

# OWNER/OPERATOR'S MANUAL & ILLUSTRATED PARTS LIST

### **MODEL:**

75-71231 COMMERCIAL SNOWBLOWER-48" SB648

Manual 4172694 Rev. G 06-2017



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.



### 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.

### 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.

### 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.

# A WARNING

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

## 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.



# 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.

### **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. Threat 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 your 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

TABLE OF CONTENTS	PAGE
DESCRIPTION / SPECIFICATIONS	2
SAFETY	3
SAFETY DECALS	6
ASSEMBLY INSTRUCTIONS	7
INSTALLATION	9
ADJUSTMENTS & REMOVAL	10
OPERATION	11
SERVICE	12
TROUBLESHOOTING	14
PARTS SECTION	16
TORQUE SPECIFICATION TABLE	26
OPTIONS	27

### **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 16" 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 select Steiner power units with quick hitch front lift and can be installed and removed quickly.

SPECIFICATIONS	
Weight:	450 lbs
Overall Width:	48"
Overall Height:	56"
Overall Length:	
Opening Size:	
Auger:	
Blower:	
Auger Speed:	
Blower Speed:	
Chute:	
Height of Cut:	Adjustable skid shoes 0" to 3/4"
NOTE: Specifications are subject to change without not	ice.

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 :	
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 "aftermarket" 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 postmanufacture modifications and/or accessories should personal injury and/or property damage result.



This symbol means:

### ATTÉNTION! 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.

### **A** DANGER

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

### **AWARNING**

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

### **A**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 1. Thoroughly inspect the area where the accessory sitting on the seat of the vehicle facing forward.

In this manual, "accessories" means attachments (snowblower, rotary broom, blade etc.) that you install 2 Disengage all clutches and shift into neutral before 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:

- is to be used and remove door mats, all foreign objects and the like.
- 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:**

- 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.
- 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 takeoff, lower the attachment, place the transmission into neutral, set the parking brake, stop the engine and remove the contact key.
- 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.
- 12. Do not overload the machine capacity by attempting to clear snow at too fast rate
- 13. Use only attachments and accessories approved by the manufacturer of the snow thrower/tractor (such as wheel weight, counterweights, or cabs)
- Never operate the snow thrower without proper guards, and other safety protective devices in place
- 15. Stop the engine (motor) whenever you leave the operating position, before unclogging the collector/impeller housing or discharge guide, and when making any repairs, adjustments or inspections

### **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.
- 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 #105127



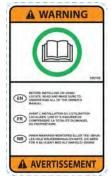
To avoid serious injury:

Keep hands out of this discharge chute while engine is running.

DECAL #105128



To avoid injury from drive belt: Keep hands, feet & clothing away. Do not attempt to install or remove drive belt without reading owner's manual. DECAL #105130



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

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 #106378



To avoid serious injury:

Keep hand & clothing away from rotating gear while the hydraulic motor is connected. Always use the snowblower with all the guards in place.

### **Tools Required**

Wrench: 9/16", 7/16", 1/2"

Ratchet

Socket: 9/16", 7/16"

Pliers Allen Key Axle Stands

Refer to parts breakdown section for parts identification.

### Step 1

### **Snowblower Preparation:**

- 1. Remove the snowblower from the shipping crate.
- 2. Remove the support plates from skid shoes

### **Chute Installation:**

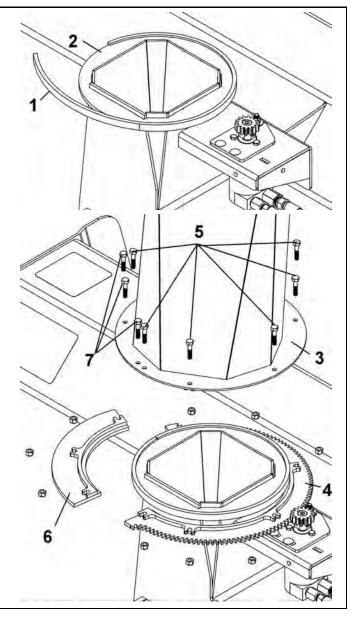
**NOTE:** This step requires two people.

- 1.Wrap the rotation ring (item 1) (groove inside) around the edge of the discharge chute (item 2) as shown.
- 2.Place the chute (item 3) (opening facing forward) over the rotation ring.

**IMPORTANT**: The ring must be inside the base of the chute. It is the chute that will hold the rotation ring in place.

- 3.On the right side of snowblower, install the grooved rotation ring (item 4) under the chute as shown.
- 4. Secure the chute and rotation ring in place with six hex bolts 1/4" x 1 1/4" (item 5) and nuts as shown. Do not tighten too firmly.
- 5.On the left side of the snowblower, install the other half of rotation ring (item 6) under the chute as shown
- 6. Secure the chute and rotation ring in place with three hex bolts 1/4" x 1 1/4" (item 7) and nuts (as shown). Do not tighten the nuts too firmly.

(Nuts that are too tight might prevent the chute from rotating side to side. Only a slight pressure is necessary).



### **Sprocket guard installation:**

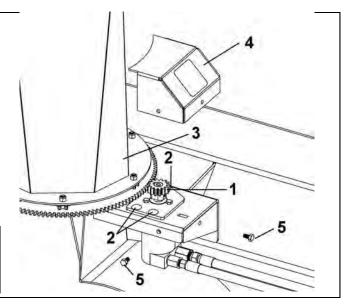
- 1.Adjust the hydraulic motor (item 1) by loosening the three nuts on the carriage bolts (item 2) that hold the hydraulic motor in place. Do not remove the nuts.
- 2.Slide the motor towards the chute (item 3) as shown (the grooves on the motor's sprocket must match those of the rotation ring). Adjust and retighten the nuts. Tighten firmly.
- 3.Install the sprocket guard (item 4) as shown and secure in place with two 1/4" x 1/2" bolts (item 5).



### **WARNING**



Operate only when all the guards are in place.



### STEP 2

### **SNOWBLOWER INSTALLATION:**

- 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

6. Attach the two hydraulic hoses to the guick 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 six weights is required on 4-wheel drive units whenever the snowblower is installed. Install according to weight bar instructions

### **A** 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.

### **AWARNING**

### **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.

### **A** CAUTION

### NEVER USE THE SNOWBLOWER WITHOUT THE BELT GUARD.

10. Raise the parking stand:

Remove the pin (item 1, raise the parking stand (item 2) and reinstall the pin.

### **IMPORTANT:** (to avoid damages)

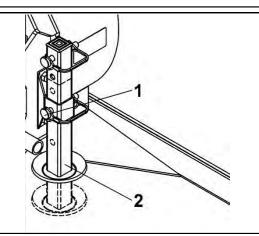
You must **RAISE** the parking stand **AFTER** installing the accessory on the tractor.



### CAUTION



Take care to avoid being pinched by the parking stand.



# STEP 3 ADJUSTMENTS

### **Drive pulley adjustment:**

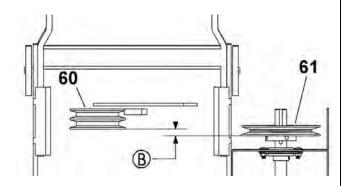
**NOTE**: Place the tractor horizontally on a flat surface.

- 1. The tractor pulley (item 60) and the snowblower pulley (item 61) must be well aligned (distance B must be close to 0" as possible) Make sure there is no contact between the two belts when the snowblower is in the highest position.
- 2.For tractor without electric clutch: 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.

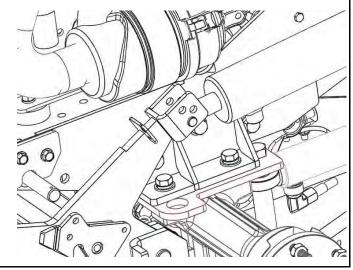
If at the highest position the two belts come into contact with each other, there is not enough space between the pulleys.

3.On 440 tractors, to prevent snowblower from contacting front of tractor during full lifts, position the lift cylinder and pin into the bottom/rear hole on the lift arm as shown on picture:

**NOTE**: Failure to position the lift cylinder as shown can result in damage to the tractor and or the snowblower.



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



### Skid shoe adjustment:

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

<u>UNEVEN OR GRAVEL SURFACE:</u> Adjust skid shoes to allow 1/2" to 3/4" clearance between cutting edge and surface.

### STEP 4

### SNOWBLOWER REMOVAL INSTRUCTIONS:

- 1.Lower parking stand.
- 2.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.

- 3. Disconnect the two hydraulic hoses and install dust covers.
- 4.Remove the drive belt and release the quick hitch. Start the engine and back out carefully.
- 5. Remove the weights from the weight bar for the 4 wheel drive unit.

### STEP 5

### **OPERATIONING INSTRUCTIONS:**

- 1. Make sure the snowblower is clear of snow before engaging the snowblower.
- 2. Make sure that the auger and impeller operate freely.
- 3. 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.

- 4. Engage P.T.O. slowly and maintain engine speed at 3/4 to full throttle.
- 5. 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.
- 6. 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.
- 7. Rotate chute using the auxiliary hydraulic control lever. Try to blow snow with the wind on windy days.
- 8. 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.
- 9. 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.

### **AWARNING**

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.

### **A**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**

### **AWARNING**

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 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:

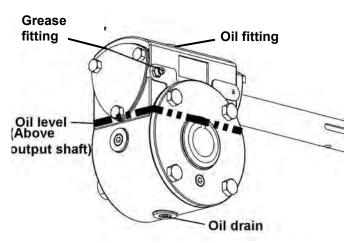
-Check drive belts for proper tension and signs of cracking.

### 100 hours:

-Change the oil in the gear box after the first 100 hours of use. Then change after every 2500 hours or every 6 months.

The type of oil used: S.A.E. grade 80W90.

-The gear box should have a total of 500 ml of oil or filled above the output shaft (see figure).



### AUGERS AND FAN SHEAR BOLT REPLACEMENT

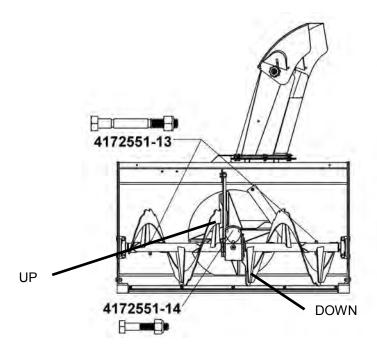
Shear bolts are to be considered a preventive measure and not an assured protection. Operator vigilance is required. Thoroughly inspect the areas where the snowblower is to be used and remove all foreign objects.

### To avoid damage to the snowblower:

Use only the original shear bolts (grooved bolts). #4172551-13 bags of 10 for the augers. #4172551-14 in bags of 10 for the fan.

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.



### **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.

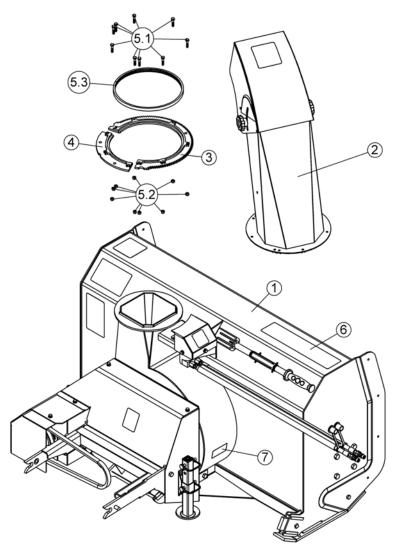
	TROUBLESHOOTING	G
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
One section or both sections of the auger stops turning.	Shear bolts are probably broken.	Replace shear bolt (for identification, see parts list "Snowblower").
Fan stops turning.	Shear bolt is probably broken.	Replace shear bolt (for identification, 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 hair pin (item 1) then screw the bolt under the hair pin until good tension on the belts. Then reinstall the hair pin to lock the bolt rotation.
	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.

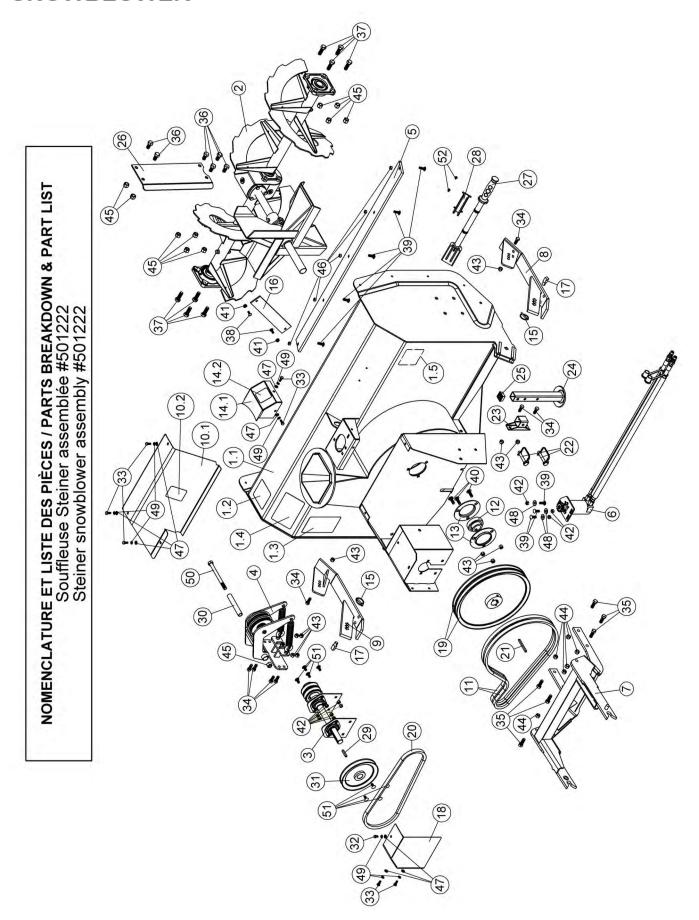
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Snowblower digs into ground.	Ground is not frozen or too soft.	Adjust skid shoes lower so they may better support the snowblower.
Snowblower vibrates or is abnormally noisy.	Damaged pulley.  Damaged bearing.  Damaged fan.  Damaged auger.	Replace pulley.  Replace bearing.  Dismount & repair or replace fan.  Replace auger.
Drive belt has burn marks in specific places or belt slips.	Lack of tension on the belt.	See tractor's manual for tensioning instructions.

# **PARTS SECTION**

### NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Souffleuse commerciale 48" #SB648 Commercial 48" snowblower #SB648

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Steiner snowblower assembly	Souffleuse Steiner assemblée	1	-
2	Chute assembly	Goulotte assemblée	1	4172551-02
3	Half rotation ring	Demi anneau de rotation	1	4172551-64
4	Half rotation ring	Demi anneau de rotation	1	4172551-65
5	Hardware bag	Sac de quincaillerie	1	-
5.1	Hex. bolt 1/4" n.c. x 1 1/4" GR5	Boulon hex. 1/4" n.c. x 1 1/4" GR5	9	64123-80
5.2	Nylon Insert lock Nut 1/4" n.c.	Écrou à garniture de nylon 1/4" n.c.	9	64229-01
5.3	Rotation ring	Anneau de rotation	1	4172551-05
6	Decal Steiner	Decalque Steiner	1	105819
7	Serial number	Numéro de série	1	#N/A





### NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Souffleuse Steiner assemblée #501222 Steiner snowblower assembly #501222

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	48" Snowblower frame #107823 w/ safe, dec.	Chassis de souffleuse 48" #107823 avec déc.	1	4172551-01
1.1	Frame 48"	Châssis 48"	1	107823-R02
1.2	Decal danger auger	Decalque danger vis	1	105126
1.3	Decal read instructions	Decalque lire instructions	1	105130
1.4	Decal warning safety	Decalque avertissement sécurité	1	105131
1.5	Decal auger positioning	Décalque positionnement vis	1	107024
2	48" Auger assembly	Vis assemblées 48"	1	4172551-33
3	Jack shaft assembly	Arbre transversal asemblé	1	4172551-34
4	Tenionner assembly	Tensionneur assemblé	1	4172551-35
5	Cutting edge 48"	Racloir 48"	1	4172551-36
6	Hydraulic motor assembly	Moteur hydraulique assemblé	1	4172551-37
7	Snowblower Hitch	Attache de souffleuse	1	4172551-38
8	Right skid shoe	Patin droit	1	4172551-39
9	Left skid shoe	Patin gauche	1	4172551-59
10	Belt guard #107832 w/ safety decal	Garde-courroie #107832 a/ déc. de séc.	1	4172551-62
10.1	Belt guard	Garde-courroie	1	4172551-40
10.2	Decal danger belts	Decalque danger courroies	1	105128
11	V belt B-53 (pair)	Courroie en V B-53 (paire)	1	81-B053
12	Bearing with set screw	Roulement à billes avec vis à pression	1	4172551-42
13	Flangette	Flangette	2	4172551-43
14	Sprocket guard with safety decal	Garde pignon avec décalque de séc.	1	4172551-44
14.1	Sprocket guard	Garde pignon	1	4172551-45
14.2	Decal "Warning gear"	Decalque "Danger engrenages"	1	106378
15	Lynch pin	Goupille à anneau	2	4172551-46
16	Reinforcement	Renfort	1	4172551-47
17	Pin	Goupille	2	4172551-48
18	Guard	Garde	1	4172551-67
19	V pulley with set screw	Poulie en V avec vis pression	2	4172551-49
20	V-belt, MXV5-480	Courroie en V, MXV5-480	1	4165834
21	Key 1/4" x 1/4" x 2 31/32	Clé 1/4" x 1/4" x 2 31/32	1	4172551-19
22	Lock pin	Tige de verrouillage	2	4172551-51

# 

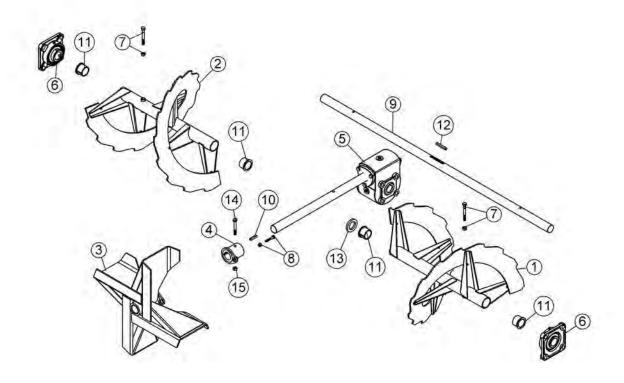
### NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Souffleuse Steiner assemblée #501222 Steiner snowblower assembly #501222

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
23	Stand holder	Support de pied	1	4172551-52
24	Parking stand	Pied de stationnement	1	4172551-53
25	Square Tube Plug	Bouchon Pour Tube Carré	1	4172551-54
26	Gear box support	Support de boîte d'engrenages	1	4172551-45
27	Chute shovel	Pelle à goulotte	1	4166797
28	Chute shovel support	Support de pelle à goulotte	1	4166936
29	Key 1/4" x 1/4" x 1 1/2"	Clé 1/4" x 1/4" x 1 1/2"	1	64164-40
30	Pivot	Pivot	1	4172551-29
31	V pulley with 2 set screw 5/16"	Poulie en V avec 2 vis à pression 5/16"	1	4165802
32	Hex. bolt 1/4" n.c. x 1/2" GR5	Boulon hex. 1/4" n.c. x 1/2" GR5	1	64123-49
33	Hex. bolt 1/4" n.c. x 3/4" GR5	Boulon hex. 1/4" n.c. x 3/4" GR5	7	64123-89
34	Hex. bolt 3/8" n.c. x 1" GR5	Boulon hex. 3/8" n.c. x 1" GR5	8	64123-50
35	Hex. bolt 7/16" n.c. x 1 1/4" GR5	Boulon hex. 7/16" n.c. x 1 1/4" GR5	6	4172551-57
36	Hex. bolt 1/2" n.c. x 1" GR5	Boulon hex. 1/2" n.c. x 1" GR5	6	64123-73
37	Hex. bolt 1/2" n.c. x 1 1/2" GR5	Boulon hex. 1/2" n.c. x 1 1/2" GR5	8	64123-11
38	Carriage bolt 1/4" n.c. x 3/4 " GR5	Boulon à carrosserie 1/4" n.c. x 3/4" GR5	2	64018-02
39	Carriage bolt 5/16" n.c. x 1 " GR5	Boulon à carrosserie 5/16" n.c. x 1 " GR5	8	64018-15
40	Carriage bolt 3/8" n.c. x 1 1/4 " GR5	Boulon à carrosserie 3/8" n.c. x 1 1/4 " GR5	3	64018-7
41	Flange nut 1/4" n.c.	Écrou à bride 1/4" n.c.	2	64141-2
42	Nylon Insert lock Nut 5/16" n.c. GR5	Écrou à garniture de nylon 5/16" n.c. GR5	11	64229-02
43	Nylon Insert Lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	11	64229-03
44	Nylon Insert lock Nut 7/16" n.c.	Écrou à garniture de nylon 7/16" n.c.	6	64229-04
45	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	11	64229-05
46	Stover lock nut 5/16" n.c.	Écrou de blocage 5/16" n.c.	5	4172551-58
47	Flat washer 1/4" hole	Rondelle plate 1/4" trou	8	64163-86
48	Flat washer 3/8" hole	Rondelle plate 3/8" trou	3	64163-61
49	Lock washer 1/4"	Rondelle de blocage 1/4"	8	64006-01
50	Hex. bolt 1/2" n.c. x 6" GR5	Boulon hex. 1/2" n.c. x 6" GR5	1	64123-203
51	Carriage bolt 5/16" n.c. x 3/4 " GR5	Boulon à carrosserie 5/16" n.c. x 3/4 " GR5	8	64018-01
52	Socket Head Cap Screw M5 x 0.80 x 10	Vis six PC tête ronde M5 x 0.80 x 10	2	4172551-21

### NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Vis assemblées 48" #501220

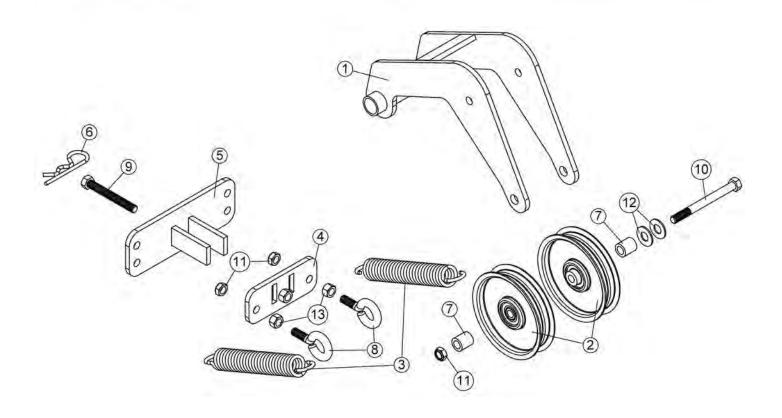
48" Auger assembly #501220

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Auger 48" right	Vis 48" droite	1	4172551-07
2	Auger 48" left	Vis 48" gauche	1	4172551-08
3	Fan with bushings	Évantail avec coussinets	1	4172551-09
4	Shear plate	Plaque de cisaillement	-1	4172551-10
5	Gear Box Left Rotation	Boîte d'Engrenage Rotation Gauche	1	4172551-11
6	Flange Mounted Bearing	Roulement Appliqué	2	4172551-12
7	Shear bolt / N.I.L.N. (auger) pkg-10	Boulon de séc. / É.G.N. (vis) pqt-10	2	4172551-13
8	Shear bolt / N.I.L.N. (fan) pkg-10	Boulon de séc./ É.G.N. (éven.) pqt-10	1	4172551-14
9	Shaft 48"	Arbre 48"	1	4172551-15
10	Key 1/4" x 1/4" x 1 1/4"	Clé 1/4" x 1/4" x 1 1/4"	1	64164-10
11	Rotation bushing	Coussinet de rotation	4	4172551-16
12	Key 1/4" x 1/4" x 2"	Clé 1/4" x 1/4" x 2"	1	64164-13
13	Shim	Espaceur	1	4172551-60
14	Hex. bolt 5/16" n.c. x 2 1/2" GR5	Boulon hex. 5/16" n.c. x 2 1/2" GR5	1	64123-12
15	Nylon Insert lock Nut 5/16" n.c. GR5	Écrou à garniture de nylon 5/16" n.c. GR5	1	64229-02



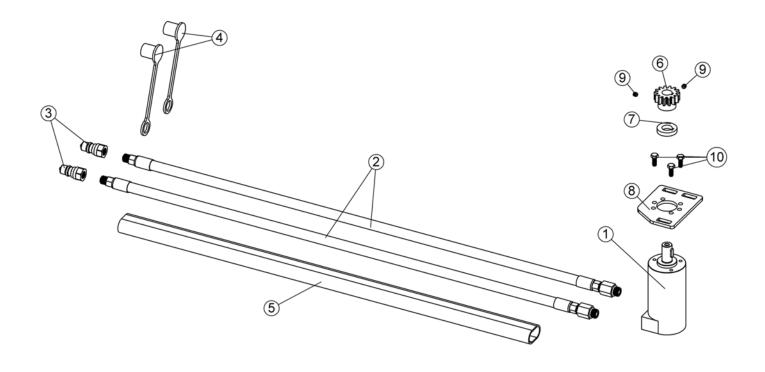
# NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Tensionneur assemblé #501219 Tenionner assembly #501219

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Tensionner arm	bras de tensionneur	1	4172551-22
2	Flat pulley	Poulie plate	2	4172551-23
3	Spring	Ressort	2	4165800
4	Tensionner adjustment plate	Plaque d'ajustement du tensionneur	1	4172551-24
5	Tensionner adjustement support plate	Plaque de support d'ajustement du tensionneur	d.	4172551-25
6	Hair pin 4mm	Goupille à ressort 4mm	1	4172551-30
7	Sleeve	Douille	2	4172551-26
8	Eye bolt	Boulon à oeuillet	2	4172551-27
9	Hex. bolt 3/8" n.c. x 3" GR5 Fullthread	Boulon hex. 3/8" n.c. x 3" GR5 Filet complet	1	4172551-28
10	Hex. bolt 3/8" n.c. x 4" GR5	Boulon hex. 3/8" n.c. x 4" GR5	1	64123-139
11	Nylon insert lock nut 3/8" n.c. (thin)	Ecrou à garniture de nylon 3/8" n.c. (mince)	3	64151-34
12	Flat washer 7/16" hole	Rondelle plate 7/16" trou	2	360.P_7-16T
13	Hex. nut 3/8" n.c.	Écrou hex. 3/8" n.c.	2	64025-05



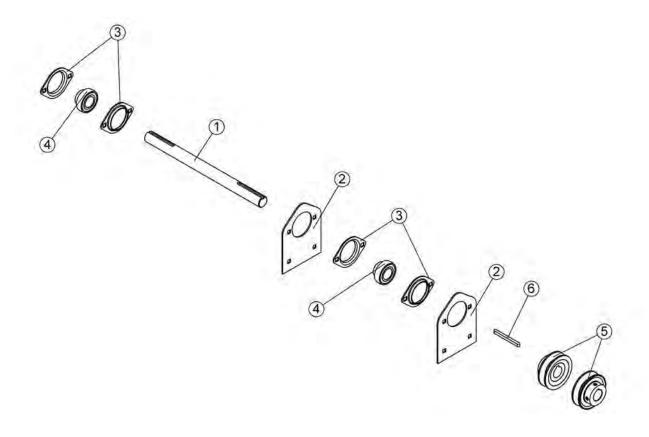
# NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Moteur hydraulique assemblé #501221 Hydraulic motor assembly #501221

			I	
REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Hydraulic motor with key	Moteur Hydraulique avec clé	1	4165815
2	Hydraulic hose	Flexible hydraulique	2	4172551-32
3	Quick nipple	Connecteur rapide mâle	2	4165847
4	Rubber boot	Capuchon de caoutchouc	2	4165851
5	Nylon sleeving	Gaine de nylon	1	4172551-61
6	Gear	Pignon	1	4169724
7	Spacer	Espaceur	1	4172551-56
8	Support plate	Plaque de support	1	4172551-41
9	Socket head set screw 1/4" n.c. x 1/4" (knurled)	Vis à pression à tête plate 6PC 1/4" n.c. x 1/4" (moletée)	2	4172551-20
10	Hex. bolt M6 x 1.00 x 16 GR8.8	Boulon hex. M6 x 1.00 x 16 GR8.8	3	64263-002



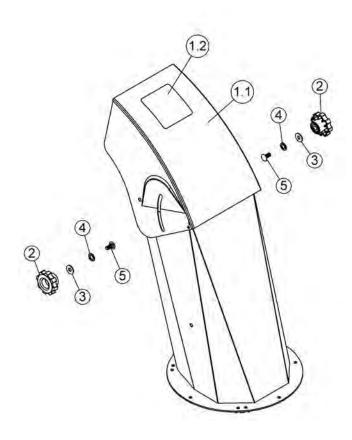
# NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Arbre transversal asemblé #501218 Jack shaft assembly #501218

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Transmission shaft	Arbre de transmission	1	4165814
2	Reinforcement plate	Plaque de renforcement	2	4165833.7
3	Flangette	Flangette	4	4170249
4	Bearing with set screw	Roulement à billes avec vis à pression	2	4170250
5	Pulley 3.15" with set screw	Poulie 3.15" avec vis pression	2	4172551-06
6	Key 1/4" x 1/4" x 2 31/32	Clé 1/4" x 1/4" x 2 31/32	1	4172551-19



## NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST Goulotte assemblée #501159 Chute assembly #501159

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#	
1	Chute #106354 with safety decal	Goulotte #106354 a/ déc. de sécurité	1	4172551-17	
1.1	Chute	Goulotte	1	4172551-18	
1.2	Danger decal chute	Décalque danger goulotte	1	105127	
2	Knob	Bouton	2	4165792	
3	Nylon flat washer 11/32"	Rondelle plate de nylon 11/32"	2	4165789	
4	Nylon flat washer 7/16"	Rondelle plate de nylon 7/16"	2	4165790	
5	Carriage bolt 5/16" n.c. x 3/4 " GR5	Boulon à carrosserie 5/16" n.c. x 3/4 " GR5	2	64018-01	



### **TORQUE SPECIFICATION TABLE**

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

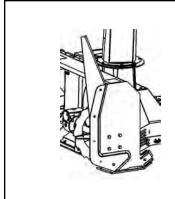
NOTE: These values apply to fasteners as received from supplier, dry or when lubricated with normal oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

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 NEWTO		NEWTON-N	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

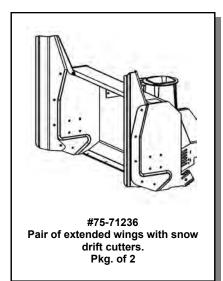
<sup>\*</sup>Thick nuts must be used with grade 8 bolts

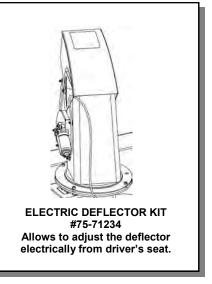
METRIC BOLT TORQUE SPECIFICATIONS									
			COARSE THRE	FINE THREAD					
Size Screw	Grade No.	Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters		
M6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	•	-		
	7T		5.8 - 9.4	7.9 - 12.7		•	-		
	8T		7.2 - 10	9.8 - 13.6		•	-		
M8	4T	1.25	7.2 - 14	9.8 - 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		

# **OPTIONS**



SNOW DRIFT CUTTER #75-71235 Cut through high drifts of snow. Pkg. of 2





# **NOTES**

# **NOTES**

# **NOTES**