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Dear Customer,

So often throughout the year we are all in a rush to meet our daily obligations. However, we at MTD Products Inc are taking a quick moment out to say... ''Thank you for your business.''

> Sincerely, MTD PRODUCTS INC

INSTRUCTIONS GIVEN WITH THIS SYM-BOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.

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

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the Service Department of MTD Products Inc.



Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes. Operate RIDING mowers up and down slopes, never across the face of slopes.

CONTENTS OF HARDWARE PACK

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.

(Hardware pack may contain extra items which are not used on your unit.)



IMPORTANT BULES FOR SAFE OPERATION

THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL— A HEED ITS WARNING.



Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

- 1. READ THIS OWNER'S MANUAL carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- 2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
- 3. Know the controls and how to stop the machine quickly.
- 4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
- 5. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
- 7. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
- To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
- 9. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury to you or a bystander.
- 10. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair, to protect eyes from foreign objects that may be thrown from the machine in any direction.
- 11. Stop the blade(s) when crossing gravel drives, walks or roads.
- 12. Disengage all attachment clutches and shift into neutral before attempting to start engine.
- Before leaving the operator's position, disengage blade(s), place shift lever in neutral, engage parking brake, shut engine off and remove key.
- 14. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
- 15. 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.
- 16. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.

- 17. Disengage power to attachment(s) when transporting or not in use.
- 18. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.
- 19. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
- 20. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in low gear when going down steep hills to take advantage of engine braking action. Choose a low enough gear so that you will not have to stop or shift while on the slope.
- 21. Stay alert for holes in terrain and other hidden hazards which may cause the unit to tip over.
- 22. 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.
- 23. Watch out for traffic when crossing or near roadways.
- 24. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
- Handle gasoline with care. It is highly flammable.
 A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline. Always use original type vented cap.
 - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.
- 26. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
- 27. To reduce fire hazard, keep engine and cutting deck free of grass, leaves or excessive grease.
- Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
- 29. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
- 30. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
- 31. Do not change the engine governor settings or overspeed the engine.

Rules for Sale Operation (continued)

- 32. 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 fi equent intervals.
- Check grass catcher bags frequently for wear or deteric ration. For safety protection, replace only with new bag meeting original equipment specifications.
- 34. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
- 35. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.
- 36. Check brake operation frequently. Adjust and service according to brake adjustment instructions in this manual.

ASSEMBLY

IMPORTANT: This unit is shipped WITHOUT GASOLINE or OIL; however, a small amount of oil may be present from the factory. Do not overfill. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.

NOTE: Reference to right or left hand side of the unit is observed from the driver's seat, facing forward.

UNPACKING

- Remove the lawn tractor from the carton as follows. Open the top flaps. Remove all loose parts and carton inserts. Cut the front corners of the carton. Make certain brake is released, and push the unit out of the carton.
- 2. Remove page four from this manual anc lay the contents of the hardware pack on the illustration for identification.

BATTERY INFORMATION



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

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







FIGURE 2.

а,



Battery contains sulfuric acid. Refer to warning on page 6. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten eggs or vegetable oil. Call physician immediately. EYES: Flush with cool water for at least 15 minutes, then get prompt medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in wellventilated areas. Make certain venting path of battery (drain tube) is always open.

> KEEP BATTERIES OUT OF THE REACH OF CHILDREN!

ACTIVATING THE BATTERY

Do not activate battery (fill with battery acid) until battery is actually placed in service. Be certain to read previous warnings before activating the battery.

- 1. Open the battery pack. Be careful not to puncture the box. It contains the battery with a long plastic tube attached, battery fluid (acid) in a plastic container, one short plastic tube and one hardware pack (two hex bolts and nuts).
- 2. Place the battery on a table or workbench. Make certain the long plastic drain tube is in place on the vent elbow.
- Remove the six fill caps from the top of the battery with a screwdriver. Be careful not to damage
 the fill caps. See figure 1.
- 4. Place the battery fluid container on the table or workbench. Carefully cut off tip of the spout and attach the short plastic tube provided. Do not squeeze the container when cutting tip.
- Fill each battery cell slowly and carefully to the UP-PER LEVEL line marked on battery. See figure 2. Use caution as the acid level will rise rapidly after the bottom of the cell is filled.
- 6. Allow battery to stand for 30 minutes with the fill caps removed, while the plates absorb acid.
- If acid level has fallen after the 30 minute standing period, refill each cell with battery acid to the UP-PER LEVEL line on battery. Replace the fill caps.
- 8. Before discarding the empty container, neutralize any residue with baking soda and rinse container with water. Puncture container several times before discarding.
- Charge the battery after the 30 minute standing period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE: This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

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

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

After battery has been charged, add only distilled water. Do not add acid.



FIGURE 3.



FIGURE 4.



INSTALLING THE BATTERY (Hardware A)

- 1. Raise the seat bracket (on top of the fenders).
- 2. Make certain the positive cable (heavy red wire) extends through the retainer on the right side of the battery box. The negative cable (heavy black wire) should be routed up along the left side of the battery box.
- Place the battery inside the battery box so that the positive terminal is toward the right side of the unit.
 See figure 3. Route the battery drain tube down beside the battery box.
- 4. Slide the hex nut (provided with battery hardware) into the positive (+) terminal. Place the positive cable on the positive terminal. Secure with bolt provided. See figure 3.
- 5. Slide the hex nut (provided with battery hardware) into the negative (-) terminal. Place the negative cable on the negative terminal. Secure with bolt provided.
- Route the drain tube through the opening between the transaxle reinforcement bracket and the frame on the left rear of the unit. Secure the drain tube to the transaxle reinforcement bracket, using the cable tie as shown in figure 4. Be certain drain tube is routed away from the wheel rim. Trim excess end of cable tie.
- 7. Close the top of the battery box.

INSTALLING THE STEERING MECHANISM (Hardware B)

- Open the hood of the lawn tractor by lifting up on both sides of the hood. Position the front wheels of the tractor so they are pointing straight forward.
- Insert the hex bearing into the hole in the frame —shown in figure 5.
- 3. Insert the end of the steering shaft which has the pinion gear attached through the hole in the dash panel. Place 5/8" I.D. flat washer on the end of the steering shaft, and insert shaft through hex bearing. Make certain the pinion gear is fully seated against the flat washer and hex bearing.

FIGURE 5.



- 4. Secure bottom of the steering shaft as follows. See ——figure 6.
 - a. Lower the deck by moving the lift and disengagement lever (located on the right fender) all the way down.
 - b. Place the plastic spacer over the end of the steering shaft. Secure with 5/16" I.D. flat washer, lock washer and hex bolt. A 1/2" wrench is required (socket wrench with an extension would be helpful).





 Place the steering column bearing (solid side up) over the upper end of the steering shaft. Seat the steering column bearing into the hole in the dash panel. Secure with countersunk screw. See figure
 7.

FIGURE 7.



- 6. Attach one end of steering bellow to the steering wheel as shown in figure 8.
- 7. With the wheels of the tractor pointing straight forward, place the steering wheel and steering bellow over the steering shaft, positioning steering wheel as desired.
- Place the washer with the cupped side down over the steering shaft. Secure with 5/16" hex lock nut.
 See figure 7.
- 9. Place the steering wheel cap over the center of the steering wheel and seat it with your hand.

FIGURE 8.



Hex Nuts Cupped Washers uss Machine Screws

ATTACHING THE SEAT (Hardware C)

Place the seat in position against the seat pivot bracket, lining up the slotted holes in the pivot bracket with the holes in the seat. Select desired position for the seat. and secure with hex self-tapping screws. See figure 9.

ATTACHING THE CHUTE DEFLECTOR

- 1. Remove the truss machine screws, cupped washers and hex jam nuts which are attached to the deck next to the chute opening.
- 2. Place the chute deflector in position as shown in figure 10. Secure with hardware just removed.



WARNING: Do not operate your unit unless the chute deflector has been properly installed.

FIGURE 10.



FIGURE 11.

CONTROLS

THROTTLE CONTROL

The throttle control is used to regulate the engine speed. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. See figure 11.

CHOKE CONTROL

The choke control is located on the dashboard and is operated manually. Details for the choke operation are covered in the separate engine manual packed with your unit. See figure 11.

SPEED CONTROL LEVER

The speed control lever allows you to regulate the ground speed of the lawn tractor. See figure 11. To select the ground speed, depress clutch pedal. Push speed control lever inward and move downward to slow lawn tractor, move upward to increase speed. When desired speed has been obtained, release lever in that position. Whenever clutch is engaged, unit will automatically go to the pre-set speed.

IGNITION SWITCH

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. See figure 11.

LIGHT SWITCH

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 11.

SHIFT LEVER

The shift lever is located on the left fender and has three positions, FORWARD, NEUTRAL and REVERSE. See figure 12. The clutch-brake pedal must be depressed and the lawn tractor must not be moving when shifting gears. Do not force the shift lever. Release the clutchbrake pedal slightly to line up the shifting collar in the transmission. Then try to shift gears.

CLUTCH-BRAKE PEDAL

The clutch-brake pedal is located on the left side of the lawn tractor. Depressing the clutch-brake pedal part way disengages the clutch. Pressing the pedal all the way down disengages the clutch and engages the disc brake. See figure 11.

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



FIGURE 12.

PARKING BRAKE

The speed control lever is used to set the parking brake. To set the parking brake, depress the clutch-brake pedal. Press the speed control lever inward and all the way down. Release the speed control lever and the clutch-brake pedal.

To release the parking brake, depress the clutch-brake pedal, press the speed control lever inward and move to desired position. Release the speed control lever and the clutch-brake pedal.

NOTE: The parking brake must be set if the operator leaves the seat with the engine running.

INTERLOCKS (Not Shown)

Interlock safety switches are located by the clutch-brake pedal, the lift and disengagement lever, the shift lever and under the seat.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse or if the operator leaves the seat, the lift and disengagement lever must be in the disengaged position.

CUTTING CONTROLS A. LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the cutting deck which determines the cutting height. Pulling it all the way back and locking it disengages the blades. The lift and disengagement lever must be in the disengaged position when starting the engine, when shifting into reverse or if the operator leaves the seat. See figure 12.

B. DECK WHEEL HEIGHT ADJUSTMENT

If your unit is equipped with deck wheels, set the wheels so they are 1/4 to 1/2 inch above the ground, by moving the deck wheels to the desired hole location in the deck.

OPERATION

CAUTION

- READ OPERATOR'S MANUAL(S)
 NEVER CARRY CHILDREN
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS
- KEEP SAFETY DEVICES (GUARDS. SHIELDS AND SWITCHES) IN PLACE AND WORKING REMOVE OBJECTS THAT COULD BE THROWN BY BLADE(S) DO NOT OPERATE THE UNIT WHEN CHILDREN AND OTHERS
- ARE AROUND
- ALWAYS LOOK BEHIND THE UNIT BEFORE BACKING UP
- DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TIP IF THE UNIT STOPS GOING UPHILL. STOP BLADE(S) AND BACK
- SLOWLY DOWNHILL BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFORE PLAC ING HANDS OR FEET NEAR BLADE(S)
- BEFORE LEAVING OPERATOR'S POSITION. DISENGAGE THE BLADE(S). PLACE THE SHIFT LEVER IN NEUTRAL, ENGAGE THE
- PARKING BRAKE, SHUT ENGINE OFF AND REMOVE THE KEY

TIRE PRESSURE

The tires on your unit may be over-inflated for shipping purposes. Reduce the tire pressure before operating the unit. Recommended operating tire pressure is approximately 12 p.s.i. (check sidewall of tire for tire manufacturer's recommended pressure).



WARNING: Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

STARTING THE ENGINE

NOTE: To open the hood, simply lift up on bo h sides of the hood.

- 1. Service the engine with oil and gasolin ϵ as described in the engine manual.
- 2. Depress the clutch-brake pedal and set the parking brake.
- 3. Place the lift and disengagement level in the DISENGAGED position. See figure 12.

NOTE: This unit is equipped with a **safety** in **terlock system** for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch-brake pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition, the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the lift and disengagement lever engaged and/or without setting the parking brake, the engine will shut off.



WARNING: Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

- 4. Set the throttle control in the FAST position. See figure 11.
- 5. Pull out choke knob to choke engine. A warm engine may not require choking.
- 6. Turn the ignition key to the START positior . When the engine is running, let the key return to the ON position. See figure 11.
- 7. Push choke knob in gradually. Move the throttle control to desired engine speed.

STOPPING THE ENGINE

Turn the ignition key to the left to the OFF r osition. Remove the key to prevent accidental starting.

IMPORTANT: If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the clamage before restarting and operating the mower.

NOTE: If any problems are encountered, refer to the Trouble Shooting Chart on page 20.

OPERATING THE LAWN TRACTOR

- 1. Start the engine as instructed above.
- 2. Move throttle control to 3/4 or full throttle to prevent strain on the engine and to operate the cutting blades.
- 3. Place the shift lever in either the FORWARD or REVERSE position.



WARNING: Look to the rear before backing up.

- 4. Release the parking brake by depressing the clutch-brake pedal, pressing outward on the speed control lever and moving to desired position. Use first speed position when operating the lawn tractor for the first time.
- 5. Release clutch-brake pedal slowly to put unit into motion.
- 6. The lawn tractor is brought to a stop by depressing the clutch-brake pedal.

NOTE: When operating the unit initially, there will be little difference between the highest two speeds until after the belts have seated themselves into the pulleys during the break-in period. Be certain to change oil in the crankcase after the first 5 hours of operation.

Be sure that the lawn is clear of stones, sticks, wire, or other objects which could damage lawn tractor, or the debris could be thrown by the blade in any direction and cause an injury. For best results and to insure more even grass distribution, do not mow when lawn is excessively wet.



WARNING: Before leaving the operator's position for any reason, disengage the blades, place the shift lever in neutral, engage the parking brake, shut engine off and remove the key.

When stopping the unit to empty a grass bag, etc., follow the instructions above. This procedure will also eliminate "browning" the grass, which is caused by hot exhaust gases from a running engine.

If unit stalls with speed control in high speed, or if unit will not operate with speed control lever in a low speed position, proceed as follows.

- 1. Place shift lever in NEUTRAL.
- 2. Restart engine.
- 3. Place speed control lever in high speed position.
- 4. Release clutch-brake pedal fully.
- 5. Depress clutch-brake pedal.
- 6. Place speed control lever in desired position.
- 7. Place shift lever in either FORWARD or REVERSE, and follow normal operating procedures.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the lawn tractor 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, the blades or any part of the deck. When the unit is used for other than mowing, the blade drive should be disengaged.

Move the lift and disengagement lever into the DISENGAGED position to raise the deck and disengage the blades.

GRASS COLLECTOR AVAILABLE

GRASS COLLECTOR Model 063 is available as optional equipment for the lawn tractor shown in this manual (requires mounting kit model 084).



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.

ADJUSTMENTS

SEAT ADJUSTMENT

To adjust the position of the seat, loosen the four selftapping screws on the bottom of the seat. See figure 9. Slide the seat forward or backward as desired. Retighten the self-tapping screws.

DECK LEVELING ADJUSTMENT

If an uneven cut is obtained, the deck may be leveled as follows.

- 1. Move the lift and disengagement lever forward (lower the cutting deck).
- 2. With unit on hard, level surface, measure the distance from the bottom edge of the center of the left side of deck to the ground. Measure the same distance just behind the chute area on the right side of the deck. Or, place the blades in a straight line, and measure the distance from the outside edge of the blade tips to the ground.
- 3. Disconnect the adjustable deck links from the deck lift pivot bracket and the deck stabilizer bracket on the right side of the unit by removing the hairpin clips and flat washers. Refer to illustration on page 31, reference no. 44.
- 4. Thread the adjustable links in or out as necessary. Reassemble the links. Check the adjustment, and readjust as necessary.

SPEED CONTROL ADJUSTMENT (See Figure 13)

NOTE: When operating the unit initially or after replacing the belts, there will be little difference between the highest two speeds until after the belts have gone through a break-in period and have seated themselves into the pulleys.

First, adjust the speed control lever as follows:

- 1. Place the shift lever in Neutral position.
- 2. Start the engine.
- 3. Place the speed control lever in high speed position.
- 4. Release the clutch-brake pedal completely, then slowly depress the pedal all the way (to disengaged position). Hold the pedal in this position.
- 5. Turn the engine off.
- 6. After engine stops completely, release the clutchbrake pedal.
- Disconnect the speed control link from the variable speed bracket by removing the hairpin clip and flat washer from the stud located on the bottom side of the variable speed bracket.
- 8. Depress the clutch-brake pedal forward until the stop on the clutch-brake pedal assembly hits solidly against the underside of the frame.
- 9. Remove the hairpin clip and flat washer from the rod attached to the back of the speed control lever.



- 10. Place the speed control lever in parking brake position.
- 11. Thread the ferrule on the rod until the ferrule slips into the bottom end of the slot in the speed control lever, then thread the ferrule down on the rod one full turn (to shorten).
- 12. Position speed control lever as follows:
 - a. **7-speed units:** Place speed control lever in second position.
 - b. **5-speed units:** Place speed control leve in first position.
- 13. Place ferrule into speed control lever slot, and secure with flat washer and hairpin clip. F elease the clutch-brake pedal.

Next, adjust the speed control link as follows to obtain the correct neutral adjustment.

- 1. Push the clutch-brake pedal backward by I and as far as it will go using light pressure. Hold it in this position as you make the following adjustment.
- 2. Thread the speed control link into or out of the ferrule until the eyelet on the opposite end of the link slips onto the stud on the bottom side of the variable speed bracket.
- 3. Secure the speed control link to the variable speed bracket with flat washer and hairpin clip.

NEUTRAL ADJUSTMENT (Wheel Drive)

- 1. Place the transmission in neutral. (The unit will move freely when pushed forward and backward with the parking brake released.)
- 2. Loosen the bolt which secures the shift lever assembly to the shift lever adjusting link. See figure 14.



- 3. Place the shift lever in the netural slot. See figure 14.
- 4. Tighten the bolt to 13 foot pounds.

CUTTING DECK ENGAGEMENT ADJUSTMENT

The cutting deck engagement may be adjusted to make certain deck is disengaged when lift handle is in the disengaged position, or to obtain more drive in the cutting positions. Correct adjustment as follows.

Place the lift handle in the highest cutting position (first notch down from disengaged position). The approximate adjustment is to have the lock nut on the threaded rod (above the rear of the deck) touching the end of the tubing. See figure 15.

Move the lock nut toward the tubing to start to disengage the deck earlier. Move the lock nut away from the tubing to obtain more drive in the cutting positions.



WARNING: Make certain the unit is adjusted so that the cutting blades are disengaged when the lift handle is in the disengaged position.





WHEEL ADJUSTMENT

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

To adjust the toe-in, follow these steps.

- 1. Remove the hex nut and lock washer, and drop the tie rod end from the wheel bracket. See figure 16.
- 2. Loosen the hex jam nut on tie rod.
- 3. Adjust the tie rod assembly for correct toe-in.



FIGURE 16.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 17.

- A.) To increase Dimension "B," thread the ferrule onto the tie rod.
- B.) To decrease Dimension "B," unscrew the ferrule from the tie rod.
- C.) Reassemble tie rod. Check dimensions. Readjust if necessary.



FIGURE 17.

CARBURETOR ADJUSTMENT



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

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load. To adjust the carburetor, refer to the separate engine manual packed with your unit.

NOTE: A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor.

BRAKE ADJUSTMENT (See figure 18)

The brake is located by the left rear wheel inside the frame. During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.



WARNING: Do not have the engine running when you adjust the brake.

To adjust the brake, remove the cotter pin. Adjust the castle nut so the brake starts to engage when the brake lever is $\frac{1}{4}$ " to $\frac{5}{16}$ " away from the axle housing.

NOTE: Figure 18 is shown with the unit tipped up on rear wheels for clarity only.



FIGURE 18.

LUBRICATION



WARNING: Always stop engine and disconnect spark plug wire before cleaning, lubricating or doing any kind of work on lawn tractor.

STEERING GEARS

Lubricate teeth of steering gears with automotive multipurpose grease after every 25 hours of operation or once a season.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

VARIABLE SPEED PULLEY

Lubricate needle bearings inside the variable speed pulley with light oil once a season. Also lubricate the bearings inside the pulley by putting a small amount of light oil on the shaft. Then start the tractor, and with the shift lever in neutral, move the speed selector forward and backward which will move the center sheave and distribute the oil on the shaft. Be careful not to get oil on the sheaves of the pulleys or on the belts, which could cause the belts to slip.

TRANSAXLE

The transaxle is lubricated and sealed at the factory and does not require checking. If disassembled for any reason, lubricate with 10 oz. of grease, part number 737-0148.

WHEELS

The front wheels are provided with grease fittings. The rear wheels must be removed from the axle for lubrication. Lubricate both front and rear wheels at least once a season with automotive multi-purpose greas 3.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

MAINTENANCE



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

TROUBLE SHOOTING

Refer to page 20 of this manual for trouble shooting information.

CRANKCASE OIL

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil level should be maintained as instructed n the separate engine manual.

After the first five hours of operating a new engine drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change he oil every 25 hours of operation. Refer to the engine manual.

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. To service the air cleaner, refer to the separate engine manual packed with your unit.

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.

SPARK PLUG

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

CUTTING BLADE

A. Removal for Sharpening or Replacement



WARNING: Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting. Protect hands by using heavy gloves or a rag to grasp the cutting blades.

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

B. Sharpening

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

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

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

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

C. Reassembly

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

When replacing the blade, be certain the wide blade is assembled on the right side of the deck. Be sure to install the blades with the side of the blades marked "Bottom" (or with part number) facing the ground when the mower is in the operating position.

Blade Mounting Torque

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

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

FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your engine authorized service dealer.

DRIVE BELT REMOVAL AND REPLACEMENT



WARNING: Disconnect the spark plug wire and ground it against the engine. Block the wheels of the unit.

NOTE: When changing the belts, a spring puller or other suitable tool is required to remove some of the springs. A spring puller (part number 732-0571) is available to assist in removal of springs.

Removing the Deck Belt

NOTE: Figures 19, 22 and 23 are shown with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

- 1. Place the lift lever in the disengaged position.
- 2. Remove the two hex bolts (belt keepers) from the engine pulley belt guard. See figure 19.



FIGURE 19.

NOTE: Make certain hex bolts are reassembled as shown in figure 19.

- 3. Unhook the deck belt from the engine pulley.
- 4. Place the lift lever in the engaged (all the way forward) position.
- 5. Disconnect the spring from the left rear transmission support bracket. See figure 20.
- 6. Disconnect the two front deck links by removing the hairpin clips and flat washers.



FIGURE 20.

- 7. Remove the belt guards at each deck pulley by removing the hex bolts, lock washers and hex nuts. See figure 21.
- 8. Remove and replace the belt, following the instructions in reverse order.



FIGURE 21.

Removing the Rear Drive Belt (Refer to figure 22)

- Start the engine. Place shift lever in neutral. Place speed control lever in high speed position and turn engine off. Engage lift lever (move all the way forward). Do not set parking brake.
- 2. Disconnect the large spring from the transmission support bracket, using a spring puller or other suitable tool.



FIGURE 22.

3. Disconnect the idler spring from the bolt on the right side of the frame and transmission support bracket.

- 4. Loosen (**do not** remove) the hex nut which secures the variable speed pulley bracket to allow clearance in order to remove the belts. A 9/16" socket wrench is required.
- 5. Remove belt from transmission pulley and idler pulley. Remove the rear drive belt from aro and the top of the variable speed pulley.
- 6. Reassemble new belt, following instructions in reverse order.

Removing the Forward Drive Belt (See figure 23)

- 1. To remove the forward drive belt, first remove the rear drive belt (steps 1 through 5 of the preceding instructions).
- 2. Remove the deck belt from the engine pulle / (steps 1 through 3 of "Removing The Deck Bel.").
- 3. Remove the engine pulley belt guard by re noving two self-tapping screws from each side of the frame. Remove the engine pulley belt guard by moving it back and to the left.
- 4. Remove the forward drive belt from the engine pulley and from the variable speed pulley.
- 5. Reassemble new belt, following instruct ons in reverse order.



FIGURE 23.

BATTERY REMOVAL OR INSTALLATION



WARNING: When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

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

To install a battery:

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

JUMP STARTING

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



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

BATTERY MAINTENANCE

- Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or a 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.
- The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

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

COMMON CAUSES FOR BATTERY FAILURE ARE:

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

NOTE: THESE FAILURES DO NOT CONSTITUTE WARRANTY.

TIRES

Recommended operating tire pressure is approximately 12 p.s.i. (check sidewall of tire for tire manufacturer's recommended pressure). Maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

When installing a tire to the rim, be certain rim is clean and free of rust. Lubricate both the tire and rim generously. Never inflate to over 30 p.s.i. to seat beads.



WARNING: Excessive pressure (over 30 p.s.i.) when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

OFF-SEASON STORAGE

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

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

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

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

I.

TROUBLE	LOOK FOR	REMEDY							
Engine will not crank	Battery installed incor- rectly	The battery must be installed with the negative terminal, identified at the terminal post by (Neg, N or $-$), grounded. The positive terminal (Pos, P or $+$) attaches to the large cable from the solenoid. The small red w re from the fuse holder or circuit breaker is also attached to the positive terminal.							
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuse or circuit breake is seldom open or fail without a reason. The problem must be corrected. Check f loose connectior s in the fuse holder. Replace fuse holder if necessary. A dead short may be in the							
		cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.							
•	Battery is dead cr weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 ± .g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit Check for groun led wire. (3) Charging system not working.							
		The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug or the engine side.							
		To Alternator Black Wire Black Wire Black Wire Black Polarized Plug							
		The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.							
	Mechanical failure (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. If the engine does not crank: (1 There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solehoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.							
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's juide for correct position for throttle control and choke for starting.							
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block abou 1/8". Crank eng ne. There should be a spark. If not, have engine repaired at authorized engine ser vice dealer.							
		Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode Replace if it does not.							

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
) 	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel line or in-line fuel filter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	Stop engine immediately. Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	Stop engine immediately. Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission speed. The slower your ground speed the better the quality of cut. Sharpen or replace blades (uncut strip problem only). Make certain deck engagement adjustment is correct. Refer to page 14.

Models 432, 442 and 452 (Style "2") Models 437, 447 and 457 (Style "7")



Models 432, 437, 442, 447, 452 and 457

PARTS LIST FOR MODEL 400 SERIES LAWN TRACTORS

	REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
F	1	16655A	N	Dash Panel Support Brkt.	44	731-0511-3	1	Trim Strip 31" Lg.
	2	16656	-	Dash Panel	45	17025		Grille (Style 2)
	3	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		16444		Grille (Style 7)
	4	725-0963		Bulb	46	17595	N	Grille Mtg. Brkt.—L.H.
	5	710-0776A		Hex AB-Tap Scr. ¼ x .62"	47	17596	N	Grille Mtg. Brkt.—R.H.
1	6	725-1058A		Socket	48	17688	638/N	Hood
	7	712-0267		Hex Nut 5/16-18 Thd.*	49	736-0217		L-Wash. 3/8" I.D.—H.D.
	8	725-0634		Light Switch	50	712-0241		Hex L-Nut 3/8-24 Thd.
	9	751-3071		Gas Cap	52	710-0473		Truss Mach. Scr. #10-24 x
	10	726-0205		Hose Clamp				.5″ Lg.
	11	726-0209		Cable Tie	53	723-0308B	N	Foot Pad—R.H.
	12	736-0119		L-Wash. 5/16" I.D.*	54	723-0309B	N	Foot Pad—L.H.
	13	725-0267		Ignition Switch	57	712-0380		Lock Nut 1/4-28 Thd.
	14	725-0201		Ignition Key	58	722-0157		Foam Strip
	15	751-0553	N	Fuel Tank	59	723-0302		Hood Stop
	16	751-0535-1		Gas Line 15" Long	60	731-0705		Headlight Housing
	17	761-0194	N	Blade Brake Ass'y.	61	731-0706		Lens
	18	710-0134		Carriage Bolt 1/4-20 x .62"	62	732-0414A		Hood Spring
	19	710-0793		Ribbed Neck Bolt 3/8-24 x .8"	64	712-0272		Hex Sems Nut #10-24 Thd.
	20	15607D		Seat Pivot Brkt.	65	736-0413		Spr. Wash39" I.D. x .62" O.D.
ļ	21	17590	638/N	Rear Fender	66	738-0724		Shid. Bolt
	22	17704	N	Seat Hinge Support Brkt.—R.H.	67	749-0722A		Grille Support
	23	17703	N	Seat Hinge Support BrktL.H.	68	731-0511-8	ו	Trim Strip 81" Lg.
	24	17553	N	Deck Lift Index Brkt.	72	746-0617A		Choke Control
	25	725-0514A		Battery	73	831-0823A		Throttle Control Box
	26	710-0817		Hex Self-Tap Screw 5/6-18 x	74	710-0779A		Truss AB-Tap Scr. #10 x .5"
	07	710 0055		1.25" Lg. Truss Mach. Scr. ¼-20 x .75"	75	746-0501		Throttle Wire (B&S) Throttle Wire (Tec.)
	27	710-0255			76	746-0638 757-0345		Seat Assembly (Low Back)
	00	710 0706		Lg. Hex AB-Tap Scr. 5/16 x .75" Lg.	10	757-0345		Seat Assembly (High Back)
	28 29	710-0726		Torx Mach. AB-Tap Sci. 5/10 x 1/3 Lg.	78	736-0159		Fl-Wash344" I.D. x .88" O.D.
	29	710-1017		.62" Lg.	79	722-0160		Bushing
	30	710-0623		Hex Self-Tap Scr. 3/8-16 x	83	710-0227		Hex Tap Scr. #8 x .5" Lg.
	50	710-0020		.75" Lg.	84	725-1439		Safety Switch (Seat)
	31	712-0287		Hex Nut 1/4-20 Thd.*	85	732-0581		Ext. Spring 5.31" Lg.
	33	731-0871A	N	Battery Box w/Cover	86	17239A		Seat Lift Brkt.
	34	732-0588		Compression Spring	87	726-0278	N	Insulator Boss Plate
	36	736-0242		Bell-Wash. 5/16" I.D.	88	738-0155		Shid. Bolt .437" Dia. x .162" Lg.
	37	736-0329		L-Wash. 1/4" I.D.*	89	738-0296		Shid. Bolt .437" Dia. x .268" Lg.
ĺ	39	13730		Grille Insert (Style 7)		736-0141		Spr. Wash445" I.D. x .75"
	43	16622A	N	Side Panel—R.H. (Style 2)				O.D.
		16621A	N	Side Panel-L.H. (Style 2)	91	710-0604		Hex Wash. Hd. Scr. 5/16-18 x
				(Not Shown)				.62″ Lg.
		14748A		Side Panel—Ŕ.H. (Style 7)	92	726-0279	N	Insulator Plate
		16269A	N	Side Panel—R.H. (Style 7-Tec.)	94		N	Center Foot Pad
		14749A		Side Panel—L.H. (Style 7)	95	725-1303		Safety Switch (Seat)
				(Not Shown)				

*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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Models 435, 445 and 455 (Style "5")

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Models 435, 445 and 455

PARTS LIST FOR MODEL 400 SERIES LAWN TRACTORS

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	16655A	N	Dash Panel Support Brkt.	47	17596	N	Grille Mtg. Brkt.—R.H.
2	16656		Dash Panel	48	16646	638	Hood
3	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	49	736-0217		L-Wash. 3/8" I.D.—H.D.
4	731-0705		Headlight Housing ^{††}	50	712-0241		Hex L-Nut 3/8-24 Thd.
5	710-0776A		Hex AB-Tap Scr. 1/4 x .62"	51	16444		Grille Ass'y. (Square Headlights)
6	731-0706		Headlight Lens††	52	710-0473	14 14 14	Truss Mach. Scr. #10-24 x .5"
7	712-0267		Hex Nut 5/16-18 Thd.*			**	ີ Lg.
8	725-0634		Light Switch	53	723-0308B	Ν	Foot Pad-R.H.
9	751-3071		Gas Cap	54	723-0309B	Ν	Foot Pad—L.H.
10	726-0205		Hose Clamp	57	712-0380		Lock Nut 1/4-28 Thd.
11	726-0209		Cable Tie	58			Foam Strip
12	736-0119		L-Wash. 5/16" I.D.*	59			Hood Stop
13			Ignition Switch	62	732-0559		Hood Spring
14	725-0201		Ignition Key	64	712-0272		Hex Sems Nut #10-24 Thd.
15	751-0553	N	Fuel Tank	65			Spr. Wash39" I.D. x .62" O.D.
16	751-0535-1		Gas Line—15" Lg.	66			Shid. Bolt
17	761-0194	N	Blade Brake Ass'y.	68		1	Trim Strip 81" Lg.
18	710-0134		Carriage Bolt 1/4-20 x .62"	72	746-0617A	•	Choke Control
19			Ribbed Neck Bolt 3/8-24 x .8"		831-0823A		Throttle Control Box
20	15607D		Seat Pivot Brkt.	74	710-0779A		Truss AB-Tap Scr. #10 x .5"
21	17590	638/N	Rear Fender	75	746-0501		Throttle Wire (B&S)
22	17704	N	Seat Hinge Support BrktR.H.	1.0	746-0638		Throttle Wire (Tec.)
23	17703	N	Seat Hinge Support Brkt.—L.H.	76	757-0345		Seat Assembly (Low Back)
	17553	N	Deck Lift Index Brkt.	10	757-0338		Seat Assembly (High Back)
25	725-0514A		Battery	78	736-0159		Flat Wash344" I.D. x .88" O.D.
26	710-0817		Hex Self-Tap Screw 5/6-18 x	79	722-0160		Bushing
20	/10-001/		1.25" Lg.	83	710-0227		Hex Tap Scr. #8 x .5" Lg.
27	710-0286		Truss Mach. Scr. 1/4-20 x .5" Lg.			Ν	Safety Switch (Seat)
28			Hex AB-Tap Scr. 5/16 x .75" Lg.		732-0581		Ext. Spring 5.31" Lg.
29			Torx Mach. AB-Tap Scr.	86	17239A		Seat Lift Brkt.
23	/10-101/		1/4 x .62" Lg.	87	726-0278	N	Insulator Boss Plate
30	710-0623		Hex Self-Tap Scr. 3/8-16 x	88	738-0155	1.4	Shid. Bolt .437" Dia. x .162" Lg.
30	710-0023		.75" Lg.	89	738-0296		Shid. Bolt .437 Dia. x .102 Lg.
31	712-0287	÷	Hex Nut 1/4-20 Thd.*	90	736-0230		Spr. Wash445" I.D. x .75"
32			Bulb ⁺	30	700-0141		0.D.
33			Battery Box w/Cover	91	710-0604		Hex Wash. Hd. Scr. 5/16-18 x
34			Compression Spring	31	110-0004		.62" Lg.
35	725-0222		Headlight	92	726-0279	Ν	Insulator Plate
36			Bell-Wash. 5/16" I.D.	92		N	Center Foot Pad
30			L-Wash. 1/4" I.D.*		725-1303	I NI	
37			Socket††		731-0895		Safety Switch (Seat) Hood Spring Retainer
	731-0465		Bezel†		710-0697		Oval Hd. Self-Tap Scr5" Lg.
1	731-0465		C-Sunk Mach. Scr. 1/4-20 x 1.5"		17592	N	Side Panel Mtg. Brkt.—R.H.
41			Headlight Retainer	30	17592	N	
	09960	N			17595	IN	Side Panel Mtg. Brkt.—L.H.
43		11	Side Panel—R.H. Side Panel—I. H. (Not Shown)	00	712-0147		(Not Shown) Speed Nut #10-24 Thd
44	16283A	- ·	Side Panel—L.H. (Not Shown)				Speed Nut #10-24 Thd.
44		T	Trim Strip 31" Lg. Grille Ass'y. (Round Headlights)	100	710-0351		Truss Mach. B-Tap Scr.
	16277	NI		101	12720		#10 x .5" Lg.
40	17595	N	Grille Mtg. Brkt.—L.H.		13730		Grille Screen††

†Used with Grille Ref. No. 45 ††Used with Grille Ref. No. 51

*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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PARTS LIST FOR MODEL 400 SERIES LAWN TRACTORS

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	17584	N	Front Axle Ass'y.—R.H.	30	750-0535		Spacer .380" I.D.
2	17585	N	Front Axle Ass'y.—L.H.	31	17548	Ν	Front Pivot Bar Support Brkt.
3	16481		Steering Arm	32	17547	N	Rear Pivot Bar Support Brkt.
4	710-0152		Hex Bolt 3/8-24 x 1" Lg.*	33	14608		Pivot Bar Ass'y.
5	710-0538		Hex Bolt 5/16-18 x .62"	34	710-0118		Hex Bolt 5/16-18 x .75" Lg.*
			(Spec.)	35	734-0863	N	Front Wheel Ass'y. Comp.
6	710-0772		Hex Bolt 5/16-24 x 2" Lg.*				15″ x 6″
7	723-3018		Ball Joint 3/8-24 Thd.		734-0864		Tire Only
8	711-0838	Ν	Steering Drag Link	36	734-0997A		Rim Ass'y. Only
9	712-0237		Hex L-Nut 5/16-24 Thd.		737-0146		Grease Fitting
10	712-0241		Hex Nut 3/8-24 Thd.	37	734-0255		Air Valve
11	712-0267		Hex Nut 5/16-18 Thd.*	38	741-0487	-	Bronze-Bearing .63" I.D. PLASTIC
12	712-0711		Hex Jam Nut, 3/8-24 Thd.	42	712-0237		Hex L-Nut 5/16-24 Ind.
13	714-0470		Cotter Pin 1/8 Dia.	43	741-0501		Steering Column Brg.
14	717-0622A	N	Steering Gear Segment	44	710-0837		Cr-Sunk Scr. #10 x 5/8" Lg.
15	723-3018		Drag Link Ball Joint 3/8-24	45	731-0805		Steering Wheel
			Thd.	46	731-0220		Steering Wheel Cap
16	726-0214		Push Cap	47	731-0484A		Hub Cap
17	736-0119		L-Wash. 5/16" I.D.*	48	731-0559		Bellow Steering Column
18	736-0169		L-Wash. 3/8" I.D.*	49	736-0242		Bell-Wash345" I.D. x .88"
19	736-0187		FI-Wash64" I.D. x 1.24"	50	712-0798		Hex Nut 3/8-16 Thd.*
20	736-0343		FI-Wash340" I.D. x 1.125"	51	738-0527		Shid. Bolt 1/2" Dia. x 2.04"
22	736-0271		Spr. Wash32" I.D. x .62"	52	736-0356		Bell-Wash39" x 1.38" O.D.
23	736-0285		FI-Wash635" I.D. x 1.585"	53	712-0123		Hex Nut 5/16-24 Thd.
24			Retainer Plate	54	731-1134		Plastic Tube
25	738-0141		Shld. Bolt .437" Dia. x .350"	55	17545	N	Pivot Bar Side Plate—L.H.
26	738-0730		Steering Shaft	56	17546	N	Pivot Bar Side Plate—R.H.
27	741-0225		Hex Flange Brg634 Dia.	57	710-1012		Rib Neck Bolt 5/16-24 x .84" Lg.
28	747-0753	N	Tie Rod 20" Lg.	58	710-0604		Hex Wash. Tap Scr. 5/16-18 x
29	750-0532		Spacer .985" I.D.				.62″ 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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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.



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PARTS LIST FOR MODEL 400 SERIES LAWN TRACTORS

REF.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1	16670		Engine Pulley Belt Guard Ass'y.	68	710-0726		Hex Wash. AB-Tap Scr. 5/16 x
2	710-0776A		Hex AB-Tap Scr. 1/4 x .62"				.75″ Lg.
3	710-0833		Hex Bolt 5/16-18 x 51/4" Lg.	69	710-0258		Hex Bolt 1/4-20 x .62" Lg.*
4	712-0267		Hex Nut 5/16-18 Thd.*	70	725-1426	N	Solenoid
5	736-0242		Bell-Wash345" I.D. x .88	71	725-0459		Circuit Breaker
6	710-0286		Truss-Mach. Scr. 1/4-20 x .50"*	73	710-0176		Hex Bolt 5/16-18 x 2.75" Lg.*
8			Bell-Wash265" I.D. x .75	74	710-0351		Truss Mach. B-Tap Scr. #10
10	1	N	Speed Selector Brace	75	17504		x .50" Lg. Foot Pedal Rod Ass'y.
11	712-0138		Hex Nut 1/4-28 Thd.*	75	17594 17644	Ν	Foot Pedal Rod Ass'y. (Style 5
12			Spring Retainer Brkt. Hex Bolt ¼-28 x 1.75" Lg.*		17044	IN	Only)
14		N	Idler Bracket	76	735-0239	N	Foot Pad
15		IN	Var. Speed Torque Brkt. Ass'y.	77	710-1012		Ribbed Neck Bolt 5/16-24 x .84"
17			Variable Speed Brkt. Ass'y.	80			Ferrule
	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	81	712-0271		Hex Sems Nut 1/4-20 Thd.
	710-0151		Hex Bolt 3/8-24 x 2.0" Lg. Gr. 5	82	714-0470		Cot-Pin 1/8" Dia. x 1.25" Lg.
22			Hex Bolt 7/16-20 x 1.5" Lg.*	83	714-0507		Cot-Pin 3/32" Dia. x .75" Lg.
24			Belt Guard Pin	85	714-0114		Sq. Key 1/4 x 2.0" Lg.
	712-0241		Hex Nut 3/8-24 Thd.*	86	736-0256		FI-Wash635" I.D. x 1.0"
27	1		Hex Nut 1/4-20 Thd.*	88		N	Brake Rod
29	712-0922		Hex Jam Nut 1/2-20 Thd.	89	750-0800	N	Spacer 5/8" I.D. x 1.2" Lg.
30			Hex Bolt 3/8-24 x 3.75" Lg.	90		N	Ground Wire 7.25" Lg.
31			Snap Ring	91	17457		Speed Selector Lever
32			Variable Speed Pulley Ass'y.	92	16693A		5 Speed Selector Brkt.
33		N	Transaxle Complete		16694A		7 Speed Selector Brkt.
34	736-0607		Ext. L-Wash. 5/16" I.D.	93			Shid. Bolt .437" Dia. x .47" Lg.
35	736-0258	+0459	FI-Wash. 3/8" I.D. x 1.0" O.D.	94	711-0677 710-0428		Ferrule Hex Bolt 1/4-28 x 1.25″ Lg.
	732-0384		Extension Spring 6.12" Lg.	95 96			Intern. Cot-Pin 5/16" Dia.
37		N	Extension Spring 7.5" Lg. Extension Spring 2.59" Lg.	97	750-0703		Spacer .375" I.D. x .625"
39			FI-Wash385" I.D. x .620"	99	1		FI-Wash344" I.D. x .62"
40			L-Wash. 5/16" I.D.*	100			FI-Wash25" I.D. x .62" O.D.
41			L-Wash. 3/8" I.D.*	101			Speed Control Rod
42			L-Wash. 7/16" I.D.*	102			FI-Wash. 3/8" I.D. x .1" O.D.
43			FI-Wash450" I.D. x 1.25"	103	714-0115		Cot-Pin 1/8" Dia. x 1.0" Lg.
44			L-Wash. 1/4" I.D.*		736-0275		FI-Wash34" I.D. x .68"
45	736-0331		Bell-Wash39" I.D. x 1.13"		736-0278	1	FI-Wash34" I.D.
46			FI-Wash56" I.D. x 1.0" O.D.		710-0627		Hex L-Bolt 5/16-24 x .75" Lg.
	736-0414		Washer ''Teflon'' .565 I.D.		734-0817		Rear Wheel Ass'y. Comp.
	3 736-0253		Bell-Wash. ½" I.D. x 1.0" O.D.		734-0448		Tire Only
49			Shaft .56" Dia. x 3.875." Lg.		734-0603A		Rear Wheel Rim Ass'y. Only Bell-Wash345" I.D. x .88"
50			Thrust Brg. 1.25 O.D.		736-0242 721-0208		Exhaust Gasket
51			Flanged Nyliner Brg. Nyliner Flanged Brg.		738-0636		Shid. Bolt 7/16" Dia. x 3-5/8" Lg.
52		N	Speed Control Rod		712-0298		Hex Jam Nut 1/4-20 Thd.
53		i N	Spacer		17178A		Shift Lever Adjusting Link
	5 754-0280		V-Belt		16482		Shift Lever Spring Brkt.
	5 754-0281		V-Belt		17597	N	Brake Rod Guide Brkt.
57			1/2 V-Pulley .501" I.D. x 8.00"		710-0289		Hex Bolt 1/4-20 x .50 Lg.*
58			Idler Pulley 3-1/8" Dia.		710-1066		Hex B-Tap Scr. #10 x .38" Lg.
	756-0551	N	Dbl. Pulley 6.0" Dia. x 3.56"	119	714-01498		Intern. Cotter Pin
	732-0303		Extension Spring 3.18" Lg.		725-3169	N	Safety Switch (Clutch)
6			Extension Spring 7.08" Lg.		720-0232		Knob
	2 748-0234		Shld. Spacer .500" Dia.		726-0231		Retaining Ring
	3 734-0255		Air Valve		732-0499		Compression Spring 1.5" Lg. Hex Wash. Hd. Scr. 5/16-18 x
	4 17588		Front Frame	124	710-0604	1	.62" Lg.
	5 17589	N	Rear Frame Transaxle Support Brkt.	125	736-0226		.02 Ly. Fl-Wash469" I.D. x .88"
6		}	Transaxle Brkt. Reinforcement	126			Shift Rod Ass'y.
0	10003			120		<u> </u>	

PARTS LIST FOR MODEL 400 SERIES LAWN TRACTORS (CONTINUED)

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
130 131 132 133 134	747-0685 17179 710-0227 726-0222 725-0758 710-0502A 710-0672	N	Shift Rod Shift Lever Support Hex Wash. Hd. #8 x .50" Lg. Insulator Nut Plate Spring Switch Hex Tap Scr. 3/8-16 x 1 25" Hex Bolt 5/16-24 x 11/4" l.g. Gr. 5	138 139 141 143	712-0123 751-0450 751-0443 736-0141 741-0404		Hex Nut 5/16-24 Thd.* Engine Muffler (B&S) Muffler (Tec.) Wave Wash445" I.D. Needle Brg. (2 Req'd.)

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

Models 432 thru 457



PARTS	LIST	FOR	ELECTRICAL	SYSTEM

REF. NO.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
1 2 3 4 5 6 7 8 9 10	725-0976A 725-0514A 725-0926 725-1426 725-0459 732-0758 725-0459 732-0758 725-0459 725-0459 725-0459 725-0267 725-0634 725-3169	N	Ground Wire Battery Electric Wire—8.0" Lg. Solenoid Circuit Breaker Spring Switch (Reverse) Safety Switch (Deck) Ignition Switch Light Switch Safety Switch (Clutch)	11 12 13 14 15 16 17 18			Harness (B&S) Harness (Tec.) Socket (Sq. Headlights) Bulb (Sq. Headlights) Ground Wire Headlight Harness Headlight (Round) Safety Switch (Seat) Safety Switch (Seat)



PARTS LIST FOR MODEL 400 SERIES LAWN TRACTORS

NO. 1 2	NO.			NO.	NO.		
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	741-0495 747-0746 16682	N	Shld. Bolt .5" Dia. x .25" Lg. Lift Handle Support Strap L-Wash. 3/8" I.D.* Hex Nut 3/8-16 Thd.* Hex Bolt ¼-28 x 1.25" Lg. Hex Wash. Hd. TT-Tap Scr. 1/4-20 x .5" Lg. Ext. Spring Grip Deck Lift Handle Ass'y. Hex Wash. TT-Tap Scr. 5/16-18 x .62" Lg. L-Wash. 5/16" I.D.* Hex Nut 5/16-18 Thd.* Nylon Sleeve Brg. 750 Cot-Pin 3/32" Dia. x .75" Lg. FI-Wash406" I.D. x .75" O.D. Internal Cot-Pin 5/16" Dia. Nyliner Flanged Brg. Deck Engagement Rod Pivot Sleeve Ass'y. Hex L-Nut 3/8-16 Thd.		712-0123 17615 712-0237 17555 738-0281 17574 738-0667 747-0745 17573 17554 17563 736-0336 17582 710-1012 17568 17557 17556 17581 17562	Z Z ZZZ Z Z ZZZZZ	Hex Nut 5/16-24 Thd. Harness Retainer Hex Cent. L-Nut 5/16-24 Thd. Deck Pivot Brkt. Ass'y.—R.H. Rear Shid. Bolt .625" Dia. x .170" Lg. Deck Link Shaft Ass'y. Shaft 11.2" Lg. Deck Lift Rod Deck Stabilizer Brkt. Deck Pivot Brkt. Ass'y.—R.H. Front Connecting Link—R.H. FI-Wash. 5/8" I.D. x 1.0" O.D. Pivot Support Brkt.—R.H. Rib Neck Bolt 5/16-24 x .84" Lg. Cross Shaft Ass'y. Deck Pivot Brkt. Ass'y.—L.H. Deck Pivot Brkt. Ass'y.—L.H. Pivot Support Brkt.—L.H. Connecting Link—L.H. Lift Link 3/8-24 x 1.25" Lg.
[©] 20 21 22 23	736-0314	er (Thrust Washer .382" I.D. FI-Wash635" I.D. x 1.04" O.D Cot-Pin 1/8 Dia. x 1.25" Lg.	44	17709 17598	N	Adj. Lift Link Ass'y. Deck Lift Link Ass'y. Deck Spring 10.33" Lg.

Deck "E' and Deck "F' 36" and 38" Side Discharge Mowing Decks 12 28 27-24 55 23-20 6 23 20 38" Deck " 1) 38 5 38 ş-56 39 \ 55 39 20 11 3) E 36" Deck

Deck "E' and Deck "F'

PARTS LIST FOR 36" AND 38" MOWING DECKS

*			PARTS LIST FOR 30 A	REF.	PART	CODE	DESCRIPTION
EF.	PART	CODE	DESCRIPTION	NO.	NO.		Riado Adapter
NO. 3	NO. 16879A 813-04103 17717 813-04104 17503 813-04104 17503 813-04105 4 16607 5 16608A 6 710-0152 7 710-0195 8 710-0255 9 710-0888 0 711-0792 1 712-0123 12 712-0138 13 712-0181 14 712-0287 17 734-0973 18 736-0105	N N N N N		NO. 25 26 27 28 33 35 37 38 38 37 38 37 38 37 38 37 38 37 38 37 38 37 38 37 38 37 38 37 38 37 38 38 37 38 37 38 37 38 37 38 38 37 38 37 38 38 37 38 38 37 38 38 37 38 38 37 38 38 38 37 38 38 38 38 38 38 38 38 38 38 38 38 38	NO. 748-0300 754-0364 754-0329 736-0270 09322 710-0157 712-0318 736-0158 736-0158 736-0119 736-0242 9 717-0900 717-0900 2 756-0486 2 703-1693 3 732-0602 4 726-0106 5 731-1032 5 710-0157 17572		Blade Adapter "V"-Belt (36" Deck) \mathcal{E} V-Belt (38" Deck) \mathcal{F} Bell-Wash. $\frac{1}{4}$ " 1.D. Brake Disc Rib Neck Bolt $\frac{5}{16-24} \times .84$ " Lg. (36" Deck) \mathcal{E} Hex Bolt $\frac{5}{16-24} \times .75$ " Lg. (38" Deck) \mathcal{F} Hex Jam Nut $\frac{5}{8-18}$ Thd. L-Wash. $\frac{5}{8}$ " 1.D.* L-Wash. $\frac{5}{8}$ " 1.D.* L-Wash. $\frac{5}{8}$ " 1.D. \times .38" O.D. (38" Deck) \mathcal{F} Blade Spindle Ass'y. Comp Incl. Ref. 33 (36" Deck) \mathcal{E} Blade Spindle Ass'y. Comp Incl. Ref. 33 (38" Deck) \mathcal{F} 5" Dia. Pulley Hinge Mtg. Brkt. Torsion Spring Push Nut Chute Ass'y. Comp. Hex Bolt $\frac{5}{16-24} \times .75$ " Lg. Deck Hanger ChannelR.H. Deck Hanger ChannelL.H.
	19 736-0119 20 736-0217 22 738-0373 23 742-0496		L-Wash. 3/8" I.D.—H.D. Shld. Bolt .498" Dia. x 1.53"† High-Lift Blade (36" Deck) <i>E</i> High-Lift Blade (38" Deck) <i>F</i>		58 17571 59 750-0456 60 09164		Spacer .79" I.D. x 1.0" O.D. (36" Deck) Reinforcement Plate (36" Deck)

†Optional Parts

*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.



PARTS LIST FOR SINGLE SPEED TRANSAXLE LEFT HAND 717-1237

3			SINGLE SPEED TRANSA				
REF.	PART NO.	CODE	DESCRIPTION	REF. NO.	PART NO.	CODE	DESCRIPTION
<u>NO.</u>			#4 Hi-Pro Key 3/32 x 5/8" Dia.	34	717-0761A	N	Lower Housing
1	714-0129		Snap Ring .625" Shaft		750-0555		Spacer .53" O.D. x 3/8" Lg.
2			Hex Bolt ¼-20 x 1.75" Lg.*		736-0329		L-Wash. 1/4" I.D.*
3			Hex Bolt 5/16-18 x 2.5"	37	710-0886		Hex Bolt 1/4-20 x 1.50" Lg.
4		N	Upper Housing				(Grade 5)
5		IN	Hex FI-Bolt 1/4-20 x .88" Lg.*	38	712-0335		Castle Nut 5/16-24 Thd.
6			Hex Nut 1/4-20 Thd.*	39	736-0159		FI-Wash344" I.D. x .875"
7			Input Shaft				O.D.
8		- -	Square Seal 5/8" I.D.	40	717-0772		Actuating Arm
9			Thrust Washer 5/8" I.D. x		717-0679		Brake Yoke
10	736-0335		1.25" O.D.	42	717-0682		Puck Plate
4 4	717-0633		Pinion Input 14T		717-0678		Brake Puck
	716-0108		Retaining Ring 7/16" Ext.		717-1022	N	Axle L.H. Ass'y.
	717-0768		Drive Shaft		717-0677		Brake Disc
	741-0336		Flange Brg. 5/8" I.D. x 3/4"	46	741-0337		Flange Bearing 5/8" I.D. x
14	141-0330		Lq.*				15/16" Lg.
15	**		FI-Wash. (See Below)	47			Woodruff Key 3/16 x 5/8 HT
	717-0757		Bevel Gear 42T	48			Shift Fork Ass'y.
	717-0667		Clutch Collar		741-0862		Ball Detent .250" Dia.
1 15	3 717-1020		Miter Gear 15T (H.D.)	50			Spring Detent
	716-0142		Snap Bing	51	714-0169		#9 Hi-Pro Key 3/16" x 3/4" Dia. HT
2			Thrust Bearing 1/2" I.D. x 1.0"				Needle Brg. 5/8" I.D. x $\frac{1}{2}$ "
			O.D.	52	741-0335		
2	1 710-0862		Pan Head Scr. 1/4-20 x .50"				Lg. Hex Bolt ¼-20 x 1.00″ Lg.
-			Lg. w/Patch		710-0855		Fl-Wash. 5/8" I.D. x .030
2	2 717-1023	N	Axle R.H. Ass'y.	54			FI-Wash. 5/8" I.D. x .040
2	3 741-0340		Sleeve Bearing 3/4" I.D. x	544	736-0337		FI-Wash. 5/8" I.D. x .020"
1			1.0″ Lg.	548	736-0349		Actuating Pin 5/16" Dia.
2	4 721-0179		Oil Seal 3/4" I.D.	50	710-0966		Hex Bolt 1/4-20 x 2.50" Lg.
2	5 741-0339		Flange Bearing 3/4" I.D. x	50	10-0900		(Grade 5)
			15/16" Lg.	E-	717-0767		Differential Gear 72T Ass'y.
2	6 736-0188		Fl-Wash760" I.D. x 1.49"	101	111-0/07		w/Bearing
			O.D.	E	717-0681		Sq. Hd. Bolt 5/16-24 Thd.
	7 717-0673		Cross Shaft	59	1 -		Cotter Pin 3/32" Dia. x .50"
	8 717-0777		Differential Housing Ass'y.	08	/ 104-1010		Lg.
	9 —		Part of Ref. 28		- 737-0148		Grease—Shell (10 oz.)
3	3 736-0188		Fl-Wash760" I.D. x 1.49"		- 101-0140		
			O.D.				

**Ref. No. 15 736-0349 FI-Wash. 5/8" I.D. x 1.0" O.D. x .020" Thk. 736-0336 FI-Wash. 5/8" I.D. x 1.0" O.D. x .030" Thk. 736-0337 FI-Wash. 5/8" I.D. x 1.0" O.D. x .040" Thk.

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service fir ns listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

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

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

Sutton's Lawn Mower Shop	Box 368, Rt. 4
CALIFORNIA Billious	PORTERVILLE 75 North D Street93257
COLORADO Spitzer Industrial Products Co.	DENVER 6601 N. Washington St
FLORIDA Radco Distributors	Box 5459
Small Eng. Dist.	HIALEAH 7995 W. 26th Court 33016
Keen Edge Co	LYONS 8615 Ogden Ave 60534
INDIANA Parts & Sales Inc.	ELKHART 2101 Industrial Pkwy. Box 277 46516
IOWA Power Lawn & Garden Equip	DUBUQUE 2551 J.F. Kennedy
MARYLAND Center Supply Co.	BELTSVILLE 6802 Industrial Dr. #208
MASSACHUSETTS Morton B. Collins Co	SPRINGFIELD 300 Birnie Ave
MICHIGAN	MOUNT CLEMENS 340 Hubbard
MINNESOTA Hance Distributing Inc.	PLYMOUTH 12795 16th Ave. North 55441
	EARTH CITY 4159 Shoreline Dr 63045
	CARTHACE

NORTH CAROLINA Dixie Sales Company	BROWNS SUMMIT 5920 Summit Ave 27214
Stebe's Mid-State Mower Supply	CARROLL Box 366, 71 High St 43112
Bleckrie, Inc.	7900 Lorain Ave
	WADSWORTH 687 Seville Rd44281 YOUNGSTOWN
	Box 929 44501
EECO Inc.	HARRISBURG 4021 N. 6th St17110 PITTSBURGH
	PTT SBURGH 11101 Frankstown Rd. 15235 PUNXSUTAWNEY . R.D. 2 . 15767
	SCRANTON 1133-35 Wyoming Ave. 18509
TENNESSEE Ace Distributors	KNOXVILLE 2103 Magnolia 37917
Chilton Air Cooled Engine	NASHVILLE 319 4th Ave. S37210
Marr Brothers, Inc.	DALLAS 423 E. Jefferson
UTAH Powered Products	•
RBI Corp	
Equip. Northwest	SEATTLE 1410 14th Ave98122
Wisconsin Magneto Inc	
PUERTO RICO Island Distribution Center	RAMEY 102 N. St

WARRANTY PARTS AND SERVICE POLICY

The purpose of warranty is to protect the customer from detects 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, Serial Number and/or Date Code of unit involved
- 2. Date unit was purchased.
- 3. Date of Failure.
- 4. Nature of Failure.

MTD PRODUCTS INC •

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