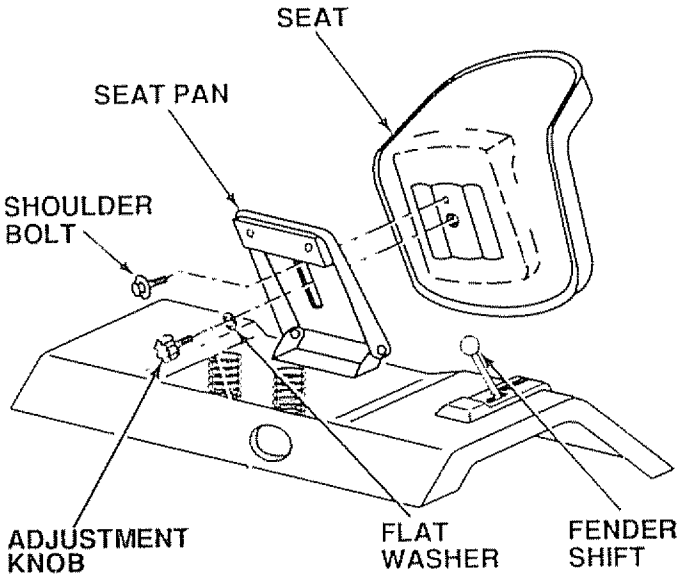


FIGURE 2

THE ADJUSTMENT BOLT AND FLAT WASHER MUST BE TIGHTENED SECURELY TO PREVENT MOVEMENT OF SEAT.

c. *Tighten shoulder bolt using a 1/2" wrench. NOTE: THE SHOULDER BOLT WILL BE LOOSE IN THE SEAT PAN SLOT.*

d. *Tighten adjustment knob finger tight.*

e. *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.*

f. *To adjust: raise seat. Loosen adjustment knob. Slide seat to desired position. Tighten adjustment knob securely.*

ASSEMBLY

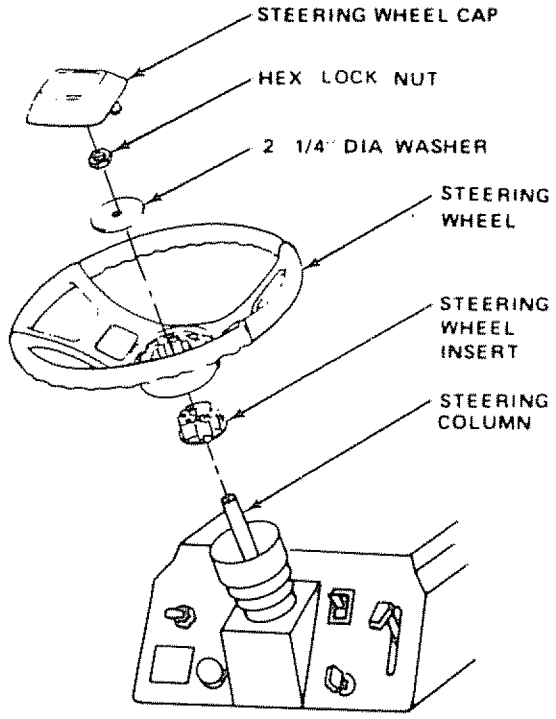


FIGURE 3

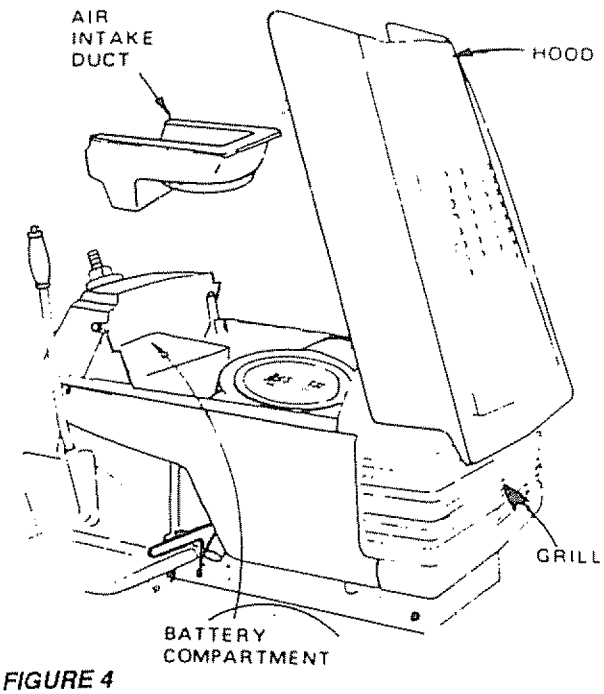
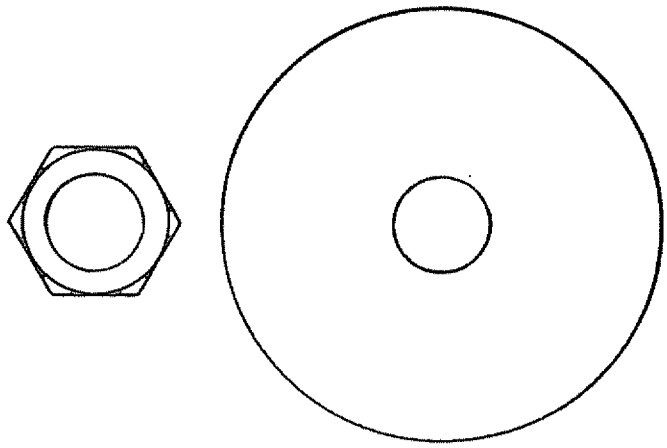


FIGURE 4

3. Install Steering Wheel

NOTE POSITION FRONT WHEEL FORWARD.

a Use a 3/4" wrench to remove lock nut, and 2 - 1/4" diameter washer (shown full size below) from steering column (Fig 3)



b. Position steering wheel over steering wheel insert (Fig. 3). BARS OF STEERING WHEEL SHOULD POINT STRAIGHT ACROSS TRACTOR.

c Secure steering wheel to steering column using 2 1/4 diameter washer and lock nut (Fig 3) Torque to 68 N-m (50 Ft. Lbs.)

d Snap steering wheel cap in place on steering wheel Steering wheel cap found in bag of parts

4. Check Tires

Reduce tire pressure to 1 Kg/cm² (14 PSI) in front tires and 0.71 Kg/cm² (10 PSI) in rear tires. (Tires were overinflated for shipping purposes.)

5 Install Battery

DO NOT SHORT BATTERY TERMINALS

BEFORE INSTALLING BATTERY, REMOVE METAL BRACLETS, WRISTWATCH BANDS, RINGS, ETC.

IF BATTERY IS REMOVED, DO NOT OPERATE ENGINE. SPARKING MAY OCCUR.

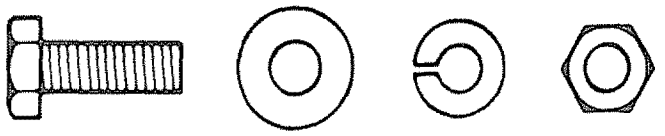
a Lift hood from rear sides (Fig 4)

b Make sure drain tube (Fig 5) is fastened to drain hole in battery tray and battery tray is positioned in hole of battery support.

c Place battery in plastic tray (battery terminals to front of tractor) (Fig 5)

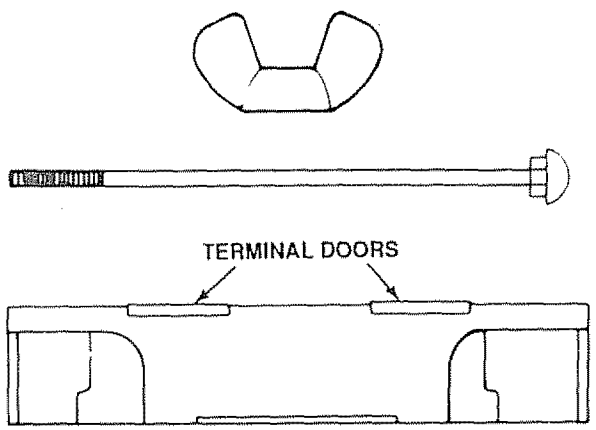
POSITIVE TERMINAL MUST BE CONNECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING.

e. *Connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lockwasher and hex nut (shown full size below) found in bag of parts (Fig. 5). Tighten securely.*
f. *Connect BLACK ground cable to negative (-) battery terminal with remaining hex bolt, flat washer, lockwasher and hex nut (shown full size below) found in bag of parts (Fig. 5). Tighten securely.*



NOTE: IF YOU HAVE A WEAK BATTERY, SEE "STARTING YOUR TRACTOR WITH A WEAK BATTERY" (PAGE 20)

g. *Using the square hole on one side of the battery support (Fig. 6) insert one battery bolt, head of bolt down. Fasten the battery bolt to the terminal guard using wing nut as shown (Fig. 6). Bolts, nuts, and terminal guard, shown below, are found in bag of parts.*
h. *Assemble the remaining battery bolt to other side of battery support and fasten terminal guard to it with remaining wing nut. Tighten both wing nuts securely (by hand)) at the same time (Fig. 6).*



i. *Replace air intake duct (Fig. 4). Make sure bottom lip of duct sits between battery and lip of battery tray.*
j. *Remove plastic from tractor hood and close.*

NOTE: USE TERMINAL ACCESS DOORS (FIG 6) FOR:
1 INSPECTION FOR SECURE CONNECTIONS (TIGHTEN HARDWARE)
2 INSPECTION FOR CORROSION
3 TESTING BATTERY
4 JUMPING (IF REQUIRED)
5 CHARGING (IF REQUIRED)

KEEP TERMINAL ACCESS DOORS CLOSED WHEN NOT IN USE.

DO NOT START ENGINE UNTIL MOWER SUSPENSION BRACKET HAS BEEN RELEASED. SEE MOWER AND DRIVE BELT INSTALLATION, PAGE 10.

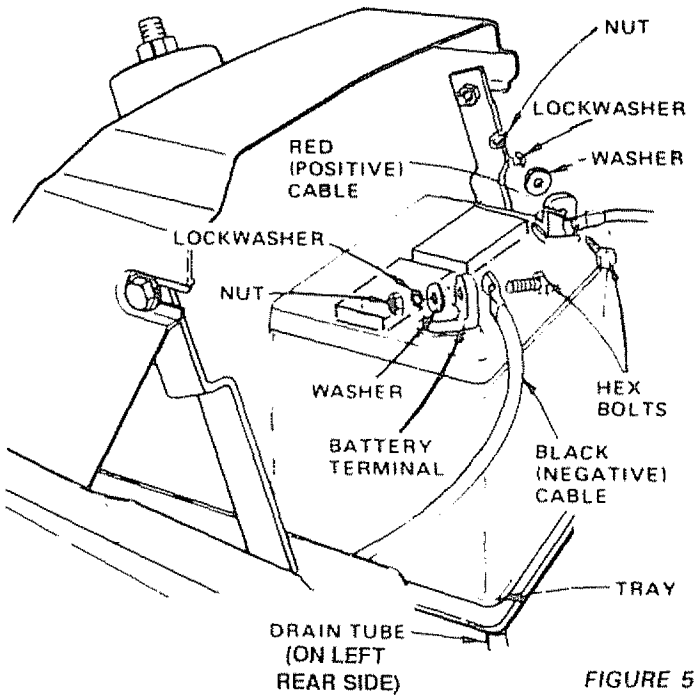


FIGURE 5

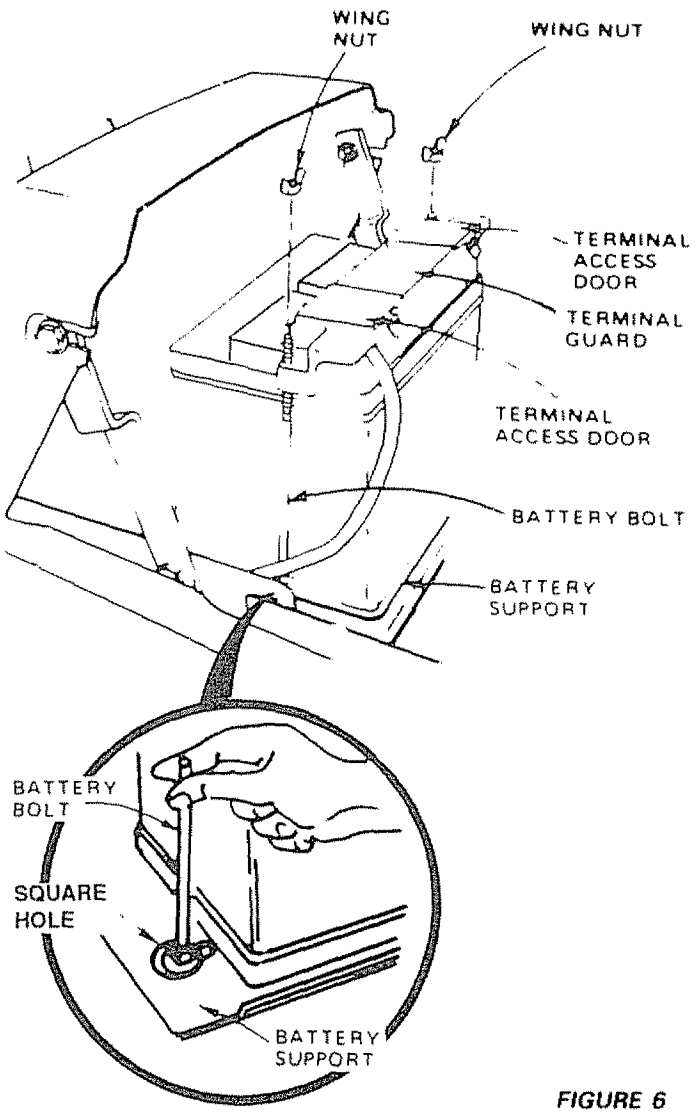


FIGURE 6

ASSEMBLY

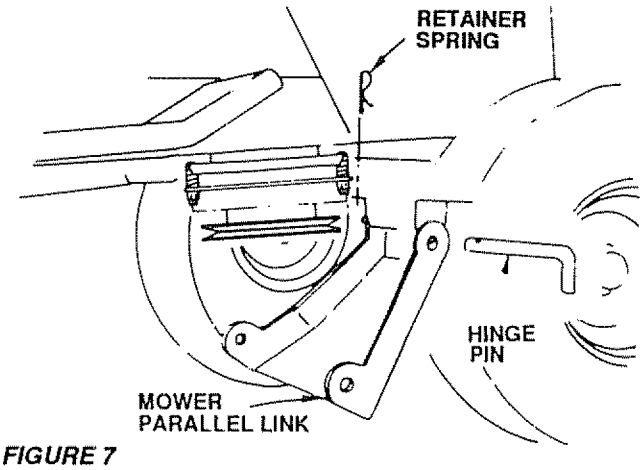


FIGURE 7

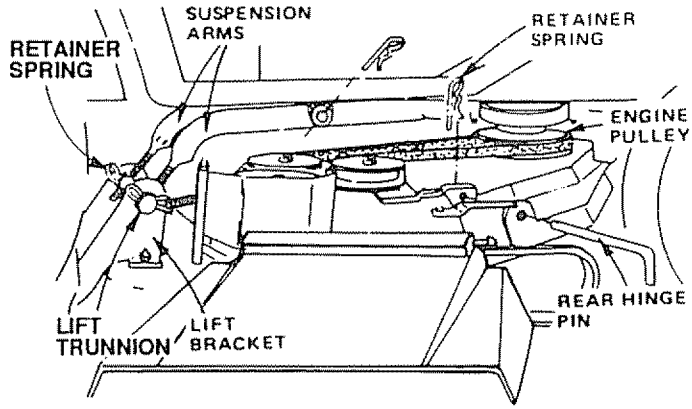


FIGURE 8

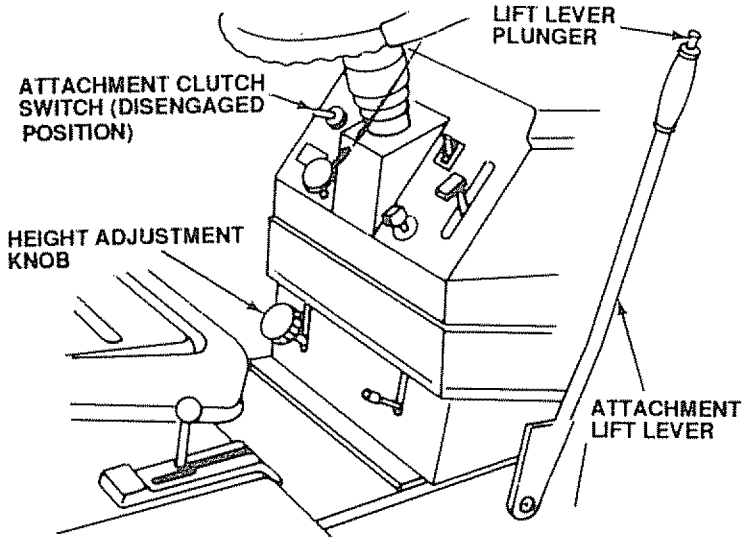


FIGURE 9

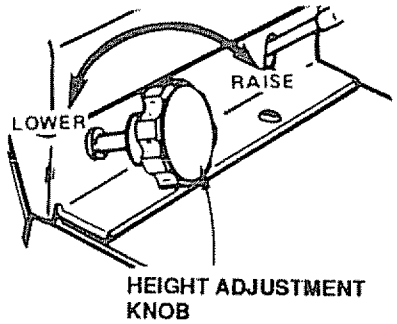


FIGURE 10

6. Mower and Drive Belt Installation

INSTALL MOWER PARALLEL LINK

Your tractor has been shipped with the mower parallel link included in the parts carton. Install mower parallel link on tractor (Fig. 7) using hinge pin and retainer spring.

NOTE: SMALLER END OF PARALLEL LINK MOUNTS TO TRACTOR. USE THE SHORTEST HINGE PIN FOR MOUNTING.

INSTALL MOWER

Your mower installs without the use of tools.

a. Raise attachement lift lever (Fig. 9) to its highest position.

b. Turn height adjustment knob counterclockwise ( ) to lowest position (Fig. 10)

c. Slide mower under tractor with discharge guard to R.H. side.

d. Install rear hinge pin through mower lift brackets and parallel link (Fig. 8). Secure with retainer spring.

e. Move attachment lift lever (Fig. 9) forward to lower suspension arms. Remove retainer springs from lift trunnions (Fig. 8).

f. Slide trunnions through upper lift bracket holes and secure with retainer springs (Fig. 8).

g. Pull L.H. idler pulley (Fig. 12) toward the right hand side of the tractor and roll belt over engine pulley (Fig. 8).

NOTE: MOWER DRIVE BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

h. Use attachment lift lever (Fig 9) to raise mower.

i. Turn height adjustment knob clockwise ( ) to the middle of its travel (Fig. 10).

7. Check Cutting Level

The blade housing was set at the factory to cut level. After mowing a short distance, look at the area that was cut. If the blade housing cuts uneven, see "MOWER ADJUSTMENT," page 21

8. Final Assembly

a. Make sure all fasteners are tight.

b. Read and follow the operation instructions (page 11). Know the location and purpose of all controls.

c. Check oil and gasoline (page 12) befcre starting the tractor.

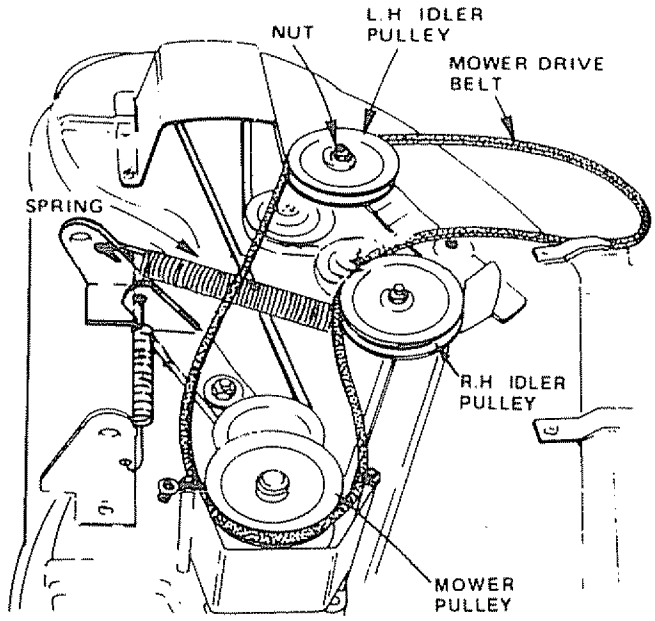
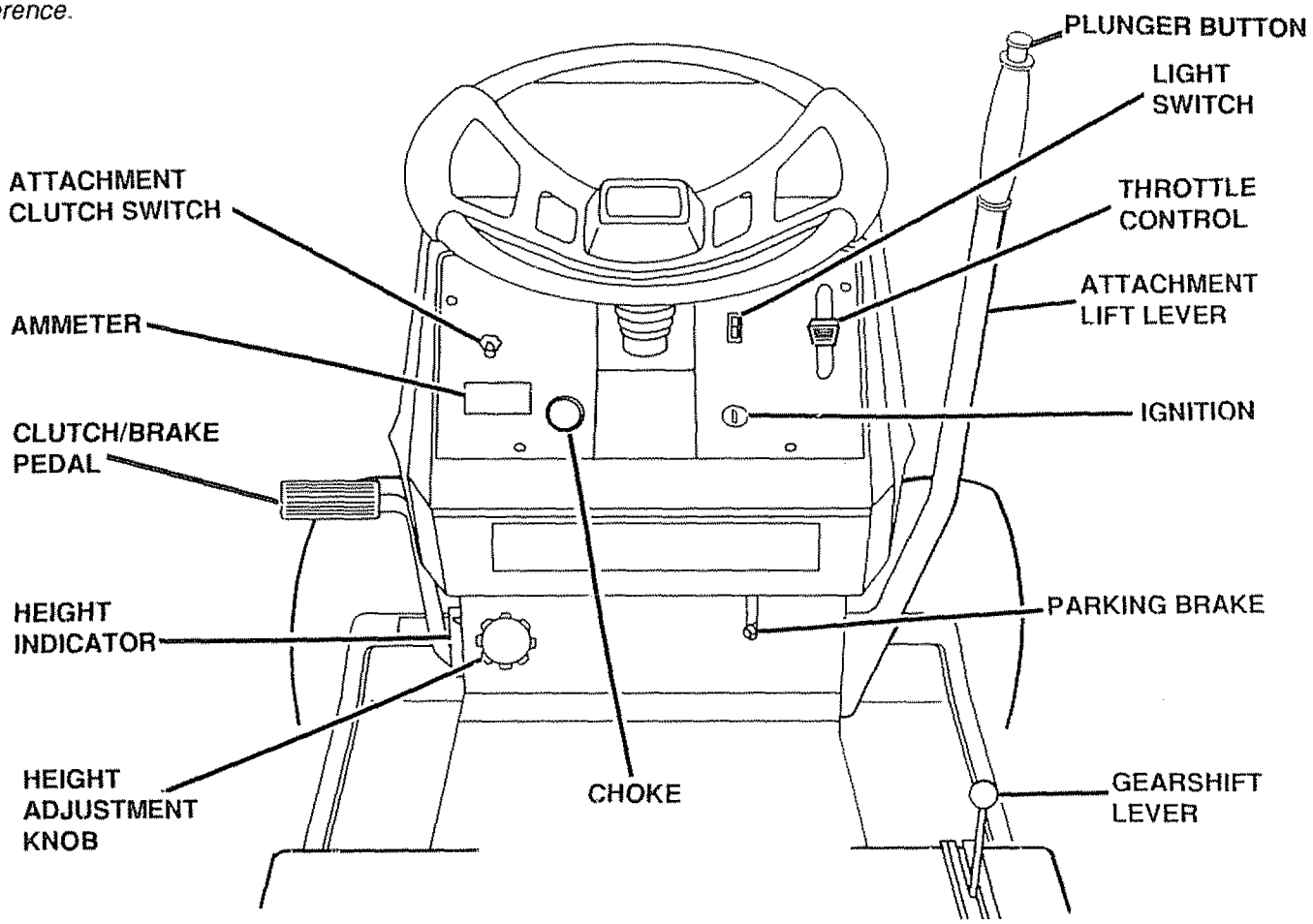


FIGURE 11

READ THIS OWNER'S MANUAL BEFORE OPERATING YOUR GARDEN 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 Garden Tractor to familiarize yourself with the location of the various controls and adjustments. Study the operating instructions and safety precautions thoroughly to insure proper functioning of your Garden 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.*



AMMETER: *Each time you start your tractor, check your ammeter. The needle should move toward the (+) charging mark indicating the battery is being charged as you operate your tractor. The headlights will not show a discharge on the ammeter because they are not connected to the battery. (They have their own electrical source.)*

ATTACHMENT CLUTCH SWITCH: *Pull switch out and 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. 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.*

HEIGHT ADJUSTMENT KNOB: *Use the height adjustment knob to adjust the mower height. With the attachement lift lever in the "up" position, turn knob clockwise (↷) to raise cutting height and counter-clockwise (↶) to lower mower cutting height. Lower attachment lift lever.*

HEIGHT INDICATOR: *Indicates height setting of mower deck Controlled by height adjustment Knob.*

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

IGNITION: *Place key in ignition and turn to the right to start.*

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. To release, push pedal in.*

THROTTLE CONTROL: *Use the throttle control to increase or decrease the speed of the engine.*

CHOKE: *To start a cold engine, pull choke out to engage.*

OPERATION

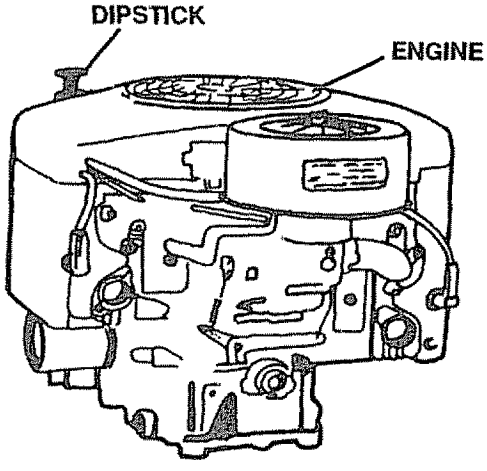


FIGURE 12

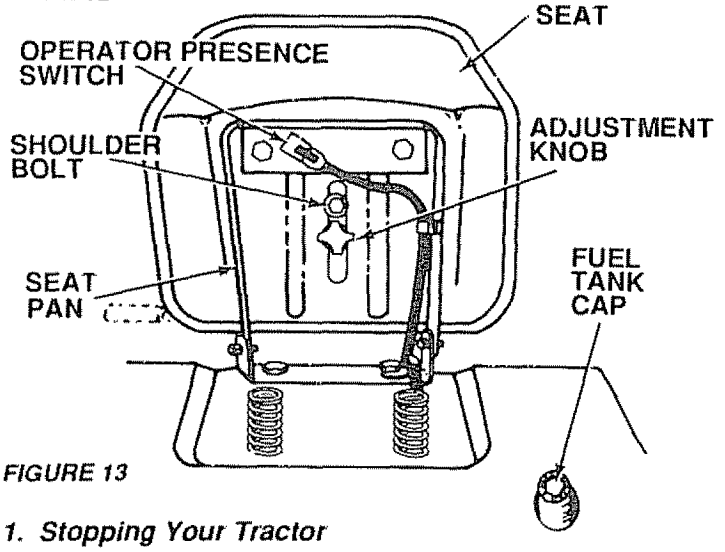


FIGURE 13

1. Stopping Your Tractor

KNOW HOW TO STOP YOUR TRACTOR BEFORE YOU ATTEMPT TO START THE ENGINE.

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

a. *Push clutch/brake pedal into full "BRAKE" position (Fig 14).*

b. *Move gear shift lever to "NEUTRAL" position (Fig. 15).*

c. *Place parking brake in "ENGAGED" position and release pressure from clutch/brake. Pedal should remain in "BRAKE" position (Fig. 14).*

NOTE: MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.

d. *Place attachment clutch switch in "DISENGAGED" position (Fig. 15).*

e. *Move throttle control to "S" (slow) position (Fig. 15).*

f. *Turn ignition key to "OFF" position (Fig. 15).*

NOTE: NEVER USE CHOKE TO STOP ENGINE.

2. Starting the Engine

LEARN TO START, STOP AND REVERSE YOUR TACTOR IN A LARGE, OPEN AREA.

THIS TRACTOR IS EQUIPPED WITH INTERLOCK SWITCHES TO PREVENT STARTING OF THE TRACTOR ENGINE WHILE THE ATTACHMENT CLUTCH SWITCH IS IN THE "ENGAGED" POSITION AND/OR THE FOOT PEDAL IS NOT FULLY DEPRESSED. IMMEDIATELY REPLACE SWITCHES THAT ARE NOT IN PROPER WORKING ORDER. DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF THESE SWITCHES.

a. *This engine has been shipped filled with summer weight oil (For cold weather operation see chart page 15). Check engine oil level See page 15*

b. *Fill fuel tank (Fig. 13) Use fresh, clean, regular unleaded gasoline. (Use of leaded gasoline will increase carbon and lead oxide depsots and reduce valve life) Capacity is 13 litres (3-1/2 gallons)*

NOTE: FRESH, CLEAN WINTER GRADE FUEL MUST BE USED TO INSURE GOOD COLD WEATHER STARTING

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 ANY 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.

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

c. *Place attachment clutch switch in "disengaged" position (Fig. 15)*

d. *Push clutch/brake pedal fully into brake position*

e. *Place gear shift lever in "NEUTRAL" positon (Fig. 15)*

f. *Pull choke out (Fig. 15)*

g. *Move throttle control to middle position (Fig. 15)*

h. *Turn ignition key clockwise (↷) to "START" position and release key as soon as engine starts*
NOTE: DO NOT RUN STARTER CONTINUOUSLY FOR MORE THAN FIFTEEN SECONDS PER MINUTE. *If engine does not start after several attempts, move throttle control to "F" (fast) position, wait a few minutes and try again.*

NOTE: IF YOU HAVE A WEAK BATTERY, SEE "STARTING YOUR TRACTOR WITH A WEAK BATTERY" (PAGE 20)

i. *After engine is warm, push choke in. The first time you start the engine, it will take extra cranking time to move fuel from tank to the engine.*

NOTE: ALLOW ENGINE TO WARM UP FOR A FEW MINUTES BEFORE ENGAGING CLUTCH OF TRACTOR OR ATTACHMENT

j When restarting a warm engine, move throttle control midway between "S" (slow) and "F" (fast) positions. Choke may not have to be used.

IMPORTANT: BEFORE DRIVING THE TRACTOR, INSTALL MOWER OR REMOVE MOWER PARALLEL LINK

FUNCTION	GEARSHIFT	THROTTLE
Normal Mowing	2 OR 3	FAST
Heavy Mowing	1 OR 2	
Snow Removal	1	
Tilling Plowing	1	MID THROTTLE
Dozing	1	SLOW-FAST
Grading	2	
Transport	3-6	

TABLE 1

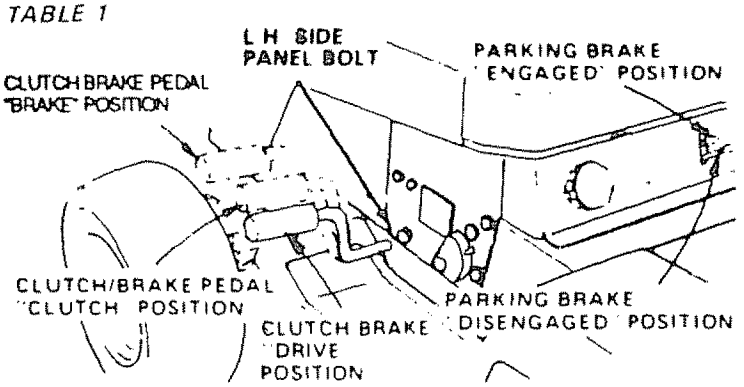


FIGURE 14

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

THE MOWER MUST BE ADJUSTED PROPERLY FROM FRONT TO REAR AND LEVELED FROM SIDE TO SIDE BEFORE OPERATING. THIS IS NECESSARY FOR LEVEL AND EFFICIENT MOWING. REFER TO PAGE 21.

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

DO NOT OVERLOAD TRACTOR BY TOWING WEIGHTS GREATER THAN 150 POUNDS (68 kg).

3. Operating Your Tractor and Mower

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 SWITCH ENGAGED WILL SHUT OFF THE ENGINE.

CAUTION
TO AVOID INJURY

1 *Read owner's manual*
2 *Know the location and function of all controls*
3 *Keep guards, safety shields 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 blade 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.

NOTE: ALWAYS OPERATE ENGINE AT FULL THROTTLE WHEN MOWING TO ASSURE BETTER MOWING PERFORMANCE AND PROPER DISCHARGE OF CUT MATERIAL. REGULATE GROUND SPEED BY SELECTING A LOW ENOUGH GEAR (TABLE 1) TO GIVE THE MOWER CUTTING PERFORMANCE PLUS QUALITY OF CUT DESIRED.

DO NOT OPERATE THE MOWER WITHOUT EITHER THE ENTIRE GRASS CATCHER, ON MOWERS SO EQUIPPED, OR THE DEFLECTOR SHIELD IN PLACE.

a Select desired height of cut position using height adjustment knob (Fig. 15)
b Raise lift lever and place attachment clutch switch in disengaged position
c Push clutch/brake pedal down firmly (Fig. 14)
d Start engine (page 12)
e With engine running and warm place throttle control midway between "S" (slow) and "F" (fast) position
f Engage mower with the attachment clutch switch
g Move gear shift lever to desired gear
h Lower mower into cutting position using attachment lift lever.
i Release clutch/brake pedal to start movement (Fig. 14)
j. Move throttle control to "F" (Fast) postion.

NOTE: SELECT A GROUND SPEED THAT WILL SUIT THE TERRAIN, QUALITY OF CUT AND ATTACHMENT BEING USED (TABLE 1).

OPERATION

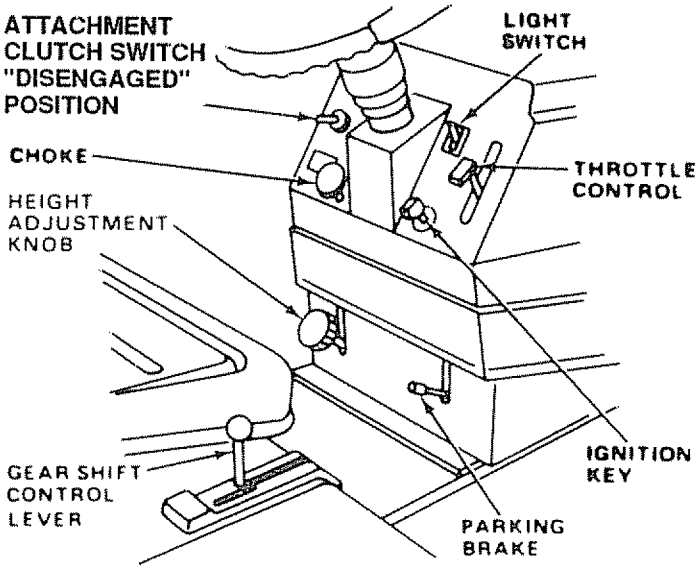


FIGURE 15

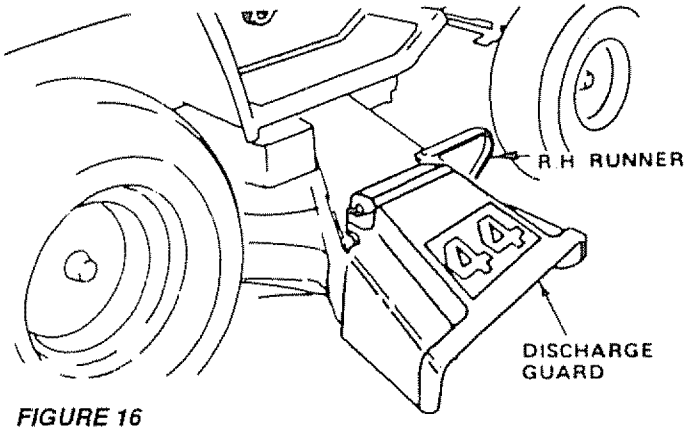


FIGURE 16

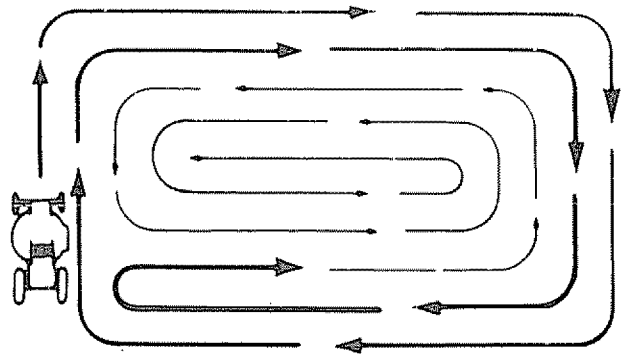


FIGURE 17

4 *Mowing Tips*

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

READ THE "SAFETY RULES" CAREFULLY BEFORE OPERATING YOUR MOWER. REFER TO PAGE 2.

a Use the runner on the R.H. side as a guide; the blade cuts approximately 2.54 cm (1 inch) outside the runner (Fig. 16).

b 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.

c When mowing large areas (Fig. 17), start by turning to the right so that the clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished.

d If grass is extremely tall, it should be mowed twice. The first time cut relatively high, the second time to the desired height.

e The left hand side of mower should be used for trimming.

f Do not mow tall, dry grass over 15.25 cm (6 inches) tall. It is a fire hazard.

5 *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 55.

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 STOPPING 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 and engage parking brake.

e To restart tractor movement, make sure tractor is in the lowest speed range ("1ST" Gear) and that you have allowed room to roll slightly downhill. Depress clutch/brake full. Disengage parking brake and release clutch/brake pedal SLOWLY to start tractor movement.

f Make all turns gradually.

6 *Flip-Up Discharge Guard*

Your mower has a flip-up discharge guard (Fig. 16) for door or gate clearance when held in raised position.

MAKE SURE ATTACHMENT CLUTCH SWITCH IS IN "DISENGAGED" POSITION AND BLADES HAVE STOPPED BEFORE RAISING DISCHARGE GUARD (DEFLECTOR). NEVER OPERATE MOWER WITHOUT DISCHARGE GUARD IN OPERATING POSITION.

MAINTENANCE

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

BEFORE MAKING ANY INSPECTION ADJUSTMENT OR REPAIR:

1. PUSH TRACTOR CLUTCH BRAKE PEDAL COMPLETELY INTO BRAKE POSITION
2. MOVE GEAR SHIFT LEVER TO NEUTRAL" POSITION.
3. PLACE PARKING BRAKE IN ENGAGED POSITION REMOVE FOOT FROM PEDAL
4. PLACE ATTACHMENT CLUTCH SWITCH IN DISENGAGED POSITION
5. TURN IGNITION KEY TO OFF POSITION
6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
7. REMOVE THE IGNITION KEY
8. DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TOO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

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 19).*

First 2 Hours (Two Mowings)

1. Change Engine Oil

Changing oil after the first two hours (or two mowings) will help eliminate break-in residue which might be damaging to your engine.

NOTE: BE CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHANGING OIL.

a. *Drain oil with engine warm.*

b. *Loosen oil drain plug (Fig. 18) and remove dipstick (Fig. 19).*

c. *Catch oil in a suitable container.*

d. *Tighten oil drain plug.*

e. *Refill engine oil (see chart at right). Refill capacity without oil filter change is 3-1/2 pints (1.7 litres). With oil filter change (page 18), capacity is 4 pints (1.9 litres).*

NOTE: DO NOT OVERFILL.

f. *Replace dipstick (Fig. 19) then remove dipstick and read oil level. Make sure oil level is at the "FULL" mark on dipstick. Add or remove oil as indicated on dipstick.*

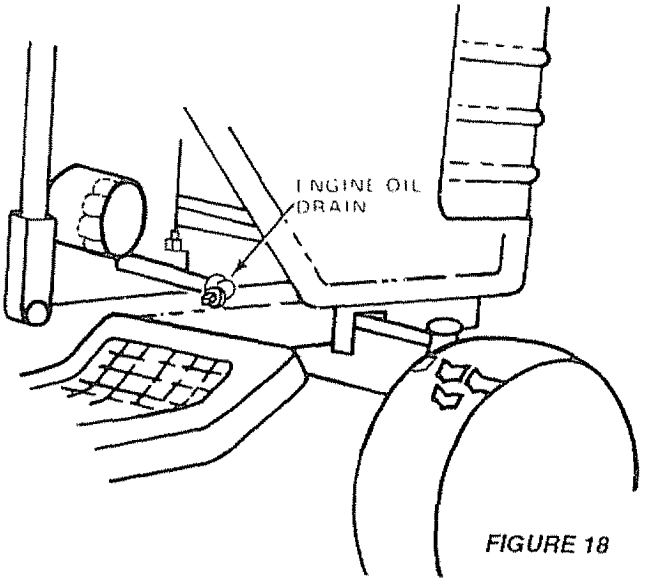
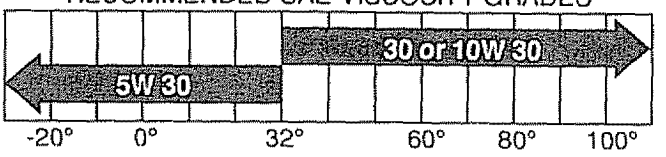


FIGURE 18

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.

RECOMMENDED SAE VISCOSITY GRADES



Dipstick assembly must be securely tightened into tube at all times when engine is operating.

CAUTION: TO AVOID DAMAGE TO THE STARTING SYSTEM, USE SAE 5W30 OIL WHEN THE TEMPERATURE FALLS BELOW 0° C (32° F)

Every 5 Hours (Five Mowings)

1 Check Engine Oil Level

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. 19) 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.

MAINTENANCE

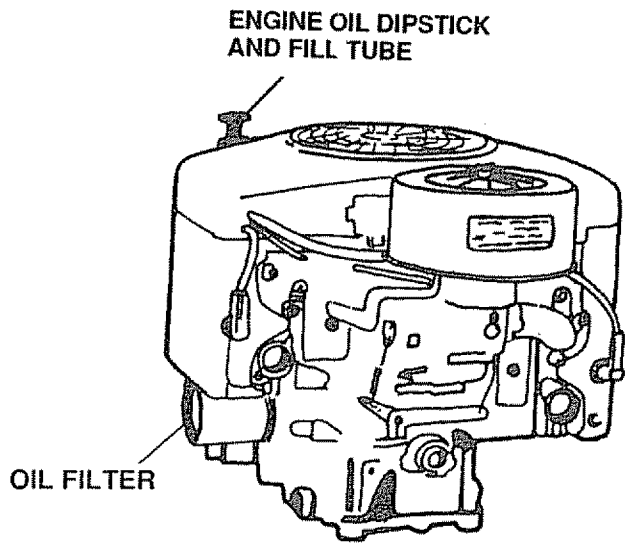


FIGURE 19

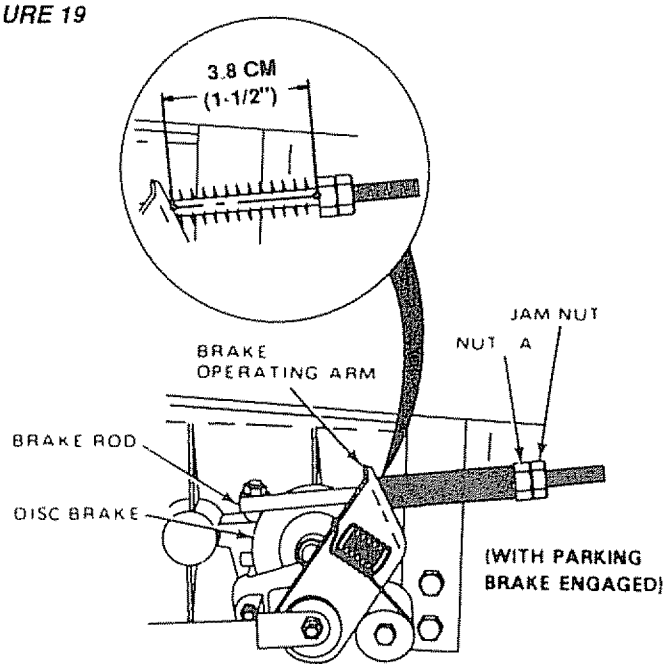


FIGURE 20

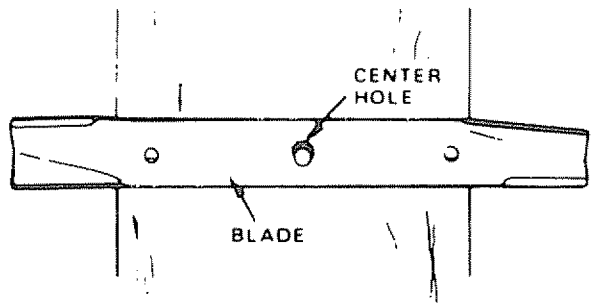


FIGURE 21

Every 25 Hours (Twice a Mowing Season)

1. Brake Adjustment

This Tractor is equipped with an adjustable brake system mounted on the right side of the transaxle (Fig. 20).

IF TRACTOR REQUIRES MORE THAN 1.8 METRES (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 3.8 cm (1-1/2"), loosen jam nut (Fig. 20) and turn nut until distance becomes 3.8 cm (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

a. *Maintain tire pressure in front at 14 PSI (1 Kg/cm²) and rear tires at 10 PSI (0.7 Kg/cm²).*

b *Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.*

c *Avoid stumps, stones, deep ruts and other hazards that may cause tire damage.*

3 Blade Sharpening

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 blades away rapidly.

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

b. *To check blade balance, drive a nail into a beam or wall. Leave about one inch (25.4 mm) of the straight nail exposed. Place center hole of clean blade over the head of the nail (Fig. 21).* NOTE: CENTER HOLE OF BLADE ON NAIL. IF BLADE IS PROPERLY BALANCED, BLADE SHOULD REMAIN IN POSITION SHOWN IN FIG. 21. IF EITHER END OF THE BLADE MOVES DOWNWARD, BLADE IS NOT BALANCED. SHARPEN THE HEAVY END UNTIL BLADE IS BALANCED.

Every 50 Hours (Once a Mowing Season)

(Operating in dusty conditions may require more frequent servicing.)

1 Check Battery

a Battery acid level in each battery cell should be even with bottoms of tubes in cells (Fig. 22). Add ONLY distilled 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.

NOTE: OVERCHARGING WILL SHORTEN BATTERY LIFE.

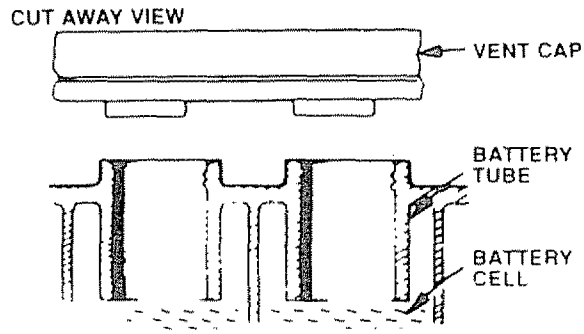


FIGURE 22

2 Clean Battery and Terminals

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

> 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.

b Disconnect BLACK battery cable then RED battery cable and remove battery from tractor.

c. Wash battery with 60 grams (1/4 cup) of baking soda to 3.8 litres (1 gallon) 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 petroleum jelly.

g Replace terminal guard.

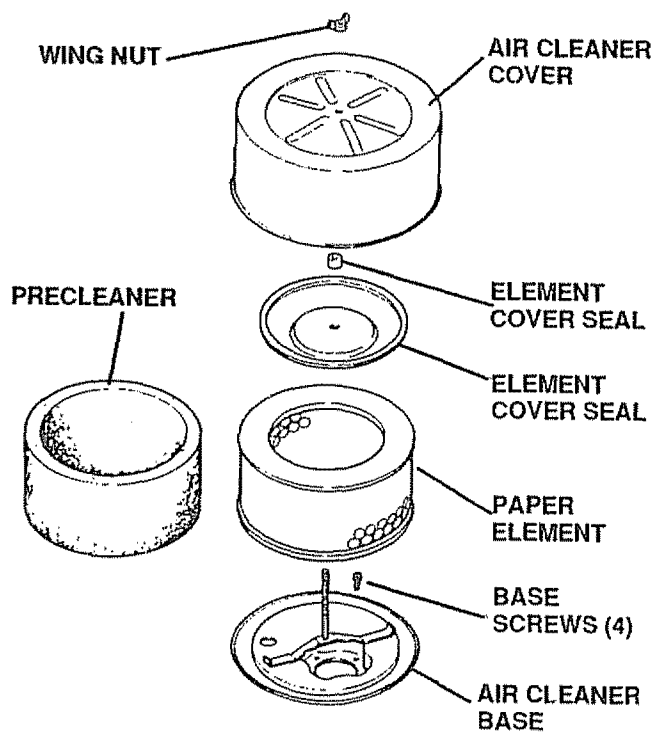


FIGURE 23

3 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. See chart, page 15.

(OPERATING IN DUSTY CONDITIONS MAY REQUIRE MORE FREQUENT SERVICING)

4 Clean Air Cleaner Foam Pre-Cleaner (Fig. 23)

a. Remove Wing Nut and cover.

b. Remove foam pre-cleaner element by sliding it off of the paper cartridge.

c. Wash foam pre-cleaner in liquid detergent and water.

d. Wrap foam pre-cleaner in cloth and squeeze dry.

e. Lightly coat foam pre-cleaner with engine oil (Do not saturate). Squeeze in rag or towel to remove excess oil.

f. Install foam pre-cleaner over paper cartridge. Reassemble cover and screw down tight.

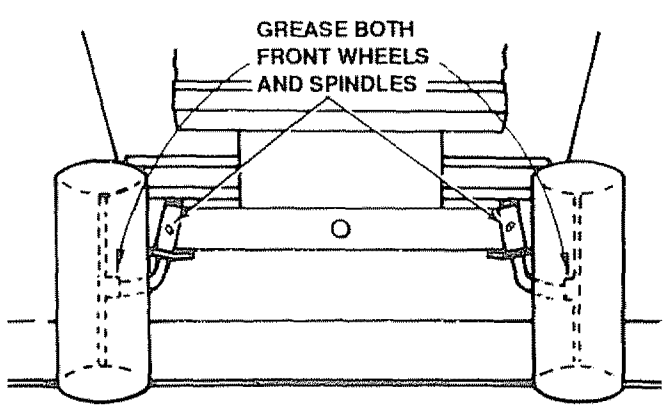


FIGURE 24

MAINTENANCE

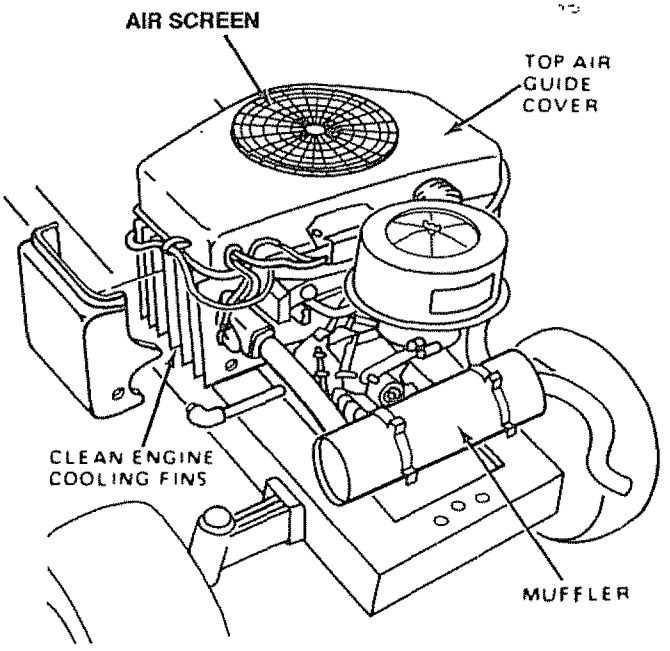


FIGURE 25

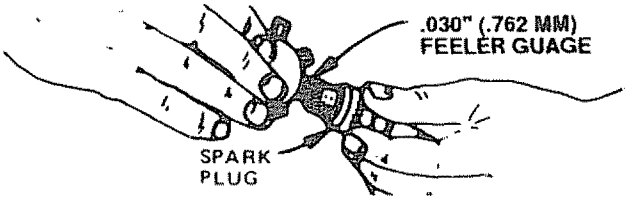


FIGURE 26

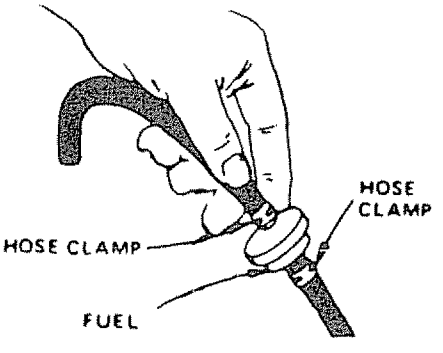


FIGURE 27

5. Lubricate Steering and Front Wheels

There is a grease fitting on each front wheel and axle spindle. Use a grease gun to give each grease fitting two shots of extreme pressure lubricating grease (available through your Sears Service Center)(Fig. 24).

6. Oil Pivot Points

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

a. Hood hinges.

b. Shifter shaft points.

SEE LUBRICATION CHART, PAGE 19.

7. Clean Air Screen

Air screen (Fig. 25) must allow free-flow of air to prevent engine damage from overheating. Clean with a wire brush, compressed air or water pressure to remove dirt, chaff, stubborn dried gum and fibers.

ALWAYS WEAR SAFETY GLASSES WHEN USING COMPRESSED AIR.
DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.

8. Inspect Muffler

Inspect and replace corroded muffler as it could create a fire hazard and/or damage (Fig. 25).

9. Clean Engine Cooling Fins

Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating. Air guide covers must be removed (Fig. 25). Remove bolts to remove side and top covers. See "HOOD REMOVAL," page 21.

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

Every 100 Hours

DISCONNECT SPARK PLUG WIRES TO PREVENT ACCIDENTAL STARTING BEFORE MAKING ANY INSPECTION, ADJUSTMENT OR REPAIR (EXCEPT CARBURETOR). BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS.

1. Replace Spark Plugs

Replace spark plugs at the beginning of each mowing season or every 100 hours, whichever comes first. Gap should be set at 0.030" (0.762 mm). (Fig. 26).

2. Replace Air Cleaner Paper Cartridge

Refer to page 17.

3. Replace In-Line Fuel Filter

If fuel filter is clogged, obstructing fuel flow to carburetor, replacement is required.

a. With engine cool, remove filter and plug fuel line sections as removed from both ends of fuel filter (Fig. 27).

b. Place new fuel filter in position in fuel line. Be sure there are no fuel line leaks and that fuel line is in proper position in hose clamps.

BE SURE THERE ARE NO FUEL LINE LEAKS AND THAT FUEL LINE IS IN PROPER POSITION IN HOSE CLAMPS.

4. Change Engine Oil Filter

a. Drain crankcase of oil (refer to "CHANGE ENGINE OIL," page 15, through step d). Remove old filter (Fig. 19) by turning counterclockwise.

b. Before installing new filter, apply a thin coating of oil on surface of the rubber seal.

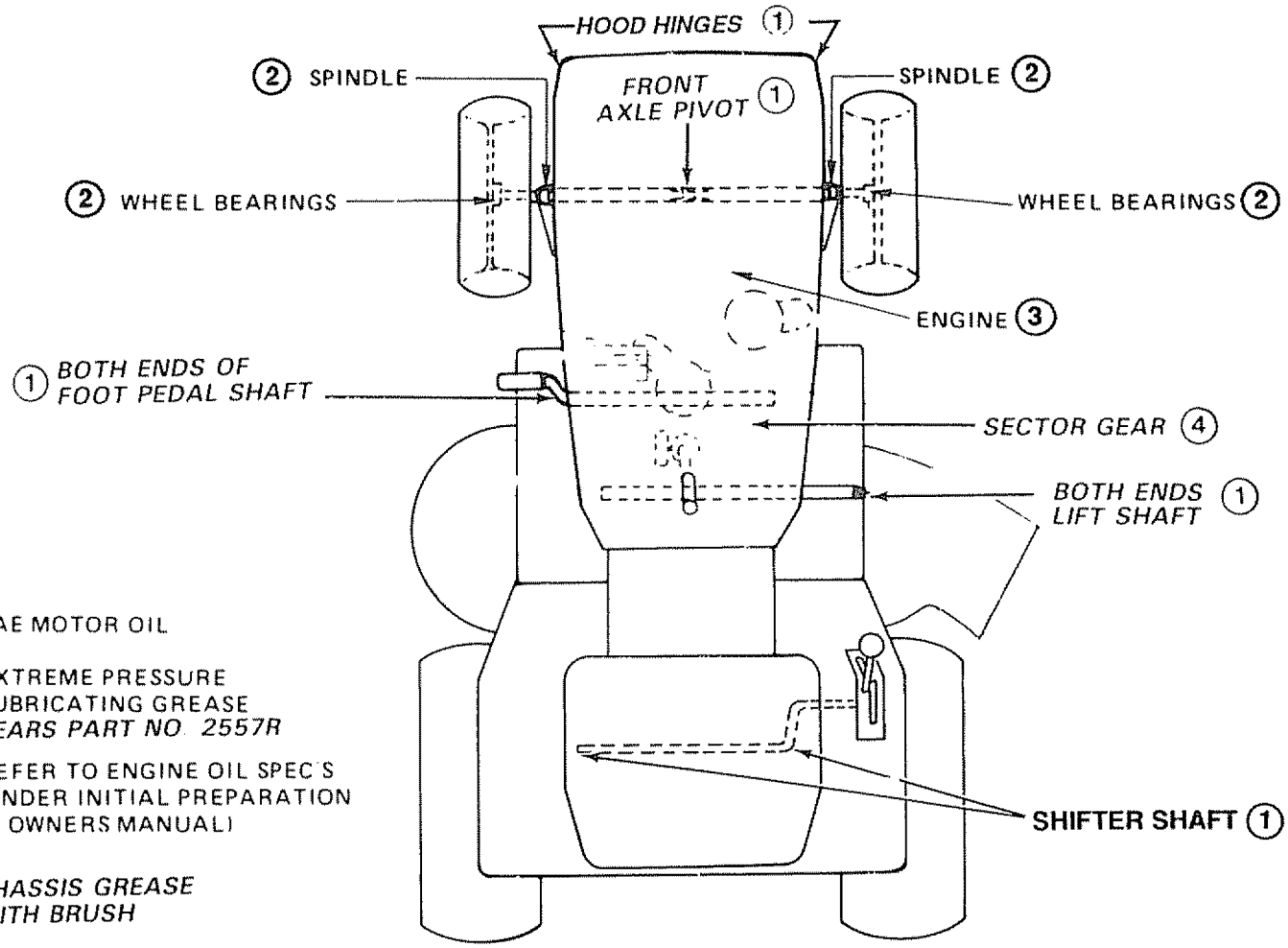
c. Install new filter by turning clockwise until rubber seal contacts the filter adapter, then tighten the filter an additional 1/2 turn.

d. Refill crankcase with engine oil (see page 15 for oil specifications). Add an additional 1/2 pint (.24 litres) oil for the new filter capacity.

e. Start the engine. Check for and correct any oil leaks.

MAINTENANCE

Lubrication



(1) SAE MOTOR OIL

(2) EXTREME PRESSURE LUBRICATING GREASE *SEARS PART NO. 2557R*

(3) REFER TO ENGINE OIL SPEC'S (UNDER INITIAL PREPARATION IN OWNERS MANUAL)

(4) *CHASSIS GREASE WITH BRUSH*

REPAIR & ADJUSTMENT

FOR ANY ADJUSTMENTS, INSPECTION OR MAINTENANCE:

1. PUSH TRACTOR CLUTCH/BRAKE PEDAL COMPLETELY INTO BRAKE POSITION
2. MOVE GEAR SHIFT LEVER TO 'NEUTRAL POSITION
3. PLACE PARKING BRAKE IN 'ENGAGED POSITION' REMOVE FOOT FROM PEDAL
4. PLACE ATTACHMENT CLUTCH SWITCH IN 'DISENGAGED' POSITION
5. TURN IGNITION KEY TO 'OFF' POSITION
6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
7. REMOVE THE IGNITION KEY
8. DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TOO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

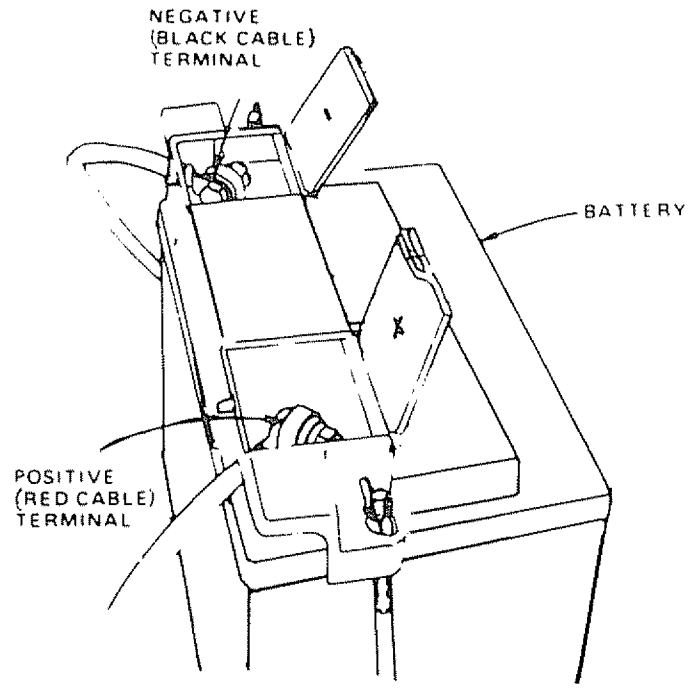


FIGURE 28

REPAIR & ADJUSTMENTS

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

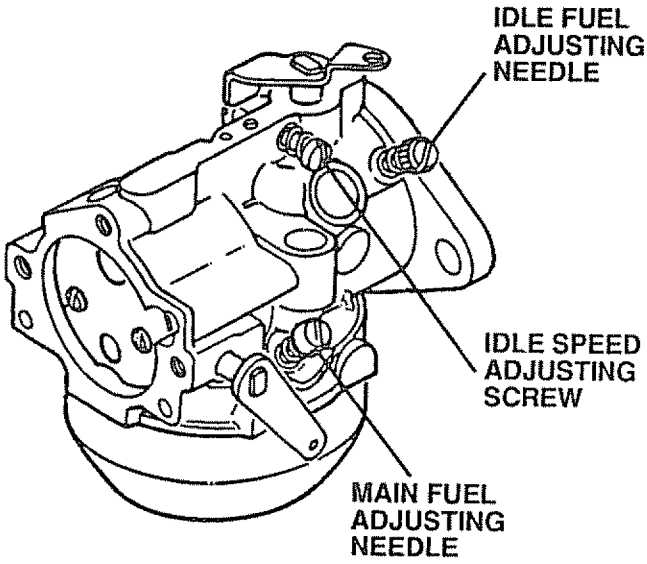


FIGURE 29

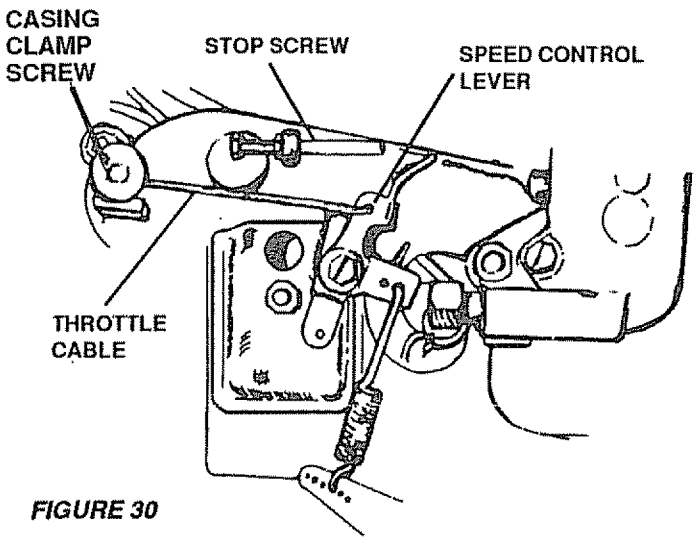


FIGURE 30

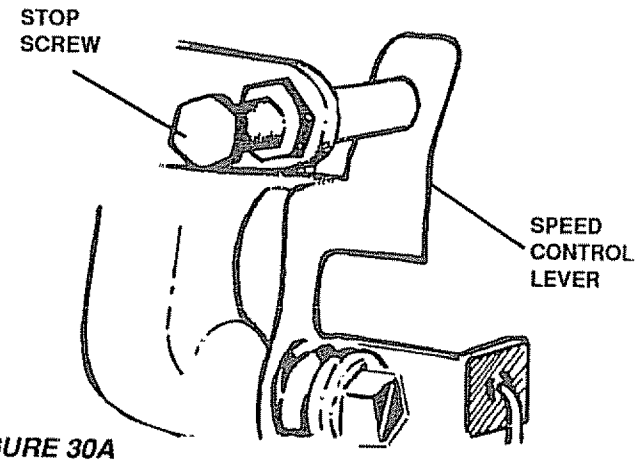


FIGURE 30A

1. 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.

a. *Connect each end of the **RED** jumper cable to the POSITIVE(+) terminals of each battery (taking care not to short against chassis). (Fig. 28)*
b. *Connect one end of the **BLACK** jumper cable to the NEGATIVE (–) terminal of fully charged battery.*
c. *Connect the other end of the **BLACK** jumper cable to the L.H. side panel bolt (Fig. 14) NOTE: KEEP AWAY FROM GAS TANK AND BATTERY.*
d. *Disconnect cables in reverse order:*
   1. *L.H. side panel bolt (Fig. 14)*
   2. *Negative terminal of fully charged battery*
   3. *Positive terminals*

DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

2 Throttle Control Cable Adjustment

Never attempt to change maximum engine speed. This is preset at the factory (3600 rpm ± 75 rpm) and should only be changed by a qualified service technician who has the necessary equipment.

a. *Remove hood (Fig. 32).*
b. *Loosen casing clamp screw (Fig. 30) until throttle cable is free to move.*
c. *Move throttle control (on dashboard) to "FAST" position.*
d. *Pull throttle cable tight (until speed control lever (Fig. 30A) is against stop screw (Fig. 30A). Retighten casing clamp screw.*

REFER TO "STARTING THE ENGINE" PAGE 12.

3. Carburetor Adjustment

In general, turning the adjusting needles (Fig. 29) in (clockwise) decreases the supply of fuel to the carburetor. This gives a leaner fuel/air mixture. Turning the adjusting needles (Fig. 29) out (counterclockwise) increases the supply of fuel to the carburetor. This gives a richer fuel/air mixture. Setting the needles midway between the lean and rich positions will usually give the best results.

Adjust the carburetor as follows:

a. *With the engine stopped, turn the idle fuel adjusting needle in (clockwise) until it bottoms lightly.*
   NOTE: The tip of the idle fuel and main fuel adjusting needles are tapered to critical dimensions. Damage to the needles and the seats in carburetor body will result if the needles are forced.
b. *Preliminary settings: Turn the adjusting needles out (counterclockwise) from lightly bottomed. Turn the idle 1-1/4 turns, turn the main 1 turn.*
c. *Start the engine and run at half throttle for five to ten minutes to warm up. The engine must be warm before making final settings (Steps d, e, f, and g).*
d. *Place the throttle into the "fast" position.*

1. Turn the main fuel adjusting needle out (counter-clockwise) from the preliminary setting until the engine speed decreases (rich).
2. Now turn the adjusting needle in (clockwise). The engine speed may increase, then it will decrease as the needle is turned in (lean).
3. Now set the adjusting needle midway between the rich and lean settings.

e. Idle Speed Setting: Place the throttle control into the "idle" or "slow" position. Set the idle speed to 1200 rpm adjusting screw in or out.

f. Idle Fuel Needle Setting: Place the throttle into the "idle" or "slow" position.

1. Turn the idle fuel adjusting needle out (counter-clockwise) from the preliminary setting until the engine speed decreases (rich).
2. Now turn the adjusting needle in (clockwise). The engine speed may increase, then it will decrease as the needle is turned in (lean).
3. Set the adjusting needle midway between the rich and lean settings.
4. Recheck the idle speed. Readjust the speed as necessary.

4. Fuse Replacement

Replace with 30 amp automotive-type plug in fuse. Fuses can be purchased at all Sears Service Centers and most retail stores. Fuse is located directly behind dash.

5. Hood Removal

a. Lift hood. Disconnect headlight wiring connection (Fig. 32).

b. Unscrew one screw at rear of each side panel (Fig. 31).

c. Pivot hood and side panel forward and lift off tractor (Fig. 32).

d. To replace, reverse above procedure.

6. Mower Adjustment

Adjust the mower while tractor is parked on level ground or driveway. Make sure tire pressures are 1 Kg/cm² (14 PSI) in front and 0.71 Kg/cm² (10 PSI) in rear. If tires are over or under inflated, you will not properly adjust your mower.

FOR ANY ADJUSTMENTS INSPECTION OR MAINTENANCE:

1. PUSH TRACTOR CLUTCH BRAKE PEDAL COMPLETELY INTO 'BRAKE' POSITION
2. MOVE GEAR SHIFT LEVER TO "N" (NEUTRAL) POSITION
3. PLACE PARKING BRAKE IN ENGAGED POSITION. REMOVE FOOT FROM PEDAL
4. PLACE ATTACHMENT CLUTCH SWITCH IN 'DISENGAGED' POSITION
5. TURN IGNITION KEY TO 'OFF' POSITION
6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
7. REMOVE THE IGNITION KEY
8. DISCONNECT THE SPARK PLUG WIRE(S) FROM THE SPARK PLUG(S) AND KEEP WIRE(S) AWAY FROM THE PLUG(S) TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

Height Adjustment

Adjustment for mower height is made with the height adjustment knob. Raise mower cutting height by turning height adjustment knob clockwise ( ). Lower mower cutting height by turning height adjustment knob counterclockwise ( ) (Fig. 33)

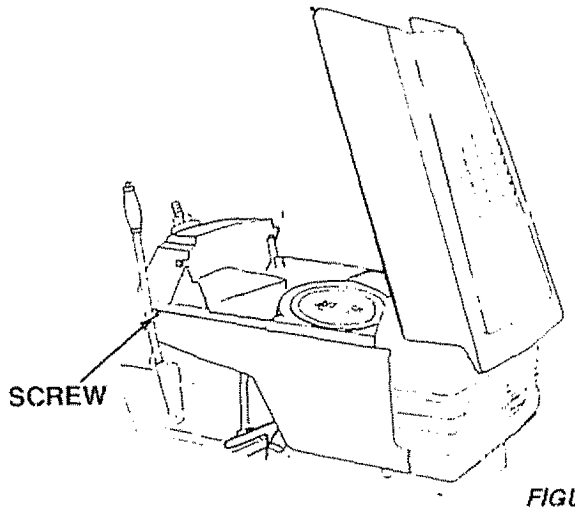


FIGURE 31

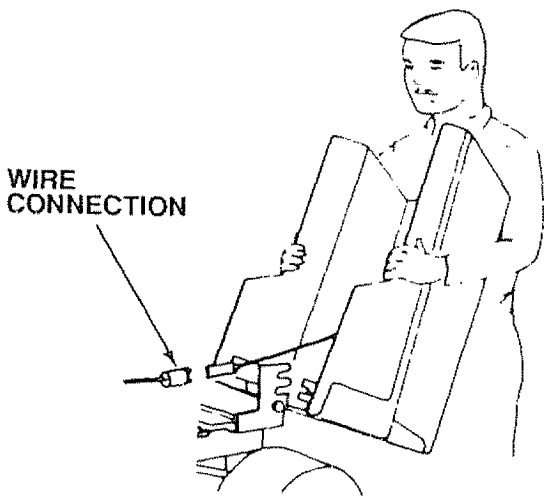


FIGURE 32

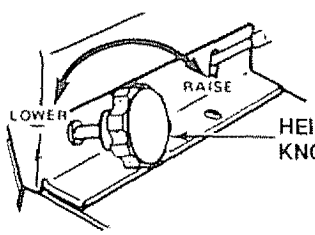


FIGURE 33

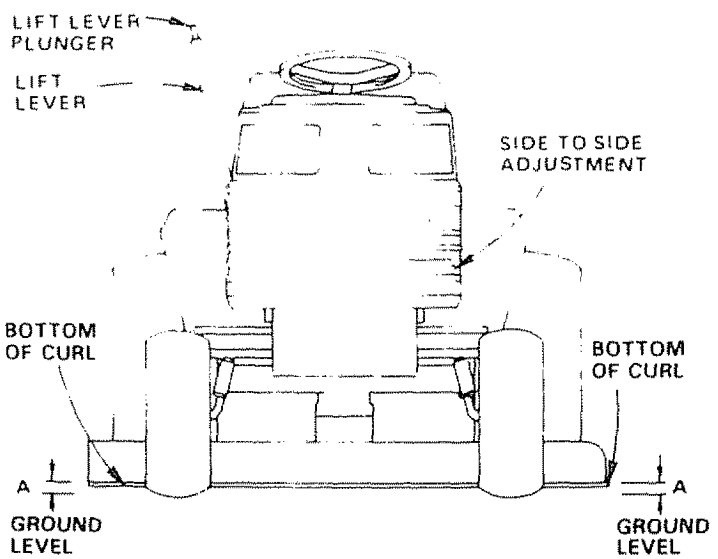


FIGURE 34

REPAIR & ADJUSTMENT

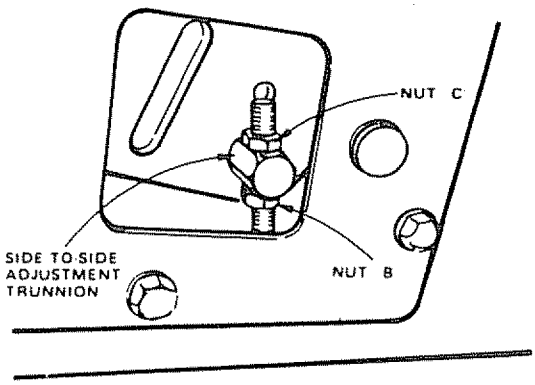


FIGURE 35

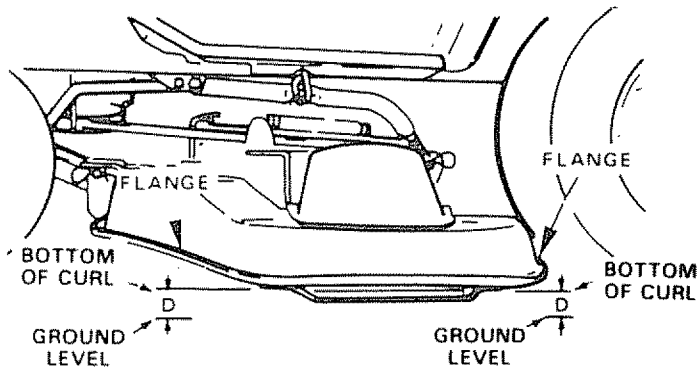


FIGURE 36

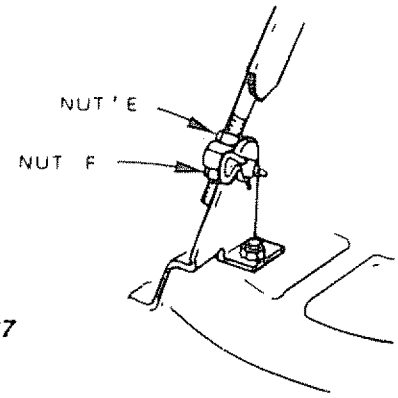


FIGURE 37

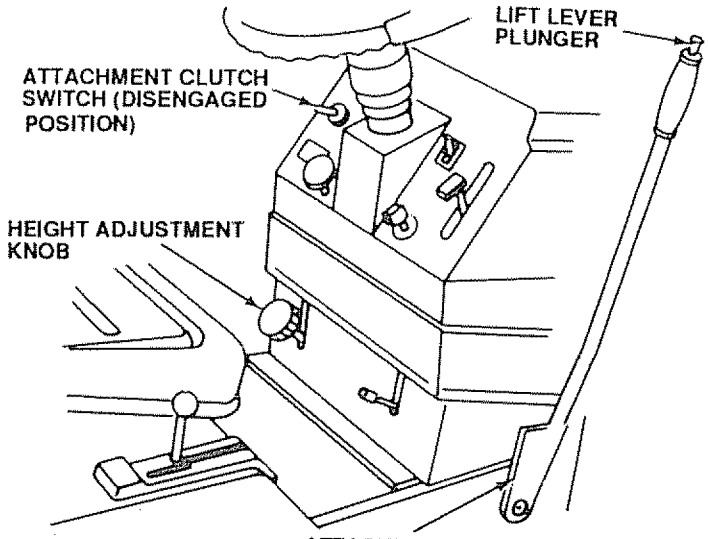


FIGURE 38

Side-to-Side mower Adjustment

a. *Depress lift lever plunger and use lift lever to raise mower to maximum cutting height (Fig. 34).*

b. *Measure height from bottom of curl to ground level at front of mower. Distance "A" should be the same (Fig. 34).*

c. *If distance "A" needs to be changed, snap out access hole cover on L.H. side above footrest. Use 11/16" wrench on nuts "B" and "C" at side-to-side adjustment trunnion (Fig. 35).*

d. *To raise left side of mower, loosen nut "B" and tighten nut "C".*

e. *To lower left side of mower, loosen nut "C" and tighten nut "B".*

NOTE: ONE ROTATION OF ADJUSTMENT NUTS IS EQUIVALENT TO APPROXIMATELY 5 MM (3/16") HEIGHT CHANGE.

f. *Be sure all nuts are securely tightened.*

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. 36) is 13 mm (1/2") lower in front when the mower is positioned in the highest cutting position.*

NOTE: MEASURE DISTANCE "D" FROM GROUND LEVEL TO BOTTOM OF CURL ON RIGHT REAR FLANGE AND COMPARE TO DISTANCE "D" AT RIGHT FRONT FLANGE.

b. *To raise rear of mower, loosen nut "E" on both rear suspension arms. Screw both nuts "F" up an EQUAL NUMBER OF TURNS (Fig. 41).*

c. *When distance "D" is 13 mm (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. 37).*

e. *When distance "D" is 13 mm (1/2") lower at front than rear, retighten nuts "E".*

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

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 switch in "Disengaged" position (Fig. 38).*

b. *Turn height adjustment knob to its lowest position. Move attachment lift lever (Fig. 38) forward to lower mower to its lowest position.*

c. *Roll belt off engine pulley (Fig. 39).*

d. *Pull belt off both mower pulley and idler pulleys (Fig. 40).*

e. *To replace mower drive belt, reverse above procedure.*

NOTE: MAKE SURE DRIVE BELT IS ENGAGED IN ALL PULLEYS.

7. Mower Removal

a. *Remove mower drive belt. (See "MOWER DRIVE BELT REMOVAL," page 22, through step 3.)*

b. *Pull belt off engine pulley (Fig. 39).*

c. *Pull retainer springs out of rear suspension trunnions. Remove rear suspension trunnions from lift brackets (Fig. 41)*

d. *Pull retainer spring out of rear hinge pin. Remove rear hinge pin (Fig. 41).*

e. *Pull retainer spring out of front hinge pin. Remove front hinge pin (Fig. 41) and parallel link.*

f. *Use lift lever to raise suspension arms. Slide mower out from under tractor.*

BEFORE DRIVING YOUR TRACTOR, INSTALL MOWER OR REMOVE PARALLEL LINK (FIG. 41).

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. 41) SHOULD BE REMOVED.

8. Mower Blade Drive Belt Replacement

a. *Remove mower drive belt. (See page 22.)*

b. *Remove mower from tractor. (See "MOWER REMOVAL," above.)*

c. *Pull belt towards rear of mower at tensioning pulley (Fig 42). Place a block between tension bracket and mower lift bracket. Roll belt off tensioning pulley.*

d. *Roll belt off all other pulleys.*

e. *Slide belt from under spring.*

f. *To install belt, reverse above procedure. Make sure belt is engaged in all pulleys.*

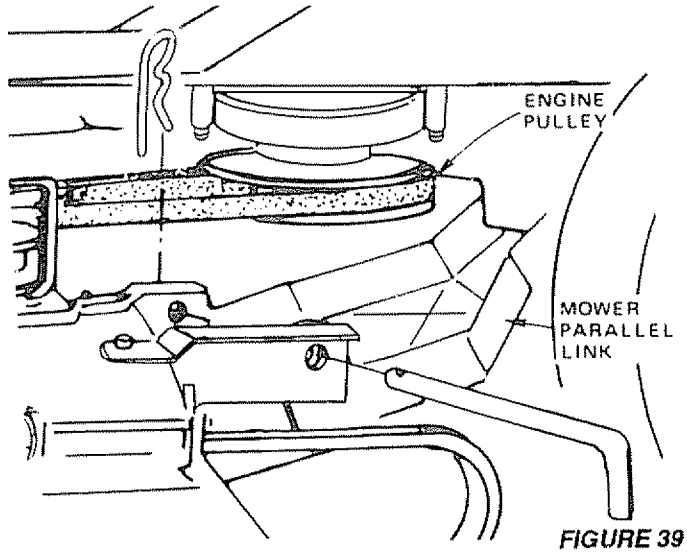


FIGURE 39

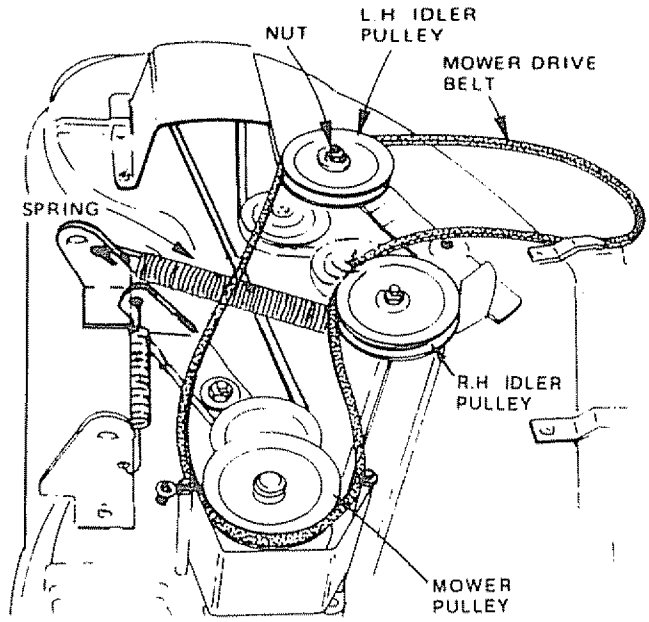


FIGURE 40

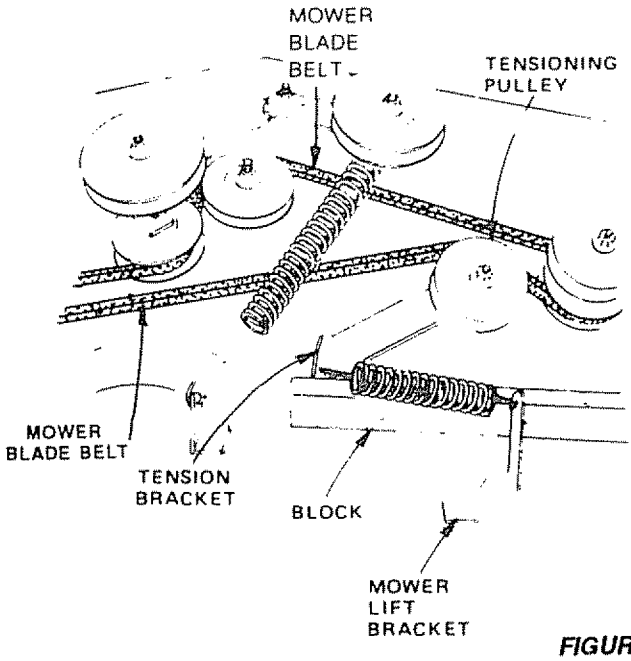


FIGURE 42

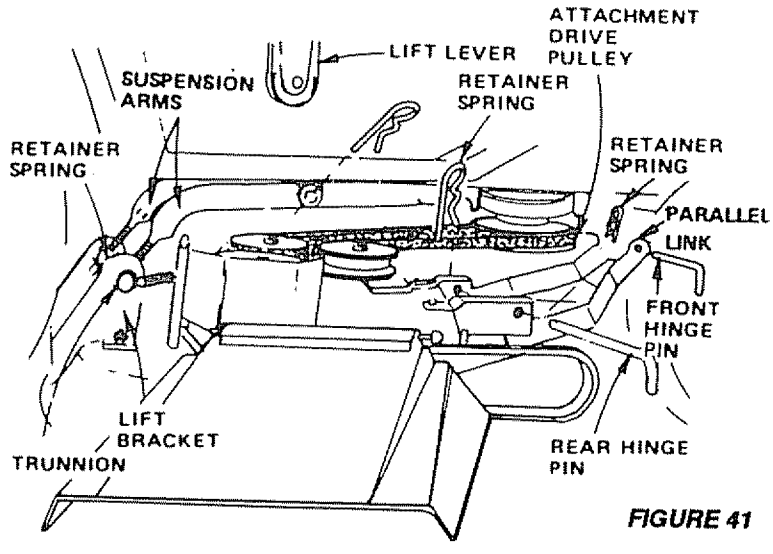


FIGURE 41

REPAIR & ADJUSTMENTS

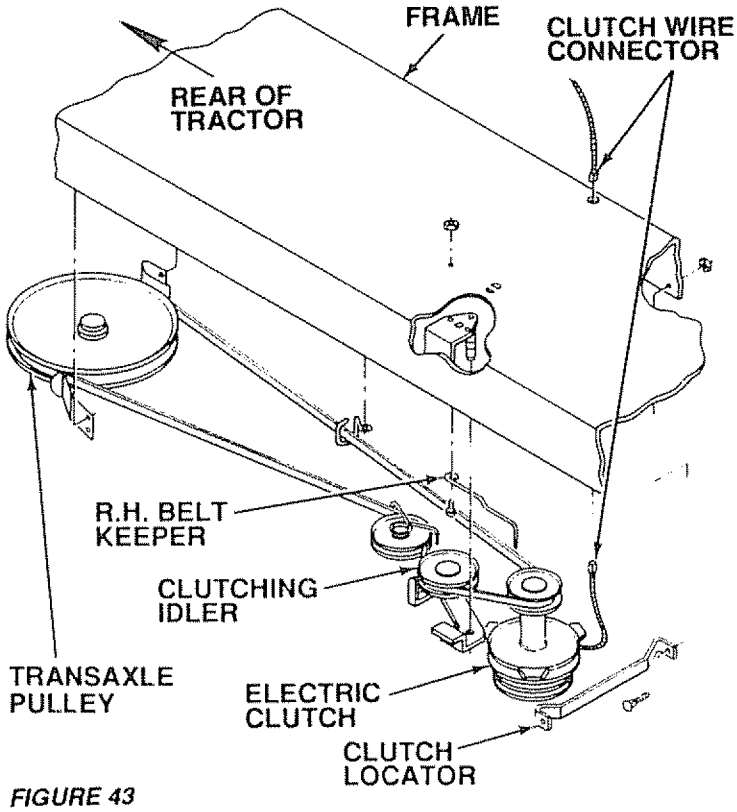


FIGURE 43

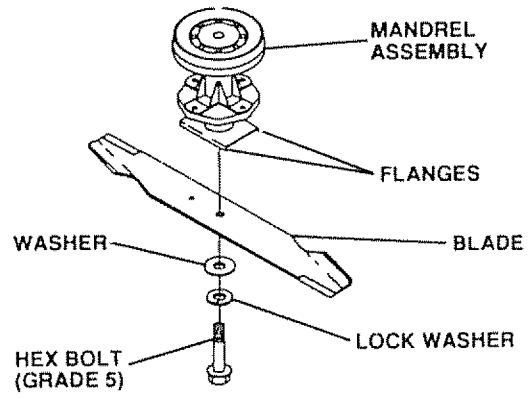


FIGURE 44

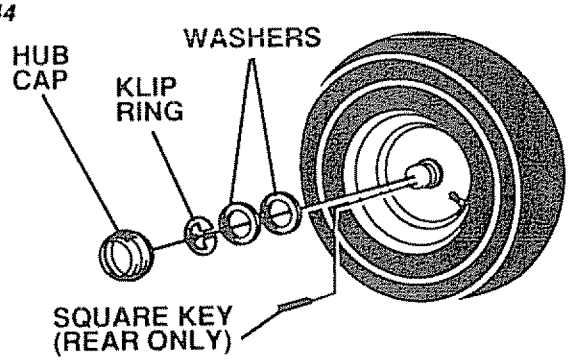
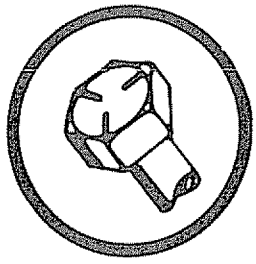


FIGURE 45



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

9 Motion Drive Belt Replacement

NOTE: BELT INSTALLATION DECAL IS LOCATED UNDER LEFT FOOTREST.

a. Remove mower (see "MOWER REMOVAL" page 23).

b. Using a 1/2" wrench, remove the clutch locator (Fig. 43).

c. Using a 9/16" wrench, loosen the right hand belt keeper (Fig. 43).

d. Disconnect clutch wire connector. Push connector through frame (Fig. 43).

e. Pull belt off clutching idler and raise to top side of pulley.

f. Release parking brake. Push belt over and away from clutching idler.

g. Pull belt slack toward rear of tractor. Remove belt from transmission pulley by deflecting keepers to force belt up and out of pulley. (Use belt to push keepers away from pulley.) (Fig. 43.)

h. Work belt around remaining pulleys and keepers, working toward transaxle pulley.

j. Pull belt forward off transaxle pulley and down over electric clutch.

h. Reinstall in reverse of above procedure.

Make sure right hand belt keeper is positioned correctly between locator tabs and electric clutch connection is secure.

10. Blade Replacement

Raise mower to highest position to permit access to blades or remove mower.

a. Remove bolt, lockwasher and washer (Fig. 44) (turn counterclockwise)(↶).

b. Remove and discard old blade.

c. Clean top and bottom of mower housing.

d. Place new blade between flanges, (Install with sharp edge down), and secure with washer, lockwasher and bolt previously removed.

11. Tire Care

a. Maintain tire pressure in front at 14 PSI (1Kg/cm²) and rear tires at 10 PSI (0.7 Kg/cm²).

b. Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.

c. Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.

d. Removing wheel for tire repair (Fig. 45).

1. Block up axle securely.

2. Remove hub cap, klip ring and washer to allow wheel removal (rear wheel contains a square key – Do Not Lose).

3. Repair tire and reassemble. Align slots in rear wheel hub and axle. Insert square key. Replace washer and snap klip ring securely in axle groove. Replace hub cap.

NOTE: USE GREASE FITTINGS TO LUBRICATE FRONT WHEELS WITH GENERAL PURPOSE GREASE. APPLY AN ANTI-SEIZE OR GOOD GENERAL PURPOSE GREASE TO LUBRICATE REAR AXLES.

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 41-47 N-m (30-35 FT.- LBS.).

WHEN MOUNTING TIRES, UNLESS BEADS ARE SEATED, OVER INFLATION CAN CAUSE AN EXPLOSION.

12. Rear Wheel Replacement

For rear wheel replacement, follow instructions under "TIRE CARE," page 24

Coat axle with grease to prevent corrosion or rust accumulation and eventual seizing of wheel hub to axle shaft.

WHEN REPLACING WHEELS ON THE TRACTOR THEY MUST BE MOUNTED WITH THE LONG HUB SIDE TOWARD THE CENTER OF THE TRACTOR. INCORRECT INSTALLATION COULD AFFECT LATERAL STABILITY. (SEE FIG. 46)

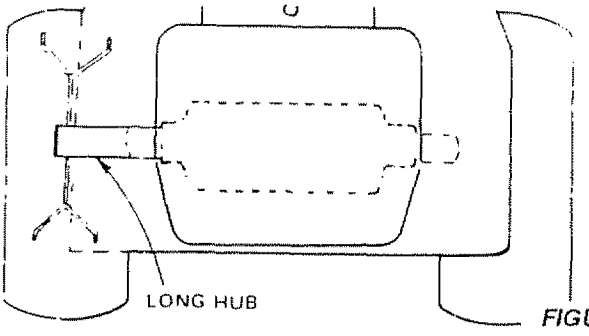


FIGURE 46

13. Transaxle Shifter Linkage Positioning and Adjustment

The transaxle should be in neutral when the gear shift lever is in the neutral (lock gate) position (Fig. 47). The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:

- *a Make sure transaxle is in neutral*
- *b Using a 7/16" wrench, loosen two (2) locknuts on tie rod (Fig. 48 - inset)*
- *c Turn center rod (Fig. 48 - inset) until gearshift lever falls into neutral lock gate on fender console (Fig. 47)*
- *d Tighten locknuts securely.*

14. 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) oil and replace with clean engine oil. (see chart on page 15)

- *c Cylinders*
  1. *Remove spark plugs*
  2. *Pour 29.5 ml (one ounce) of oil through spark plug hole into cylinder*
  3. *Turn ignition key to "START" position for a few seconds to distribute oil*
  4. *Replace with new spark plugs*

- *d Battery*
  1. *Prior to storage, clean terminals and top of battery*
  2. *Disconnect cable from positive side of battery.*

After a period of time in storage, battery may require recharging.

- *e General Cleaning*

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

- *f Store in a clean, dry area*

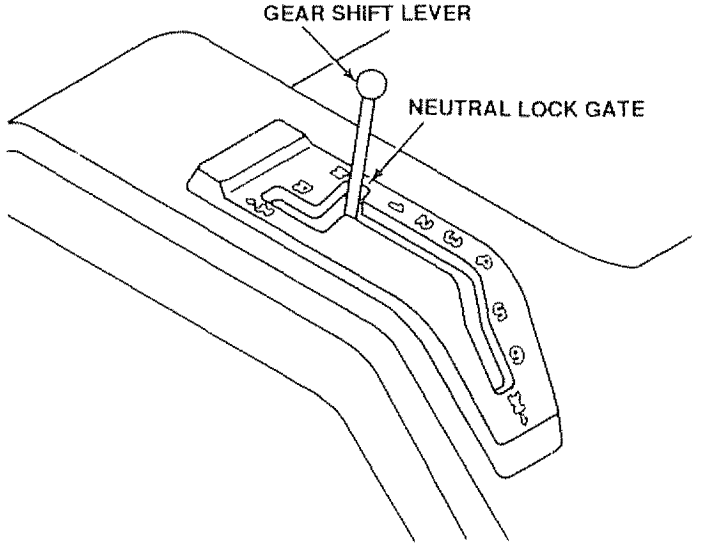


FIGURE 47

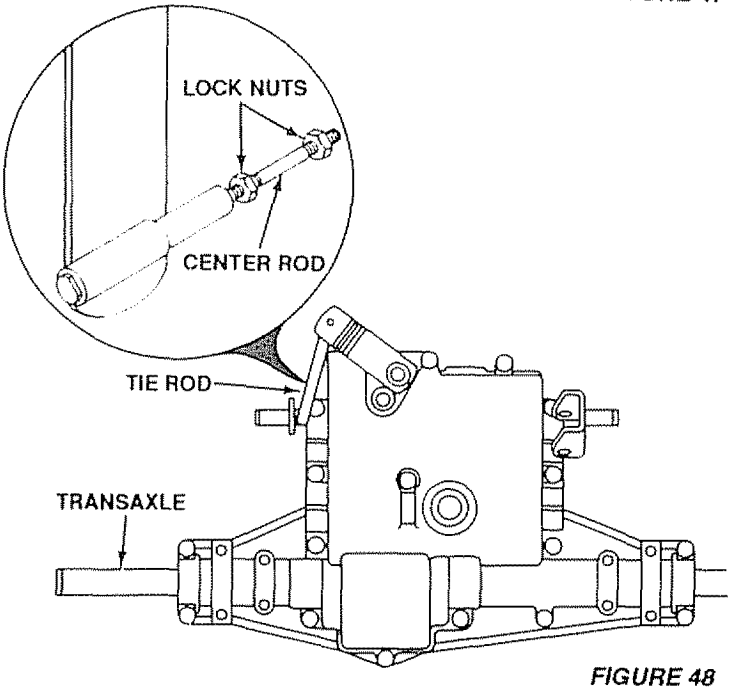


FIGURE 48

TROUBLESHOOTING

PROBLEM	CAUSE / REMEDY (SEE INDEX)
WILL NOT START	*Fill Tank with Gasoline. Check Fuel Line and Carburetor (clean if necessary). Replace Fuel Filter. Use Fresh Fuel* *Recharge or replace Battery* *Check Wiring* *Replace Spark Plug(s) and adjust gap* *Drain and replace oil for proper temperature*
WILL NOT TURN OVER	*Push Clutch/Brake Pedal into brake position* *Charge or replace Battery* *Move Attachment ClutchSwitchto "DISENGAGED" position* *Replace Ignition Switch* *Replace Interlock Switch(es)* *Replace Solenoid or Starter* *Replace Fuse* *Check all Wire Connections and "Ground" Points* *Reattach Tiller Attachment Wire Loop*
ENGINE CLICKS BUT WON'T START	*Clean Battery Terminals* *Replace Starter or Solenoid* *Charge or Replace Battery* *Check Wire Connections and "Ground" Points*
HARD TO START	*Place Throttle Control in "FAST" position and run starter several times to clear out gas* *Remove Air Filter and clean* *Replace Spark Plug(s) and adjust gap* *Recharge or replace Battery* *Check the Wiring* *Drain Fuel Tank and Carburetor. Use Fresh Fuel* *Replace Fuel Filter* *Make necessary adjustments to Carburetor* *Major Engine Overhaul*
ENGINE MISSES OR LACKS POWER	*Shift to a lower gear or reduce load* *Drain Gas Tank and Carburetor Use Fresh Fuel* *Remove and clean Air Cleaner* *Make necessary carburetor adjustments* *Clean Air Screen* *Add or change oil* *Replace Spark Plug(s) and adjust gap* *Replace Fuel Filter* *Major Engine Overhaul*
ENGINE OVERHEATS	*Shift to lower gear or reduce load* *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* *Replace Switch*
WON'T CHARGE	*Check Fuse for fault and replace* *Replace Battery* *Replace Diode Assembly* *Replace Alternator*
OPERATOR PRESENCE SYSTEM WILL NOT SHUT DOWN ENGINE 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 engine running and the attachment clutch engaged will shut down the engine.*	*Check all Wire Connections* *Check Seat Switch*

TROUBLESHOOTING

UNSATISFACTORY MOWER PERFORMANCE UNEVEN DISTRIBUTION OF CLIPPINGS	*Move Throttle Control to "FAST"* *Check air pressure in Tires* *Check front-to-rear and side-to-side Mower adjustment* *Use a slower ground speed* *Replace Mower Blades* *Reinstall Mower Blades with Top of Blade up* *Clean underside of Mower Deck* *Readjust Mower Drive Belt*
MOWER BLADES WILL NOT ROTATE	*Correct Clutch Mechanism Interference* *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	*Set Throttle for maximum engine speed* *Let grass dry out* *Clean underside of Mower Deck* *Readjust Mower front-to-rear and side-to-side* *Replace Blades*
UNEVEN CUT OR SCALPING	*Readjust Mower front-to-rear and side-to-side* *Replace Blades* *Replace bent Mandrel(s)*

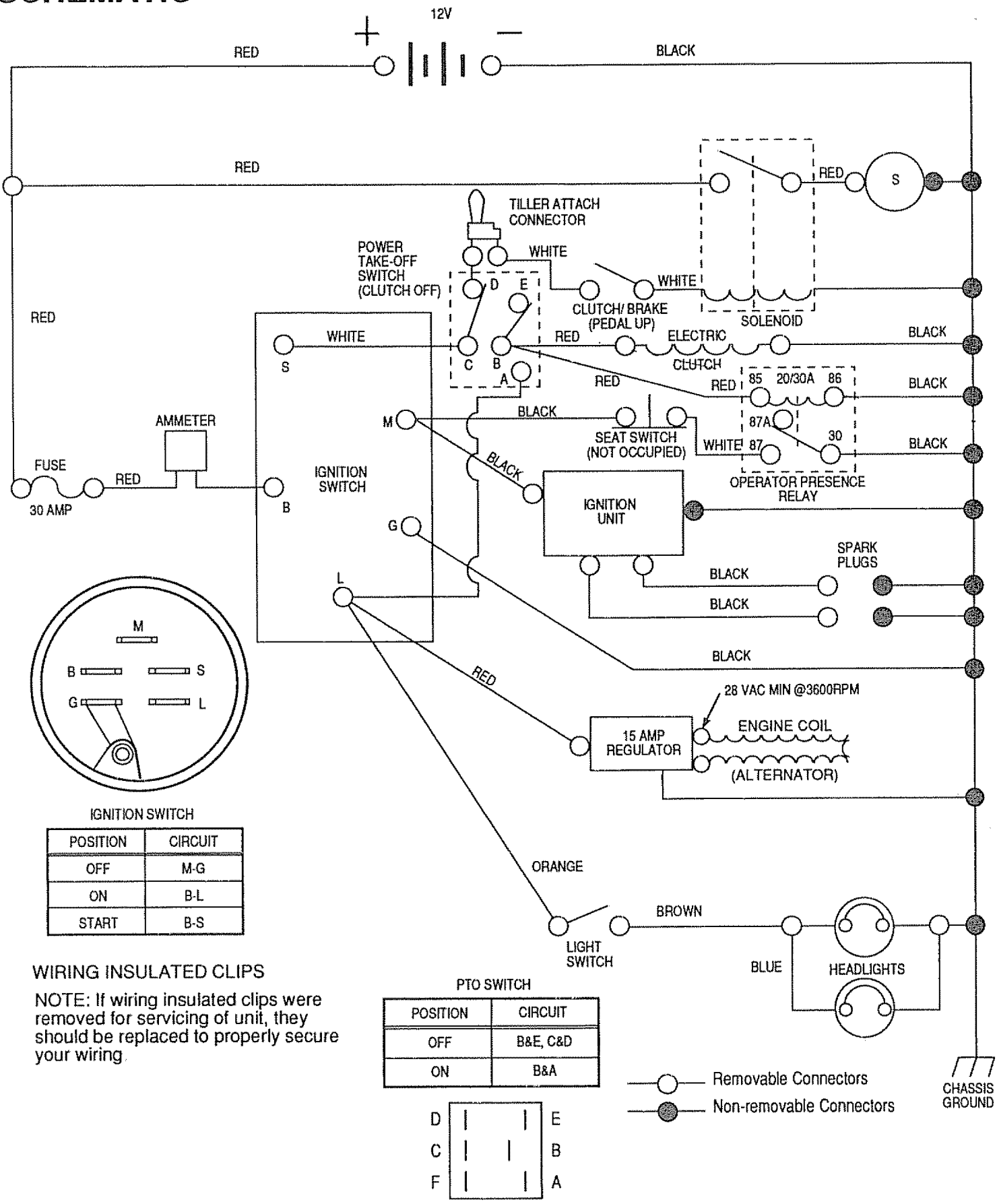
SERVICE RECORD

FILL IN DATES AS YOU COMPLETE REGULAR SERVICE

	FIRST 2 HOURS	EVERY 5 HOURS	EVERY 25 HOURS	EVERY 50 HOURS	EVERY 100 HOURS	EVERY 200 HOURS	SERVICE DATES						
Change Engine Oil	✓			✓									
Check Brake Operation			✓										
Check Tire Pressure		✓											
Clean Air Screen				✓									
Clean Air Cleaner				✓									
Lubricate Pivot Points (see page 24)				✓									
Check Battery Level and Recharge				✓									
Clean Battery and Terminals				✓									
Carburetor Adjustment			✓										
V-Belt Adjustment			✓										
Clean Engine Cooling Fins				✓									
Check Muffler				✓									
Replace Air Cleaner Paper Cartridge					✓								
Replace Spark Plug					✓								
Change Engine Oil Filter				✓									
Replace Fuel Filter					✓								

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

SCHEMATIC



IGNITION SWITCH

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

PTO SWITCH

POSITION	CIRCUIT
OFF	B&E, C&D
ON	B&A

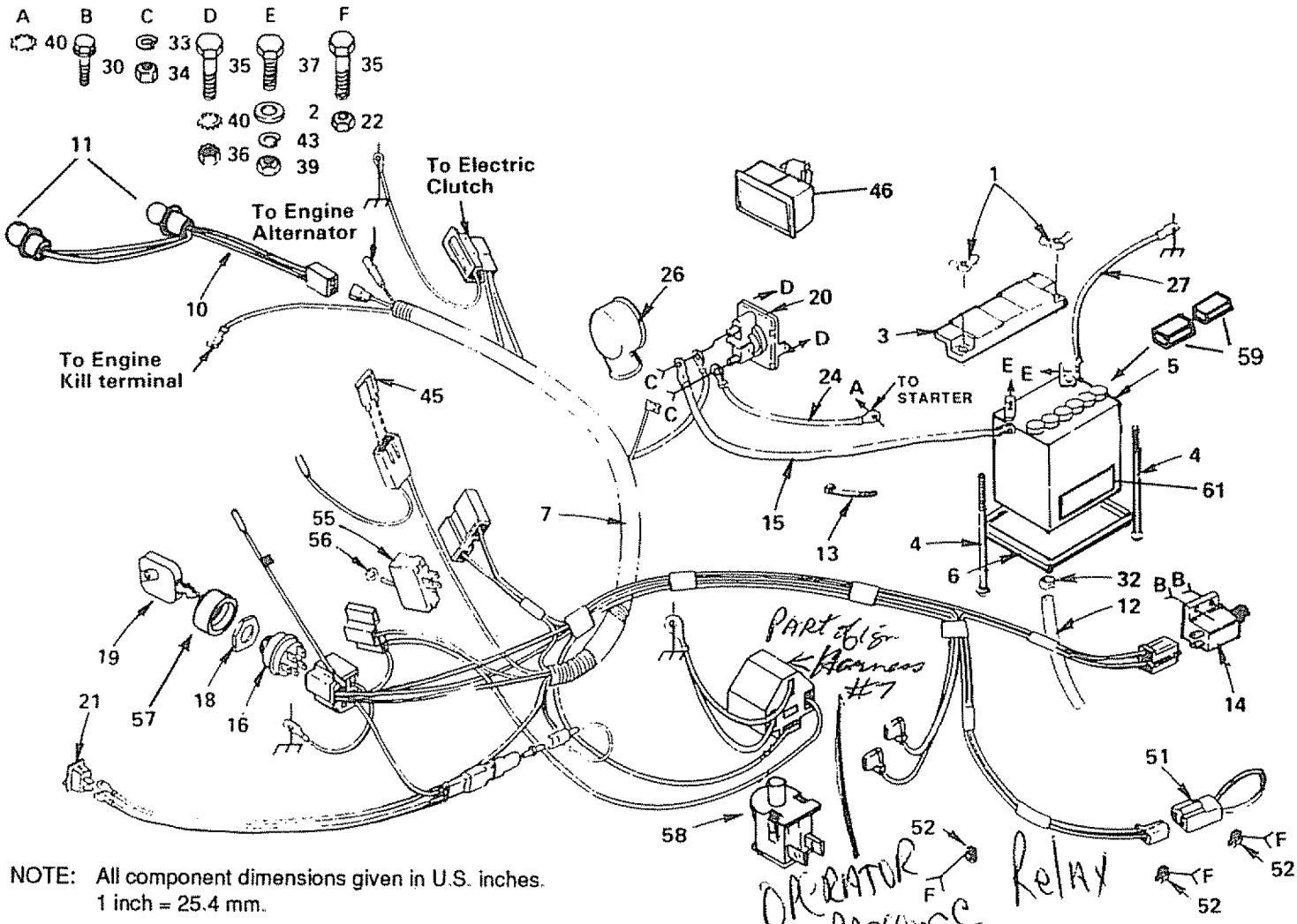
WIRING INSULATED CLIPS

NOTE: If wiring insulated clips were removed for servicing of unit, they should be replaced to properly secure your wiring.

REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

ELECTRICAL



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

KEY NO.	PART NO.		DESCRIPTION
1	123198X		Wing Nut 1/4 - 20
2	STD551025	*	Washer 9/32 x 5/8 x 16 Ga.
3	102476X		Guard - Terminal
4	STD532575	*	Bolt, Carriage 1/4- 20 x 7- 1/2
5	121537X		Battery
6	7603J		Battery Tray
7	124654X		Harness - Ignition
10	110859X		Harness - Light Socket
11	4152J		Bulb - Light
12	100541K		Tube - Battery Tray
13	7192J		Cable Tie
14	104445X		Switch - Interlock - Clutch
15	4206J		Cable - Battery (Battery to Solenoid)
16	4406R		Ignition Switch
18	109788X		Nut - Ignition
19	109310X		Key
20	109081X		Solenoid
21	110712X		Switch - Light
22	73680400		Nut - Hex 1/4 - 20
24	4799J		Cable - Battery (Solenoid to Starter)
26	719J		Terminal Cover (For Solenoid)
27	4207J		Cable - Battery IBattery to Ground)

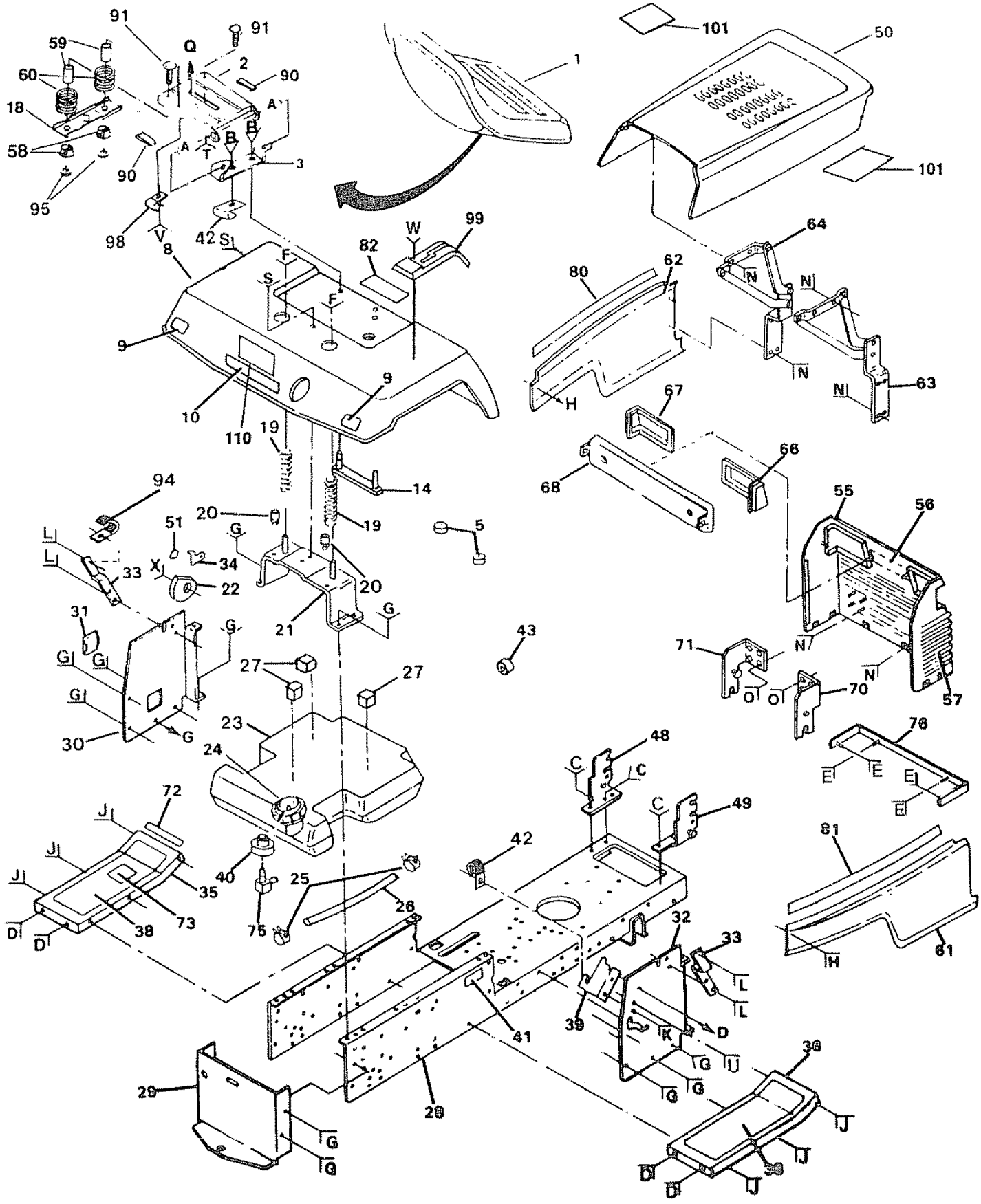
KEY NO.	PART NO.		DESCRIPTION
30	STD601005	*	Screw - Tap. Hex Hd. No. 10 - 24 UNC x 1/2 Type T
32	109596X		Clamp - Hose
33	STD551125	*	Lockwasher 1/4
34	73350400	*	Nut - Hex Jam 1/4 - 20
35	74780408		Bolt-Hex 1/4 - 20 x 1/2 Gr. 5
36	STD541425	*	Nut-Keps, Hex 1/4 - 20
37	74760412		Bolt-Hex 1/4 - 20 x 3/4
39	STD541025	*	Nut-Hex 1/4 - 20
40	11050400		Washer - Lock 1/4 Ext. Tooth
43	STD551125	*	Lockwasher 1/4
45	108824X		Fuse - 30 Amp.
46	121433X		Ammeter
51	102501X		Loop - Wire
52	235R		Clip - Insulated
55	4021J		Switch PTO
56	4022J		Nut-Hex
57	109787X		Bezel, Ignition
58	121305X		Switch Seat
59	121264X		Cap Battery
61	120960X		Decal, Battery
- - -	125895X		Owner's Manual (English)
- - -	101539X		Sheet, Instruction - Tractor 15° Slope (English)

*STANDARD HARDWARE--PURCHASE LOCALLY

REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

CHASSIS AND ENCLOSURES



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

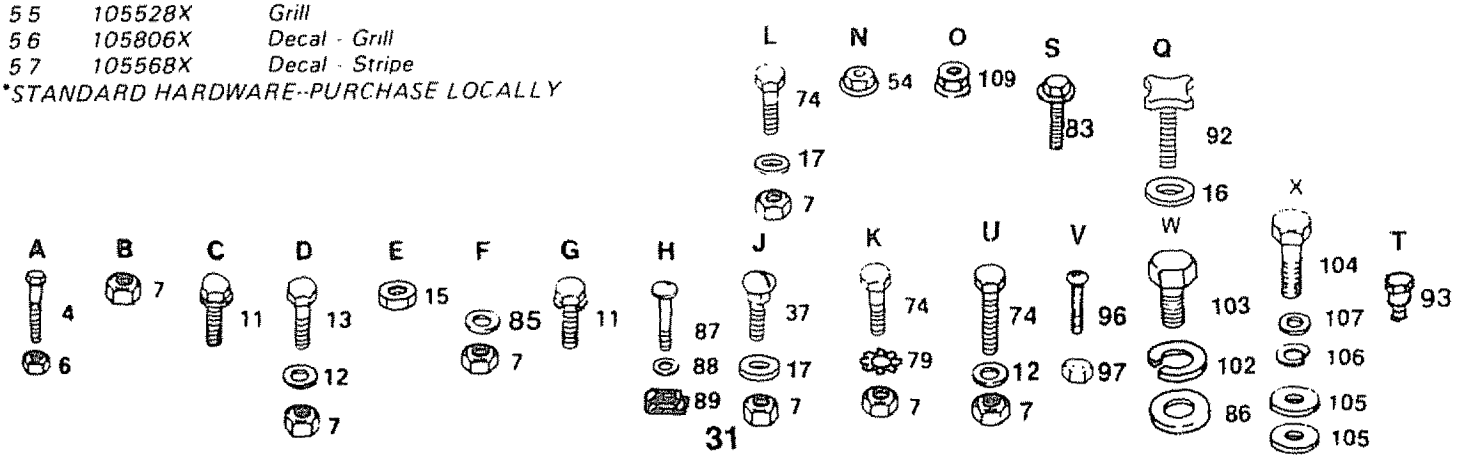
CHASSIS AND ENCLOSURES

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

KEY NO.	PART NO.	DESCRIPTION
1	120066X	Seat
2	124294X	Pan - Seat
3	105513X	Bracket - Pivot - Seat
4	105529X	Bolt - Shoulder 5/16 - 18
5	124238X	Cap - Spring
6	73680500	Nut - Lock 5/16 - 18
7	73680600	Nut - Lock 3/8 - 16
8	123784X	Fender
9	106202X	Reflector - Rear
10	105801X	Decal
11	17490612	Screw, Hex Washer Thd Roll 3/8-16 x 3/4
12	19131312	Washer 13/32 x 13/16 x 12 Ga
13	STD523707	*Bolt, Hex. 3/8-16 x 3/4
14	105511X	Strap - Fender
15	73220400	Nut, Fin. Hex 1/4 - 20
16	19171912	Washer 17/32 x 1-3/16 x 12 Ga.
17	120684X	Washer, Neoprene
18	121246X	Bracket, Switch - Seat
19	124181X	Compression - Spring R.H.
20	105531X	Nut, Push
21	105509X	Bracket - Fender
22	123934X	Scale, Height Indicator
23	106020X	Tank - Fuel
24	123549X	Cap - Fuel
25	123487X	Clamp - Hose
26	8542R	Line - Fuel
27	106082X	Pad - Spacer
28	121277X	Chassis Assembly
29	123785X	Drawbar
30	124118X	Panel - Dash - L.H.
31	121794X	Cover, Access
32	110828X	Panel - Dash - R.H.
33	105525X	Bracket - Support - Dash
34	123933X	Pointer, Height Indicator
35	105465X	Footrest - L.H.
36	105464X	Footrest - R.H.
37	STD533707	*Bolt, Carr. 3/8-16 x 3/4
38	105466X	Pad, Footrest
39	110923X	Bracket - Clutch - Mower
40	3645J	Bushing
41	105567X	Decal - 6 Speed 44"
42	2751R	Clip - Insulated
43	110436X	Grommet, Split
48	109015X	Bracket - Pivot - L.H.
49	109016X	Bracket - Pivot - R.H.
50	106013X017	Hood
51	123935X	Plug, Hole
52	73680400	Nut - Crownlock 1/4-20
54	108067X	Pal - Nut
55	105528X	Grill
56	105806X	Decal - Grill
57	105568X	Decal - Stripe

*STANDARD HARDWARE--PURCHASE LOCALLY

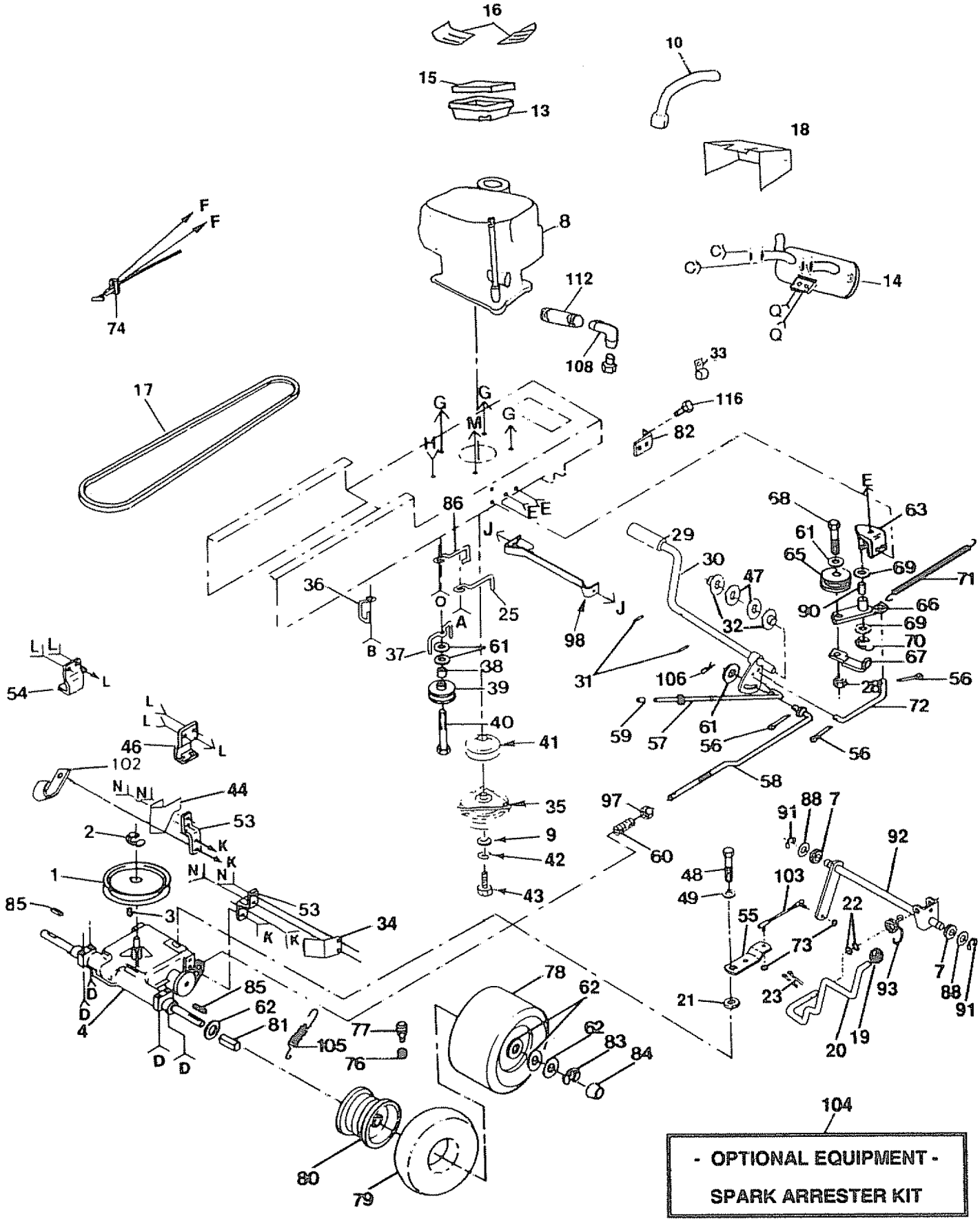
KEY NO.	PART NO.	DESCRIPTION
58	121248X	Bushing, Snap
59	121249X	Spacer, Split
60	121250X	Spring, Compression
61	108403X	Panel - Side - R.H.
62	108410X	Panel - Side - L.H.
63	126432X	Hinge - R.H.
64	126431X	Hinge - L.H.
66	106003X	Lens - R.H.
67	106004X	Lens - L.H.
68	110897X	Bezel - Headlight
70	108512X	Bracket - Pivot - R.H.
71	108513X	Bracket - Pivot - L.H.
72	4900J	Decal - Clutch Brake
73	109199X	Decal - Drive Belt
74	74760612	Bolt - Hex 3/8-16 x 3/4
75	8710J	Stem - Tank Fuel
76	110350X	Strap Assembly - Grill
79	11050600	Washer - Lock Ext. Tooth 3/8
80	106813X	Decal - Stripe Side Panel, L.H.
81	106814X	Decal - Stripe Side Panel, R.H.
82	106974X	Decal - Caution
83	17490608	Bolt, Hex Washer Thread Rolling 3/8 - 16 X 1/2
85	19131614	Washer 13/32 x 1 x 14 Ga
86	19060718	Washer 3/16 x 7/16 x 18 Ga.
87	106909X	Screw - Special
88	106910X	Washer
89	108402X	U-Clip
90	121251X	Strip, Foam
91	72170410	Bolt, Carr. 1/4 - 20 x 1-1/4
92	120068X	Knob, Seat
93	121144X	Shoulder Bolt
94	5320R	Clip - Insulated
95	123976X	Nut, Hex Large Flange
96	74641008	Screw - Sltd Pan Head #10 - 24 x 1/4
97	73951000	Nut, Keps #10 - 24
98	4171R	Clip, Insulated
99	123825X	Console, Shifter
101	126313X	Decal, Hood
102	10100800	Washer, Lock
103	74640806	Screw #8 x 3/8
104	74780516	Bolt, Hex 5/16 - 18 UNC x 1
105	19112410	Washer 11/32 x 1 1/2 x 10 Ga.
106	10040500	Washer, Lock
107	120529X	Washer, Nylon
108	9151R	Grommet
109	120579X	Pal Nut
110	750211	Decal, U.S.A.



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

DRIVE



REPAIR PARTS

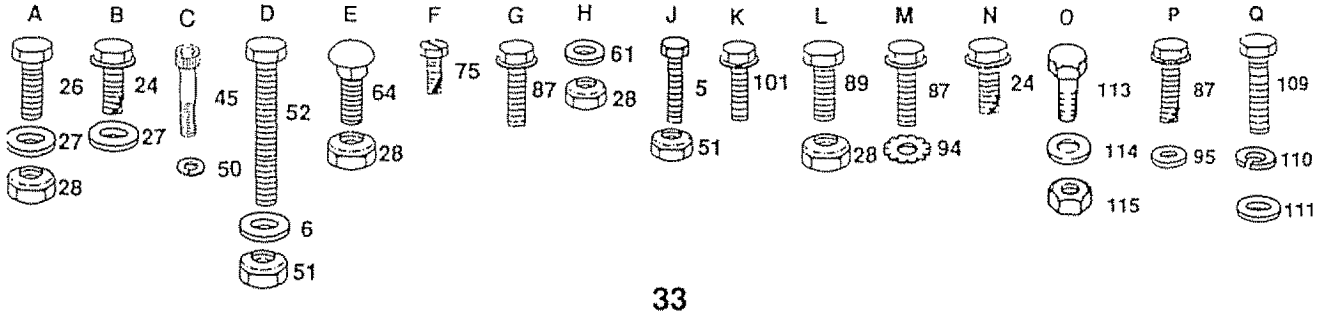
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

DRIVE

KEY NO.	PART NO.		DESCRIPTION
1	121327X		Pulley, Transaxle (Driven)
2	12000004		Ring, Retainer
3	2228M		Key, Woodruff #9
4	123797X		Transaxle, 6-Speed, Peerless Model No. 143.820- 016
5	STD533107	*	Bolt,Hex 5/16 - 18 x 3/4
6	19111214		Washer 11/32 x 3/4 x 14 Ga
7	71208		Bushing, Rod, Steering
8	125605X		Engine, 20 HP Kohler Model No MV20S, Spec. No. 57517
9	126197X		Washer 15/32 x 1- 3/4 x 1/4
10	125893X		Tube Assembly, Exhaust
13	125762X		Duct, Air, Kohler
14	125890X		Muffler
15	123537X		Foam, Strip
16	120511X		Bracket,Air Duct
17	123796X		V-Belt, Drive
18	125891X		Shield, Heat Kohler Vertical Twin
19	106933X		Knob
20	123781X		Rod, Shifter
21	105701X		Washer, Shift Plate
22	19171216		Washer 17/32 x 3/4 x 16 Ga
23	STD561210	*	Pin, Cotter 1/8 x 1
24	17490612		Screw, Hex Washer Hd Thd Roll 3/8 - 16 x 3/4
25	105730X		Keeper, Belt, Engine
26	STD523710	*	Bolt,Hex 3/8 - 16 x1
27	19131312		Washer 13/32 x 13/16 x12Ga
28	STD541437	*	Locknut 3/8 -16
29	8883R		Cover, Foot Pedal
30	122424X		Shaft, Foot Pedal
31	1572H		Pin,Roll 3/16 x 1
32	120813X		Bearing, Nylon
33	122758X		Clamp, Muffler
34	123792X		Keeper, Belt, Transaxle, R.H.
35	124648X		Clutch, Electric
36	123788X		Retainer, Belt
37	109070X		Keeper, Belt
38	4470J		Spacer
39	123674X		Idler, Flat
40	STD523727	*	Bolt, Hex 3/8 - 16 x 2 - 3/4
41	124647X		Pulley, Engine
42	STD551143	*	Washer, Lock 7/16
43	74610764		Bolt, Hex 7/16 - 20 x 4
44	123791X		Keeper, Belt, Transaxle, L.H.
45	74570512		Screw, Hex Socket 5/16 - 16 X 12 Ga.
46	123776X		Bracket Transaxle, R H
47	19211616		Washer 21/32 x 1 x 16 Ga.
48	71040412		Bolt, Hex 1/4 - 28 x 3/4
49	STD551025	*	Washer 9/32 x 3/4 x 16 Ga.
50	STD551131		Washer, Lock Hvy. Helical Spring
51	STD541431	*	Locknut 5/16 -18
52	74780544	*	Bolt, Hex 5/16 -18 x 2 - 3/4
53	123787X		Strap, Torque
54	123780X		Bracket, Transaxle. L H
55	123794X		Shift Arm
56	STD561210	*	Pin, Cotter 1/8 x 3/4
57	125637X		Rod, Brake, Park
58	123786X		Rod, Brake
59	124236X		Cap, Plunger
60	106888X		Spring, Rod, Brake
61	STD551037	*	Washer 13/32 x 13/16 x 16 Ga.
62	123800X		Washer 1-1/32 x 1 - 5/8 x 16 Ga.
63	123102X		Bracket, Clutch
64	STD533707	*	Bolt, Carriage 3/8 - 16 x 3/4
65	123766X		Pulley, Idler
66	123789X		Arm, Idler
67	123205X		Retainer, Belt
68	STD523715	*	Bolt, Hex 3/8 -16 x 1-1/2
69	110812X		Washer, Hardened
70	12000039		Ring, Clip
71	105709X		Spring, Return Clutch
72	105710X		Link, Clutch
73	73530400		Nut 1/4 - 28
74	125726X		Control, Throttle
75	17720410		Screw, Hex, Thread Cutting 1/4 - 20 x 5/8
76	59192		Cap, Valve
77	65139		Stem, Valve
78	124106X		Tire, Rear
79	7154J		Tube (Not furnished with Tractor)
80	124074X		Rim
81	108097X		Spacer, Split
82	108236X		Bracket, Switch
83	12000053		E-Ring
84	104757X		Cap Hub, Rear
85	9396E		Key Square 1/4 x 2
86	121218X		Keeper, Belt, Engine
87	125991X		*Screw, Self Tapping Rolling 3/8 - 16 x 1- 1/2
88	19212016		Washer 21/32 x 1 - 1/4 x 16 Ga
89	STD523707	*	Bolt Hex 3/8 - 16 x 3/4
90	105706X		Bearing
91	12000008		Ring, Klip
92	123772X		Shaft Assembly, Shifter
93	123782X		Spring, Torsion
94	STD551237	*	Washer, Lock, Ext. Tooth 3/8
95	19060916		Washer
97	STD541437	*	Locknut 3/8 - 16
98	109169X		Retainer Assembly, Clutch
101	17490512		Screw, Hex, Washer, Thd Rolling 5/16 -18 x 3/4
102	2751R		Clip, Fuel Line
103	123793X		Rod, Tie
104	126621X		Spark Arrester Kit
105	110422X		Spring, Brake Return
106	4497H		Clip, Hair Pin
108	13280336		Nipple, Pipe
109	STD512505	*	Bolt, Hex 1/4 - 20 x 1/2
110	STD551131	*	Washer, Lock 1/4
111	STD551025	*	Washer 9/32 x 3/4 x 16 Ga.
112	13200300		Elbow, Pipe STD 90°
113	74760516		Bolt, Hex 5/16 - 18 UNC x 1
114	19111212		Washer 11/32 x 3/4 x 12 Ga
115	STD541431	*	Nut, Crownlock 5/16 - 18
116	STD601005	*	Screw, Tap Hex Hd #10 - 24 x 1/2

* *STANDARD HARDWARE—PURCHASE LOCALLY*

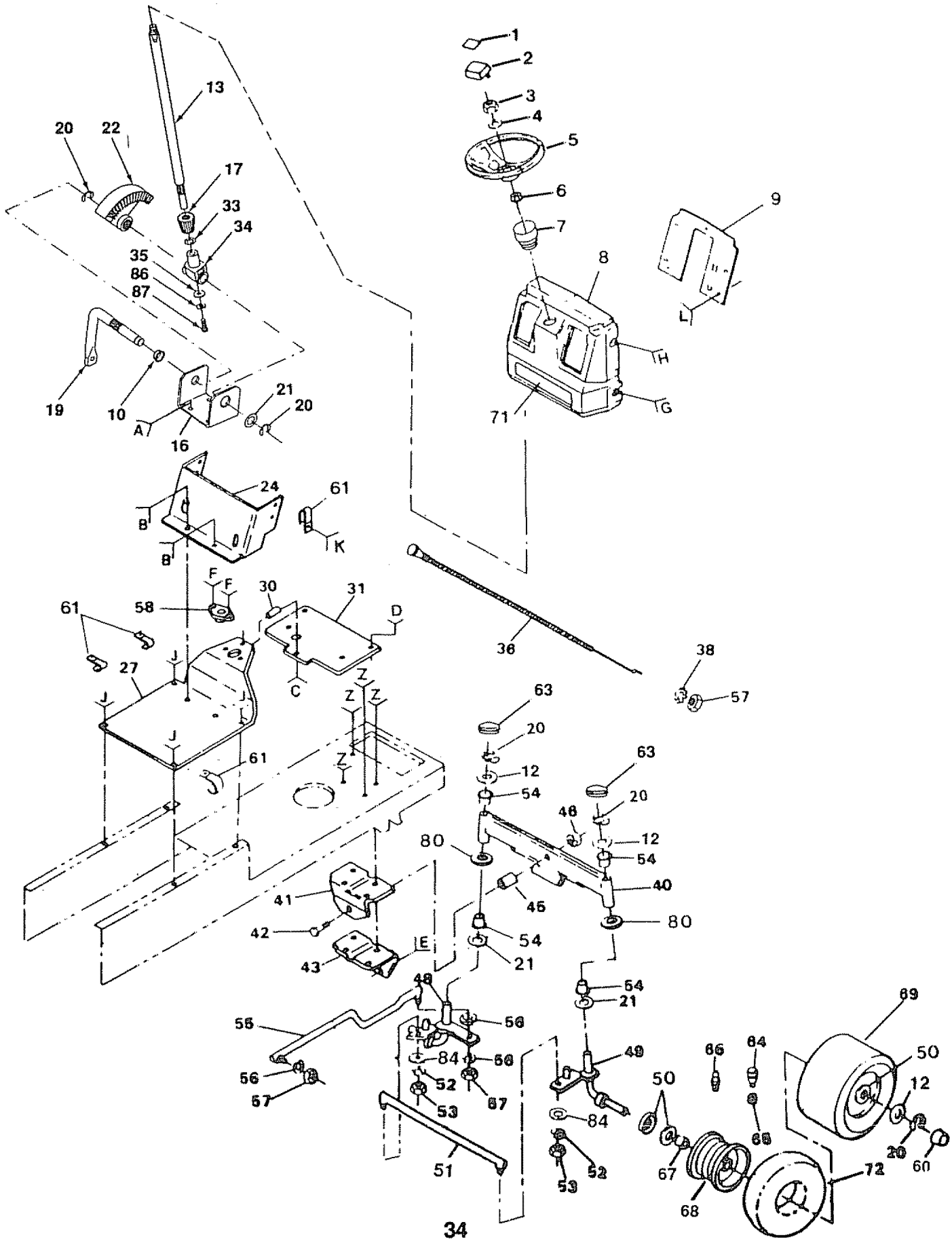
NOTE: All component dimensions given in U S inches - 1 inch = 25 4 mm



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

STEERING ASSEMBLY



REPAIR PARTS

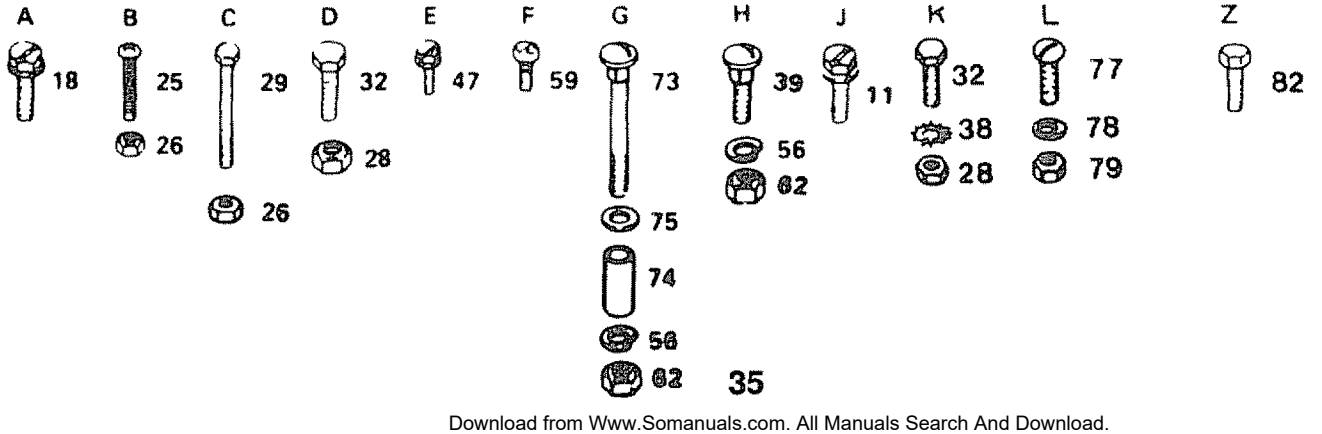
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

STEERING ASSEMBLY

KEY NO.	PART NO.	DESCRIPTION
1	105810X	Decal - Cap Steering Wheel
2	100710L	Insert, Steering Wheel
3	73940800	*Nut Top Lock 1/2 - 20UNF
4	100712K	Washer
5	121021X	Wheel, Steering
6	100711L	*Adapter - Steering Wheel
7	110709X	Column - Steering
8	120028X	Dash
9	124557X011	Dash Plate
10	109816X	Nyliner, Snap-In
11	17490608	Screw, Hex Washer Thd Rolling 3/8-16 x 1/2
12	121748X	Washer 25/32 x 1-5/8 x 16 Ga
13	124041X	Shaft, Steering
16	124036X	Bracket, Steering
17	124037X	Gear, Pinion
18	17490612	Screw, Hex Washer Thd Rolling 3/8-16 x 3/4
19	124033X	Shaft, Pitman
20	12000029	Klip Ring
21	6266H	Bearing, Thrust
22	124034X	Gear, Sector
24	105518X	Dash, Lower
25	74180512	Screw, Crown Truss Hd 5/16-18 x 3/4
26	73680500	Nut, Lock 5/16-18
27	123783X012	Saddle
28	73680600	Nut, Lock 3/8-16
29	STD523120	*Bolt, Hex 5/16-18 x 2
30	121236X	Spacer
31	106001X	Support Plate, Battery
32	STD523707	*Bolt, Hex 3/8-16 x 3/4
33	57079	Washer
34	124035X	Shaft, Support
35	126684X	Washer 5/8 x 1/4 x 16 Ga.
36	125727X	Control, Choke
38	11050600	Washer, Lock, Int /Ext Tooth 3/8
39	72110608	Bolt, Carriage
40	108075X	Axle, Front
41	105663X	Support, Saddle, Rear
42	74761060	Bolt, Hex 5/8-11 x 3-3/4
43	105664X	Support, Saddle, Front
45	110438X	Spacer Bearing Front Axle
46	73901000	Nut, Lock, Flange 5/8-11
47	17490508	Screw, Hex Washer Thd Rolling 5/16-18 x 1/2
48	105656X	Spindle, L H
49	105654X	Spindle, R H
50	121749X	Washer 25/32 x 1-1/4 x 16 Ga
51	121334X	Rod, Tie
52	STD551131	*Washer, Lock 5/16
53	STD541131	*Nut, Hex 5/16-24
54	3366R	Bearing
55	124032X	Link, Drag
56	STD551137	*Washer, Lock 3/8
57	STD541137	*Nut, Hex 3/8-24
58	1554J	Bushing, Steering
59	17431008	Screw, Hex No 10-16 x 1/2
60	104757X	Cap, Hub, Front
61	2751R	Clip, Fuel Line
62	STD541037	*Nut, Hex 3/8-16
63	121232X	Spindle, Cap
64	59192	Cap, Valve
65	65139	Stem, Valve
66	278H	Fitting, Grease
67	9040H	Bearing
68	106732X	Rim, 6" Front
69	106222X	Tire, Front
71	108456X	Decal, Instructions, Operating
72	59904	Tube, Tire, Front
73	72110622	Bolt, Carriage Hex 3/8-16 x 2-3/4
74	121235X	Spacer
75	19131416	Washer 13/32 x 7/8 x 16 Ga
77	STD512507	*Screw, Pan Head 1/4-20 x 3/4
78	19091216	Washer 13/32 x 3/4 x 16 Ga
79	73510400	Nut, Keps 1/4 NC
80	19272016	Washer 27/32 x 1-1/4 x 16 Ga
82	122819X	Screw, Special 3/8 - 16 x 3/4
84	19111216	Washer 11/32 x 3/4 x 16 Ga
86	STD551125	Lockwasher 1/4
87	71070410	Screw, Socket Hex 1/4 x 20 x 5/8

*STANDARD HARDWARE -- PURCHASE LOCALLY

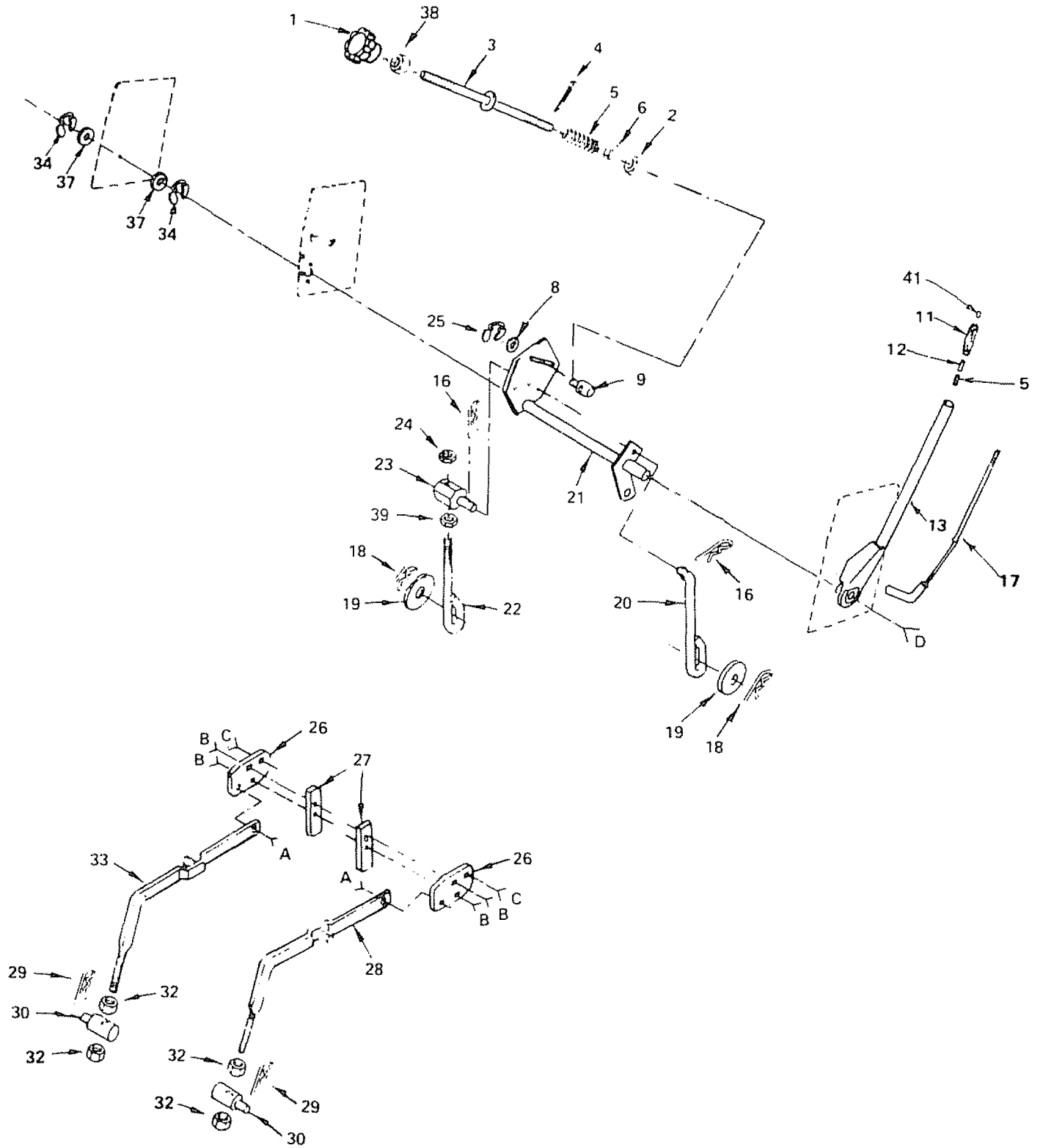
NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

LIFT ADJUSTMENT



REPAIR PARTS

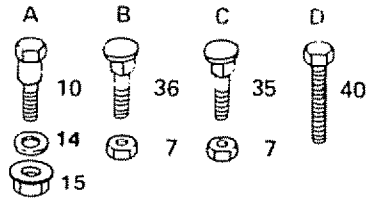
20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

LIFT ADJUSTMENT

KEY NO.	PART NO.		DESCRIPTION
1	100734K		Knob, Height Adjustment
2	110807X		Nut Hex Special
3	110729X		Rod - Adjust - Lift
4	STD560907	*	Pin - Cotter 3/32 x 1/2
5	2876H		Spring
6	19131016		Washer 13/32 x 5/8 x 16 Ga.
7	STD541437	*	Nut - Lock 3/8 - 16
8	19151216		Washer 15/32 x 3/4 x 16 Ga.
9	110810X		Trunnion
10	105848X		Bolt, Shoulder 3/8 - 16
11	125631X		Grip- Handle
12	122364X		Plunger - Lever
13	121004X		Lever - Lift (Includes Key No. 17)
14	110739X		Spring Washer
15	73980600		Center Lock Flangenut 3/8 x 16
16	4939M		Retainer - Spring
17	121006X		Rod - Lever
18	4921H		Retainer - Spring
19	19171516		Washer 17/32 x 15/16 x 16 Ga.
20	110029X		Link - Lift
21	124516X		Shaft - Lift
22	110448X		Link - Lift, Adjust
23	110447X		Trunnion - Lift
24	73710700		Nut Lock 7/16 - 20 UNF
25	12000037		Klip Ring
26	105864X		Bracket - Suspension
27	121252X		Upstop Mower
28	121598X		Arm - Suspension - R.H.
29	9135R		Retainer Spring
30	106308X		Trunnion - Lift - Lower
32	STD541050	*	Nut- Hex Fin. 1/2 - 13
33	121599X		Arm - Suspension - L.H.
34	12000022		E-Ring
35	STD533710	*	Bolt - Carriage 3/8 - 16 x 1
36	STD533707	*	Bolt Carriage 3/8 - 16 x 3/4
37	19292016		Washer 29/32 x 1 - 1/4 x 16 Ga.
38	STD541237	*	Nut., Hex Jam 3/8 - 16
39	STD541343	*	Nut - Hex Jam 7/16-20
40	74780624		Bolt - Hex 3/8 - 16 x 1 - 1/2
41	122365X		Button - Plunger

*STANDARD HARDWARE—PURCHASE LOCALLY

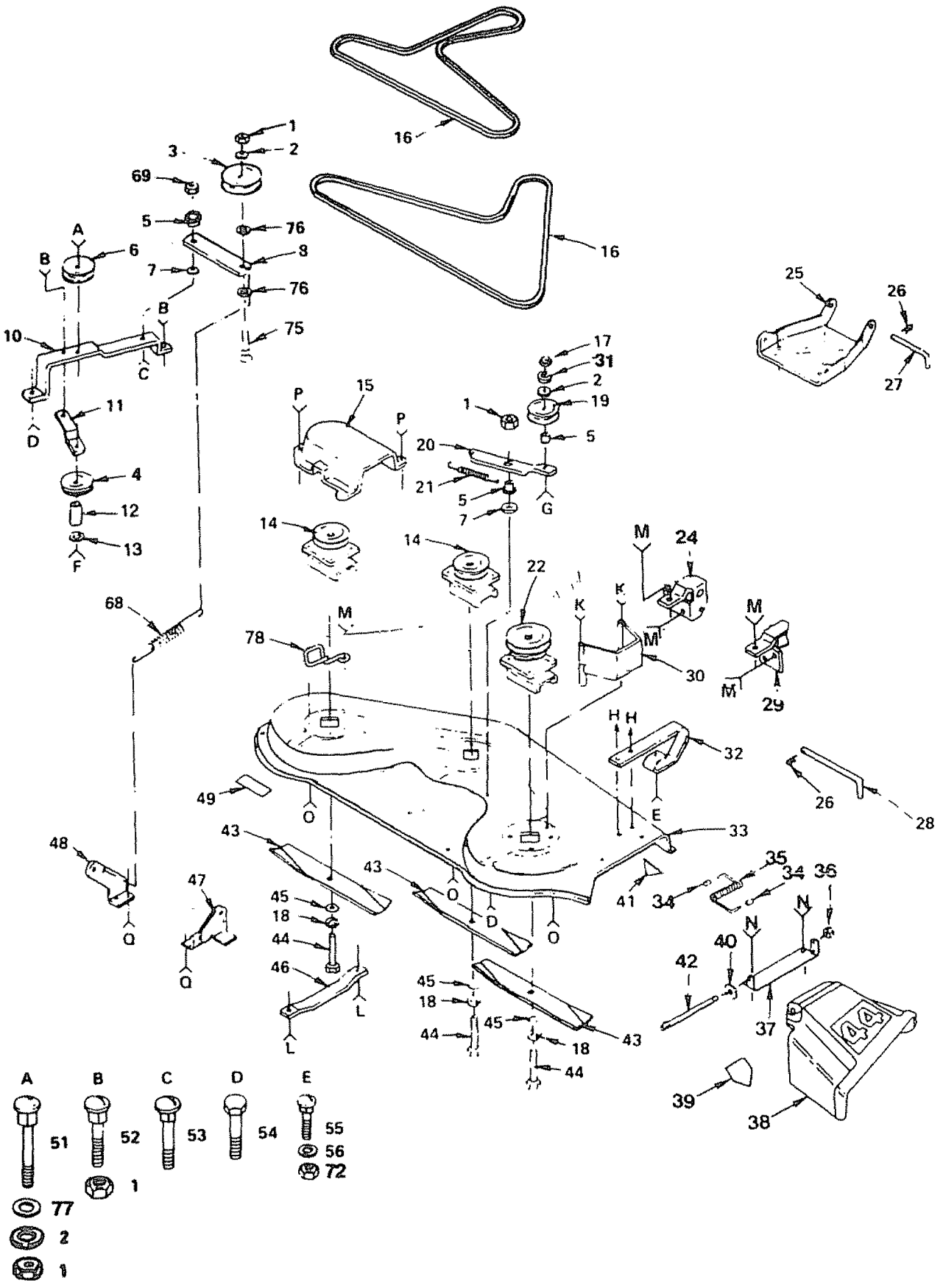
NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460

MOWER



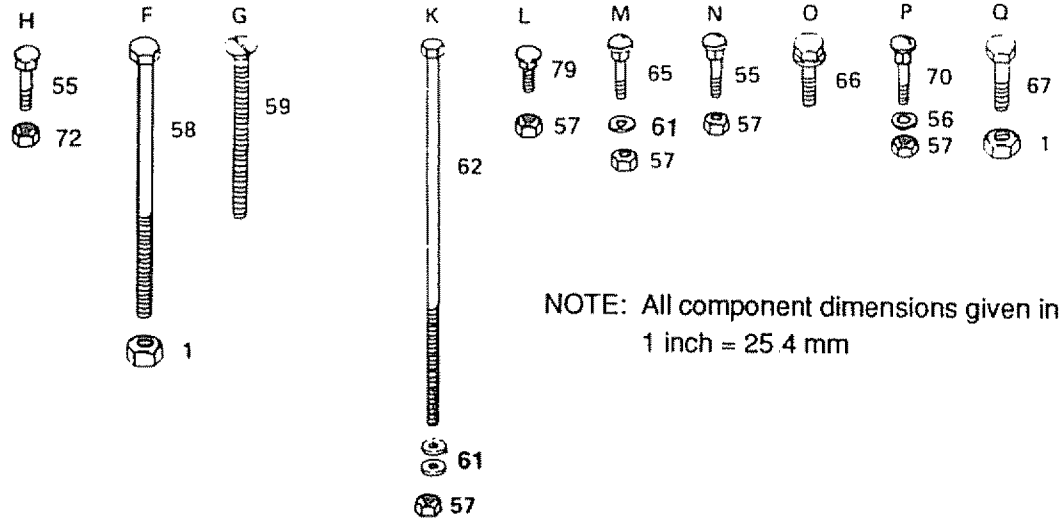
REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460

MOWER

KEY NO.	PART NO.		DESCRIPTION
1	STD541437	*	Nut - Lock 3/8 - 16
2	19131614		Washer 13/32 x 1 x 14 Ga.
3	121316X		Pulley Idler
4	102403X		Pulley, Idler
5	106902X		Spacer
6	677A451		Pulley Idler
7	106513X		Washer - Wear
8	121425X		Arm - Idler
10	106523X		Bar Support - Idler
11	106522X		Brace - Idler - Deck
12	121236X		Spacer
13	STD551037	*	Washer, 13/32 X 13/16 X 16 Ga.
14	121658X		Mandrel - Secondary
15	106214X		Guard
16	106085X		V Belt
17	STD541037	*	Nut, Hex 3/8 - 16
18	STD551137	*	Washer - Lock 3/8
19	102932X		Idler - Flat
20	106526X		Arm - Idler - Deck
21	7644J		Spring- Extension
22	121705X		Mandrel - Primary
24	106511X		Bracket Lift L.H.
25	105662X		Link Parallel
26	4921H		Retainer - Spring
27	105744X		Pln, Front Hinge
28	109835X		Pin, Rear Hinge
29	106512X		Bracket Lift - R.H.
30	108119X		Guard Bel t - R.H.
31	10040600		Washer, Lock Hvy. Hel. Spring
32	8418J		Runner - R. H .
33	121423X		Housing - Mower
34	105304X		Cap Sleeve
35	106734X		Spring
36	110452X		Nut . Push
37	109743X		Bracket - Deflector
38	109785X		Guard - Discharge
39	121343X		Decal - Warning
40	19111016		Washer 11/32 x 5/8 x 16 Ga.
41			Decal OPEI (not serviced)
42	106735X		Rod Hinge
43	106635X		Blade
44	STD623715	*	Bolt- Hex 3/8 - 24 x 1- 1/2 Gr. 5
45	19132012		Washer 13/32 x 1-1/4 x 12 Ga.
46	7631J		Runner - L.H.
47	123807X		Bracket Suspension, Rear- R.H.
48	123808X		Bracket - Suspension, Rear- L.H.
49	106223X		Decal- V-Belt - Schematic
51	STD533717	*	Bolt - Carriage 3/8 - 16 x 1 - 3/4
52	STD533710	*	Bolt - Carriage 3/8 - 16 x 1
53	STD533715	*	Bolt - Carriage 3/8 16 x 1-1/2
54	STD523712	*	Bolt - Hex 3/8 - 16 x 1 - 1/4
55	STD533107	*	Bolt - Carriage 5/16- 18 x 3,'4
56	STD551031	*	Washer 11/32 x 11/16x 16 Ga.
57	STD541431	*	Nut - Lock 5/16- 18
58	STD523730	*	Bolt - Hex 3/8 - 16 x 3
59	74110632		Screw - Flat Head 3/8 - 16 x 2
61	19111216		Washer 11/32 x 3/4x 16 Ga.
62	STD523150	*	Bolt - Hex 5/16 18 x 5
65	STD533107	*	Bolt - Carriage 5/16 - 18 x 5/8 UNC x 3/4
66	17490612		Screw - Hex Washer Thread Rolling 3/8 16 x 3/4
67	STD533707	*	Bolt - Carriage 3/8 - 16 x 3/4
68	102727X		Spring - Extension
69	STD541437	*	Nut - Centerlock 3/8 - 16
70	STD533107	*	Bolt - Carriage 5/16 - 18 x 3/4
72	1685H		Nut - Lock 5/16 - 18
75	72140620		Bolt, Carriage 3/8 - 16 X 2 1/2
76	19131210		Washer 13/32 x 3/4 x 10 Ga.
77	STD533106		Washer, 13/32 X 7/8 X 10 Ga.
78	121352X		Keeper - L.H. Mandrel
79	72110505	*	Bolt - Carriage 5/16 - 18 X 5/8
---	125493X		Mower Deck, Complete

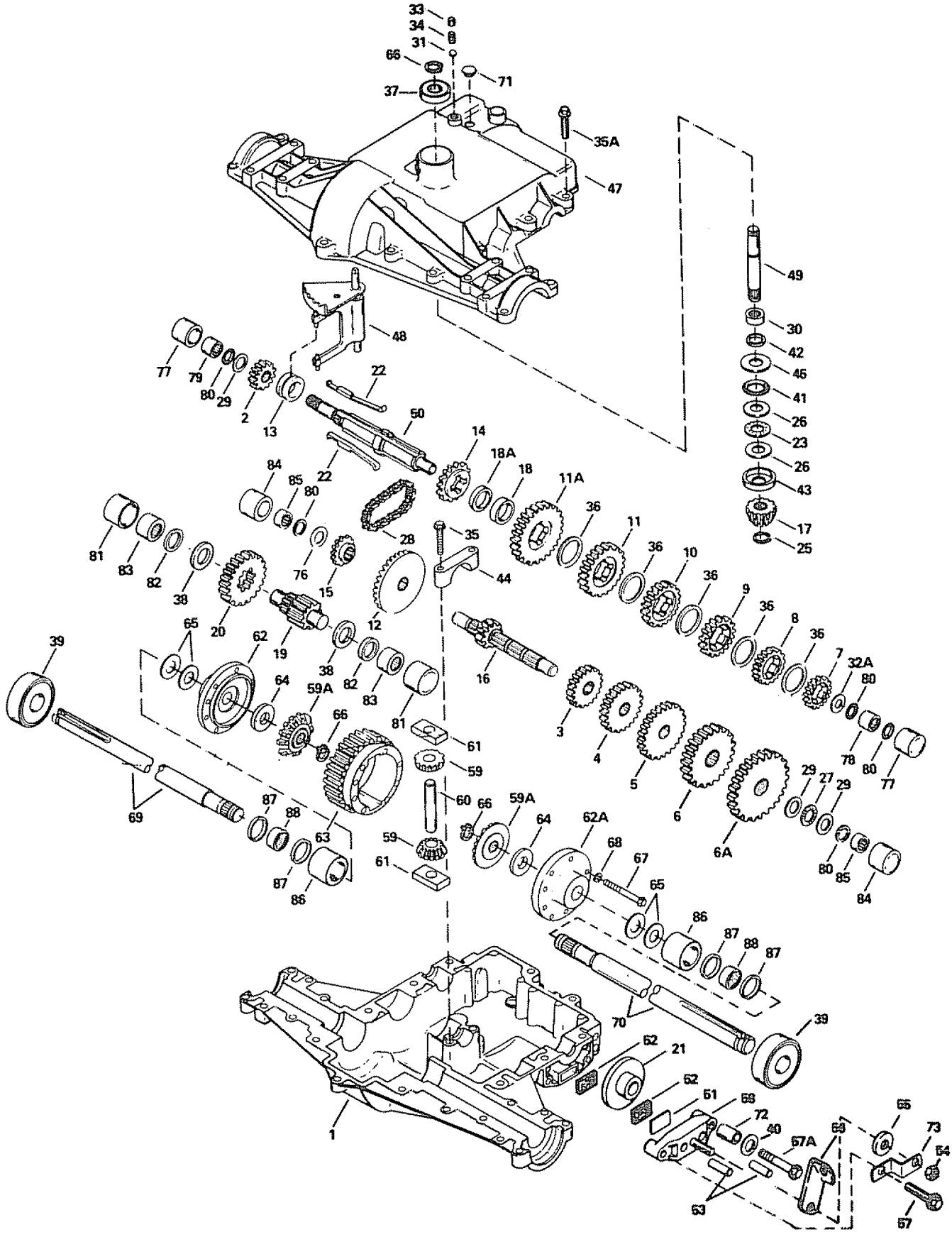
* STANDARD HARDWARE--PURCHASE LOCALLY



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

REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040
TRANSAXLE PEERLESS - - MODEL NUMBER 143-820-016



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040
TRANSAXLE PEERLESS - - MODEL NUMBER 143-820-016

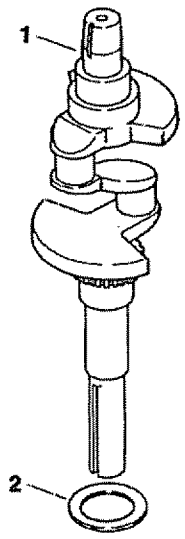
Ref. No.	Part No.	Part Name	Ref. No.	Part No.	Part Name
1	770088	Case, Transaxle	44	786131	Cap, Bearing
2	778253	Gear, Spur (15 teeth)	45	780165	Washer, Flat
3	778211	Gear, Spur (12 teeth)	47	772098	Cover, Transaxle
4	778240	Gear, Spur (18 teeth)	48	784342	Rod & Fork Assy., Shift
5	778201	Gear. Spur (25 teeth)	49	776274	Shaft, Input
6	778202	Gear, Spur (28 teeth)	50	776313	Shaft, Brake (4 Keyed)
6A	778208	Gear, Spur (31 teeth)	51	790007	Plate, Brake pad
7	778209	Gear, Spur (19 teeth)	52	790006	Pad, Brake
8	778203	Gear, Spur (22 teeth)	53	786026	Pin, Dowel
9	778204	Gear, Spur (25 teeth)	54	792075	Locknut, 5/16-24
10	778239	Gear. Spur (32 teeth)	55	792076	Washer, Flat
11	778207	Gear, Spur (37 teeth)	56	790047	Lever, Brake
11A	778216	Gear. Spur (41 teeth)	57	792073	Screw, Flanged hex hd thread-forming, 1/4-20 x 1-1/4
12	778246	Gear, Bevel (33 teeth)			
13	784216	Collar, Shift	57A	792085	Screw, Flanged hex hd thread-forming, 1/4-20 x 2-1/4
14	786123	Sprocket (18 teeth)			
15	786082	Sprocket (9 teeth)	58	790025	Holder, Brake pad
16	776291	Shaft, Counter (w/9 tooth gear)	59	778197	Pinion, Differential bevel
17	778245	Bevel Pinion, Input (13 teeth)	59A	778198	Gear, Bevel
18	786121	Spacer, Netural (.350/.340 thick)	60	786019	Pin, Drive
18A	786122	Spacer, Netural (.276/.268 thick)	61	786027	Block, Drive
19	776275	Shaft. Output (9 teeth)	62	774833	Carrier, Differential (Threaded holes)
20	778247	Gear. Output (35 teeth)	62A	774834	Carrier, Differential
21	790043	Disk. Brake	63	778248	Gear, Ring (31 teeth)
22	792138	Key	64	780107	Washer
23	780084	Bearing, Thrust	65	780042	Washer, Thrust
25	788040	Ring, Retaining	66	792018	Ring, Snap
26	780051	Washer. Thrust	67	792020	Screw, Hex hd., 1/4-20 x 2-1/4
27	780071	Bearing, Thrust	68	792006	Lockwasher, 1/4"
28	786081	Chain, Roller (No 41 chain, 24 links)	69	774832	Axle (12-5/16" long)
29	780072	Washer, Thrust	70	774831	Axle (16-3/16" long)
30	780155	Bearing, Needle	71	792074	Plug, Hex hd , 9/16-18 thread
31	792077	Ball, Steel	72	786067	Spacer
32A	780139	Washer, Thrust	73	786086	Bracket, Brake lever
33	792078	Screw, Set, 3/8-16 x 3/8	76	780153	Washer
34	792079	Spring	77	786144	Sleeve (stepped)
35	792073	Screw, Flanged hex hd thread-forming, 1/4-20 x 1-1/4	78	780150	Bearing, Needle
			79	780152	Bearing, Needle (capped)
35A	792129	Screw, Hex hd threadforming. 5/16-18 x 1-1/4	80	792001	"O" Ring
			81	786142	Sleeve (stepped)
36	780108	Washer. Thrust	82	788071	Ring, Square cut
37	780119	Bearing, Ball	83	780049	Bearing, Needle (capped)
38	780128	Washer, Thrust	84	786143	Sleeve (stepped)
39	780050	Bearing, Ball	85	780151	Bearing, Needle (capped)
40	792128	Washer, Flat	86	786145	Sleeve (stepped)
41	788077	"O" Ring	87	788070	Ring, Square cut
42	788042	Seal, Oil	88	780031	Bearing, Needle
43	780166	Washer. Cupped			

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

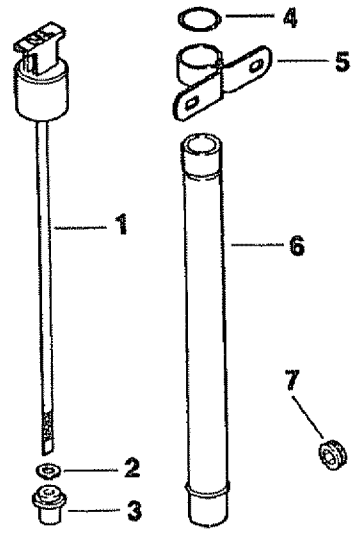
REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

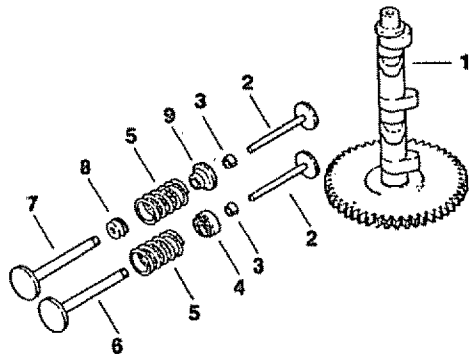
CRANKSHAFT



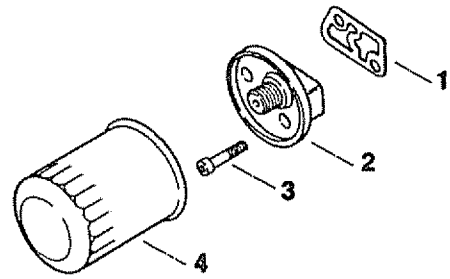
DIPSTICK



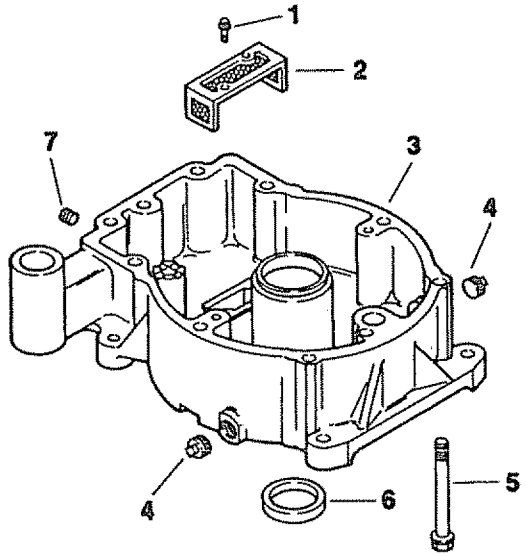
CAMSHAFT AND VALVES



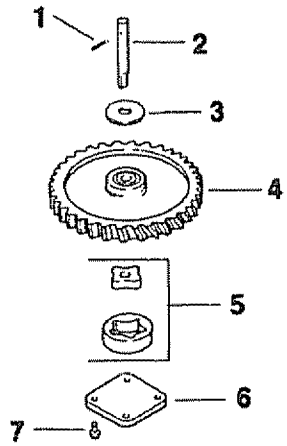
OIL FILTER



OIL PAN



OIL PUMP



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

CRANKSHAFT

KEY NO.	PART NO.	DESCRIPTION
1	82 014 07	Crankshaft
2	52 468 03	"Washer, thrust .119/.122 (A.R.)"
	52 468 04	"Washer, thrust .128/.131"
	52 468 05	"Washer, thrust .137/.140 (A.R.)"

OIL FILTER

KEY NO.	PART NO.	DESCRIPTION
1	52 041 16	"Gasket, oil filter"
2	52 181 03	"Adapter, oil filter"
3	X-55-15	"Screw, hex. socket hd 5/16-18x1-1/4 (2)"
4	52 050 02	Oil filter

CAMSHAFT & VALVES

KEY NO.	PART NO.	DESCRIPTION
1	52 012 09	Camshaft
2	52 019 03	Tappet (4)
3	41 755 10	"Kit, retainer (4)"
4	52 413 01	"Rotator, exhaust valve (2)"
5	25 089 01	"Spring, valve (4)"
6	52 016 06	"Valve, exhaust (2)"
7	52 017 07	"Valve, intake (2)"
8	52 032 13	"Seal, intake valve stem (2)"
9	230011	"Retainer, intake valve (2)"

DIPSTICK

KEY NO.	PART NO.	DESCRIPTION
1	52 038 08	"Dipstick 13-1/2"" blade"
2	X-25-44	"Washer, plain 5/16"
3	52 032 14	"Seal, rubber"
4	41 153 01	O-Ring
5	52 126 11	"Bracket, oil tube support"
6	52 123 20	"Tube, oil fill 11-7/8"""
7	47 139 01	"Plug, hex. ctsk. 3/4""N.P.T.F."

OIL PAN

KEY NO.	PART NO.	DESCRIPTION
1	X-67-64	"Screw, hex. wash. hd. 10-32x7/16 (2)"
2	52 050 03	"Filter, oil pickup"
3	52 199 03	Oil pan
4	X-75-10	"Plug, sq. hd. 3/8 N.P.T.F. (2)"
5	52 086 12	"Screw, hex. wash. hd. 5/16-18x1-1/4 (9)"
6	52 032 10	"Seal, rear oil"

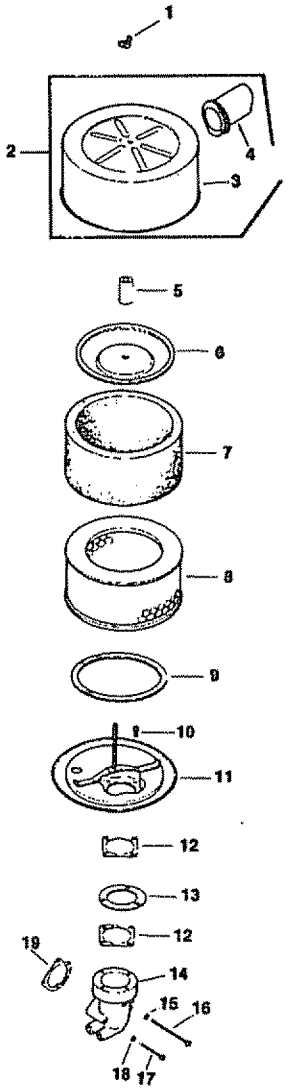
OIL PUMP

KEY NO.	PART NO.	DESCRIPTION
1	X-280-25	"Pin, roll"
2	52 144 05	"Shaft, oil pump"
3	52 422 01	"Spacer, shim (A.R. max. 2)"
4	52 043 05	"Gear, oil pump"
5	52 393 09	Rotor set
6	52 096 03	"Cover, oil pump"
7	X-67-64	"Screw, hex. wash. hd. 10-32x7/16 (4)"

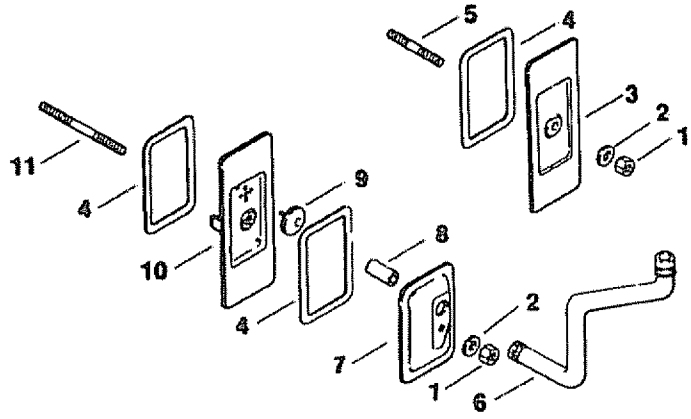
REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

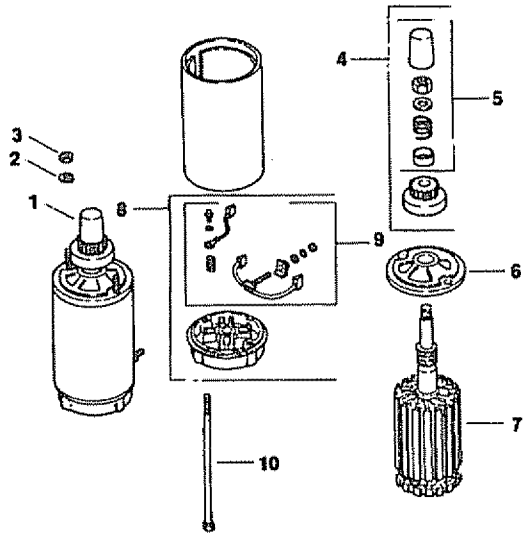
AIR INTAKE



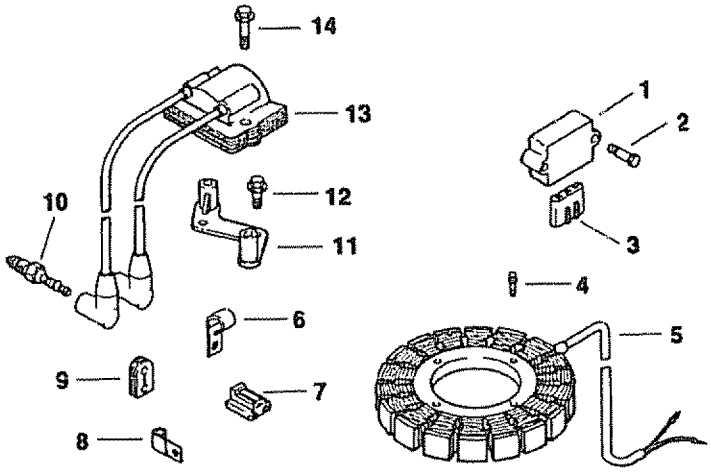
BREATHER & VENT



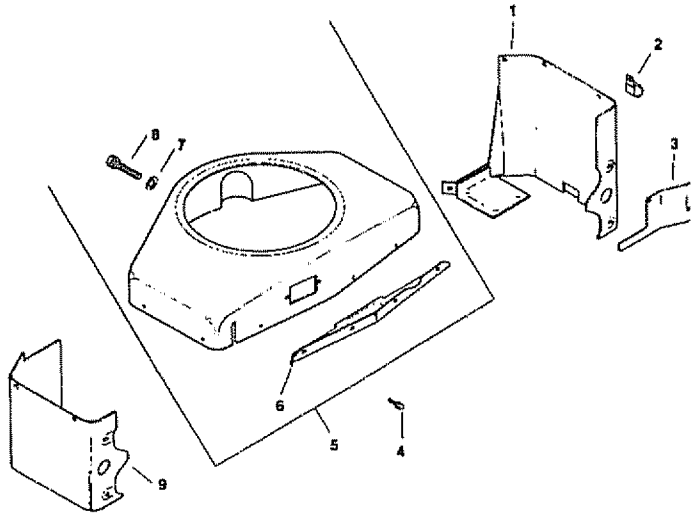
ELECTRIC START



IGNITION



BAFFLES & SHROUD



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

AIR INTAKE

KEY NO.	PART NO.	DESCRIPTION
1	X-276-7	Wing nut 1/4-20
2	52 755 83	"Kit, cover & tube (Includes 3,4 & decal 52 113 30)"
3	52 755 83	"Cover, air cleaner"
4	52 123 21	"Tube, air intake"
5	231032	"Seal, element cover"
6	52 082 04	"Cover, air cleaner element"
7	45 083 01	Precleaner
8	45 083 02	Element
9	237423	"Seal, air cleaner cover"
10	X-67-98	"Screw, hex. wash. hd. 10-32 x 9/16 (4)"
11	52 201 06	"Base, air cleaner"
12	277093	"Gasket, air cleaner (2)"
13	52 112 11	Spacer
14	52 054 34	"Elbow, air intake"
15	X-22-9	"Washer, I.T. #10 (2)"
16	X-50-57	"Screw, sltd. pan hd.10-32 x 1-3/4 (2)"
17	X-50-37	"Screw, sltd. pan hd. 10-32 x 2-1/4 "
18	X-25-79	"Washer, plain #10"
19	277069	"Gasket, elbow"
—	25 113 07	"Decal, air cleaner"

IGNITION

KEY NO.	PART NO.	DESCRIPTION
1	25 755 03	"Kit, rectifier-regulator (Includes 2)"
2	X-132-5	"Screw, H.C. 1/4-20xS/8 (2)"
3	236602	Connector
4	X-67-51	"Screw, H.C. 10-24x3/4 (4)"
5	237878	"Kit, stator"
6	210281	Clip
7	236473	Connector
8	48 154 01	Clamp
9	52 313 02	Grommet
10	51 132 02	Spark plug (2)
11	52 126 08	"Bracket, module"
12	25 086 16	"Screw, hex. wash. hd. 1/4-20x7/8 (2)"
13	52 584 02	"Module, ignition"
14	25 086 15	"Screw, hex. wash. hd. 1/4-20xl (2)"
—	47 518 33	"Lead, violet, rectifier-reg.(11"" - 14 gauge - uninsulated push on tab terminals)"
—	52 518 17	"Lead, white, module to connector (12-1/2"" - 18 gauge - insulated push on tab and uninsulated push on tab terminals)"

BREATHER & VENT

KEY NO.	PART NO.	DESCRIPTION
1	X-81-1	"Nut, hex. 1/4-20 (2)"
2	X-25-12	"Washer, plain 1/4 (2)"
3	52 096 18	"Cover, #2 cylinder valve"
4	52 055 01	"Gasket, cover (3)"
5	X-352-39	"Stud, #2 cylinder valve cover 1/4-20x2-1/4"
6	52 326 12	"Hose, breather"
7	52 096 08	"Cover, #1 upper cyl. valve"
8	52 032 04	"Seal, breather"
9	52 462 01	"Valve, umbrella"
10	52 096 22	"Cover, #1 lower cyl. valve"
11	275220	"Stud, #1 cylinder valve cover 1/4-20x3-1/4"

ELECTRIC START

KEY NO.	PART NO.	DESCRIPTION
1	52 098 10	Starter assembly (Includes 4-10)
2	X-20-1	"Washer, lock 1/4 (2)"
3	X-81-1	"Nut, hex. 1/4-20 (2)"
4	52 755 05	"Kit, drive (Includes 5)"
5	52 755 08	"Kit, drive parts"
6	52 227 01	"Cap, drive end"
7	52 170 03	Armature
8	52 227 08	"Cap, commutator end (Includes 9)"
9	52 755 15	"Kit, brush"
10	52 211 03	"Bolt, thru 1/4-20x6-7/8 (2)"
—	25 450 03	"Tag, caution"

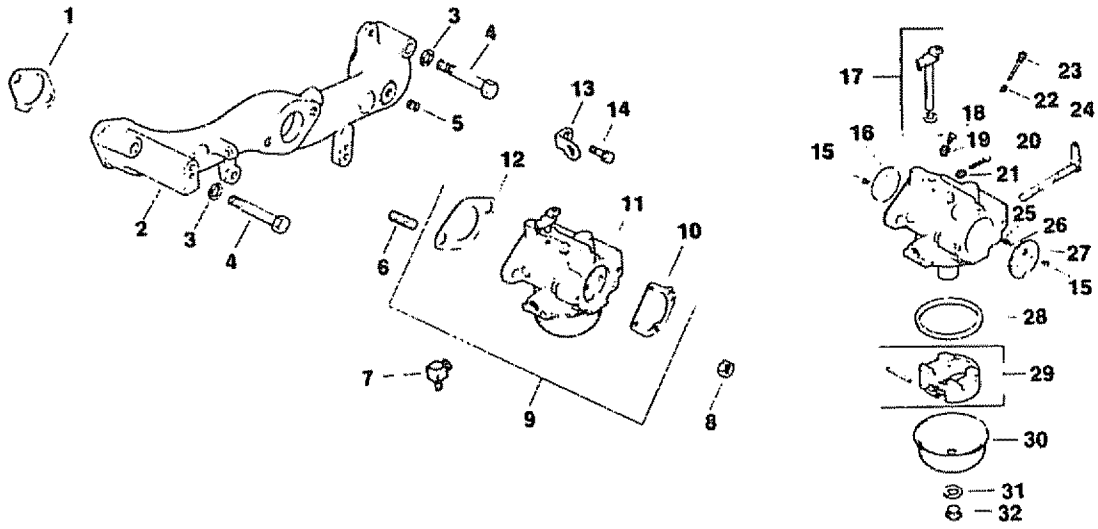
BAFFELS & SHROUD

KEY NO.	PART NO.	DESCRIPTION
1	52 063 30	"Baffle, #2 cylinder head"
2	48 154 01	Clamp
3	52 063 01	"Baffle, #2 cylinder top"
4	X-67-83	"Screw, hex. wash. hd. 1/4-20 x 7/16 (20)"
5	52 755 70	"Kit, blower housing (Includes 6-8)"
6	52 217 01	"Support, upper housing"
7	52 468 16	"Washer, flat 1/4 (2)"
8	52 086 11	Screw 1/4-20x5/8 (2)
9	52 124 05	"Baffle, #1 cylinder head"

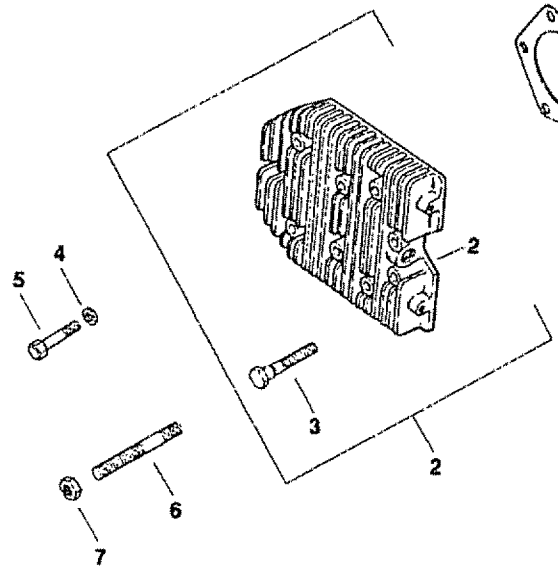
REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

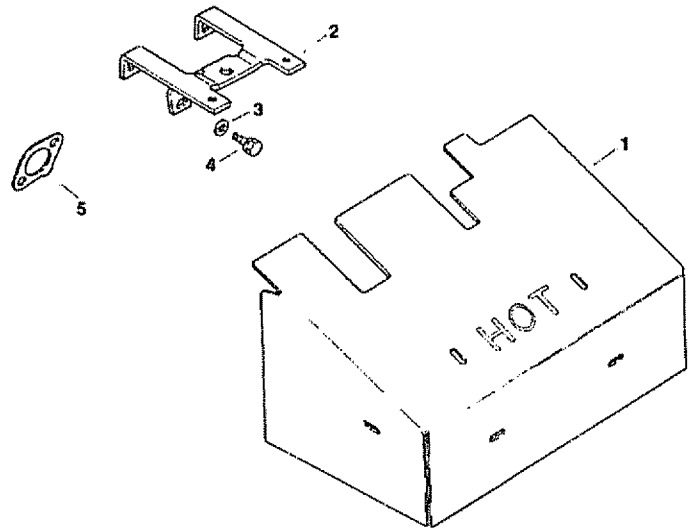
CARBURETOR



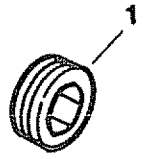
CYLINDER HEAD



EXHAUST



LOW OIL PRESSURE CUTOUT



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

CARBURETOR

KEY NO.	PART NO.	DESCRIPTION
1	52 041 09	"Gasket, intake (2)"
2	52 164 15	"Manifold, intake"
3	X-25-44	"Washer, plain 5/16 (4)"
4	X-6-29	"Screw, H.C. 5/16-18x1-1/4 (4)"
5	X-73-23	Plug
6	X-352-37	Stud 5/16-18xl (2)
7	25 155 02	"Connector, hose"
8	X-77-2	Nut 5/6 (2)
9	52 853 29	"Kit, carburetor w/gasket (Includes 10-13,15-32) "
10	277069	"Gasket, air cleaner"
11	52 053 55	Carburetor (For information only not available separately)
12	271030	"Gasket, carburetor"
13	232867	"Strap, lifting"
14	X-67-62	"Screw, hex. wash. hd. 1/4-20x3/4"
15	25 086 27	"Screw, throttle & choke plate (4)"
16	25 146 02	"Plate, throttle"
17	52 144 16	"Shaft, throttle w/lever & seal"
18	25 368 01	"Needle, idle fuel adj."
19	25 089 02	"Spring, idle fuel"
20	25 086 26	"Screw, idle speed adj."
21	25 089 04	"Spring, idle speed"
22	25 089 02	"Spring, main fuel"
23	25 368 03	"Needle, main fuel"
24	52 090 13	"Lever, choke"
25	25 089 03	"Spring, choke friction"
26	25 194 01	"Ball, choke friction"
27	25 146 03	"Plate, choke"
28	25 041 04	"Gasket, bowl"
29	25 757 09	"Kit, float"
30	25 104 01	"Bowl, fuel"
31	25 041 03	"Gasket, bowl retainer screw"
32	25 100 05	"Screw, bowl retainer"
—	25 757 11	"Kit, carburetor repair"

CYLINDER HEAD

KEY NO.	PART NO.	DESCRIPTION
1	52 041 18	"Gasket, head (2)"
2	52 755 78	"Kit, cylinder head (2) (Includes 3)"
3	25 086 07	"Screw, hex. machine 5/16-18x2 (4)"
4	220534	"Washer, plain 5/16 (18)"
5	41 086 02	"Screw, hex. hd. 5/16-18x1-1/2 (8)"
6	52 072 15	Stud 5/16-18x2 (6)
7	X-82-2	"Nut, hex. 5/16-18 (6)"

EXHAUST

KEY NO.	PART NO.	DESCRIPTION
1	52 281 31	"Shield, heat"
2	52 126 12	Bracket
3	X-25-72	"Washer, plain (3)"
4	52 086 11	Screw 1/4-20x5/8 (3)
5	52 041 14	"Gasket, exhaust (2)"

LOW OIL PRESSURE CUTOUT

KEY NO.	PART NO.	DESCRIPTION
1	X-75-23	"Plug, pipe 1/8 N.P.T.F."
	52 755 94	Gasket Set
	82 522 23	Short Block

REPAIR PARTS

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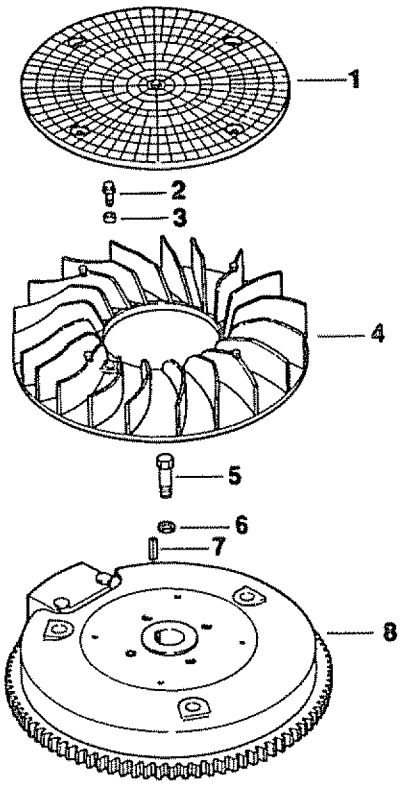
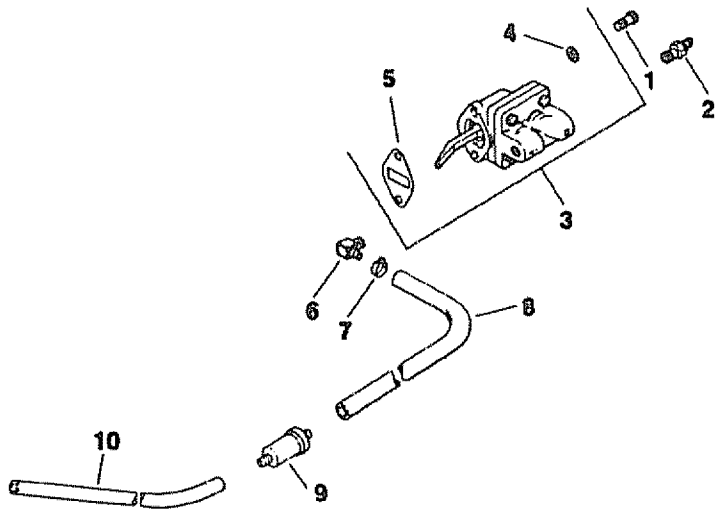
ENGINE MODEL NUMBER MV20S, 57517

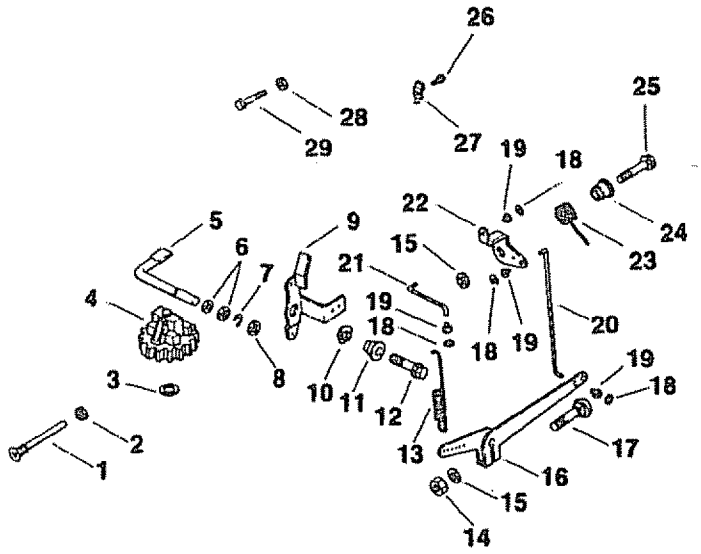
FLYWHEEL



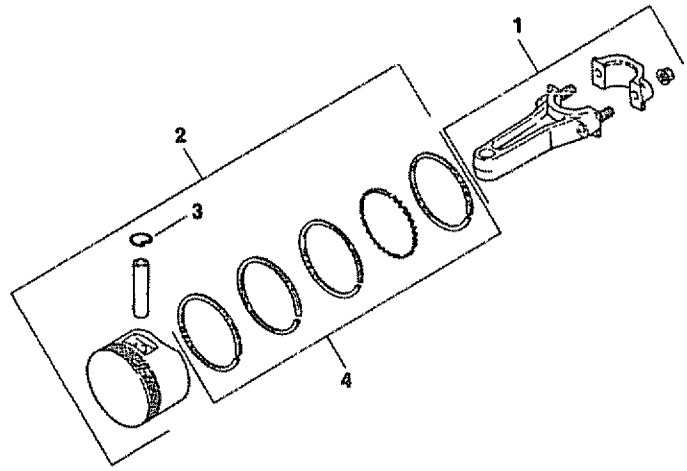
FUEL PUMP



GOVERNOR



PISTON & ROD



REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and917.250040
ENGINE MODEL NUMBER MV20S, 57517

FLYWHEEL

KEY NO.	PART NO.	DESCRIPTION
1	25 162 01	"Screen, grass"
2	25 086 21	"Screw, hex. wash. hd. 1/4-20x5/8 (4)"
3	25 112 04	Spacer (4)
4	25 157 01	Fan
5	25 086 24	"Screw, hex. machine 3/8-24x1-1/4"
6	52 468 15	"Washer, plain"
7	X-286-17	"Key, square 3/16x7/8"
8	52 025 36	Flywheel

GOVERNOR

KEY NO.	PART NO.	DESCRIPTION
1	231355	"Pin, governor stop"
2	X-25-12	"Washer, plain 1/4"
3	237022	"Washer, thrust"
4	A-235743-S	"Kit, governor gear"
5	52 078 04	"Shaft, governor cross"
6	X-25-102	"Washer, plain 1/4 (2)"
7	X-269-28	"Retainer, governor"
8	X-25-63	"Washer, plain 1/4"
9	52 090 18	"Lever, speed control"
10	277341	"Washer, tension"
11	25 431 01	"Bushing, speed control lever"
12	25 086 21	"Screw, hex. wash. hd. 1/4-20x5/8"
13	52 089 07	"Spring, governor"
14	X-81-1	"Nut, hex. 1/4-20"
15	X-25-72	"Washer, plain 1/4 (2)"
16	52 186 09	"Arm, governor"
17	52 211 04	"Screw, R.H. sq. neck 1/4-20xl"
18	25 141 03	"Ring, retaining (4)"
19	25 158 08	"Bushing, linkage retaining (4)"
20	52 079 07	"Linkage, governor"
21	52 079 06	"Linkage, throttle"
22	52 090 14	"Lever, throttle"
23	52 089 08	"Spring, torsion"
24	52 158 07	"Bushing, thr. control lever"
25	25 086 15	"Screw, hex. wash. hd. 1/4-20xl"
26	X-67-97	"Screw, hex. wash. hd. 10-24x3/8 (3)"
27	235778	Clamp (3)
28	X-70-3	"Nut, hex. 10-32"
29	52 086 05	"Screw, hex. hd. 10-32x7/8"

FUEL PUMP

KEY NO.	PART NO.	DESCRIPTION
1	47 086 08	"Screw, pozidriv T.H. 1/4-20x5/8 (2)"
2	X-380-1	"Connector, straight"
3	52 559 01	"Pump, fuel assembly (Includes 4 & 5)"
4	X-25-63	"Washer, plain 1/4 (2)"
5	25 041 05	"Gasket, fuel pump"
6	25 155 02	"Connector, hose"
7	X-426-9	"Clamp, hose (4)"
8	52 353 18	"Line, fuel"
9	45 050 01	"Filter, fuel"
10	41 353 14	"Hose, fuel"

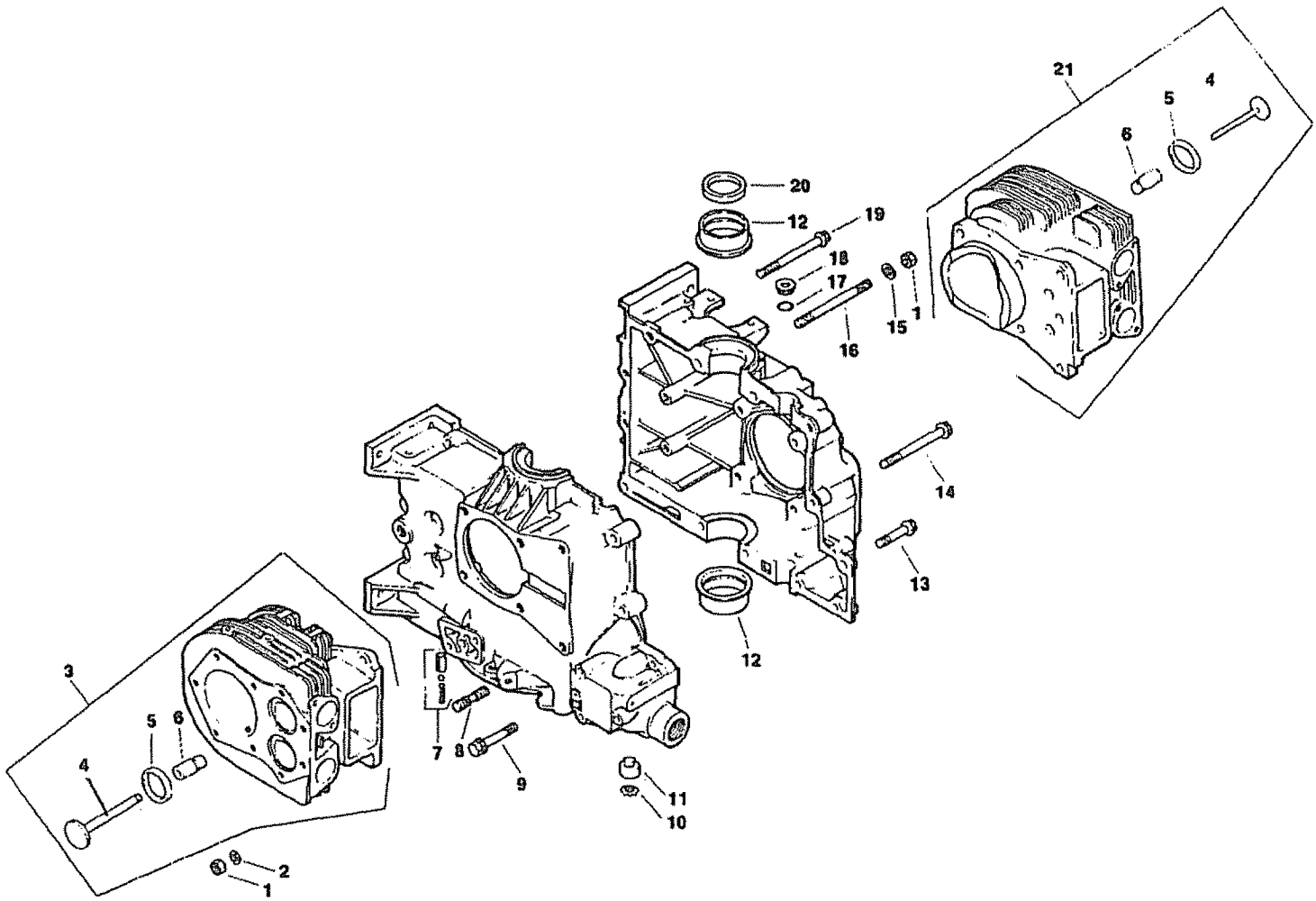
PISTON & ROD

KEY NO.	PART NO.	DESCRIPTION
1	52 067 71	Connecting Rod (Std.) (2)
	52 067 72	Connecting Rod (.010) (2)
2	52 874 16	Piston w/Ring Set (Std.) (2)
	52 874 17	Piston w/Ring Set (.003) (2)
	52 874 18	Piston w/Ring Set (.010) (2)
	52 874 19	Piston w/Ring Set (.020) (2)
	52 874 20	Piston w/Ring Set (.030) (2)
3	52 141 01	"Retainer, piston pin (4)"
4	52 108 09	Ring Set (Std. & .003) (2)
	52 108 10	Ring Set (.010) (2)
	52 108 11	Ring Set (.020) (2)
	52 108 12	Ring Set (.030) (2)

REPAIR PARTS

20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
ENGINE MODEL NUMBER MV20S, 57517

CRANKCASE



KEY NO.	PART NO.	DESCRIPTION
1	X-82-2	"Nut, hex. 5/16-18 (16)"
2	52 468 12	"Washer, flat 5/16 (12)"
3	82 755 18	"Kit, #1 cylinder barrel (Includes 4-6)"
4	52 016 06	"Valve, exhaust"
5	52 031 01	"Insert, valve seat (2)"
6	52 316 06	"Guide, valve (2)"
7	52 755 50	"Kit, oil relief"
8	52 072 12	"Step stud 5/16-18x3/4" ,3/8-16x5/8"",2"" long(12)"
9	25 086 12	"Screw, hex. flange 5/16-18x2 (2)"
10	X-269-43	"Ring, retaining"
11	52 078 05	"Shaft, governor"
12	52 030 10	"Bearing, sleeve (Std.) (2)"
	52 030 11	"Bearing, sleeve (.010)"
	52 030 12	"Bearing, sleeve (.020)"

KEY NO.	PART NO.	DESCRIPTION
13	25 086 10	"Screw, hex. flange 5/16-18x1-1/2 (3)"
14	25 086 13	"Screw, hex. flange 3/8-16x3-5/8 (2)"
15	41 468 01	"Washer, plain (4)"
16	X-352-33	Stud 5/16-18x4-1/8 (2)
17	52 141 02	O-ring
18	52 139 08	Plug
19	25 086 11	"Screw, hex. flange 5/16-18x3-1/2 (6)"
20	52 032 10	"Seal, front oil"
21	82 755 19	"Kit, #2 cylinder barrel (Includes 4-6)"

SERVICE NOTES

SERVICE NOTES

Attachments That Add to the Usefulness of Your Craftsman Garden 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.

LAWN SWEEPERS let you collect grass clippings and leaves.

Stock No.		Path	Capacity
71-24030		30-in.	9.0 cu. ft.
71-24032		32-in.	10.0 cu. ft.
71-24033	High-Performance	32 in.	11.5 cu. ft.
71-24038		38-in.	12.5 cu. ft.

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

Stock No.	Engine	Capacity	Also Required
71-2452	3HP	12 bu.	71-26471 chute
71-2447	5HP	25bu.	71-24474 chute
71-2455	3HP	8 bu.	71-26471 chute

CARTS make hauling easy.

Stock No.	Size	Capacity	
71-24353	4 cu. ft.	400 lb.	Dump cart
71-24354	10 cu. ft.	1,000 lb.	Hauling cart
71-24355	10 cu. ft.	1,000 lb.	Dump cart
71-24356	14 cu. ft.	1,250 lb.	Dump cart
71-24357	17 cu. ft.	1, 500 lb.	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 number 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. capcity steel hopper.
- 71-24394 Broadcasts over a 5 to 8 foot swath. 70 lb. capacity steel hopper. Noncorrosive spreading spinner, nylon gear box, stainless steel shaft.
- 71-24395 Broadcasts 8 to 10 foot swath. 160 lb. capacity.(covers 40,000sq. ft.)No-rust polypropylene hopper and impeller. Vinyl hopper cover.
- 71-2416 Broadcasts 6 to 8 foot swath. 50 lb. capacity. Corrosion-resistant construction. Polyethylene hopper.

CORING AERATOR takes small plugs out of soil to allow moisture and nutrients to reach grass roots. 36-inch swath. 24 hardened steel coring tips. 150 lb. capacity weight tray. Stock number 71-24351

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 tray for increased penetration. Stock number 71-2435.

DETHATCHER loosens and flips thatch and matted leaves to lawn surface for easy pick up. Twenty spring tine teeth. Useful to prepare bare areas for reseeding. 40 inch rear mount: Stock number 71-24303. 38 inch front mount: Stock number 71-24301.

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

- 71-2458 50 psi maximum pressure with 25 foot wand length. Sprays up to 25 feet with wand.
- 71-24398 25 psi maximum pressure with 18 foot wand length. Sprays up to 18 feet with wand.

DOZER BLADE removes snow; grades dirt, sand and gravel. 48 inches wide, 17 inches high, clears 44 inch path when angled. Master lift controle lever for operator ease. Spring trip for snow removal on uneven pavement; built - in float for blade to follow ground contour. Reversible, replaceable scraper bar. (Use with tire chains, wheel weights or rear drawbar weight). Stock No. 71-24401

SNOWTHROWER has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arangement. 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. 71-24077 .

TIRE CHAINS are heavy duty; closely spaced extra-large cross links give smooth ride, outstanding traction. Stock No. 71-26945.

WHEEL WEIGHTS provide stability, reduce tearing of turf when moving on hills, stopping, turning, starting. Provides extra weight for traction to pull low-loads, lawn vac. Required for snow removal. For plowing: one in front frame, one in right rear tire, two on left rear tire. For snow blower or dozer blade: one on right rear tire, one on left rear tire. 55 pounds. Stock No. 71-26234. (Front or rear mounting frame bracket Stock No. 71-244360 OR 262235).

CHEVRON TIRES for extra traction. Pair of rear tires mounted on wheels. Stock No. 71-24166.

TRACTOR CAB has heavy duty vinyl fabric over tubular steel frame, fiberglass top; clear plastic windshield offers 360 degree visibility. Hinged metal frame doors with catch. Keeps operator warm and dry. Remove vinyl and windshield for use as sun protector in summer. Stock No. 71-24172.

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

TRACTOR COVER protects tractor from weather. Made of Evolution 3 fabric (water-repellent, extremely breathable, light weight, soft, non-abrasive, pliable in all temperatures, durable, stain-tear-puncture resistant, will not shrink or stretch). Stock No. 71-24602.

*TILLER has 8hp engine to prepare seed beds, cultivate and compost garden residue. Chain- drive transmission. Six 11 inch dia., one piece heat-treated steel tines. Tills 30 inch path. (Requires sleeve hitch Stock No. 71-24235) Stock No. 71-25249.

*PLOW turns soil 6 inches deep, cuts 10 inch furrow. Crank adjustment controls depth, 3-position yoke sets width. Heavy steel landslide for straight forrowing. Stock No. 71-24233.

*DISC HARROW has 2 gangs of 4 steel blades that angle from 10 to 20 degrees 40 inches wide. Can hook 2 units in tandem. Stock No. 71-24234.

*REAR GRADER/LEVELER BLADE is 42-inches wide operated from driver's seat. Reversible steel blade can be angled at 30 degrees for grading. Reverses for snow plowing. Stock No. 71-24239.

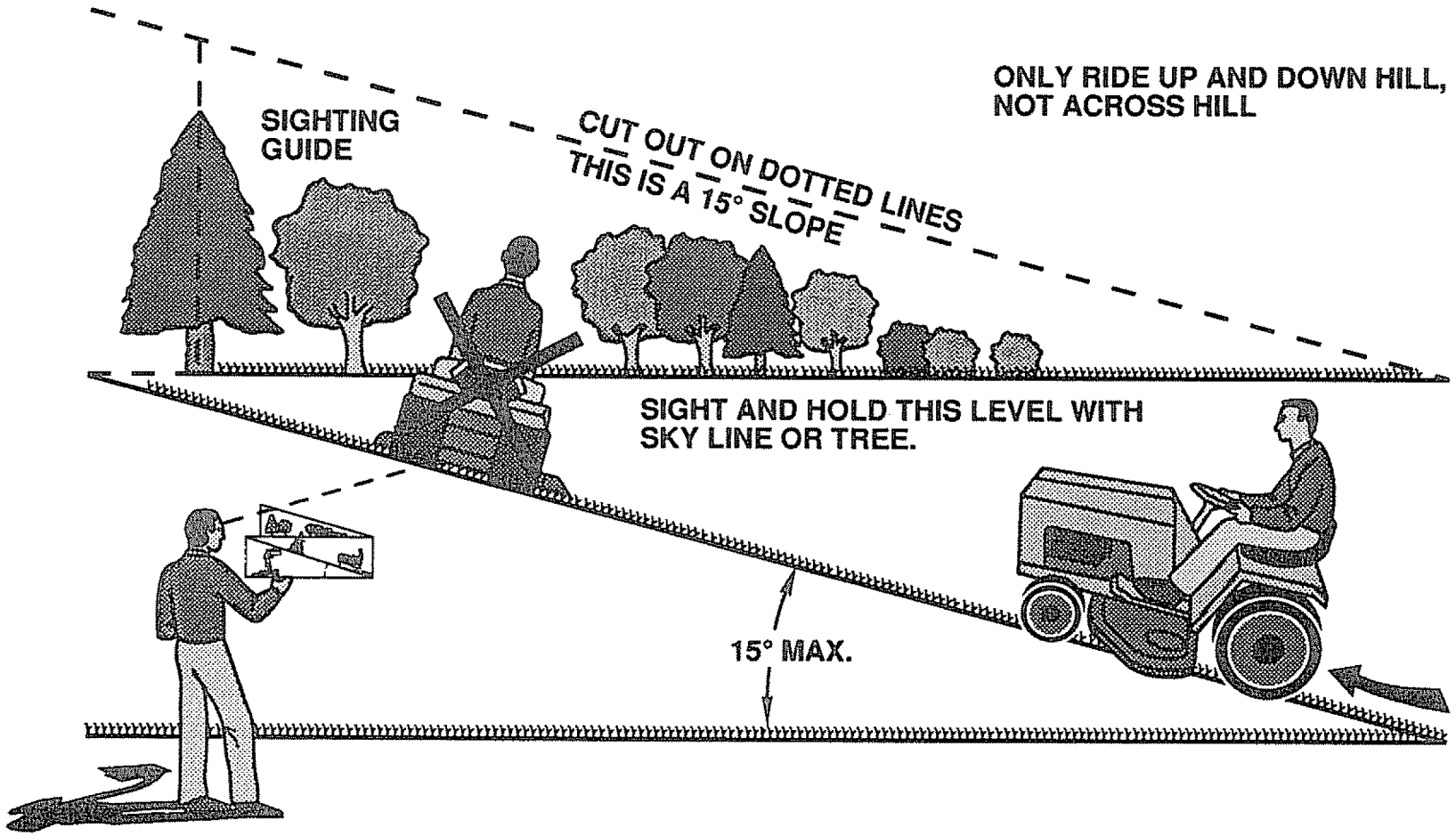
*SLEEVE CULTIVATOR is 43 inches wide. Prepares ground for seeding, helps weed control. Steel frame holds 5 adjustable sweeps. Adjusts vertically, horizontally, Stock No. 71-25304. Optional accessory for cultivator: steel furrow opener for wider for wide openings for potatoes, corn, and other deep seeded crops (Stock No. 71-25305).

WEIGHT BRACKET for drawbar for snow removal applications. Can be mounted on front of tractor for plowing applications. Uses (1) 55 lb. weight - number 71-26234.

*Asterisked attachments require sleeve hitch (Stock No. 71-24235) for use with master lift system. Single pin couples/ uncouples.

Source for Attachments 842.

SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION



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

SEARS

OWNER'S MANUAL

MODEL NO. 917.254460

MODEL NO. 917.250040 (without Mower Deck)

HOW TO ORDER REPAIR PARTS

CRAFTSMAN®

20.0 HP TWIN ELECTRIC START 44" MOWER DECK 6 SPEED TRANSAXLE GARDEN TRACTOR

Each Tractor has its own model number. Each Engine has its own model number.

The Model Number for your Tractor will be found on the Model Plate located under the seat.

The model number for the Engine will be found on the Blower Housing.

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

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT - 20.0 HP GARDEN TRACTOR
- MODEL NUMBER - 917.254460 AND 917.250040
- ENGINE MODEL NUMBER -MV20S - SPEC NUMBER -57517
- PART NUMBER
- PART DESCRIPTION

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

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.

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