

OPERATOR'S MANUAL

Snow Blower

2-Stage and 3-Stage (700 Series)

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Record Product Information

Before setting up and operating your new snow blower, please locate the model plate on the equipment and record the information in the provided area to the right. You can locate the model plate by standing at the operator's position and looking down at the rear of the snow blower. This information will be necessary, should you seek technical support via our web site, Customer Support Department, or with a local authorized service dealer.

Model Number

Serial Number

WARNING

Read and follow all safety rules and instructions in this manual before attempting to operate this machine.

Failure to comply with these instructions may result in personal injury - SAVE THESE INSTRUCTIONS.

WARNING

CALIFORNIA PROPOSITION 65

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.

NOTE: This Operator's Manual covers several models. Features may vary by model. Not all features in this manual are applicable to all models and the model depicted may differ from yours.



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!**

DANGER

This machine was built to be operated according to the safe operation practices 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 fingers, hands, toes and feet and throwing debris. 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 of age to operate this machine. Children 14 and over should read and understand the instructions and safe operation practices in this manual and on the machine and be trained and supervised by an adult.
4. Never allow adults to operate this machine without proper instruction.
5. Thrown objects can cause serious personal injury. Plan your snow-blowing pattern to avoid discharge of material toward roads, bystanders and the like.
6. Keep bystanders, 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

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 machine.

1. 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.
2. 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.
3. Use a grounded three-wire extension cord and receptacle for all machines with electric start engines.
4. Adjust auger housing height to clear gravel or crushed rock surfaces.
5. Disengage all control levers before starting the engine.
6. Never attempt to make any adjustments while engine is running, except where specifically recommended in the operator's manual.
7. Let engine and machine adjust to outdoor temperature before starting to clear snow.

SAFE OPERATION PRACTICES

SAFE HANDLING OF GASOLINE

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.

1. Use only an approved gasoline container.
2. Extinguish all cigarettes, cigars, pipes and other sources of ignition.
3. Never fuel machine indoors.
4. Never remove gas cap or add fuel while the engine is hot or running.
5. Allow engine to cool at least 5 minutes before refueling.
6. Never over fill fuel tank. Fill tank to no more than ½ inch below bottom of filler neck to provide space for fuel expansion.
7. Replace gasoline cap and tighten securely.
8. If gasoline is spilled, wipe it off the engine and equipment. Move machine to another area. Wait 5 minutes before starting the engine. If fuel is spilled on clothing, change clothing immediately.
9. 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.).
10. Allow machine to cool at least 5 minutes before storing.
11. Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
12. If possible, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
13. Keep the nozzle in contact with the rim of the fuel tank or container opening at all times until fueling is complete. Do not use a nozzle lock-open device.

OPERATION

1. Do not put hands or feet near rotating parts, in the auger housing or chute assembly. Contact with the rotating parts can amputate hands and feet.
2. The auger 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. Keep children away.
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. Do not operate on steep slopes.
10. Plan your snow-blowing 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. Release auger control lever to disengage power to the auger when transporting or not clearing snow.
15. Never operate machine at high transport speeds on slippery surfaces. Look down and behind and use care when backing up.
16. After striking a foreign object or if the machine should start to vibrate abnormally, stop the engine, remove the safety key or disconnect spark plug wire. Inspect thoroughly for damage. Repair any damage before starting and operating.

SAFE OPERATION PRACTICES

17. Disengage all control levers, stop engine, remove the safety key or disconnect spark plug wire before you leave the operating position (behind the handles). Wait until the auger 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, remove the safety key or disconnect spark plug wire. 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. When starting engine, pull cord slowly until resistance is felt, then pull rapidly. Rapid retraction of starter cord (kickback) will pull hand and arm toward engine faster than you can let go. Broken bones, fractures, bruises or sprains could result.
21. If situations occur which are not covered in this manual, use care and good judgment. Contact Customer Support for assistance and the name of your nearest servicing dealer.
5. Snow blower 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 control levers 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.
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.

CLEARING A CLOGGED DISCHARGE CHUTE

Hand contact with the rotating impeller or auger inside the discharge chute is the most common cause of injury associated with snow blowers. Never use your hand to clean out the discharge chute.

To clear the chute:

1. SHUT THE ENGINE OFF!
2. Remove the safety key or disconnect spark plug wire.
3. Wait 10 seconds to be sure the impeller or auger has stopped rotating.
4. Always use a clean-out tool, not your hands.

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, stop the engine, remove the safety key or disconnect spark plug wire. Wait until the auger comes to a complete stop.
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.

12. Check fuel line, tank, cap, and fittings frequently for cracks or leaks. Replace if necessary.
13. Do not crank engine with spark plug removed.
14. According to the Consumer Products Safety Commission (CPSC) and the U.S. Environmental Protection Agency (EPA), this product has an **Average Useful Life** of seven (7) years, or 60 hours of operation. At the end of the **Average Useful Life** have the machine inspected annually by an authorized service dealer to ensure that all mechanical and safety systems are working properly and not worn excessively. Failure to do so can result in accidents, injuries or death.

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), Oxidizing Catalyst (OC), Secondary Air Injection (SAI) and Three Way Catalyst (TWC) if so equipped.

SAFETY SYMBOLS

This page depicts and describes safety symbols that may appear on the snow blower and engine. Read, understand, and follow all warnings and instructions on the snow blower and engine, along with the operator's manuals before attempting to operate.

Symbol	Description
 <p>OPESymbol.com</p>	<p>WARNING – READ OPERATOR'S MANUAL: Read, understand and follow all the safety rules and instructions in the manual(s) and on the snow blower before attempting to operate this snow blower. Failure to comply with this information may result in personal injury or death. Keep this manual in a safe location for future and regular reference. Using a Smart Phone, scan the QR code symbol to learn more information concerning the warnings contained on this snow blower. You can also go to www.OPESymbol.com for more information.</p>
	<p>WARNING – AVOID AMPUTATION INJURY, DISCHARGE CHUTE: Do not put hands near or into the discharge chute while the engine is running. Contact with the rotating impeller or auger can amputate fingers and hands. Stop engine and remove safety key and wait until all moving parts have stopped rotating. Always use clean-out tool to clear the discharge chute, never use your hand.</p>
	<p>WARNING – AVOID AMPUTATION INJURY, AUGER HOUSING: Do not put hands or feet near or into the auger housing while the engine is running. Contact with the auger can amputate fingers, hands, toes and feet. Stop engine and remove safety key and wait until all moving parts have stopped rotating. Always use clean-out tool to clear the auger housing, never use your hands.</p>
	<p>WARNING— ELECTRICAL SHOCK: Do not plug in and use the engine's electric starter in the rain or wet conditions.</p>
	<p>WARNING—GASOLINE IS FLAMMABLE: Allow the engine to cool at least five minutes before refueling.</p>
	<p>WARNING— CARBON MONOXIDE: Never run an engine indoors or in a poorly ventilated area. Engine exhaust contains carbon monoxide, an odorless and deadly gas.</p>
	<p>WARNING— HOT SURFACE: The muffler and engine become very hot and can cause serious burn injuries. Do not touch. Allow the snow blower to cool for at least five minutes before storing or attempting any service.</p>

⚠ WARNING

Your Responsibility—Restrict the use of the snow blower to persons who read, understand and follow all warnings and instructions on snow blower, along with the operator's manuals. - **SAVE THESE INSTRUCTIONS!**

ASSEMBLY

Overview

- Remove packaging materials from snow blower.
- Rotate handle into the upright position. Refer to Handle Assembly.
- Install the chute. Refer to Chute Assembly Options.
- Complete snow blower assembly according to model and equipment. Refer to Set-Up.
- If necessary make adjustments to ensure proper snow blower operation. Refer to Adjustments.
- Add fuel and oil. Refer to the Engine Operator's Manual shipped with snow blower.

Tools Required

- Adjustable Wrench or Socket Set
- Needle Nose Pliers

Handle Assembly

1. Cut cable ties securing chute control rod or upper handle to the lower handle (if applicable), set aside the chute control rod (if applicable) and remove the wrap around the handles (if applicable).

NOTE: Do not cut the cable tie securing the control cables to the engine, if equipped.

NOTE: On models with Overhead Chute Control (with Flex Shaft), Four-Way Chute Control, and Electric Chute Control cut cable ties securing flex shaft to the lower handle and set the flex shaft aside. Remove rubber bands securing cables to carriage bolts and cut cable tie securing shift rod to lower handle. Refer to Figure 5 to help identify the control styles.

2. Loosen the top two nuts (a) securing the upper and lower handle and remove the two carriage bolts (b) from the upper handle and set aside as shown in Figure 1.

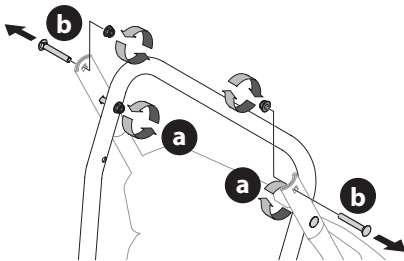


Figure 1

3. Place shift lever in Forward-6 position or fastest forward speed (if equipped).
4. Observe lower rear area of equipment to be sure both cables (if equipped) are aligned and seated properly in roller guides (Figure 2).

NOTE: On select models, chute-pitch control cables will be routed under the engine on the left side and will not use roller guides.

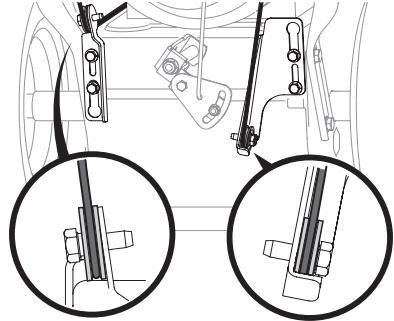


Figure 2

5. Pivot handle upward and align the lower handle (Figure 3). Remove and discard any rubber bands, if present. They are for packaging purposes only.

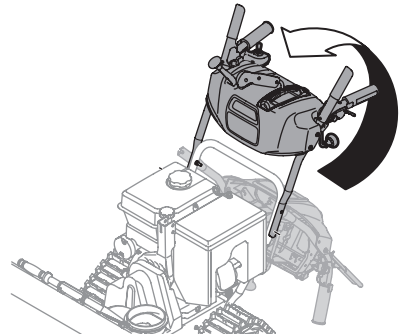


Figure 3

NOTE: On select models with steel rod speed selectors, you may need to lower shift rod to the side slightly to maneuver handle panel over it when pivoting handle upward.

ASSEMBLY

6. Attach the two carriage bolts (b) and nuts (a) removed in Step 2.
2. Finish securing the handle by tightening the top two nuts (c) loosened in Step 2. See Figure 4.

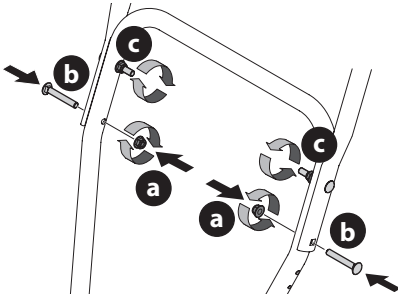
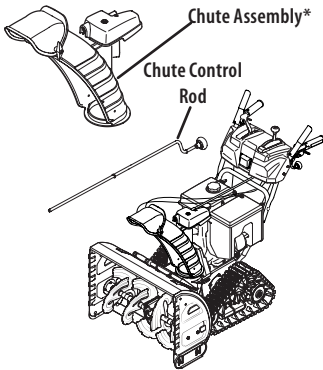


Figure 4

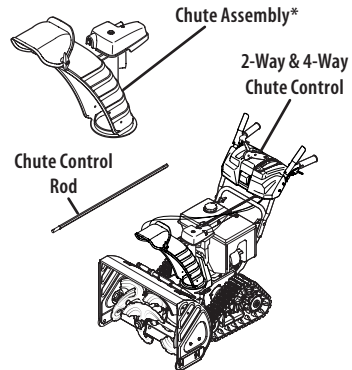
● STOP

Refer to Figure 5 below to identify your "Chute Control Style" and continue to the "Assembly" instructions for your specific style on pages 8-13.

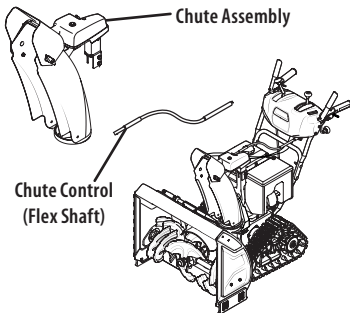
Chute Control Styles



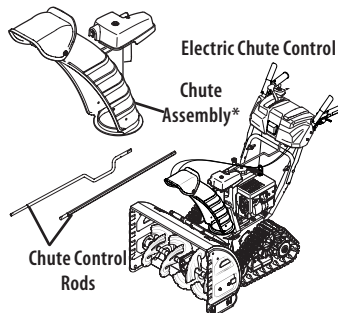
Overhead Chute Rotation Control on page 8



Overhead Chute Rotation Control w/ 2-Way Pitch or 4-Way Pitch & Rotation Control on page 9



Overhead Chute Control (Flex Shaft) w/ Steel Chute & 2-Way Pitch Control on page 10



Overhead Chute Rotation Control w/ 4-Way Electric Pitch & Rotation Control on page 12

***NOTE:** This model may be equipped with a metal chute assembly.

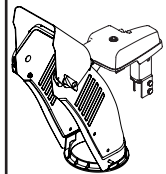


Figure 5

Overhead Chute Rotation Control

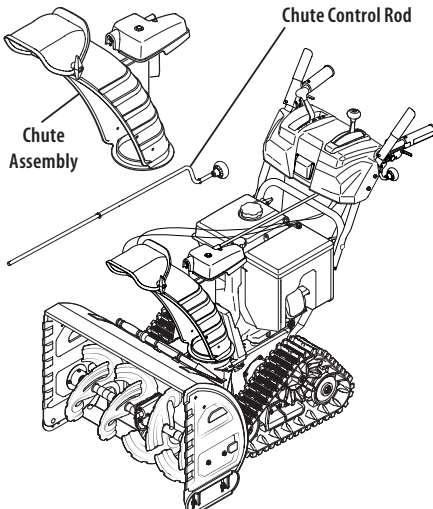
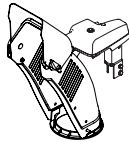


Figure 6

NOTE: If equipped with a metal chute assembly - This assembly will install the same the standard chute shown in the figures of this procedure.



1. Remove wing nut (or locknut if equipped) (a) and hex screw (b) from chute control head and clevis pin (c) and cotter pin (d) from chute support bracket. Position chute assembly (forward-facing) over chute base and chute support bracket (Figure 7).

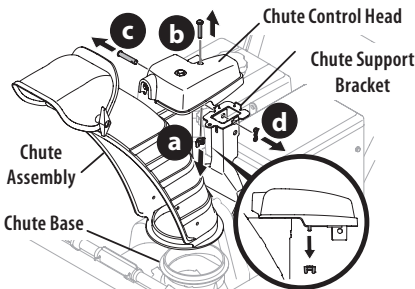


Figure 7

2. Secure chute control head to chute support bracket with clevis pin (c) and bow-tie cotter pin (d) removed in Step 1 (Figure 8).

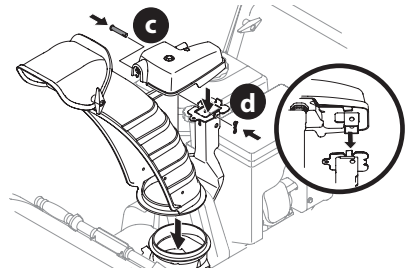


Figure 8

3. Finish securing chute control head to chute support bracket with wing nut (a) and hex screw (b) removed in Step 1 (Figure 9).

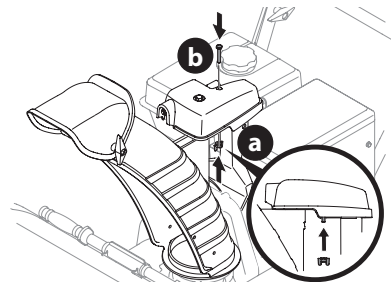


Figure 9

4. Insert chute control rod into the support bracket on rear of the dash panel (Figure 10).

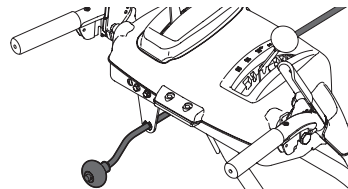


Figure 10

5. Remove hairpin clip (e) from rear of chute control head (Figure 11).

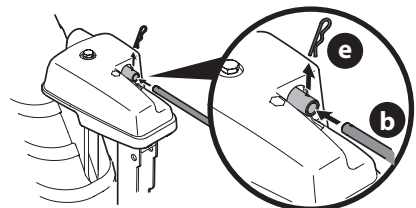


Figure 11

6. Insert chute control rod (b) into rear of chute control head (Figure 11) and secure with hairpin clip (e) removed in Step 5.

● STOP

Continue to Set-Up (page 13).

Overhead Chute Rotation Control w/ 2-Way Pitch or 4-Way Pitch & Rotation Control

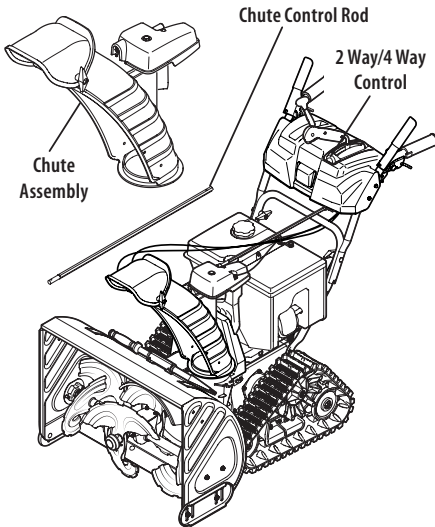


Figure 12

NOTE: If equipped with a metal chute assembly - This assembly will install the same the standard chute shown in the figures of this procedure.

1. Remove hairpin clip (a), wing nut (b) and hex screw (c) from chute control head and clevis pin (d) and bow-tie cotter pin (e) from chute support bracket (Figure 13).

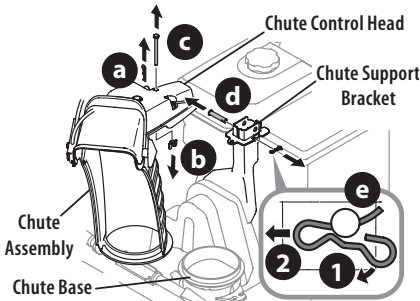


Figure 13

NOTE: For smoothest operation, cables should all be to the left of the chute control rod.

2. Insert chute control rod into chute control head. Push rod as far into chute control head as possible, keeping holes in rod pointing upward (Figure 14).

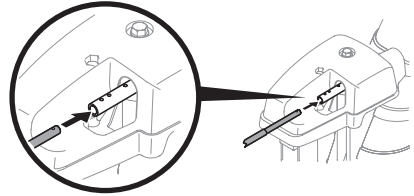


Figure 14

3. Place chute assembly onto chute base and ensure chute control rod is positioned above lower handle. Install hex screw (c) removed in Step 1, but do not secure with wing nut at this time (Figure 15).

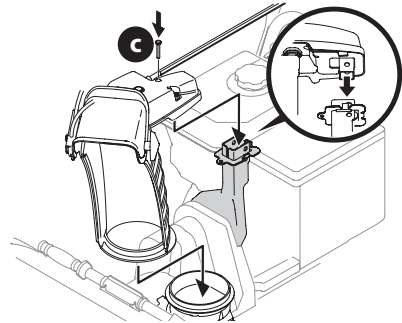


Figure 15

4. Squeeze trigger on 2-way/4-way chute control and rotate chute by hand to face forward. The holes in chute control collar will be facing up (Figure 16).

Chute Control Collar

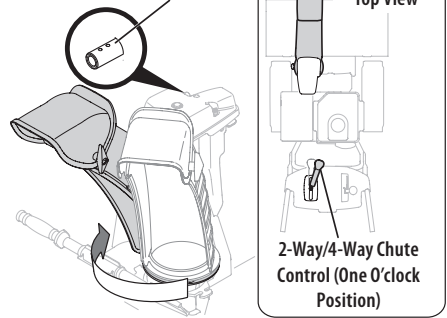


Figure 16

IMPORTANT: Chute will not rotate without squeezing trigger on 2-way/4-way chute control.

5. Rotate 2-way/4-way chute control to one o'clock position (Figure 16) so that indicator arrow on pinion gear below control handle faces upward (Figure 17).

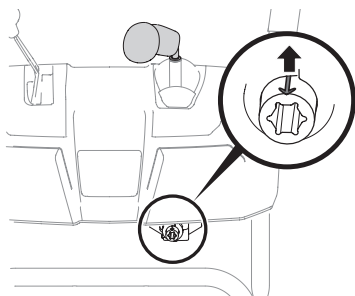


Figure 17

6. Insert chute control rod into pinion gear under handle panel. Make sure to line up hole in rod with arrow on pinion gear (Figure 18).

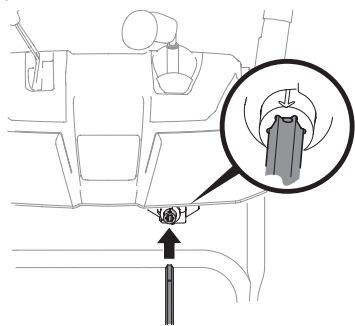


Figure 18

NOTE: Chute control rod will fit snug into pinion gear. Support rear of handle panel with one hand while inserting rod with your other hand to ensure rod is inserted **all the way** into pinion gear.

NOTE: The hole in the chute control rod is a reference for aligning rod with indicator arrow on pinion gear, and will be visible after rod has been fully inserted.

7. Push chute control rod toward control panel until hole in rod lines up with hole in chute control input collar closest to chute control head and insert hairpin clip (a) removed in Step 1 (Figure 19).

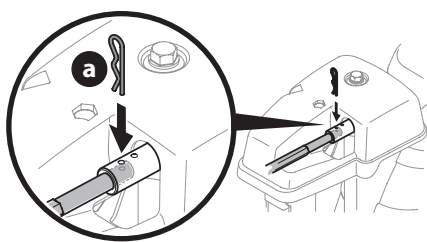


Figure 19

NOTE: Second hole is used to achieve further engagement of chute control rod into pinion gear, if required. Refer to Product Care section for Chute Control Rod adjustments.

8. Finish securing chute control head to chute support bracket with wing nut (b), clevis pin (d), and bow-tie cotter pin (e) removed in Step 1.

● STOP

Continue to Set-Up (page 13).

Overhead Chute Control (Flex Shaft) w/ Steel Chute & 2-Way Pitch Control

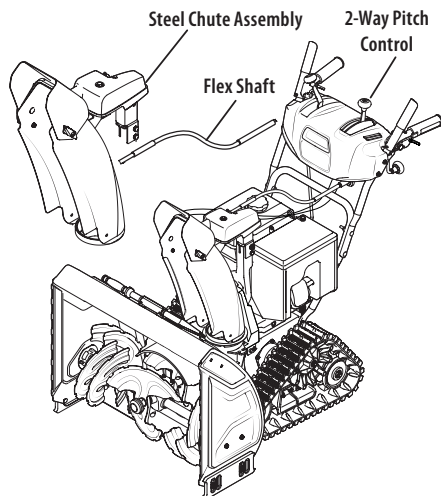


Figure 20

1. Remove lock nuts (a) and hex screws (b) from chute support bracket (this will require two wrenches) (Figure 21).

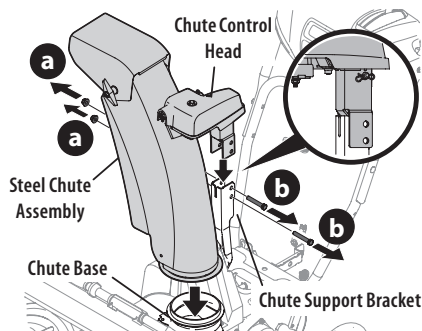


Figure 21

2. Place steel chute assembly onto chute base and chute control head onto chute support bracket (Figure 21).
3. Secure chute control head to chute support bracket with lock nuts (a) and hex screws (b) removed in Step 1 (Figure 22).

ASSEMBLY

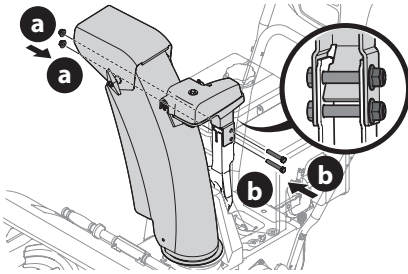


Figure 22

NOTE: For smoothest operation, cables should all be to the left of the chute control rod.

4. Remove hairpin clip (c) from rear of chute control head (Figure 23).

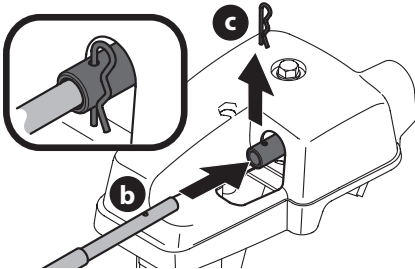


Figure 23

5. Insert flex shaft (b) into rear of chute control head, with hairpin clip (c) removed in Step 4 (Figure 23).
6. Perform one of the following to connect the flex shaft to the chute control rod coupling:
 - Models with Overhead Rotational - Insert hex end of flex shaft into chute control rod coupling under handle panel (Figure 24).

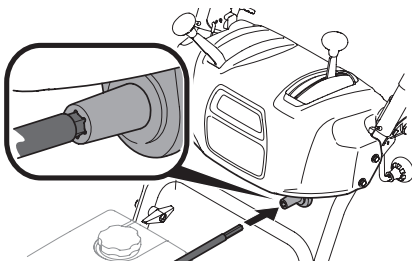


Figure 24

- Models with Electric Chute Control - Insert other end of flex shaft into chute control rod coupling under handle panel. Make sure to line up flat end of rod and flat end of coupler. You may need to rotate rod around until these two surfaces line up (Figure 25 inset).

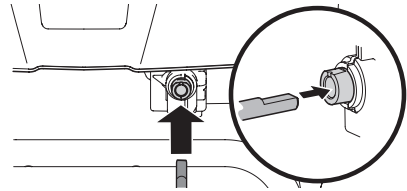


Figure 25

7. Ensure speed selector is in fastest forward speed.
8. Remove hairpin clip (c) and washer (d) from ferrule on end of shift rod (Figure 26 inset).

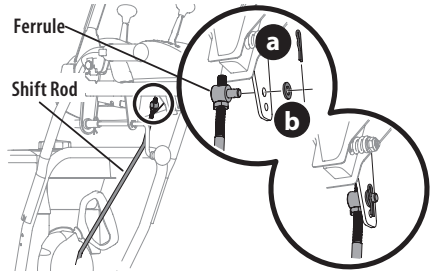


Figure 26

9. Make sure the shift lever on the back of the transmission is rotated downward to the full extent of its rotation (Figure 27).

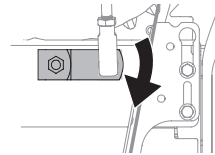


Figure 27

10. Insert ferrule into top hole of shift lever and secure with hairpin clip (c) and washer (d) removed in Step 8 (Figure 26). Ferrule may need to be adjusted up or down.

● STOP

Continue to Set-Up (page 13).

ASSEMBLY

Overhead Chute Rotation Control w/ 4-Way Electric Pitch & Rotation Control

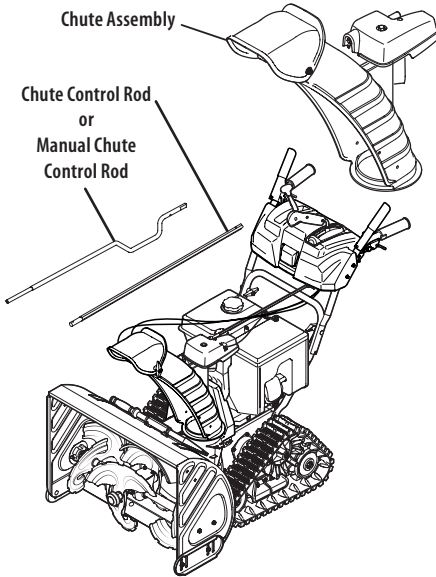
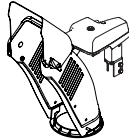


Figure 28

NOTE: If equipped with a metal chute assembly - This assembly will install the same the standard chute shown in the figures of this procedure.



1. Remove hairpin clip (a), wing nut (b) and hex screw (c) from chute control head. Remove clevis pin (d) and bow-tie cotter pin (e) from chute support bracket (Figure 29).

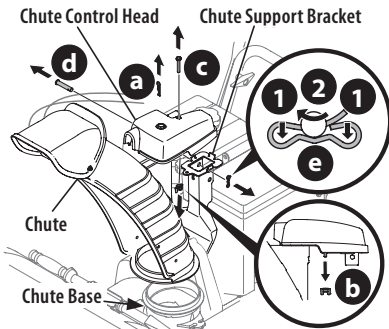


Figure 29

NOTE: For smoothest operation, cables should all be to the left of the chute control rod.

2. Insert round end of chute control rod into chute control head. Push rod as far into chute control head as possible, keeping holes in rod pointing upward (Figure 30).

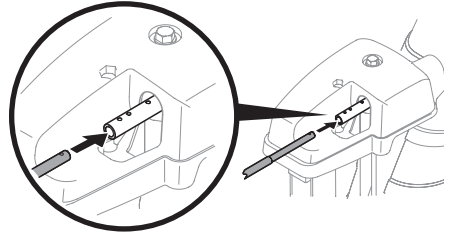


Figure 30

3. Place chute onto chute base and ensure chute control rod is positioned above lower handle. Secure chute control head to chute support bracket with clevis pin (d) and bow-tie cotter pin (e) removed in Step 1 (Figure 31).

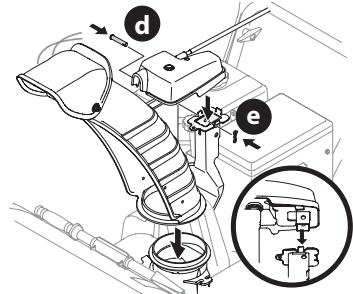


Figure 31

4. Finish securing chute control head by installing hex screw (c) and wing nut (b) removed in Step 1 (Figure 32).

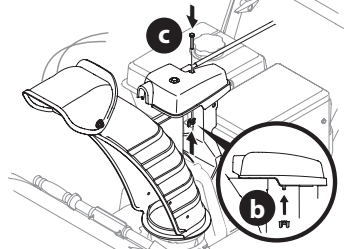


Figure 32

5. Insert other end of chute control rod into coupler below handle panel. Make sure to line up flat end of rod and flat end of coupler. You may need to rotate rod around until these two surfaces line up (Figure 33 inset).

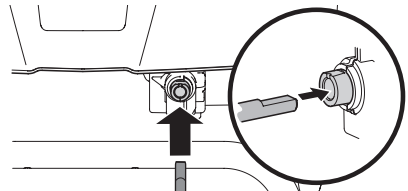


Figure 33

ASSEMBLY

- Push chute control rod toward the control panel until hole in rod lines up with middle hole in chute control coupler and insert hairpin clip (a) removed in Step 1 (Figure 34).

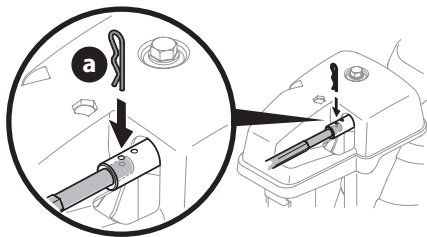


Figure 34

NOTE: There is a reference hole provided at rear end of control rod to help know when holes are vertical.

NOTE: Hole furthest from chute control head is used to achieve further engagement of chute control rod into coupler, if required. Refer to Adjustments, Overhead Chute Control on page 15.

NOTE: For models equipped with manual chute control rods, the hole closest to chute control head is used for manual movement of chute assembly, if required. Refer to Operation, Manual Chute Rotation Control & Electric Chute Control on page 20.

STOP

Continue to Set-Up (page 13).

Set-Up

CHUTE CONTROL CABLE ROUTING (IF EQUIPPED)

For models equipped with 2-way or 4-way chute controls, electric chute control and/or chute-pitch controls, ensure control cables are routed properly.

Chute control cables are routed through a single wire guide (a) on top of the engine and/or through two wire guides (b) located on the front and left side of the engine (Figure 35).

NOTE: On models equipped with a cable tie securing the cables to the rear of the gas tank, pull the cables toward the chute and pull the cable tie snug to secure the cables in place.

NOTE: For smoothest operation, cables should all be to the left of the chute control rod (c).

NOTE: The number of cables routed through the wire guides will vary depending on model.

- Locate cable guide(s) and perform the following:

- Top Mounted Wire Guide (a) - Check that all cables are properly routed through cable guide on top of engine (Figure 35).
- Front and Side Mounted Wire Guides (b) - Check that all cables are properly routed through the wire guide below the left side of the engine and the wire guide below the chute control head (Figure 35).

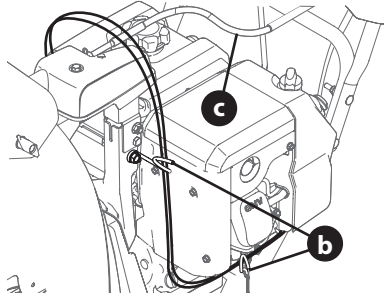
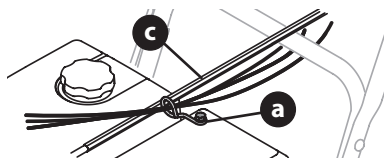


Figure 35

SHEAR PINS STORAGE (IF EQUIPPED)

On select models, holes are provided in the rear of the handle panel for shear pin (a) and bow-tie cotter pin (b) storage as shown in Figure 36. If not provided, make sure to store them in a safe place until needed.

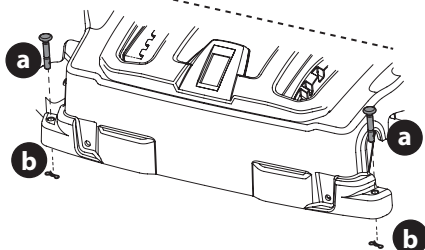
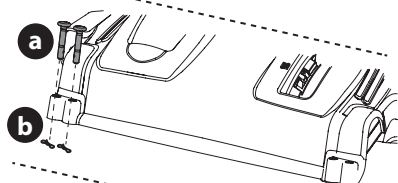
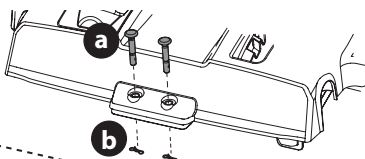


Figure 36

ASSEMBLY

DRIFT CUTTERS (IF EQUIPPED)

The drift cutters are mounted inverted at the factory for shipping purposes.

Non-Adjustable

1. Remove two carriage bolts (a) and lock nuts (b) that secure each drift cutter, and remove them from the sides of auger housing (Figure 37).

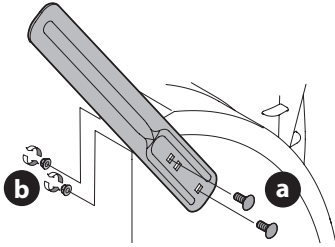


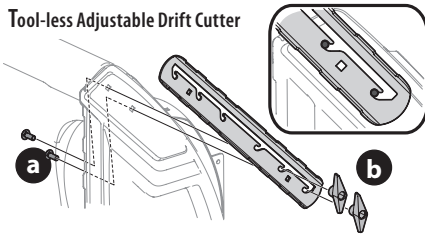
Figure 37

2. Turn the drift cutters around and position them as shown in Figure 37 to the outside of the auger housing.
3. Attach drift cutters with carriage bolts (a) and lock nuts (b) removed in Step 1.

Tool-less

1. Remove two carriage bolts (a) and wing knob (b) that secure each drift cutter, and remove them from the sides of auger housing (Figure 38).

Tool-less Adjustable Drift Cutter



Tool-less Non-Adjustable Drift Cutter

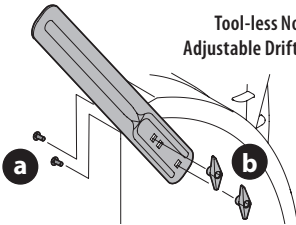


Figure 38

2. Turn the drift cutters around and position them as shown in Figure 38 to the outside of the auger housing.
3. Attach drift cutters with carriage bolts (a) and wing knob (b) removed in Step 1.

SKID SHOES (IF APPLICABLE)

Select models require the installation to the provided skid shoes.

1. Using the two carriage bolts (a) and hex flange nuts (b) and flat washers (if equipped) (c), secure the skid shoes to the auger housing (d). Hand tighten hex flange nuts (Figure 39).
2. Adjust the skid shoes to provide a minimum of 1/8th inch clearance between the shave plate (e) and the ground. Securely tighten hex flange nuts.
3. If necessary refer to Skid Shoes in the Adjustments section on page 14.

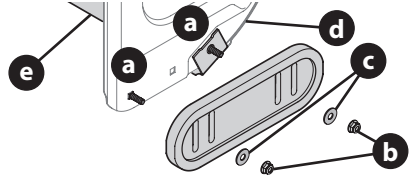


Figure 39

CHUTE CLEAN-OUT TOOL

The chute clean-out tool is fastened to the top of the auger housing with a mounting clip (Figure 40).

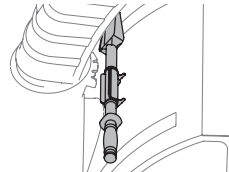


Figure 40

Adjustments

SKID SHOES

Snow blower skid shoes are adjusted at a factory setting roughly 1/8" below the shave plate. Adjust them upward or downward, if desired, prior to operating.

⚠ WARNING

Use extreme caution when operating on or near gravel and adjust skid shoes to clear gravel or crushed rock surfaces to avoid picking up and throwing objects which could cause serious injury or property damage.

- For close snow removal on a smooth surface, raise skid shoes higher on auger housing.
- Use a lower position when area to be cleared is uneven, such as a gravel driveway.

IMPORTANT: If you choose to operate on a gravel surface, keep skid shoes in position for maximum clearance between ground and shave plate.

1. Loosen four hex nuts (a) (two on each side) and carriage bolts (b). Move skid shoes to desired position (Figure 41).

ADJUSTMENTS

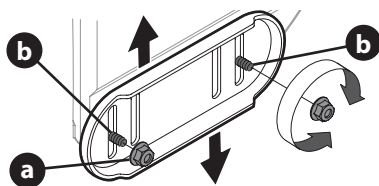


Figure 41

NOTE: The skid shoes on your snow blower may look slightly different (and have different hardware) than ones shown in Figure 41.

2. Make certain entire bottom surface of skid shoe is against ground to avoid uneven wear on skid shoes.
3. Securely tighten hex nuts (a) to carriage bolts (b).

ADJUSTABLE DRIFT CUTTERS (IF EQUIPPED)

The drift cutters are mounted inverted at the factory for shipping purposes.

1. Loosen the two carriage bolts (a) and wing knob (b) that secure each drift cutter to the sides of auger housing (Figure 42).

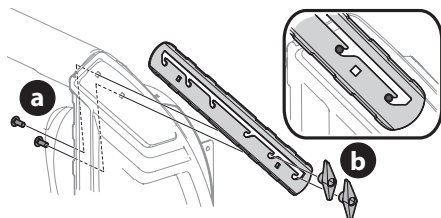


Figure 42

2. Slide the drift cutters to desired height.
3. Securely tighten the two carriage bolts and wing knob that secure each drift cutter to the sides of auger housing.

MANUAL CHUTE PITCH ADJUSTMENT

NOTE: For models without manual chute pitch, see Controls and Operation on page 20-21.

On models with manual chute pitch, the distance snow is thrown can be adjusted by changing angle of chute assembly. To do so:

1. Loosen wing knob found on left side of the upper chute assembly (Figure 43).

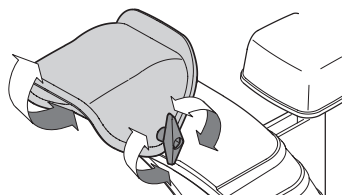


Figure 43

2. Pivot chute upward or downward before re-tightening wing knob.

OVERHEAD CHUTE CONTROL (IF EQUIPPED)

If chute fails to remain stationary during operation, preload of chute can be adjusted by tightening hex nut found on front of chute control head.

1. To increase preload, tighten hex nut (a) clockwise in $\frac{1}{4}$ turn intervals. The chute control rod (b) will need to be held stationary when tightening the nut (Figure 44).

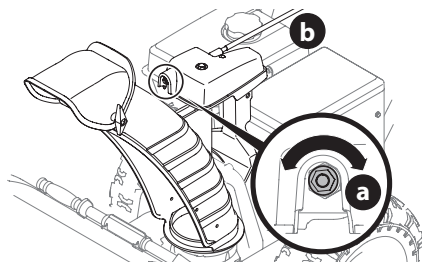


Figure 44

2. If chute control rod is difficult to turn, decrease preload by loosening hex nut counter-clockwise in $\frac{1}{4}$ turn intervals.

2-WAY OR 4-WAY CHUTE CONTROL (IF EQUIPPED)

To adjust chute control rod for increased engagement into the handle panel control, proceed as follows:

1. Remove hairpin clip (a) from hole closest to chute assembly on chute control head.
2. Pull out chute control rod until hole in it lines up with second hole in chute control head (Figure 45).

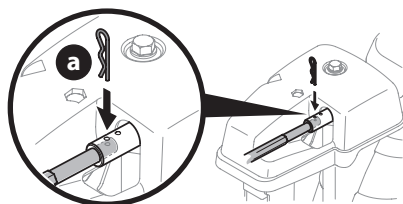


Figure 45

3. Reinsert hairpin clip (a) through this hole and chute control rod.

ADJUSTABLE SHAVE PLATE (IF EQUIPPED)

1. Allow engine to run until it is out of fuel. Do not attempt to drain fuel from the engine. Remove safety key or disconnect spark plug wire.
2. Carefully pivot snow blower up and forward so that it rests on front of auger housing.
3. Loosen rear skid shoe nuts (a) on both sides of auger housing and remove carriage bolts (b) and hex nuts (c) which attach shave plate (d) to the bottom of the auger housing (Figure 46).

ADJUSTMENTS

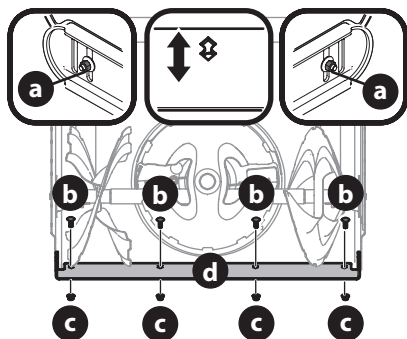


Figure 46

NOTE: 3-Stage model shown.

4. Adjust the shave plate to one of 2 mounting positions. Reinstall and securely tighten all carriage bolts, nuts and skid shoe hardware from Step 3 (Figure 46).
5. Readjust the skid shoes. See Skid Shoes on page 15.

AUGER CONTROL

⚠ WARNING

Prior to operating, carefully read and follow all instructions below. Perform all adjustments to verify your snow blower is operating safely and properly.

Refer to Auger Control Lever on page 19 for the location of auger control lever and check adjustment as follows:

1. When auger control lever is released and in disengaged "UP" position, the cable should have very little slack. It should NOT be tight.
2. In a well-ventilated area, start the engine. Refer to your Engine Operator's Manual.
3. While standing in the operator's position (behind the handles), depress the auger control lever to engage auger.
4. Allow auger to remain engaged for approximately ten (10) seconds before releasing auger control lever. Repeat this several times.
5. With auger control lever in disengaged "UP" position, walk to front of machine.
6. Confirm that auger has completely stopped rotating and shows NO signs of motion. If auger shows ANY signs of rotating, immediately shut OFF engine, remove safety key or disconnect spark plug wire. Wait for ALL moving parts to stop before readjusting auger control lever.

7. To readjust the auger control cable, loosen upper hex screw (a) (Figure 47).

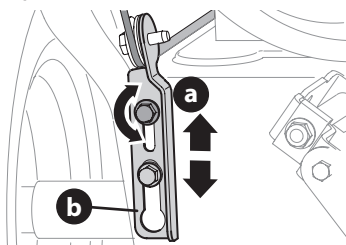


Figure 47

8. Position auger control bracket (b) upward to provide more slack in cable (Figure 47).
9. Re-tighten upper/rear hex screw (a).
10. Repeat the steps 1 - 6 to verify proper adjustment has been achieved.

SHIFT CABLE (IF EQUIPPED)

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

1. Place shift lever in fastest forward speed position.
2. Loosen hex nut (a) on shift cable index bracket (b) (Figure 48).
3. Pivot bracket downward to take up slack in cable.
4. Re-tighten hex nut.
5. If further adjustment is necessary move the shift cable to one of the alternate holes in the shift cable index bracket.

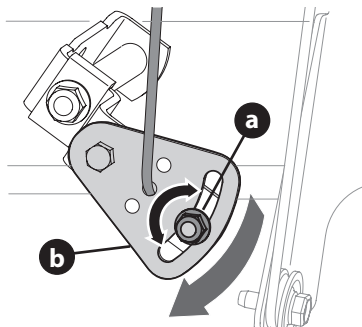


Figure 48

ADJUSTMENTS

SHIFT ROD (IF EQUIPPED)

If full range of speeds (forward and reverse) cannot be achieved, adjust shift rod as follows:

1. Place shift lever in fastest forward speed position.
2. Remove hairpin clip (a) and washer (b) from adjustment ferrule on shift rod and pull it out from shift lever (Figure 49).

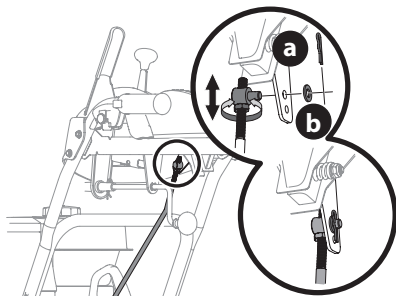


Figure 49

3. Make sure the shift lever on the back of the transmission is rotated downward to the full extent of its rotation (Figure 50).

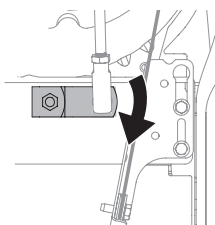


Figure 50

4. Rotate ferrule up or down on shift rod as necessary until it lines up with upper hole in shift lever (Figure 50 inset).
5. Insert the ferrule into the upper hole and secure with the washer and hairpin clip.

DRIVE CONTROL (IF EQUIPPED)

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

NOTE: If excessive slack is present in drive cable or if drive is disengaging intermittently during operation, the cable may be in need of adjustment.

Check adjustment of drive control lever as follows:

1. With drive control lever released, push snow blower gently forward. It should move freely.
2. Engage drive control lever and gently attempt to push the snow blower forward. The tracks should not move freely.
3. If equipped with a shift lever, with drive control lever released, move shift lever back and forth between the R2 position and the F6 position several times. There should be no resistance in the shift lever.

If any of the above tests fail, the drive cable is in need of adjustment. Proceed as follows:

1. Shut OFF engine, remove safety key or disconnect spark plug wire. Refer to the Engine Operator's Manual.
2. Loosen lower hex screw (a) on drive cable bracket (b) (Figure 51).

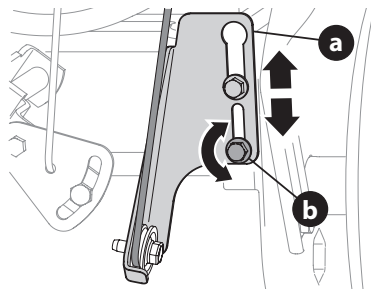


Figure 51

3. Position bracket upward to provide more slack (or downward to increase cable tension).
4. Re-tighten lower hex screw.
5. Check adjustment of drive control lever as described above to verify proper adjustment has been achieved.

Adding Fuel & Oil

Refer to the Engine Operator's Manual for information on adding fuel and oil.

OPERATION

Model Features

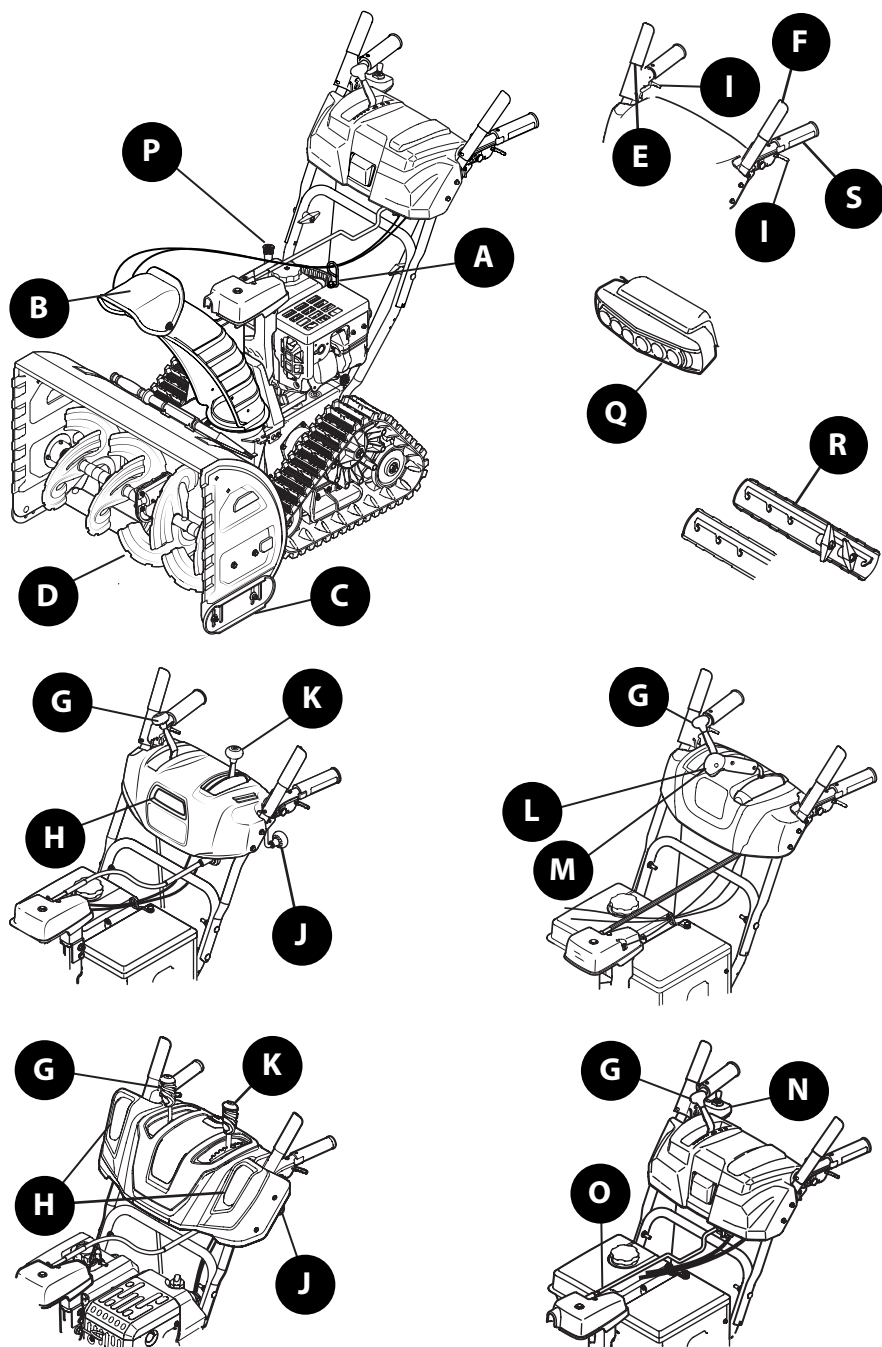


Figure 52

OPERATION

FEATURES

Snow blower controls and features are described below and may be illustrated in Figure 52.

NOTE: This Operator's Manual covers several models. Snow blower features may vary by model. Not all features in this manual are applicable to all snow blower models and the snow blower depicted may differ from yours.

NOTE: All references to the left or right side of the snow blower are from the operator's position. Any exceptions will be noted.

A. ENGINE CONTROLS

Refer to your Engine Operator's Manual for location and description of engine controls pertaining to your engine.

B. CHUTE ASSEMBLY

Snow gathered into the auger and impeller housings is discharged out the chute assembly.

C. SKID SHOES

Skid shoes provide the proper clearance of the shave plate for the surface conditions and the snow to be cleared. Adjust upward for hard-packed snow. Adjust downward when operating on gravel or crushed rock surfaces. See Skid Shoe Adjustment section on page 14.

D. AUGERS

When engaged, the augers rotate and gather snow into the auger and impeller housings.

E. DRIVE CONTROL LEVER/AUGER CLUTCH LOCK* (IF EQUIPPED)

The drive control lever is located on the right handle. Squeeze the control lever down against the handle to engage the track drive. Release to stop (Figure 53).



Figure 53

*On select models, the drive control lever also locks the auger control lever so that you can operate the chute control without interrupting the snow blowing process. When both the auger and drive levers are engaged at any time, the operator can release the auger control lever (on the left handle) and the augers will remain engaged. Release both control levers to stop augers and track drive.

NOTE: Always release drive control lever before changing speeds. Failure to do so will result in increased wear on your machine's drive system.

F. AUGER CONTROL LEVER

The auger control lever down is located on the left handle. Squeeze the control lever against the handle to engage the augers and start snow blowing action. Release to stop (Figure 54).



Figure 54

IMPORTANT: Refer to the Auger Control information in the Assembly & Set-Up section prior to operating your snow blower. Read and follow all instructions carefully and perform all adjustments to verify your snow blower is operating safely and properly.

G. SHIFT LEVER (6-SPEED TRANSMISSION) (IF EQUIPPED)

The shift lever is located on the handle panel and is used to determine ground speed and direction of travel.

• Forward

There are six forward (F) speeds. Position one (1) is the slowest and position six (6) is the fastest.

• Reverse

There are two reverse (R) speeds. Position one (1) is the slowest and position two (2) is the fastest.

H. HEADLIGHT (SINGLE OR DUAL) (IF EQUIPPED)

The headlight(s) located on the front of the handle panel is/are automatically turned ON when the engine is started.

I. STEERING TRIGGER CONTROLS (IF EQUIPPED)

The left and right track steering trigger controls are located on the underside of the handles (Figure 55).

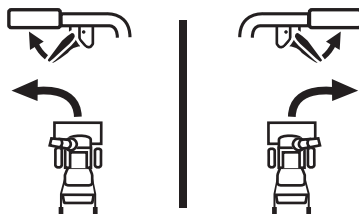


Figure 55

- Squeeze the right trigger control to turn right.
- Squeeze the left trigger control to turn left.

⚠ CAUTION

Operate the snow blower in open areas until you are familiar with these controls.

OPERATION

J. OVERHEAD CHUTE ROTATION CONTROL (IF EQUIPPED)

The overhead chute rotation control is located at the rear of the snow blower under the handle panel. To change the direction in which snow is thrown, rotate the control (Figure 56).



Figure 56

K. CHUTE-PITCH CONTROL (IF EQUIPPED)

The two-way chute-pitch control is located on the left side of the dash panel and is used to raise and lower the upper chute, which will change the distance the snow is thrown.

To raise or lower the upper chute, move the lever forward or backward (Figure 57).

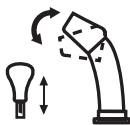
Two-Way Chute-Pitch Control

- **To Reduce the Distance Snow is Thrown:** Move the lever forward to tilt the upper chute down (Figure 57).
- **To Increase the Distance Snow is Thrown:** Move the lever rearward to tilt the upper chute up (Figure 57).

Two-Way Indexed Chute-Pitch Control

- **To Reduce the Distance Snow is Thrown:** Disengage lever from the current chute setting. Move the lever forward to tilt the upper chute down to the desired setting (a) (Figure 57).
- **To Increase the Distance Snow is Thrown:** Disengage lever from the current chute setting. Move the lever rearward to tilt the upper chute up to the desired setting (b) (Figure 57).

TWO-WAY CHUTE-PITCH CONTROL



TWO-WAY INDEXED CHUTE-PITCH CONTROL

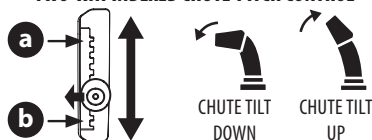


Figure 57

L. 2-WAY CHUTE ROTATION CONTROL (IF EQUIPPED)

The 2-Way chute rotation control is located on the left side of the dash panel.

- To change direction in which snow is thrown, squeeze button on control and rotate to the right or to the left (Figure 58).



Figure 58

M. 4-WAY CHUTE ROTATION CONTROL (IF EQUIPPED)

The 4-Way chute rotation 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 control and rotate to the right or to the left (Figure 59).
- To change the distance which snow is thrown, move the control forward or backward.



Figure 59

N. ELECTRIC CHUTE PITCH & ROTATION CONTROL (JOYSTICK) (IF EQUIPPED)

The electric chute control is located on the right side of the dash panel (Figure 60).

- To change the direction in which snow is thrown, move the joystick to the right or to the left.
- To change the distance which snow is thrown, move the joystick forward or backward.

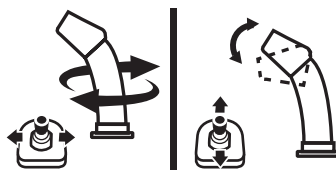


Figure 60

O. MANUAL CHUTE ROTATION CONTROL & ELECTRIC CHUTE CONTROL (JOYSTICK) (IF EQUIPPED)

Follow this procedure to manually change the chute direction on models equipped with an electric chute control (joystick) and manual chute rotation control rod only (Figure 62).

1. Remove cotter pin (a) from either of the holes furthest from the chute assembly on chute control head (Figure 61).

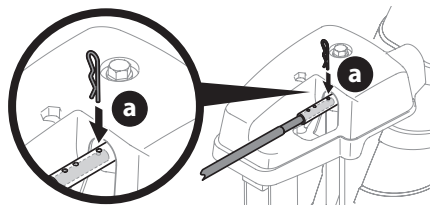


Figure 61

2. Push in chute control rod until the hole in it lines up with the third hole in chute control head (Figure 61).
3. Reinsert cotter pin (a) through this hole and chute control rod (Figure 61).

OPERATION

- Grasp indented portion of chute control rod and manually rotate chute assembly to the right or to the left (Figure 62).

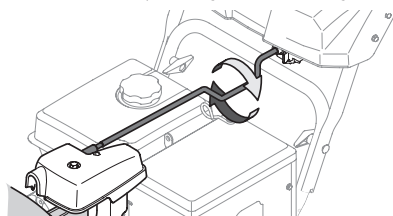


Figure 62

P. TRACK LOCK LEVER

The track lock lever is located on the right side of the snow blower and is used to select the position of the auger housing and the method of track operation.

To move the track lock lever, shut off the engine. Refer to the engine operators manual. While standing on the right side of the unit, place your left hand on the right handle grip. Apply a light downward force to the right handle and use your right hand to adjust the track lock lever to one of the four positions.

Transport

Raises the snow blower auger housing for easy transport.

Snow-covered Gravel

Raises the snow blower auger housing so that its shave plate leaves gravel undisturbed while clearing snow.

Normal Snow

Adjusts the tracks to be level, for full auger housing contact with the ground.

Packed Snow

Locks the auger housing down to the ground for hard packed or icy snow conditions.

Q. LED LIGHT BAR (IF EQUIPPED)

The LED headlight is located on top of the auger housing and is automatically turned ON when the engine is running.

R. DRIFT CUTTERS (IF EQUIPPED)

The drift cutters are designed for use in deep snow. Their use is optional for normal snow conditions. Maneuver snow blower so that the cutters penetrate a high standing snow drift to assist snow falling into the augers.

S. HEATED GRIPS (IF EQUIPPED)



It is recommended that you wear gloves when using the heated grip. If the heated grips become too hot, turn them OFF.

To activate the heated grips, move switch found on top (a) or on the rear (b) of dash panel into the ON position (Figure 63). To turn OFF heated grips, move switch to the OFF position.

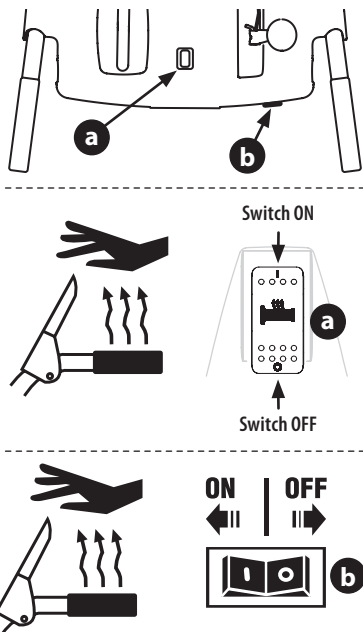


Figure 63

Starting and Stopping the Engine



Always keep hands and feet clear of moving parts. Do not use a pressurized starting fluid. Vapors are flammable.

Refer to the Engine Operator's Manual for instructions on starting and stopping the engine (Figure 64).



Figure 64

TO ENGAGE DRIVE

- With the throttle control in the Fast (rabbit) position, move the shift lever into one of the six forward (F) positions or two reverse (R) positions. Select a speed appropriate for the snow conditions and a comfortable pace.

- Squeeze the drive control lever against the handle and the snow blower will move. Release to stop.

TO ENGAGE AUGERS

To engage the augers, squeeze the auger control lever against the left handle. Release to stop.

OPERATION

TO STEER (IF EQUIPPED)

With the drive control lever engaged, squeeze the right steering trigger control to turn right, or squeeze the left steering trigger control to turn left.

⚠ CAUTION

Operate the snow blower in open areas and at slow speeds until you are familiar with the drive control and comfortable operating the steering controls.

Clearing a Clogged Chute Assembly

⚠ WARNING

Never use your hands to clear a clogged chute assembly. Shut OFF engine, remove safety key, disconnect spark plug wire and remain behind handles until all moving parts have stopped before unclogging.

The chute clean-out tool is conveniently fastened to the rear of the auger housing with a mounting clip. Should snow and ice become lodged in the chute assembly during operation, proceed as follows to safely clear the chute assembly and chute opening:

1. Release both the auger control lever and the drive control lever and rotate the chute assembly to the left.
2. SHUT THE ENGINE OFF! Refer to the Engine Operator's Manual. Remove the safety key.
3. Remove clean-out tool from the clip which secures it to the rear of the auger housing.
4. Use the shovel-shaped end of the clean-out tool to dislodge and scoop any snow and ice which has formed in and near the chute assembly. Always use the clean-out tool (Part # 931-2643), not your hands. Refer to the separate supplement for clean-out tool ordering information, if lost or damaged (Figure 65).
5. Re-fasten the clean-out tool to the mounting clip on the rear of the auger housing, reinsert the safety key and start the engine.
6. While standing in the operator's position (behind the snow blower), engage the auger control lever for a few seconds to clear any remaining snow and ice from the chute assembly.

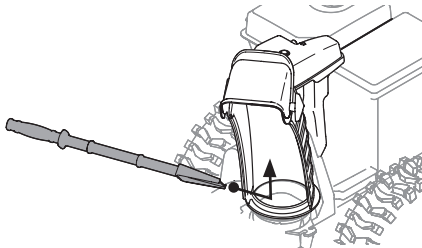


Figure 65

Replacing Shear Pins

⚠ CAUTION

NEVER replace the auger or central accelerator shear pins with anything other than OEM Part No. 738-04124A (round head replacement shear pins), 738-05273 (black colored, round head replacement shear pins) or 738-06654 (hex head replacement shear pins). Any damage to the auger gearbox or other components as a result of failing to do so will NOT be covered by your snow blower's warranty.

⚠ WARNING

Shut OFF engine, remove safety key or disconnect spark plug wire prior to replacing shear pins.

The augers are secured to the spiral shaft with shear pins (a, b or c) and cotter pins (d). If the auger should strike a foreign object or ice jam, the snow blower is designed so that the pins may shear. If the augers will not turn, check to see if the pins have sheared

IMPORTANT: ALWAYS use the correct OEM replacement shear pin.

2-STAGE SNOW BLOWER REPLACEMENT SHEAR PINS

- The auger is secured to the spiral shaft using round head shear pins (a) - OEM Part No. 738-04124A.



3-STAGE SNOW BLOWER REPLACEMENT SHEAR PINS

- The side augers are secured to the spiral shaft using round head shear pins (marked with a "3" on the head) (b) - OEM part number 738-05273.
- The central accelerator augers are secured to the spiral shaft using hex head shear pins (marked with an "A" on the head) (c) - OEM part number 738-06654.

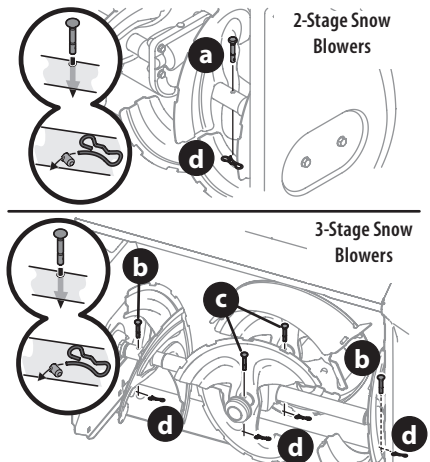


Figure 66

SERVICE AND MAINTENANCE

⚠ WARNING

Before servicing, repairing or inspecting the snow blower, disengage the auger control lever. Stop the engine, remove the safety key or disconnect spark plug wire to prevent unintended starting.

Troubleshooting

ENGINE

1. Engine fails to start, runs erratic, skips (hesitates) or idles poorly. Refer to the Engine Operator's Manual.
 - Refer to the Engine Operator's Manual for engine-related troubleshooting and service.

EXCESSIVE VIBRATION

1. Loose or damaged parts.
 - Stop engine immediately, remove safety key or disconnect spark plug wire. Check for possible damage. Tighten all nuts and bolts. Repair as needed. If the problem persists, contact an authorized service center.

FAILS TO PROPEL ITSELF

1. Drive control cable in need of adjustment.
 - Adjust drive control cable. Refer to Drive Control on page 17.
2. Drive belt loose or damaged.
 - Replace drive belt. Contact an authorized Service Center.
3. Friction wheel worn.
 - Replace friction wheel. Refer to Friction Wheel Inspection on page 26.

FAILS TO DISCHARGE SNOW

1. Chute assembly clogged.
 - Stop engine and immediately, remove safety key or disconnect spark plug wire. See Engine Operator's Manual. Clean chute assembly and inside of auger housing with clean-out tool. Refer to Cleaning a Clogged Chute Assembly on page 22.
2. Foreign object lodged in auger.
 - Stop engine and immediately, remove safety key or disconnect spark plug wire. See Engine Operator's Manual. Remove object from auger with clean-out tool. Refer to Cleaning a Clogged Chute Assembly on page 22.
3. Auger control cable in need of adjustment.
 - Refer to Auger Control on page 16.
4. Auger belt loose or damaged.
 - Refer to Auger Belt Replacement on page 25.
5. Shear pin(s) sheared.
 - Refer to Replacing Shear Pins on page 22.

CHUTE FAILS TO EASILY ROTATE

1. Chute assembled incorrectly.
 - Disassemble chute control and reassemble as directed in the Assembly & Set-up section.

PUSHES SNOW INSTEAD OF THROWING

1. Low/slow ground speed in wet/slushy snow 1-3" in depth.
 - Increase ground speed and always operate snow blower engine at FULL throttle.
2. Shear pin(s) sheared.
 - Refer to Replacing Shear Pins on page 22.

OVERHEAD CHUTE CONTROL DOES NOT STAY STATIONARY WHILE THROWING SNOW

1. Insufficient preload applied to chute control.
 - Refer to Overhead Chute Control (If Equipped) on page 15.

Maintenance

ENGINE

Refer to Engine Operator's Manual.

SHAVE PLATE & SKID SHOES

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

NOTE: Deluxe skid shoes (on select models) have two wear edges. When one side wears out, they can be rotated 180° to use the other edge.

To remove skid shoes (Deluxe shown):

1. Remove four carriage bolts (a) and hex flange nuts (b) and flat washers (c) which secure them to the housing.
2. Rotate and reassemble new skid shoes with four carriage bolts (a) (two on each side) and hex flange nuts (b) and flat washers (c) (Figure 67).

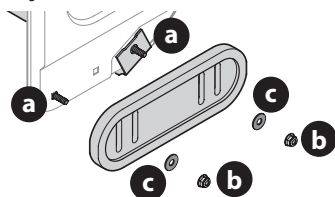


Figure 67

SERVICE AND MAINTENANCE

To remove shave plate:

1. Allow the engine to run until it is out of fuel. Do not attempt to drain fuel from the engine. Remove safety key or disconnect spark plug wire.
2. Carefully pivot snow blower up and forward so that it rests on the auger housing.
3. Remove carriage bolts (a) and hex nuts (b) which attach it to auger housing (Figure 68).

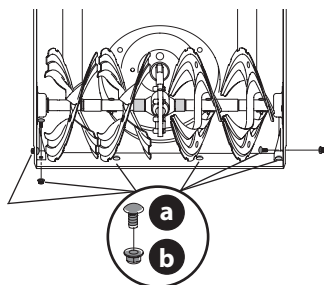


Figure 68

4. Reassemble new shave plate, making sure heads of carriage bolts are to the inside of housing. Tighten securely (Figure 68).
5. If adjusting the shave plate is necessary, refer to Adjustable Shave Plate (If Equipped) on page 15.

OFF-SEASON STORAGE

If the snow blower will no longer be used until next season, follow the storage instructions below.

1. Run engine until fuel tank is empty and it stops due to lack of fuel. Do not attempt to drain fuel from engine.
2. Fill the tank with Fresh, ethanol free fuel treated with a fuel stabilizer or bottled alcohol free fuel available at your local power equipment retailer.
3. Run engine for 5 – 10 minutes to ensure the old fuel has been removed from the fuel system.

NOTE: Refer to Engine Operator's Manual for information on storing your engine.

4. Lubricate machine as instructed on page 24.
5. Store in a clean, dry area.
6. If storing in an unventilated area, rustproof machine using a light oil or silicone to coat the snow blower.
7. Clean the exterior of the engine and the snow blower.
8. Always store the machine with the track lock lever in the Normal operating position.

IMPORTANT: When storing or when it is not being serviced, it is to remain in the upright position with both tracks and auger housing on the ground.

Lubrication

CHUTE ROTATION CONTROL (IF EQUIPPED)

Once a season, lubricate eye-bolt bushing and the spiral with 3-in-1 oil.

FRICTION WHEEL HEX SHAFT

The friction wheel hex shaft should be lubricated at least once a season or after every twenty-five (25) hours of operation.

1. Allow engine to run until it is out of fuel. Remove safety key or disconnect spark plug wire.
2. Carefully pivot snow blower up and forward so that it rests on auger housing.
3. Remove frame cover from underside by removing self-tapping screws (Figure 69).

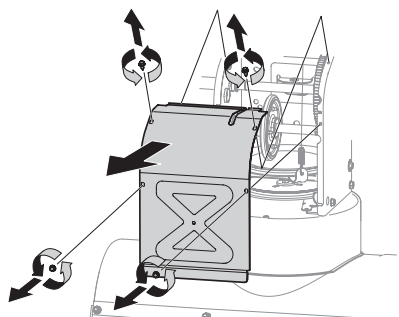


Figure 69

4. Apply a light coating of Bostik Regular Grade Never-Seez® to hex shaft (Figure 70).

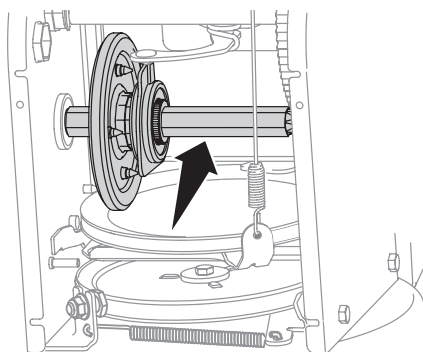


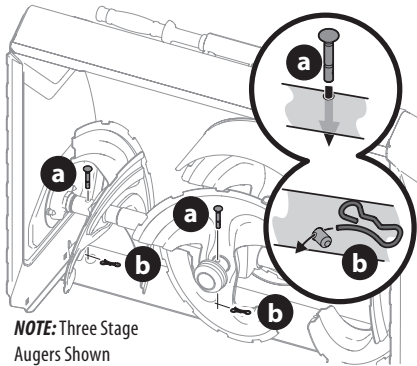
Figure 70

NOTE: When lubricating hex shaft, be careful not to get any lubricant on aluminum drive plate or rubber friction wheel. Doing so will affect the drive system. Wipe off any excess or spilled lubricant.

SERVICE AND MAINTENANCE

AUGER SHAFT

At least once a season, remove shear pins (a) and cotter pins (b) from auger shaft(s). Spray lubricant inside shaft and around spacers and flange bearings found at either end of shaft(s) (Figure 71).



NOTE: Three Stage Augers Shown

Figure 71

IMPORTANT: On 3-stage models, there is an additional shear pin in the rear accelerator.

Service

CONTINUOUS TRACKS

The snow blower is equipped with an auto-tensioner on both the left and right sides. The system is designed to maintain constant tension on both tracks. However, if the snow blower fails to propel itself because the track wheel is "jumping" drive lugs, the tracks are too loose and are in need of adjustment. See an authorized Service Dealer to have the tracks properly adjusted. (Figure 72).

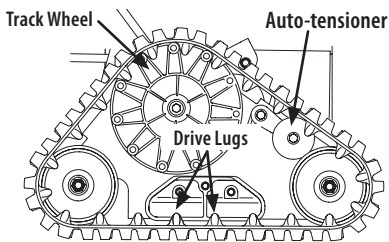


Figure 72

AUGER BELT REPLACEMENT

To remove and replace auger belt, proceed as follows:

1. Allow engine to run until it is out of fuel. Do not attempt to drain fuel from engine. Remove safety key or disconnect spark plug wire.
2. Remove plastic belt cover on front of engine by removing two self-tapping screws (a) (Figure 73).

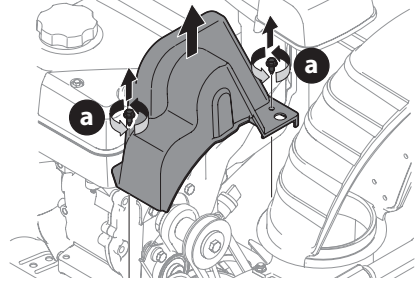


Figure 73

NOTE: On models equipped with the LED light bar on top of the auger housing, make sure to unplug the wire harness before removing the belt cover (Figure 74).

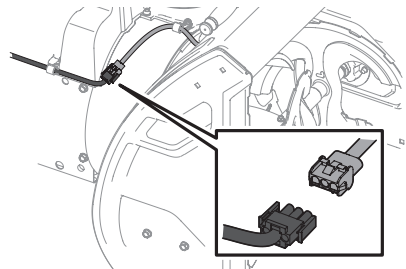


Figure 74

3. Roll auger belt off engine pulley (Figure 75).

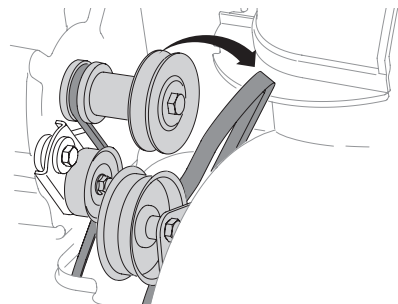
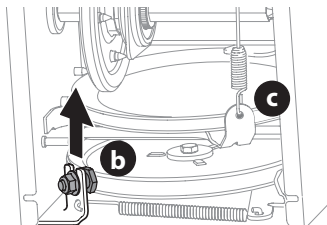


Figure 75

SERVICE AND MAINTENANCE

4. Carefully pivot the snow blower up and forward so that it rests on the auger housing.
5. Remove frame cover from underside by removing self-tapping screws (Figure 69).
6. Loosen and remove shoulder bolt (b) which acts as a belt keeper and unhook the spring (c) from the frame (Figure 76).



NOTE: Multi-speed unit shown.

Figure 76

7. Remove belt from around auger pulley, and slip it between support bracket and auger pulley (Figure 77).

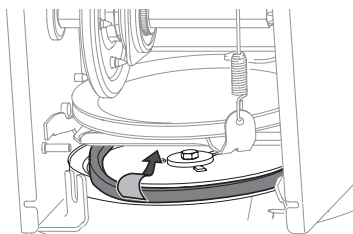


Figure 77

NOTE: Engaging auger control will ease removal and reinstallation of belt.

8. Replace auger belt by following instructions in reverse order.

NOTE: Make sure to reinstall shoulder bolt (a) and reconnect spring to frame after installing a replacement auger belt (Figure 76).

9. After replacing auger belt, perform Auger Control test in Assembly & Set-Up section (page 16).

DRIVE BELT REPLACEMENT

NOTE: See your authorized service dealer to have drive belt replaced or contact Customer Support.

FRICTION WHEEL INSPECTION

If snow blower fails to drive with drive control lever engaged, and performing drive control cable adjustment fails to correct problem, the friction wheel may need to be replaced.

NOTE: Special tools are required and several components must be removed in order to replace the friction wheel rubber. See your authorized service dealer to have friction wheel rubber replaced or contact Customer Support.

To inspect friction wheel, proceed as follows:

1. Allow engine to run until it is out of fuel. Do not attempt to drain fuel from engine. Remove safety key or disconnect spark plug wire.
2. Carefully pivot snow blower up and forward so that it rests on auger housing.
3. Remove frame cover from underside by removing four self-tapping screws (Figure 69).
4. Inspect friction wheel for signs of wear or cracking.
5. Using the four self tapping screws, reinstall the frame cover (Figure 69).
6. If friction wheel rubber must be replaced see your authorized service dealer to have friction wheel rubber replaced or contact Customer Support.