

OWNER'S MANUAL Model Number

700255-3 Snowblower



Berco Compact Two Stage 40" SnowblowerFor LAWN AND YARD TRACTORS

* ASSEMBLY

* REPAIR PARTS

* OPERATION

* MAINTENANCE

CAUTION:

READ & FOLLOW ALL SAFETY RULES & INSTRUCTIONS BEFORE OPERATING YOUR EQUIPMENT



LIMITED WARRANTY

Conditions and Products Covered:

BERCOMAC guarantees any part of the product or accessory manufactured by BERCOMAC and found in the reasonable judgment of BERCOMAC to be defective in material and or workmanship will be repaired or replaced by an authorized dealer without charge up to our maximum labor rates and preestablished times. For replacement parts only standard ground freight services are covered. This warranty extends to the original retail purchaser only and is not transferable to any subsequent purchasers.

Warranty Period

(from date of the original retail purchase)

• Residential use: 1 year

• Semi-commercial, professional or rental use: 90 days

Exceptions Noted Below; the following items are guaranteed by the original manufacturer and have their own warranty, conditions and limited time:

• Tire Chains: 90 days

• Engines: Will vary as per the manufacturer

Please refer to the engine manufacturer's warranty statement included with the unit. BERCOMAC is not authorized to handle warranty adjustments on engines.

Items and Conditions NOT Covered:

This warranty does not cover the following:

- Pick-up or delivery charges or in-home services fees.
- Any damage or deterioration of the unit, parts and or finish of these due to normal use, wear and tear, or exposure.
- Cost of regular use or maintenance service or parts, such as gas, oil, lubricants, tune-up parts, and adjustments.
- Any part or accessory which has been altered, modified, misused, neglected, accidentally damaged or not properly installed, maintained, stored or repaired not in accordance with the instructions in the owner's manual.
- Repair due to normal wear and or any wear items such as shear pins, bolts, belts, etc.
- Expedited freight fee services for replacement parts.
- Shear bolts and shear pins are to be considered as a preventive measure not as an assured protection, any damages resulting from the lack of shear bolts breakage are not covered.

NOTE: All warranty work must be performed by an authorized dealer using original (manufacturer) replacement parts.

Owner's Responsibilities:

BERCOMAC's defective equipment or part must be returned to an authorized dealer within the warranty period for repairs. In the event that defective merchandise must be returned to manufacturer for repairs, freight fees are prepaid and a written authorization from BERCOMAC must be obtained by dealer prior to the shipment. This warranty extends only to equipment operated under normal conditions. To validate a warranty claim, it is the user's responsibility to maintain and service the unit as specified in the owner's manual or to have the unit serviced at their dealer at their expense.

General Conditions:

The sole liability of BERCOMAC with respect to this warranty shall be strictly and exclusively repair and replacement as mentioned herein. BERCOMAC shall not have any liability for any other costs, loss or damage, including but not limited to, any incidental or consequential loss or damage.

In particular, without being limited to, BERCOMAC shall have no liability or responsibility for:

- Travel time, overtime, after hours time or other extraordinary repair charges or relating to repairs and or replacements outside of normal business hours.
- Rental of like or similar replacement equipment during the period of any, repair or replacement work.
- Any communicating or travel charges.
- Loss or damage to person or property other than that covered by the terms of this warranty.
- Any claims for lost revenue, lost profit or any similar costs as a result of damage or repair.
- · Attorney's fees.

BERCOMAC's responsibility in respect to claims is limited to making the required repairs or replacement without charge up to our maximum labor rates and pre-established times and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any product or accessory.

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

NOTE: Bercomac reserves the right to change or improve the design of any part or accessory without assuming any obligation to modify any product previously manufactured.

Instructions for Obtaining Warranty Services:

Contact dealer where equipment was purchased or any other BERCOMAC service dealer to arrange service at their dealership. To locate a dealer convenient to you, access our website at www.bercomac.com. Don't forget to bring the product and your proof of purchase (sales receipt) to the BERCOMAC dealer.

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INTRODUCTION

TO THE PURCHASER

This new accessory was carefully designed to give years of dependable service. This manual has been provided to assist in the safe operation and servicing of your attachment.

NOTE: All photographs and illustrations in the manual may not necessarily depict the actual models or attachment, but are intended for reference only and are based on the latest product information available at the time of publication.

Familiarize yourself fully with the safety recommendations and operating procedures before putting the machine to use. Carefully read, understand and follow these recommendations and insist that they be followed by those who will use this attachment.



THIS SAFETY ALERT SYMBOL IDENTIFIES AN IMPORTANT SAFETY MESSAGE IN THIS MANUAL THAT HELPS YOU AND OTHERS AVOID PERSONAL INJURY OR EVEN DEATH. DANGER, WARNING, AND CAUTION ARE SIGNAL WORDS USED TO IDENTIFY THE LEVEL OF HAZARD. HOWEVER, REGARDLESS OF THE HAZARD, BE EXTREMELY CAREFUL.

DANGER: Signals an extreme hazard that will cause serious injury or death if recommended precautions

are not followed.

WARNING: Signals a hazard that may cause serious injury or death if the recommended precautions are

not followed.

CAUTION: Signals a hazard that may cause minor or moderate injury if the recommended precautions are

not followed.

Record your attachment serial number and purchase date in the section reserved below (there is no serial number on the subframe). Your dealer requires this information to give you prompt, efficient service when ordering replacement parts. Use only genuine parts when replacements are required.

If warranty repairs are required please present this registration booklet and original sales invoice to your selling dealer for warranty service.

This manual should be kept for future reference.

Please check if you have received all the parts for your kit with the list of the bag and the list of the box.

SERIAL NUMBER : (IF APPLICABLE) MODEL NUMBER:	
PURCHASE DATE :	



SAFETY PRECAUTIONS



Careful operation is your best insurance against an accident. Read this section carefully before operating the vehicle and accessory. This accessory is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury. All operators, no matter how experienced they may be, should read this and other manuals related to the vehicle and accessory before operating. It is the owner's legal obligation to instruct all operators in safe operation of the accessory.

GLOSSARY:

In this manual, right and left sides are determined by sitting on the seat of the vehicle facing forward.

In this manual, "accessories" means attachments (snowblower, rotary broom, blade etc.) that you install on the vehicle (lawn tractors, A.T.V. s etc).

TRAINING:



This symbol, "Safety Alert Symbol", is used throughout this manual and on the accessory's safety labels to warn of the possibility of serious injury. Please take special care in reading and understanding the safety precautions before operating the vehicle and accessory.

- Read this owner's manual carefully. Be thoroughly familiar with the controls and proper use of the vehicle and accessory. Know how to stop the unit and disengage the controls quickly.
- 2. Never allow children to operate the vehicle nor the accessory. Never allow adults to operate the vehicle nor the accessory without proper instructions.
- 3. No one should operate the vehicle nor the accessory while intoxicated or while taking medication that impairs the senses or reactions.
- 4. Keep the area of operation clear of all people, particularly small children and pets.

PREPARATION:

- 1. Thoroughly inspect the area where the accessory is to be used and remove door mats, all foreign objects and the like.
- 2. For motorized accessories, disengage all clutches and shift into neutral before starting engine.
- Do not operate the accessory without wearing adequate winter outer garments. Avoid loose fitting clothing that can get caught in moving parts. Wear footwear that will improve footing on slippery surfaces.

- 4. Handle fuel with care, it is highly flammable.
 - a) Use approved fuel container.
 - b) Never add fuel to a running engine or hot engine.
 - Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
 - d) Never fill containers inside a vehicle, or on a truck or a 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 equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
 - f) Keep the 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 lockopen device.
 - g) Replace fuel cap securely and wipe up spilled
 - h) If fuel is spilled on clothing, change clothing immediately.
- 5. Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).
- 6. Let the vehicle and accessory adjust to outdoor temperatures before using.
- 7. Never use an accessory without proper guards, plates, or other safety protective devices in place
- 8. Always make sure to wear the appropriate safety equipment required (glasses, muffs, mask...) for each type of product. See operation section.
- Always make sure of having safe traction on the vehicle by using the recommended accessories (chains, A.T.V. tracks, counterweights...). See operation section.
- 10. Never modify the accessory or any part without the written consent from the manufacturer.



SAFETY PRECAUTIONS



OPERATION:

- Do not put hands or feet near, under or inside rotating parts.
- Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
- After striking a foreign object, stop the engine (motor), disconnect the wire from the spark plug(s) and keep wire away to prevent accidental starting. Thoroughly inspect the accessory for any damage and repair damage before restarting and using the accessory.
- 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.
- Take all possible precautions when leaving the vehicle unattended. Disengage the power take-off, lower the attachment, place the transmission into neutral, set the parking brake, stop the engine and remove the contact key.
- 6. Do not run the engine indoors, except when starting the engine and for transporting in or out of the building. Do not operate or let motor run in a storage area without ventilation because gas contains carbon monoxide which is odorless, colorless and can cause death.
- 7. Never use the accessories across the face of slopes, go from top to bottom. Exercise extreme caution when using equipment on slopes. Do not attempt to clear a steep slope.
- 8. Never tolerate bystanders in the working zone. Never use an accessory in the direction of bystanders, it might throw gravel or debris that can hurt people or damage property.
- Never operate the accessory at high transport speeds on slippery surfaces. Use care when backing up.
- 10. Do not carry passengers.
- 11. Disengage power to the accessory when it is transported or not in use.
- 12. Never operate the accessory without good visibility or light.

Keep the accessory away from heat sources or flames.

MAINTENANCE AND STORAGE

- When cleaning, repairing or inspecting the vehicle and accessory, make certain that all moving parts have stopped. Disconnect wire from the spark plug(s) and keep wire away to prevent accidental starting.
- 2. Check all the bolts and components at frequent intervals to make sure that they are properly tightened.
- Never store a motorized accessory with fuel in the fuel tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
- 4. Always refer to the owner's manual when you store the accessory and vehicle for a prolonged or an unspecified length of time.
- Maintain or replace safety and instruction labels, as necessary.
- 6 For winter accessories, (if applicable), let the engine run for a few minutes after clean snow in order to prevent the rotary parts from freezing.
- Inspect the vehicle's and accessory's air filter every day. Clean it or replace it as necessary. Change the oil more often when working in dusty conditions. See the vehicle's and accessory's owner's manual.



THIS SYMBOL MEANS

DANGER!

BECOME ALERT!

YOUR SAFETY IS INVOLVED!



SAFETY DECALS



REPLACE IF DECALS ARE DAMAGED SEE PARTS BREAKDOWN FOR DECAL LOCATION



A ATTENTION

- POUR ÉVITER DES BLESSURES:
- LIRE LE MANUEL DU PROPRIÈTAIRE ET SUIVRE LES INSTRUCTIONS D'OPÉRATION ET DE SÉCURITÉ. UN CONTREPOIDS ARRIÈRE 100 LB MIN. EST REQUIS POUR CONTREBALANCER LE POIDS DE LA SOURSE FISIE.
- DES CHAÎNES À PNEUS APPROUVÉES SONT REQUISES
 LORS DU DÉMONTAGE, ENLEVER LE CONTREPOIDS APRIÈRE
- ARRIERE.

 NE PAS OPÉRER DANS UNE PENTE DE PLUS DE 10%
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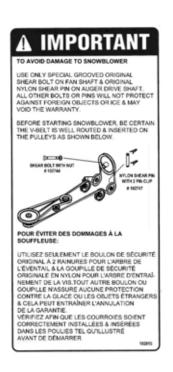


Decal # 102124 Decal # 102125 Decal # 102126

102125



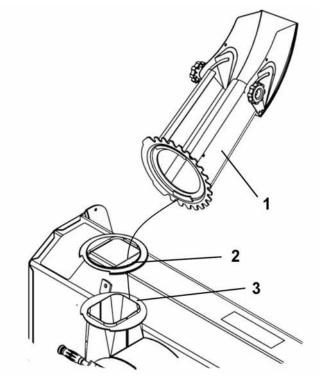




STEP 1 SNOWBLOWER PREPARATION:

Install the rotation ring (item 2) over opening (item 3) as shown and align the notches.

Place the chute (item 1) (facing the rear) and clip the back over the rotation ring then turn the chute towards the front to lock into place.

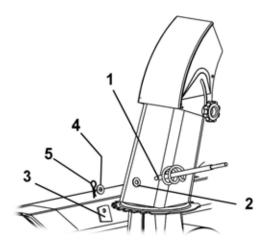


Install chute

Place a 7/16" flatwasher (item 2) on the rotation worm shaft (item 1).

Install the rotation worm in the rotation support (item 3).

Secure with a 7/16" dia. flatwasher (item 4) and a 2.5 mm. hair pin (item 5).



Install rotation worm

NEW:

In a constant effort to improve our products, a lift assist spring was added to the snowblower. The new generation of subframes are now equipped to receive this spring.

However, if you wish to benefit from this improvement, you may modify the left support on your subframe by following the instructions below.

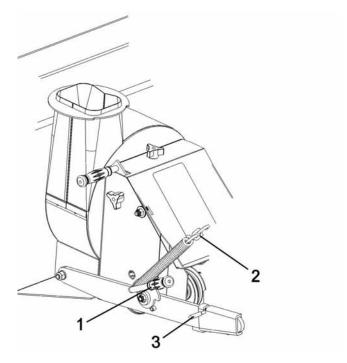
Make a bracket (item 4) to be able to install the lift assist spring.

To determine how long to make it and where to place the bracket on the left support of the subframe, lift the snowblower, and pull the tension arm (item 1) towards the back.

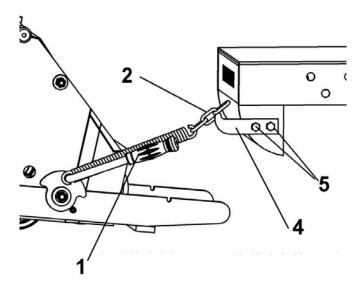
Adjust the bracket in order to hook the chain (item 2) (preferably in the second link of the chain) on the hook.

Install the bracket in that position with two bolts (item 5).

If the spring is not required simply remove it.



If required, make and install the bracket for the lift assist spring.



This figure is for your information only.

STEP 2

SNOWBLOWER INSTALLATION:

Refer to parts breakdown section for parts identification.



WARNING



TO PREVENT INJURIES:

Stop the motor.

Apply parking brake.

Remove the ignition key.

Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.

Attach the snowblower to the subframe as shown.

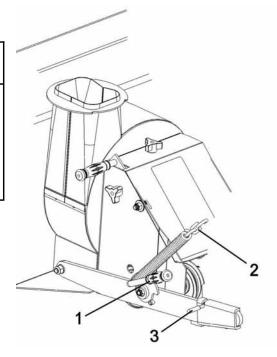
Make sure the snowblower is pushed in until locked into place by the springs (item 3).

Lift the snowblower.

Turn the tension arm (item 1) towards the back and install the chain (item 2) on the hook (if subframe is equipped with one)

Turn the tension arm towards the front to apply tension on the spring.

Lower the snowblower.



Install snowblower



CAUTION



The belt tension and lift assist spring arm are spring loaded & need to be held firmly while displacing to prevent injury.



WARNING



TO PREVENT INJURIES:

It is the person who installs the drive mechanism responsibility to make sure that when the clutch is disengaged that all moving parts stop.

For more information, do not hesitate to contact the technical support.

NOTE: See belt installation instructions in the Maintenance section.



CAUTION

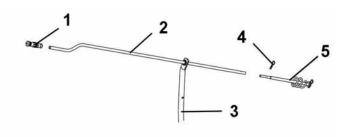


Never use the snowblower without the belt guard.

Insert the handgrip (item 1) on the handle (item 2).

Insert the handle (item 2) through the support (item 3) as shown.

Insert the handle (item 2) on the rotation worm (item 5) and secure with a 2.5 mm. hair pin (item 4).

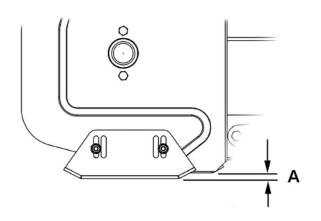


Install handle

VERIFY SKID SHOE ADJUSTMENT:

<u>LEVEL PAVED SURFACE:</u> Adjust skid shoes to allow 3/16" to 1/4" clearance (A) between cutting edge and surface.

<u>UNEVEN OR GRAVEL SURFACE:</u> Adjust skid shoes to allow 1/2" to 5/8" clearance (A) between cutting edge and surface.



VERIFY TIRE PRESSURE:

Adjust skid shoes

Check and adjust tractor tire pressure as follows:

Front tires: 14-15 psi Back tires: 7-8 psi

Tire pressure must be even on both sides of tractor.

OPERATION

SNOWBLOWER OPERATION

- a) Make sure the snowblower is clear of snow before engaging the snowblower.
- b) Make sure that the auger and impeller operate freely.
- c) Start the tractor engine.
- d) Before engaging the snowblower drive, always have the engine running at medium R.P.M.
- e) Operate the snowblower at maximum engine R.P.M.

IMPORTANT: USE FULL ENGINE R.P.M. WHEN REMOVING WET OR STICKY SNOW. LOW R.P.M. WILL TEND TO PLUG THE CHUTE.

CONTROLS

CHUTE ROTATION

The chute rotation handle is located to the left of steering wheel. Turning the handle in a clockwise direction, the discharge chute will turn in a clockwise direction or vice versa.

CHUTE DEFLECTOR

Set the angle of the deflector according to the distance the snow must be thrown and to prevent property damage. To change the deflector angle, loosen the two deflector knobs & adjust the deflector to the appropriate angle and retighten the two knobs securely.

SNOW REMOVAL

When removing snow, do not use the snowblower as a dozer blade to push snow. Allow snowblower to ingest snow at its own speed. If the speed of your tractor is too fast, the snowblower may become overloaded and plug. For best results, raise the snowblower and remove a top layer of snow. A second pass with the snowblower will remove the remaining snow.



WARNING



- -Do not attempt to clear plugged chute, auger or fan of snow while tractor engine is running.
- -Disengage snowblower.
- -Lower snowblower onto ground.
- -Set the parking brake.
- -Stop engine, remove the ignition key, disconnect the wire from spark plug(s) and keep away from spark plug(s) to prevent accidental starting.
- -Make sure all moving parts have stopped.
- -Do not use hand to unplug chute.
- -Use a 36" (924 mm.) minimum length stick or board.



WARNING



Read the tractor Owner's Manual carefully. Be thoroughly familiar with the controls & proper use of the attachment. Know how to stop the attachment & disengage the controls quickly.



WARNING



- TO PREVENT INJURIES AND FOR MORE TRACTION WHEN USING AN ATTACHMENT:
- -Rear counterweight of 100 lbs. minimum is required to counterbalance the attachment's weight.
- -Tractor manufacturer approved tire chains are required.
- -Do not operate on a slope greater than 10°.
- -When dismounting the attachment remove rear counterweights.

MAINTENANCE



WARNING



TO PREVENT INJURIES:

Stop the motor.

Apply parking brake.

Remove the ignition key.

Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.

MAINTENANCE

- a) Check mounting bolts at frequent intervals for proper tightness in order to prevent costly repairs. Make sure your snowblower is in safe working condition.
- b) Provide adequate blocking before working under snowblower when in raised position.

ADJUSTMENTS

SKID SHOE ADJUSTMENT:

<u>Level Paved Surface</u>: Adjust skid shoes to obtain 3/16" to 1/4" clearance between cutting edge and surface.

<u>Uneven or Gravel Surface</u>: Adjust skid shoes to obtain 1/2" to 5/8" clearance between cutting edge and surface.

CHAIN ADJUSTMENT:

<u>Auger drive chain</u>: Loosen the 3/8" x 2 1/2" hex bolt (see Parts Breakdown, Snowblower) on snowblower's right side, and set chain tension leaving 1/2" deflection in chain span. Retighten hex bolt securely.

LUBRICATION

Apply oil at all pivot points.

<u>Drive Chains</u>: Lubricate with chain saw chain lubricant every four hours of operation and at the end of each operation.

<u>Chute Rotation System</u>: Oil chute base, rotation worm every eight hours of operation.

<u>CLEARING A CLOGGED DISCHARGE</u> CHUTE:

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

To clear the chute:

- Lower snowblower to the ground and set parking brake.
- 2. SHUT THE ENGINE OFF & REMOVE KEY!
- 3. Wait 10 seconds to be sure the **all moving parts** such as the impeller blades have stopped moving.
- 4. Disconnect wire from the spark plug(s) and keep wire away to prevent accidental starting.
- 5. Always use a clean-out tool of at least 36" in length, NOT YOUR HANDS.

CUTTING EDGE MAINTENANCE

Verify from time to time the wear on the cutting edge to make sure you do not wear out the base of the snowblower's chassis. This cutting edge is reversible. All you have to do is unscrew the bolts and turn the cutting edge, reinstall and tighten the bolts securely.

SHEAR BOLT & SHEAR PIN REPLACEMENT

Shear bolts and shear pins are to be considered a preventive measure and not an assured protection. Operator vigilance is required. Thoroughly inspect the areas where the snowblower is to be used and remove all foreign objects.

Fan Shear Bolt Replacement:

The fan is protected by a special shear bolt with two grooves. If you hit a foreign object or ice, the shear bolt is designed to break in two upon absorbing impact. The fan will stop turning. This is to avoid damage to the fan or to the snowblower. Replace only with original part (for identification, see parts list: "Snowblower"). The use of any other bolt may void the warranty. Accessible by removing the belt guard.

Auger Shear Pin Replacement:

The auger is protected by a special nylon shear pin. If you hit a foreign object or ice, the shear pin is designed to break in two upon absorbing impact. The auger will stop turning. This is to avoid damage to the auger or the snowblower. Replace only with original parts (for identification, see parts list: "Snowblower"). The use of any other pin may void the warranty. Accessible by removing the belt guard.

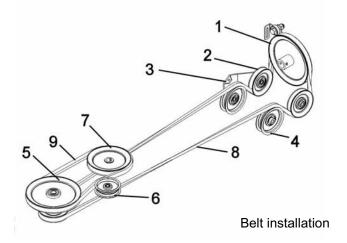
STORAGE

- a) Clean snowblower and subframe thoroughly and repaint all parts from which paint has worn.
- b) List the replacement parts that will be needed to be replaced before the next season.
- c) Follow the instructions in the Lubrication section.
- d) Store the snowblower and the subframe in a dry place.

MAINTENANCE

BELT INSTALLATION, ADJUSTMENT, AND REPLACEMENT: SNOWBLOWER BELT:

- a) Lower the snowblower to the ground.
- b) Remove the belt guard.
- c) Loosen the knob (item 10) of the bearing support (item 11).
- d) Install the belt as shown.



Item 1: Snowblower pulley

Item 2: V pulley

Item 3: Tension arm

Item 4: Flat pulley

Item 5: Drive mechanism pulley

Item 6: Flat pulley

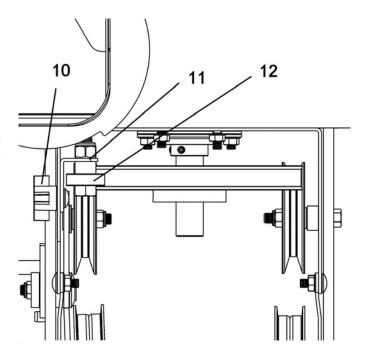
Item 7: Engine pulley

Item 8: Snowblower belt

Item 9: Drive mechanism belt

e) Adjust the ball bearing support (bracket) (item 11) on the belt. Push on the bearing (item 12) to apply a slight pressure on the back of the belt (just enough to hold the belt in place). It is normal that the bearing is off centre (towards the back of the snowblower) on the pulley. Just make sure that it does not come into contact with the wall of the pulley.

Tighten firmly with the knob (item 10).



Position the bearing support

MAINTENANCE

- f) Apply tension to the belt by pulling up the tension arm (item 1).
 - After installation of the snowblower belt, make sure there is enough tension on the belt. To obtain the proper tension, the distance between the coils of the spring should be .25" (1/4") approx.
 - If not, remove the bolt, sleeve and the spring (item 3) from the original hole and reinstall them in the second hole (item 2). This will apply more tension on the belt helping to prevent it from slipping in the pulleys.
- g) Engage the snowblower for a few seconds under supervision. Stop the engine. Inspect the belt to make sure it does not interfere with any parts; that it is well inserted in the pulleys and that it has not flipped on it's side while still on the pulleys. The V of the belt <u>must be in</u> the V of the pulleys. The back of the belt <u>must rest on</u> the flat pulleys (D) as shown.
- h) Reinstall the belt guard.
- g) Use genuine belts only, they are specifically fabricated for this application.

NOTE: Belts must be under high tension at all times. If spring is damaged or stretched, you must replace it.



CAUTION



The belt tension and lift assist spring arm are spring loaded & need to be held firmly while displacing to prevent injury.



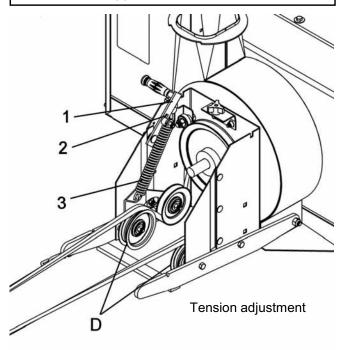
WARNING

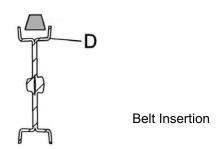


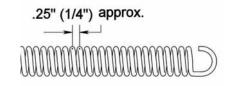
TO PREVENT INJURIES:

It is the person who installs the drive mechanism responsibility to make sure that when the clutch is disengaged that all moving parts stop.

For more information, do not hesitate to contact the technical support.









CAUTION



Never use the snowblower without the belt guard.

Distance between coils

DISMOUNTING

SNOWBLOWER DISMOUNTING



WARNING



TO PREVENT INJURIES:

Stop the motor.

Apply parking brakes.

Remove the ignition key.

Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.



CAUTION



The belt tension and lift assist spring arm are spring loaded & need to be held firmly while displacing to prevent injury.

- a) Remove the hair pin and the handle for the chute rotation.
- b) Remove the belt guard and release the tension on the belt by displacing the tension arm backwards. The tension arm is spring loaded and needs to be held firmly while lowering to prevent injuries. Remove the belt.
- c) Detach the snowblower by removing the lift assist spring and by lifting the two spring locks on the male quick hitch and pulling out the snowblower one side at a time.

TROUBLESHOOTING

* Please refer to parts breakdown section for parts identification.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Auger stops turning.	Nylon shear pin is probably broken.	Replace shear pin (for identification, see parts list "Snowblower").
	The reduction chain is broken or the connecting link is unlocked.	Remove both chain guards. Inspect & repair chain if needed (for identification, see parts list "Snowblower").
Fan stops turning.	Shear bolt is probably broken.	Replace shear bolt (for identification, see parts list "Snowblower").
Snowblower stops turning.	One of the two belts is probably damaged or broken.	Check both belts and replace damaged belt (s) (for instructions, see belt replacement in Maintenance section).
Belt has burn marks in specific places.	Lack of tension on belt.	Adjust manual clutch cable or replace springs if stretched. To obtain the proper tension, the distance between the coils of the spring should be .25" (1/4"). If not, remove the bolt, sleeve and the spring from the original hole and reinstall them in the second hole. (See Maintenance section, Belt installation, adjustment and replacement).
	Snowblower engaged when plugged.	Make sure the auger & the fan are not frozen or plugged before engaging.
Belt snapping, shredding or burning	Not original shear bolts	Use original shear bolts
	Height when snowblower is raised	Should not exceed 4 inches off ground. Make adjustment as per instructions in owner's manual.
	Not original belts	Always use original belts. See parts breakdown in subframe/drive mechanism manual for part number.
	Imperfections in pulleys	Verify that pulleys are smooth, have no rust spots or weld burrs. Sand down pulleys or replace.
	Interference	Make sure that belt does not come into contact with any other part, bolts, guides etc when engaged.
	Improper tension	Make proper adjustment, verify if springs are stretched from use, if so, replace springs. Check in which hole on the tension arm of the snowblower, the spring is installed. There is too much tension.
	Belt has flipped on its side	When installing new belt, have snowblower run under supervision for a few minutes. Turn everything off and verify that belt has not turned on its side. If so, remove belt and reinstall in opposite fashion to rectify the bad twist the belt has taken.

TROUBLESHOOTING

* Please refer to parts breakdown section for parts identification.

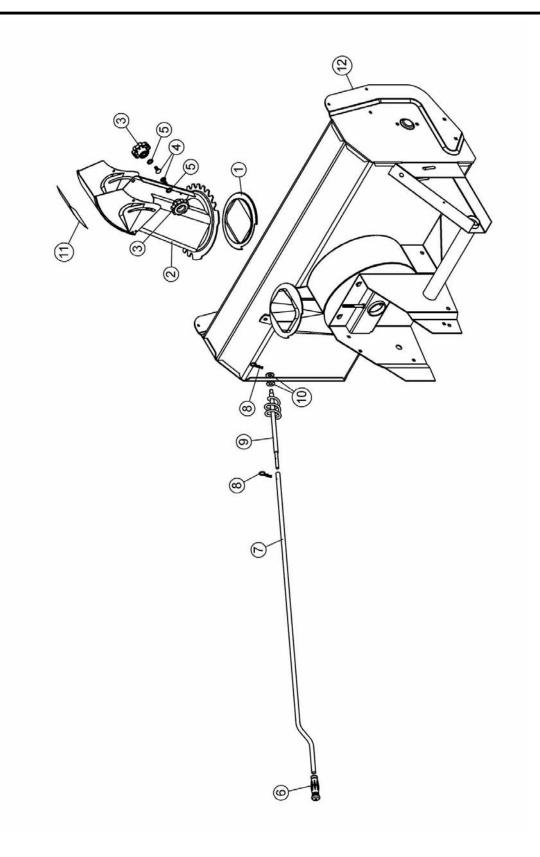
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Belt shredding	Alignment	Verify alignment of belt. Make sure belt is feeding well into pulleys. If not, adjust pulleys properly.
Belt slips	Worn springs	Verify if springs are stretched from use and replace.
	Improper tension	Increase tension on belt.
	Not original belts	Always use original belts. See parts breakdown in subframe/drive mechanism manual for part number.
	Loose pulleys	Inspect pulleys. Pulleys must be well secured in place and not wobbling.
	Belt does not run well in the pulleys	Belt must be well seated in middle of pulleys.
	Worn belt	Belt may be worn and has lost its elasticity causing a slack.
Belt comes off pulley or flips off	Belt guides not well positioned	Guides must be in proper position to guide the belt into the pulleys properly.
	New or cold belts flip off	After installation, turn on snowblower and watch the belt. If it flips, it does it in the first few seconds. Remove belt and turn it around, reinstall and let it run. Sometimes it can take up to 4 times before the belt sits in the pulleys.

TROUBLESHOOTING

* Please refer to parts breakdown section for parts identification.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION		
Chute plugs easily.	Tractor engine turning too slowly.	Run engine at full throttle during snowblowing operation.		
	Advancing too quickly with tractor.	Allow snowblower to ingest snow at its own speed.		
Chute rotation is difficult.	Dirt or ice may be underneath chute.	Dismount chute by removing the rotation worm (for identification, see parts list "Chute with Rotation System"). Turn the chute completely towards the rear and it will disconnect from base. Clean the base of chute and the rotation ring. Lubricate & re-install.		
Snowblower digs into ground.	Ground is not frozen or too soft.	Adjust skid shoes lower so they may better support the snowblower. If problem persists, change skid shoes for heavy duty skid shoes (option #700243) which cover more surface and prevents snowblower from digging.		
Snowblower does not raise evenly.	Tire pressure uneven from one side to another.	Verify and adjust tire pressure: Front tires: 14 to 15 psi Rear tires: 7 to 8 psi		
	Maladjustment of the snowblower.	Loosen male hitch on snowblower (for identification, see parts list "Snowblower").		
		Place a shim (ex.:piece of wood approx. 2" thick) under the lowest side of snowblower which needs to be leveled. Re-tighten bolts.		
Snowblower vibrates or is	Damaged pulley.	Replace pulley.		
abnormally noisy.	Damaged bearing.	Replace bearing.		
	Damaged fan.	Dismount & repair or replace fan.		
	Damaged auger.	Replace auger.		
Auger turns the wrong way.	Belt is installed improperly.	See Belt mounting instructions Snowblower Installation section or check the belt replacement instructions in the maintenance section.		
1	1	I .		

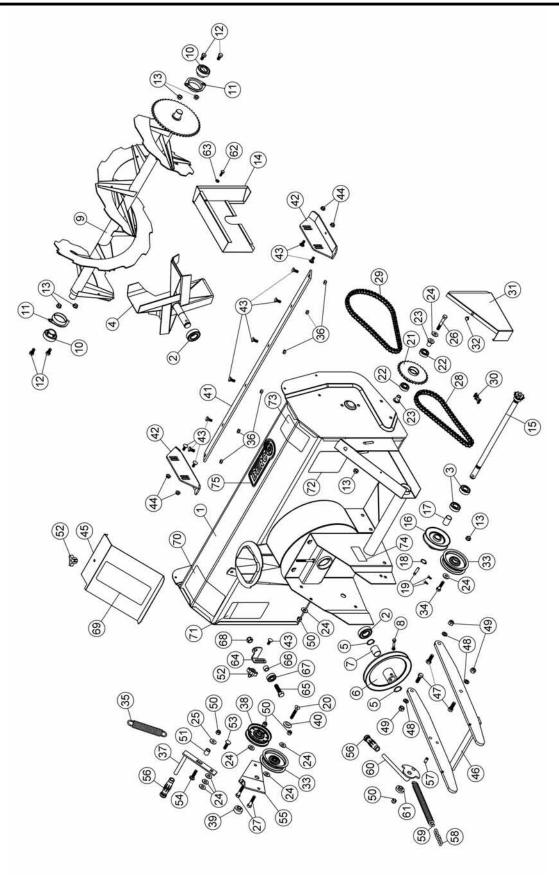
PARTS BREAKDOWN / NOMENCLATURE DES PIÈCES CHUTE WITH ROTATION SYSTEM / GOULOTTE AVEC SYSTÈME DE ROTATION



PARTS LIST / LISTE DES PIÈCES CHUTE WITH ROTATION SYSTEM / GOULOTTE AVEC SYSTÈME DE ROTATION

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #	
1	Rotation ring	Coussinet de rotation	1	102756	
2	Chute	Goulotte	1	102748	
3	Knob	2	102020		
4	Carriage bolt 5/16" n.c. x 3/4"	Boulon à carrosserie 5/16" n.c. x 3/4"	2	O/L	
5	Nylon flat washer 7/16"	Rondelle plate de nylon 7/16"	2	102011	
6	Handgrip	Poignée	1	102062	
7	Handle	Handle Manivelle			
8	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013	
9	Rotation worm	Spirale de rotation	1	102695	
10	Flat washer 7/16" hole	Rondelle plate 7/16" trou	2	O/L	
11	Danger decal	Décalque danger	1	102127	
12	Frame	Châssis	1	REF	

PARTS BREAKDOWN / NOMENCLATURE DES PIÈCES SNOWBLOWER/ SOUFFLEUSE



PARTS LIST / LISTE DES PIÈCES SNOWBLOWER/ SOUFFLEUSE

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Frame	Châssis	1	103000
2	Bearing	Roulement à billes	2	102757
3	Bearing	Roulement à billes	2	102758
4	Fan	Éventail	1	102743
5	Retaining ring	Bague de retenue	2	102760
6	Main drive pulley inc. 102784	Poulie d'entraîn. princ. inc. 102784	1	102691
7	Oil lite bushing	Coussinet imprégné d'huile	1	102784
8	Shear bolt /N.I.L.N.T. pkg-10	Boulon de séc. /É.G.N.M. pqt-10	1	102744
9	Auger 40"	Vis 40"	1	102000
10	Bearing with set screw	Roulement à billes avec vis à pression	2	102755
11	Flangette	Flangette	2	102680
12	Hex. bolt 3/8" n.c. x 3/4"	Boulon hex. 3/8" n.c. x 3/4"	4	O/L
13	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	6	O/L
14	Chain guard	Garde-chaîne	1	102698
15	Drive shaft	Arbre de commande	1	102696
16	Auger drive pulley inc. 102783	Poulie d'entraîn. de la vis inc. 102783	1	102690
17	Oil-lite bushing	Coussinet imprégné d'huile	1	102783
18	Retaining ring	Bague de retenue	1	102761
19	Nylon shear pin w/2 clips	Goupille de sécurité nylon a/2 clips	1	102747
20	Hex socket f.h. cap screw 3/8" n.c. x 2 1/4"	Vis a pression hex. t.p. 3/8" n.c. x 2 1/4"	1	O/L
21	Double sprocket inc. 102759 & 102683	Pignon double inc. 102759 & 102683	1	102684
22	Bearing	Roulement à billes	2	102759
23	Flange sleeve	Douille à bride	2	102683
24	Flat washer 7/16" hole	Rondelle plate 7/16" trou	9	O/L
25	Flat washer 3/8" hole	Rondelle plate 3/8" trou	1	O/L
26	Hex. bolt 3/8" n.c. x 2 1/2"	Boulon hex 3/8" n.c. x 2 1/2"	1	O/L
27	Hex. bolt 3/8" n.c. x 1 3/4"	Boulon hex. 3/8" n.c. x 1 3/4"	2	O/L
28	Roller chain #40 x 54 /w connecting link	Chaîne #40 x 54 mailles /a maille d'accoup.	1	102767
29	Roller chain #40 x 64 /w connecting link	Chaîne #40 x 64 mailles /a maille d'accoup.	1	102768
30	Connecting Link #40	Maille d'accouplement #40	1	102040

PARTS LIST / LISTE DES PIÈCES SNOWBLOWER/ SOUFFLEUSE

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #		
31	Chain guard	Garde-chaîne	1	102745		
32	Tapping screw 1/4"-14 x 1/2"	Vis taraudeuse 1/4"-14 x 1/2"	1	O/L		
33	Flat pulley	2	102765			
34	Hex. bolt 3/8" n.c. x 1 1/2"	1	O/L			
35	Spring	Spring Ressort				
36	Stover lock nut 5/16" n.c.	Écrou de blocage 5/16" n.c.	6	O/L		
37	Tension arm	Bras de tension	1	103026		
38	Idler	Poulie	1	103044		
39	Flange washer	Rondelle à bride	1	103025		
40	Special washer	Rondelle plate spécial	1	103042		
41	Cutting edge 40"	Racloir 40"	1	102047		
42	Skid shoe	Skid shoe Patin				
43	Carriage bolt 5/16" n.c. x 3/4"	" n.c. x 3/4" Boulon à carrosserie 5/16" n.c. x 3/4"				
44	Flange nut 5/16" n.c.	nut 5/16" n.c. Écrou à bride 5/16" n.c.				
45	Belt guard	Garde courroie	1	103024		
46	Male hitch	Attache mâle	1	103043		
47	Hex. bolt 7/16" n.c. x 1 1/4"	Boulon hex. 7/16" n.c. x 1 1/4"	3	O/L		
48	Lock washer 7/16"	Rondelle de blocage 7/16"	3	O/L		
49	Nylon insert lock nut 7/16" n.c.	Écrou à garniture de nylon 7/16" n.c.	3	O/L		
50	Nylon insert lock nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	5	O/L		
51	Sleeve	Douille	1	103028		
52	Knob	Bouton	2	103027		
53	Carriage bolt 3/8" n.c. x 1 1/4"	Boulon à carrosserie 3/8" n.c. x 1 1/4"	1	O/L		
54	Carriage bolt 3/8" n.c. x 1-1/2"	Boulon à carrosserie 3/8" n.c. x 1 1/2"	1	O/L		
55	Tension lever	Levier de tension	1	103023		
56	Handgrip	Poignée	2	102062		
57	Roll pin 3/8" x 3/4"	Goupille roulée 3/8" x 3/4"	1	O/L		
58	Chain	Chaîne	1	103950		
59	Spring	Ressort	1	103073		
60	Tension arm	Bras de tension	1	103947		

PARTS LIST / LISTE DES PIÈCES SNOWBLOWER/ SOUFFLEUSE

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
61	Flange washer	Rondelle à bride	1	103481
62	Hex. bolt 1/4" n.c. x 3/4"	Boulon hex. 1/4" n.c. x 3/4"	1	O/L
63	Spring Washer	Rondelle à ressort	1	104352
64	Bracket	Fixation	1	104737
65	Hex. bolt 1/2" n.c. x 1 3/4"	Boulon hex. 1/2" n.c. x 1 3/4"	1	O/L
66	Bushing	Coussinet	1	102225
67	Bearing	Roulement à billes	1	104624
68	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	1	O/L
69	Important decal	Décalque important	1	102815
70	Warning decal	Décalque attention	1	102125
71	Danger decal	Décalque danger	1	102128
72	Warning decal	Décalque attention	1	102124
73	Danger decal	Décalque danger	1	102126
74	Serial number	Numéro de série	1	REF
75	Berco decal	Décalque Berco	1	102471

TORQUE SPECIFICATION TABLE

GENERAL TORQUE SPECIFICATION TABLE USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

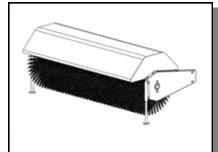
NOTE: These values apply to fasteners as received from supplier, dry or when lubricated with normal oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

* Thick nuts must be used with grade 8 bolts

SEE Grade	No.		2	2		5			8 *				
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE MANUFACTURING MARKS WILL VARY			TOR	QUE		TORQUE				TORQUE			
во	LT SIZE	FOOT	POUNDS	NEW TON-N	IETERS	FOOT POUNDS		NEW TON-N	IETERS	FOOT P	OUNDS	NEW TON-M	IETERS
Inches	Millimetre	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min. Max.	Max.	Min. Max.	Max.
1/4"	6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16"	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8"	9.53	20	23	27.1	31.2	35	42	47.5	57	45	54	61	73.2
7/16"	11.11	30	35	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2"	12.7	45	52	61	70.5	80	96	108.5	130.2	110	132	149.2	179
9/16"	14.29	65	75	88.1	101.6	110	132	149.2	179	160	192	217	260.4
5/8"	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358
3/4"	19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8"	22.23	160	200	216.8	271	400	480	542.4	650.9	600	720	813.6	976.3
1"	25.4	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5

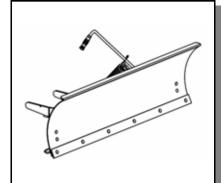
			METRIC BOLT	TORQUE SPECIF	ICATIONS		
			COARSE THRE	AD		FINE THREA	D
Size Screw	Grade No.	Pitch (mm)	Foot Pounds	Newton-Meters	Pitch (mm)	Foot Pounds	Newton-Meters
М6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	-	-
	7T	1	5.8 - 9.4	7.9 - 12.7	1 i	-	-
	8T		7.2 - 10	9.8 - 13.6	1 i	-	-
М8	4T	1.25	7.2 - 14	9.8 - 19	1.00	12 - 17	16.3 - 23
	7T]	17 - 22	23 - 29.8	1 i	19 - 27	25.7 - 36.6
	8T		20 - 26	27.1 - 35.2	1 1	22 - 31	29.8 - 42
M10	4T	1.50	20 - 25	27.1 - 33.9	1.25	20 - 29	27.1 - 39.3
	7T]	34 - 40	46.1 - 54.2	1 i	35 - 47	47.4 - 63.7
	8T		38 - 46	51.5 - 62.3		40 - 52	54.2 - 70.5
M12	4T	1.75	28 - 34	37.9 - 46.1	1.25	31 - 41	42 - 55.6
	7T]	51 - 59	69.1 - 79.9] i	56 - 68	75.9 - 92.1
	8T		57 - 66	77.2 - 89.4		62 - 75	84 - 101.6
M14	4T	2.00	49 - 56	66.4 - 75.9	1.50	52 - 64	70.5 - 86.7
	7T		81 - 93	109.8 - 126		90 - 106	122 - 143.6
	8T		96 - 109	130.1 - 147.7		107 - 124	145 - 168
M16	4T	2.00	67 - 77	90.8 - 104.3	1.50	69 - 83	93.5 - 112.5
	7T		116 - 130	157.2 - 176.2		120 - 138	162.6 - 187
	8T		129 - 145	174.8 - 196.5		140 - 158	189.7 - 214.1
M18	4T	2.00	88 - 100	119.2 - 136	1.50	100 - 117	136 - 158.5
	7T		150 - 168	203.3 - 227.6		177 - 199	239.8 - 269.6
	8T		175 - 194	237.1 - 262.9		202 - 231	273.7 - 313
M 20	4T	2.50	108 - 130	146.3 - 176.2	1.50	132 - 150	178.9 - 203.3
	7T		186 - 205	252 - 277.8] [206 - 242	279.1 - 327.9
	8T		213 - 249	288.6 - 337.4	<u> </u>	246 - 289	333.3 - 391.6

OPTIONS & ATTACHMENTS



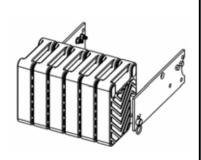
ROTARY BROOM #700380 with nylon brush /#700381 with polypropylene brush.

> Fits on same subframe as snowblower or utility blade. Requires an adaptor.



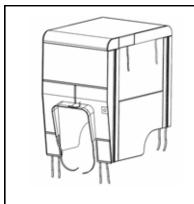
UTILITY BLADE #700266

Mounts on the same subframe as the snowblower & rotary broom.



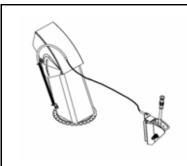
COUNTERWEIGHT

Model # according to tractor Required for safety and traction. Counter-balances weight of attachment.



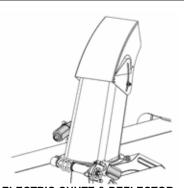
TRACTOR WINTER CAB #700423

Universal type fits on a wide variety of lawn and garden tractors.



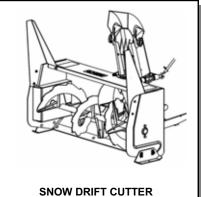
DEFLECTOR ADJUSTMENT KIT #700239 **ELECTRIC DEFLECTOR ADJUSTMENT KIT**

#700526 Adjusts height at which snow is thrown from the driver's seat.

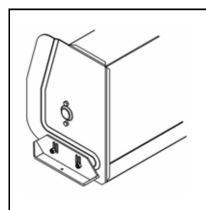


ELECTRIC CHUTE & DEFLECTOR #700522

Allows to turn chute and adjust deflector electrically from driver's

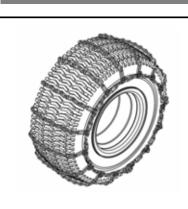


#700260 for compact snowblower. Facilitates and increases snow intake. Pkg. of 2



HEAVY DUTY SKID SHOES #700243

> For gravel driveways. Pkg. of 2



TIRE CHAINS

Two link spacing. Required for traction and safety.

Pkg. of 2



WHEN PERFORMANCE & DEPENDABILITY ARE NON NEGOTIABLE!

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