FIFTY CENTS

OWNER'S MANUAL

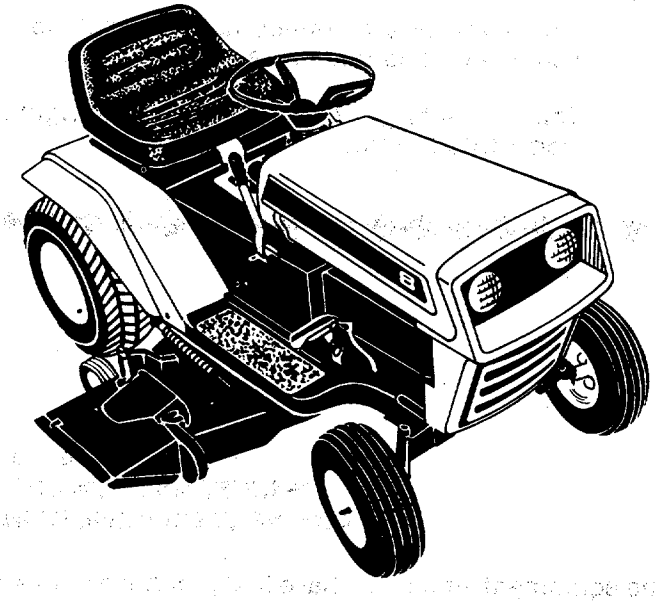
- ASSEMBLY
- OPERATION
- MAINTENANCE
- PARTS LIST

Model Nos.
138-472A
138-475A

Important:

Read Safety Rules and Instructions Carefully

34" RIDING MOWERS



PRINTED IN U.S.A.

FORM NO. 770-7451

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 under this warranty must be paid by the purchaser unless return is requested by MTD PRODUCTS INC.

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

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

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

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

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

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

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

➡IMPORTANT

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

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

Your rotary mower is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

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

INDEX

GRASS CATCHER Model No. 198-015A is available as optional equipment for the mowers shown in this manual.

WARNING

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

NOTE

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 bag No. 764-0121.

IMPORTANT

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

The steering wheel and seat, with the necessary hardware, are easily assembled to the machine. On the electric starter models, the battery must be activated and installed as outlined in this section.

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. PRESSURE SHOULD BE APPROXIMATELY 15 P.S.I. EQUAL TIRE PRESSURE SHOULD BE MAINTAINED ON ALL TIRES. MAXIMUM TIRE PRESSURE IS 30 P.S.I.

CAUTION

Installation of tire to rim:

1. Lubricate 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.

NOTE

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

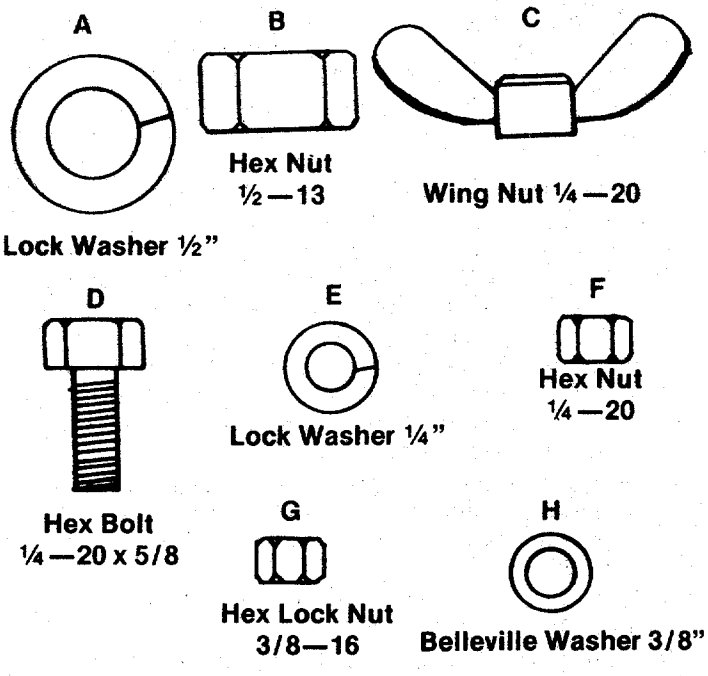


FIGURE 1. HARDWARE SUPPLIED

Step 1. Remove the lawn mower and all parts from the carton. Make certain that all loose parts and literature have been removed before the carton is discarded.

Step 2. Place steering wheel over steering shaft.

Step 3. Secure with Belleville washer and hex nut. See figure 2.

Step 4. Press the cap on the steering wheel by hand. See figure 2.

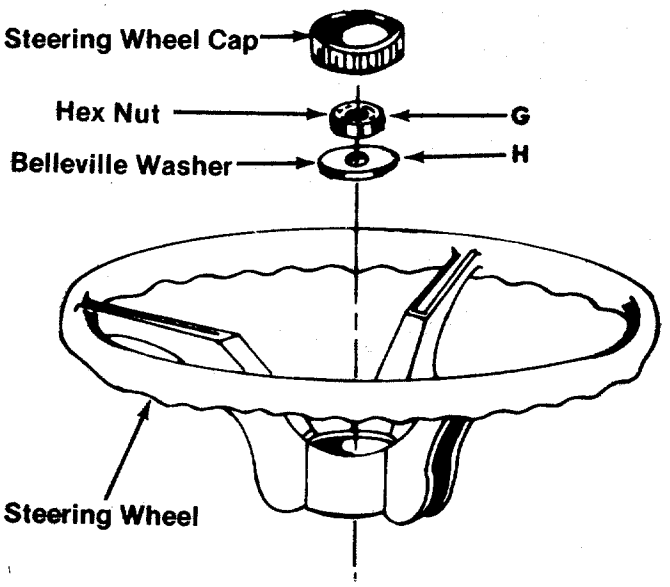


FIGURE 2. STEERING WHEEL ASSEMLY

Step 5. Your molded seat comes with the mounting bolt molded in the seat.

A. Select one of three hole locations on seat spring.

B. Place seat on spring and secure with lockwasher (A) and hex nut (B). See figures 1 and 3.

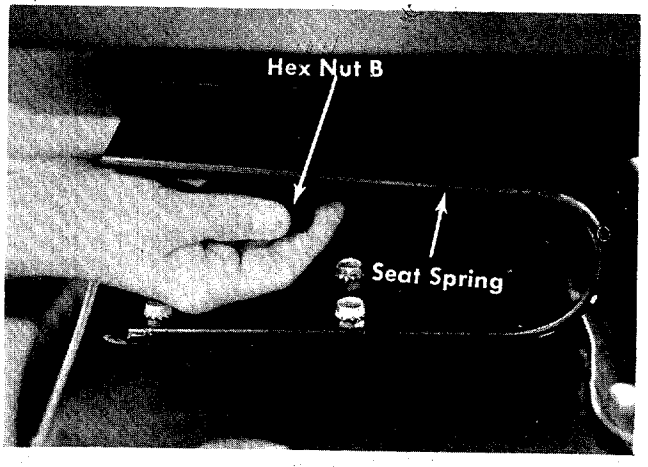


FIGURE 3. SEAT ASSEMBLY

NOTE

Check ALL nuts and bolts for correct tightness.

BATTERY INFORMATION FOR ELECTRIC START MODELS

WARNING

A. Battery acid must be handled with great care as it will blister the skin and damage clothing. It is advisable to wear goggles, rubber gloves, and a protective apron when working with it.

B. Neutralize acid spilled on clothing with dilute ammonia water or a water solution of baking soda. If acid gets on clothes, dilute it with clean water first, then neutralize.

C. If for any reason acid should be spattered in the eyes, wash it out immediately with clean cold water. Seek medical aid if discomfort continues.

D. Since battery acid is corrosive to metals, do not pour into any sink or drain. Rinse empty electrolyte containers and mutilate before discarding.

DANGER

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

A. Keep sparks, flame, cigarettes away.

B. Hydrogen gas is generated during charging and discharging.

C. Ventilate when charging or using in enclosed space.

D. When using a charger—to avoid sparks, NEVER connect or disconnect charger clips to battery while charger is turned on.

E. Always shield eyes, protect skin and clothing when working near batteries.

A. ACTIVATING THE BATTERY

1. Place battery to be filled on bench or workbench. NEVER activate battery in unit. Remove vent caps from all cells.

2. Fill each cell carefully using battery grade 1.250-1.265 specific gravity. Sulfuric acid to be 3/8" above the top of the separators or to the split ring.

3. Allow battery to set for 20 minutes to ½ hour. Add additional acid if necessary to bring it up to the proper level.
4. Replace the vent caps.
5. The battery can now be charged after the 20 minutes setting period. Battery can be SLOW CHARGED (DO NOT FAST CHARGE) at a maximum bench rate of 4-5 amperes until the specific gravity reading is 1.265-1.275. A charging rate in excess of this will buckle and warp the positive plates and perforate the separators. If electrolyte bubbles violently while charging, reduce charging rate until excessive bubbling action subsides, then continue charging until specific gravity is reached.

CAUTION

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

B. TO INSTALL BATTERY

To install the battery in this unit, refer to page 6.

C. MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is 9/16" above separator plates. Add only distilled water or good quality 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.

D. STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. Store in cold, dry place.
3. Recharge battery whenever the specific gravity is less than 1.225 before returning to service or every two months, whichever occurs first.

E. COMMON CAUSES FOR BATTERY FAILURE ARE:

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

NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

INSTALLING THE BATTERY

1. Open the hood of the riding mower.
2. Place the battery in the battery case with the terminal to the front. See figure 4.

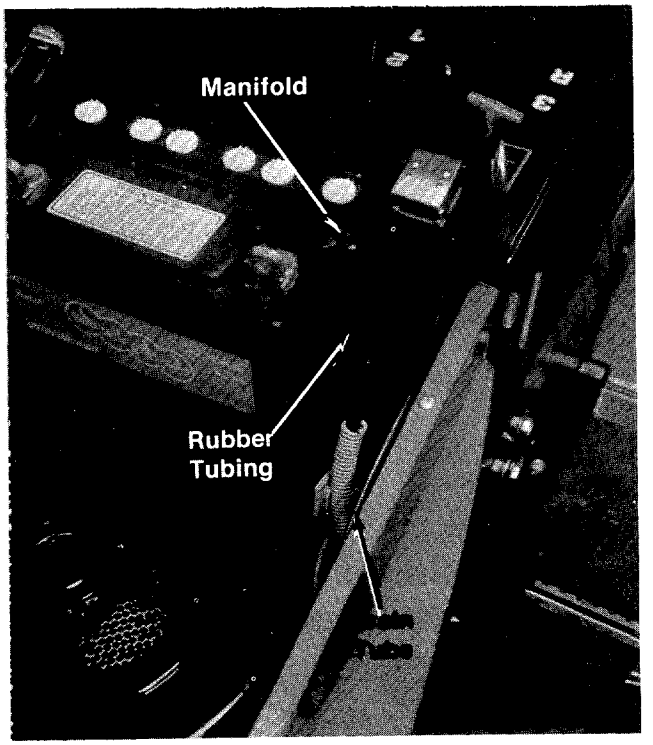


FIGURE 4.

3. Cut the black rubber tubing approximately 4 inches long.

4. Push the rubber tubing into the manifold of the battery and place the other end into the drain tube. See figures 4 and 5.

NOTE

The vented battery allows any gases or liquid from the battery to be carried to the rear of the mower through the drain tube.

5. Hook the hold down rods under the battery case and place the hold down over the manifold of the battery as shown in figure 6.

6. Secure the hold down with the wing nuts.

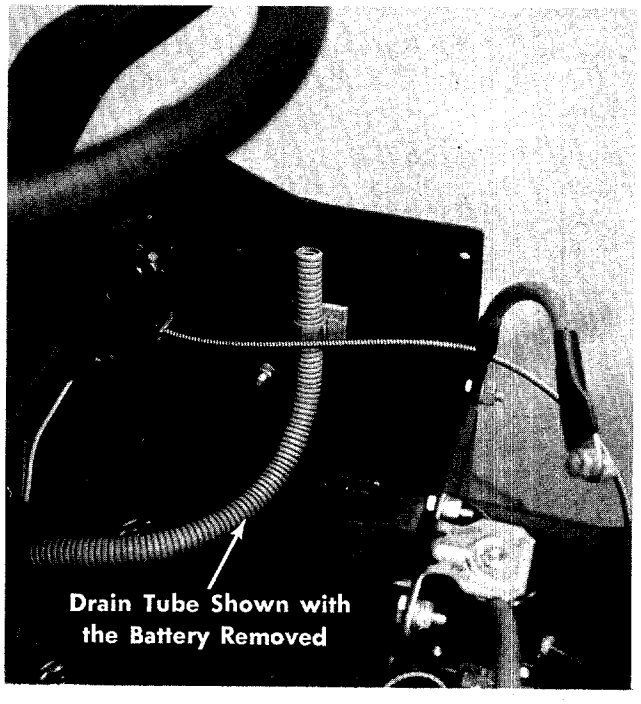


FIGURE 5.

7. Attach the positive cable from the starter solenoid) and the small wire (from the ammeter) to the positive battery terminal with the bolt, lockwasher and nut in the assembly pack.

8. Attach the negative cable, grounded, to the negative battery terminal with the bolt, lockwasher and nut in the assembly pack.

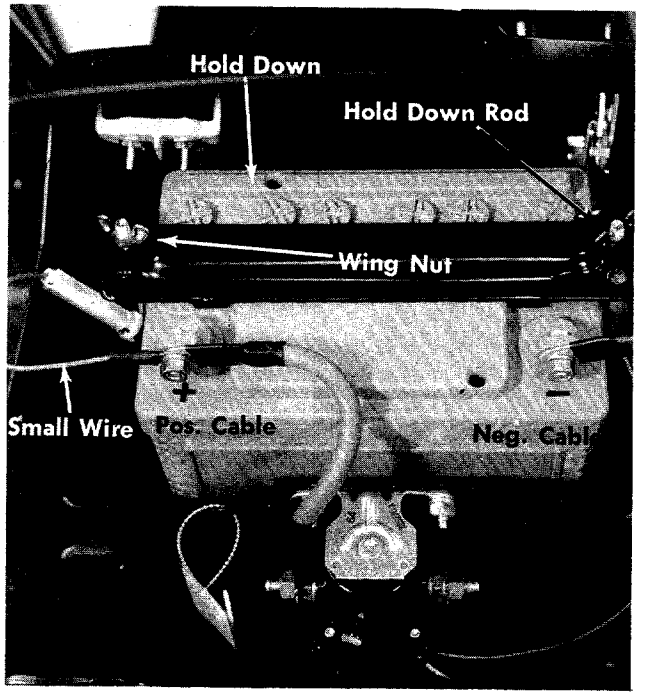


FIGURE 6.

CONTROLS

The controls on both models may be considered as the Drive Control and the Cutting Control as follows:

a. Throttle control. The throttle control is used to regulate the engine speed and choke the engine. The engine should be operated from ¾ to full throttle when operating the cutting deck or snow thrower (optional). See figure 7.

b. Gear Shift Lever. The gear shift lever is used to shift into one of three FORWARD GEARS, NEUTRAL or REVERSE. See figure 7.

c. Brake. The brake pedal is located on the right hand side of the mower and is operated by depressing it with your right foot. See figure 8.

d. Brake Lock. The brake lock is located on the right hand side of the mower. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 9.

e. Clutch Pedal. The clutch pedal is used to disengage the drive mechanism. Depressing the clutch pedal at any time will reduce mower speed. If depressed all the way, it will stop the mower. See figure 9.

f. Clutch Lockout. When the clutch pedal is depressed all the way it can be locked by placing the clutch lockout in the START position as shown in figure 9. The clutch locknut must be in this position before the engine will start.

g. 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 will not show a charge. See figure 7.

h. Light Switch. Pull the light switch out to turn on the lights. The lights will only operate when the engine is running. See figure 7.

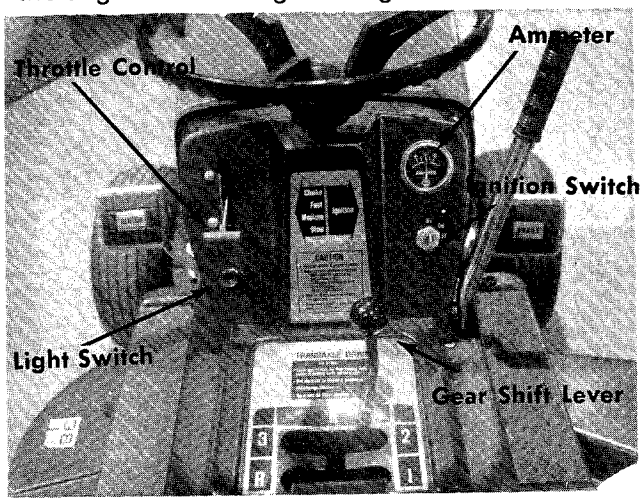


FIGURE 7. CONTROLS

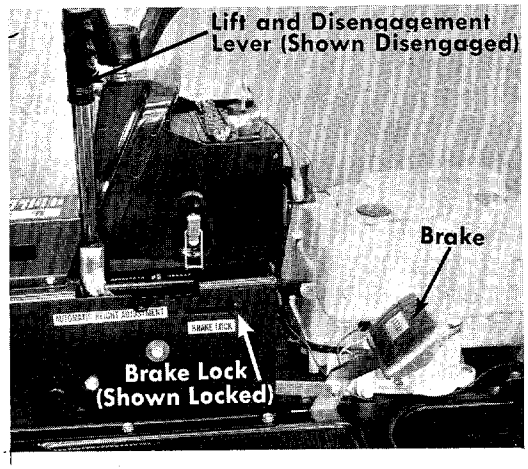


FIGURE 8. RIGHT HAND CONTROLS

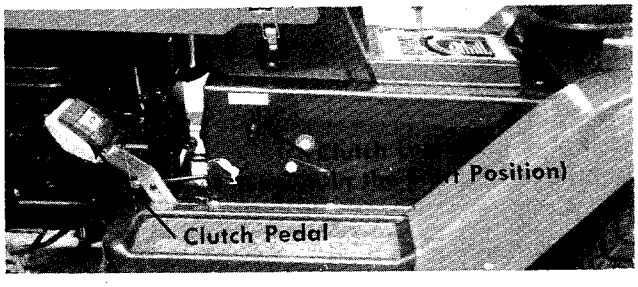


FIGURE 9. LEFT HAND CONTROLS

i. Ignition Switch. The ignition switch is located on the right side of the dashboard.

Recoil Model. The key must be turned to the ON position before you pull the recoil handle to start the engine. Remove the key when the mower is not in use. Turn the key to the left to the OFF POSITION TO STOP THE ENGINE. See figure 12.

Electric Start. See figure 7. Turn the key to the START position to start the engine. When the engine is running, let the key return to the ON position. To stop the engine, turn the key to the left to the OFF position and remove it to prevent accidental starting.

NOTE

The engine will not start unless the clutch lockout is in the START position and the lift lever is in the DISENGAGED position.

j. Lift and Disengagement Lever. It is used to raise the cutting deck. Pulling it all the way back and locking it disengages the blades. The engine will not start unless the lift and disengagement lever is in the disengaged position. See figure 8.

k. Cutting Controls. The cutting controls consist of the height of cut stop and the wheel height adjusters.

Height of Cut Stop. See figure 10. Lift the stop and set it at the desired cutting height.

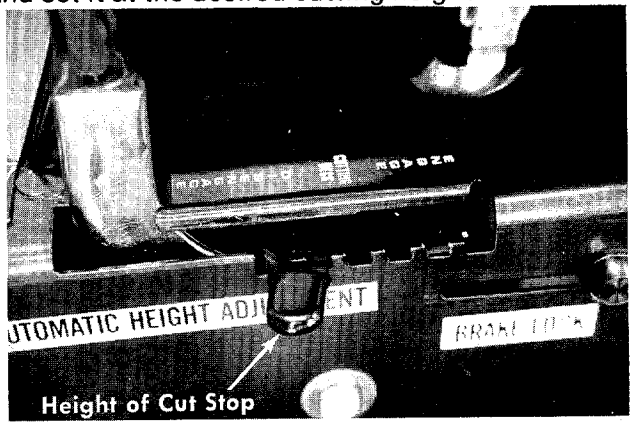


FIGURE 10. HEIGHT OF CUT SETTINGS

Wheel Height Adjuster. See figure 11. Move the lever towards the wheel and set it in the desired cutting height.

The cutting height of the mower can be set in two different ways: FULL FLOAT position where the deck follows the contour of the ground, and the SUSPENDED position where the deck hangs from the frame of the rider. The suspended position is normally used for cutting rough uneven ground.

To set the cutting deck in the full float position, set the wheel height adjusters in the desired cutting height as indicated in figure 11. Set height of cut stop in the 1½ position. See figure 10.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheel so they just clear the ground.

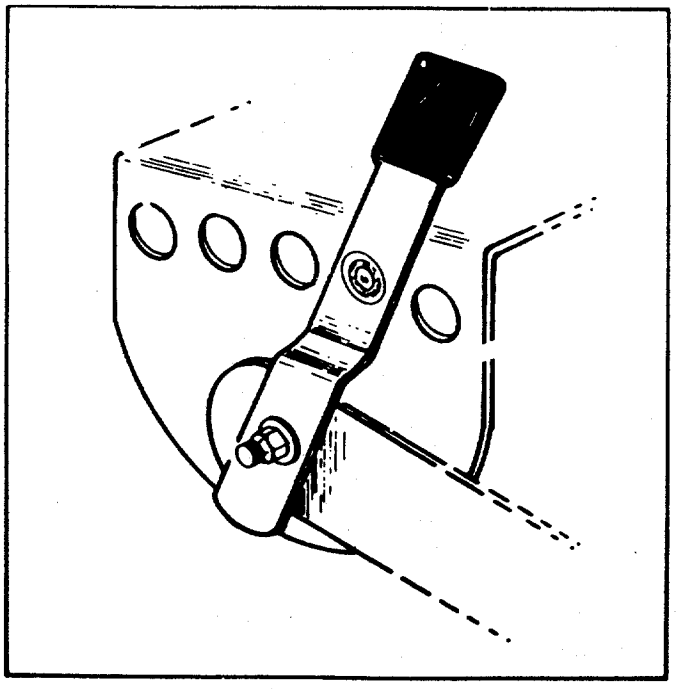


FIGURE 11. WHEEL HEIGHT ADJUSTER

RECOIL STARTER HANDLE

The recoil starter handle is located on the right side of the dashboard. The recoil starter handle can either be pulled while seated on the rider or pulled while standing behind the rider. The ignition key must be on before the engine will start. After the engine starts, the recoil starter handle must be returned and locked into the dashboard before the blade or clutch are engaged. The engine will stop if you do not follow these instructions. See figure 12.

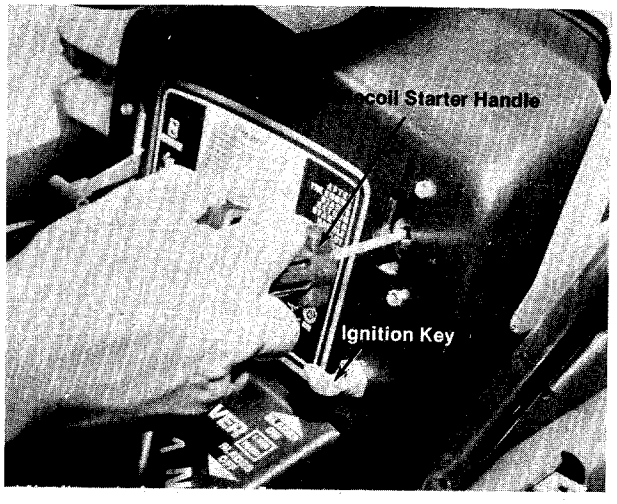


FIGURE 12. RECOIL STARTER

OPERATING INSTRUCTIONS

STARTING THE ENGINE

Be sure to follow the instructions for the oil and gasoline as described in the engine section of this manual.

Step 1. Be sure the fuel shut-off valve is open. See figure 13.

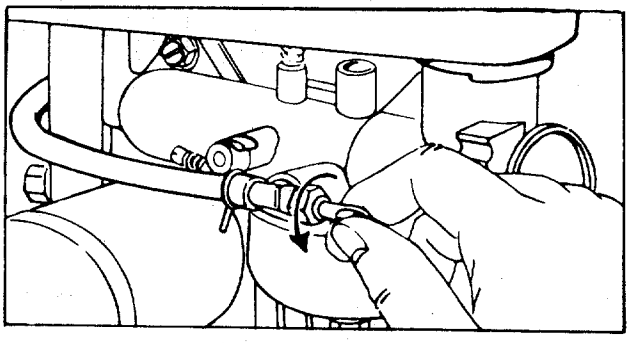


FIGURE 13. FUEL SHUT-OFF VALVE

Step 2. Place the clutch lockout in the START position. See figure 9.

Step 3. Place the lift and disengagement lever in DISENGAGED position. See figure 8.

Step 4. Set the throttle control in the CHOKE position. See figure 7.

NOTE

This unit is equipped with a brake indicator light which is located on the dash panel. Whenever the starter key is on and the brake pedal is depressed, it will light.

CAUTION

This light indicates that the brake is engaged. Operating the unit with the brake engaged will result in rapid brake wear and premature brake failure.

Step 5. **Recoil Model.** Turn the ignition key to the ON position, twist the recoil starter handle until it is free and pull it with a quick steady motion. After the engine starts, return the recoil starter handle and twist it until it locks. See figures 12 and 14.

NOTE

The engine will stop when clutch or blades are engaged if this procedure is not followed.

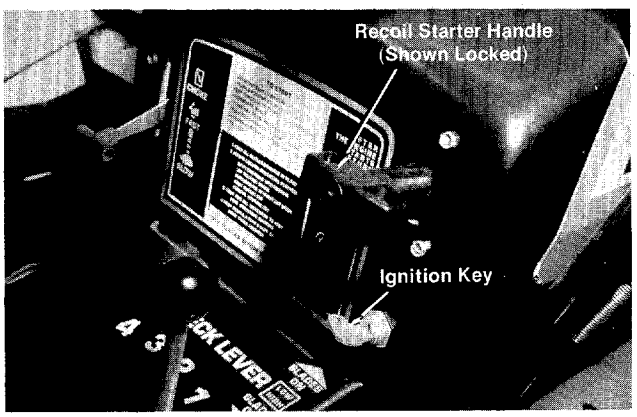


FIGURE 14. RECOIL STARTER

Electric Start

See figures 15 and 16. Turn the ignition key to the START position. When the engine is running, let the key return to the ON position.

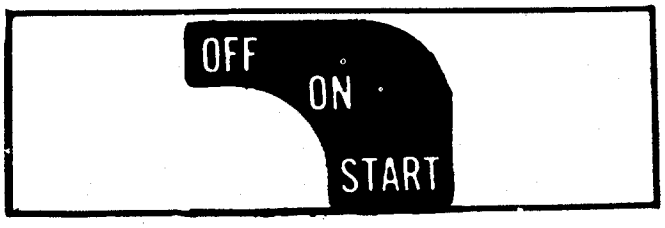


FIGURE 15. STARTER SWITCH

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. This 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 2 hours of operation.

CAUTION

Parking brake MUST be disengaged before unit is put into motion.

NOTE

Unit is equipped with separate brake and clutch pedals. To efficiently stop, it is necessary to disengage clutch when applying brakes.

Step 6. To stop either model, turn the ignition key to the OFF position and remove the key when the unit is not in use.

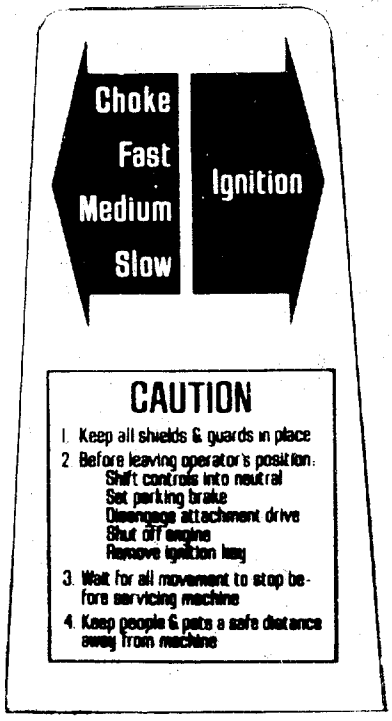


FIGURE 16. DASH PANEL LABEL

OPERATING THE MOWER

Step 1. Set the desired cutting height.

Step 2. Start the engine as outlined above.

Step 3. Select gear and shift.

NOTE

DO NOT force the gear shift lever! If the lever cannot be moved from NEUTRAL to one of the drive positions, release the clutch pedal slowly, depress it again, and then move the gear shift lever as required.

Step 4. Once the machine is in motion, remove foot from the pedal. The mower will now move ahead or to the rear, and the use of the steering wheel will provide directional control.

Step 5. The mower is brought to a stop by pressing your right foot against the brake pedal and your left foot against the clutch pedal. The drive belt will be disengaged and the brake will be applied.

CAUTION

Gear changing should be done only after the mower has been brought to a full stop. If the mower is not to be used for a long period, place the gear shift lever in NEUTRAL and stop the engine. DO NOT leave the machine on an incline.

OPERATING THE CUTTER BLADE

The cutting blades may be engaged while the mower is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.

WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening and from the blade.

To stop the blades, move the lift and disengagement lever (figure 8) into the DISENGAGED position. This raises the deck and disengages the blades.

NOTE

When the machine is used for other than mowing operations the blade drive should be disengaged.

MAINTENANCE

CRANKCASE OIL

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

Oil Check

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil should be kept between the add and full marks on the dipstick.

After the first five hours of operating a new engine, drain the oil (See figure 17.) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. This procedure ensures for minimum wear of engine parts and provides for virtually trouble-free operation. To change the oil, proceed as follows:

Step 1. With the machine on level ground, place a suitable metal container under the oil drain plug, then remove the drain plug. See figure 17.

Step 2. After the oil has been drained completely from the crankcase, replace the drain plug and tighten.

Step 3. Refill crankcase with 2¼ pints of good quality, type MS, Engine oil into the crankcase. Summer use SAE 30; Winter (Below 40°F.) use SAE 5W-20 or SAE 10W.

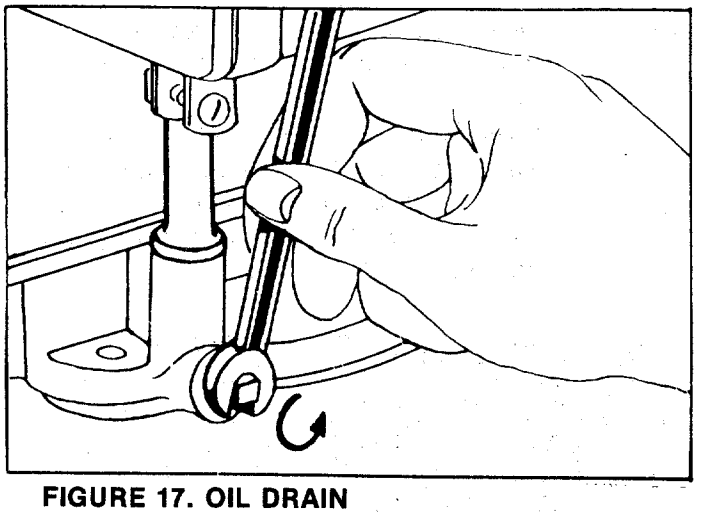


FIGURE 17. OIL DRAIN

LUBRICATION

Lubricate the wheel bearings (2 per wheel) and the upper and lower spindle bearings with SAE 30 oil once a season. See figure 18.

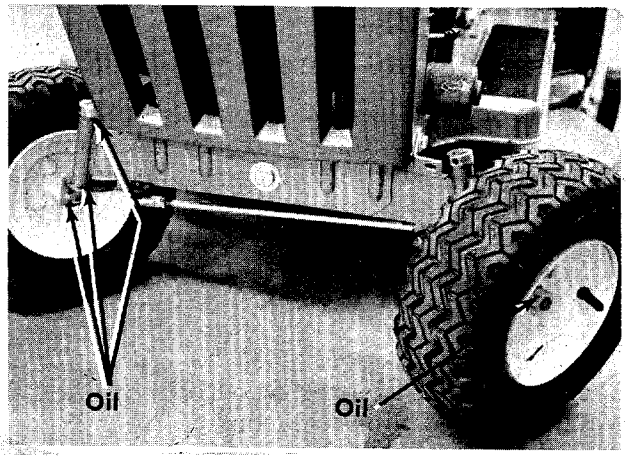


FIGURE 18. WHEEL AND SPINDLE BEARINGS

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions the air cleaner must be serviced after every hour of operation. Refer to figure 19.

When assembling the air cleaner, make certain the lip of the foam element extends over edge of the air cleaner body. The foam element will form a protective seal.

Step 1. Remove two screws and lift off complete air cleaner assembly.

Step 2. Remove screen and spacers from foam element.

Step 3. Remove foam element from air cleaner body.

Step 4. a. Wash foam element in kerosene or liquid detergent and water to remove dirt.

b. Wrap foam in cloth and squeeze dry.

c. Saturate foam in SAE 30 engine oil, then squeeze out excess oil.

d. Assemble parts, fasten to carburetor with screw.

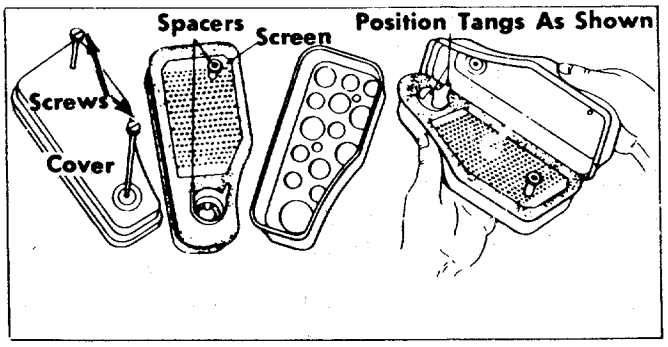


FIGURE 20. AIR CLEANER

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 belt periodically with a clean rag.

NOTE

Belt tension is automatically maintained by the spring on the variable speed bracket on the drive belts and the belt tension on the deck belt is maintained by the two deck springs.

SPARK PLUG

The spark plug gap should be cleaned and reset to a 0.030-inch clearance every 25 hours of engine operation.(See figure 20.) Spark plug replacement is recommended at the start of each mowing season; check engine parts list for correct plug type.

NOTE

Whenever the spark plug is removed for cleaning, it is advisable to replace the spark plug gasket with a new gasket.

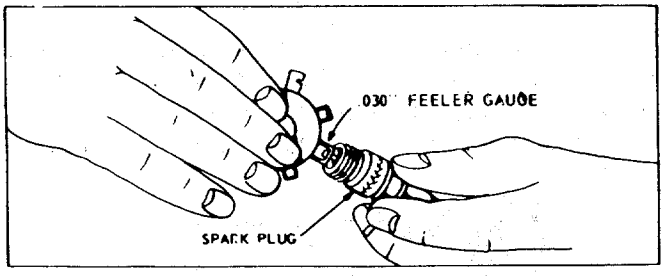


FIGURE 20. SPARK PLUG CLEARANCE

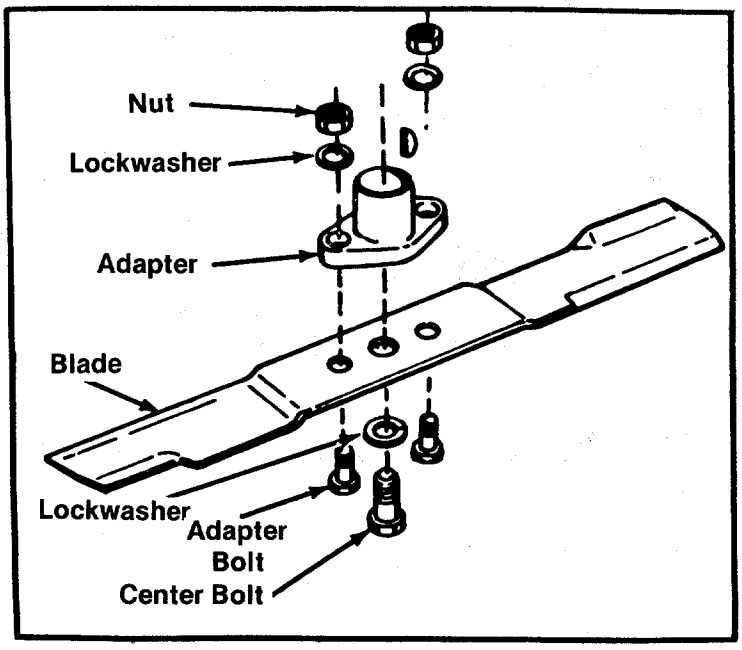


FIGURE 21. BLADE REMOVAL

REPLACING BLADE

WARNING

Before beginning work on the cutter blade, remove the spark plug from the cylinder.

The adapter can be removed from the blade by removing the two adapter bolts, lockwashers and nuts.

Removing and Sharpening Blades. Remove the center bolt and lockwasher. (See figure 21.) Pull the blade and blade adapter from the blade spindle.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) requires no adjustment. Automotive steering principals have been used to determine the caster and camber on the rider. The front wheels should toe-in 1/8 inch.

To adjust the toe-in follow these steps.

Step 1. Remove the elastic locknut and drop the tie rod end from the wheel bracket. (See figure 22.)

Step 2. Loosen the hex jam nut on the rod.

Step 3. Adjust the tie rod assembly for correct toe-in.

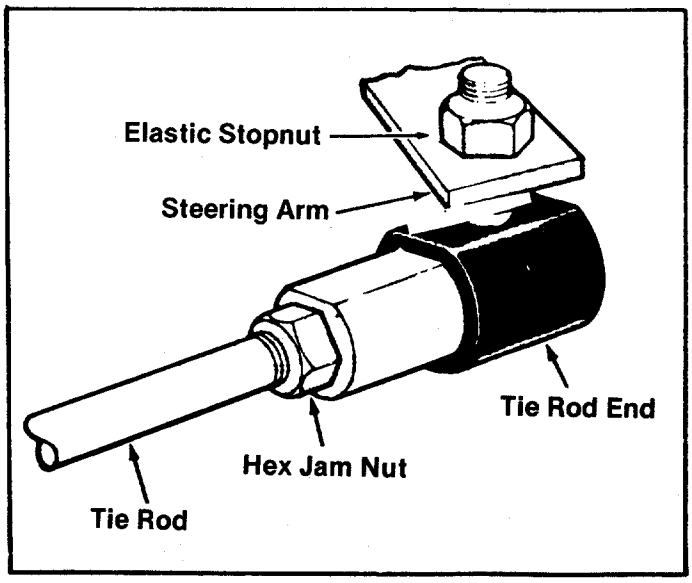


FIGURE 22. TIE ROD END

ADJUSTMENTS

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

A.) To increase dimension "B", screw the rod into tie rod end.

B.) To decrease dimension "B", unscrew tie rod from tie rod end.

C.) Reassemble the rod. Check dimensions. Readjust if necessary.

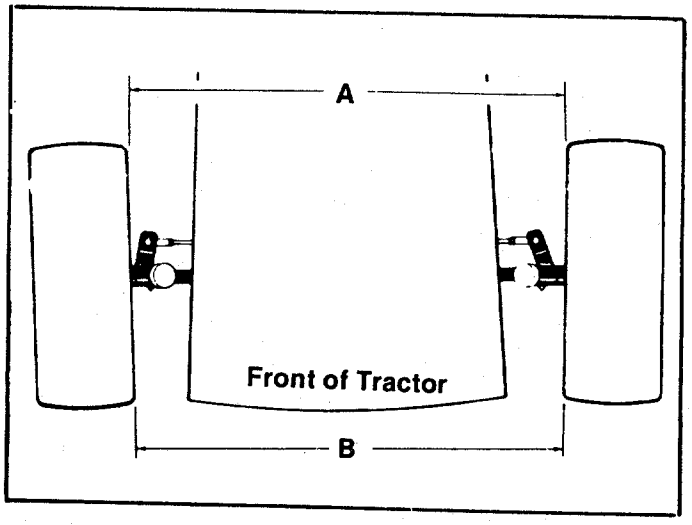


FIGURE 23. TOE-IN DIAGRAM

NOTE

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

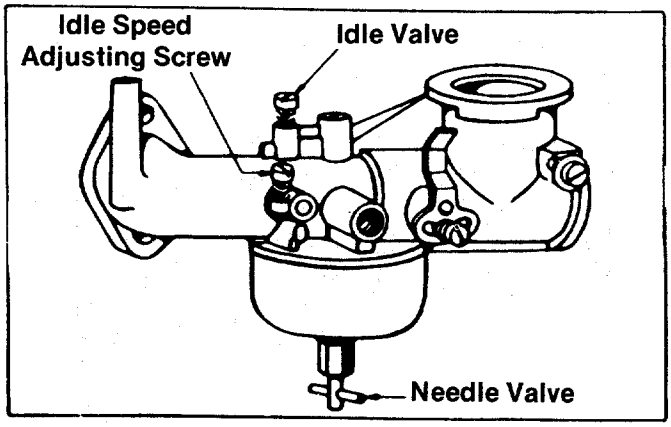


FIGURE 24. CARBURETOR ADJUSTMENT

ADJUSTING CARBURETOR CHOKE

Proper choke operation is dependent upon proper adjustment of remote controls on the powered equipment.

To Check Operation of Choke-A-Matic Controls:

Move control lever to CHOKE position. (See figure 7.) The carburetor choke should be closed.

NOTE

The air cleaner can be removed to check the operation of the choke.

To Adjust:

Place control lever on equipment in FAST (high speed) position. Loosen control casing clamp screw B. Move control casing A and wire until lever D touches choke operating link at C. Tighten casing clamp screw B. **See figure 25.**

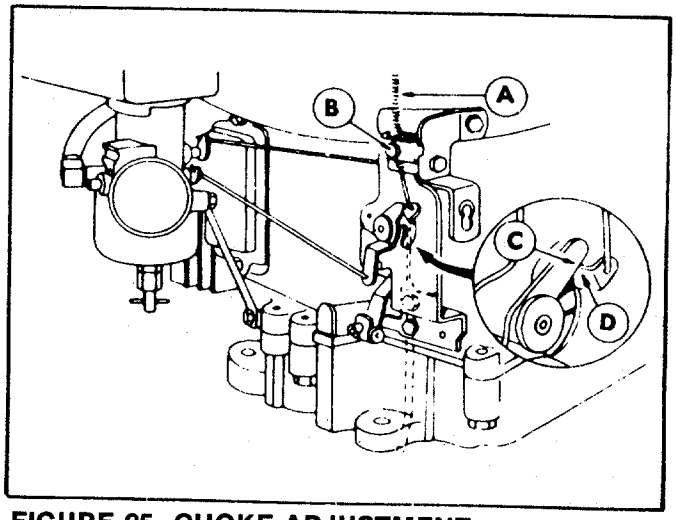


FIGURE 25. CHOKE ADJUSTMENT

BRAKE ADJUSTMENT

1. Move brake pedal forward by hand until pressure or resistance is noted. This is the point where the brake pedal spring begins to stretch.
2. If adjustment is correct, parking brake lock will have moved approximately ¼". See figure 26.

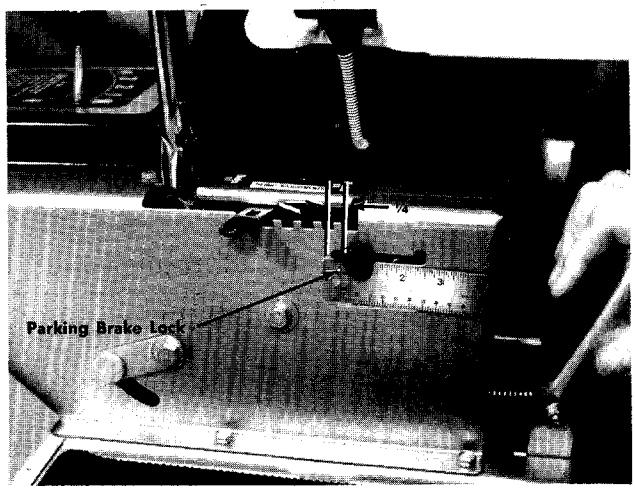


FIGURE 26. PARKING BRAKE LOCK

3. If adjustment is incorrect, loosen nut at brake lever, thread adjuster pin in or out as necessary and tighten nut. See figure 27. Periodic adjustment is necessary to maintain effective brake operation.

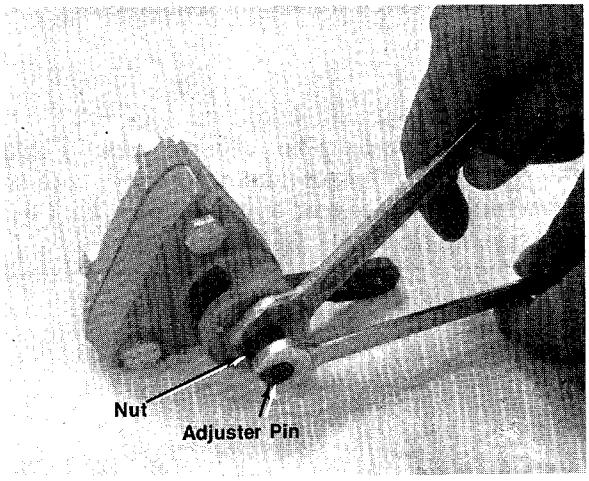


FIGURE 27. BRAKE ADJUSTMENT

PREPARING FOR BELT REMOVAL

1 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.

2. Disconnect the spark plug wire and ground it against the engine.
3. Remove the battery to prevent acid from leaking.

WARNING

Disconnect the negative terminal first and connect last when installing the battery.

MOWING UNIT BELT REPLACEMENT

Step 1. Place the lift lever in the disengaged position. See figure 8.

Step 2. Remove the belt keeper and large bolt on the engine pulley. See figure 28.

Step 3. Unhook the belt from the engine pulley. See figure 29.

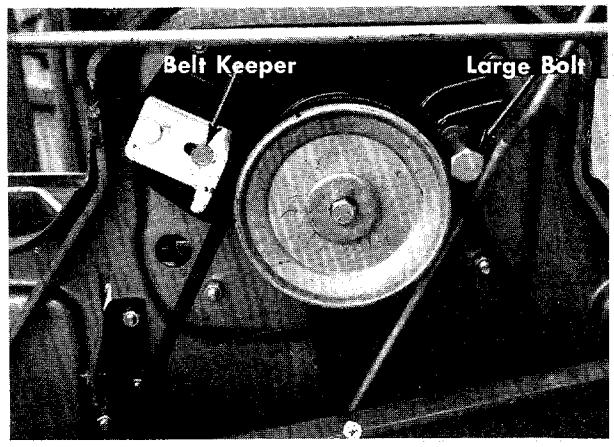


FIGURE 28. BELT KEEPER

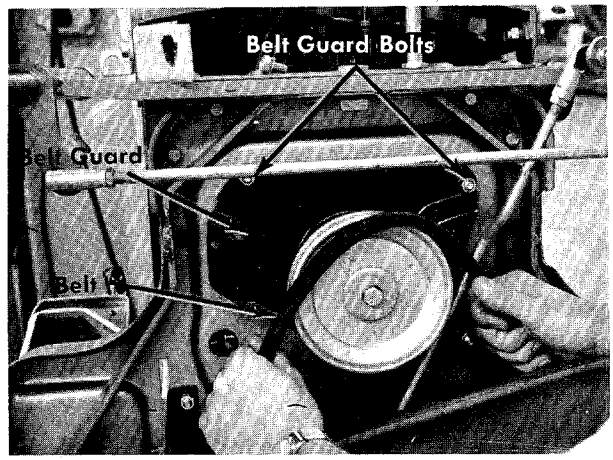


FIGURE 29. REMOVING MOWER BELT

Step 4. Place the lift lever in the engaged position. See figure 8.

Step 5. Unhook the tension springs on both sides of the deck. See figure 30.

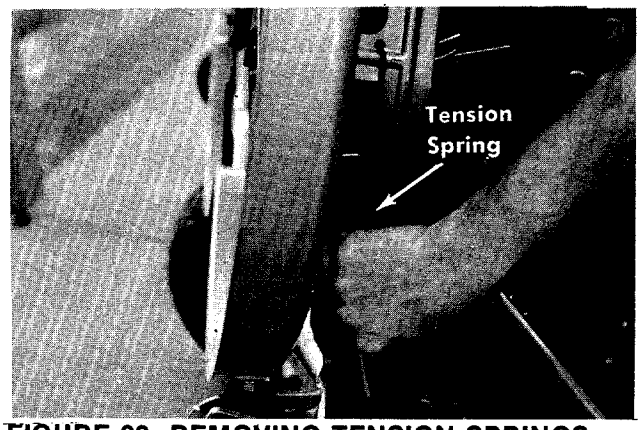


FIGURE 30. REMOVING TENSION SPRINGS

Step 6. Remove the front four deck links from the cutting deck. See figure 31.

Step 7. Remove the belt guards from both deck pulleys. See figure 31.

Step 8. Remove and replace the belt and reassemble.

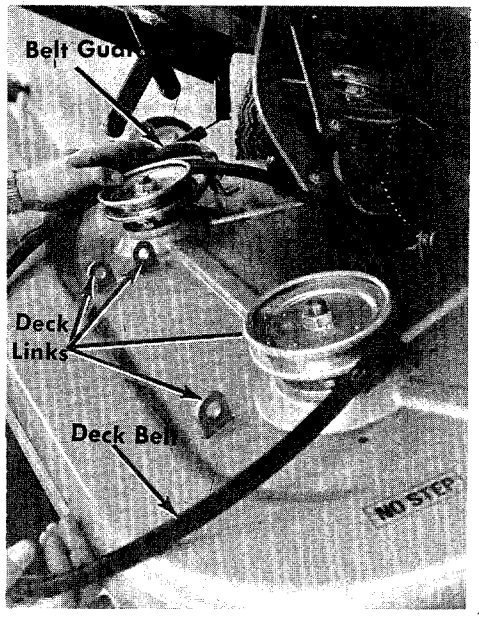


FIGURE 31. DECK LINKS

TRANSMISSION BELTS REMOVAL

Step 1. Place the lift lever in the disengaged position. See figure 8.

Step 2. Remove the belt keeper and large bolt on the engine pulley. See figure 28.

Step 3. Unhook the belt from the engine pulley. See figure 29.

Step 4. Place the lift lever in the engaged position. See figure 8.

Step 5. Unhook the tension springs on both sides of the deck. See figure 30.

Step 6. Remove the front four deck links from the cutting deck. See figure 31.

Step 7. Tip the deck down as shown in figure 32.

NOTE

Leave the belt attached to the deck pulleys unless you want to replace it.

NOTE

By working between the frame and the deck, it is possible to remove and replace the deck belt without removing the deck, however, the working space is limited.

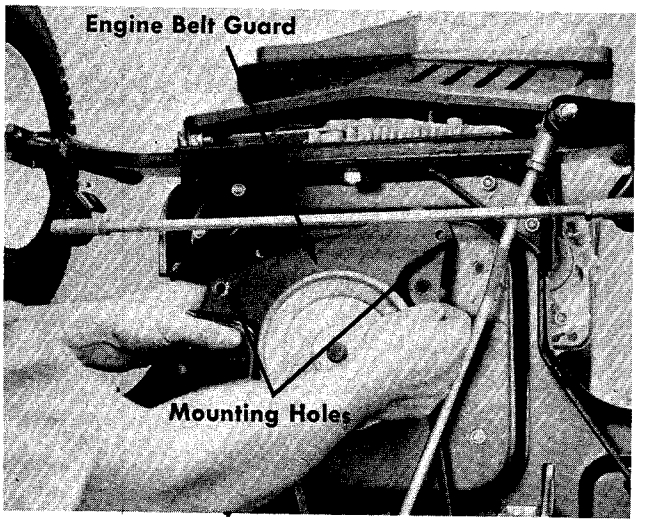


FIGURE 32. BELT GUARD REMOVAL

Step 9. **Removing the transmission belt.** See figure 31.

a. Remove the entire belt guard from the engine pulley by removing the two front engine bolts. See figure 30.
b. Remove the transmission pulley by removing the hex nut and washer. See figure 31.
c. Remove the bolt and nut from the steering rack and remove the belt.
d. Reassemble in reverse order with the new belt.

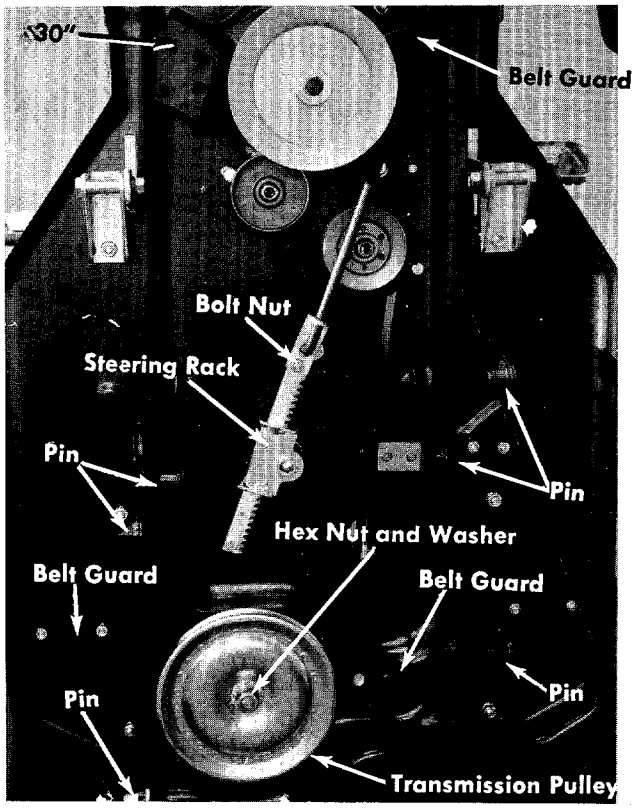


FIGURE 33. BOTTOM VIEW

OFF-SEASON STORAGE

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

Step 1. Working outdoors, drain all fuel from the fuel tank. Use a clean dry cloth to absorb the small amount of fuel remaining in the tank, then run the engine until all fuel in carburetor is exhausted.

WARNING

Do not drain fuel while smoking, or if near an open fire.

Step 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.

Step 3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.

Step 4. Clean the engine and the entire mower thoroughly.

Step 5. Lubricate all lubrication points indicated in figure 17; then wipe the entire machine with an oiled rag in order to protect the surfaces.

TROUBLE SHOOTING CHART FOR RECOIL START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine fails to start.	Safety System	If the engine will not start be sure the clutch control is disengaged; blade controls disengaged, the throttle control is set and the key is turned on. A. Disconnect the yellow wire from the engine. This comes from the ignition switch. B. If the engine fails to start the problem is with the engine, not the safety system. C. If the engine starts, the problem is with the safety system. Check the yellow wire for a ground. D. Check the operation of the switch behind the recoil starter handle. E. If the engine stops when the clutch or blade is engaged, the recoil handle is not pushed into the receptacle and twisted a quarter turn.
Hard starting or loss of power.	Blocked fuel line or empty gas tank	Clean fuel line; check fuel supply. Also check fuel shut-off valve.
	Defective spark plug	Spark plug lead wire disconnected. Faulty spark plug—spark should jump gap between control electrode and side electrode. If spark does not jump, replace spark plug. NOTE: Use insulated pliers to hold the spark plug wire.
	Throttle setting	Throttle control lever not in the starting position.
	Loose connections	Spark plug wire loose.
	Dirty air cleaner	Remove air cleaner and clean as outlined in **Engine Manual.**
	Carburetor improperly adjusted	Review paragraph **Carburetor Adjustment.**
Excessive vibration.	Bent or damaged blade spindle	Stop engine immediately; tighten all bolts and make all necessary repairs. If vibration continues, have the unit serviced by a competent repairman.
Unit fails to discharge grass.	Discharge chute clogged	Clean discharge chute and inside of deck.
	Foreign object lodged in deck	Remove object from deck. See CAUTION following step 1 in paragraph **Operation.**
Engine overheats.	Obstructions in air passages	Remove any obstruction from air passages in shroud. Grass and dirt in engine shroud. Clean cooling fins.
	Oil level	Fill crankcase to proper oil level.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine fails to start.	Safety System	A. Check for a blown fuse in the wire leading from the positive terminal of the battery. B. Before checking the safety system further, be sure the clutch control and the blade control are disengaged; only the starting system is being checked. Therefore remove the spark plug lead and ground it to prevent the engine from starting. C. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal (coil primary) of the solenoid. If the engine cranks, the problem is in the safety system. D. Check for continuity from the battery to the solenoid. NOTE: The positive terminal of the battery should have a large cable (#8 gauge) and a small wire (#18 gauge) attached to it. E. Check all wires and cable for tightness. F. Use a #8 gauge wire and jump between the two large terminals of the solenoid. If the unit starts, replace the solenoid. G. If the unit fails to start after following the above procedure the problem is probably in the starting motor of the engine.
	Blocked fuel line or empty gas tank	Clean fuel line; check fuel supply. Also check fuel shut-off valve.
	Defective spark plug	Spark plug lead wire disconnected. Faulty spark plug—spark should jump gap between control electrode and side electrode. If spark does not jump, replace spark plug. NOTE: Use insulated pliers to hold the spark plug wire.
	Throttle setting	Throttle control lever not in the starting position.
	Loose connections	Spark plug wire loose.
Hard starting or loss of power.	Dirty air cleaner	Remove air cleaner and clean as outlined on page 17 of this manual.
	Carburetor improperly adjusted	Review paragraph **Carburetor Adjustment.**
Excessive vibration.	Bent or damaged blade spindle	Stop engine immediately; tighten all bolts and make all necessary repairs. If vibration continues, have the unit serviced by a competent repairman.
Unit fails to discharge grass.	Discharge chute clogged	Clean discharge chute and inside of deck.
	Foreign object lodged in deck	Remove object from deck. See CAUTION following step 1 in paragraph **Operation.**
Engine overheats.	Obstructions in air passages	Remove any obstruction from air passages in shroud.
	Grass and dirt in engine shroud	Clean cooling fins.
	Oil level	Fill crankcase to proper oil level.

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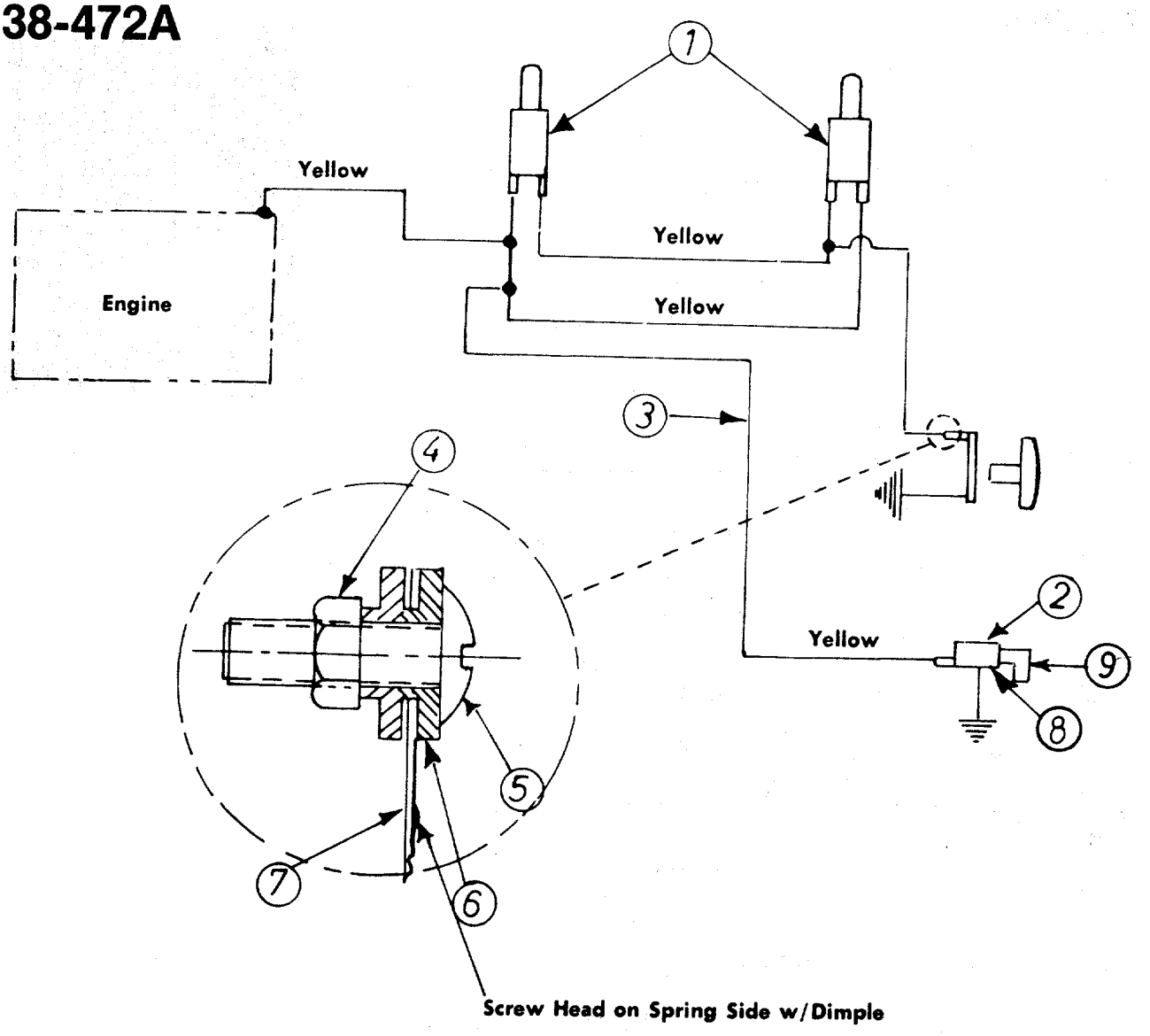

SCHEMATIC FOR ELECTRICAL SYSTEM

PARTS LIST FOR SCHEMATIC MODEL 138-472A ONLY

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0269	Safety Switch Norm Closed—Red	
2	725-0464	Magneto Ignition Switch w/Nut	
3	725-0272	Wire Harness	
4	712-0121	Hex Nut #10-24	
5	710-0425	Truss Mach. Scr. #10-24 x .62	
6	736-0338	Fiber Washer	
7	732-0257	Switch Spring	
8	736-0225	Internal L-Wash. 5/8 I.D.	
9	725-0201	Ignition Key	

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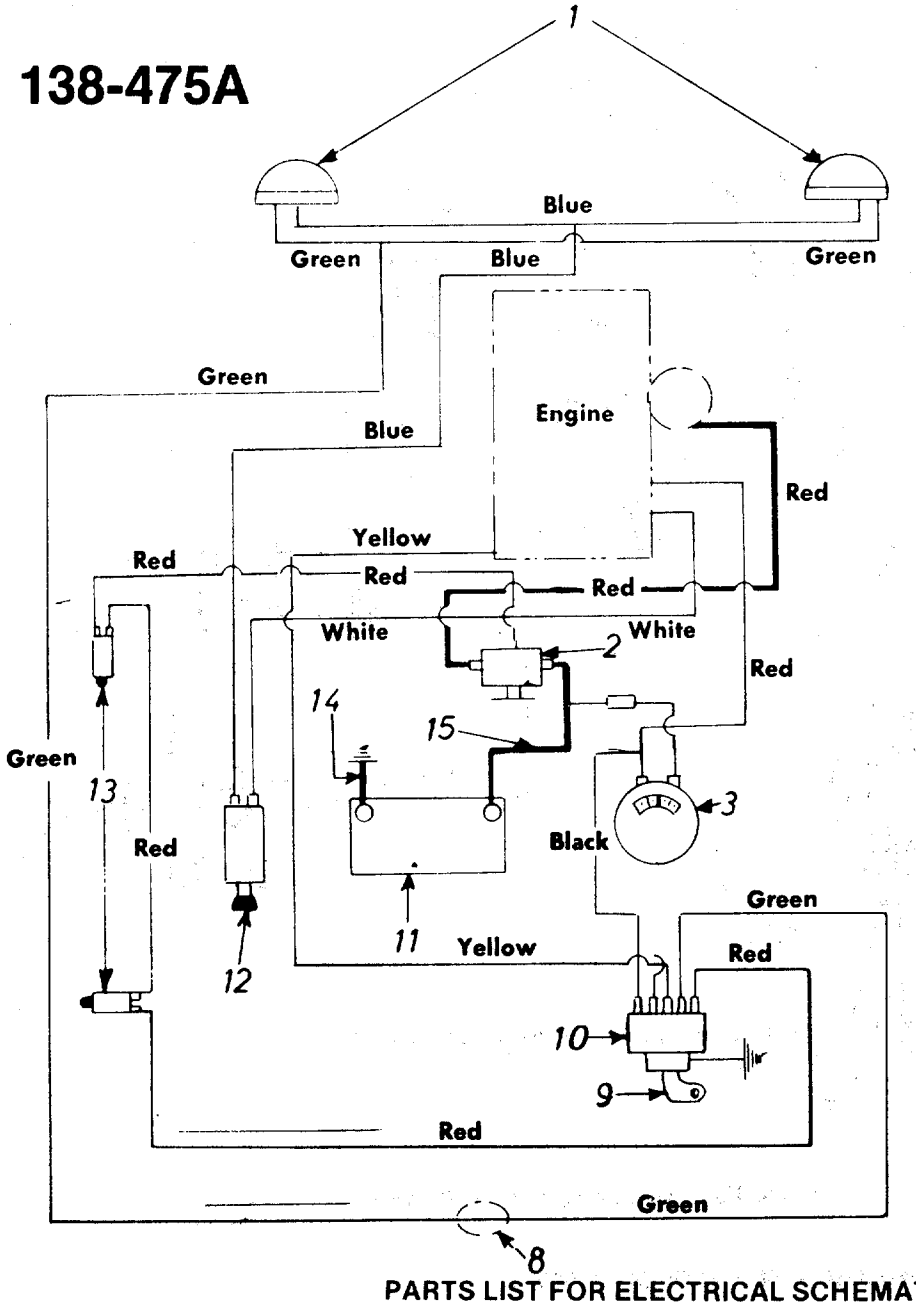

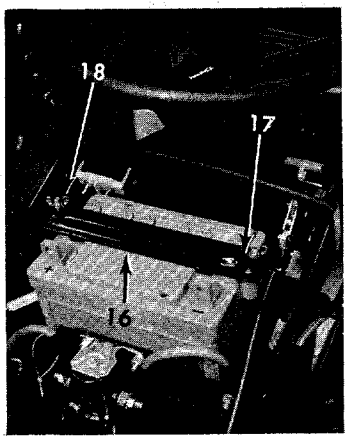

PARTS LIST FOR ELECTRICAL SCHEMATIC 138-475A ONLY

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	725-0222		Headlights	
2	725-0530		Solenoid	
3	725-0119		Ammeter	
8	725-0364		Wiring Harness	
9	725-0201		Ignition Key	
10	725-0267		Ignition Switch	
11	725-0453		Battery	
12	725-0202		Headlight Switch	
13	725-0268		Safety Switch—Black with Brkt.	
14	725-0121		Electric Wire	
15	725-0122		Electric Wire	
16	12614		Battery Hold Down	
17	711-0222		Hold Down Rods	
18	712-0113		Wing Nuts	

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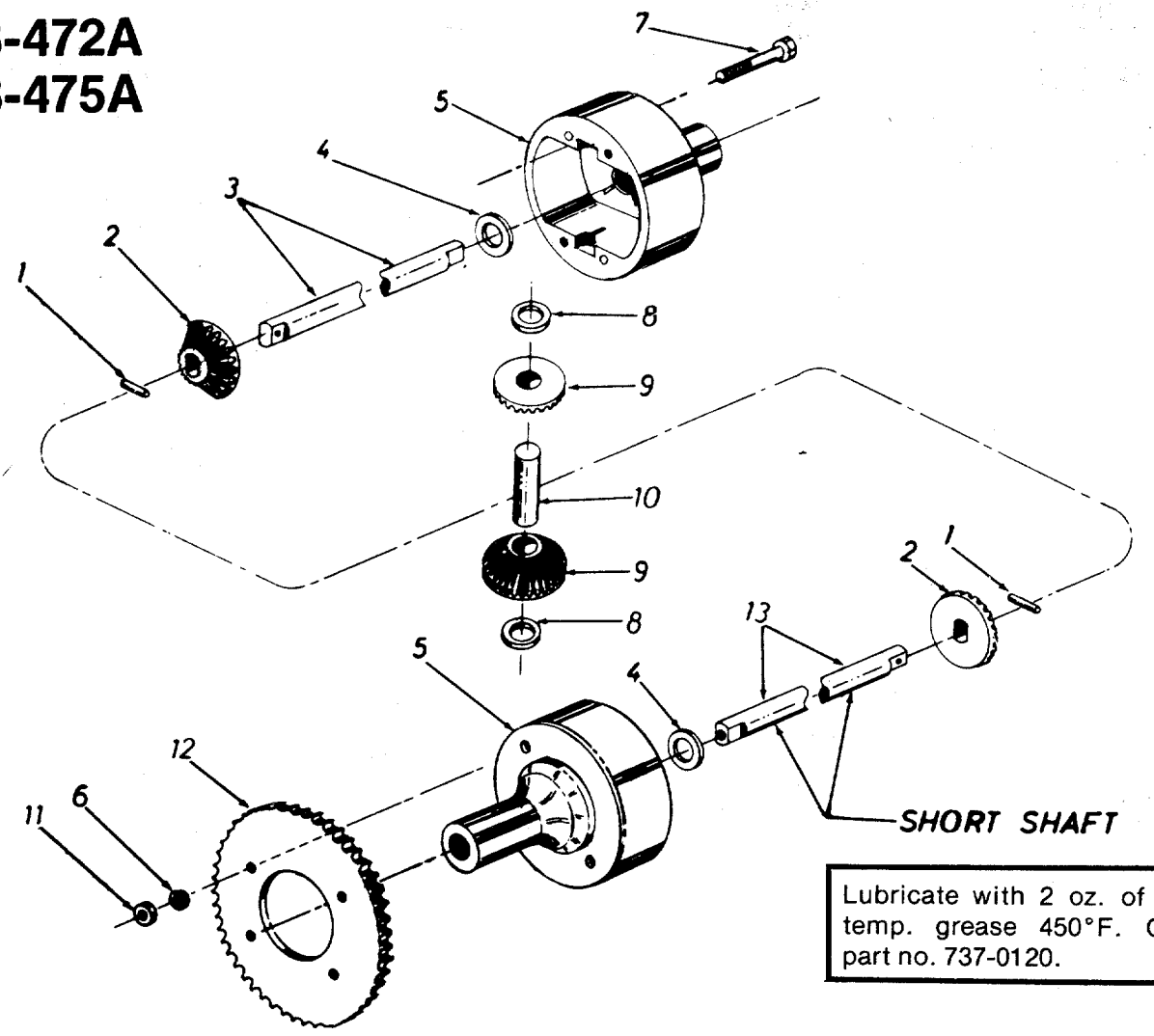

Lubricate with 2 oz. of high temp. grease 450°F. Order part no. 737-0120.

PARTS LIST FOR DIFFERENTIAL ASSEMBLY 717-0330

REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION	NEW PART
1	715-0247	2	Spring Pin Spir. 3/16" Dia. x 1.00	
2	748-0185	2	Gear—Double "D" Hole	
3	738-0249	1	Shaft—Long 16.89" Lg.	
4	736-0188	2	Fl-Wash. .160 I.D. x 1.49 O.D. x .06	
5	717-0341	2	Housing Half	
6	736-0119	4	L-Wash. 5/16" Scr.*	
7	710-0526	2	Hex Scr. 5/16-24 x 4.0" Lg.	
8	736-0187	2	Fl-Wash. .640 I.D. x 1.24 O.D. x .06	
9	748-0158	2	Gear—Round Hole	
10	711-0276	1	Drive Pin	
11	712-0237	2	Hex Cent. L-Nut 5/16-24 Thd.	
12	09133	1	Sprocket—60 Tooth	
13	738-0250	1	Shaft—Short 9.53" Lg.	

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

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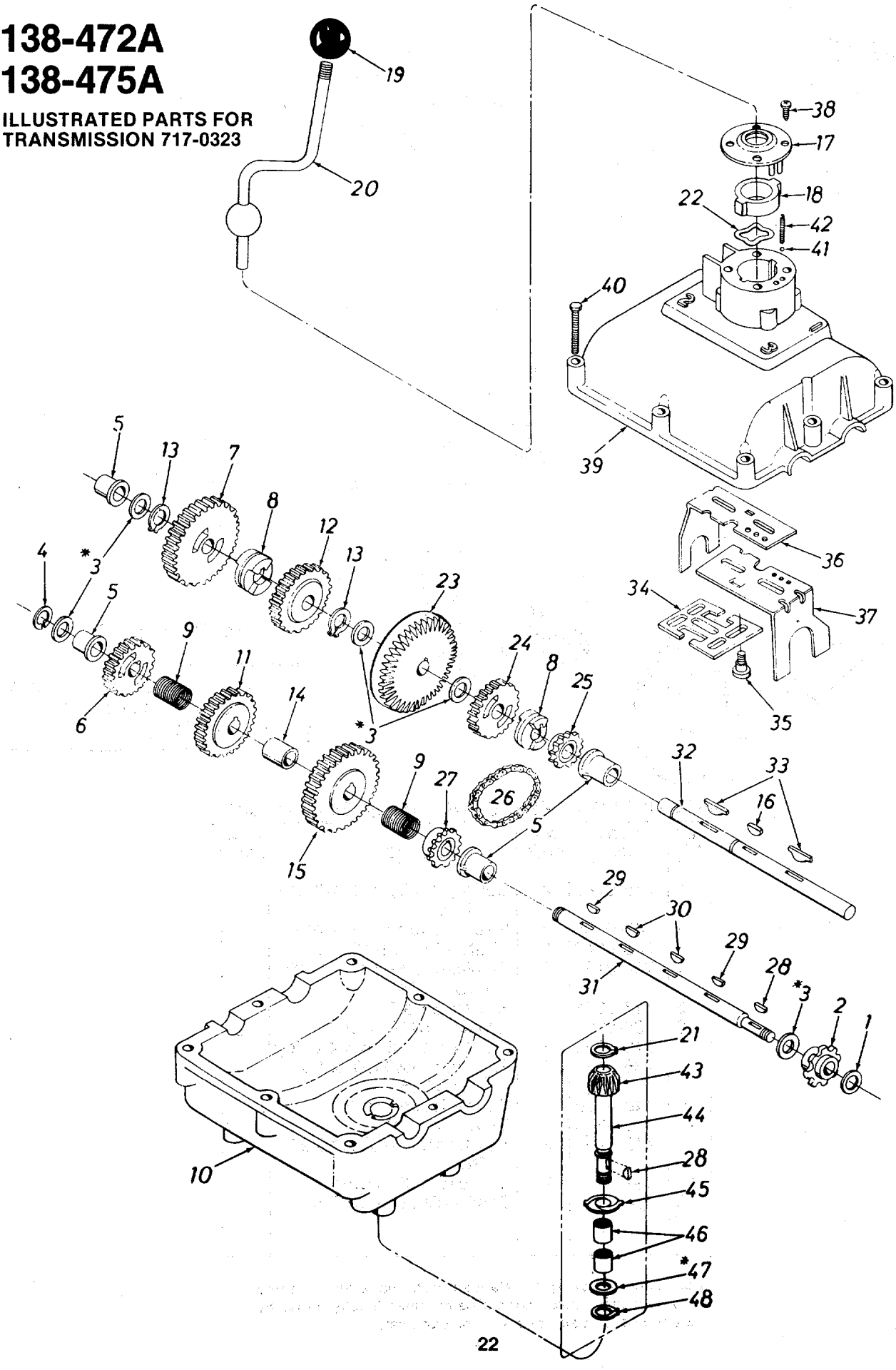
ILLUSTRATED PARTS FOR TRANSMISSION 717-0323



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PARTS LIST FOR TRANSMISSION MODEL NO. 717-0323

Ref. No.	Part No.	No. Req'd	DESCRIPTION
1	FF-1300	1	Ring, Retaining
2	FF-1129	1	Sprocket, 8T
3	FF-1068	*	Washer, Plain (.040)
3	FF-1082	*	Washer, Plain (.031)
3	FF-1145	*	Washer, Plain (.060)
3	FF-1358	*	Washer, Plain (.050)
3	FF-1423	*	Washer, Plain (.025)
3	FF-1424	*	Washer, Plain (.035)
3	FF-1425	*	Washer, Plain (.045)
3	FF-1441	*	Washer, Plain (.020)
4	FF-1106	1	Ring, Retaining
5	FF-1101	4	Bearing, Flange
6	FF-1072	1	Gear, Spur, 20T.
7	FF-1444	1	Gear, Spur, 30T.
8	FF-1083	2	Collar, Clutch
9	FF-1095	2	Spring, Compression
10	FF-1064-A	1	Housing, Lower
11	FF-1076	1	Gear, Spur, 25T.
12	FF-1075	1	Gear, Spur, 25T.
13	FF-1099	2	Ring, Retaining
14	FF-1325	1	Spacer
15	FF-1078	1	Gear, Spur, 30T.
16	FF-1374	1	Key, Wdr., No. 9 Alloy
17	FF-1670	1	Cover, Nylon
18	FF-1091	1	Insert, Nylon
19	FF-1318	1	Knob, Shift
20	FF-2683	1	Assembly, Lever, Shift
21	FF-1100	1	Ring, Retaining
22	FF-1096	1	Washer, Wave
23	FF-1085	1	Gear, Bevel, 42T.
24	FF-1071	1	Gear, Spur, 20T.
25	FF-1087	1	Sprocket, 12T., Special
26	FF-1090	1	Chain
27	FF-1104	1	Sprocket, 12T., Special
28	FF-1371	2	Key, Wdrf., No. 4 Alloy
29	FF-1369	2	Key, Wdr., No. 3 Alloy
30	FF-1375	2	Key, Wdrf., No. 61 Alloy
31	FF-1094	1	Shaft, Output
32	FF-1443	1	Shaft, Drive
33	FF-1086	2	Key, Hi-Pro, Special
34	FF-1074	1	Plate, Lock-out
35	FF-1073	4	Screw, Shoulder
36	FF-1657	1	Fork, Shifter, R.H.
37	FF-1070	1	Fork, Shifter, L.H.
38	FF-1357	4	Screw, No. 10-24 x ½
39	FF-1065-J	1	Housing, Upper
40	FF-1360	8	Bolt, Hx. Hd. ¼-20 x 1-5/16
41	FF-1037	2	Ball, Detent
42	FF-1475	2	Spring, Detent
43	FF-1105	1	Pinion, Bevel, 16T.
44	FF-1747	1	Shaft, Input
45	FF-1499	1	Washer, Thrust
46	FF-1102	2	Bearing, Needle
47	FF-1430	*	Washer, Plain (.040)
47	FF-1431	*	Washer, Plain (.050)
47	FF-1760	*	Washer, Plain (.015)
48	FF-1491	1	Ring, Retaining

*Indicates used in various combinations to maintain proper clearances.

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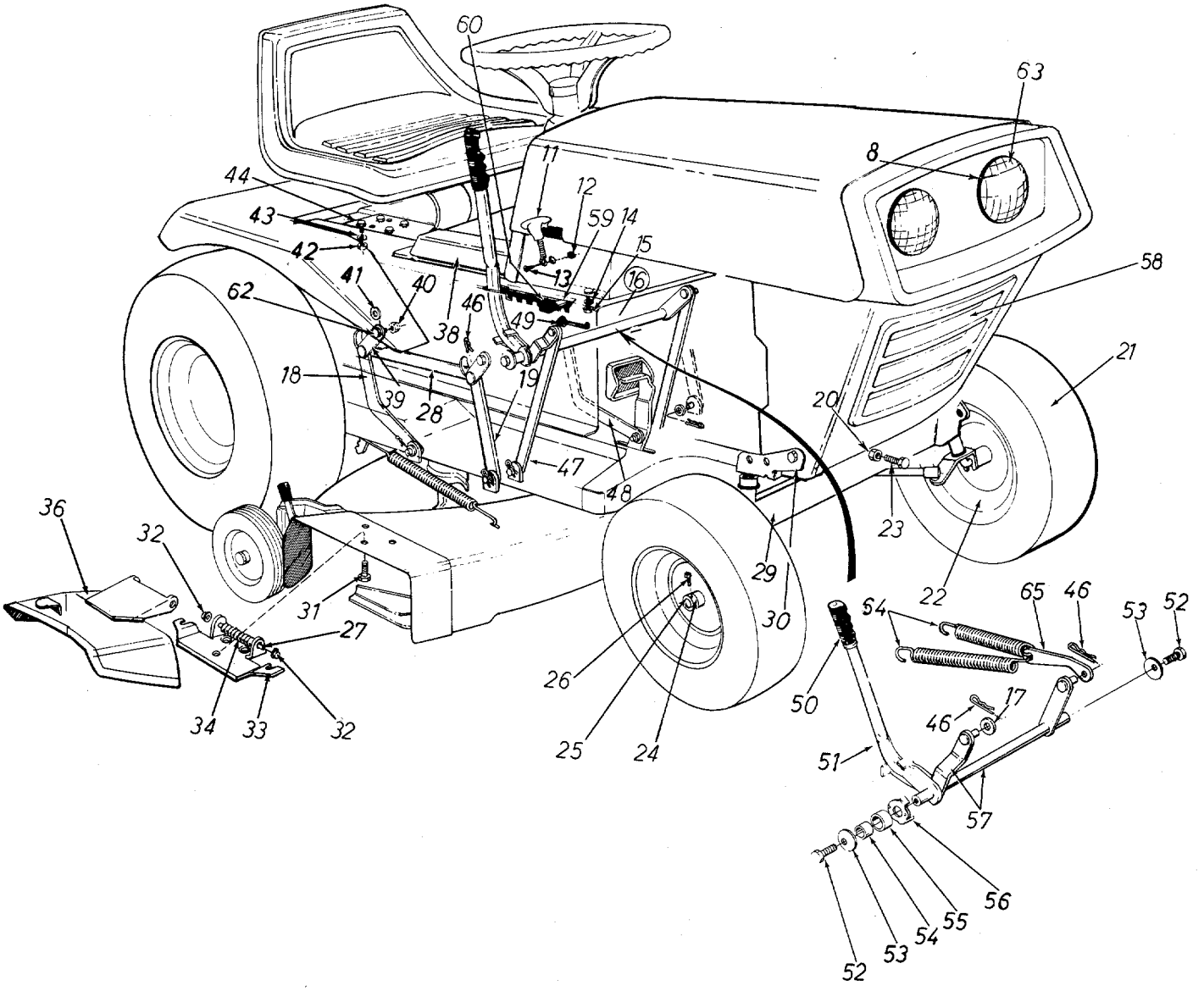
138-475A

IF YOU WRITE TO US ABOUT THIS ARTICLE OR IF YOU ORDER REPLACEMENT PARTS ALWAYS MENTION THIS MODEL & SERIAL NO

MODEL



RIGHT HAND VIEW

NOTE

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

PARTS LIST FOR MODELS 138-472A AND 138-475A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
8	735-0156		Head Lamp—Door Mounting	
11	723-0296		Hood Lock Ass'y.	
12	712-0287		Hex Nut ¼-20 Thd.*	
13	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
14	736-0119		Spring Lockwasher 5/16" Scr.*	
15	712-0267		Hex Nut 5/16-18 Thd.*	
16	—		See Breakdown	
17	736-0192		Flat Washer .531 I.D. x .93 O.D.	
18	10349	—463	Deck Link Ass'y.	
19	10904	—463	Deck Link Ass'y.	
20	712-0923		Hex Center Locknut 5/8-18 Thd.	
21	734-0494		Front Wheel Ass'y.—Comp. 13 x 5.00	
	734-0495		Front Wheel Tire Only	
22	734-0520		Front Wheel Rim Ass'y. Only	
23	710-0622		Hex Hd. Cap Scr. 5/8-18 x 1.62" Lg.	
24	711-0169		Collar 5/8" I.D.	
25	748-0184		Front Wheel Bearing	
26	710-0666		Sq. Hd. Set Scr. 5/16-18 x .38 Cup	
27	711-0571		Pivot Pin	
28	09735	—463	Connecting Rod 3/16 x 1.00 x 12.5" Lg.	
29	12406	—463	Pivot Bar Assembly	
30	12411	—463	Front Pivot Bracket	
31	710-0195		Hex Hd. Cap Scr. ¼-28 x .62" Lg.*	
32	726-0106		Push On Flange Palnut	
33	11399	—463	Adapter Plate Ass'y.	
34	732-0261		Torsion Spring	
35	11633	—452	Chute Cover Ass'y.—Comp.	
36	11574	—452	Chute Cover Ass'y.	
38	12725	—463	Upper Frame Cover	
39	09721	—463	Pivot Link Ass'y.	
40	712-0267		Hex Nut 5/16-18 Thd.*	
41	736-0264		Flat Washer .344 I.D. x .62 O.D.	
42	712-0267		Hex Nut 5/16-18 Thd.*	
43	736-0119		Spring Lockwasher 5/16" Scr.*	
44	710-0198		Hex Hd. Sems Scr. 5/16-18 x .75" Lg.*	
45	732-0354		Seat Spring 3.25" High	
46	714-0101		Internal Cotter Pin ½" Dia.	
47	13636	—463	Lockout Link Ass'y.	
48	11056-310		Parking Brake—Lever Ass'y.—R.H.	
49	726-0121		Push Cap ¼" Dia.—Black	
50	720-0157		Grip	
51	749-0212		Lift Handle—R.H.	
52	710-0201		Hex Hd. Cap Scr. 3/8-16 x .62" Lg.*	
53	736-0219		Belleville Washer .400 I.D. x 1.13 O.D.	
54	748-0201		Spacer .635 I.D. x .88 O.D. x .57	
55	736-0233		Wave Washer .660 I.D. x .82 O.D. x .029	
56	11029		Handle Pivot Bracket	
57	13630		Lift Handle Bracket Ass'y.	N
58	731-0208		Grille Insert	
59	11027		Handle Stop Bracket Ass'y.	
60	11249		Knob	
61	736-0156		Flat Washer	
62	730-0140		Shd. Bolt .473 x .180	
63	725-0222		Headlights	
64	732-0233		Ext. Spring	N
65	13638		Spring Link	N

*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.

(463—Top Flite Red)
When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Top Flite Red Finish—11852 (463).)

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."

WHEEL CHART

FRONT WHEEL

PART NO.	COLOR CODE	DESCRIPTION	NEW PART
734-0494		Wheel Ass'y.—Comp.	
734-0520		Rim Only with Hub	
734-0495		Tire Tubeless 13 x 5.00	
734-0255		Air Valve	
748-0184		Bearing	

REAR WHEEL

PART NO.	COLOR CODE	DESCRIPTION	NEW PART
734-0592		Wheel Ass'y.—Comp.	
734-0594		Rim Only	
734-0294		Tire Tubeless 18 x 6.50—8	
734-0255		Air Valve	

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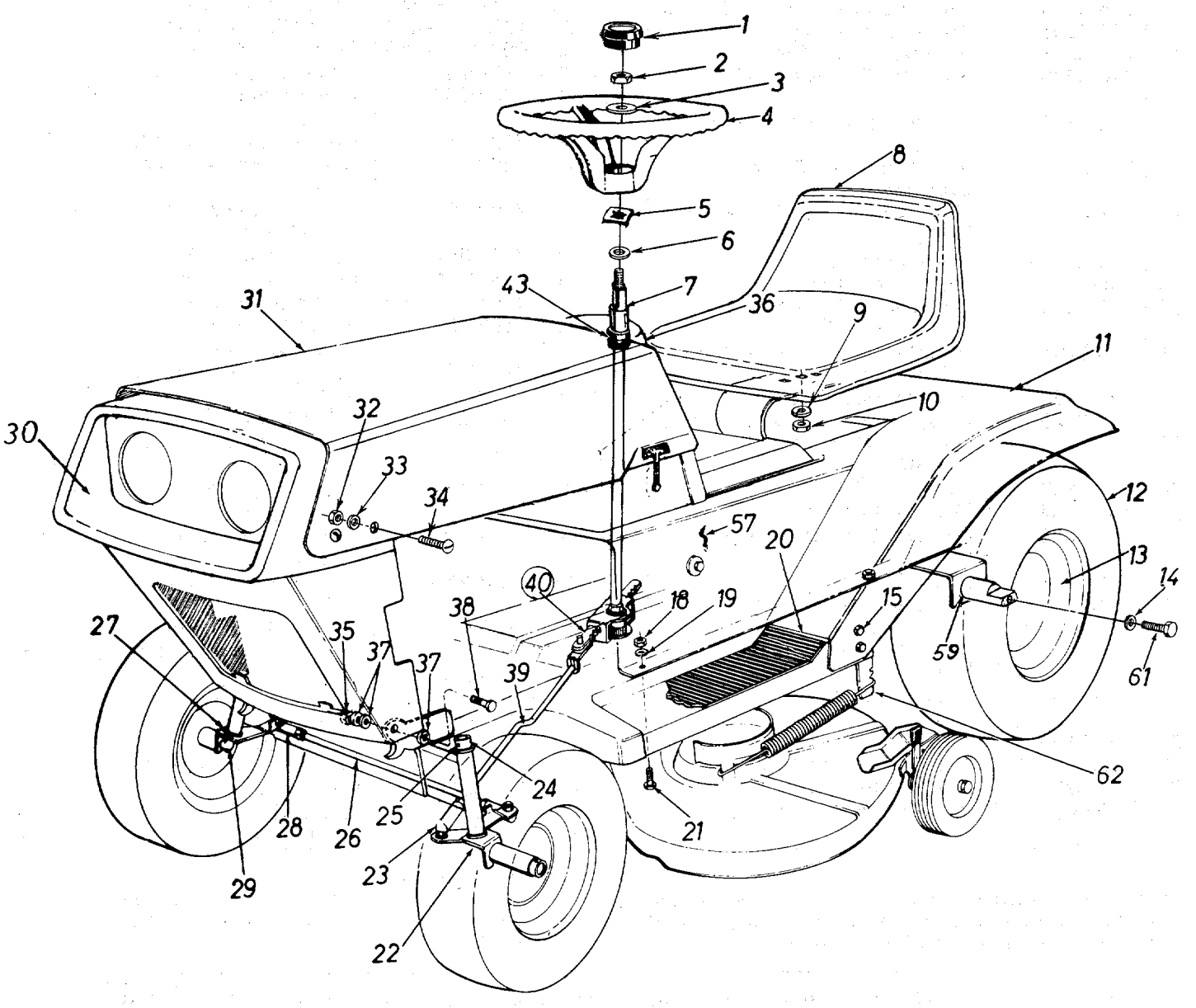
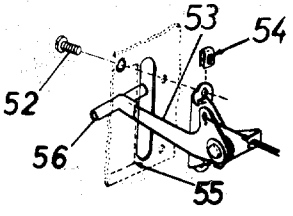
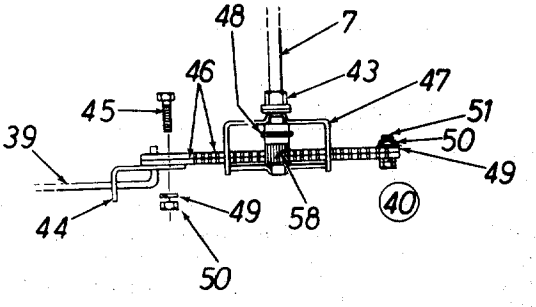
138-475A







LEFT HAND VIEW

PARTS LIST FOR MODELS 138-472A AND 138-475A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap	
2	712-0158		Hex Center Locknut 5/16-18 Thd.	
3	736-0219		Belleville Washer .400 I.D. x 1.13 O.D.	
4	731-0219		12.0 Inch Steering Wheel	
5	712-0222		Push Nut 5/8" Dia.	
6	736-0174		Wave Washer .660 I.D. x .88 O.D.	
7	738-0200		Steering Shaft	
8	757-0264		Seat Ass'y.—Comp.	
9	736-0921		Spring Lockwasher ½" Scr.*	
10	712-0206		Hex Nut ½-13 Thd.*	
11	09087		Rear Fender	
12	734-0592		Rear Wheel Ass'y.—Comp. 18.0 x 6.50—8	
	734-0294		Rear Wheel Tire Only 18.0 x 6.50—8	
	734-0255		Air Valve—Tubeless	
13	734-0594		Rear Wheel Rim Ass'y.	
14	736-0242		Belleville Wash.	
15	710-0258		Hex Hd. Cap Scr. ¼-20 x .62" Lg.*	
16	736-0329		Spring Lockwasher ¼" Scr.*	
18	712-0267		Hex Nut 5/16-18 Thd.*	
19	736-0119		Spring Lockwasher 5/16" Scr.*	
20	723-0241		Foot Pad 15.75" Lg. x 4.0" Wide	
21	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
22	09098	—463	Front Axle Ass'y.—L.H.	
23	723-0156		Ball Joint Ass'y.	
24	711-0169		Collar 5/8" I.D.	
25	710-0494		Sq. Hd. Set Scr. 5/16-18 x .38 Cup	
26	711-0613		Tie Rod	
27	748-0227		Flange Bearing 6.30 I.D.	
28	723-0156		Ball Joint Ass'y.	
29	09095	—463	Front Axle Ass'y.—R.H.	
30	719-0197		Grille—Front (475A)	
	10491	—463	Grille Front (472A)	
31	11836		Front Hood (475A)	
	11855	—463	Front Hood (472A)	
32	712-0287		Hex Nut ¼-20 Thd.*	
33	736-0329		Spring Lockwasher ¼" Scr.*	
34	710-0286		Truss Hd. Mach. Scr. ¼-20 x .50" Lg.*	
35	712-0375		Hex Center Locknut 3/8-16 Thd.	
36	11862	—463	Dash Panel Ass'y. (475A)	
	11861		Dash Panel Ass'y. (472A)	
37	736-0105		Belleville Washer	
38	710-0253		Hex Hd. Cap Scr. 3/8-16 x 1.00" Lg.*	
39	747-0138		Steering Rod	
40	—		Steering Ass'y. Breakdown	
43	748-0228		Hex Flange Bearing .505 I.D. Bronze	
44	12372		Steering Rod Bracket	
45	710-0412		Hex Hd. Cap Scr. ¼-28 x .75" Lg.*	
46	11048		Steering Segment	
47	11074		Steering Housing Ass'y.	
48	715-0134		Spring Pin Spirol 3/16" Dia. x 1.50" Lg.	
49	736-0329		Spring Lockwasher ¼" Scr.*	
50	712-0117		Hex Nut ¼-28 Thd. Lock*	
51	710-0412		Hex Hd. Cap Scr. ¼-28 x .75" Lg.*	
52	710-0351		Truss Hd. Mach. B-Tapp Scr. #10 x .50" Lg.	
53	746-0160		Throttle Control—Complete	
54	712-0147		Speed Nut #10-24 U-Type	
55	11862	—463	Dash Panel Ass'y.	
56	722-0111		Knob Only—Throttle Control	
57	13466	—463	Upper Frame	
58	748-0203		12 Teeth Spur Gear	
59	736-0134		Flat Washer	
60	731-0423		Plastic Trim Strip Dash 12.0' Lg.	N
61	710-0627		Hex Scr. with Lock 5/16"-24 x .75" Lg.	
62	13620		Spring Brkt.	

*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.

(463—Top Flite Red)
When ordering parts, if color or finish is important use the appropriate color code shown above (e.g. Top Flite Red Finish—11852 (463).)

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."

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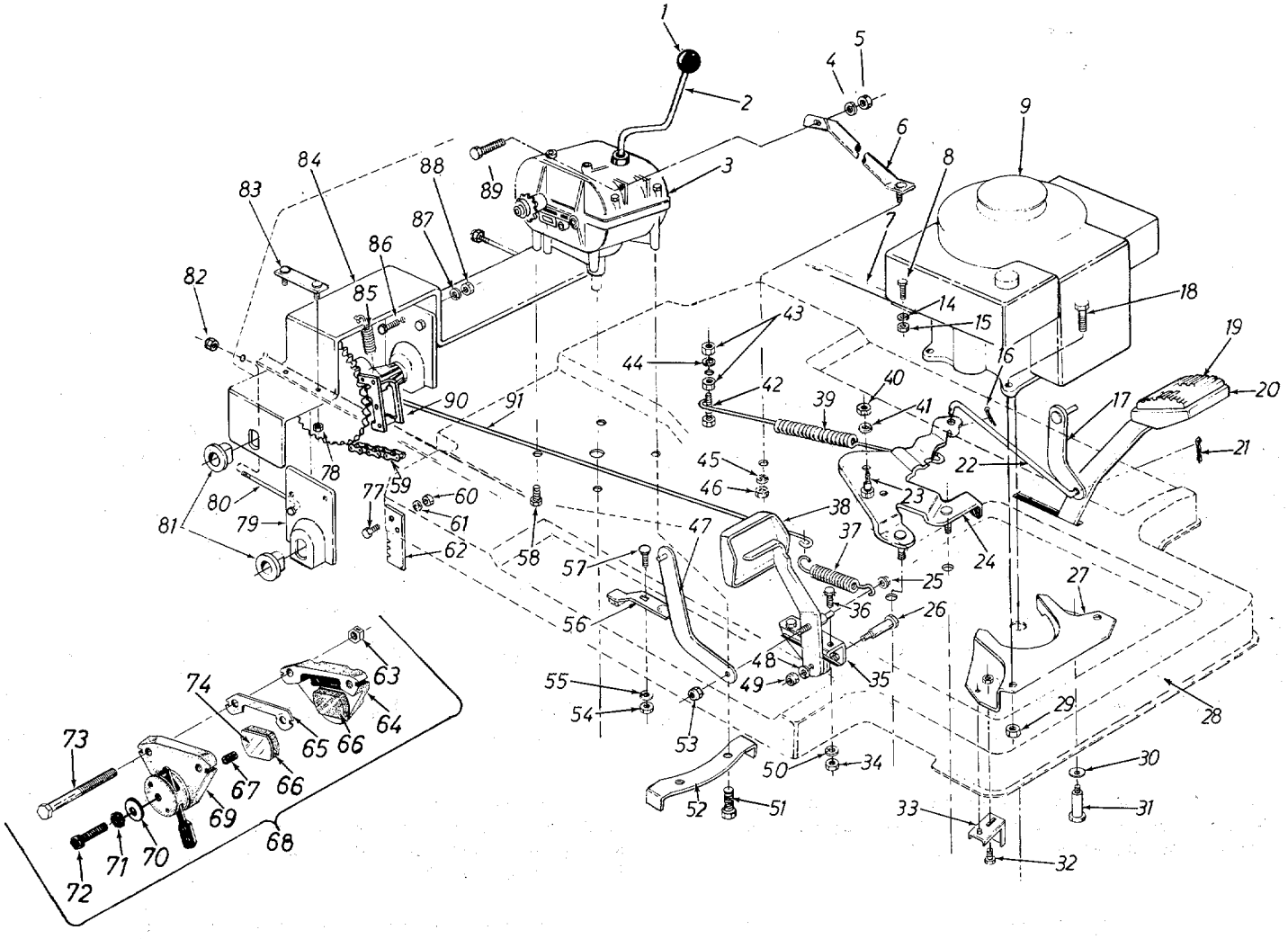
H PATTERN - EASIER SHIFTING



PARTS LIST FOR MODEL NOS. 138-472A AND 138-475

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0165		Knob (For Transmission Lever)	
2	747-0172		Shift Lever	
3	717-0323		3 Speed Transmission (See Breakdown on page 18)	
4	736-0329		Spring L-Wash. 1/4" Scr.	
5	712-0138		Hex Nut 1/4-28 Thd.*	
6	12732		Transmission Support Brkt. Ass'y.	
7	11095		Engine Brace	
8	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
9	—		Engine	
10	710-0289		Hex Scr. 1/4-20 x .50" Lg.*	
11	736-0329		L-Wash. 1/4" Scr.*	
14	736-0119		Spring L-Wash. 5/16" Scr.*	
15	712-0267		Hex Nut 5/16-18 Thd.*	
16	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.	
17	11057	—463	Parking Brake-Lever Ass'y.—L.H.	
18	710-0442		Hex Hd. Cap Scr. 5/16-18 x 1.50 Lg.*	
19	12379		Clutch Pedal Pad	
20	11037-452		Clutch Pedal Ass'y.	
21	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.	
22	747-0112		Clutch Rod	
23	738-0140		Shld. Scr. .437 Dia. x .180" Lg.	
24	12448		Idler Brkt. Ass'y.	
25	726-0100		Push Nut 3/8" Rod	
26	738-0213		Shld. Scr. .498" Dia. x 1.450" Lg.	
27	12654-463		Engine Belt Guard Ass'y.	
28	11090-463		Frame Ass'y.	
29	712-0267		Hex Nut 5/16-18 Thd.	
30	736-0105		Bell. Wash. 3/8" Scr.	
31	738-0129		Shld. Scr. .498" Dia. x 2.00 Lg.*	
32	710-0259		Hex Sems Scr. 5/16-18 x .62 Lg.*	
33	10426-463		Belt Keeper Ass'y.	
34	712-0267		Hex Nut 5/16-18 Thd.*	
35	11039		Pedal "U"-Brkt. Ass'y.	
36	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
37	732-0245		Brake Spring	
38	11036-463		Brake Pedal Brkt. Ass'y.	
39	732-0191		Spring .75" O.D. x 11.0" Lg.	
40	712-0267		Hex Nut 5/16-18 Thd.	
41	736-0119		Spring L-Wash. 5/16" Scr.*	
42	710-0289		Hex Hd. Cap Scr. 1/4-20 x .50" Lg.*	
43	712-0287		Hex Nut 1/4-20 Thd.*	
44	736-0329		Spring L-Wash. 1/4" Scr.*	
45	736-0119		Spring L-Wash. 5/16" Scr.*	
46	712-0267		Hex Nut 5/16-18 Thd.*	
47	11056-463		Parking Brake-Lever Ass'y. R.H.	
48	736-0169		Spring L-Wash. 3/8" Scr.*	
49	712-0798		Hex Nut 3/8-16 Thd.*	
50	736-0119		Spring L-Wash. 5/16" Scr.*	
51	710-0198		Hex Sems Scr. 5/16-18 x .75 Lg.*	
52	11845		Transmission Belt Guard	
53	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
54	712-0287		Hex Nut 1/4-20 Thd.*	
55	736-0329		Spring L-Wash. 1/4" Scr.*	
56	761-0168		Blade Brake Ass'y. .88 High	
57	710-0134		Car. Bolt 1/4-20 x .62" Lg.*	
58	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
59	713-0240		#420 Chain 1/2" Pitch x 81 Links	
60	712-0287		Hex Nut 1/4-20 Thd.	
61	736-0329		Spring L-Wash. 1/4" Scr.*	
62	10410		Spring Brkt.	
63	HU-37-9238		Locknut	N
64	HU-16-13807		Anvil	N
65	HU-39-13946		Spacer	N
66	HU-24-13772		Lining	N
67	HU-39-13774		Pin Actuator	N
68	761-0167		Disc Brake Ass'y. Comp.	N
69	HU-39-14097		Housing w/Lever and Groove Pin	N
70	HU-20-9764		Washer	N
71	HU-37-13818		Nut	N
72	HU-39-13775		Pin Adjustment	N
73	HU-37-13821		Bolt	N
74	HU-25-13808		Backing Plate	N
77	710-0258		Hex Hd. Cap Scr. 1/4-20 x .62 Lg.*	
78	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
79	13457		Rear Axle Plate	N
80	710-0437		Chain Adjusting Link	
81	741-0199		Plastic Brg. with Flats .753 I.D.	
82	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
83	10360		Axle Bolt Plate Ass'y.	
84	13455		Rear Axle Brkt. Ass'y.	N
85	732-0265		Spring .38 O.D. x 3.25"	
86	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
87	736-0119		Spring L-Wash. 5/16 Scr.*	
88	712-0267		Hex Nut 5/16-18 Thd.	
89	710-0412		Hex Hd. Cap Scr. 1/4-28 x .75" Lg.*	
90	13459		Disc Brake Brkt.	N
91	747-0277		Brake Rod .25" Dia. x 23.50" Lg.	

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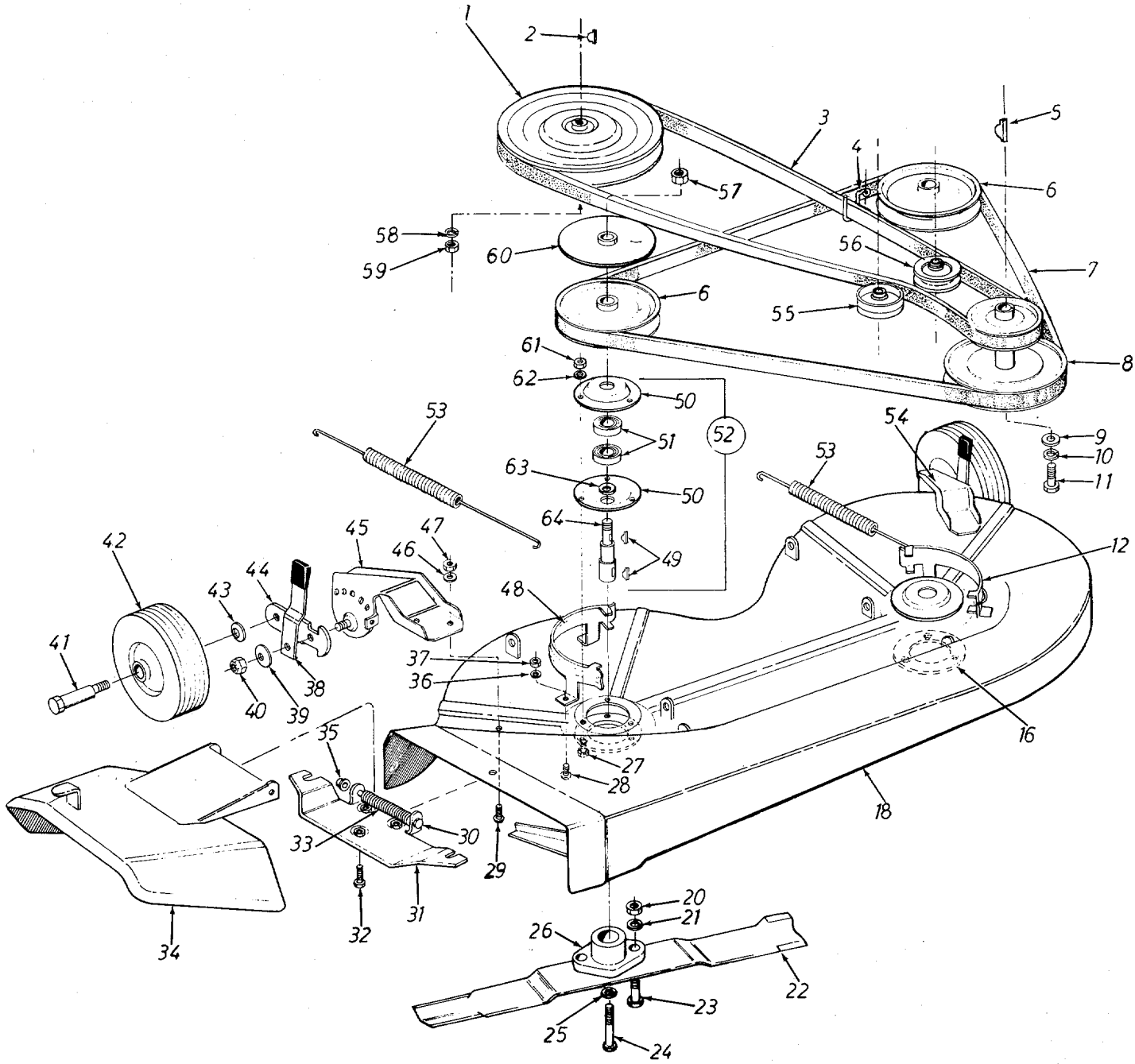
IMPORTANT

Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide temporary service.



PARTS LIST FOR MODELS 138-472A AND 138-475A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	756-0174		Transmission Split Pulley .50 I.D.	
2	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia. Hdn.	
3	754-0191		"V"-Belt ½ x 65" Lg.	
4	732-0332		Belt Trap	
5	714-0365		#6 Hi-Pro-Key 5/32 x 5/8" Dia.	
6	756-0251		Deck Pulley 4.75" O.D.	
7	754-0151		"V"-Belt 21/32 x 67" Lg. (Blade Drive Belt)	
8	756-0308		Two Step Engine Pulley	
9	736-0235		Fl-Wash. .406 I.D. x 1.25 O.D.	
10	736-0169		Spring L-Wash. 3/8" Scr.	
11	710-0152		Hex Hd. Cap Scr. 3/8-24 x 1.00" Lg.*	
12	12672		Belt Guard—L.H. Deck	
16	09164		Deck Reinforcement Plate	
18	13450-452		34" Deck Ass'y.	
19	10426		Belt Keeper Ass'y.	
20	712-0123		Hex Nut 5/16-24 Thd.*	
21	736-0119		Spring L-Wash. 5/16" Scr.*	
22	742-0120		17" Blade	
23	710-0117		Hex Hd. Cap Scr. 5/16-24 x 1.00" Lg. H.T.	
24	710-0459		Hex Hd. Cap Scr. 3/8-24 x 1.50" Lg. H.T.	
25	736-0217		Spring L-Wash. 3/8" Scr. H.D.	
26	10769		Blade Adapter Kit	
27	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
28	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
29	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
30	711-0571		Pivot Pin	
31	11399		Adapter Plate Ass'y.	
32	710-0195		Hex Hd. Cap Scr. ¼-28 x .62" Lg.*	
33	732-0261		Torsion Spring	
34	11574		Chute Cover Ass'y.	
35	726-0106		Push Nut ¼" Rod	
36	736-0329		Spring L-Wash. ¼" Scr.*	
37	712-0287		Hex Nut ¼-20 Thd.*	
38	10949		Spring Lever Ass'y. w/Knob	
39	736-0219		Bell.-Wash.	
40	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
41	738-0119		Shld. Scr. .625" Dia. x 1.75" Lg.	
42	734-0796		Wheel Ass'y. 5.0 Dia. (Deck)	
43	736-0105		Bell.-Wash.	
44	10937		Wheel Pivot Bar	
45	11236		Wheel Brkt. Ass'y.—R.H. (Deck)	
46	736-0329		Spring L-Wash. ¼" Scr.*	
47	712-0287		Hex Nut ¼-20 Thd.*	
48	12673		Belt Guard—R.H. (Deck)	
49	714-0365		#6 Hi-Pro-Key 5/32 x 5/8" Dia.	
50	08253		Bearing Housing	
51	741-0919		Ball Brg. .787" I.D. x 1.85" O.D.	
52	09321		Blade Spindle Ass'y.—Comp.	
53	732-0307		Spring .75" O.D. x 11.0" Lg. (Deck)	
54	11237		Wheel Brkt. Ass'y. L.H. (Deck)	
55	756-0217		"P"-Flat Idler 2.75" O.D.	
56	756-0116		"V"-Belt Idler 3.06" O.D.	
57	712-0261		Hex Jam Nut 5/8-11 Thd.	
58	736-0921		Spring L-Wash. ½" Scr.*	
59	712-0922		Hex Jam Nut ½-20 Thd.	
60	09322		Blade Brake Disc	
61	712-0267		Hex Nut 5/16-18 Thd.*	
62	736-0119		L-Wash. 5/16 Scr.*	
63	736-0287		Fl-Wash. .793 I.D. x 1.24 O.D.	
64	711-0255		Blade Spindle	

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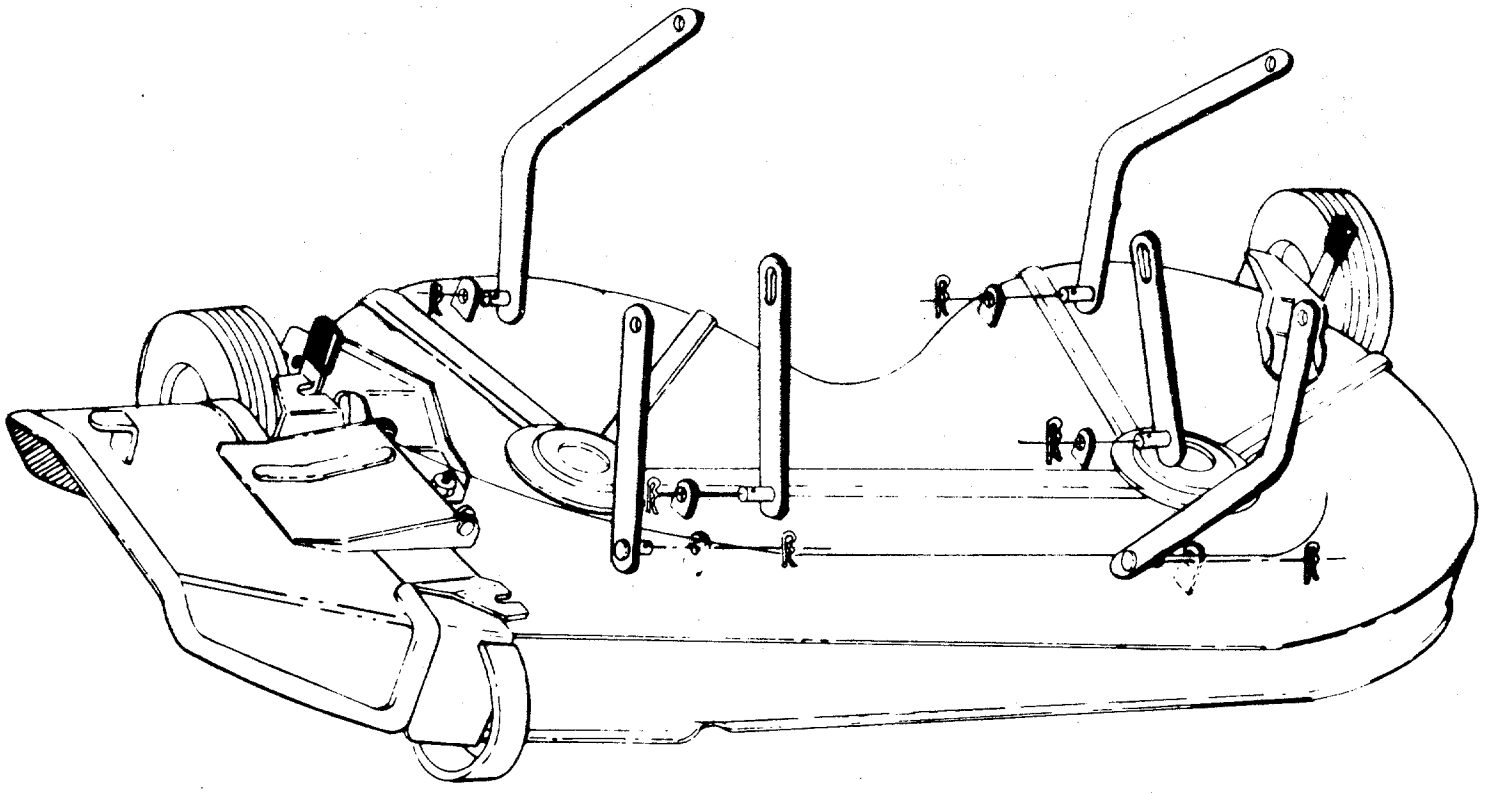
DECK LINKAGE

NOTE

Refer to illustration below for proper deck link hook-up. If the deck is removed for any reason use the illustration below for correct assembly.



PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

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

ALABAMA	**BIRMINGHAM**	
Auto Electric & Carburetor Co.	2625 4th Ave. S.	35233
ARKANSAS	**NORTH LITTLE ROCK**	
Sutton's Lawn Mower Shop	Rt. 4, Box 368	72117
	FORT SMITH	
Mity Mite Motors, Inc.	2515 Towson Ave.	72901
CALIFORNIA	**PORTERVILLE**	
Billious	75 North D Street	93257
	SAN BERNARDINO	
Lawn Mower Supply Co.	25608 E. Baseline	92410
	SAN FRANCISCO	
J.W. Jewett Co.	981 Folsom St.	94107
	SACRAMENTO	
Luttig & Severson	2030 28th St.	95818
COLORADO	**DENVER**	
South Denver Lawn Equip.	527 West Evans	80223
FLORIDA	**JACKSONVILLE**	
Radco Distributors	2403 Market St.	32206
	CORAL GABLES	
Moz-All of Florida, Inc.	365 Greco Ave.	33146
GEORGIA	**EAST POINT**	
East Point Cycle & Key	2834 Church St.	30344
ILLINOIS	**LYONS**	
Keen Edge Co.	8615 Ogden Ave.	60534
INDIANA	**ELKHART**	
Parts & Sales Inc.	2101 Industrial Pkwy.	46514
IOWA	**DUBUQUE**	
Power Lawn & Garden Equip.	2551 J.F. Kennedy	52001
LOUISIANA	**NEW ORLEANS**	
Suhren Engine Co.	8330 Earhart Blvd.	70118
MARYLAND	**TAKOMA PARK**	
Center Supply Co.	6867 New Hampshire Ave.	20012
MASSACHUSETTS	**SPRINGFIELD**	
Morton B. Collins Co.	300 Birnie Ave.	01107
MICHIGAN	**MOUNT CLEMENS**	
Power Equipment Dist.	36463 South Gratiot	48043
	LANSING	
Lorenz Service Co.	2500 S. Pennsylvania	48900
MINNESOTA	**MINNETONKA**	
Hance Distributing Inc.	11212 Wayzata Blvd.	55343
MISSISSIPPI	**BILOXI**	
Biloxi Sales & Service, Inc.	506 Caillavet St.	39533
MISSOURI	**KANSAS CITY**	
Automotive Equip. Service	3117 Holmes St.	64109
	ST. LOUIS	
Henzler, Inc.	2015 Lemay Ferry Rd.	63125
NEW JERSEY	**BELLMAWR**	
Lawnmower Parts Inc.	717 Creek Rd., P.O. Box 7	08030
NEW YORK	**CARTHAGE**	
Gamble Dist., Inc.	West End Ave.	13619

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 **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

NORTH CAROLINA	**GREENSBORO**	
Dixie Sales Company	327 Battleground Ave.	27402
	GOLDSBORO	
Smith Hardware Co.	515 N. George St.	27530
OHIO	**WADSWORTH**	
National Central	687 Seville Rd.	44281
	CLEVELAND	
Bleckrie, Inc.	7900 Lorain Ave.	44102
	CARROLL	
Stebe's Mid-State Mower Supply	Box 366	43112
	WILLARD	
Sunshine Wholesale Tire Outlet	Route 224	44890
OKLAHOMA	**MUSKOGEE**	
Victory Motors, Inc.	605 S. Cherokee	74401
	ADA	
Ada Auto Supply	301 E. 12th St.	74820
OREGON	**PORTLAND**	
Kenton Supply Co.	8216 N. Denver Ave.	97217
PENNSYLVANIA	**HARRISBURG**	
Eeco Inc.	4021 N. 6th St.	17110
	PHILADELPHIA	
Thompson Rubber Co.	5222-24 N Fifth St.	19120
	PITTSBURGH	
Bluemont Co.	11125 Frankstown Rd.	15235
TENNESSEE	**KNOXVILLE**	
Master Repair Service	2423 Broadway, N.E.	37917
	MEMPHIS	
Memphis Cycle & Supply Co.	421 Monroe Ave.	38103
American Sales & Service, Inc.	1922 Lynnbrook	38116
TEXAS	**DALLAS**	
Marr Brothers, Inc.	423 E. Jefferson	75203
	HOUSTON	
Bullard Supply Co.	2409 Commerce St.	77003
	SAN ANTONIO	
Catto & Putty, Inc.	P.O. Box 2408	78206
	FORT WORTH	
Woodson Sales Corp.	1702 N. Sylvania	76111
UTAH	**SALT LAKE CITY**	
A-1 Engine & Mower Co.	437 E. 9th St.	84111
VERMONT	**BURLINGTON**	
Vermont Appliance Co.	44 Lakeside Ave.	05401
VIRGINIA	**RICHMOND**	
RBI Corp.	963 Myers St.	23260
WASHINGTON	**SEATTLE**	
Bailey's Rebuild, Inc.	1325 E. Madison St.	98102
WEST VIRGINIA	**CHARLESTON**	
Young's, Inc.	233 Virginia St., E.	25301
WISCONSIN	**APPLETON**	
Automotive Supply Co.	123 S. Linwood Ave.	54911

WARRANTY PARTS AND SERVICE POLICY

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

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

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

All claims MUST be substantiated with the following information:

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