



OWNER/OPERATOR'S MANUAL & ILLUSTRATED PARTS LIST

MODEL :

75-70666 SNOWBLOWER-48" SB448
75-70667 SNOWBLOWER-54" SB454

Manual 4169733
Rev. B 09-2013



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



SNOWBLOWER

**CALIFORNIA
Proposition 65 Warning**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

 **WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**Californie Proposition 65
Avertissement**

Les échappements des moteurs diesel et certains de leurs composés sont reconnus par l'Etat de Californie pour être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

 **AVERTISSEMENT**

L'émission du moteur de ce matériel contient des produits chimiques que l'Etat de Californie considère être cancérigènes, provoquer des défauts congénitaux et d'autres dangers en matière de reproduction.

**California Advertencia
de la Proposicion 65**

El estado de California hace saber que los gases de escape de los motores diesel y algunos de sus componentes producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

 **ADVERTENCIA**

El estado de California hace saber que los gases de escape de este producto contienen productos químicos que producen cáncer, defectos de nacimiento y otros daños en el proceso de reproducción humana.

**CALIFORNIA
Proposition 65 Warning**

Battery posts, terminals, wiring insulation, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
WASH HANDS AFTER HANDLING.

SNOWBLOWER

IMPORTANT MESSAGE

Thank you for purchasing this Schiller Grounds Care, Inc. product. You have purchased a world class product, one of the best designed and built anywhere.

This product comes with an Owner / Operator's Manual. The useful life and good service you receive from this product depends to a large extent on how well you read and understand this manual. Treat this product properly and adjust it as instructed, and it will give you many years of reliable service. This manual has been provided to assist in the safe operation and servicing of you attachment.

See a Schiller Grounds Care, Inc. dealer for any service or parts needed. Schiller Grounds Care, Inc, service ensures that you continue to receive the best results possible from Schiller Grounds Care, Inc. products. You can trust Schiller Grounds Care, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

Schiller Grounds Care, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this product only as directed in the manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

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 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.

Schiller Grounds Care, Inc.
One Bob Cat Lane
Johnson Creek, WI 53038-0469

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SNOWBLOWER

DESCRIPTION / SPECIFICATIONS

DESCRIPTION

This Snowblower is designed to facilitate clearing of large volumes of snow from sidewalks, driveways, and small parking lots.

This is a 2-stage blower. The auger feeds the snow into the blower housing. The Snowblower is belt-driven with a gearbox to the 15" open-centered auger. The hydraulic controlled chute directs the snow from side to side with fingertip control of the auxiliary hydraulics. A heavy-duty wear edge shears snow cleanly from pavement or height can be regulated with adjustable skid shoes.

The Snowblower mounts on all Steiner power units with quick hitch front lift and can be installed and removed quickly.

SPECIFICATIONS

Weight:270lbs. (SB448) & 306lbs. (SB454)
Overall Width:48" (SB448) & 58" (SB454)
Overall Height:42"
Overall Length:40"
Opening Size:21" h x 48" w (SB448) & 21" h x 58" w (SB454)
Auger: 15" diameter open center
Blower:14" diameter, 4 blades
Auger Speed:230 RPM
Blower Speed:1150 RPM
Chute:6" diameter, 237 degree rotation
Height of Cut:Adjustable skid shoes 0" to 1-1/4"

NOTE: Specifications are subject to change without notice.

Record your attachment's serial number and purchase date in the section reserved below. 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.

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

NOTICE !!!!

Unauthorized modifications may present extreme safety hazards to operators and bystanders and could also result in product damage.

Schiller Grounds Care, Inc. strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Schiller Grounds Care, Inc Engineering Department. Any Schiller Grounds Care, Inc product that is altered, modified or changed in any manner not specifically authorized after original manufacture-including the addition of "after-market" accessories by Schiller Grounds Care, Inc.-will result in the Schiller Grounds Care, Inc. Warranty being voided.

Any and all liability for personal injury and /or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Schiller Grounds Care, Inc. will be considered the responsibility of the individual(s) or company designing and/or making such changes. Schiller Grounds Care, Inc. will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



This symbol means:
ATTENTION !
BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Schiller Grounds Care, Inc. machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbols shown above. Regardless of the hazard be extremely careful.

DANGER

DANGER Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

WARNING

WARNING Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION

CAUTION Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage.

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.

TRAINING:

1. 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. Disengage all clutches and shift into neutral before starting engine.
3. 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. Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).
5. Let the vehicle and accessory adjust to outdoor temperatures before using.
6. Never use an accessory without proper guards, plates, or other safety protective devices in place
7. Always make sure to wear the appropriate safety equipment required (glasses, muffs, mask...) for each type of product. See operation section.
8. Always make sure of having safe traction on the vehicle by using the recommended accessories

OPERATION:

1. Do not put hands or feet near, under or inside rotating parts.
2. Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
3. 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.
5. 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. 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.
7. 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.
8. Never operate the accessory at high transport speeds on slippery surfaces. Use care when backing up.
9. Do not carry passengers.
10. Disengage power to the accessory when it is transported or not in use.
11. Never operate the accessory without good visibility or light.

MAINTENANCE AND STORAGE

1. 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.
3. Always refer to the owner's manual when you store the accessory and vehicle for a prolonged or an unspecified length of time.
4. Maintain or replace safety and instruction labels, as necessary.
5. Let the engine run for a few minutes after cleaning snow in order to prevent the rotary parts from freezing.

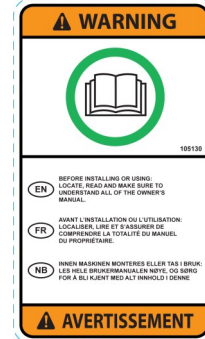
**REPLACE IF DECALS ARE DAMAGED
SEE PARTS BREAKDOWN FOR DECAL LOCATION**

DECAL #105126



To avoid serious injury:
Keep hands, feet & clothing away from rotating auger while engine is running.

DECAL #105130



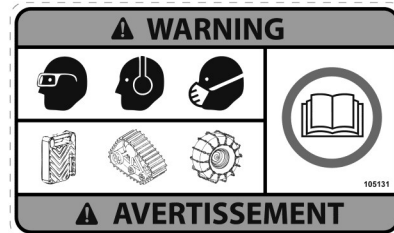
Before installing or using:
Locate, read and make sure to understand all of the owner's manual.

DECAL #105127



To avoid serious injury:
Keep hands out of this discharge chute while engine is running.

DECAL #105131



Refer to owner's manual about wearing safety glasses, ear muffs and mask.
Refer to owner's manual for use of counter weights, cat tracks and tire chains.

DECAL #105128



To avoid serious injury:
Keep hands, feet & clothing away.
Do not attempt to install or remove drive belt without reading owner's manual.

SNOWBLOWER

STEP 1

SNOWBLOWER PREPARATION:

Refer to parts breakdown section for parts identification.

Tools needed: 7/16" and 1/2" combination wrench.

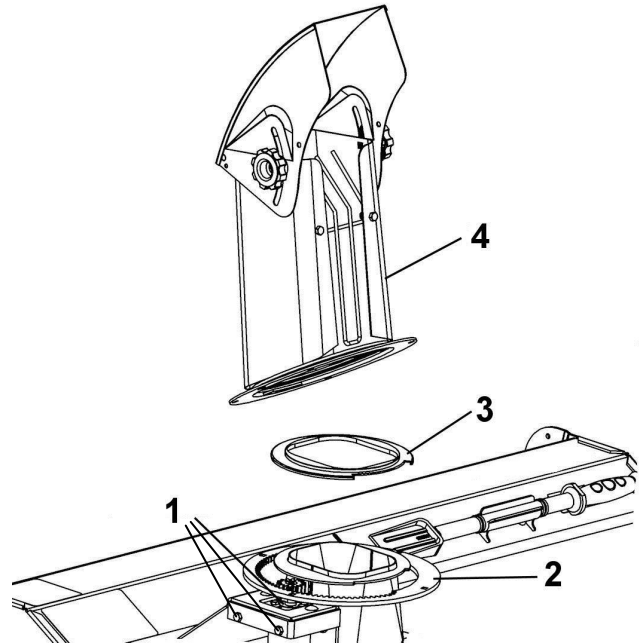
Loosen the tensioner (item 1) of the hydraulic motor and the adjustment bolts.

Install the metal rotation ring (item 2) over the opening of the chute as shown.

Install the nylon rotation ring (item 3) over the opening of the chute as shown.

Place the chute (item 4) facing the rear of blower on the opening as shown.

Clip the back under the rotation ring and turn the chute towards the front to lock into place.



Install rotation rings & the chute

IMPORTANT: Make sure to place the holes of the metal rotation ring (item 1) in line with the holes at the base of the chute (item 2) as shown in Figure A.

Insert the four spacers (item 3) between the metal rotation ring and the chute as shown.

Insert the four carriage bolts 1/4" x 1" (item 4) from the bottom of the rotation ring as shown.

Secure in place with four nylon insert lock nuts 1/4" (item 5) as shown.

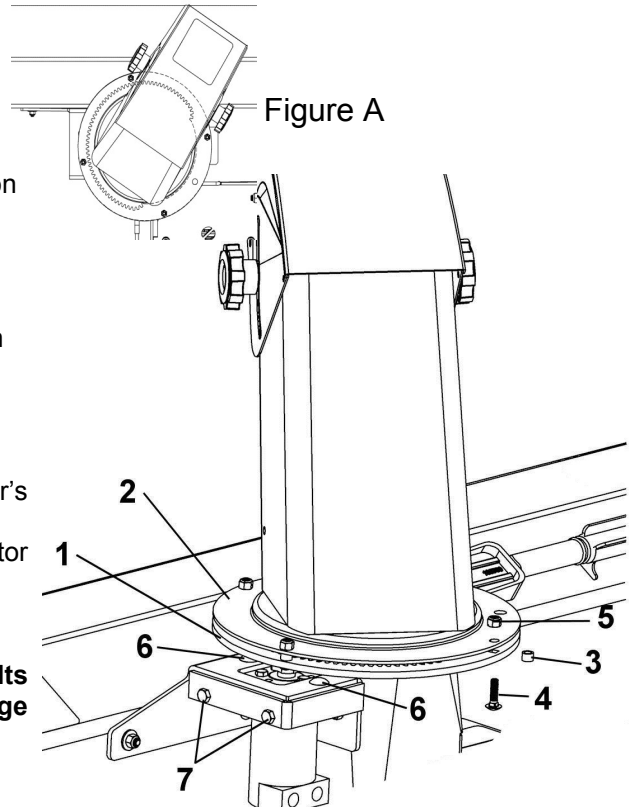
Turn the chute towards the front as shown in figure A.

Loosen the two bolts (item 6) to adjust the rotation motor's sprocket into the teeth of the metal rotation ring.

Use the adjustment bolts (item 7) to make sure the motor sprocket rests lightly inside the metal rotation ring.

Tighten bolts. Lock the bolts (item 7) with the nuts.

IMPORTANT: Do not over tighten the adjustment bolts (item 7). Tightening the bolts too much may damage the rotation ring.



Secure the rotation ring & chute together.

SNOWBLOWER

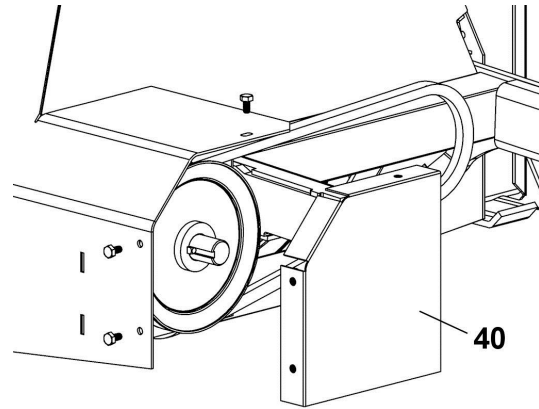
Drive belt installation:

1. Remove the drive pulley guard (item 40) and install the proper drive belt for the power unit.

Model 430: 4165834

Model 235: 4165850

2. Replace the guard.



Extended wings with drift cutters installation:

SEE OPTIONS PAGE

For the SB454 model only.

Follow the instructions in box.

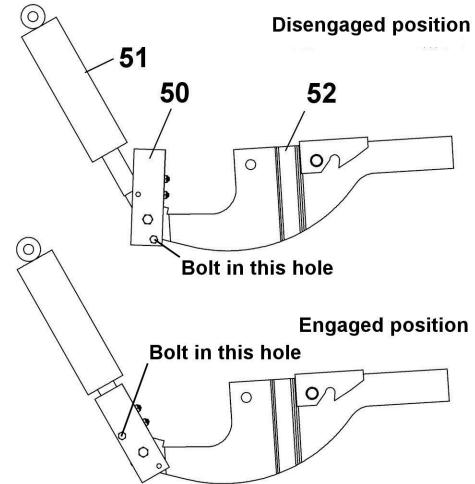
SNOWBLOWER

STEP 2

SNOWBLOWER INSTALLATION:

For model 430 in order to prevent the snowblower from starting without the P.T.O. being engaged in the low position. Install the lift stopper (item 50) in the engaged position as shown. To do so, remove the pin between the hydraulic cylinder (item 51) and the front lift (item 52). Install the stopper.

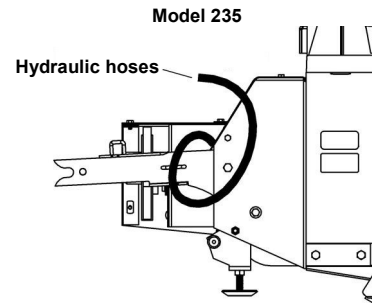
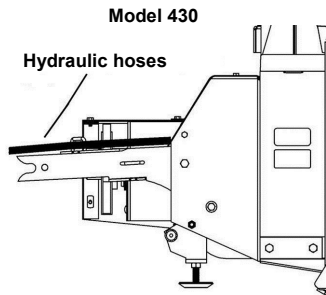
1. Attach snowblower to the power unit.
2. Be sure drive belt is in place over the left hitch arm.
3. Drive the power unit into the hitch arms and latch the quick hitch handle.
4. Stop the engine.



⚠ 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.

5. Install the drive belt and adjust drive pulley position (see adjustment section).
 6. Attach the two hydraulic hoses to the quick couplers on the tractor.
- NOTE:** If the rotation does not match the lever operation, the hoses may be reversed.



7. Install the drive belt to the tractor. (See tractor's manual for belt tensioning specifications).
8. A weight bar with four weights is required on 4-wheel drive units whenever the snowblower is installed. Install according to weight bar instructions

⚠ DANGER

IF THE SNOWBLOWER STARTS WITHOUT ENGAGING THE P.T.O. STOP THE ENGINE. IMPROPER TENSION.

9. For models without an electric clutch, go to a safe location, place a security barrier all around the snowblower. Raise the snowblower to it's highest point and then lower to it's lowest point. If the snowblower starts without engaging the P.T.O., lower the drive belt tension according to the tractor's owner's manual.

⚠ WARNING

TO PREVENT INJURIES: THE PERSON WHO INSTALLS THE DRIVE MECHANISM HAS THE 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.

SNOWBLOWER

STEP 3 ADJUSTMENTS

Drive pulley adjustment:

NOTE: Place the tractor horizontally on a flat surface.

1. For model 235:

The tractor pulley (item 60) and the snowblower pulley (item 61) must be well aligned (this is to ensure a longer life span of the belt).

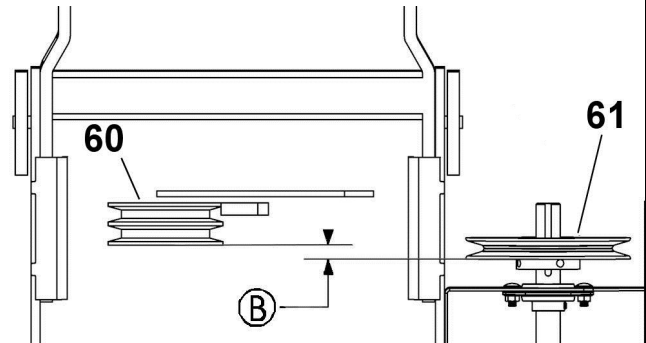
For model 430:

The tractor pulley and the snowblower pulley must be slightly misaligned (about 1/16" to 1/8" (item B)). Make sure there is no contact between the two belts when the snowblower is in the highest position.

2. Do the same tests as in snowblower installation section, paragraph 9.

If the snowblower starts and proper tension is used, the pulleys are misaligned too much.

If at the highest position the two belts come into contact with each other, there is not enough space between the pulleys.

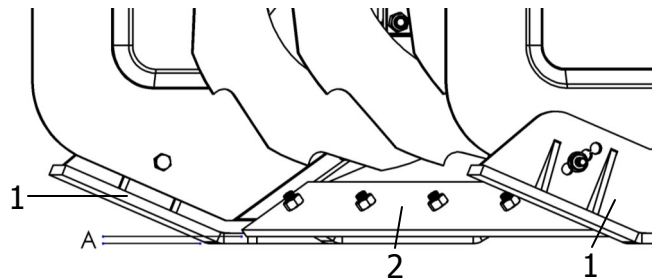


When you have confirmed the alignment, put thread locking on set screw and torque at 183 lbs-in.

Skid shoe adjustment:

LEVEL PAVED SURFACE: Adjust skid shoes (1) to allow 3/16" to 1/4" or 5mm to 7mm clearance (A) between cutting edge (2) and surface.

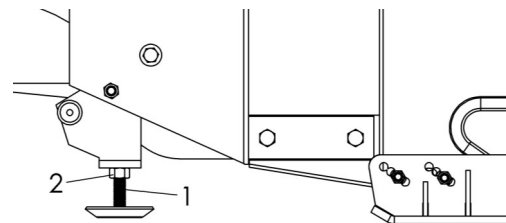
UNEVEN OR GRAVEL SURFACE: Adjust skid shoes (1) to allow 1/2" to 5/8" or 13mm to 16mm clearance (A) between cutting edge (2) and surface.



Parking stand adjustment:

The parking stand (item 1) should be adjusted to the same height as the skid shoes.

Loosen the nut (item 2) and adjust the height of the parking stand. Retighten firmly the nut so that it does not loosen.



STEP 4 SNOWBLOWER REMOVAL INSTRUCTIONS:

1. Lower the snowblower and stop engine

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.

2. Disconnect the two hydraulic hoses and install dust covers.
3. Remove the drive belt and release the quick hitch. Start the engine and back out carefully.
4. Remove the four weights from the weight bar for the 4 wheel drive unit.
5. For model 430, move the stopper into the disengaged position. (See step 2).

SNOWBLOWER**STEP 5****OPERATIONING INSTRUCTIONS:**

1. For the 430 model, put the stopper in the engaged position. (See Installation step 2).
2. Make sure the snowblower is clear of snow before engaging the snowblower.
3. Make sure that the auger and impeller operate freely.
4. Start the tractor engine

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

5. Engage P.T.O. slowly and maintain engine speed at 3/4 to full throttle.
6. Low range works best for most conditions. Adjust speeds to match snow conditions. The snowblower works best with plenty of snow being fed into the blades. In light snow (4" to 6" or 10 to 15 cm) increase travel speed.
7. Float position may be used, but carrying some of the weight with the power unit gives better traction. May require frequent lifting and lowering on 4-wheel drive units. If drive belts slips, adjust drive belt tension according to power unit manual. Never put down force on the snowblower.
8. Keep the chute rotator chain tight.
9. Rotate chute using the auxiliary hydraulic control lever. Try to blow snow with the wind on windy days.
10. 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. If equipped with an Electric Deflector Kit, use the toggle switch for up or down deflector movement.
11. 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**CLEARING A CLOGGED DISCHARGE 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:

1. Lower snowblower to the ground and set parking brake.
2. SHUT THE ENGINE OFF & REMOVE KEY!
3. Wait 10 seconds to be sure that **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 (chute shovel) supplied with this snowblower, NEVER YOUR HANDS.

 WARNING

ASSURE CLEAR DISTANCE IN THE DIRECTION OF THROWING SNOW. OBJECTS CAN BE PROPELLED FROM BLOWER CAUSING POSSIBLE DAMAGE TO PROPERTY OR INJURY TO BYSTANDERS.

 CAUTION

BE ALERT! WATCH FOR BURIED OBJECTS IN THE SNOW WHICH COULD BE THROWN OR CAUSE DAMAGE TO MACHINE.

 CAUTION

NEVER TRAVEL AT SPEEDS THAT WOULD CAUSE DAMAGE TO THE MACHINE OR INJURY TO THE OPERATOR IF THE MACHINE WERE TO BE STOPPED SUDDENLY BY AN IMMOVABLE OBJECT.

 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.

SERVICE SCHEDULE

▲ 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.

Daily:

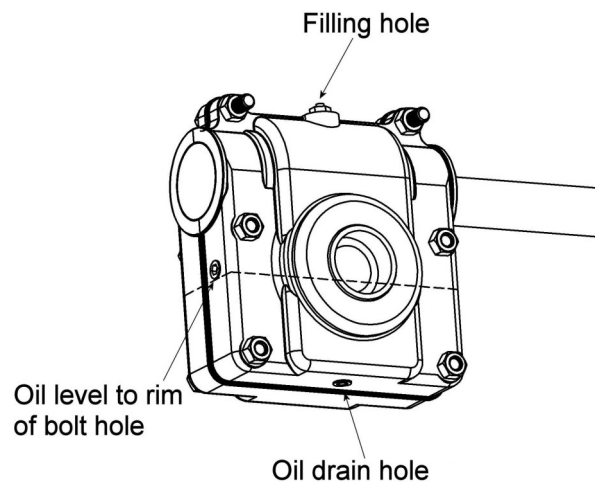
- Check for any damage on the hydraulic hose. The hydraulic hose must be replaced if there is any small damage.
- Check for any signs of loose bolts and tighten as needed. Check mounting bolts at frequent intervals for proper tightness in order to prevent costly repairs. Make sure your snowblower is in safe working condition.
- Check chute rotator chain for excess slack.
- Check skid shoe (see installation section).
- Check from to time the wearing 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.

50 Hours:

- Check drive belts for proper tension and signs of cracking.

100 hours:

- Check the oil in the gear box annually. If necessary, add AGMA 5 EP or SAE 90 oil. The gear box should have a total of 275 ml of oil or filled to the rim of the bolt hole when installed on the snowblower. (see figure)



AUGERS AND FAN SHEAR BOLT REPLACEMENT

Shear bolts 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.

To avoid damage to the snowblower:

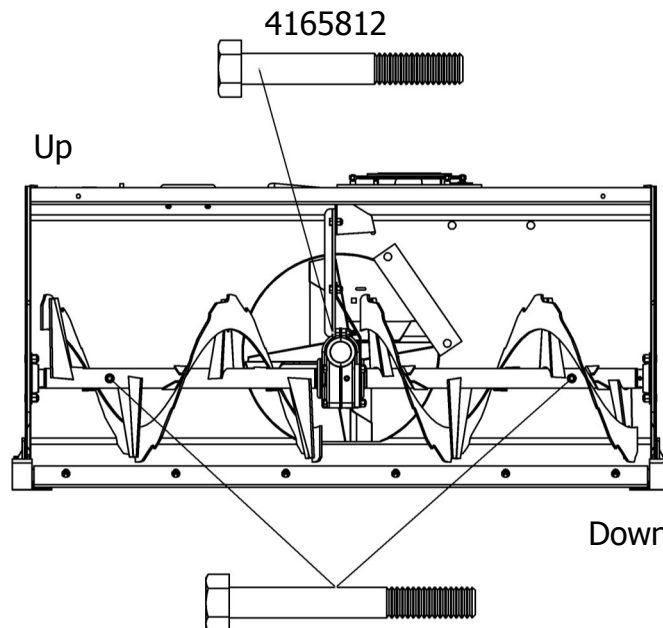
Use only the original shear bolts.

Hex. bolt 5/16" n.c. x 2 1/2" GR5 with Nylon Insert lock Nut 5/16" n.c. for the augers.

#4165812 in bags of 10 for the fan. (grooved bolts)

The use of any other shear bolt will not insure any protection and may void the warranty.

IMPORTANT: IT IS VERY IMPORTANT TO REPLACE THE AUGERS IN THE SAME POSITION AS SHOWN IN THE DRAWING BEFORE INSTALLING THE SHEAR BOLTS. ONE SIDE AUGER SHOULD BE OPPOSITE OF THE OTHER SIDE.

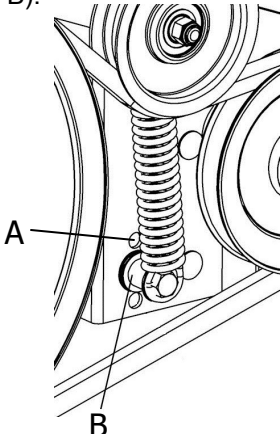


Hex. bolt 5/16" n.c. x 2 1/2" GR5 with Nylon Insert lock Nut 5/16" n.c.

END OF SEASON STORAGE

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

* Please refer to parts breakdown section for parts identification.

TROUBLESHOOTING		
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
One section or both sections of the auger stops turning.	Shear bolts are probably broken.	Replace shear bolt (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 Maintenance section, Installation, Adjustment and Replacement section).
Snowblower belt has burn marks in specific places or the belt slips.	Lack of tension on belt.	Remove the bolt, sleeve and the spring from the original hole (item A) and reinstall them in the lower hole (item B). 
	Snowblower engaged when plugged.	Make sure the auger & the fan are not frozen or plugged before engaging.
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 (see installation section). Clean the base of chute and the rotation ring. Lubricate & re-install.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Snowblower digs into ground.	Ground is not frozen or too soft.	Adjust skid shoes lower so they may better support the snowblower.
Snowblower vibrates or is abnormally noisy.	Damaged pulley. Damaged bearing. Damaged fan. Damaged auger.	Replace pulley. Replace bearing. Dismount & repair or replace fan. Replace auger.
Snowblower starts without the PTO engaged on model 430	Too much tension on the drive belt.	Lower the tension on the tractor's tensionner. See tractor's manual for tensioning instructions.
Drive belt has burn marks in specific places or belt slips.	Lack of tension on the belt.	See tractor's manual for tensioning instructions.

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.

SEE Grade No.		2				5				8 *			
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE MANUFACTURING		TORQUE				TORQUE				TORQUE			
BOLT SIZE		POUNDS FEET		NEWTON-METERS		POUNDS FEET		NEWTON-METERS		POUNDS FEET		NEWTON-METERS	
Inches	Millimetre	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	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

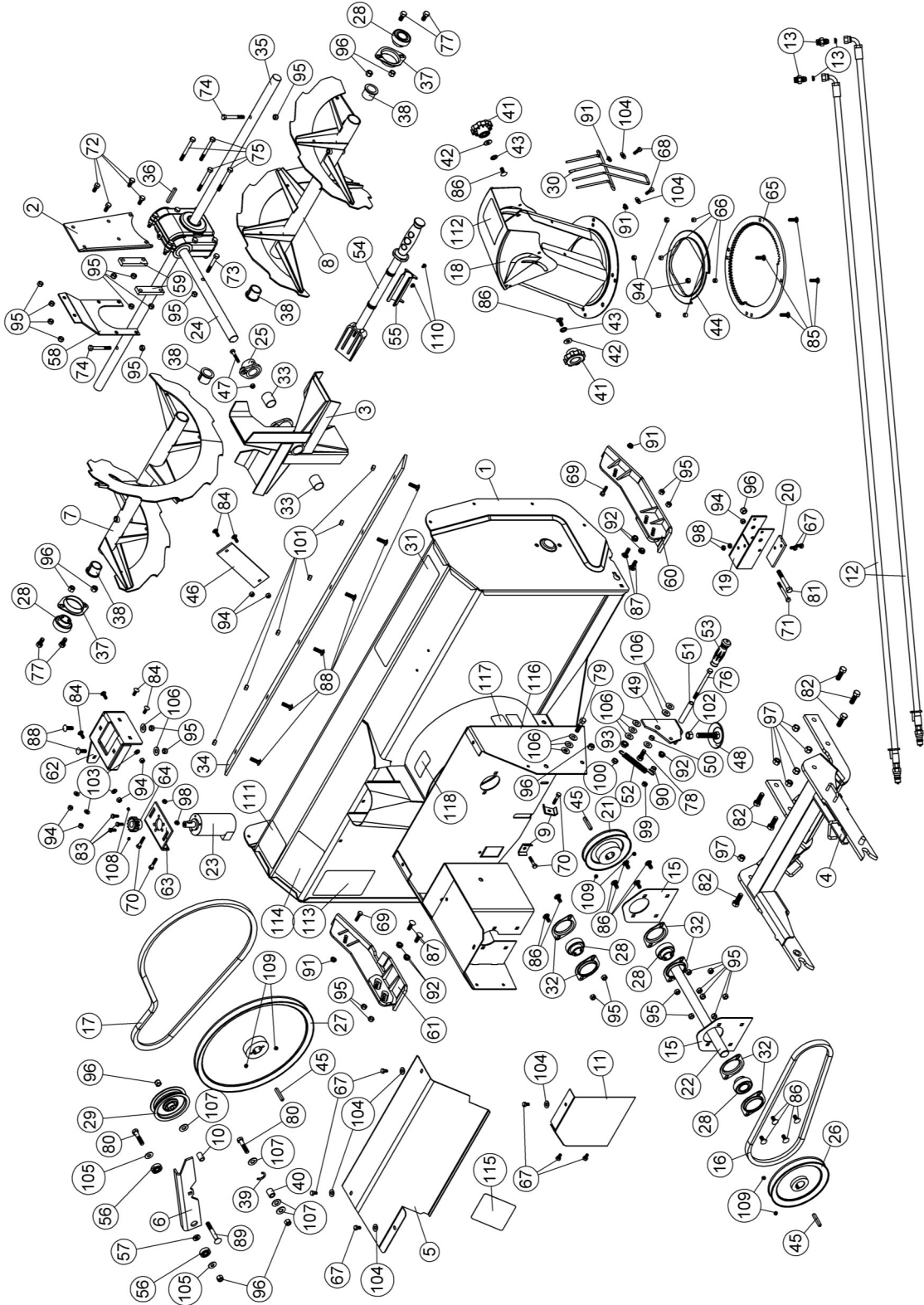
*Thick nuts must be used with grade 8 bolts

METRIC BOLT TORQUE SPECIFICATIONS							
Size Screw	Grade No.	COARSE THREAD			FINE THREAD		
		Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	-	-
	7T		5.8 - 9.4	7.9 - 12.7		-	-
	8T		7.2 - 10	9.8 - 13.6		-	-
M8	4T	1.25	7.2 - 14	9.8 - 19	1.00	12 - 17	16.3 - 23
	7T		17 - 22	23 - 29.8		19 - 27	25.7 - 36.6
	8T		20 - 26	27.1 - 35.2		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		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		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
M20	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		246 - 289	333.3 - 391.6

PARTS SECTION

SNOWBLOWER

PARTS BREAKDOWN SB448 SNOWBLOWER



SNOWBLOWER

PARTS LIST SB448 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
1	Frame 48"	1	4165817.2
2	Gear box support	1	4165818.7
3	Fan	1	4165820.7
4	Hitch	1	4165821.7
5	Belt guard	1	4165822.2
6	Tension arm	1	4169721
7	Auger 48" left	1	4165824.7
8	Auger 48" right	1	4165825.7
9	Attaching plate	2	4165828.7
10	Sleeve	1	4165829.7
11	Guard	1	4165830.2
12	Hydraulic hose assembly	2	4169735
13	Seal	2	4169736
14	Adapter	2	4169737
15	Reinforcement plate	2	4165833.7
16	V-belt, MXV5-480	1	4165834
17	V-belt, 5VX-570	1	4169727
18	Chute	1	4169738
19	Lift stopper	1	4165840.7
20	Protection plate	1	4165841
21	V pulley	1	4165813
22	Transmission shaft	1	4165814
23	Hydraulic motor with key	1	4165815
24	Gear box left rotation	1	4165807
25	Shear plate	1	4165803.7
26	V pulley	1	4165802
27	V pulley with set screw	1	4169726
28	Bearing with set screw	5	4165796
29	Flat pulley	1	4165797
30	Hand guard	1	4165791

O/L = Obtain Locally

SNOWBLOWER

PARTS LIST SB448 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
31	Decal Steiner	1	4158620
32	Flangette	6	4165794
33	Oil lite bushing	2	4165799
34	Cutting edge 48"	1	4165848.7
35	Shaft 48"	1	4165808
36	Key 1/4" x 1/4" x 2"	1	64164-13
37	Flangette	2	4165795
38	Rotation bushing	4	4165805
39	Spring	1	4165800
40	Sleeve	1	4165801
41	Knob	2	4165792
42	Nylon flat washer 11/32"	2	4165789
43	Nylon flat washer 7/16"	2	4165790
44	Rotation ring	1	4165804
45	Key 1/4" x 1/4" x 1 3/4"	3	64164-40
46	Reinforcement	1	4165811.7
47	Shear bolt / N.I.L.N. (fan) pkg-10	1	4165812
48	Skid shoe	1	4166444
49	Parking stand	1	4166441.7
50	Sleeve	1	4166442.7
51	Sleeve	1	4166443.7
52	Spring 1/2"	1	4166445
53	Handgrip	1	4166446
54	Chute shovel	1	4166797
55	Chute shovel support	1	4166936
56	Ball Bearing 1614 2RS	2	4169730
57	Spacer	1	4169729
58	Reinforcement plate	1	4169728
59	Shim	2	4169720
60	Right commercial skid shoe	1	4169732

O/L = Obtain Locally

SNOWBLOWER

PARTS LIST SB448 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
61	Left commercial skid shoe	1	4169731
62	Motor support	1	4169722
63	Support plate	1	4169723
64	Gear	1	4169724
65	Rotation ring	1	4169719
66	Spacer	4	4169725
67	Hex. bolt 1/4" n.c. x 1/2" GR5	8	O/L
68	Hex. bolt 1/4" n.c. x 3/4" GR5	2	O/L
69	Hex. bolt 1/4" n.c. x 1" GR5	2	O/L
70	Hex. bolt 1/4" n.c. x 1 1/4" GR5	4	O/L
71	Hex. bolt 1/4" n.c. x 2 1/2" GR5	1	O/L
72	Hex. bolt 5/16" n.c. x 3/4" GR5	4	O/L
73	Hex. bolt 5/16" n.c. x 2 1/4" GR8	1	O/L
74	Hex. bolt 5/16" n.c. x 2 1/2" GR5	2	O/L
75	Hex. bolt 5/16" n.c. x 3" GR5	4	O/L
76	Hex. bolt 5/16" n.c. x 4" GR5	1	O/L
77	Hex. bolt 3/8" n.c. x 3/4" GR5	4	O/L
78	Hex. bolt 3/8" n.c. x 1" GR5	1	O/L
79	Hex. bolt 3/8" n.c. x 1 1/2" GR5	1	O/L
80	Hex. bolt 3/8" n.c. x 1 3/4" GR5	2	O/L
81	Hex. bolt 3/8" n.c. x 2 3/4" GR5	1	O/L
82	Hex. bolt 7/16" n.c. x 1 1/4" GR5	6	O/L
83	Hex. bolt M6 x 1.00 x 16 GR8.8	3	O/L
84	Carriage bolt 1/4" n.c. x 3/4 " GR5	6	O/L
85	Carriage bolt 1/4" n.c. x 1 " GR5	4	O/L
86	Carriage bolt 5/16" n.c. x 3/4 " GR5	12	O/L
87	Carriage bolt 5/16" n.c. x 1 " GR8	4	O/L
88	Carriage bolt 5/16" n.c. x 1 " GR5	8	O/L
89	Carriage bolt 3/8" n.c. x 2 3/4" GR5	1	O/L
90	Hex. nut 5/16" n.c.	1	O/L

O/L = Obtain Locally

SNOWBLOWER

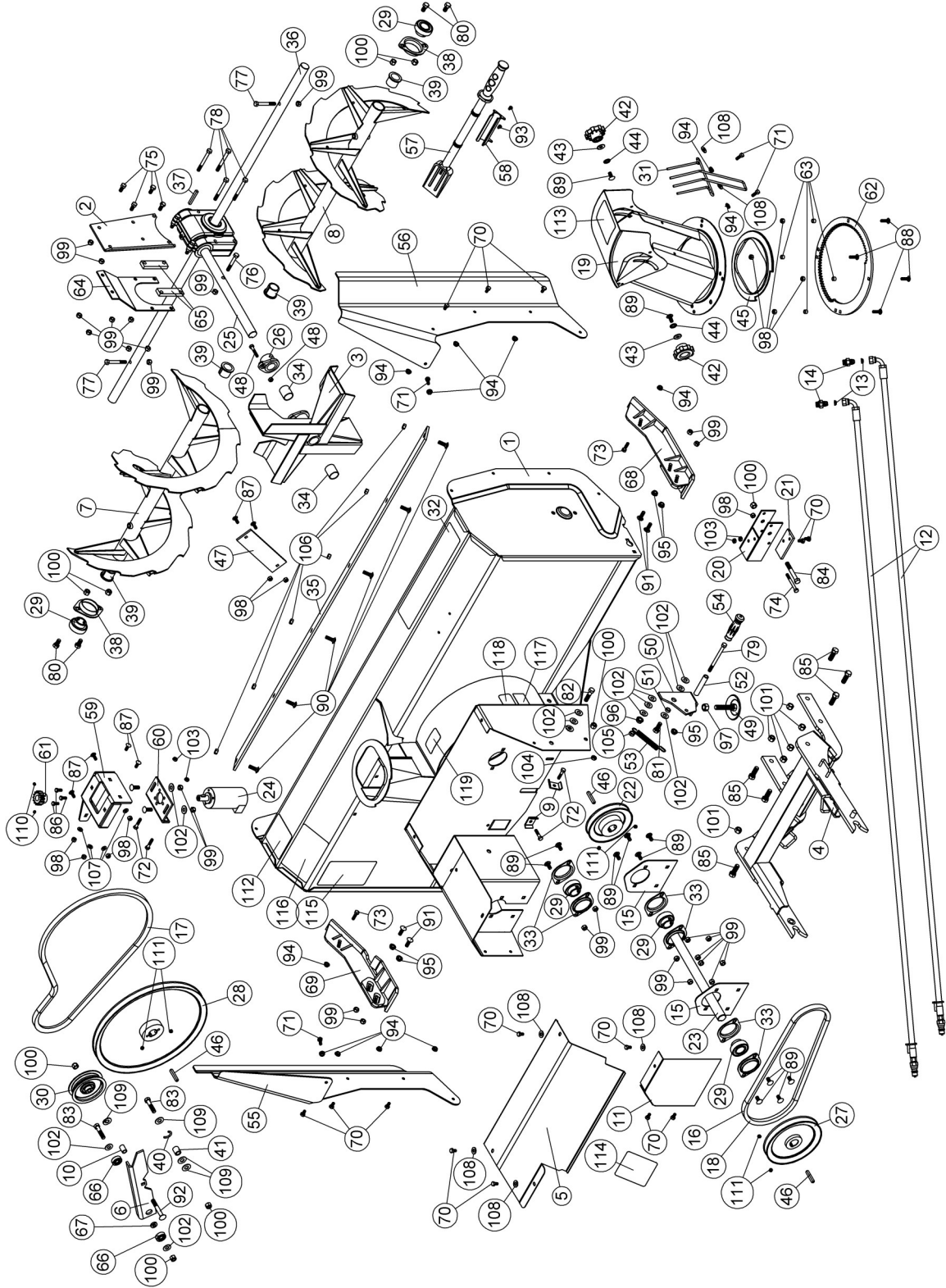
PARTS LIST SB448 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
91	Flange nut 1/4" n.c.	4	O/L
92	Flange nut 5/16" n.c.	5	O/L
93	Flange nut 3/8" n.c.	1	O/L
94	Nylon Insert lock Nut 1/4" n.c.	11	O/L
95	Nylon Insert lock Nut 5/16" n.c.	27	O/L
96	Nylon Insert lock Nut 3/8" n.c.	9	O/L
97	Nylon Insert lock Nut 7/16" n.c.	6	O/L
98	Nylon insert lock nut 1/4" n.c. (thin)	4	O/L
99	Nylon insert lock nut 5/16" n.c. (thin)	1	O/L
100	Nylon insert lock nut 3/8" n.c. (thin)	1	O/L
101	Stover lock nut 5/16" n.c.	6	O/L
102	Hex. nut M12 x 1.75 GR8.8	1	O/L
103	Flat washer 1/4" hole	4	O/L
104	Flat washer 5/16" hole	6	O/L
105	Flat washer 3/8" hole	2	O/L
106	Flat washer 3/8" hole	11	O/L
107	Flat washer 7/16" hole	4	O/L
108	Socket head set screw 1/4" n.c. x 1/4" (knurled)	2	O/L
109	Socket head set screw 5/16" n.c. x 5/16"	6	O/L
110	Socket Head Cap Screw M5 x 0.80 x 10	2	O/L
111	Decal danger auger	1	105126
112	Danger decal chute	1	105127
113	Decal read instructions	1	105130
114	Decal warning safety	1	105131
115	Decal danger belts	1	105128
116	Serial number	1	REF
117	Decal location	1	REF
118	Made in Canada decal	1	REF

O/L = Obtain Locally

SNOWBLOWER

PARTS BREAKDOWN SB454 SNOWBLOWER



SNOWBLOWER

PARTS LIST SB454 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
1	Frame 54"	1	4165842.2
2	Gear box support	1	4165818.7
3	Fan	1	4165820.7
4	Hitch	1	4165821.7
5	Belt guard	1	4165822.2
6	Tension arm	1	4169721
7	Auger 54" left	1	4165843.7
8	Auger 54" right	1	4165844.7
9	Attaching plate	2	4165828.7
10	Sleeve	1	4165829.7
11	Guard	1	4165830.2
12	Hydraulic hose assembly	2	4169735
13	Seal	2	4169736
14	Adapter	2	4169737
15	Reinforcement plate	2	4165833.7
16	V-belt, MXV5-480	1	4165834
17	V-belt, 5VX-570	1	4169727
18	V-belt, MXV5-510	1	4165850
19	Chute	1	4169738
20	Lift stopper	1	4165840.7
21	Protection plate	1	4165841
22	V pulley	1	4165813
23	Transmission shaft	1	4165814
24	Hydraulic motor with key	1	4165815
25	Gear box left rotation	1	4165807
26	Shear plate	1	4165803.7
27	V pulley	1	4165802
28	V pulley with set screw	1	4169726
29	Bearing with set screw	5	4165796
30	Flat pulley	1	4165797

O/L = Obtain Locally

SNOWBLOWER

PARTS LIST SB454 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
31	Hand guard	1	4165791
32	Decal Steiner	1	4158620
33	Flangette	6	4165794
34	Oil lite bushing	2	4165799
35	Cutting edge 54"	1	4165849.7
36	Shaft 54"	1	4165809
37	Key 1/4" x 1/4" x 2"	1	64164-13
38	Flangette	2	4165795
39	Rotation bushing	4	4165805
40	Spring	1	4165800
41	Sleeve	1	4165801
42	Knob	2	4165792
43	Nylon flat washer 11/32"	2	4165789
44	Nylon flat washer 7/16"	2	4165790
45	Rotation ring	1	4165804
46	Key 1/4" x 1/4" x 1 3/4"	3	64164-40
47	Reinforcement	1	4165811.7
48	Shear bolt / N.I.L.N. (fan) pkg-10	1	4165812
49	Skid shoe	1	4166444
50	Parking stand	1	4166441.7
51	Sleeve	1	4166442.7
52	Sleeve	1	4166443.7
53	Spring 1/2"	1	4166445
54	Handgrip	1	4166446
55	Left extension	1	4165846.7
56	Right extension	1	4165846.7
57	Chute shovel	1	4166797
58	Chute shovel support	1	4166936
59	Motor support	1	4169722
60	Support plate	1	4169723

O/L = Obtain Locally

SNOWBLOWER

PARTS LIST SB454 SNOWBLOWER

Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
61	Gear	1	4169724
62	Rotation ring	1	4169719
63	Spacer	4	4169725
64	Reinforcement plate	1	4169728
65	Shim	2	4169720
66	Ball Bearing 1614 2RS	2	4169730
67	Spacer	1	4169729
68	Right commercial skid shoe	1	4169732
69	Left commercial skid shoe	1	4169731
70	Hex. bolt 1/4" n.c. x 1/2" GR5	14	O/L
71	Hex. bolt 1/4" n.c. x 3/4" GR5	4	O/L
72	Hex. bolt 1/4" n.c. x 1 1/4" GR5	4	O/L
73	Hex. bolt 1/4" n.c. x 1" GR5	2	O/L
74	Hex. bolt 1/4" n.c. x 2 1/2" GR5	1	O/L
75	Hex. bolt 5/16" n.c. x 3/4" GR5	4	O/L
76	Hex. bolt 5/16" n.c. x 2 1/4" GR8	1	O/L
77	Hex. bolt 5/16" n.c. x 2 1/2" GR5	2	O/L
78	Hex. bolt 5/16" n.c. x 3" GR5	4	O/L
79	Hex. bolt 5/16" n.c. x 4" GR5	1	O/L
80	Hex. bolt 3/8" n.c. x 3/4" GR5	4	O/L
81	Hex. bolt 3/8" n.c. x 1" GR5	1	O/L
82	Hex. bolt 3/8" n.c. x 1 1/2" GR5	1	O/L
83	Hex. bolt 3/8" n.c. x 1 3/4" GR5	2	O/L
84	Hex. bolt 3/8" n.c. x 2 3/4" GR5	1	O/L
85	Hex. bolt 7/16" n.c. x 1 1/4" GR5	6	O/L
86	Hex. bolt M6 x 1.00 x 16 GR8.8	3	O/L
87	Carriage bolt 1/4" n.c. x 3/4 " GR5	6	O/L
88	Carriage bolt 1/4" n.c. x 1 " GR5	4	O/L
89	Carriage bolt 5/16" n.c. x 3/4 " GR5	12	O/L
90	Carriage bolt 5/16" n.c. x 1 " GR5	8	O/L

O/L = Obtain Locally

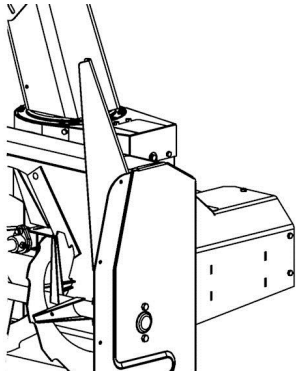
SNOWBLOWER

PARTS LIST SB454 SNOWBLOWER

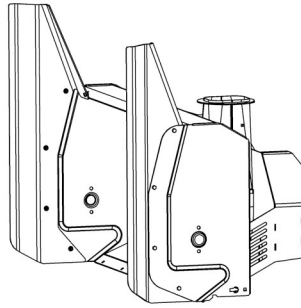
Ref. Réf.	English description	Qty. Qté.	Part # Pièce #
91	Carriage bolt 5/16" n.c. x 1 " GR8	4	O/L
92	Carriage bolt 3/8" n.c. x 2 3/4" GR5	1	O/L
93	Socket Head Cap Screw M5 x 0.80 x 10	2	O/L
94	Flange nut 1/4" n.c.	12	O/L
95	Flange nut 5/16" n.c.	5	O/L
96	Flange nut 3/8" n.c.	1	O/L
97	Hex. nut M12 x 1.75 GR8.8	1	O/L
98	Nylon Insert lock Nut 1/4" n.c.	11	O/L
99	Nylon Insert lock Nut 5/16" n.c.	27	O/L
100	Nylon Insert lock Nut 3/8" n.c.	9	O/L
101	Nylon Insert lock Nut 7/16" n.c.	6	O/L
102	Flat washer 3/8" hole	13	O/L
103	Nylon insert lock nut 1/4" n.c. (thin)	4	O/L
104	Nylon insert lock nut 5/16" n.c. (thin)	1	O/L
105	Nylon insert lock nut 3/8" n.c. (thin)	1	O/L
106	Stover lock nut 5/16" n.c.	6	O/L
107	Flat washer 1/4" hole	4	O/L
108	Flat washer 5/16" hole	6	O/L
109	Flat washer 7/16" hole	4	O/L
110	Socket head set screw 1/4" n.c. x 1/4" (knurled)	2	O/L
111	Socket head set screw 5/16" n.c. x 5/16"	6	O/L
112	Decal danger auger	1	105126
113	Danger decal chute	1	105127
114	Decal danger belts	1	105128
115	Decal read instructions	1	105130
116	Decal warning safety	1	105131
117	Serial number	1	REF
118	Decal location	1	REF
119	Made in Canada decal	1	REF

O/L = Obtain Locally

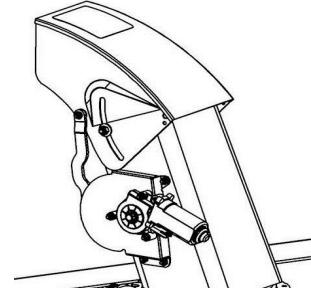
OPTIONS



SNOW DRIFT CUTTER
#970400
Cut through high drifts of snow.
Pkg. of 2



#970403
Pair of extended wings with snow
drift cutters.
Pkg. of 2



ELECTRIC DEFLECTOR KIT #970401
Allows to adjust the deflector
electrically from driver's seat.

BELT CHART

STEINER BELT CHART											
MODEL	220	230	230 Diesel	235	410	415	420	430	425	525	UM428
Tractor PTO Belt	81-A034 W/O EI Clutch 81-B033 W/EI Clutch	81-B033	81-B033	4165347	81-B039	81-B039	81-A038 SN: 1001-2999 81-B039 SN: 3000-5000	81-B039	81-B042 W/O EI Clutch 81-B040 W/EI Clutch	81-B042	81-B029
MR, MW, MD, MX. Rotary mowers	81-A040	81-A040	81-B041	81-B041	81-A040	81-A040	81-A040	81-A040	81-B041	81-B041	81-B040
BM425 Boom Mower	N/A	N/A	N/A	N/A	N/A	N/A	81-A040	81-A040	81-B041	81-B041	N/A
MC444 Tree Farm Mower											
RC466 Rough Cut Mower	81-A042 W/O EI Clutch 81-A040 W/EI Clutch	81-A040	81-B041	81-B041	N/A	N/A	81-A040	81-A040	81-B041	81-B041	81-B040
RM674 & 684 Reel Mowers	81-A045 W/O EI Clutch 81-A043 W/EI Clutch	81-A043	81-B043	81-B043	N/A	N/A	81-A043	81-A043	81-B044 W/O EI Clutch 81-B042 W/EI Clutch	81-B043	81-B042
CS312 Chipper Shredder	N/A	N/A	N/A	N/A	N/A	N/A	81-B041	81-B041	81-B041	81-B041	81-B040
GN10KW Generator LD300 Loader	81-B050	81-B050	81-B050	81-B050	81-B050	81-B050	81-B050	81-B050	81-B050	81-B050	81-B050
PB100 & PB200 Power Blower	81-A042 W/O EI Clutch 81-A040 W/EI Clutch	81-A040	81-B041	81-B041	N/A	N/A	81-A026	81-A026	N/A	N/A	N/A
PR348 Power Box Rake	81-A045 W/O EI Clutch 81-A043 W/EI Clutch	81-A043	81-B043	81-B043	N/A	N/A	81-A043		81-B044 W/O EI Clutch 81-B042 W/EI Clutch	81-B043	81-B043
RS350 small Rotary Sweeper	81-A042 W/O EI Clutch 81-A040 W/EI Clutch	81-A040	81-B040	81-B040	81-A040	81-A040	81-A040	81-A040	81-B041 W/O EI Clutch 81-B040 W/EI Clutch	81-B040	81-B040
RS454 large Rotary Sweeper	81-A048 W/O EI Clutch 81-A046 W/EI Clutch	81-A046	81-B046	81-B046	81-A046	81-A046	81-A046	81-A046	81-B046	81-B046	81-B044
SB348 Snowblower SN:1001-1713	81-A055 W/O EI Clutch 81-A053 W/EI Clutch	81-A053	81-B054	81-B054	81-A053	81-A053	81-A053	81-A053	81-B054 W/O EI Clutch 81-B053 W/EI Clutch	81-B054	81-B053
SB348 Snowblower SN:1714-7570665****	81-A053 W/O EI Clutch 81-A051 W/EI Clutch	81-A051	81-B051	81-B051	81-A051	81-A051	81-A051	81-A051	81-B053 W/O EI Clutch 81-B051 W/EI Clutch	81-B051	81-B051
SB448 Snowblower		105803	105829	105829	105803	105803	105803	105803			
SB454 Snowblower		105803	105829	105829	105803	105803	105803	105803			
SC101 Stump Cutter	N/A	N/A	N/A	N/A	81-A043	81-A043	81-A043	81-A043	81-B045 W/O EI Clutch 81-B043 W/EI Clutch	81-B0424	81-B042
TH300 Trencher	N/A	N/A	N/A	N/A	N/A	N/A	81-B050	81-B050	81-B051	81-B051	81-B050
TL348 Tiller	81-A042 W/O EI Clutch 81-A040 W/EI Clutch	81-A040	81-B041	81-B041	81-A040	81-A040	81-A040	81-A040	81-B041 W/O EI Clutch 81-B040 W/EI Clutch	81-B041	81-B040
VA242 Vertical Auger	N/A	N/A	N/A	N/A	N/A	N/A	81-A027	81-A027	N/A	N/A	N/A

