

# OWNER'S MANUAL *Model Number*

C 151 61822 4

- \* ASSEMBLY
- \* OPERATION
- \* MAINTENANCE
- \* REPAIR PARTS

Sears Canada Inc. Toronto, Ontario M5B 2B8



# **CRAFTSMAN**®

**Compact 2 Stage Snowblower 40"** with Electric Lift for **CRAFTSMAN TRACTORS** 

# WARNING:

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

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# LIMITED WARRANTY

### LIMITED ONE (1) YEAR WARRANTY ON CRAFTSMAN

### TRACTOR ATTACHMENTS

For one (1) year from date of purchase, Sears Canada Inc. will repair or replace free of charge at Sears option any parts which are defective as a result of defective material or faulty workmanship.

### COMMERCIAL OR RENTAL USE:

Warranty on Tractor Attachments used for commercial or rental purposes is limited to 90 days.

### This warranty does NOT cover:

- \* Wear items, such as shear pins and shear bolts, belts
- \* Repairs due to customer abuse or neglect
- \* Pre-delivery set-up
- \* In Home service

This warranty is in addition to any statutory warranty and does not exclude or limit legal rights you may have but shall run concurrently with applicable provincial legislation. Furthermore, some provinces do NOT allow limitation on how long an implied warranty will last so the above limitations may not apply to you.

### Instructions for Obtaining Warranty Services:

Warranty service is available by returning the Craftsman Tractor Attachment to the nearest Sears Service Centre /Department in Canada. This warranty applies only while this product is in use in Canada.

SEARS CANADA INC. Toronto, Ontario, M5B 2B8

FOR SERVICE PLEASE CALL SEARS HOME CENTRAL 1800-4-MY-HOME ®

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

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.

- 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.
- 5. Never start or operate the accessories except from the operator's station on the power unit except if this is impossible.

#### 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.
- 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. Handle fuel with care, it is highly flammable.
  - a) Use approved fuel container.
  - b) Never add fuel to a running engine or hot engine.
  - c) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
  - 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 fuel.
  - 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.
- 9. 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. Always make sure all components are correctly installed. (driveline securely attached and locked at both ends, belts properly installed...)
- 11. If applicable, always handle the winch cable with thick leather gloves.
- 12. Never modify the accessory or any part without the written consent from the manufacturer.





#### **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.
- 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 ignition 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.
- 9. 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.
- 13. Keep the accessory away from heat sources or flames.
- 14. If applicable, never handle the winch cable or hook while in tension.

#### MAINTENANCE AND STORAGE

- When cleaning, repairing or inspecting the vehicle and accessory: stop the engine, set brake, remove ignition key, and wait that all moving parts have stopped. For gasoline engine, 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. 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.
- Always refer to the owner's manual when you store the accessory and vehicle for a prolonged or an unspecified length of time.
- 5. Maintain or replace safety and instruction labels, as necessary.
- 6 For winter accessories, (if applicable), let the engine run for a few minutes after clearing snow in order to prevent the rotary parts from freezing.
- 7. Inspect the vehicle's and accessory's air filter (if applicable) 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.

#### TRANSPORT

- 1. Review Transport Safety instructions in vehicle manual before moving.
- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- 3. Make sure all lights and reflectors that are required by the local highway and transport authorities (exemple : SMV (Slow Moving Vehicle)) are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.
- 4. Never have the equipment in operation during transport.
- 5. Always travel at a safe speed.



### SAFETY DECALS



### 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 #105133



Failure to observe these instructions could lead to severe injury or death.

To avoid injury to hands or fingers:

- -Always keep hands clear of rope hook loop, ,hook and fairlead opening during installation , operation and when spooling in or out.
- -Always use extreme caution when handling hook and rope during spooling operations.
- -Always wear heavy leather gloves when handling rope.
- -Keep hands away from the hot surface.

# IMPORTANT: TORQUE ALL BOLTS ACCORDING TO TORQUE SPECIFICATION TABLE WHEN STATED: TIGHTEN FIRMLY.

# THE WINCH KIT IS TO BE USED ONLY TO LIFT BERCO ACCESSORIES, ANY OTHER USE MAY CAUSE DAMAGE TO THE VEHICLE.

This subframe may be used to install different attachments (see attachments page). Once installed, it may remain permanently on your vehicle.

**NOTE:** It is not necessary to remove mower deck at this step.

### **INSTALLING THE REFLECTORS**

**IMPORTANT:** When operating the tractor with the front mounted attachment, install the two red-colored adhesive reflectors on the rear vertical surface of the tractor's fender.

### **TOOLS REQUIRED:**

Wrenches: 5/16, 7/16, 9/16, 1/2, 10mm Ratchet Sockets: 9/16, 1/2 Pliers Square head screwdriver: #2 1 wrench (for the nuts on the battery posts of the vehicle)

Optional tools according to the year of the vehicle: Drill Bit: 13/32 Punch Hammer Bit: 1/2" to install the winch control switch. Please sort out and identify all the hardware before starting installation. Lists for the hardware bag and for the box are supplied in each.

Before starting the subframe installation, verify if your has a tractor heat shield as shown (A-1). If not, go to the instructions on next page.

If the tractor has this shield, you must remove it and install the new one included in this kit (See picture below (A-2).

**NOTE:** If the original heat shield is bolted to the front of tractor frame, detach the top part (item 1) of the heat shield (item 2) that is supplied by folding it up and down along the dotted line.

<u>Be careful not to cut yourself on the sharp edges.</u> For your safety sand down the sharp edges.

Use the tractor bolts to secure in place.



### <u>STEP 1</u> SUBFRAME INSTALLATION:

Refer to parts breakdown section for parts identification.

Install the supports (item 5) on each side of the vehicle.		
Item #	Description	Action
1	Carriage bolt, 3/8 x 1" (qty 6)	Insert as shown.
2	Carriage bolt, 5/16 x 1" (qty 2)	Insert as shown.
*3	Flat washer 1/2'', (qty 6)	See*
4	Flat washer 7/16", (qty 2)	Insert on carriage bolt (item 2)
5	Support (qty 2)	Install on the bolts as shown.
6 Flange nut 3/8", Do not tighten (qty 6) now.		
7 Flange nut 5/16", Do not tighten (qty 2) now.		
<ul><li>*For tractors with a engine mounting plate use only two washers. Do not use washer A.</li><li>*For tractors without an engine mounting plate use all three washers.</li></ul>		



Install the supports

	Install the female hitch (item 1)	
# Item	Description	Action
1	Female hitch	Install between the two supports.
2	Hex bolt 3/8 x 1" (qty 4)	Insert as shown.
3	Flange nut 3/8" (qty 4)	Tighten all the nuts firmly.



Install the female hitch between the two supports

Install the spring (item 1)		
# Item Description Action		Action
1	Spring	Install the spring on the frame as shown.
NOTE: The latch must move freely.		



Install the spring as shown

# NOTE: Use these same instructions for both sides of tractor.

**Manual Clutch:** Install the new belt guides (item A) that are included with the drive mechanism on the bottom carriage bolt (item 1). Choose hole A1 or A2 that best suits to guide the belt around the engine pulley. Place a 1/2" flat washer (items B & C) over the belt guide and the top carriage bolt. Continue with the handle support installation.

**Electric Clutch:** Do not install belt guides. Place a 1/2" flat washer (item B) over the bottom carriage bolt. Continue with the handle support (left side) installation and cab support (right side).

Install the handle support (item 2) on the left side and the cab support on the right side as shown.

# Item	Description	Action
1	Carriage bolt 3/8 x 1" (qty 4)	Insert the bolts as shown.
2	Handle / cab support	Install as shown.
**3	Thread cutting screw 3/8 x1"	See **
4	Flat washer 3/8" (qty 4)	Install as shown.
5	Flange nut 3/8" (qty 4)	Tighten the nuts.
6	Square head set screw 5/16 x 1/2"	Insert in the hole of the handle.
7	Plastic grommet	Insert as shown.
** Use this screw if the bottom hole is threaded.		



Install the handle support on left side



Install the cab support on right side

### STEP 2 SUBFRAME PREPARATION:

#### Step A :

Remove the bolts and nuts holding the winch to the female hitch assembly. (item 1)

### Step B :

Install the winch on the female hitch using the bolts 5/16" x 1-1/4" GR8 as illustrated (1).

Install the hitch plate as illustrated (2).

Insert the nylon lock nuts 5/16" as illustrated (3), tighten firmly.



#### Installation of the pulley :

### Step A:

Pass the cable (1) through the pulley assembly (2) as illustrated. Attach the chain link of the cable (1) to the attaching plate (3) and secure it with the hair pin (4) as illustrated.



Close the pulley assembly (1) around the cable using the shackle (2).

	Install the heat shield (item 1).		
# Item	Description	Action	
1	Heat shield	Install as shown.	
2	2 Hex bolts 1/4 x 1/2" Tighten firmly. (qty 2)		
NOTE: If the tractor has a front muffler, install the			

**NOTE:** If the tractor has a front muffler, install the heat shield (item 3) using the two bolts (item 4) which holds the winch on the frame.







Install the heat shield

### STEP 3: INSTALLATION OF THE WINCH CONTROL SWITCH

	Install the relay (item 1).		
# Item	Description	Action	
1	Relay	Install in an appropriate area.	
2	Metal screw #12 x 3/4" (qty 4)	Secure relay in place.	
*3 Nylon tie wrap 8" See * (qty 4)			
*If necessary use the nylon tie wraps to secure the relay in place. ** Install in a sheltered place away from bad weather.			

Before drilling the hole, check behind the dashboard to make sure there is enough space to install the switch.

Drill a 1/2" hole in the dashboard or an appropriate place (see reference drawing). Stick the UP/DOWN decal over the hole for the switch.

Insert the switch in the hole and secure in place with the rubber boot.

**NOTE:** It is important to install the switch vertically. Connect the wires as shown.

When the switch is raised, the winch must lift the accessory. If you prefer the contrary, invert the green and black wires.



Up / Down decal





Install the winch control switch



Connect the wires

### IMPORTANT

To prolong the winch cable's life, release the winch control switch as soon as the accessory touches the ground. This will keep the cable from tangling up which causes premature wear.

#### **CONNECTING THE WIRES**

**NOTE:** The posts on the relay are identified by numbers. (1-2-3-4).

Install the wires from the winch on the posts of the relay.

Red wire (+) on post #3. Black wire (-) on post #4.

Connect the red wire from the winch (limit switch) with the green wire from the relay.



View behind the switch

#### **IDENTIFY THE IGNITION WIRE:**

Place the clip of the Hi / Low tester on the negative post (-) on the battery or a metal surface without any paint.

Turn the ignition key to the position: Accessory.

Insert the tip of the tester in a hole at the back of the starter (switch) make sure to touch the metal part of the wire (on most tractors, it is the A1 terminal on the ignition switch that is used for accessories. Before connection, verify with HI/LOW tester).

If the tester's light turns on, turn the ignition key to the position, Off. The light must turn off.

You have identified the ignition wire, if not repeat the operation on another wire.

#### **INSTALL THE CONTROL WIRE:**

Join the ignition wire and the red wire from the winch control (item 1) with the instant connector (item 2).

Connect the black wire of the winch control (item 3) to the black wire on the relay.

Connect the green wire of the winch control (item 3) with the red wire of the winch (limit switch).

Vue derrière le commutateur



# CAUTION



FOR YOUR SECURITY:

Read and follow the safety precautions for the battery in the vehicle's manual.

### CONNECT THE WIRES ON THE BATTERY:

Connect the wires from the relay to the vehicle's battery.

The red wire (+) on the positive post of the battery (item 1).

The black wire (-) on the negative post of the battery (item 2).

Make sure to tighten the nuts on the posts.

### TIE ALL THE WIRES:

**NOTE:** Make sure the wires from the control assembly do not interfere with anything on the tractor nor come into contact with any heating, electrical or removable elements of the tractor.

Tie the wires with four nylon tie wraps included in the kit.



Connect the relay wires to the battery

### VERY IMPORTANT:

Make sure the cable winds up and unrolls as shown in the figure (cable under the spool). Lubricate the cable and drum with grease.

If the winch cable does not wind up from the bottom of spool as shown, the limit switch will not work and may cause damage to the subframe, winch and accessory.

### STEP 4: DRIVE MECHANISM INSTALLATION:



# 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.

NOTE: You must remove mower deck to install the drive mechanism.

Install the support (item 2) on each side.				
# Item	Description	Action		
1	Carriage bolt 3/8 x 3/4'' (qty 4)	Insert as shown.		
2	Support (qty 2) See*		Support (qty 2)	See*
3 Flange nut 3/8" Tighten firmly. (qty 4)		Tighten firmly.		
*Choose the appropriate holes in the supports and make sure that there is no interference between the pin and the parts of the vehicle.				

### The next two instructions are for vehicles that do not have pins that are used as supports for the mower deck.

Use the drilling template to drill a hole on each side of the vehicle.



# 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.



Install the supports



Drill a hole if applicable

Install the sleeve (item 1) on each side.		
# Item	Description	Action
1	Sleeve (qty 2)	Install as shown.
2	Hex bolt 3/8 x 1 1/4" (qty 2)	Insert in the sleeve.
3	Flange nut 3/8" (qty 2)	Tighten firmly.



Install the drive mechanism (item 1).			
# Item	Description	Action	
1	The front end of drive mechanism	Hook on the sleeves.	
2	The back end of drive mechanism	Install between the supports.	
3	Two pins	Insert as shown on each side. *See note.	
4	4 Hair pins Secure the pins.		
<b>*NOTE:</b> If the pins (item 3) are difficult to slide in the support, loosen the nuts ( item A).			



Install the drive mechanism

### For tractors with Electric Clutch:

Install the belt on the engine pulley of the vehicle.

Check the tension on the spring.

If necessary, adjust the tension by moving the adjustment rod (item 1) and tighten the set screw (item 2).

<u>\*For tractors with a 5 1/2" engine pulley:</u> A shorter drive belt may be necessary to achieve the proper tension. Belt A-51 (105190) instead of a A-52 (104847)



No modifications to be done

#### For tractors with Manual Clutch activated by a cable:

Install the tractor's manual clutch cable . * Remove the spring.			
# Item	Description	Action	
1	Spring from the clutch cable	Install as shown in the hole on the tension pulley.	
2	Clutch cable	Insert in the slot on the adjustment rod.	
3	Hair pin 2mm	Secure the cable.	
4	Adjustment rod	Slide towards the back to apply enough tension on the spring.*	
5	5 Square head set screw 5/16 x 1/2" Secure the adjustment rod.		
Install the belt on the engine pulley of the vehicle. Check the tension on the spring. If necessary, adjust the tension by moving the adjustment rod and tighten the set screw.			

\*For tractors with a 5 1/2" engine pulley:

A shorter drive belt may be necessary to achieve the proper tension.

Belt A-51 (105190) instead of a A-52 (104847)



Install the manual clutch cable

### VERIFICATION OF THE BELT AND PULLEY ALIGNMENT:



# WARNING



TO PREVENT INJURIES: do this verification when the engine of the vehicle is not running.

**IMPORTANT:** Adjust the height of the three supports (items 1, 2 and 3) to make sure the drive mechanism pulley (item 4) is aligned with the engine pulley (item 5) more or less 1/8".

If applicable, you can remove or add a flat washer on the tension pulley (item 6) for a better adjustment.

Engage and disengage the clutch a few times and make sure the belt does not touch the belt guide (item A and B) in any place when the drive mechanism is engaged.



### 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. If needed, with manual clutch, reposition belt guide (item A) to disengage properly.

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



Adjust the supports



Adjust the pulleys



Overall view

### STEP 5: SNOWBLOWER PREPARATION:

Refer to parts breakdown section for parts identification.

Install the chute (item 2).		
Item #	Description	Action
1	Rotation ring	Install over opening.
2	Chute	Place as shown, turn to lock into place.



Install chute

	Install rotation worm (item 2).			
Item #	Description	Action		
1	Flat washer 7/16", (qty2)	Install on each side of rotation support.		
2	Rotation worm	Install in rotation support.		
3	Hair pin 2.5mm	Secure rotation worm shaft in support.		



Prepare handle (item 3).			
Item #	Description	Action	
1	Hand grip	Install on handle.	
2	Hair pin	Install on handle.	
Store these parts safely until you install the snowblower.			



Prepare handle

### INSTALLATION

### STEP 6 SNOWBLOWER INSTALLATION:

You must install the subframe and drive mechanism before continuing to install the snowblower.



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 lock (item 1).

Install belts.

**NOTE:** See the belt installation instructions in the Maintenance section.



Insert the snowblower in the lock.



The belt tension arm & needs to be held firmly while displacing to prevent injury.

### Lift cable installation:

After installing the belt, hook the shackle (item 1) to the hook (position A) and secure with a 2.5mm hair pin (item 2).

**NOTE**: Make sure the head of the shackle pin is down to prevent any contact with the pulley.

**NOTE**: For your information, it is possible to attach the winch hook in position B by removing the pulley.

Familiarize yourself with the winch control and make sure the cable stays wrapped from the bottom of the drum of the winch. See picture of the winch in the subframe's owner manual.

Lift and lower the snowblower using the switch.

When lowering the accessory, release the switch of the winch control as soon as the accessory touches the ground.





Install the cable

Install handle (item 2).		
Item #	Description	Action
1	Hair pin	Remove from handle.
2	Handle	Insert in handle support.
3	Rotation worm	Insert in handle and secure with hair pin.



Install handle

#### VERIFY SKID SHOE ADJUSTMENT:

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

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

### VERIFY TIRE PRESSURE:

Tire pressure must be even on both sides of the tractor according to the owner's manual of the vehicle.



Adjust skid shoes

### **OPERATION**



# 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 guickly.

### **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) 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.

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

### 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.

-Do not attempt to clear plugged chute, auger or fan of snow while the snowblower's engine is running.

-Disengage snowblower.

-Lower snowblower to the ground and set parking brake.

-SHUT THE ENGINE OFF & REMOVE KEY!

-Wait 10 seconds to be sure that all moving parts such as the impeller blades have stopped moving.

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

-Do not use hand to unplug chute use a clean-out tool (chute shovel).

### VERIFY TIRE PRESSURE:

Tire pressure must be even on both sides of the tractor according to the owner's manual of the vehicle.





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.

-Manufacturer approved tire chains are required. -Do not operate on a slope greater than 10°.

-When dismounting the attachment remove rear counterweights.

-Ear muffs and safety glasses are recommended.

### **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. To change the deflector angle, loosen the two deflector knobs & adjust the deflector to the appropriate angle.

#### **IMPORTANT:**

THE WINCH KIT IS TO BE USED ONLY TO LIFT THE ACCESSORY, ANY OTHER USE MAY CAUSE DAMAGE TO THE VEHICLE.

### **IMPORTANT:**

In order to avoid damage to the battery of the vehicle, always start the engine before using the winch.

Push up or down the winch control switch to lift or lower the accessory to the ground.

There is a limit switch stopper that limits the lifting.

Always prestretch cable and respool under load before installing the hook on the accessory. A tightly wound cable reduces chances of binding, which can cause damage to the cable.

To prolong the winch cable's life, release the winch control switch as soon as the accessory touches the ground. This will keep the cable from tangling up, causing premature wear of the cable.

### 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.

### MAINTENANCE

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.





### TO PREVENT INJURIES:

-Check mounting bolts at frequent intervals for proper tightness in order to prevent costly repairs. -Make sure your snowblower is in safe working condition.

-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>: 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 eight hours of operation.

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

### 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 frame. This cutting edge is reversible.

### **GENERAL MAINTENANCE**

- Check mounting bolts at frequent intervals for proper tightness to be sure equipment is in safe working condition.
- b) Apply oil at all pivot points.
- c) To prolong the life span of the winch, make sure the snap mount switch works well.

### 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 parts.

#### 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.



### WINCH CABLE MAINTENANCE

To reduce the risk of cable failure during the season, we recommend changing the winch cable every year.

Install the new winch cable as shown in figure in the parts breakdown.

Lubricate the winch cable and the drum periodically with grease.

### **BELT REPLACEMENT**

**Drive Mechanism Belt:** 

- a) Dismount the drive mechanism.
- b) Remove the bolt which retains the tension pulley.
- c) Replace the belt and re-install the tension pulley. Before tightening make sure the belt guide does not touch the belt at any time.
- d) Re-install the drive mechanism.
- e) Check the alignment of the belt that joins the drive mechanism to the engine pulley.

### MAINTENANCE

### BELT INSTALLATION, ADJUSTMENT, AND REPLACEMENT:



# WARNING



The belt tension arm is spring loaded & needs to be held firmly while displacing to prevent injury.

**IMPORTANT:** When aligning or replacing the snowblower pulley (item 4), You must clean the parts and apply some "Loctite" 2760 on the key of the pulley and the set screws of the bearing and pulley. Tighten firmly.

### SNOWBLOWER BELT:

- a) Lower the snowblower to the ground.
- b) Remove the belt guard.
- c) Remove tension on the belt by lowering the tension arm (item 1)
- d) Loosen the knob (item 2) on the bracket that holds the bearing (item 3).
- e) Install the belt as shown.
- f)) Adjust the bracket by pushing on the bearing (item 3) 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 vehicle) on the pulley. Just make sure that it does not come into contact with the wall of the pulley.
- g) Tighten firmly with the knob.
- h) Apply tension on the belt by pulling up the tension arm (item 1). To obtain the proper tension, the distance between the coils of the spring (item 6) should be .25" (1/4") approx.

If not, remove the bolt, sleeve and the spring from the original hole and reinstall them in the second hole (item 5). This will apply more tension on the belt helping to prevent it from slipping in the pulleys.

- 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.
- j) Reinstall the belt guard.
- k) Use genuine belts only, they are specifically fabricated for this application.

**NOTE**: There must be a good tension on the belt at all times. If spring is damaged or stretched, you must replace it.



### **DISMOUNTING & STORAGE**

### **SNOWBLOWER DISMOUNTING**

# CAUTION



The belt tension is spring loaded & needs to be held firmly while displacing to prevent injury.

- a) Remove the hair pin and the handle from the chute rotation.
- b) Remove the belt guard.
- c) Unhook the shackle from the snowblower.
- d) Release the tension on the belt by displacing the tension arm backwards. Remove the belt from the engine pulley under the tractor.
- e) Remove the snowblower by activating the latch of the female hitch.
- f) Reinstall the belt guard.



Never use the snowblower without the belt guard.

### **DRIVE MECHANISM DISMOUNTING**

- a) Dismount the attachment.
- b) Remove the rear counterweight when you remove the front attachment (if applicable).
- c) Remove the belt from the engine pulley.
- d) Dismount the drive mechanism by supporting it in hand and removing the two hair pins and the pins. Carefully lower to the ground. Remove the V-belt from engine pulley.

Manual clutch activated by cable: Unhook cable shield by removing the hair pin. Unhook spring. Pull out drive mechanism from underneath tractor.

- e) You may leave the subframe on tractor all year long or remove it if preferred.
- f) Reinstall mower if needed.

### **STORAGE**

- a) Clean snowblower 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 in a dry place.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION		
Auger stops turning.	Nylon shear pin is probably broken.	Replace shear pin.		
	The reduction chain is broken or the connecting link is unlocked.	Remove both chain guards. Inspect & repair chain if needed.		
Fan stops turning.	Shear bolt is probably broken.	Replace shear bolt.		
Snowblower stops turning.	One of the two belts is probably damaged or broken.	Check both belts and replace damaged belt(s).		
Belt snapping, shredding or burning or worn	Lack of tension on belt.	Adjust manual clutch cable or replace springs if stretched.		
in a specific place.	Snowblower engaged when plugged.	Make sure the auger & the fan are not frozen or plugged before engaging.		
	Not original belts.	Always use original belts.		
	Worn belt. Belt may be worn causing a slack.	Inspect the belt. Replace if required.		
	Not original shear bolts.	Use original shear bolts		
	Imperfections in pulleys.	Verify if the pulleys are damaged. Verify that pulleys are smooth, without rust spots. Sand down the pulleys or replace them.		
	Interference.	Make sure that belt does not come into contact with any other part, bolts, guides etc when engaged.		
	Belt has flipped on its side.	When installing new belt, have snowblower run between 20 to 40 seconds. Turn everything off and verify that belt has not turned on its side. If so, remove belt and re-install in opposite fashion to rectify the bad twist the belt has taken.		
Belt comes off pulley or flips off	Bearing which acts as a belt guide is not well positioned.	Guides must be in proper position to guide the belt into the pulleys properly. See belt adjustment section.		
	Defective pulley.	Replace the pulley		
Drive belt from engine pulley to drive mechanism seems to be to long and lack of power to snowblower or rotary broom.	Wrong routing of the drive belt.	Make sure the drive belt is routed on the left side of the idler pulley of drive mechanism. (See routing of the belt in assembly section of subframe manual).		
Chute plugs easily.	Tractor engine turning too slowly.	Run engine at full throttle durin snowblowing operation.		
	Advancing too quickly with tractor.	Allow snowblower to ingest snow at its own speed.		

### \* Please refer to parts breakdown section for parts identification.

\* Please refer to parts breakdown section in subframe manual for parts identification.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Chute rotation is difficult.	Dirt or ice may be underneath chute.	Dismount chute by removing the rotation worm. 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.	Tire pressure must be even on both sides of tractor according to the owner's manual of the vehicle.
	Left and Right subframe side supports are not tighten level on tractor frame.	Raise the snowblower and put a block underneath the lowest side of the snowblower and lower it on the block. Loosen subframe support nuts and bolts on both sides and retighten nuts and bolts. Raise the snowblower and remove the block.
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.

### \* Please refer to parts breakdown section for parts identification.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Winch runs backwards or stays	Winch wires reversed.	Recheck wiring.
stuck in up position.	Switch wires reversed.	Recheck wiring.
	Switch installed incorrectly.	Check switch installation.
	Battery wires reversed.	Recheck wiring.
	Winch cable is not winded up from the bottom of spool.	Wind winch cable from the bottom of the spool. (see assembly section in subframe manual)
Winch will not operate or runs in one direction only.	Vehicle's ignition switch is at OFF position.	Turn vehicle's ignition switch at ON position.
	Broken wires or bad connection.	Check for poor connections.
	Control switch is inoperative.	Replace control switch.
	Relay or breaker is damaged.	Replace the relay or breaker.
	Limit switch is damaged or wires disconnected from limit switch.	Replace limit switch or verify wire connections on limit switch.
	Winch is damaged.	Replace or repair winch.
Winch runs but with insufficient power or line speed.	Weak battery.	Recharge or replace battery. Check charging system
	Poor battery connection.	Check battery terminals for corrosion. Clean when required.
	Winch is damaged.	Replace or repair winch.
Winch cable breaking prematurely.	Frequently stopping the winch when accessory is going down.	Doing complete up and down cycles and avoid stopping midway.
	Cable tangling up.	Release the control switch as soon as the accessory touches the ground.
Winch drum and cable wearing prematurely.	Insufficient lubrication of winch drum and cable.	Lubricate winch drum and cable periodically with grease.
Winch does not hold the accessory in up position.	Winch is damaged.	Replace or repair winch.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
The shackle between the accessory and the lifting pulley is broken or the back of the snowblower is deformed.	Excessive repeated impacts.	Replace shackle and / or straighten the back of the snowblower. After repairs, drive slowly crossing obstacles, to avoid putting excessive tension on the shackle.
	Excessive high lifting overload.Lifting too high when snowblower is covered in snow.	Replace shackle and / or straighten the back of the snowblower. After repairs, take care to lift the snowblower when it is free to move (not covered in ice,), and not covered with snow.
The shackle between the accessory and the pulley lift is slightly distorted.	Impacts	Use shackle as it is, if you need to replace the cable or remove the pulley, remove the bolt from the pulley.
		Drive slowly over obstacles.
	Lifting when overloaded with snow.	Use shackle as it is, if you need to replace the cable or remove the pulley, remove the bolt from the pulley.
		Be sure to lift the snowblower when it is free to move (not covered in ice,) and not covered with snow.
	Limit switch broken	Use shackle as it is, if you need to replace the cable or remove the pulley, remove the bolt from the pulley.
		See the troubleshooting section for this problem on the next page.
	Cable wound up in reverse, therefore the limit switch did not stop the winch when lifting procedure was complete.	Use shackle as it is, if you need to replace the cable or remove the pulley, remove the bolt from the pulley.
		See the troubleshooting section for this problem on the next page.

### \* Please refer to parts breakdown section in subframe manual for parts identification.

ΗΟΨ ΤΟ ΚΝΟΨ	POINTS TO CHECK
Poor connections.	Recheck wiring with the owner's manual
HI/LOW voltage tester does not work.	Connect it on battery posts (+ and -) of a functional battery. If there is no light, the tester is damaged.
The control switch inoperative.	Test both connectors with HI/LOW voltage tester. If light comes ON or the relay is clicking in both positions (UP & DOWN), the control switch is operative.
Relay is damaged	If there is voltage on battery wire posts 1 & 2 on the relay and no voltage on posts 3 & 4 when control switch is activated and relay is clicking in both directions, the relay is defective. (see relay assembly section in owner's manual for relay post identification). Check connections with HI/LOW voltage tester.
Winch is damaged	The ultimate test is to connect the winch directly to the battery and reverse the wires to test both directions. If the winch doesn't work, it is damaged.
The limit switch is damaged.	When the limit switch is pushed or stuck inside, the winch can't raise the accessory, only lower it. If not working properly replace it.
The breaker is damaged.	Place clip of the HI / LOW voltage tester on negative (-) post of the battery. Check the voltage with the tip of the tester on both terminals of the breaker. If voltage only on 1 terminal replace the breaker. (sometimes it could take a few minutes for the breaker to automatically reset itself)

### \* Please refer to parts breakdown section for parts identification.



### PARTS BREAKDOWN CHUTE WITH ROTATION SYSTEM



### PARTS LIST CHUTE WITH ROTATION SYSTEM

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Chute	Goulotte	1	102748
2	Rotation worm	Spirale de rotation	1	102695
3	Handle	Manivelle	1	102061
4	Rotation ring	Coussinet de rotation	1	102756
5	Knob	Bouton	2	102020
6	Nylon flat washer 7/16"	Rondelle plate de nylon 7/16"	2	102011
7	Handgrip	Poignée	1	102062
8	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013
9	Carriage bolt 5/16" n.c. x 3/4"	Boulon à carrosserie 5/16" n.c. x 3/4"	2	O/L
10	Flat washer 7/16" hole	Rondelle plate 7/16" trou	2	O/L
11	Danger decal chute	Décalque danger goulotte	1	105127
12	Frame	Châssis	1	REF

### PARTS BREAKDOWN SNOWBLOWER



### PARTS LIST SNOWBLOWER

	S	NOWBLOWER		
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Frame	Châssis	1	104808
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	Chain guard	Garde-chaîne	1	102698
13	Drive shaft	Arbre de commande	1	102696
14	Auger drive pulley inc. 102783	Poulie d'entraîn. de la vis inc. 102783	1	102690
15	Oil-lite bushing	Coussinet imprégné d'huile	1	102783
16	Retaining ring	Bague de retenue	1	102761
17	Nylon shear pin w/2 clips pkg-10	Goupille de sécurité nylon a/2 clips pqt-10	1	102747
18	Double sprocket inc. 102759 & 102683	Pignon double inc. 102759 & 102683	1	102684
19	Bearing	Roulement à billes	2	102759
20	Flange sleeve	Douille à bride	2	102683
21	Roller chain #40 x 54 /w connecting link	Chaîne #40 x 54 mailles /a maille d'accoup.	1	102767
22	Roller chain #40 x 64 /w connecting link	Chaîne #40 x 64 mailles /a maille d'accoup.	1	102768
23	Connecting Link #40	Maille d'accouplement #40	1	102040
24	Chain guard	Garde-chaîne	1	102745
25	Flat pulley	Poulie plate	2	102765
26	Spring	Ressort	1	102861
27	Tension arm	Bras de tension	1	103026
28	Idler	Poulie	1	103044
29	Flange washer	Rondelle à bride	1	103025
30	Special washer	Rondelle plate spécial	1	103042

### PARTS LIST SNOWBLOWER

	SNOWBLOWER						
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #			
31	Cutting edge 40"	Racloir 40"	1	102047			
32	Skid shoe	Patin	2	103188			
33	Belt guard	Garde courroie	1	104811			
34	Male Hitch	Attache mâle	1	104809			
35	Sleeve	Douille	1	103028			
36	Knob	Bouton	2	103027			
37	Tension lever	Levier de tension	1	104810			
38	Handgrip	Poignée	1	102062			
39	Spring Washer	Rondelle à ressort	1	104352			
40	Bracket	Fixation	1	104737			
41	Bushing	Coussinet	1	102225			
42	Bearing	Roulement à billes	1	104624			
43	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013			
44	Chute shovel	Pelle à goulotte	1	105700			
45	Chute shovel support	Support de pelle à goulotte	1	105701			
46	Shackle	Clévis	1	107153			
47	Hitch plate	Plaque d'attache	1	107154			
48	Pulley assembly	Poulie assemblée	1	107157			
49	Hex. bolt 1/4" n.c. x 3/4"	Boulon hex. 1/4" n.c. x 3/4"	1	O/L			
50	Hex. bolt 5/16" n.c. x 1 1/4" GR8	Boulon hex. 5/16" n.c. x 1 1/4" GR8	2	O/L			
51	Hex. bolt 3/8" n.c. x 3/4"	Boulon hex. 3/8" n.c. x 3/4"	4	O/L			
52	Hex. bolt 3/8" n.c. x 1 1/2"	Boulon hex. 3/8" n.c. x 1 1/2"	1	O/L			
53	Hex. bolt 3/8" n.c. x 2 1/2"	Boulon hex 3/8" n.c. x 2 1/2"	1	O/L			
54	Hex. bolt 7/16" n.c. x 1 1/4"	Boulon hex. 7/16" n.c. x 1 1/4"	3	O/L			
55	Hex. bolt 1/2" n.c. x 1 3/4"	Boulon hex. 1/2" n.c. x 1 3/4"	1	O/L			
56	Carriage bolt 5/16" n.c. x 3/4"	Boulon à carrosserie 5/16" n.c. x 3/4"	11	O/L			
57	Carriage bolt 3/8" n.c. x 1 1/4"	Boulon à carrosserie 3/8" n.c. x 1 1/4"	1	O/L			
58	Carriage bolt 3/8" n.c. x 1-1/2"	Boulon à carrosserie 3/8" n.c. x 1 1/2"	1	O/L			
59	Carriage bolt 3/8" n.c. x 1 3/4"	Boulon à carrosserie 3/8" n.c. x 1 3/4"	2	O/L			
60	Hex socket f.h. cap screw 3/8" n.c. x 2"	Vis a pression hex. t.p. 3/8" n.c. x 2"	1	O/L			

### PARTS LIST SNOWBLOWER

SNOWBLOWER				
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
61	Tapping screw 1/4"-14 x 1/2"	Vis taraudeuse 1/4"-14 x 1/2"	1	O/L
62	Socket Head Cap Screw M5 x 0.80 x 10	Vis six PC tête ronde M5 x 0.80 x 10	2	O/L
63	Flange nut 5/16" n.c.	Écrou à bride 5/16" n.c.	4	O/L
64	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	6	O/L
65	Nylon Insert lock Nut 5/16" n.c. GR5	Écrou à garniture de nylon 5/16" n.c. GR5	2	O/L
66	Nylon insert lock nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	5	O/L
67	Nylon insert lock nut 7/16" n.c.	Écrou à garniture de nylon 7/16" n.c.	3	O/L
68	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	1	O/L
69	Stover lock nut 5/16" n.c.	Écrou de blocage 5/16" n.c.	6	O/L
70	Lock washer 7/16"	Rondelle de blocage 7/16"	3	O/L
71	Flat washer 3/8" hole	Rondelle plate 3/8" trou	1	O/L
72	Flat washer 7/16" hole	Rondelle plate 7/16" trou	9	O/L
73	Decal danger belts	Decalque danger courroies	1	105128
74	Decal warning safety	Decalque avertissement sécurité	1	105131
75	Decal read instructions	Decalque lire instructions	1	105130
76	Decal danger auger	Decalque danger vis	1	105126
77	Decal Craftsman	Décalque Craftsman	1	105163
78	Serial number	Numéro de série	1	REF
79	Made in Canada decal	Décalque Fabriqué au Canada	1	REF
## PARTS BREAKDOWN WINCH 106125



PARTS LIST WINCH 106125							
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #			
1	Reduction box	Boîte de réduction	1	105237			
2	Planetary gear	Engrenage planétaire	1	105241			
3	Inner gear	Engrenage intérieur	1	105239			
4	Drum support bushing	Coussinet du support de tambour	1	105242			
5	Drum support plate	Plaque de support du tambour	1	105243			
6	Spline shaft	Arbre à cannelures	1	105246			
7	Spring	Ressort	1	105245			
8	Drum	Tambour	1	105238			
9	Bushing	Coussinet	1	105240			
10	Base plate assembly	Plaque de base assemblée	1	105244			
11	Winch cable	Cable du treuil	1	106089			
12	Flange nut M6 x 1.00	Écrou à bride M6 x 1.00	1	O/L			

O/L = Obtain Locally

## PARTS BREAKDOWN COMPACT DRIVE MECHANISM



# PARTS LIST COMPACT DRIVE MECHANISM

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #			
1	Drive frame	Châssis d'entraînement	1	104838			
2	Drive frame support	Support du châssis d'entraînement	1	107288			
3	Adjustment rod	Tige d'ajustement	1	104841			
4	Right support	Support droit	1	104842			
5	Left support	Support gauche	1	104843			
6	Support	Support	2	104844			
7	Idler arm	Bras de tension	1	104845			
8	Pin	Goupille	2	102189			
9	Flat pulley	Poulie plate	1	102839			
10	Double pulley inc. 102736 & 102782	Poulie double inc. 102736 & 102782	1	102692			
11	Ball bearing	Roulement à billes	2	102736			
12	Sleeve	Douille	1	102782			
13	Belt guide	Guide-courroie	1	104095			
14	Flange washer	Rondelle à bride	1	102969			
15	Spring 1/2"	Ressort 1/2"	1	102003			
16	Spring	Ressort	1	102304			
17	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013			
18	V-Belt , B-118	Courroie en V , B-118	1	104044			
19	V-Belt , A-52	Courroie en V , A-52	1	104847			
20	Sleeve	Douille	2	104874			
21	Belt guide	Guide-courroie	2	105601			
22	Hex. bolt 3/8" n.c. x 1 1/4" GR5	Boulon hex. 3/8" n.c. x 1 1/4" GR5	2	O/L			
23	Carriage bolt 3/8" n.c. x 1 1/4 " GR5	Boulon à carrosserie 3/8" n.c. x 1 1/4 " GR5	3	O/L			
24	Carriage bolt 3/8" n.c. x 3/4 " GR5	Boulon à carrosserie 3/8" n.c. x 3/4" GR5	4	O/L			
25	Carriage bolt 3/8" n.c. x 2 " GR5	Boulon à carrosserie 3/8" n.c. x 2 " GR5	1	O/L			
26	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	6	O/L			
27	Nylon Insert lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	4	O/L			
28	Nylon Insert lock Nut 5/8" n.c.	Écrou à garniture de nylon 5/8" n.c.	1	O/L			
29	Flat washer 7/16" hole	Rondelle plate 7/16" trou	5	O/L			
30	Square head set screw 5/16" x 1/2"	Vis à pression à tête carré 5/16" x 1/2"	1	O/L			
31	Tie wrap 8"	Attache de nylon 8"	1	O/L			

## PARTS BREAKDOWN SUBFRAME



PARTS LIST SUBFRAME							
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #			
1	Female hitch	Attache femelle	1	104817			
2	Latch	Loquet	1	104818			
3	Cab support	Support de cabine	1	104819			
4	Support	Support	2	104822			
5	Winch assembly	Treuil assemblé	1	106125			
6	Heat shield	Pare-chaleur	1	104824			
7	Handgrip	Poignée	1	104825			
8	Handle support	Support de manivelle	1	104826			
9	Spring	Ressort	1	103566			
10	Plastic grommet	Oeillet de plastique	1	102063			
11	Winch control wire	Fil du contrôle du treuil	1	106103			
12	Wire assembly	Fil assemblé	1	105256			
13	Wire assembly	Fil assemblé	1	104831			
14	Relay	Relais	1	105257			
15	Instant connector	Connecteur instantané	1	105152			
16	Push plate	Plaque de poussée	1	105150			
17	Limit switch	Commutateur de fin de course	1	105136			
18	Hi/low voltage tester	Testeur de haute/basse tension	1	105151			
19	Breaker	Disjoncteur	1	105219			
20	Heat shield	Pare-chaleur	1	105262			
21	Winch control switch	Commutateur de contrôle du treuil	1	106090			
22	Heat shield	Pare-chaleur	1	104669			
23	Reflector (Pack of 2)	Réflecteur (Ensemble de 2)	1	106108			
24	Hex. bolt 1/4" n.c. x 1/2" GR5	Boulon hex. 1/4" n.c. x 1/2" GR5	2	O/L			
25	Hex. bolt 5/16" n.c. x 1" GR5	Boulon hex. 5/16" n.c. x 1" GR5	2	O/L			
26	Hex. bolt 5/16" n.c. x 1 1/4" GR5	Boulon hex. 5/16" n.c. x 1 1/4" GR5	2	O/L			
27	Hex. bolt 3/8" n.c. x 1" GR5	Boulon hex. 3/8" n.c. x 1" GR5	4	O/L			
28	Carriage bolt 5/16" n.c. x 1 " GR5	Boulon à carrosserie 5/16" n.c. x 1 " GR5	2	O/L			
29	Carriage bolt 3/8" n.c. x 1 " GR5	Boulon à carrosserie 3/8" n.c. x 1 " GR5	6	O/L			
30	Carriage bolt 3/8" n.c. x 1 1/4 " GR5	Boulon à carrosserie 3/8" n.c. x 1 1/4 " GR5	4	O/L			

PARTS LIST SUBFRAME						
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #		
31	Nylon Insert lock Nut 5/16" n.c. GR5	Écrou à garniture de nylon 5/16" n.c. GR5	2	O/L		
32	Flange nut 5/16" n.c.	Écrou à bride 5/16" n.c.	4	O/L		
33	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	14	O/L		
34	Thread cutting screw 3/8" n.c. x 1"	Vis a filetage coupante 3/8" n.c. x 1"	2	O/L		
35	Flat washer 5/16" hole	Rondelle plate 5/16" trou	2	O/L		
36	Flat washer 3/8" hole	Rondelle plate 3/8" trou	4	O/L		
37	Flat washer 7/16" hole	Rondelle plate 7/16" trou	2	O/L		
38	Flat washer 1/2" hole	Rondelle plate 1/2" trou	10	O/L		
39	Square head set screw 5/16" x 1/2"	Vis à pression à tête carré 5/16" x 1/2"	2	O/L		
40	Metal screw T.H. #12" x 3/4"	Vis à métal T.H. #12" x 3/4"	4	O/L		
41	Tie wrap 8"	Attache de nylon 8"	8	O/L		
42	Decal caution hot surfaces	Décalque attention surfaces chaudes	1	105133		
43	Lift decal	Décalque de relevage	1	106124		
44	Model number	Numéro de modèle	1	REF		

# 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	SEE Grade No. 2			5			8 *						
	TION I ORQUE PER GRADE JFACTURING					TORQUE			TORQUE				
во	LT SIZE	FOOT	POUNDS	NEW TON-M	IETERS	FOOT	POUNDS	NEW TON-M	IETERS	FOOT P	OUNDS	NEW TON-M	ETERS
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 SPECIFICATIONS								
			COARSE THRE	EAD	FINE THREAD			
Size Screw	Grade No.	Pitch (mm)	Foot Pounds Newton-Meters		Pitch (mm)	Foot Pounds	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 & ATTACHMENTS**



# NOTES


# NOTES


# NOTES

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