Print Vendor Instructions

How to use this file

Operator's Manuals

Paper Size:
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- Body - 50 lbs brilliant white offset or equivalent
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- Body - 1 color, 2-sided
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Bindery:
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- FRONT COVER is present at the beginning of the file.
- BACK COVER is the page immediately after the front cover.
- The part number for this manual (typically a 172_____ number) is located on the front cover.
- This file may contain several manual which differ only by their covers. See the part number at the bottom of the cover page. .
- Inside of front cover is BLANK and inside of back cover is BLANK.
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- The body for all manuals is identical regardless of the cover.
- Odd number pages are always right hand pages, even number pages are always left hand pages.

General:
- This instruction sheet is NOT part of the manual and must not be printed.
- Pages labeled "THIS PAGE INTENSIONALLY BLANK" are placement pages and should NOT be printed.

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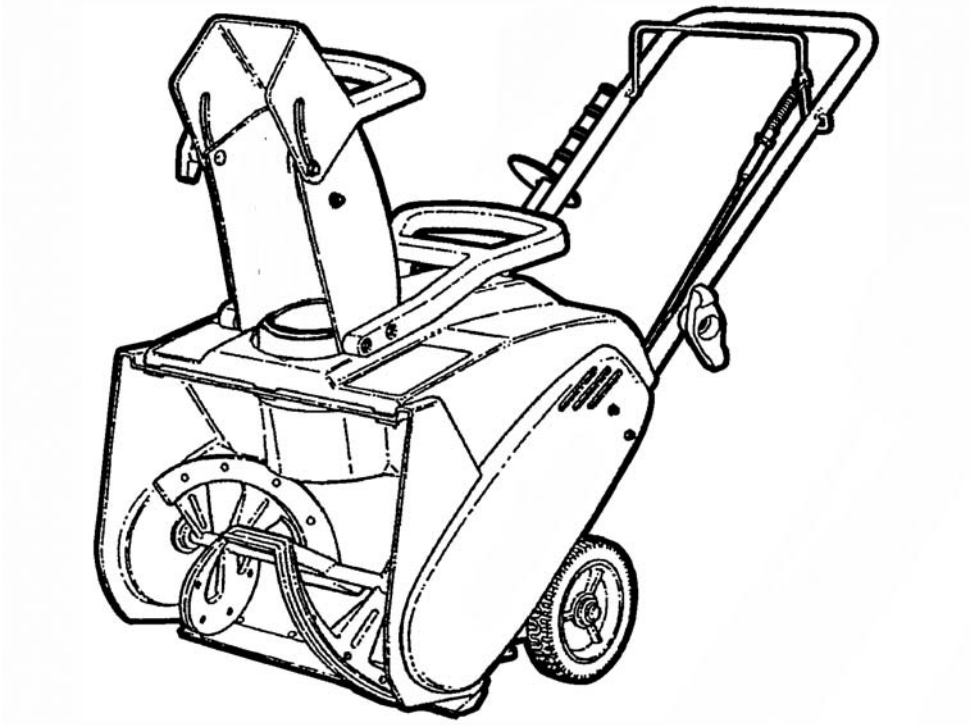
(FOR PLACEMENT ONLY - DO NOT PRINT)

Simplicity®

OPERATOR'S MANUAL



Single Stage Snowthrower

319M Models

Mfg. No.	Description
1694583	319M, 3HP Snowthrower, Manual Start

319E Models

Mfg. No.	Description
1694584	319E,3HP Snowthrower, Electric Start

Manual No. 1727190

Rev 4/2004
TP 100-4091-00-SW-S

Simplicity

MANUFACTURING, INC.
500 N Spring Street / PO Box 997
Port Washington, WI 53074-0997

www.simplicitymfg.com

Table of Contents

⚠ WARNING

Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.

Safety Rules & Information

This machine is capable to amputating hands and feet. Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of unit, severe personal injury or death to you, or bystanders, or damage to property or equipment. The triangle ⚠ in text signifies important cautions or warnings which must be followed.

TRAINING

1. Read, understand, and follow all instructions on the machine and in the manuals before operating this unit. Be thoroughly familiar with the controls and the proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Never allow children to operate the equipment. Never allow adults to operate the equipment without proper instruction.
3. Keep the area of operation clear of all persons, particularly small children and pets.
4. 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 and remove all doormat, sleds, boards, wires, and other foreign objects.
2. Disengage all clutches and shift into neutral before starting engine (motor).
3. Do not operate the equipment without wearing adequate winter outer garments. Wear footwear that will improve footing on slippery surfaces.
4. Handle fuel with care; it is highly flammable.
   (a) Use an approved fuel container.
   (b) Never add fuel to a running engine or hot engine.
   (c) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors. Replace fuel cap securely and wipe up spilled fuel.
   (d) 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.
   (e) When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
   (f) Keep nozzle in contact with the rim of the fuel tank or container opening at all times, until refueling is complete. Do not use a nozzle lock-open device.
   (g) Replace gasoline cap securely and wipe up spilled fuel.
   (h) If fuel is spilled on clothing, change clothing immediately.
5. Use extension cords and receptacles as specified by the manufacturer for all units with electric drive motors or electric starting motors.
6. Adjust the collector housing height to clear gravel or crushed rock surfaces.
7. Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by the manufacturer).
8. Let engine (motor) and machine adjust to outdoor temperatures before starting to clear snow.
9. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair to protect eye from foreign objects that may be thrown from the machine.

OPERATION

1. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times.
2. Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
3. After striking a foreign object, stop the engine (motor), remove the wire from the spark plug, disconnect the cord on electric motors, thoroughly inspect the snowthrower for any damage, and repair the damage before restarting and operating the snowthrower.
4. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
5. Stop the engine (motor) whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and when making any repairs, adjustments, or inspections.
6. When cleaning, repairing, or inspecting make certain the collector/impeller and all moving parts have stopped. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
7. Do not run the engine indoors except for starting the engine or for transporting the snowthrower in or out of the building. Open the outside doors; exhaust fumes are dangerous.
8. Exercise extreme caution when operating on slopes. Do not attempt to clear steep slopes.
9. Never operate the snowthrower without proper guards plates, or other safety protective devices in place and working.
10. Never direct the discharge toward people or areas where property damage can occur. Keep children and others away.
11. Do not overload the machine capacity by attempting to clear snow at too fast a rate.
12. Never operate the machine at high transport speeds on slippery surfaces. Look behind and use care when operating in reverse.
13. Disengage power to the collector/impeller when snowthrower is transported or not in use.
14. Use only attachments and accessories approved by the manufacturer of the snowthrower (such as wheel weights, counterweights, or cabs).
15. Never operate the snowthrower without good visibility or light. Always be sure of your footing, and keep a firm hold on the handles. Walk, never run.
16. Never touch a hot engine or muffler.
17. Never operate the snowthrower near glass enclosures, automobiles, window wells, drop-offs, and the like without proper adjustment of the discharge angle.
18. Never direct discharge at bystanders or allow anyone in front of the unit.
19. Never leave a running unit unattended. Always disengage the auger and traction controls, stop engine, and remove keys.
20. Do not operate the unit while under the influence of alcohol or drugs.

21. Keep in mind the operator is responsible for accidents occurring to other people or property.
22. Data indicates that operators, age 60 years and above, are involved in a large percentage of power equipment-related injuries. These operators should evaluate their ability to operate the unit safely enough to protect themselves and others from injury.
23. DO NOT wear long scarves or loose clothing that could become entangled in moving parts.
24. Snow can hide obstacles. Make sure to remove all obstacles from the area to be cleared.

CHILDREN

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the unit and the operating activity. Never assume that children will remain where you last saw them.

1. Keep children out of the area and under the watchful care of another responsible adult.
2. Be alert and turn unit off if children enter the area.
3. Never allow children to operate the unit.
4. Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure vision.

CLEARING A CLOGGED DISCHARGE CHUTE

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

To clear the chute:

1. SHUT OFF THE ENGINE.
2. Wait 10 seconds to be sure the impeller blades have stopped rotating.
3. Always use a clean out tool, not your hands.

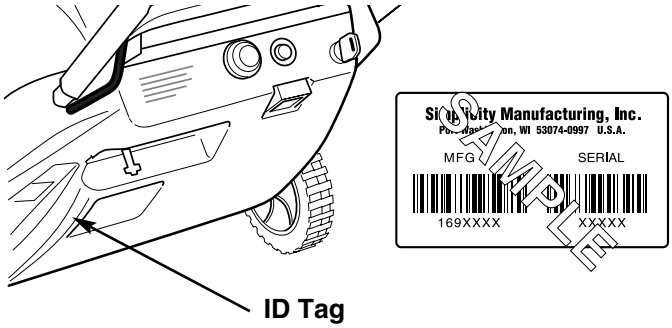
SERVICE, MAINTENANCE, AND STORAGE

1. Check shear bolts and other bolts at frequent intervals for proper tightness to be sure the equipment is in safe working condition.
2. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present such as hot water and spacer heaters, or clothes dryers. Allow the engine to cool before storing in any enclosure.
3. Always refer to the operator's manual for important details if the snowthrower is to be stored for an extended period.
4. Maintain or replace safety and instruction labels as necessary.
5. Run the machine a few minutes after throwing snow to prevent freeze-up of the collector/impeller.
6. If fuel is spilled, do not attempt to start the engine but move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.
7. Always observe safe refueling and fuel handling practices when refueling the unit after transportation or storage.
8. Always follow the engine manual instructions for storage preparations before storing the unit for both short and long term periods.
9. Always follow the engine manual instructions for proper start-up procedures when returning the unit to service.
10. Maintain or replace safety and instruction labels as necessary.
11. Keep nuts and bolts tight and keep equipment in good condition.
12. Never tamper with safety devices. Check their proper operation regularly and make necessary repairs if they are not functioning properly.
13. Components are subject to wear, damage, and deterioration. Frequently check components and replace with manufacturer's recommended parts, when necessary.
14. Check control operation frequently. Adjust and service as required.
15. Use only factory authorized replacement parts when making repairs.
16. Always comply with factory specifications on all settings and adjustments.
17. Only authorized service locations should be utilized for major service and repair requirements.
18. Never attempt to make major repairs on this unit unless you have been properly trained. Improper service procedures can result in hazardous operation, equipment damage and voiding of manufacturer's warranty.
19. Check shear bolts and other bolts at frequent intervals for proper tightness to be sure the equipment is in safe working condition.

EMISSIONS

1. Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.
2. If available, look for the relevant Emissions Durability Period and Air Index information on the engine emissions label.

IDENTIFICATION NUMBERS



When contacting your authorized dealer for replacement parts, service, or information you MUST have these numbers.

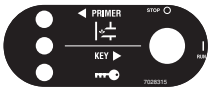
Record your model name/number, manufacturer's identification numbers, and engine serial numbers in the space provided for easy access. These numbers can be found in the locations shown.

NOTE: For location of engine identification numbers, refer to the engine owner's manual.

PRODUCT REFERENCE DATA	
Model Description Name/Number	
Unit MFG Number	Unit SERIAL Number
Mower Deck MFG Number	Mower Deck SERIAL Number
Dealer Name	Date Purchased
ENGINE REFERENCE DATA	
Engine Make	Engine Model
Engine Type/Spec	Engine Code/Serial Number

SAFETY DECALS

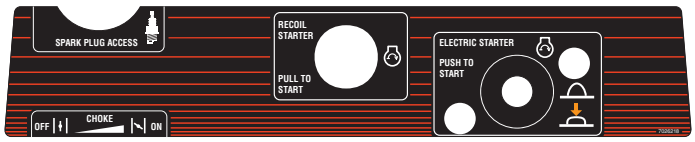
Safety warning decals are placed at strategic locations on the snowthrower as a constant reminder to the operator of the most important safety precautions. All warning, caution and instructional messages on your snowthrower should be carefully read and obeyed. If any of these decals are lost or damaged, replace them at once. They can be purchased from your local dealer.



Part No. 7028315
Control Decal - Primer, Key

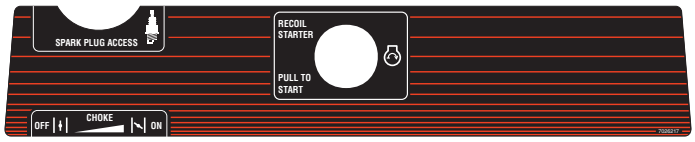
Part No. 7072883
Control Decal - Auger

Part No. 7071880
Danger Decal - Auger & Chute



Part No. 7026218
Control Decal - Choke, Electric Starter, Warnings

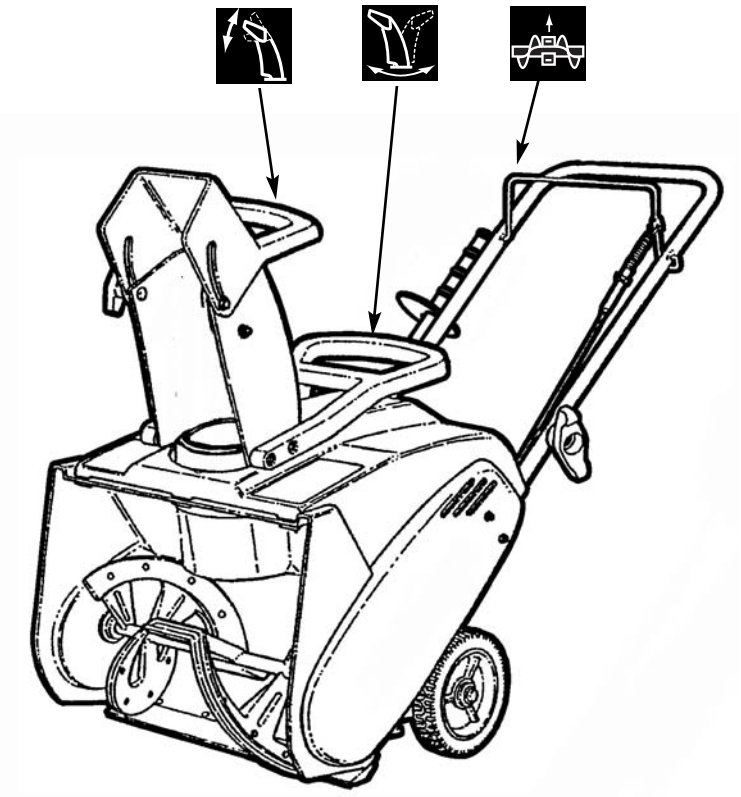
Part No. 7026733
Warning Decal

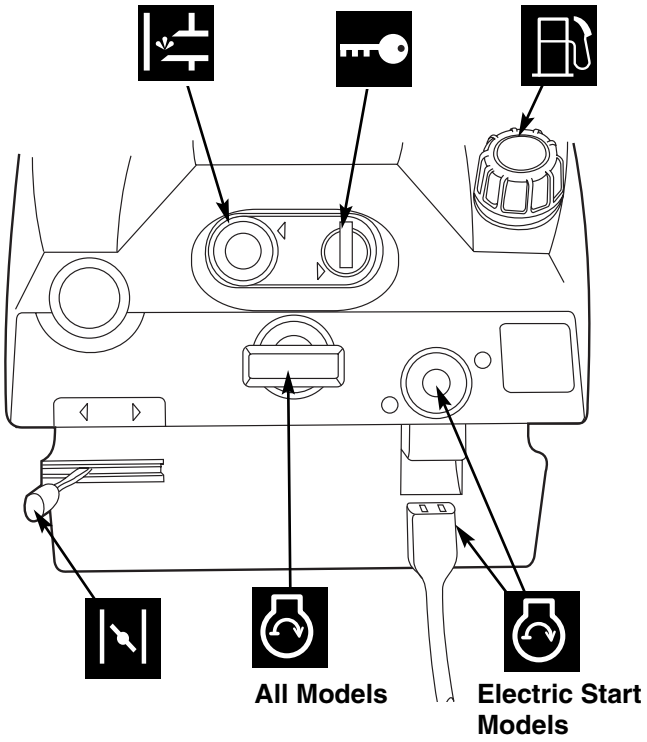


Part No. 7026217
Control Decal - Choke, Electric Starter, Warnings

Part No. 7073844
Warning Decal - Do Not Store Unit on End, Risk of Fuel Leak and Possible Fire Hazard

Features & Controls





CONTROL LOCATIONS

The information below briefly describes the function of individual controls. Starting, stopping, and driving require the combined use of several controls applied in specific sequences. To learn what combination and sequence of controls to use for various tasks see the OPERATION section.

NOTE: Throttle - This snowthrower does NOT have a throttle for controlling operating speed of engine. The engine governor maintains operating speed for varying snow removal conditions.

Chute Deflector Control

Controls the distance snow is thrown. Tilting the chute deflector UP provides a higher stream and greater distance, while tilting the deflector DOWN provides a lower stream and less distance. Loosen the deflector knob, adjust the deflector, then retighten the knob.

Chute Direction Control

The chute direction control allows the discharge chute to be rotated to throw snow in the desired direction. Snow may be thrown at any angle from straight left to straight forward, to straight right.

Auger Control

This control engages and disengages the auger. Pull the control back against handle to engage the auger, (this will pull snowthrower forward if auger is in contact with the ground). Release the auger control to stop rotation of auger.

Primer Button

When pressed, the primer button provides initial fuel to help start a cold engine. Normally, pressing the primer button twice will provide enough fuel to start a cold engine.

Ignition Switch

The ignition switch starts and stops the engine, and can be removed to prevent engine starting. It has two positions:

OFF Stops the engine and shuts off the electrical system.

RUN Allows the engine to run and powers the electrical system.

Fuel

Fuel tank filler cap (see illustration). This cap is vented to prevent vapor lock.

Starter

Electric Start (If Equipped): Depressing the starter button activates the electric starter. The electric start button operates on 120 Volts AC, which is provided by connection to the extension cord provided with units equipped with this feature. Connect this extension cord ONLY to a properly grounded, polarized electrical outlet.

Engage Depressing the starter button activates the electric starter.

Disengage Releasing the starter button deactivates the electric starter.

Recoil Starter (All Models): Pulling the recoil handle cranks the engine.

Choke Control

The Choke control adjusts the air/fuel mixture, and is used to help start a cold engine by providing a richer mixture. Once the engine is warm and running smoothly, the Choke control should be set to the OFF position to provide a normal air/fuel mix.

Operation

GENERAL OPERATION

CHECKS BEFORE EACH START-UP

1. Make sure all safety guards are in place and all nuts, bolts and clips are secure.
2. Check the fuel supply. Fill the tank no closer than 1/4 to 1/2 inch of top of tank to provide space for expansion. See your engine owner's manual for fuel recommendations.
3. Check the auger control for proper operation. If adjustment is required, see the Service section (pages 13-15) for procedures.
4. Check the chute direction control for proper operation. The discharge chute should rotate freely in both directions. See the Service section for adjustment procedures and troubleshooting.
5. Check the chute deflector for proper operation. The deflector should pivot freely up and down. See the Service Section for procedures.
6. Position the chute at the desired starting direction and set the deflector at the desired angle.
7. Check that the auger housing is free of obstructions and debris and only use clean-out tool to remove them. Clean any debris or spilled fuel off engine.
8. Make sure the clean-out tool is mounted in the storage position on the snow thrower.

⚠ DANGER

Never run engine indoors or in enclosed, poorly ventilated areas. Engine exhaust contains CARBON MONOXIDE, an ODORLESS and DEADLY GAS.

⚠ DANGER

DO NOT clean out discharge chute with hands. Contact with moving parts in the chute will cause serious injury. Use clean-out tool provided with machine.

⚠ WARNING

OPERATIONAL WARNINGS

Clearing The Discharge Chute

To avoid serious injury, do not put your hands into the auger housing or discharge chute. If the auger stalls or chute becomes plugged, use the following procedure to remove objects or clear the chute:

1. **Release the auger control.**
2. **Shut off the engine.**
3. **Remove the key.**
4. **Wait for all moving parts to stop.**
5. **Use the clean-out tool to remove foreign objects and clear the chute or auger. Never put your hands into the auger or discharge chute.**
6. **If servicing is needed, remove cover and disconnect spark plug wire.**

Discharge Chute Adjustment

Release the auger control and make sure the auger has STOPPED before rotating the discharge chute or adjusting the deflector. DO NOT place hands near the auger while the engine is running.

Thrown Objects

Objects can be thrown by the snowthrower while it is in operation. Thrown objects could cause serious injury to the operator or bystanders. Always wear safety goggles or other suitable eye protection. Keep people and pets away from the area.

Slope Operation

For your safety, operation on slopes should be in an up and down direction only. If it becomes necessary to move across the face of a slope, use caution and do not activate the auger. Be very careful when changing direction on a slope.

Proper winter footwear is recommended for the operator to help prevent slipping. Never attempt to clean snow from slopes. The maximum slope for any operation is 17.7% (10º).

Do not use the snowthrower on surfaces above ground level such as the roof of a building.

FUEL AND OIL MIXTURE

The snowthrower uses a two cycle engine that requires a mixture of fuel (gasoline) and oil for lubrication of engine bearings and other moving parts.

The correct fuel/oil mixture ratio is 50 to 1. Use fuel/oil mixture chart shown.

NOTE: To prevent damage to engine, carefully observe recommended fuel to oil mixing ratio and procedures.

- Gasoline and oil must be premixed in a clean fuel container.
- Always use fresh, unleaded, winter grade fuel
- Never put plain, unmixed fuel into fuel tank. Shake fuel container each time before filling fuel tank.
- Never use “stale” fuel left over from last season or stored for long periods.
- DO NOT USE MULTI VISCOSITY OILS, SUCH AS 10W-30 or 10W-40.

PROPER FUEL MIXING PROCEDURE

1. Fill approved clean fuel container one quarter full with fresh unleaded fuel - one quart (one liter) in a one gallon (4 liter) container.
2. Pour recommended amount of **high quality two cycle oil** — 2.5 ounces (80 ml) into fuel container for one gallon (4 liters) of fuel. **(NOTE: DO NOT USE MULTI VISCOSITY OILS, SUCH AS 10W-30 or 10W-40.)**
3. Reinstall cap on the fuel container and shake container vigorously so oil mixes with gasoline.
4. Unscrew cap and fill container with fuel. Shake container again.
5. Remove fuel tank cap and carefully pour mixed fuel into the fuel tank, filling to 1/2 inch (1.5 cm) below filler neck to allow room for expansion. **Never put plain, unmixed fuel into fuel tank. Shake fuel container each time before filling fuel tank.**

⚠ WARNING

Gasoline is highly flammable and must be handled with care. Follow these fuel handling precautions:

- **Use an approved fuel container.**
- **DO NOT run the unit indoors. DO NOT fill fuel tank indoors or while engine is running.**
- **Allow engine to cool for at least ten minutes before refueling.**
- **Wipe up any spilled fuel before starting the engine.**
- **Fuel vapors can travel to distant ignition sources. Keep fuel and fuel vapors away from ignition sources.**

FUEL TO OIL MIXTURE CHART (50:1)					
U.S.		Imperial		Metric	
Gasoline Gallons	2 Cycle Oil Ounces	Gasoline Gallons	2 Cycle Oil Ounces	Gasoline Liters	2 Cycle Oil Milliliters
1	2.5	1	2.8	4	80 ml
2	5	2	5.6	8	160 ml
5	13	5	14.1	20	400 ml

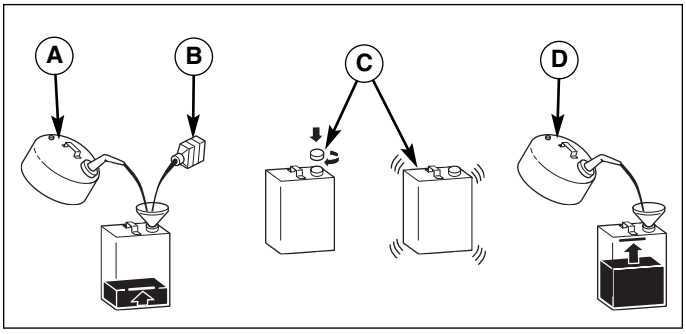


Figure 1. Proper Fuel Mixing Procedure
A. Fill Container with 1 Quart (1 Liter) of fuel
B. 2.5 Ounces (80 ml) of two-cycle oil
C. Combine in container, then shake container
D. Additional fuel brings total to 1 Gallon (4 liters)

STARTING THE ENGINE

NOTE: The snowthrower engine is designed to operate at cold temperatures. Avoid operating the snowthrower if air temperature is 40° F or warmer. Engine will be difficult to start in warm weather.

⚠ WARNING

Electric start precautions:

- **Use only with a grounded, polarized 120V AC outlet. Do not modify the plug to fit into any other type of outlet.**
- **Use only the power cord supplied with the unit. DO NOT use a damaged cord.**
- **Be sure there is no moisture present on the cord ends or receptacles when connecting to an outlet or to the unit.**

1. Insert engine key into the switch and turn key (B, Figure 2) to the ON position. Make sure the auger control is in the released OFF position.
2. If engine is cold, move choke control lever (C) to the ON position. Do not choke a warm engine.
3. Push the primer button (A) three times if engine is cold. Do not prime a warm engine.

ELECTRIC START MODELS:

4. Plug the power cord supplied into the starter receptacle first, then plug into a 120Volt AC household outlet. DO NOT use an extension cord. Push the starter button (E) to crank engine. Release the start button when the engine starts. DO NOT crank engine for more than a total of 15 seconds without allowing electric starter to cool for 10 minutes. **NOTE: Do not push primer button (A) while engine is being cranked.**
5. Gradually move choke lever (C) to the OFF position.
6. **Disconnect power cord from household receptacle FIRST,** and then from starter switch on the snowthrower.

MANUAL (RECOIL) START MODELS

4. Pull the recoil starter (D) rope out rapidly to start the engine. Let the rope return slowly to the starter. If the engine does not start after three pulls, push the primer bulb once, and again pull starter rope.
5. Gradually move choke lever (C) to the OFF position.
6. Allow engine to warm up before beginning snowthrower operations. The engine will operate at full throttle when thoroughly warmed up.

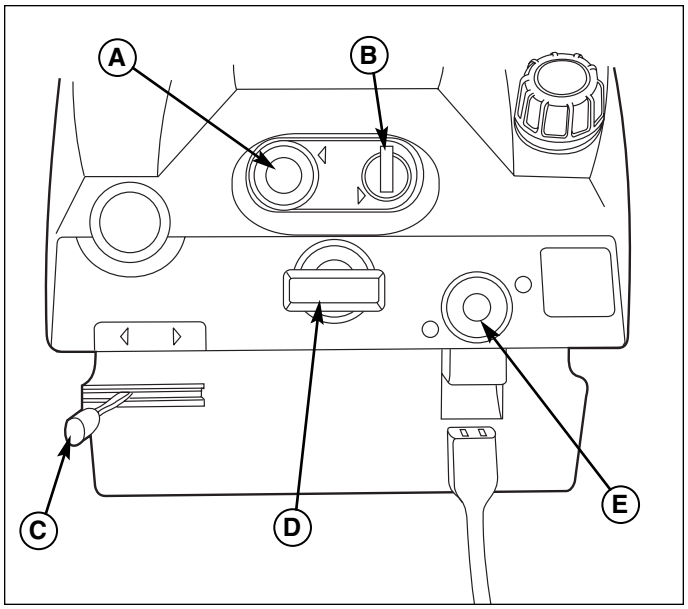


Figure 2. Engine Controls
A. Primer
B. Ignition (Key) Switch
C. Choke Control
D. Recoil Starter
E. Electric Starter Switch

STOPPING THE ENGINE

1. Release the auger control.
2. Turn engine key (B, Figure 2) to the OFF position.
3. Remove the key from the switch if you are leaving the operating position or will be making adjustments or repairs. (NOTE: Allow the unit to cool before storing or making any adjustments or repairs.)

If you will be storing the unit for the season, see the STORAGE section for instructions on properly preparing the unit for long-term storage.

OPERATING THE SNOWTHROWER

Before operating snowthrower, review the CHECKS BEFORE EACH START UP on page 8 of this manual. Refer to FEATURES & CONTROLS for control locations.

1. Rotate the discharge chute to the desired direction.
2. Pull the auger control back against the handle to engage the auger.

   NOTE: The snowthrower will be pulled forward by the auger when the auger contacts the ground or with the snow being thrown.
3. Begin snow removal by clearing a path down the center of walk or driveway, then gradually widen path, throwing snow off to both sides.
4. Release the auger control to stop both the auger and the forward motion of the snowthrower.

⚠ DANGER

DO NOT clean out discharge chute with hands. Contact with moving parts in the chute will cause serious injury. Use clean-out tool provided with machine.

SNOWTHROWING TIPS

Discharge chute plugging may occur as the result of snow build up inside the chute. **DO NOT** use your hands to clear the blockage, only use the clean-out tool. **DO NOT** place your hands near the auger or discharge chute any time the engine is running. Turn the engine OFF, be sure all moving parts have stopped, and clear the blockage using the clean-out tool, or put the unit indoors and allow the blockage to melt.

Various snow conditions will affect performance of snowthrower. The snowthrower should be allowed to move into the snow at its' own pace.

Wet, heavy snow — When clearing wet, heavy snow, the forward movement of the snowthrower may have to be slowed by pushing down on the handle while allowing engine to operate at full throttle.

Do not operate on **gravel or crushed rock surfaces**. Avoid picking up this type of material with auger since damage to unit could result and particles can be discharged with considerable force that could cause serious injury.

Always be alert to hidden hazards that might be struck by the auger. Should a foreign object be struck by the auger, immediately stop the engine and inspect machine for any damage. Repair damage before continuing operation.

STORAGE

After Each Use

Allow snowthrower to run a few minutes after clearing snow to reduce the likelihood of parts freezing while machine is not is use.

Off-Season Storage

Before you store your snowthrower for the off-season, read the Service, Maintenance and Storage instructions in the Safety Rules section and take the following precautions:

NOTE: Gasoline, if permitted to stand unused for extended periods (30 days or longer), may develop gummy deposits which can adversely affect the engine carburetor and cause engine malfunction. To avoid this condition, add Dealer Line Gasoline Stabilizer to the fuel tank, or drain all fuel from the system before placing unit in storage.

NOTE: Refer to the engine manufacturer's owner's manual for engine storage information.

1. Drain fuel from the fuel tank and let the engine run until all fuel is consumed and the engine stops. Allow the unit to cool.
2. Disconnect the spark plug wire and secure away from the spark plug.
3. Tape all openings to prevent spraying water into the exhaust or air intakes.
4. Tilt the snowthrower up on its wheels and thoroughly clean the underside.
5. Lubricate all exposed metal with a light coating of oil. DO NOT place any type of lubrication on the drive belt or pulleys.
6. Store the unit in a shelter or other dry area protected from the weather.

Starting After Storage

1. Remove the spark plug and wipe dry. Then reinstall plug.
2. Fill fuel tank with fresh fuel (unless a fuel stabilizer was used).
3. Check to be sure the engine fins are clean and air flow is unobstructed.
4. Start the engine outdoors. Allow the engine to warm up before blowing snow.
5. Check the operation of all the controls.

Regular Maintenance

MAINTENANCE SCHEDULE

MAINTENANCE ITEMS	Before Each Use	Every 25 Hours	Every 100 Hours	Each Season
Check Auger Cable & Stopping Time	●			
Check Auger & Flite Shoes	●			
Check/Adjust Drive Belt**		●		●
Clean Cooling Fins *			●	
Inspect Spark Plug *				●
Replace Fuel Filter				●

* Refer to the Engine Manufacturer's Owner's Manual for engine-related information.
** Adjust after the first 5 hours of operation.

CHECK AUGER CABLE & STOPPING TIME

1. Visually check the cable (C, Figure 3) for kinks, fraying, or severed cable strands. Replace if damaged or worn.
2. Start the engine.
3. Engage the auger control (A) and hold for five seconds.
4. Release the auger control (A). The auger (B) must stop within 5 seconds or less. If the auger does not stop within 5 seconds, perform the auger adjustment listed in the ADJUSTMENTS section.

CHECK AUGER & FLITE SHOES

1. Make sure the engine is OFF, the key is removed, and all moving parts have stopped.
2. Manually rotate the auger (B, Figure 3) and inspect the flites. Repair or replace as necessary.

CHECK DRIVE BELT

1. Remove the side cover (D, Figure 3) and inspect the drive belt (A, Figure 4). Replace if worn or damaged.

REPLACE FUEL FILTER

1. Drain the fuel tank (see OFF SEASON STORAGE) and remove and replace the filter.

ENGINE / SEASONAL MAINTENANCE

Refer to the engine manufacturer's owner's manual for engine-related information. Refer to the STORAGE section for seasonal maintenance information.

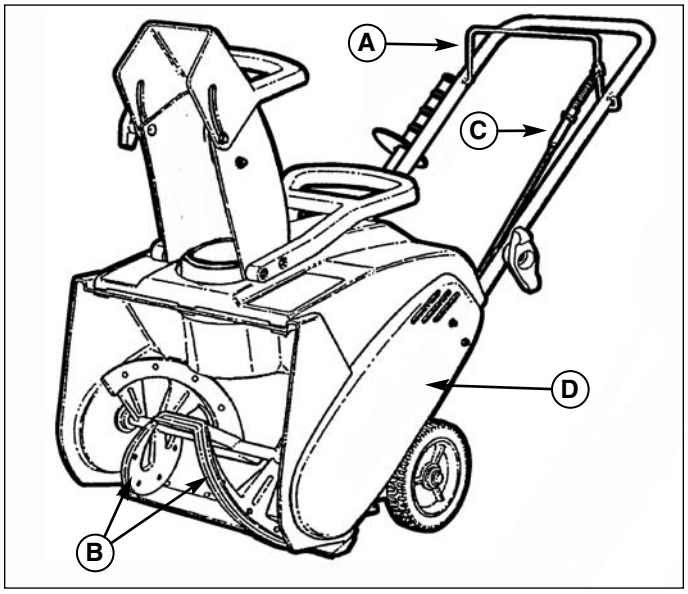


Figure 3. Maintenance
A. Auger Control
B. Auger & Flites
C. Auger Control Cable
D. Side Cover

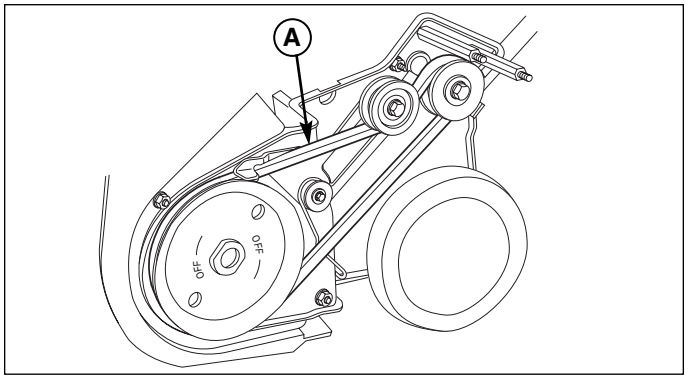


Figure 4. Drive Belt
A. Drive belt

Troubleshooting, Adjustments, & Service

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Engine Will Not Start Using Recoil Starter	1. Fuel tank empty.	1. Fill fuel tank with fresh fuel/oil mix.
	2. Engine needs choking & priming.	2. Move choke control to "CHOKE" position. Push primer bulb three times.
	3. Spark plug fouled or wire disconnected.	3. Replace spark plug. Attach plug wire onto spark plug.
Engine Will Not Crank Using Electric Starter	1. Power extension cord not plugged into machine or 120 Volt outlet.	1. Plug power extension cord into machine & into 120 Volt outlet.
	2. Power extension cord damaged.	2. Discard damaged power extension cord.
	3. Starter switch damaged or faulty.	3. Replace starter switch.
	4. Key switch turned to "OFF" position.	4. Turn key switch to "ON" position.
Engine Stalls or Stops After Running	1. Fuel and 2-Cycle oil mixture ratio incorrect.	1. Mix fuel and 2-Cycle oil to correct ratio.
	2. Choke control in the "CHOKE" position.	2. Move choke control to "OFF" position.
	3. Fuel tank empty.	3. Fill with fuel to proper level.
	4. Air intake clogged with snow or debris.	4. Unclog air intake.
	5. Spark plug defective or gap set improperly.	5. Service spark plug.
	6. Water, debris or stale fuel in fuel system.	6. Drain and clean fuel system.
	7. Fuel filter clogged.	7. Replace with new in line filter.
Engine Loses Power	1. Fuel and 2-Cycle oil mixture ratio incorrect.	1. Mix fuel and 2-Cycle oil to correct ratio.
	2. Spark plug faulty.	2. Service spark plug.
	3. Water, debris or stale fuel in fuel system.	3. Drain and clean fuel system.
Excessive Vibration	1. Damaged, out of balance or bent auger.	1. Replace auger.
	2. Loose engine or auger components.	2. Service and tighten loose components.
	3. Loose or missing flite shoes.	3. Replace flite shoes.
	4. Cracked, severed or frayed belt	4. Replace belt.
	5. Bent or loose Idler pulley	5. Tighten or replace pulley.
Poor Snow Discharge	1. Clogged discharge chute.	1. Stop engine, remove key, and unclog discharge chute with a piece of wood.
	2. Damaged or bent auger or components.	2. Service auger or components.
	3. Cracked, severed or frayed belt.	3. Replace belt.
	4. Belt tension out of adjustment.	4. Adjust auger control.
	5. Auger flite shoes damaged or missing.	5. Replace flite shoes.

⚠ WARNING

Before beginning any repair stop the engine, remove the key, disconnect the spark plug wire, and wait for all moving parts to stop.

AUGER CONTROL ADJUSTMENT

Inspection

1. Inspect the auger cable for kinks, wear, or frayed cable strands. Replace if worn or damaged.
2. Start the engine.
3. Engage the auger control for 5 seconds.
4. Disengage the auger control. The auger should stop in 5 seconds or less. If not, perform the auger control adjustment.

Adjustment

1. Turn the engine OFF.
2. With the auger control disengaged, measure the length of the cable spring (A, Figure 5).
3. Engage the auger control and measure the length of the expanded cable spring (A, Figure 6).

   The cable spring should be stretched 1/2”-3/4” (1.3cm-1.9cm) when the auger control is engaged. If not, proceed to step 4.
4. Loosen the jam nut (B, Figure 5) at the upper end of the cable. Hold the threaded end of the cable and turn the cable clockwise until the desired extension is achieved. Retighten the jam nut and repeat steps 2-3.

   If the cable sheath cannot be adjusted to achieve 1/2”-3/4” (1.3cm-1.9cm) of spring deflection, the auger belt idler pulley can be adjusted. See the following section.

⚠ WARNING

DO NOT over-tighten the cable. The control cable must have some slack when in the disengaged position for the auger brake to function properly. If the auger does not stop within 5 seconds of the auger control being released, see your dealer.

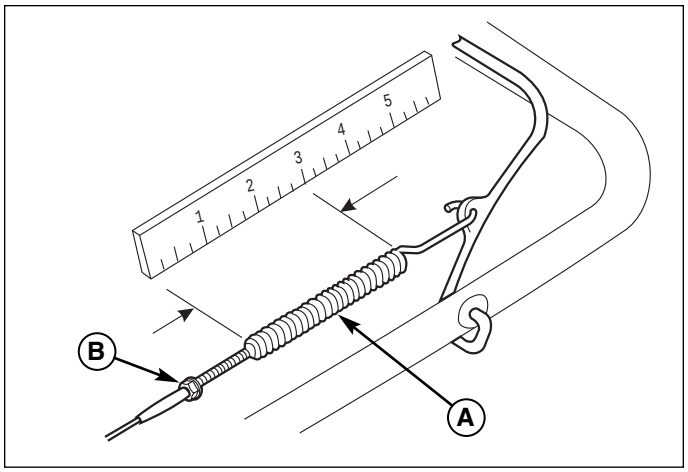


Figure 5. Auger Cable Adjustment - Disengaged
A. Cable Spring
B. Jam Nut

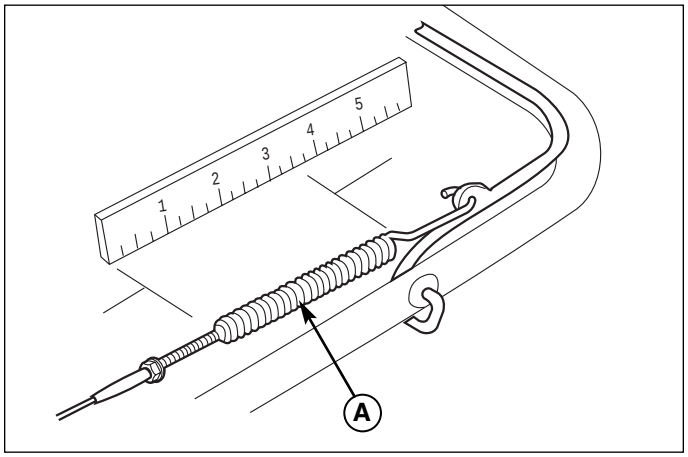


Figure 6. Auger Cable Adjustment - Engaged
A. Cable Spring

AUGER DRIVE BELT IDLER PULLEY ADJUSTMENT

If the auger control cable has run out of adjustment, the drive belt idler pulley (B) can be adjusted to take up more belt slack.

1. Turn the engine OFF.
2. Loosen the jam nut (B, Figure 5) at the upper end of the cable. Hold the threaded end of the cable and turn the cable counterclockwise until the adjustment is half way between fully in and fully out.
3. Remove the belt cover to access the idler pulley (B, Figure 7).
4. Loosen the idler capscrew (C) and slide the idler pulley (B) to the back of the slot in the idler bracket (A).
5. Retighten the capscrew (C) and perform the AUGER CONTROL ADJUSTMENT.

   After performing the AUGER CONTROL ADJUSTMENT reinstall the belt cover.

⚠ WARNING

DO NOT over-tighten the cable. The control cable must have some slack in the disengaged position for the auger brake to function properly. If the auger does not stop within 5 seconds of the auger control being released, see your dealer.

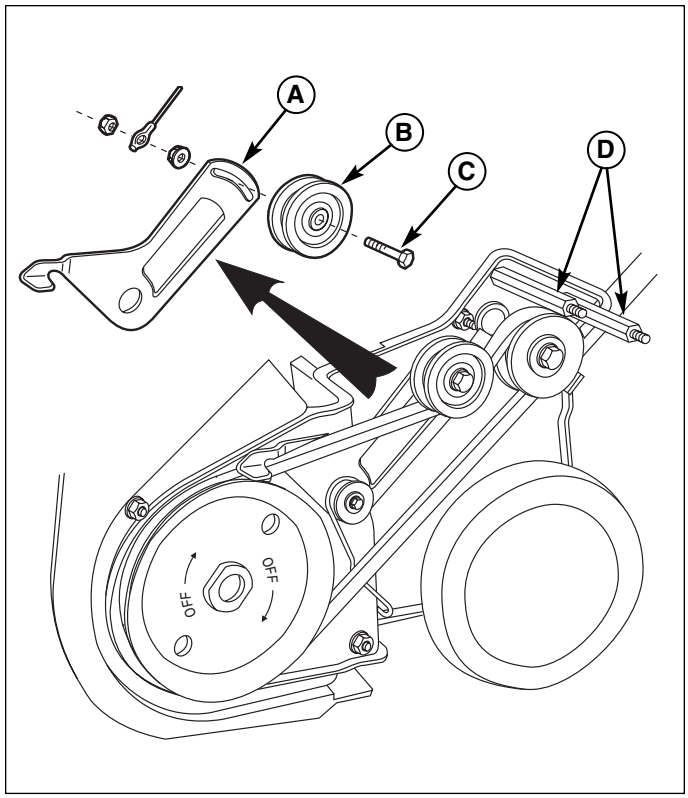


Figure 7. Auger Drive Belt Idler Pulley Adjustment
A. Idler Pulley Bracket
B. Idler Pulley
C. Idler Pulley Capscrew
D. Cover Studs

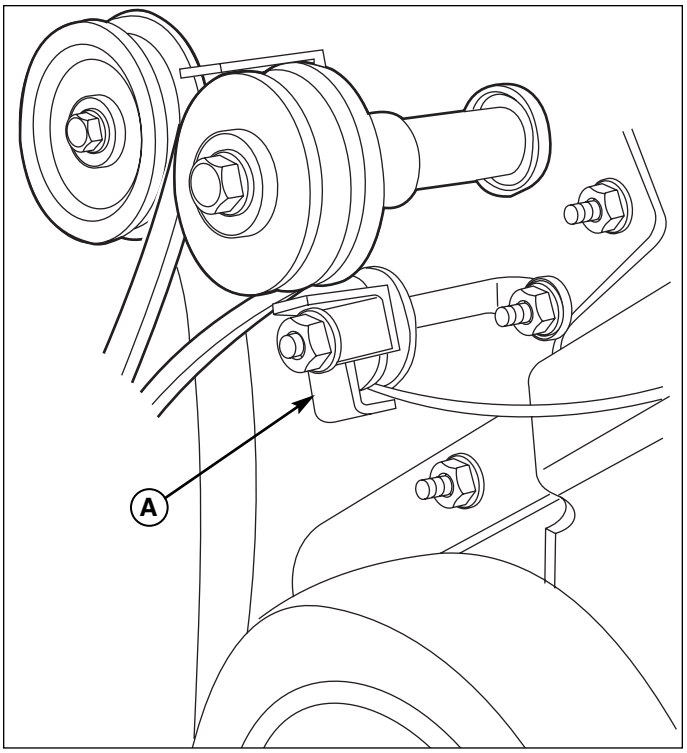


Figure 8. Drive Belt
A. Belt Guide

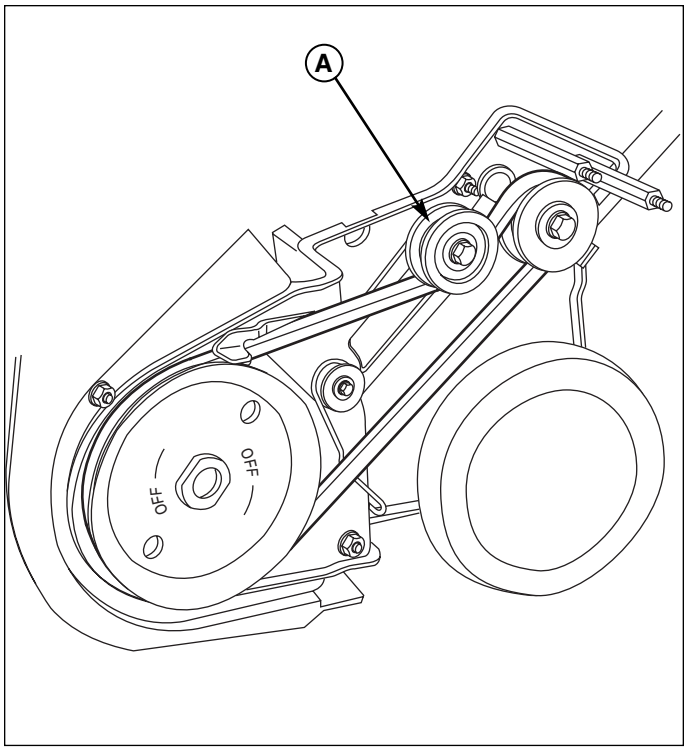


Figure 9. Drive Belt Bracket
A. Spring-Loaded Idler Pulley

AUGER DRIVE BELT REPLACEMENT

Inspect belt frequently for signs of excessive wear. Visually check for cracking, fraying, severed or exposed belt strands.

1. Remove the side belt cover (D, Figure 3).
2. Remove both belt cover retaining studs (D, Figure 7).
3. Remove belt guide (A, Figure 8)
4. Push the spring-loaded idler pulley (A, Figure 9) down and remove the belt.
5. Install the new drive belt.
6. Reinstall belt guide (A, Figures 8,10). Make sure when reinstalling belt guide (A, Figure 10) that it does not touch PTO pulley (C). Belt guides (A) should have an equal amount of clearance on both belt guide fingers as shown.
7. Reinstall the side cover studs (D, Figure 7).
8. Perform the AUGER CONTROL ADJUSTMENT.
9. Reinstall the side cover (D, Figure 3).

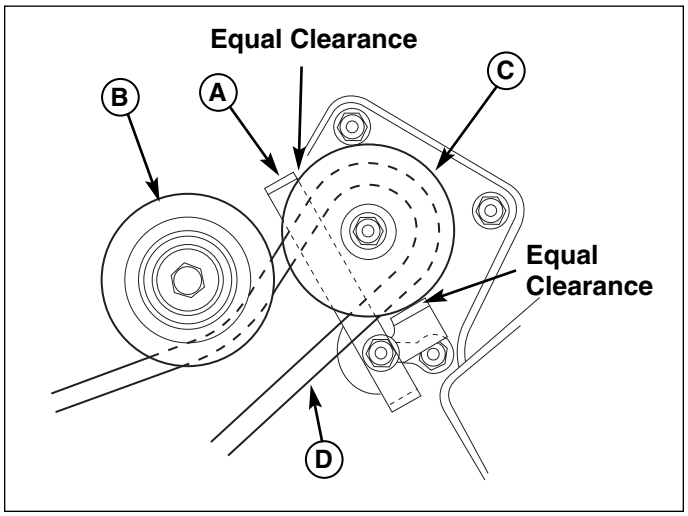


Figure 10. Belt Diagram - PTO Pulley
A. Belt Guide
B. Idler Pulley
C. PTO Pulley
D. Drive Belt

⚠ WARNING

If the auger does not stop within 5 seconds of the auger control being released, see your dealer.

AUGER FLITE SHOE REPLACEMENT

Inspect the flite shoes frequently for signs of excessive wear. Visually check flite shoes for cracking, fraying, and severed or exposed belts.

1. Turn the engine OFF, remove the key, disconnect the spark plug wire, and wait for all moving parts to stop.
2. Tilt the unit backward to access the auger. Secure the unit in the tilted position.
3. Remove all the self-tapping screws (C, Figure 11) securing the flite shoes to the auger. Retain the screws, discard the old flite shoes (B).
4. Secure the new flite shoes to the auger using the original self-tapping screws. Be careful not to strip the screws. Be sure the angled ends of the flite shoe are aligned with the angled ends of the auger.

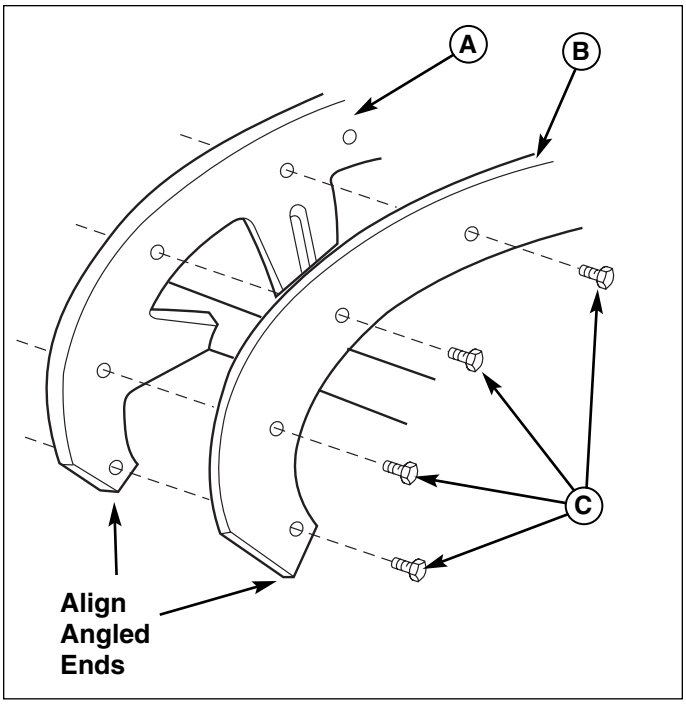


Figure 11. Auger Flites
A. Auger
B. Flite Shoe
C. Self-Tapping Screws

Specification, Parts, & Accessories

SPECIFICATIONS

Engine

Make	Tecumseh
Model	HSK600
Spec	1691V / 1702V
Horsepower*	3 @ 4300 rpm
Displacement	6 cu. in.
Oil Type	2-Cycle
Starter	Recoil, or Recoil with Electric Start

Chassis

Chute Rotation	200 degrees
Fuel Tank Cap.	1.25 Qt.
Overall Height	36”
Overall Width	21”
Auger Width	19”
Overall Length	42”
Weight	54 Lbs.

REPLACEMENT PARTS

Replacement parts are available from your authorized dealer. Always use genuine Simplicity Parts.

MAINTENANCE ITEMS

Many convenient and helpful service and maintenance items are available from you authorized dealer. Some of these items include:

Engine Oil
Touch-Up Paint
Grease Gun Kit
8 oz. Grease Tube
Tire Sealant
Degreaser
Gas Stabilizer

NOTE: Specifications are correct at time of printing and are subject to change without notice. * Actual sustained equipment horsepower will likely be lower due to operating limitations and environmental factors.

TECHNICAL MANUALS

Additional copies of this manual are available, as well as fully illustrated parts lists. These manuals show all of the product’s components in exploded views (3D illustrations which show the relationship of parts and how they go together) as well as part numbers and quantities used. Important assembly notes and and torque values are also included.

For applicable manuals currently available for your model, contact our Customer Publications Department at 262-284-8519. Have the information listed in the box below available when phoning in your request. Technical manuals can be downloaded from www.simplicitymfg.com

Model: _____

Mfg. No.: _____

Your Name: _____

Address: _____

City, State, Zip: _____

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