

OPERATOR'S MANUAL



MODELS E740 E760



IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forestcovered, 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, P.O. Box 368022 Cleveland, Ohio 44136-9722.

MTD PRODUCTS INC. P.O. BOX 368022 CLEVELAND, OHIO 44136-9722

SECTION 1: IMPORTANT SAFE OPERATION PRACTICES



WARNING: 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 SNOW THROWER. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL-HEED ITS WARNING.



WARNING: The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



DANGER: Your snow thrower 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. TRAINING

- Read this operator's manual carefully in its entirety before attempting to assemble or operate this machine. Be completely familiar with the controls and the proper use of this machine before operating it. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Never allow children under 14 years old to operate a snow thrower. Children 14 years old and over should only operate snow thrower under close parental supervision. Only persons well acquainted with these rules of safe operation should be allowed to use your snow thrower.
- No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
- Keep the area of operation clear of all persons, especially small children and pets.
- Exercise caution to avoid slipping or falling, especially when operating in reverse.

2. PREPARATION

- Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.
- Disengage all clutches and shift into neutral before starting engine.
- Do not operate equipment without wearing adequate winter outer garments. Do not wear jewelry, long scarfs or other loose clothing which could become entangled in moving parts. Wear footwear which will improve footing on slippery surfaces.

- Before working with gasoline, extinguish all cigarettes and other sources of ignition. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the gasoline tank indoors, while the engine is running, or until engine has been allowed to cool at least two minutes. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.
- Use a grounded three wire plug-in for all units with electric drive motors or electric starting motors.
- Adjust collector housing height to clear gravel or crushed rock surface.
- Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
- Let engine and machine adjust to outdoor temperature before starting to clear snow.
- 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.

3. OPERATION

- Do not put hands or feet near or under rotating parts. Keep clear of discharge opening and auger at all times.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
- After striking a foreign object, stop the engine, remove wire from spark plug, and thoroughly inspect the snow thrower for any damage. Repair the damage before restarting and operating the snow thrower.

- If the snow thrower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
- Stop engine whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and making any repairs, adjustments, or inspections. Never place your hand in the discharge or collector openings. Use a stick or wooden broom handle to unclog the discharge opening.
- Take all possible precautions when leaving the unit unattended. Disengage the collector/impeller, shift into neutral, stop the engine, and remove the key.
- When cleaning, repairing, or inspecting, make certain collector/impeller and all moving parts have stopped. Disconnect spark plug wire and keep away from plug to prevent accidental starting.
- Do not run engine indoors, except when starting engine and transporting snow thrower in or out of building. Open doors. Exhaust fumes are dangerous.
- Do not clear snow across the face of slopes. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
- Never operate snow thrower without guards, plates, or other safety protection devices in place.
- Never operate snow thrower near glass enclosure, automobiles, window wells, drop off, etc., without proper adjustments of snow thrower discharge angle. Keep children and pets away.
- Do not overload machine capacity by attempting to clear snow at too fast a rate.

- Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when backing.
- Never direct discharge at bystanders or allow anyone in front of unit.
- Disengage power to collector/impeller when transporting or not in use.
- Use only attachments and accessories approved by the manufacturer of snow thrower (such as wheel weights, counter weights, cabs, etc.).
- Never operate the snow thrower without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, never run.
- Muffler and engine become hot and can cause a burn. Do not touch.

4. MAINTENANCE AND STORAGE

- Check shear bolts, engine mounting bolts, etc., at frequent intervals for proper tightness to be sure equipment is in safe working condition.
- 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 engine to cool before storing in any enclosure.
- Always refer to operator's manual instructions for important details if snow thrower is to be stored for an extended period.
- Run machine a few minutes after throwing snow to prevent freeze up of collector/impeller.
- Check clutch controls periodically to verify they engage and disengage properly and readjust if necessary. Refer to operator's manual for adjustment instructions.



WARNING - YOUR RESPONSIBILITY: Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.



Safety labels found on your snow thrower.



SECTION 2: FINDING YOUR MODEL NUMBER

This Operators Manual is an important part of your new snow thrower. It will help you assemble, prepare and maintain your snow thrower. Please read and understand what it says.

Before you start to prepare your snow thrower for its first use, please locate the model plate and copy the information from it in this Operators Manual. The information on the model plate is very important if you need help from your dealer or the MTD customer support department.

- Every snow thrower has a model plate. You can locate it by standing behind the unit in the operating position and looking down at the dash panel.
- The model plate will look like Figure 1.



Figure 1

SECTION 3: CALLING CUSTOMER SUPPORT

If you are having difficulty assembling this product or if you have any question regarding the controls, operation or maintenance of this snow thrower, please call the Customer Support Department. You can reach them by calling:

1-800-800-7310

Before you call, make sure that you have both your model and serial number ready. By having the model and serial number ready, you help the Customer Support Representative give you faster service. To find your units model and serial number, see SECTION 2: FINDING YOUR MODEL NUMBER.

SECTION 4: CONTENTS OF HARDWARE PACK

Lay out the hardware according to the illustration for identification purposes. Parts are illustrated approximately one-half size. Part numbers are shown in parentheses.

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



SECTION 5: ASSEMBLY INSTRUCTIONS

NOTE: Reference to right or left side of the snow thrower can be determined from behind the unit in the operating position.









Figure 4

UNPACKING

- 1. Remove staples or break glue on the top flaps of the carton. Remove any loose parts included with unit (i.e., operator's manual, etc.).
- 2. Cut along dotted lines and lay end of carton down flat. Remove packing material.
- 3. Roll unit out of carton. Check carton thoroughly for loose parts.
- 4. Lay out the hardware according to the illustration on page 5 for identification purposes.

Tools Required for Assembly:

- (1) 3/8" Wrench or Adjustable
- (2) 7/16" Wrenches or Adjustable
- (1) 1/2" Wrench or Adjustable
- (1) Pair of Pliers
- (1) Phillips Screwdriver

Loose Parts in Carton:

- (1) Handle Panel (1) Chute Crank Assembly
- (1) Chute Assembly (1) Shift Rod
- (1) Right Handle (1) Hardware Pack
- (1) Left Handle

ATTACHING THE HANDLE ASSEMBLY

(Hardware A)

- 1. Stretch out control cables and place on the floor behind unit.
- Identify left and right handles as shown in figure
 The flats on the lower part of handles will be placed against the snow thrower housing.
- 3. Place right handle in position with flat side against the snow thrower. Secure bottom hole in handle to snow thrower using hex bolt 3/4" long and lock washer. See figure 3. Do not tighten at this time.
- 4. Place handle tab over the upper hole in handle, so the curve in the handle tab matches the curve in the handle. Secure to the snow thrower using 1-3/4" hex bolt and lock washer. Do not tighten at this time.
- 5. Attach the left handle in the same manner. Do not tighten at this time.
- 6. Place the handle panel in position between the handles. To hold the handle panel in place, engage both clutch grips (hold them against the handles). Now release the left hand grip, and it will remain against the handle. Keep holding the right hand clutch grip. See figure 4.
- 7. Secure the right side of the handle panel by inserting carriage bolt through handle and handle panel (must go through both the plastic and metal parts of the handle panel). Secure with cupped washer (cupped side against the handle panel) and hex nut. Repeat using another carriage bolt, cupped washer and hex nut.
- 8. Secure the left side of the handle panel in the same manner.
- 9. Tighten the four hex bolts which attach the bottom of the handles to the snow thrower frame.



ATTACHING THE CHUTE ASSEMBLY (Hardware B)

- 1. Place chute assembly over chute opening, with the opening in the chute assembly facing the front of the unit.
- 2. Place chute flange keepers beneath lip of chute assembly with the flat side down.
- Insert hex bolt up through chute flange keeper and chute assembly as shown in figure 5. Secure with hex lock nut.
- 4. After assembling all three chute flange keepers, tighten all nuts and bolts. Do not overtighten hardware as it will restrict movement of the discharge chute.

ATTACHING THE CHUTE CRANK (Hardware C)

- 1. Insert hex bolt through the upper chute crank bracket. See figure 6.
- 2. Place the hex bolt into the hole provided in the left handle. Secure with lock washer and hex nut. Do not tighten until after attaching the other end of the chute crank.
- 3. Loosen the carriage bolts and hex lock nuts which secure the lower chute crank bracket to the extension on the left side of the chute assembly. See figure 7.
- 4. Place one flat washer on the end of the chute crank, then insert the end of the crank into the hole in the plastic bushing in the lower chute crank bracket. See figure 8. Place the other flat washer on the end of the chute crank, and insert hairpin clip into hole in the end of crank.
- 5. Adjust the chute bracket so that the spiral on the chute crank fully engages the teeth on the chute assembly. Tighten the nuts on the lower chute crank bracket securely. Tighten the hex bolt and nut on the upper chute crank bracket on the handle.

IMPORTANT: Attach the shift rod and clutch cables as follows. THEN CHECK THE ADJUSTMENTS AS INSTRUCTED, AND MAKE ANY FINAL ADJUSTMENTS NECESSARY <u>BEFORE</u> OPERATING YOUR SNOW THROWER. Failure to follow the instructions may cause damage to the snow thrower.









ATTACHING THE SHIFT ROD

(Hardware D)

- 1. Place the shift lever (on the handle panel) in the sixth (6) speed position (all the way forward).
- 2. Place the bent end of the shift rod into the hole in the shift arm assembly. See figure 9. Secure with flat washer and hairpin clip.
- 3. Start threading the ferrule onto the other end of the shift rod. Push down on the shift rod (and shift arm assembly) as far as it will go.
- 4. Thread the ferrule onto the shift rod until the ferrule lines up with the **upper** hole in the shift lever (beneath the handle panel). Insert the ferrule into the upper hole in the shift lever from the left side when adjustment is correct. Secure with flat washer and hairpin clip.

Make certain to check for correct adjustment of the shift rod as instructed in the Final Adjustment section before operating the snow thrower.

ATTACHING THE CLUTCH CABLES

The "Z" end of the clutch cables are hooked into the clutch grips on each handle. Attach cables as follows.

- 1. Thread the hex jam nuts all the way up the threaded portion of the "Z" ends of the clutch cables.
- 2. Make certain each cable is in groove of cable roller guides. Place the clutch grip in the raised (up) position.
- 3. Thread the cable onto the threaded portion of the "Z" and until there is no slack in the cable, but the cable is NOT tight. Do not overtighten cable. See figure 10.



WARNING: If cable is tightened so there is tension on the cable with the clutch grip released, the safety features of the snow thrower may be overridden.

4. When correct adjustment is reached, tighten the hex jam nut against the bottom portion of the cable to lock it in position.

ATTACHING THE TRACK CONTROLS (Hardware G)

- 1. Remove the screw from the top of the right hand track control. Be careful not to lose the flat weld nut that is inside the control.
- 2. Place the right track control in position underneath the right handle. Secure with screw just removed. See figure 11.
- 3. Secure the left track control in the same manner.

- Attach track control cable to track control handle by inserting cable ball into slot on track control handle. Pull cable down and up until it snaps into front of track control handle. Repeat on other side.
- Secure the track control cables to the inside of the lower handle using the cable ties provided. Pull the cable ties tight, and trim the excess ends of the cable ties. See figure 12.



Figure 12

FINAL ADJUSTMENTS

Auger Drive Clutch

To check the adjustment of the auger drive clutch, push forward on the left hand clutch grip (depress the rubber bumper). There should be slack in the cable. Release the clutch grip. The cable should be straight. Make certain you can depress the auger drive clutch grip against the left handle completely.

If necessary, loosen the hex jam nut and thread the cable in (for less slack) or out (for more slack) as necessary. Refer to figure 10. Recheck the adjustment. Tighten the hex jam nut against the cable when correct adjustment is reached.

Traction Drive Clutch and Shift Lever Adjustment To check the adjustment of the traction drive clutch and shift lever, move the track lock lever to the transport position (see figure 15) and the shift lever all the way forward to sixth (6) position. With the traction drive clutch released, push the snow thrower forward to check that the tracks turn.

NOTE: It may be necessary to "rock" the snow thrower backward, then forward, to start the tracks turning.

Engage the traction drive clutch and push the snow thrower. The tracks should not turn. Release the traction drive clutch and make sure the tracks again turn. Move the shift lever back to the fast reverse position, then all the way forward again. There should be no resistance in movement of shift lever.

If you have resistance when moving the shift lever or you are unable to turn the tracks by pushing the snow thrower, loosen the lock nut on the traction drive cable and unthread the cable one turn. If you are able to turn the tracks when you engage the traction drive clutch grip, loosen the lock nut on the traction drive cable and thread the cable in one turn. Recheck and repeat adjustment as necessary. Tighten the lock nut to secure the cable when correct adjustment is reached.

NOTE: If you are uncertain that you have reached the correct adjustment, refer to the Adjustment section on page 13.

Skid Shoe Adjustment

The space between the shave plate and the ground can be adjusted. For close snow removal, place skid shoes in the low position. Use middle or high position when area to be cleared is uneven. See figure 13.

Adjust skid shoes by loosening the four hex nuts and carriage bolts and moving skid shoes to desired position. Make certain the entire bottom surface of skid shoe is against the ground to avoid uneven wear on the skid shoes. Retighten nuts and bolts securely.

It is not recommended that you operate this snow thrower on gravel as loose gravel can be easily picked up and thrown by the auger causing an injury or damage to the snow thrower. If you do wish to use the snow thrower on gravel, refer to "Track Lock Lever" instructions in the Control section.



SECTION 6: CONTROLS



SHIFT LEVER (See figure 14)

The shift lever is located in the center of the handle panel. The shift lever may be moved into one of eight positions. Run engine with throttle in the fast position. Use the shift lever to determine ground speed.



number six (6) is the fastest. **Reverse**—two reverse (R) speeds. "R" closest to the operator (all the way

Forward-one of six speeds. Position

number one (1) is the slowest. Position

AUGER DRIVE CLUTCH

back) is the faster of the two.

(See figure 14)

The auger drive clutch is located on the left handle. Squeeze the auger drive clutch against the handle to engage the augers. Release to stop the snow throwing action. (Traction drive clutch must also be released.)

TRACTION DRIVE/AUGER CLUTCH LOCK (See figure 14)

The traction drive clutch is located on the right handle. Squeeze the traction drive clutch to engage the wheel drive. Release to stop.

This same lever also locks the auger clutch so you can turn the chute crank without interrupting the snow throwing process. If the auger drive clutch is engaged with the traction drive clutch engaged, the operator can release the auger drive clutch (on the left handle) and the augers will remain engaged. Release the traction drive clutch to stop both the augers and wheel drive (auger drive clutch must also be released).

CHUTE CRANK (See figure 14)

The chute crank is located on left hand side of the snow thrower.

To change the direction in which snow is thrown, turn chute crank as follows:

- 1. Crank clockwise to discharge to the left.
- 2. Crank counterclockwise to discharge to the right.

LEFT AND RIGHT TRACK CONTROLS

The left and right track controls are located on the underside of the handles and are used to assist in steering your snow thrower. See figure 14. Squeeze the right track control when turning right, squeeze the left control when turning left. Operate your snow thrower in open areas until you become familiar with these controls.

TRACK LOCK LEVER

The track lock lever is located on the right side of the snow thrower and is used to select the position of the housing and the method of track operation. See figure 15. Move the lever to the right, then forward or backward to one of the three positions.

Transport—Raises the front end of the snow thrower for easy transport. May also be used on gravel driveways to clear snow and leave gravel undisturbed.

Normal Snow—Allows the tracks to be suspended independently for continuous ground contact.

Packed Snow—Locks the front end of the snow thrower down to the ground for hard-packed or icy snow conditions.



Figure 15

SECTION 7: OPERATION

GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your snow thrower. Read instructions carefully.



WARNING: Never fill fuel tank indoors, with engine running or while engine is hot. Do not smoke when filling fuel tank.

Electric Starter

WARNING: The electric starter is equipped with a three-wire power cord and plug, and is designed to operate on 120 volt AC household current. It must be properly grounded at all times to avoid the possibility of electric shock which may be injurious to the operator. Follow all instructions carefully. Determine that your house wiring is a three-wire grounded system. Ask a licensed electrician if you are not certain. If your house wiring system is not a three-wire grounded system, do not use this electric starter under any conditions. If your system is grounded and a three-hole receptacle is not available at the point your starter will normally be used, one should be installed by a licensed electrician.

When connecting the power cord, always connect cord to starter on engine first, then plug the other end into a three-hole grounded receptacle.

When disconnecting the power cord, always unplug the end from the three-hole grounded receptacle first.

TO START ENGINE

IMPORTANT: If unit shows any sign of motion (drive or augers) with the clutch grips disengaged, shut engine off immediately. Readjust as instructed in the "Final Adjustments" section of the Assembly Instructions.



Figure 16

- 1. Attach spark plug wire to spark plug.
- 2. Make certain the fuel shut-off valve is in the open (vertical) position.
- 3. Make certain the auger drive and traction drive clutch grips are in the disengaged (released) position.
- 4. Move throttle control up to FAST position. Insert ignition key into slot. See figure 16. Be certain it snaps into place. **Do not** turn key.
- 5. Rotate choke knob to FULL choke position (cold engine start).
- 6. If engine is warm, place choke in OFF position instead of FULL.
- 7. Connect power cord to switch box on engine. Plug the other end of power cord into a threehole, grounded 120 volt AC receptacle.
- 8. **Recoil Start Only:** Push primer button two or three times. If engine is warm, push primer button once only. See figure 16.

NOTE: Always cover vent hole in primer button when pushing. Additional priming may be necessary for first start if temperature is below 15°F.

9. **Electric Start:** Push starter button on top of the engine to crank the engine. When engine starts, release starter button.

Recoil Start: Grasp starter handle (see figure 16) and pull rope out slowly, until it pulls slightly harder. Let rope rewind slowly. Pull starter handle rapidly. Do not allow handle to snap back. Allow it to rewind slowly while keeping a firm hold on the starter handle.

- 10. Repeat step 9 until engine starts. If engine fails to start, repeat steps 8 and 9 until engine starts.
- 11. As engine warms up and begins to operate evenly, rotate choke knob slowly to OFF position. If engine falters, return to FULL choke, then slowly move to OFF position.



TO STOP ENGINE

- 1. Run engine for a few minutes before stopping to help dry off any moisture on the engine.
- 2. To help prevent possible freeze-up of starter, proceed as follows.

Connect power cord to switch box on engine, then to 120 volt AC receptacle. With the engine running, push starter button and spin the starter for several seconds. The unusual sound made by spinning the starter will not harm engine or starter. Disconnect the power cord from receptacle first, and then from switch box.

Recoil Starter (Optional Instructions): With engine running, pull starter rope with a rapid, continuous full arm stroke three or four times. Pulling the starter rope will produce a loud clattering sound, which is not harmful to the engine or starter.

3. To stop engine, remove the ignition key. Do not turn key. Disconnect the spark plug wire from the spark plug to prevent accidental starting while equipment is unattended.

NOTE: Do not lose ignition key. Keep it in a safe place. Engine will not start without the ignition key.

4. Wipe all snow and moisture from the carburetor cover in the area of the control levers. Also, move control levers back and forth several times. Leave throttle control lever in the STOP or OFF position. Leave choke control in the FULL choke position.



TO ENGAGE DRIVE

- With the engine running near top speed, move shift lever into one of the six FORWARD positions or two REVERSE positions. Select a speed appropriate for the snow conditions that exist. Use the slower speeds until you are familiar with the operation of the snow thrower.
- 2. Squeeze the traction drive clutch grip against the right handle and the snow thrower will move. Release it and the drive motion will stop.

NOTE: *NEVER move shift lever without first releasing the drive clutch.*

TO ENGAGE AUGERS

To engage the augers and start the snow throwing action, squeeze the auger clutch grip against the left handle. Release to stop the augers (traction drive clutch grip must also be released).

The auger drive clutch can also be locked so you can turn the chute crank without interrupting the snow throwing process. Refer to "Traction Drive/ Auger Clutch Lock" in the Control section.

OPERATING TIPS

NOTE: Allow the engine to warm up for a few minutes as the engine will not develop full power until it reaches operating temperature.



WARNING: Temperature of muffler and surrounding areas may exceed 150°F. Avoid these areas.

- 1. For most efficient snow removal, remove snow immediately after it falls.
- 2. Discharge snow downwind whenever possible. Slightly overlap each previous swath.
- 3. Set the skid shoes 1/4" below the scraper bar for normal usage. The skid shoes may be adjusted upward for hard-packed snow. Adjust downward when using on gravel or crushed rock.
- 4. Be certain to follow the precautions listed under "To Stop Engine" on page 12 to prevent possible freeze-up.
- 5. Clean the snow thrower thoroughly after each use.

SECTION 8: ADJUSTMENTS



WARNING: NEVER attempt to clean chute or make any adjustments while engine is running.

CHUTE ASSEMBLY ADJUSTMENT

The distance snow is thrown can be adjusted by adjusting the angle of the chute assembly. Refer to the Control section of this manual.

SKID SHOE ADJUSTMENT

The space between the shave plate and the ground can be adjusted. Refer to the Final Adjustments section page 9.

TRACTION DRIVE CLUTCH ADJUSTMENT

Refer to the Final Adjustment section of the Assembly Instructions to adjust the traction drive clutch. If you are uncertain that you have reached the correct adjustment, the adjustment can be physically checked as follows.

With the snow thrower tipped forward (be certain to drain the gasoline or place plastic film under the gas cap if the snow thrower has already been operated), remove the frame cover underneath the snow thrower by removing four self-tapping screws.

With the traction drive clutch released, there must be clearance between the friction wheel and the drive plate in all positions of the shift lever. With the traction drive clutch engaged, the friction wheel must contact the drive plate. See figure 17.

If adjustment is necessary, loosen the lock nut on the traction drive cable and thread the cable in or out as necessary. Tighten the lock nut to secure the cable when correct adjustment is reached. Reassemble the frame cover.

NOTE: If you placed plastic under the gas cap, be certain to remove it.



Figure 17

AUGER CLUTCH ADJUSTMENT

To adjust the auger clutch, refer to the Final Adjustments section page 9.

SHIFT ROD ADJUSTMENT

To adjust the shift rod, remove the hairpin clip and flat washer which secure the ferrule to the shift lever, beneath the handle panel. Refer to figure 9. Refer to the Final Adjustments section page 9.

CARBURETOR ADJUSTMENT



WARNING: If any adjustments are made to the engine while the engine is running (e.g. carburetor), 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.

Refer to the separate engine manual packed with your unit for carburetor adjustment information.

SECTION 9: LUBRICATION



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

ENGINE

Refer to engine manual for all engine lubrication instructions.



WARNING: When following instructions in separate engine manual for draining oil, be sure to protect frame to avoid oil dripping onto transmission parts.

AXLE BEARINGS

Oil or spray lubricant into axle bearings at the housing at least once a season.

CHUTE CRANK

The gear on the end of the chute crank should be greased with multi-purpose automotive grease once a season.

AUGER SHAFT

At least once a season, remove shear bolts on auger shaft. Oil or spray lubricant inside shaft. See figure 18. Also lubricate the auger bearings at least once a season.



Figure 18

SPROCKET SHAFT

Lubricate the sprocket shaft with good all-weather multi-purpose light grease at least once a season or after every 25 hours of operation. Refer to figure 22.

IMPORTANT: Keep all grease and oil off of the rubber friction wheel and aluminum drive plate.

DRIVE AND SHIFTING MECHANISM

At least once a season or after every 25 hours of operation, remove rear cover. Lubricate any chains, sprockets, gears, bearings, shafts, and shifting mechanism at least once a season. Use engine oil or a spray lubricant. Avoid getting oil on rubber friction wheel and aluminum drive plate. Refer to figure 16.

TRACTION DRIVE/AUGER CLUTCH LOCK

The cams on the ends of the control rods which interlock the traction drive and auger drive clutches must be lubricated at least once a season or every twenty-five hours of operation. The cams can be accessed beneath the handle panel. Use a multipurpose automotive grease.

GEAR CASE

The gear case is lubricated with grease at the factory and does not require checking. If disassembled for any reason, lubricate with 2 ounces of Shell Alvania grease EPR00, part number 737-0168. Before reassembling, remove old sealant and apply "Loctite 5699" or equivalent.

IMPORTANT: Do not overfill the gear case. Damage to the seals could result. Be sure the vent plug is free of grease in order to relieve pressure.

SECTION 10: MAINTENANCE



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

AUGER BELTS

1. Remove the plastic belt cover on the front of the engine by removing the two self-tapping screws. See figure 19.



Figure 19

- 2. Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap.
- 3. Tip the snow thrower up and forward so that it rests on the housing.
- 4. Remove four self-tapping screws from the frame cover underneath the snow thrower.
- 5. Roll the front and rear auger belts off the engine pulley. See figure 20.

- 6. Unhook the idler spring from the hex bolt on the auger housing. See figure 21.
- Back out the stop bolt to allow the belts to slip between the bolt and auger pulley. See figure 22.

NOTE: It may be necessary to loosen the six nuts that connect the frame to the auger housing to aid in belt removal.

- 8. Lift the rear auger belt from the auger pulley, and slip belt between the support bracket and the auger pulley. See figure 21. Repeat this step for the front auger belt.
- 9. Replace both auger drive belts by following instructions in reverse order.

DRIVE BELT

- 1. Follow steps 1 through 4 of previous instructions.
- 2. Pull idler pulley up, and lift belt off engine pulley and friction wheel disc. See figure 20.
- 3. Back out the stop bolt until the support bracket rests on the auger pulley. See figure 22.
- Slip belt between friction wheel and friction wheel disc. See figure 22. Remove and replace belt. Reassemble following the instructions in reverse order.

NOTE: The support bracket must rest on the stop bolt after the new belt has been assembled. See figure 22.



Figure 20





Figure 22

CHANGING THE FRICTION WHEEL RUBBER

The rubber on the friction wheel is subject to wear and should be checked after 25 hours of operation, and periodically thereafter. Replace the friction wheel rubber if any signs of wear or cracking are found.

- 1. Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap.
- 2. Tip the snow thrower up and forward, so that it rests on the housing.
- 3. Remove four self-tapping screws from the frame cover underneath the snow thrower.
- 4. Using a 7/8" wrench to hold the shaft, loosen, but do not completely remove, the hex bolt and bell washer from the left end of the shaft. See figure 23.
- 5. Move the track lock lever to the packed snow position. See figure 15.
- Lightly tap the head of bolt to dislodge the ball bearing from the right side of frame, then remove hex bolt and bell washer from left end of shaft.
- 7. Sliding the shaft to the right, remove the spacer, sprocket, and friction wheel assembly from the shaft. See figure 24.
- 8. Remove the six screws from the friction wheel assembly (three from each side). Remove the friction wheel rubber from between the friction wheel plate.
- 9. Reassemble new friction wheel rubber to the friction wheel assembly, tightening the six screws in rotation and with equal force.
- 10. Position the friction wheel assembly up onto the pin of the shift rod assembly, and slide the shaft through the friction wheel. See figure 24.

11. Slide the shaft into the **hex** I.D. of the sprocket, the spacer, and the left ball bearing, and secure with the bell washer and hex bolt. See figure 24.



Track

Figure 23



SECTION 11: OFF-SEASON STORAGE



WARNING: Never store engine with fuel in tank indoors or in poorly ventilated areas, where fuel fumes may reach an open flame, spark or pilot light as on a furnace, water heater, clothes dryer or other gas appliance.

If unit is to be stored over 30 days, prepare for storage as follows:

- Remove all gasoline from carburetor and fuel tank to prevent gum deposits from forming on these parts and causing possible malfunction of engine.
 - a. Run engine until fuel tank is empty and engine stops due to lack of fuel.
 - b. Drain carburetor by pressing upward on bowl drain, located below the carburetor cover.

WARNING: Drain fuel into approved container outdoors, away from open flame. Be certain engine is cool. Do not smoke. Fuel left in engine during warm weather deteriorates and will cause serious starting problems. **NOTE:** Fuel stabilizer (such as STA-BIL) is an acceptable alternative in minimizing the formation of fuel gum deposits during storage. Add stabilizer to gasoline in fuel tank or storage container. Always follow mix ratio found on stabilizer container. Run engine at least 10 minutes after adding stabilizer to allow it to reach carburetor. Do not drain carburetor if using fuel stabilizer.

- Remove spark plug and pour one (1) ounce of engine oil through spark plug hole into cylinder. Crank engine several times to distribute oil. Replace spark plug.
- 3. Remove all dirt from exterior of engine and equipment.
- 4. Follow lubrication recommendations on page 14.
- 5. Store 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 rust proof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

SECTION 12: TROUBLE SHOOTING GUIDE

Trouble	Possible Cause(s)	Corrective Action
Engine fails to start	Fuel tank empty, or stale fuel.	Fill tank with clean, fresh mixture of gasoline and oil. Fuel will not
-		last over thirty days unless a fuel stabilizer is used.
	Blocked fuel line.	Clean fuel line.
	Choke not in ON position	Move switch to ON position
	Faulty spark plug.	Clean, adjust gap or replace.
	Key not in switch on engine.	Insert key.
	Spark plug wire	Connect spark plug wire.
	disconnected.	
	Primer button not depressed.	Refer to the engine manual packed with your unit.
	Fuel shut-off valve closed	Open fuel shut-off valve.
	(if so equipped).	
	Improper gasoline and oil mixture.	Refer to the engine manual packed with your unit.
Engine runs erratic	Unit running on CHOKE.	Move choke lever to OFF position.
3	Blocked fuel line or stale fuel.	Clean fuel line; fill tank with clean fresh gasoline. Fuel will not last
		over thirty days unless a fuel stabilizer is used.
	Water or dirt in fuel system.	Drain fuel tank. Refill with fresh fuel.
	Carburetor out of adjustment.	Refer to the engine manual packed with your unit or have
		carburetor adjusted by an authorized service dealer.
Loss of power	Spark plug wire loose.	Connect and tighten spark plug wire.
	Gas cap vent hole plugged.	Remove ice and snow from cap. Be certain vent hole is clear.
	Exhaust port plugged.	Clean-see Maintenance section of engine manual.
Engine overheats	Carburetor not adjusted	Refer to the engine manual packed with your unit or have
-	properly.	carburetor adjusted by an authorized service dealer.
	Incorrect fuel mixture.	Drain fuel tank. Refill with proper fuel mixture.
Excessive vibration	Loose parts or damaged	Stop engine immediately and disconnect spark plug wire. Tighten
	auger.	all bolts and nuts. Make all necessary repairs. If vibration
		continues, have unit serviced by an authorized service dealer.
Unit fails to propel	Incorrect adjustment of drive	Adjust drive cable. Refer to Belt Tension Adjustment in
itself	cable.	Adjustment section of this manual.
	Drive belt loose or damaged.	Replace drive belt. Refer to Belt Replacement in Maintenance
		section of this manual.
Unit fails to	Discharge chute clogged.	Stop engine immediately and disconnect spark plug wire. Clean
discharge snow		discharge chute and inside of auger housing.
	Foreign object lodged in	Stop engine immediately and disconnect spark plug wire.
	auger.	Remove object from auger.
	Incorrect adjustment of drive	Adjust drive cable. Refer to Belt Tension Adjustment in
	cable.	Adjustment section of this manual.
	Drive belt loose or damaged.	Replace drive belt. Refer to Belt Replacement in Maintenance
		section of this manual.

For repairs beyond the minor adjustments above, contact your local authorized service dealer.

Gear Assembly



Ref.				Ref.			
No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1	618-0123	Housing-L.H.	1	11	721-0327	Seal-Oil	1
2	618-0124	Housing-R.H.	1	12	721-0328	Locktite 5699	
3	710-0642	Screw	5	13	736-0351	Washer-Flat	2
4	711-0909	Spiral Axle 26"	1	14	736-0369	Washer-Flat	4
5	714-0161	Key	1	15	736-0445	Washer-Flat	1
6	715-0143	Pin-Spiral	1	16	737-0168	Grease	1.5 oz.
7	717-0526	Shaft-Worm	1	17	741-0662	Bearing-Flange	1
8	717-0528	Gear-Worm	1	18	741-0663	Bearing-Flange	1
9	718-0186	Collar-Thrust	1		618-0121	Ass'y. Complete 26"	
10	721-0325	Plug	1				

Handle Assembly



Handle Assembly

Ref.				Ref.			
No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1	684-0008	Arm-Shift	1	34	741-0475	Bushing-Plastic	1
3	684-0103	Panel-Handle	1	35	747-0798A	Rod-Shift	1
4	684-0036	Handle-Engagement-R.H.	1	36	747-0877	Rod-Cam	2
5	684-0037	Handle-Engagement-L.H.	1	37	748-0362	Cam-Handle Lock	2
7	710-0276	Screw	1	38	748-0363	Pawl-Handle Lock	1
8	710-0451	Bolt-Carriage	1	39	749-0910A	Handle-R.H.	1
9	710-0599	Screw	4	40	749-0911A	Handle-L.H.	1
10	710-1003	Screw	2	41	784-5619	Handle-Shift	1
11	711-0653	Pin-Clevis	1	42	784-5679	Bracket-Handle Support-L.H.	1
12	712-0116	Nut-Hex	1	43	784-5680	Bracket-Handle Support-R.H.	1
13	712-3010	Nut-Hex	2	44	784-5681	Bracket-Handle Support-L.H.	1
14	712-0429	Nut-Lock	1	45	784-5682	Bracket-Handle Support-R.H.	1
15	714-0507	Pin-Cotter	3	46	736-0119	Washer-Lock	7
16	715-0138	Pin-Roll	1	47	710-0538	Screw	2
17	720-0201A		1	48	710-3180	Screw	2
18	720-0232	Knob-Shift	1	49	784-5599	Tab-Handle	2
19	720-0274	Grip	2		736-0140	Washer-Flat	2
20	720-0284	Knob	1	51	714-0507	Pin-Cotter	4
21	726-0102	Cap-Push	1	52	684-0022	Crank-Chute	1
22	731-0921	Chute-Upper	1	53	710-0442	Screw	1
23	731-1300A		1	54	736-0242	Washer-Bell	4
24	731-1391	Panel-Handle	1		711-0677	Ferrule	1
25	732-0145	Spring	1	56	736-0264	Washer-Flat	2
26	732-0193	Spring	1	57	710-1250	Bolt-Carriage	4
27	732-0746	Spring	1	58	710-3015	Screw	6
28	735-0199A		2	59	731-0851A	Keeper-Chute Flange	3
29	736-0105	Washer-Bell	1	60	712-3027	Nut-Lock	6
30	736-0119	Washer-Lock	2	62	736-0264	Washer-Flat	2
31	736-0159	Washer	2	63	714-0104	Pin-Cotter	2
32	736-0509	Washer	2	64	784-5678	Bracket	1
33	737-0133	Lubricant		65	710-0459	Screw	1

Blower Housing 26"



Ref.				Ref.			
No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1	05931	Housing-Bearing	1	19	731-1379	Adapter-Chute	1
2	605-5193	Spiral Assembly-L.H. 26"	1	20	732-0611	Spring	1
3	605-5192	Spiral Assembly-R.H. 26"	1	21	736-0119	Washer-Lock	9
4	618-0121	Gear Assembly 26"	1	22	736-0164	Washer-Wave	1
5	684-0040A	Housing Assembly 26"	1	23	736-0169	Washer-Lock	1
6	710-0459	Arm-Idler Assembly	1	24	736-0188	Washer-Flat	6
7	684-0065	Impeller Assembly	1	25	736-0242	Washer-Bell	16
8	705-5226	Reinforcement-Chute	1	26	738-0281	Screw-Shoulder	1
9	710-0134	Screw-Carriage	5	27	741-0245	Bearing-Flange	2
10	710-0451	Screw-Carriage	10	28	741-0309	Bearing-Ball	1
11	710-0604	Screw-Hex	6	29	741-0475	Bushing-Plastic	1
12	710-0890	Shear Bolt	2	30	741-0493A	Bushing-Flange	4
13	712-0116	Nut-Hex Lock	1	31	756-0178	Idler-Flat	1
14	712-0310	Nut-Hex	19	32	784-5580	Shoe-Slide	2
15	712-0429	Nut-Hex	2	33	784-5579A	Shave Plate 26"	1
16	712-0798	Nut-Hex	1	34	784-5618	Housing-Bearing	2
17	712-3024	Nut-Hex Lock	5	35	784-5647	Bracket-Chute Crank	1
18	715-0114	Pin-Spring	2	36	736-0463	Flat Washer	5

Track and Frame



Track and Frame



Track and Frame

Ref.				Ref.			
No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1	611-0053	Axle Assembly	2	45	732-0209	Spring	2
2	618-0043	Dog Assembly-R.H.	1	46	732-0264	Spring	1
3	618-0044	Dog Assembly-L.H.	1	47	736-0105	Washer-Bell	1
4	618-0169	Shaft Assembly		49	736-0160	Washer-Flat	1
5	631-0032	Wheel Assembly Idler	2	50	736-0176	Washer-Flat	2
6	656-0012A	Disc Assembly	1	51	736-0242	Washer-Bell	5
7	683-0024	Hub Assembly	2	52	736-0270	Washer-Bell	2
8	684-0009	Rod Track Pivot	1	53	736-0272	Washer-Flat	4
9	684-0014B	Rod Shift Assembly	1	54	736-0287	Washer-Flat	4
10	684-0021	Bracket Assembly	1	55	736-0406	Washer-Flat	4
11	684-0024	Axle Assembly	1	56	737-0170	Lubricant	
12	684-0031	Frame Assembly	1	57	738-0140	Screw-Shoulder	4
13	684-0038	Handle Assembly	1	58	738-0924	Screw-Shoulder	3
14	684-0042B	Wheel Assembly Friction	1	59	741-0339	Bearing-Flange	4
	735-0243	Rubber Only	1	60	741-0563	Bearing-Ball	2
16	710-0157	Screw	1	61	741-0597	Bearing-Hex Flange	2
17	710-0459	Screw	1	62	746-0897	Cable-Auger Clutch	1
18	710-0599	Screw	2	63	746-0898	Cable-Drive Clutch	1
19	710-0602	Screw	8	64	746-0950	Cable with Trigger Lever	2
20	710-0604	Screw	6	65	748-0190	Spacer	1
21	710-0875	Screw	2	66	748-0234	Spacer-Shoulder	2
22	710-0654A	Screw	4	67	748-0353A	Lift-Shaft Drive	1
23	710-0788	Screw	2	68	750-0547	Spacer	2
24	710-0896	Screw	10	69	750-0903	Spacer-Split	2
25	710-1087	Screw	2	70	750-0904	Spacer-Split	1
26	710-0538	Screw	2	71	750-0909	Spacer	2
27	710-1233	Screw	2	72	750-0995	Spacer	2
28	711-0911	Shaft	1	73	750-0997	Spacer	1
29	711-1042	Shaft	1	74	756-0625	Roller-Cable	3
30	712-0127	Nut Flange	2	75	784-5590	Bracket	1
31	712-0214	Nut Lock	1	76	784-5609	Bracket	1
32	712-0158	Nut Hex	4	77	784-5639	Plate-Track Side	2
33	712-0346	Nut Jam	4	78	784-5642	Plate-Track Lockout	1
34	712-0429	Nut Hex	2	79	784-5648	Cover-Frame	1
35	712-0711	Nut Jam	1	80	784-5687	Bracket-Guide	1
36	713-0233	Chain	1	81	784-5688	Bracket-Guide	1
37	713-0413	Sprocket	1	82	784-5689A	Bracket-Guide	1
38	713-0437	Chain	2	83	717-1211	Gear Ring	2
39	714-0474	Pin Cotter	1	84	717-1209	Gear 12-Tooth	6
40	719-0295A	Housing Track	1	85	717-1210	Gear 18-Tooth	1
41	720-0223	Grip	1	86	741-0542	Pin Dowel	6
42	725-0157	Cable Tie	2	87	718-0188	Carrier	2
43	731-1292	Track	2	88	746-0948	Cable: Strg: Track	2
44	731-1538A	Wheel-Track Drive	2				_

Engine and V-Belts



Ref.				Ref.			
No.	Part No.	Description	Qty.	No.	Part No.	Description	Qty.
1	05896A	Bracket-Idler	1	17	736-0331	Washer-Bell	1
2	629-0071	Cord-Extension 110V	1	18	736-0505	Washer-Flat	1
3	710-0627	Screw-Hex	1	19	748-0234	Spacer	1
4	710-1245	Screw-Hex	1	20	748-0360	Adapter-Pulley	1
5	710-0230	Screw-Hex	1	21	754-0346	V-Belt	1
6	710-0342	Screw-Hex	1	22	754-0430	V-Belt	2
7	710-0696	Screw-Hex	1	23	756-0313	Idler-Flat	1
9	710-0896	Screw-Hex	2	24	756-0569	Pulley Half	4
10	712-0181	Nut-Hex	1	25	756-0967	Pulley-Auger	2
11	731-1324	Cover-Belt	1	26	756-0986	Pulley Half	1
12	732-0710	Spring	1	27	756-0987	Pulley Half	1
13	736-0119	Washer-Lock	1	28	390-987	Electric Start Kit	1
14	736-0242	Washer-Bell	1	29	8520155545	Engine Tec. 8 H.P.	1
15	736-0247	Washer-Flat	1		8520159295	Engine Tec. 10 H.P.	1
16	736-0270	Washer-Bell	1				

MANUFACTURER'S LIMITED WARRANTY FOR:



For TWO YEARS from the date of retail purchase within the United States of America, its possessions and territories, MTD PRODUCTS INC will, at its option, repair or replace, for the original purchaser, free of charge, any part or parts found to be defective in material or workmanship. This warranty covers units which have been operated and maintained in accordance with the operating instructions furnished with the unit, and which have not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance or alteration.

Normal wear parts or components thereof are subject to separate terms as noted below in the "No Fault Ninety Day Consumer Warranty" clause.

All normal wear part failures will be covered on this product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear parts failures will be covered ONLY IF caused by defects in material or workmanship of OTHER component parts. Normal wear parts are defined as batteries*, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires.

How to obtain service: Warranty service is available, with proof of purchase, through your local authorized service dealer. To locate the dealer in your area, please check the yellow pages or contact the Customer Service Department of MTD PRODUCTS INC, P. O. Box 368022, Cleveland, Ohio 44136-9722. Phone 1 (800) 800-7310. The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by the Customer Service Department of MTD PRODUCTS INC.

Transportation charges: Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser.

Units exported out of the United States: MTD PRODUCTS INC does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through MTD PRODUCTS INC's authorized channels of export distribution.

Other Warranties:

- 1. The engine or component parts thereof carry separate warranties from their manufacturers. Please refer to the applicable manufacturer's warranty on these items.
- 2. *Batteries are covered by a 90-day replacement warranty.
- Log splitter pumps, valves and cylinders or component parts thereof are covered by a one year warranty.
- 4. All other warranties, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, are hereby expressly disclaimed in their entirety.
- 5. The provisions as set forth in this warranty provide the sole and exclusive remedy of MTD PRODUCTS INC's obligations arising from the sales of its products. MTD PRODUCTS INC will not be liable for incidental or consequential loss or damage.

How state law relates to this warranty: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Certain disclaimers are not allowed in some states and therefore they may not apply to you under all circumstances.

NOTE: This warranty does not cover routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments. Nor does this warranty cover normal deterioration of the exterior finish due to use or exposure.