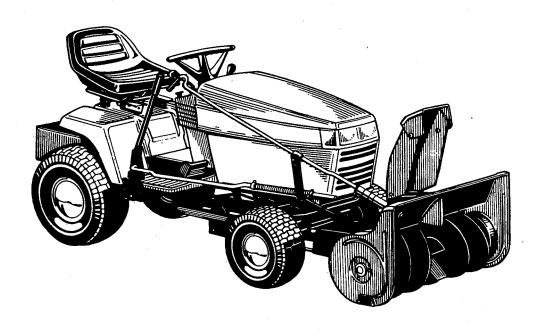
OPERATOR'S MANUAL 36" & 42" SNOWTHROWERS



FORM — 1704745-02 PRINTED IN U.S.A. 9/90 36" SNOWTHROWER
MFG. NO. 1691521
42" SNOWTHROWER
MFG. NO. 1691522
HITCH
MFG. NO. 1691829

TORQUE SPECIFICATIONS FOR STANDARD MACHINE HARDWARE TOLERANCE ± 10%

SIZE	SAE GRADE #2		SAE GRADE #2 SAE GRADE #5		SAE GRADE #8	
8-32	19	In. Lbs.	30	In. Lbs.	41	In. Lbs.
8-36	20	,,	31	"	43	,,
10-24	27		43	"	60	"
10-32	31	"	49	"	68	"
1/4-20	66	"	8	Ft. Lbs	12	Ft. Lbs.
1/4-28	76	"	10	"	14	,,
5/16-18	11	Ft. Lbs	17	"	25	"
5/16-24	12	ıı .	19	"	25	**
3/8-16	20	"	30	"	45	"
3/8-24	23	"	35	<i>.</i>	50	"
7/16-14	30	"	50	"	70	"
7/16-20	35	"	55	"	80	"
1/2-13	50	**	75	· • • • • • • • • • • • • • • • • • • •	110	"
1/2-20	55	,,	90		120	"
9/16-20	65	. "	110	"	150	"
9/16-18	75	,,	120	. "	170	"
5/8-11	90	"	150		220	"
5/8-18	100	"	180	"	240	"
3/4-10	160	"	260	" .	386	"
3/4-16	180		300	"	420	" .
7/8-9	140	,,	400	<i>"</i>	600	"
7/8-14	155	ii.	440	"	660	"
1-8	220	"	580	"	900	"
1-12	240	"	640	"	1,000	"

NOTES:

- 1. These torque values are to be used for all Simplicity hardware excluding: locknuts, self-tapping screws, thread forming screws, and sheet metal screws.
- 2. Unless otherwise noted on assembly drawings all torque values must meet this specification.

BOLT HEAD MARKING S.A.E. GRADE:

2

5

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Contents

SAFETY DECALS	
ACCESSORIES	1
SAFETY RULES	2
INSTALLATION & REMOVAL	3
OPERATION	5
NORMAL CARE	7
TROUBLESHOOTING & BELT REPLACEMENT	9
ADJUSTMENTS	10
ASSEMBLY	12
TIRE CHAIN INSTALLATION	14
SPECIFICATIONS	16
IDENTIFICATION	16

Safety Decals





A CAUTION TO AVOID POSSIBLE INJURY

- REFER TO OPERATOR'S MANUAL FOR SAFETY DO NOT USE HANDS TO UNPLUG CHUTE OR AND OPERATING INSTRUCTIONS.
- KEEP ALL GUARDS AND SHIELDS IN PLACE. STOP ENGINE, REMOVE KEY, AND BE SURE ALL MOVING PARTS HAVE COME TO A COMPLETE STOP BEFORE SERVICING OR

UNPLUGGING.

- ALWAYS DIRECT DISCHARGE SO AS TO AVOID INJURY OR DAMAGE TO PERSONS OR PROPERTY.
- NEVER ALLOW ANYONE IN FRONT OF OPERATING MACHINE.



SPRING IS UNDER TENSION. RAISE SNOW-THROWER BEFORE PULLING LEVER BACK TO DISCONNECT SPRING.

Accessories

Tire chains and a weight box (1691838) are recommended. These accessories will improve traction, thereby making the snowthrower more efficient. For additional traction, one wheel weight per wheel is recommended. Weight added to tractor should not exceed 35 lbs. per wheel weight and 100 lbs. additional weight with the weight

For operation on slopes greater than 15 percent (8.5°) weight box, tire chains, and wheel weights are required. Never operate on slopes greater than 30 percent (16.7°).

A lift lever (1691832) is required (may already be on tractor).

See your dealer to purchase any accessory.

Safety Rules



Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury to yourself or bystanders, or damage to property or equipment.

The triangle in the text signifies important cuations and warnings which must be followed.



ALL WARNING, CAUTION and instructional messages on this attachment and on your tractor should be carefully read and obeyed. Personal bodily injury can result when these instructions are not followed.



If the auger stalls or the chute plugs, DISEN-GAGE THE ELECTRIC CLUTCH, STOP THE ENGINE AND REMOVE THE KEY. SET THE PARKING BRAKE. WAIT FOR MOVING PARTS TO STOP. Remove the foreign object or clear the spout with piece of wood before restarting the engine. Never place hands into auger housing or spout to clear jammed object. Auger may rotate when object is removed.

GENERAL

- Read this manual and the tractor Operator's Manual carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- Never pull the spring-assist tension lever back unless snowthrower is in raised position. The spring is under tension when snowthrower is in lowered position.
- Never allow children to operate the machine.
 Do not allow adults to operate it without proper instruction.
- Do not carry passengers.
- Use only attachments or accessories designed for your machine. See your dealer for a complete list of recommended attachments or accessories.
- Keep the area of operation clear of all persons, particularly small children, and pets.
- Never direct discharge toward bystanders.
- · Make sure:
 - a. all nuts and screws are tight and snowthrower is in good operating condition.
 - b. all safety devices and shields are in good working condition, and
 - c. all adjustments are correct before using unit.

PREPARATION

- Never attempt to make any adjustments while engine is running.
- Thoroughly inspect the area where the snowthrower is to be used and remove all door mats, sleds, boards, wires and other foreign objects.
- Adjust skid shoe height to clear gravel or crushed rock surface.

OPERATION

- Always clear snow up and down the face of slopes, and never across the face. Exercise extreme caution when changing direction on slopes. Do not attempt to clear steep slopes.
- Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.
- After striking an object or if unit starts to vibrate abnormally, stop the engine, disengage electric clutch, and remove the key. Check for the cause and any damage before restarting. Before inspecting make sure all moving parts have stopped.
- Take all possible precautions before leaving opertor's position. Disengage the electric clutch, lower the attachment, set the parking brake, stop the engine, and remove the key.
- Never operate snowthrower near glass enclosures, automobiles, window wells, dropoffs, etc., without proper adjustment of snow discharge angle.
- Do not overload machine capacity by attempting to clear snow at too fast a rate.
- Never operate machine at high transport speeds on slippery surfaces. Use care when backing.
- Disengage power to snowthrower when transporting or not in use.
- Never operate the snowthowwer without good visibility or light. Always be sure your feet are properly placed on the foot rests and keep a firm hold on the steering wheel.

Installation & Removal

INSTALLATION

NOTE

See page 12 for assembly instructions.

- Increase front tire pressure to 20 psi (138 kPa) to compensate for added weight. Be sure both tires have equal pressure.
- 2. From the front of tractor, slide the hitch under the tractor, or drive the tractor up to the hitch and position the hitch between the front tires.
- 3. Turn the wheels fully left and install the front hitch bar (A, figure 1) onto tractor brackets. Secure with long hitch pin (B) and safety clip (C).

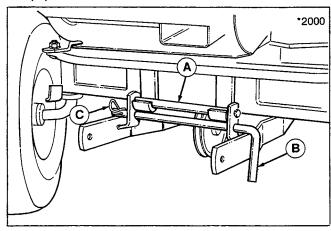


Figure 1. Install Front Hitch

A. Hitch Bar

B. Hitch Pin

C. Safety Clip

NOTE

Step 4 may have been performed during lift lever installation.

 Install the rear hitch bracket (A, figure 2) onto lift lever rod (B) as instructed in lift lever kit. Secure rear of hitch (C) with clevis pin (D) and safety clip.

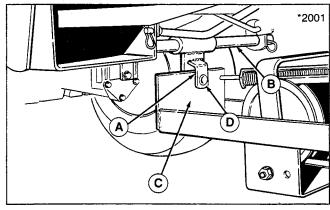


Figure 2. Install Rear Hitch

A. Rear Hitch Bracket

C. Rear Hitch

B. Lift Lever Rod

D. Clevis Pin

5. Lift up snowthrower so that spacers (A, figure 3) rest on tractor hitch arms (B). Line up snowthrower brackets with hitch arms (B). Before installing snowthrower, install belt from hitch idler pulley to snowthrower pulley (refer to figure 8). When hitch is aligned, install clevis pins (C) and safety clips (D).

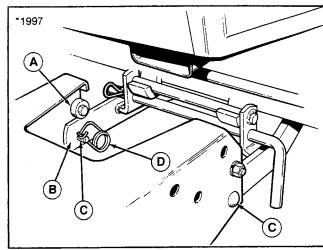


Figure 3. Install Snowthrower

- A. Spacers
- **B.** Hitch Arms
- C. Clevis Pin
- D. Safety Clips
 - 6. Place the lift lever in the fully forward position. Install the lift rod to the lever and secure with spring clip. Install the lift rod to the snowthrower bracket as shown in figure 4. Secure with spring clip. Raise the snowthrower to the transport position.

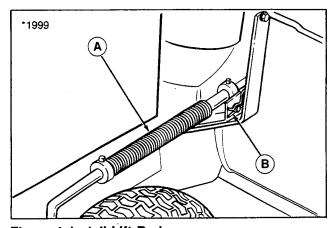


Figure 4. Install Lift Rod

A. Lift Rod

B. Spring Clip

NOTE

4-link chain replaces 3-link chain packaged with snowthrower.

NOTE

On single cylinder tractors, clevis pin (B, figure 5) must be installed to bracket before mounting on tractor frame.

7. Place snowthrower in down position. Install the spring-assist bracket (A, figure 5) to tractor frame (bracket is mounted underneath frame). Secure with capscrew (from top), lockwasher, and nut. Place clevis pin (B) through bracket and install flat washer, chain (C), flat washer, and safety clip.

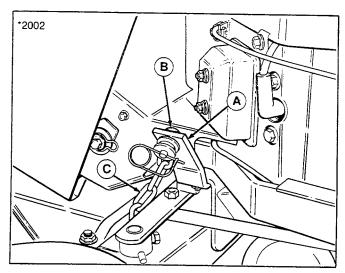


Figure 5. Install Spring Assist Bracket

A. Bracket

B. Clevis Pin

C. 4-Link Chain

8. Snowthrower must be in fully raised position. Place spring-assist lever (A, figure 6) in rearward position. Install spring to 4-link chain and lever as shown in figure 6. Rotate the lever forward so that it travels "over center" to the fully forward position. Lower the snowthrower.

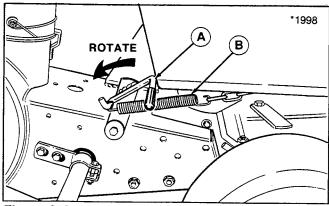


Figure 6. Install Spring A. Spring-Assist Lever

B. Spring

9. Check the belt routing around the snowthrower pulley, idler pulley, and hitch pulleys. Refer to figure 8. To install belt around electric clutch pulley, the trunion (A, figure 7) on the tension spring assembly (B) must be fully forward. If it is not, turn handle (C) to move trunion forward. Install the belt and turn handle so that trunion is centered between marks to ensure proper belt tension.

NOTE

If trunnion (A) cannot be centered between marks, loosen capscrew (D) and reposition pulley (E) rearward. Retighten capscrew and center trunnion.

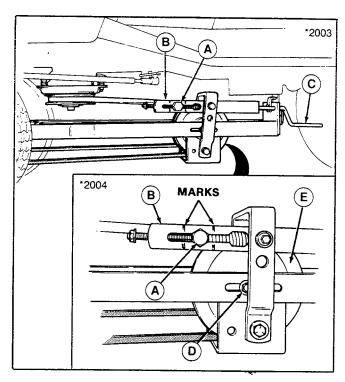


Figure 7. Install Belt

- A. Trunion
- **B.** Tension Spring Assembly
- C. Handle
- D. Capscrew
- E. Pulley

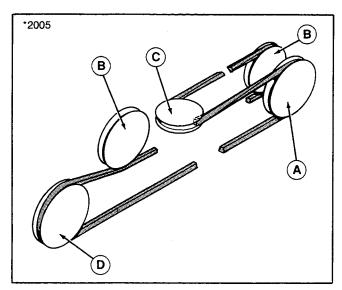


Figure 8. Belt Routing

- A. V-Pulley
- **B.** Idler Pulley
- C. Electric Clutch Pulley (V-Pulley)
- D. Snowthrower Pulley (V-Pulley

REMOVAL

- 1. Remove the snowthrower by reversing the above steps. Note the following two points:
 - Use caution when removing spring from chain and spring-assist lever. Snowthrower must be in fully raised position to relieve spring tension.
 - b. Always remove chain (C, figure 4) from spring-assist bracket (A) to prevent interference with front steering components. Reinstall washers on clevis pin and secure with safety clip.
 - c. Whenever removed, install clevis/hitch pins and clips onto snowthrower and hitch for storage.

Operation

CONTROLS

Figure 9 shows the locations, names, and operation of the snowthrower controls.

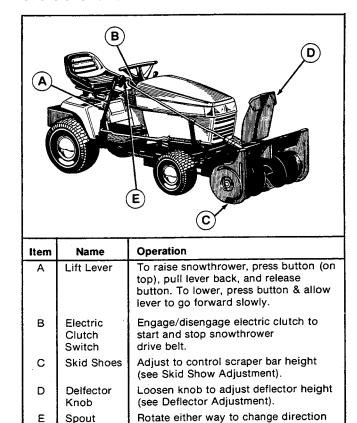


Figure 9. Controls

Control

CHECKS BEFORE STARTING

1. Refer to the Normal Care section and perform any needed care. Also, refer to the tractor Operator's manual Normal Care section to perform any needed care for the tractor.

of snow discharge.

- 2. Remove any objects from the work area which might be caught in or thrown by the auger.
- 3. Clear the auger of any ice particles which may cause damage to auger.
- Adjust the deflector and skid shoes to desired height (see Skid Shoe Adjustment and Deflector Adjustment).
- 5. Make sure all screws, nuts and pins are present and secure.

TRANSPORTING

Disengage the electric clutch and then raise the snowthrower. Adjust ground speed according to surface conditions. Select a low ground speed when transporting on a slippery surface.

ENGINE & GROUND SPEED SELECTION

Normally, a low ground speed is best for throwing snow. Engine should be run at full throttle to ensure battery charging in winter. When throwing deep or heavy snow, select a low ground speed and use full engine speed.

OPERATION ON SLOPES



Never operate on slopes greater than 30 percent (16.7°) which is a rise of three feet (.9 m) vertically in 10 feet (3.1 m) horizontally. When operating on slopes greater than 15 percent (8.5°) one wheel weight on each rear wheel and tire chains are required. Select slow ground speed before driving onto a slope. Avoid using brakes to control speed. Drive up and down the face of slopes, and never across the face. Use caution when changing directions and DO NOT STOP OR START.

STARTING & STOPPING

- 1. Start the tractor engine. Set engine speed at 1/2 speed.
- 2. Lower the snowthrower.
- 3. Engage the electric clutch switch.
- 4. Adjust engine speed to 3/4 to full speed. Select the appropriate ground speed range.
- 5. To stop the tractor, depress the clutch-brake pedal. To stop the snowthrower, disengage the electric clutch. Before leaving the seat, stop the engine, disengage the electric clutch, set the parking brake, remove the key and wait for moving parts to stop.

SNOW REMOVAL SUGGESTIONS



CAUTION

Always raise the snowthrower before turning or backing to prevent damage to it.

Determine the best snow removal pattern before beginning. Wind direction is an important factor to consider. Rotate the spout to discharge snow downwind. Plan the pattern so that you avoid throwing snow on cleared areas and on yourself as you are operating.

When land contour permits, it is best to travel in the longest direction to minimize turning.

WARNING

If the auger stalls or the chute plugs, DISENGAGE THE ELECTRIC CLUTCH, STOP THE ENGINE AND REMOVE THE KEY. SET THE PARKING BRAKE. WAIT FOR MOVING PARTS TO STOP. Remove the foreign object or clear the spout with piece of wood before restarting engine. Never place hands into auger housing or spout to clear jammed object. Auger may rotate when object is removed.

In very deep or heavy snow, it may be necessary to make the first pass with snowthrower partially raised, backing up every few feet to clear the snow left on the surface. Also, it may be necessary to slice off less than the full width of the auger or to reduce ground speed. If the snow stops flowing freely from the spout, use reverse to back away until snowthrower clears itself.

Normal Care

SCHEDULE FOR NORMAL CARE

A schedule for normal care is provided in the following chart.

Care Required	Schedule	
Clean snow and ice from snowthrower.	After each use.	
Lubricate snowthrower.	Every 10 hours or at least once a year.	
Adjust belt tension.	Every 25 hours or at least once a year.	
Inspect, adjust, and lubricate drive chain.	Once a year or more often under frequent use.	

Normal Care Chart

INSPECT, ADJUST & LUBRICATE DRIVE CHAIN

- 1. Remove the chain guard (E, figure 10) by removing the two nuts (F).
- 2. Check the chain for wear or damage. Replace chain if worn or damaged.
- There should be no slack in the chain and the sprockets (G and K) should be aligned. The drive shaft housing (L) should be parallel with the auger housing. To adjust, proceed as follows.
 - a. Loosen the four screws (A).
 - b. Pull rearward on the drive shaft housing (L) until all slack is removed from chain. With drive shaft housing parallel to auger housing and sprockets aligned, retighten the four screws. Be sure to hold nuts while tightening screws (A) and hold screws (inside housing) while tightening nuts (B). Torque to 40-50 ft. lbs.
 - d. Spread a coat of grease on the chain, working the grease into the links.
 - e. Reinstall the chain guard and two nuts.

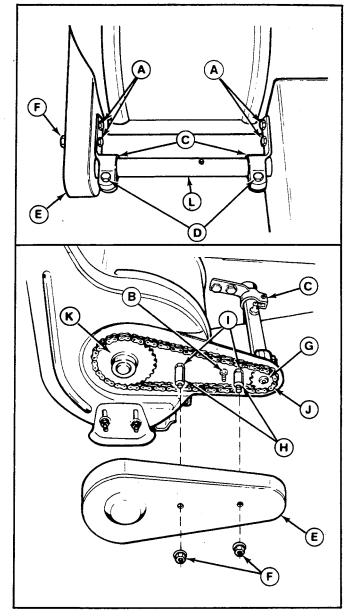


Figure 10. Drive Chain

- A. Screws
- B. Flange Nut
- C. Clamps
- D. Screw
- E. Chain Guard
- F. Nuts
- G. Drive Shaft Sprocket
- H. Spacers
- I. Nuts
- J. Chain
- K. Auger Sprocket
- L. Drive Shaft Housing

LUBRICATE SNOWTHROWER

- Apply a thin film of grease or a few drops of oil to:
 - a. Spout Rotating Surface (shown in figure 11);
 and
 - b. Hitch Mounting Pins.
- 2. Lubricate drive shaft and auger shaft as shown in figure 11.

OFF-SEASON STORAGE

- 1. Remove the snowthrower from the tractor.
- 2. Use water pressure or a brush to thoroughly clean the housing.
- 3. Paint or lightly coat with oil any area where paint has been worn or chipped away.
- 4. Lubricate the snowthrower.
- 5. To save space, the hitch can be removed from the snowthrower by removing two pins and spring clips and by removing the belt guide and belt from the snowthrower pulley.

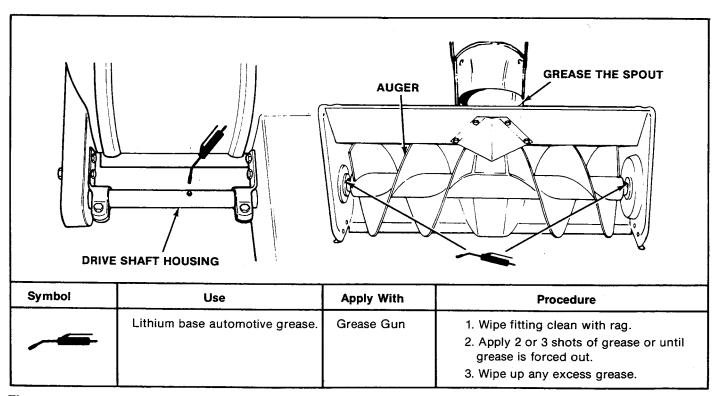


Figure 11. Lubricate Drive Shaft & Auger Shaft

Troubleshooting & Belt Replacement

WARNING

To avoid serious injury, perform maintenance on the tractor or snowthrower only when the engine is stopped, parking brake is set, and all moving parts have stopped. Always remove the ignition key before beginning the maintenance to prevent accidental starting of the engine.

TROUBLESHOOTING

Locate the problem you've encountered in the Troubleshooting Chart. Check the possible causes one at a time in the order listed. Correct any problems that are found and operate the snowthrower to see if you have eliminated the problem.

Problem 1. Snowthrower auger does not rotate.		Cause/Remedy		
		Electric clutch not engaged. Engage electric clutch. See Operation section.		
	В.	Foreign material blocking auger. STOP engine. Remove key. Unplug auger with piece of wood. Read WARNING, page 6.		
	C.	Snowthrower drive belt slipping. Adjust drive belt tension. See Adjustment section.		
	D.	Drive chain broken. Replace parts as necessary.		
2. Auger rotates, but snow not thrown far enough.	A.	Engine RPM too slow. Operate engine at 3/4 to full throttle.		
	₿.	Ground speed too fast. Use low ground speed.		
	C.	Snowthrower discharge spout clogged. STOP engine. Remove key. Unplug discharge spout.		
3. Scraper bar does not clean down to on hard surface.	A.	Skid shoes not properly adjusted. Adjust skid shoes. See Adjustments section.		
4. Snowthrower picks up and throws stones on gravel drive.	A.	Skid shoes not properly adjusted for gravel surface. Adjust skid shoes. See Adjustments section.		
	В.	Too much down pressure on snowthrower. Use the tractor lift lever to raise the snowthrower slightly. See Operation section.		
5. Tractor does not have sufficient traction.		Tractor too light at rear wheels. See recommended accessories on page 1.		
6. Tractor not stable on sloping surfaces.	A.	Ground speed too fast. Reduce ground speed.		
	В.	Tractor not properly weighted. See recommended accessories on page 1.		
	C.	Tire pressure incorrect. Front tires should be inflated to 20 psi (138 kPa) for snowthrower use.		
	D.	Slope grade is too steep. Refer to "Operation on Slopes" warning on page 6.		
7. Auger does not stop when electric clutch is disengaged.		Electric clutch brake not operating properly. See your dealer for adjustment/repair.		

Troubleshooting Chart

BELT REPLACEMENT

- 1. Remove the snowthrower from the tractor.
- 2. Remove the belt from the pulley inside the snowthrower.
- 3. Loosen the lockwashers and nuts securing two belt stops (A,figure 12) on idler pulleys.
- 4. Install new belt as shown in figure 12.
- 5. Retighten belt stops as shown in figure 12.

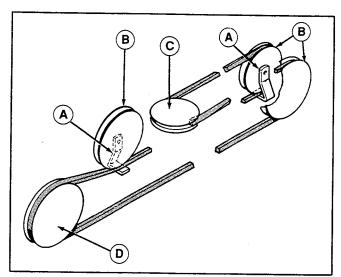


Figure 12.

- A. Belt Stops
- **B. Idler Pulleys**
- C. Electric Clutch Pulley (V-Pulley)
- D. Snowthrower Pulley (V-Pulley)
- E. V-Pulley

Adjustments



Before performing adjustments, stop the engine and remove the key. Place tractor and snowthrower on a level surface. Engage the vehicle parking brake. Wait for all moving parts to stop.

BELT TENSION ADJUSTMENT

- With the snowthrower drive belt installed, trunion (A, figure 13) should be between marks on spring-tension bracket (B) for correct belt tension.
- Turn belt tension handle (C) to move trunion forward or rearward until in correct range (between marks).

 If trunion cannot be placed between marks, loosen capscrew (D) and reposition idler pulley (E) forward or back. The pivot bracket (F) should be perpendicular to snowthrower hitch. Retighten capscrew and repeat step 2.

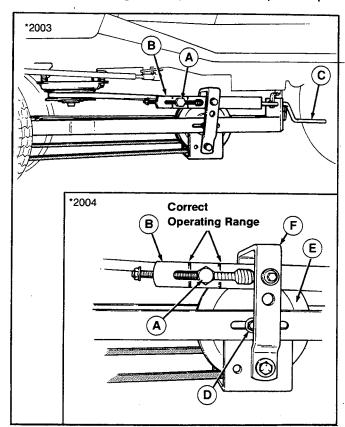


Figure 13. Adjust Belt Tension

- A. Trunion
- **B. Spring Tension Bracket**
- C. Handle
- D. Capscrew
- E. Idler Pulley
- F. Pivot Bracket

SKID SHOE ADJUSTMENT

On a smooth, hard surface such as concrete or asphalt, adjust the skid shoes so that the scraper bar rests on the surface. On a rough surface, such as gravel, adjust the skid shoes so that the scraper bar rides slightly above the surface and does not pick up debris.

To adjust, rest each side of the scraper bar on wood blocks about one inch (25 mm) high, with scraper bar level with surface. Loosen the two nuts holding each skid shoe and move the skid shoes up or down (figure 14). Tighten the nuts securely, with both skid shoes adjusted to same level and parallel to the surface.

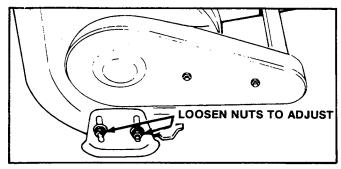


Figure 14. Adjust Skid Shoe

DEFLECTOR ADJUSTMENT

The position of the deflector determines the height and distance snow will be thrown. Most snow throwing can be done with the deflector all the way up.

To adjust, loosen the wing nut and move the deflector up or down. Retighten the wing nut.

LIFT ROD ADJUSTMENT

- Fully raise the snowthrower. Measure the clearance between the scraper bar and the ground. The clearance should be about 3-1/2 to 4 inches (89 to 102 mm). If not, perform step 2. If clearance is OK, go to step 3.
- 2. Lower the snowthrower. Loosen the setscrew in the front set collar (A, figure 15). To increase the clearance, move the set collar toward the rod guide (B). To decrease clearance, move the set collar toward front. Tighten the setscrew. Raise the snowthrower and recheck the measurement. Readjust if necessary.
- 3. The scraper blade will float over the surface bumps or dig into them depending on the down pressure adjustment. The initial adjustment made during snowthrower installation may be suitable. If not, perform step "a" to allow scraper blade to float or step "b" to increase down pressure.

- a. Fully raise the snowthrower. Loosen the setscrew in the rear set collar (D, figure 15). Move the set collar back away from spring. The farther back the set collar is moved, the more the scraper blade will float. Tighten the setscrew.
- b. Fully lower the snowthrower lift lever. Loosen the setscrew in the front set collar (A) and slide it off the lift rod. Pull the lift lever back slightly so lift rod moves back one inch or two inches. Place the spring against the rod guide. Place the rear set collar against the spring and tighten the setscrew. Fully lower the lift lever. Notice that the spring is now compressed to provide down pressure. (Spring should compress about two inches. Do not allow spring to go solid.) Place the front set collar on the rod and tighten the setscrew. Recheck the scraper bar clearance (step 1) and readjust front set collar if necessary.

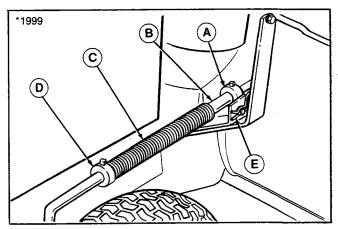


Figure 15. Adjust Lift Rod

- A. Front Set Collar
- **B.** Rod Guide
- C. Spring
- D. Rear Set Collar
- E. Spring Clip

Assembly

ATTENTION SETUP PERSONNEL:

As setup personnel you have an obligation to know the product better than the customer. This includes safety related items. Prior to actual setup, thoroughly familiarize yourself with the Operator's Manual. Pay special attention to all safety warnings. It is possible during setup to place yourself in a position which is more hazardous than when the unit is in operation. Remember, it is your responsibility to set up the product safely and to know it well enough to be able to instruct a customer in the safe use of his power unit.

Safety is a matter of common sense . . . A matter of thinking before acting. Most shops have specific safety practices. Follow them. The precautions listed in the Operator's Manual should not supersede existing practices but should be considered as supplemental information.

SNOWTHROWER ASSEMBLY

1. Attach the support arm (E, figure 16) to the snowthrower frame with two 1 inch (25.4 mm) long capscrews and flange locknuts (F) provided.

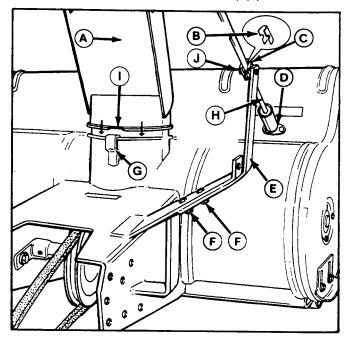


Figure 16. Install Spout & Controls

- A. Spout Extension
- B. Rod Guide Liner
- C. Rod Guide
- D. Pivot Bearing
- E. Support Arm
- F. Flange Locknuts
- G. Clip
- H. Spout Control Rod
- I. Notch
- J. Rod Guide

NOTE

In next step, do not let the bearing alone support the full weight of the rod, as the bearing can be damaged.

- 2. Insert the end of the spout control rod (H) through the plastic pivot bearing (D) on the auger housing. Place a cotter pin in the lowest rod hole on the inside of the housing. Spread the cotter pin fully around the rod. Pull the rod back so the cotter pin is up against the bearing and insert another cotter pin through the rod just above the bearing. Spread the cotter pin fully around the rod.
- 3. Place the thin plastic rod guide liner (B) inside the rod guide (J). Place the rod guide over the spout control rod and attach the rod guide to the support arm with the 1-1/2 inch (38 mm) long capscrew and locknut provided. Install the locknut flush with the end of the capscrew.
- 4. Install the spout extension (A) on the snowthrower housing so the clip (G) is positioned in the notch (I) on the spout extension. Oil the spout extension so it turns freely.
- 5. With the spout extension facing slighly left, wind the cable around the control rod spool as shown in figure 17. Wind three turns on the rear part of the spool so that the cable leaves the spool on the lower edge as shown. Wind two turns on the front part of the spool so that the cable leaves the spool on the upper edge as shown.

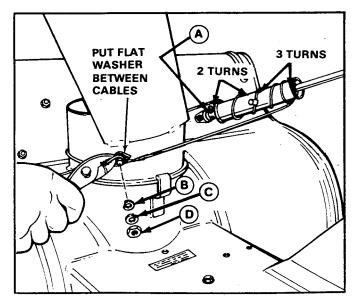


Figure 17. Install Control Cable

- A. Cotter Pin
- B. Cup Washer
- C. Lockwasher
- D. Nut

- 6. Place the looped end of the cable over the stud on the spout extension (see figure 17). Place the small flat washer provided on the stud. Pull the other end of the cable around the stud as shown with a pliers. While holding the cable tight, install the cup washer (facing inward), lockwasher and nut to hold the cable. Tape any loose cable neatly to the taut cable.
- 7. Attach the deflector (C, figure 18) to the spout extension with two screws (H), washers (G), spacers (F), washers (A), lockwashers (E) and nuts (D).
- 8. Position the bolt (I) and washer (A) and then thread the knob (B) onto the bolt (I).
- 9. Install the two snowthrower hitch brackets (A, figure 19) and secure with 1" capscrews (B) and flange locknuts (C).
- 10. Install the two spacers (D) above brackets (A) and secure with 1-1/4" capscrews (E), lockwasher (F) and nuts (G).

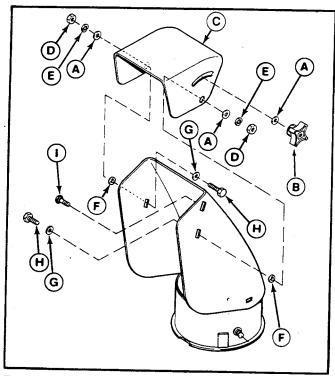


Figure 18. Install Deflector

- A. Washer 5/16
- B. Knob
- C. Deflector
- D. Nut, 5/16
- E. Lockwasher, 5/16
- F. Spacer
- G. Washer, 5/16
- H. Screw, 5/16
- I. Carriage Bolt, 5/16

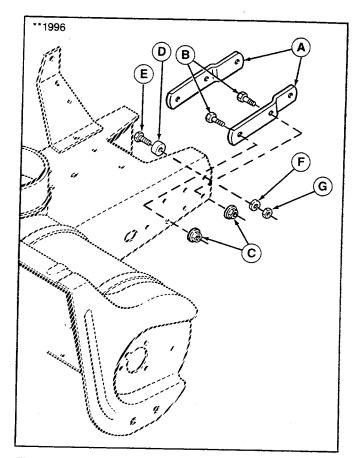


Figure 19. Install Brackets and Spacers

- A. Hitch Brackets
- B. Capscrews, 1"
- C. Flange Locknuts
- D. Spacers
- E. Capscrews, 1-1/4"
- F. Lockwasher
- G. Nut

REFLECTOR INSTALLATION

1. Position the two red reflectors (A, figure 20) onto rear of tractor as shown.

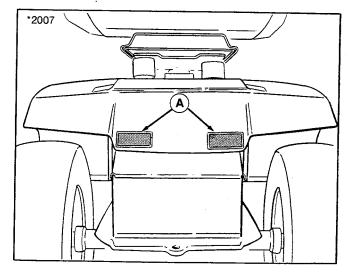


Figure 20. Install Reflectors
A. Reflectors

Tire Chain Installation

NOTE

The tires shown are typical and may not match your model exactly.

PREPARATION

- 1. Place the tractor or snowthrower on a level surface. Stop the engine and remove the key.
- 2. The air pressure in the tires must be 6 to 8 psi to allow installation of chains. Check the pressure and release air if necessary.

CHAIN INSTALLATION, LEFT TIRE

 Lay the chain out in front of the tire with the "quick hook" (A, figure 21) and "fastener" (B) to the rear as shown. The quick hook must be on the inside and the fastener on the outside. The open sides of the cross chains must be down.

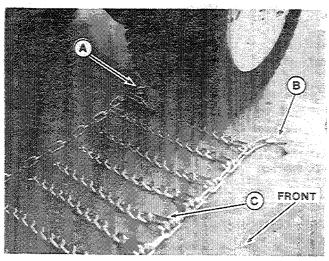


Figure 21. Position Chain

- A. Quick Hook
- B. Fastener
- C. Cross Chain Hook
- Place the transmission in NEUTRAL and release the parking brake. Put the hydro release rod in the "PUSH" position.
- 3. Roll the tractor forward so that the tire rests on the chain as shown in figures 22.
- 4. Set the parking brake and place transmission in gear.
- 5. Pull the chain over the top of the tire until side chains are tight and cross chains are positioned as shown in figure 24.

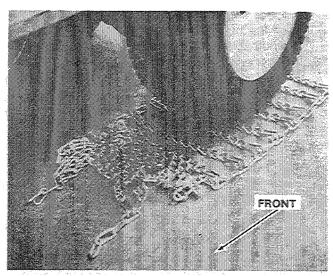


Figure 22. Position Tractor

- 6. Insert the quick hook (A, figure 23) into one of the end links (B). The correct end link to use depends on the tire size. Select the appropriate link to achieve a snug chain fit.
- 7. The fastener must be connected so that the chain has a snug fit on the tire as shown in figure 24. A closeup of the fastener connection is shown in figure 25. Insert the fastener thru the appropriate end link and then hook it to the chain as shown in figure 25. A pair of pliers can be used to assist in connecting fastener.

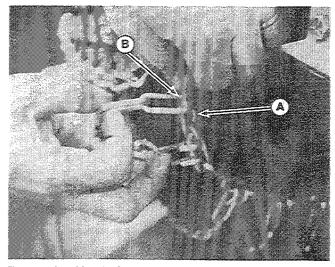


Figure 23. Hook Chain
A. Quick Hook
B. End Link

CHAIN INSTALLATION, RIGHT TIRE

- Lay the chain out in front of the right tire with the quick hook fastener to the front. The quick hook must be on the inside and the fastener on the outside. The open sides of the cross chain hooks must be down.
- 2. Use the same procedure to install chain on right tire as was used for left tire.

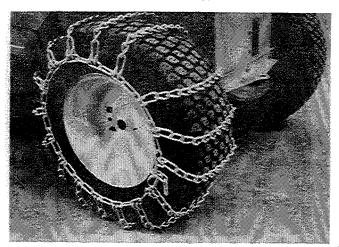


Figure 24. Installed Chain

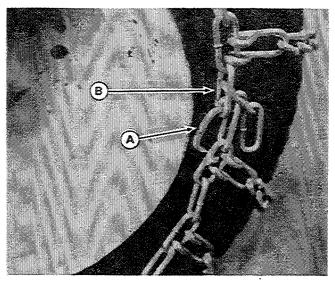


Figure 25. Chain Links - Closeup A. Fastener

B. End Link

FINAL CHECKS

 For better traction, the tire pressure can be increased to 15 to 18 psi. If the chain is tight due to large tire size, do not increase tire pressure.

WARNING

Stop the engine, disengage electric clutch, set the parking brake, remove the key and wait for moving parts to stop before leaving operator's postion to adjust chains.

2. After driving the tractor or snowthrower for a short time, recheck each chain. If a chain does not fit snugly, move the fastener and quick hook up another link to tighten chain.

Specifications

CONTROLS

Auger Drive: Electric clutch switch on dash

Raise & Lower: Tractor lift lever

Spout Rotation: Handle to right of operator

DRIVE TRAIN

Input Drive: Cushioning V-Belt

Final Drive: Prelubricated enclosed roller chain **Clutch:** Tensioning V-Belt with electric clutch

AUGER HOUSING

Bearings: Self-aligning rolling contact

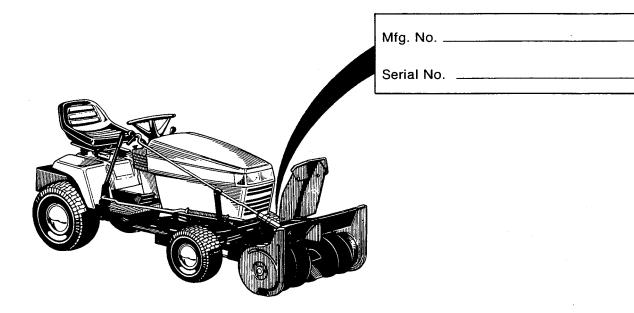
Housing: Welded steel

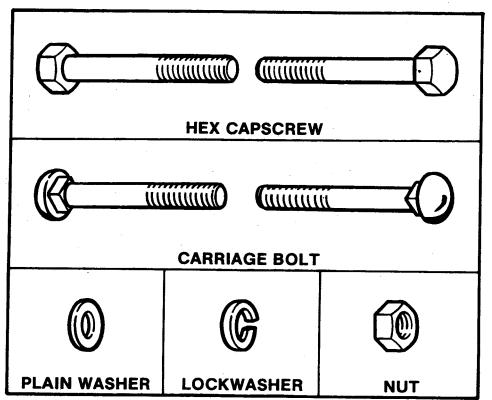
Scraper Bar: Full width high carbon steel - replaceable

DIMENSIONS	36 INCH	42 INCH 42" (1067 mm)		
Effective Width:	36" (914 mm)			
Overall Width:	36-1/2" (953 mm)	43-1/2" (1105 mm)		
Overall Length:	27" (686 mm)	27" (686 mm)		
Auger Diameter:	12" (305 mm)	12" (305 mm)		

Identification

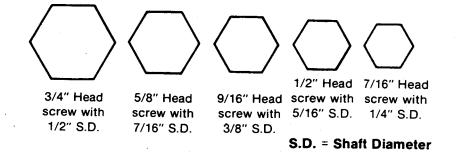
When ordering replacement parts, give your dealer the Manufacturing No. found on the identification plate shown below. We suggest you record the number here for easy reference.

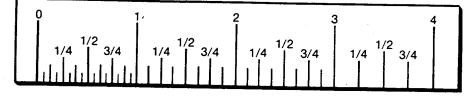




HEX CAPSCREW IDENTIFICATION

Shown below are actual size hex heads for standard screw sizes. Example: a 1/4" screw has a 7/16 head and thus requires a 7/16 wrench. To measure length, use the scale below.





WASHER AND NUT IDENTIFICATION

Place the washer or nut on the above scale to determine inside diameter. The actual inside diameter can vary 1/16 inch. Use the scale for comparison.

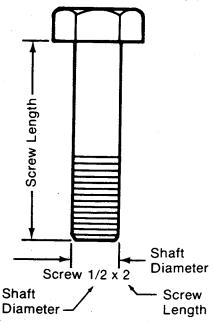
STANDARD FASTENER IDENTIFICATION CHART

Hardware sizes are given in the illustrations throughout this manual.

If a washer or nut is identified as "washer, 1/2" or "nut, 1/2", this means the inside diameter is 1/2 inch.

If a screw is identified as "screw, 1/2 x 2", this means the shaft diameter is 1/2 inch and the shaft of the screw is 2 inches long. If a screw is identified as "screw, 1/2-16 x 2", the number "16" means that the screw has 16 threads per inch.

SAMPLE: SCREW IDENTIFICATION



SAMPLE: NUT IDENTIFICATION

