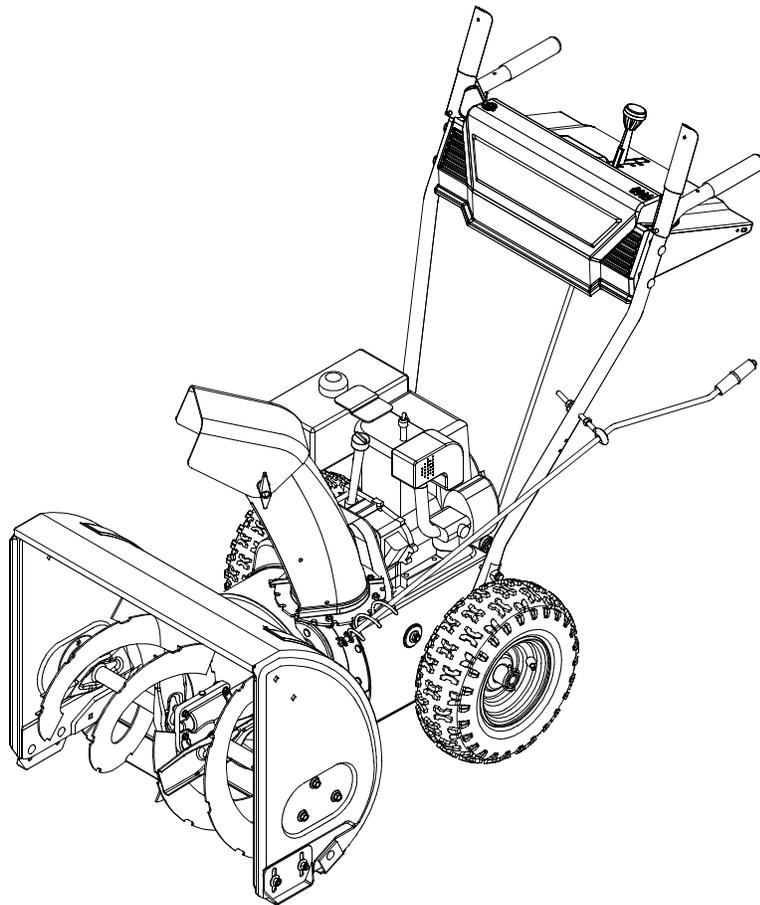




OPERATOR'S MANUAL



**SNOW
THROWER
MODELS
E600E, E610E
E640F, E660G
E6C0F**



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 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, P.O. Box 368022 Cleveland, Ohio 44136-9722.

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

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FINDING MODEL NUMBER

This Operator's Manual is an important part of your new snow thrower. It will help you assemble, prepare and maintain the unit for best performance. Please read and understand what it says.



Before you start assembling your new equipment, please locate the model plate on the equipment and copy the information from it in the space provided below. The information on the model plate is very important if you need help from our Customer Support Department or an authorized dealer.

- You can locate the model number by standing behind the unit in the operating position and looking down at the rear frame below the engine. A sample model plate is explained below. For future reference, please copy the model number and the serial number of the equipment in the space below.

| | |
|----------------|-----------------|
| _____ | _____ |
| (Model Number) | (Serial Number) |

 **MTD PRODUCTS INC**
CLEVELAND, OHIO 44136

Copy the model number here: _____

Copy the serial number here: _____

CALLING CUSTOMER SUPPORT

If you have difficulty assembling this product or have any questions regarding the controls, operation or maintenance of this unit, please call the Customer Support Department.



Call **1- (330) 220-4MTD** (4683) or **1- (800)-800-7310** to reach a Customer Support representative. Please have your unit's model number and serial number ready when you call. See previous section to locate this information. You will be asked to enter the serial number in order to process your call .

For more details about your unit, visit our website at www.mtdproducts.com

SECTION 1: IMPORTANT SAFE OPERATION PRACTICES



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 this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol—**heed its warning**.



WARNING: Engine Exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to State of California to cause cancer and birth defects or other reproductive harm.



DANGER: This machine 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. This machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

Training

1. Read, understand, and follow all instructions on the machine and in the manual(s) before attempting to assemble and operate. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
 2. Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.
 3. Never allow children under 14 years old to operate this machine. Children 14 years old and over should read and understand the operation instructions and safety rules in this manual and should be trained and supervised by a parent.
 4. Never allow adults to operate this machine without proper instruction.
 5. Thrown objects can cause serious personal injury. Plan your snow throwing pattern to avoid discharge of material toward roads, bystanders and the like.
 6. Keep bystanders, helpers, pets and children at least 75 feet from the machine while it is in operation. Stop machine if anyone enters the area.
 7. Exercise caution to avoid slipping or falling, especially when operating in reverse.
7. Never attempt to make any adjustments while engine is running, except where specifically recommended in the operator's manual.
 8. Let engine and machine adjust to outdoor temperature before starting to clear snow.
 9. To avoid personal injury or property damage use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Serious personal injury can occur when gasoline is spilled on yourself or your clothes which can ignite. Wash your skin and change clothes immediately.
 - a. Use only an approved gasoline container.
 - b. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
 - c. Never fuel machine indoors.
 - d. Never remove gas cap or add fuel while the engine is hot or running.
 - e. Allow engine to cool at least two minutes before refueling.
 - f. Never over fill fuel tank. Fill tank to no more than ½ inch below bottom of filler neck to provide space for fuel expansion.
 - g. Replace gasoline cap and tighten securely.
 - h. If gasoline is spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting the engine.
 - i. Never store the machine or fuel container inside where there is an open flame, spark or pilot light (e.g. furnace, water heater, space heater, clothes dryer etc.).
 - j. Allow machine to cool at least 5 minutes before storing.

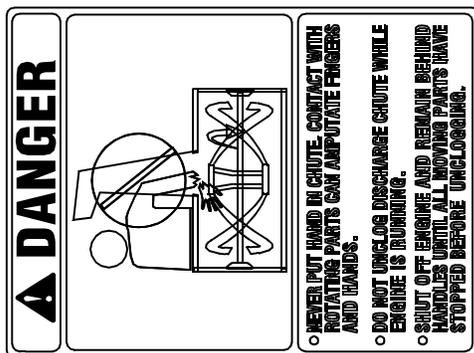
Preparation

1. Thoroughly inspect the area where the equipment is to be used. Remove all door mats, newspapers, sleds, boards, wires and other foreign objects which could be tripped over or thrown by the auger/impeller.
2. Always wear safety glasses or eye shields during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.
3. Do not operate without wearing adequate winter outer garments. Do not wear jewelry, long scarves or other loose clothing which could become entangled in moving parts. Wear footwear which will improve footing on slippery surfaces.
4. Use a grounded three wire extension cord and receptacle for all units with electric start engines.
5. Adjust collector housing height to clear gravel or crushed rock surfaces.
6. Disengage all clutch levers before starting the engine.

Operation

1. Do not put hands or feet near rotating parts, in the auger/impeller housing or discharge chute. Contact with the rotating parts can amputate hands and feet.
2. The auger/impeller clutch lever is a safety device. Never bypass its operation. Doing so, makes the machine unsafe and may cause personal injury.
3. The clutch levers must operate easily in both directions and automatically return to the disengaged position when released.

4. Never operate with a missing or damaged discharge chute. Keep all safety devices in place and working.
5. Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.
6. Do not operate machine while under the influence of alcohol or drugs.
7. Muffler and engine become hot and can cause a burn. Do not touch.
8. Exercise extreme caution when operating on or crossing gravel surfaces. Stay alert for hidden hazards or traffic.
9. Exercise caution when changing direction and while operating on slopes.
10. Plan your snow throwing pattern to avoid discharge towards windows, walls, cars etc. To avoid property damage or personal injury caused by a ricochet.
11. Never direct discharge at children, bystanders and pets or allow anyone in front of the machine.
12. Do not overload machine capacity by attempting to clear snow at too fast of a rate.
13. Never operate this machine without good visibility or light. Always be sure of your footing and keep a firm hold on the handles. Walk, never run.
14. Disengage power to the auger/impeller when transporting or not in use.
15. Never operate machine at high transport speeds on slippery surfaces. Look down and behind and use care when in reverse.
16. If the machine should start to vibrate abnormally, stop the engine, disconnect the spark plug and ground it against the engine. Inspect thoroughly for damage. Repair any damage before starting and operating.
17. Disengage all clutch levers and stop engine before you leave the operating position (behind the handles). Wait until the auger/impeller comes to a complete stop before unclogging the discharge chute, making any adjustments, or inspections.
18. Never put your hand in the discharge or collector openings. Always use a clearing tool to unclog the discharge opening.
19. Use only attachments and accessories approved by the manufacturer (e.g. wheel weights, tire chains, cabs etc.).
20. If situations occur which are not covered in this manual, use care and good judgment. Contact your dealer or telephone 1-800-800-7310 for assistance and the name of your nearest servicing dealer.



Maintenance And Storage

1. Never tamper with safety devices. Check their proper operation regularly.
2. Disengage all clutch levers and stop engine. Wait until the auger/impeller come to a complete stop. Disconnect the spark plug wire and ground against the engine to prevent unintended starting before cleaning, repairing, or inspecting.
3. Check bolts, and screws for proper tightness at frequent intervals to keep the machine in safe working condition. Also, visually inspect machine for any damage.
4. Do not change the engine governor setting or over-speed the engine. The governor controls the maximum safe operating speed of the engine.
5. Snow thrower shave plates and skid shoes are subject to wear and damage. For your safety protection, frequently check all components and replace with original equipment manufacturer's (O.E.M.) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
6. Check clutch controls periodically to verify they engage and disengage properly and adjust, if necessary. Refer to the adjustment section in this operator's manual for instructions.
7. Maintain or replace safety and instruction labels, as necessary.
8. Observe proper disposal laws and regulations for gas, oil, etc. to protect the environment.
9. Prior to storing, run machine a few minutes to clear snow from machine and prevent freeze up of auger/impeller.
10. Never store the machine or fuel container inside where there is an open flame, spark or pilot light such as a water heater, furnace, clothes dryer etc.
11. Always refer to the operator's manual for proper instructions on off-season storage.

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. The safety labels are given below for your reference.



SECTION 2: LOOSE PARTS & HARDWARE PACK

IMPORTANT: After assembly, service engine with gasoline, and check oil level as instructed in the separate engine manual packed with your unit.

Unpacking

- 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).
- Cut along corners and lay end of carton down flat. Remove packing material.
- Roll unit out of carton. Check carton thoroughly for loose parts before discarding.

Tools Required For Assembly

- Pair of pliers
- Two adjustable wrenches

Contents In Carton See Figure 1

- Right and Left Handles
- Handle Panel Assembly
- Chute Assembly
- Chute Directional Control Assembly
- Shift Rod
- Hardware Pack

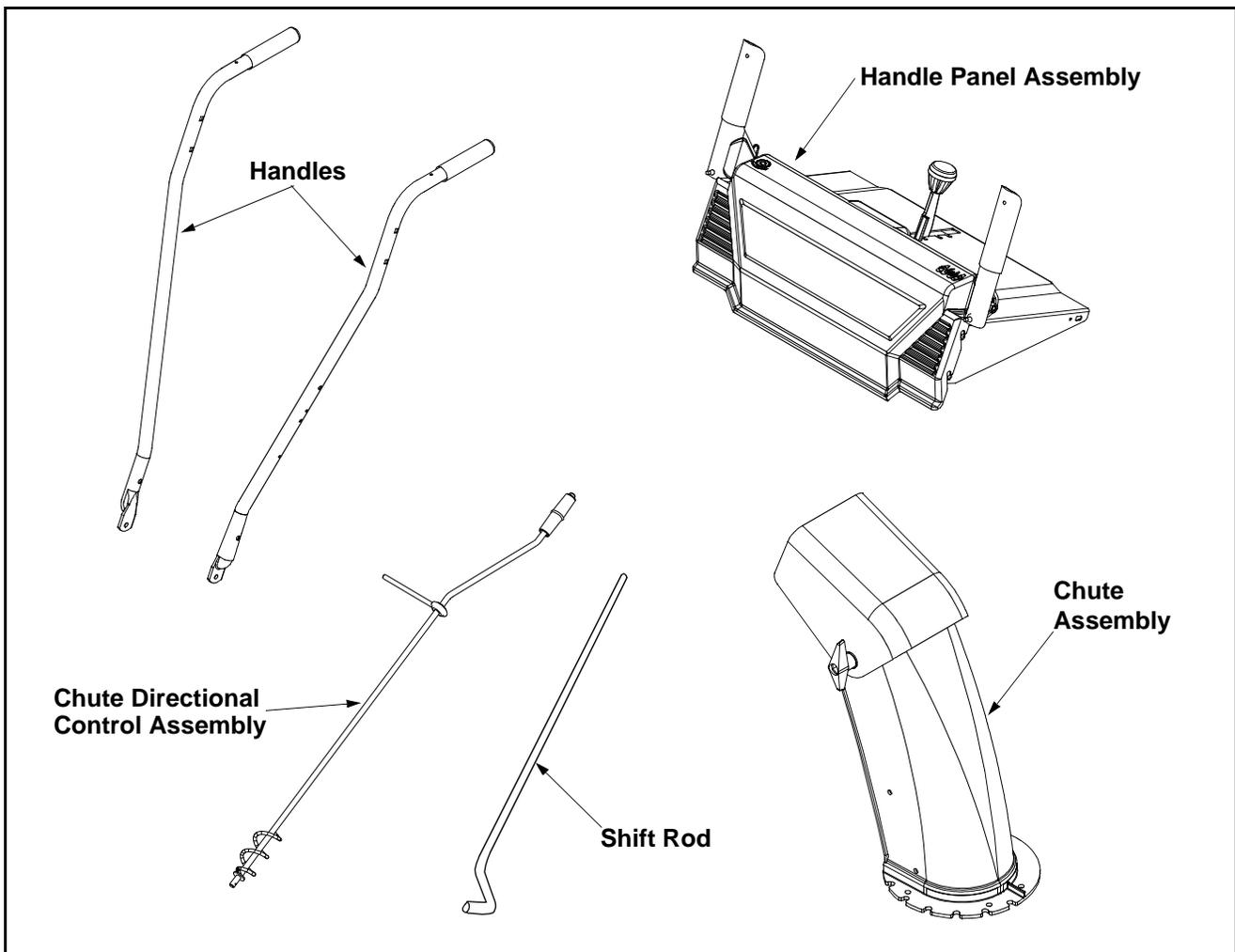
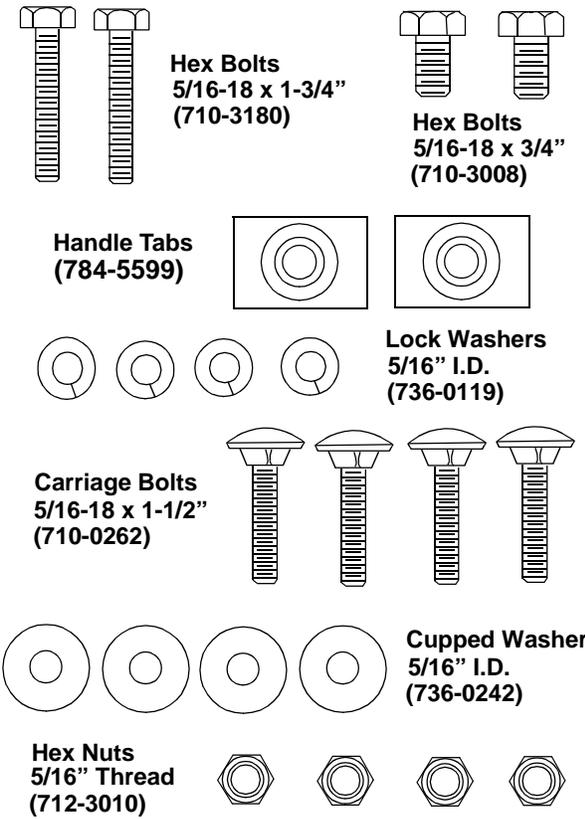
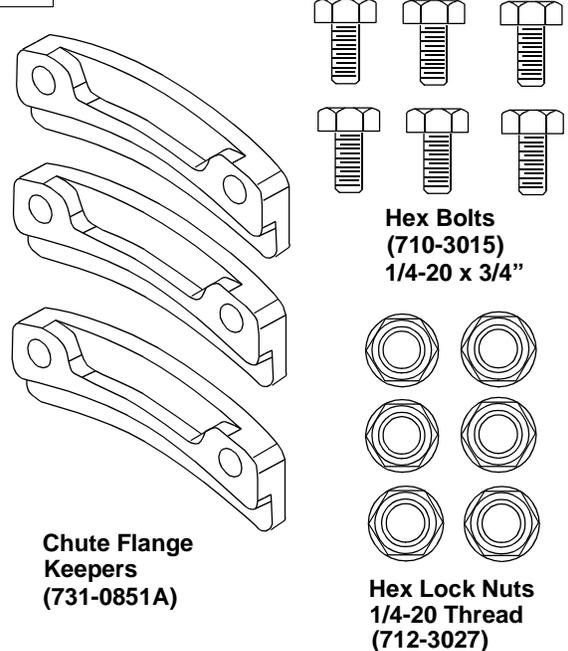


Figure 1

Contents Of Hardware Pack

Lay out the hardware according to the illustration for identification purposes. Part numbers are shown in parentheses. (Hardware pack may contain extra items which are not used on your unit.)

| | |
|--|--|
| <p>A ATTACHING THE HANDLES</p>  <p>Hex Bolts 5/16-18 x 1-3/4" (710-3180)</p> <p>Hex Bolts 5/16-18 x 3/4" (710-3008)</p> <p>Handle Tabs (784-5599)</p> <p>Lock Washers 5/16" I.D. (736-0119)</p> <p>Carriage Bolts 5/16-18 x 1-1/2" (710-0262)</p> <p>Cupped Washers 5/16" I.D. (736-0242)</p> <p>Hex Nuts 5/16" Thread (712-3010)</p> | <p>C ATTACHING THE CHUTE ASSEMBLY</p>  <p>Hex Bolts (710-3015) 1/4-20 x 3/4"</p> <p>Chute Flange Keepers (731-0851A)</p> <p>Hex Lock Nuts 1/4-20 Thread (712-3027)</p> |
| <p>B ATTACHING THE SHIFT ROD AND CONTROL CABLES</p>  <p>Ferrule (711-0677)</p> <p>Flat Washers 3/8" I.D. x 5/8" O.D. (736-0275)</p> <p>Hair Pin Clip (714-0104)</p> <p>Hex Nut 5/16" Thread (712-3010)</p> <p>Cupped Washers 5/16" I.D. (736-0242)</p> <p>Hair Pin Clip (714-0104)</p> | <p>D ATTACHING THE CHUTE DIRECTIONAL CONTROL</p>  <p>Flat Washers 3/8" I.D. x 5/8" O.D. (736-0185)</p> <p>Hex Nut 5/16" Thread (712-3010)</p> <p>Cupped Washers 5/16" I.D. (736-0242)</p> <p>Hair Pin Clip (714-0104)</p> |
| <p>E AUGER SHEAR BOLTS (SPARES)</p>  <p>Shear Bolts (710-0890A)</p> <p>Hex Lock Nuts 5/16" Thread (712-0429)</p> | |

NOTE: The augers are secured to the spiral shaft with two shear bolts and hex lock nuts. If you hit a hard foreign object or an ice jam, the snow thrower is designed so that the bolts may shear. Two replacement shear bolts and nuts are provided for your convenience. Store in a safe place until needed.

IMPORTANT: NEVER replace the auger shear bolts with standard hex bolts. Any damage to the auger gearbox or other components as a result of doing so will NOT be covered by your snow thrower's warranty.

SECTION 3: ASSEMBLING YOUR SNOW THROWER



WARNING: Disconnect the spark plug wire and ground it against the engine to prevent unintended starting.

NOTE: All references to right or left side of the snow thrower are determined from behind the unit in the operating position.

Attaching The Handle Assembly (Hardware A)

- Place right handle in position against the snow thrower so the flat side of the handle is against the snow thrower. Secure bottom hole in handle to snow thrower using 3/4" hex bolt and lock washer. Do not tighten at this time. See Figure 2.
- 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.
- Attach the left handle in the same manner. Do not tighten at this time.

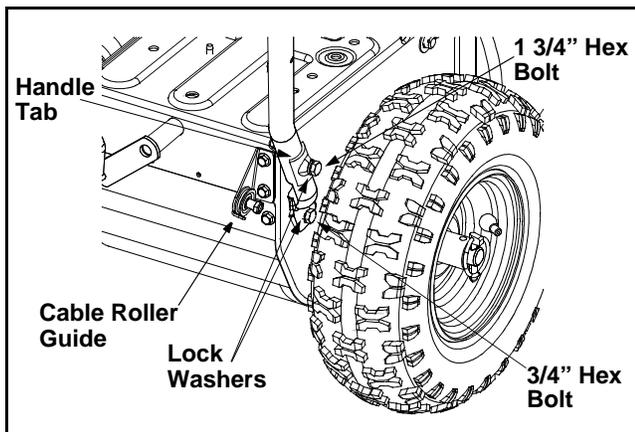


Figure 2

- Place the handle panel in position between the handles. To hold the handle panel in place, depress both controls against the handles. While continuing to hold the right control, release the left control (the auger control lock will keep left control engaged). See Figure 3.
- Fasten right side of the handle panel by inserting two carriage bolts through handle and handle panel (bolts must go through both the plastic and metal parts of the handle panel). Secure with cupped washers (cupped side against handle panel) and hex nuts.
- Secure the left side of the handle panel in the same manner.
- Tighten the four hex bolts used to attach the bottom of the handles to the snow thrower frame.

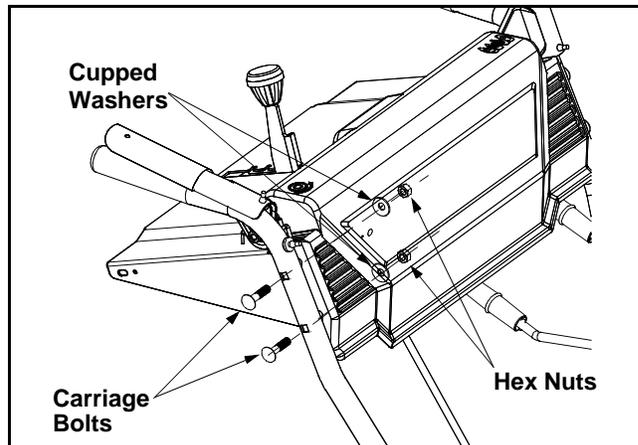


Figure 3

Attaching The Control Cables (Hardware B)

The "Z" end of the cables are hooked into the controls on each handle. See Figure 4.

- Thread the hex lock nuts all the way up the threaded portion of the "Z" ends of the cables.
- Make certain all cables are in the grooves of the cable roller guides. The two roller guides are located in the lower rear of the unit, one on each side. See Figure 2.
- Thread the cable onto the threaded portion of the "Z" end until there is no slack in the cable, but the cable is NOT tight. Do not overtighten cable.



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.

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

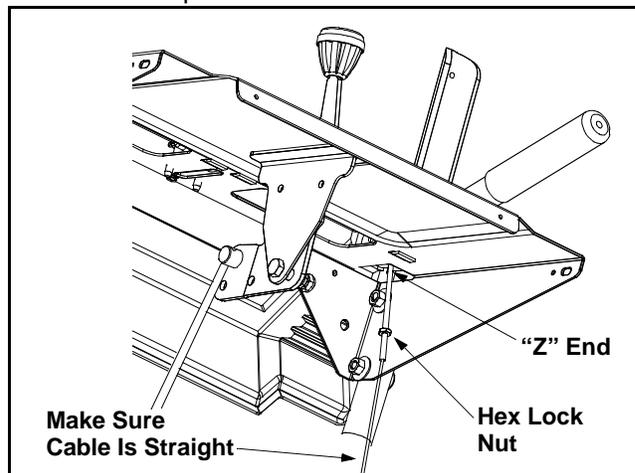


Figure 4

Attaching The Chute Assembly (Hardware C)

Place chute assembly over chute opening, with the opening in the chute assembly facing the front of the unit. Place chute flange keepers beneath lip of chute assembly, with the flat side down. Secure with hex bolts and hex lock nuts. Tighten with two adjustable wrenches. Do not overtighten. See Figure 5.

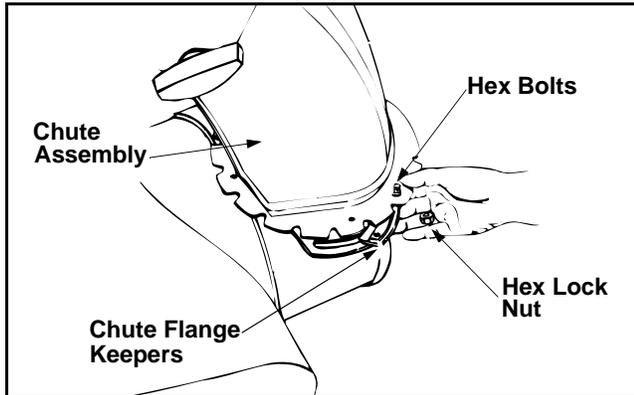


Figure 5

Attaching The Chute Directional Control (Hardware D)

- Thread one hex nut about halfway onto eye bolt on the chute directional control. Insert eye bolt through the hole provided in the left handle. See Figure 6.
- Secure with cupped washer (cupped side against the handle) and other hex nut. Do not tighten until after attaching the other end of the chute directional control.

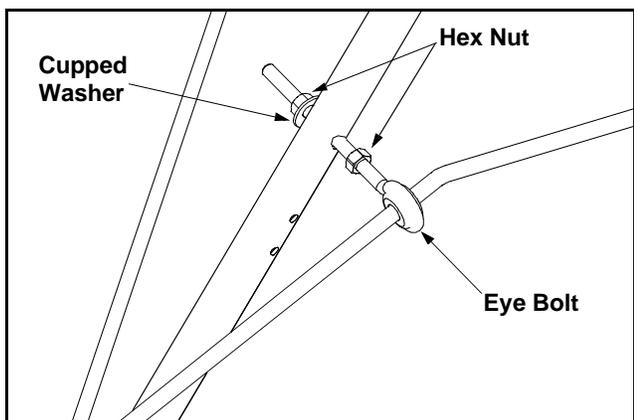


Figure 6

- To align the spiral on the chute directional control, it may be necessary to loosen the carriage bolts and hex lock nuts which secure the lower chute bracket to the extension on the left side of the chute assembly. See Figure 7.

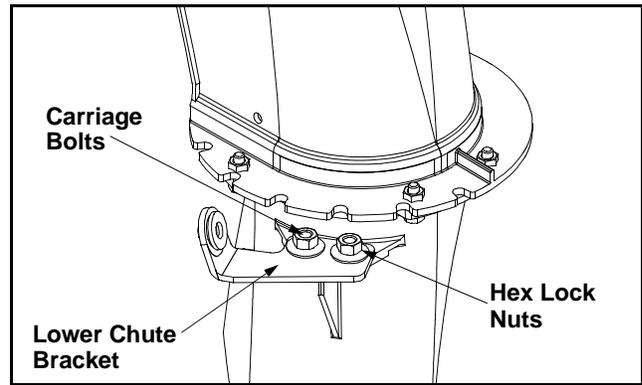


Figure 7

- Place one flat washer on the end of the chute directional control, then insert the end of the control into the hole in the plastic bushing in the lower chute bracket. Place another flat washer on the end of the chute directional control, and insert hairpin clip into hole in the end of control. See Figure 8.

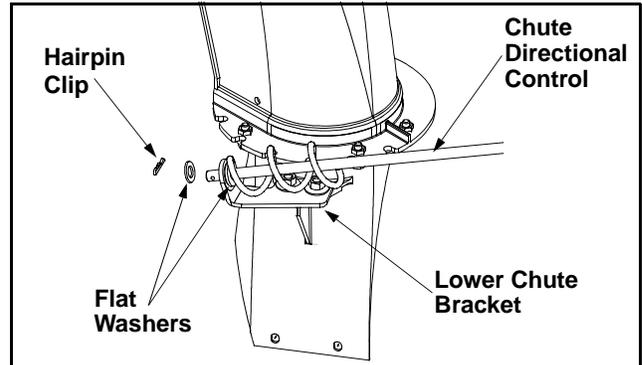


Figure 8

- Adjust the chute bracket so that the spiral on the chute directional control fully engages the teeth on the chute assembly. Tighten the nuts on the lower chute bracket securely. Tighten the hex nut on the eye bolt on the chute directional control.

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

Attaching The Shift Rod (Hardware B)

- Place the shift lever (on the handle panel) in the sixth (6) speed position (all the way forward).
- Place the bent end of the shift rod into the hole in the shift arm assembly. Secure with flat washer and hairpin clip. See Figure 9.
- 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.

- 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.

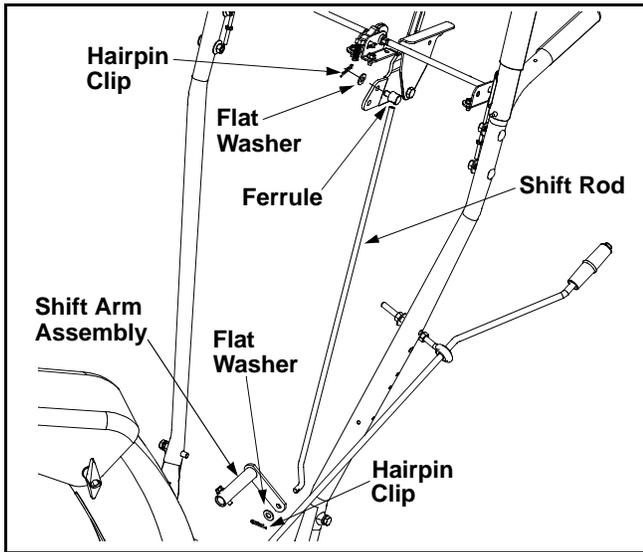


Figure 9

Final Adjustments

Auger Control Adjustment

To check the adjustment of the auger control, push forward on the left hand control, depressing the rubber bumper on end of control. There should be slack in the cable. Release the control. The cable should be straight. Make certain you can depress the auger control 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. Recheck the adjustment. Tighten the jam nut against the cable when correct adjustment is reached. See Figure 10.

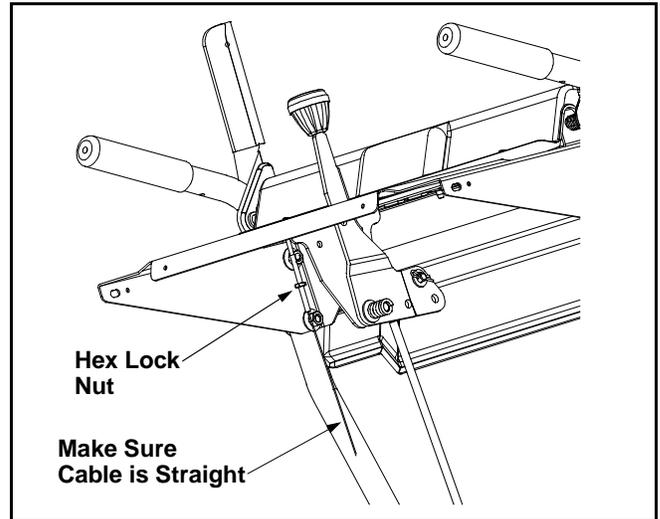


Figure 10

Traction Control And Shift Lever Adjustment

To check the adjustment of the traction control and shift lever, move the shift lever all the way forward to sixth (6) position. With the traction control released, push the snow thrower forward. The unit should move forward freely. Then engage the traction control grip. The wheels should stop turning.

Now release the traction control grip, and push the unit again. Move the shift lever back to the fast reverse position, then all the way forward again. There should be no resistance in the shift lever, and the wheels should keep turning.

If you have resistance when moving the shift lever or the wheels stop when they should not, loosen the jam nut on the traction control cable and unthread the cable one turn. If the wheels do not stop when you engage the traction control grip, loosen the jam nut on the traction control cable and thread the cable in one turn. Recheck the adjustment and repeat as necessary. Tighten the jam nut to secure the cable when correct adjustment is reached.

Adjusting The Skid Shoes

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 11.

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.

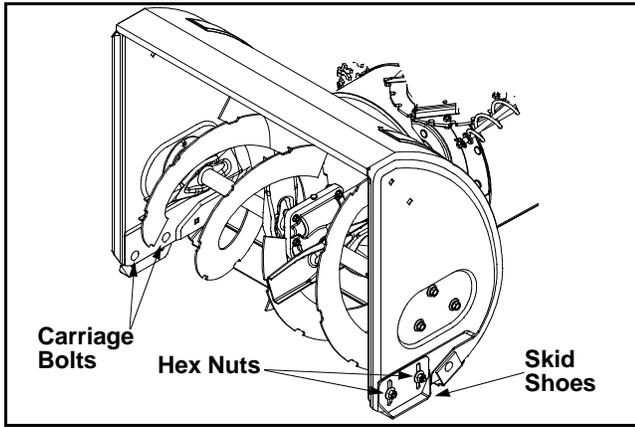


Figure 11

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.

Tire Pressure (Pneumatic Tires)

The tires are over-inflated for shipping purposes. Check tire pressure and reduce to 15 to 20 psi.

NOTE: If the tire pressure is not equal in both tires, the unit may pull to one side or the other.

SECTION 4: KNOW YOUR SNOW THROWER



WARNING: Be familiar with all controls and their proper operation. Know how to stop the machine and disengage them quickly.

Operating Controls

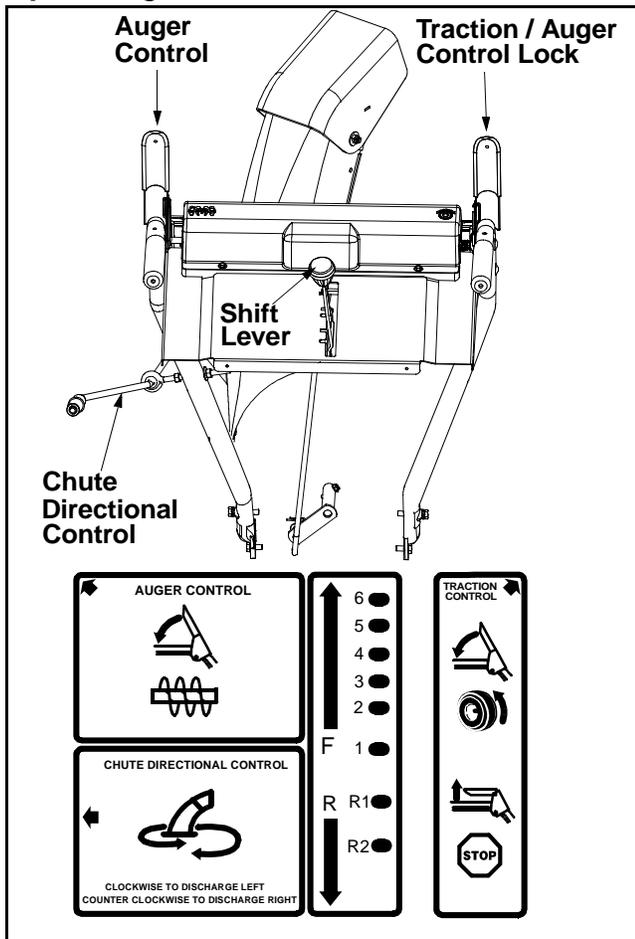


Figure 12

Shift Lever

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. See Figure 12.

Forward - There are six speeds. Position number one (1) is the slowest. Position number six (6) is the fastest.

Reverse - There are two reverse (R) speeds R1 and R2. The "R2" closest to the operator (all the way back) is the faster of the two.

Auger Control

The auger control is located on the left handle. Squeeze the control to engage the augers. Release to stop the snow throwing action. (Traction control must also be released.) See Figure 12.

Traction / Auger Control Lock

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

This same control also locks the auger control so you can turn the chute directional control without interrupting the snow throwing process. If the auger control is engaged with the traction control engaged, the operator can release the auger control (on the left handle) and the augers will remain engaged. Release the traction control to stop both the augers and wheel drive (auger control must also be released). See Figure 12.

Chute Directional Control

The chute directional control is located on left hand side of the snow thrower. See Figure 12.

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

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

Throttle Control

The throttle control is located on the engine. It regulates the speed of the engine. See Figure 14.

Safety Ignition Switch

The ignition key must be inserted in the switch before the unit will start. Remove the ignition key when snow thrower is not in use.

Fuel Shut-off Valve (If Equipped)

The fuel shut-off valve, located under fuel tank, controls fuel flow from tank. See Figure 13.

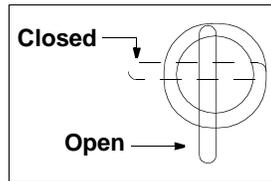


Figure 13

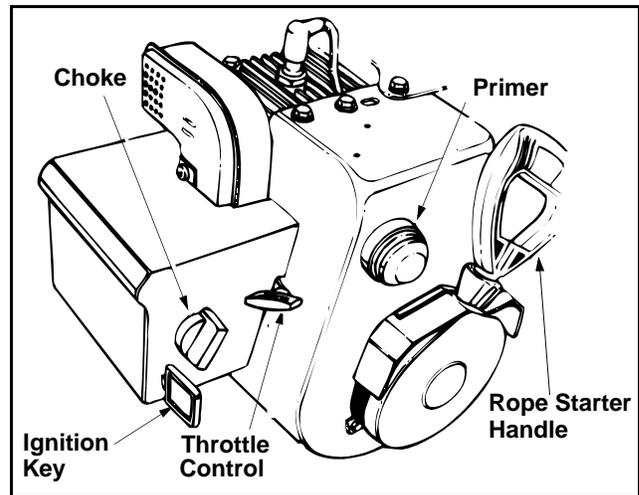


Figure 14

SECTION 5: OPERATING YOUR SNOW THROWER

Before Starting



WARNING: Read, understand, and follow all instructions and warnings on the machine and in this manual before operating.

- The spark plug wire was disconnected for safety. Attach spark plug wire to spark plug before starting.

Gas And Oil Fill-up



WARNING: Use extreme care when handling gasoline. Gasoline is extremely flammable and the vapors are explosive. Never fuel machine indoor or while the engine is hot or running. Extinguish cigarettes, cigars, pipes and other sources of ignition.

- A plastic **cup** was provided inside the fuel fill opening on the fuel tank. Remove and discard this cup before filling up the tank. Use the separate fuel tank cap to close after fill-up.

Starting Engine

- Attach spark plug wire to spark plug. Make certain the metal loop on end of the spark plug wire (inside the boot) is fastened securely over the metal tip on the spark plug. See Figure 15.

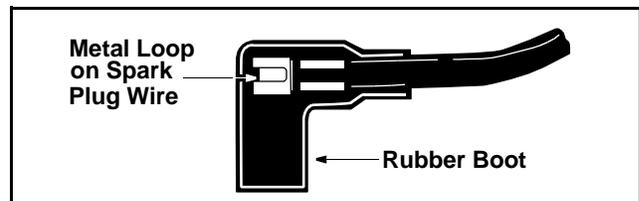


Figure 15

- Make certain the fuel shut-off valve is in the OPEN (vertical) position.
- Make certain the auger and traction controls are in the disengaged (released) position.
- Move throttle control up to FAST position. Insert ignition key into slot. Be certain it snaps into place. Do not turn key. See Figure 16.

NOTE: Engine will not start unless ignition key is inserted into ignition slot in carburetor cover. Do not turn ignition key.

Recoil Starter:

- Rotate choke knob to FULL choke position (cold engine start).
- If engine is warm, place choke in OFF position instead of FULL.
- Push primer button three or four times for cold engine start.
- If engine is warm, push primer button once only.

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

- Grasp starter handle 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.
- Repeat step above until engine starts.
- 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.

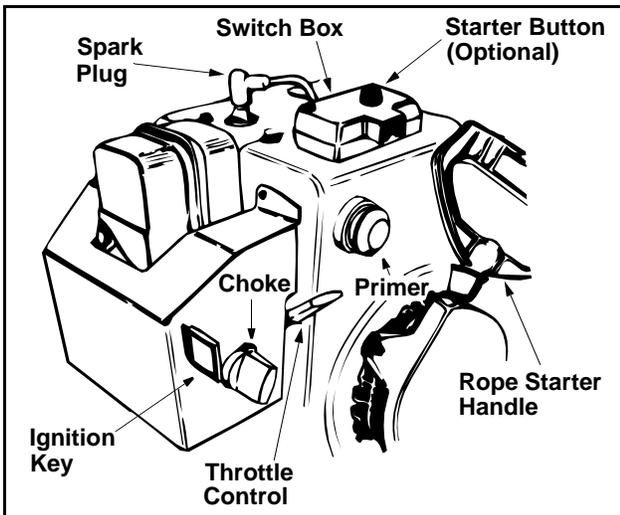


Figure 16

Electric Starter: (If Equipped)



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 cause injury 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.

- Rotate choke knob to OFF position. **Do not prime engine.**

- Connect power cord to switch box on engine. Plug the other end of power cord into a three-hole, grounded 12-volt AC receptacle.
- Push starter button to crank engine. See Figure 16. As you crank the engine, move choke knob to FULL choke position. (cold engine start)
- When engine starts, release starter button, and move choke gradually to OFF. If engine falters, move choke immediately to FULL and then gradually to OFF.

Stopping Engine

- Run engine for a few minutes before stopping to help dry off any moisture on the engine.
- To help prevent possible freeze up of starter, proceed as follows.
 - **Electric Starter:** 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:** With engine running, pull starter rope with a rapid, continuous full arm stroke two or three times. Pulling the starter rope will produce a loud clattering sound, which is not harmful to the engine or starter.
- To stop engine, move throttle control to “stop” or “off” position.
- 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 the ignition key. Keep it in a safe place. Engine will not start without the ignition key.

- 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.

To Engage Drive

- With the engine running near top speed, move shift lever into one of the five 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.
- Squeeze the auger control and the augers will turn. Release it and the augers will stop.
- Squeeze the traction control and the snow thrower will move. Release it and drive motion will stop.
- **NEVER** move shift lever without releasing traction control.

To Engage Augers

To engage the augers and start the snow throwing action, squeeze the auger control against the left handle. Release to stop the augers.

Tire Chains (Optional Equipment)

If your unit is not equipped with tire chains, you may purchase them. Tire chains should be used whenever extra traction is needed.

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: Muffler, engine and surrounding areas become hot and can cause a burn. Do not touch.

- For most efficient snow removal, remove snow immediately after it falls.
- Discharge snow downwind whenever possible. Slightly overlap each previous path.
- 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.
- Be certain to follow the precautions listed under **STOPPING ENGINE** to prevent possible freeze-up.
- Clean the snow thrower thoroughly after each use.

SECTION 6: MAKING ADJUSTMENTS



WARNING: NEVER attempt to make any adjustments while the engine is running, except where specified in the operator's manual.

Chute Assembly Adjustment

The distance snow is thrown can be adjusted by adjusting the angle of the chute assembly. The sharper the angle, the shorter the distance snow is thrown. See Figure 17.

To adjust chute assembly, loosen the hand knob. Pivot the top of the chute assembly to position desired. Retighten the hand knob.

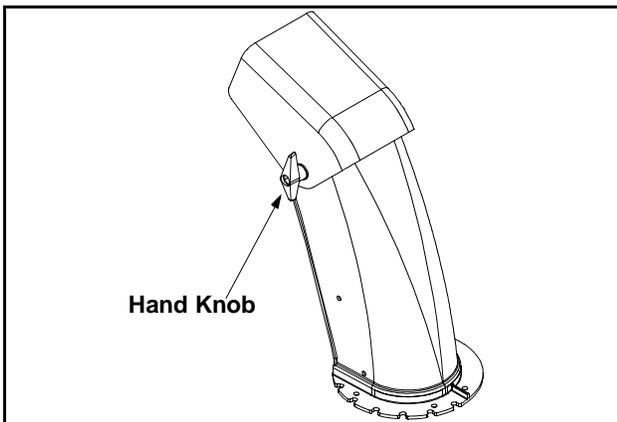


Figure 17

Auger Clutch Adjustment

To adjust the auger control, refer to FINAL ADJUSTMENT section of Assembly Instructions.

Shift Rod Adjustment

To adjust the shift rod, separate the shift rod and ferrule from the shift lever by removing the hairpin clip and flat washer from the ferrule underneath the handle panel. Refer to Figure 9. Adjust as specified in the Assembly Instructions.

Carburetor Adjustment



WARNING: If any adjustments need to be made to the engine while the engine is running (e.g. carburetor), keep clear of all moving parts. Be careful of muffler, engine and other surrounding heated surfaces.

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.

Skid Shoe Adjustment

The space between the shave plate and the ground can be adjusted. Refer to the ASSEMBLY section.

Traction Control Adjustment

Refer to the FINAL ADJUSTMENT section of the Assembly Instructions to adjust the traction control. 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 oil and gasoline or drain the oil and 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 six self-tapping screws.

With the traction control released, there must be clearance between the friction wheel and the drive plate in all positions of the shift lever. With the traction control engaged, the friction wheel must contact the drive plate. See Figure 18.

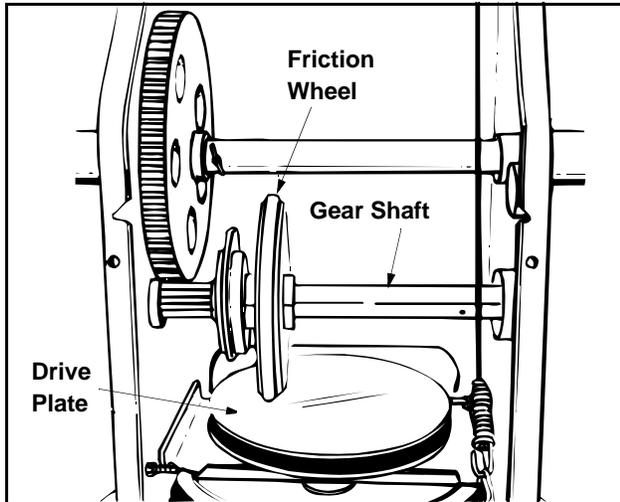


Figure 18

If adjustment is necessary, loosen the hex jam nut on the traction control cable and thread the cable in or out as necessary. Tighten the hex jam 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.

Drive Wheels

The wheels may be adjusted for two different methods of operation. The adjustment is made by placing the klick pins in one of two different holes on the right side of the unit. See Figure 19.

- **One Wheel Driving-** Place klick pin in the outside axle hole on the right side. This position gives power drive to the left wheel only, making the unit easier to maneuver.
- **Both Wheels Driving-** Rotate wheel assembly to align hole in hub with inner hole on axle shaft. Insert klick pin in hole. Outer axle shaft hole should be visible. This position is good for heavy snow as there is power to both wheels.

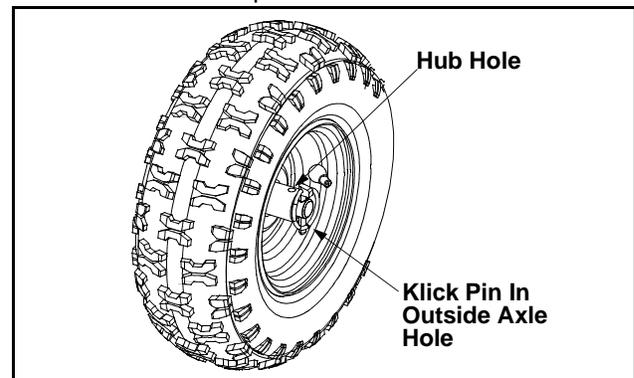


Figure 19

SECTION 7: MAINTAINING YOUR SNOW THROWER



WARNING: Before servicing, repairing, or inspecting, disengage all clutch levers and stop engine. Wait until all moving parts have come to a complete stop. Disconnect spark plug wire and ground it against the engine to prevent unintended starting.

Lubrication

Chute Directional Control

The worm gear on the chute directional control should be greased with multipurpose automotive grease.

Wheels

Oil or spray lubricant into bearings at least once a season. Pull the klick pins and remove wheels, clean and coat axles with a multipurpose automotive grease. See Figure 20.

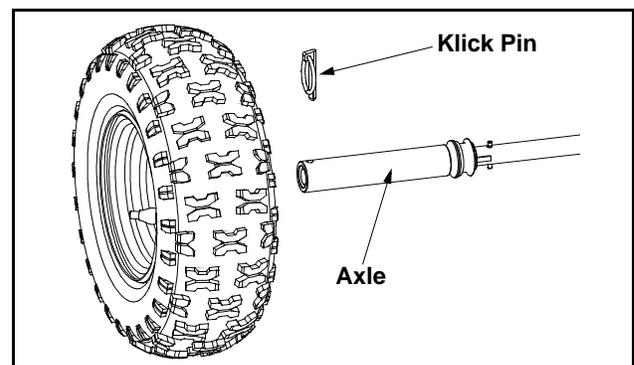


Figure 20

Auger Shaft

At least once a season, remove shear bolts on auger shaft. Oil or spray lubricant inside shaft. Also lubricate the auger bearings at least once a season. See Figure 21.

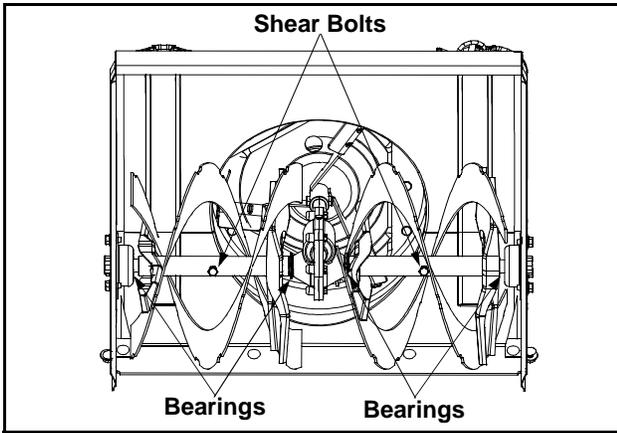


Figure 21

Gear Shaft

Lubricate the gear shaft with a good all-weather multi-purpose light grease at least once a season or after every 25 hours of operation. Refer to Figure 18.

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

Drive And Shifting Mechanism

Remove rear cover. Oil 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 18.

Gear Case

The worm gear case has been filled with grease at the factory. If disassembled for repairs, lubricate with 2 ounces of shell grease, part no. 737-0168.

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.

Engine

Refer to separate engine manual for engine maintenance procedures.



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

Clean Equipment

Be certain to follow the precautions listed under **TO STOP ENGINE** to prevent possible freeze-up.

SECTION 8: SERVICE

Augers

The augers are secured to the spiral shaft with two shear bolts and hex lock nuts. See Figure 21. If you hit a foreign object or ice jam, the snow thrower is designed so that the hex bolts will shear.

If the augers will not turn, check to see if the bolts have sheared. Two replacement shear bolts and hex lock nuts have been provided with the snow thrower. For future use, order part number 710-0890A (shear bolt 5/16-18 x 1.5") and 712-0429 (hex lock nut 5/16-18).

Shave Plate And Skid Shoes

The shave plate and skid shoes on the bottom of the snow thrower are subject to wear. They should be checked periodically and replaced when necessary.

To remove skid shoes, remove the four carriage bolts, bell washers and hex nuts which attach them to the snow thrower. Reassemble new skid shoes with the four carriage bolts, bell washers (cupped side goes against skid shoes) and hex nuts. Make certain

the skid shoes are adjusted to be level.

To remove shave plate, remove the carriage bolts, bell washers and hex nuts which attach it to the snow thrower housing. Reassemble new shave plate, making sure heads of the carriage bolts are to the inside of the housing. Tighten securely.

Engine

Refer to separate engine manual for all engine service procedures.

Belt Removal And Replacement



WARNING: Disconnect the spark plug wire from the spark plug and ground.

Auger Belts

NOTE: It is necessary to remove both belts in order to change either one. If changing just one belt, be certain to check the condition of the other belt (model

600/610E has only one auger belt).

- Remove the plastic belt cover on the front of the engine by removing the two self-tapping screws. See Figure 22.

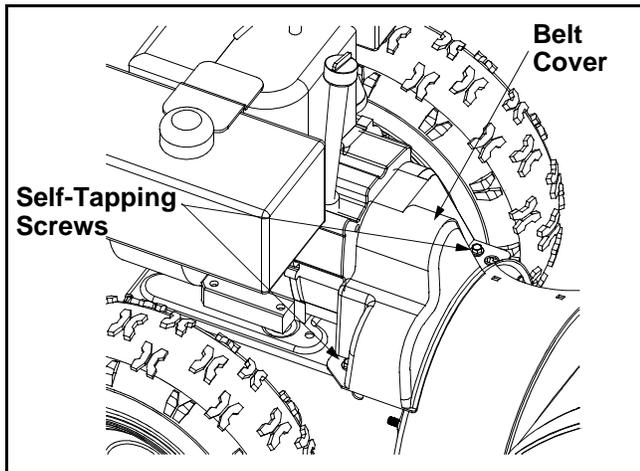


Figure 22

- Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap.
- Tip the snow thrower up and forward so that it rests on the housing.
- Remove six self-tapping screws from the frame cover underneath the snow thrower.
- Roll the front and rear auger belts off the engine pulley. See Figure 23.

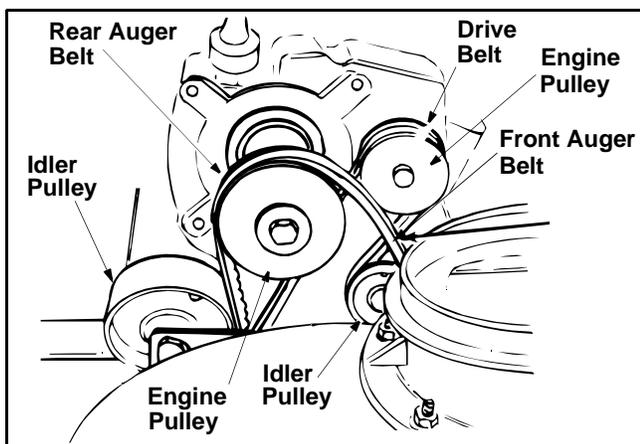


Figure 23

- Unhook the idler spring from the hex bolt on the auger housing. See Figure 24.
- Back out the stop bolt to allow the belts to slip between the bolt and auger pulley. See Figure 25.

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

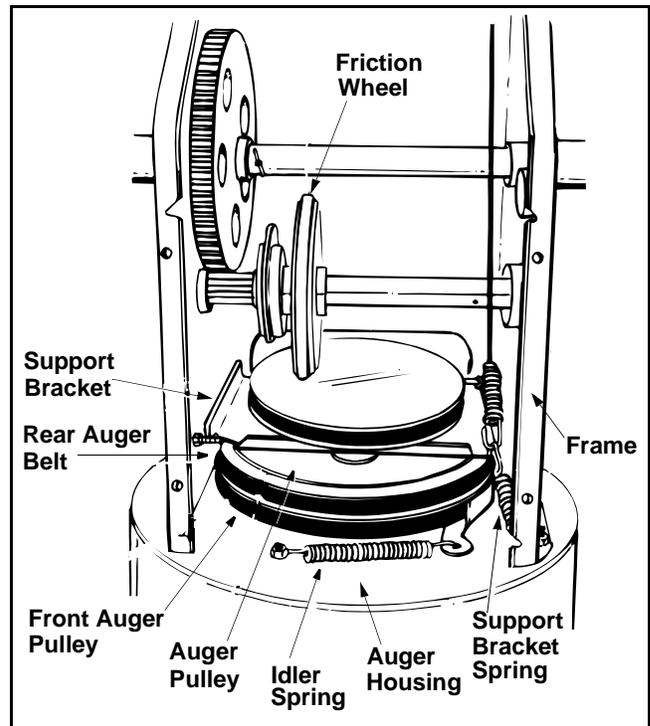


Figure 24

- Lift the rear auger belt from the auger pulley, and slip belt between the support bracket and the auger pulley. See Figure 24. Repeat this step for front auger belt (except models 600/610E).
- Replace both auger drive belts by following instructions in reverse order.

Drive Belt

- Follow steps 1 through 4 of previous instructions.
- Pull idler pulley up, and lift belt off engine pulley and friction wheel disc. See Figure 23.
- Back out the stop bolt until the support bracket rests on the auger pulley. See Figure 25.
- Slip belt between friction wheel and friction wheel disc. 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 25.

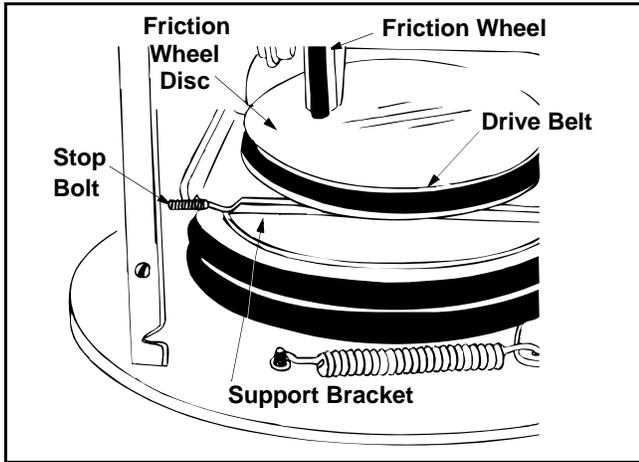


Figure 25

Changing 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.

- Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap.
- Tip the snow thrower up and forward, so that it rests on the housing. See Figure 26.

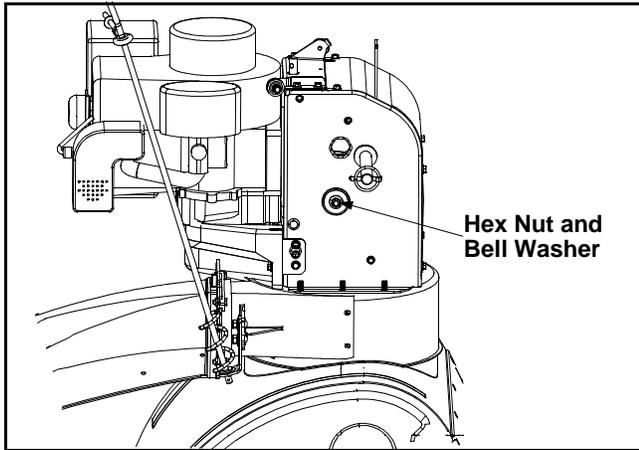


Figure 26

- Remove six self-tapping screws from the frame cover underneath the snow thrower.
- Remove the click pins which secure the wheels, and remove the wheels from the axle.
- Using a wrench to hold the shaft, loosen, but do not completely remove, the hex nut and bell washer on left end of gear shaft. See Figure 26.
- Lightly tap the hex nut to dislodge the ball bearing from the right side of frame. Remove the hex nut and bell washer from left end of shaft.
- Slide the gear shaft to the right and slide the friction wheel assembly from the shaft.
- Remove the six screws from the friction wheel assembly (three from each side). Remove the friction wheel rubber from between the friction wheel plate.

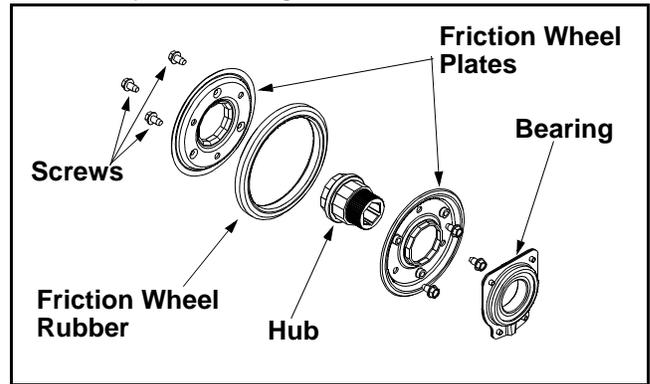


Figure 27

- Reassemble new friction wheel rubber to the friction wheel assembly, tightening the six screws in rotation and with equal force.
- Position the friction wheel assembly up onto the pin of the shift rod assembly, and slide the shaft through the assembly. Reassemble in reverse order.

SECTION 9: OFF-SEASON STORAGE



WARNING: Never store engine with fuel in tank indoors or in enclosed, 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 the engine for storage as instructed in the separate engine operator's manual included with your unit.

- Remove all dirt from exterior of engine and equipment.
- Follow lubrication recommendations in SECTION 7: MAINTAINING YOUR SNOW THROWER.

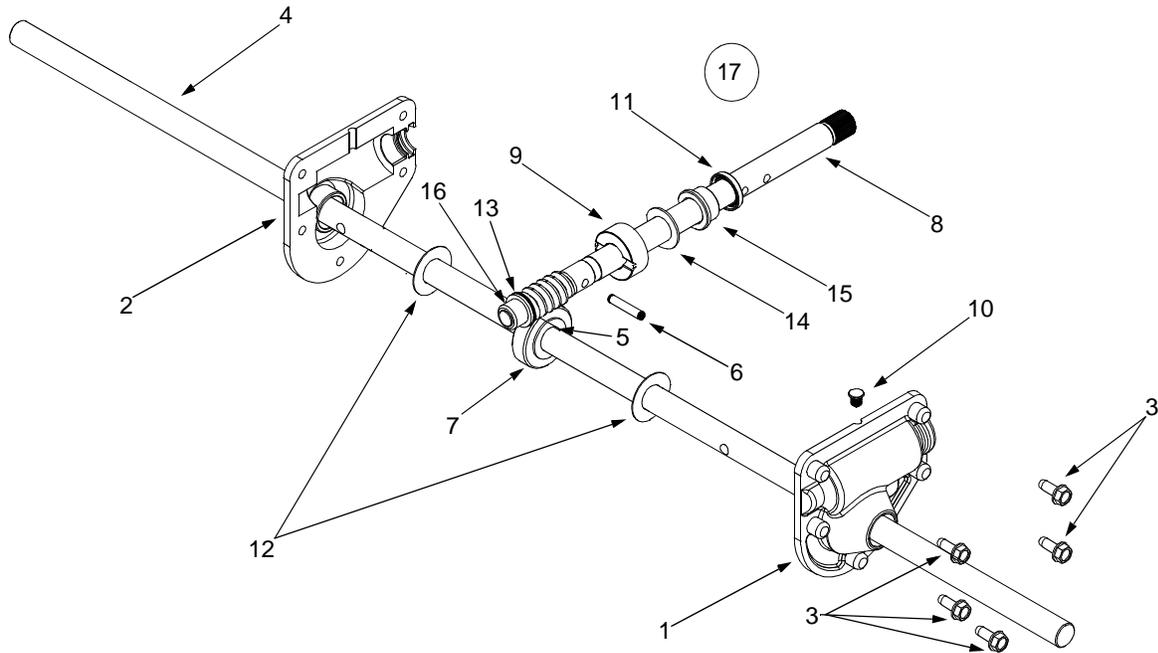
NOTE: When storing any type of power equipment in an poorly ventilated or metal storage shed, care should be taken to rustproof the equipment, especially springs, cables and all moving parts.

SECTION 10: TROUBLE SHOOTING GUIDE

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

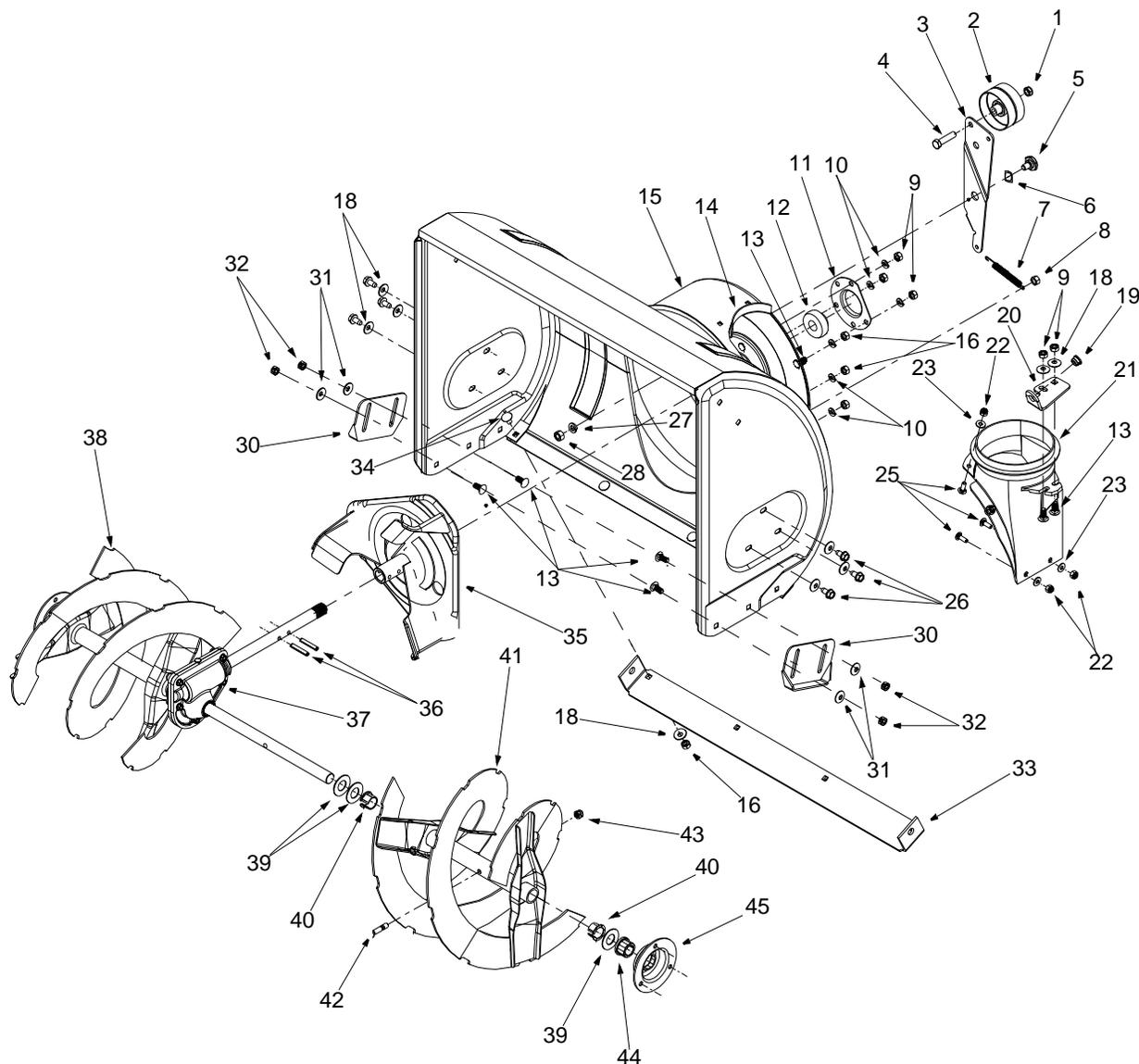
NOTE: For repairs beyond the minor adjustments listed above, contact your nearest authorized service dealer or call 1-800-800-7310 for the Customer Support Center. Refer to separate engine manual packed with your snow thrower for more engine related information.

Models E600E, E610E, E640F, E660G, and E6C0F



| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|----------|------------------------|----------|----------|---------------------------------|
| 1 | 618-0123 | RH Reducer Housing | 10 | 721-0325 | Grease Plug |
| 2 | 618-0124 | LH Reducer Housing | 11 | 721-0327 | Grease Seal |
| 3 | 710-0642 | Hex Screw 1/4-20 x .75 | 12 | 736-0351 | Flat Washer .76 x 1.5 x .030 |
| 4 | 711-0908 | Spiral Axle 24" | 13 | 736-0369 | Flat Washer .508 x 1.0 x .020 |
| | 711-0909 | Spiral Axle 26" | 14 | 736-0445 | Flat Washer .76 x 1.5 x .060 |
| | 711-0910 | Spiral Axle 28" | 15 | 741-0662 | Flange Bearing .75 x 1.0 x .59 |
| 5 | 714-0161 | Key | 16 | 741-0663 | Flange Bearing .75 x 1.0 x .925 |
| 6 | 715-0143 | Pin-Spiral | 17 | 618-0120 | Ass'y. Complete 24" |
| 7 | 717-0528 | Worm Gear, 20T | | 618-0121 | Ass'y. Complete 26" |
| 8 | 717-0526 | Worm Shaft | | 618-0122 | Ass'y. Complete 28" |
| 9 | 718-0186 | Thrust Collar | | | |

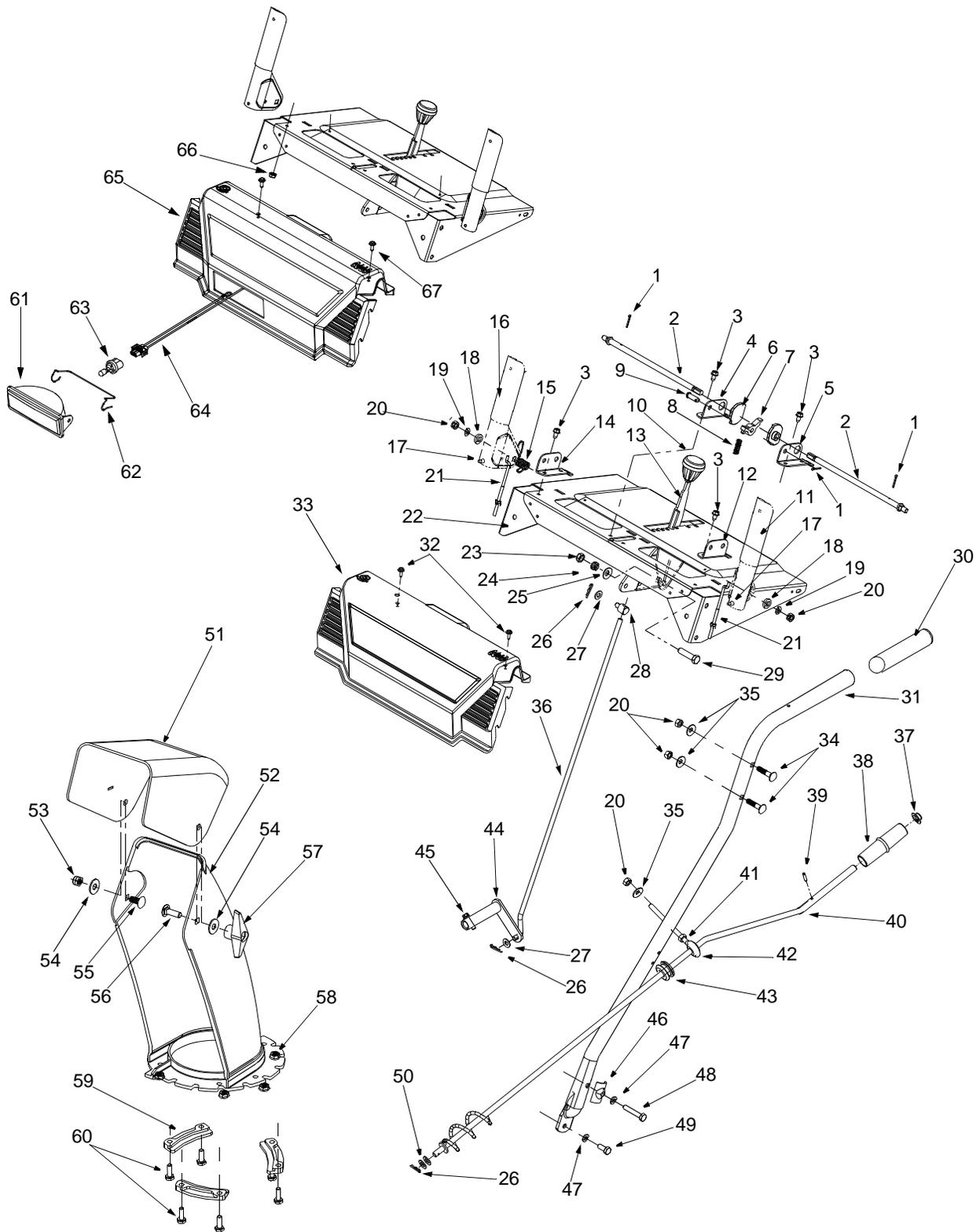
Models E600E, E610E, E640F, E660G, and E6C0F



Models E600E, E610E, E640F, E660G, and E6C0F

| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|-----------|-----------------------------|----------|-----------|-----------------------------|
| 1 | 712-0116 | Lock Jam Nut 3/8-24 | 27 | 736-0169 | Lock Washer 3/8 |
| 2 | 756-0178 | Flat Idler | 28 | 712-0798 | Hex Nut 3/8-16 |
| 3 | 784-5632A | Auger Idler Arm | 30 | 784-5580 | Snow Shoe |
| 4 | 710-0459A | Hex Cap Screw 3/8-24 x 1.50 | 31 | 736-0242 | Bell Washer |
| 5 | 738-0281 | Shoulder Screw | 32 | 712-3010 | Hex Nut 5/16-18 |
| 6 | 736-0174 | Wave Washer | 33 | 784-5581A | 24" Shave Plate |
| 7 | 732-0611 | Extension Spring | | 784-5579A | 26" Shave Plate |
| 8 | 712-3068 | Hex Nut 5/16-18 | | 784-5582A | 28" Shave Plate |
| 9 | 712-3010 | Hex Nut 5/16-18 | 34 | 710-0260 | Carriage Bolt 5/16-18 x .62 |
| 10 | 736-0119 | Lock Washer 5/16 | 35 | 684-0065 | Impeller Assembly |
| 11 | 05931 | Housing | 36 | 715-0114 | Pin |
| 12 | 741-0309 | Ball Bearing | 37 | 618-0120 | 24" Gear Assembly |
| 13 | 710-0451 | Carriage Bolt 5/16-18 x .75 | | 618-0121 | 26" Gear Assembly |
| 14 | 705-5226 | Reinforcement Chute | | 618-0122 | 28" Gear Assembly |
| 15 | 684-0039C | 24" Housing Assembly | 38 | 605-5188A | Spiral 24" RH |
| | 684-0040C | 26" Housing Assembly | | 605-5192A | Spiral 26" RH |
| | 684-0041C | 28" Housing Assembly | | 605-5196A | Spiral 28" RH |
| 16 | 712-3010 | Hex Nut 5/16-18 | 39 | 736-0188 | Flat Washer |
| 18 | 736-0242 | Bell Washer | 40 | 741-0493A | Flange Bushing |
| 19 | 741-0475 | Bushing | 41 | 605-5189A | Spiral 24" LH |
| 20 | 784-5647 | Chute Crank Bracket | | 605-5193A | Spiral 26" LH |
| 21 | 731-1379A | Chute Adapter | | 605-5197A | Spiral 28" LH |
| 22 | 712-0324 | Hex Lock Nut 1/4-20 | 42 | 710-0890A | Shear Bolt 5/16-18 x 1.5 |
| 23 | 736-0463 | Flat Washer | 43 | 712-0429 | Lock Nut 5/16-18 |
| 25 | 710-0703 | Carriage Screw 1/4-20 x .75 | 44 | 741-0245 | Hex Flange Bearing |
| 26 | 710-0604 | Hex Washer Screw 5/16-18 | 45 | 784-5618 | Bearing Housing |

Models E600E, E610E, E640F, E660G, and E6C0F

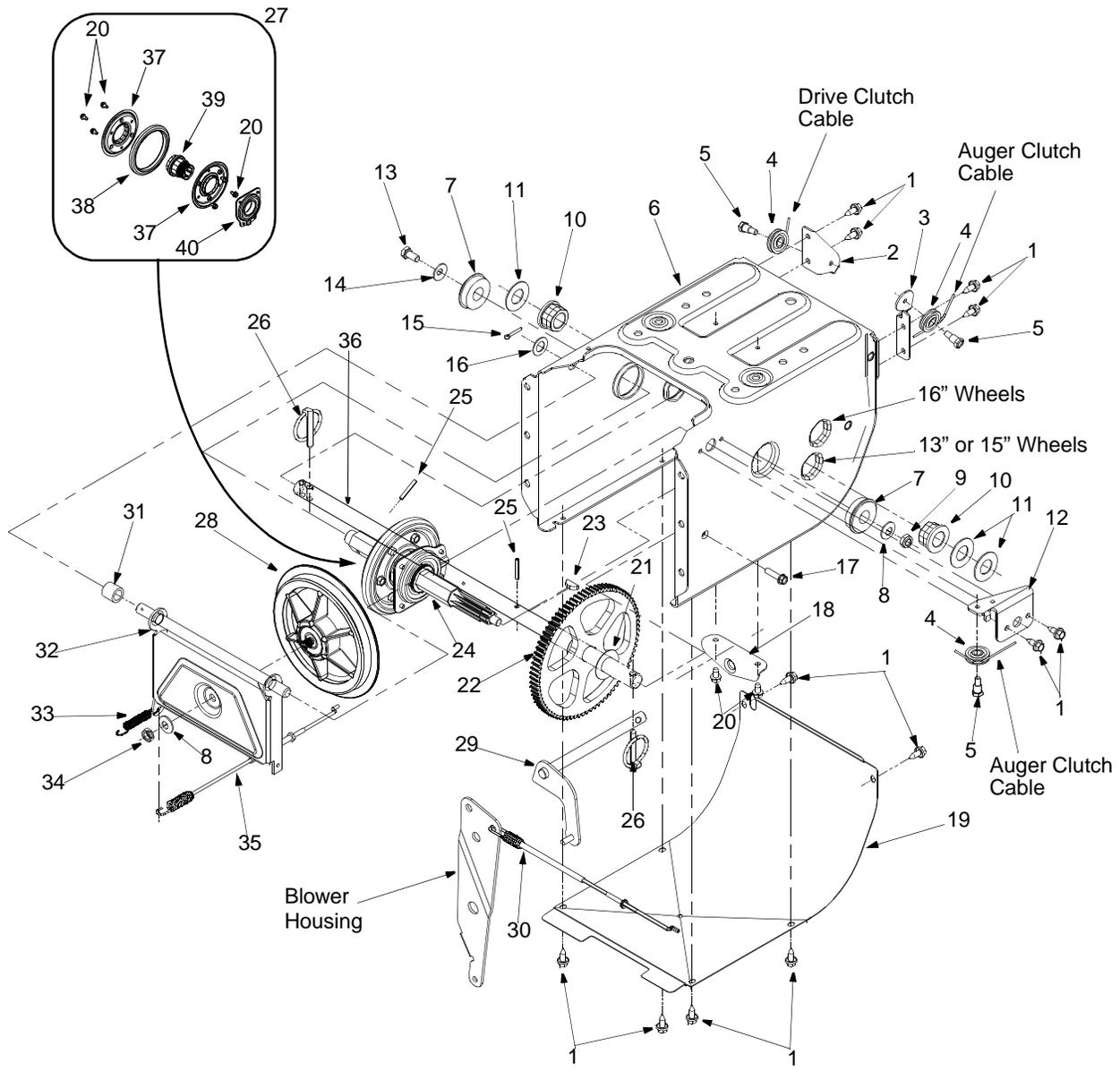


Models E600E, E610E, E640F, E660G, and E6C0F

| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|-----------|------------------------------|----------|-----------|----------------------------------|
| 1 | 714-0507 | Cotter Pin | 34 | 710-0262 | Carriage Bolt 5/16-18 x 1.50 |
| 2 | 747-0877 | Rod | 35 | 736-0242 | Bell Washer .340 ID x .872 OD |
| 3 | 710-0599 | Hex Washer Screw 1/4-20 x .5 | 36 | 747-0798A | Shift Rod |
| 4 | 784-5680 | Handle Support Bracket - RH | 37 | 726-0100 | Push Cap |
| 5 | 784-5679 | Handle Support Bracket - LH | 38 | 720-0201A | Chute Knob |
| 6 | 748-0362 | Cam Lock Handle | 39 | 715-0138 | Roll Pin |
| 7 | 748-0363 | Handle Lock Pawl | 40 | 705-5204A | Chute Crank |
| 8 | 732-0145 | Compression Spring | 41 | 712-3010 | Hex Nut 5/16 - 18 |
| 9 | 711-0653 | Clevis Pin | 42 | 747-0697 | Chute Crank Eyebolt |
| 10 | 720-0232 | Knob | 43 | 735-0234 | Rubber Grommet |
| 11 | 684-0037 | Handle Assy - LH | 44 | 684-0008A | Shift Arm Assembly |
| 12 | 784-5681 | Handle Support Bracket - LH | 45 | 710-0788 | Hex Washer Screw 1/4-20 x 1.0 |
| 13 | 784-5619A | Shift Handle | 46 | 784-5599 | Handle Tab |
| 14 | 784-5682 | Handle Support Bracket - RH | 47 | 736-0119 | Lock Washer 5/16 |
| 15 | 732-0746 | Torsion Spring | 48 | 710-3180 | Hex Cap Screw 5/16-18 x 1.75 |
| 16 | 684-0036 | Handle Assy - RH | 49 | 710-3008 | Hex Cap Screw 5/16-18 x .75 |
| 17 | 735-0199A | Rubber Bumper | 50 | 736-0185 | Flat Washer |
| 18 | 736-0509 | Washer | 51 | 731-0921 | Upper Chute |
| 19 | 736-0119 | Lock Washer 5/16 | 52 | 731-1300A | Lower Chute |
| 20 | 712-3010 | Hex Nut 5/16-18 | 53 | 712-0429 | Hex Lock Nut 5/16-18 |
| 21 | 746-0778 | Cable | 54 | 736-0159 | 5/16 Washer |
| 22 | 684-0103 | Panel | 55 | 710-0451 | Carriage Bolt 5/16-18 x .75 |
| 23 | 712-0116 | Jam Lock Nut 3/8-24 | 56 | 710-0276 | Carriage Screw 5/16-18 x 1.0 |
| 24 | 732-0193 | Compression Spring | 57 | 720-0284 | Knob |
| 25 | 736-0105 | Bell Washer | 58 | 712-3027 | Hex Lock Nut 1/4-20 |
| 26 | 714-0104 | Cotter Pin | 59 | 731-0851A | Flange Keeper |
| 27 | 736-0275 | Flat Washer 5/16 | 60 | 710-3015 | Hex Cap Screw 1/4-20 x .75 |
| 28 | 711-0677 | Ferrule | 61 | 725-1672 | Lens Housing Assembly † |
| 29 | 710-0459A | Hex Cap Screw 3/8-24 x 1.50 | 62 | 747-1136 | Headlight Retaining Wire † |
| 30 | 720-0274 | Grip | 63 | 725-1658 | Halogen Light † |
| 31 | 749-0910B | Handle - RH | 64 | 629-0059 | Light Harness † |
| | 749-0911B | Handle - LH | 65 | 731-1392 | Panel w/light † |
| 32 | 710-1003 | Hex Washer Screw | 66 | 712-0271 | Hex Nut 1/4-20 † |
| 33 | 731-1391 | Handle Panel | 67 | 710-1003 | Hex Washer Screw #10-16 x .625 † |
| | 731-1393 | Handle Panel w/ Top Light | | | |

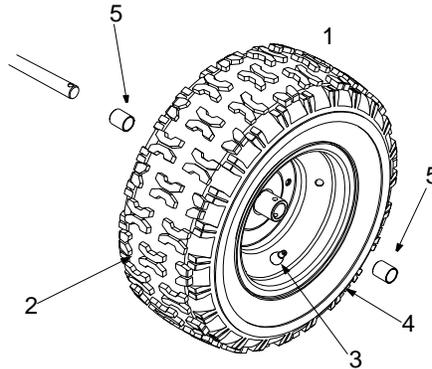
† If Equipped

Models E600E, E610E, E640F, E660G, and E6C0F



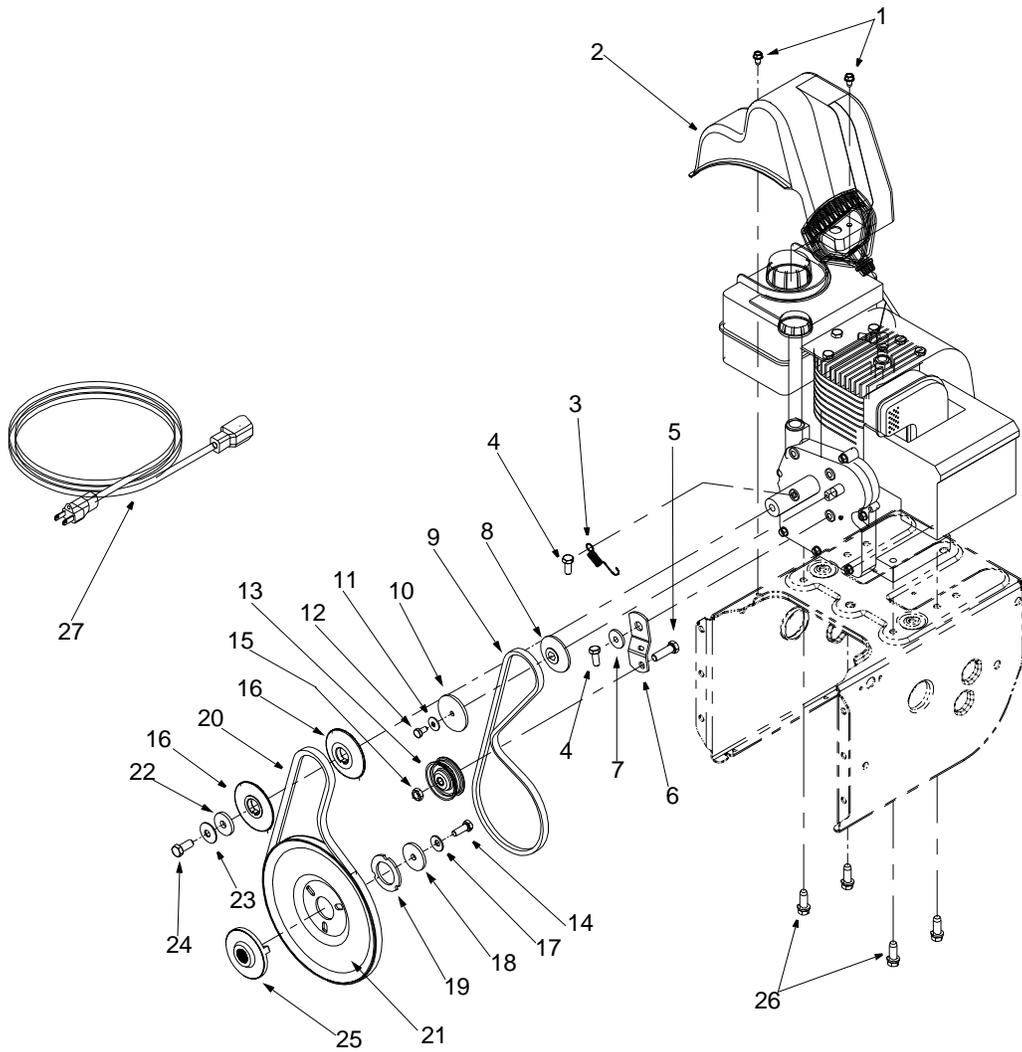
Models E600E, E610E, E640F, E660G, and E6C0F

| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|-----------|-------------------------------|----------|-----------|---------------------------------|
| 1 | 710-1652 | Hex Screw | 22 | 717-1445 | Gear |
| 2 | 784-5688 | Drive Cable Guide Bracket | 23 | 714-0126 | Key |
| 3 | 784-5687A | Auger Clutch Cable Bracket | 24 | 717-1444 | 7-Tooth Shaft |
| 4 | 756-0625 | Roller Cable | 25 | 715-0249 | Roll Pin |
| 5 | 738-0924 | Hex Screw 1/4-28 | 26 | 714-0143 | Klik Pin |
| 6 | 684-0030 | Frame Assembly | 27 | 684-0042B | Friction Wheel Assembly |
| 7 | 741-0563 | Ball Bearing | 28 | 656-0012A | Friction Disc Wheel |
| 8 | 736-0105 | Bell Washer | 29 | 684-0013B | Wheel Shift Rod Assembly |
| 9 | 712-0116 | Lock Jam Nut | 30 | 746-0897 | Drive Cable |
| 10 | 741-0598 | Hex Flange Bearing | 31 | 748-0190 | Spacer |
| 11 | 736-0188 | Flat Washer | 32 | 684-0021 | Friction Wheel Bracket Assembly |
| 12 | 784-5689A | Front Support Guide Bracket | 33 | 732-0264 | Extension Spring |
| 13 | 710-0538 | Lock Hex Screw | 34 | 712-0711 | Jam Nut 3/8-24 |
| 14 | 736-0242 | Bell Washer .340 ID x .872 OD | 35 | 746-0898 | Drive Cable |
| 15 | 714-0474 | Cotter Pin | 36 | 738-0869 | Axle 13" Wheels |
| 16 | 736-0160 | Flat Washer .536 ID x .930 OD | | 738-0830 | Axle 16" Wheels |
| 17 | 710-0788 | Hex Washer Screw 1/4-20 | 37 | 784-5617A | Friction Plate |
| 18 | 784-5590 | Frame Shift Bracket | 38 | 735-0243 | Friction Wheel Rubber |
| 19 | 784-5638 | Frame Cover | 39 | 718-0301A | Friction Wheel Hub |
| 20 | 710-0599 | Hex Washer Screw 1/4-20 | 40 | 618-0063 | Friction Wheel Bearing |
| 21 | 736-0351 | Flat Washer .760 ID x .50 OD | | | |



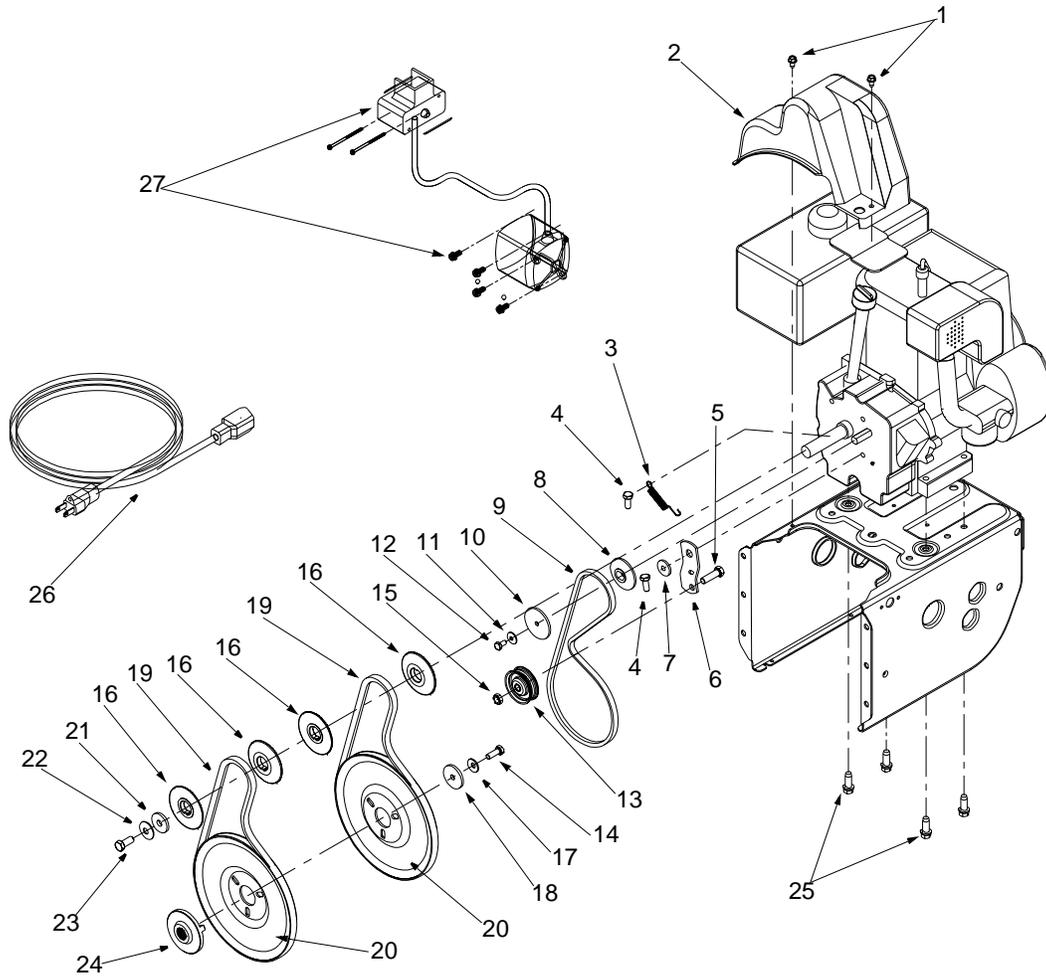
| WHEEL ASSEMBLIES | | | | | | |
|------------------|------------|---------------------------------------|----------------------------|----------------------------|---------------------------|-------------------------------------|
| MODEL NUMBER | SIZE | REF. NO. 1 WHEEL ASS'Y COMPLETE | REF. NO. 2 TIRE ONLY | REF. NO. 3 AIR VALVE | REF. NO. 4 RIM ONLY | REF. NO. 5 SLEEVE BEARING (2) |
| 31AE600E | 13 x 5 | 734-1714 | 734-1527 | 734-0255 | 734-1713 | 741-0401 |
| 31AE610E | 13 x 5 | 734-1714 | 734-1527 | 734-0255 | 734-1713 | 741-0401 |
| 31AE640F | 16.5 x 4.8 | 734-1709 | 734-1530 | 734-0255 | 734-1708 | 741-0401 |
| 31AE660G | 16 x 6.5 | 734-1712 | 734-1525 | 734-0255 | 734-1711 | 741-0401 |
| 31AE6C0F | 16.5 x 4.8 | 734-1709 | 734-1530 | 734-0255 | 734-1708 | 741-0401 |

E600E, E610E



| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|----------|-----------------------------|----------|-------------|-------------------------------|
| 1 | 710-1652 | Hex Washer Screw 1/4-20 x.5 | 15 | 712-0181 | Lock Jam Nut 3/8-16 |
| 2 | 731-1324 | Belt Cover | 16 | 756-0569 | Pulley Half |
| 3 | 732-0339 | Extension Spring | 17 | 736-0242 | Bell Washer |
| 4 | 710-0627 | Hex Screw 5/16-24 x .75 | 18 | 736-0505 | Flat Washer |
| 5 | 710-3005 | Hex Cap Screw 3/8-16 x 1.25 | 19 | 736-0507 | Washer |
| 6 | 05896A | Drive Clutch Bracket | 20 | 754-0430A | Belt |
| 7 | 748-0234 | Shoulder Spacer | 21 | 756-0967 | Auger Pulley |
| 8 | 756-0985 | Pulley Half | 22 | 736-0247 | Flat Washer |
| 9 | 754-0343 | V-Belt | 23 | 736-0331 | Bell Washer |
| 10 | 756-0984 | Pulley Half | 24 | 710-0696 | Hex Cap Screw 3/8-24 |
| 11 | 736-0270 | Bell Washer | 25 | 748-0360 | Pulley |
| 12 | 710-0230 | Hex Cap Screw 1/4-28 x .50 | 26 | 710-0654A | Hex Washer Screw 3/8-16 x 1.0 |
| 13 | 756-0313 | Flat Idler | 27 | 629-0071 | Extension Cord |
| 14 | 710-1245 | Lock Cap Screw 5/16-24 | | OEM-390-986 | Electric Start Kit |

E640F, E660G, and E6C0F



| REF. NO. | PART NO. | DESCRIPTION | REF. NO. | PART NO. | DESCRIPTION |
|----------|----------|--------------------------------|----------|-------------|---------------------------|
| 1 | 710-1652 | Hex Washer Screw 1/4-20 x .625 | 15 | 712-0181 | Lock Jam Nut 3/8-16 |
| 2 | 731-1324 | Belt Cover | 16 | 756-0569 | Pulley Half |
| 3 | 732-0710 | Extension Spring | 17 | 736-0242 | Bell Washer |
| 4 | 710-0627 | Hex Screw 5/16-24 x .75 | 18 | 736-0505 | Flat Washer |
| 5 | 710-3005 | Hex Cap Screw 3/8-16 x 1.25 | 19 | 754-0430A | Belt |
| 6 | 05896A | Drive Clutch Idler Bracket | 20 | 756-0967 | Auger Pulley |
| 7 | 748-0234 | Shoulder Spacer | 21 | 736-0247 | Flat Washer 3/8 x 1.25 OD |
| 8 | 756-0987 | Pulley Half | 22 | 736-0331 | Bell Washer |
| 9 | 754-0346 | V-Belt | 23 | 710-0696 | Hex Cap Screw 3/8-24 |
| 10 | 756-0986 | Pulley Half | 24 | 748-0360 | Adapter Pulley |
| 11 | 736-0270 | Bell Washer | 25 | 710-0654A | Hex Screw 3/8-16 x 1.0 |
| 12 | 710-0230 | Hex Cap Screw 1/4-28 x .50 | 26 | 629-0071 | Extension Cord |
| 13 | 756-0313 | Flat Idler | 27 | OEM-390-987 | Electric Start |
| 14 | 710-1245 | Lock Hex Cap Screw 5/16-24 | | | |

MANUFACTURER'S LIMITED WARRANTY FOR:



The limited warranty set forth below is given by MTD PRODUCTS INC ("MTD") with respect to new merchandise purchased and used in the United States, its possessions and territories.

MTD warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water or damage because of other peril or natural disaster. Damage resulting from the installation or use of any accessory or attachment not approved by MTD Products Inc. for use with the product(s) covered by this manual will void your warranty as to any resulting damages.

Normal wear parts or components thereof are subject to separate terms as follows: All normal wear part or component failures will be covered on the product for a period of 90 days regardless of cause. After 90 days, but within the two year period, normal wear part failures will be covered ONLY IF caused by defects in material or workmanship of OTHER component parts. Normal wear parts and components include, but are not limited to, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires. Batteries are covered by a 90-day limited replacement warranty.

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 for a listing in the Yellow Pages or contact the Customer Service Department of MTD PRODUCTS INC by calling 1-800-800-7310 or writing to P.O. Box 368022, Cleveland, Ohio 44136-9722.

This limited warranty does not provide coverage in the following cases:

- a. The engine or component parts thereof. These items carry a separate manufacturer's warranty. Please refer to the applicable manufacturer's warranty on these items.
- b. Log splitter pumps, valves and cylinders have a separate one year warranty.

c. Routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments; and normal deterioration of the exterior finish due to use or exposure.

d. MTD 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's authorized channels of export distribution.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including a dealer or retailer, with respect to any product shall bind MTD. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sales. MTD shall not be liable for incidental or consequential loss or damages including, without limitation, expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser, original lessee or the person for whom it was purchased as a gift.

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.