Owner's Operating Service Instruction Manual

10¢

- ASSEMBLY
- OPERATION
- REPAIR PARTS

Model Nos.
135-495A
135-497A

38" RIDING MOWERS

WARRANTY

For one year from date of purchase, MTD Products Inc will replace for the original purchaser, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. All transportation charges on parts submitted for replacement under this warranty must be paid by the purchaser. This warranty does not include replacement of parts which become inoperative through misuse, excessive use, accident, neglect, improper maintenance or alterations by unauthorized persons. This warranty does not include the engine, motor, battery, battery charger or any component parts thereof. For service on these units, refer to the applicable manufacturer's warranty.

The above warranty will apply only to the original owner and will be effective only if the warranty card has been properly processed. It will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. UNDER NO CIRCUMSTANCES WILL THE RETURN OF A COMPLETE UNIT BE ACCEPTED BY THE FACTORY UNLESS PRIOR WRITTEN PERMISSION HAS BEEN EXTENDED.

MTD PRODUCTS INC • 5389 WEST 130th STREET • P. O. BOX 2741 CLEVELAND OHIO 44111

770-5649

IMPORTANT

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.
3. Do not carry passengers. **Keep children and pets a safe distance away.**
4. Clear work area of objects which might be picked up and thrown.
5. Disengage all attachment clutches and shift into neutral before attempting to start engine .
6. Disengage power to attachment(s) and stop engine (motor) before leaving operator position.
7. Disengage power to attachment(s) and stop en- before making any repairs or adjustments.
8. Disengage power to attachment(s) when transporting or not in use.
9. 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.
10. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face.
11. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
12. Stay alert for holes in terrain and other hidden hazards.
13. 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.
14. Watch out for traffic when crossing or near roadways.
15. When using any attachments never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
16. 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.
17. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in owner's manual.
18. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
19. 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.
20. To reduce fire hazard keep engine free of grass, leaves or excessive grease.
21. 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.
22. Do not change the engine governor settings or overspeed the engine.
23. 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 engine off when removing grass catcher and/or unclogging chute.
    (4) Check blade mounting bolts for proper tightness at frequent intervals.
24. Check grass catcher bags frequently for wear or deterioration. Replace with new bags for safety protection.
25. Look behind to make sure the area is clear before placing the transmission in reverse and backing up.

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ASSEMBLY

GRASS CATCHER Model No. 195-015A 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. 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.

NOTE

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

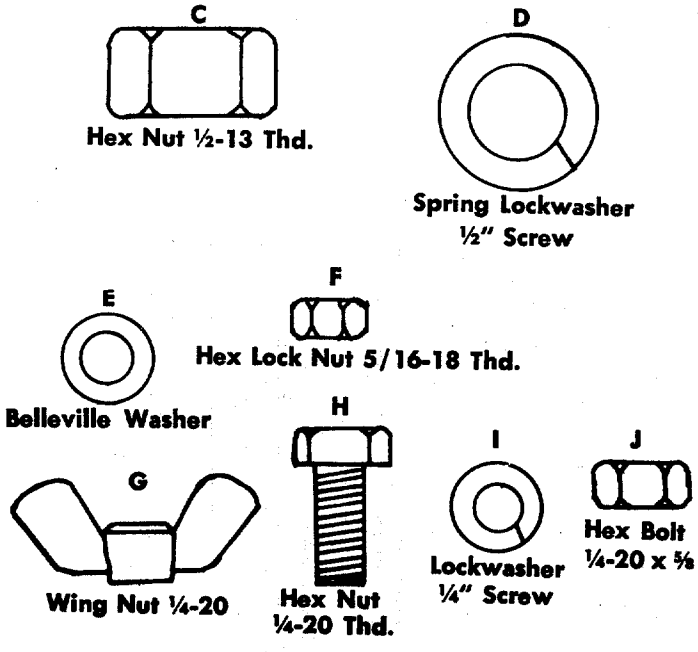


FIGURE 1. HARDWARE SUPPLIED

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 (E) and Hex Nut (F). See figure 2.

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

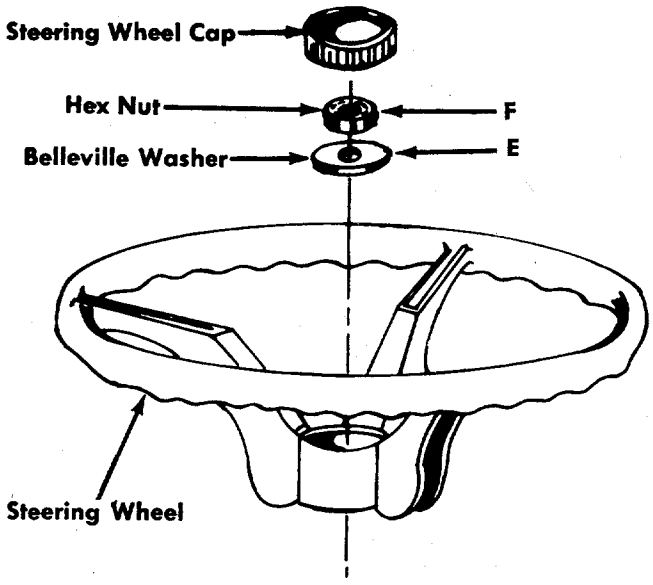


FIGURE 2. STEERING WHEEL ASSEMBLY

Step 5. Place seat and seat adiustment assembly on seat spring (center hole). Secure with Hex Nut (C) and Lockwasher (D). See figure 3.

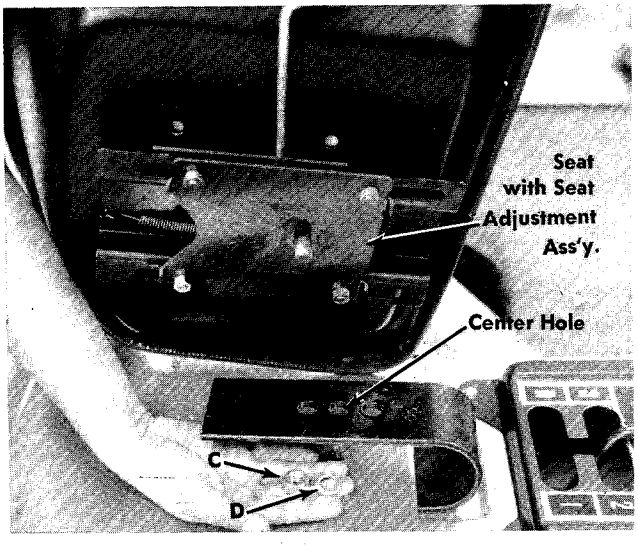


FIGURE 3. SEAT ASSEMBLY

NOTE

Check ALL nuts and bolts for correct tightness.

ACTIVATING THE BATTERY

DANGER

BATTERIES CONTAIN SULFURIC ACID
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.

WARNING

Since battery acid is corrosive to metals, do not pour into any sink or drain. Rinse empty electrolyte containers and mutilate before discarding. If acid is accidentally spilled on battery during filling or charging, or on bench or clothing, etc., flush off with clear water and neutralize with soda or ammonia solution.

1. Place battery to be filled on bench or workbench. Never activate battery in mower. Remove vent plugs from all cells.

2. Fill each cell carefully using battery grade 1.250-1.265 specific graviy. Sulfuric acid to ⅜" above the top of the separators or to the split ring.

3. Allow battery to set for 20 minutes. Battery can then be installed, however, to have maximum capacity the battery should be placed on a charger after the 20 minutes setting period. Battery can be charged at maximum of 35 amperes until the specific gravity reading is 1.265-1.275.

4. 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.

5. 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. Coat the terminals with a thin coat of grease.

6. If the battery is not going to be used in the winter, remove the battery and store in a cool, dry place. Do not store directly on a concrete floor as this will drain the battery. Recharge whenever the specific gravity is less than 1.225.

7. Install the battery.

   a. Open the hood of the mower.

   b. Place the battery with the terminals to the FRONT in the battery case. See figure 4.

   c. Hook both hold-down rods under the battery case and place the hold down over the battery caps and secure with wing nuts G.

CAUTION

Be sure the flared edge of the hold down is facing up to avoid damage to the battery.

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.

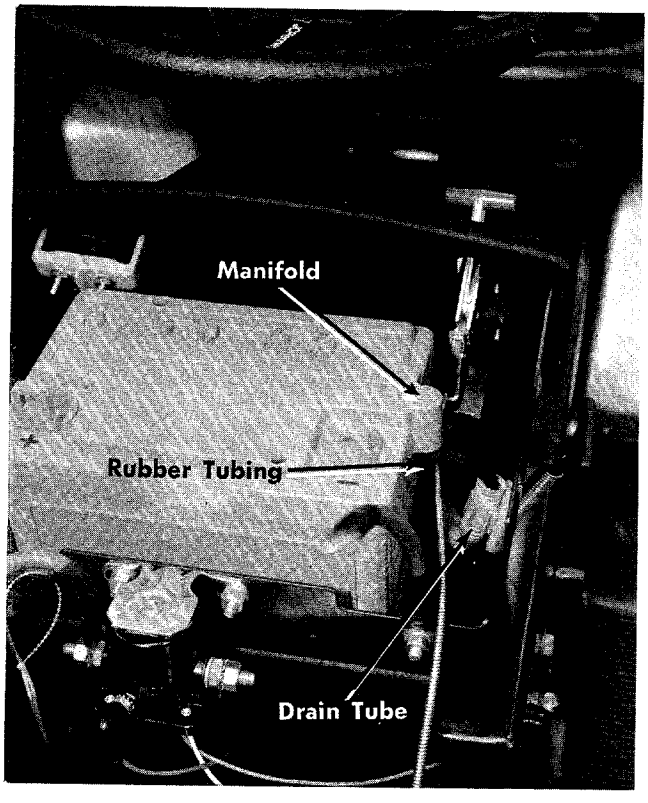


FIGURE 4.

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.

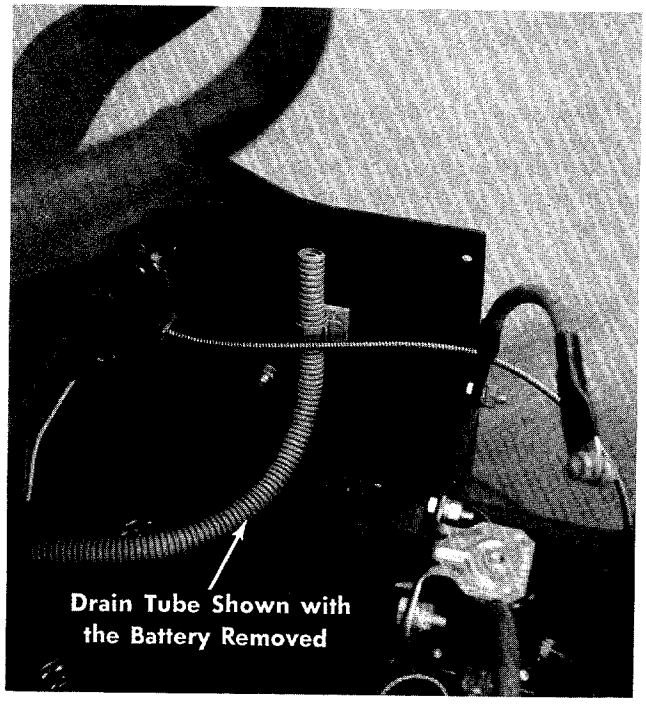


FIGURE 5

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.

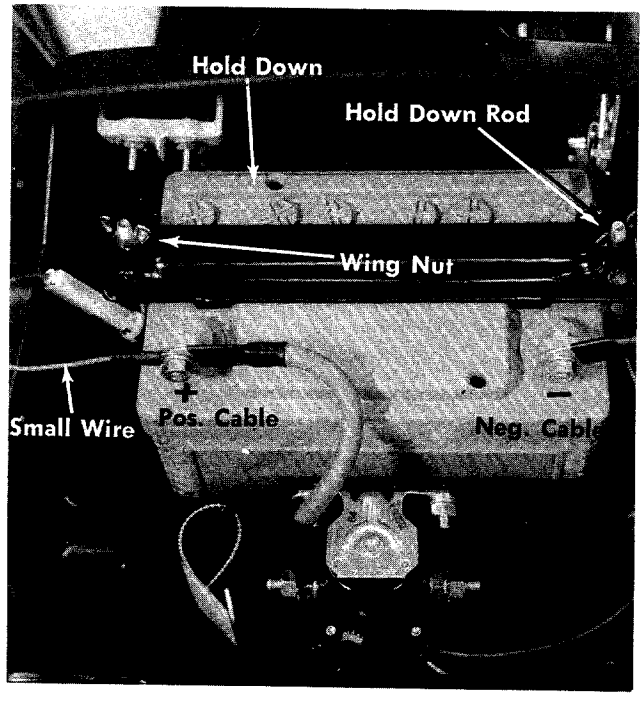


FIGURE 6

CONTROLS

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 regu late the engine speed and choke the engine. The en gine 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 figures 7 and 8.

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 9.

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 10.

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 8. The clutch lockout 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.

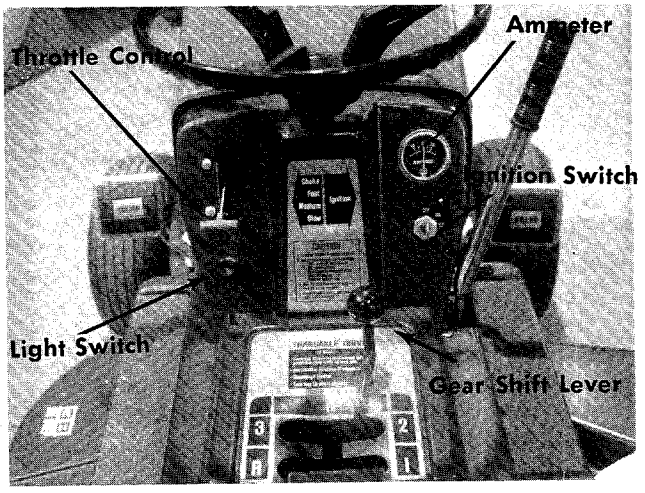


FIGURE 7. CONTROLS

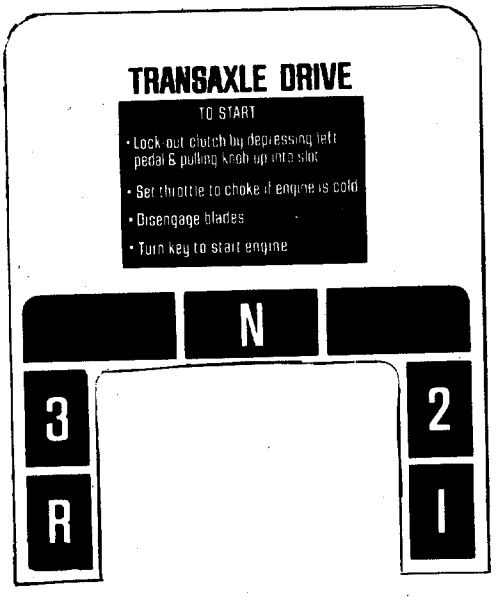


FIGURE 8. SHIFT PATTERN

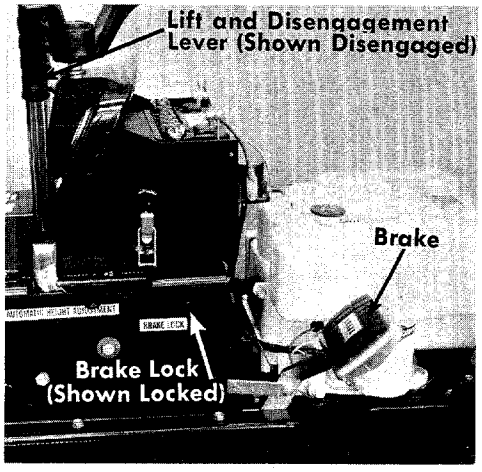


FIGURE 9. RIGHT HAND CONTROLS

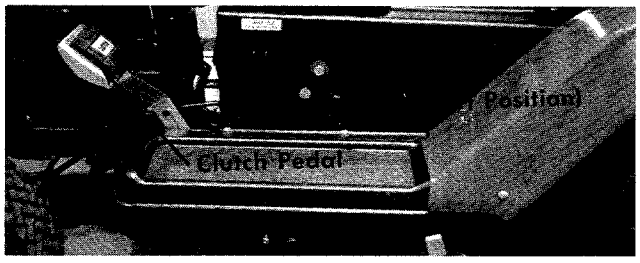


FIGURE 10. LEFT HAND CONTROLS

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

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 9.

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

Height of Cut Stop. See figure 11. Lift the stop and set it at the desired cutting height.

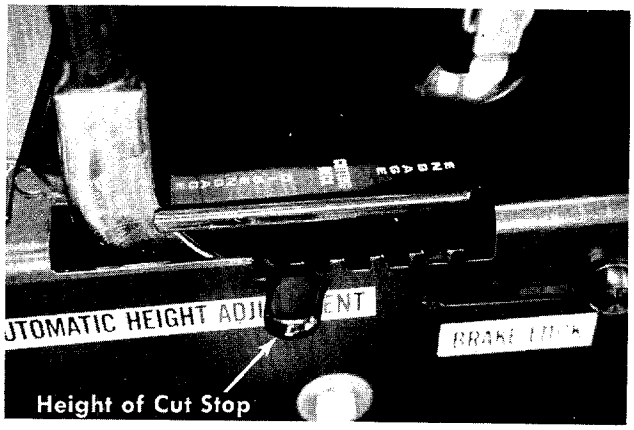


FIGURE 11. HEIGHT OF CUT SETTINGS

Wheel Height Adjuster. See figure 12. 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 12. Set height of cut stop in the 1½ position. See figure 11.

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.

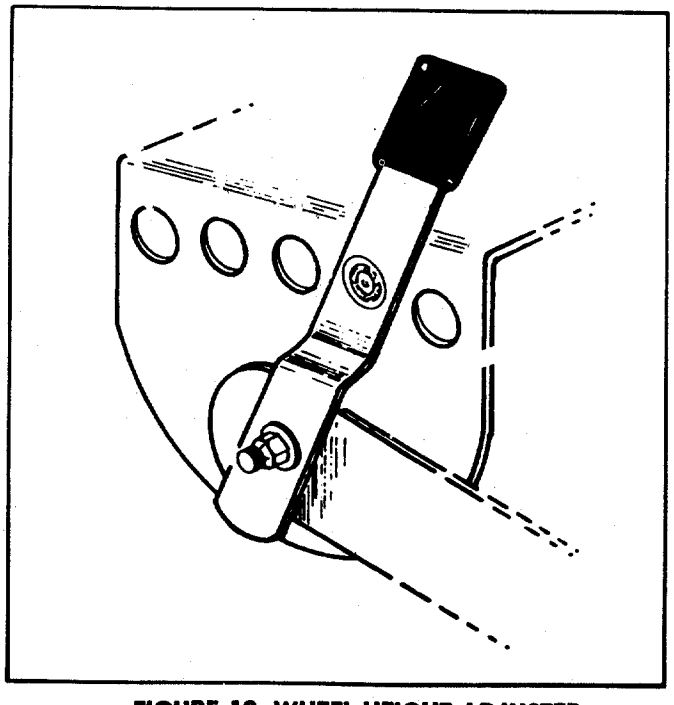


FIGURE 12. WHEEL HEIGHT ADJUSTER

OPERATING INSTRUCTIONS

STARTING THE ENGINE

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

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

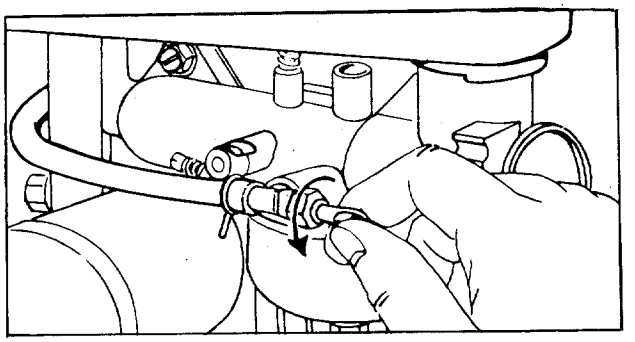


FIGURE 13. FUEL SHUT-OFF VALVE

Step 2. Place the clutch lockout in the START position. See figure 10.

Step 3. Place the lift and disengagement lever in the DISENGAGED position. See figure 9.

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.

Electric Start

See figures 14 and 15. Turn the ignition key to the START position. When the engine is running, let the key return to the ON position.

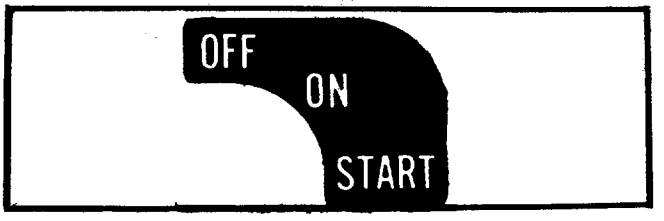


FIGURE 14. STARTER SWITCH

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.

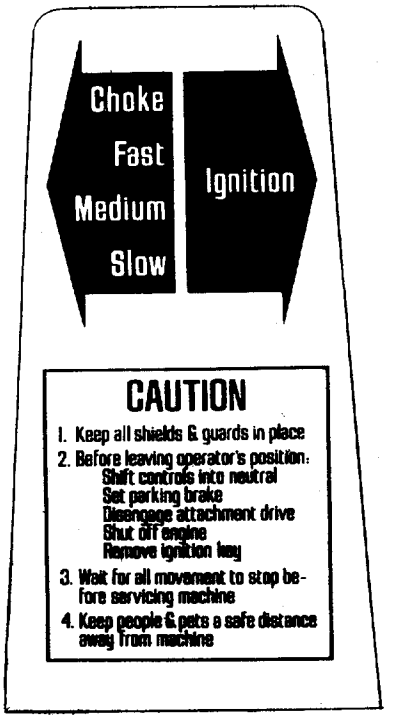


FIGURE 15. DASH PANEL LABEL

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.

STOPPING THE ENGINE

Turn the ignition key to the left to the OFF position and remove the key to prevent accidental starting.

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 positons, 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 9) 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 16.) 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 14.

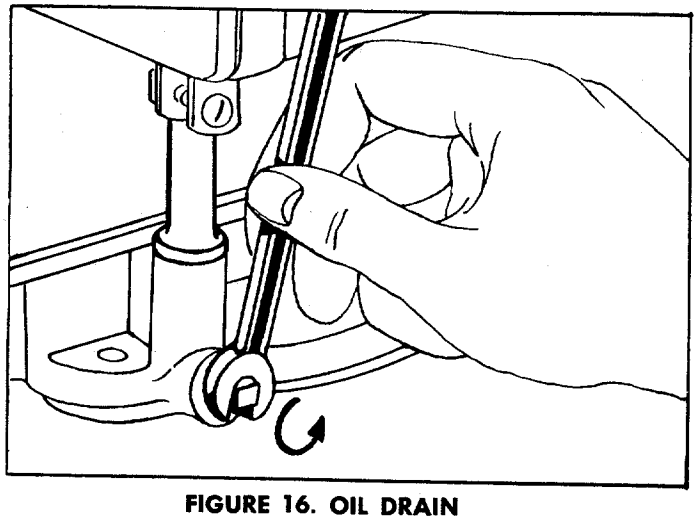


FIGURE 16. OIL DRAIN

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.

LUBRICATION

Lubricate the wheel bearings (2 per wheel) and the upper and lower spindle bearings with SAE 30 oil once a season. See figure 17.

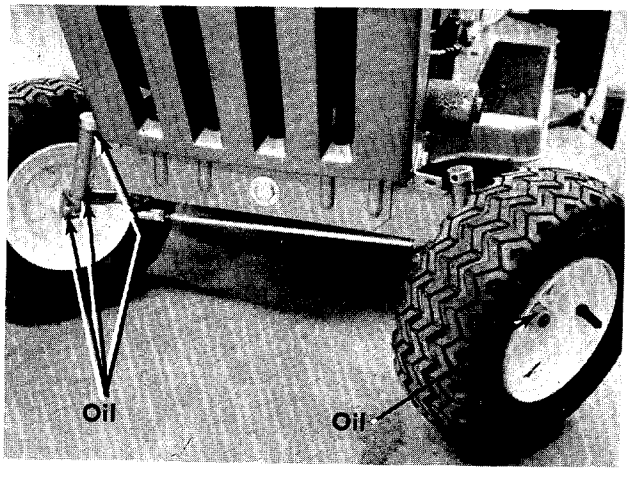


FIGURE 17. WHEEL AND SPINDLE BEARINGS

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 18.

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.

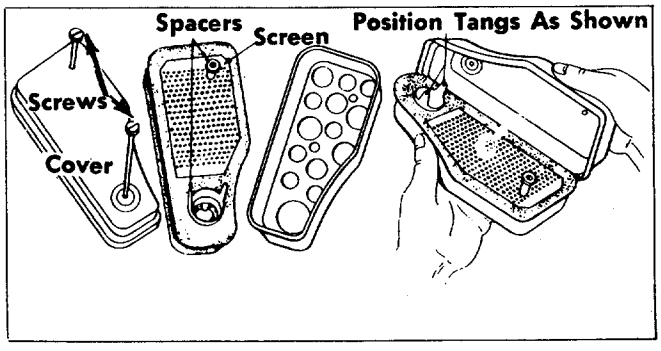


FIGURE 18. AIR CLEANER

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 belts 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 19.) 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.

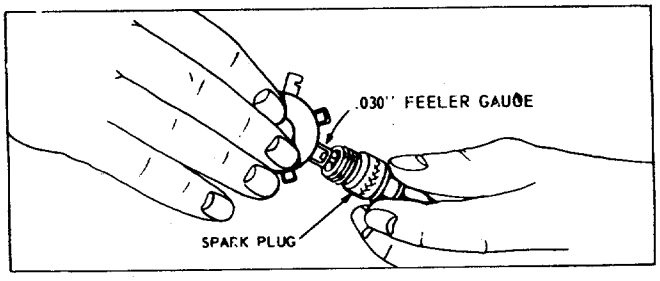


FIGURE 19. SPARK PLUG CLEARANCE

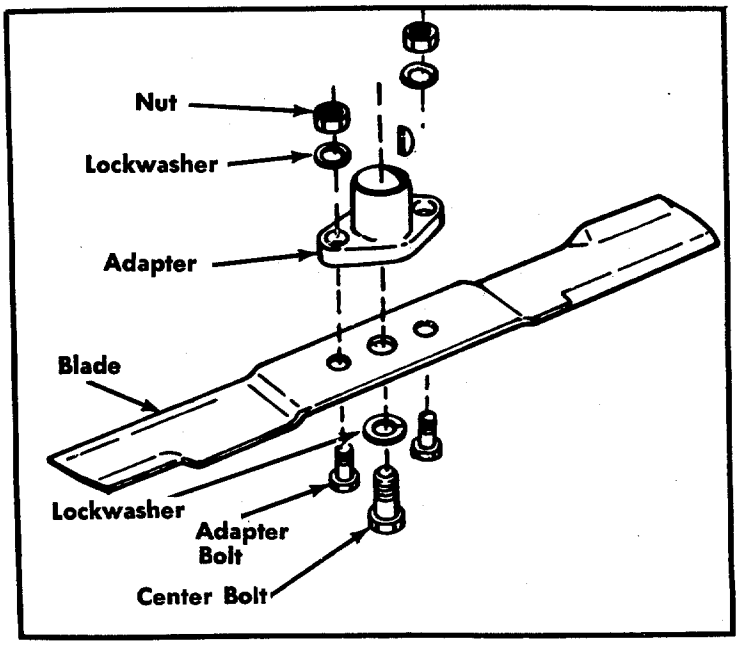


FIGURE 20. BLADE REMOVAL

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 20. 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 21.

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

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

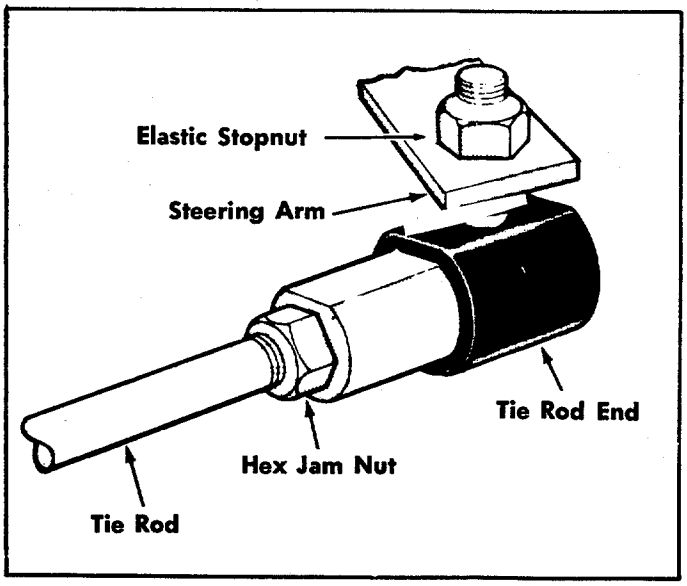


FIGURE 21. TIE ROD END

ADJUSTMENT

Dimension "B" should be approximately ⅛" 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.

NOTE

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

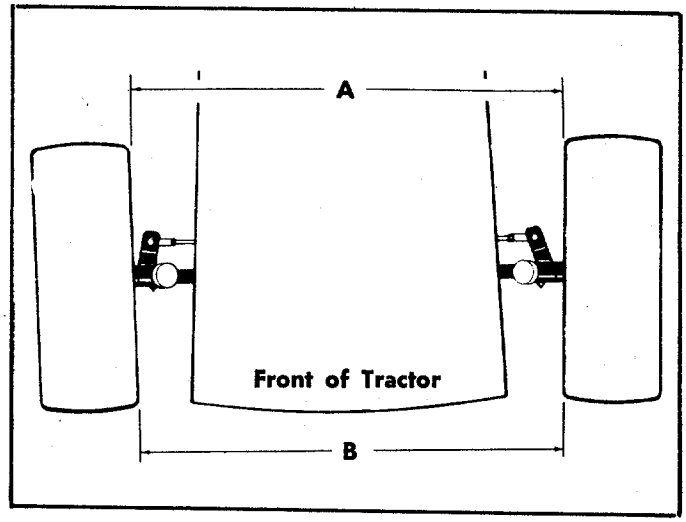


FIGURE 22. TOE-IN DIAGRAM

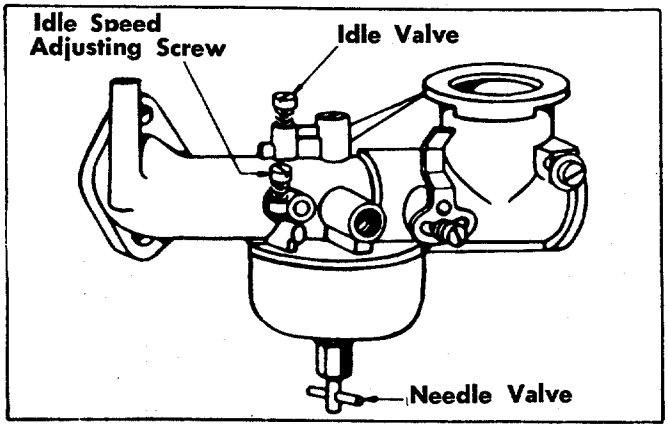


FIGURE 23. CARBURETOR ADJUSTMENT

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 24.

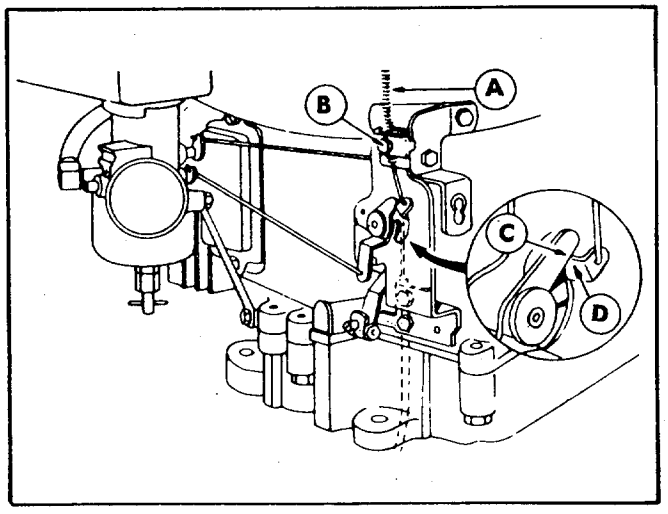


FIGURE 24. CHOKE ADJUSTMENT

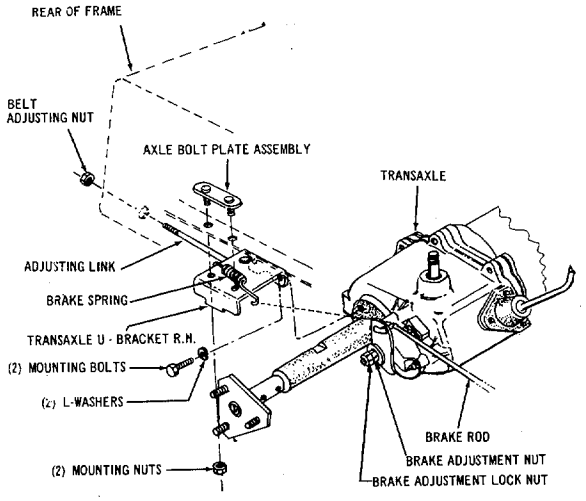


FIGURE 26. BRAKE ADJUSTMENT NUT

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 25.

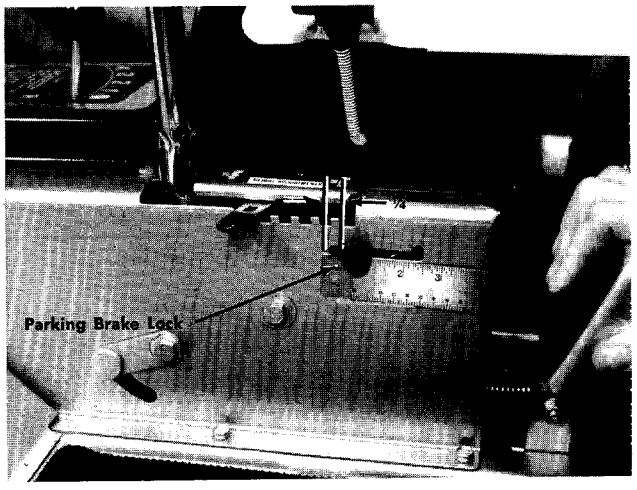


FIGURE 25. PARKING BRAKE LOCK

3. If adjustment is incorrect, tighten or loosen brake adjusting nut until correct dimension is obtained. See figure 26. Over tightening will reduce effective braking action. Lock brake adjustment with brake adjustment lock nut. Periodic adjustment is necessary to maintain effective brake operation.

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.

NOTE

If the unit is equipped with a battery, continue with step 3.

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 9.

Step 2. Remove the belt keeper and large bolt on the engine pulley. See figure 27.

Step 3. Unhook the belt from the engine pulley. See figure 28.

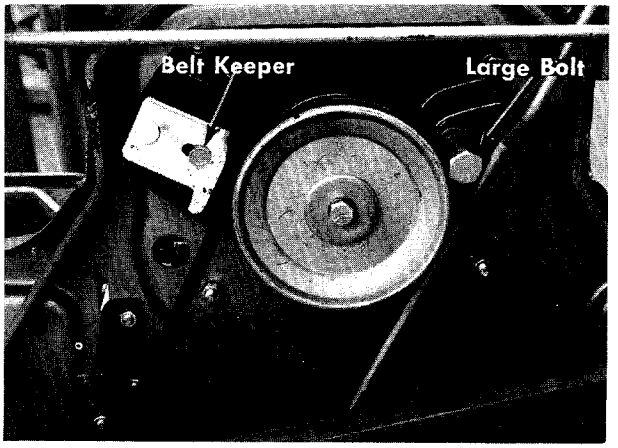


FIGURE 27. BELT KEEPER

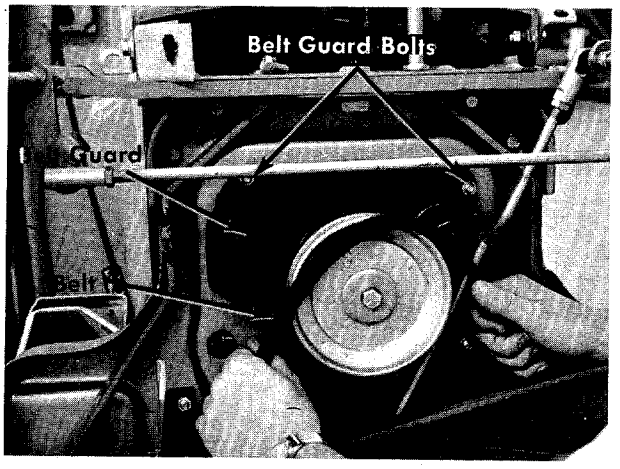


FIGURE 28. REMOVING MOWER BELT

Step 4. Place the lift lever in the engaged position. See figure 9.

Step 5. Unhook the tension springs on both sides of the deck. See figure 29.

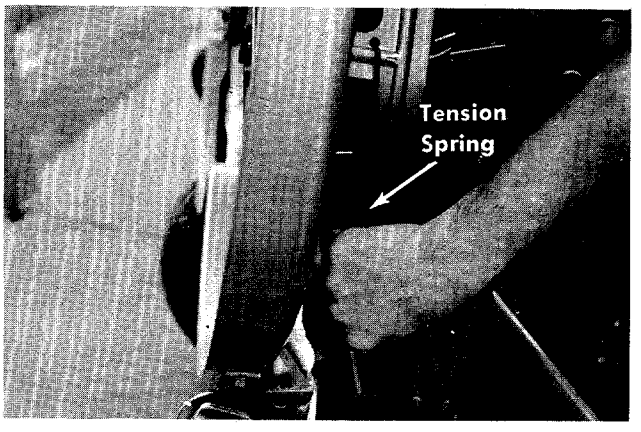


FIGURE 29. REMOVING TENSION SPRINGS

Step 6. Remove the front four deck links from the cutting deck. See figure 30.

Step 7. Remove the belt guards from both deck pulleys. See figure 30.

Step 8. Remove and replace the belt and reassemble.

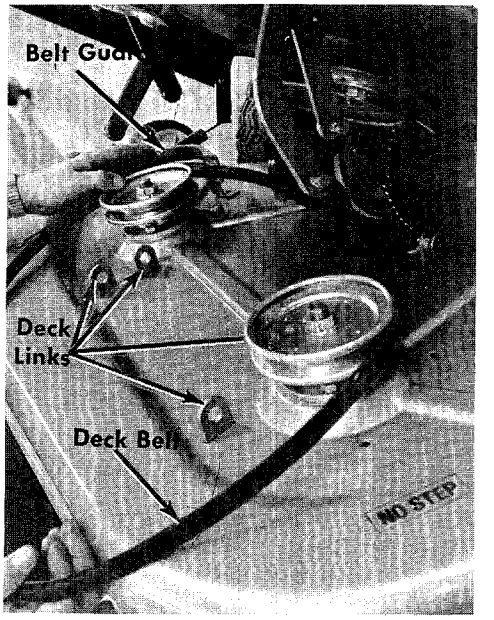


FIGURE 30. DECK LINKS

TRANSMISSION BELTS REMOVAL

Step 1. Place the lift lever in the disengaged position. See figure 9.

Step 2. Remove the belt keeper and large bolt on the engine pulley. See figure 27.

Step 3. Unhook the belt from the engine pulley. See figure 28.

Step 4. Place the lift lever in the engaged position. See figure 9.

Step 5. Unhook the tension springs on both sides of the deck. See figure 29.

Step 6. Remove the front four deck links from the cutting deck. See figure 30.

Step 7. Tip the deck down as shown in figure 30.

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.

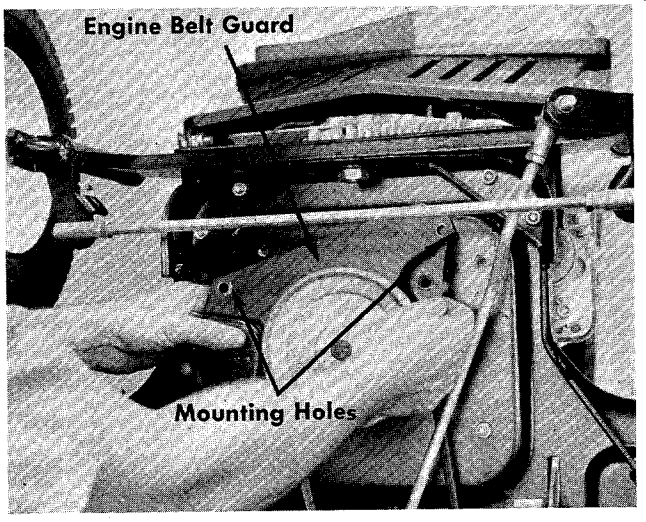


FIGURE 31. BELT GUARD REMOVAL

Step 9. **Removing the transmission belt.** See figure 30.

a. Remove the entire belt guard from the engine pulley by removing the two front engine bolts. See figure 29.

b. Remove the transmission pulley by removing the hex nut and washer. See figure 30.

c. Remove the bolt and nut from the steering rack and remove the belt.

d. Reassemble in reverse order with the new belt.

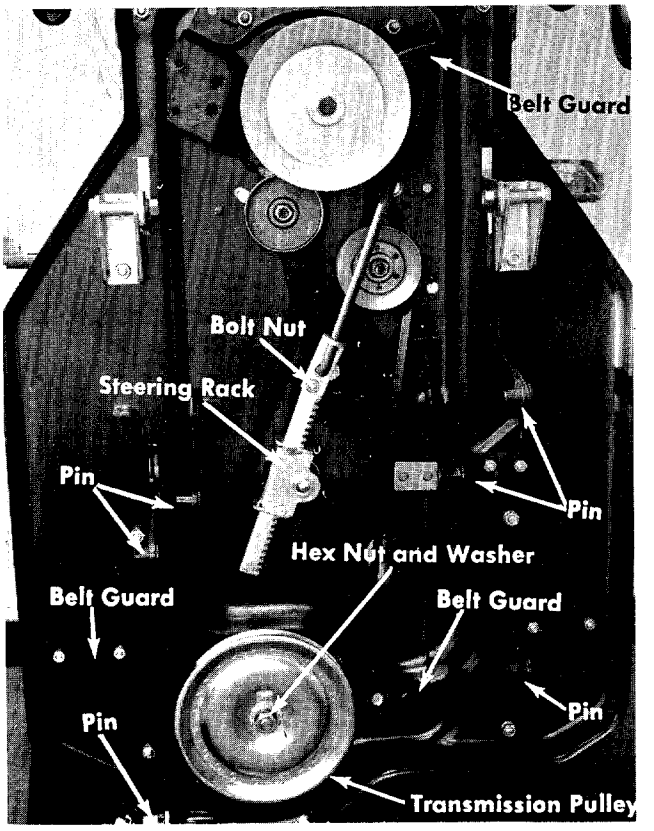


FIGURE 32. BOTTOM VIEW

OFF-SEASON STORAGE

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.

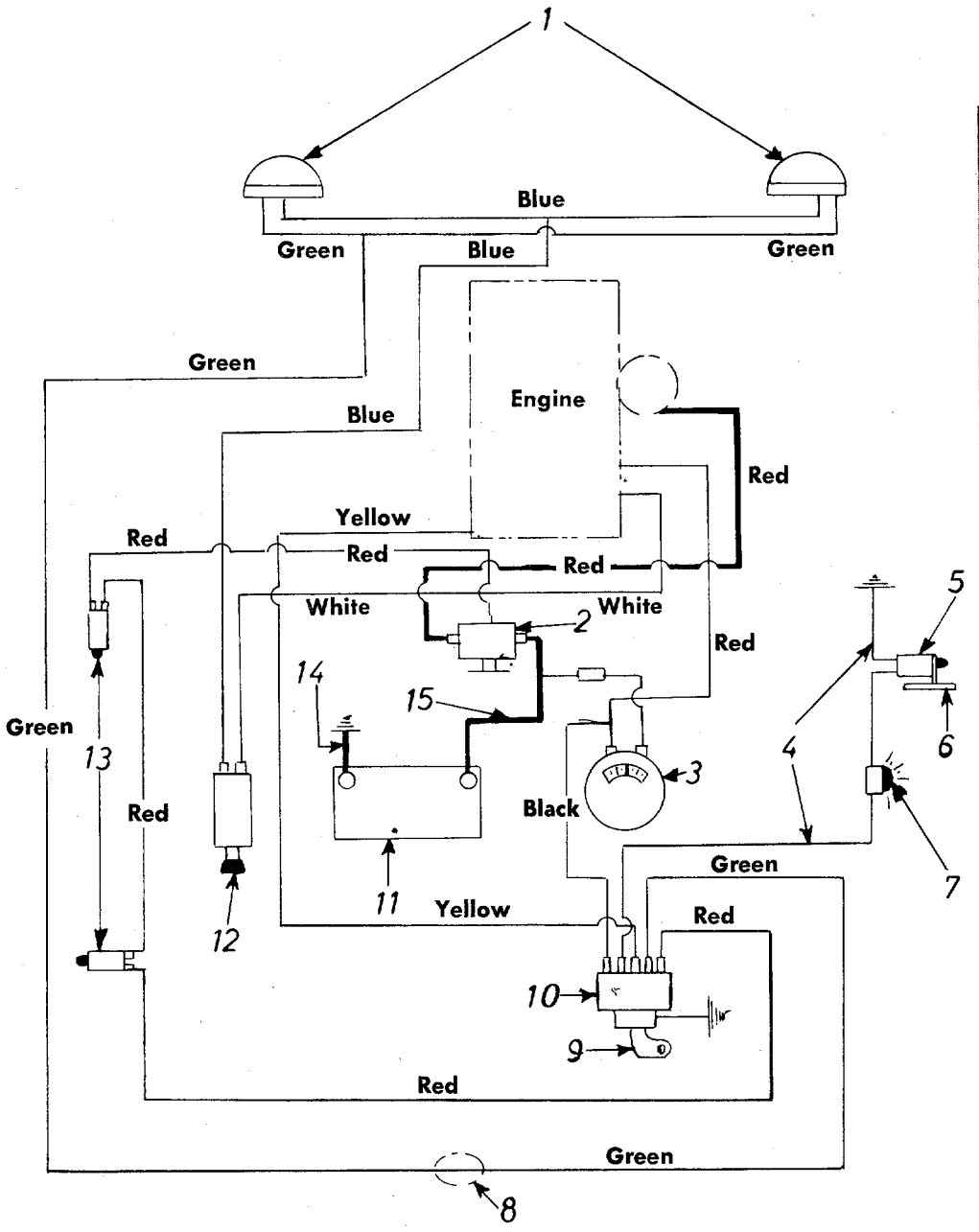
Step 3. Disconnect the spark plug wire and remove the spark plug from the cylinder. Pour about six drops of engine oil into the cylinder, and then pull the recoil starter several times to spread the oil on the cylinder wall. Replace the spark plug, but DO NOT connect the wire.

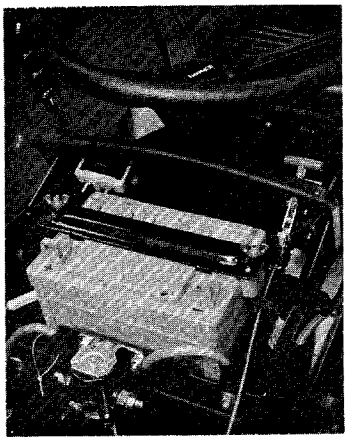
Step 4. Clean the engine and the entire mower thoroughly.

Step 5. Lubricate all lubrication points indicated in figure 15; then wipe the entire machine with an oiled rag in order to protect the surfaces.

TROUBLE SHOOTING CHART

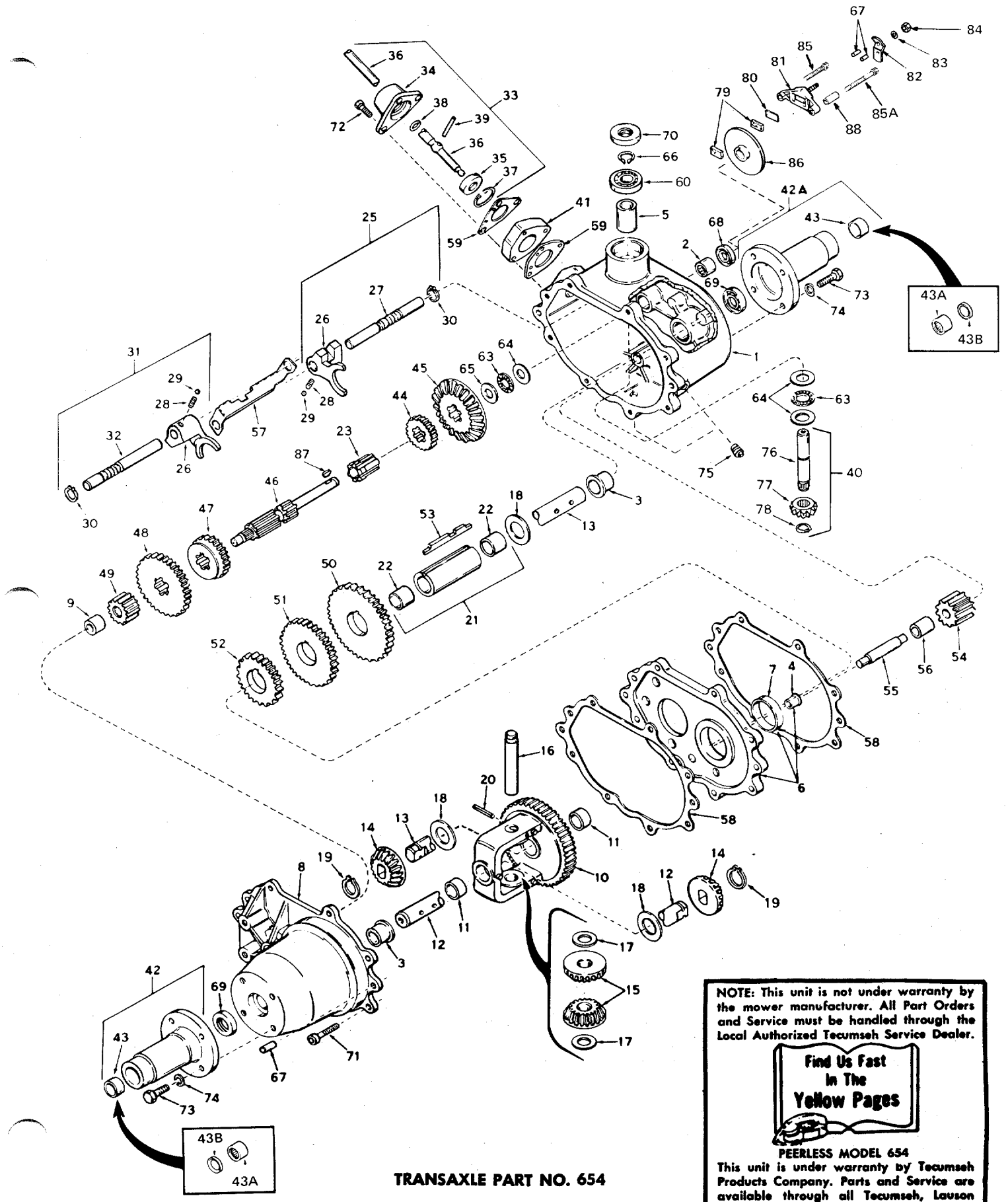
TROUBLE	LOOK FOR	REMEDY
Engine fails to start.	Safety System	A. Check for a blown fuse in the wire leading from the positive terminal of the battery. B. Before checking the safety system further, be sure the clutch control and the blade control are disengaged; only the starting system is being checked. 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 guage) 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 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.





PARTS LIST FOR ELECTRICAL SCHEMATIC 135-495A AND 135-497A

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0222	Headlights	
2	725-0270	Solenoid	
3	725-0119	Ammeter	
4	725-0429	Indicator Wire Harness	
5	725-0379	Safety Switch—Red, without Brkt.	
6	12356	Warning Light Bracket	
7	725-0428	Brake Indicator Light	
8	725-0364	Wiring Harness	
9	725-0201	Ignition Key	
10	725-0267	Ignition Switch	
11	725-0453	Battery	N
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	N
17	711-0222	Hold Down Rods	
18	712-01113	Wing Nuts	



TRANSAXLE PART NO. 654

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

Find Us Fast In The Yellow Pages

PEERLESS MODEL 654

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

PARTS LIST FOR TRANSAXLE MODEL NO. 654

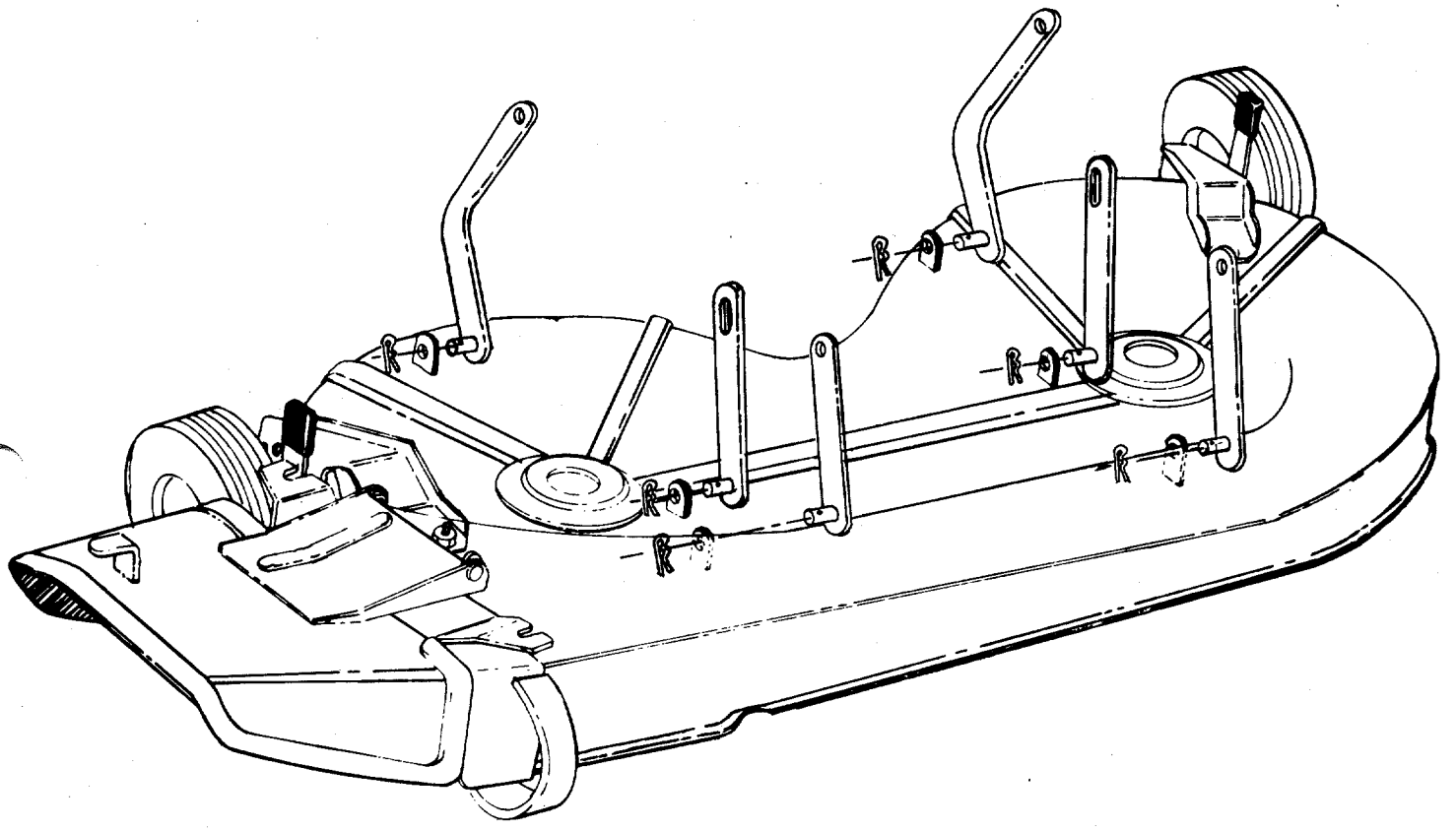
REF. NO.	PART NO.	DESCRIPTION
1	PE-770063	Case Ass'y. Transaxle (Incl. Nos. 2, 3 & 5)
2	PE-780086	Bearing, Needle
3	PE-780059	Bearing, Bronze
4	PE-780060	Bearing, Bronze
5	PE-780061	Bearing, Bronze
6	PE-786033	Plate Ass'y., Center (Incl. Nos. 4 & 7)
7	PE-780062	Bearing, Bronze
8	PE-772042	Cover Ass'y., Transaxle (Incl. Nos. 3 & 9)
9	PE-780063	Bearing, Needle
10	PE-778053	Gear Ass'y., Differential (Incl. No. 11)
11	PE-780064	Bearing, Bronze
12	PE-774340	Axle, Left Hand
13	PE-774341	Axle, Right Hand
14	PE-778067	Gear, Bevel
15	PE-778068	Pinion, Bevel
16	PE-786034	Pin, Drive
17	PE-780065	Washer, Thrust
18	PE-780001	Washer, Thrust
19	PE-788038	Ring, Snap
20	PE-792040	Pin, Roll
21	PE-786035	Sleeve Ass'y., Countershaft (Incl. No. 22)
22	PE-780066	Bearing, Bronze
23	PE-776090	Shaft, Idler
25	PE-784079	Rod Ass'y., Shift (1st & Rev.) (Incl. Nos. 26 thru 30)
26	PE-784004	Fork, Shift
27	PE-784083	Rod, Shift
28	PE-792003	Spring
29	PE-792004	Ball, Steel
30	PE-792017	Ring, Snap
31	PE-784084	Rod Ass'y., Shift (2nd & 3rd) (Incl. Nos. 26, 28, 29, 30, 32)
32	PE-784085	Rod, Shift
33	PE-784244	Lever & Hsg. Ass'y., Shift (Incl. Nos. 34 thru 39)
34	PE-784088	Housing, Shift Lever
35	PE-784094	Keeper, Shift Lever
36	PE-784245	Lever, Shift
37	PE-792016	Ring, Snap
38	PE-792001	Ring, Quad
39	PE-792049	Pin, Drive
40	PE-776154	Shaft & Gear Ass'y, Input (Incl. Nos. 76, 77 & 78)
41	PE-786057	Block, Riser
42	PE-782038A	Hsg. Ass'y., Axle (Incl. #43)
42A	PE-782043	Hsg. Ass'y., Axle (Incl. #43)
43	PE-780091	Brg. & Seal Ass'y., Needle (See Note 1)
43A	PE-530105	Bearing Needle
43B	PE-788042	Seal, Oil
44	PE-778024	Gear (16 teeth)
45	PE-778057	Gear, Bevel (33 teeth)
46	PE-776138	Shaft, Shifter & Brake
47	PE-778058	Gear, Shifting (2nd & 3rd)
48	PE-778059	Gear, Shifting (1st & Rev.)
49	PE-778060	Gear, Spur (12 teeth)
50	PE-778061	Gear, Countershaft drive (39 teeth)
51	PE-778062	Gear, Countershaft (34 teeth)
52	PE-778063	Gear, Countershaft (25 teeth)
53	PE-792034A	Key, Countershaft
54	PE-778064	Idler, Reverse
55	PE-776057	Shaft, Reverse Idler
56	PE-786036	Spacer, Reverse Idler
57	PE-784087	Stop, Shifter
58	PE-788033	Gasket, Case & Cover
59	PE-788003	Gasket, Shift Lever Hsg.
60	PE-780093	Bearing, Ball
63	PE-780071	Bearing, Thrust
64	PE-780072	Washer, Thrust
65	PE-780073	Washer, Thrust
66	PE-792035	Ring, Snap
67	PE-786026	Pin, Dowel
68	PE-788043	Seal, Oil
69	PE-788009	Seal, Oil
70	PE-788035	Seal, Oil
71	PE-792036	Scr., Socket Hd. Cap, ¼-20 x 1¼
72	PE-792051	Scr., Socket Hd. Cap, ¼-20 x 1¾
73	PE-792037	Scr., Hex Hd., 5/16-18 x 1
74	PE-792029	Lockwasher, 5/16"
75	PE-792039	Plug, Pipe ⅛"
76	PE-776155	Shaft, Input
77	PE-778077	Pinion, Input
78	PE-788040	Ring, Retaining
79	PE-790006	Pad, Brake
80	PE-790007	Plate, Brake Pad
81	PE-790005	Holder, Brake Pad
82	PE-790004	Lever, Brake
83	PE-792076	Washer, Flat
84	PE-792075	Nut, Lock
85	PE-792073	Scr., Hex Hd. Cap, ¼-20 x 1¼ thr'd forming
85A	PE-792085	Scr., Hex Hd. Cap, ¼-20 x 2¼ thr'd forming
86	PE-790009	Disc, Brake
87	PE-792045	Key, Woodruff #61
88	PE-786066	Spacer

NOTE 1: The no. 780091 bearing & seal can be used interchangeably with the separate #530105 bearing and the separate no. 788042 seal.

DECK LINKAGE

NOTE

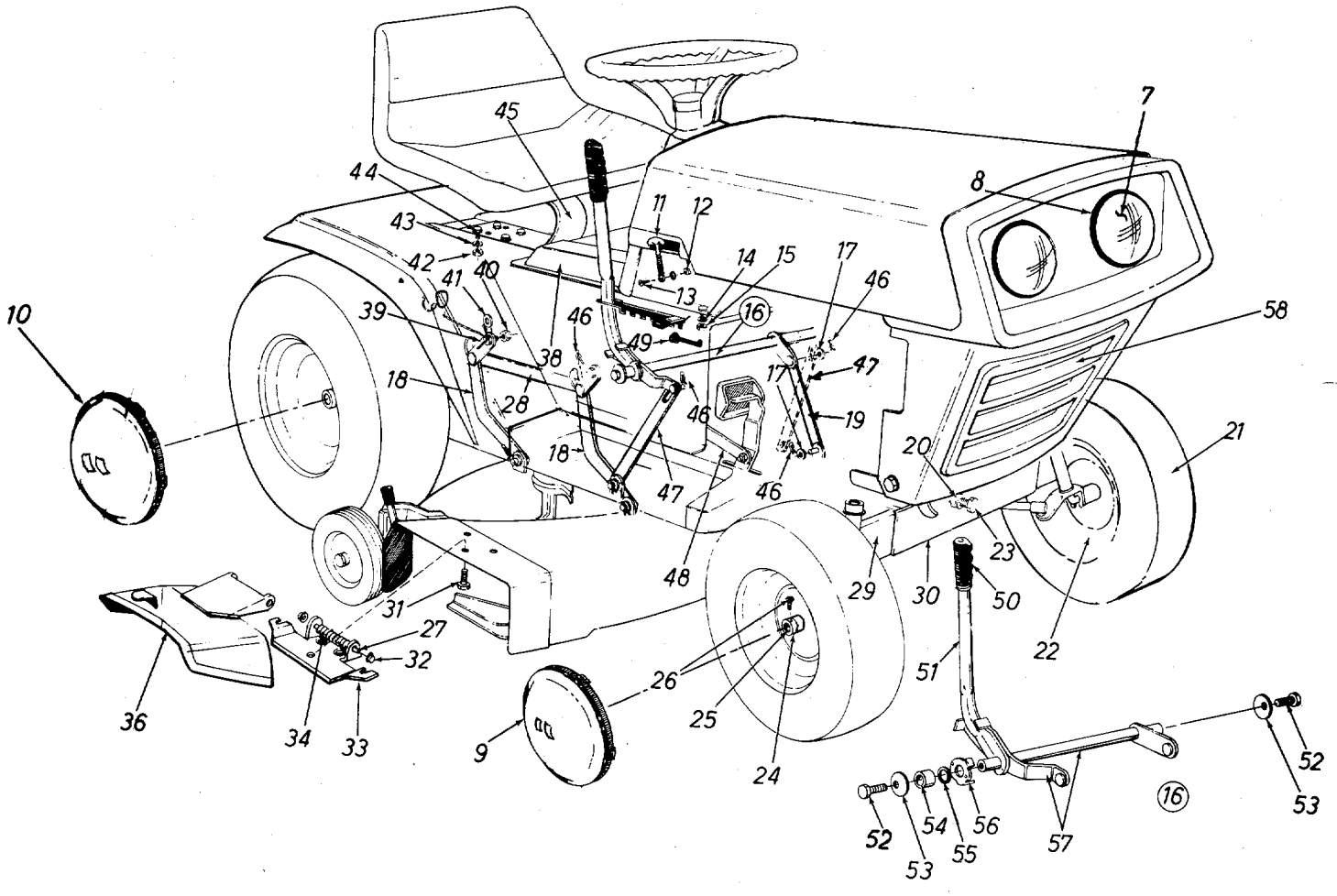
Refer to illustration below for proper deck link hook-up. If the deck is removed for any reason use the illustration below for correct assembly.



135-495A
135-497A

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

MODEL



RIGHT HAND VIEW

PARTS LIST FOR RIGHT HAND VIEW 135-495A AND 135-497A

F. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
7	725-0222		Head Lights	
8	735-0156		Head Light—Door Mounting	
9	734-0541		Front Wheel Hub Cap 6 inch Dia.	
10	734-0542		Rear Wheel Hub Cap 8 inch Dia.	
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	—		Lift Handle Ass'y.—See Breakdown	
17	736-0192		Flat Washer .531 I.D. x .93 O.D	
18	10349		Deck Link Assembly	
19	10904		Deck Link Assembly	
20	712-0923		Hex Center Locknut ⅝-18 Thd	
21	734-0497		Front Wheel Ass'y. Comp. 15 x 6.00	
	734-0498		Front Wheel Tire Only 15 x 6.00	
22	734-0499		Front Wheel Rim Only	
23	710-0622		Hex Hd. Cap Scr. ⅝-18 x 1.62" Lg.	N
24	711-0169		Collar ⅝" I.D.	
25	748-0184		Front Wheel Bearing	
26	710-0494		Sq. Hd. Set Scr. 5/16-18 x .38" Lg. Cup	
27	711-0577		Pivot Pin	
28	09735		Connecting Rod 3/16 x 1.00 x 12.5" Lg.	
29	12406		Front Pivot Bar Ass'y.	N
30	12411		Front Pivot Bracket	N

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
31	710-0195		Hex Hd. Cap Scr. ¼-28 x .62" Lg.*	
32	726-0106		Push-on Flange Palnut	
33	11399		Adapter Plate Assembly	
34	732-0261		Torsion Spring	
35	11633		Chute Cover Ass'y. Comp.	
36	11574		Chute Cover Ass'v.	
38	11842		Upper Frame Cover	
39	09721		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	732-0256		Seat Spring	
46	714-0101		Internal Cotter Pin ½" Dia.	
47	10346		Deck Link Assembly	
48	11056		Parking Brake—Lever Ass'y. R.H.	
49	726-0121		Push Cap ¼" Dia.—Black	
50	08118		Grip	
51	11030		Lift Handle R.H.	
52	710-0201		Hex Hd. Cap Scr. ⅜-16 x .62" Lg.*	
53	736-0233		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.	
56	11029		Handle Pivot Bracket	
57	11032		Lift Handle Bracket Ass'y.	
58	731-0208		Grille Insert	
59	12360		Dash Panel (not shown)	

60 738-140 5/16 SCR.

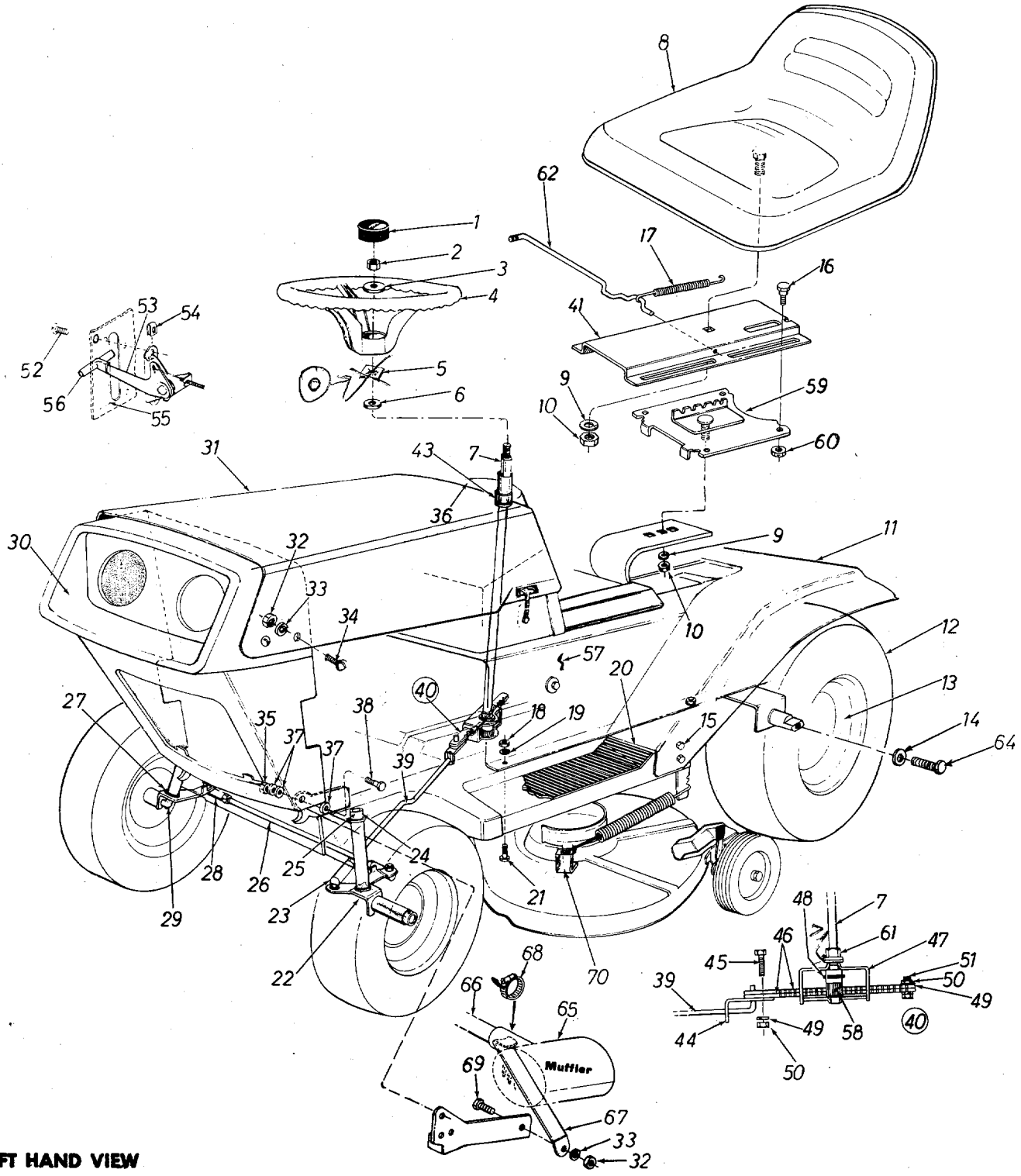
*For faster service obtain standard nuts and bolts locally. If these items cannot be obtained locally, order by part number and size as shown on the parts list.

(462—Red Flake) When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—11836 (462)).

135-495A
135-497A

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

MODEL



LEFT HAND VIEW

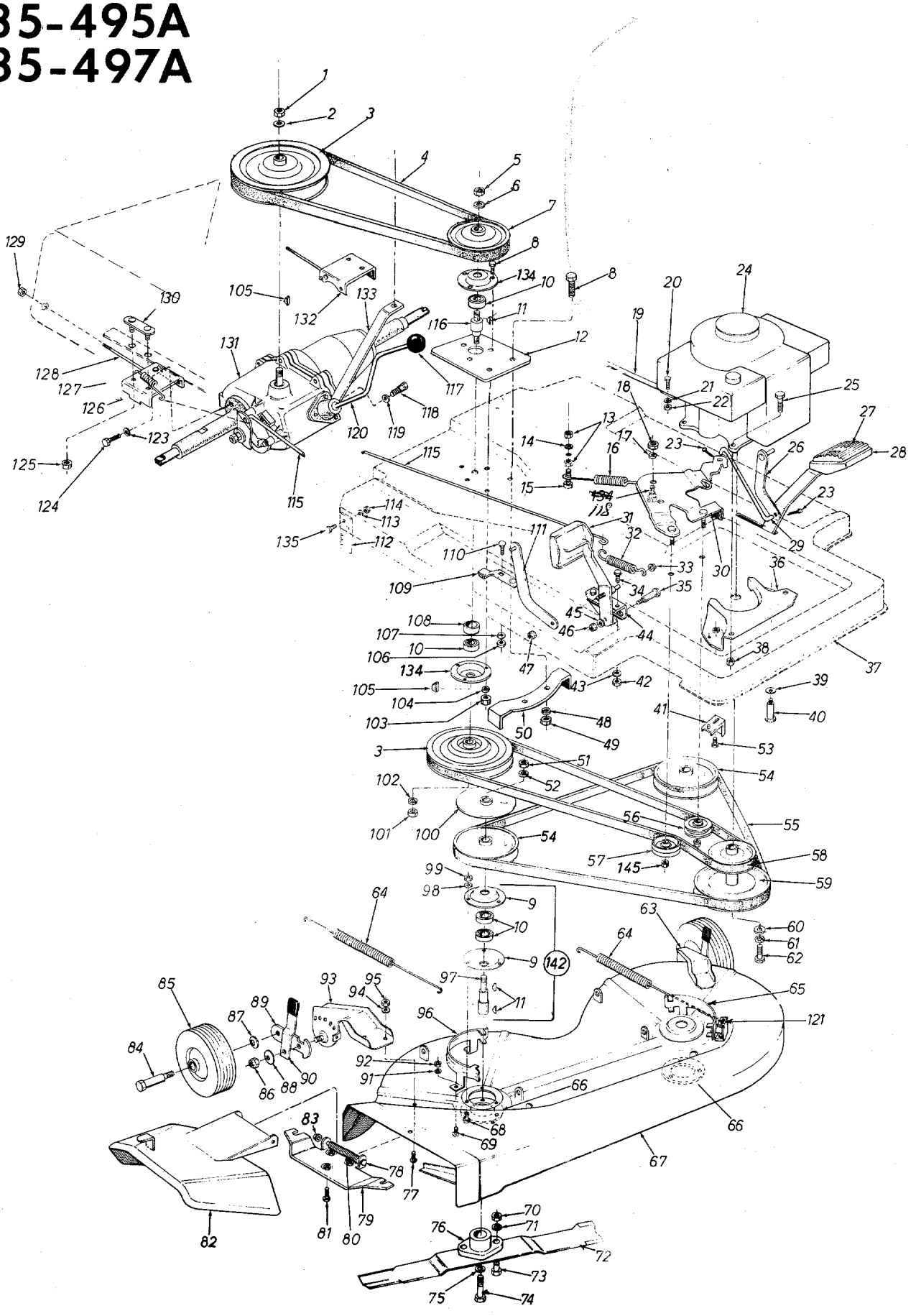
PARTS LIST FOR LEFT HAND VIEW 135-495A AND 135-497A

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	736-0242		Belleville Washer .400 I.D. x 1.13 O.D.	
4	731-0219		Steering Wheel 12.0 inch	
5	736-0156		FL-WASH, .635 x 1.12	
6	736-0174		Wave Washer .660 I.D. x .88 O.D.	
7	738-0200		Steering Shaft	
8	757-0241		Seat Assembly Comp—10.0" Black (Mtg. Bolt Molded in Seat)	
9	736-0921		Spring Lockwasher ½" Scr.*	
10	712-0206		Hex Nut ½-13 Thd.*	
11	11839	-462	Rear Fender	
12	734-0601		Rear Wheel Ass'y.—Comp. 18 x 8.50	N
	734-0516		Rear Wheel Tire Only 18 x 8.50	
13	734-0603		Rear Wheel Rim Ass'y	N
14	736-0242		Belleville Washer	
15	710-0258		Hex Hd. Cap Scr. ¼-20 x .62" Lg.*	
16			Part of Ref. No. 41	
17			" " " "	
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	-462	Front Axle Ass'y.—L.H.	
23	723-0156		Ball Joint Ass'y. (Tie Rod End)	
24	711-0169		Collar ⅝" I.D.	
25	710-0494		Sq. Hd. Set Scr. 5/16-18 x .38 Cup	
26	711-0613		Tie Rod ⅜-24 Threaded Both Ends	
27	748-0184		Flange Bearing .630 I.D.	
28	723-0156		Ball Joint Ass'y. (Tie Rod End)	
29	09095	-462	Front Axle Ass'y.—R.H.	
30	719-0197		Front Grille	
31	11836	-462	Front Hood	
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 ⅜-16 Thd.	
36	12360		Dash Panel and Battery Box Ass'y.	
37	736-0105		Belleville Washer	
38	710-0253		Hex Hd. Cap Scr. ⅜-16 x 1.00" Lg.*	
39	747-0138		Steering Rod	
40	—		Steering Ass'y.—See Breakdown	
41	12400		Adj. Seat Assembly—Comp.	N
43	748-0227		Hex Flange Bearing .630 I.D. Bronze	
44	12372		Steering Rod Bracket	
45	710-0142		Hex Hd. Cap. Scr. ¼-28 x .75" Lg.*	
46	11048		Steering Segment	
47	11074		Steering Housing Ass'y.	
48	715-0134		Spirol Pin 3/16" Dia. x 1.50" Lg.	
49	736-0329		Spring Lockwasher ¼" Scr.*	
50	712-0138		Hex Nut ¼-28 Thd.*	
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	12360		Dash Panel and Battery Box Ass'y	
56	722-0115		Knob—Only—Throttle Control	
57	11852		Upper Frame	
58	748-0203		12 Teeth—Spur Gear	
59			Part of Ref. No. 41	
60			Part of Ref. No. 41	
61	748-0228		Hex Flange Bearing .505 I.D.	
62	11129		Adjustment Rod	
64	710-0621		Hex Wash. Hd. Tap. Scr. w LOCK 5/16-18 x .75" Lg.	N
65	751-0177		Muffler Ass'y.	N
66	751-0175		Muffler Tubing	N
67	751-0178		Muffler Bracket	N
68	726-0132		Hose Clamp	
69	710-0258		Hex Scr. ¼-20 x .62" Lg.*	
70	12405		Deck Spring Brkt.	N
71	736-192		FL WASH .531 x .930 OD	

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

(462—Red Flake) When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—11836 (462)).

135-495A
135-497A



DECK AND FRAME VIEW

PARTS LIST FOR DECK AND FRAME VIEW 135-495A AND 135-497A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	712-0922		Hex Jam Nut ½-20 Thd.*	
2	736-0921		Spring Lockwasher ½" Scr.*	
3	756-0174		Transmission Split Pulley .50" I.D.	
4	754-0173		"V"-Belt 21/32 x 37" Lg.	
5	712-0261		Hex ~~Serr~~ Nut ⅝-11 Thd.	
6	736-0158		Spring Lockwasher ⅝" Scr.*	
7	756-0124		Pulley 4.75" O.D.	
8	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
9	08253		Bearing Housing	
10	741-0919		Ball Bearing .787 I.D. x 1.85 O.D.	
11	714-0365		#6 Hi-Pro Key 5/32 x ⅝" Dia.	
12	11851		Spindle Plate	
13	712-0267		Hex Nut 5/16-18 Thd.*	
14	736-0119		Spring Lockwasher 5/16" Scr.*	
15	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
16	732-0191		Spring .75" O.D. x 11.0" Lg. (Idler)	
17	736-0119		Spring Lockwasher 5/16" Scr.*	
18	712-0267		Hex Nut 5/16-18 Thd.*	
19	11095		Engine Brace	
20	710-0259		Hex Sems Scr. 5/16-18 x.62" Lg.*	
21	736-0119		Spring Lockwasher 5/16" Scr.*	
22	712-0267		Hex Nut 5/16-18 Thd.*	
23	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.	
24	—		Engine	
25	710-0442		Hex Hd. Cap Scr. 5/16-18 x 1.50" Lg.*	
26	11057		Parking Brake Lever Ass'y. —L.H.	
27	10614		Pedal Pad Vinyl	
28	11037		Clutch Pedal Ass'y.	
29	747-0112		Clutch Rod	
30	12448		Idler Bracket Ass'y.	N
31	11036		Brake Pedal Bracket Ass'y.	
32	732-0245		Brake Spring	
33	726-0100		Push Nut ⅜" Rod	
34	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.*	
35	738-0213		Shoulder Scr. .498" Dia. x 1.450" Lg.	
36	12654		Engine Belt Guard Assembly	N
37	11090		Frame Assembly	
38	712-0267		Hex Nut 5/16-18 Thd.*	
39	736-0105		Belleville Washer ⅜" Scr.	
40	738-0215		Shoulder Scr. .498" Dia. x 3.00" Lg.*	N
41	12160		Belt Keeper Ass'y.	N
42	712-0267		Hex Nut 5/16-18 Thd.*	
43	736-119		Spring Lockwasher 5/16" Scr.*	
44			Pedal "U" Bracket Ass'y.	
45	736-0169		Spring Lockwasher ⅜" Scr.*	
46	712-0798		Hex Nut ⅜-16 Thd.*	
47	712-0429		Hex Inserted Locknut 5/16-18 Thd.	
48	736-0119		Spring Lockwasher 5/16" Scr.*	
49	712-0267		Hex Nut 5/16-18 Thd.*	
50	11845		Transmission Belt Guard	
51	712-0261		Hex Jam Nut ⅝-11 Thd.	
52	736-0158		Spring Lockwasher ⅝" Scr.*	
53	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
54	756-0251		Deck Pulley 4.75" O.D.	N
55	754-0145		"V" Belt 21/32 x 69" Lg. (Blade Drive Belt)	
56	756-0116		"V" Belt Idler 3.06" O.D.	
57	756-0217		Flat Idler 2.75" O.D. with Flanges	
58	754-0191		"V" Belt ½ x 65" Lg. (Transmission)	
59	756-0234		Two Step Engine Pulley	
60	736-0235		Flat Washer .406 I.D. x 1.25 O.D.	
61	736-0169		Spring Lockwasher ⅜" Scr*	
62	710-0152		Hex Hd. Cap Scr. ⅜-24 x 1.00" Lg.*	
63	11237		Wheel Bracket Assembly—L.H. (Deck)	
64	732-0191		Spring .75 O.D. x 11.0" Lg. (Deck)	
65	12672		Belt Guard—L.H. (Deck)	N
66	09164		Deck Reinforcement Plate	
67	12676		38 Inch Deck Assembly	N
68	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
69	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
70	712-0123		Hex Nut 5/16-24 Thd.*	
71	736-0119		Spring Lockwasher 5/16" Scr.*	
72	742-0122		19 Inch Blade	
73	710-0117		Hex Hd. Cap Scr. 5/16-24 x 1.00" Lg. Heat Treated	
74	710-0459		Hex Hd. Cap Scr. ⅜-24 x 1.50" Lg. Heat Treated	
75	736-0217		Spring Lockwasher ⅜" Scr. Heavy Duty	
76	10769		Blade Adapter Kit	
77	710-0289		Hex Hd. Cap Scr. ¼-20 x .50" Lg.*	
78	711-0571		Pivot Pin	
79	11399		Adapter Plate Ass'y.	
80	732-0261		Torsion Spring	
81	710-0195		Hex Hd. Cap Scr. ¼-28 x .62" Lg.*	

PARTS LIST (CONTINUED) FOR DECK AND FRAME VIEW 135-495A AND 135-497A

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
82	11574		Chute Cover Assembly	
83	726-0106		Push Nut—¼" Rod	
84	738-0119		Shoulder Scr. .625" Dia. x 1.75" Lg.	
85	734-0295		Wheel Ass'y.— 5.0 x 1.25 Dia. (Deck)	
86	712-0116		Hex Inserted Locknut ⅜-24 Thd.	
87	736-0105		Belleville Washer	
88	736-0105		Belleville Washer	
89	10937		Wheel Pivot Bar	
90	10949		Spring Lever Ass'y. with Knob	
91	736-0329		Spring Lockwasher ¼" Scr.*	
92	712-0287		Hex Nut ¼-20 Thd.*	
93	11236		Wheel Bracket Ass'y.—R.H. (Deck)	
94	736-0329		Spring Lockwasher ¼" Scr.*	
95	712-0287		Hex Nut ¼-20 Thd.*	
96	12673		Belt Guard—R.H. (Deck)	N
97	711-0255		Blade Spindle	
98	736-0329		Spring Lockwasher ¼" Scr.*	
99	712-0287		Hex Nut ¼-20 Thd.*	
100	09322		Blade Brake Disc	
101	712-0239		Hex Jam Nut ½-20 Thd.	
102	736-0921		Spring Lockwasher ½" Scr.*	
103	712-0287		Hex Nut ¼-20 Thd.*	
104	736-0329		Spring Lockwasher ¼" Scr.*	
105	714-0129		#4 Hi-Pro Key 3/32 x ⅝ Dia.	
106	712-0287		Hex Nut ¼-20 Thd.*	
107	736-0329		Spring Lockwasher ¼" Scr.*	
108	750-0142		Spacer .836 I.D. x 1.01 O.D	
109	761-0148		Blade Brake Ass'y .88" High	N
110	710-0134		Carriage Bolt ¼-20 x .62" Lg.*	
111	11059		Parking Brake Lever Ass'y.—R.H.	
112	10410		Spring Bracket	
113	736-329		Spring Lockwasher ¼" Scr.*	
114	712-287		Hex Nut ¼-20 Thd.*	

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
115	747-0110		Brake Rod .25 Dia. x 22.75" Lg.	
116	738-0177		Spindle for Transaxle	
117	722-0115		Ball Knob—Black 1⅜ Dia. x ⅜-16 Thd.	
118	738-0140		Shoulder Scr. .437 Dia. x .180	
119	736-0242		Belleville Washer .345 I.D. x .88 O.D.	
120	717-0262		Shift Lever	
121	12405		Deck Spring Bracket	N
123	736-0119		Spring Lockwasher 5/16" Scr.*	
124	710-0573		Hex Lock Scr. 5/16-18 x 1.25" Lg.	N
125	712-0429		Hex Inserted Locknut 5/16-18 Thd.	
126	11848		Transaxle U-Bracket—R.H.	
127	732-0157		Spring .38 O.D. x 3.25" Lg.	
128	710-0437		Chain Adj. Link 5/16-18 x 4.38" Lg.	
129	712-0429		Hex Inserted Locknut 5/16-18 Thd.	
130	10360		Axle Bolt Plate Ass'y.	
131	—		Transaxle—3 Speed	
132	11849		Transaxle U-Bracket—L.H.	
133	11850		Transaxle Support Bracket	
134	741-0163		Bearing—Housing Ass'y. (Includes Bearing)	
140	12362		38 inch Deck Ass'y.—Comp.	
141	11633		Chute Cover Ass'y.—Comp. (Includes Ref No's. 78, 79, 80, 81, 82 & 83)	
142	09321		Spindle Ass'y. Comp. (Deck)	
143	09963		Hitch Bracket (Not Shown)	
144	731-0144		Vinyl Black Strip for Dash 12.0" Lg. (Not Shown)	
145	712-0116		Hex Inserted Locknut ⅜-24 Thd.	

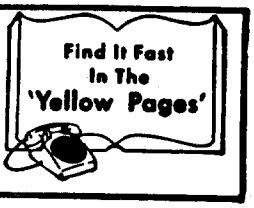
135 LO TONE MUFFLER
136 11857 MUFF. BRKT
137 751-12Y MUFF EXTASSY
138 736-329 L WASH ¼ SCR
139 710-289 HEX SCR ¼-20 X.50 Lg

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

462—Red Flake

When ordering parts if color or finish is important, use the appropriate color code shown at left. (e.g. Red Flake Finish—11836 (462)).

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



BATTERY WARRANTY CERTIFICATE

The following general warranty policy applies to all batteries sold by IBMA members using this warranty. The nationwide warranty applies only to batteries bearing the IBMA seal of approval.

All new batteries sold by IBMA members carry a warranty against faulty material or workmanship for 90 days from date of purchase. A faulty battery is to be adjusted, repaired or replaced with a new battery by an IBMA member, jobber or dealer only, or the warranty becomes void. An IBMA type battery that is faulty within the 90 day period is to be repaired or replaced with a new battery F.O.B. any IBMA factory supplier or any IBMA authorized dealer, without charge.

Your battery carries a further warranty on a pro-rata adjustment basis covering the number of months determined by the class of service and type of battery. In determining the exchange cost of a new battery, charges will be made for months of service used and the warranty is valid to the original purchaser only.

IBMA approved factory suppliers, as well as all IBMA authorized dealers, are to honor this Warranty. If your IBMA approved battery carries the IBMA seal of approval, this Warranty is to be honored by dealers handling IBMA approved batteries everywhere. (Independent Battery Manufacturers Association, Inc.)

Failures in service that are caused by fire, collision, freezing, abuse, faulty electrical equipment or the use of a battery of a group size smaller or specifications lower than the original battery are not covered by this policy.

BATTERY MANUFACTURER MEMBERSHIP LIST

ALABAMA

Birmingham
Southern Bty.
Yocam Batteries

Mobile
Yocam Batteries

Montgomery
Ebco Battery

ALASKA

Anchorage
Alaska Husky Bty.

ARKANSAS

Hot Springs
Red Diamond Bty.

CALIFORNIA

Los Angeles
Estee Battery
Laher Bty. Prod.

Oakland
Laher Bty Prod.

Sacramento
Laher Bty. Prod.

San Francisco
Amp King Bty.
Laher Bty. Prod.
Pico Bty. Mfg.

Stockton
Stockton Battery

COLORADO

Denver
Moore Battery

D. C.

Washington
Express Bty. Div.
Leeth Brothers

FLORIDA

Fort Lauderdale
Florida Bty.

Hialeah
East Penn Mfg.

Jacksonville
Tropex Batteries
Yocam Batteries

Miami
Tropex Batteries
Yocam Batteries

Orlando
Yocam Batteries

Pensacola
Yocam Batteries

St. Petersburg
Electro Battery Co.

Tampa
Bilt-Rite Bty. Mfg.
Contract Bty. Mfg.
DeSoto Bty. & Elec.
Tropex Batteries
Yocam Batteries

GEORGIA

Albany
Ebco Battery

Atlanta
Ebco Battery
Southern Bty.
Yocam Batteries

Columbus
Ebco Battery
Contract Bty. Mfg.
Yocam Batteries

ILLINOIS

Belleville
Bell City Bty. Mfg.

Chicago
Illinois Bty. Mfg.
Universal Bty.
Volta Bty. Corp.

Peoria
Red Diamond Bty.

INDIANA

Muncie
Stout Storage Bty.

IOWA

Corydon
Voltmaster

Council Bluffs
Reliance Bty. Prod.

Des Moines
Voltmaster

KANSAS

Kansas City
American Batteries
Contract Bty. Mfg.

KENTUCKY

Whitesburg
Electro-Lite Bty.

LOUISIANA

New Orleans
Central Bty.
Reliable Bty.

Shreveport
Central Bty.

MARYLAND

Baltimore
East Penn Mfg.

MASSACHUSETTS

Watertown
Atlantic Bty.

MICHIGAN

Detroit
Batteries Mfg.

Flint
ABC Batteries

Holly
Detroit Battery

Madison Heights
C & W Lektra

Warren
G & M Battery

MINNESOTA

St. Paul
Standard Storage Bty.

MISSISSIPPI

Florence
Contract Bty. Mfg.

Jackson
Central Bty.

New Albany
Laher Bty. Prod.

MISSOURI

Joplin
Lead Products

Maryland Heights
Electro Bty. Mfg.

Sikeston
Electro Bty.

NEW JERSEY

Atlantic City
Landis Battery

NEW MEXICO

Alburquerque
Sandia Bty. Mfg.

NEW YORK

Buffalo
East Penn Mfg.

Lockport
Great Lakes Battery

NORTH CAROLINA

Charlotte
Yocam Batteries

Thomasville
East Penn Mfg.

OHIO

Akron
Crown Battery

Cincinnati
Moore Battery

Cleveland
Crown Battery
New Castle Bty.

Columbus
Crown Battery

Fremont
Crown Battery

OREGON

Beaverton
Western Bty., Inc.

Portland
Laher Bty. Prod.

PENNSYLVANIA

Altoona
East Penn Mfg.

Erie
New Castle Bty.

Lancaster
Lancaster Bty.

Lyon Station
East Penn Mfg.

New Castle
New Castle Bty.

Philadelphia
East Penn Mfg.

Pittsburgh
Simon Bty. & Res.
Geidel Bty. Div.

RHODE ISLAND

Providence
Pilof Mfg., Inc.

SOUTH CAROLINA

Columbia
Yocam Batteries

TENNESSEE

Chattanooga
Electro-Lite Bty.

Knoxville
Southern Bty.

Memphis
Central Battery
Laher Bty. Prod.
Southern Bty.

Nashville
Electro-Lite Bty.
Southern Bty.

TEXAS

Dallas
Continental Bty.
Reliable Battery

El Paso
El Paso Bty.

Houston
Texford Bty. Co.
Reliable Battery

San Antonio
Reliable Battery

UTAH

Salt Lake City
Laher Bty. Prod.

VIRGINIA

Arlington
Express Bty. Div.
Leeth Bros.

Lynchburg
Hydrate Battery

WASHINGTON

Seattle
Laher Bty. Prod.

Spokane
Laher Bty. Prod.

CANADA

Vancouver, B. C.
Industrial Bty. & Supply

PARTS INFORMATION

DEFECTIVE OR MISSING PARTS must be reported to the factory immediately. Such claims must include your model number and date of purchase.

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

A 1 Engine & Mower Co.
327 East 9th Street
Salt Lake City, Utah 84102

Auto Electric & Carburetor Co.
2525 4th Avenue, S.
P. O. Box 1948
Birmingham, Alabama 35233

Automotive Equipment Service Co.
3117 Holmes Street
Kansas City, Missouri 64109

Bailey's Rebuild Inc.
1325 E. Madison Street
Seattle Washington 98102

Bleckrie, Inc.
7900 Lorain Avenue
Cleveland, Ohio 44102

Brown Equipment Distributor Inc.
110 Beech Street
Corydon, Indiana 47112

Bullard Supply
2409 Commerce Street
Houston, Texas 77003

Catto & Putty, Inc.
P. O. Box 2408
510 Soledad Street
San Antonio, Texas 78205

Center Supply Company
6867 New Hampshire Avenue
Takoma Park, Maryland 20012

Dixie Sales Company
P. O. Box 1408
327 Battleground Avenue
Greensboro, North Carolina 27402

East Point Cycle & Key Shop
1617 Whiteway
East Point, Georgia 30044

Gamble Distributors
West End Avenue
Carthage, New York 13619

Garden Equipment Co., Inc.
6600 Cherry Avenue
Long Beach, California 90805

Gardenville Supply, Inc.
Pipersville, Pennsylvania 18947

Henry W. O'Neil & Assoc., Inc.
410 North Goodman Street
Rochester, New York 14609

Henzler, Inc.
2015 Lemay Ferry Road
St. Louis, Missouri 63125

Kenton Supply
8216 North Denver Avenue
Portland, Oregon 97217

Kimber's Inc.
115 W. Geddes St.
Syracuse, New York 13204

Marr Brothers
423 E. Jefferson
Dallas, Texas 75203

McClure Lawn & Garden Supply
1114 Lexington Avenue
Mansfield, Ohio 44907

Memphis Cycle & Supply Co.
421 Monroe Avenue
Memphis Tennessee 38103

Morton B. Collins Co.
300 Birnie Avenue
Springfield, Massachusetts 01107

Moz-All of Florida, Inc.
365 Greco Avenue
Coral Gables, Florida 33146

National Central
687 Seville Rd.
Wadsworth, Ohio 44281

Parts & Sales Inc.
2101 Industrial Pkwy.
Elkhart, Indiana 46514

Power Equipment Distributor
36463 So. Gratiot Avenue
Mt. Clemens, Michigan 48043

Power Lawn & Garden Equip. Co.
2551-2571 J. F. Kennedy Road
Dubuque, Iowa 52001

Radco Distributors
2403 Market Street
P. O. Box 3216
Jacksonville, Florida 32206

Raub Supply Company
James & Mulberry Sts.
Lancaster, Pennsylvania 17604

Richmond Battery & Ignition
P. O. Box 25369 — 957 Myers St.
Richmond, Virginia 23260

R. P. W., Inc.
623 S. 16th Street
Omaha, Nebraska 68102

Smith Hardware Company
515 N. George Street
Goldsboro, North Carolina 27530

South Denver Lawn Equip. Co.
527 West Evans
Denver, Colorado 80223

Suhren Engine
8330 Earhart Blvd.
New Orleans, Louisiana 70118

Sutton's Lawn Mower Shop
Route 4, Box 343
North Little Rock, Arkansas 72117

Woodson Sales & Service
1702 North Sylvania
Ft. Worth, Texas 76111

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 — Power Products.

WARRANTY PARTS AND SERVICE POLICY

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

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES

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

All claims MUST be substantiated with the following information:

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