KIMPEX Action

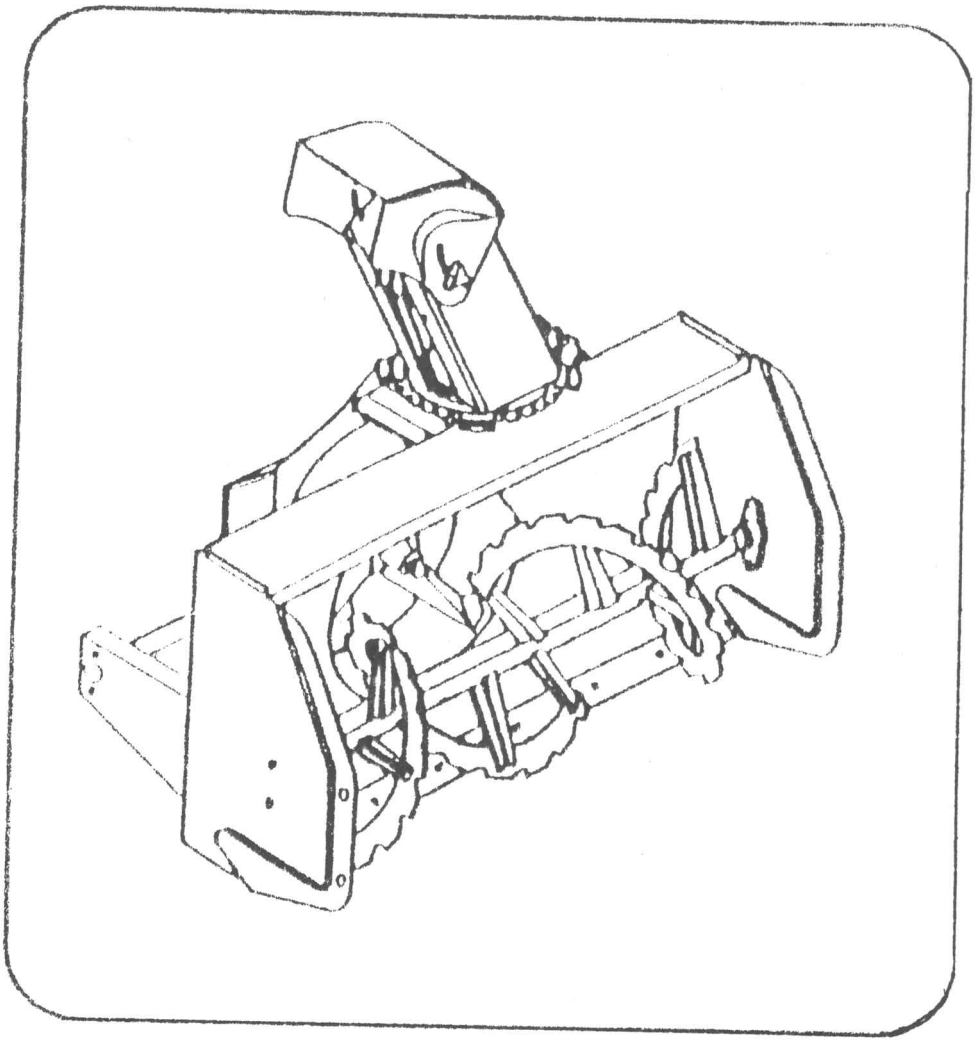
OWNER'S MANUAL

MODEL NUMBER

05-260

FOR ALL TERRAIN VEHICLES

700226A



CAUTION:
Read and Follow All Safety Rules and Instructions Before Operating Your Equipment

*** ASSEMBLY**
*** OPERATION**
*** MAINTENANCE**
*** REPAIR PARTS**

102549 – updated 06/30/98

CHANTAL

KIMPEX

44" TWO STAGE SNOWBLOWER

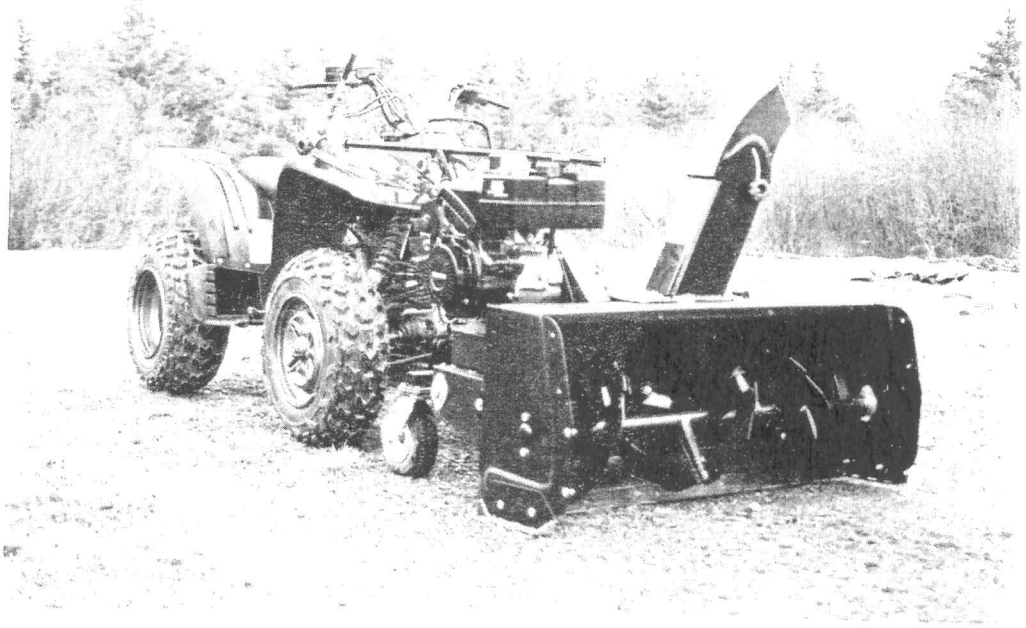
KIMPEX Action

OWNER'S MANUAL

MODEL NUMBER

058-260

FOR ALL TERRAIN VEHICLES



CAUTION:
Read and Follow All Safety Rules and Instructions Before Operating Your Equipment

*** ASSEMBLY**
*** OPERATION**
*** MAINTENANCE**
*** REPAIR PARTS**

102549 – updated 06/10/99

KIMPEX

44" TWO STAGE SNOWBLOWER

WARRANTY

LIMITED ONE YEAR ON A.T.V. SNOWBLOWER

K I M P E X

For one year from date of purchase, Kimpex Action Inc. will repair or replace free of charge at Kimpex's option any parts which are defective as a result of material or workmanship.

COMMERCIAL OR RENTAL USE:

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

This warranty does NOT cover:

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

Warranty service is available by returning the "KIMPEX" snowblower to the authorized dealers.

KIMPEX Action Inc.
5355, St-Rock, Drummondville (Québec) Canada, J2B 6V4

TABLE OF CONTENTS

SAFETY PRECAUTIONS

Careful operation is your best insurance against an accident. Read this section carefully before operating the A.T.V. (all terrain vehicle) and snowblower. All operators, no matter how experienced they may be should read this and other related manuals before operating the attachment. It is the owner's legal obligation to instruct all operators in safe operation.

BEFORE OPERATION

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on the attachment safety labels to warn of the possibility of personal injury. Please take special care
in reading and understanding the safety precautions before operating the attachment or the A.T.V.

1. Read this Owner's Manual carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.

2. Never allow children to operate equipment. Never allow adults to operate equipment without proper instructions.

3. No one should operate the unit while intoxicated or while taking medication that impairs the senses or reactions.

4. Keep the area of operation clear of all persons, especially small children and pets.

5. Never wear loose, torn or bulky clothing around the tractor and attachment. It may catch on moving parts or controls, leading to the risk of accident.

PREPARATION

1. Thoroughly inspect the area where the equipment is to be used and remove all door mats, sleds, boards, wires and other foreign objects.

2. Never run the snowblower engine without belt guard in place. Never run the snowblower engine without the stopper belt guide in place. Otherwise, the snowblower does not stop or stop too slowly.

3. Do not operate equipment without wearing adequate winter outer garnments. Wear footwear which will improve footing on slippery surfaces.

4. Check the fuel before starting the engine. Gasoline is an extremely flammable fuel. Do not fill the fuel tank indoors or while the engine is running or while the engine is still hot. Replace gasoline cap securely and wipe off any spilled gasoline before starting the engine as it may cause a fire or explosion.

5. Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).

6. Let engine and machine adjust to outdoor temperature before starting to clear snow.

7. Disengage clutch before starting engine.

8. Always wear safety glasses or eye shields during operation or while performing an adjustment or repair to protect eyes from foreign objects that may be thrown from any direction.

9. Adjust the collector housing height to clear gravel or crushed rock surface.

SAFETY PRECAUTIONS

OPERATION

1. Do not put hands or feet near rotating parts. Keep clear of discharge opening at all times.

2. Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic.

3. After striking a foreign object, stop the engine, remove wire from spark plug wire and keep away from plug to prevent accidental starting. Thoroughly inspect the snowblower for any damage, repair the damage before restarting and operating the snowblower.

4. If the snowblower should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.

5. Whenever you leave the operator's position, set the parking brake, stop both engines and remove the keys.

6. When cleaning, repairing or inspecting, make certain collector/impeller and all moving parts have stopped. Disconnect spark plug wire and keep away from plug to prevent accidental starting.

7. Do not run engine indoors except when starting engine and transporting snowblower in or out of building. Open doors. Exhaust fumes are dangerous.

8. Do not clear snow on the face of slopes. Exercice extreme caution when changing direction on slopes. Do not operate on slope greater than 10%.

9. Never operate snowblower without guards, plates or other safety protection devices in place.

10. Never operate snowblower near glass enclosure, automobiles, window wells, drop off, etc... without proper adjustments of snowblower discharge angle. Keep children and pets away.

11. Do not overload machine capacity by attempting to clear snow at too fast a rate.

12. Do not drive more than 10km/hr with the snowblower in raised position. Do not drive more than 3 km/hr with the snowblower on the ground, in working position. Look behind and use care when backing.

13. Never direct discharge at bystanders or allow anyone in front of unit.

14. Disengage power to collector/impeller when transporting or not in use.

15. Do not carry passengers on snowblower or A.T.V.

16. Do not attempt to clear plugged chute of snow while engine is running. If the chute plugs, disengage the PTO, shut off the engine, remove the ignition key and then clear the snow from the chute. Do not use hand to unplug chute, use a 36" (924mm) minimum length stick or board.

17. For snow clearing, use only A.T.V. manufacturer approved tire chains.

SAFETY PRECAUTIONS

18. Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable noises.

19. Never operate the snowblower without good visilbility or light.

MAINTENANCE AND STORAGE

1. Check shear bolts, mounting bolts, etc..., at frequent intervals for proper tightness to be sure equipment is in safe working condition.

2. Never store the snowblower with fuel in the tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers and the like. Allow engine to cool before storing in any enclosure.

3. Always refer to Owner's Manual instructions for important details if snowblower is to be stored for an extended period.

4. Run snowblower a few minutes after blowing snow to prevent freeze up of collector/impeller.

5. Maintain or replace safety and instructions labels, as necessary

WHENEVER YOU SEE THIS SYMBOL

IT MEANS:

ATTENTION !

BECOME ALERT !

YOUR SAFETY IS INVOLVED !

INTRODUCTION

TO THE PURCHASER

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

NOTE All photographs and illustrations in the manual may not necessarily depict the actual models or equipment, 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 work with you.

THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE IT, BE ALERT TO THE POSSIBILITY OF PERSONAL INJURY AND CAREFULLY READ THE MESSAGE THAT FOLLOWS.

Record your snowblower model and serial number (there is none with subframe). Your Dealer requires this information to give you prompt, efficient service when ordering parts or attachments. Service with original parts when replacement parts are required.

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

Right hand and left hand are determined by sitting on the tractor seat facing forward.

MODEL .....

SERIAL NUMBER .....

DATE PURCHASED .....

ASSEMBLY

IMPORTANT: Torque all bolts according to torque specification table on page 24, unless otherwise specified.

STEP 1: SNOWBLOWER PREPARATION

NOTE: See page 25 for options available. Also see page 27 for pictures of final assembly.

a) Install the skid shoes on the snowblower (fig. 1, item 1) with 5/16 x 3/4" carriage bolts (item 2), heads on the outside. Secure with flange nuts (item 3). Do not tighten yet.

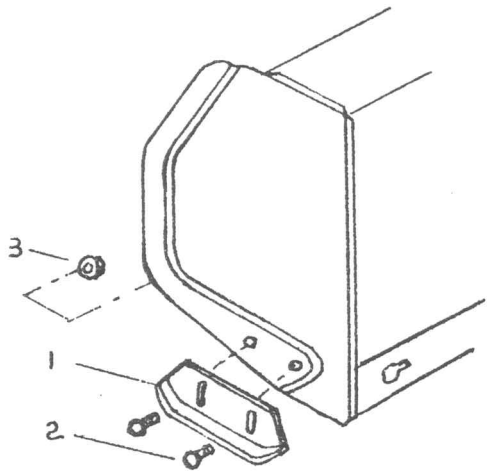


FIGURE 1

Skid Shoe Adjustment

Level Paved Surface - adjust skid shoes to allow 3/16 to 1/4" clearance (fig. 2, item 1) between cutting edge and surface.

Uneven or Gravel Surface - adjust skid shoes to allow 1/2 to 5/8" clearance (fig.2, item 1) between cutting edge and surface.

b) Install hand guard (fig.3, item 1) on chute (item 2) with the top portion inside the chute and the bottom section outside the chute base ring. Place two 1/4 X 3/4" bolts (item 3) with the head on the outside of chute, through the chute then through the hand guard and secure with flatwashers and nuts. Tighten securely.

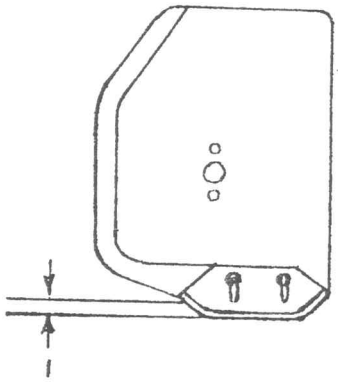


FIGURE 2

ASSEMBLY

c) Place plastic anti-friction insert (fig.3, item 5) over chute base. Only one position provides a perfect fit.

d) Insert shortest plastic bushing (fig. 3, item 6) in snowblower tube weldment.

e) Insert longest plastic bushing (fig.3, item 7) in bushing support (item 4), grease both ends of rotation worm and place rotation worm (item 8) in bushing.

f) Install rotation worm assembly through tube weldment with the bushing support (fig.3, item 4) on the underside of chute base lip.

g) Install chute (fig.3, item 2) over plastic insert (item 5) (applying grease in between) and secure with four retaining plates (item 9) using six 1/4 X 1/2" bolts (item 10) and two 1/4 X 3/4" bolts (item 11) to also secure bushing support (item 4). Lock all bolts with nuts. Tighten securely.

h) Install the push frame assembly (fig. 4, item 1) on the back of snowblower and secure in place using four 7/16 X 1 1/4" bolts (item 2). Secure bolt in the slot closest to collector housing with flatwasher, lockwasher and nylon nut and secure three other bolts with lockwashers and nylon nuts. Do not tighten yet.
See Step 4 item d.

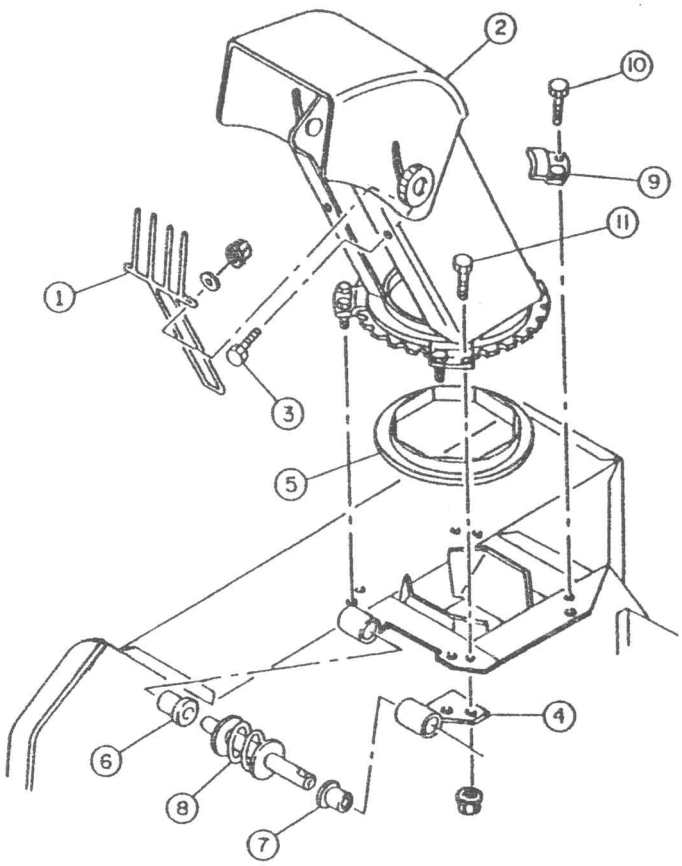


FIGURE 3

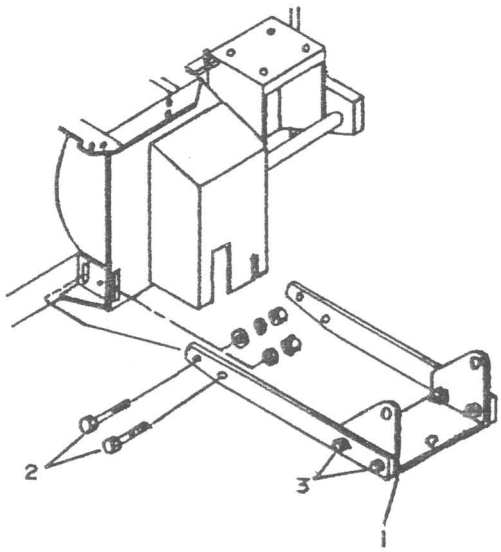


FIGURE 4

STEP 2: SUBFRAME PREPARATION

a) Install the two caster wheels (fig.5, item 1) to the wheel support (item 9) and two non-sway chains 3/16 X 32" (item 12) on top of support plate. Using the 3/8 X 1" bolt & flatwasher through the chain, through the support plate on the inside rear hole. In the other holes, use 3/8 X 3/4" bolts. Secure with nuts, tighten securely.

ASSEMBLY

b) Install the subframe (fig. 5, item 2) to the wheel support (item 9) and secure with four 7/16 X 1" bolts, lockwashers and nuts. Tighten securely.

c) Install the subframe to the snowblower push frame (fig.5, item 3) with 2 sleeves 1.00 dia. X 0.31" (item 4). Secure in place with two 1/2 X 1 1/2" bolts, flatwashers, lockwashers and nuts. Tighten securely.

d) Install the subframe extension (fig. 5, item 5) to subframe using 3/8 x 3/4" hex bolts and nylon nuts. Tighten securely.

NOTE : If you install a manual lift kit, install the ball bearing in frame before tightening the bolt.

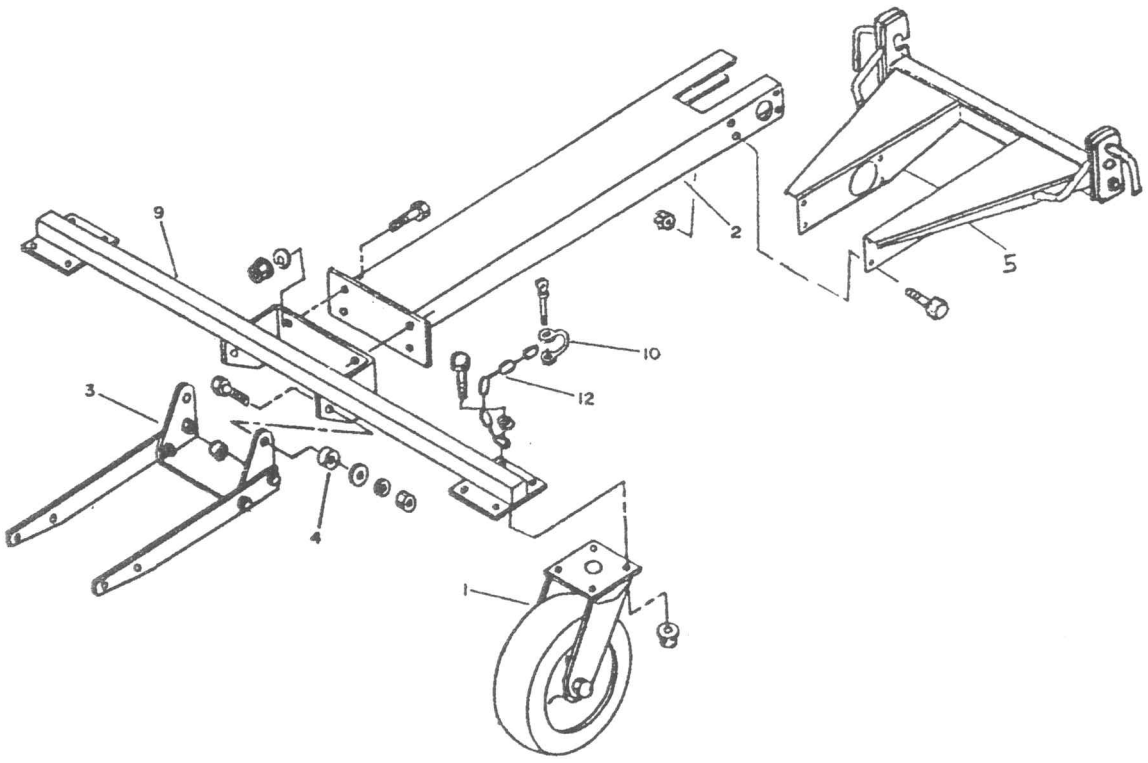


FIGURE 5

ASSEMBLY

NOTE : If you lift the snowblower with the ATV's winch go to step 3.

SNOWBLOWER MANUAL LIFT (option):

e) Adjust overall length of push arm (fig. 6, item 1) to 43 3/4" by turning the adjusting rod (item 2).

f) Install the adjusting rod (fig. 6, item 2) in the middle sleeve holes of the pivot support (fig.5, item 3) and secure with 3mm hair pin.

g) Install ball bearings (fig. 6, item 3) by inside the subframe (fig. 5, item 2) on each side toward outside. Install the lift lever extension (fig. 6, item 6) from the left hand side through bearing (item 3), sleeve spacer (item 8), lever assembly (item 7), sleeve spacer (item 8) and the other bearing until it protrudes by 1". Tighten the 5/8" bolt lightly.

h) Install arm lift (fig. 6, item 4) on extension (item 6) using two 5/16 x 3/4" bolts with nuts. Tighten securely.

i) Rotate the lift lever (fig. 6, item 7) upward to the maximum, against the stop. Set handle section of arm lift (item 4) parallel to the subframe. SEE : Step 4, item f) for final adjustment.

j) Install 1" handle grip (fig.6, item 5) on the arm lift.

k) Adjust the pressure of the caster wheels tires to 50 p.s.i.

STEP 3: ENGINE INSTALLATION

IMPORTANT: 10 TO 13 HP ENGINES ONLY ARE RECOMMENDED FOR SNOWBLOWER.

a) Remove belt guard.

b) Install 2 1/2" pulley on motor shaft, the hub toward the engine with 1/4" x 1/4" x 1 3/4" key.

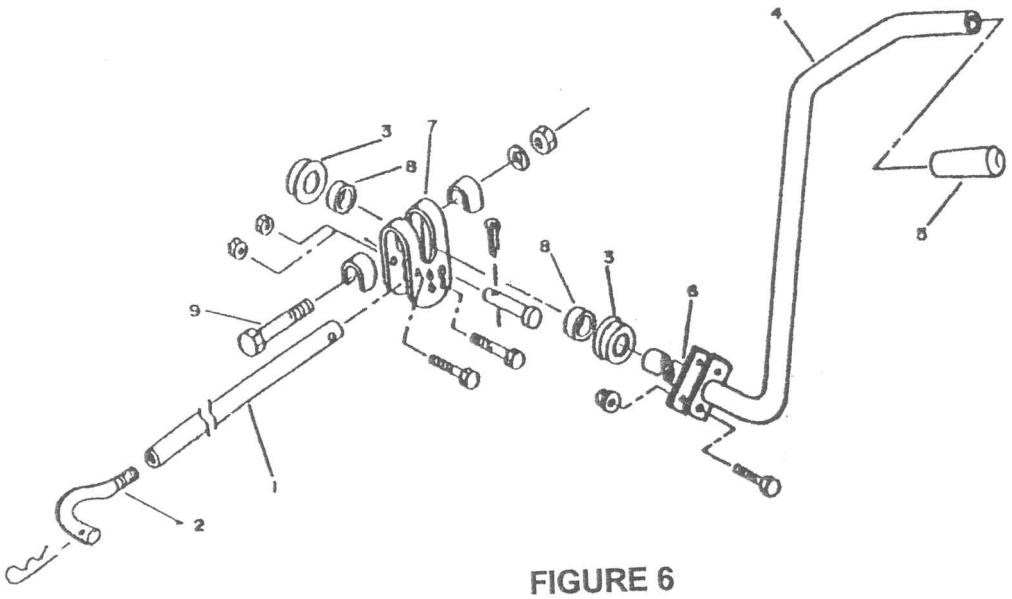


FIGURE 6

ASSEMBLY

c) Tecumseh Engine Installation: Measure the crank shaft height (fig. 7) to choose the appropriate shim : 1.00 or 3/4" to obtain 5.187 to 5.250" between the snowblower stand and the crank shaft, see fig. 7. Choose the holes identified as item « A » in Fig. 8. Secure the engine in place with 5/16 x 2 1/4" hex bolts and flange nuts.

NOTE: Be sure the engine base is perpendicular 90° to the snowblower body before tightening the bolts securely. GO TO STEP f).

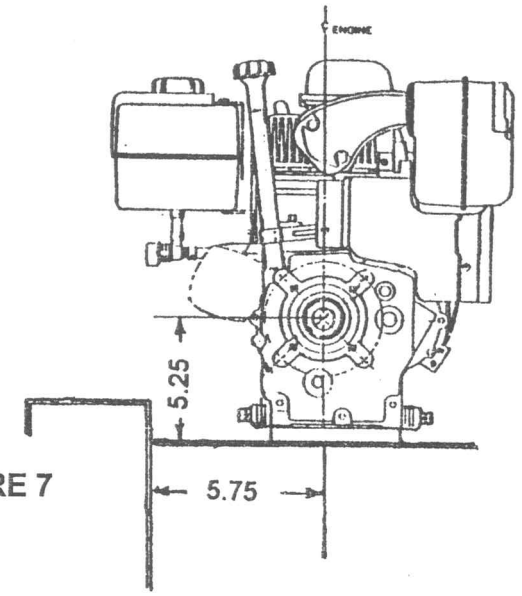


FIGURE 7

d) Honda Engine Installation 11 or 13HP: Install the engine on the stand (fig. 9). Using the holes Identified as item « B » with four bolts 3/8 X 1 1/2", two flatwashers on top of the slot and secure with nuts.

NOTE: Be sure the engine base is 90° perpendicular to the snowblower body and tighten bolts securely. GO TO STEP f).

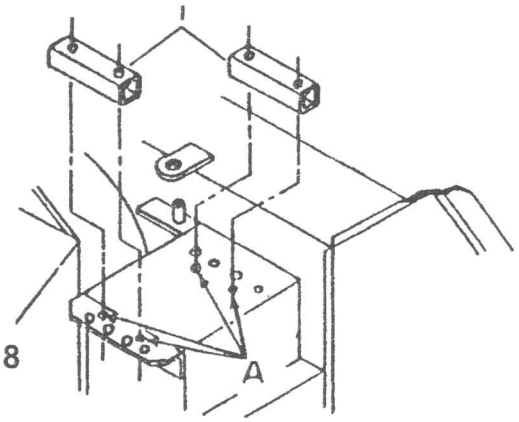


FIGURE 8

e) All Other Brands of Engines Installation: You may drill new holes or add shims as needed to obtain the correct distances between the snowblower housing and the crank shaft. It is very important to obtain the correct engine location as shown in fig. 7.

NOTE: Be sure the engine base is 90° perpendicular to the snowblower body and tighten bolts securely. GO TO STEP f).

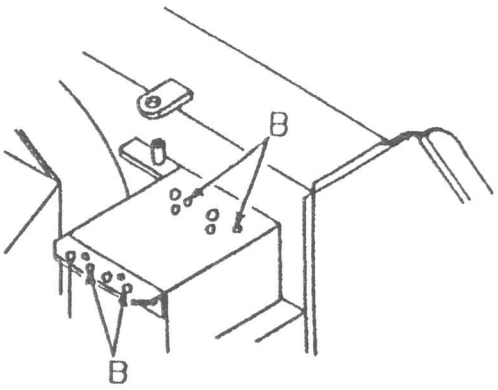


FIGURE 9

f) Verify the alignment of upper pulley with lower pulley and the clutch idler. If accurate, tighten the allen set screws. Install the V-belts.

ASSEMBLY

g) Engage the clutch belt tightner and install the belt guard (fig. 10, item 1). Secure in place with the rubber latch and install the belt guide stopper (item 2). Secure with lockwasher and wing nut. Disengage the clutch.

h) Verify if the motor is installed properly. The stopper pin (fig. 10, item 2 & fig. 11, items C & D) will clear the V-belt by 0.125" with the clutch lever in engaged position. If not, loosen the engine mounting bolts and move the engine to the correct position and retighten the bolts.

WARNING: Never run the engine without belt guard and belt guide stopper in place.

i) Install the throttle cable (fig. 13, item 2) to engine carburator throttle lever. Adjust the cable when the carburator lever is in the middle position, the hand lever (item 4) will be perpendicular or in middle position.

j) Verify if the clutch cable is adjusted properly, the distance (fig. 11, item B) should be 0.250" to 0.312" in the engaged position. If not, dismount the hook on the end of cable. Cut the inner cable as required and reinstall the cable end to the spring's hook. Reverify the adjustment. If there is not enough tension on the spring idler, the V-belt will slip and be ruined.

WARNING : Start the engine, engage and disengage the clutch to be sure it functions normally, this means when you disengage the clutch, the snowblower will stop immediately.

STEP 4: INSTALLATION ON A.T.V.:

a) Install the quick hitch bracket under the A.T.V., see chart on page 26 to identify the proper bracket model for your A.T.V. Follow the mounting instructions supplied with this kit. If the blade is not being used, install only the quick hitch bracket under the A.T.V. Do not install other items.

b) Carefully drive the A.T.V. forward over the subframe (you may drive over the arm lift with the front wheel). Hook the subframe to the quick hitch bracket under the A.T.V. and secure in place with the spring handle lock.

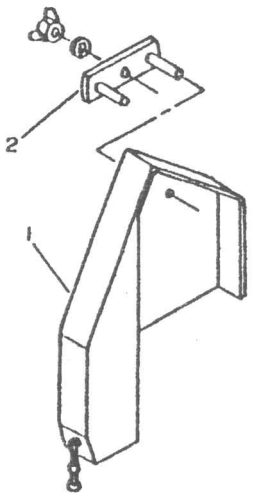


FIGURE 10

ASSEMBLY

c) Install chains with shackles (fig. 5, items 10 & 12) to prevent the snowblower from shaking sideways. The chain located at the bottom right hand side of the push frame should be attached (using shackles) to the bottom left hand side of A.T. V. The chain located at the bottom left hand side of push frame should be attached to the bottom right hand side of A.T.V. Chains must be tight and horizontally crossed (parallel to ground).

d) Loosen the 4 bolts pre-assembly which hold the push frame. Lift the motor side of the snowblower and slide a 1 1/2" (approx.) piece of wood underneath and tighten the 8 bolts very securely using lockwashers and nylon nuts (torque to 65 lbs./ft.). Now your snowblower should lift evenly. If not, repeat the procedure using thicker or thinner piece of wood depending on the weight of the motor.

SNOWBLOWER LIFT WITH A.T.V. WINCH LIFT (option): If you do not use the winch, go directly to Step f).

NOTE : Option kit #700269 winch kit must be used. This kit will double the winch's lift and brake capacity.

e) Hook the pulley's block to the flat bar's weldment on the snowblower. Remove the pulley from the block to pass the winch cable through the pulley block. Use the chain and shackles supplied in the kit to attach the winch cable to the A.T.V. chassis. If the winch is located lower than the hook on the snowblower, attach the cable in the highest position possible on A.T.V. chassis. If the winch is located higher than the hook on the snowblower, attach the cable in the lowest position possible on A.T.V. chassis.

MANUAL LIFT (option):

f) Raise the snowblower head by hand until the lift mechanism locks in place. Normally, you have 3 or 3 1/2" clearance between the snowblower and the ground. If not, adjust the push arm by turning the adjusting rod (fig. 6, item 2) to obtain this height. When the snowblower is on the ground, make sure the arm lift does not interfere with the A.T.V.'s front wheels under any circumstances. In the raised position, the handle section of the lift arm should be parallel with the ground. After the adjustments have been done, tighten the 5/8" bolt very firmly (fig. 6, item 9) at 80 lbs/ft.

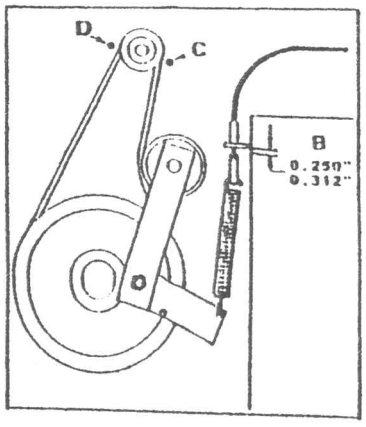


FIGURE 11

ASSEMBLY

NOTE : To install the engine and chute control on « Polaris » A.T.V. with a plastic rack, you must have a steel rack extension or option kit #700270 mini rack extension.

g) Install the rotation support bracket (fig. 12, item 3 & 7) using 1/4 X 3/4" bolt and nut on the left hand side on the A.T.V rack. Choose the ideal place and make sure the hand crank is easily accessible and does not interfere with the steering handle.

h) Install 1/2 X 3" handle grip (fig. 12, item 1) on chute rotation handle (item 2) and insert handle through hole in rotation support bracket.

i) Install hook (fig. 12, item 4) on rotation worm. Insert hook in rotation handle and lock in place with a 2.5mm hair pin (item 6).

j) Install the clutch arm fixture at the right hand side of the A.T.V. on front rack. Identify where is the best place. Be sure that the driver has easy access to the control. Wrap the rubber piece (fig. 14, item 1) on the tube. Install the clutch fixture (item 2) on the tube over the rubber piece, the round holes toward the front. Fasten in front with a 5/16 X 1 3/4" carriage bolt (item 5), the head toward inside and secure with nut. Tighten lightly. The distance between the bolt head and the fixture is normal and is designed to have the slot support attached. Install a 5/16 X 1 3/4" carriage bolt (item 6) on the rear square hole, the head toward the inside and secure with knob (item 4). The support should be exactly 90° with the ground. Using the top holes as a template, drill through the tube and secure with 1/4 X 1 1/4" bolts and nuts. Install the clutch arm support (fig. 13, item 1) by loosening the knob (fig. 14, item 4) and slide the front slot of arm support (fig. 13, item 1) between the bolt head (fig. 14, item 5) and the fixture (item 2). The rear slot "B" on the arm support (fig. 13, item 1),must slide between the bolt head (fig. 14, item 6) and the fixture (item 2). Secure with knob (item 4).

k) Torque all bolts according to torque specification table, page 24.

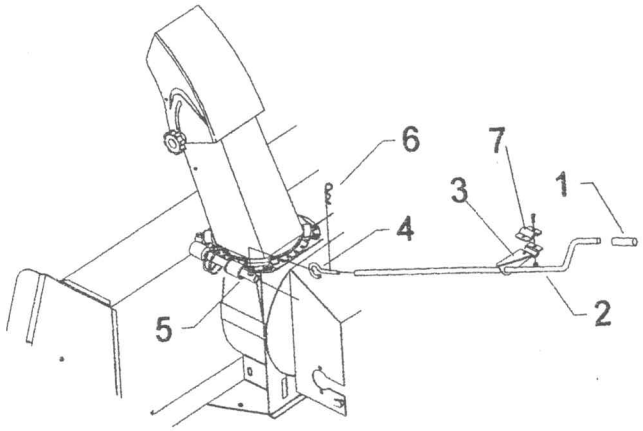


FIGURE 12

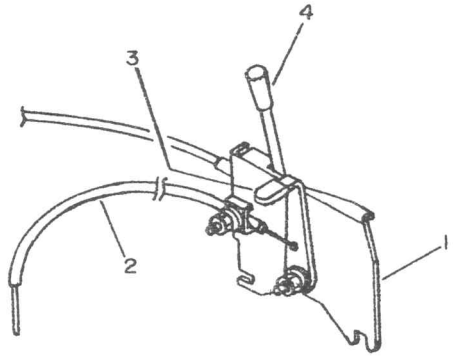


FIGURE 13

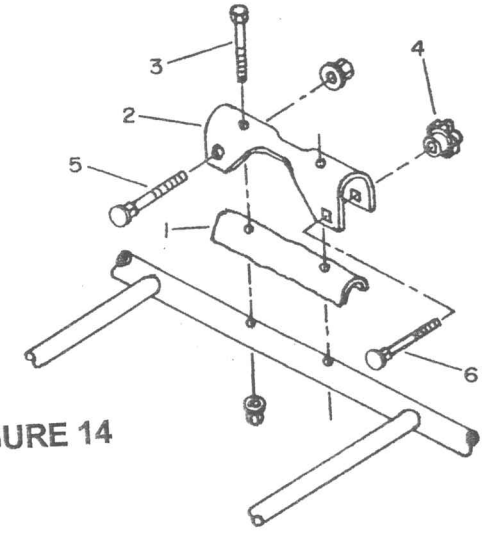


FIGURE 14

OPERATION

PREPARING FOR SNOW REMOVAL

WARNING:

1. **Read the Owner's Manual carefully. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.**

2. **Never allow children to operate equipment. Never allow adults to operate equipment without proper instructions.**

3. **Do not allow anyone other than the operator on the A.T.V.**

4. **Keep the area of operation clear of all persons.**

5. **Do not wear loose clothing to avoid getting caught in mobile parts**

OPERATING THE SNOWBLOWER

1. Make sure that the snowblower is clear of snow before engaging the snowblower.

2. Make sure that the auger and impeller operate freely.

3. Start the engine.

4. Before engaging the snowblower drive, always have the engine running at idle.

5. Operate the snowblower at maximun engine RPM.

SNOW REMOVAL METHOD

When removing snow, do not use the snowblower as a dozer blade to push snow. Let the snowblower work its way through deep drifts. If the speed of your A.T.V. 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.

IMPORTANT: Use full RPM power when removing wet, sticky snow. Low RPM power will tend to plug the chute.

WARNING: Do not attempt to clear plugged chute of snow while engine is running. If the chute plugs, disengage the PTO, shut off the engine, remove the ignition key and then clear the snow from the chute. Do not use hand to unplug chute, use a 36" (924mm) minimum length stick or board.

WARNING: TO AVOID INJURY WHEN USING SNOWBLOWER ON A.T.V.:

- **Do not drive more than 10 km/hr (6m/hr) with the snowblower in raise position**
- **Do not drive more than 3 km/hr (2m/hr) with the snowblower on the ground, in working position**
- **Do not operate on slopes greater than 10%**
- **Approved tire chains are required**

OPERATION

OPERATING CONTROLS

1. **Chute Rotation**
   The chute rotation handle (fig. 12, item 2) is located to the left of the steering bar. Turning the handle in a clockwise direction turns the discharge chute in a clockwise direction.

2. **Raising And Lowering The Snowblower**
   The lift arm (fig.6, item 4) to raise and lower the snowblower is located on the left hand side. To raise the snowblower, pull the lever back and to lower the snowblower, push the lever forward.

NOTE: With the winch switch control, you can raise and lower the snowblower, to raise the snowblower, pull the cable winch and to lower the snowblower, extend the cable.

3. **Starting And Stopping The Snowblower**
   Engage snowblower when engine is running at low rpm. To engage, pull the clutch lever and to disengage, move the clutch lever forward.

IMPORTANT: Never install the stopper belt guide (fig. 10, item 2) without engaging the clutch first, otherwise the belt guide pin will touch the belt and ruin it.

WARNING: Never run the snowblower engine without belt guard in place. Never run the snowblower engine without the stopper belt guide in place. Otherwise the snowblower does not stop or stops too slowly.

ADJUSTMENTS

WARNING: Before making any adjustments, stop the snowblower engine and remove the ignition key.

1. **Chain Adjustments**
   AUGER DRIVE CHAIN: Loosen chain idler bolt (page 16, item 48) on snowblower's right hand side, and set chain tension leaving 1/2" deflection in longest chain span. Tighten idler arm bolt securely.

2. **Deflector Adjustment**
   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 knob & adjust the deflector to the appropriate angle and retighten the two knobs securely.

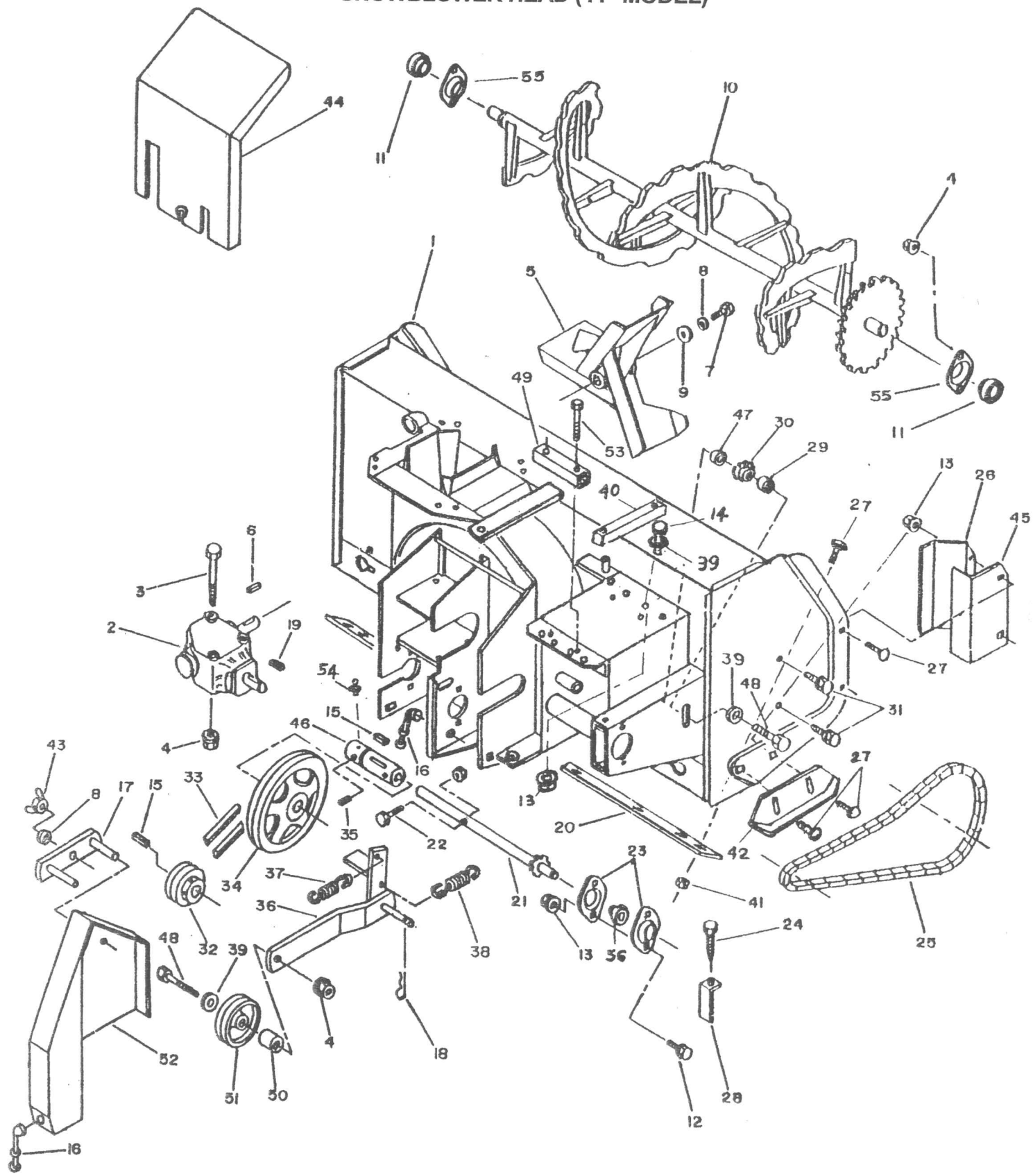
3. **Auger Shearbolt Replacement**
   Remove the stopper belt guard (fig. 10, item 2). Remove the belt guard (item 1), replace the shearbolt on the shaft (see page 16, item 22). Use 5 X 45mm bolt with 1/2" shoulder, part number 102038. Reinstall the belt guard in place and secure with the rubber latch. Engage the clutch belt tightner by pulling the clutch lever. Install the stopper belt guide and secure with lockwasher and wing nut.

4. **Skid Shoe Adjustment**
   Follow the instructions on page 6, Step 1.

5. **Lubrication**
   Drive Chains: Lubricate with chain saw chain libricant every 4 hours of operation and at the end of each operation.
   Chute Rotation System: Oil chute base rotation worm bushings and rotation hood every 8 hours of operation.
   Sleeve Adaptor: Page 16, item 46, grease every 20 hours of operation.

05-260 7002661

SNOWBLOWER HEAD (44" MODEL)



SNOWBLOWER HEAD (44" MODEL)

REF	DESCRIPTION	QTY	PART NO
1	Frame	1	102550
2	Gear box	1	102029
3	Bolt 3/8 X 4"	3	O/L
4	Flange nut 3/8"	13	O/L
5	Fan assembly	1	102001
6	Key 8mm X 7mm X 35mm	1	102035
7	Bolt M8 X 1.25 X 25mm	1	O/L
8	Lock washer 5/16"	2	O/L
9	Flat washer 3/8" dia. hole	1	O/L
10	Auger	1	102100
11	Bearing 1.00" dia.	2	102755
12	Bolt 5/16 X 3/4"	2	O/L
13	Flange nut 5/16"	12	O/L
14	Hex bolt 3/8 X 1 1/2"	4	O/L
15	Key 1/4 X 1/4 X 1 3/4"	2	102327
16	Rubber latch.	2	102547
17	Belt guide stopper	1	102328
18	Hair pin 2.5mm	1	102013
19	Key 8mm X 7mm X 25mm	1	102030
20	Cutting edge	1	102101
21	Driven shaft	1	102470
22	Auger shear bolt (5mm X 0.8 X 45mm) with nylon nut	1	102038
23	Flangets	2	102212
24	Self taping screw 1/4 X 1/2"	1	O/L
25	Chain roller no 40 X 92 links with connecting link	1	102022
-	Connecting link no 40	1	102040
26	Chain guard	1	102010
27	Carriage bolt 5/16 X 3/4"	12	O/L
28	Chain guard	1	102041
29	Spacer 5/8"	1	102242
30	Idler sprocket	1	102027
31	Bolt 3/8 X 3/4"	4	O/L
32	Pulley 2.5" dia. with set screw	1	102330
33	"V" belt	2	102329
34	Pulley 8" dia. with set screw	1	102331
35	Allen set screw 5/16 X 5/16"	2	O/L
36	Idler arm	1	102537
37	Spring	1	102592
38	Spring	1	102003
39	Flat washer 7/16" dia.	4	O/L
40	Shim support	2	102886
41	Lock nut 5/16"	6	O/L

SNOWBLOWER HEAD (44" MODEL)

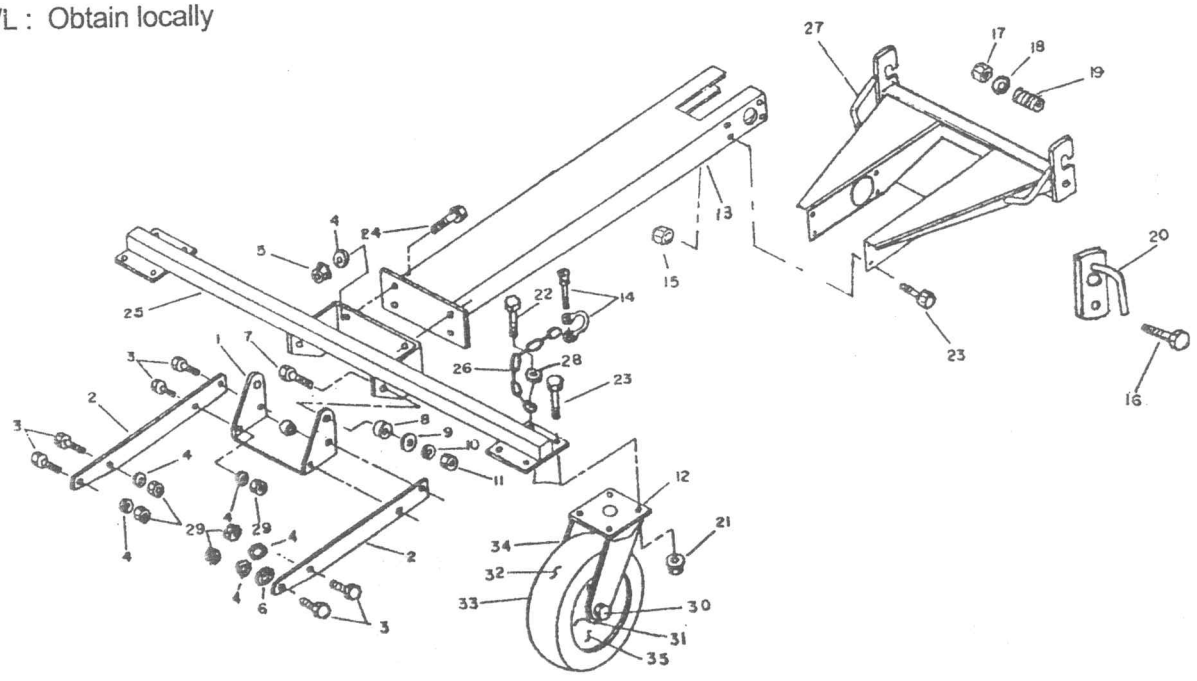
REF	DESCRIPTION	QTY	PART NO
42	Heavy duty skid shoes	2	102591
43	Wing nut 5/16"	1	O/L
44	Reduction cover	1	102556
45	Reinforcing angle	1	102133
46	Sleeve adaptor	1	102334
47	Spacer 1/4"	1	102241
48	Bolt 3/8 X 2"	2	O/L
49	Shim	2	102485
50	Sleeve 0.87" long	1	102460
51	Idler pulley	1	102548
52	Belt guard	1	102551
53	Hex bolt 5/16 X 2 1/4"	4	O/L
54	Halometer 1/8 NPT	1	O/L
55	Flanget	2	102680
56	Bearing 3/4" dia.	1	102864

* O/L : Obtain locally

PUSH FRAME ASSEMBLY

REF	DESCRIPTION	QTY	PART NO.
1	Pivot support	1	102888
2	Attaching flat bar	2	102340
3	Hex bolt 7/16 X 1 1/4"	8	O/L
4	Lock washer 7/16"	12	O/L
5	Hex nut 7/16"	4	O/L
6	Flat washer 1/2" dia. hole	1	O/L
7	Hex bolt 1/2 X 1 1/2"	2	O/L
8	Sleeve 1.00 X 0.31"	2	102308
9	Flat washer 9/16" dia. hole	2	O/L
10	Lockwasher 1/2"	2	O/L
11	Hex nut 1/2"	2	O/L
12	Caster wheel ass'y (included 102674-102675-102685-102686-102687-102688)	2	102341
13	Subframe	1	102887
14	Shackles	2	102343
15	Nylon lock nut 3/8"	8	O/L
16	Hex bolt 5/16 X 2"	2	O/L
17	Lock nut 5/16" (nylon insert)	2	O/L
18	Flat washer 5/16" dia.	2	O/L
19	Spring	2	102892
20	Handle lock	2	102891
21	Flange nut 3/8"	8	O/L
22	Hex bolt 3/8 X 1.00"	2	O/L
23	Hex bolt 3/8 X 3/4"	14	O/L
24	Hex bolt 7/16 X 1"	4	O/L
25	Wheel support	1	102889
26	Chain 3/16 X 32"	2	102544
27	Subframe extension	1	102890
28	Flat washer 7/16"	2	O/L
29	Nylon locknut 7/16"	8	O/L
30	Axle bolt & nut	1	102685
31	Bearing only	2	102688
32	Inner tube 250 x 4	1	102675
33	Tire 2.80 x 4	1	102674
34	Fork assembly	1	102686
35	Rim and bearing	1	102687

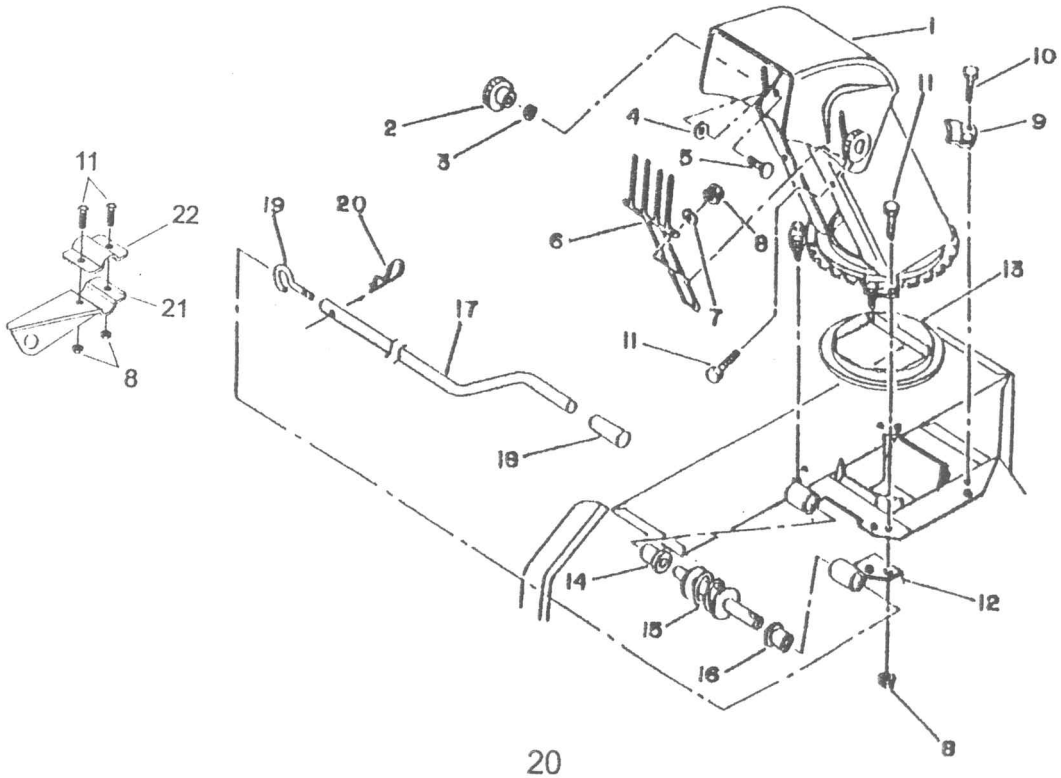
* O/L : Obtain locally



ROTATION SYSTEM WITH CHUTE

REF	DESCRIPTION	QTY	PART NO.
1	Chute and deflector	1	102058
2	Knob 5/16"	2	102020
3	Nylon flat washer 11/32" dia. hole	2	102009
4	Nylon flat washer 7/16" dia. hole	2	102011
5	Carriage bolt 5/16" X 3/4"	2	O/L
6	Hand guard	1	102012
7	Flat washer 5/16" dia. hole	2	O/L
8	Flange nut 1/4"	12	O/L
9	Retaining plate	4	102007
10	Bolt 1/4 X 1/2"	6	O/L
11	Bolt 1/4 X 3/4"	6	O/L
12	Worm support	1	102014
13	Rotation ring	1	102016
14	Plastic bushing 1 5/16"	1	102060
15	Rotation worm (cw)	1	102005
16	Plastic bushing 1 11/16"	1	102059
17	Handle	1	102061
18	Handle grip	1	102062
19	Handle hook	1	102006
20	Hair pin 2.5mm	1	102013
21	Handle support	1	103067
22	Support fixation	1	103068

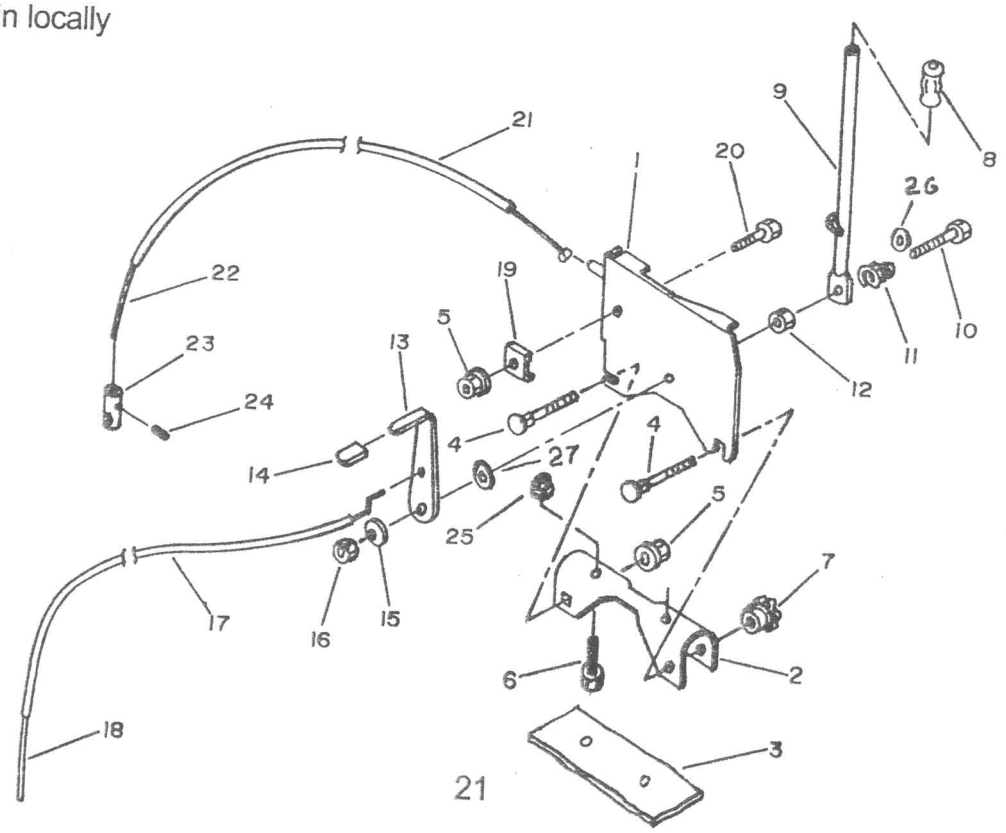
* O/L: Obtain locally



MANUAL CLUTCH MECHANISM

REF	DESCRIPTION	QTY	PART NO.
1	Clutch support	1	102534
2	Clutch fixture	1	102542
3	Rubber pad	1	102545
4	Carriage bolt 5/16 X 1 3/4"	2	O/L
5	Flange nut 5/16"	2	O/L
6	Hex bolt 1/4 X 1 1/4"	2	O/L
7	Knob 5/16"	1	102020
8	Handle grip	1	102062
9	Clutch arm	1	102536
10	Hex bolt 5/16 X 1 3/4"	1	O/L
11	Spring	1	102302
12	Hex nut 5/16"	1	O/L
13	Throttle arm	1	102541
14	Handle grip	1	102546
15	Bellville washer 3/8" dia.	1	102144
16	Stover nut 5/16"	1	O/L
17	Cable shield 5mm	1	102557
18	Inner wire 1.5mm	1	102540
19	Spring fixation	1	102210
20	Hex bolt 5/16 X 3/4"	1	O/L
21	Cable shield 6mm	1	102539 104302
22	Inner cable 2mm	1	102538 104301
23	Cable end	1	102543
24	Allen set screw 1/4 X 1/4"	1	O/L
25	Flange nut 1/4"	2	O/L
26	Flatwasher 5/16" hole dia.	1	O/L
27	Flatwasher 3/8" hole dia.	1	O/L

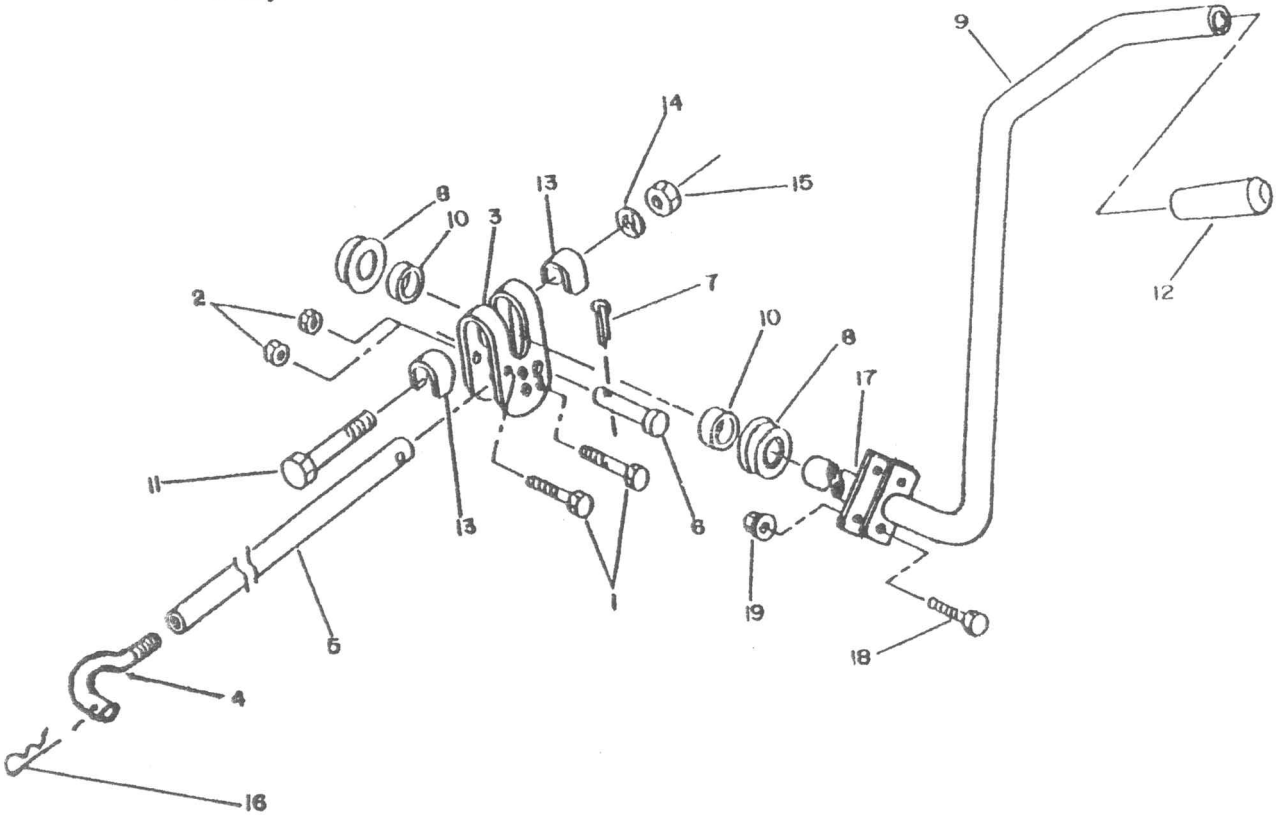
O/L : Obtain locally



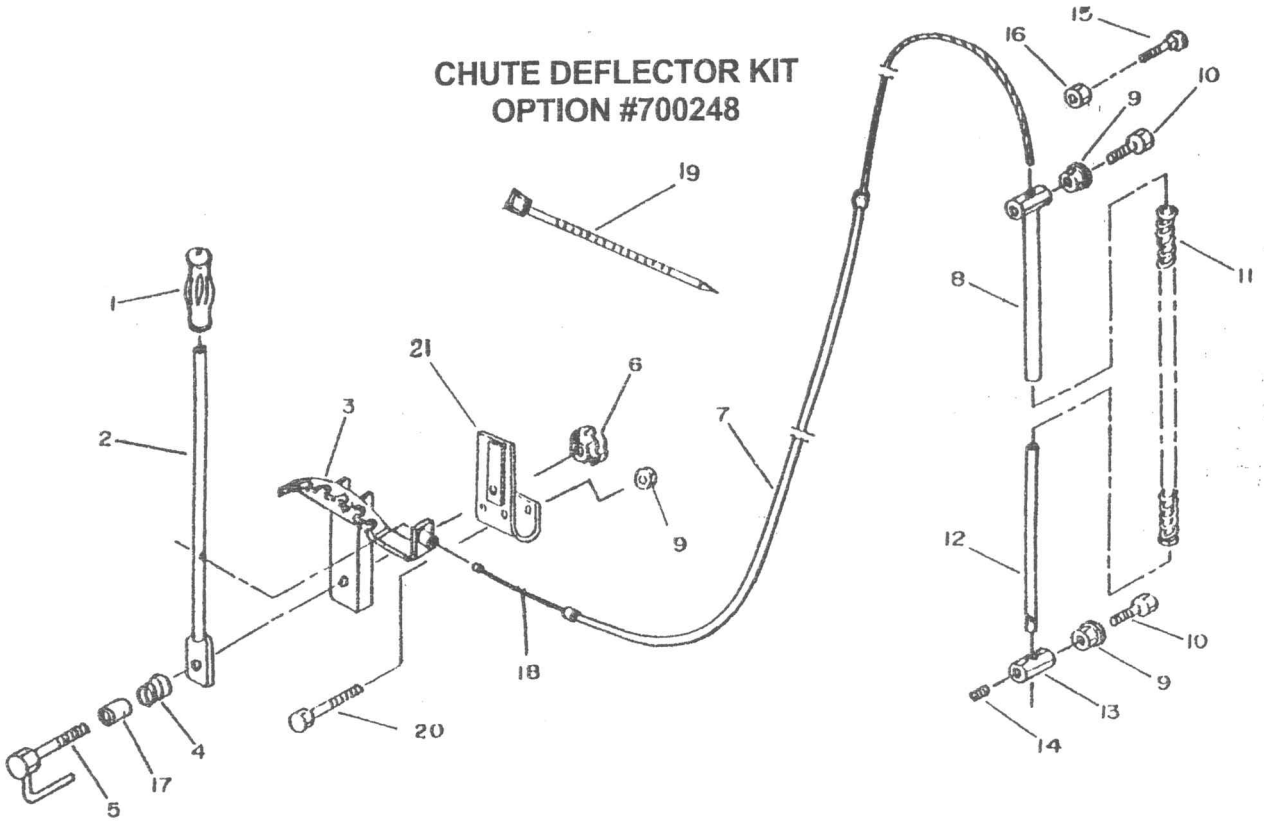
MANUAL LIFT MECHANISM ASSEMBLY
(OPTION #700250)

REF	DESCRIPTION	QTY	PART NO.
1	Hex bolt 3/8 X 2 1/4"	2	O/L
2	Stover lock nut 3/8"	2	O/L
3	Lift lever	1	102072
4	Adjustment rod	1	102653
5	Push arm	1	102349
6	Pin 17/32 X 2 1/4"	1	102079
7	Cotter pin 5/32 dia. X 1"	1	O/L
8	Bearing flange	2	102075
9	Lift arm	1	102461
10	Tube spacer	2	102351
11	Bolt 5/8 X 4"	1	O/L
12	Handle grip	1	102025
13	Bent retainer plate	2	102078
14	Lock washer 5/8"	1	O/L
15	Nut 5/8"	1	O/L
16	Hair pin 3mm dia.	1	102617
17	Lift arm extension	1	102406
18	hex bolt 5/16 X 3/4"	2	O/L
19	Flange nut 5/16"	2	O/L

* O/L : Obtain locally



CHUTE DEFLECTOR KIT
OPTION #700248



REF.	DESCRIPTION	QTY	PARTS NO
1	Handle grip	1	102062
2	Deflector arm	1	102230
3	Arm support	1	102233
4	Cone spring	1	102302
5	Special bolts 5/16 x 2"	1	102567
6	Knob 5/16"	1	102020
7	Cable shield	1	102539
8	Top actuator rod	1	102235
9	Flange nut 1/4"	4	O/L
10	Bolt 1/4 x 1/2"	2	O/L
11	Spring	1	102301
12	Bottom actuator	1	102236
13	Actuator nut	1	102234
14	Allen set screw 1/4 x 1/4"	1	O/L
15	Carriage bolt 5/16 x 3/4"	2	O/L
16	Stover lock nut 5/16"	2	O/L
17	Sleeve	1	102465
18	Inner cable	1	103039
19	Cable tie wrap 6"	1	O/L
20	Hex bolt 1/4 x 1 1/2"	2	O/L
21	A.T.V. support	1	102562

*O/L = Obtain locally

TORQUE SPECIFICATION TABLE

GENERAL TORQUE SPECIFICATION TABLE (Revised 2-74)
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 engine 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.

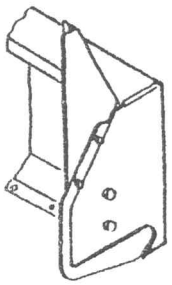
SEE Grade No.		2				5				8 *			
BOLT HEAD INDENTIFICATION MARKS AS PER GRADE - NOTE: MANUFACTURING MARKS WILL VARY		TORQUE				TORQUE				TORQUE			
BOLT SIZE		POUNDS FEET		NEWTON-METERS		POUNDS FEET		NEWTON-METERS		POUNDS FEET		NEWTON-METERS	
Inches	Milimeter	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4"	6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16"	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8"	9.53	20	23	27.1	31.2	35	42	47.5	57.0	45	54	61.0	73.2
7/16"	11.11	30	25	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2"	12.7	45	52	61.0	70.5	80	96	108.5	130.2	110	132	149.2	179.0
9/16"	14.29	65	75	88.1	101.6	110	132	149.2	179.0	160	192	217.0	260.4
5/8"	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358.0
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	271.0	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
1 1/8"	25.58	-		-		800	880	1084.8	1193.3	1280	1440	1735.7	1952.6
1 1/4"	31.75	-		-		1120	1240	1518.7	1681.4	1820	2000	2467.9	2712.0
1 3/8"	34.93	-		-		1460	1680	1979.8	2278.1	2380	2720	3227.3	3688.3
1 1/2"	38.1	-		-		1940	2200	2630.6	2983.2	3160	3560	4285.0	4827.4

THICK NUTS MUST BE USED WITH GRADE 8 BOLTS

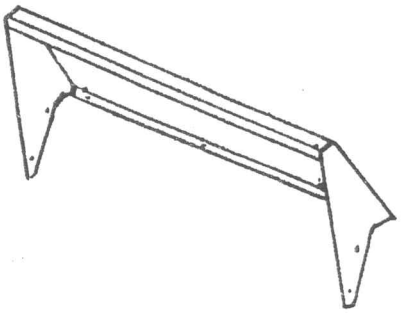
METRIC BOLT TORQUE SPECIFICATIONS

Size Screw	Grade No.	COARSE THREAD			FINE THREAD		
		Pitch (mm)	Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	4T	1.00	3.6-5.8	4.9-7.9	-	-	-
	7T		5.8-9.4	7.9-12.7		-	-
	8T		7.2-10	9.8-13.6		-	-
M8	4T	1.25	7.2-14	9.8-19	1.00	12-17	16.3-23
	7T		17-22	23-29.8		19-27	25.7-36.6
	8T		20-26	27.1-35.2		22-31	29.8-42
M10	4T	1.50	20-25	27.1-33.9	1.25	20-29	27.1-39.3
	7T		34-40	46.1-54.2		35-47	47.4-63.7
	8T		38-46	51.5-62.3		40-52	54.2-70.5
M12	4T	1.75	28-34	37.9-46.1	1.25	31-41	42-55.6
	7T		51-59	69.1-79.9		56-68	75.9-92.1
	8T		57-66	77.2-89.4		62-75	84-101.6
M14	4T	2.00	49-56	66.4-75.9	1.50	52-64	70.5-86.7
	7T		81-93	109.8-126		90-106	122-143.6
	8T		96-109	130.1-147.7		107-124	145-168
M16	4T	2.00	67-77	90.8-104.3	1.50	69-83	93.5-112.5
	7T		116-130	157.2-176.2		120-138	162.6-187
	8T		129-145	174.8-196.5		140-158	189.7-214.1
M18	4T	2.00	88-100	119.2-136	1.50	100-117	136-158.5
	7T		150-168	203.3-227.6		177-199	239.8-269.6
	8T		175-194	237.1-262.9		202-231	273.7-313
M20	4T	2.50	108-130	146.3-176.2	1.50	132-150	178.9-203.3
	7T		186-205	252-277.8		206-242	279.1-327.9
	8T		213-249	288.6-337.4		246-289	333.3-391.6

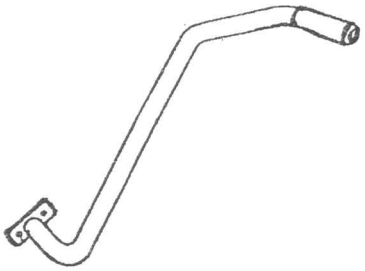
AVAILABLE OPTIONS



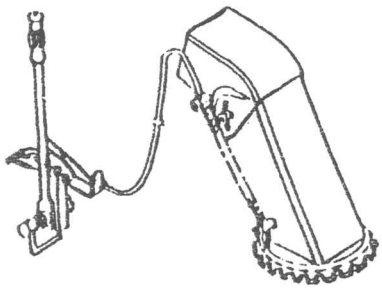
 # 700261 SNOW DRIFT CUTTER
Slices through high snow drifts to facilitate and increase snow intake - pkg of 2.



 # 700241 BODY EXTENSION 10"
Increase snow intake. Prevents snow from getting in motor.

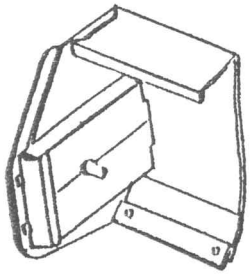


 # 700250 MANUAL LIFT KIT
Raise the snowblower from the driver seat

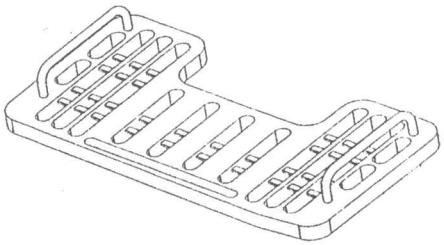


 # 700248 CHUTE DEFLECTOR KIT
Adjusts chute deflector from driver's seat.

 # 700269 WINCH KIT
Doubles winch's lift and brake capacity.



 # 700242 FULL CHAIN GUARD
Full guard to completely protect chain.



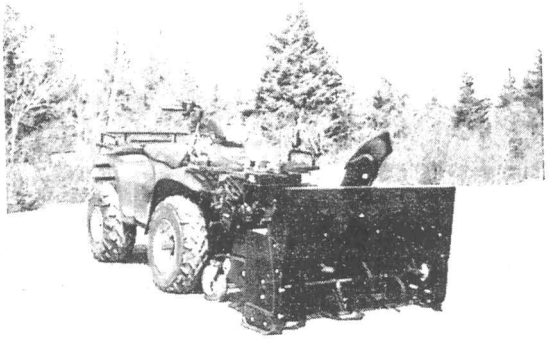
 # 700270 MINI RACK EXTENSION
For « Polaris » A.T.V.s.

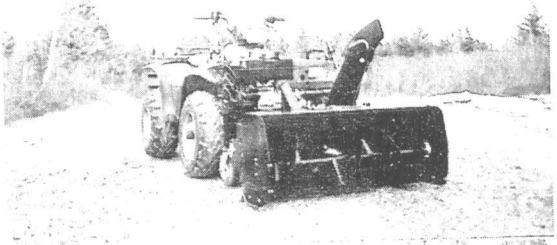
MOUNTING BRACKET CHART

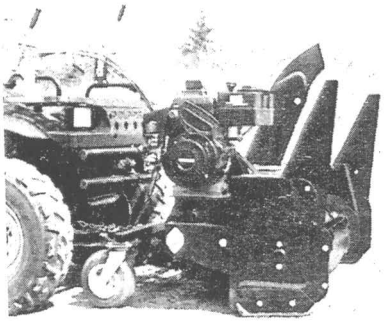
BRAND	MODEL	QUICK HITCH BRACKET
Arctic Cat	Bearcat 500 – 4 x 4 1998	073017
	Bearcat 454 – 4 x 4 1996–98	073017
	Bearcat 400 – 4 x 4 1998	073017
	Bearcat 300 – 4 x 4 1998	073017
Bombardier	Traxter 500 – 4 x 4 1998	073100
Honda	Foreman 450 ES - 4 x 4 1998	073221
	Foreman 450 S – 4 x 4 1998	073210
	Foreman 400 – 4 x 4 1995-98	073210
	TRX 300 FW – 1988-98	073211
Kawasaki	Prairie 400 – 4 x4 1997-98	073392
	Bayou 400 – 4 x 4 1993-98	073393
	Bayou 300 – 4 x 4 1989-98	073394
Polaris	Explorer 500 – 4 x 4 1997	073400
	Sportsman 500 – 4 x 4 1996-98	073400
	Magnum 425 – 4 x 4 1995-98	073402
	Sportsman 400 – 4 x 4 1994-97	073402
	Explorer 400 – 4 x 4 1998	073403
Suzuki	Quadrunner 500 – 4 x 4 1998	073609
	King Quad 300 – 4 x 4 1991-98	073600
Yamaha	Grizzly 600 – 4 x 4 1998	073707
	Kodiak 400 – 4 x 4 1993-98	073706
	Big Bear. SE – 4 x 4 1995-98 10sp	073706
	Big Bear 350 – 4 x 4 1997-98 5sp	073711
	Wolverine 350 – 4 x 4 1995-98	073705

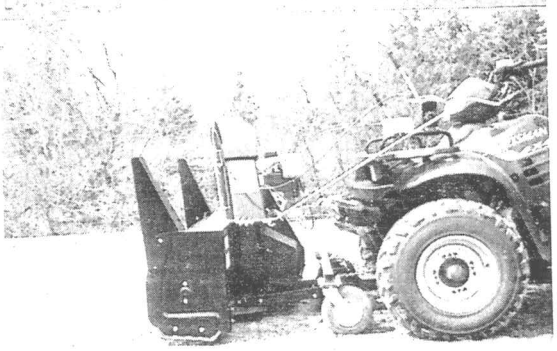
REFERENCE PHOTOS

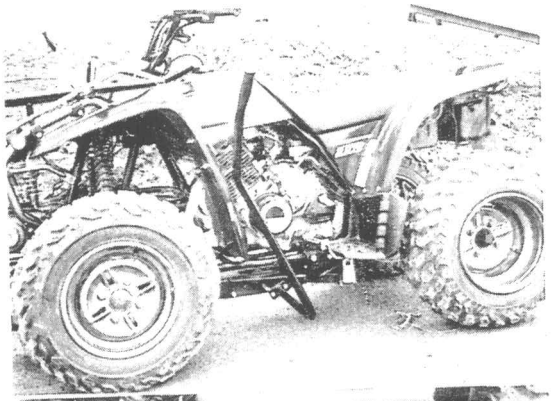
Certain photos Include optional kits described on page 25.
Certaines photos démontrent des options décrites à la page 16.

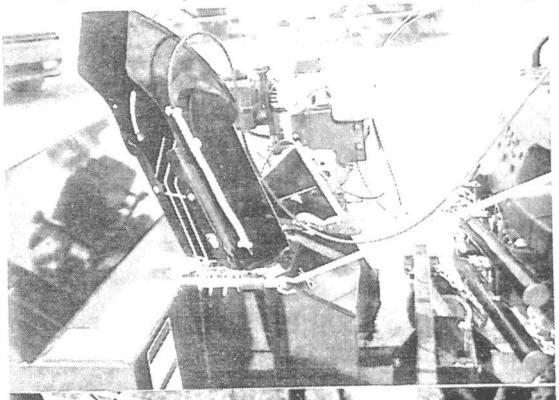


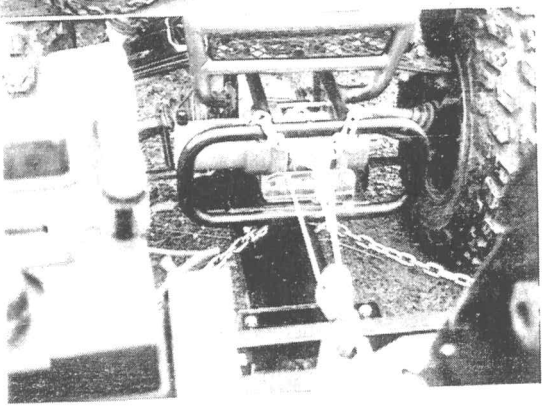


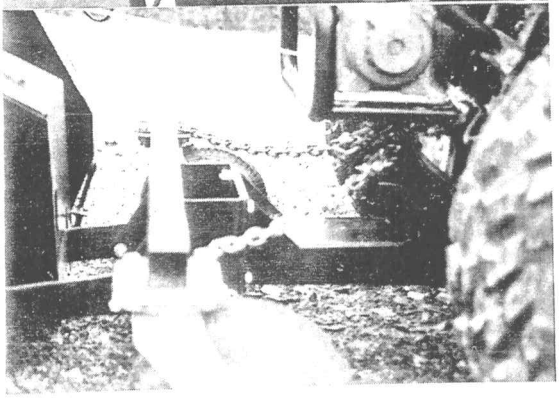












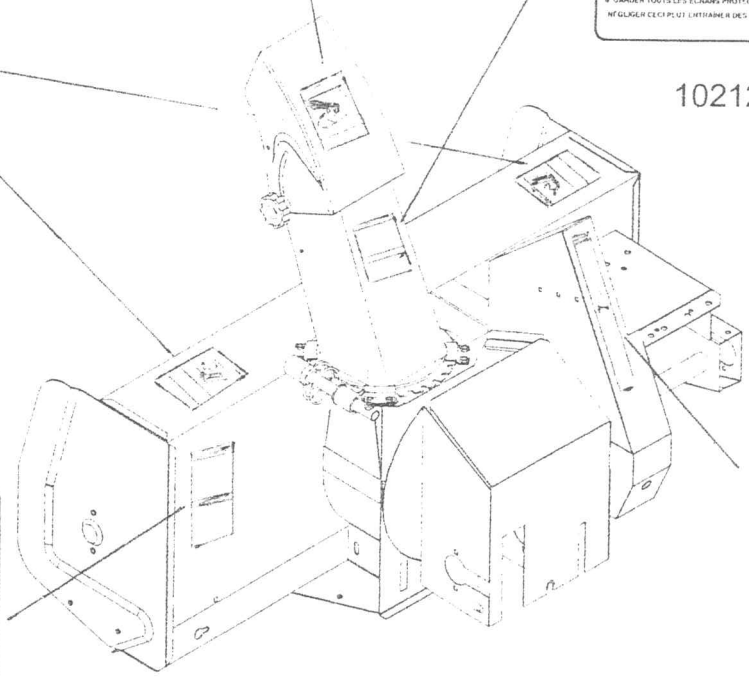
SAFETY DECALS - DECALQUES SECURITAIRES

REPLACE IMMEDIATELY IF DAMAGED-REMPLACEZ IMMEDIATEMENT SI ENDOMMAGES

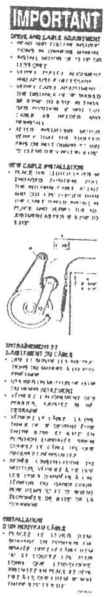
102126

102127

102125



102553



102671