
Simplicity®

**OWNER'S
MANUAL**

MFG. NO. 882

**32" ROTARY
SNOW THROWER**

586 WINTERIZING KIT

SIMPLICITY MANUFACTURING COMPANY, INC.



SER. FORM - OP64
LITHO IN U.S.A.

TP - 1361

PROTECT YOURSELF AND OTHERS

- Know the controls and how to stop quickly – READ THE OWNER'S MANUAL.
 - Do not allow children or young teenagers to operate vehicle or adults to operate it without proper instruction.
 - Do not carry passengers. Keep children and pets a safe distance away.
 - Clear work area of objects which might be picked up and thrown.
 - Disengage all clutches and shift into neutral before starting engine.
 - Disengage power to implement (s) and stop engine before leaving operator position.
 - Disengage power to implement (s) and stop engine before making any repairs or adjustments.
 - Disengage power to implement (s) when transporting or not in use.
 - Take precautions, such as disengaging power take-off, lowering implements, shifting into neutral, setting parking brake, stopping engine and removing key when leaving vehicle unattended.
 - Don't stop or start suddenly when going uphill or downhill.
 - Reduce speed on slopes and in sharp turns to prevent tipping or loss of control.
 - Stay alert for holes in terrain and other hidden hazards.
 - Use care when pulling loads or using heavy equipment.
 - A. Use only approved drawbar hitch points.
 - B. Limit loads to those you can safely control.
 - C. Don't turn too sharp, and use care when backing.
 - D. Use counterweight (s) or wheel weights when suggested in owner's manual.
- Watch out for traffic when crossing or near roadways.
- When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
 - Handle gasoline with care -- it is highly flammable.
 - A. Use approved gasoline container.
 - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 - C. Replace gasoline cap securely.
 - D. Open doors if engine is run in garage -- exhaust gasses are dangerous.
 - Keep vehicle and attachments in good operating condition and keep safety devices in place. Use guards as instructed in owner's manual.
- Do not put hands or feet near or under rotating parts. Keep clear of discharge opening at all times.
 - Before cleaning, inspecting, adjusting, or repairing the tractor or any attachments stop the engine, remove the ignition key (electric start models) and be sure all blades and other moving parts have stopped.
 - If your equipment should start to vibrate abnormally, stop the engine and check immediately for the cause. Vibration is generally a warning of trouble.
 - Do not run the engine indoors.
 - Look to be sure that children are not behind the tractor, before backing up.
 - Keep all nuts, bolts, and screws tight to be sure equipment is in safe working condition.
 - Never store equipment with gasoline in the tank inside of a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
 - To reduce fire hazard keep engine free of grass, leaves or excessive grease.
 - Never operate any attachment without all guards, deflectors, and other protective covering in place.
 - Keep the area of operation clear of all persons, particularly small children, and pets.
 - Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wire, bones and other foreign objects.
 - Check fuel before starting engine. Do not fill gasoline tank when engine is running or while engine is still hot. Wipe off any spilled gasoline before starting engine. Do not smoke when fueling engine or around open gasoline containers.
 - Do not change engine governor, settings or overspeed engine.

ROTARY SNOW THROWER

Mfg. No. 562" for use on BROADMOOR & YEOMAN.

REQUIRED ACCESSORIES

RECOMMENDED ACCESSORIES

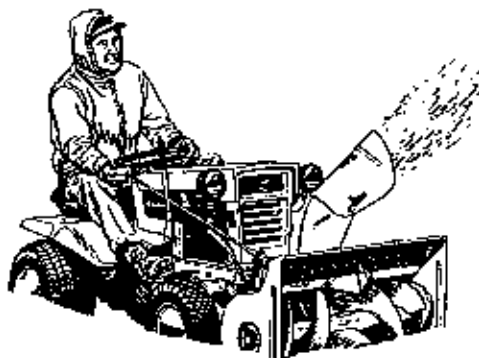
One Mfg. No. 449 Rear Wheel Weights

One Mfg. No. 300 Rear Weight

Two Mfg. No. 045 Weights

One Mfg. No. 582 Snow Tire and Wheel set (Broadmoor and Yeoman only).

Appropriate Tire Chains (See accessories section of the tractor manual).



INSTALLATION

The illustration (Figure 1) shows the snow blower completely mounted (the tractor is tipped for clarity only). For easiest installation, follow the sequence below:

1. Place the drive belt (A) in position on the lower groove of the engine pulley (B). Pass the belt through the loops of the belt stop (C). Give the belt a suitable "twist" to properly fit the P.T.O. pulleys (D) and let it lay temporarily over them. Rotate the front belt stop on the left P.T.O. pulley out of the way so it does not interfere with the blower belt.

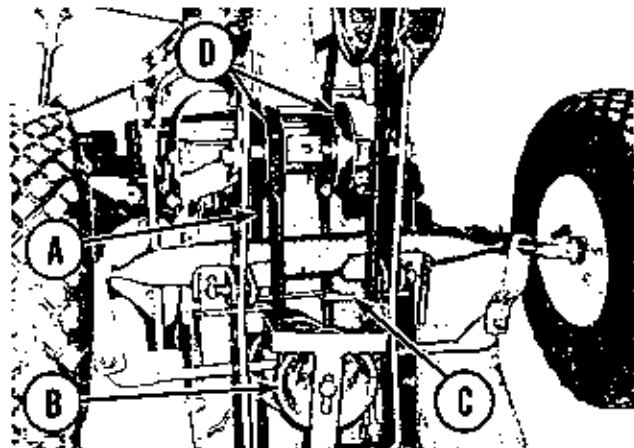


FIGURE 1

2. Attach the hitch (E) to the snow thrower housing with two pins and spring clips (F). Move the housing and hitch into position at the front of the tractor and attach the hitch

to the tractor axle and frame at points (G) with pins and spring clips. (See Figure 2)

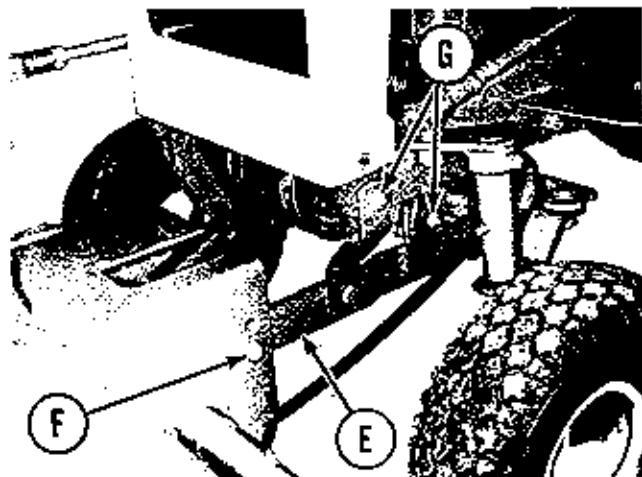


FIGURE 2

3. Position the belt in the groove of the hitch pulley (H). (See Figure 3). Then pull all slack forward to the left side and seat the belt around the auger drive pulley (J). The hitch pulley (H) can be moved in its slotted hole to provide slack. (See "Adjustments").

4. Connect the lift rod end to the lift lever with a spring clip. Connect the clevis end of the rod to the lift bracket on the hitch with the remaining pin and spring clip. (See Figure 4).

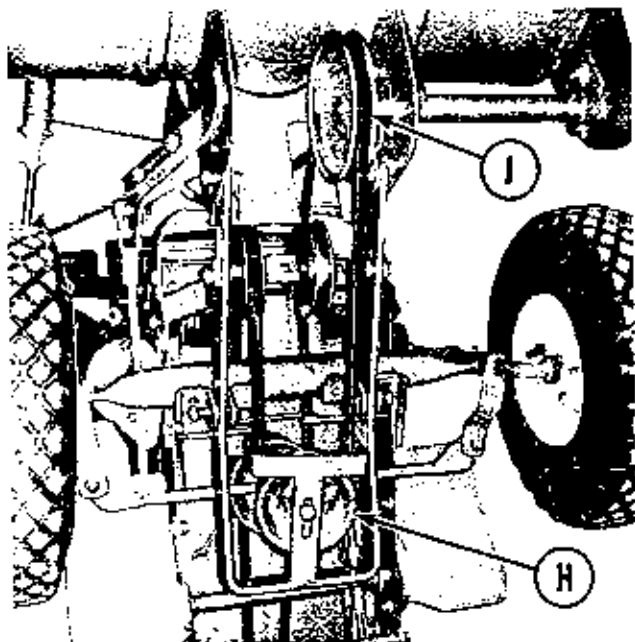


FIGURE 3

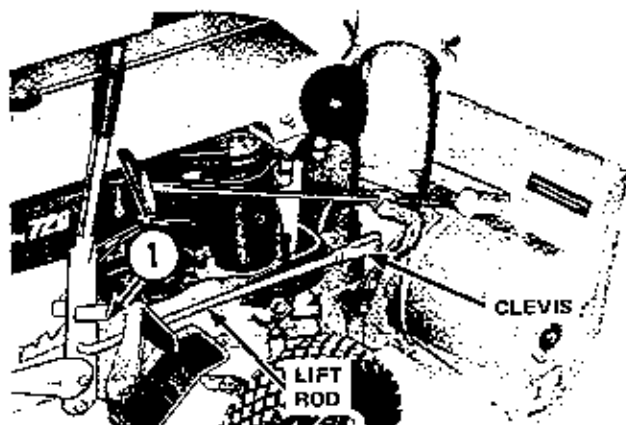


FIGURE 4

SEE PAGE 6 FOR LIFT ROD INSTALLATION

Install pin and spring clip in quadrant to prevent lift lever from locking. (See (1) Figure 4). This applies to all front mounted attachments.

OPERATION

Before operating your Simplicity snow blower, make the skid shoe and chute deflector adjustment.

CHUTE DEFLECTOR ADJUSTMENT

The chute deflector position can be adjusted by loosening the wing nuts and moving the deflector up or down. Be sure to tighten both wing nuts after positioning the deflector. See Figure 5.

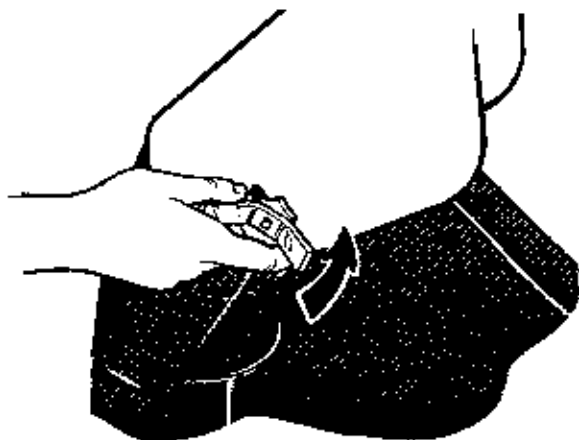


FIGURE 5

This deflector position supplements the engine speed control to control throwing distance. The highest position provides the greatest throwing distance. Most snow moving can be done with the deflector all of the way up by using the engine speed lever to control the throwing distance. Hold the rear of the deflector down while tightening the wing nuts to make sure that all of the snow goes out of the chute.

SKID SHOE ADJUSTMENT

Your Simplicity snow blower has hardened steel adjustable skid shoes. (See Figure 6). Their large area supports the front of the Snow-Away above even a gravel surface.

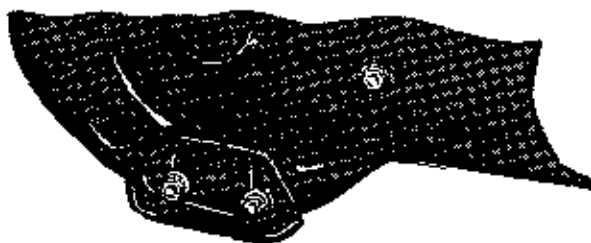


FIGURE 6

Gravel Surface Use Adjustment: If you will be clearing a gravel surface, loosen the nuts, see Figure 6. Raise the front of the snow blower and drop the skid shoes all of the way down. Set the bottom surface of the skid shoes so they are level or slightly (maximum of one-eighth inch) higher in the front and tighten the nuts securely. Repeat these steps for the skid shoe on the other side. Check to make sure that with the snow blower resting on the skid shoes, that the skid shoes are even with each other. The snow blower will now be supported on the skid shoes so the scraper bar can skim the snow from the surface and leave the stones on your driveway instead of throwing them on your lawn.

Hard Surface Use Adjustment: Loosen the skid shoe nuts and rest the snow blower on a hard level surface. The snow blower should now be supported by the tractor and skid shoes with the scraper bar resting on the surface. Tighten

the nuts on both skid shoes taking care that their position doesn't change while the nuts are tightened. The full width scraper bar on your Simplicity snow blower will now get down to "bed rock" and leave the surface clean.

SELECTING TRANSMISSION GEAR

Use Second or Third Gear for transporting to the snow removal area.

Use Second Gear when light snow is up to four inches deep and heavy snow is up to two inches deep.

Use First Gear for light deep snow and heavy snow over two inches deep.

THROWING DISTANCE

The snow should be deposited beyond the surface you want to clear if at all possible, so start with the deflector all the way up and adjust the engine speed so that the thrown snow is deposited just beyond the far side of the area to be cleared. If the snow is only a couple of inches deep it may be necessary to go over the ground quite rapidly to feed snow into the auger. In this situation, the deflector should be lowered and the engine speed increased. **CAUTION:** Stop the engine while changing the deflector adjustment.

THROWING DIRECTION

Whenever possible begin snow removal on the upwind side of the sidewalk or driveway so it is not necessary to blow snow over an area already cleaned.

The chute should be rotated to discharge the snow downwind, not into it.

Always adjust the spout and extension so that you are well out of the path of the snow stream.

CAUTION

CONSTANT INHALATION OF COLD, WET VAPOR IS EXTREMELY INJURIOUS. ON WINDY DAYS HAVE YOUR NOSE AND MOUTH WELL COVERED.

MOVING THE SNOW

Light Snow:

Snow up to six inches deep can usually be cleared in one pass the full width of the machine. Face the snow blower into the snow, set the throttle at half speed or more and engage the tractor power take-off completely. When the auger drive is fully engaged, readjust the engine speed as described under throwing distance. Select the proper gear for the conditions as explained under selecting transmission gear. Engage the touch-o-matic clutch slowly and guide the tractor through the snow. When you come to the end of a

pass, raise the snow blower and turn the tractor around to make the next pass alongside of the cleared area. Allow about two inches of over-lap into the cleared area. Lower the snow blower, rotate the chute so the snow stream goes downwind and engage the touch-o-matic clutch for the second pass. Repeat these steps until the area is cleared.

Heavy Deep Snow:

With very dense snow or snow deeper than the center of the auger, a different method is necessary. (Always use first gear).

FIRST PASS:

Lower the deflector about half way and run the engine at full speed. Raise the snow blower until the top of the auger housing is above the top of the snow whenever possible. Engage the touch-o-matic clutch gently, and "inch" through the snow. (Readjust the deflector if necessary to obtain the desired throwing distance. Remember to stop the engine before adjusting the deflector.) At the end of the pass, turn around as described under light snow except go back over the same path with the snow blower in the lowered position.

SUBSEQUENT PASSES:

Use the same procedure as light snow, but substantially increase the overlap into the cleared area. In other words, take a narrower slice of snow than the width of the auger housing. Judge how wide a "bite" to take by watching the snow stream, it should continue to flow freely from the chute, if it doesn't, engage the clutch less or take a narrower slice of snow. Any time snow stops flowing freely from the spout, use reverse to back away until the snow blower clears itself and then inch into the snow. You will soon get the "feel" of how fast to go and how wide a slice to take.

Foreign Object In The Auger or Plugged Chute:

If the auger stalls or the chute plugs, disengage the tractor power take-off control **IMMEDIATELY**. Pull the speed control all of the way back to stop the engine, and remove the foreign object or spout blockage.

CAUTION

ALWAYS STOP THE ENGINE BEFORE WORKING NEAR OR ON THE AUGER OR SPOUT.

SHUTDOWN AND STORAGE

After the clearing job is finished, the tractor should be transported to a sheltered area.

When transporting the snow thrower, always disengage the power take-off, pull the lift lever back to latched position and carry the snow thrower in raised position.

Set the transmission lever and power take-off control in the neutral position and run the engine at slow speed to prevent icing.

CAUTION

DO NOT RUN ENGINE IN AN ENCLOSED AREA.

Allow the tractor to cool about five minutes and fill the fuel tank to reduce condensation during storage. Icing during storage will be reduced if the tractor and snow blower can be stored in an unheated place. The storage cover Mfg. No. 638 will protect your tractor and snow blower if it must be stored out of doors.

TROUBLE SHOOTING

If belt slippage occurs, check the following:

1. Belts may be stretched or excessively worn.
2. Pulleys may be greasy or oily.
3. Insufficient belt tension (see "Adjustments").
4. Auger may be clogged. Stop engine before cleaning.

1. Look for sharp edges or rough spots on pulleys.
2. Pulleys may be misaligned.
3. Belt tension may be too tight (see "Adjustment").
4. Auger may be blocked by a foreign object or snow. Stop engine before cleaning.

If general performance seems unsatisfactory, check the following:

1. Controls or drive system may be out of adjustment. (See "Adjustments" and "Maintenance").
2. Extremely wet and heavy snow. See "Operation". Run at full throttle and in successive passes.
3. Belt slippage. See "Adjustments".
4. Low discharge capacity due to insufficient auger speed. See "Operation" and run at full throttle.
5. Lack of traction. Install tire chains for greater traction.

ADJUSTMENTS

DRIVE BELT

The hitch pulley may be moved forward or back in the slotted hole to adjust belt slack. If the belt slips when the power take-off is engaged, move the pulley back. If the belt is too tight for proper idling move the pulley forward. (See Figure 7)

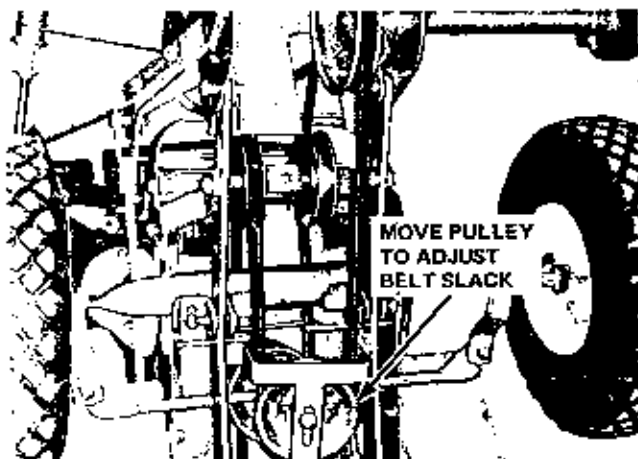


FIGURE 7

CLUTCH ADJUSTMENT

After the belt slack adjustment is made, check the power take-off clutch rod spring. Engage the lever and check the spacing between the set collar and the rod guide. Loosen the setscrew and adjust the collar to the one-fourth inch

dimension shown. If belt slippage should occur during use, this dimension may need to be increased. (See Figure 8)

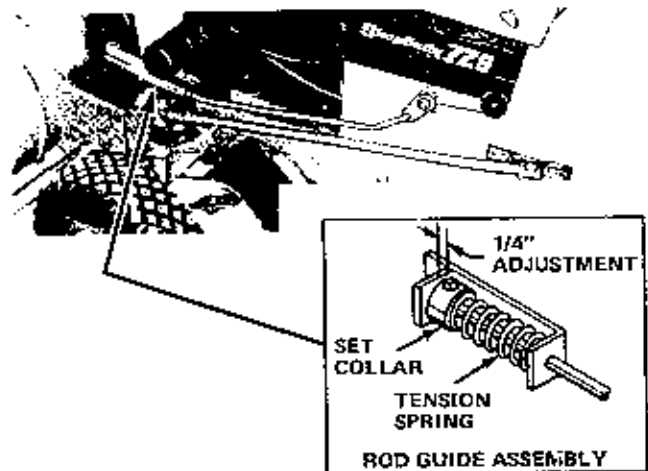
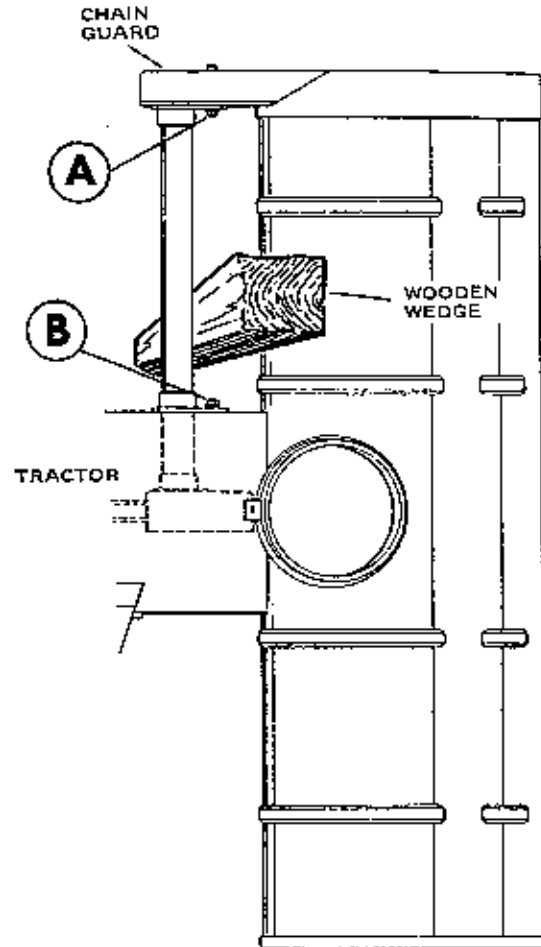


FIGURE 8

CHAIN ADJUSTMENT

The auger drive chain is correctly adjusted when all slack has been removed from it.

1. If adjustment is required, loosen but do not remove bolts A and B which hold the support assembly clamps at each end of the bearing housing.
2. Remove the chain guard.
3. Use a wooden wedge, bar, etc., between the blower housing and bearing housing to remove the slack from the chain.
4. Tighten bolt A at the chain sprocket end of the bearing housing.
5. Tighten bolt B, making sure the bearing housing is parallel to the auger housing.
6. Check the chain tightness and replace the chain guard.



THIS VIEW FROM TOP OF UNIT

MAINTENANCE

EVERY 10 OPERATING HOURS

Apply general purpose automotive grease to the auger drive shaft fitting. At the same time, remove the chain guard and coat the chain drive with grease. (See Figure 10). Also apply light engine oil to the spout control linkage and all pivot points.

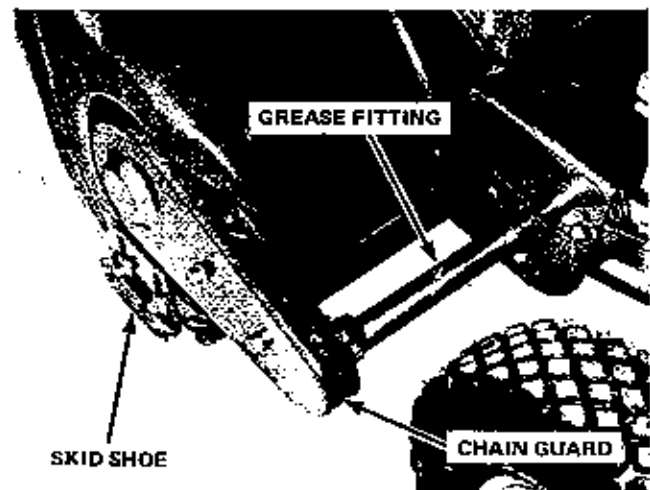
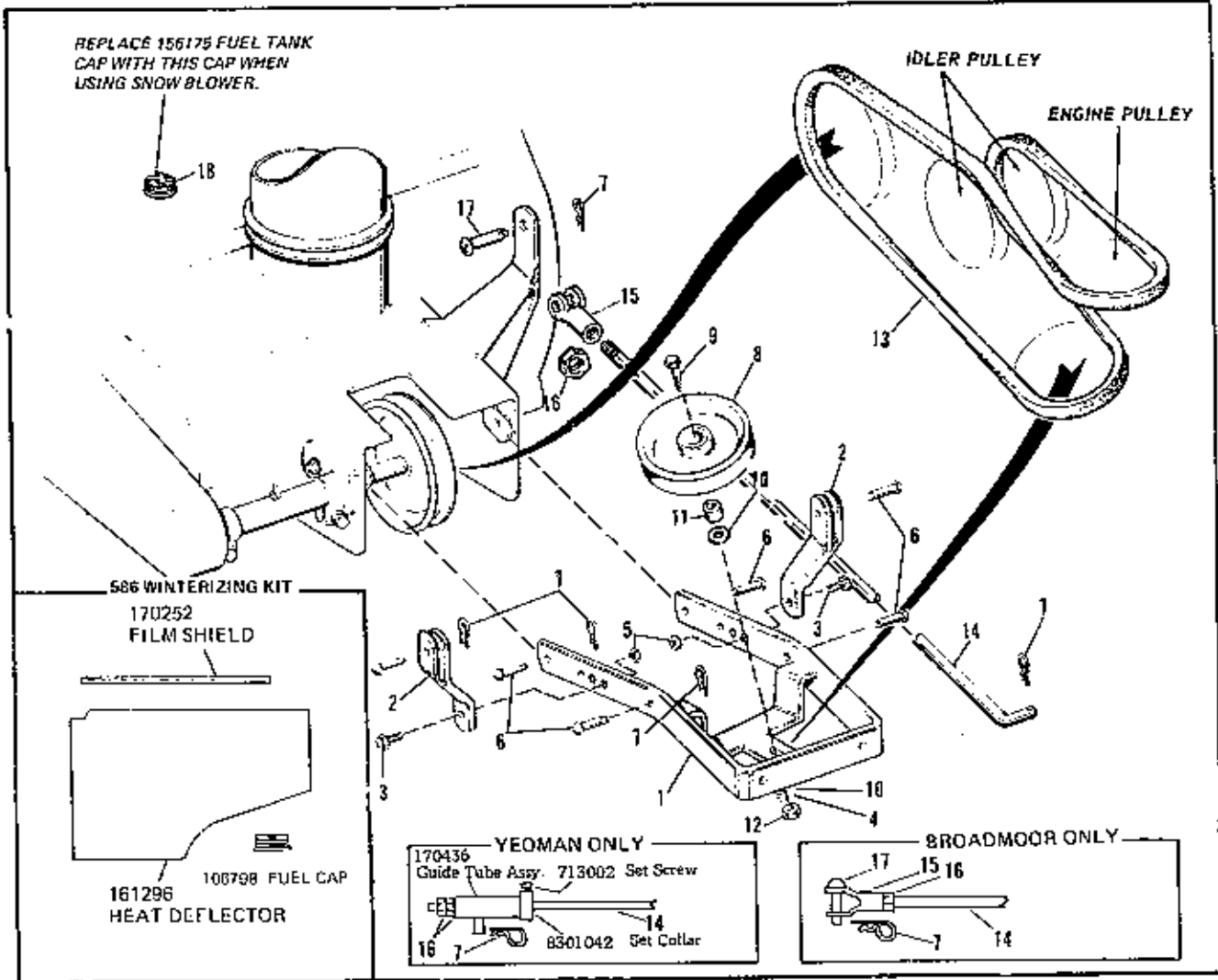


FIGURE 10

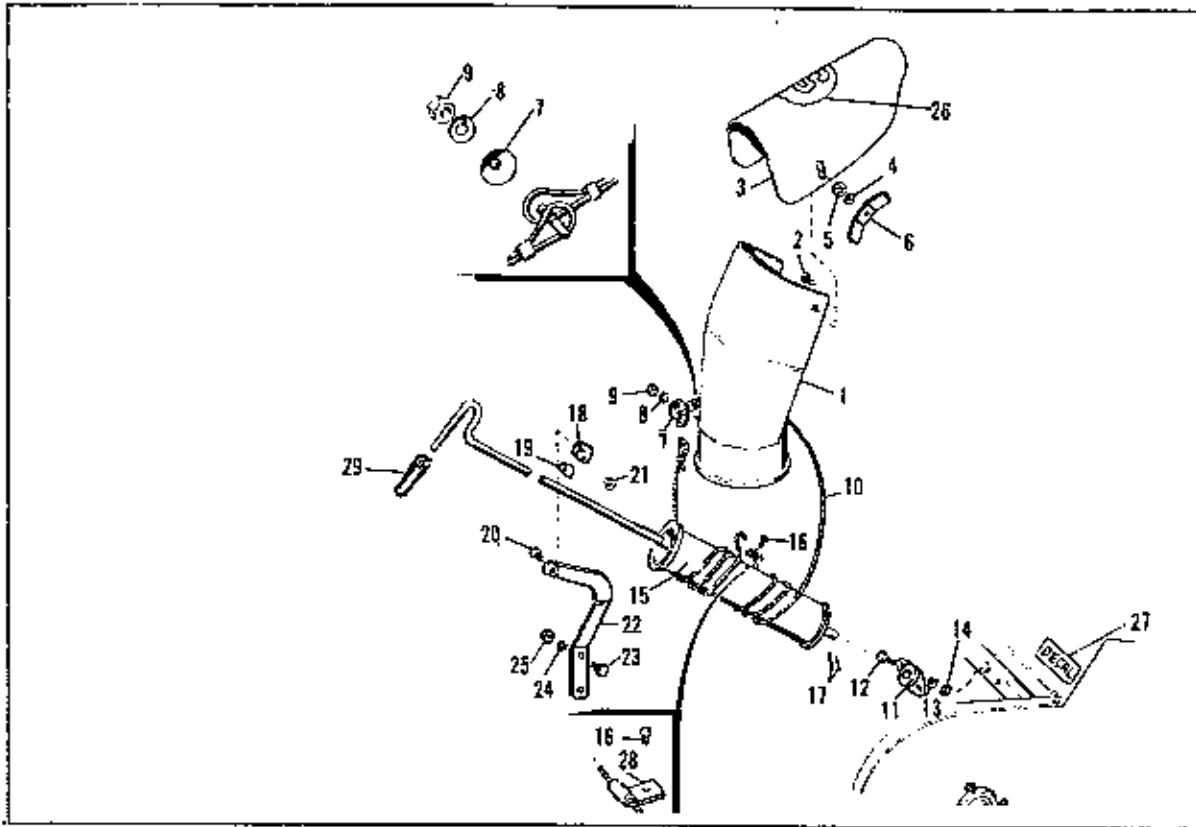
HITCH GROUP



Ref. No.	Part No.	Qty. Req.	Description
1	106500	1	Push Arm Assembly
2	161267	2	Support Arm Assembly
3	705005	3	Hex Capscrew, 3/8"-16 x 1" lg.
4	720002	1	Lock Washer, 3/8"
5	717510	2	Hex Nut, Full Lock 3/8"-16
6	156306	6	Pin
7	106788	6	Spring Clip
8	101096	1	Pulley
9	705010	1	Hex Capscrew 3/8"-16 x 1-3/4" lg.
10	719001	2	Plain Washer 3/8"
11	154177	1	Spacer

Ref. No.	Part No.	Qty. Req.	Description
12	717003	1	Hex Nut, Full 3/8"-16
13	108209	1	"V" Belt
14	176202	1	Front Lift Rod
15	157631	1	Adjusting Yoke
16	717008	1	Hex Nut, Full 1/2"-20
17	154305	1	Yoke Pin
18	106798	1	Cap (Winter) Fuel Tank
19	161296	1	Deflector - Heat
20	170252	1	Film - Shield
	161252		Emblem
	161247		Decal, Safety
	176415		Serial Number Plate

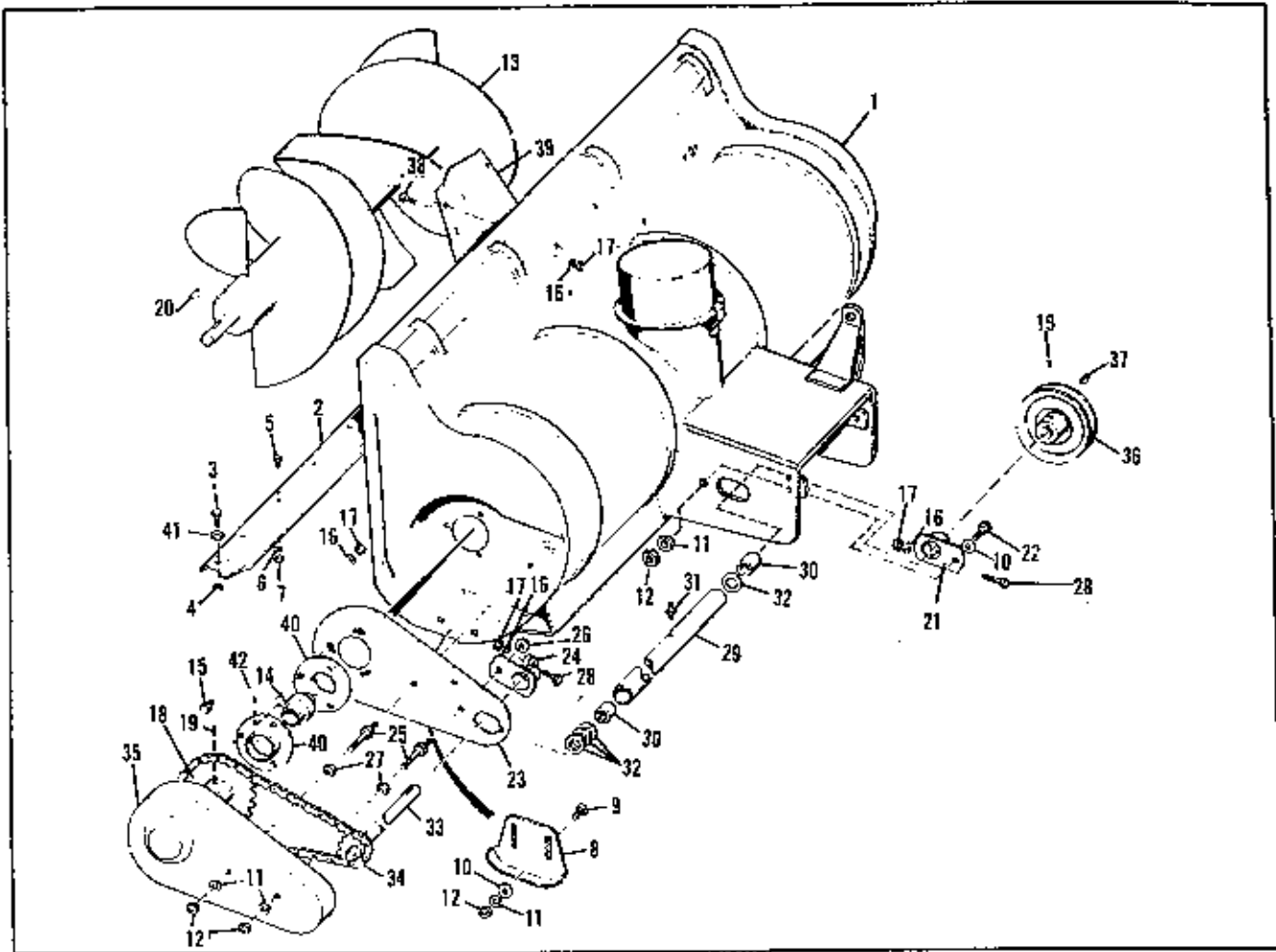
SPOUT GROUP



Ref. No.	Part No.	Qty. Req.	Description
1	106762	1	Spout Assembly
2	703005	2	Carriage Bolt, 5/16"-18 x 3/4"
3	106760	1	Spout Extension
4	719001	2	Washer, Plain 3/8"
5	721601	2	Washer, Lock 3/8"
6	106229	2	Wing Nut
7	171379	1	Cup Washer
8	720001	1	Washer, Lock 5/16"
9	717001	1	Nut, Hex Full 5/16"-18
10	171362	1	Cable Assembly
11	106491	1	Bearing
12	705015	2	Capscrew, Hex 1/4"-20 x 5/8"
13	720003	2	Washer, Lock, 1/4"
14	717005	2	Full Hex Nut, 1/4"-20
15	176331	1	Rod Assy., Spout Control
16	715067	1	Self-tapping Screw, 1/4"-20 x 3/8"

Ref. No.	Part No.	Qty. Req.	Description
17	722016	2	Cotter Pin, 3/32" x 5/8"
18	152050	1	Guide, Ron
19	121175	1	Liner, Guide
20	705018	1	Capscrew, Hex, 5/16"-18 x 1-1/2"
21	717511	1	Nut, Hex, Full, Lock, 5/16"-18
22	106499	1	Rod Guide Support
23	705005	2	Hex Capscrew, 3/8"-16 x 1" lg.
24	720002	2	Lock Washer, 3/8"
25	717003	2	Hex Nut, Full, 3/8"-16
26	161252		Decal
27	161247		Decal
28	154247	1	Clamp (For Service Only)
29	176933	1	Handle Grip
30	722015	1	Pin, Cotter
31	171382	1	Clamp

ROTOR, BODY & DRIVE GROUP



Ref. No.	Part No.	Qty. Req.	Description
1	161198	1	Body Assembly
2	106853	1	Body Scraper
3	715071	2	Hex Capscrew, 5/16"-18 x 5/8"
4	717511	2	Full Lock Hex Nut 5/16"-18
5	715018	6	Hex Capscrew, 1/4"-20 x 5/8"
6	720003	6	Lock Washer 1/4"
7	717005	6	Full Hex Nut 1/4"-20
8	106747	2	Skid
9	703004	4	Carriage Bolt, 3/8"-16 x 3/4"
10	719001	5	Plain Washer, 3/8"
11	720002	7	Lock Washer, 3/8"
12	717003	7	Full Hex Nut, 3/8"-16
13	106847	1	Rotor Assembly
14	106732	2	Bearing Cartridge w/713509 Set Screw
15	705017	6	Hex Capscrew, 5/16"-18 x 3/4"
16	720001	12	Lock Washer 5/16"
17	717001	12	Full Hex Nut, 5/16"-18
18	106653	1	Rotor Sprocket
19	713503	2	Set Screw, 5/16"-18 x 5/16"
20	151040	1	Hi-Pro Key

Ref. No.	Part No.	Qty. Req.	Description
21	176161	1	Support Assembly Clamp
22	705005	1	Hex Capscrew, 3/8"-16 x 1
23	170754	1	Side Plate
24	176161	1	Support Assy. Clamp
25	106771	2	Stud
26	718035	2	Nut, Flange, 3/8"-16
27	717510	2	Full Lock Hex Nut 3/8"-16
28	705018	2	Hex Capscrew 5/16"-18 x 1-1/2"
29	106854	1	Bearing Housing
30	154258	2	Needle Bearing
31	727013	1	Grease Fitting
32	8061012	7	Washer
33	106851	1	Shaft Assembly
34	106058	1	Chain
35	170865	1	Chain Guard
36	106485	1	Pulley
37	725003	1	Key 3/16" dia. x 3/4"
38	705012	4	Hex Capscrew, 5/16"-18 x 5/8"
39	106774	1	Deflector
40	161069	4	Bearing Flange
41	719006	2	Washer
42	713503	1	Set Screw, 5/16"-18 x 5/16"

SIMPLICITY'S NEW EQUIPMENT WARRANTY

The Company warrants Simplicity products to be free from defects in material and workmanship, except the Company makes no warranty, express or implied, with respect to tires, engines, generators and voltage regulators, which are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year (45 days for equipment used for rental, municipal or commercial purposes) under normal use, from date of purchase, will be replaced without charge, provided such part is returned to the factory, (if requested), and is found to be defective upon examination at the factory. This warranty does not apply to any Simplicity products altered outside of the Simplicity factory. THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. The Company's obligation under its warranty is strictly and exclusively limited to the replacement of such parts, and in no event shall the Company be liable for any other damages, whether direct, immediate, incidental, special, or consequential. Simplicity Manufacturing Company, Inc., reserves the right to modify or change specifications without prior notification. There are no warranties which extend beyond the description of any Simplicity product.

AUGER	DRIVE TYPE	Cushioning V-Belt and Roller Chain
	CLUTCH	V-Belt Idler
	CONSTRUCTION	Solid Flite Welded Steel
	DIAMETER	14 Inches
	EFFECTIVE WIDTH	32 Inches
	ROTATION SPEED	943 R.P.M. (at Full Engine Speed)
HOUSING	MOUNTING	Front Axle, Four Pins
	CONSTRUCTION	Welded Steel
	OPENING HEIGHT	19 Inches
	CHUTE DIAMETER	6-1/4 Inches
	FRONT SUPPORT	Adjustable, Hardened, Large-Area Skid Shoes
	SCRAPER BAR	Full Width, High Carbon Steel, Replaceable
	ADJUSTABLE SPOUT	ROTATION: 255 Degrees
CONTROLS	AUGER DRIVE	Tractor Power Take-Off
	RAISE & LOWER	Tractor Lift Lever
	SPOUT ROTATION	"T" Handle to Right of Operator
	TYPE	Freeze-Proof Stainless Steel Aircraft Cable
DIMENSIONS	LENGTH	INCLUDING TRACTOR: 79-1/2 Inches (Broadmoor) 73-1/2 Inches (Yeoman)
	WIDTH	33-1/2" Inches
	WEIGHT	NET: 111 Lbs. SHIPPING: 122 Lbs.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.