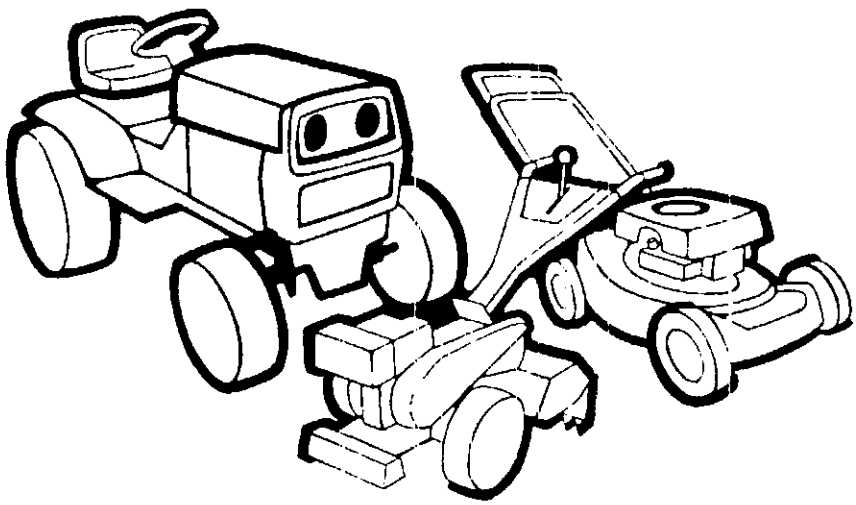
OWNERS MANUAL



YaRD-MaN

VARIABLE SPEED RIDING MOWERS

ASSEMBLY
OPERATION
MAINTENANCE
PARTS LIST

Model Numbers
13513L
13514L
13518L

Important:
Read Safety Rules and Instructions Carefully

Thank you for purchasing an American built product.

PRINTED IN U.S.A.

FORM NO. 770-3343

INDEX

LIMITED WARRANTY

For two years from the date of original retail purchase, YARD-MAN COMPANY 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 YARD-MAN COMPANY.

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, Peerless components, the motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

Warranty on units used commercially is limited to sixty (60) days.

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 YARD-MAN.

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

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

WARNING

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

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

WARNING

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

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. 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.
6. 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.
7. 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.
8. 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.
9. 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.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. 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.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
21. 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.
26. 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 operator's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow 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.
34. 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. Disengage blades before shifting into reverse and backing up.
36. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

NOTE

Reference to right hand or left hand side of machine is from the driver's seat facing forward.

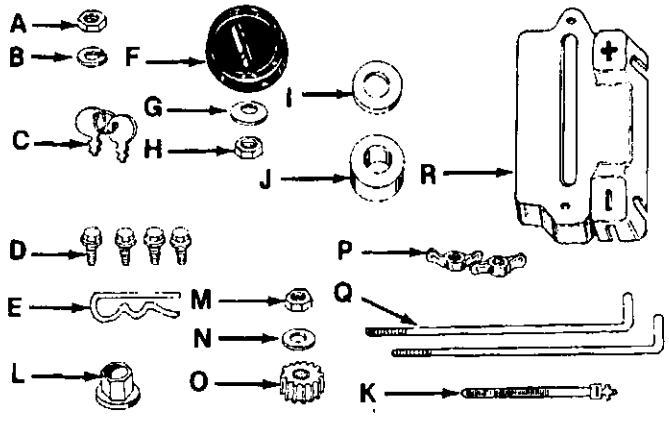


FIGURE 1.

ASSEMBLY INSTRUCTIONS

Contents of Hardware Pack: (See Figure 1)

A (1) Hex Nut ½-13 Thread
B (1) Lock Washer ½" I.D.
C (2) Ignition Keys (May be on Rider)
D (4) Hex Self-Tapping Screws
E (1) Hairpin Cotter (30" Side Discharge Deck Only)
F (1) Steering Wheel Cap
G (1) Cupped Washer 5/16" I.D.
H (1) Hex Nut 5/16-18 Thread
I (1) Flat Washer 5/8" I.D. x 1½" O.D.
J (1) Plastic Spacer
K (1) Cable Tie
L (1) Hex Flange Bearing
M (1) Hex Nut 5/16-24 Thread
N (1) Flat Washer 5/16" I.D. x 5/8" O.D.
O (1) Pinion Gear
P (2) Wing Nuts
Q (2) Battery Hold-Down Rods
R (1) Battery Cover

Loose Parts in Carton:

(1) Seat
(1) Steering Wheel
(1) Steering Shaft Assembly
(1) 12 Volt Battery
(1) Steering Gear Cover

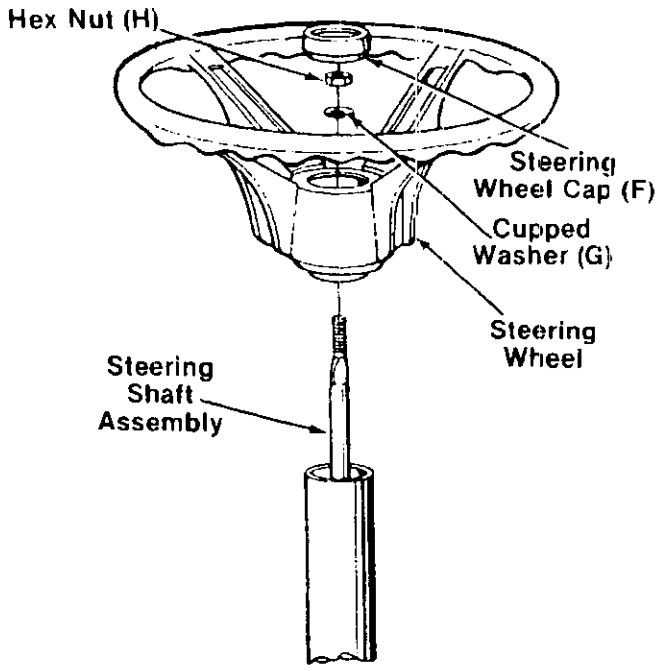


FIGURE 2.

INSTALLATION OF STEERING MECHANISM

1. Place **steering wheel** over the end of the **steering shaft,** lining up the flattened portions of the steering shaft with the flattened portions of the steering wheel. Make certain steering wheel is seated over the end of the steering tube.
2. Place **cupped washer** (G) over the **steering shaft**, with the cupped side of the washer against the steering wheel. Secure with **hex nut** (H) (5/16" I.D.). See figure 2. Tighten securely.

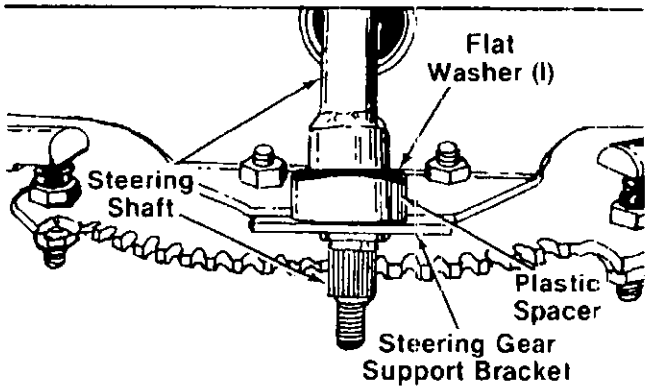


FIGURE 3.

3. Insert the **steering shaft** through the **steering housing cover.** Place **flat washer** (I) and **plastic spacer** (J) over end of **steering shaft** before inserting the shaft through the hole in the front end of the **steering gear support bracket** (Ref. No. 12 on page 26). See figure 3.

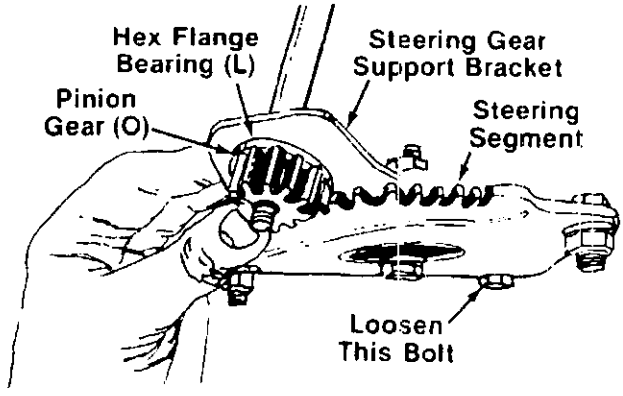


FIGURE 4.

4. Loosen the **hex nut** located at the **rear of the steering gear segment** (Ref. No. 27 on page 26) so that the steering gear segment can be pushed about ¼" toward the rear of the rider, to permit easier assembly of the **pinion gear.** Two 9/16" wrenches are required. See figure 4.
5. Place **hex flange bearing** (L), flat side down, over the end of the **steering shaft,** and seat it into the **steering gear support bracket.** See figure 4.
6. Position **pinion gear** (O) over splined collar on **steering shaft.** Then place **flat washer** (N) (5/8" diameter) on shaft and secure with **hex nut** (M) (5/16" I.D.). Do not tighten at this time.

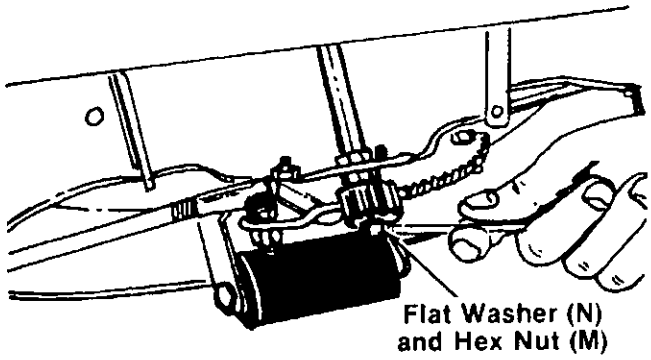


FIGURE 5.

7. Push the **steering gear segment** (loosened in step 9) forward toward its original position, until it **engages the teeth of the pinion gear.** Retighten the nut at the rear of the steering gear segment. Two 9/16" wrenches are required.
8. Now tighten the hex nut (M) which secures the pinion gear. See figure 5.
9. Lubricate the teeth of the pinion gear and steering gear segment with an automotive chassis grease.

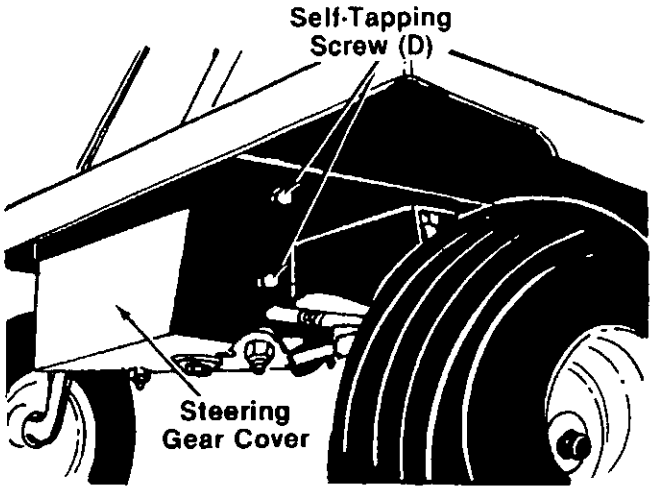


FIGURE 6.

10. Install the **steering gear cover** as shown in figure 6, to cover the underside of the steering mechanism. Secure with two **self-tapping screws** (D) on each side of the cover. Do not completely tighten any of these screws until all four of them are positioned correctly.
11. Press **steering wheel cap** (F) in place in the center of the **steering wheel.** See figure 2.

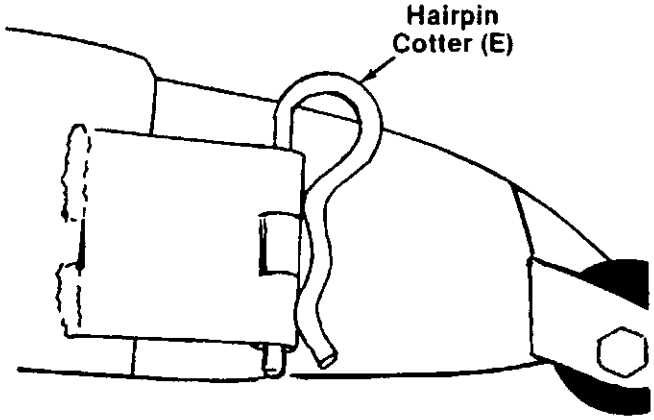


FIGURE 7.—30" Side Discharge Deck Only

CHUTE DEFLECTOR

30" Side Discharge Deck:

Secure the **chute deflector** to the deck by placing the **large hairpin cotter** (E) in the **chute deflector bracket,** located on the front of the deck. See figure 7.

36" Rear Discharge Deck:

Attach the **chute deflector** to the **deck** as instructed in the separate deck manual packed with your unit. **The riding mower cannot be operated unless the chute deflector is correctly installed.**

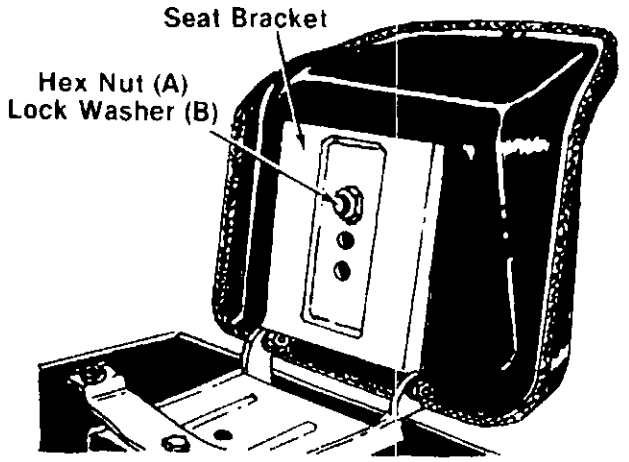


FIGURE 8.

SEAT

The seat may be adjusted to three different positions. Select the desired seat position and secure the seat to the seat bracket with hex nut (A) and lock washer (B). See figure 8.

TIRE PRESSURE

For shipping purposes the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

BATTERY INFORMATION

WARNING

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.

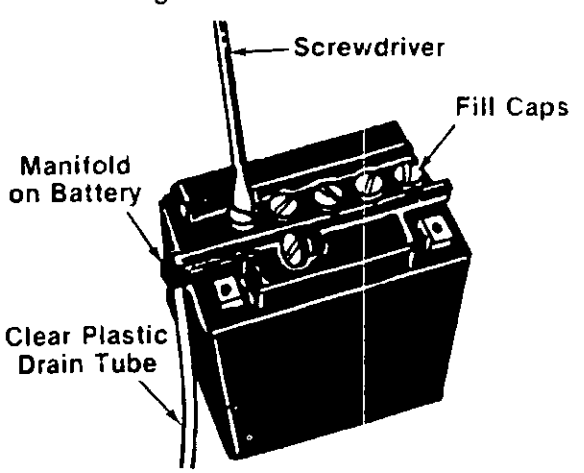


FIGURE 9.

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.**

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware. See figure 12.

DANGER

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

2. Place the battery on table or workbench to be filled.
3. Place one end of clear plastic drain tube on manifold of battery. See figure 9.

NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 9.

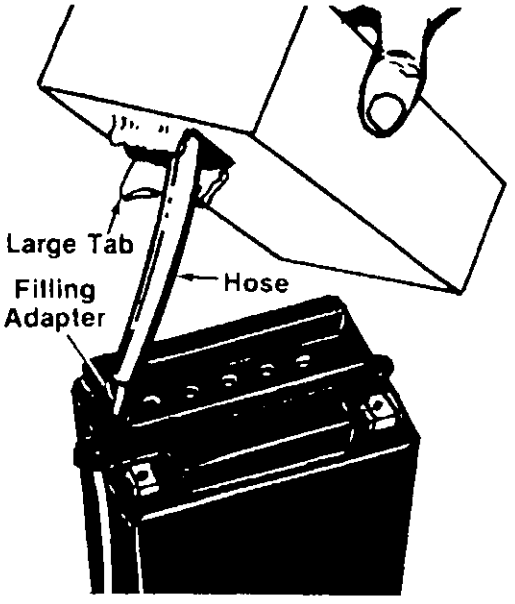


FIGURE 10.

WARNING

Battery contains sulfuric acid. Refer to warning on page 7. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc) away. Be sure to charge battery only in well-ventilated areas. Keep batteries out of the reach of children!

Store battery in a cool, dry place, not on concrete. Charge at 1.4 ampere maximum every 60 days.

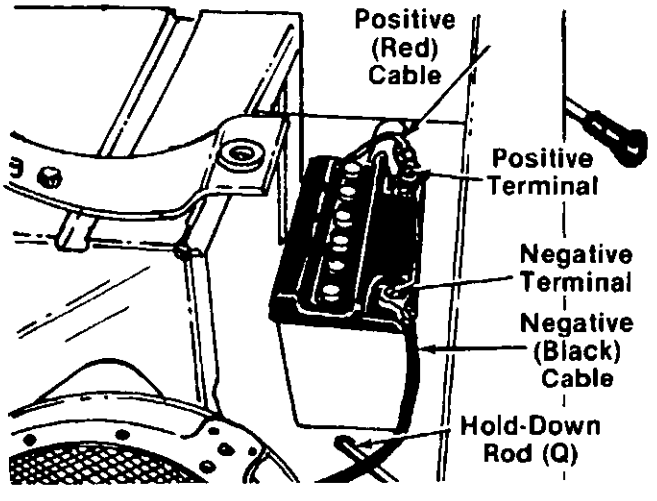


FIGURE 11.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use a sharp tool or object to open acid package.
6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 10.
7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 10.
8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.
9. The battery can be charged after the 20 minutes sitting period. The battery can be slow charged (do not fast charge) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE

Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours, NO LONGER THAN 30 HOURS.

CAUTION

After battery has been in service, add only distilled water. DO NOT ADD ACID.

NOTE

During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the lawn tractor after winter storage.

INSTALLING THE BATTERY

1. Hook the battery hold-down rods into the holes in the frame. See figures 11 and 12.
2. Place the battery in the rider with the positive terminal to the front. The negative terminal goes to the rear of the unit. See figure 11.
3. Place the positive (heavy red) cable and small red wire with in-line fuse on the positive terminal. Secure with bolt, nut and lock washer provided with battery.
4. Place the negative (heavy black) cable on the negative terminal. Secure with bolt, nut and lock washer provided with battery. See figure 11.

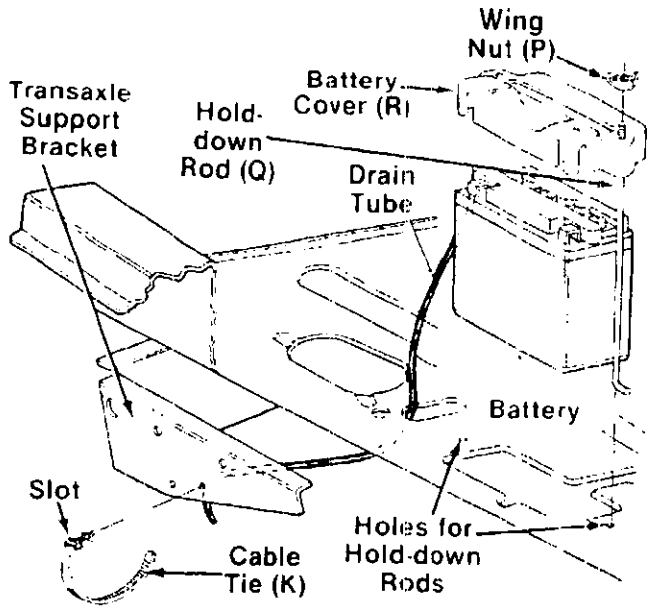


FIGURE 12.

5. Secure the battery in place w th battery cover (R) and hold-down rods (Q). Secure with two wing nuts (P). See figure 12.
6. Route the clear plastic drain tube down through the hole in the frame shown in figure 12.
7. Push the locking end of cable tie (K) through the hole in transaxle support bracket. See figure 12. Place the end of cable tie through the slot so a loop is formed around the drain tube to secure it. Tighten cable tie and cut off excess end.

CONTROLS

This manual should be read in its entirety before operating the riding mower. While reading the manual, compare the illustrations with your mower to familiarize yourself with the locations of various controls, lubrication points and adjustment features.

Study the operating instructions and safety precautions thoroughly to insure proper functioning of your mower and to prevent injury to yourself and others. Be sure to save this manual for future reference.

THROTTLE CONTROL

The throttle control is used to regulate the engine speed and choke the engine. The engine should be operated from 3/4 to full throttle when operating the cutting deck. See figure 13.

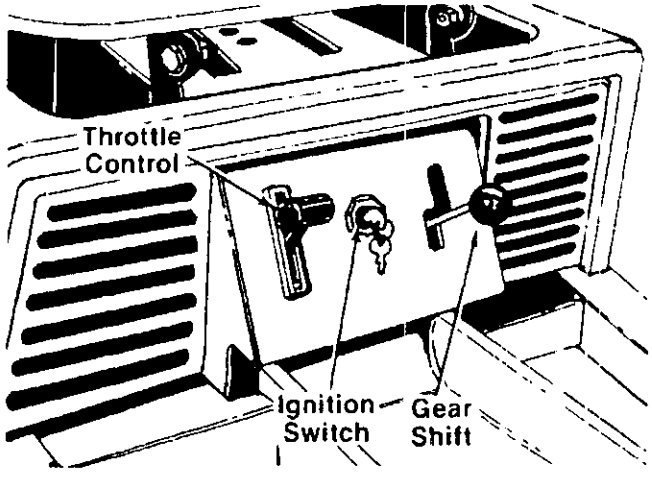


FIGURE 13.

IGNITION KEY

The key must be turned to the "START" position to start the engine. After the engine is running, let the key return to the "ON" position. Turn the key to the "OFF" position to stop the engine. Remove the key when the rider is not in use. See figure 13.

SHIFT LEVER

The shift lever is located on the left hand side of the console and has three positions, "FORWARD," "NEUTRAL" and "REVERSE." See figure 13. The clutch-brake pedal must be depressed and the riding mower must not be moving when shifting gears. Do not force the shift lever. Release the clutch-brake pedal slightly to line up the shifting collar in the transmission. Then try to shift gears.

SPEED CONTROL LEVER

The speed control lever allows you to regulate the ground speed of the riding mower. See figure 14. It may be set in any one of either five or six positions. To set, depress clutch pedal. Push speed control lever inward and move backward to slower, move forward to increase speed. When desired speed has been obtained, place lever in that position. Whenever clutch is engaged, rider will automatically go to the pre-set speed.

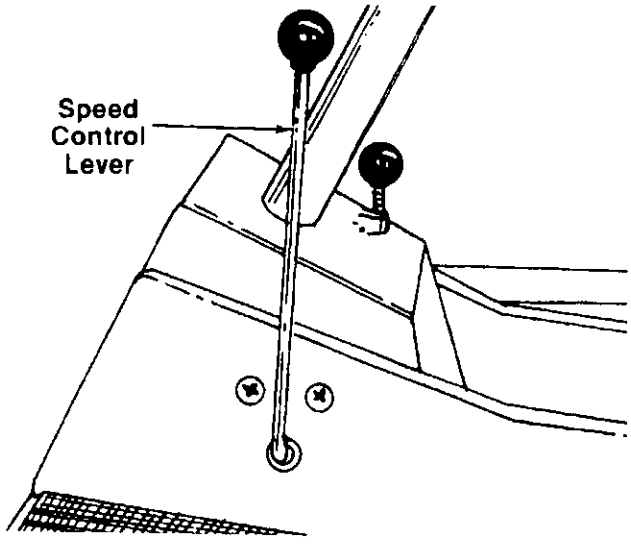


FIGURE 14.

GASOLINE GAUGE

The gasoline gauge is located in the gasoline fill cap. The gauge indicates the amount of fuel in the tank.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the right side of the rider. 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. See figure 15.

NOTE

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

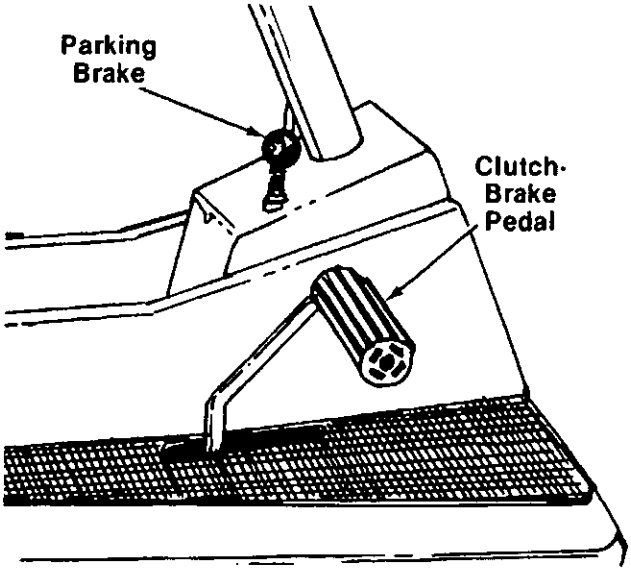


FIGURE 15.

PARKING BRAKE

To set the parking brake, depress the clutch-brake pedal and press the parking brake knob down. To release the parking brake, depress and release the clutch-brake pedal. See figure 15.

BLADE ENGAGEMENT LEVER

The blade engagement lever is located on the right hand side of the deck. Figure 16 shows the blade engagement lever in the disengaged position.

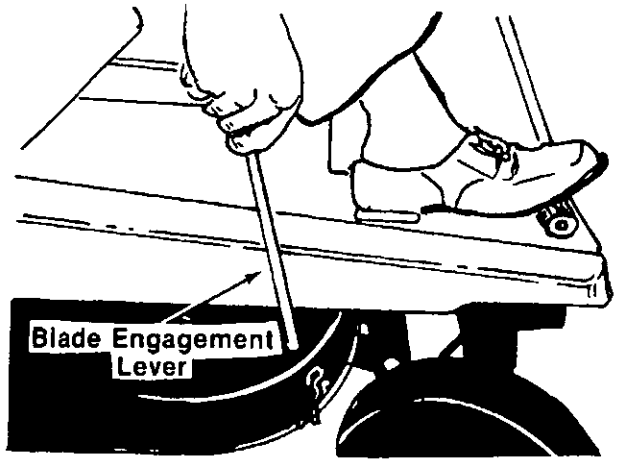


FIGURE 16.

To engage the blade, move the blade engagement lever toward the front of the unit. Move the lever toward the rear to disengage the blade.

DECK CUTTING HEIGHT LEVER

The deck cutting height lever is used to raise and lower the cutting deck, which sets the cutting height.

Move the lever outward, select desired cutting height and release lever. The lever may be set in any one of the six cutting height positions. See figure 17.

CAUTION

The blade does not shut off when the deck is raised. You must place the Blade Engagement Lever in the disengaged (OFF) position.

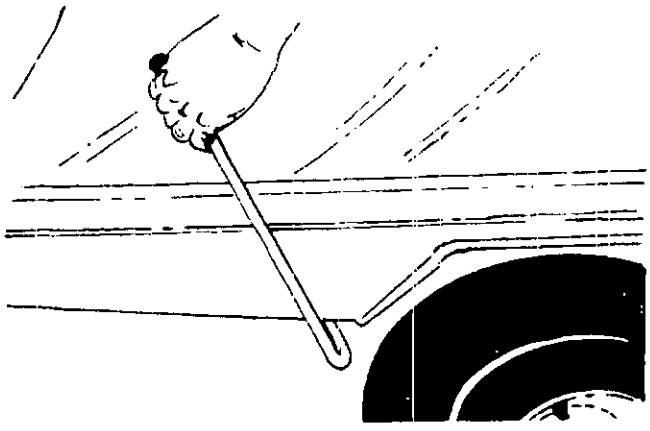


FIGURE 17.

SAFETY INTERLOCK SYSTEM

Interlock safety switches are located on the clutch-brake pedal, the blade engagement lever and shift lever.

Before the engine will start, the clutch pedal must be depressed all the way and the blade engagement lever must be in the disengaged position.

Before the unit can be shifted into reverse, the blade engagement lever must be in the disengaged position.

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.

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

NOTE

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 blade engagement lever is in the disengaged position. In addition, the blade engagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.

WARNING

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

STARTING THE ENGINE

CAUTION

Get on and off the unit from the left hand side to avoid possible contact with the blade engagement lever (located on the right hand side).

1. Be sure the crankcase is filled with oil as recommended in the engine manual. Fill fuel tank with **regular** gasoline.
2. Attach the wire to the spark plug.
3. Depress the clutch-brake pedal and lock it down.
4. Move the blade engagement lever back to the disengaged position.
5. Set the throttle control lever in the "CHOKE" position.

6. Place the shift lever in the "NEUTRAL" position.
7. Turn the ignition key to the "START" position. As soon as the engine starts, let the key return to the "ON" position.
8. Slowly return the throttle to the running position as soon as the engine starts.
9. To stop, turn the ignition key to the "OFF" position. Remove the key when the rider is not in use.

PUTTING THE RIDING MOWER IN MOTION

CAUTION

Parking brake **must** be disengaged before unit is put into motion.

1. Advance the throttle control from 3/4 to full throttle to prevent strain on the engine and to operate the cutting blades.
2. Place the shift lever in either the "FORWARD" or "REVERSE" position.

CAUTION

Look to the rear before backing up.

3. Slowly release the clutch-brake pedal.
4. To stop, depress the clutch-brake pedal.
5. The blades can be engaged either while moving or while standing still. Move the blade engagement lever forward slowly until the blades are turning.

WARNING

When the blades are engaged, keep feet and hands away from the discharge opening, the blades or any part of the deck.

STOPPING

Engine—Turn the ignition key to the left to the "OFF" position.

Rider—Depress the clutch-brake pedal.

Blades—Pull the blade engagement lever all the way back.

CAUTION

If the unit is not to be used for a long period, place the shift lever in NEUTRAL, stop the engine, set the parking brake and remove the key. DO NOT leave the machine on an incline.

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. The break-in consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 5 hours of operation.

Be sure that the lawn is clear of stones, sticks, wire, or other objects which could damage lawn mower or engine. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.

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

CAUTION

Do not at any time make any adjustment to lawn mower without first stopping engine and disconnecting spark plug wire.

THROTTLE CONTROL

To Check Operation:

1. Remove air cleaner.
2. Move throttle control lever to "CHOKE" position. The carburetor choke should be closed.
3. Move throttle control lever to "STOP" position. Lever should make good contact with stop switch.

If adjustment is needed, refer to the separate engine manual packed with your unit.

BRAKE ADJUSTMENT (See Figure 18)

During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.

The brake is located by the left rear wheel inside the frame.

To adjust the brake, loosen the outside hex nut. Tighten the inside hex nut one-quarter turn. Test the brake and repeat adjustment if necessary. Then tighten the outside hex nut. See figure 18.

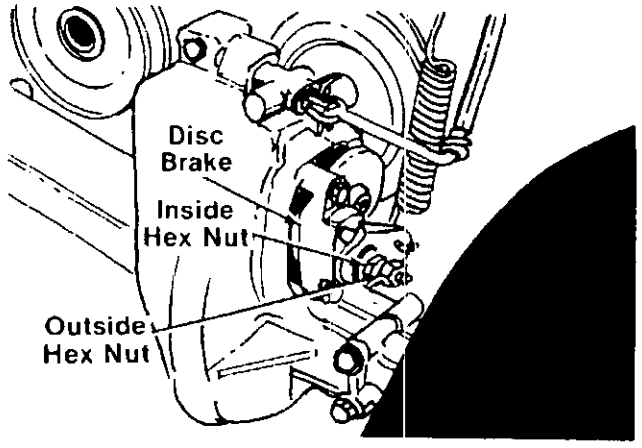


FIGURE 18.

WHEEL ALIGNMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the mower. The front wheels should toe-in 1/8 inch. See figure 19. To adjust, follow these steps:

1. Remove the cotter pin and flat washer which hold the tie rod to the axle bracket. See figure 19.
2. Adjust the tie rod in or out until the wheels toe-in approximately 1/8".
3. Replace the tie rod into the wheel bracket, and replace the cotter pin and flat washer.

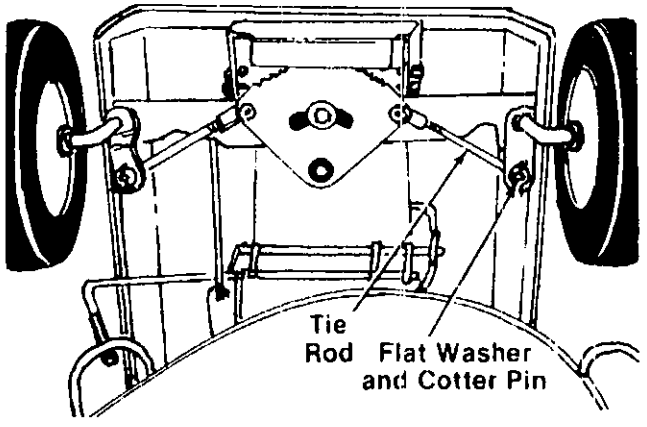


FIGURE 19.

DECK ADJUSTMENT ROD

If an uneven cut is obtained, the deck may be adjusted. A deck adjustment rod is located on the right side of the unit. See figure 20.

To adjust the deck, loosen the two hex nuts at the right rear deck link assembly. Thread the hex nuts up or down the deck adjustment rod as necessary. Retighten the hex nuts.

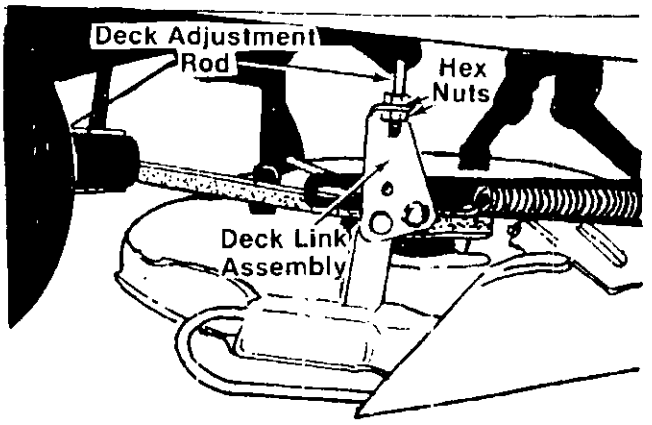


FIGURE 20.

CARBURETOR ADJUSTMENT

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.

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

To adjust the carburetor, refer to the separate engine manual packed with your unit.

LUBRICATION

IMPORTANT

Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on riding mower.

1. **Engine.** Maintain the engine oil according to the engine manual.
2. **Front Wheels.** The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multi-purpose grease.
3. **Linkage.** Oil all deck linkage and height adjustment linkage.
4. **Transaxle.** It is lubricated at the factory and does not require checking. Lubricate with 10 oz. of grease (Part No. 737-0148) if disassembled.

MAINTENANCE

WARNING

Disconnect spark plug wire and ground it against the engine before performing any repairs or maintenance.

CUTTING BLADE

A. Removal for Sharpening or Replacement

WARNING

Be sure to disconnect and ground the spark plug wire before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle. See figure 21.
2. Remove the blade and adapter from the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter. See figure 21.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

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

NOTE

It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

NOTE

To insure safe operation, ALL nuts and bolts must be checked periodically for correct tightness.

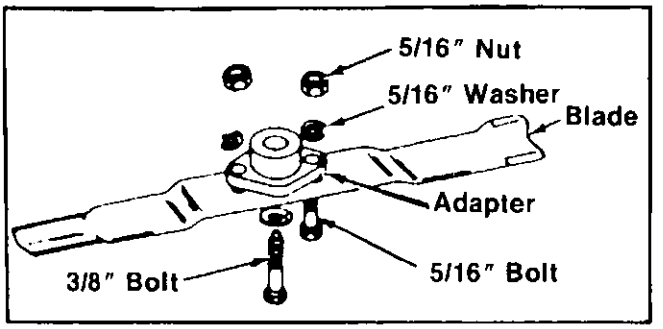


FIGURE 21.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

BELTS

Check that belts are free of oil or dirt. Wipe the belts periodically with a clean rag.

ENGINE OIL

Check oil level before starting engine and after every 5 hours of operation or each period of use. Refer to separate engine manual.

Change oil after first 5 hours of operation. Thereafter change every 25 hours. Change oil while engine is warm.

AIR CLEANER

Service air cleaner every 25 hours under normal conditions. Clean every few hours under extremely dusty conditions. Poor engine performance and flooding usually indicates that the air cleaner should be serviced. Refer to separate engine manual.

SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manua for correct plug type and gap specification.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or good qua ity drinking water. NEVER add additional acid or other chemicals to 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, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte 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.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

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.

INSTALLATION OF TIRE TO RIM

WARNING

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

1. Be sure rim is clean and rust free.
2. Lubricate both the tire and rim generously.
3. Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

DRIVE BELT REMOVAL AND REPLACEMENT

NOTE

It is recommended that the entire instructions on belt removal and replacement be read before changing the belts.

1. Remove the battery from the unit.
2. To prevent gasoline from leaking from the engine, remove the fuel tank cap, place a piece of thin plastic over the neck of the fuel tank and screw on the cap.
3. Disconnect the spark plug wire and ground it against the engine.
4. Remove the deck as described in the separate deck manual.
5. Unhook the idler spring from the rider frame. See figure 22.

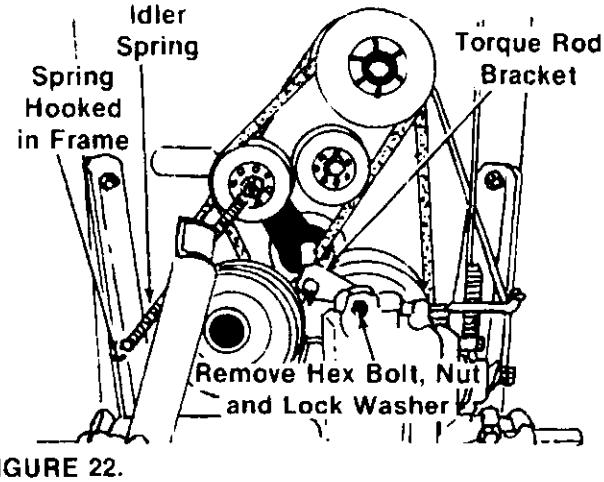


FIGURE 22.

6. Remove the hex bolt, nut and lock washer at the torque rod bracket and transaxle. See figure 22.
7. Remove the hex bolt which holds the torque rod bracket to the torque rod, and remove bracket. See figure 23.

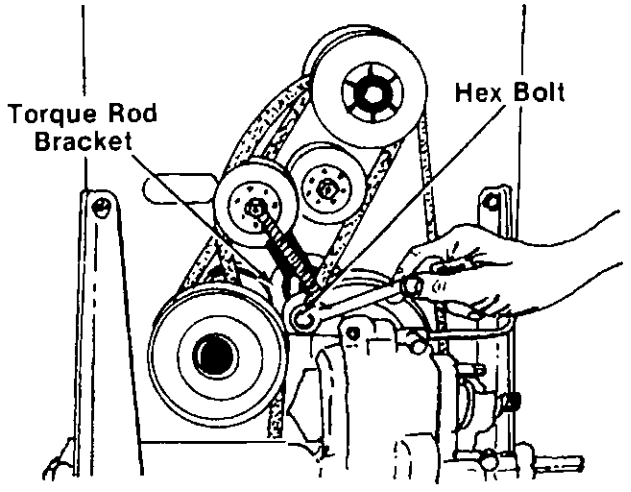


FIGURE 23.

8. Slip the "V"-belt off the variable speed pulley and transaxle pulley. See figure 24.

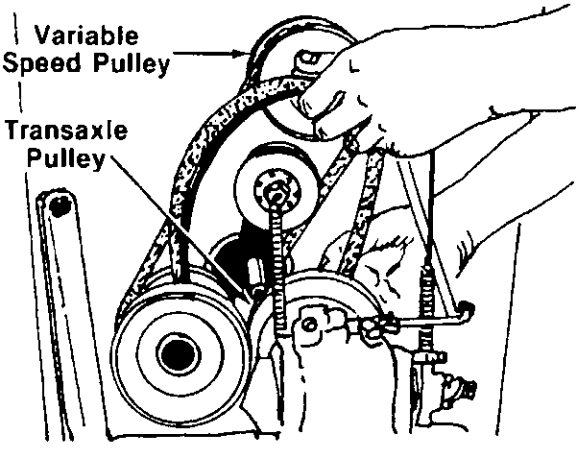


FIGURE 24.

9. Remove two hex bolts, nuts and lock washers from the engine pulley belt guard at rider frame to allow the engine pulley belt guard to drop down out of the way. See figure 25.

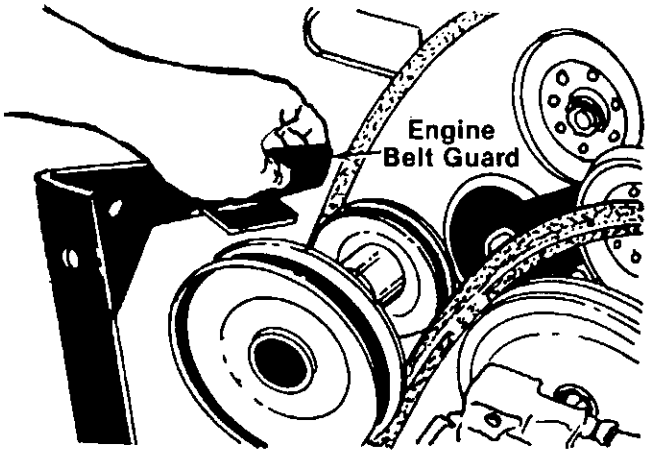


FIGURE 25.

10. Remove the idler pulley by removing the hex lock nut. See figure 26.

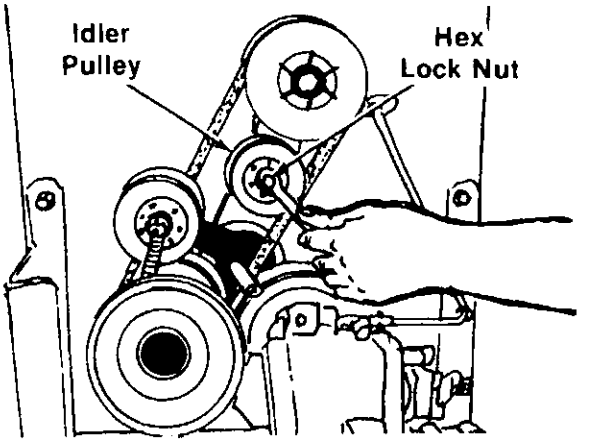


FIGURE 26.

11. Remove and replace the "V"-belt. See figure 27.

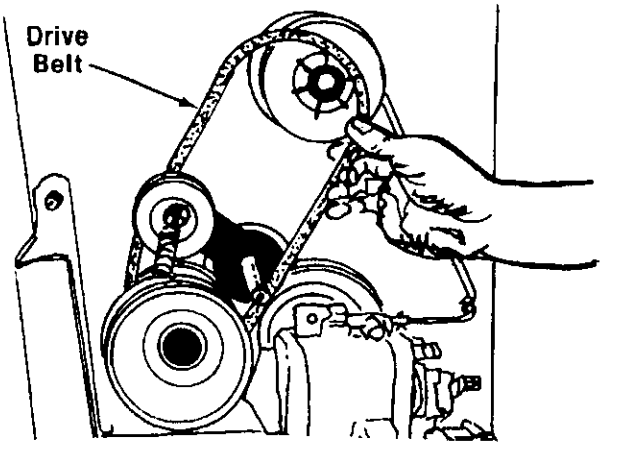


FIGURE 27.

12. Upon reassembly of idler pulley, be certain the hub side of idler goes against the idler bracket. See figure 28.

13. When sliding the idler pulley on the idler bracket, be certain the belt is between the pulley and guide pin. See figure 29.

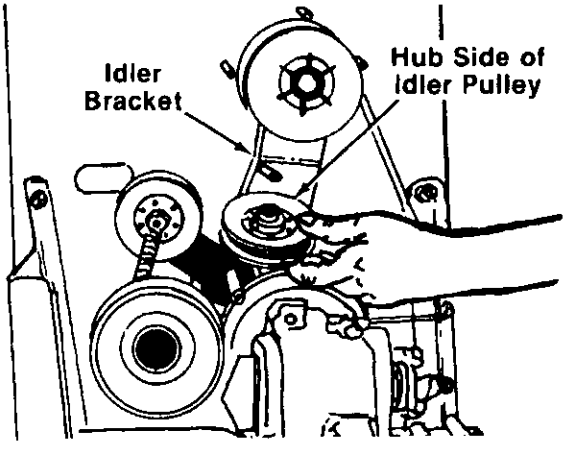


FIGURE 28.

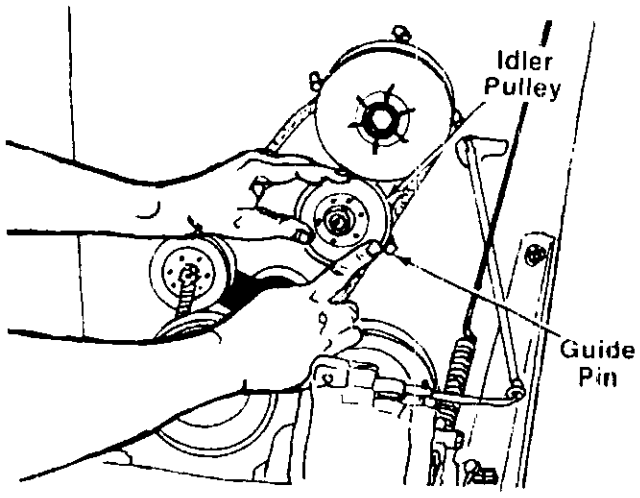


FIGURE 29.

14. Reverse the above steps (paying close attention to steps 12 and 13) when reassembling the new belts.

NOTE

Be certain all belts are inside belt guards and keepers. Also, be sure to reassemble the safety wire at the deck chute.

OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions on page 18.
5. Store unit in a clean, dry area.

CAUTION

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rust proof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

GRASS CATCHERS are available as optional equipment for the mowers shown in this manual as follows:

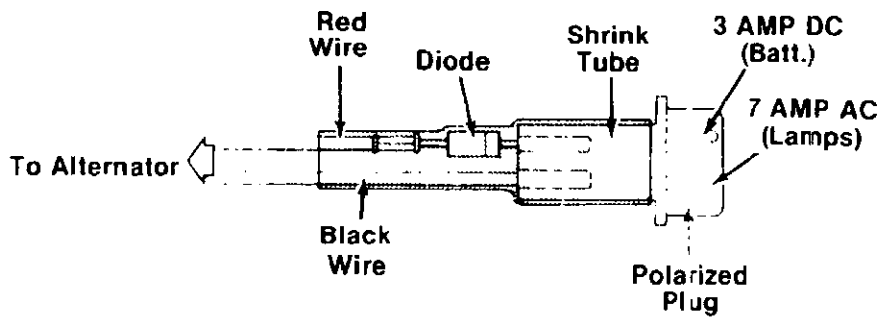
Model 194-038-000 for 30" Rear Discharge Deck
Model 194-055-000 for 30" Side Discharge Deck
Model 194-058-000 for 36" Rear Discharge Deck

The mower should not be operated without the entire grass catcher or chute deflector in place.

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bags.

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.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" 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 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.  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

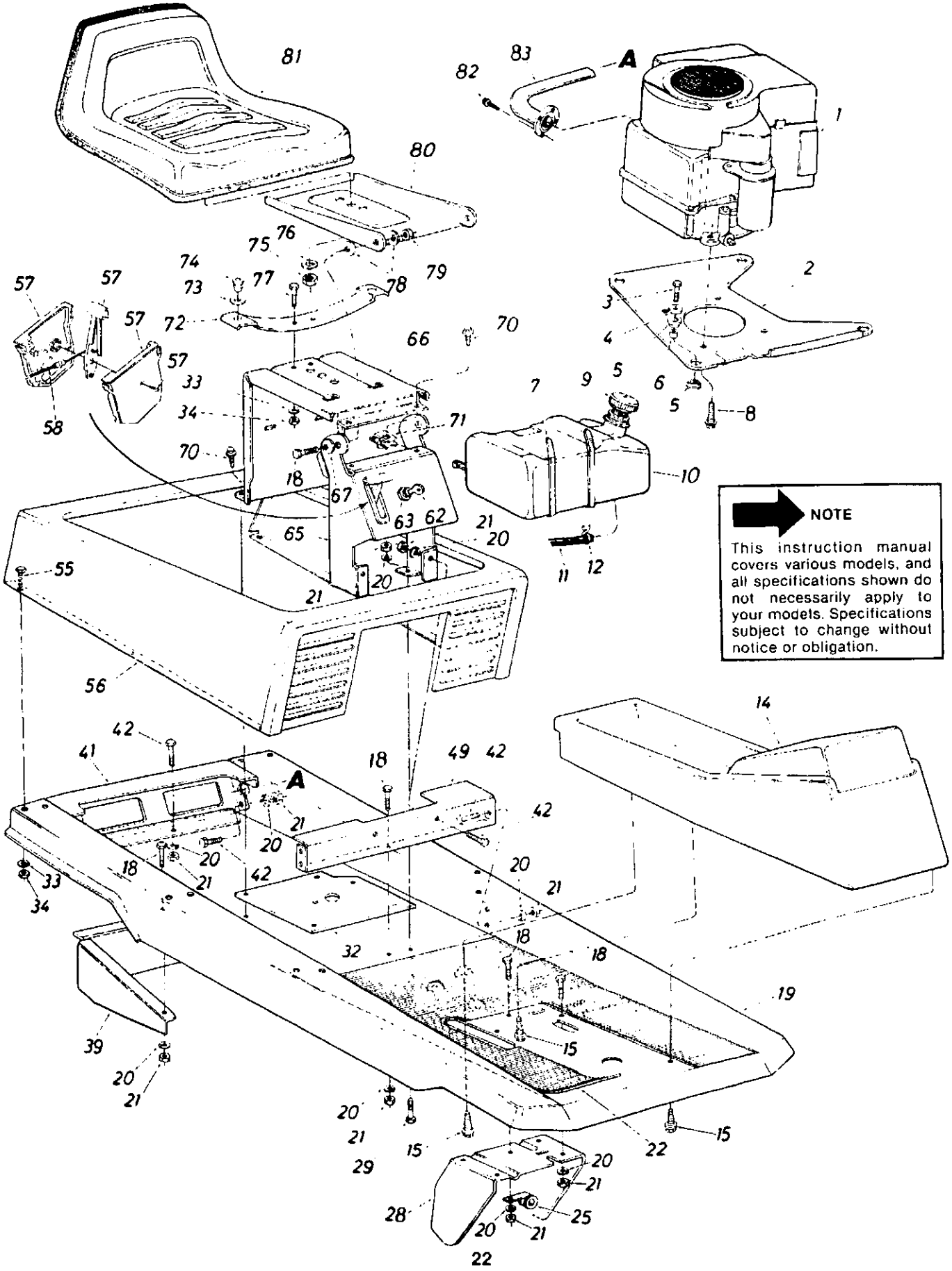
TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach 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 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 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).

BELT TROUBLE SHOOTING CHART

Failure	Probable Cause	Corrective Action
1 Broken Belt	1A Sudden stop or shock load to belt	1A Inspect rider for cause such as foreign objects stuck in between deck and frame or belt path. Remove obstruction and inspect for damage. Replace belt per parts list in this manual.
	1B Incorrect belt used	1B Replace with proper belt only. See parts list in this manual. Roll belt onto pulley. **Do not** use a screwdriver to push or pry belt onto pulley. The sharp bend can damage internal cords.
	1C Abrupt engagement	1C Slower engagement required.
	1D Defective or damaged belt	1D Refer to 1B.
2 Belt Shreds	2A Belt guides or guards incorrectly adjusted	2A Belt guides and guards should be adjusted to approximately 1/16 to 1/8 inch from belt when in the engaged position.
	2B Pulleys not aligned	2B Realign pulleys to be within approximately 1/16 inch of each other. Check with straight edge. Be sure fastening hardware is tight.
	2C Bad pulley—rough, rusty, chipped, bent, frozen bearing, etc.	2C Replace as necessary. Adjust as per 2B.
3 Belt Comes Off	3A Belt stretched	3A Adjust as necessary when applicable. Refer to 1B.
	3B Broken or weak idler spring	3B Replace.

NOTES

13413, 13514 and 13518



13513, 13514 and 13518

PARTS LIST FOR MODELS 13513, 13514 AND 13518 RIDING MOWERS

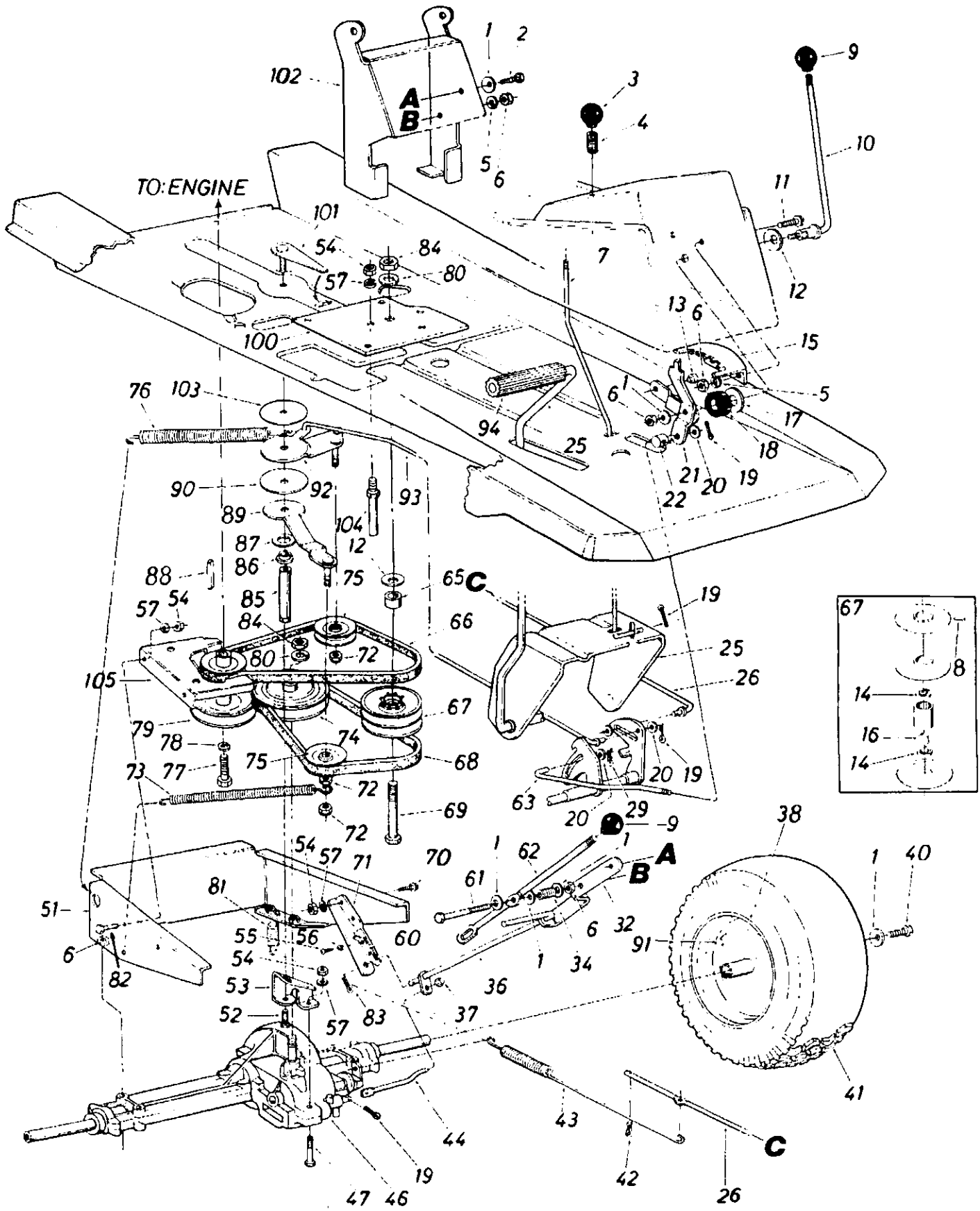
REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	—		Engine	
2	15572		Engine Mounting Plate	
3	710-0158		Hex Bolt 5/16-24 x 1.25" Lg.*	
4	736-0231		Fl-Wash. .330" I.D. x 1.125" O.D.	
5	722-0153		Engine Mounting Grommet	
6	750-0539		Spacer .315" I.D. x .50" O.D. x .520" Lg.	
7	726-0153		Cable Tie	
8	710-0502		Hex Wash. Hd. Self-Tap Scr. 3/8-16 x 1.25" Lg.	
9	723-0155		Gas Gauge	
10	751-0368		Fuel Tank	
11	751-0173		Gas Line	
12	726-0207		Hose Clamp—.406" Dia.	
14	731-0712		Front Console	
15	710-0906		Plastite Scr. 5/16" x 1.25" Lg.	
18	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
19	15978		Main Frame	
20	736-0119		L-Wash. 5/16" I.D.*	
21	712-0267		Hex Nut 5/16-18 Thd.*	
22	735-0220		Floor Mat	
25	726-0175		Clamp	
28	15562		Clutch-Brake Pedal Ass'y	
29	710-0759		Hex Bolt 5/16-18 x .62" Lg*	
32	15588		Mounting Brkt. Variable Speed Pulley	
33	736-0329		L-Wash. ¼" I.D.*	
34	712-0287		Hex Nut ¼-20 Thd.*	
39	15552		Transaxle Support Ass'y.	
41	15571		Rear Frame Panel	
42	710-0621		Hex Bolt 5/16-18 x .50" Lg.*	
49	15604		Seat Support & Frame Brkt.	
55	710-0289		Hex Bolt ¼-20 x .50" Lg.*	
56	15975		Engine Cover Ass'y	
57	831-0692		Throttle Control Box Ass'y.	N
58	746-0503		Throttle Control Wire	
62	725-0201		Ignition Key	
63	725-0267		Ignition Switch	
65	15897		Front Seat Bracket	
66	15606		Rear Seat Bracket	
67	736-0242		Bell-Wash. .345" I.D. x .88" O.D.	
70	710-0601		Hex Wash Hd. Scr. 5/16-18 x .75"	
71	726-0211		Palnut Lug 5/16-18 Thd.	
72	732-0431		Seat Spring	
73	736-0160		Fl-Wash. .531" I.D. x .930" O.D.	
74	731-0555		Grommet	
75	712-0206		Hex Nut ½-13 Thd.*	
76	736-0921		L-Wash. ½" I.D.*	
77	710-0258		Hex Bolt ¼-20 x .62" Lg.*	
78	736-0242		Bell-Wash. .345" I.D. x .88" O.D.	
79	712-0158		Hex Cent. L-Nu 5/16-18 Thd	
80	15607		Seat Pivot Bracket	
81	757-0264		Seat Ass'y Comp.	
82	710-0894		Hex Wash. Hd. TT-Tap Scr. 8-32 x .50" Lg.	
83	751-0341		Exhaust Pipe Ass'y. (8 HP)	
	751-0337		Exhaust Pipe Ass'y. (11 HP)	

*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.

(615—Red)

When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Red Finish—11836 615).

13513, 13514 and 13518

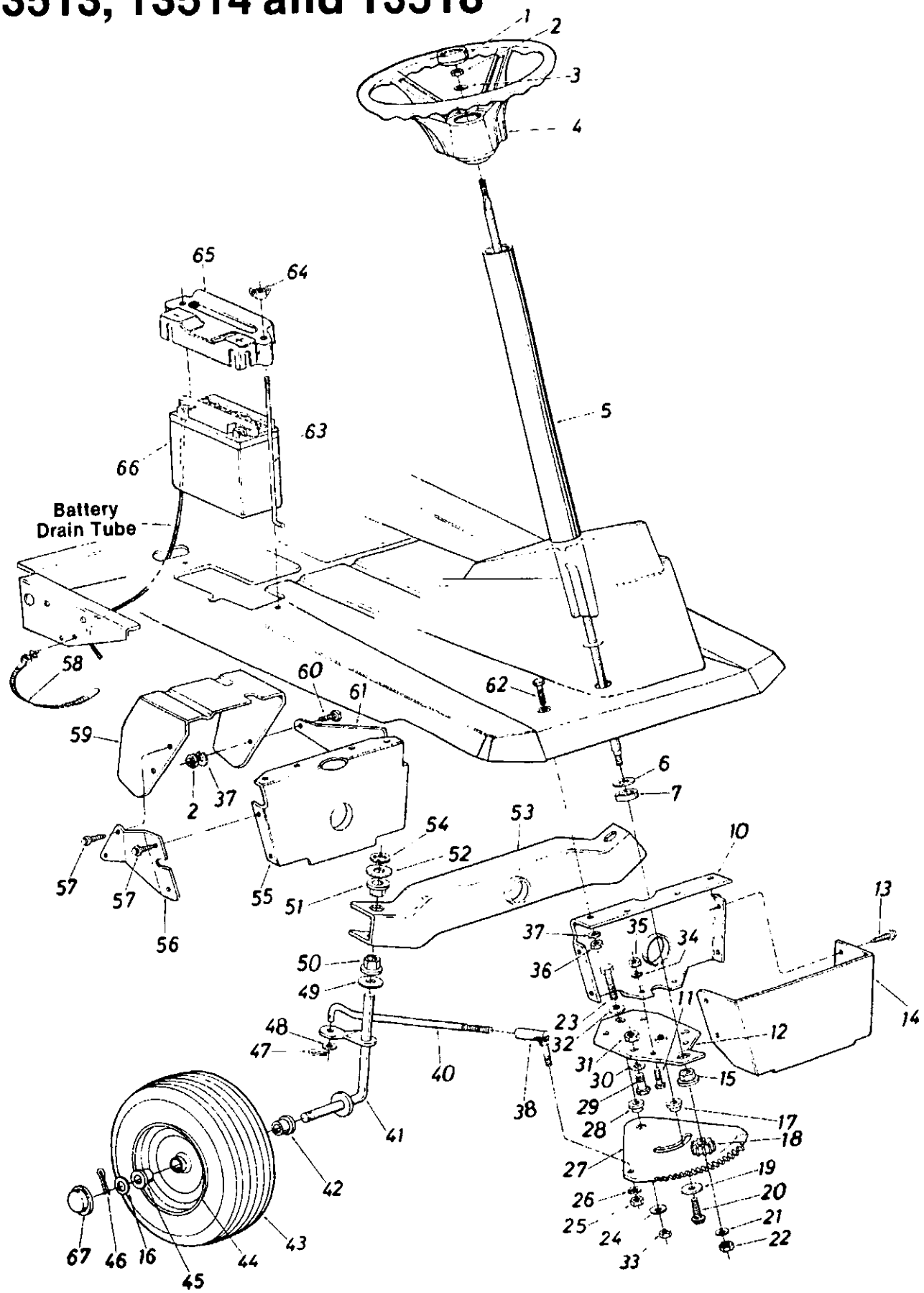


13413, 13514 and 13518

PARTS LIST FOR MODELS 13513, 13514 AND 13518 RIDING MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	736-0242		Bell-Wash. .345" I.D. x .88" O.D.	
2	710-0776		Hex Wash. Hd. AB-Tap Scr. ¼ x .62" Lg.	
3	720-0187		Ball Knob	
4	732-0437		Compression Spring	
5	736-0119		L-Wash. 5/16" I.D.*	
6	712-0267		Hex Nut 5/16-18 Thd.*	
7	747-0450		Brake Locking Rod	
8	715-0124		Spring Pin Spir. 5/32" Dia x .62" Lg.	
9	720-0165		Gear Shift Knob	
10	747-0424		Speed Control Lever	
11	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	
12	736-0253		Bell-Wash. .505" I.D. x 1.00"	
13	731-0493		Cap	
14	741-0139		Ball Brg. .50" I.D. x 1.38"	
15	15581		Index Bracket	
16	750-0516		Spacer .50" I.D. x .69" O.D. x 1.38" Lg.	
17	736-0154		Fl-Wash. ½" I.D. x 1.50"	
18	735-0219		Rubber Wash .50" I.D. x 1.25" O.D.	
19	714-0115		Cotter Pin 1/8 x 1.00" Lg.	
20	736-0275		Fl-Wash. .344" I.D. x .688"	
21	15582		Speed Control Lever Brkt Ass'y	
22	711-0677		Ferrule—Engagement	
25	15562		Clutch-Brake Pedal Ass'y	
26	747-0431		Brake Rod	
29	714-0104		Intern. Cotter Pin 5/16" Dia.	
32	15659		Shift Lever Brkt.	
34	732-0369		Spring	
36	15637		Shift Lever Ass'y.	
37	726-0106		Cap Speed Nut ¼" Rod	
38	734-0521		Rear Wheel Rim Only	
40	710-0627		Hex L-Bolt 5/16-24 x .75" Lg	
41	734-0524		Rear Wheel Ass'y. Comp.	
	734-0427		Rear Wheel Tire Only	
42	714-0470		Cot-Pin 1/8" Dia. x 1.25	
43	732-0389		Ext. Spring .75" O.D. x 17.0" Lg.	
44	747-0421		Shift Rod	
46	717-0775		Transaxle Comp.	
47	710-0136		Hex Bolt ¼-20 x 1.75" Lg.*	
51	15552		Transaxle Support Ass'y.	
52	710-0180		Hex Bolt 3/8-24 x .75" Lg.*	
53	15564		Torque Rod Bracket	
54	712-0287		Hex Nut ¼-20 Thd.*	
55	710-0789		C-Sink AB S-Tap Scr. #8 x .50"	
56	726-0206		Push-n Nut #10	
57	736-0329		L-Wash. ¼" I.D.*	
60	732-0420		Spring Switch	
61	710-0395		Hex Bolt 5/16-18 x 2.25" Lg.*	
62	747-0430		Upper Shift Lever	
63	747-0451		Speed Control Link	
65	750-0333		Spacer .501" I.D. x .750" O.D. x .775	
66	754-0241		"V"-Belt 5/8" L x 35" Lg.	
67	717-0473		Variable Speed Pulley Ass'y.	
68	754-0240		"V"-Belt 5/8" L x 38" Lg.	
69	710-0786		Hex Bolt ½-13 x 4.0 Lg.*	
70	710-0258		Hex Bolt ¼-20 x .62" Lg.*	
71	15624		Shift Lever Support	
72	712-0116		Hex ins. L-Nut 3/8-24 Thd.	
73	732-0308		Extension Spring	
74	756-0390		5/8" V-Pulley 6.0" O.D.	
75	756-0116		"V"-Belt Idler 3.06" O.D.	
76	732-0436		Extension Spring .99" O.D x 8.0" Lg.	
77	710-0314		Hex Bolt 7/16-20 x 1.0" Lg.*	
78	736-0171		L-Wash. 7/16" I.D.*	
79	756-0391		Engine Pulley	
80	736-0921		L-Wash. ½" I.D.*	
81	732-0303		Brake Return Ext. Spring	
82	710-0352		Hex Bolt ¼-20 x .75" Lg.*	
83	714-0111		Cotter Pin 3/32" Dia. x .75" Lg.	
84	712-0206		Hex Nut ½-13 Thd.*	
85	711-0676		Torque Rod 3.835" Lg.	
86	748-0294		Flange Bearing 378	
87	736-0187		Fl-Wash. .640" I.D. x 1.24"	
88	714-0114		Sq. Key ¼" x 2.00" Lg.*	
89	15569		Idler Bracket Ass'y.	
90	736-0283		Thrust Wash. .635" I.D. x 3.50" O.D.	
91	734-0255		Air Valve	
92	15585		Idler Bracket Ass'y.	
93	747-0422		Clutch Rod	
94	735-0196		Foot Pad	
100	15588		Mounting Bracket Variable Speed Pulley	
101	15642		Weld Scr. Brkt. Ass'y.	
102	15605		Front Seat Bracket	
103	736-0284		Thrust Wash. .385" I.D. x 3.50" O.D.	
104	711-0747		Belt Guard Pin ¼" Dia. x 1.68" Lg.	
105	15623		Upper Engine Belt Guard	

13513, 13514 and 13518

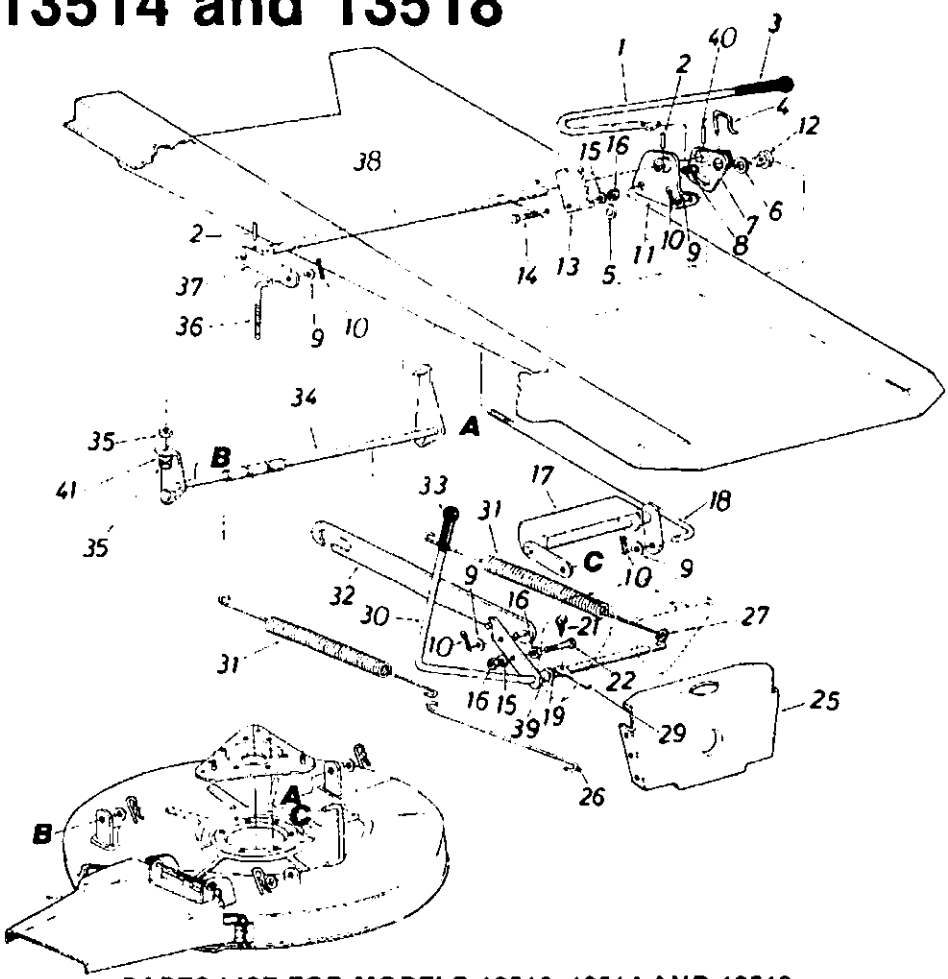


13513, 13514 and 13518

PARTS LIST FOR MODELS 13513, 13514 AND 13518
RIDING MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap	
2	712-0267		Hex Nut 5/16-18 Thd.*	
3	736-0242		Bell-Wash. .345" I.D. x .88" O.D.	
4	731-0219		Steering Wheel Ass'y.	
5	16042		Steering Shaft Ass'y.	
6	736-0187		Fl-Wash. .62" I.D. x 1.50" O.D.	
7	750-0532		Spacer (Plastic)	
10	15613		Pivot Bar Bracket	
11	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
12	15614		Steering Gear Support Brkt.	
13	710-0776		Hex Wash. Hd. AB-Tap Scr. ¼ x .62" Lg.	
14	15608		Steering Gear Cover	
15	741-0225		Hex Flange Bearing	
16	736-0285		Fl-Wash. .64" I.D. x 1.62 O.D.	
17	738-0541		Shoulder Spacer .622 Dia x .218	
18	748-0290		Steering Pinion Gear	
19	736-0320		Fl-Wash. .385" I.D x 1.38" O.D.	
20	710-0502		Hex Wash. Hd. Self-Tap Scr. 3/8-16 x 1.25" Lg.	
21	736-0242		Bell-Wash. .345" I.D. x .88" O.D.	
22	712-0123		Hex Nut 5/16-24 Thd.*	
23	710-0191		Hex Bolt 3/8-24 x 1.25" Lg. (Grade 5)	
24	736-0320		Fl-Wash. .385" I.D. x 1.38" O.D.	
25	712-0241		Hex Nut 3/8-24 Thd.*	
26	736-0169		L-Wash. 3/8" I.D.*	
27	717-0472		Steering Gear Segment	
28	738-0541		Shoulder Spacer .622" Dia. x .218	
29	710-0689		Hex Bolt (Nylon) ½-13 x .75" Lg.	
30	736-0160		Fl-Wash. .530" I.D. x .930" O.D.	
31	712-0206		Hex Nut ½-13 Thd.*	
32	736-0105		Bell-Wash. .335" I.D. x .88" O.D.	
33	712-0241		Hex Nut 3/8-24 Thd.*	
34	736-0119		L-Wash. 5/16" I.D.*	
35	712-0267		Hex Nut 5/16-18 Thd.*	
36	712-0267		Hex Nut 5/16-18 Thd.*	
37	736-0119		L-Wash. 5/16" I.D.*	
38	723-0156		Ball Joint Ass'y 3/8-24 Thd.	
40	747-0417		Steering Tie Rod	
41	15616		Front Axle Ass'y.—R.H.	
	15617		Front Axle Ass'y.—L.H. (Not Shown)	
42	741-0313		Flange Bearing .632" I.D.	
43	734-1184		Front Wheel Ass'y. Comp.	
	734-1185		Tire Only	
44	734-1183		Front Wheel Rim Only	
	734-0225		Air Valve	
	737-0146		Grease Fitting	
45	741-0313		Flange Bearing .632" I.D.	
46	714-0470		Cotter Pin 1/8" Dia. x 1.25" Lg.*	
47	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*	
48	736-0300		Fl-Wash. .385" I.D. x .87" O.D.	
49	736-0156		Fl-Wash. .635" I.D. x 1.12" O.D.	
50	741-0225		Hex Flange Bearing	
51	741-0225		Hex Flange Bearing	
52	736-0156		Fl-Wash. .635" I.D. x 1.12" O.D.	
53	15610		Pivot Bar Ass'y.	
54	726-0159		Speec Nut 5/8" I.D.	
55	15613		Pivot Bar Bracket	
56	15694		Bracket Reinforcement—R.H.	
57	710-0776		Hex Wash. Hd. AB-Tap Scr. ¼ x .62" Lg.	
58	726-0154		Cable Tie	
59	15562		Clutch-Brake Pedal Ass'y.	
60	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
61	15699		Bracket Reinforcement—L.H.	
62	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
63	711-0222		Battery Hold Down Rod	
64	712-0113		Wing Nut Solid ¼-20 Thd.	
65	731-0708		Battery Cover	
66	725-0514		12V Battery	
67	731-0484		Plastic Hub Cap	

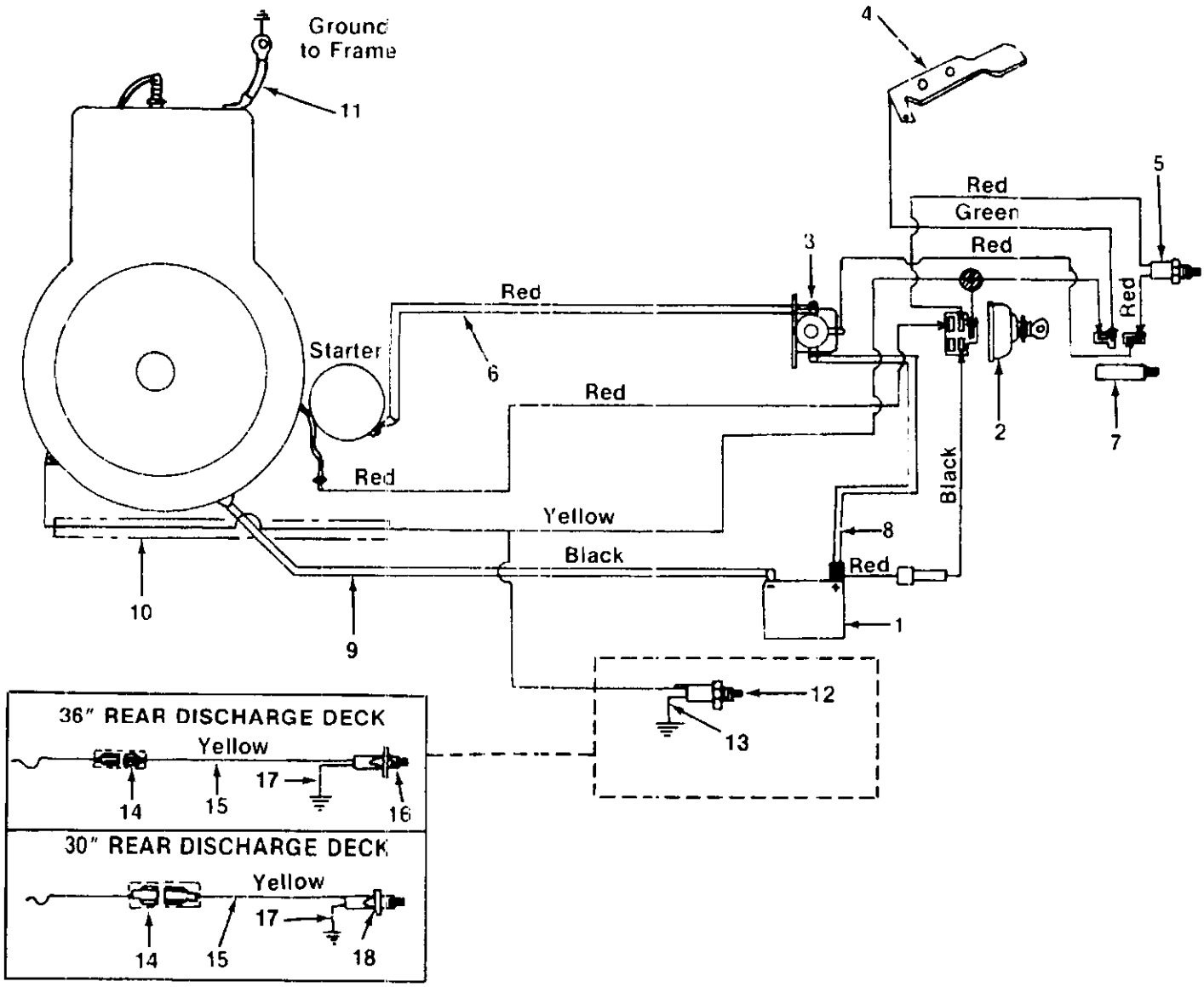
13513, 13514 and 13518



PARTS LIST FOR MODELS 13513, 13514 AND 13518 RIDING MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	747-0418		Deck Lift Handle	
2	715-0114		Spring Pin Spir. ¼" Dia. x 1.50" Lg.	
3	720-0143		Grip	
4	714-0166		Cotter Pin (Special)	
5	736-0162		Fl-Wash. 5/8" I.D. x 1.0" O.D. x .12	
6	736-0187		Fl-Wash. 5/8" I.D. x 1.25" O.D. x .60	
7	15576		Deck Lift Handle Brkt. Ass'y.	
8	732-0430		Compression Spring .50" O.D. x 1.04	
9	736-0300		Fl-Wash. .385" I.D. x .87" O.D. x .06	
10	714-0115		Cotter Pin 1/8" Dia. x 1.00"*	
11	15578		Deck Lift Brkt. Ass'y.—L.H.	
12	711-0749		Adj. Ferrule—Deck Lift Handle	
13	15581		Index Bracket	
14	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
15	736-0119		L-Wash. 5/16" I.D.*	
16	712-0267		Hex Nut 5/16-18 Thd.*	
17	15573		Deck Lift Ass'y. Front	
18	747-0426		Deck Lift Connecting Rod	
19	736-0160		Fl-Wash. .531" I.D. x .930"	
21	710-0599		Hex Wash. Hd. Self-Tap Scr. ¼-20 x .50" Lg.	
22	710-0805		Hex Bolt 5/16-18 x 1.50" Lg.*	
25	15613		Pivot Bar Bracket	
26	732-0451		Spring Hook	
27	711-0753		Spec. Clevis Pin .250" Dia.	
29	732-0435		Switch Actuator	
30	15568		Blade Engagement Lever Ass'y.	
31	732-0440		Extension Spring .99" O.D. x 14.25" Lg.	
32	15644		Deck Drive Control Brkt. Ass'y.	
33	720-0143		Grip	
34	15600		Deck Link Ass'y.—Rear	
35	712-0798		Hex Nut 3/8-16 Thd.*	
36	710-0866		Deck Adj. Scr. 3/8-16 Thd.	
37	15609		Deck Lift Brkt. Ass'y.—R.H.	
38	738-0550		Rear Height Adj. Shaft	
39	750-0515		Sleeve .511" I.D. x .70" O.D. x .37" Lg.	
40	715-0134		Spring Pin Spir. 3/16" Dia. x 1.50" Lg.	
41	736-0169		L-Wash. 3/8" I.D.*	

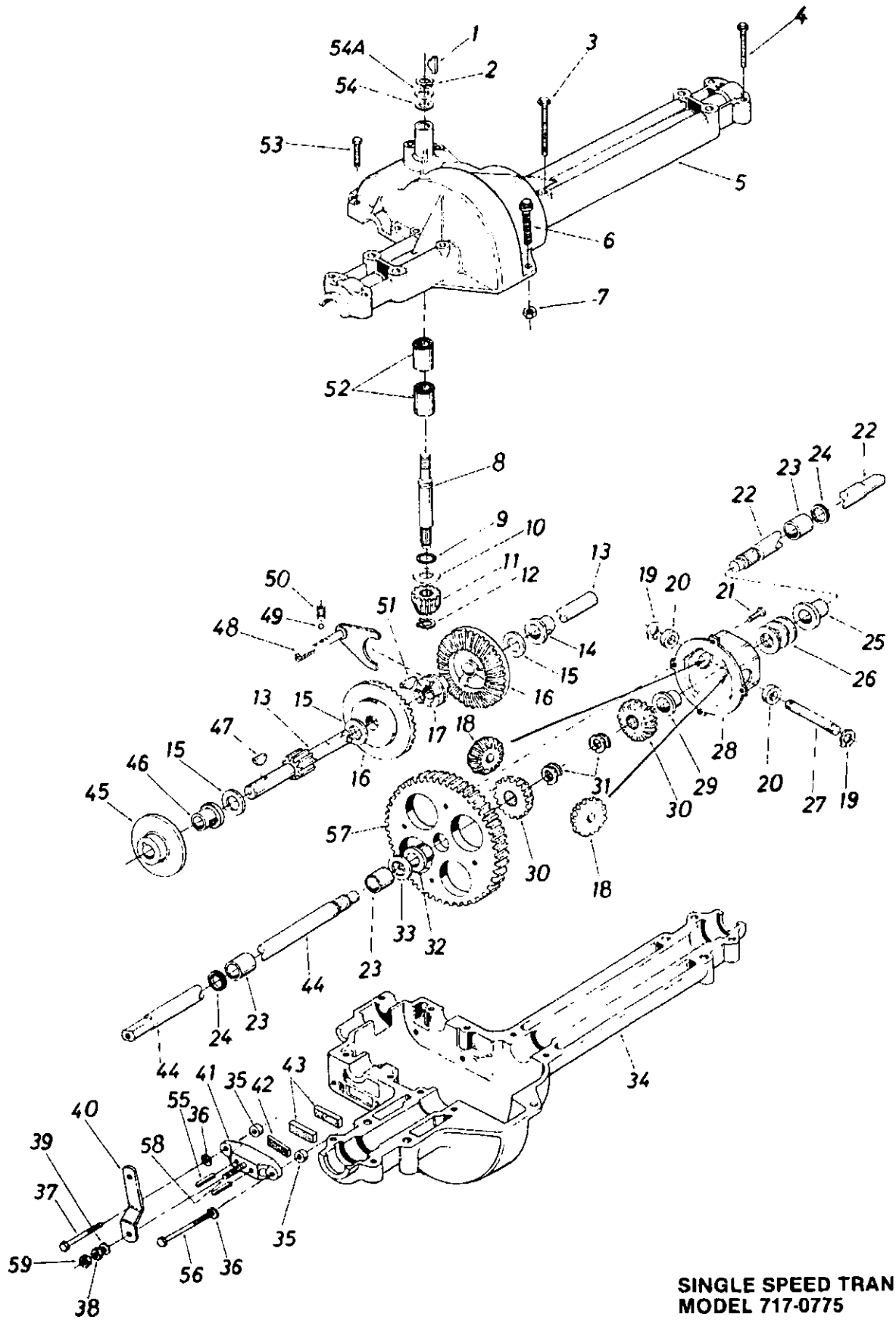
13513, 13514 and 13518



PARTS LIST FOR ELECTRICAL SYSTEM
MODELS 13513, 13514 AND 13518
RIDING MOWERS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0514		Battery		11	725-0977		Ground Wire	N
2	725-0267		Key Switch		12	725-0269		Safety Switch (Deck)	
3	725-0771		Solenoid		13	725-0765		Wire Lead	
4	732-0420		Spring Switch (Reverse)		14	725-0717		Tab Receptacle	
5	725-0268		Safety Switch		15	725-1037		Wire Lead—12" Lg.	N
6	725-0424		Electric Wire	N	16	725-1001		Safety Switch	N
7	725-0819		Safety Switch		17	725-1037		Ground Wire	
8	725-0927		Electric Wire—13.5" Lg.	N	18	725-0269		Safety Switch	
9	725-0975		Ground Wire	N	—	725-0861		Wire Harness	
10	731-0652		Convoluted Conduit—24' Lg.						

13413, 13514 and 13518



SINGLE SPEED TRANSAXLE
MODEL 717-0775

13513, 13514 and 13518

PARTS LIST FOR SINGLE SPEED TRANSAXLE 717-0775

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.	
2	716-0115		Snap Ring .625" Shaft	
3	710-0854		Hex Bolt ¼-20 x 1.75" Lg *	
4	710-0809		Hex Bolt ¼-20 x 1.25" Lg *	
5	717-0764		Upper Housing	
6	710-0889		Hex Fl-Bolt ¼-20 x .88" Lg.*	
7	712-0298		Hex Jam Nut ¼-20 Thd.*	
8	717-0634		Input Shaft	
9	721-0178		Square Seal 5 8" I D.	
10	736-0335		Thrust Washe' 5/8" I.D. x 1.25" O.D.	
11	717-0633		Pinion Input 14T	
12	716-0108		Retaining Ring 7/16" Ext.	
13	717-0768		Drive Shaft	
14	741-0336		Flange Brg. 5/8" I.D. x ¾ Lg.*	
15	**		Fl-Wash. (See Below)	
16	717-0757		Bevel Gear 42T	
17	717-0667		Clutch Collar	
18	717-0674		Miter Gear 15T	
19	716-0142		Snap Ring	
20	717-0690		Thrust Bearing ½" I.D x 1.0" O.D.	
21	710-0862		Pan Head Scr ¼-20 x .50" Lg. w/Patch	
22	717-0771		Axle R.H.	
23	741-0340		Sleeve Bearing ¾" I.D x 1.0" Lg.	
24	721-0179		Oil Seal ¾" I.D.	
25	741-0339		Flange Bearing ¾" I.D. x 15/16" Lg.	
26	736-0188		Fl-Wash. .760 I.D. x 1.49 O.D.	
27	717-0673		Cross Shaft	
28	717-0669		Housing Differential	
29	741-0338		Flange Bearing ¾" I.D. x .53" Lg.	
30	717-0687		Miter Gear	
31	716-0144		Retaining Ring	
32	741-0376		Flange Bearing ¾" I.D. x .587	
33	736-0188		Fl-Wash. .760" I.D. x 1.49" O.D.	
34	717-0761		Lower Housing	
35	750-0555		Spacer .53" O.D. x 3/8" Lg.	
36	736-0329		L-Wash. ¼" I.D *	
37	710-0886		Hex Bolt ¼-20 x 1.50" Lg. (Grade 5)	
38	712-0123		Hex Nut 5/16-24 Thd.*	
39	736-0159		Fl-Wash. .344" I.D. x .875" O.D.	
40	717-0772		Actuating Arm	
41	717-0679		Brake Yoke	
42	717-0682		Puck Plate	
43	717-0678		Brake Puck	
44	717-0770		Axle L.H.	
45	717-0677		Brake Disc	
46	741-0337		Flange Bearing 5/8" I.D. x 15/16" Lg.	
47	714-0161		Woodruff Key 3/16 x 5/8 HT	
48	717-0754		Shift Fork Ass'y.	
49	741-0862		Ball Detent .250" Dia.	
50	732-0863		Spring Detent	
51	714-0126		#9 Hi-Pro Key 3/16" x ¾" Dia HT	
52	741-0335		Needle Brg. 5/8" I.D. x ½" Lg.	
53	710-0855		Hex Bolt ¼-20 x 1.00" Lg.	
54	736-0336		Fl-Wash. 5/8" I.D. x .030	
54A	736-0337		Fl-Wash. 5/8" I.D. x .040	
55	741-0343		Actuating Pin 5/16" Dia.	
56	710-0886		Hex Bolt ¼-20 x 1.50" Lg. (Grade 5)	
57	717-0759		Differential Gear 72T	
58	717-0681		Sq. Hd. Bolt 5/16-24 Thd.	
59	712-0256		Hex Jam Nut 5/16-24 Thd.*	
—	737-0148		Grease—Shell (10 oz.)	

**Ref. No. 15 736-0349 Fl-Wash. 5/8" I.D. x 1.0" O.D.
736-0336 Fl-Wash. 5/8" I.D. x .030" O.D.
736-0337 Fl-Wash. 5/8" I.D. x .040" O.D.

YaRD-MaN
PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service for all YaRD-MaN manufactured power equipment are available through the authorized service distributors listed below. All orders should specify the model number of your unit, parts numbers, description of parts and the quantity of each part required. DO NOT SEND PARTS ORDER TO FACTORY. Dealers should contact their area distributors identified by state abbreviation below.

BRIGGS & 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 **Engine—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

MD, DE, WA-DC, N-VA, S-CA, AZ
ADAMS EQUIPMENT
8001 Newell St.
Silver Spring, MD 20910
(301) 585-1322

NC, SC
ALLISON-ERWIN CO.
2920 N. Tryon Street
P.O. Box 32308
Charlotte, NC 28232
(704) 334-8621

IL
B & D INC.
2809 N. Vermilion St.
Box 1255
Danville, IL 61832
(217) 446-5167

ME, N-NH
M. L. COFFIN
725 Broadway
Bangor, ME 04401
(207) 942-8289

CT VT, RI MA, S-NH
CRANDALL-HICKS CO.
Route 9
337 Boston Worcestpke
Southboro, MA 01772
(617) 485-6300

Jackson County MI
FACTORY BRANCH COMPANY
440 East Prospect
Jackson, MI 49203
(517) 783-2766

S FL
FLORIDA TURF & GARDEN EQUIP.
7275 NW 64th St.
Miami, FL 33166
(305) 592-3846

W-E-MI, N-W-OH
IDEAL MOWER SALES
811 Woodward Heights
Ferndale, MI 48220
(313) 541-4660

N-CA
IMPOSSIBLE EQUIPMENT
1880 Enterprise
P.O. Box 1016
W. Sacramento, CA 95691
(916) 371-9110

N FL
LAWN PRODUCTS OF AMERICA
565 S. Edgewood Ave.
Jacksonville, FL 32205
(904) 387-1512

PA, S-NJ
S.P. LUMMUS CO., INC.
800 Industrial Hwy.
Pottstown, PA 19464
(215) 327-4920

WI, UP-W-MI
MERCO CORP.
4080 N. Pt. Washington Rd.
P.O. Box 12145
Milwaukee, WI 53212
(414) 961-3200

N-NJ, NY
NIEMEYER CORP.
1135 Phoenixville Pike
P.O. Box 1477
West Chester, PA 19380
(215) 431-7200

MO, E-KS
OZARK EQUIPMENT CO.
Hwy. 63 & Black Street
P.O. Box 784
Rolla, MO 65401
(314) 364-2180

UT, NV
POWERED PRODUCTS
485 North 500 West
Bountiful, UT 84010
(801) 295-4148

OH, IN
RAHRIG SALES INC.
108-110 W. Lima St.
Forest, OH 45843
(419) 273-2556

NM
HUGO SCHULTE & CO.
6666 Fourth St.
Albuquerque, NM 87107
(505) 345-2633

NE, CO, S E WY, N W KS
STICKNEYS INC.
101 Main St.
Sterling, CO 80751
(303) 522-2665

TX, OK, AR, LA
TIMBERLAND SAW CO.—TIMSCO
1603 E. Houston—Box 1227
Marshall, TX 75670
(214) 935-5251

TX
WOODSON SALES CORP.
1720 N. Sylvania Ave.
Fort Worth, TX 76111
(817) 838-6736

OR, W ID
R. M. WADE & CO.
10025 S. W. Allen Blvd.
Beaverton, OR 97005
(503) 641-1865

WA
R.M. WADE & CO.
5808 S. 196
P.O. Box 58503
Kent, WA 98032
(206) 872-9233

CANADA
MTD PRODUCTS CANADA
97 Kent Ave.
Kitchener, Ontario
Canada, N2G 4J1
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WARRANTY PARTS AND SERVICE POLICY (0883)

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—Date Repaired.
4. **Nature** of failure—Correction.