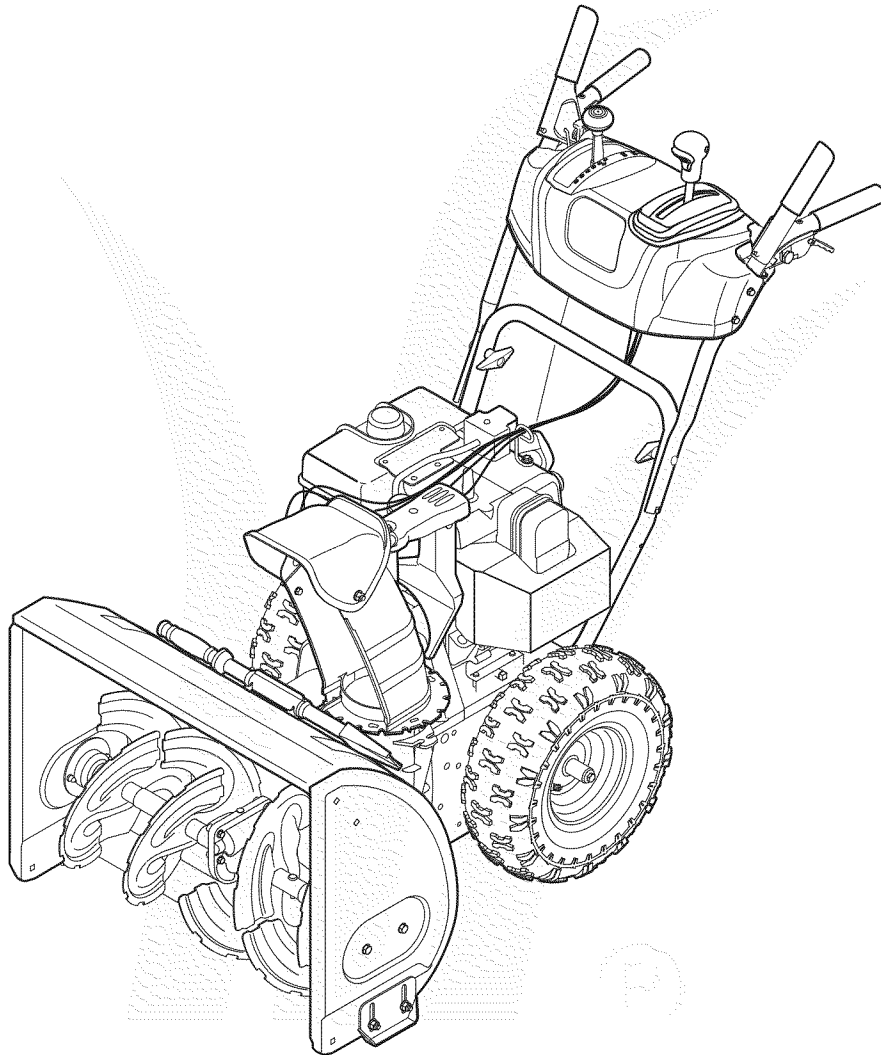


OPERATOR'S MANUAL



Two-Stage Snow Thrower — Model 5ML

IMPORTANT

READ SAFETY RULES AND INSTRUCTIONS CAREFULLY BEFORE OPERATION

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 361131 Cleveland, Ohio 44136-0019.

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.

Table of Contents

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Finding and Recording Model Number

BEFORE YOU START ASSEMBLING YOUR NEW EQUIPMENT, please locate the model plate on the equipment and copy the information to the sample model plate provided to the right. You can locate the model plate by standing at the operating position and looking down at the rear of the snow thrower. This information will be necessary to use the manufacturer's web site and/or obtain assistance from the Customer Support Department or an authorized service dealer.

| Model Number | Serial Number |
|---|---|
|  www.mtdproducts.com | MTD LLC P.O. BOX 361131 CLEVELAND, OH 44136 330-220-4683 800-800-7310 |

Customer Support

Please do **NOT** return the unit to the retailer from which it was purchased, without first contacting Customer Support.

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this unit, you can seek help from the experts. Choose from the options below:

1. Visit **mtdproducts.com**. Click on the Customer Support menu option.
2. Phone a **Customer Support Representative** at 1 (800) 800-7310.
3. The **engine manufacturer** is responsible for all engine-related issues with regards to performance, power-rating, specifications, warranty and service. Please refer to the engine manufacturer's Owner's/Operator's Manual, packed separately with your unit, for more information.

| | | | | | |
|----------|---------------|----------------|--------------|-----------------|----------------------|
| Yard-Man | Yard Machines | Manuals Online | Parts Online | Service Locator | Product Registration |
|----------|---------------|----------------|--------------|-----------------|----------------------|


Need help using this site? Find instructions [here](#).

When searching this site, using fewer key words is more efficient than sentences or long phrases.

| | | | |
|---|-----------------|--|---|
| Answers | My Stuff | Login | Help |
| Products & Services ⓘ All Products ▼ | | Search Text (optional) <input type="text"/> | Search Tips <input type="button" value="Search"/> |
| | | Search by Similar Phrases ▼ |  |

! DANGER

1. KEEP AWAY FROM ROTATING IMPELLER AND AUGER. CONTACT WITH IMPELLER OR AUGER CAN AMPUTATE HANDS AND FEET.
2. USE CLEAN-OUT TOOL TO UNCLOG DISCHARGE CHUTE.
3. DISENGAGE CLUTCH LEVERS, STOP ENGINE, AND REMAIN BEHIND HANDLES UNTIL ALL MOVING PARTS HAVE STOPPED BEFORE UNCLOGGING OR SERVICING MACHINE.
4. TO AVOID THROWN OBJECTS INJURIES, NEVER DIRECT DISCHARGE AT BYSTANDERS. USE EXTRA CAUTION WHEN OPERATING ON GRAVEL SURFACES.
5. READ OPERATOR'S MANUAL.

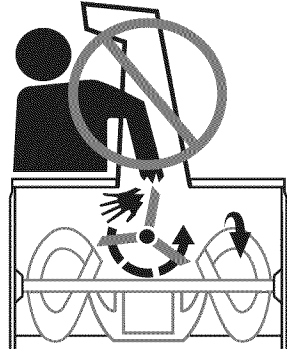
CLEAN-OUT TOOL 

! DANGER

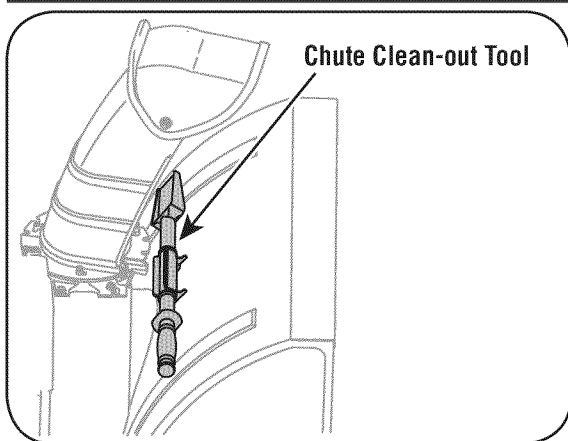


AVOID INJURY FROM ROTATING AUGER - KEEP HANDS, FEET AND CLOTHING AWAY.

! DANGER



- NEVER PUT HAND IN CHUTE. CONTACT WITH ROTATING PARTS CAN AMPUTATE FINGERS AND HANDS.
- SHUT OFF ENGINE AND WAIT UNTIL ALL MOVING PARTS HAVE STOPPED BEFORE UNCLOGGING.
- USE CLEAN-OUT TOOL OR WOODEN STICK TO UNCLOG DISCHARGE CHUTE.



A chute clean-out tool is fastened to the top of the auger housing with a mounting clip. The tool is designed to clear a chute assembly of ice and snow.

This item is fastened with a cable tie at the factory. Cut the cable tie before operating the snow thrower.



WARNING: Never use your hands to clear a clogged chute assembly. Shut off engine and remain behind handles until all moving parts have stopped before using the clean-out tool to clear the chute assembly.

1

Safety Labels



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 this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol.

HEED ITS 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.

2

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 this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol.

HEED ITS 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.



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.

Preparation

1. Thoroughly inspect the area where the equipment is to be used. Remove all doormats, 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 control levers before starting the engine.
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.

Operation

1. Do not put hands or feet near rotating parts, in the auger/impeller housing or chute assembly. Contact with the rotating parts can amputate hands and feet.
2. The auger/impeller control lever is a safety device. Never bypass its operation. Doing so makes the machine unsafe and may cause personal injury.
3. The control levers must operate easily in both directions and automatically return to the disengaged position when released.
4. Never operate with a missing or damaged chute assembly. 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. Thus, avoiding possible 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 backing up.
16. If the machine should start to vibrate abnormally, stop the engine, disconnect the spark plug wire and ground it against the engine. Inspect thoroughly for damage. Repair any damage before starting and operating.
17. Disengage all control 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 chute assembly, making any adjustments, or inspections.
18. Never put your hand in the discharge or collector openings. Always use the clean-out tool provided to unclog the discharge opening. Do not unclog chute assembly while engine is running. Shut off engine and remain behind handles until all moving parts have stopped before unclogging.
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 call (800) 800-7310 for assistance and the name of your nearest servicing dealer..

Maintenance & Storage

1. Never tamper with safety devices. Check their proper operation regularly. Refer to the maintenance and adjustment sections of this manual.
2. Before cleaning, repairing, or inspecting machine disengage all control levers and stop the 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.
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 (OEM) parts only. "Use of parts which do not meet the original equipment specifications may lead to improper performance and compromise safety!"
6. Check 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.

Do not modify engine

To avoid serious injury or death, do not modify engine in any way. Tampering with the governor setting can lead to a runaway engine and cause it to operate at unsafe speeds. Never tamper with factory setting of engine governor.

Notice regarding Emissions

Engines which are certified to comply with California and federal EPA emission regulations for SORE (Small Off Road Equipment) are certified to operate on regular unleaded gasoline, and may include the following emission control systems: Engine Modification (EM) and Three Way Catalyst (TWC) if so equipped.

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.

2

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 this machine. Failure to comply with these instructions may result in personal injury. When you see this symbol.

HEED IT'S 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.

3

Setting Up Your Snow Thrower



NOTE: All references in this manual to the left or right side of the snow thrower is from the operating position only. Exceptions, if any, will be specified.

IMPORTANT

This unit is shipped with the engine full of oil. After assembly, refer to the Tecumseh Engines manual packed separately with your snow thrower for fuel and oil fill-up details.

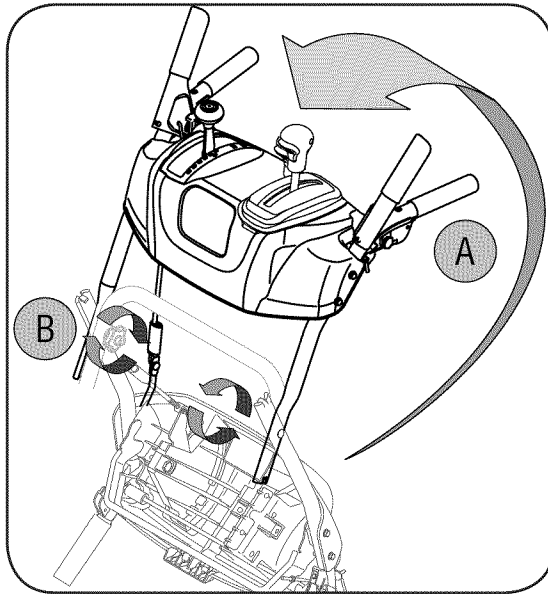


Figure 1

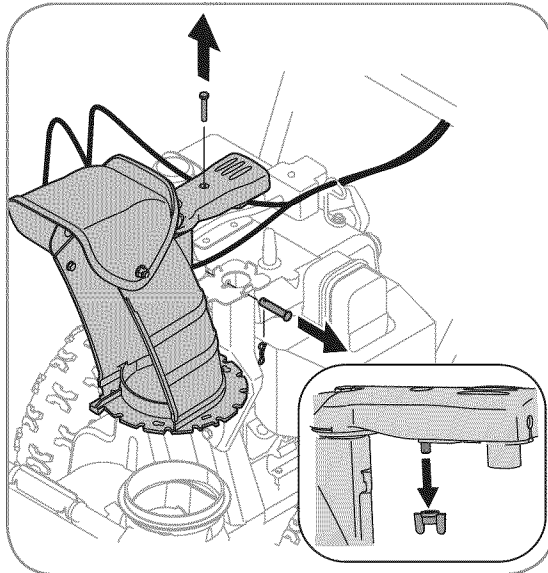


Figure 2

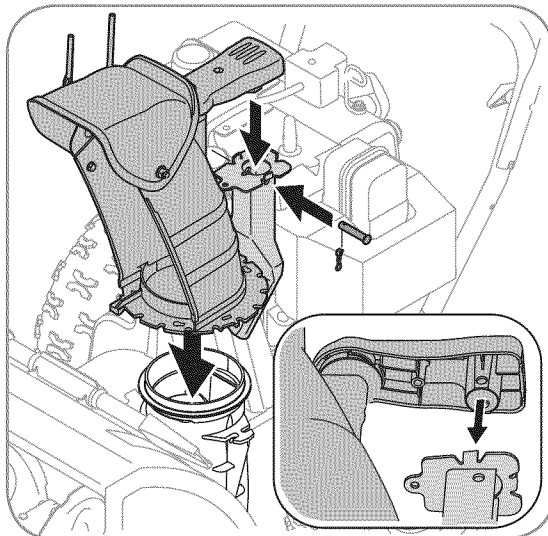


Figure 3

IMPORTANT: Two replacement auger shear pins are included with this manual (or stowed in the plastic handle panel). Refer to Augers on page 21 for more information regarding shear pin replacement.

1. Observe the lower area of the snow thrower to be sure both cables are aligned with roller guides before pivoting handle upward.
 - a. Pull up and back on upper handle as shown in Figure 1. Align upper handle with the lower handle.
 - b. Tighten hand knobs securing upper handle to lower handle.
2. Remove wing nut and hex screw from chute control assembly and clevis pin and cotter pin from chute support bracket. See Figure 2. Position the chute assembly (forward-facing) over the chute base.
3. Place chute assembly onto chute base and secure chute control assembly to chute support bracket with clevis pin and cotter pin removed earlier. See Figure 3.

4. Finish securing chute control assembly to chute support bracket with wing nut and hex screw removed earlier. See Figure 4.
5. Check that all cables are properly routed through the cable guide on top of the engine. See Figure 5.

The extension cord is fastened with a cable tie to the rear of the auger housing for shipping purposes. Cut the cable tie and remove it before operating the snow thrower.



CAUTION: Prior to operating your snow thrower, refer to Auger Control Test on page 13. Read and follow all instructions carefully, and perform all adjustments to verify your snow thrower is operating safely and properly.

Shear Pin Storage

An area for convenient shear pin storage is located under the plastic dash panel. See Figure 6.

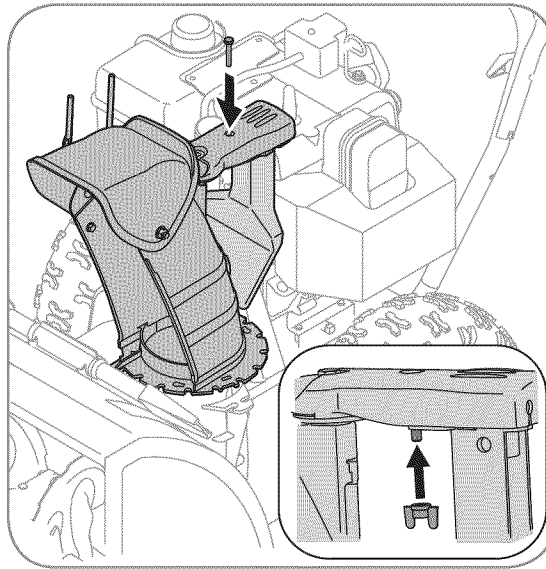


Figure 4

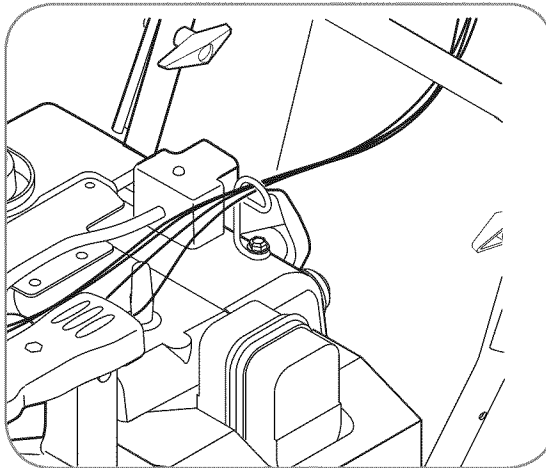


Figure 5

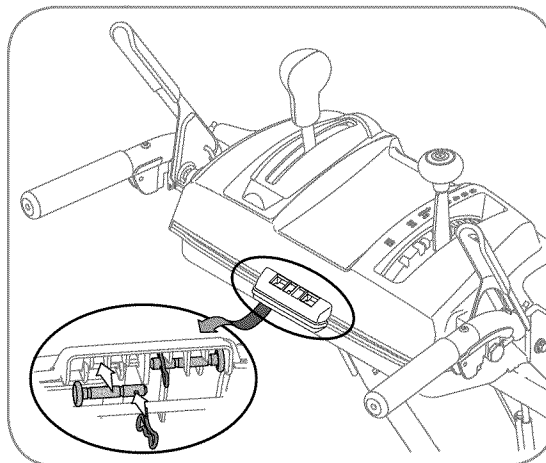


Figure 6

3

Setting Up Your Snow Thrower



CAUTION

Prior to operating your snow thrower, refer to Auger Control Test on page 13. Read and follow all instructions carefully and perform all adjustments to verify your unit is operating safely and properly.

3

Setting Up Your Snow Thrower

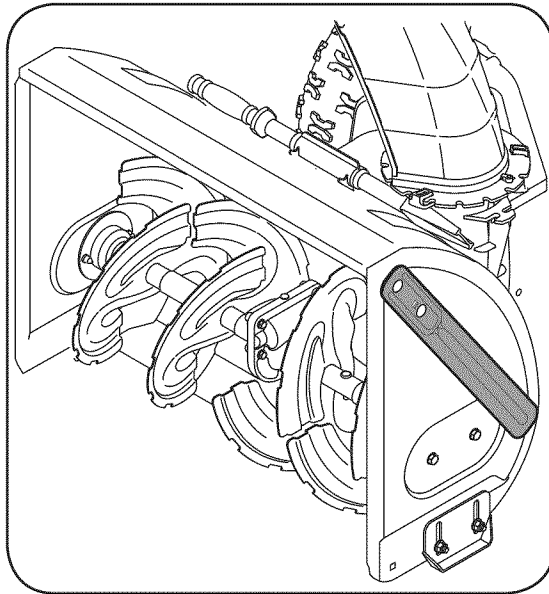


Figure 7

Drift Cutters (If Equipped)

Drift cutters should be used when operating the snow thrower in heavy drift conditions.

- On models so equipped, drift cutters are assembled to the auger housing inverted. See Figure 7.
- Remove the carriage bolts by unthreading the hex nuts which secure them, and reinstall the drift cutters facing forward before operating the snow thrower. Refer to Figure 8.
- Secure to the auger housing with carriage bolts and hex nuts previously removed. See Figure 9.

If your unit is not equipped with drift cutters, you may contact Customer Support as instructed on page 2 for information regarding price and availability.

| | |
|--------------------|-------------------|
| Snow Thrower Model | Drift Cutter Kit: |
| All models- | OEM-390-679 |

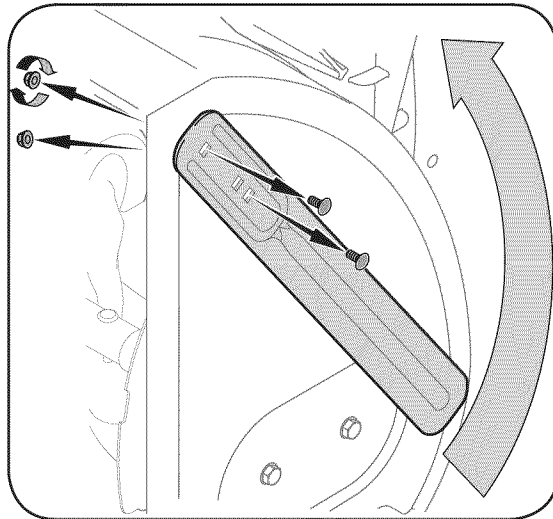


Figure 8

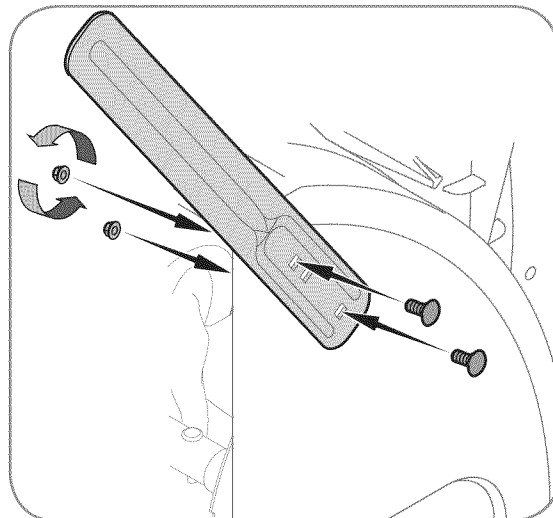


Figure 9

Chute Clean-Out Tool

The clean-out tool is conveniently fastened to the rear of the auger housing with a mounting clip. See Figure 10.

1. Release both the auger control and the drive/auger control lock.
2. Stop the engine by moving the throttle to the stop position.
3. Remove the clean-out tool from the mounting clip.
4. Use the shovel-shaped end of the clean-out tool to remove any snow and ice in the chute assembly.
5. Re-fasten the clean-out tool to the mounting clip on the rear of the auger housing and restart engine.
6. While standing in the operator's position (behind the snow thrower), engage the auger control for a few seconds to clear any remaining snow or ice from the chute assembly before continuing to clear snow.

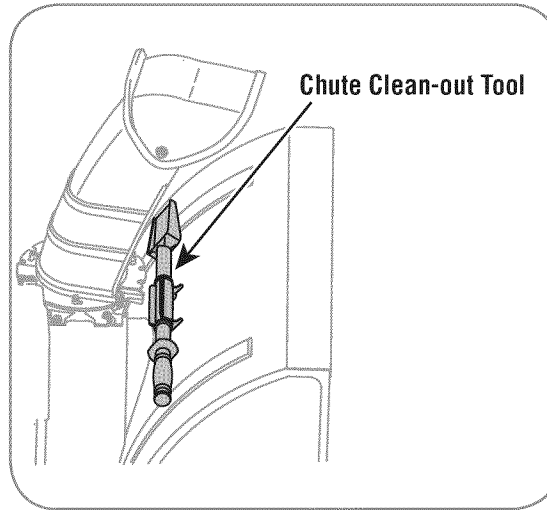


Figure 10



WARNING: Never use your hands to clean snow and ice from the chute assembly or auger housing.

Tire Pressure (Pneumatic Tires)

The tires are over-inflated for shipping purposes. Check the tire pressure before operating the snow thrower. Refer to the tire side wall for tire manufacturer's recommended psi and deflate (or inflate) the tires as necessary.

NOTE: If the tire pressure is not equal in both tires, the unit may not travel in a straight path and the shave plate may wear unevenly.

3

Setting Up Your Snow Thrower



WARNING

Never use your hands to clean snow and ice from the chute assembly or auger housing.



IMPORTANT

Under any circumstance do not exceed manufacturer's recommended psi. Equal tire pressure should be maintained at all times. Excessive pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury. Refer to sidewall of tire for recommended pressure.

4

Operating Your Snow Thrower



WARNING

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

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

Know Your Snow Thrower

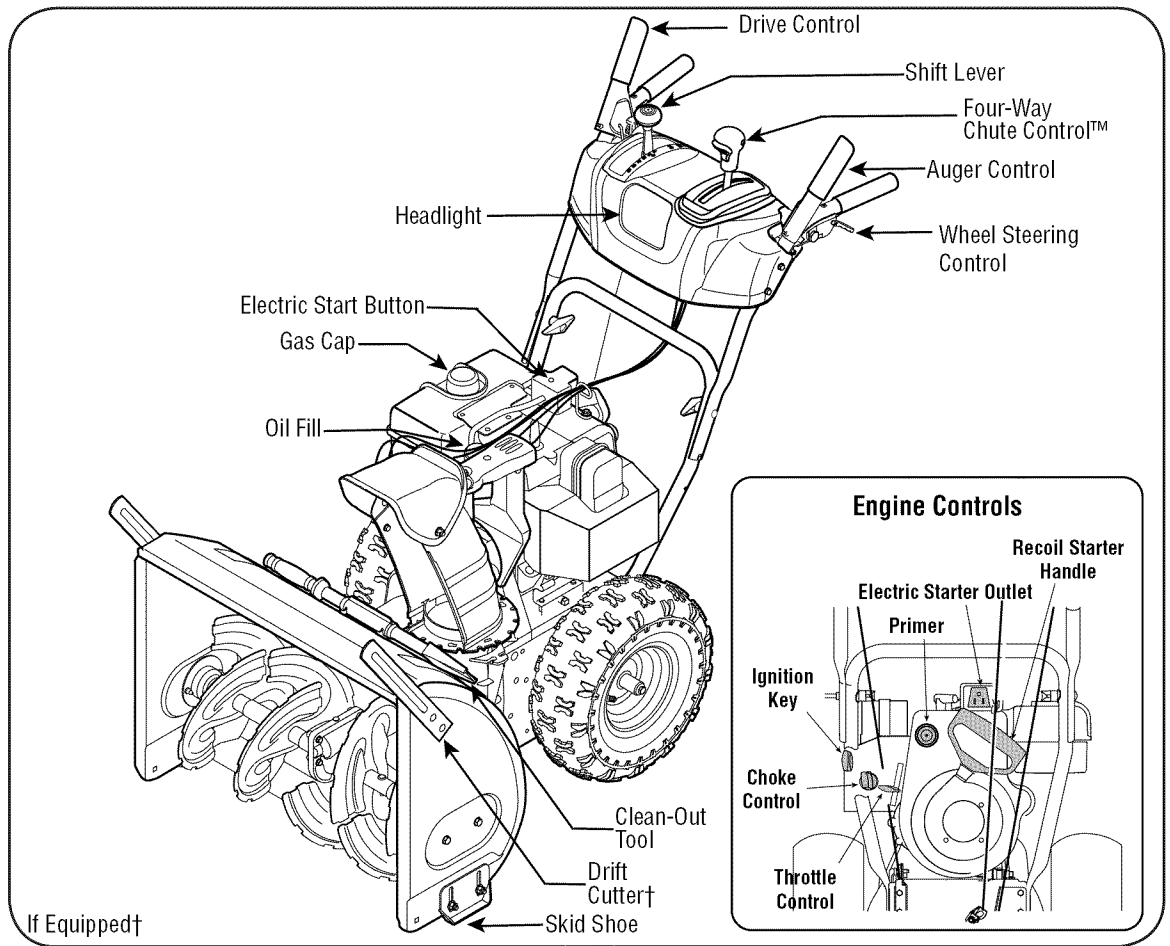


Figure 11

Now that you have set up your snow thrower for operation, get acquainted with its controls and features. These are described below and illustrated this page. This knowledge will allow you to use your new equipment to its fullest potential.

NOTE: For detailed starting instructions and more information on all engine controls, refer to the *Tecumseh Engines* manual packed separately and **Starting The Engine** on page 12 of this manual.

Shift Lever

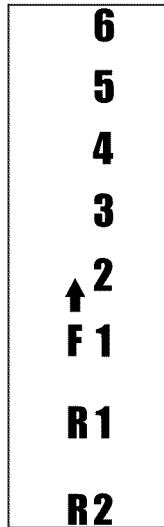
The shift lever is located on the right side of the handle panel. Place the shift lever into any of eight positions to control the direction of travel and ground speed.

Forward

Your snow thrower has six forward (F) speeds, with position number one (1) being the slowest speed.

Reverse

Your snow thrower has two reverse (R) speeds, with position number one (1) being the slower speed.



Choke Control



The choke control is found on the rear of the engine and is activated by rotating the knob clockwise. Activating the choke control closes the choke plate on the carburetor and aids in starting the engine.

Throttle Control

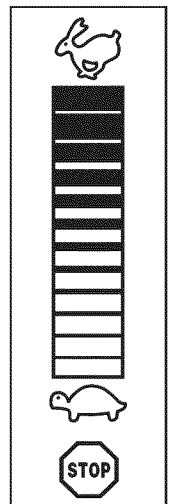
The throttle control is located on the engine. It regulates the speed of the engine and will shut off the engine when pushed down completely.

Primer

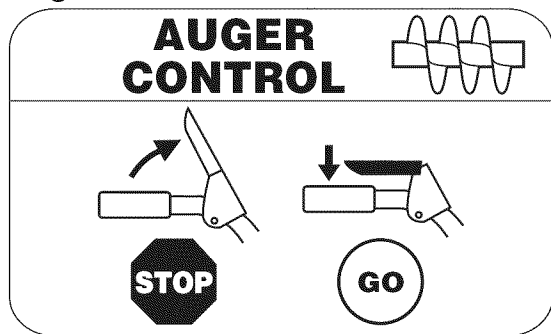
Depressing the primer forces fuel directly into the engine's carburetor to aid in cold-weather starting.

Oil Fill

Engine oil level can be checked and oil added through the oil fill.

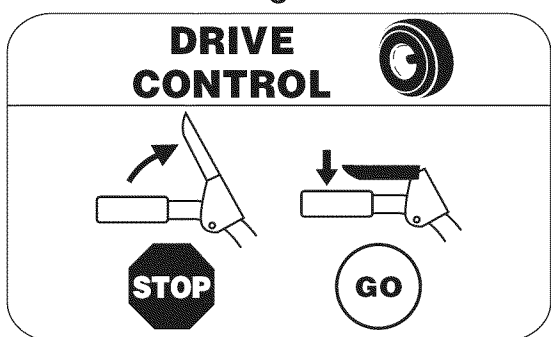


Auger Control



The auger control is located on the left handle. Squeeze the control grip against the handle to engage the augers and start snow throwing action. Release to stop.

Drive Control/ Auger Control Lock

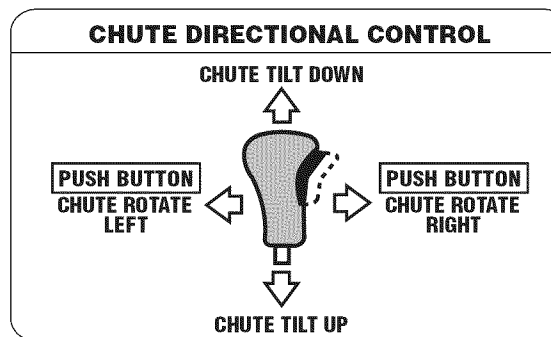


The drive control is located on the right handle. Squeeze the control grip against the handle to engage the wheel drive. Release to stop.

The drive control also locks the auger control so you can operate the chute directional control without interrupting the snow throwing process. If the auger control is engaged simultaneously with the drive control, the operator can release the auger control (on the left handle) and the augers will remain engaged. Release both controls to stop the augers and wheel drive.

IMPORTANT: Always release the drive control before changing speeds.

Four-Way Chute Control™



The chute directional control is located on the left side of the dash panel.

- To change the direction in which snow is thrown, squeeze the button on the joy-stick and pivot the joy-stick to the right or to the left.
- To change the angle/distance which snow is thrown, pivot the joy-stick forward or backward.

Wheel Steering Controls

The left and right wheel steering controls are located on the underside of the handles. Squeeze the right control to turn right; squeeze the left control to turn left.

NOTE: Operate the snow thrower in open areas until you are familiar with these controls.

Ignition Key

The ignition key must be inserted and snapped in place in order for the engine to start. Remove the ignition key to prevent unauthorized use of equipment. Do NOT attempt to turn the key.

Clean-Out Tool



WARNING: Never use your hands to clear a clogged chute assembly. Shut off engine and remain behind handles until all moving parts have stopped before unlogging.

The clean-out tool is mounted to the rear of the auger housing and is designed to clear a clogged chute. Refer to page 9 for instructions on how to properly use it.

NOTE: This item is fastened with a cable tie to the rear of the auger housing at the factory. Cut the cable tie before operating the snow thrower.

Skid Shoes

Position the skid shoes based on surface conditions. Adjust upward for hard-packed snow. Adjust downward when operating on gravel or crushed rock surfaces.

Drift Cutters (If Equipped)

Drift cutters should be used when operating the snow thrower in heavy drift conditions.

Tire Chains (If Equipped)

Tire chains should be used whenever extra traction is needed. If your unit is not equipped with tire chains, contact Customer Support as instructed on page 2 for information regarding price and availability.

Electric Starter Button

Pressing the electric starter button engages the engine's electric starter when plugged into a 120V power source.

Electric Starter Outlet

Requires the use of a three-prong outdoor extension cord and a 120V power source/wall outlet.

4

Operating Your Snow Thrower



WARNING

The operation of any snow thrower can result in foreign objects being thrown into the eyes, which can damage your eyes severely. Always wear safety glasses while operating the snow thrower, or while performing any adjustments or repairs on it.

Be sure no one other than the operator is standing near the snow thrower while starting engine or operating snow thrower. Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains carbon monoxide, an odorless and deadly gas. Keep hands, feet, hair and loose clothing away from any moving parts on engine and snow thrower.



WARNING

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

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

If your home's wiring system is not a three-wire grounded system, do not use this electric starter under any conditions.

If your home electrical system is grounded, but a three-hole receptacle is not available, do not use your snow thrower's electric starter.

Gas & Oil Fill-Up

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

Starting The Engine

1. Attach spark plug wire to spark plug. Make certain the metal loop on the end of the spark plug wire (inside the rubber boot) is fastened securely over the metal tip on the spark plug.
2. Make certain both the auger control and drive control are in the disengaged (released) position.
3. Move throttle control up to FAST position. Insert ignition key into slot. Make sure it snaps into place. Do not attempt to turn the key.

NOTE: The engine cannot start unless the key is inserted into ignition switch.

Electric Starter

1. Determine that your home's wiring is a three-wire grounded system. Ask a licensed electrician if you are not certain.



WARNING: The optional electric starter is equipped with a grounded three-wire power cord and plug, and is designed to operate on 120 volt AC household current. It must be used with a properly grounded three-prong receptacle at all times to avoid the possibility of electric shock. Follow all instructions carefully prior to operating the electric starter.

If you have a grounded three-prong receptacle, proceed as follows:

1. Plug the extension cord into the outlet located on the engine's surface. Plug the other end of extension cord into a three-prong 120-volt, grounded, AC outlet in a well-ventilated area.
2. Rotate choke control to FULL choke position (for a cold engine start).

NOTE: If the engine is already warm, place choke control in the OFF position instead of FULL.

3. Push the primer two or three times for cold engine start, making sure to cover vent hole in the center of the primer when pushing.

NOTE: DO NOT use primer to restart a warm engine after a short shutdown.

4. Push starter button to start engine.
5. Once the engine starts, immediately release starter button.

6. As the engine warms, slowly rotate the choke control to the OFF position. If the engine falters, quickly rotate the choke control back to FULL and then slowly into the OFF position again.
7. When disconnecting the extension cord, always unplug the end at the three-prong wall outlet before unplugging the opposite end from the snow thrower.

Recoil Starter

1. Rotate choke control to FULL choke position (cold engine start).

NOTE: If the engine is already warm, place choke control in the OFF position instead of FULL.

2. Push the primer two or three times for cold engine start, making sure to cover vent hole in the center of the primer when pushing.

NOTE: DO NOT use primer to restart a warm engine after a short shutdown.

NOTE: Additional priming may be necessary if the temperature is below 15° Fahrenheit.

3. Grasp the recoil starter handle and slowly pull the rope out. At the point where it becomes slightly harder to pull the rope, slowly allow the rope to recoil.
4. Pull the starter handle with a firm, rapid stroke. Do not release the handle and allow it to snap back. Keep a firm hold on the starter handle and allow it to slowly recoil.
5. As the engine warms, slowly rotate the choke control to the OFF position. If the engine falters, quickly rotate the choke control back to the FULL position and then slowly into the OFF position again.

NOTE: Allow the engine to warm up for a few minutes after starting. The engine will not develop full power until it reaches operating temperatures.

Stopping The Engine

Run engine for a few minutes before stopping to help dry off any moisture on the engine.

- To help prevent possible starter freeze-up, proceed as follows:

Electric Starter (on models so equipped)

1. Connect extension cord to the electric starter outlet on the engine, then to 120 volt AC outlet.
2. With the engine running, push the starter button and allow the starter for spin for several seconds. The noise made by the starter is normal. The engine's starter is not being harmed.

- When disconnecting the extension cord, always unplug the end at the three-prong wall outlet before unplugging the opposite end from the snow thrower.
- Move throttle control to STOP position.
- Remove the ignition key (Do not turn key) to prevent unauthorized use of equipment.
- Wipe all snow and moisture from the area around the engine as well as the area in and around the drive control and auger control. Also, engage and release both controls several times.

NOTE: Keep the key in a safe place. The engine cannot start without the ignition key.

Recoil Starter

- 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 engine.
- Move throttle control to STOP position.
- Remove the ignition key (Do not turn key) to prevent unauthorized use of equipment.

NOTE: Keep the key in a safe place. The engine cannot start without the ignition key.

- Wipe all snow and moisture from the area around the engine as well as the area in and around the drive control and auger control. Also, engage and release both controls several times.

To Engage Drive

- With the engine running near top speed, move shift lever to one of six FORWARD positions or two REVERSE positions. Select a speed appropriate for the snow conditions that exist.
- Squeeze drive control against the right handle and the snow thrower will move. Release it and the drive motion will stop.
- To turn the unit left or right, squeeze the respective wheel steering control. See Figure 11.

To Engage Augers

- To engage augers and start snow throwing, squeeze the left hand auger control against the left handle. Release to stop augers.
- While the auger control is engaged, squeeze the drive control to move, release to stop. Do not shift speeds while the drive is engaged.

NOTE: This same lever also locks auger control so you can turn the chute control without interrupting the snow throwing process.

- Release the auger control; the interlock mechanism should keep the auger control engaged until the drive control is released.
- Release the drive control to stop both the augers and the wheel drive. To stop the auger, both levers must be released.

Auger Control Test

Perform the following test before operating your snow thrower for the first time and at the start of each winter. Check the adjustment of the auger control as follows:

- When the auger control is released and in the disengaged “up” position, the cable should have very little slack. It should NOT be tight.
- In a well-ventilated area, start the snow thrower engine as instructed on the previous page. Make sure the throttle is set in the FAST position.
- While standing in the operator’s position (behind the snow thrower), engage the auger.
- Allow the auger to remain engaged for approximately ten (10) seconds before releasing the auger control. Repeat this several times.
- With the throttle control in the FAST (rabbit) position and the auger control in the disengaged “up” position, walk to the front of the machine.
- Confirm that the auger has completely stopped rotating and shows NO signs of motion. If the auger shows ANY signs of rotating, immediately return to the operator’s position and shut off the engine. Wait for ALL moving parts to stop before re-adjusting the auger control.
- To readjust the control cable, loosen the upper hex nut on the auger cable bracket.
- Position the bracket upward to provide more slack (or downward to increase cable tension). See Figure 12.
- Retighten the upper hex nut.
- Repeat Auger Control Test to verify proper adjustment has been achieved.

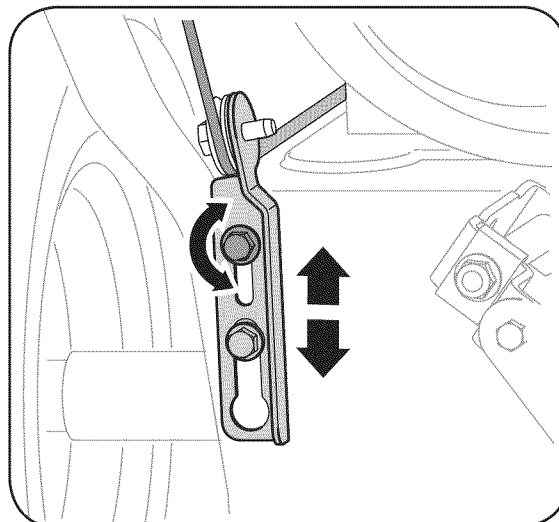


Figure 12



WARNING

The muffler, engine and surrounding areas become hot and can cause a burn. Do not touch.



When selecting a Drive Speed, use the slower speeds until you are comfortable and familiar with the operation of the snow thrower.

NEVER reposition the shift lever (change speeds or direction of travel) without first releasing the drive control and bringing the snow thrower to a complete stop. Doing so will result in premature wear to the snow thrower’s drive system.

5

Making Adjustments



WARNING

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

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

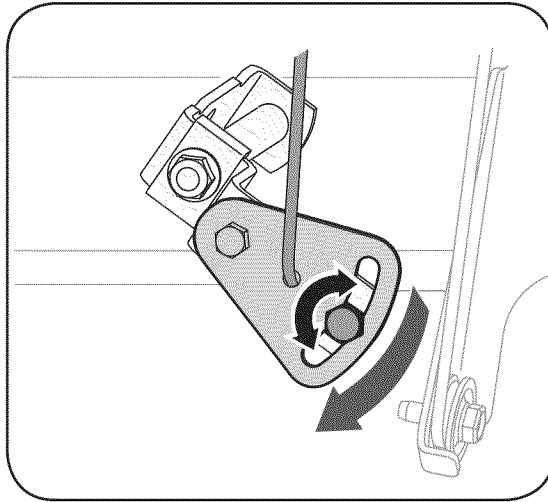


Figure 13

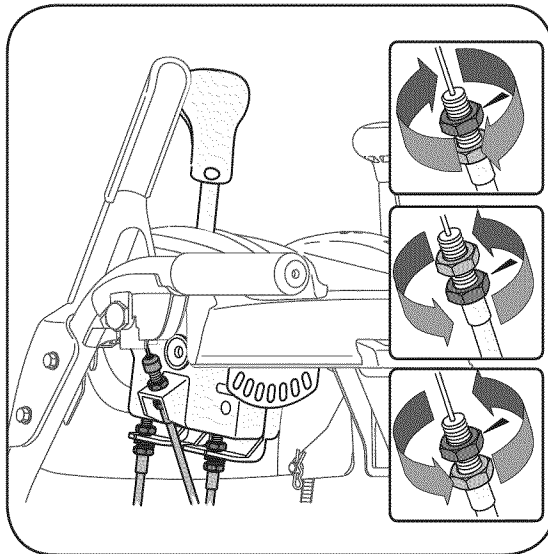


Figure 14

Shift Cable

If the full range of speeds (forward and reverse) cannot be achieved, refer to the figure to the left and adjust the shift cable as follows:

1. Place the shift lever in the **fastest** forward speed position.
2. Loosen the hex nut on the shift cable index bracket. See Figure 13.
3. Pivot the bracket downward to take up slack in the cable.
4. Retighten the hex nut.
5. Check for correct adjustment before operating the snow thrower.

Chute Control

Once a season or every 25 hours of operation, whichever is earlier, check whether the four-way chute control™ cables have slackened. If the chute does not rotate fully or its pitch cannot be moved up or down, the chute control cables will have to be adjusted.

To adjust these cables, proceed as follows:

1. To tighten cable, loosen the top nut and tighten the bottom nut on the cable.
2. Adjust equally on both sides by working on both cables. See Figure 14.

Drive Control & Shift Lever

When the drive control is released and in the disengaged "up" position, the cable should have very little slack. It should NOT be tight.

Check the adjustment of the drive control as follows:

1. With the drive control released, push the snow thrower gently forward. The unit should roll freely.
2. Engage the drive control and gently attempt to push the snow thrower forward. The wheels should not turn. The unit should not roll freely.
3. With the drive control released, move the shift lever back and forth between the R2 position and the F6 position several times. There should be no resistance in the shift lever.
4. If any of the above tests failed, the drive cable is in need of adjustment. Proceed as follows:

5. Loosen the lower hex nut on the drive cable bracket. See Figure 16.
6. Position the bracket upward to provide more slack (or downward to increase cable tension).
7. Retighten the lower hex nut.

You can also check the adjustment as follows:

1. With the snow thrower tipped forward (be certain to drain 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 the self-tapping screws. Refer to Figure 21 on page 17.
2. With the drive control released, there must be 1/8" clearance between the friction wheel and the drive pulley in all positions of the shift lever.
3. With the drive control engaged, the friction wheel must contact the drive pulley. Refer to Figure 23 on page 18.
4. If adjustment is necessary, loosen the lower hex nut on the drive cable index bracket and pivot the bracket upward or downward as necessary. Refer to Figure 15. Tighten the lower hex nut to secure the bracket when correct adjustment is reached.
5. Reassemble the frame cover and turn the unit back to its operating position.

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

Skid Shoes

The space between this 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.

1. Adjust skid shoes by loosening the four lock nuts and carriage bolts and moving skid shoes to desired position. See Figure 16.
2. Make certain the entire bottom surface of skid shoes are against the ground to avoid uneven wear on the skid shoes.
3. Tighten nuts and bolts securely.

Auger Control

To adjust the auger control, refer to page 13.

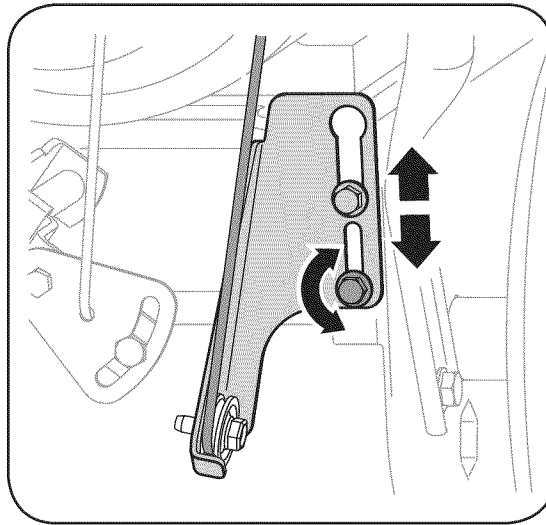


Figure 15

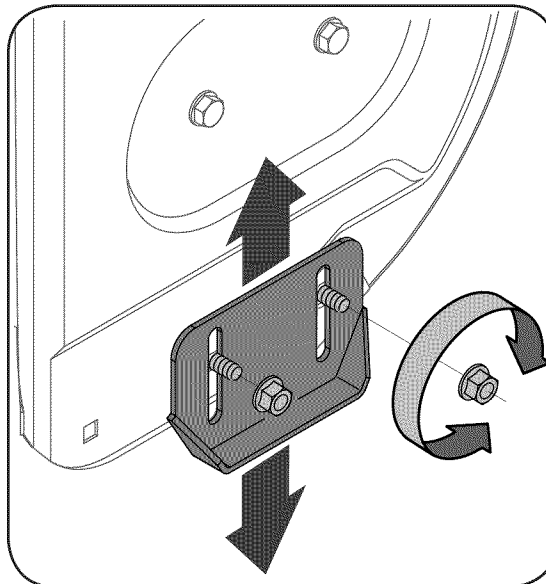


Figure 16

5

Making Adjustments



IMPORTANT

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 personal injury or damage to the snow thrower.

If for some reason, you have to operate the snow thrower on gravel, keep the skid shoe in the highest position for maximum clearance between the ground and the shave plate.

6

Maintaining Your Snow Thrower



WARNING

Always stop engine, disconnect spark plug, and ground against engine before cleaning, lubricating or doing any kind of maintenance on your machine.



IMPORTANT

Avoid oil spillage on rubber friction wheel and aluminum drive plate.

Do not overfill the gear case. Damage to the seals could result.

IMPORTANT

NEVER replace the auger shear pins with standard pins. 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.

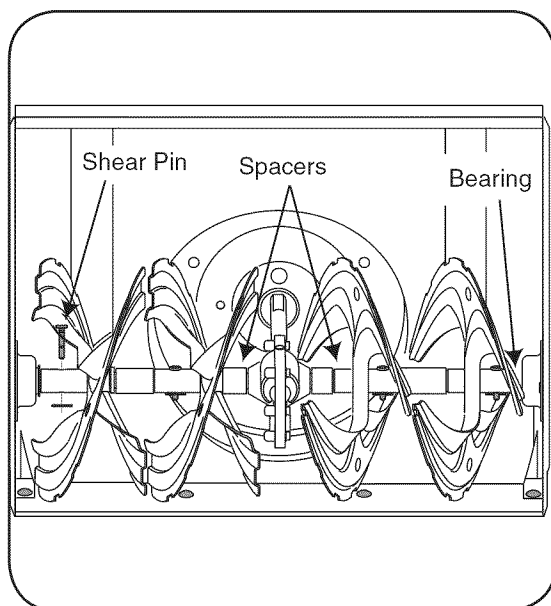


Figure 17

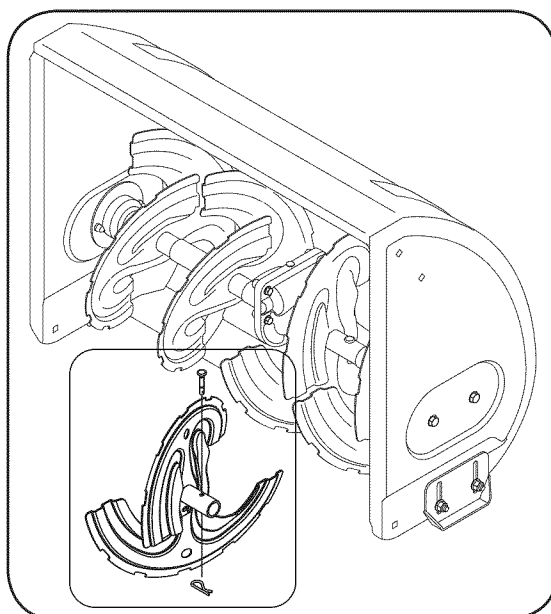


Figure 18

General Recommendations

1. Always observe safety rules when performing any maintenance.
2. The warranty on this snow thrower does not cover items that have been subjected to operator abuse or negligence. To receive full value from warranty, operator must maintain the snow thrower as instructed here.
3. Some adjustments will have to be made periodically to maintain your unit properly.
4. Periodically check all fasteners and make sure these are tight.



WARNING: Always stop engine and disconnect spark plug wire before performing any maintenance or adjustments. Always wear safety glasses during operation or while performing any adjustments or repairs.

Engine

Refer to the separate *Tecumseh* Engines manual packed with your unit for all engine maintenance.

Lubrication

1. **Drive Mechanism:** Once a season or after every 25 hours of operation, remove rear frame cover and lubricate any chains, sprockets, gears, bearings, and shafts with engine oil or lubricant spray.
2. **Hex Gear Shaft:** Once a season, lubricate the hex shaft with a penetrating oil, but not grease. Refer to Figure 23 on page 18.
3. **Gear Case:** The gear case is lubricated with grease at the factory and does not require regular lubrication. However, if disassembled for any reason, lubricate with 2 ounces of Shell Alvania™ grease (part # 737-0168). Before reassembling, remove old sealant and apply new sealant.
4. **Wheels:** Once a season, remove the bolt from each wheel and take the wheel off the axle. Apply a multipurpose automotive grease on the shaft before putting back the wheels.
5. **Auger Shaft:** At least once a season, remove the shear pins on auger shaft. Spray lubricant inside shaft, around the spacers. Also lubricate the flange bearings found at either end of the shaft. See Figure 17.
6. **Drive/Auger Control Lock:** The cam on the ends of the control rods which interlock the drive and auger controls must be lubricated at least once a season or every 25 hours of operation using a multi-purpose automotive grease. The cam can be accessed beneath handle panel.
7. **Engine:** Refer to the separate *Tecumseh* Engines manual packed with your unit for all engine lubrication instructions.

Augers

The augers are secured to the spiral shaft with two shear pins and cotter pins. See Figure 18. If you hit a foreign object or ice jam, the snow thrower is designed so that the pins will shear.

1. If the augers do not turn, check to see if the pins have sheared.
2. Replace the pins if needed. Two replacement shear pins and cotter pins have been provided with the snow thrower. Spray an oil lubricant into shaft before inserting new pins and securing with new cotter pins. See Figure 18.

6

Maintaining Your Snow Thrower

Shave Plate and Skid Shoes

The shave plate and skid shoes on the bottom of the snow thrower are subject to wear. Check these periodically and replace as necessary.

Replacing Skid Shoe

1. Remove four carriage bolts and lock nuts which attach two skid shoes to the snow thrower on two sides. See Figure 19.
2. Reassemble new skid shoes with the same hardware. Make certain the skid shoes are adjusted to be level.

Replacing Shave Plate

1. After removing both skid shoes, remove four carriage bolts and lock nuts which attach shave plate to the snow thrower housing. See Figure 19.
2. Reassemble new shave plate, making sure heads of the carriage bolts are to the inside of the housing. Tighten securely. Re-install skid shoes.

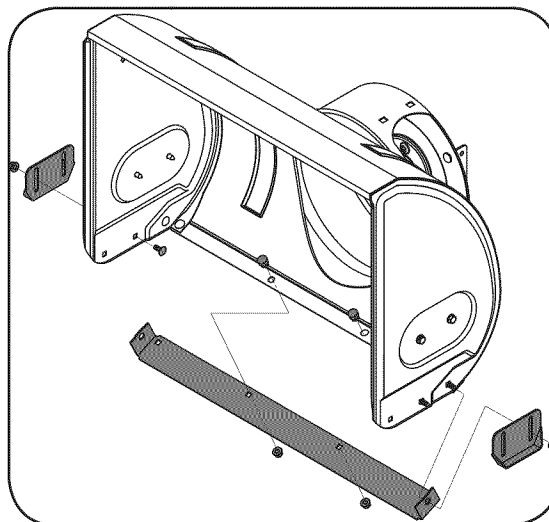


Figure 19

Replacing Belts

Check the condition of both auger belt and drive belt every 25 hours of snow thrower operation. Replace if either shows signs of wear and tear. To remove and replace either the auger belt or the drive belt, follow the steps below and then proceed to the specific steps listed under respective sub-headings.

1. Remove belt cover by removing the two self-tapping screws that secure it to the snow thrower housing. See Figure 20.
2. Drain the gasoline from the snow thrower, or place a piece of plastic under the gas cap. Carefully tip the snow thrower up and forward, so that it rests on the housing. Remove the self-tapping screws from the frame cover underneath the snow thrower and move the frame cover away. See Figure 21.

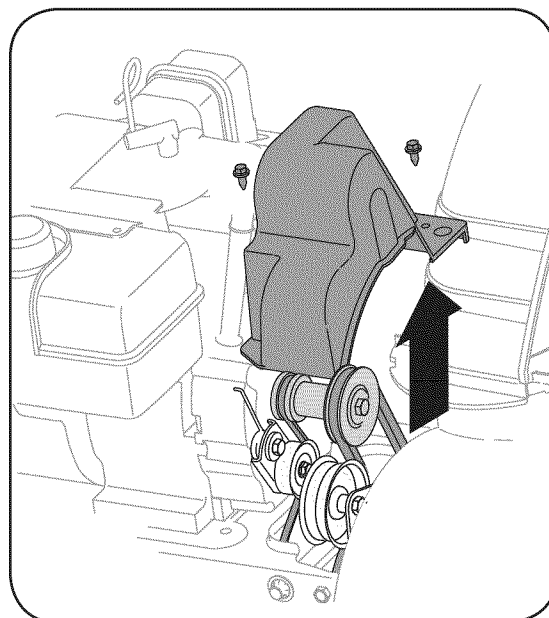


Figure 20

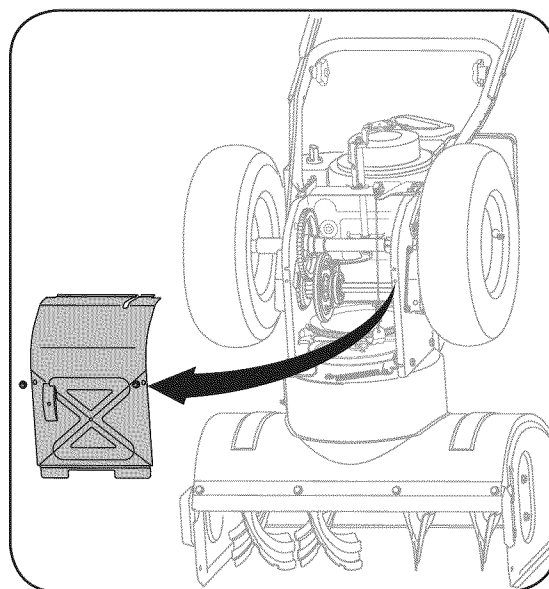


Figure 21

6

Maintaining Your Snow Thrower



WARNING

Always stop engine, disconnect spark plug, and ground against engine before cleaning, lubricating or doing any kind of maintenance on your machine.

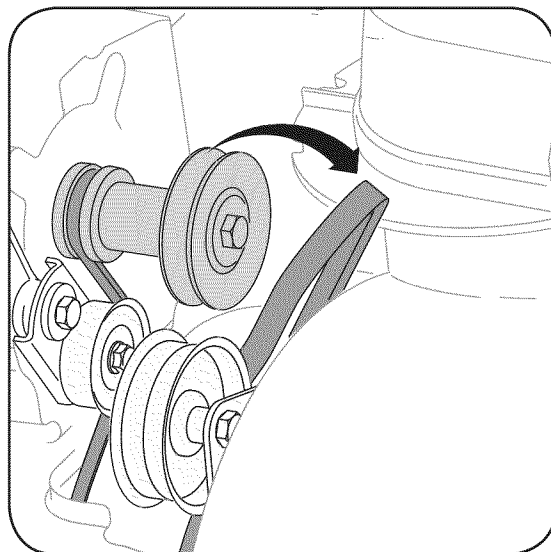


Figure 22

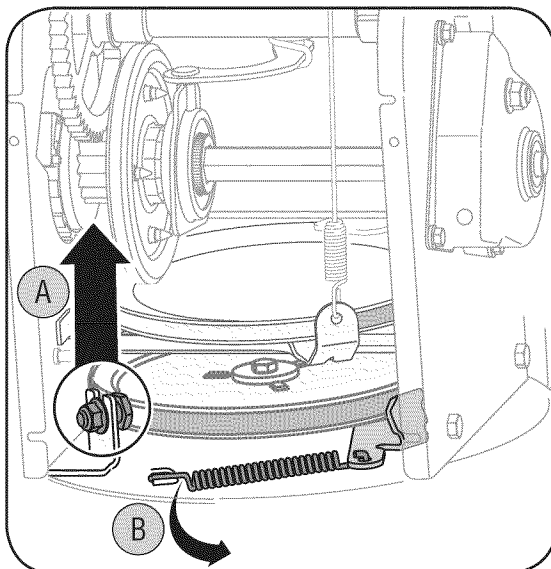


Figure 23

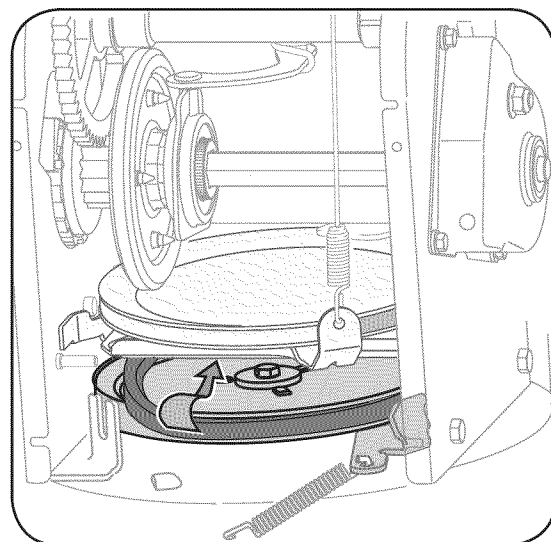


Figure 24

Auger Belt

1. Roll auger belt off the pulley as shown in Figure 22.
2. a. Turn the shoulder screw a half a turn and slide it out of the mounting bracket. See Figure 23.
b. Unhook spring to release tension on the auger belt. See Figure 23.
3. Remove old belt and replace with new belt wrapping it around the auger pulley. See Figure 24.
4. Re-insert shoulder screw into the mounting bracket and tighten to secure.
5. Wrap auger belt behind the idler. Reattach the spring to the bolt where it was earlier secured.
6. Re-install frame cover and flip the snow thrower back to the operating position.
7. Re-install auger belt around the engine pulley.
8. Re-install belt cover with the self-tapping screws removed earlier.

6

Maintaining Your Snow Thrower

Drive Belt

1. a. Grasp the idler pulley and pivot it toward the right. See Figure 25. Insert a screw driver through aligning holes in both the idler bracket and the engine. This will release tension on drive belt.
b. Roll the auger belt off the engine pulley.
c. Lift the drive belt off engine pulley. See Figure 25.
2. Slip the drive belt off the pulley and between friction wheel and friction wheel disc. See Figure 26.
3. Replace with new belt, first sliding it through the crank shaft, then working it around the groove of the drive pulley and finally wrapping it around the engine pulley from where the old belt was removed. Once the belt is firmly placed on the pulleys, make sure to remove the screwdriver from the idler.
4. Re-install auger belt on the engine pulley.
5. Re-attach frame cover on the snow thrower housing and put the equipment back to operating position. Re-attach belt cover with two self-tapping screws removed earlier.

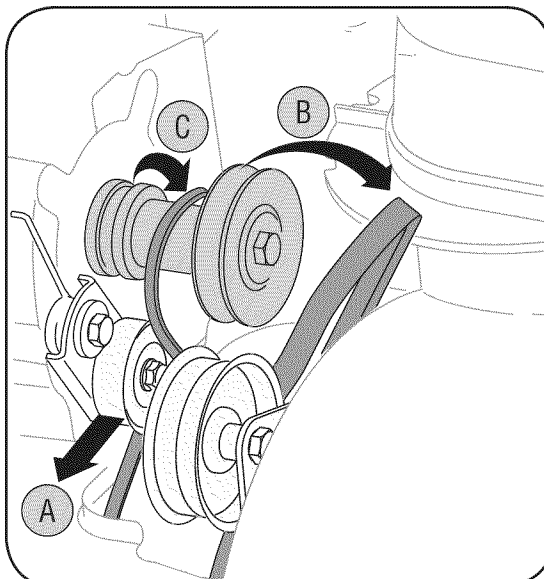


Figure 25

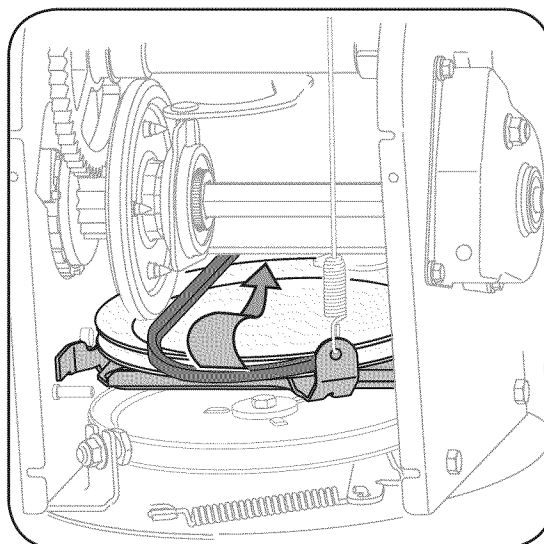


Figure 26

Friction Wheel Rubber

NOTE: Several components must be removed and special tools are required in order to replace this snow thrower's friction wheel rubber. See an authorized MTD Service Dealer if your friction wheel rubber needs to be replaced or phone Customer Support as instructed on page 2 for information on ordering a MTD Service Manual.

Also, refer to the **Drive Control** adjustment in the "Making Adjustments" section of this manual to adjust for wear on the friction wheel rubber.

7

Off-Season Storage



WARNING

Never store snow thrower 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 gas appliance.

Drain fuel into an approved container outdoors, away from any open flame. Be certain engine is cool. Do not smoke. Fuel left in engine during warm weather deteriorates and will cause serious starting problems.

Do not drain carburetor if using fuel stabilizer. Never use engine or carburetor cleaning products in the fuel tank or permanent damage may occur.

If the snow thrower will not be used for 30 days or longer, or if it is the end of the snow season when the last possibility of snow is gone, the equipment needs to be stored properly. Follow storage instructions below to ensure top performance from the snow thrower for many more years.

Preparing Engine



WARNING: Never store snow thrower 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 gas appliance.

NOTE: It is important to prevent gum deposits from forming in essential fuel system parts of the engine such as the carburetor, fuel filter, fuel hose or tank during storage.

CAUTION: Alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage.

To avoid engine problems, the fuel system should be emptied before storage for 30 days or longer. Follow these instructions to prepare your snow thrower for storage:



WARNING: Drain fuel into an approved container outdoors, away from any open flame. Be certain engine is cool. Do not smoke. Fuel left in engine during warm weather deteriorates and will cause serious starting problems.

1. Remove all gasoline from the carburetor and the fuel tank to prevent gum deposits from forming on these parts and harming the engine.
2. Run the engine until the fuel tank is empty and it stops due to lack of fuel.
3. Drain carburetor by pressing upward on bowl drain, located below the carburetor cover (refer to the *Tecumseh* engine manual for more detailed instruction).



WARNING: Do not drain carburetor if using fuel stabilizer. Never use engine or carburetor cleaning products in the fuel tank or permanent damage may occur.

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 the carburetor. Do not drain carburetor if using fuel stabilizer.

4. Remove the spark plug and pour one (1) ounce of engine oil through the spark plug hole into the cylinder. Cover spark plug hole with a rag and crank the engine several times to distribute the oil. Replace spark plug.

NOTE: Refer to the *Tecumseh* engine manual for more information on preparing the snow thrower engine for storage.

Preparing Snow Thrower

1. When storing the snow thrower in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.
2. Remove all dirt from exterior of engine and equipment.
3. Follow lubrication recommendations on page 12.
4. Store equipment in a clean, dry area.

| Problem | Cause | Remedy |
|------------------------------|--|---|
| Engine fails to start | <ol style="list-style-type: none"> 1. Choke not in ON position. 2. Spark plug wire disconnected. 3. Fuel tank empty or stale fuel. 4. Engine not primed. 5. Faulty spark plug. 6. Blocked fuel line. 7. Safety key not in ignition on engine. | <ol style="list-style-type: none"> 1. Move choke to ON position. 2. Connect wire to spark plug. 3. Fill tank with clean, fresh gasoline. 4. Prime engine as instructed in "Operating Your Snow Thrower". 5. Clean, adjust gap, or replace. 6. Clean fuel line. 7. Insert key fully into the switch. |
| Engine runs erratic | <ol style="list-style-type: none"> 1. Unit running on CHOKE. 2. Blocked fuel line or stale fuel. 3. Water or dirt in fuel system. 4. Carburetor out of adjustment. | <ol style="list-style-type: none"> 1. Move choke lever to OFF position. 2. Clean fuel line; fill tank with clean, fresh gasoline. 3. Drain fuel tank. Refill with fresh fuel. 4. Contact MTD Service Center. |
| Engine overheats | <ol style="list-style-type: none"> 1. Carburetor not adjusted properly. | <ol style="list-style-type: none"> 1. Contact MTD Service Center. |
| Excessive Vibration | <ol style="list-style-type: none"> 1. Loose parts or damaged auger. | <ol style="list-style-type: none"> 1. Stop engine immediately and disconnect spark plug wire. Tighten all bolts and nuts. If vibration continues, have unit serviced by a MTD Service Center. |
| Loss of power | <ol style="list-style-type: none"> 1. Spark plug wire loose. 2. Gas cap vent hole plugged. 3. Exhaust port plugged. | <ol style="list-style-type: none"> 1. Connect and tighten spark plug wire. 2. Remove ice and snow from gas cap. Be certain vent hole is clear. 3. Contact MTD Service Center. |
| Unit fails to propel itself | <ol style="list-style-type: none"> 1. Drive control cable in need of adjustment. 2. Drive belt loose or damaged. | <ol style="list-style-type: none"> 1. Adjust drive control cable. Refer to "Making Adjustments". 2. Replace drive belt. |
| Unit fails to discharge snow | <ol style="list-style-type: none"> 1. Chute assembly clogged. 2. Foreign object lodged in auger. 3. Auger control cable in need of adjustment. 4. Auger belt loose or damaged. 5. Shear pin(s) sheared. | <ol style="list-style-type: none"> 1. Stop engine immediately and disconnect spark plug wire. Clean chute assembly and inside of auger housing with clean-out tool or a stick. 2. Stop engine immediately and disconnect spark plug wire. Remove object from auger with clean-out tool or a stick. 3. Refer to "Auger Control Test" on page 11. 4. Refer to Maintenance section. 5. Replace with new shear pin(s). |

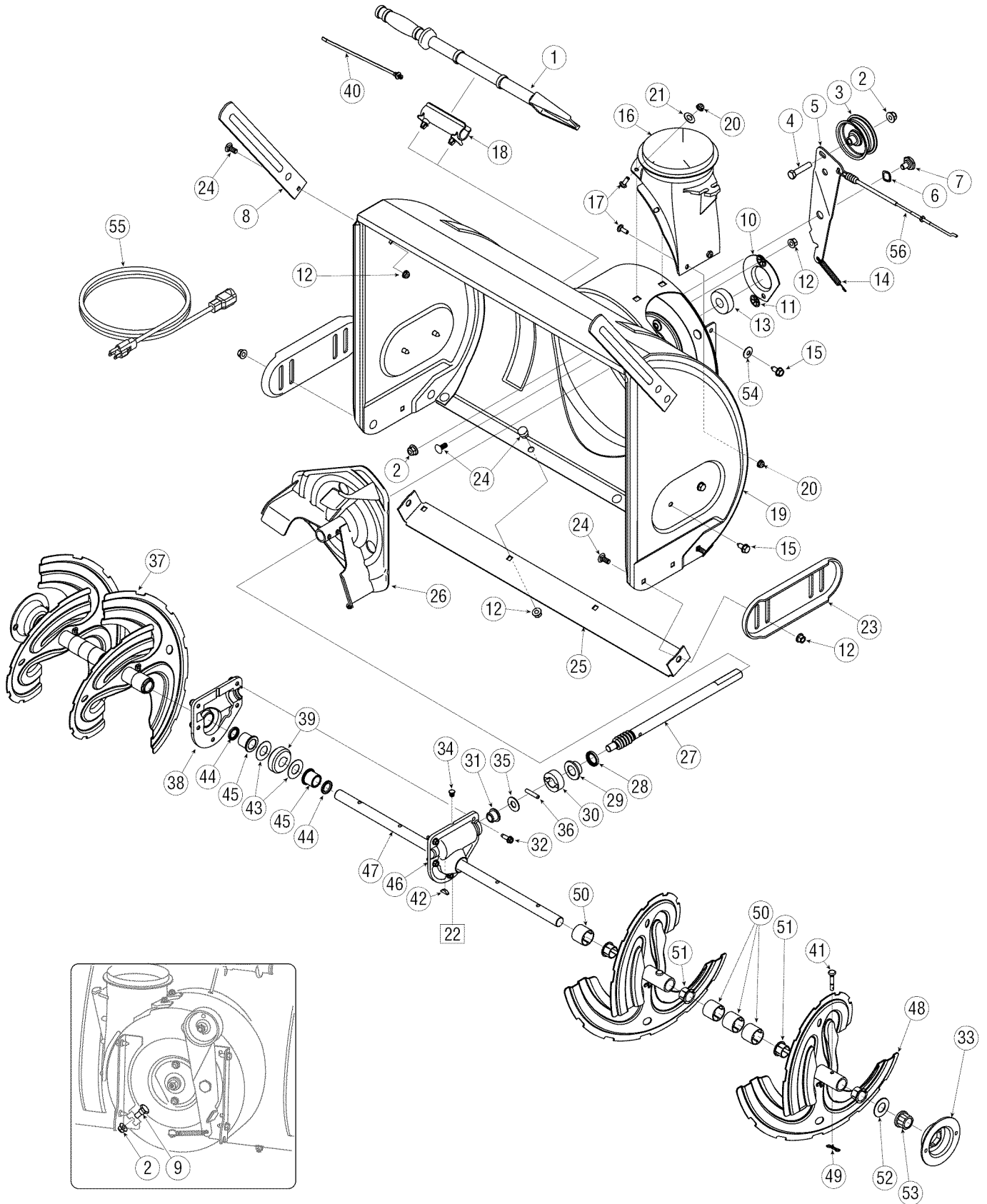
8

Trouble-Shooting



NOTE: This section addresses minor service issues. For further details, contact a MTD authorized service center or call 1 (800) 800-7310 for assistance.

Model 5ML



| | | |
|-----|------------|-------------------------------|
| 1. | 731-2643 | Clean-Out Tool |
| 2. | 712-04065 | Flange Lock Nut |
| 3. | 756-0981A | Flat Idler Pulley |
| 4. | 710-0347 | Hex Bolt, 3/8-16 x 1.75 |
| 5. | 790-00080 | Auger Idler Bracket |
| 6. | 736-0174 | Wave Washer |
| 7. | 738-0281 | Shoulder Screw |
| 8. | 790-00181† | Blade Guide |
| 9. | 738-0143 | Shoulder Screw |
| 10. | 790-00075 | Bearing Housing |
| 11. | 726-04012 | Push Nut |
| 12. | 712-04063 | Flange Lock Nut, 5/16-18 |
| 13. | 741-0309 | Ball Bearing |
| 14. | 732-0611 | Extension Spring |
| 15. | 710-0604A | AB Screw, 5/16-18 x 0.625 |
| 16. | 731-04705 | Chute Adapter |
| 17. | 710-0703 | Carriage Screw, 1/4-20 x 0.75 |
| 18. | 731-2635 | Clean-out Tool Mtg. Bracket |
| 19. | 684-04073 | Auger Housing Assembly: 28" |
| 20. | 712-04064 | Flange Lock Nut, 1/4-20 |
| 21. | 736-0463 | Flat Washer |
| 22. | 618-04173 | Gearbox Assembly Complete |
| 23. | 790-00091 | Slide Shoe |
| 24. | 710-0451 | Carriage Bolt |
| 25. | 790-00118 | Shave Plate |
| 26. | 684-04057 | Impeller Assembly |
| 27. | 717-04126 | Worm Shaft |
| 28. | 721-0327 | Oil Seal |

| | | |
|-----|------------|-----------------------------------|
| 29. | 741-0662 | Flange Bearing |
| 30. | 718-04071 | Thrust Collar |
| 31. | 741-0663 | Flange Bearing |
| 32. | 710-0642 | TT Screw, 1/4-20 x 0.75 |
| 33. | 790-00087A | Bearing Housing |
| 34. | 721-0325 | Plug |
| 35. | 736-3084 | Flat Washer |
| 36. | 715-04021 | Dowel Pin |
| 37. | 684-04108 | Spiral Assembly- RH |
| 38. | 618-0123 | Reducer Hsg.-RH (Incl Ref. 44-45) |
| 39. | 717-0528A | Worm Gear, 20T |
| 40. | 725-0157 | Cable Tie |
| 41. | 738-04124A | Shear Pin |
| 42. | 714-0161 | Key |
| 43. | 736-0351 | Flat Washer |
| 44. | 721-0179 | Oil Seal |
| 45. | 741-0661A | Flange Bearing |
| 46. | 618-0124 | Reducer Hsg.-LH (Incl Ref. 44-45) |
| 47. | 711-04283 | Auger Axle |
| 48. | 684-04107 | Spiral Assembly- LH |
| 49. | 714-04040 | Bow Tie Cotter Pin |
| 50. | 731-04870 | Spacer |
| 51. | 741-0493A | Flange Bushing |
| 52. | 736-0188 | Flat Washer |
| 53. | 741-0245 | Hex Flange Bearing |
| 54. | 736-0242 | Bell Washer |
| 55. | 629-0071 | Extension Cord |
| 56. | 746-04230 | Auger Clutch Cable |

† If Equipped

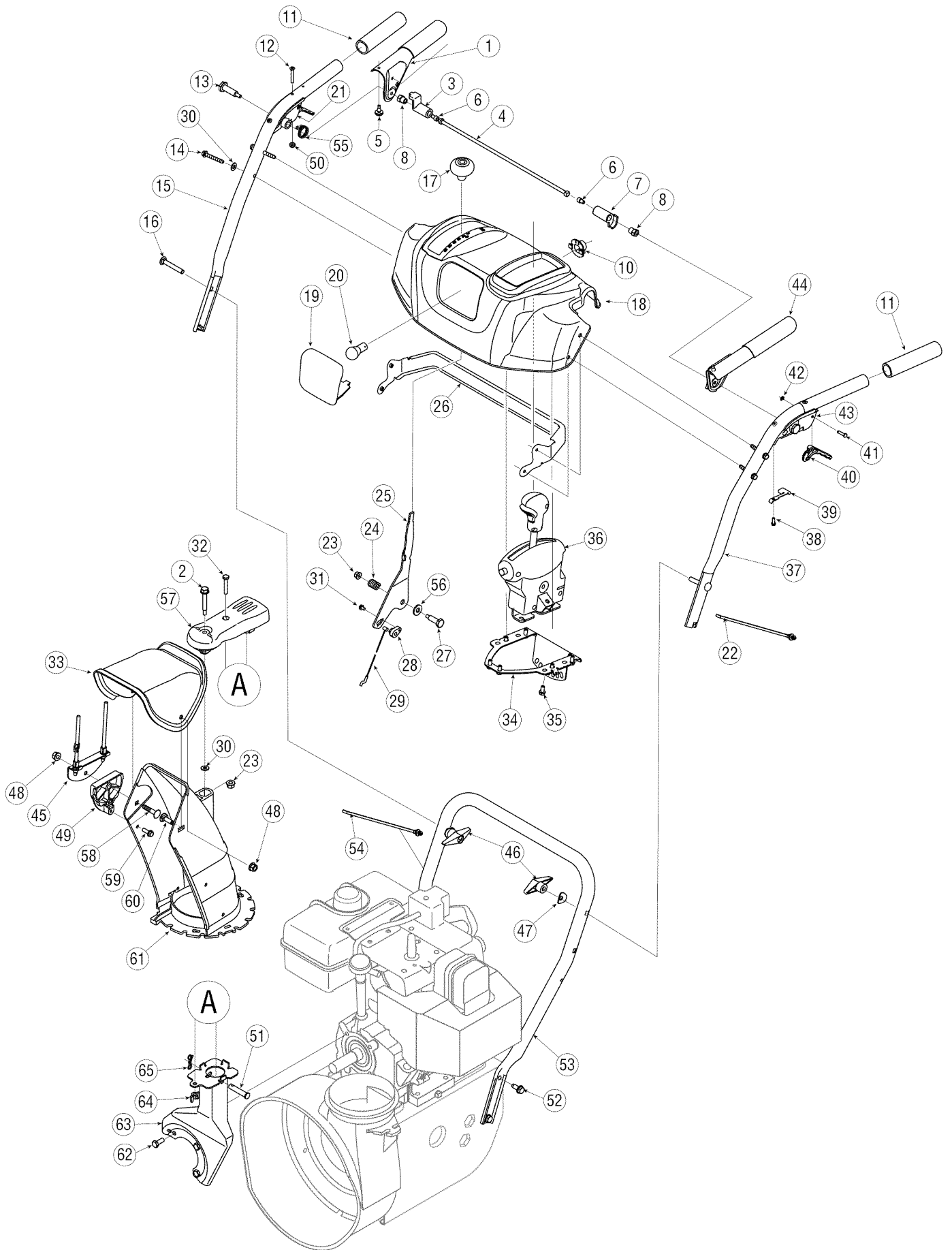
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Parts List



To order replacement parts, contact
1-800-800-7310,
or visit
www.mtdproducts.com.

Model 5ML



| | | |
|-----|------------|----------------------------------|
| 1. | 684-04109A | Handle Engagement Assembly RH |
| 2. | 738-04194 | Flange Shoulder Screw |
| 3. | 731-04894A | Lock Plate |
| 4. | 711-04287 | Pivot Rod |
| 5. | 735-0199A | Rubber Bumper |
| 6. | 710-04354 | Screw, 1/4-20 x.375 |
| 7. | 731-04896A | Clutch Lock Cam |
| 8. | 712-04081A | Shoulder Nut, 1/4-20 |
| 9. | 725-04214 | Wire Harness (Not Shown) |
| 10. | 725-1649 | Light Socket |
| 11. | 720-0274 | Handle Grip |
| 12. | 710-1233 | Screw, #10-24 x 0.375 |
| 13. | 738-04122 | Shoulder Screw, 1/4-20 x 1.345 |
| 14. | 710-1026 | Screw, 1/4-20 x 1.750 |
| 15. | 749-04141 | Upper Handle RH |
| 16. | 710-0449 | Carriage Screw, 5/16-18 x 2.25 |
| 17. | 720-04046 | Shift Knob |
| 18. | 631-04183 | Handle Panel (Includes Ref. #19) |
| 19. | 731-05320 | Lens |
| 20. | 725-04213 | Lamp |
| 21. | 731-04784A | Handle Clutch Lock - RH |
| 22. | 725-0157 | Cable Tie |
| 23. | 712-04064 | Flange Lock Nut, 1/4-20 |
| 24. | 732-0193 | Compression Spring |
| 25. | 790-00203 | Shift Lever |
| 26. | 790-00140 | Panel Bracket |
| 27. | 738-04125 | Shoulder Screw |
| 28. | 746-0605 | Cable Barrel Holder |
| 29. | 746-04227 | Speed Selector Cable |
| 30. | 736-0463 | Flat Washer, .25 x .630 x .0515 |
| 31. | 710-0224 | Screw, #10-16 x .500 |
| 32. | 710-0606 | Hex Screw, 1/4-20 x 1.50 |
| 33. | 731-04427A | Upper Chute |

| | | |
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| 34. | 790-00131 | Joystick Bracket |
| 35. | 710-04187 | Hi-Lo Screw, 1/4-15 x 0.5 |
| 36. | 684-04116A | 4-Way Chute Control™ Assembly (Includes Ref.# 57) |
| 37. | 749-04142 | Upper Handle LH |
| 38. | 710-04326 | Screw, #8-16 x 0.50 |
| 39. | 732-04219 | Clutch Lock Spring |
| 40. | 731-04954 | Steering Control |
| 41. | 738-04126 | Pin, 3/16 |
| 42. | 716-04036 | E Ring |
| 43. | 731-04785 | Handle Clutch Lock - LH |
| 44. | 684-04110A | Handle Engagement Assembly LH |
| 45. | 784-5594 | Cable Bracket |
| 46. | 720-0284 | Handle Knob Assembly |
| 47. | 736-0451 | Saddle Washer |
| 48. | 712-04063 | Flange Lock Nut, 5/16-18 |
| 49. | 731-1313C | Chute Tilt Cable Guide |
| 50. | 712-0161 | Hex Lock Nut, #10-24 |
| 51. | 711-04469A | Clevis Pin |
| 52. | 710-1260A | AB Screw, 5/16-18 x 0.75 |
| 53. | 749-04138 | Lower Handle |
| 54. | 726-0470 | Cable Tie |
| 55. | 732-04238 | Torsion Spring |
| 56. | 736-0262 | Flat Washer |
| 57. | 731-04890A | Joystick Pulley Cover |
| 58. | 710-0262 | Carriage Bolt, 5/16-18 x 1.50 |
| 59. | 710-0895 | Hi-Lo Screw, 1/4-15 x .75 |
| 60. | 710-04071 | Carriage Bolt, 5/16-18 x 1.0 |
| 61. | 731-04861A | Lower Chute |
| 62. | 710-0627 | Hex Screw, 5/16-24 x .750 |
| 63. | 684-04162 | Chute Support Bracket |
| 64. | 712-3087 | Wing Nut, 1/4-20 |
| 65. | 714-04040 | Bow Tie Cotter Pin |

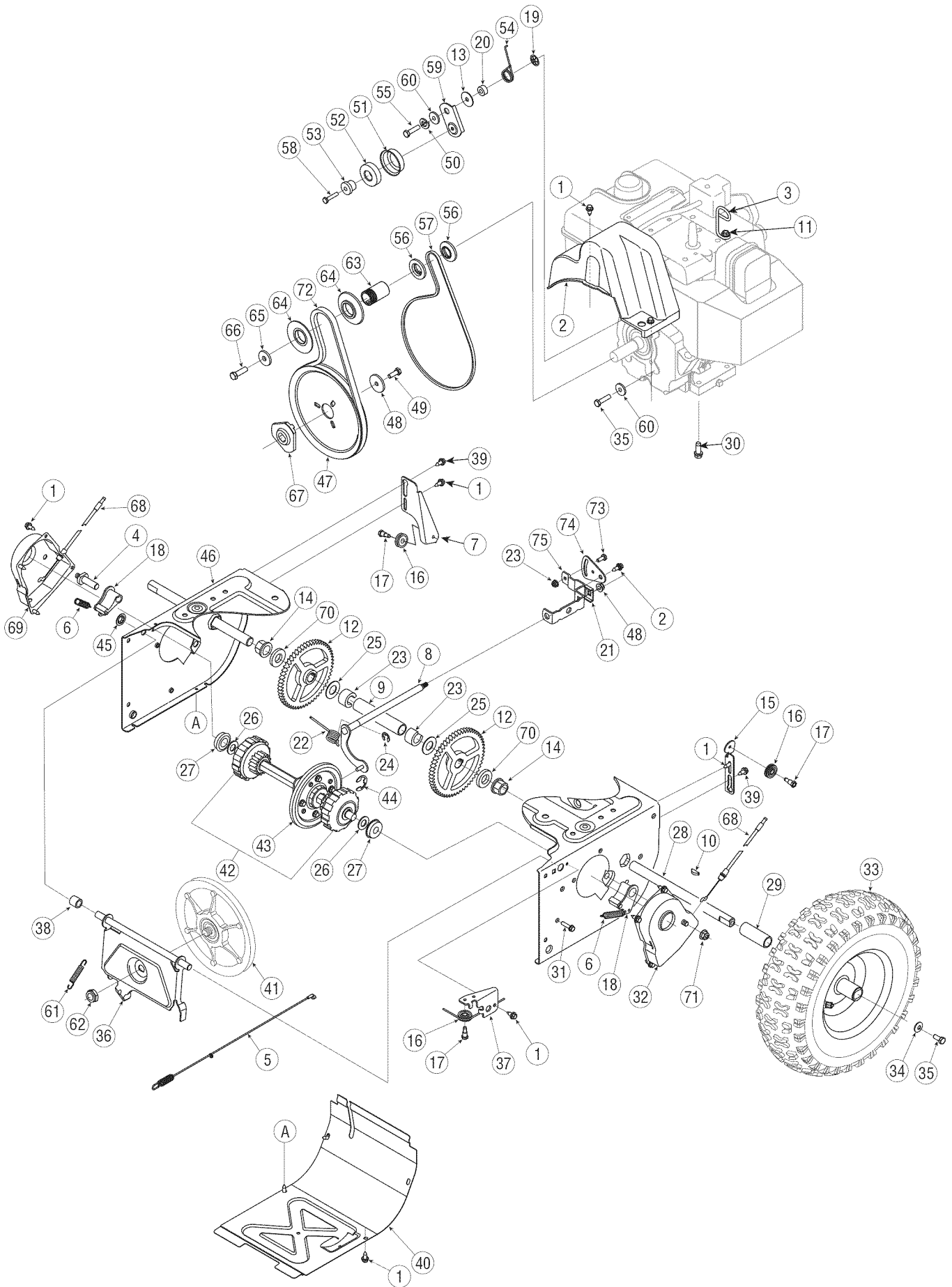
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Parts List



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Model 5ML



| | | |
|-----|-----------|------------------------------------|
| 1. | 710-1652 | AB Screw, 1/4-20 x 0.625 |
| 2. | 731-05353 | Belt Cover |
| 3. | 732-0705 | Cable Guide |
| 4. | 711-1268B | Actuator Shaft |
| 5. | 746-04229 | Drive Clutch Cable |
| 6. | 732-0209 | Extension Spring |
| 7. | 790-00207 | Drive Clutch Cable Guide Bracket |
| 8. | 684-04156 | Shift Rod Assembly |
| 9. | 750-04474 | Axle Support Tube |
| 10. | 714-0126 | Hi Pro Key |
| 11. | 710-0602 | TT Screw, 5/16-18 x 1.00 |
| 12. | 717-04210 | Gear, 56T |
| 13. | 736-0362 | Flat Washer |
| 14. | 741-0245 | Hex Flange Bearing |
| 15. | 790-00206 | Auger Clutch Cable Guide Bracket |
| 16. | 756-0625 | Cable Roller |
| 17. | 738-0924 | C Screw, 1/4-28 x 0.375 |
| 18. | 618-04288 | Dogg Assembly - LH |
| — | 618-04287 | Dogg Assembly - RH |
| 19. | 726-04012 | Push-on Nut |
| 20. | 750-04477 | Spacer |
| 21. | 790-00156 | Shift Bracket Spacer |
| 22. | 732-04311 | Torsion Spring, .750ID x .968 Lg. |
| 23. | 731-05297 | Spacer |
| 24. | 716-0104 | E Ring |
| 25. | 736-0188 | Flat Washer, .76 x 1.49 x .06 |
| 26. | 736-0626 | Flat Washer |
| 27. | 741-04076 | Ball Bearing |
| 28. | 738-04180 | Axle |
| 29. | 731-04873 | Spacer |
| 30. | 710-0654A | TT Sems Screw, 3/8-16 x 1.0 |
| 31. | 710-0788 | TT Screw, 1/4-20 x 1.0 |
| 32. | 790-00185 | Shaft Retainer - LH |
| 33. | 634-04141 | Wheel Complete |
| 34. | 736-0242 | Bell Washer |
| 35. | 710-0627 | Hex Bolt, 5/16-24 x 0.75 |
| 36. | 684-04154 | Friction Wheel Support Brkt. Assy. |
| 37. | 790-00096 | Auger Cable Guide Bracket |
| 38. | 748-0190 | Spacer |

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| 39. | 738-04184 | Shoulder Screw |
| 40. | 790-00226 | Frame Cover |
| 41. | 656-04025 | Friction Wheel Disc Assembly |
| 42. | 618-04283 | Drive Shaft Assembly |
| 43. | 684-04159 | Friction Wheel Assembly |
| — | 735-04054 | Friction Wheel Rubber Only |
| 44. | 716-0136 | Retainer Ring |
| 45. | 726-0221 | Speed Nut |
| 46. | 790-00183 | Wheel Drive Frame |
| 47. | 756-04109 | Auger Pulley |
| 48. | 736-0505 | Flat Washer |
| 49. | 710-1245B | Hex Bolt, 5/16-24 x 0.875 |
| 50. | 736-0119 | Lock Washer |
| 51. | 790-00230 | Bearing Sleeve |
| 52. | 741-0919 | Ball Bearing |
| 53. | 750-04571 | Spacer |
| 54. | 732-04308A | Torsion Spring |
| 55. | 710-0672 | Hex Screw, 5/16-24 x 1.25 |
| 56. | 756-04179 | Pulley Half |
| 57. | 754-04088 | V-Belt, 2L x 33 |
| 58. | 710-0809 | TT Screw, 1/4-20 x 1.25 |
| 59. | 790-00208 | Drive Clutch Idler Bracket |
| 60. | 748-04112 | Shoulder Spacer |
| 61. | 732-0264 | Extension Spring |
| 62. | 712-0413 | Jam Lock Nut, 5/8-18 |
| 63. | 750-04303 | Spacer |
| 64. | 756-04113 | Pulley Half |
| 65. | 736-0247 | Flat Washer |
| 66. | 710-0191 | Hex Bolt, 3/8-24 x 1.25 |
| 67. | 748-04053 | Pulley Adapter |
| 68. | 746-0956A | Steering Cable |
| 69. | 790-00186 | Shaft Retainer - RH |
| 70. | 750-0767 | Axle Spacer |
| 71. | 712-04065 | Flange Lock Nut, 3/8-16 |
| 72. | 754-04050 | V-Belt,.500 x 35.00 Lg |
| 73. | 710-0751 | Hex Screw, 1/4-20 x .620 |
| 74. | 790-00217 | Speed Selector Pivot Bracket |
| 75. | 790-00218 | Speed Selector Shift Bracket |
| — | 723-0608 | Tire Chains (If Equipped) |

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Parts List



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or visit
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MANUFACTURER'S LIMITED WARRANTY FOR



The limited warranty set forth below is given by MTD LLC 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 materials 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 part, accessory or attachment not approved by MTD for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Normal wear parts are warranted to be free from defects in material and workmanship for a period of thirty (30) days from the date of purchase. Normal wear parts include, but are not limited to items such as: batteries, belts, blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates, auger spiral rubber 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, check your Yellow Pages, or contact MTD LLC at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-800-800-7310 or 1-330-220-4683 or log on to our Web site at www.mtdproducts.com.

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

- a. The engine or component parts thereof. These items may carry a separate manufacturer's warranty. Refer to applicable manufacturer's warranty for terms and conditions.
- b. Log splitter pumps, valves, and cylinders have a separate one year warranty.
- c. Routine maintenance items such as lubricants, filters, blade sharpening, tune-ups, brake adjustments, clutch adjustments, deck adjustments, and normal deterioration of the exterior finish due to use or exposure.
- d. Service completed by someone other than an authorized service dealer.

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

f. Replacement parts that are not genuine MTD parts.

g. Transportation charges and service calls.

No implied warranty, including any implied warranty of merchantability of 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, 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.

The provisions as set forth in this warranty provide the sole and exclusive remedy arising from the sale. MTD shall not be liable for incidental or consequential loss or damage including, without limitation, expenses incurred for substitute or replacement lawn care services or for rental expenses to temporarily replace a warranted product.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations 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 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 misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or to 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.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.