OWNER'S MANUAL

16 & 18 H.P. GARDEN TRACTORS



142-822A

142-824A

142-826A

142-832A

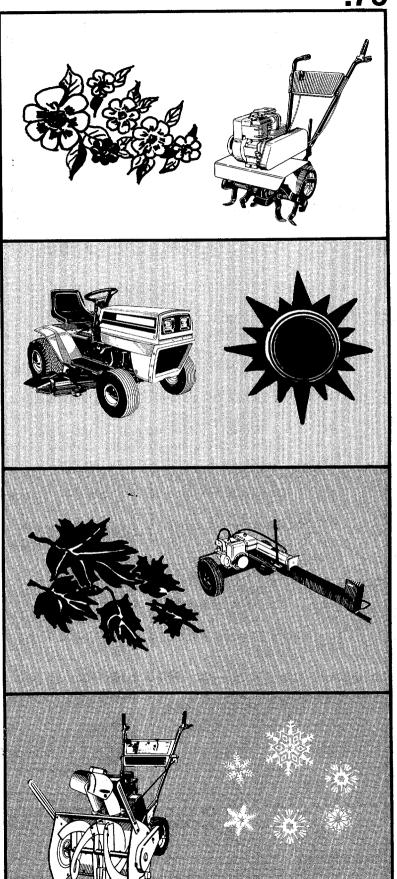
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Important:

Read Safety Rules and Instructions Carefully

Thank you for purchasing an American built product.



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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 the movement of any power equipment unit or attachment are the responsibility of the purchaser. 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.



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.



To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

- It is suggested that this manual be read in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future reference and for ordering replacement parts.
- This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
- Know the controls and how to stop quickly— READ THIS OWNER'S MANUAL.
- 4. 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.
- 5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
- Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
- Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
- To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
- 10. 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 accidently thrown by the mower in any direction and cause injury.
- Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
- Stop the blade(s) when crossing gravel drives, walks or roads.
- Disengage all attachment clutches and shift into neutral before attempting to start engine.
- 14. Disengage power to attachment(s) and stop engine before leaving operating position.
- 15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.

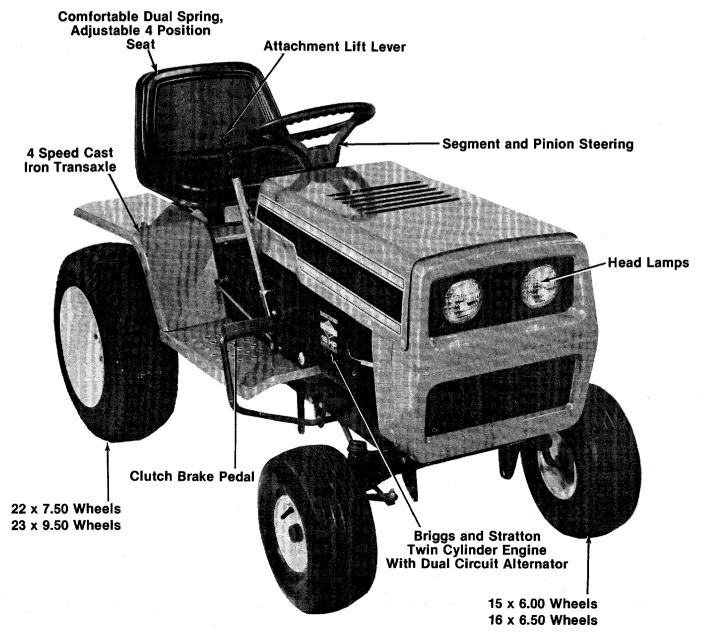
- 16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
- 17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, 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.
- 18. Disengage power to attachment(s) when transporting or not in use.
- 19. 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.
- Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
- Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
- 22. Stay alert for holes in terrain and other hidden hazards.
- 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(s) 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 vehicle while in operation.
- 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.
- 27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual
- 28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.

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- 29. 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.
- 30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
- 31. 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.
- 32. Do not change the engine governor settings or overspeed the engine.
- 33. 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.
- Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
- 35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up.

KNOW YOUR TRACTOR



ASSEMBLY



This unit is shipped WITHOUT GAS-OLINE or OIL. After assembly, see operating section of this manual for proper fuel and engine oil recommendations.

The garden tractor is packed and shipped in one container and is fully assembled except for the steering wheel, seat and battery.

BATTERY INFORMATION



- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*
- B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.
 - *Always shield eyes, protect skin and clothing when working near batteries.



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

KEEP BATTERIES OUT OF THE REACH OF CHILDREN.

ACTIVATING THE BATTERY



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

- 1. Place the battery to be filled on a workbench. Never activate a battery in the unit.
- 2. Slip one end of battery drain tube on the battery manifold.
- 3. Remove the fill caps from all cells.
- 4. Fill each cell carefully using 1.265 specific gravity electrolyte. Fill each cell to the top of the separators. Do not overfill.
- 5. Let the battery sit for 20 minutes to allow the chemical reaction to take place.
- 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.



An excessive rate of charge will damage the battery.

- Check the level of electrolyte. Adjust level to bottom of split ring if necessary with electrolyte.
- 8. Replace fill caps.



CAUTION

Once the battery has been activated, never add anything except distilled water or pure 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



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.

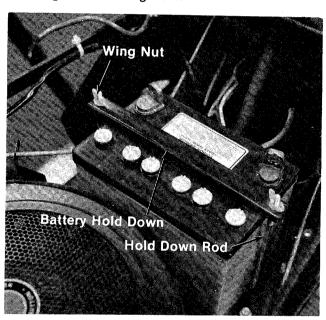


FIGURE 1.

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.

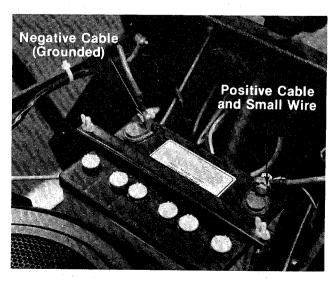


FIGURE 2.

- 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.
- 5. Route the battery drain tube down beside the oil drain pipe on the right side of the tractor. Slip the end of the drain tube into the mounting clamp provided in hardware pack. Secure the mounting clamp to the tractor by placing the clamp over the hex bolt and nut which hold the engine pulley belt guard to the frame. Secure in place with hex lock nut provided in hardware pack. See reference numbers 36 and 46 on page 26.



The vented battery allows any gases or liquid from the battery to be drained 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.

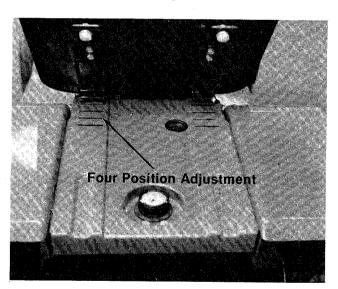


FIGURE 3.

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

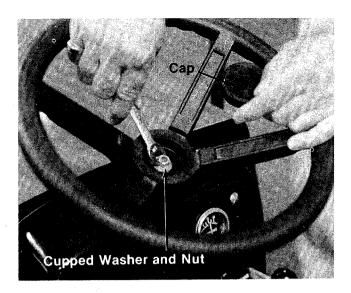


FIGURE 4.

TIRE PRESSURE

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

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 5.



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 5. 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.

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 5.

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 5.

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 5.

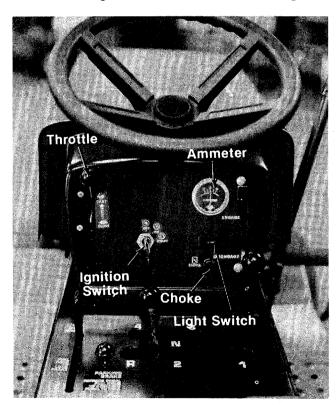


FIGURE 5.

Gasoline Tank

The gasoline tank is located under the tractor seat. Tip the seat forward to fill the tank. See figure 6.

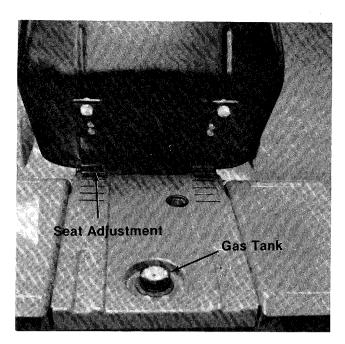


FIGURE 6.

Gear Shift Lever

The transaxle has four forward gears, neutral and reverse. Do **not** shift through the gears on the transaxle as you would in an automobile. Preselect the gear appropriate for the job you are doing. See figure 7.

You must depress the clutch-brake pedal and come to a complete stop before shifting gears.

Clutch-Brake Pedal

The clutch-brake pedal is located on the right side of the tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake.



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 figure 7.

Hill Hold Brake Lever

When stopping on a hill, hold the lever back while you release the clutch-brake pedal until the tractor begins to move, then release the lever. This lever prevents the tractor from rolling down the hill while releasing the clutch. See figure 7.

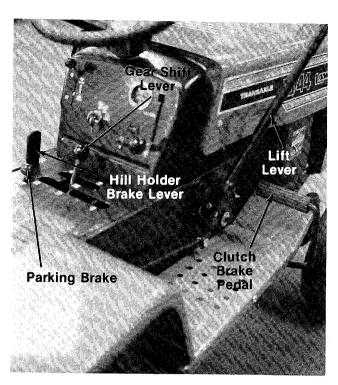


FIGURE 7.

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 8.

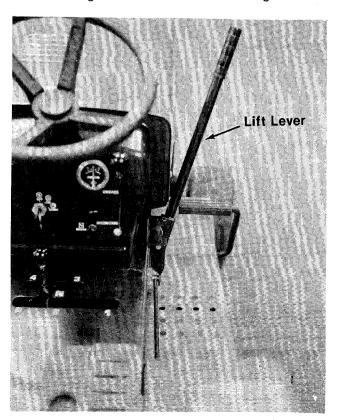


FIGURE 8.

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 9.



The PTO lever **must** be in the disengaged position (down) when starting the engine and when shifting into reverse.



FIGURE 9.

OPERATION

CAUTION

- 1. Keep all shields in place.
- 2. Before leaving operator's position:
 - a. Shift transmission to neutral
 - b. Set parking brake
 - c. Disengage attachment clutch
 - d. Shut off engine
 - e. Remove ignition key
- 3. Wait for all movement to stop before servicing machine.
- 4. Keep people and pets a safe distance away from machine.
- 5. Look to the rear before backing up.

PREPARATION



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.

1. Put oil in engine crankcase, using 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.

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—3 Pints.

2. Fill the gasoline tank with clean, fresh, regular grade automotive gasoline.

OPERATING THE TRACTOR



This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the PTO lever is in the disengaged position. In addition, the PTO lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.



Do not operate the rider if the interlock system is malfunctioning because it is a safety device, designed for protection.

- 1. Place the PTO lever in the disengaged (down) position.
- 2. Pull out the choke control. A warm engine requires less choking.

- 3. Set the throttle control in the FAST position.
- Depress the clutch-brake pedal and hold it down.
- 5. Turn the ignition key to the START position. After the engine starts, release the key.
- 6. With the clutch-brake pedal depressed, move the gear shift lever into one of the forward gears.
- 7. Slowly release the clutch-brake pedal and the tractor will move forward.
- 8. When stopping, depress the clutch-brake pedal. This will apply both the clutch and the brake.
- 9. To shut off the engine, turn the ignition key to the left to the OFF position.



IMPORTANT

If you strike 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.

ADJUSTMENTS

SEAT ADJUSTMENT

The tractor seat 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. Refer to figure 6.

REAR WHEEL TRACK 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, the outside of the rear wheels is even with the outside of the front wheels.

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

BRAKE ADJUSTMENT

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and 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.

- 1. Loosen the lock nut. See figure 10.
- 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.

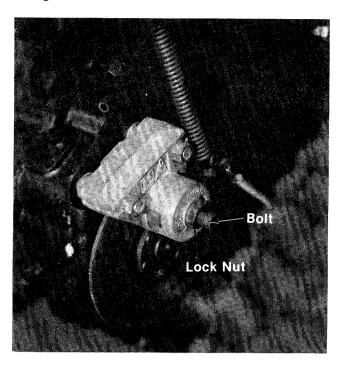


FIGURE 10.

CARBURETOR ADJUSTMENTS



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.

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

Refer to separate engine manual for carburetor adjustment information.

LUBRICATION

STEERING GEARS

Wipe off the old grease and dirt. After every 25 hours of operation place an automotive multipurpose grease in the teeth of the segment and pinion gears. See figure 11.

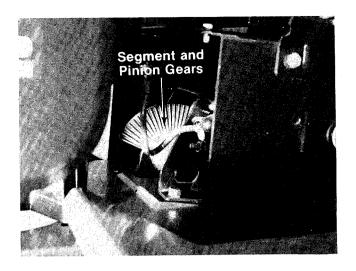


FIGURE 11.

TRANSAXLE

Check the oil level four times a year. Lubricant should be at the point of overflowing. Use E.P. 90 oil. Drain and refill every two years. Capacity 4 pints. See figure 12.

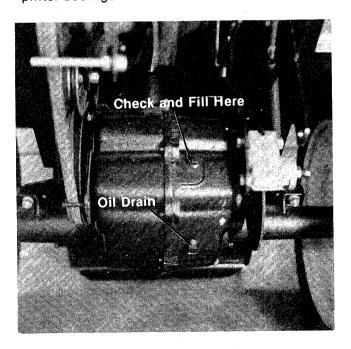


FIGURE 12.

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

TROUBLE SHOOTING

Refer to the chart on page 16 for trouble shooting engine problems.

CRANKCASE OIL

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

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 13.

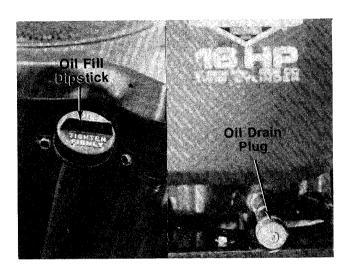


FIGURE 13.

After the first two hours of operating a new engine, drain the oil (see figure 10) 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. 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 9 for quantity and type of oil.

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 14.

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.



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

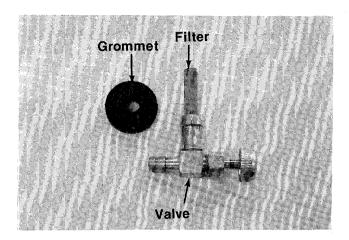


FIGURE 14. WHEEL ALIGNMENT

The front wheels should toe-in approximately 1/8". Measure the distances A and B on the front wheels. See figure 15.



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 lock nut, 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 16.

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

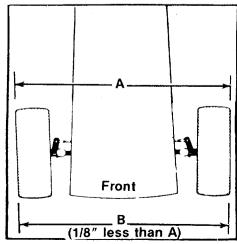


FIGURE 15.

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 incorrectly, 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.

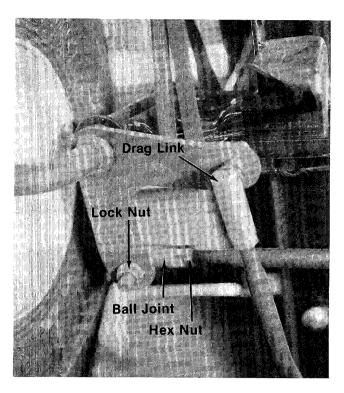


FIGURE 16.

ENGINE

Refer to separate engine manual for all engine maintenance procedures.

MAINTENANCE OF BATTERY

- 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.
- 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.
- 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. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
- 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.
^	



CAUTIO

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
- Loose hold downs and/or corroded connections
- 5. Excessive loads
- 6. Battery electrolyte substitutes
- 7. Freezing of electrolyte



These failures do not constitute warranty.

BATTERY REMOVAL OR INSTALLATION



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.



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

INSTALLATION OF TIRE TO RIM



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.

BELT REMOVAL AND REPLACEMENT Changing the Front Drive Belt

- 1. If a cutting deck is attached to your tractor, remove it. Remove the 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 17.

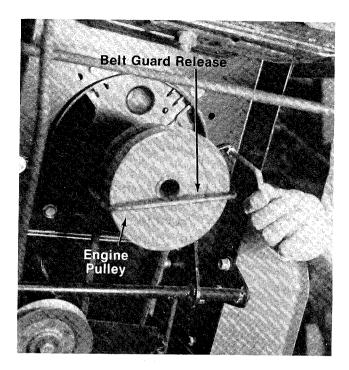


FIGURE 17.

4. Swing the belt guard forward towards the front of the tractor. See figure 18.



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

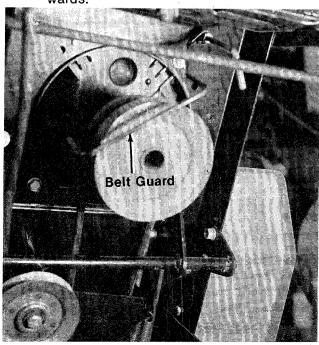


FIGURE 18.

- 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 19.
- 6. 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.
- 7. Test the operation of the tractor to assure the belt has been installed correctly.

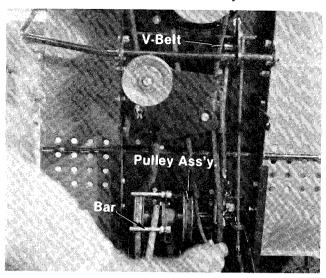


FIGURE 19.

Removing the Rear (Clutch) Belt

- 1. If a cutting deck is attached to your tractor, remove it. Remove the 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 20.

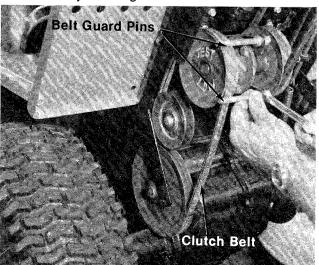


FIGURE 20.

Take off the idler assembly by removing the center bolt.



Be sure the belt clip is reassembled the same way. See figure 21.

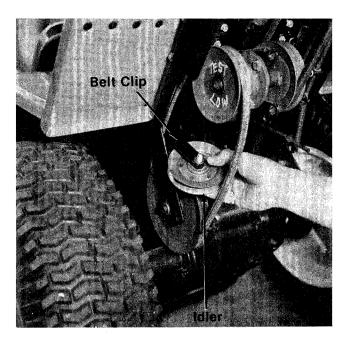


FIGURE 21.

- 6. Remove the center bolt and slide the transaxle pulley off. See figure 22.
- 7. Reassemble in reverse order with a new V-belt.

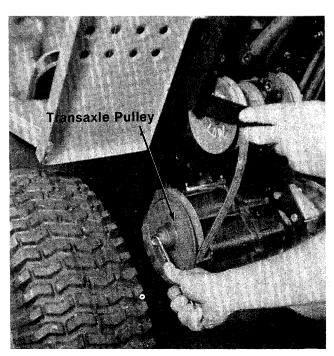


FIGURE 22.

OFF-SEASON STORAGE

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

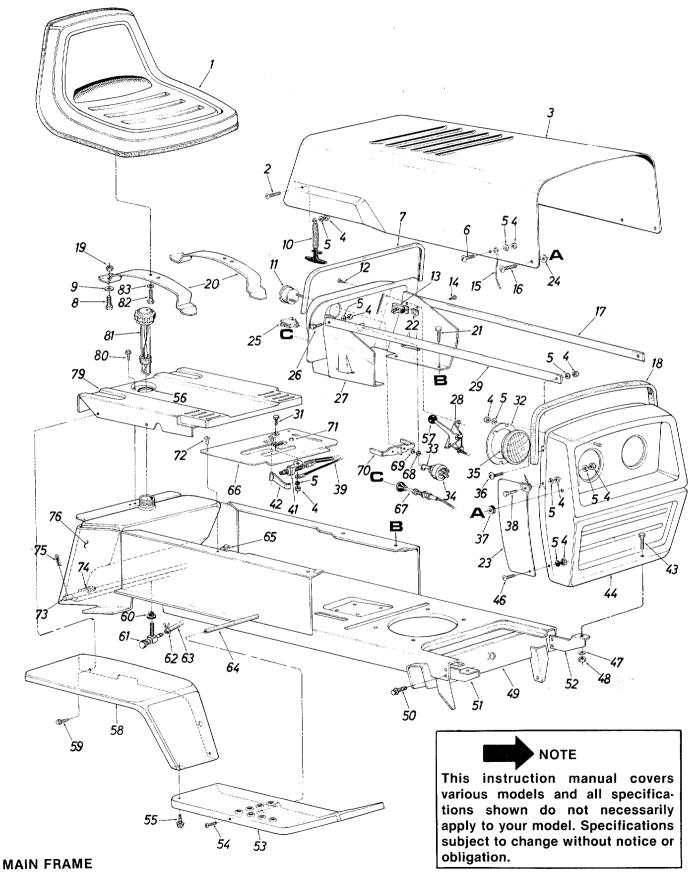
- Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in the carburetor is exhausted.
- 2. Drain all the oil from the crankcase (this should be done after the engine has been operated and 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. Follow battery storage instructions on page 13.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incor- rectly	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 7½ amp. fuse ¼ x 1¼ " Ig. 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 electrican'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	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, either engine alternator or trickle charger. Trickle Charger. Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1/2 amp. Alternator (dual or single circuit) 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.
		Red Wire Diode Tube (Batt.) To Alternator Black Wire Polorized Plug
		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.
	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 (if separate control) for starting.

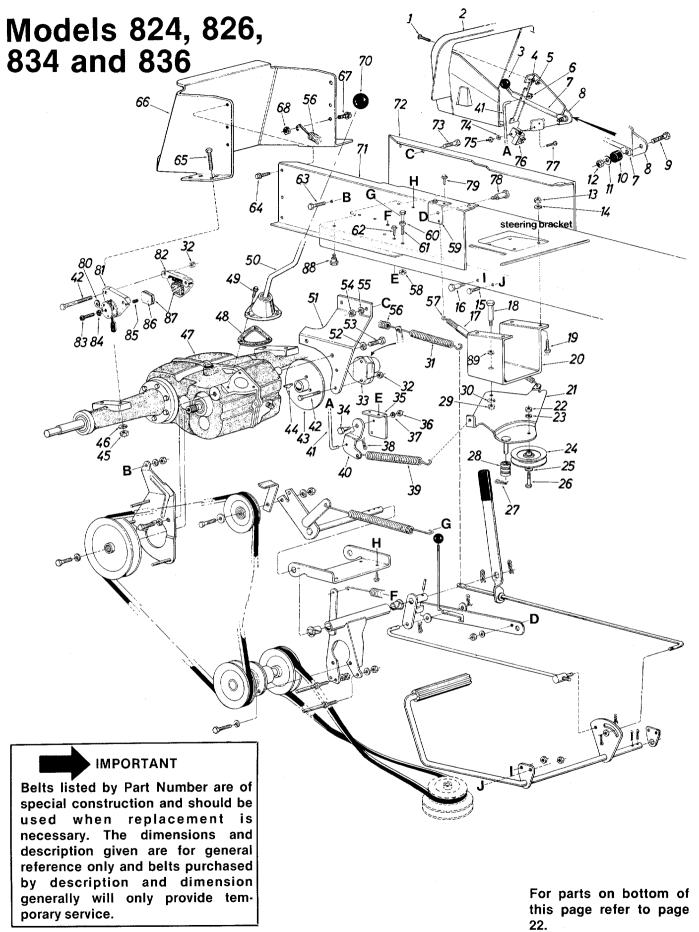
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

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 adpaters, 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 Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission gear. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).



PARTS LIST FOR MAIN FRAME MODELS 824, 826, 834 and 836

	824, 826, 834 and 836							
REI NO	. NO. CODE		NEW PART		PART (COLOR CODE	DESCRIPTION	NEW
1 2		Seat Assembly Truss Mach. Scr. 1/4-20 x .50"		42	732-0405	l	Switch Actuator Spring	
3 4	13808 —462 712-0287	Lg.* Hood Hex Nut ¼-20 Thd.*		43 44	710-0118 13801 - 14226	_462	Lever Hex Scr. 5/16-18 x .75" Lg.* Grille Ass'y. (Painted) Grille Ass'y. (Chrome)	A
5 6	736-0329 710-0286	L-Wash. 1/4" Scr. * Truss Mach. Scr. 1/4-20 x .50"		46	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.*	
7 8	731-0423 710-0689	Lg.* Vinyl Molding Strip Hex Nylon Scr. ½-13 x		47 48 49	736-0119 712-0267 13820		L-Wash. 5/16" Scr.* Hex Nut 5/16-18 Thd.* Lower Frame Ass'y.	
9	736-0192	.75" Lg. FI-Wash50" I.D. x 1.00" O.D. x .090		50	710-0600		Hex Thd. Rolling Scr. 5/16-24 x .50" Lg.	
10	723-0296 725-0119	Hood Latch Ass'y. Ammeter		51 52 53	13862 13863 13828 -	-452	Grille Mount Brkt.—R.H. Grille Mount Brkt.—L.H. Running Board—R.H.	
12	710-0351 725-0459	Hex Tap Scr. #10 x .50" Lg.* Circuit Breaker 8 Amp.			13827 –	452	Running Board—L.H. (Not Shown)	
14 15 16	710-0351 727-0199 710-0255	Hex Tap Scr. #10 x .50" Lg.* Hood Stop Truss Mach. Scr. 1/4-20 x .75"		54 55	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	
17	749-0220	Lg.* Grille Positioning Rod		56	735-0179		Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. Grommet (Gas Tank Neck)	
18	722-0137 712-0206	PVC Foam Strip ½ x 1.00" x 12.5" Lg. Hex Nut ½-13 Thd.*		57 58		-462	Knob (Throttle Control) Fender Ass'y.—R.H.	
20 21	13123 710-0599	Seat Spring Hex Thd. Rolling Scr. ¼-20 x		59	13809 – 710-0600	1	Fender Ass'y.—L.H. (Not Shown) Hex Thd. Rolling Scr. 5/16-24	
22 23	712-0344 14748 —462	.50" Lg. Speed Nut #10Z		60	735-0149		x .50" Lg. Bushing (Gas Tank)	
23	14749 —462 14749 —462	Grille Side Panel—R.H. Grille Side Panel—L.H. (Not Shown)	N N	61 62 63	751-0171 726-0183 751-0173	ļ	Fuel Shut-Off Valve Hose Clamp 3/8" Gas Line 60" Lg.	
24 25	736-0173 725-0634	FI-Wash. ¼ " I.D. Light Switch		64 65	738-0435 726-0156		Running Board Rod Speed Nut	
26 27	710-0166	Truss Hd. Scr. ¼-20 x 1.00" Lg.* Dash Panel Ass'y.		66 67 68	14466 746-0394	1	Transmission Cover Ass'y. Choke Control Comp.	
28 29	746-0354 749-0220	Throttle Control Comp. Grille Positioning Rod		69 70			Part of Ref. No. 11 Part of Ref. No. 11 Part of Ref. No. 11	
30 31	751-0272 710-0289	Fuel Line Connector (Not Shown) Hex Bolt 1/4-20 x .50" Lg.*		71 72	731-0405 710-0473		Snap Bushing Truss Hd. Scr. ¼-20 x .75"	
32 33	09960 725-0201	Head Lamp Retainer Ignition Key		73 74	738-0482 722-0135		Lg. Hitch Rod PVC Foamstrip ½ " x 1.00"	
34 35 36	725-0267 725-0222 710-0258	Ignition Switch Head Lamp		75	714-0149		x 2.00" Internal Cotter Pin	
37	735-0144	Hex Scr. ¼-20 x .62" Lg.* Rubber Wash50" I.D. x 1.00 O.D. x .25 Thk.		76 79 80	751-0259 13814 710-0600	- 9	Gas Tank Seat Plate	
38	710-0286	Truss Mach. Scr. 1/4-20 x .50" Lg.*		81	723-0346		Hex Thd. Rolling Scr. 5/16-24 x .50" Lg. Gas Gauge	-
39 41	725-0764 725-0268	Reverse Lockout Wire Harness		82	710-0726	.	Hex Wash. Hd. AB-Tap Scr. 5/16 x .75" Lg.	
71	120-0200	Safety Switch		83	736-0119		Wash. 5/16" Šcr.*	



PARTS LIST FOR DRIVE SYSTEM MODELS 824, 826, 834 and 836

	824, 826, 834 and 836							
REF NO.	NO. CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-0286	Truss Mach. Scr. 1/4-20 x .50"		47	_		Transaxle (See page 28 for	
١	120.42	Lg.*		40			Breakdown)	
2	13843	Dash Panel Ass'y.		48	_		Part of Ref. No. 47	
3	720-0165	Knob—Blade Clutch		49			Part of Ref. No. 47	
4	736-0329	L-Wash. 1/4" Scr.*		50	-		Part of Ref. No. 47	
5	712-0287	Hex Nut 1/4-20 Thd.*		51	13012		Transaxle Support	
6	726-0106	Push Cap 1/4" Rod	İ	52	736-016		L-Wash. 3/8" Scr.*	
7	747-0157	Blade Clutch Lever		53	710-02		Hex Scr. 3/8-16 x .75" Lg.*	
8	13950	Deck Clutch Control Brkt.		54	712-079		Hex Nut 3/8-16 Thd.*	
9	710-0106	Hex Scr. ¼-20 x 1.25" Lg.*		55	736-016		L-Wash. 3/8" Scr.*	
10	735-0126	Rubber Wash330 I.D. x .87		56	732-019		Ext. Spring—Brake Return	
11	736-0173	FI-Wash. 1/4" I.D. x .75" O.D.		57	732-030	08	Ext. Spring—Deck Idler	
12	712-0107	X .057		50	710.00	^7	Return	
13		Hex Cent. L-Nut 1/4-20 Thd.		58	712-026	0/	Hex Nut 5/16-18 Thd.*	
14	712-0267 736-0119	Hex Nut 5/16-18 Thd.*		59	13833		Parking Brake Cam Mtg.	
15	710-0201	L-Wash. 5/16" Scr.*	ł		740.000	^=	Brkt.	
16	738-0143	Hex Scr. 3/8-16 x .62" Lg.* Shld. Scr. ½" Dia. x .335 Lg.		60	712-026		Hex Nut 5/16-18 Thd.*	
10	730-0143	3/8-16		61 62	710-044		Hex Scr. 5/16-18 x 1.50" Lg.*	
17	731-0483	Convoluted Conduit .50 I.D. x		02	710-059	99	Hex Thd. Rolling Scr. 1/4-20 x	
' '	731-0403	4" Lg.		63	710-02	16	.50" Lg.	
18	738-0155	Shld. Scr. 7/16 Dia. x .16"		64	710-02		Hex Scr. 3/8-16 x .75" Lg.* Hex Thd. Rolling Scr. 5/16-24	
1.0	7000100	5/16-18		04	7 10-000	00	x .50" Lg.	
19	710-0376	Hex Scr. 5/16-18 x 1.00" Lg.*		65	710-034	1.1	Hex Scr. 3/8-16 x 1.50" Lg.*	ļ
20	13826	Idler Mtg. Brkt.—Deck		66	13813	77	Hitch Plate	1
21	13893	Idler Brkt. Ass'y.	ĺ	67	710-060	าา	Hex Thd. Rolling Scr. 5/16-24	
22	712-0798	Hex Nut 3/8-16 Thd.*		"	/ 10 000	·	x .75" Lg.	
23	736-0105	Belleville Wash. 3/8" I.D.		68	712-012	23	Hex Nut 5/16-24 Thd.*	
24	756-0293	4"-"V" idler Pulley		70	720-016		Knob-Transaxle	
25	736-0300	FI-Wash. 3/8" I.D.		71	13848		Side Panel Upper Frame—	
26	710-0342	Hex Scr. 3/8-16 x 1.25" Lg.*					R.H.	
27	714-0104	Hairpin Cotter 5/16" Rod		72	13847		Side Panel Upper Frame—	
28	748-0278	Spacer					L.H.	[
29	712-0267	Hex Nut 5/16-18 Thd.*		73	710-021	16	Hex Scr. 3/8-16 x .75" Lg.*	
30	736-0119	L-Wash. 5/16" Scr.*		74	736-014	17	Ext. L-Wash. #10 Scr.*	
31	732-0260	Ext. Spring—Brake Rod		75	712-012	21	Hex Nut #10-24 Thd.*	
32	712-0375	Hex Cent. L-Nut 3/8-16 Thd.		76	725-046		Safety Switch (Deck)	
33	761-0178	Disc Brake Caliper Ass'y.		77	710-047	73	Truss Mach. Scr. #10-24 x	
34	738-0155	Shld. Scr. 7/16" Dia. x .16"					.50" Lg.*	
25	10000	Lg. 5/16-18		78	738-015	5	Shld. Scr. 7/16" Dia. x .16"	
35	13833	Parking Brake Cam Mtg.		70	740 050	,	Lg. 5/16-18	
36	712-0267	Brkt.		79	710-059	19	Hex Thd. Rolling Scr. 1/4-20 x	
37	736-0119	Hex Nut 5/16-18 Thd.* L-Wash. 5/16" Scr.*		00	шило	7764	.50" Lg.	
38	714-0104	Hairpin Cotter 5/16" Dia.		80 81	HU-20-9		Washer	
39	732-0384	Ext. Spring—Deck Control		82	HU-37-7 HU-16-1		Housing with Lever & Pin	
40	13887	Deck Control Pivot Brkt.		83			Anvil	
41	747-0307	Deck Control Rod	ļ	84	HU-39-1 HU-37-1		Pin, Adjuster	
42	710-0937	Hex Scr. 3/8-16 x 2.50" Lg.*		85	HU-39-1		Nut Pin, Actuator	
43	761-0142	Hub & Disc Ass'y. (For	1	86	HU-25-1			
	1010172	Brake)		87	HU-24-1		Backing Plate Lining	
44	714-0137	Hi-Pro Key 3/16 x 3/4" Lg.		88	738-025		Shid. Bolt .50" Dia. x .25"	
45	712-0798	Hex Nut 3/8-16 Thd.*		55	, 00-020		Lg. 3/8-16 Thd.	
46	736-0169	L-Wash. 3/8" Scr.*		89	736-014	.1	Wave Washer	
L		-						

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

(462-Red Flake)

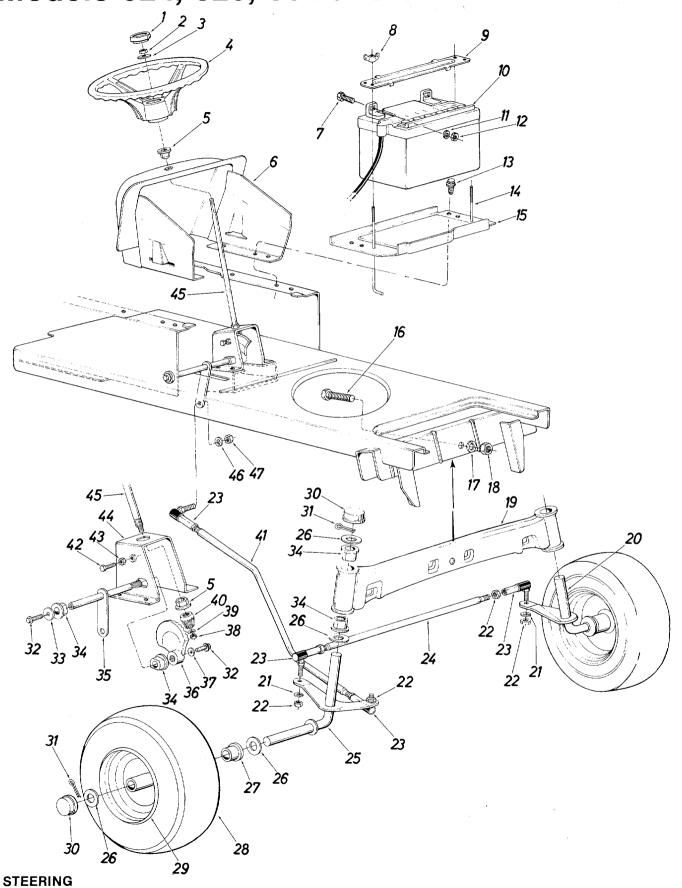
When ordering parts if color is important, use the appropriate color code listed above. (e.g. 12369—462—Red Flake.)

Models 824, 826, 834 and 836 For parts on top of this page refer to page 20. steering bracket ر ا ا 55-54 53 D 52 29 27 39 *3*4

DRIVE SYSTEM

PARTS LIST FOR DRIVE SYSTEM MODELS 824, 826, 834 and 836

REF. NO.	PART COLO		NEW PART		PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	736-0169	L-Wash. 3/8" Scr.*		32	712-079	8	Hex Nut 3/8-16 Thd.*	
2	712-0798	Hex Nut 3/8-16 Thd.*		33	736-016	9	L-Wash. 3/8" Scr.*	
3	13819	Belt Guard (Clutch Idler)		34	754-024	15	"V"-Belt 1/2 x 59" Lg.	
4	13815	Clutch Brkt. Ass'y.					(Polyester)	
5	736-0169	L-Wash. 3/8" Scr.*	ŀ	35	711-069)6	Stùd 3/8-16 x 3.62" Lg.	
6	712-0798	Hex Nut 3/8-16 Thd.*					Special	
7	732-0384	Ext. Spring (Drive Idler)		36	756-032		Jack Shaft Ass'y.	
8	720-0166	Knob (Parking Brake)		37	736-011	9	L-Wash. 5/16" Scr.*	
9	13872	Hand Brake Lever		38	710-019	8	Hex Sem Scr. 5/16-18 x .75"	
10	714-0117	Hairpin Cotter 5/8" Dia.					Lg.*	
11	747-0304	Brake Rod		39	754-024	4	"V"-Belt 1/2 x 40" Lg.	
12	13832	Parking Brake Cam					(Kevlar)	
13	736-0275	Fl-Wash. 5/16" Scr.	İ	40	741-029		Nyliner 5/8" I.D. x .88" Lg.	
14	712-0267	Hex Nut 5/16-18 Thd.*		41	732-015		Ext. Spring (Jack Shaft)	
15	736-0275	FI-Wash. 5/16" Scr.]]	42	710-059	19	Hex Thd. Rolling Scr. 1/4-20 x	
16	714-0145	Hairpin Cotter 3/8" Rod					.50" Lg.	
17	714-0474	Cotter Pin 1/8" Dia. x 1.00"		43	13871		Clutch-Idler Horn Ass'y.	
40	40050	Lg.*		44	715-010	18	Spring Pin Spiral ¼ " Dia. x	
18	13859	Clutch Rod Brg. Brkt.				_	1.00" Lg.	
19	13856	Clutch—Brake Pedal Ass'y.		45	757-030	10	Parking Brake Link	
20	712-0375	Hex Cent. L-Nut 3/8-16 Thd.*		46	13822		ldler Mtg. Brkt.—Drive	
22	756-0328	Engine Pulley 4.75 & 5.56		47	756-029		4" "V"-Idler Pulley	
24 25	712-0375	Hex Cent. L-Nut 3/8-16 Thd.*		48	736-030		FI-Wash. 3/8" I.D.	
25	714-0115	Cotter Pin 3/32" Dia. x .75"		49	710-034		Hex Scr. 3/8-16 x 1.75" Lg.*	
26	711 0100	Lg.*		50	736-016		L-Wash. 3/8" Scr.*	
26 27	711-0198 747-0306	Pivot Bushing		51	710-021		Hex Scr. 3/8-16 x .75" Lg.*	
28	747-0306 735-0196	Brake Cam Rod		52	756-033	2	"V"-Pulley 7.0" O.D.	
29	735-0196 714-0145	Foot Pad			700.040	_	(Transaxle)	1
30	736-0101	Hairpin Cotter 3/8" Rod FI-Wash. 3/8" I.D. x 1.00"		53	736-016		L-Wash. 3/8" Scr.*	İ
30	7 30-0 10 1	O.D. x .030		54	710-018	u	Hex Scr. 3/8-24 x .75" Lg.*	
31	13823	Jack Shaft Mtg. Brkt. Ass'y.		55	13829		Belt Guard Ass'y.	
<u> </u>	10020	Juden Shart Willy, Birt. Ass y.				<u></u>		

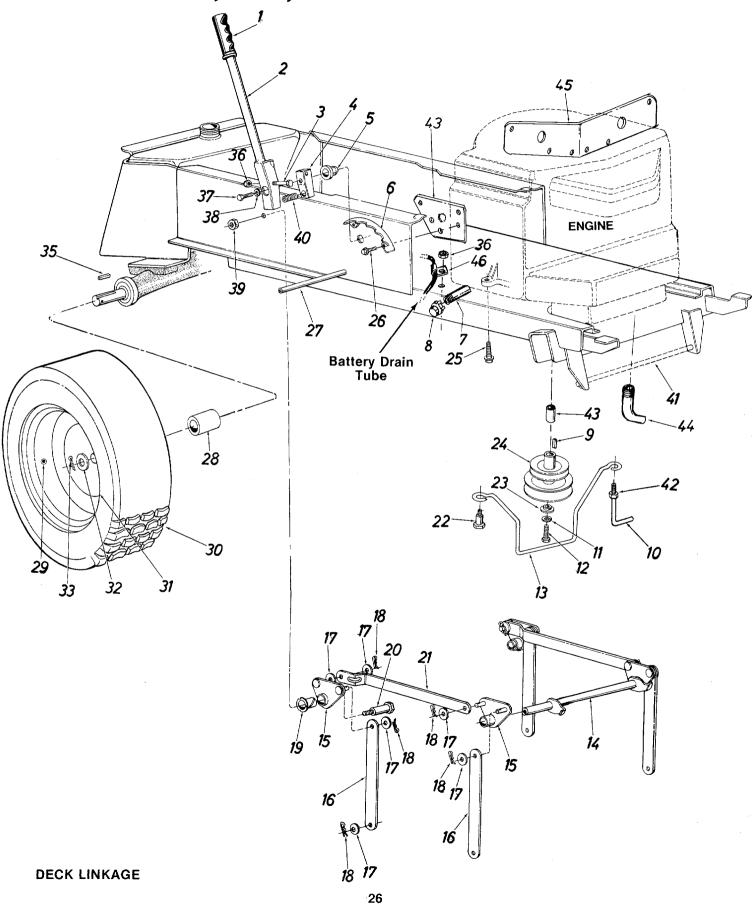


PARTS LIST FOR STEERING MODELS 824, 826, 834 and 836

	731-0220		DESCRIPTION	PART	REF.	NO.	COLOR	DESCRIPTION	NEW PART
	/ 3 -UZZU		Steering Wheel Cap	1	27	**		Flange Bearing	1 7111
2	712-0158		Hex Cent. L-Nut 5/16-18 Thd.		28	**		Front Wheel Ass'y. Comp.	
2	736-0275		FI-Wash. 5/16" I.D. x 1.00"		29	**		Front Wheel Rim Only	
,			O.D. x .057		30	731-048	84	Dust Cover	
4	731-0356		Steering Wheel		31	714-012		Cotter Pin 5/32" Dia. x 1.00"	
	741-0225		Plastic Hex Bearing 5/8" I.D.		٠.		• •	Lg.*	
	13843		Dash Panel Ass'y.		32	710-018	in.	Hex Scr. 3/8-24 x .75" Lg.	
	710-0258		Hex Scr. 1/4-20 x .62" Lg.		<u> </u>	7 10 0 10		Grade 5	
	712-0113		Wing Nut Plastic 1/4-20 Thd.		33	736-013	3	Fl-Wash. 3/8 I.D. x 1.25 O.D.	
9	12614		Battery Hold Down		•	, , , , , , ,		x .090	
10	725-0453		12-V Battery		34	741-019	9	Flange Double "D" Brg753	
	736-0329		L-Wash. 1/4" Scr.*		•	, 11 0 10		I.D.	
	712-0287		Hex Nut 1/4-20 Thd.*		35	12749		Steering Arm Shaft Ass'y.	
13	710-0599	İ	Hex Thd. Rolling Scr. 1/4-20	l	36	748-023	6	Side Gear—Steering	
ĺ			x .50" Lg.		37	736-010		Bell-Wash. 3/8" I.D.	
14	711-0222		Battery Hold Down Rod		38	712-023		Hex Cent. L-Nut 5/16-24 Thd.	
15	13379		Battery Plate		39	736-026		Fl-Wash. 5/16" I.D. x .62 O.D.	
16	710-0533		Hex Scr. 5/8-18 x 2.50" Lg.*				•	x .059	
17	736-0158		L-Wash. 5/8" Scr.*		40	748-023	7	Pinion Gear—Steering	
18	712-0923		Hex Cent. L-Nut 5/8-18 Thd.		41	747-030		Drag Link	
19	13865		Front Pivot Bar Ass'y.		42	710-067		Hex Nylon Scr. 3/8-16 x 1.25"	.
20	13839		Front Axle Ass'y.—L.H.		- '-		"	Lg.	1
21	736-0169		L-Wash. 3/8" Scr.*	1	43	712-079	8	Hex Nut 3/8-16 Thd.*	
22	712-0241		Hex Nut 3/8-24 Thd.*		44	12850		Steering Gear Sup. Ass'y.	
23	723-0156		Ball Joint Ass'y.		45	738-031	7	Steering Shaft	
24	747-0301		Tie Rod	ļ	46	736-0169		L-Wash. 3/8" Scr.*	
	13838		Front Axle Ass'y.—R.H.	ĺ	47	712-024		Hex Nut 3/8-24 Thd.*	
26	736-0316		FI-Wash780 I.D. x 1.59 O.D.					110% 1431 0/0 24 11Id.	

**FRONT WHEEL CHART

Description	16 x 6.50—Part No.	15 x 6.00—Part No.
Wheel Assembly Comp.	734-1006	734-0960
Tire Only	734-0526	734-0498
Rim Only	734-0787	734-0961
Bearing	741-0312	734-0293
Air Valve	734-0255	734-0255



PARTS LIST FOR DECK LINKAGE MODELS 824, 826 834 and 836

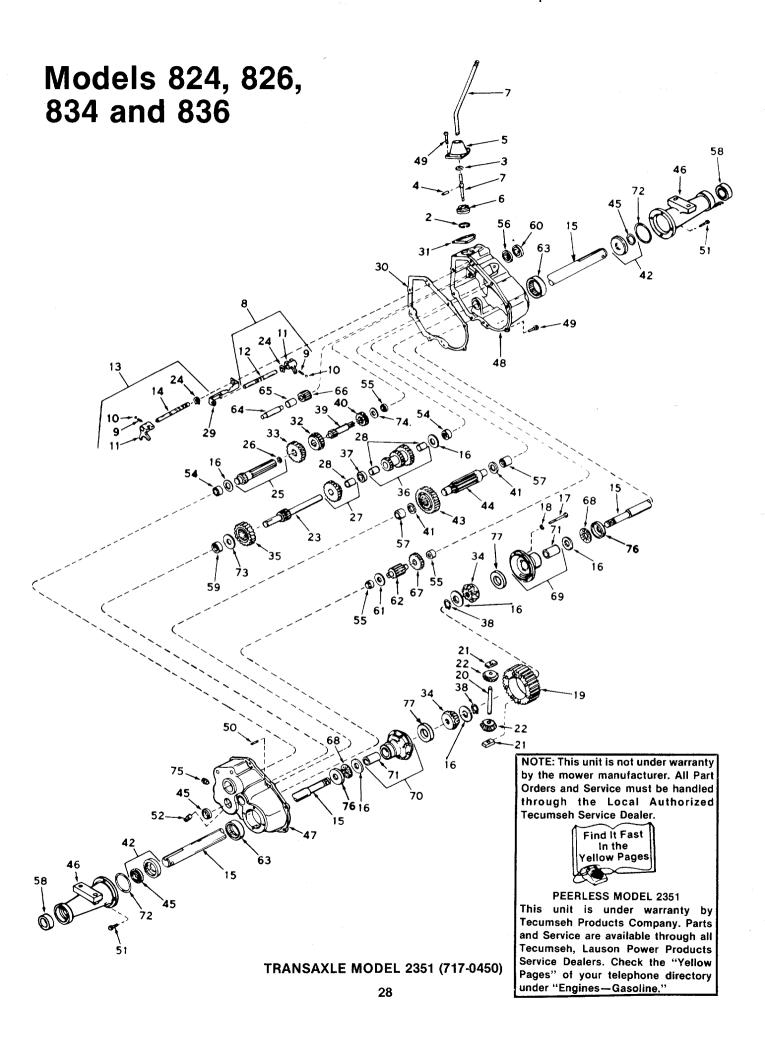
REF. NO.	PART COLOR NO. CODE	DESCRIPTION	NEW PART		PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0157	Grip		25	710-050	2	Hex Wash. Hd. Scr. 3/8-16 x	
2	14233	Lift Handle Ass'y.					1.25" Lg.	
3	710-0442	Hex Scr. 5/16-18 x 1.50" Lg.*		26	710-060	0	Hex Thd. Rolling Scr. 5/16-24	
4	748-0274	Lift Shaft Drive					x .50" Lg.	
5	741-0225	Plastic Hex Brg. 5/8" I.D.		27	738-043		Running Board Rod	
6	14231	Index Brkt. Deck Lift		28	750-049	0	Spacer 1.0" I.D. x 1.25"	
7	737-0164	Pipe Nipple 3/8-18 Npt.					O.D. x 2.12" Lg.	ĺ
8	737-0143	Pipe Cap 3/8-18 Npt.		29	734-025	5	Air Valve	
9	714-0118	Sq. Key 1/4" x 1/4" x 1.50"		30	**		Rear Wheel Ass'y. Comp.	
		Lg.		31	**		Rear Wheel Rim Only	
10	747-0216	Belt Guard Lock Pin		32	736-025		Washer 1 x 1.63 x .09	
11	736-0171	L-Wash. 7/16" Scr.*		33	714-014	2	Cotter Pin 3/16" Dia. x	
12	710-0757	Hex Scr. 7/16-20 x 1.50" Lg.					1.50" Lg.	
13	747-0299	Belt Guard			712-019	3	Hex Cone Nut 3/8-24 Thd.	
14	13889	Lift Shaft Ass'y.		35	714-014	6	#27 Woodruff Key 1/4 x	
15	13895	Lift Pivot Brkt. Ass'y.					2.12 H.T.	
16	13791	Link (Deck)			712-015	8	Hex Cent. L-Nut 5/16-18 Thd.	
17	736-0192	FI-Wash. 1/2" I.D. x 1.00"		37	710-023	7	Hex Scr. 5/16-24 x .62" Lg.*	
		O.D. x .090		38	736-011	9	L-Wash. 5/16" Scr.*	
	714-0145	Hairpin Cotter		39	712-018	1	Hex Top L-Nut 3/8-16 Thd.	
	741-0295	Nyliner 5/8" I.D. x .88" Lg.		40	732-0369	9	Compression Spring	
20	738-0445	Shld. Scr. 5/8" Dia. x .96"		41	738-039	2	Deck Connecting Rod	
		Lg. 3/8-16		42	712-012	3	Hex Nut 5/16-24 Thd.*	
21		Connecting Link		43	14170		Index Brkt. Reinforcement	
22	738-0296	Shld. Scr437 Dia. x .268 Lg.					Plate	
		5/16-18		44	751-0275	5	Exhaust Pipe	
	748-0277	Step Wash. (Special)		45	14282		Heat Shield	
24	756-0328	Two-Step Engine Pulley 4.75" & 5.56						
			·					

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."



**REAR WHEEL CHART

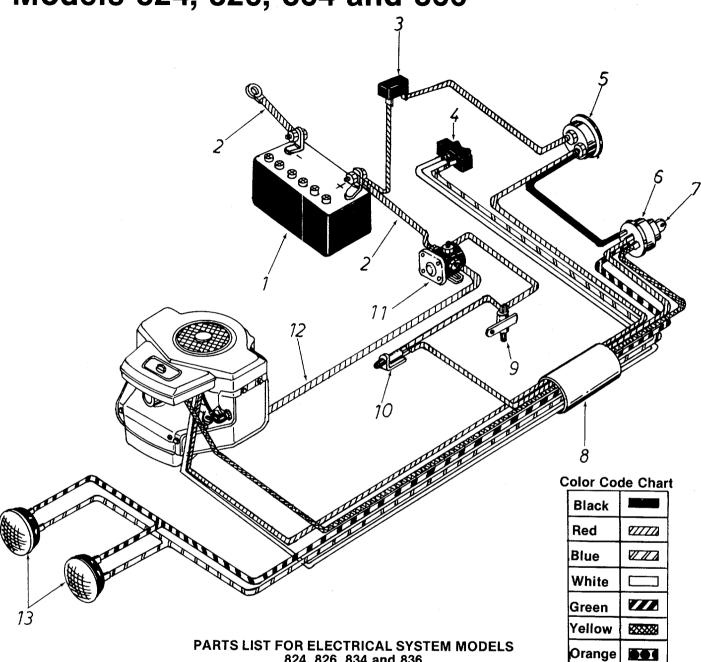
Description	23 x 9.50—Part No.	22 x 7.50—Part No.
Wheel Assembly Comp.	734-1005	734-1004
Tire Only	734-0322	734-0967
Rim Only	734-1015	734-1015



PARTS LIST FOR TRANSAXLE PEERLESS MODEL 2351 (717-0450)

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
2	PE-792016	Ring, Snap	41	PE-780052	Washer, Thrust
3	PE-792001	Ring, Quad	42	PE-788021	Seal and Retainer Ass'y.,
4	PE-792049	Pin, Roll			Oil (Incl. No. 45)
5	PE-784093	Housing, Shift Lever	43	PE-778036	Gear, Output
6	PE-784094	Keeper, Shift Lever	44	PE-776028	Pinion, Output
7	PE-784308	Lever, Shift	45	PE-788008	Seal, Oil
8	PE-784054	Rod Ass'y., Shift (Incl. Nos.	46	PE-782025	Housing, Axle
"	1 2 10 100 1	9 thru 12 and 24)	47	PE-772016A	Cover Ass'y., Transaxle
9	PE-792003	Spring	7'	1 E-772010A	(Incl. Nos. 54, 55, 57, 59
10	PE-792004	Ball, Steel			and 63)
11	PE-784004	Fork, Shifter	48	PE-770012	
12	PE-784055	Rod, Shifter (3rd and 4th)	40	PE-770012	Case Ass'y., Transaxle
13		Rod Ass'y., Shift (Incl. Nos.			(Incl. Nos. 54, 55, 57 and
13	PE-784056	0 10 11 14 and 24)	40	DE 700007	63)
	DE 7040E7	9, 10, 11, 14 and 24)	49	PE-792007	Screw, Socket Hd., 1/4-20
14	PE-784057	Rod, Shifter (Low)		DE	_ x 3/4
15	PE-774433	Axle (18-11/32" Long)	50	PE-786026	Pin, Dowel
16	PE-780042	Washer, Thrust	51	PE-792037	Screw, Hex Hd. Sems,
17	PE-792005	Scr., Hex Hd., 1/4-20 x 21/2		·	5/16-18 x 1
18	PE-792006	Lock Washer, 1/4"	52	PE-792019	Plug, Magnetic Drain
19	PE-778033A	Gear, Ring	54	PE-780049	Bearing, Needle
20	PE-786019	Pin, Drive	55	PE-530105	Bearing, Needle
21	PE-786027	Block, Drive	56	PE-780024	Bearing, Ball
22	PE-778094	Pinion, Bevel	57	PE-780047	Bearing, Needle
23	PE-776029A	Shaft and Gear, Brake	58	PE-780050	Bearing, Ball
24	PE-792017	Ring, Snap	59	PE-780046	Bearing, Needle
25	PE-776189A	Shaft and Bearing Ass'y.,	60	PE-788025	Seal, Oil
1		Pinion (Incl. No. 26)	61	PE-780001	Washer
26	PE-780018	Bearing, Needle	62	PE-776031	Shaft and Pinion
27	PE-778034	Gear Cluster Ass'y. (Incl.	63	PE-780048	Bearing, Needle
		No. 28)	64	PE-776030	Shaft, Reverse Idler
28	PE-780053	Bushing	65	PE-786025	Spacer, Reverse Idler
29	PE-784074	Stop, Shifter	66	PE-778016	Idler, Reverse
30	PE-788023	Gasket, Case and Cover	67	PE-778038	Spur Gear (22 Teeth)
31	PE-788022	Gasket, Shifter Lever	68	PE-780039	Bearing, Thrust
		Housing	69	PE-774072A	Carrier Ass'y., Differential
32	PE-778019A	Gear, Shifting (3rd and 4th)		1 2 11 4012/	(Incl. No. 71)
33	PE-778020	Gear, Shifting (1st, 2nd and	70	PE-774071A	Carrier Ass'y, Differential
30	. 2 1 1 0020	Rev.)	'	L-114011A	(Incl. No. 71)
34	PE-778095	Gear, Bevel	71	PE-780041	Bushing
35	PE-778037	Gear, Idler	72	PE-788024	
36	PE-778035A	Gear Cluster Ass'y. (Incl. No.			"O" Ring
ا مد	FE-110USSA		73	PE-780007	Washer, Thrust
37	PE-786024	28) Spacer	74	PE-780051	Washer, Thrust
		Spacer	75	PE-792010	Plug, Pipe
38	PE-792018	Ring, Snap	76	PE-780075	Race, Thrust
39	PE-776175	Shaft, Input	77	PE-780107	Washer
40	PE-778024A	Spur Gear, Input Shaft			

^{*}Shift lever is not shipped with transaxle. Order separately.



PARTS LIST FOR ELECTRICAL SYSTEM MODELS 824, 826, 834 and 836

REF.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0453		12V-Battery	
	725-0563		Electric Cable	
2 3	725-0459		Circuit Breaker	
4	725-063	4	Light Switch	
5	725-011	9	Ammeter	
6 7	725-0267		Ignition Switch	
	725-0201		Ignition Key	
8	725-0666		Wire Harness	}
9	725-026	8	Safety Switch—Black N.O.	
10	725-046	5	Safety Switch	
11	725-077	•	Solenoid	
12	725-056	1	Electric Cable	}
13	725-0222		Headlight	

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, part numbers, description of parts and the quantity of each part required.

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.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	BIRMINGHAM
ARKANSAS	2625 4th Ave. S 35233
Mity Mite Motors, Inc.	FORT SMITH 4515 S. 16th St72901
Couttour la Laure Maria de Ol	NORTH LITTLE ROCK Rt. 4, Box 368
CALIFORNIA	Rt. 4, Box 368
Billious	PORTERVILLE 75 North D Street 93257
COLORADO Spitzer Industrial Products Co.	DENVER
	D 00444 00000
FLORIDA Radco Distributors	JACKSONVILLE
Radco Distributors	4909 Victor St., Box 545932207
	Box 5459 32207
Small Eng. Dist	OPA LOCKA 2351 N.W. 147th St 33054
GEORGIA	EAST POINT 2834 Church St30344
iLLINOIS	2834 Church St 30344
Keen Edge Co	LYONS 8615 Ogden Ave60534
INDIANA	ELKHARŤ 2101 Industrial Pkwy46514
IOWA	2101 Industrial Pkwy46514 DUBUQUE
Power Lawn & Garden Equip	2551 J.F. Kennedy52001
LOUISIANA	NEW ORLEANS 8330 Earhart Blvd70118
MARYLAND	8330 Earhart Blvd70118
MARYLAND Center Supply Co	6867 New Hampshire
***************************************	Ave 20012
MASSACHUSETTS Morton B. Collins Co	300 Birnia Ava 01107
MICHIGAN	LANSING 2500 S. Pennsylvania 48910
Lorenz Service Co	2500 S. Pennsylvania 48910
Power Equipment Dist	MOUNT CLEMENS . 340 Hubbard
MINNESOTA	HOPKINS 420 Excelsior Ave. W55343
Hance Distributing Inc	420 Excelsior Ave. W 55343
MISSISSIPPI Biloxi Sales & Service Inc.	BILOXI . 506 Caillavet St 39533
MISSOURI	KANSAS CITY3117 Holmes St64109
Automotive Equip. Service	3117 Holmes St 64109
Ross-Frazier Supply Co	ST. JOSEPH 8th and Monterey 64503
11033-1 Tazioi Gappiy Go	ST. LOUIS 2015 Lemay Ferry Rd63125
Henzler, Inc.	2015 Lemay Ferry Rd 63125
NEW JERSEY Lawnmower Parts Inc.	BELLMAWR . 717 Creek Rd
NEW MEXICO	ALBUQUERQUE 1023 Third St. N.W87103
Spitzer Eng. & Parts	1023 Third St. N.W87103
NEW YORK Gamble Dist., Inc.	CARTHAGE West End Ave 13619
assio bioti, inc. i i i i i i i i i i i i i i i i i i i	

NORTH CAROLINA Smith Hardware Co	GOLDSBORO 515 N. George St. 27530
omminadware oo	GREENSBORO
OHIO	CARROLL
Stebe's Mid-State Mower Supply	. 71 High St., Box 366 43112
Bleckrie, Inc	CLEVELAND7900 Lorain Ave44102 WADSWORTH
National Central	687 Seville Rd 44281
Burton Supply Co	1301 Logan Ave., Box 929
OKLAHOMA Victory Motors, Inc.	Box 929
Victory Motors, Inc	605 S. Cherokee 74401 PORTLAND
Kenton Supply Co	8216 N. Denver Ave 97217
PENNSYLVÁNÍA EECO Inc	4021 N. 6th St17110
Thompson Rubber Co	PHILADELPHIA 5222-24 N. Fifth St 19120
Bluemont Co	PITTSBURGH 11125 Frankstown Rd 15235
Frank Roberts & Sons	PUNXSUTAWNEY R.D. 2
TENNESSEE Master Repair Service	KNOXVILLE 2000 Western Ave 37921
	MEMPHIS 3035-43 Bellbrook 38116
TEXAS Marr Brothers, Inc	DALLAS
Marr Brothers, Inc	FORT WORTH
Woodson Sales Corp	1702 N. Sylvania 76111 HOUSTON
Bullard Supply Co	2409 Commerce St 77003
A-1 Engine & Mower Co	437 E. 9th St84111
Vermont Howe Co. Inc.	180 Flynn Ave05401
VIRGINIA RBI Corp.	ASHLAND Lake Ridge Park,
WASHINGTON	101 Cedar Run Dr 23005 SEATTLE
Bailey's Inc	1414 14th Ave 98102
WEST VIRGINIA Young's, Inc.	233 Virginia St., E25301
WISCONSIN Power Pac	301 E. 29th St54449

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 over 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.