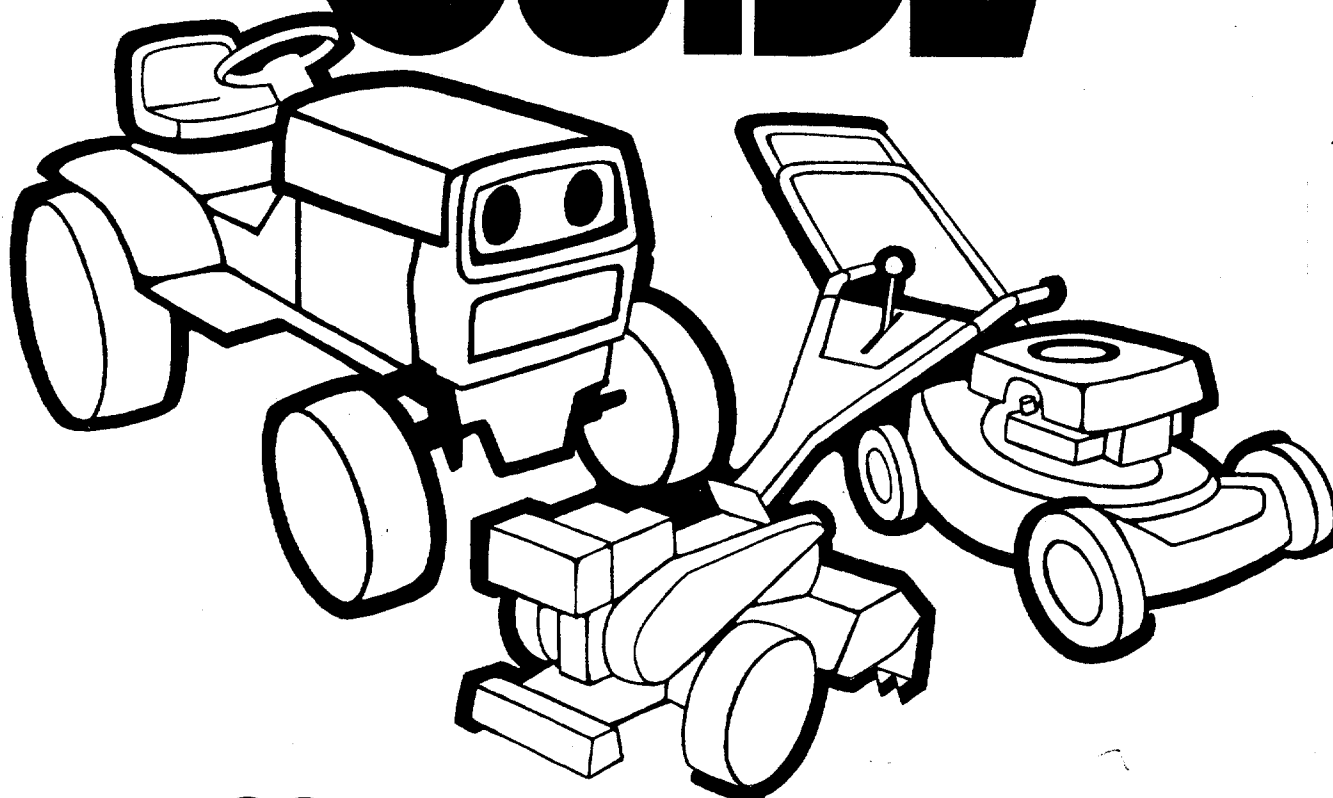


.50

OWNER'S GUIDE



**ASSEMBLY
OPERATION
MAINTENANCE
PARTS LIST**

**IMPORTANT:
Read Safety Rules
and Instructions**

**MODEL NUMBER
130-780A**

**16 H.P.
HYDRO STATIC
LAWN TRACTOR**

➔ NOTE

**OPTIONAL 44" DECK
MODEL 190-935A
AVAILABLE**

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.



WARNING

TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES IN THE STATE OF CALIFORNIA

The equipment which you have just purchased does not have a spark arrester. If this equipment is used on any forest covered land, brush covered land, or grass covered unimproved land in the State of California, before using on such land, the California law requires that a spark arrester be provided. In addition, spark arrester is required by law to be in effective working order. The spark arrester must be attached to the exhaust system and comply with Section 4442 of the California Public Resources Code.

➔ IMPORTANT

It is suggested that this manual be read in its entirety before attempting to assemble or operate. Keep this manual in a safe place for future reference and for ordering replacement parts.

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see operating section of this manual for proper fuel and amount.

This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

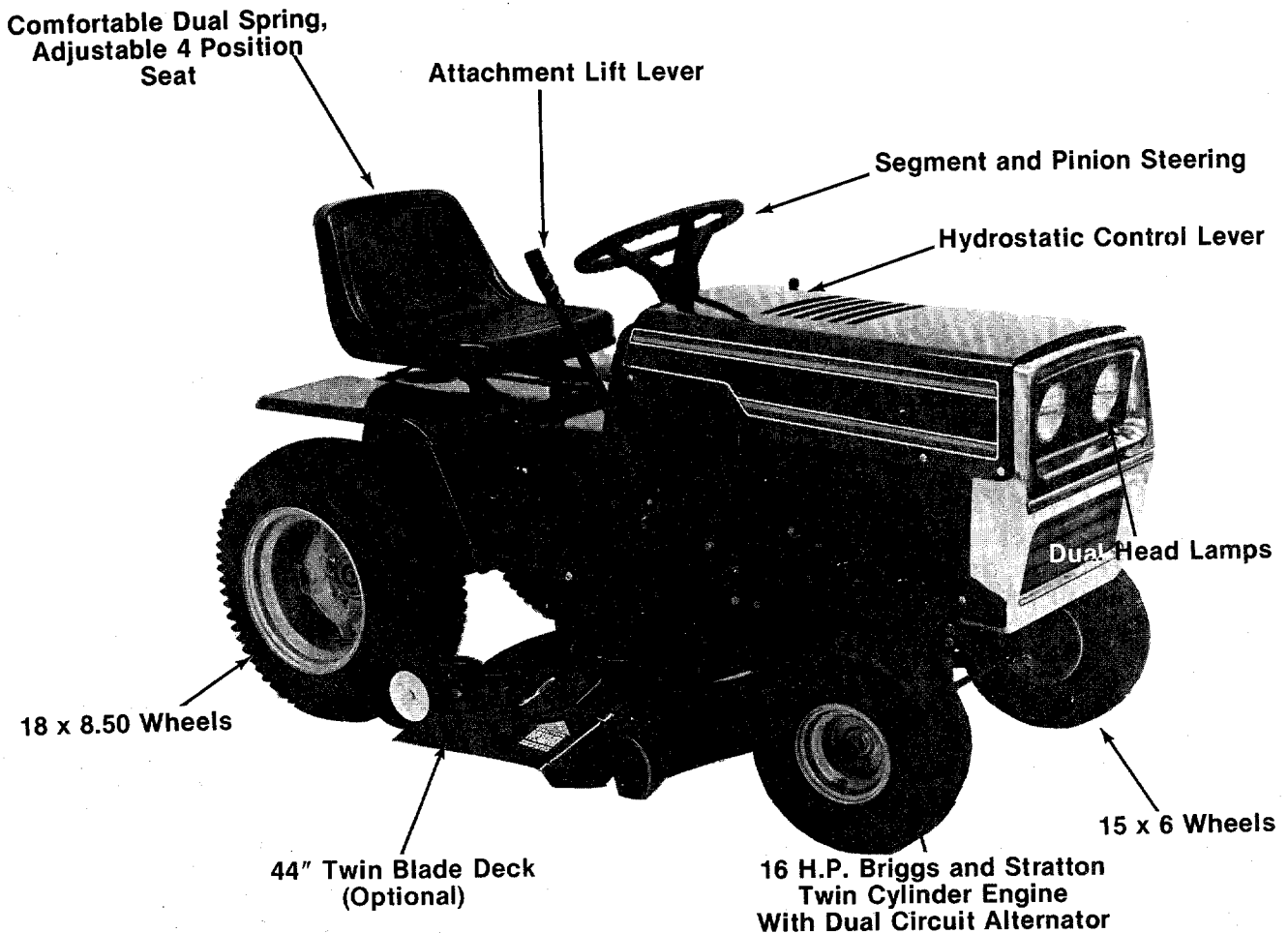
SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. Know the controls and how to stop quickly—**READ THE OWNER'S MANUAL.**
2. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
3. Do not carry passengers
4. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction.
5. Clear work area of objects which might be picked up and thrown by the mower in any direction.
6. Disengage all attachment clutches and shift into neutral before attempting to start engine.
7. Disengage power to attachment(s) and stop engine before leaving operating position.
8. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
9. Before attempting to unclog the mower or discharge chute, stop the engine and be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
10. Disengage power to attachment(s) when transporting or not in use.
11. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
12. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
13. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
14. Stay alert for holes in terrain and other hidden hazards.
15. 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(s) or wheel weights when suggested in owner's manual.
16. Watch out for traffic when crossing or near roadways.
17. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
18. Handle gasoline with care. It is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
19. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
20. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
21. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
22. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
23. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
24. Do not change the engine governor settings or overspeed the engine.
25. When using the vehicle with mower, proceed as follows:
 - (1) Mow only in daylight or in good artificial light.
 - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
 - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
 - (4) Check blade mounting bolts for proper tightness at frequent intervals.
26. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
27. Look behind to make sure the area is clear before placing the transmission in reverse and backing up.

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KNOW YOUR TRACTOR



ASSEMBLY

The Garden Tractor is packed and shipped in one container and is fully assembled except for the steering wheel, seat, battery and mounting the cutting deck.

BATTERY INFORMATION



WARNING

- A. Battery acid must be handled with great care as it will blister the skin and damage clothing. It is advisable to wear goggles, rubber gloves, and a protective apron when working with it.
- B. Neutralize acid spilled on clothing with dilute ammonia water or a water solution of baking soda. If acid gets on clothes, dilute it with clean water first, then neutralize.
- C. If for any reason acid should be spattered in the eyes, wash it out immediately with clean cold water. Seek medical aid if discomfort continues.
- D. Since battery acid is corrosive to metals, do not pour into any sink or drain. Rinse empty electrolyte containers and mutilate before discarding.



DANGER

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added)

- A. Keep sparks, flame, cigarettes away.
- B. Hydrogen gas is generated during charging and discharging.
- C. Ventilate when charging or using in enclosed space.
- D. When using a charger—to avoid sparks, NEVER connect or disconnect charger clips to battery while charger is turned on.
- E. Always shield eyes, protect skin and clothing when working near batteries.

ACTIVATING THE BATTERY



NOTE

If your battery is activated (electrolyte in the battery) and installed in the tractor, go directly to step 9.

1. Place the battery to be filled on a workbench. Never activate a battery in the unit.
2. Remove the fill caps from all cells.
3. Fill each cell carefully using 1.265 specific gravity electrolyte. Fill each cell to the top of the separators. Do not overfill.
4. Let the battery sit for 20 minutes for the chemical reaction to take place.
5. Charge the battery at a **MAXIMUM RATE OF 5 AMPS.** until the specific gravity reads 1.265. Use a hydrometer to check the specific gravity.



CAUTION

An excessive rate of charge will damage the battery.

6. Check the level of electrolyte. Adjust level to bottom of split ring if necessary with electrolyte.
7. Replace fill caps.
8. Once the battery has been activated never add anything except distilled water or a good grade of drinking water.
9. If your battery has been installed in your unit at the factory:
 - A. Use a hydrometer to check the specific gravity. The specific gravity should be 1.265 at 80° F.
 - B. If it is less, remove the fill caps and use a battery charger to bring the specific gravity up to 1.265. **NEVER CHARGE AT MORE THAN 5 AMPS.**
 - C. Replace the fill caps.
 - D. The positive cable has been attached to the positive terminal of the battery at the factory. You only have to attach the negative cable (grounded) to the negative (Neg. N or -) terminal of the battery with a hex head bolt, lock washer and nut.

Installing the Battery



NOTE

The positive battery terminal is marked Pos. (+). The negative battery terminal is marked Neg. (-).

1. Place the battery in the battery box with the terminals towards the rear of the tractor.
2. Secure the battery with the two hold down rods, battery hold down, lock washers and wing nuts. See figure 1.

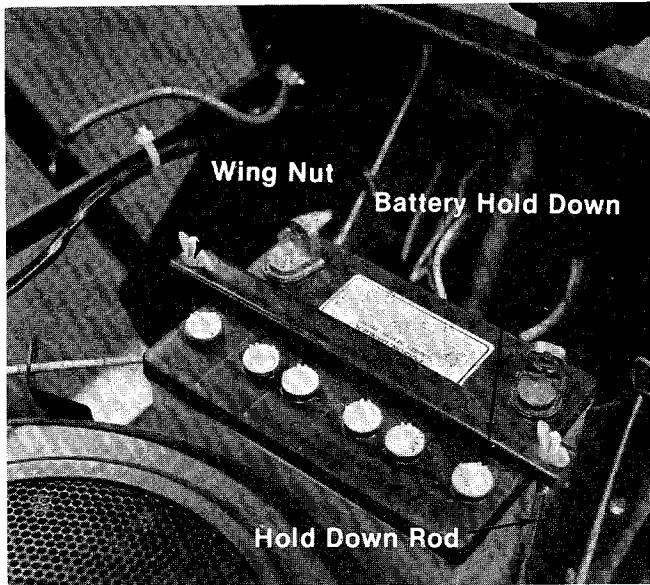


FIGURE 1.

3. Attach the positive cable (from the starter solenoid) and the small wire (from the circuit breaker) to the positive battery terminal (+) with a 1/4-20 x 3/4" long bolt, lock washer and hex nut.
4. Attach the negative cable (grounded) to the negative battery terminal (-) with the other 1/4-20 x 3/4" long bolt, lock washer and hex nut.

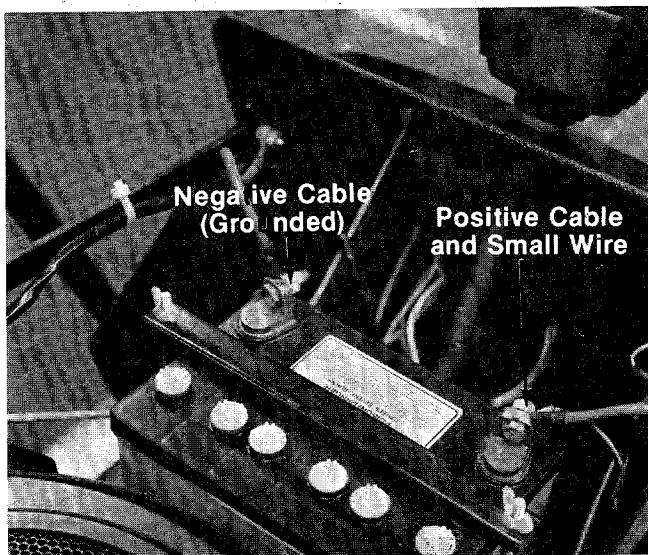


FIGURE 2.

NOTE

The vented battery allows any gases or liquid from the battery to be carried to the rear of the tractor and on to the ground.

Route the rubber drain tube down beside the tractor frame so it drains onto the ground.

SEAT ASSEMBLY

The seat can be adjusted to four positions. With the seat tipped forward, hook the front of the seat spring into the slots on the tractor frame. Allow the seat to pivot backwards until it rests on the rear of the springs. (See figure 3.)

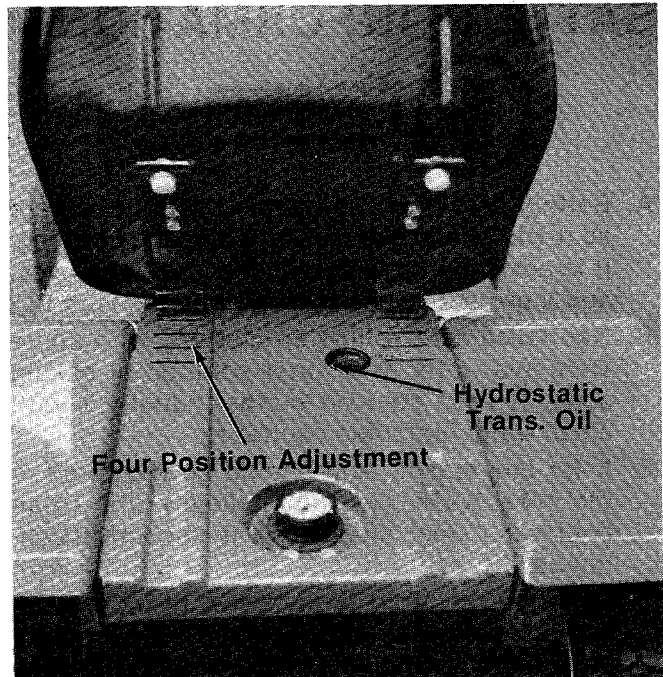


FIGURE 3.

STEERING WHEEL

1. Place the steering wheel over the steering column extending through the dash. Line up the flats on the steering column with the flats in the steering wheel. (See figure 4.)

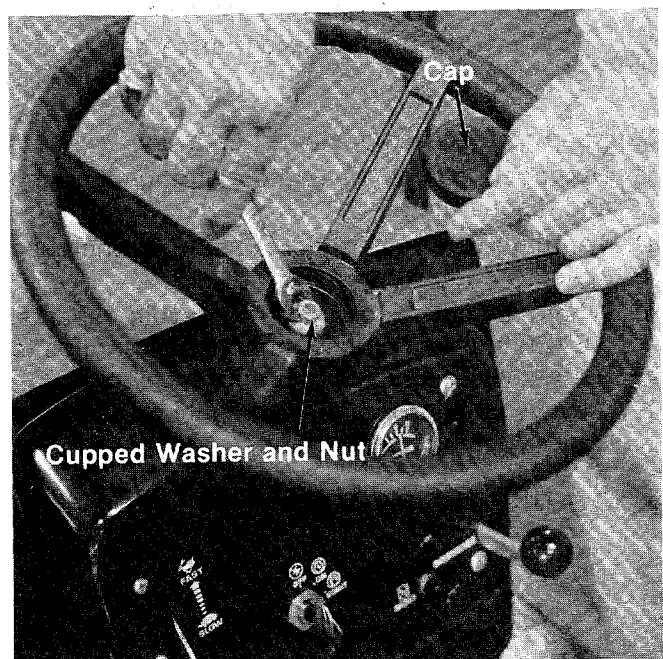


FIGURE 4.

- Place the washer with the cupped side down over the steering column and secure with a hex nut 5/16".
- Place the cap over the center of the steering wheel and seat it with your hand.

TIRE PRESSURE

Reduce the rear wheel tire pressure to 15 p.s.i. for operation. The tires have been over-inflated for shipping. Equal tire pressure should be maintained on all tires. Maximum tire pressure is 30 p.s.i.

HYDROSTATIC TRANSMISSION

See the maintenance section of this manual for correct lubrication and level for the oil in the hydrostatic transmission.

ATTACHING THE CUTTING DECK (Optional)

Deck Assembly Screw Pack

- 4 Flat Washers 1/2" I.D.
- 1 Small Cotter Hairpin
- 4 Medium Cotter Hairpins
- 2 Large Cotter Hairpins

- Remove the round belt keeper from the idler by removing the cotter hairpin. (See figure 5.)
- Unscrew the "L" bolt and swing the wire belt guard on the engine pulley forward.

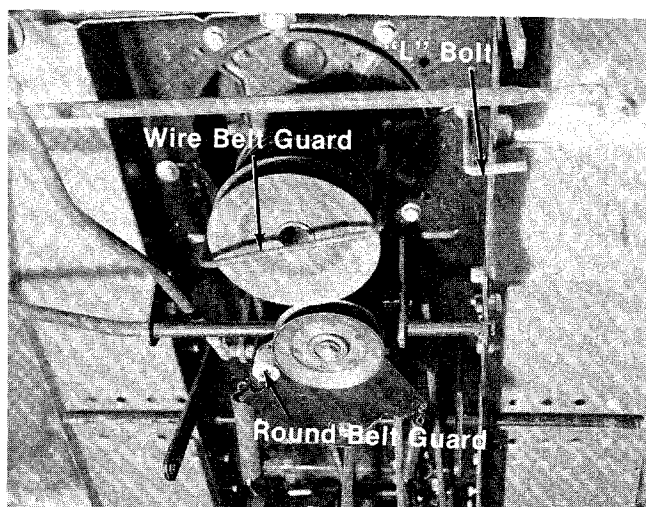


FIGURE 5.

- Adjust the deck wheels to their lowest cutting position.
- Move the tractor lift handle all the way back to the full raised position.
- Turn the tractor steering wheel all the way to the left.
- Slide the deck under the tractor from the left side.
- Attach the four tractor hanger brackets to the deck with four 1/2" I.D. washers and four medium cotter hairpins. (See figure 6.)



The left front tractor hanger bracket goes through the center of the V-belt.

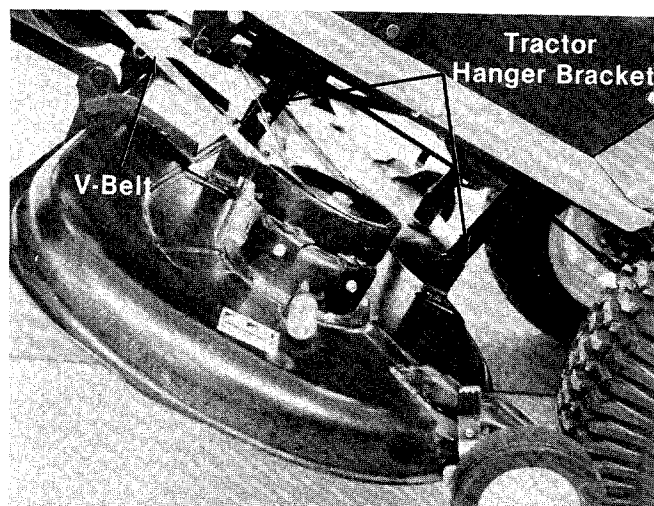


FIGURE 6.

- Assemble the front cross bar as shown in figure 7 using two large cotter hairpins to attach the deck linkage to the tractor frame.

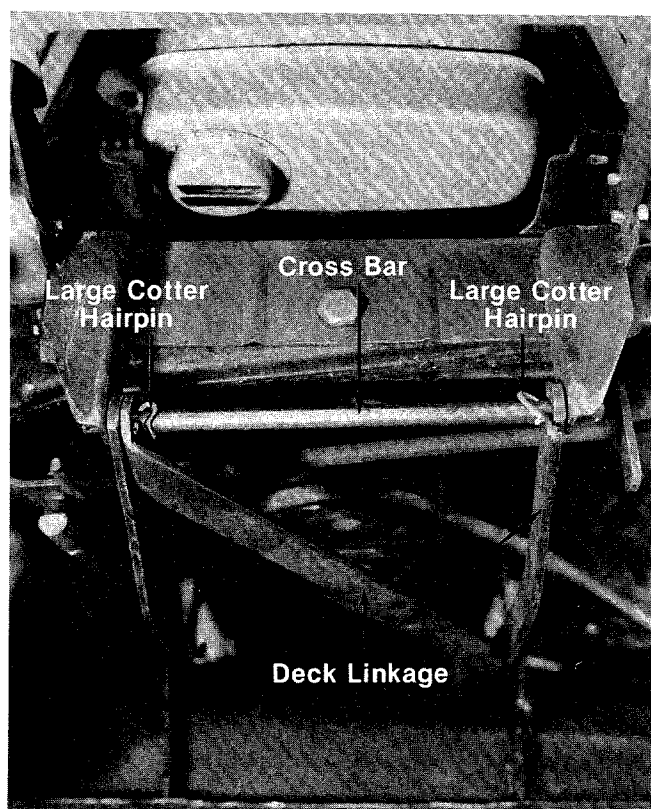


FIGURE 7.

8. Place the deck belt around the engine pulley and idler. (See figure 8.)
9. Replace the round belt guard and swing the wire belt guard over the engine pulley and secure it with the "L" bolt.
10. Check all belt guards for clearance. The belt guards must be between 1/16" and 1/8" away from the belt when the PTO lever is in the engaged position.
11. Hook the brake release cable into the tractor idler bracket and secure it with the small cotter hairpin and clevis pin.

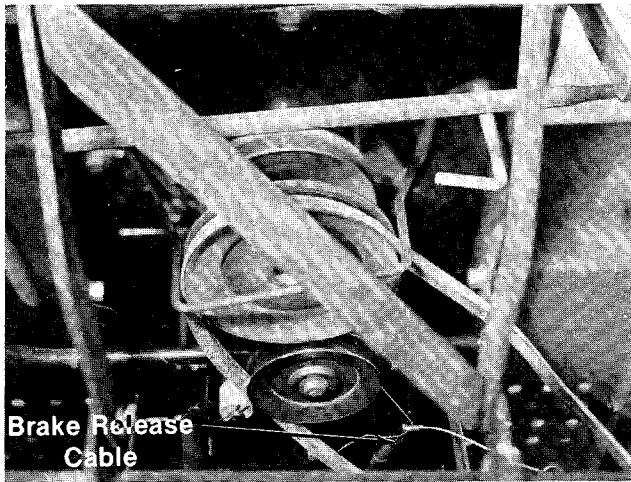


FIGURE 8.

CONTROLS AND PRELIMINARY CHECKS

CONTROLS

Ignition Switch

The ignition switch is located in the center of the dashboard. Turn the key to the START position to start the engine. When the engine is running leave the key in the ON position. To stop the engine turn the key to the OFF position. (See figure 9.)



WARNING

Remove the key from the tractor when the tractor is not in use to prevent accidental starting.

Throttle Control

The throttle control is located on the left side of the dashboard and is used to regulate the engine speed. (See figure 9.) The engine should be operated from 3/4 to full throttle (FAST) when operating any equipment that uses the tractor engine as a source of power such as the mowing deck, snow thrower or rotary tiller. (See figure 9.)

Choke Control

The choke control is located on the right side of the dashboard and is operated manually. Details for the choke operation are covered in the Engine Operating and Maintenance Instructions Manual. (See figure 9.)

Light Switch

The head lamps are operated by pushing the light switch located on the dashboard. The head lamps will only operate when the engine is running. (See figure 9.)

Ammeter

The ammeter registers the rate of battery charge or discharge. The ammeter should register on the plus (+) side when the engine is running in the FAST position until the battery is completely charged.

With a fully charged battery or with the engine idling the ammeter may not show a charge.

The maximum charging rate is 3 amps. The head lamps operate directly from the engine alternator and do not register on the ammeter. (See figure 9.)

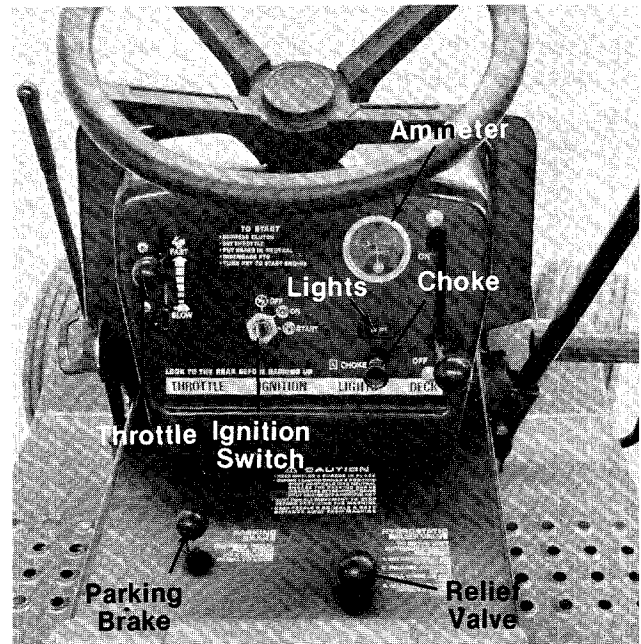


FIGURE 9.

Gasoline Tank

The gasoline tank is located under the tractor seat. Fill the gasoline tank with approximately 1.9 gallons of clean, fresh, lead-free or leaded "regular" grade automotive gasoline. Tip the seat forward to fill the tank. (See figure 10.)

Seat Adjustment

The tractor is adjustable to four positions. To change positions, tip the seat all the way forward and lift it out of the slots on each side. (See figure 10.)

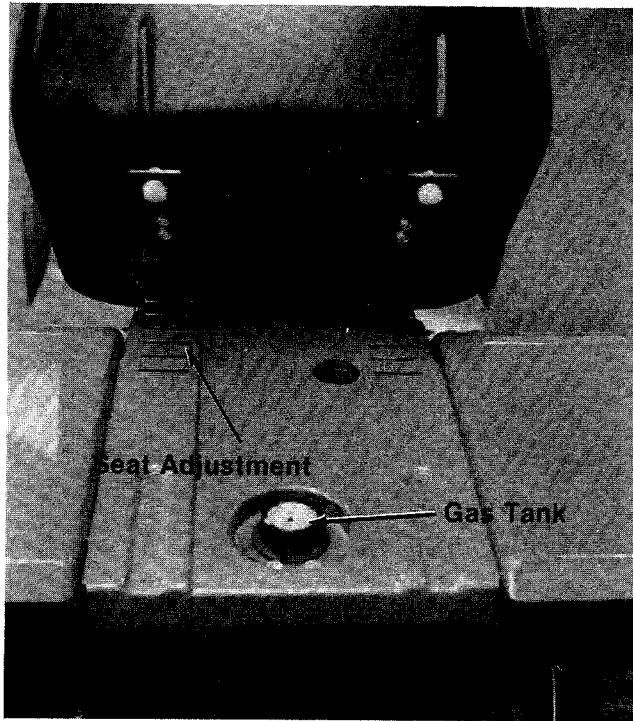


FIGURE 10.

Hydrostatic Control Lever

A single control lever connected to the hydrostatic transmission controls both the speed and direction of the tractor. Infinite speed control is achieved by moving the control lever forward or backward. The farther forward or backward you move the control lever the faster you will travel. Pulling the control lever into neutral (N) area will stop the tractor. To increase rear wheel torque (pulling power) move the control lever towards neutral (N) position. The riding mower responds similar to shifting to a lower gear with a gear type transmission. (See figure 11.)

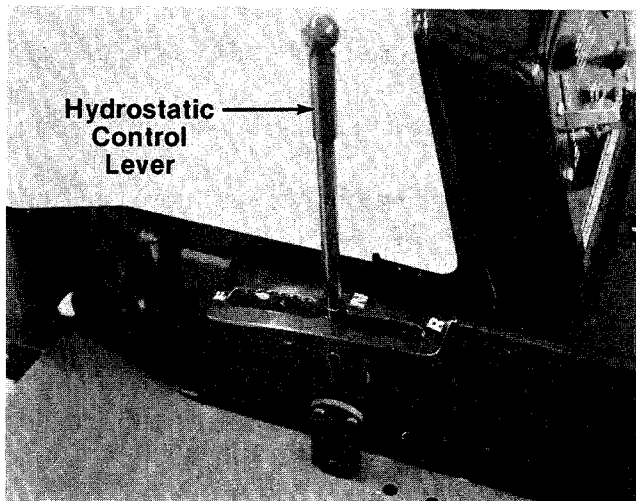


FIGURE 11.

Clutch-Brake Pedal

The clutch-brake pedal is located on the right side of the riding mower. Depressing the pedal disengages the engine from the hydrostatic transmission and applies the brake. You can release the clutch pedal and resume the same speed without moving the hydrostatic control lever. See figure 12.

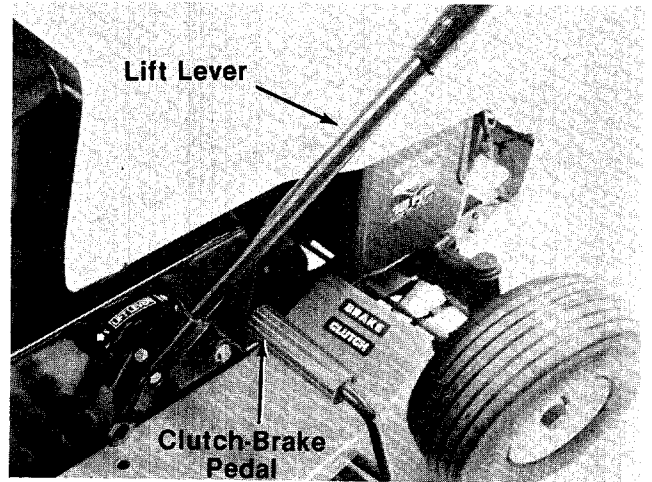


FIGURE 12.



The clutch-brake pedal must be depressed to start the engine.

Parking Brake

To set the parking brake, depress the clutch-brake pedal and pull up the parking brake knob. It will stay in the raised position. To release the parking brake, depress and release the clutch-brake pedal. (See figures 9 and 12.)

Lift Lever

The five position lift lever is used to change the operating position of the attachments. To operate, pull the lever towards you. To release, move the lever to the right and then forward. (See figure 12.)

Power Take Off (PTO) Lever

The PTO lever is located on the right side of the dashboard. To engage the PTO, lift the lever slowly and lock it into the notch. (See figure 13.)



The PTO lever must be in the disengaged position (down) to start the engine.

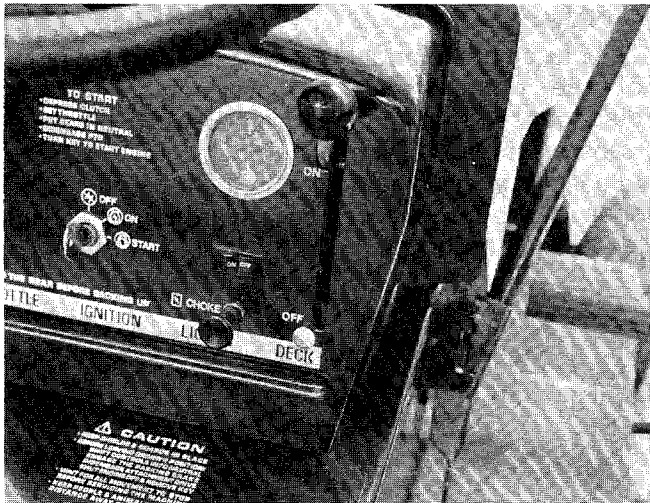


FIGURE 13.

Relief Valve

To move the riding mower without the engine running, pull up the relief valve and lock it in the raised position. This allows the rear wheels to roll. (See figure 9.)

CHECKING OIL AND GASOLINE



When packaged for shipment, the machine contains no oil or gasoline. Before starting the engine, oil must be added to the engine crankcase and gasoline to the tank. DO NOT mix oil with gasoline.

Briggs & Stratton. Use a high quality detergent oil classified "For Service SC or SD or MS". Nothing should be added to the recommended oil.

Summer. (Above 40°F.) Use SAE 30. If not available use SAE 10W-30 or SAE 10W-40.

Winter. (Under 40°F.) Use SAE 5W-20 or SAE 5W-30. If not available, use SAE 10W or SAE 10W-30. Below 0°F., use SAE 10W or SAE 10W-30 diluted 10% with kerosene.

Place the engine level. Fill the oil sump to the FULL mark on the dipstick. Pour slowly.

Crankcase Capacity—3½ Pints.

OPERATION

CAUTION

1. KEEP ALL SHIELDS & GUARDS IN PLACE
2. BEFORE LEAVING OPERATOR'S POSITION:
SHIFT CONTROLS INTO NEUTRAL
SET PARKING BRAKE
DISENGAGE ATTACHMENT DRIVE
SHUT ENGINE OFF
REMOVE IGNITION KEY
3. WAIT FOR ALL MOVEMENT TO STOP BEFORE
SERVICING MACHINE
4. KEEP PEOPLE & PETS A SAFE DISTANCE
AWAY FROM MACHINE

Your riding mower is equipped with a chute deflector and internal baffle on the cutting deck. The riding mower must not be operated without these pieces in their proper place.

CAUTION

**DO NOT OPERATE
MOWER UNLESS
GUARD OR ENTIRE
GRASS CATCHER IS
IN ITS PROPER PLACE.**

Operation

1. Place the PTO lever in the disengaged position (down).
2. Depress the clutch-brake pedal and set the parking brake.
3. Place the hydrostatic control lever in the "NEUTRAL" (N) position.
4. Set the throttle control in the "FAST" position.
5. Pull out the choke control. A warm engine requires less choking.
6. Turn the ignition key to the right to the "START" position. After the engine starts release the key. It will return to the "ON" position.
7. Slowly push in the choke as the engine warms up.

8. Depress the clutch-brake pedal so the parking brake is released and then release the clutch-brake pedal.
9. Move the hydrostatic control lever forward. The farther forward you move the hydrostatic control lever the faster you will travel.
10. To stop the tractor pull the hydrostatic control lever into "NEUTRAL" (N) or depress the clutch-brake pedal.
11. To shut off the engine, turn the ignition key to "OFF" position.

➔ IMPORTANT

After striking a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

MAINTENANCE

TROUBLESHOOTING

Refer to the chart on page 22 for troubleshooting engine problems.

CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Oil Check

Check the oil level in the crankcase before each use of the machine and after every two hours of operation. Keep the oil level between ADD and FULL. See figure 14.

Oil Change

After the first two hours of operating a new engine, drain the oil (see figure 14) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil after every 25 hours of operation. This procedure ensures minimum wear of engine parts and provides virtually trouble-free operation. To change the oil, proceed as follows:

- Step 1. Remove oil filler plug.
- Step 2. Drain the oil.
- Step 3. Replace oil filler plug.
- Step 4. Refill crankcase with oil. See page 10 for quantity and type of oil.

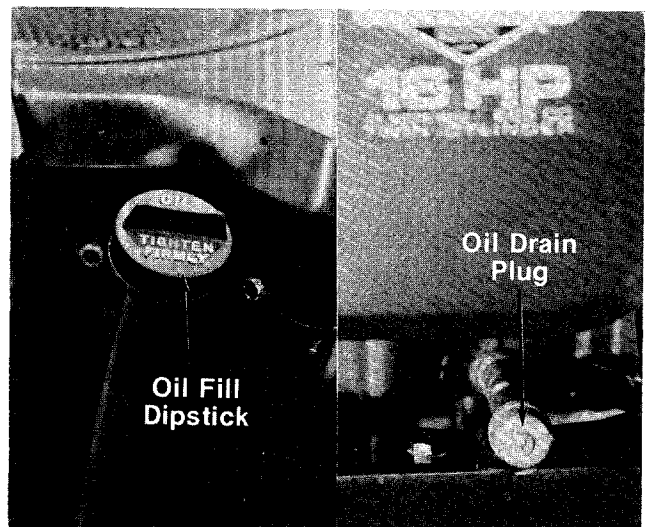


FIGURE 14.
Hydrostatic Oil Level

The transmission has been filled at the factory and should not require changing for the life of the transmission. The following oils can be used.

Texaco 2209
General Motors Dexron B
Ford M2C-33F
Mobil Fluid 300
or a good quality SAE 20 High Detergent oil



CAUTION

Never use a multi-viscosity oil.

The transmission fluid level should be checked prior to initial use. The level should not be above the COLD mark which is about 1/4" from the bottom of the reservoir/expansion tank. (See figure 15.)

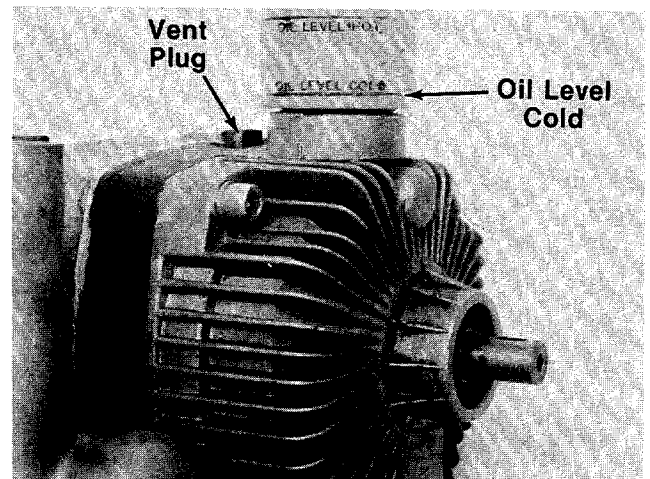


FIGURE 15.



CAUTION

Overfilling reduces the expansion area in the reservoir/expansion tank and fluid will spill at operating temperatures.

To check or add fluid to the transmission:

1. Unscrew the parking brake and relief valve knobs. (See figure 9.)
2. Unscrew the two screws holding the access cover located in front of the seat.
3. Check the oil level in the reservoir/expansion tank. (See figure 15.)
4. If it is necessary to add oil, remove the plastic plug, unscrew the cap on the reservoir/expansion tank and add oil through the hole with a funnel. Do not overfill. (See figure 16.)
5. Reassemble parts.

If frequent additions are required, locate the leak and correct. Inadequate supply of fluid may result in permanent internal damage.

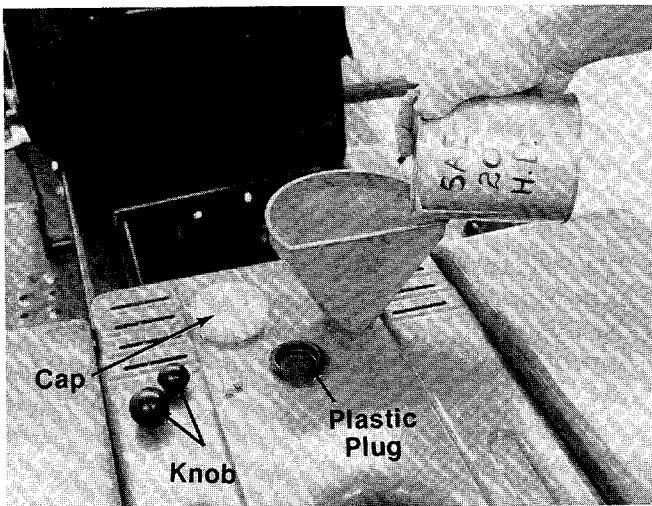


FIGURE 16.

If contaminate is observed on the reservoir/expansion tank screen, poor maintenance is indicated. Remove the reservoir/expansion tank, wash clean, dry and reinstall. If the screen is pierced, the reservoir/expansion tank should be replaced.



CAUTION

The threads on the reservoir/expansion tank are left hand thread.

If the natural color of the transmission fluid has changed, black or milky, overheating and/or water contaminate is indicated. The fluid should be drained and replaced with new transmission fluid.

To drain the hydrostatic transmission, remove the hex plug on the bottom of the hydrostatic transmission.

To fill the hydrostatic transmission, remove the vent plug located next to reservoir/expansion tank to prevent an air lock. Replace vent plug.

Hydrostatic Transmission Cooling.

The hydrostatic transmission is cooled by the oil, fan and fins. Normal operating temperature is 180°F. If the hydrostatic transmission runs hot check to see if the fan is in operating condition, the oil level is correct and the fins are clean.



CAUTION

Do not use high pressure water spray or steam to clean the hydrostatic transmission.

Transaxle

Check the oil level four times a year. Lubricant should be at the point of overflowing. Use SAE E.P. 90 oil. Drain and refill every two years. Capacity 2¾ pints. (See figure 17.)

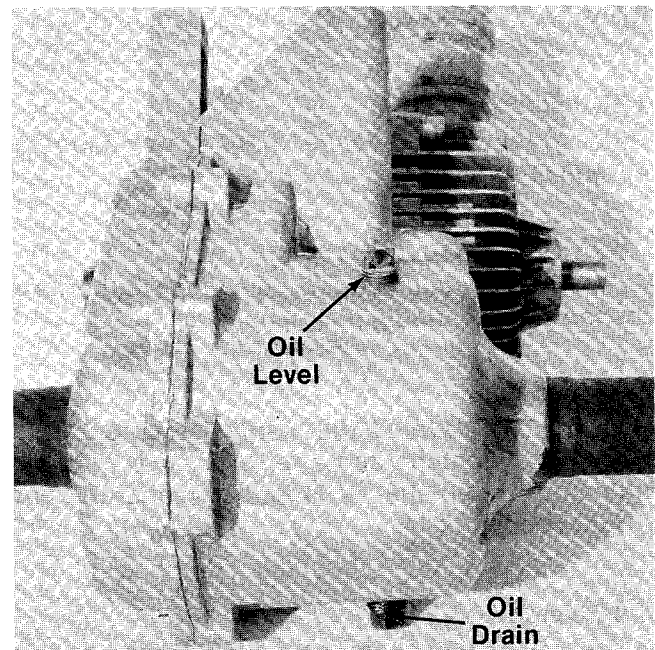


FIGURE 17.

Hydrostatic Control Adjustment

The hydrostatic transmission control is in correct adjustment when the tractor does not move with the engine running, the clutch engaged and the hydrostatic control lever is in the neutral position.

If adjustment is necessary, follow these steps:

1. Raise both rear wheels off the ground by placing blocks under the rear frame.
2. Loosen both lock nuts on both ends of the connecting rod. See figure 18.

3. Place the hydrostatic control lever in the neutral position. See figure 11.
4. Start the tractor.
5. Release the clutch/brake pedal.



Do NOT set the parking brake or the dump valve.



Be careful of the cooling fan on the front of the hydrostatic transmission.

6. Turn the connecting rod back and forth until the rear wheels do not rotate.
7. Shut off the engine.
8. Tighten both lock nuts on the connecting rod.
9. Remove the blocks under the tractor frame and test the tractor operation.

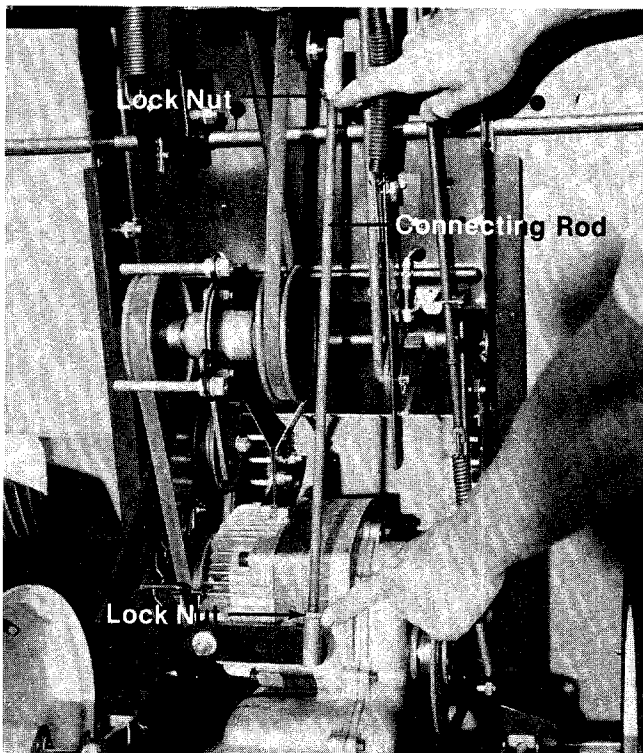


FIGURE 18.

Steering Gears

Wipe off the old grease and dirt. After every 25 hours of operation place an automotive multi-purpose grease in the teeth of the segment and pinion gears. (See figure 19.)

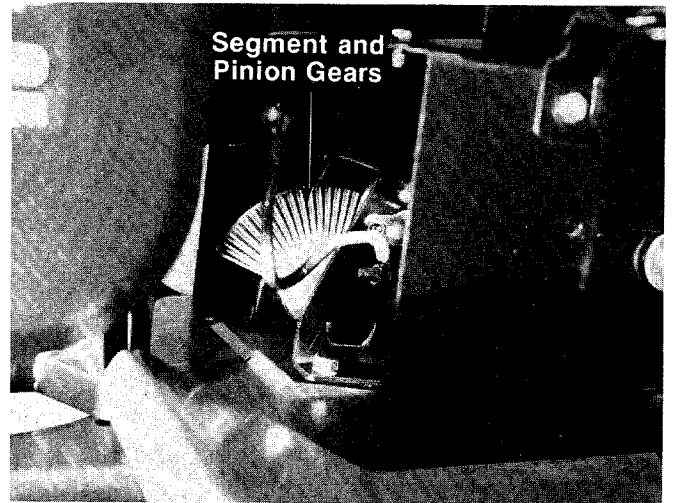


FIGURE 19.

Linkage—Once a season lubricate all the pivot points on the clutch, brake and lift linkage with SAE 30 engine oil.

Wheel Bearings—The front wheel bearings and king pin bearings have Oilon PV 80 bearings that require no lubrication.

Ball Joints—The ball joints and drag link ends are permanently lubricated.

MAINTENANCE OF BATTERY

1. Check electrolyte level periodically (at least every two weeks). Keep the level to the split rings. Use only distilled water or a good quality drinking water. Never add acid or any other chemicals to the battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, the battery should be recharged. Maximum charge rate 5 amps.
3. Coat the terminals and exposed wire with a thin coat of grease or petroleum jelly for longer service and protection against corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.
5. Avoid tipping the battery. Even a "sealed" battery will leak electrolyte when tipped.

STORAGE OF THE BATTERY

1. Store the battery in the unit.
2. Keep the exterior of the battery clean, especially the top. A dirty battery will discharge itself.

3. Check the battery with a hydrometer. The battery must be stored with a full charge. A discharged battery will freeze.

| Specific Gravity | Freezing Point |
|------------------|----------------|
| 1.265 | - 71°F. |
| 1.250 | - 62°F. |
| 1.200 | - 16°F. |
| 1.150 | 5°F. |
| 1.100 | 16°F. |



CAUTION

All batteries discharge during storage.

4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service or every two months, whichever comes first.

COMMON CAUSES FOR BATTERY FAILURE

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte



NOTE

These failures do not constitute warranty.

BATTERY REMOVAL OR INSTALLATION



WARNING

When removing the battery follow this order of disassembly to prevent your wrench from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.

2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



WARNING

Failure to use this starting procedure could cause sparking and the gases in either battery could explode.

Fuel Shut-Off Valve and Filter

The valve and filter is located on the bottom of the gasoline tank located at the extreme rear of the tractor.

Turn the valve knob in to shut off the fuel flow. Turn the valve knob out to operate the tractor. (See figure 20.)

The entire valve can be pulled out to clean the filter. When reassembling, place the rubber grommet into the gasoline tank first, then push the valve all the way in.



WARNING

Only use factory approved parts if repairs are needed on the gasoline tank, grommet, valve or gasoline line.

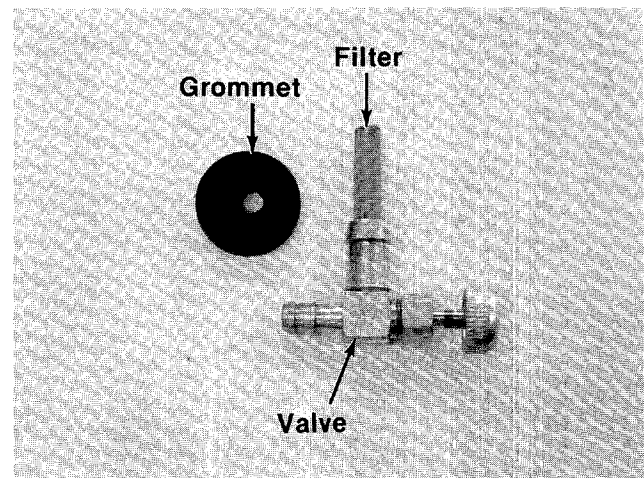


FIGURE 20.
Installation of Tire to Rim



WARNING

The following procedure must be followed when removing or installing a tire to the rim.

1. Lubricate the tire beads and rim flanges.
2. Do not exceed 30 p.s.i. when seating beads.
3. Adjust to recommended pressure after beads are sealed.

Rear Wheel Tract Adjustment

The distance between the rear wheels can be changed from wide to narrow by removing the rear wheels one at a time and reversing them on the hub.

With the rear wheels in the narrow position, their outside is even with the outside of the front wheels.

With the rear wheels in the wide position, their inside is even with the inside of the front wheels.

Wheel Alignment

The front wheels should toe-in approximately $1/8$ ". Measure the distances A and B on the front wheels. (See figure 21.)



Dimension B should be approximately $1/8$ inch less than dimension A.

To adjust the toe-in, loosen the hex jam nut, remove the elastic locknut, lift the tie rod end out of the hole in the steering arm and screw the tie rod end in or out as necessary. (See figure 22.)

Reassemble the tie rod end after the correct alignment is made.

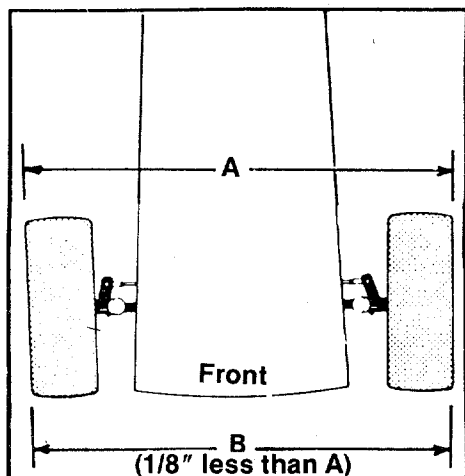


FIGURE 21.

Drag Link

If the drag link or ball joints are changed the new assembly must be adjusted to the exact same length as the original. If adjusted wrong it will allow the tractor to turn sharper one direction than the other.

To take off the drag link, remove the nuts and lock washers holding the ball joint to the steering gear and left front axle bracket.

Brake Adjustment



CAUTION

Do not adjust the brake while the engine is running. Be sure to block the wheels of the tractor before making the brake adjustment.

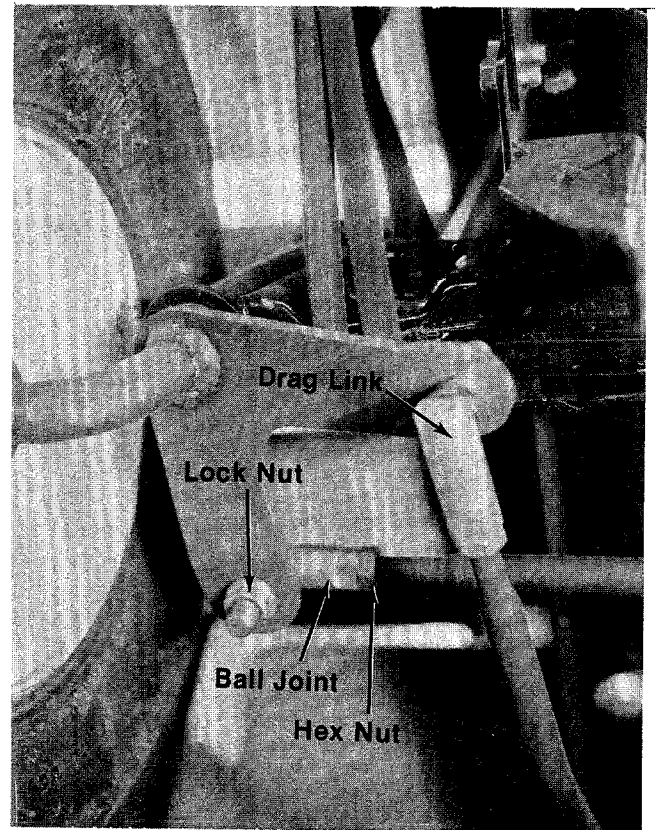


FIGURE 22.

1. Loosen the lock nut. (See figure 23.)
2. Tighten the center bolt all the way in.
3. Unscrew the center bolt one complete turn.
4. Test the brakes and repeat step three if necessary.
5. Tighten the lock nut.

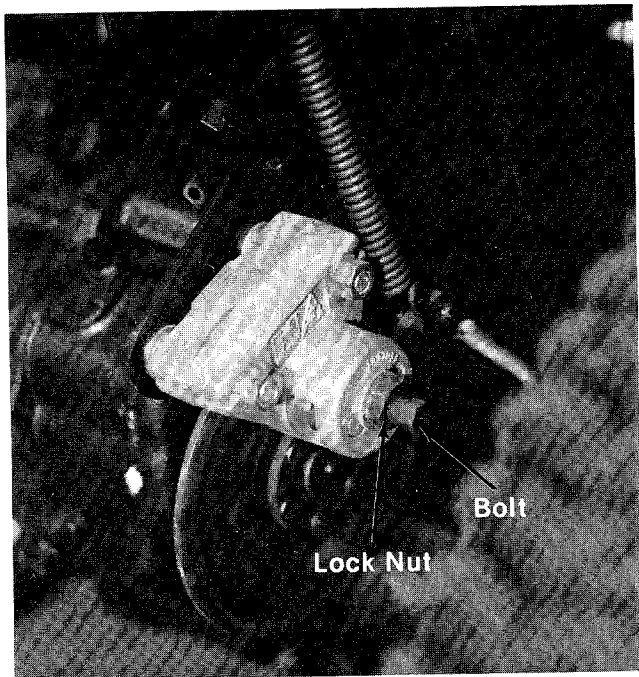


FIGURE 23.

Changing the Front Drive Belt

1. Remove the cutting deck and battery.
2. Raise and block the front wheels of the tractor so you can work under it.
3. Unscrew the belt guard release next to the engine pulley. (See figure 24.)

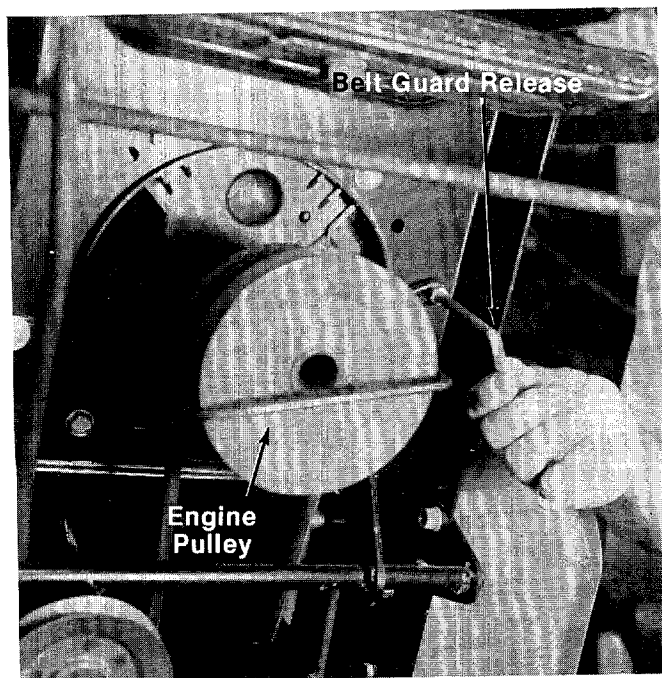


FIGURE 24.

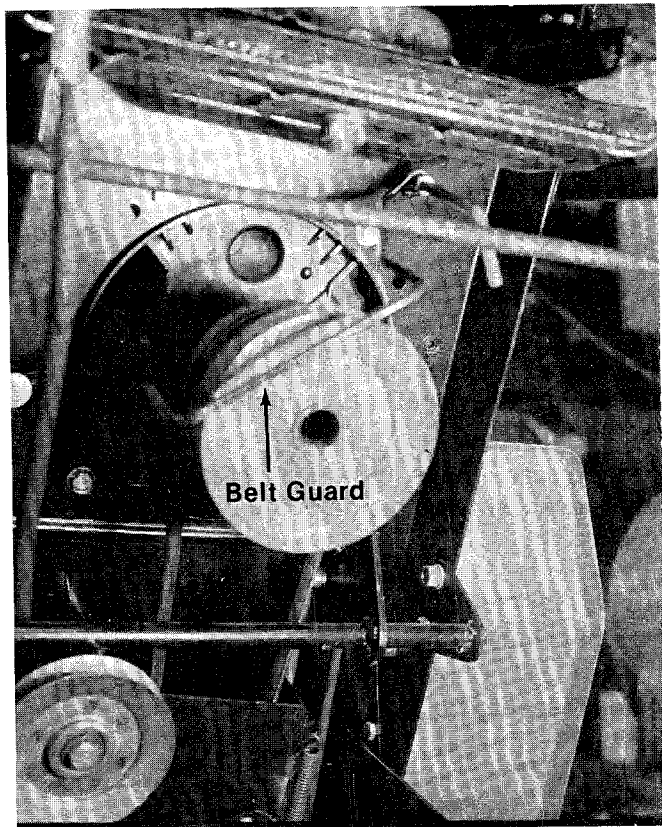


FIGURE 25.

4. Swing the belt guard forward towards the front of the tractor. (See figure 25.)



WARNING

Observe the way the belt is twisted. If the new belt is installed backwards, the tractor will run backwards.

5. Loosen the stop bolt behind the pulley assembly so the pulley assembly will pivot forward enough to remove the V-belt.
6. Using a bar or large screwdriver, pry the pulley assembly towards the front of the tractor and unhook the belt from the pulley. (See figure 26.)
7. Install the new belt by hooking it over the engine pulley and twisting the belt to the left as you attach it to the pulley.
8. Test the operation of the tractor to assure the belt has been installed correctly.

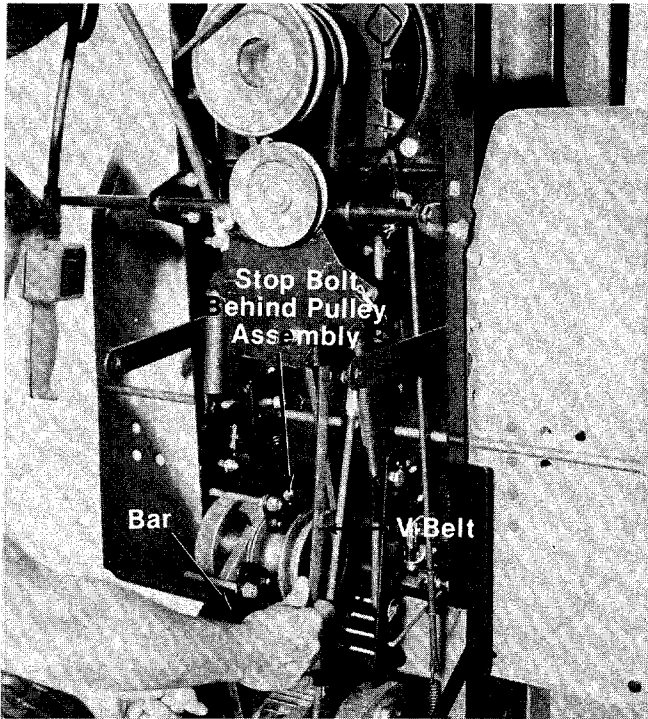


FIGURE 26.

Removing the Rear (Clutch) Belt

1. Remove the cutting deck and battery.
2. Raise and block the front wheels of the tractor so you can work under it.
3. Depress the clutch-brake pedal and set the parking brake.
4. Remove the two belt guard pins on the pulley assembly. (See figure 27)

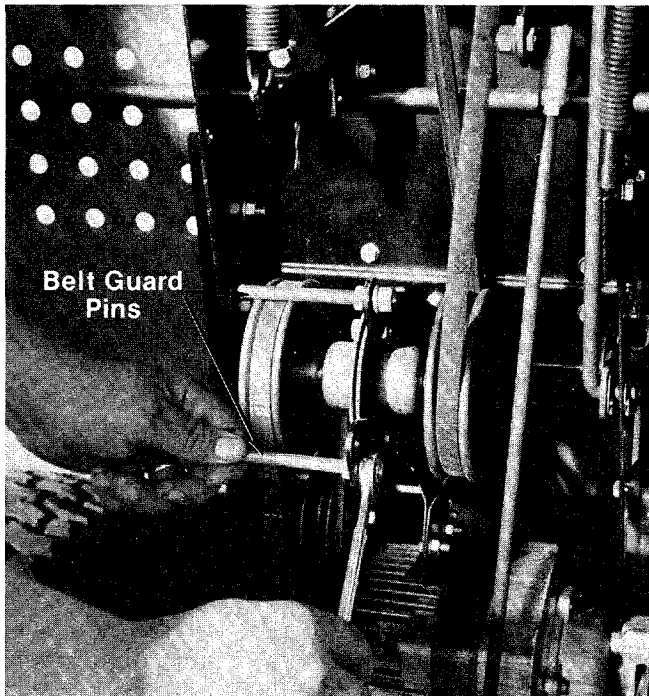


FIGURE 27.

5. Take off the idler assembly by removing the center bolt.



Be sure the belt clip is reassembled the same way. (See figure 28.)

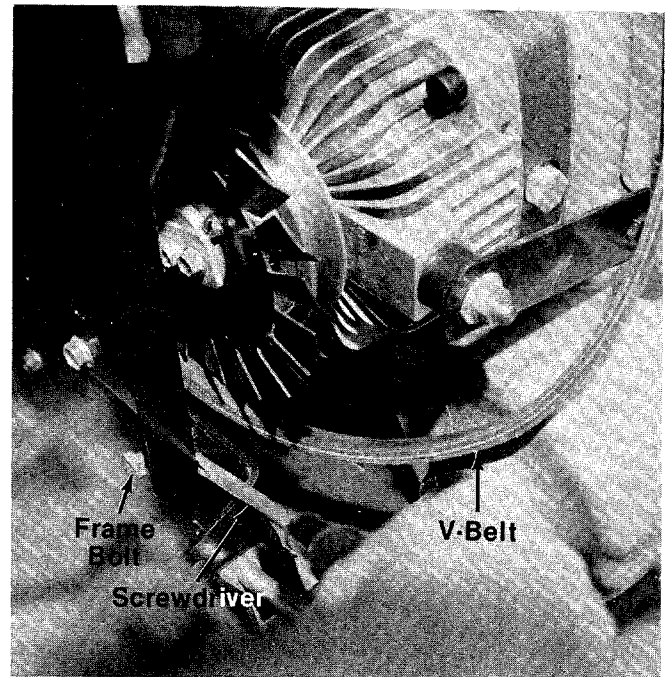
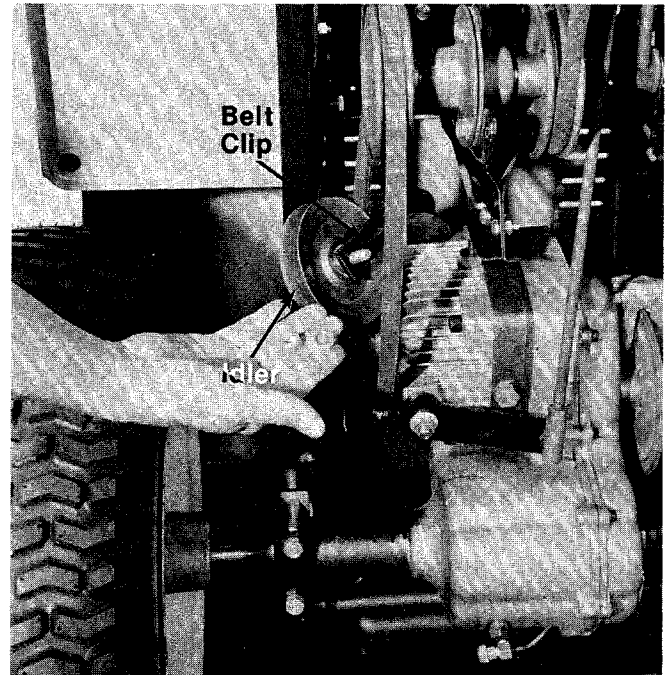


FIGURE 29.

6. Take off the round wire belt guard around the hydrostatic pulley by removing the two screws through the frame.

7. Loosen the frame bolt holding the rear axle bracket to the frame. See figure 29.
8. Pry the frame over about 1/4" and remove the V-belt.
9. Reassemble in reverse order with a new V-belt.

Clean Air Cleaner

Clean and re-oil foam pre-cleaner at 3 month intervals or every 25 hours, whichever occurs first.

1. Remove the wing nut and cover.
2. Remove the hex nut and washer with a 7/16" wrench and lift off the inner oblong cover.
3. Remove the foam pre-cleaner element by sliding it off the paper filter cartridge.
 - A. Wash foam in liquid detergent and water.
 - B. Squeeze dry.
 - C. Oil with one ounce of engine oil. Squeeze to distribute oil evenly. Remove excess oil.
4. Install foam element over the paper filter cartridge. Install the oblong inner cover and secure with the hex nut. Replace the outer cover and secure with the wing nut.

Yearly or every 100 hours, whichever occurs first, remove paper air filter cartridge. Clean by tapping gently on flat surface. If very dirty, replace cartridge, or wash in liquid detergent and water. Rinse until water remains clear. Cartridge must be air dried thoroughly before re-using. (See figure 30.)

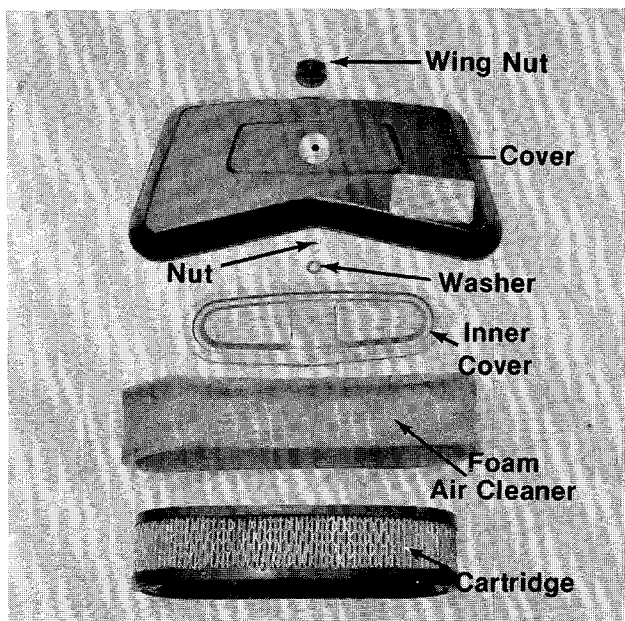


FIGURE 30.

Clean Cooling System

Grass or chaff may clog cooling system after prolonged service. Continued operation with a clogged cooling system causes severe overheating and possible engine damage. Remove blower housing and clean regularly. (See figure 31.)

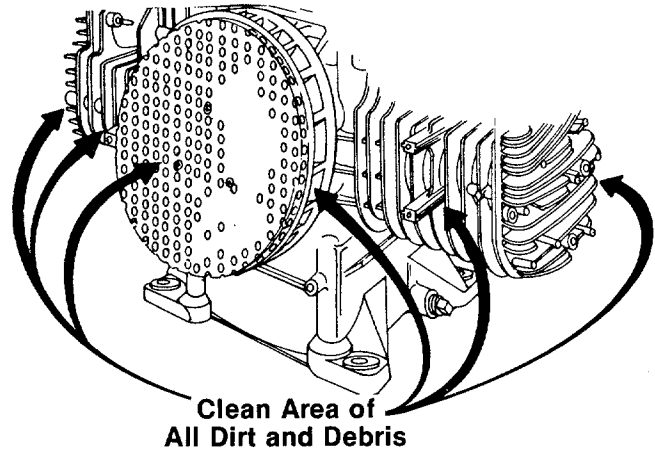


FIGURE 31.



WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Carburetor Adjustments

Minor carburetor adjustments may be required to compensate for differences in fuel, temperature, altitude and load.

To Adjust Carburetor—Turn needle valve clockwise until it just closes.



CAUTION

Valve may be damaged by turning it in too far.

Now open needle valve 1½ turns counterclockwise. Close idle valve in same manner and open 1½ turns. This initial adjustment will permit the engine to be started and warmed up prior to final adjustment. (See figure 32.)

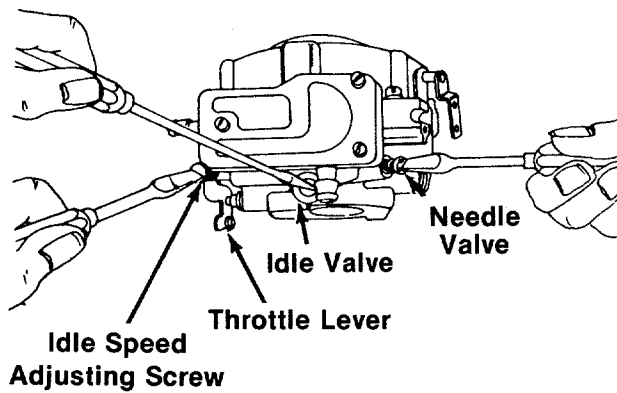


FIGURE 32.

Final Adjustment

Place governor speed control lever in "IDLE" position. Hold throttle lever against idle stop and set idle speed adjusting screw to obtain 1400 R.P.M. Turn idle valve slowly clockwise (lean mixture) until engine misses or R.P.M. slows. Then turn idle valve 1/2 turn counterclockwise.

Hold throttle shaft in closed position and adjust idle speed screw to 900 R.P.M. Release the throttle. With remote control in idle position, adjust tab "A" to obtain 1400 R.P.M.



Governed idle must be adjusted on all engines for proper operation. The smaller spring keeps the engine on governor, even at idle speed. If moderate loads are applied at idle, the engine will not stall. Idle speed should be no lower than 1100 R.P.M.

Place governor speed control lever in fast position. Then turn needle valve in slowly clockwise (lean) until engine misses or R.P.M. slows. Then turn needle valve 1/2 turn counterclockwise.

If engine does not accelerate properly, readjust needle valve approximately 1/8 turn counterclockwise (richer). (See figure 33.)

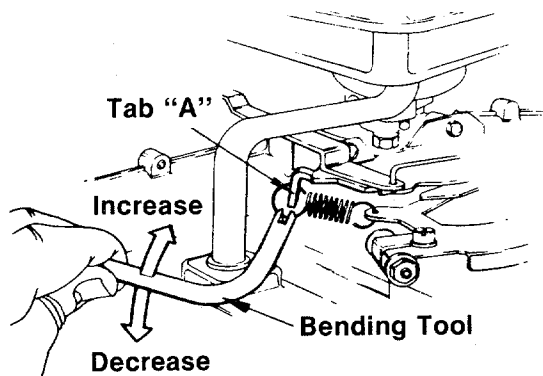


FIGURE 33.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, the following procedures are recommended:

1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in the carburetor is exhausted.
2. Drain all the oil from the crankcase (this should be done after the engine has been operated and is still warm) and refill the crankcase with clean new oil.
3. Disconnect the spark plug wires and remove the spark plugs from the cylinders. Pour about 2 or 3 tablespoons of engine oil into each cylinder, and then turn the engine over several times to spread out the oil. Replace the spark plugs but do not connect the wires.
4. Clean the engine and the entire tractor thoroughly.
5. Lubricate all lubrication points and wipe the entire machine with an oiled rag in order to protect the surfaces.
6. Battery storage. See page 13.

MAINTENANCE CUTTING DECK (Optional)

CAUTION
DO NOT OPERATE MOWER UNLESS GUARD OR ENTIRE GRASS CATCHER IS IN ITS PROPER PLACE.



FIGURE 34.

Keep hands and feet away from the chute area on cutting deck. See figure 34.

Lubrication

The blade spindles on the cutting deck are permanently lubricated.

Cutting Blade

The blades may be removed for sharpening or replacement as follows:

1. Remove the large bolt and lock washer holding the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the crankshaft.
3. Remove the two smaller bolts, lock washers and nuts holding the blade to the adapter. See figure 35.

When sharpening the blade, follow the original angle of grind as a guide. It is extremely important that each cutting edge be ground equally to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds and may cause damage to the mower.

The blade can be tested for balance by balancing it on a screwdriver. Remove metal from the heavy side until it balances evenly. See figure 36.

NOTE

When replacing the blade, be sure the side of the blade marked "Bottom" or having the part number, is facing down toward the ground when the mower is in the operating position.

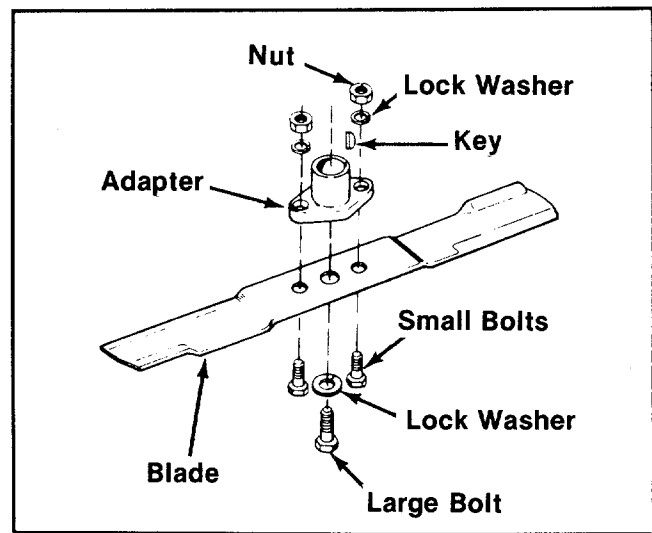


FIGURE 35.

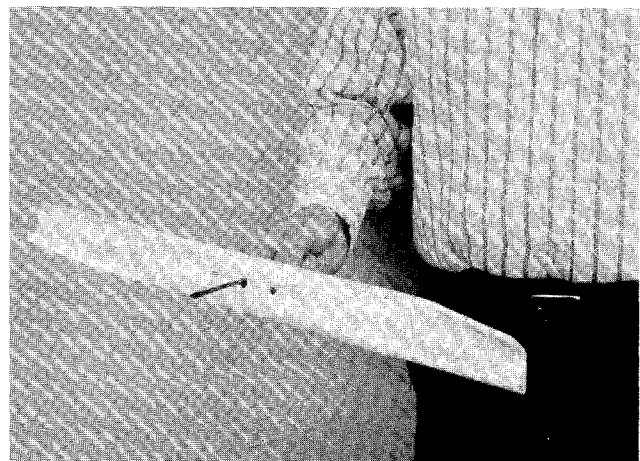


FIGURE 36.

Removing the Deck Belt

1. Remove the two hex screws holding the belt guard to the timing belt cover. See figure 37.
2. Replace the belt and reassemble.

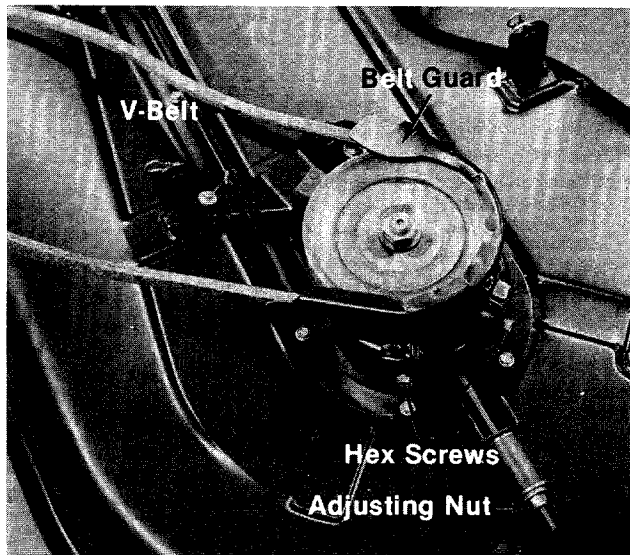


FIGURE 37.

Removing the Blade Belt

1. Remove the belt guard and drive pulley. See figure 37.
2. Remove the blade belt cover.
3. Loosen the four spindle nuts. See figure 40.
4. Loosen the tension adjusting nut. See figure 38.
5. Remove and replace the blade belt.
6. Reassemble and adjust the belt tension.

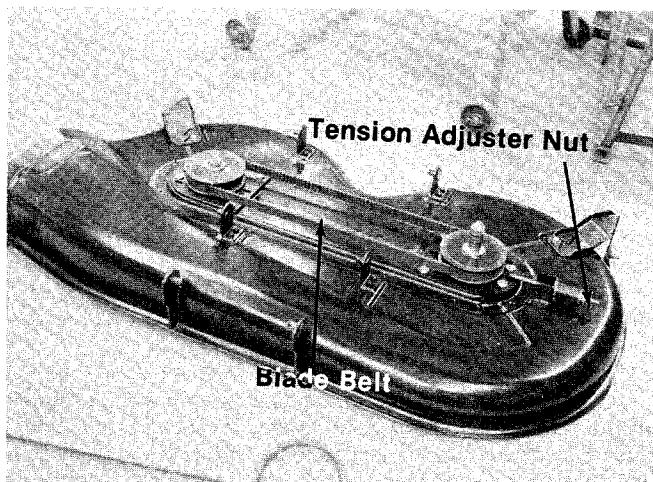


FIGURE 38.

Timing the Blades

1. Remove the center blade bolt on either blade.
2. Rotate the blade on the cutting deck and reassemble the other blade at 90° exactly as shown in figure 39.



If the blades are not timed it will affect the cut of the grass and the discharge.

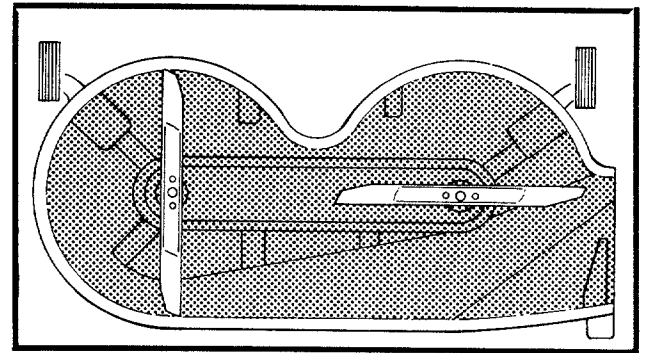


FIGURE 39.

Adjusting the Belt Tension

1. Loosen the four spindle nuts on the bottom of the cutting deck. See figure 40.
2. Tap the deck with a hammer handle to loosen the washers on the four spindle nuts.
3. Tighten the tension adjustment nut until the large spacer is not loose. See figure 38.
4. Tighten the four spindle nuts.

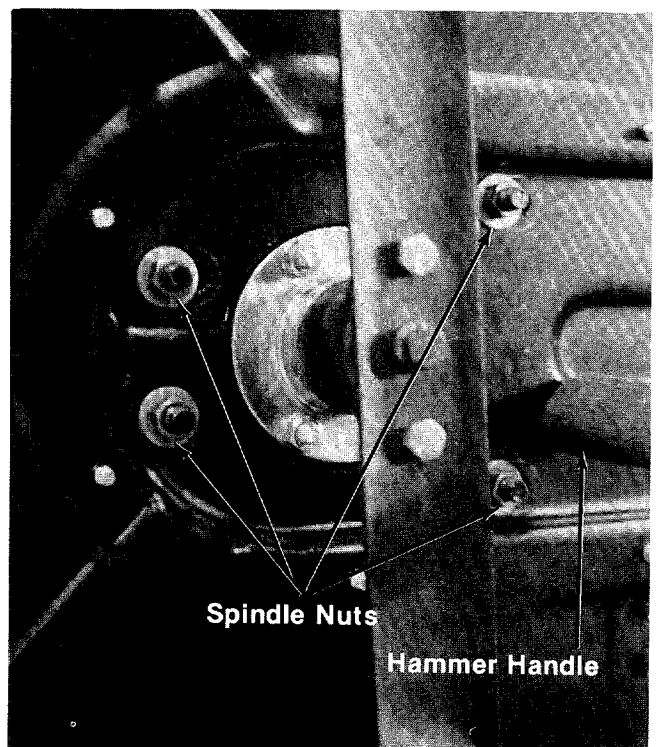


FIGURE 40.



This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

| TROUBLE | LOOK FOR | REMEDY |
|--|---|---|
| Engine will not crank | Battery installed incorrectly | The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal. |
| | Blow fuse or circuit breaker | Replace fuse with 7 1/2 amp. fuse 1/4 x 1 1/4" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part. |
| | Battery is dead or weak | <p>Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working.</p> <p>Alternator. The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.</p> <div style="text-align: center;"> </div> <p>The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.</p> |
| Mechanical failure. (Wires and switches) | The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary. | |
| Engine cranks but will not start | Throttle or choke not in starting position | Check owner's guide for correct position for throttle control and choke for starting. |

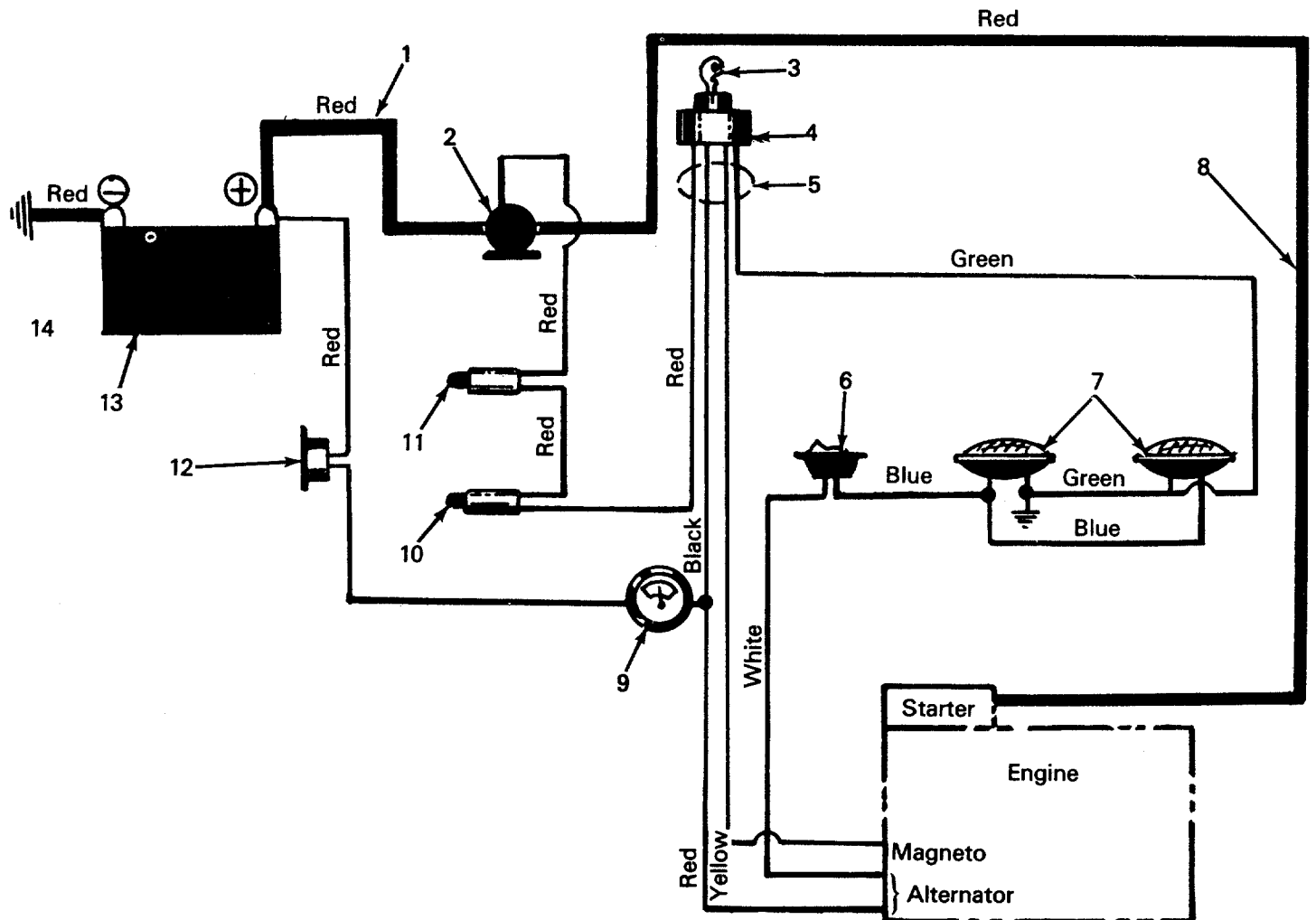
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

| TROUBLE | LOOK FOR | REMEDY |
|---|-------------------------------|--|
| | No spark to spark plug | Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not. |
| | No fuel to the carburetor | Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean. |
| | Air filter dirty | If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer. |
| Engine smokes | Engine loses crankcase vacuum | Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace. |
| Excessive vibration | Bent or damaged blade spindle | Stop engine immediately. Check all pulleys, blade spindles, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts. |
| | Bent blade | Stop engine immediately. Replace damaged blade. Only use original equipment blades. |
| Mower will not discharge grass or leaves uncut strips | Engine speed low | Throttle must be set between 3/4 and full throttle. |
| | Transmission selection | Use lower transmission speed. The slower your ground speed, the better the quality of cut. |
| | Blades short or dull | Sharpen or replace blades (uncut strip problem only). |

HYDROSTATIC TRANSMISSION TROUBLE SHOOTING

| | |
|---|--|
| No output torque (power) in either direction, cold start. | <ol style="list-style-type: none"> 1. Recheck relief valve position, control linkage, input drive. 2. Oil level in reservoir low. 3. Broken control shaft dowel pin. Transmission must be repaired or replaced. |
| Loss of output torque, continuous load. | <ol style="list-style-type: none"> 1. Operating at conditions approaching hydraulic stall. The transmission fluid has exceeded 180°F. 2. Internal leakage due to wear. Transmission should be repaired or replaced. 3. Water in transmission fluid. Purge system of all fluid and replace with new transmission fluid. Replacement of the transmission is generally not necessary. |
| No output torque in one direction. | <ol style="list-style-type: none"> 1. One of the directional valves is stuck. Transmission should be repaired or replaced. 2. Low oil level. |
| Riding mower cannot be pushed with engine off. | <ol style="list-style-type: none"> 1. Relief valve control not set. 2. Relief valve travel not adjusted. 3. Motor piston or rotor seized. Transmission must be repaired or replaced. |
| No neutral. | <ol style="list-style-type: none"> 1. Recheck linkage. Loose linkage creates an adjustment problem. Note: The hydraulic neutral band is very narrow. Deflection in the linkage may make it difficult to obtain neutral from both directions. It is recommended that neutral should be positive from forward drive. |
| Oil leakage at the control shaft seal. | <ol style="list-style-type: none"> 1. Spillage when fluid has been added to the reservoir. 2. Spillage at the vent in the reservoir at operating temperatures due to cold level being too high or water in the fluid. Reduce fluid level or replace fluid in the event there is water in it (milky color). 3. Loose oil reservoir or cover. 4. Loose vent bolt. 5. Damaged control shaft seal. Transmission should be repaired. |
| Noisy Operation. | <ol style="list-style-type: none"> 1. Operating at part throttle. Hydrostatic transmission is designed to operate with the engine running at full throttle. 2. Water in transmission fluid. Replace transmission fluid. 3. Air in transmission fluid. Bleed air from vent. |
| Output shaft rotates in the opposite direction. | <ol style="list-style-type: none"> 1. The transmission body is 180° out of position. Transmission has to be removed and reassembled correctly. |

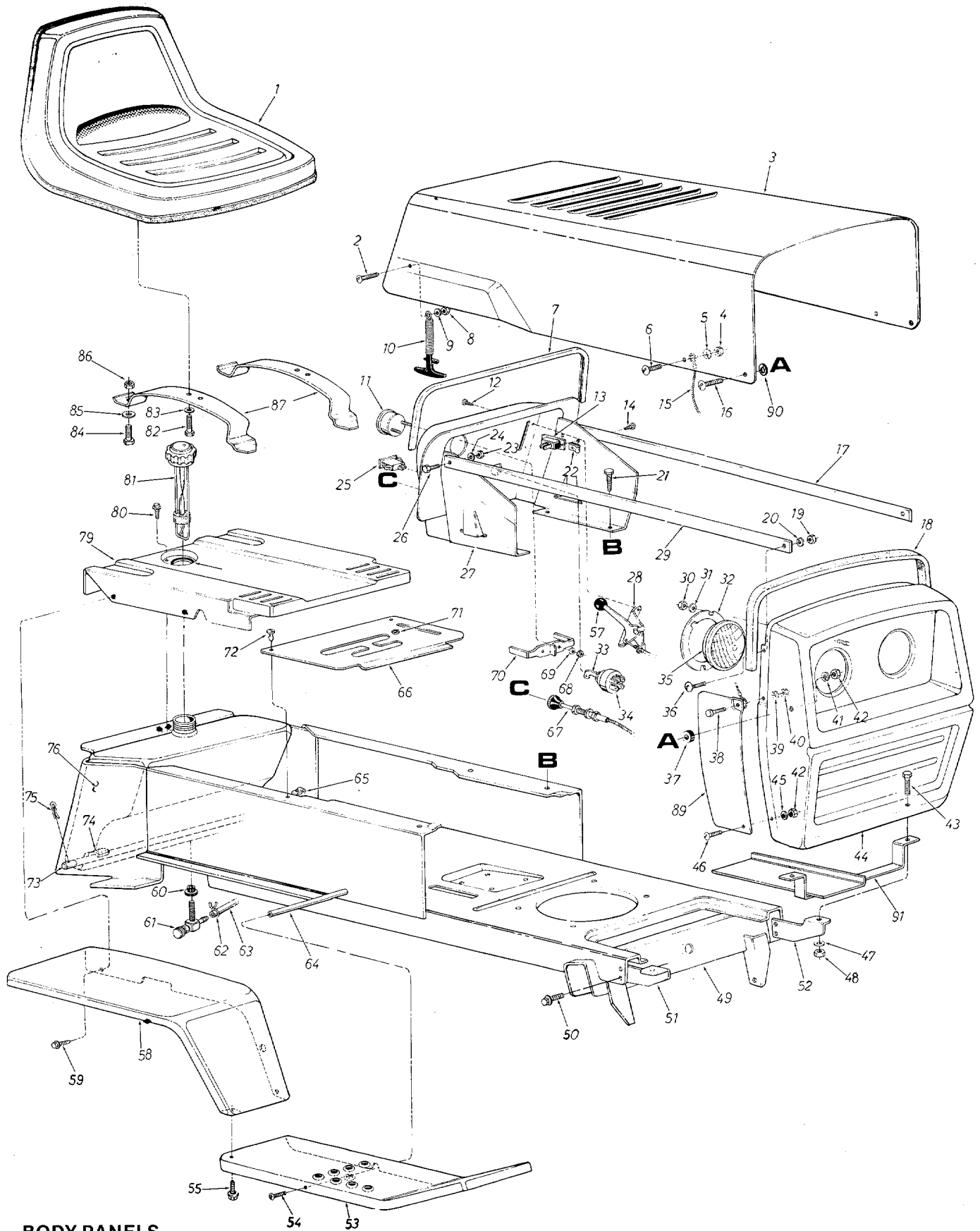
130-780A



PARTS LIST FOR ELECTRICAL SYSTEM 130-780A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|----------|------------|--------------------------|----------|
| 1 | 725-0563 | | Electric Cable | |
| 2 | 725-0530 | | Solenoid | |
| 3 | 725-0201 | | Ignition Key | |
| 4 | 725-0267 | | Ignition Switch | |
| 5 | 725-0666 | | Wire Harness | |
| 6 | 725-0634 | | Light Switch | |
| 7 | 725-0222 | | Headlight | |
| 8 | 725-0561 | | Electric Cable | |
| 9 | 725-0119 | | Ammeter | |
| 10 | 725-0465 | | Safety Switch | |
| 11 | 725-0268 | | Safety Switch—Black N.O. | |
| 12 | 725-0459 | | Circuit Breaker | |
| 13 | 725-0453 | | 12 V-Battery | |
| 14 | 725-0563 | | Electric Cable | |

130-780A



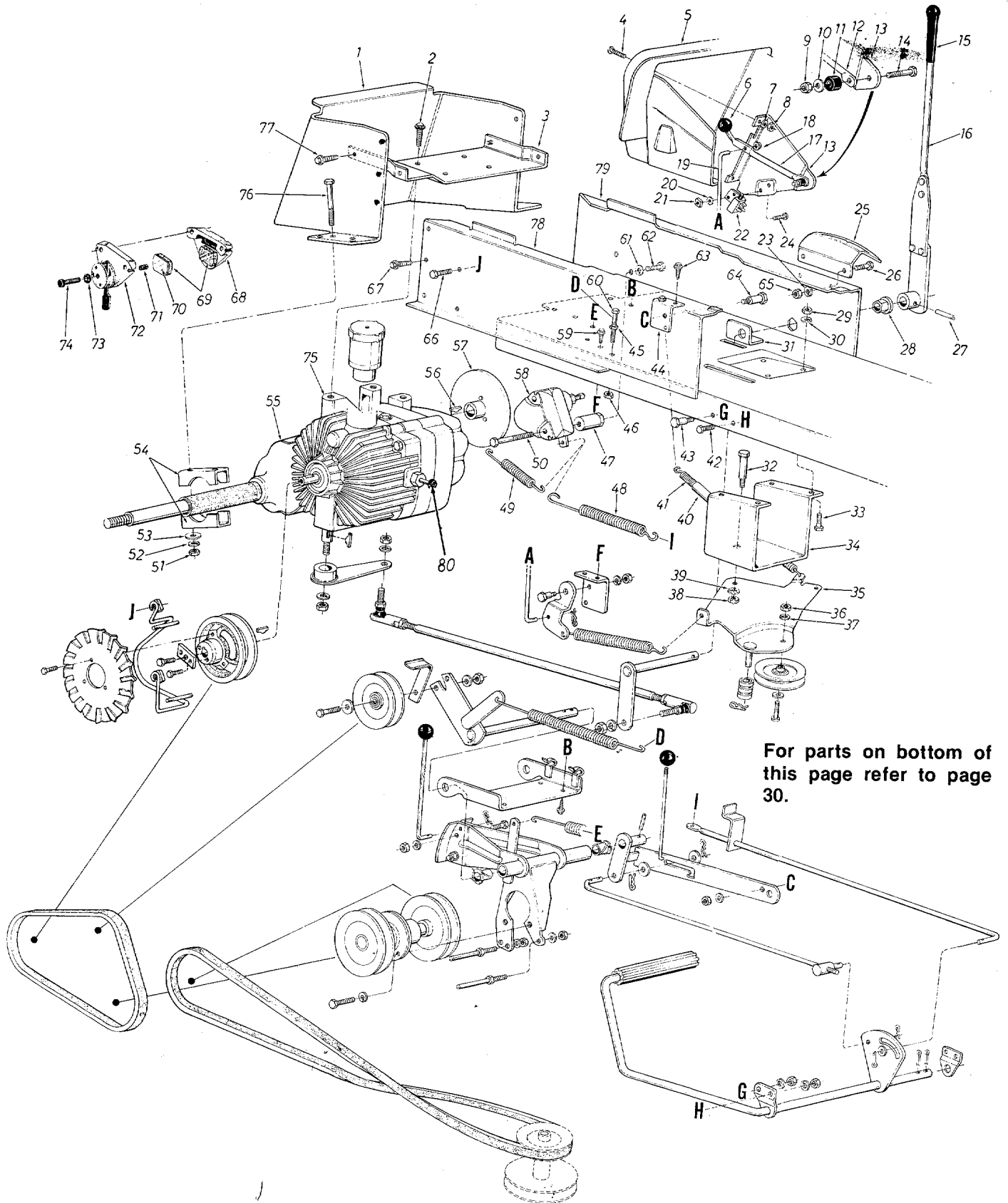
BODY PANELS

PARTS LIST FOR MODEL 130-780A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART | REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|----------|------------|---|----------|----------|----------|------------|--|----------|
| 1 | 757-0286 | | Seat Assembly | | 48 | 712-0267 | | Hex Nut 5/16-18 Thd.* | |
| 2 | 710-0286 | | Truss Mach. Scr. 1/4-20 x .50" Lg.* | | 49 | 13820 | | Lower Frame Ass'y. | |
| 3 | 13808 | —462 | Hood | | 50 | 710-0600 | | Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. | |
| 4 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 51 | 13862 | | Grille Mount Brkt.—R.H. | |
| 5 | 736-0329 | | L-Wash. 1/4" Scr.* | | 52 | 13863 | | Grille Mount Brkt.—L.H. | |
| 6 | 710-0286 | | Truss Mach. Scr. 1/4-20 x .50" Lg.* | | 53 | 13828 | —452 | Running Board—R.H. | |
| 7 | 731-0423 | | Vinyl Molding Strip | | | 13827 | —452 | Running Board—L.H.(Not Shown) | |
| 8 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 54 | 710-0323 | | Truss Mach. Scr. 5/16-18 x .75" Lg.* | |
| 9 | 736-0329 | | L-Wash. 1/4" Scr.* | | 55 | 710-0600 | | Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. | |
| 10 | 723-0296 | | Hood Latch Ass'y. | | 56 | 735-0179 | | Grommet (Gas Tank Neck) | |
| 11 | 725-0119 | | Ammeter | | 57 | 720-0166 | | Knob (Throttle Control) | |
| 12 | 710-0351 | | Hex Tap Scr. #10 x .50" Lg.* | | 58 | 13810 | —462 | Fender Ass'y.—R.H. | |
| 13 | 725-0459 | | Circuit Breaker 8 Amp. | | | 13809 | —462 | Fender Ass'y.—L.H. (Not Shown) | |
| 14 | 710-0351 | | Hex Tap Scr. #10 x .50" Lg.* | | 59 | 710-0600 | | Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. | |
| 15 | 727-0199 | | Hood Stop | | 60 | 735-0149 | | Bushing (Gas Tank) | |
| 16 | 710-0255 | | Truss Mach. Scr. 1/4-20 x .75" Lg.* | | 61 | 751-0171 | | Fuel Shut-Off Valve | |
| 17 | 749-0220 | | Grille Positioning Rod | | 62 | 726-0183 | | Hose Clamp 3/8" | |
| 18 | 722-0137 | | PVC Foam Strip 1/2 x 1.00" x 12.5" Lg. | | 63 | 751-0173 | | Gas Line 60" Lg. | |
| 19 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 64 | 738-0435 | | Running Board Rod | |
| 20 | 736-0329 | | L-Wash. 1/4" Scr.* | | 65 | 726-0156 | | Speed Nut | |
| 21 | 710-0599 | | Hex Thd. Rolling Scr. 1/4-20 x .50" Lg. | | 66 | 14023 | | Access Cover | |
| 22 | 712-0344 | | Speed Nut #10 Z | | 67 | 746-0343 | | Choke Control Comp. | |
| 23 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 68 | — | | Part of Ref. No. 11 | |
| 24 | 736-0329 | | L-Wash. 1/4" Scr.* | | 69 | — | | Part of Ref. No. 11 | |
| 25 | 725-0634 | | Light Switch | | 70 | — | | Part of Ref. No. 11 | |
| 26 | 710-0166 | | Truss Hd. Scr. 1/4-20 x 1.00" Lg.* | | 71 | 731-0405 | | Snap Bushing | |
| 27 | 13843 | | Dash Panel Ass'y. | | 72 | 710-0473 | | Truss Hd. Scr. 1/4-20 x .75" Lg. | |
| 28 | 746-0354 | | Throttle Control Comp. | | 73 | 738-0401 | | Hitch Rod | |
| 29 | 749-0220 | | Grille Positioning Rod | | 74 | 722-0135 | | P.V.C. Foamstrip 1/2" x 1.00" x 2.00" | |
| 30 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 75 | 714-0149 | | Internal Cotter Pin | |
| 31 | 736-0329 | | L-Wash. 1/4" Scr.* | | 76 | 751-0259 | | Gas Tank | |
| 32 | 09960 | | Head Lamp Retainer | | 79 | 13814 | | Seat Plate | |
| 33 | 725-0201 | | Ignition Key | | 80 | 710-0600 | | Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. | |
| 34 | 725-0267 | | Ignition Switch | | 81 | 723-0346 | | Gas Gauge | |
| 35 | 725-0222 | | Head Lamp | | 82 | 710-0118 | | Hex Scr. 5/16-18 x .75" Lg.* | |
| 36 | 710-0258 | | Hex Scr. 1/4-20 x .62" Lg.* | | 83 | 736-0119 | | L-Wash. 5/16" Scr.* | |
| 37 | 735-0144 | | Rubber Wash. .50" I.D. x 1.00 O.D. x .25 Thk. | | 84 | 710-0689 | | Hex Scr. Nylon Scr. 1/2-13 x .75" Lg. | |
| 38 | 710-0286 | | Truss Mach. Scr. 1/4-20 x .50" Lg.* | | 85 | 736-0192 | | FI-Wash. .50" I.D. x 1.00" O.D. x .090 | |
| 39 | 736-0329 | | L-Wash. 1/4" Scr.* | | 86 | 712-0206 | | Hex Nut 1/2-13 Thd.* | |
| 40 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 87 | 13123 | | Seat Spring | |
| 41 | 736-0329 | | L-Wash. 1/4" Scr.* | | 89 | 13864 | —462 | Grille Side Panel—R.H. | |
| 42 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | | 13235 | —462 | Grille Side Panel—L.H. (Not Shown) | |
| 43 | 710-0118 | | Hex Scr. 5/16-18 x .75" Lg.* | | 90 | 736-0173 | | FI-Wash. 1/4" I.D. | |
| 44 | 13801 | —462 | Grille Ass'y. | | 91 | 14150 | | Muffler Shield | N |
| 45 | 736-0329 | | L-Wash. 1/4" Scr.* | | | | | | |
| 46 | 710-0286 | | Truss Mach. Scr. 1/4-20 x .50" Lg.* | | | | | | |
| 47 | 736-0119 | | L-Wash. 5/6" Scr.* | | | | | | |

310 PHROME

130-780A



For parts on bottom of this page refer to page 30.

DRIVE SYSTEM

PARTS LIST FOR MODEL 130-780A

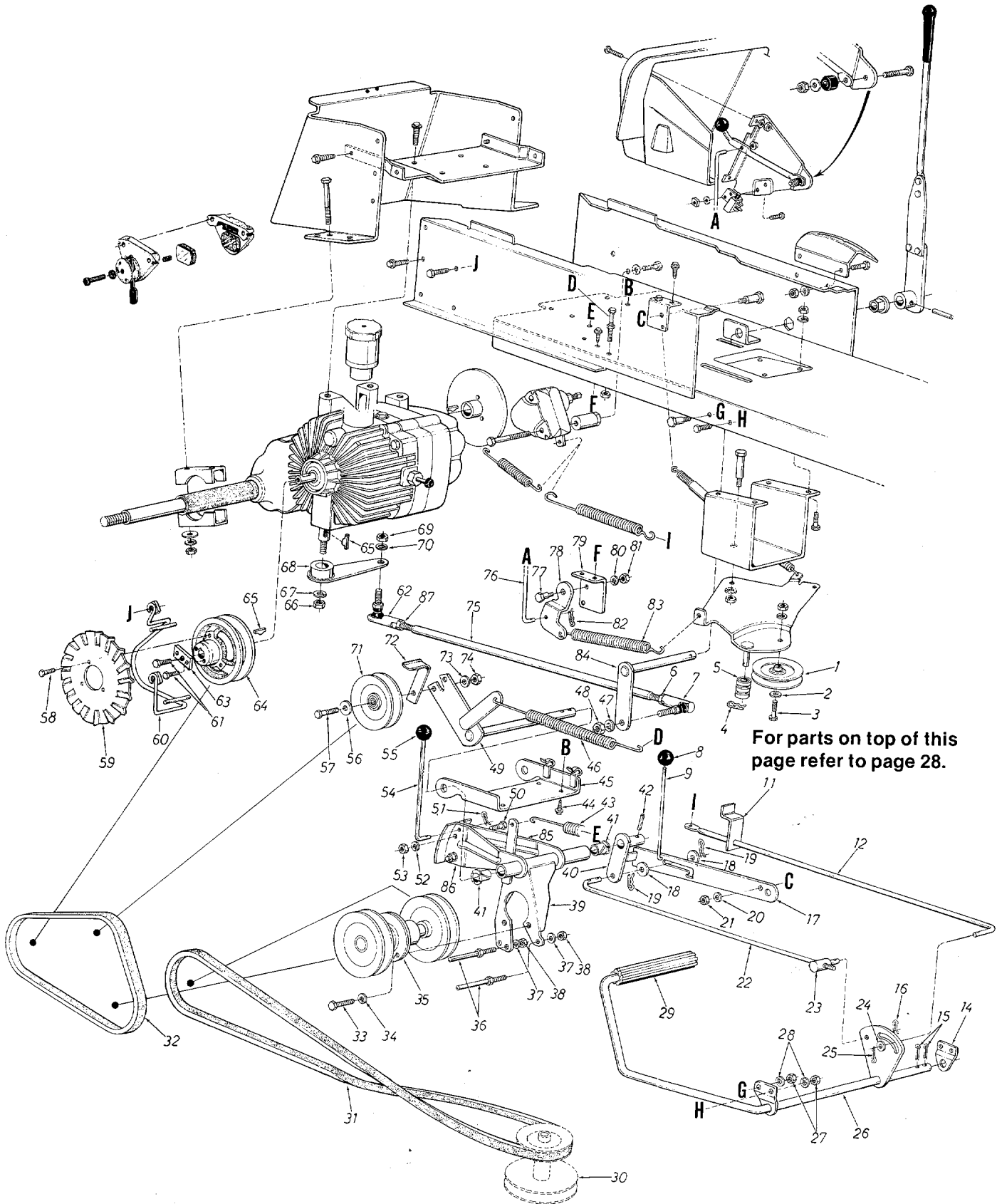
| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART | REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|----------|------------|--|----------|----------|---------------|------------|--|----------|
| | 13813 | | Hitch Plate | | 42 | 710-0201 | | Hex Bolt 3/8-16 x .62" Lg.* | |
| 2 | 710-0216 | | Hex Bolt 3/8-16 x .75" Lg.* | | 43 | 738-0234 | | Shld. Scr. .50" Dia. x .395" Lg. (3/8-16) | |
| 3 | 13835 | | Rear Axle Support Brkt. | | | | | Parking Brake Cam Mtg. Brkt. | |
| 4 | 710-0286 | | Truss Mach. Scr. 1/4-20 x .50" Lg.* | | 44 | 13833 | | Hex Nut 5/16-18 Thd.* | |
| 5 | 13843 | | Dash Panel Ass'y. | | 45 | 712-0267 | | Hex Nut 5/16-18 Thd.* | |
| 6 | 720-0165 | | Knob—Blade Clutch | | 46 | 712-0267 | | Spacer | |
| 7 | 736-0329 | | L-Wash. 1/4" I.D.* | | 47 | 748-0276 | | Brake Tension Spring | |
| 8 | 712-0287 | | Hex Nut 1/4-20 Thd.* | | 48 | 732-0260 | | Ext. Spring—Brake Return | |
| 9 | 712-0107 | | Hex Cent. L-Nut 1/4-20 Thd. | | 49 | 732-0157 | | Hex Bolt 3/8-16 x 2.50" Lg.* | |
| 10 | 736-0173 | | FI-Wash. .28" I.D. x .74" O.D. x .063 | | 50 | 710-0937 | | Hex Nut 3/8-16 Thd.* | |
| 11 | 735-0126 | | Rubber Wash. .33" I.D. x .87" O.D. x .30 | | 51 | 712-0798 | | L-Wash. 3/8" I.D.* | |
| 12 | 747-0157 | | Blade Clutch Lever | | 52 | 736-0169 | | FI-Wash. .390" I.D. x 1.00" O.D. x .125" Thk. | |
| 13 | 13950 | | Deck Clutch Cont. Brkt. | | 53 | 736-0258 | | Rear Axle Bracket | |
| 14 | 710-0106 | | Hex Bolt 1/4-20 x 1.25" Lg.* | | 54 | 13892 | | Transaxle (See Breakdown Page 40) | |
| 15 | 720-0143 | | Grip | | 55 | — | | Hi-Pro Key 3/16 x 3/4" Lg. | |
| 16 | 14038 | | Control Arm Ass'y. | N | 56 | 714-0137 | | Hub and Disc Ass'y. (For Brake) | |
| 17 | 747-0157 | | Blade Clutch Lever | | 57 | 761-0142 | | Disc Brake Ass'y. Comp. | |
| 18 | 726-0106 | | Push Nut 1/4" O.D. Rod | | 58 | 761-0179 | | Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg. | |
| 19 | 747-0307 | | Deck Control Rod | | 59 | 710-0599 | | Hex Bolt 5/6-18 x 1.50" Lg.* | |
| 20 | 736-0147 | | Ext. L-Wash. #10 Scr.* | | 60 | 710-0442 | | L-Wash. 3/8" I.D.* | |
| 21 | 712-0121 | | Hex Nut #10-24 Thd.* | | 61 | 736-0169 | | Hex Bolt 3/8-16 x .75" Lg.* | |
| 22 | 725-0465 | | Safety Switch | | 62 | 710-0216 | | Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg. | |
| 23 | 736-0119 | | L-Wash. 5/16" I.D.* | | 63 | 710-0599 | | Shld. Scr. .437" Dia. x .162" Lg. | |
| 24 | 710-0473 | | Truss Mach. Scr. #10-24 x .50" Lg.* | | 64 | 738-0155 | | Hex Nut 5/16-18 Thd.* | |
| 25 | 14020 | | Speed Control Bracket | N | 65 | 712-0267 | | Hex Bolt 3/8-16 x .75" Lg.* | |
| 26 | 710-0752 | | Hex Bolt 5/16-18 x .62" Lg.* | | 66 | 710-0216 | | Hex Wash. Hd. Self-Tap Scr. 5/16-24 x .50" Lg. | |
| 27 | 715-0108 | | Spring Pin Spiral 1/4" Dia. x 1.00" Lg. | | 67 | 710-0600 | | Anvil | |
| 28 | 741-0225 | | Hex Flange Brg. | | 68 | HU-16-13807 | | Lining | |
| 29 | 712-0267 | | Hex Nut 5/16-18 Thd.* | | 69 | HU-24-13772 | | Backing Plate | |
| 30 | 736-0119 | | L-Wash. 5/16" I.D.* | | 70 | HU-25-13808 | | Pin, Actuator | |
| 31 | 14035 | | Speed Control Shaft Brkt. | N | 71 | HU-39-13774 | | Housing with Lever and Pin Nut | |
| 32 | 738-0155 | | Shld. Scr. .437" Dia. x .162" Lg. | | 72 | HU-B003770069 | | Pin, Adjuster | |
| 33 | 710-0376 | | Hex Bolt 5/16-18 x 1.00" Lg.* | | 73 | HU-37-13818 | | Hydrostatic Pump Comp. | N |
| 34 | 13826 | | Idler Support Brkt. | | 74 | HU-39-13775 | | Hex Bolt 3/8-16 x 3.25" Lg.* | |
| 35 | 13893 | | Idler Brkt. Ass'y. | | 75 | 717-0426 | | Hex Wash. Hd. Self-Tap Scr. 5/16-24 x .50" Lg. | |
| 36 | 712-0798 | | Hex Nut 3/8-16 Thd.* | | 76 | 710-0644 | | Side Panel Upper Frame R.H. | |
| 37 | 736-0105 | | Belleville Washer. 3/8" I.D. | | 77 | 710-0600 | | Side Panel Upper Frame L.H. | |
| 38 | 712-0267 | | Hex Nut 5/16-18 Thd.* | | 78 | 13848 | | Cap | |
| 39 | 736-0119 | | L-Wash. 5/16" I.D.* | | 79 | 13847 | | | |
| 40 | 731-0483 | | Convolute Conduit .50" I.D. x 4.0" Lg. | | 80 | 731-0493 | | | |
| 41 | 732-0308 | | Ext. Spring .50" O.D. x 6.37" Lg. | | | | | | |

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake)

When ordering parts if color is important, use the appropriate color code listed above. (e.g. 12369—462—Red Flake)

130-780A



DRIVE SYSTEM

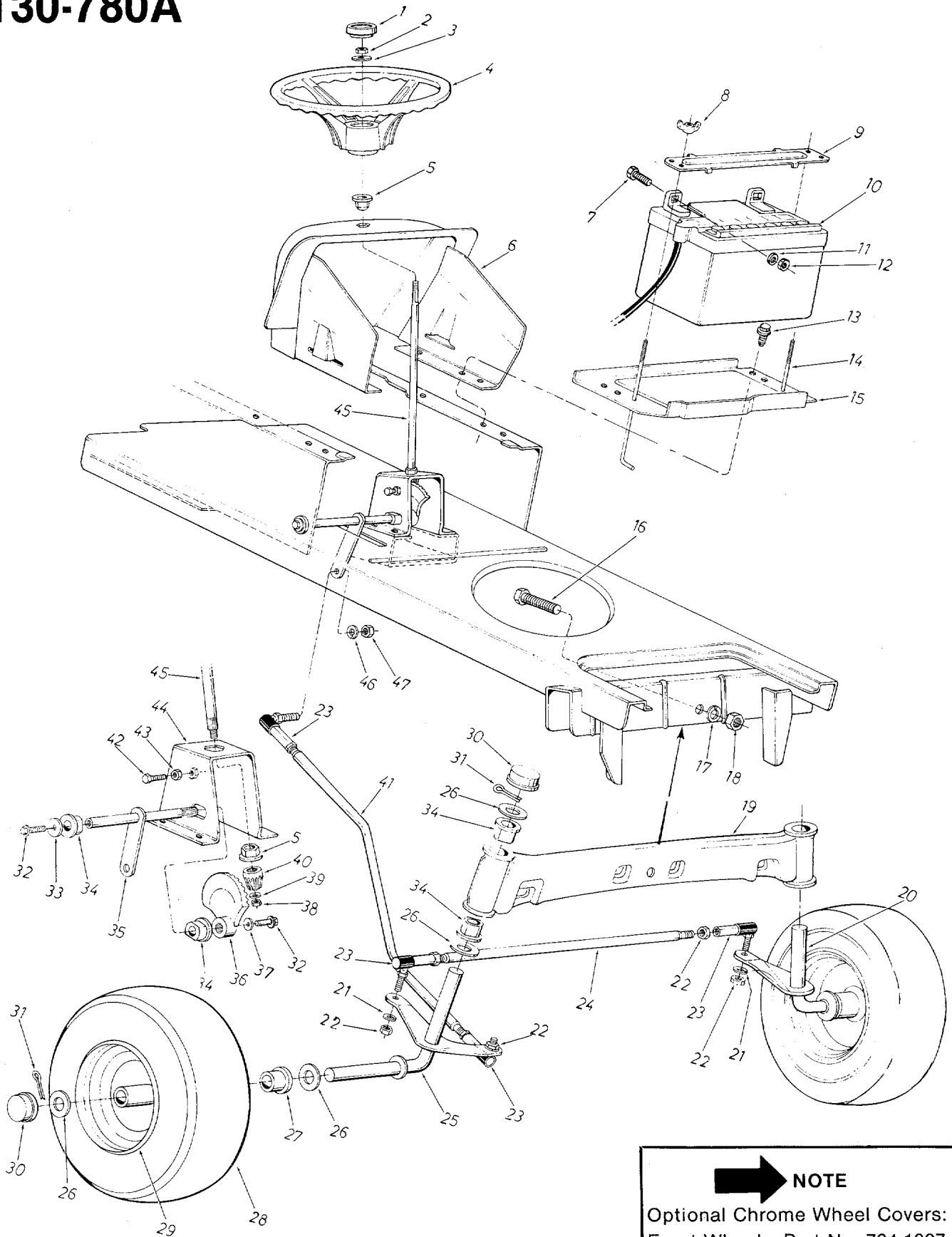
PARTS LIST FOR MODEL 130-780A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART | REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|----------|------------|---|----------|----------|---------------------|------------|---|----------|
| 1 | 756-0293 | | 4" Dia. "V"-Idler Pulley | | 45 | 13822 | | Idler Mtg. Brkt. | |
| 2 | 736-0300 | | FI-Wash. 3/8" I.D. | | 46 | 732-0262 | | Ext. Spring (Drive Idler) | |
| 3 | 710-0342 | | Hex Bolt 3/8-16 x 1.25" Lg.* | | 47 | 736-0169 | | L-Wash. 3/8" I.D.* | |
| 4 | 714-0104 | | Intern. Cotter Pin 5/16" Dia. | | 48 | 712-0241 | | Hex Nut 3/8-24 Thd.* | |
| 5 | 748-0278 | | Spacer | | 49 | 13815 | | Clutch Brkt. Ass'y. | |
| 6 | 712-0711 | | Hex Jam L-Nut 3/8-24 Thd. | | 50 | 710-0289 | | Hex Bolt 1/4-20 x .50" Lg.* | |
| 7 | 723-0156 | | Ball Joint Ass'y. 3/8-24 Thd. | | 51 | 714-0104 | | Internal Cotter Pin 5/16" Dia. | |
| 8 | 720-0166 | | Ball Knob | | | | | Rod | |
| 9 | 747-0300 | | Parking Brake Link | | 52 | 736-0329 | | L-Wash. 1/4" I.D.* | |
| 11 | 14027 | | Brake Rod Hanger | N | 53 | 712-0287 | | Hex Nut 1/4-20 Thd.* | |
| 12 | 747-0305 | | Brake Rod | | 54 | 747-0312 | | Relief Valve Lockout Rod | N |
| 14 | 13859 | | Clutch Rod Brg. Brkt. | | 55 | 720-0166 | | Ball Knob | |
| 15 | 714-0474 | | Cotter Pin 1/8" Dia. x 1.00" Lg.* | | 56 | 736-0300 | | FI-Wash. 3/8" I.D. | |
| | | | | | 57 | 710-0347 | | Hex Bolt 3/8-16 x 1.25" Lg.* | |
| 16 | 714-0145 | | Hairpin Cotter 3/8" Rod | | 58 | 710-0289 | | Hex Bolt 1/4-20 x .50" Lg.* | |
| 17 | 13832 | | Parking Brake Cam | | 59 | 14019 | | Cooling Fan | N |
| 18 | 736-0101 | | FI-Wash. .406 I.D. x 1.00" O.D. x .030 | | 60 | 14016 | | Belt Guard Ass'y. | N |
| | | | | | 61 | 710-0211 | | Hex Sems Bolt 1/4-20 x .75" Lg.* | |
| 19 | 714-0145 | | Hairpin Cotter 3/8" Rod | | | | | Ball Joint Ass'y. 3/8-24 L.H. Thd. | N |
| 20 | 736-0275 | | FI-Wash. 5/16" Scr.* | | 62 | 723-0351 | | End Stop | |
| 21 | 712-0267 | | Hex Nut 5/16-18 Thd.* | | 63 | 04493 | | Transaxle Pulley 4.25" Dia. | N |
| 22 | 747-0306 | | Brake Cam Rod | | 64 | 756-0338 | | Hi-Pro Key 1/8" x 1/2" Dia. | N |
| 23 | 711-0198 | | Pivot Bushing | | 65 | 714-0156 | | Hex Nut 3/8-16 Thd.* | N |
| 24 | 736-0275 | | FI-Wash. .401" I.D. x .749" O.D. x .057" Thk. | | 66 | 712-0798 | | L-Wash. 3/8" I.D.* | |
| 25 | 714-0115 | | Cotter Pin 1/8" Dia. x 1.00" Lg. | | 67 | 736-0169 | | Pintle Arm Ass'y. | N |
| | | | | | 68 | 14022 | | Hex Nut 3/8-24 Thd.* | |
| 26 | 13856 | | Clutch Brake Pedal Ass'y. | | 69 | 712-0241 | | L-Wash. 3/8" I.D.* | |
| 27 | 736-0169 | | L-Wash. 3/8" I.D.* | | 70 | 736-0169 | | 4" "V"-Idler Pulley | |
| 28 | 712-0375 | | Hex Cent. L-Nut 3/8-16 Thd. | | 71 | 756-0293 | | Belt Guard (Clutch Idler) | |
| 29 | 735-0196 | | Foot Pad | | 72 | 13819 | | L-Wash. 3/8" I.D.* | |
| 30 | 756-0328 | | Two-Step Engine Pulley 4.75" and 5.56" | | 73 | 736-0169 | | Hex Nut 3/8-16 Thd.* | |
| 31 | 754-0245 | | "V"-Belt 1/2" x 59" Lg. | | 74 | 712-0798 | | Speed Control Rod | N |
| 32 | 754-0154 | | "V"-Belt 1/2" x 37" Lg. | | 75 | 747-0321 | | Deck Control Rod | |
| 33 | 710-0198 | | Hex Sems Bolt 5/16-18 x .75" Lg.* | | 76 | 747-0307 | | Shld. Scr. .437" Dia. x .162" Lg. (5/16-18) | |
| | | | | | 77 | 738-0155 | | Deck Control Pivot Brkt. | |
| 34 | 736-0119 | | L-Wash. 5/16" I.D.* | | 78 | 13887 | | Parking Brake Cam Mtg. Brkt. | |
| 35 | 756-0324 | | Jack Shaft Ass'y. | | 79 | 13833 | | L-Wash. 5/16" I.D.* | |
| 36 | 711-0696 | | Stud 3/8-16 x 3.62" Lg. | | | | | Hex Nut 5/16-18 Thd.* | |
| 37 | 736-0169 | | L-Wash. 3/8" I.D.* | | 80 | 736-0119 | | Internal Cotter Pin 5/16" Rod | |
| 38 | 712-0798 | | Hex Nut 3/8-16 Thd.* | | 81 | 712-0267 | | Extension Spring | |
| 39 | 13823 | | Jack Shaft Mtg. Brkt. Ass'y. | | 82 | 714-0104 | | Speed Control Shaft Ass'y. | N |
| 40 | 13871 | | Clutch Idler Horn Ass'y. | | 83 | 732-0384 | | Relief Valve Cam—L.H. | N |
| 41 | 741-0295 | | Nyliner 5/8" I.D. x .88" Lg. | | 84 | 14034 | | Relief Valve Cam—R.H. | N |
| 42 | 715-0108 | | Spring Pin Spiral 1/4" Dia. x 1.00" Lg. | | 85 | 14025 | | Hex Jam L-Nut 3/8-24 L.H. Thd. | N |
| | | | | | 86 | 14026 | | | |
| 43 | 732-0153 | | Ext. Spring (Jack Shaft) | | 87 | 712-0312 | | | |
| 44 | 710-0599 | | Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg. | | | | | | |

 **NOTE**

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

130-780A



NOTE
 Optional Chrome Wheel Covers:
 Front Wheel—Part No. 734-1007
 Rear Wheel—Part No. 734-1008

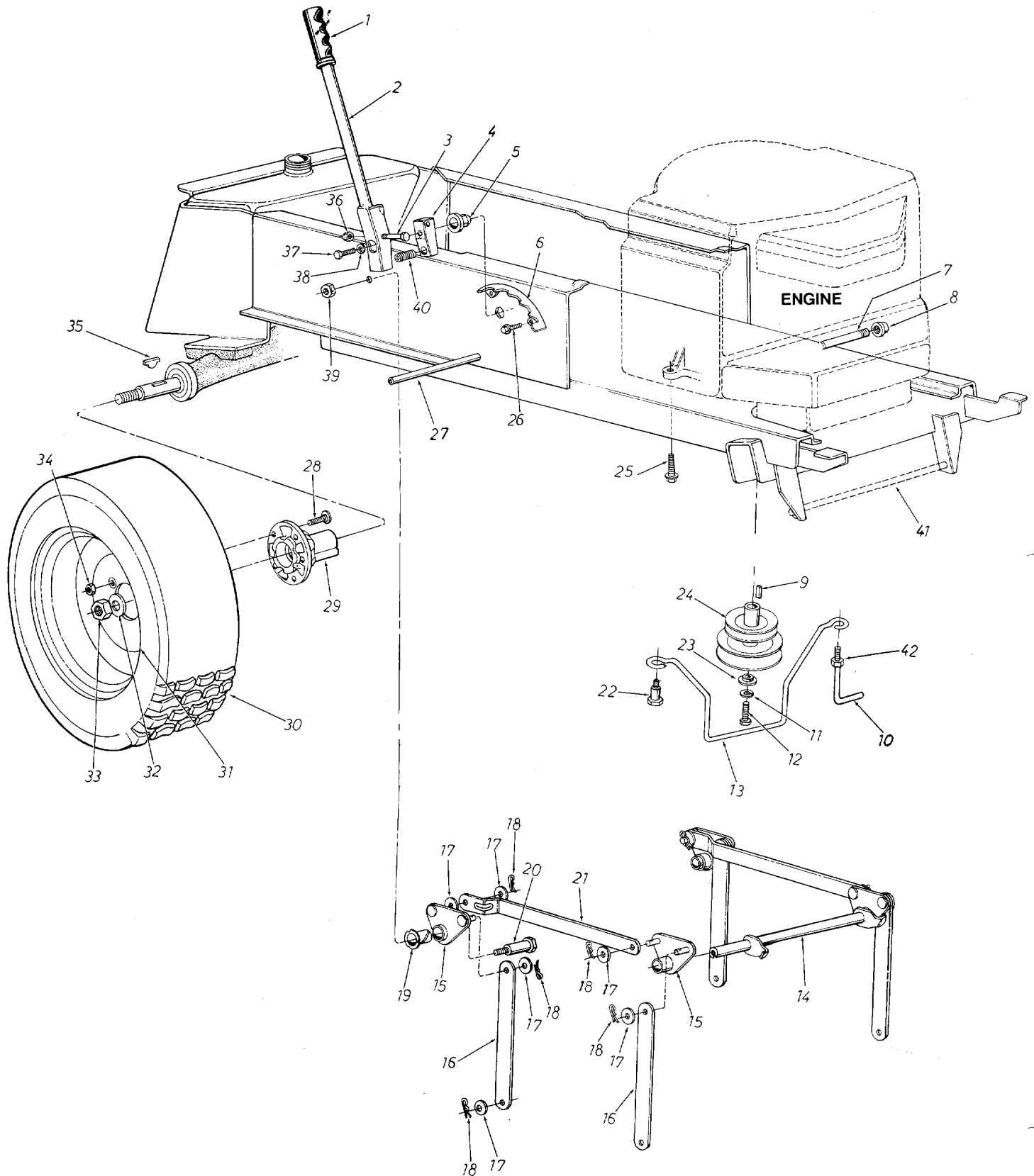
STEERING

HUB CAPS FRONT 734-541 32
 " " REAR 734-1007

PARTS LIST FOR MODEL 130-780A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|------------------------|------------|---|----------|
| 1 | 731-0220 | | Steering Wheel Cap | |
| 2 | 712-0158 | | Hex Cent. L-Nut 5/16-18 Thd. | |
| 3 | 736-0275 | | Fl-Wash. 5/16" I.D. x 1.00" O.D. x .057 | |
| 4 | 731-0356 | | Steering Wheel | |
| 5 | 741-0225 | | Plastic Hex Bearing 5/8" I.D. | |
| 6 | 13843 | | Dash Panel Ass'y. | |
| 7 | 710-0258 | | Hex Scr. 1/4-20 x .62" Lg. | |
| 8 | 712-0113 | | Wing Nut Plastic 1/4-20 Thd. | |
| 9 | 12614 | | Battery Hold Down | |
| 10 | 725-0453 | | 12-V Battery | |
| 11 | 736-0329 | | L-Wash. 1/4" Scr.* | |
| 12 | 712-0287 | | Hex Nut 1/4-20 Thd.* | |
| 13 | 710-0599 | | Hex Thd. Rolling Scr. 1/4-20 x .50" Lg. | |
| 14 | 711-0222 | | Battery Hold Down Rod | |
| 15 | 13379 | | Battery Plate | |
| 16 | 710-0533 | | Hex Scr. 5/8-18 x 2.50" Lg.* | |
| 17 | 736-0158 | | L-Wash. 5/8" Scr.* | |
| 18 | 712-0923 | | Hex Cent. L-Nut 5/8-18 Thd. | |
| 19 | 13865 | | Front Pivot Bar Ass'y. | |
| 20 | 13839 | | Front Axle Ass'y.—L.H. | |
| 21 | 736-0169 | | L-Wash. 3/8" Scr.* | |
| 22 | 712-0241 | | Hex Nut 3/8-24 Thd.* | |
| 23 | 723-0156 | | Ball Joint Ass'y. | |
| 24 | 747-0301 | | Tie Rod | |
| 25 | 13838 | | Front Axle Ass'y.—R.H. | |
| 26 | 736-0316 | | Fl-Wash. .780 I.D. x 1.59 O.D. | |
| 27 | 741-0293 ¹² | | Flange Bearing | |
| 28 | 734-0960 | | Front Wheel Ass'y. Comp. | |
| 29 | 734-0961 | | Front Wheel Rim Only | |
| | 734-0498 | | Front Wheel Tire Only 15 x 6.00 | |
| | 734-0255 | | Air Valve | |
| 30 | 731-0484 | | Dust Cover | |
| 31 | 714-0121 | | Cotter Pin 5/32" Dia. x 1.00" Lg.* | |
| 32 | 710-0180 | | Hex Scr. 3/8-24 x .75" Lg. Grade 5 | |
| 33 | 736-0133 | | Fl-Wash. 3/8 I.D. x 1.25 O.D. x .090 | |
| 34 | 741-0199 | | Flange Double "D" Brg. .753 I.D. | |
| 35 | 12749 | | Steering Arm Shaft Ass'y. | |
| 36 | 748-0236 | | Side Gear—Steering | |
| 37 | 736-0105 | | Bell-Wash. 3/8" I.D. | |
| 38 | 712-0237 | | Hex Cent. L-Nut 5/16-24 Thd. | |
| 39 | 736-0264 | | Fl-Wash. 5/16" I.D. x 62 O.D. x .059 | |
| 40 | 748-0237 | | Pinion Gear—Steering | |
| 41 | 747-0302 | | Drag Link | |
| 42 | 710-0670 | | Hex Nylon Scr. 3/8-16 x 1.25" Lg. | |
| 43 | 712-0798 | | Hex Nut 3/8-16 Thd.* | |
| 44 | 12850 | | Steering Gear Sup. Ass'y. | |
| 45 | 738-0317 | | Steering Shaft | |
| 46 | 736-0169 | | L-Wash. 3/8" Scr.* | |
| 47 | 712-0241 | | Hex Nut 3/8-24 Thd.* | |

130-780A



DECK LINKAGE

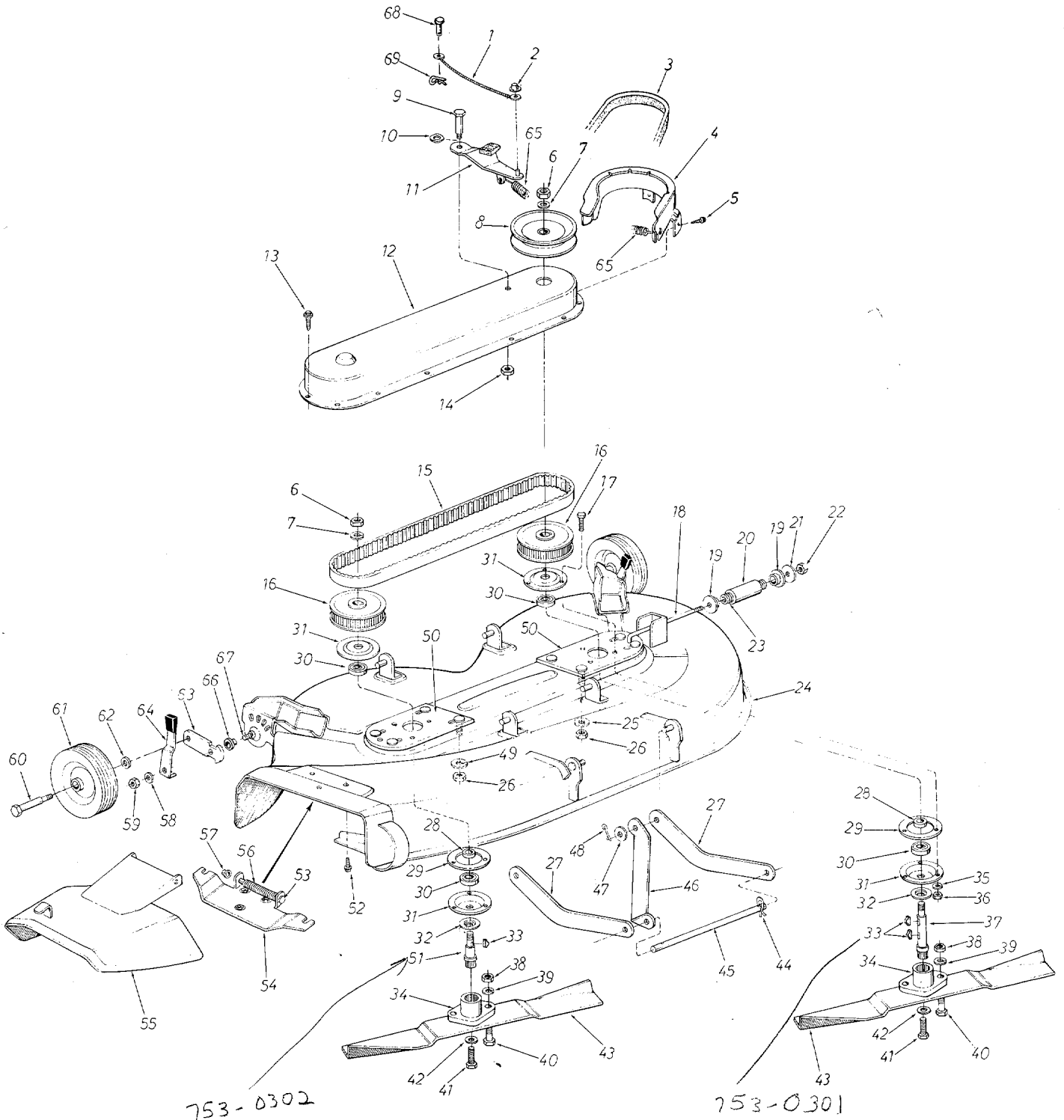
PARTS LIST FOR MODEL 130-780A

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|----------|------------|--|----------|
| 1 | 720-0157 | | Grip | |
| 2 | 13884 | | Lift Handle Ass'y. | |
| 3 | 710-0442 | | Hex Scr. 5/16-18 x 1.50" Lg.* | |
| 4 | 748-0274 | | Lift Shaft Drive | |
| 5 | 741-0225 | | Plastic Hex Brg. 5/8" I.D. | |
| 6 | 13873 | | Index Brkt. Deck Lift | |
| 7 | 737-0164 | | Pipe Nipple 3/8-18 Npt. | |
| 8 | 737-0143 | | Pipe Cap 3/8-18 Npt. | |
| 9 | 714-0118 | | Sq. Key 1/4" x 1/4" x 1.50" Lg. | |
| 10 | 747-0216 | | Belt Guard Lock Pin | |
| 11 | 736-0171 | | L-Wash. 7/16" Scr.* | |
| 12 | 710-0757 | | Hex Scr. 7/16-20 x 1.50" Lg. | |
| 13 | 747-0299 | | Belt Guard | |
| 14 | 13889 | | Lift Shaft Ass'y. | |
| 15 | 13895 | | Lift Pivot Brkt. Ass'y. | |
| 16 | 13791 | | Link (Deck) | |
| 17 | 736-0192 | | Fl-Wash. 1/2" I.D. x 1.00" O.D. x .090 | |
| 18 | 714-0474 | | Cotter Pin 1/8" Dia. x .75" Lg. | |
| 19 | 741-0295 | | Nyliner 5/8" I.D. x .88" Lg. | |
| 20 | 738-0445 | | Shld. Scr. 5/8" Dia. x .96" Lg. 3/8-16 | |
| 21 | 13790 | | Connecting Link | |
| 22 | 738-0296 | | Shld. Scr. .437 Dia. x .268 Lg. 5/16-18 | |
| 23 | 748-0277 | | Step Wash. (Special) | |
| 24 | 756-0328 | | Two-Step Engine Pulley 4.75" & 5.56" | |
| 25 | 710-0502 | | Hex Wash. Hd. Scr. 3/8-16 x 1.25" Lg. | |
| 26 | 710-0600 | | Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. | |
| 27 | 738-0435 | | Running Board Rod | |
| 28 | 710-0617 | | Rd. Hd. Ribbed Neck Scr. 3/8-24 x 1.00" Lg. (Service Only) | |
| 29 | 719-0236 | | Rear Wheel Hub Ass'y. with Studs | |
| 30 | 734-0966 | | Rear Wheel Ass'y. Comp. | |
| 31 | 734-0785 | | Rear Wheel Rim Only | |
| | 734-0967 | | Rear Wheel Tire Only 22 x 7.50 | |
| 32 | 748-0160 | | Spacer | |
| 33 | 712-0288 | | Hex Ins. L-Nut 3/4-16 Thd. | |
| 34 | 712-0193 | | Hex Cone Nut 3/8-24 Thd. | |
| 35 | 714-0146 | | #27 Woodruff Key 1/4 x 2.12 H.T. | |
| 36 | 712-0158 | | Hex Cent. L-Nut 5/16-18 Thd. | |
| 37 | 710-0237 | | Hex Scr. 5/16-24 x .62" Lg.* | |
| 38 | 736-0119 | | L-Wash. 5/16" Scr.* | |
| 39 | 712-0181 | | Hex Top L-Nut 3/8-16 Thd. | |
| 40 | 732-0369 | | Compression Spring | |
| 41 | 738-0392 | | Deck Connecting Rod | |
| 42 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines — Gasoline."



190-935A (OPTIONAL 44" DECK)



CUTTING DECK

OPTIONAL

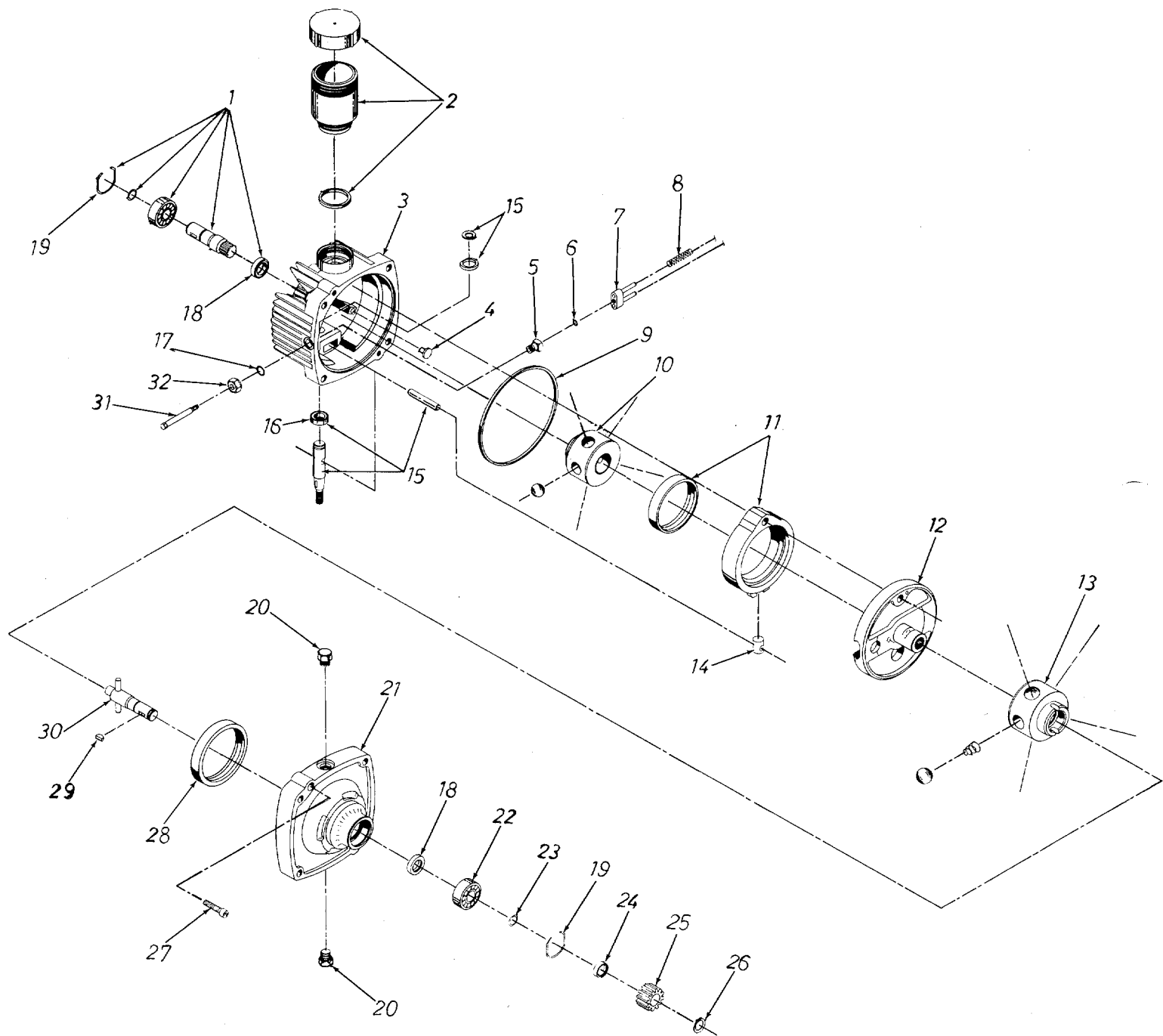
753-0308

PARTS LIST FOR MODEL 190-935A 44" DECK

| REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART | REF. NO. | PART NO. | COLOR CODE | DESCRIPTION | NEW PART |
|----------|----------|------------|---|----------|----------|----------|------------|---|----------|
| 1 | 746-0237 | | Brake Cable Ass'y. (Deck) | | 37 | 738-0436 | | Blade Spindle—L.H. | |
| 2 | 726-0106 | | Push Cap 1/4" Stud | | 38 | 712-0123 | | Hex Nut 5/16-24 Thd.* | |
| 3 | 754-0230 | | "V"-Belt 1/2" x 56" Lg. | | 39 | 736-0119 | | L-Wash. 5/16" Scr.* | |
| 4 | 13910 | | Belt Guard (Deck) | | 40 | 710-0117 | | Hex Scr. 5/16-24 x 1.00" Lg. | |
| 5 | 710-0599 | | Hex Thd. Rolling 1/4-20 x .50" Lg. | | 41 | 710-0180 | | Grade 5 Hex Scr. 3/8-24 x .75" Lg. | |
| 6 | 712-0242 | | Hex Jam Nut 5/8-11 Thd. | | 42 | 736-0217 | | Grade 5 L-Wash. 3/8" Scr. H.D. | |
| 7 | 736-0317 | | Belle. Wash. 5/8" I.D. x 1.25 O.D. | | 43 | 742-0125 | | 22" Blade | |
| 8 | 756-0329 | | Deck Drive "V"-Pulley | | 44 | 714-0149 | | Hairpin Cotter | |
| 9 | 738-0140 | | Shld. Scr. .437" Dia. x .180" Lg. 5/16-18 | | 45 | 738-0392 | | Deck Connecting Rod | |
| 10 | 736-0141 | | Wave Wash. 7/16" Scr. | | 46 | 13867 | | Diagonal Brace | |
| 11 | 13908 | | Spindle Brake Arm Ass'y. | | 47 | 736-0192 | | Fl-Wash. 1/2" I.D. x 1.00" O.D. x .090 | |
| 12 | 13874 | | Belt Cover Ass'y. | N | 48 | 714-0111 | | Cotter Pin 3/32" Dia. x 1.00" Lg.* | |
| 13 | 710-0599 | | Hex Thd. Rolling Scr. 1/4-20 x .50" Lg. | | 49 | 736-0105 | | Belle. Wash. 3/8" Scr. | |
| 14 | 712-0158 | | Hex Cent. L-Nut 5/16-18 Thd. | | 50 | 13868 | | Spindle Plate Ass'y. | |
| 15 | 754-0246 | | Timing Belt #1440-8M-20 | | 51 | 738-0437 | | Blade Spindle—R.H. | |
| 16 | 756-0334 | | Sprocket Pulley Ass'y. | | 52 | 710-0599 | | Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg. | |
| 17 | 710-0322 | | Hex Sems Scr. 5/16-18 x 1.00" Lg.* | | 53 | 711-0571 | | Hinge Pin | |
| 18 | 710-0754 | | Adjustment Scr. | | 54 | 11396 | | Grass Catcher Adapter Plate | |
| 19 | 738-0347 | | Shld. Spacer (Special) | | 55 | 11633 | | Chute Cover Ass'y. | |
| 20 | 750-0455 | | Spacer—Adj. Scr. | | 56 | 732-0261 | | Torsion Spring | |
| 21 | 736-0231 | | Fl-Wash. 5/16" I.D. x 1.125" O.D. | | 57 | 726-0106 | | Push Nut 1/4" Rod | |
| 22 | 712-0267 | | Hex Nut 5/16-18 Thd.* | | 58 | 736-0219 | | Belleville Wash. | |
| 23 | 732-0377 | | Compression Spring | | 59 | 712-0181 | | Hex Nut 3/8-16 Thd.* | |
| 24 | 13861 | | 44" Deck Ass'y. | | 60 | 738-0455 | | Shld. Scr. .498 Dia. x 1.53" Lg. 3/8-16 | |
| 25 | 736-0105 | | Belleville Wash. 3/8" I.D. | | 61 | 734-0974 | | Wheel Ass'y. Comp. 6" (Deck) | N |
| 26 | 712-0241 | | Hex Nut 3/8-24 Thd.* | | 62 | 736-0105 | | Belleville Wash. 3/8" I.D. | |
| 27 | 13866 | | Deck Stabilizer | | 63 | 10937 | | Wheel Pivot Bar | |
| 28 | 750-0456 | | Spacer | | 64 | 14082 | | Spring Lever Ass'y. with Knob | N |
| 29 | 09164 | | Reinforcement Plate | | 65 | 732-0118 | | Extension Spring | |
| 30 | 741-0919 | | Ball Bearing | | 66 | 748-0279 | | Shld. Spacer | |
| 31 | 08253 | | Bearing Housing | | 67 | 710-0342 | | Hex Scr. 3/8-16 x 1.00" Lg. Grade 5 | |
| 32 | 13703 | | Bearing Shield | | 68 | 711-0701 | | Clevis Pin 1/4" Dia. x 1.00" Lg. | |
| 33 | 714-0126 | | #9 Hi-Pro Key 3/16 x 3/4" Dia. | | 69 | 714-0104 | | Hairpin Cotter 1/4" Dia. | |
| 34 | 748-0235 | | Blade Adapter 3/4" Spindle | | | | | | |
| 35 | 736-0119 | | L-Wash. 5/16" Scr.* | | | | | | |
| 36 | 712-0267 | | Hex Nut 5/16-18 Thd.* | | | | | | |

130-780A

HYDROSTATIC TRANSMISSION M-7 (717-0426)
ET-000700-002



**PARTS LIST FOR HYDROSTATIC TRANSMISSION M-7
(717-0426) ET-000700-002**

| REF. NO. | PART NO. | DESCRIPTION |
|----------|---------------|--|
| 1 | ET-990067-000 | Kit—Input Shaft |
| 2 | ET-990077-000 | Kit—Reservoir |
| 3 | ET-990176-000 | Kit—Cover |
| 4 | ET-101597-000 | Button |
| 5 | ET-024234-000 | O-Ring Fitting Guide Sub-assembly |
| 6 | ET-008761-010 | O-Ring |
| 7 | ET-024166-000 | Bracket—Pins Subassembly |
| 8 | ET-072149-000 | Valve Spring |
| 9 | ET-008771-162 | Square Cut Seal Ring |
| 10 | ET-022712-000 | Pump Rotor-Ball Subassembly |
| 11 | ET-102449-000 | Cam Ring Subassembly |
| 12 | ET-102532-000 | Pintle Subassembly |
| 13 | ET-022711-000 | Motor Rotor-Ball Subassembly |
| 14 | ET-095203-000 | Cam Ring Insert |
| 15 | ET-990083-000 | Kit—Control Shaft |
| 16 | ET-093895-000 | Oil Seal |
| 17 | ET-008761-013 | O-Ring .013 |
| 18 | ET-093955-000 | Oil Seal |
| 19 | ET-091231-000 | Retaining Ring |
| 20 | ET-025090-006 | O-Ring Plug Subassembly |
| 21 | ET-032278-000 | Body |
| 22 | ET-090797-000 | Ball Bearing (output) |
| 23 | ET-097121-000 | Snap Ring |
| 24 | ET-095202-000 | Spacer |
| 25 | ET-040511-000 | Drive Gear |
| 26 | ET-096098-066 | External Retaining Ring |
| 27 | ET-095912-125 | Socket Hd. Scr. 5/16-18 x 1.25" Lg. |
| 28 | ET-040519-000 | Motor Race |
| 29 | ET-009476-000 | Woodruff Key #3 |
| 30 | ET-022892-000 | Output Shaft Subassembly |
| 31 | ET-062240-000 | Dump Valve Shaft |
| 32 | ET-024235-000 | Nut-Gasket Subassembly |

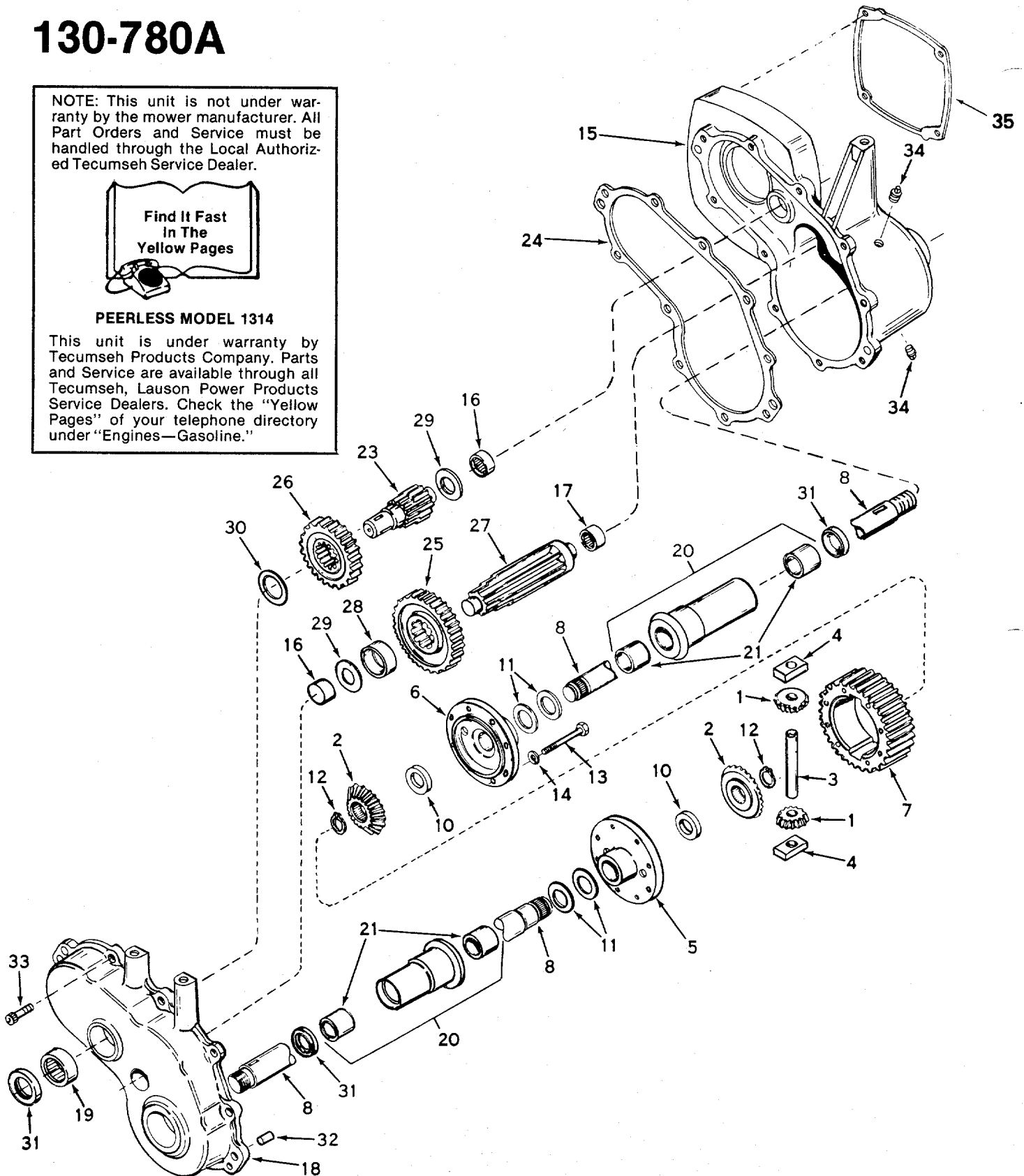
130-780A

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.



PEERLESS MODEL 1314

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."



GEAR REDUCTION AND DIFFERENTIAL MODEL 1314.

**PARTS LIST FOR GEAR REDUCTION AND
DIFFERENTIAL MODEL 1314**

| REF. NO. | PART NO. | DESCRIPTION |
|----------|------------|--|
| 1 | PE-778014 | Pinion, Bevel |
| 2 | PE-778039 | Gear, Bevel |
| 3 | PE-786019 | Pin, Drive |
| 4 | PE-786027 | Block, Drive |
| 5 | PE-774028A | Carrier, Differential |
| 6 | PE-774029A | Carrier, Differential |
| 7 | PE-778033A | Gear, Ring |
| 8 | PE-774403 | Axle |
| 10 | PE-780107 | Washer |
| 11 | PE-780042 | Washer, Thrust |
| 12 | PE-792018 | Ring, Snap |
| 13 | PE-792020 | Screw, Hex Hd., 1/4-20 x 2-1/4 |
| 14 | PE-792006 | Lock Washer, 1/4" |
| 15 | PE-770052 | Case Ass'y. (Incl. Nos. 16 & 17) |
| 16 | PE-780013 | Bearing, Needle |
| 17 | PE-780088 | Bearing, Needle |
| 18 | PE-772063 | Cover Ass'y. (Incl. Nos. 16 & 19) |
| 19 | PE-780089 | Bearing, Needle |
| 20 | PE-782041 | Housing Ass'y., Axle (Incl. 2 of No. 21) |
| 21 | PE-780054 | Bushing |
| 23 | PE-776093 | Shaft, Brake |
| 24 | PE-788044 | Gasket, Case to Cover |
| 25 | PE-778036 | Gear, Output |
| 26 | PE-778037 | Gear, Idler |
| 27 | PE-778041 | Shaft, Output |
| 28 | PE-786017 | Spacer |
| 29 | PE-780001 | Washer |
| 30 | PE-780090 | Washer |
| 31 | PE-788008 | Seal, Oil |
| 32 | PE-786026 | Pin, Dowel |
| 33 | PE-792046 | Screw, Hex Hd. Self-Tapping, 1/4-20 x 1 |
| 34 | PE-792010 | Plug, Pipe |
| 35 | PE-788046 | Gasket |

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.



PEERLESS MODEL 1314

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all MTD manufactured power equipment are available through the authorized service firms listed below. All orders should specify the model number of your unit, parts number, description of parts and the quantity of each part required.

| | |
|-------------------------------------|---------------------------------|
| ALABAMA | BIRMINGHAM |
| Auto Electric & Carburetor Co. | 2625 4th Ave. S. 35233 |
| ARKANSAS | FORT SMITH |
| Mity Mite Motors, Inc. | 4515 South 16th Street 72901 |
| | NORTH LITTLE ROCK |
| Sutton's Lawn Mower Shop | Rt. 4 Box 368. 72117 |
| CALIFORNIA | PORTERVILLE |
| Billious | 75 North D Street 93257 |
| | SAN BERNARDINO |
| Lawn Mower Supply Co | 25608 E. Baseline 92410 |
| | SAN FRANCISCO |
| J.W. Jewett Co. | 981 Folsom St. 94107 |
| COLORADO | DENVER |
| South Denver Lawn Equip. | 527 West Evans 80223 |
| FLORIDA | JACKSONVILLE |
| Radco Distributors | 2403 Market St. 32206 |
| | OPA LOCKA |
| Small Eng. Dist. | 2351 N.W. 147th St. 33054 |
| GEORGIA | EAST POINT |
| East Point Cycle & Key | 2834 Church St. 30344 |
| ILLINOIS | LYONS |
| Keen Edge Co. | 8615 Ogden Ave. 60534 |
| INDIANA | ELKHART |
| Parts & Sales Inc. | 2101 Industrial Pkwy. 46514 |
| IOWA | DUBUQUE |
| Power Lawn & Garden Equip. | 2551 J.F. Kennedy. 52001 |
| LOUISIANA | NEW ORLEANS |
| Suhren Engine Co. | 8330 Earhart Blvd. 70118 |
| MARYLAND | TAKOMA PARK |
| Center Supply Co. | 6867 New Hampshire Ave. 20012 |
| MASSACHUSETTS | SPRINGFIELD |
| Morton B. Collins Co. | 300 Birnie Ave. 01107 |
| MICHIGAN | LANSING |
| Lorenz Service Co. | 2500 S. Pennsylvania. 48910 |
| | MOUNT CLEMENS |
| Power Equipment Dist. | 36463 South Gratiot .. 48043 |
| MINNESOTA | HOPKINS |
| Hance Distributing Inc. | 420 Excelsior Ave. W. 55343 |
| | ST. PAUL |
| Power Tools Inc. | 3771 Sibley Memorial Hwy. 55122 |
| MISSISSIPPI | BILOXI |
| Biloxi Sales & Service, Inc. | 506 Caillavet St. 39533 |
| MISSOURI | KANSAS CITY |
| Automotive Equip. Service | 3117 Holmes St. 64109 |
| | ST. JOSEPH |
| Ross-Frazier Supply Co. | 8th and Monterey 64503 |
| | ST. LOUIS |
| Henzler, Inc. | 2015 Lemay Ferry Rd. 63125 |
| NEW JERSEY | BELLMAWR |
| Lawnmower Parts Inc. | 717 Creek Rd. 08030 |
| | RUTHERFORD |
| Feld Distributor | 28 Glen Rd. 07070 |
| NEW YORK | CARTHAGE |
| Gamble Dist., Inc. | West End Ave. 13619 |

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

| | |
|--------------------------------------|----------------------------------|
| | SYRACUSE |
| GTP Leisure Products Inc. | 420 Marcellus St. 13204 |
| NORTH CAROLINA | GOLDSBORO |
| Smith Hardware Co. | 515 N. George St. 27530 |
| | GREENSBORO |
| Dixie Sales Company | 327 Battleground Ave. 27402 |
| OHIO | CARROLL |
| Stebe's Mid-State Mower Supply | Box 366-71 High St. ... 43112 |
| | CLEVELAND |
| Bleckrie, Inc. | 7900 Lorain Ave. 44102 |
| | WADSWORTH |
| National Central. | 687 Seville Rd. 44281 |
| | YOUNGSTOWN |
| Burton Supply Co. | 1301 Logan Ave. Box 929 .. 44501 |
| OKLAHOMA | ADA |
| Ada Auto Supply | 301 E. 12th St. 74820 |
| | MUSKOGEE |
| Victory Motors, Inc. | 605 S. Cherokee. 74401 |
| | OKLAHOMA CITY |
| Forest Sales Inc. | 1039 NW 63rd St. 73116 |
| OREGON | PORTLAND |
| Kenton Supply Co. | 8216 N. Denver Ave. ... 97217 |
| PENNSYLVANIA | CHESTER |
| Stull Equipment Corp. | 742 W. Front St. 19013 |
| | HARRISBURG |
| EECO Inc. | 4021 N. 6th St. 17110 |
| | PHILADELPHIA |
| Thompson Rubber Co. | 5222-24 N. Fifth St. ... 19120 |
| | PITTSBURGH |
| Bluemont Co. | 11125 Frankstown Rd. 152?? |
| TENNESSEE | KNOXVILLE |
| Master Repair Service. | 2000 Western Ave. ... 37921 |
| | MEMPHIS |
| Memphis Cycle & Supply Co. | 421 Monroe Ave. 38103 |
| American Sales & Service, Inc. | 1922 Lynnbrook. 38116 |
| TEXAS | DALLAS |
| Marr Brothers, Inc. | 423 E. Jefferson. 75203 |
| | FORT WORTH |
| Woodson Sales Corp. | 1702 N. Sylvania 76111 |
| | HOUSTON |
| Bullard Supply Co. | 2409 Commerce St. ... 77003 |
| | SAN ANTONIO |
| Catto & Putty, Inc. | 414 Live Oak 78298 |
| UTAH | SALT LAKE CITY |
| A-1 Engine & Mower Co. | 437 E. 9th St. 84111 |
| VERMONT | BURLINGTON |
| Vermont Hdwe. Co. Inc. | 180 Flynn Ave. 05401 |
| VIRGINIA | RICHMOND |
| RBI Corp. | 963 Myers St. 23260 |
| WASHINGTON | SEATTLE |
| Bailey's Inc. | 1414 14th Ave. 98102 |
| WEST VIRGINIA | CHARLESTON |
| Young's, Inc. | 233 Virginia St., E. ... 25301 |
| WYCONSIN | APPLETON |
| Automotive Supply Co. | 123 S. Linwood Ave. ... 54911 |

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number of unit involved.
2. Date unit was purchased or first put into service.
3. Date of failure.
4. Nature of failure.

Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

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<http://golfingnear.com>

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<http://emailbydomain.com>

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<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>