

WHEEL HORSE

SNOW ATTACHMENTS

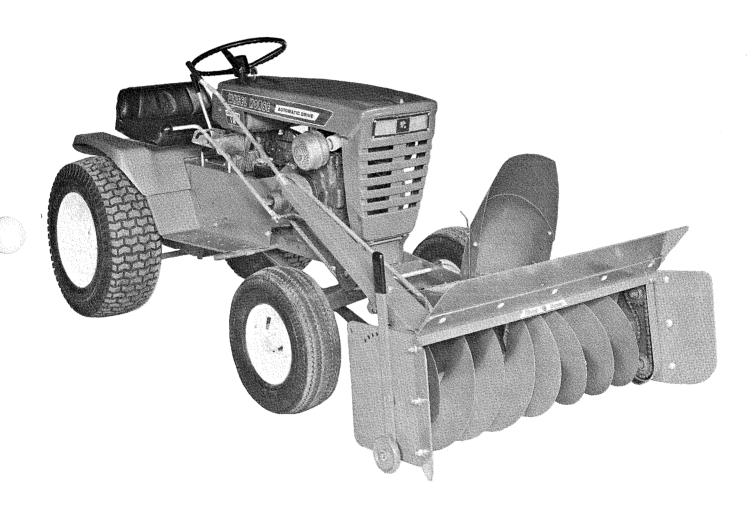
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PARTS LIST AND INSTRUCTIONS **TIMEL HOUSE** WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

SNOW THROWER

MODEL 6-6211

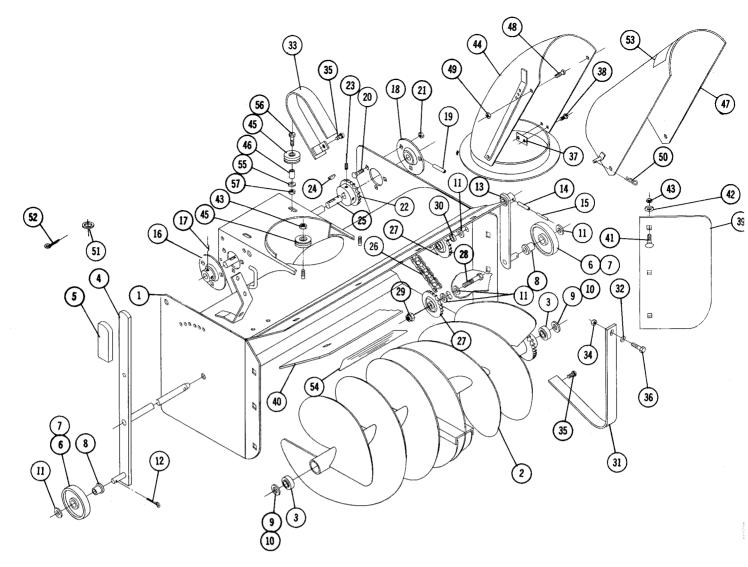


Snow throwers are shipped in two separate cartons, a basic unit, and a completing package. This carton contains the basic unit. Two completing packages are available Model 6-9111 and Model 6-9121.

The 6-9111 completing package will fit all long-frame $45\frac{1}{2}$ " wheel base tractors. The 6-9121 completing package will fit tractor Model 1-7441.

All tractors require a power take-off clutch. Two power take-off clutches are available, Model 8-3111 mechanical type and Model 8-3511 electric type. Note: Tractor models prior to 1968 equipped with Pt-6 Power Take-off can be used with this unit.

Complete assembly and mounting instructions of the basic unit is provided in the completing package.



6-6211 SNOW THROWER - BASIC UNIT

When ordering parts always list Part No. and Name of Part.

Specifications Subject To Change Without Notice.

Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'o
1	6429	Wrapper Ass'y	1	30	6417	Spacer	1
2	4467	Auger Ass'y	1	31	6418	Guard — Inner	1
3	5493	Ball Bearing	2	32	920037-4	Washer 1/4 U.S.	1
4	4477	Auger Shaft Ass'y	1	33	2162	Guard — Outer	1
5	5359	Grip	1	34	915968-4	Nut 1/4-20 Hex Keps	1
6	2173	Wheel & Bushing Ass'y	2	35	1391	Screw — Sems $\frac{1}{4}$ -20 x $\frac{3}{8}$	3
7	1987	Wheel	2	36	908002-4	Bolt Hex 1/4-20 x 5/8	1
8	1974	Bushing - Nylon	2	37	6433	Speed Nut — Double #10	1
9	920225	Washer .080 Thick	2	38	926306-4	Screw #10-16 x 1/2 Round Head S.T.	2
10	1278	Washer .050 Thick	2	39	5502	Plate — Side Extension	2
11	920011-4	Washer 1/2 SAE	2	40	7495	Plate — Top Extension	1
12	932016-4	Cotter Pin 1/8 x 3/4	2	41	900063-4	Bolt Carriage 3/8-16 x 1	11
13	51 <i>5</i> 7	Wheel Support Ass'y	1	42	920009-4	Washer 3/8 SAE	11
14	933215	Roll Pin 1/4 x 11/4	1	43	915663-4	Nut 3/8-16 Elastic Stop	13
15	933173	Roll Pin $\frac{5}{32} \times 1\frac{1}{4}$	1	44	5220	Shroud Ass'y	1
16	5269	Flanged Ball Bearing	1	45	1973	Roller	4
17	909862-5	Set Screw 1/6-18 x 1/6 Nylok	2	46	2163	Spacer	2
18	4571	Flanged Ball Bearing	1	47	2165	Deflector Ass'y	ī
19	933216	Roll Pin 1/4 x 13/8	1	48	909052-4	Bolt Round Head 1/4-20 x 1/2	2
20	900037-4	Bolt — Carriage 5/6-18 x 3/4	6	49	915661-4	Nut 1/4-20 Elastic Stop	2
21	915112-6	Nut - 16-18 Nylok	6		933503-4	Hairpin Cotter	2
22	6415	Sprocket	1	50			!
23	909848-5	Set Screw 1/4-20 x 1/4 Nylok	2	51	920013-4	Washer 5/8 SAE	1
24	937014	Key #9 Woodruff	2	52	932034-4	Cotter 3/6 x 1	1
25	4757	Shaft — Drive	1	53	4498	Decal — Caution	1
26	6416	Chain	1	54	5604	Decal — Attachment	1
27	2174	Idler Sprocket	2	55	920007-4	Washer ¼ SAE	2
28	908060-4	Bolt Hex 1/2-13 x 13/4	2	56	908006-4	Bolt Hex 1/4-20 x 11/4	2
29	915115-6	Nut 1/2-13 Nylok	2	57	915111-6	Nut Nylok 1/4-20	2

PARTS LIST AND INSTRUCTIONS



WHEELHORSE PRODUCTS, INC. - SOUTH BEND, IND.

SNOW THROWER

COMPLETING PACKAGE MODEL 6-9121



DESCRIPTION

The snow thrower is shipped in two separate cartons, a basic unit, and a complete package. This carton contains the completing package and must be used with the basic unit No. 6-6211.

ASSEMBLY AND MOUNTING

Remove all parts from the cartons and place on a clean flat surface. All loose parts are identified

- 1. Mount the top and side extension plates as shown in Figure 2. Secure in place with the bolts, washers and nuts provided.
- 2. Install the mounting frame assembly by bolting the end with the four bolt holes to the blower housing frame. The arms should extend upward from the blower housing as shown in Fig. 2. Use the bolts and nuts provided to secure in place. Place one shim (#4774) between the LEFT arm and outside the blower housing. Place the remaining shim inside the right hand side of the blower housing as a reinforcement plate for the right arm.

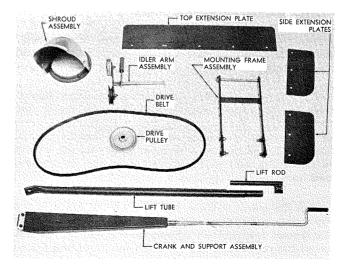


Figure 1

3. Loosen the two $\frac{1}{4}$ " bolts holding the rear rollers. Slide the roller back and insert the ring on the shroud assembly into the roller grooves. Adjust the rollers forward to fit snug against the shroud ring. Tighten the bolts, the shroud should turn freely. See Fig. 2.

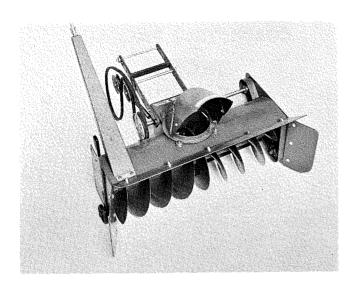


Figure 2

- 4. Insert idler arm assembly shaft through the hole in the right side of the mounting frame assembly. The assembly is held in place with a $\frac{1}{2}$ " washer and a hairpin cotter, items 17 and 18, see the exploded view drawing. Stretch the spring that is connected to the idler arm and hook the loose end into the hole provided in the blower housing frame.
- 5. The "V" belt must be wrapped around the pulley before sliding it on the drive shaft. Slide the pulley on to the drive shaft. Do not tighten the pulley set screw at this time.
- 6. Attach the crank and support assembly to the blower housing line up the holes in the crank support with the two holes in the blower housing and the two holes in the bracket. Two reinforcing plates are used to support the assembly to the blower housing. One is placed directly under the bolt heads and the other is placed on the inside of the blower housing, see Fig. 2 and the exploded view drawing.

Insert the crank rod through the hole in the crank support bracket, and retain it with the $\frac{1}{2}$ " washer and hairpin cotter.

7. Remove the $8\frac{1}{2}$ inch long rod and spacer from the mounting frame. Roll the unit up to the tractor. Align the mounting frame so that the arms of the mounting frame straddle the tractor frame. See Fig. 3. Roll the snow thrower back into the tractor to allow the belt to be placed over the attachment and into the belt groove.

Roll the snow thrower forward till the holes in the mounting arms align with the first set of holes of the tractor frame. Turn wheels all the way to the left. Insert the rod and spacer through the mounting frame and tractor frame. Hold in place with the $\frac{3}{8}$ -16 nylok nut. See Fig. 3.

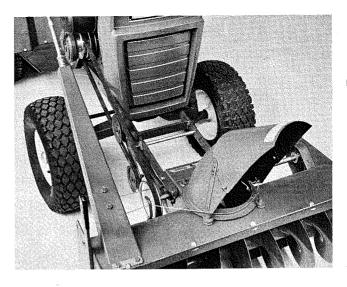


Figure 3

- 8. Wrap the belt around the idler pulleys as shown in Fig. 3. NOTE: Adjust blower drive pulley in or out to align with the idler pulleys, tighten set screws.
- 9. Slide the lift rod into the lift tube. Fasten the lift tube over the pin located at the lower rear center of the blower housing. It is held with $\frac{5}{8}$ washer and $\frac{3}{16} \times 1''$ cotter pin.
- 10. Install lift rod into the bottom hole of the long tractor lift lever arm. Secure with the hairpin cotter.
- 11. A steering stop bracket (#9705) is provided to prevent the tire from hitting the idler pulley.

To install place the bracket between the frame rails and in line with the fifth hole back from the front. Note the bracket faces to the rear of the tractor as shown in the exploded view drawing. Hold the bracket in place with the $\frac{3}{8}$ -16 x 1" bolts and $\frac{3}{8}$ -16 Nylok nuts.

CABLE WRAPPING INSTRUCTIONS:

- Face Shroud, Part No. 5220 to the right. (See Figure 4.)
- Thread Cable, Part No. 4795, end "A" up under the Double Speed Nut, Part No. 6433, and tighten screws just enough to retain cable.
- 3. Pull cable around the shroud and thread end "B" of cable through hole #1 then back through hole #2 in Crank, Part No. 8157, and then wrap seven (7) complete turns in direction shown in Figure 4. Finish last turn on top of crank. Pull cable end "B" behind the hook on the wrapper assembly and thread up under the double speed nut. Retighten screws just enough to retain cable.
- Face shroud forward and grip both ends of cable with pliers and pull until cable is tight. Tighten screws in speed nut securely.

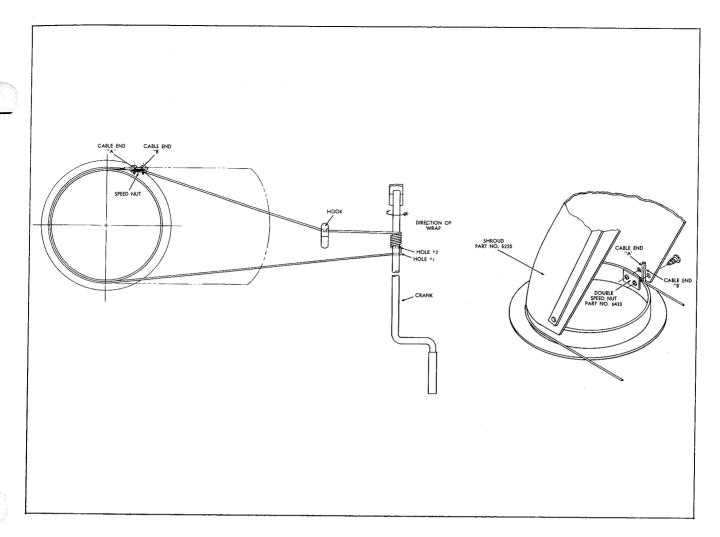


Figure 4

The adjustable shroud allows the operator to control the direction the snow may be thrown by turning the convenient pivot crank. The upper part of the snow shroud is adjustable to deflect the snow in an upward or downward direction depending upon conditions. There are wheels on each side for raising or lowering to prevent the Snow Thrower from catching on uneven surfaces. Under some conditions it will be necessary to coat the auger, shroud and the inside with paraffin or wax to prevent snow and ice from sticking. Best results are obtained with slow forward movement of the tractor and high auger speed, therefore under normal conditions the tractor should be operated with full throttle and the speed should be about one m.p.h.

CAUTION:

ELECTRIC CLUTCH — Be especially careful after the blower has set outdoors after use. The auger could be frozen to the housing. If this condition exists it

could cause damage to the clutch or belt. Check auger before starting, it should rotate freely.

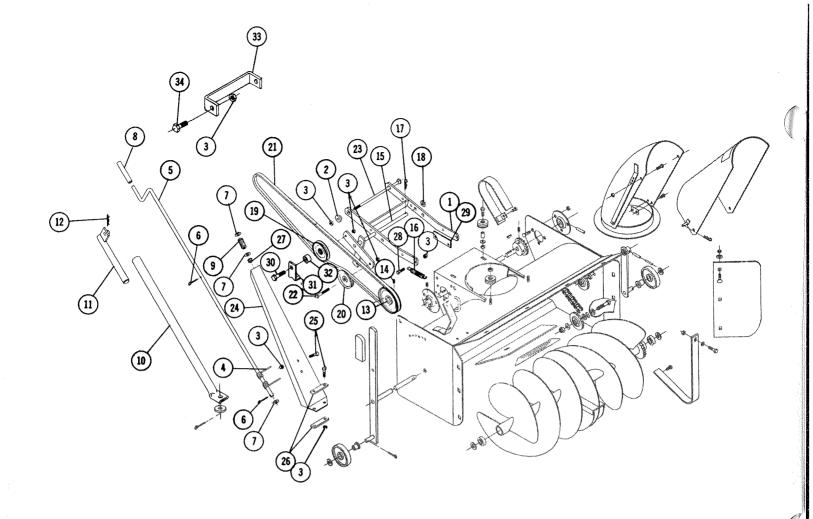
Always shut off engine before making any adjustment or lubrication.

After the first hour of use recheck all bolts, nuts, and set screws — tighten securely. Check chains and belt alignment. Keep children and pets away while operating, there may be rocks or metal in the snow which could be thrown forward or out the chute. Never permit anyone to stand in front of blower when engine is running.

When snow drifts are high and hard-packed, the side plate extensions may be removed, to prevent the tractor from being pulled sideways into the drift.

LUBRICATION

The drive chain should be oiled with a light grade of machine oil. All other bearings and movable parts should be oiled frequently. In storing the Snow Thrower, it is advisable to coat the auger with a heavy machine oil to prevent rust.



6-9121 SNOW THROWER - COMPLETING PACKAGE

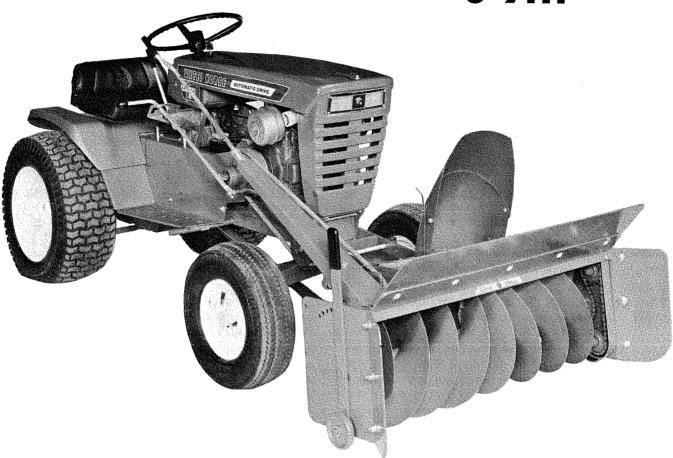
When ordering parts always list Part No. and Name of Part. (Specifications subject to change without notice.)

Item No.	Part No.	Description	No. Req'd.	ltem No.	Part No.	Description	No. Req'd
1	9706	Mounting Frame	1	18	920011-4	Washer ½ Dia. SAE	1
2	1982	Spacer	1	19	7451	Pulley — Idler	1
3	915113-6	Nut 3/8-16 Nylok	13	20	6719	Pulley — Idler	1
4	4795	Cable	1	21	8160	Drive Belt	1
5	8157	Crank	1	22	908036-4	Bolt Hex 3/8-16 x 11/2	1
6	932016-4	Cotter Pin 1/8 x 3/4	2	23	4776	Rod and Spacer Mounting	1
7	920011-4	Washer ½ SAE	3	24	6426	Crank Support	1
8	4569	Handle — Rubber	1	25	908032-4	Bolt Hex 3/8-16 x 3/4	4
9	2354	Spring	1	26	7494	Reinforcing Bar	2
10	8730	Tube and Bar	1	27	5982	Bushing — Nyliner	1
11	8727	Lift Rod	1	28	908035-4	Bolt 3/8-16 x 11/4	4
12	933505-4	Hairpin Cotter	1	29	4774	Shim	2
13	8158	Pulley — Drive Shaft	ī	30	908037-4	Bolt Hex 3/8-16 x 13/4	ī
14	909862-5	Set Screw 16-18 x 16 Nylok	2	31	7672	Spacer	1
15	8159	Idler Arm Ass'y.	ī	32	7450	Bracket — Belt Guard	1
16	6651	Spring	1	33	9705	Bracket — Steering Stop	1
17	933504-4	Hairpin Cotter	1	34	908034-4	Bolt 3/8-16 x 1	2



SNOW THROWER

MODEL 6-9111



DESCRIPTION

The snow thrower is shipped in two separate cartons, a basic unit, and a complete package. This carton contains the completing package and must be used with the basic unit No. 6-6211.

ASSEMBLY AND MOUNTING

Remove all parts from the cartons and place on a clean flat surface. All loose parts are identified in Figure 1.

- 1. Mount the top and side extension plates as shown in Figure 2. Secure in place with the bolts, washers and nuts provided.
- 2. Install the mounting frame assembly by inserting the end with the four bolt holes into the blower housing frame. The arms should extend upward from the blower housing as shown in Fig. 2. Use the bolts and nuts provided to secure in place.

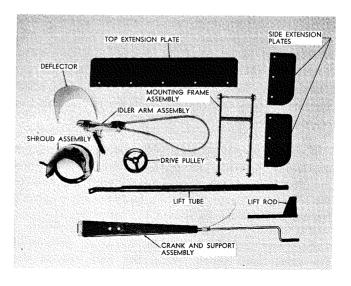


Figure 1

3. Loosen the two $\frac{1}{4}$ " bolts holding the rear rollers. Slide the roller back and insert the ring on the shroud assembly into the roller grooves. Adjust the rollers forward to fit snug against the shroud ring. Tighten the bolts, the shroud should turn freely. See Fig. 2.

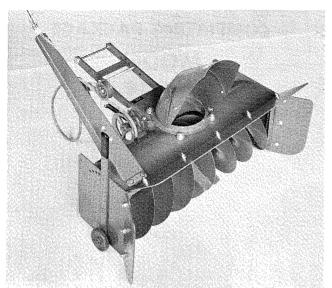


Figure 2

- 4. Insert idler arm assembly shaft through the hole in the right side of the mounting frame assembly. The assembly is held in place with a $\frac{1}{2}$ " washer and a hairpin cotter, items 9 and 14, see the exploded view drawing. Stretch the spring that is connected to the idler arm and hook the loose end into the hole provided in the blower housing frame.
- 5. The "V" belt must be wrapped around the pulley before sliding it on the drive shaft. Slide the pulley on to the drive shaft. Do not tighten the pulley set screw at this time.
- 6. Attach the crank and support assembly to the blower housing line up the holes in the crank support with the two holes in the blower housing and the two holes in the bracket. Two reinforcing plates are used to support the assembly to the blower housing. One is placed directly under the bolt heads and the other is placed on the inside of the blower housing, see Fig. 2 and the exploded view drawing.

Insert the crank rod through the hole in the crank support bracket, and retain it with the $\frac{1}{2}$ " washer and hairpin cotter.

- 7. Remove the $8\frac{1}{2}$ inch long bolt from the mounting frame. Roll the unit up to the tractor and align the first hole of the tractor frame with the hole in the mounting frame. Insert the bolt through a spacer, frame, and spacer as shown in Figure 3.
- 8. Place the drive belt in the inner groove of the attachment clutch, wrap the belt around the idler pulleys as shown in Figure 3. NOTE: Adjust

blower drive pulley in or out to align with the idler pulleys, tighten set screw.

9. Slide the lift rod into the lift tube. Fasten the lift tube over the pin located at the lower rear center

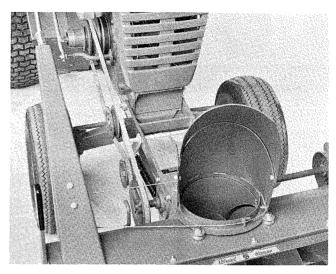


Figure 3

of the blower housing. It is held with $\frac{5}{8}$ washer and $\frac{3}{6}$ x 1" cotter pin.

10. Install lift rod into the top hole of the bottom tractor lift lever arm. The arm with the lift cable attached. Secure with the hairpin cotter.

NOTE: Two spacers are positioned between the idler pulleys and the clutch arm, one $\frac{1}{2}$ inch long (#6309) and one $\frac{1}{8}$ inch long (#7672). The $\frac{1}{8}$ " long spacers are removed for tractors models previous to 1968. Be sure the blower drive pulley is adjusted to align with the idler pulleys.

CABLE WRAPPING INSTRUCTIONS:

- 1. Face Shroud, Part No. 5520 to the right. (See Fig. 3.)
- Thread Cable, Part No. 4795, end "A" up under the Double Speed Nut, Part No. 6433, and tighten screws just enough to retain cable.
- 3. Pull cable around the shroud and thread end "B" of cable through hole #1 then back through hole #2 in Crank, Part No. 6413, and then wrap seven (7) complete turns in direction shown in Figure 4. Finish last turn on top of crank. Pull cable end "B" behind the hook on the wrapper assembly and thread up under the double speed nut. Retighten screws just enough to retain cable.
- Face shroud forward and grip both ends of cable with pliers and pull until cable is tight. Tighten screws in speed nut securely.

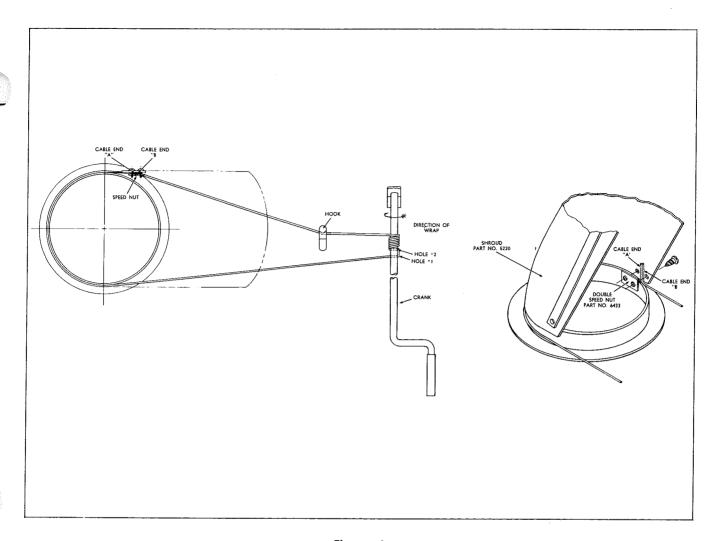


Figure 4

The adjustable shroud allows the operator to control the direction the snow may be thrown by turning the convenient pivot crank. The upper part of the snow shroud is adjustable to deflect the snow in an upward or downward direction depending upon conditions. There are wheels on each side for raising or lowering to prevent the Snow Thrower from catching on uneven surfaces. Under some conditions it will be necessary to coat the auger, shroud and the inside with paraffin or wax to prevent snow and ice from sticking. Best results are obtained with slow forward movement of the tractor and high auger speed, therefore under normal conditions the tractor should be operated in first gear with full throttle. On automatic drive tractors the speed should be about one m.p.h.

CAUTION:

MANUAL CLUTCH — Engage clutch gently, do not snap into engagement.

ELECTRIC CLUTCH — Be especially careful after the

blower has set outdoors after use. The auger could be frozen to the housing. If this condition exists it could cause damage to the clutch or belt. Check auger before starting, it should rotate freely.

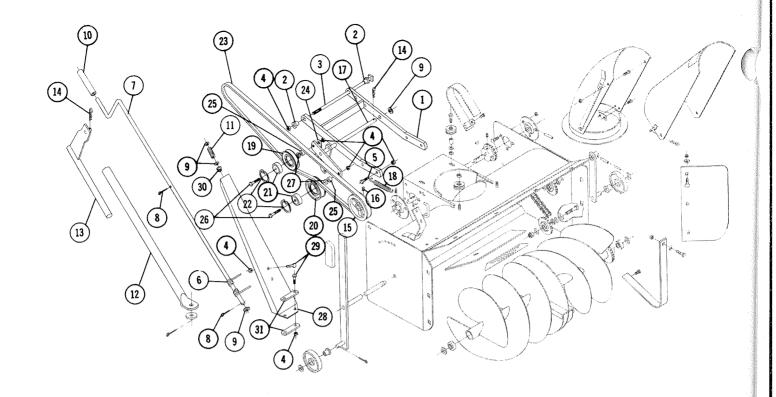
Always shut off engine before making any adjustment or lubrication.

After the first hour of use recheck all bolts, nuts, and set screws — tighten securely. Check chains and belt alignment. Keep children and pets away while operating, there may be rocks or metal in the snow which could be thrown forward or out the chute. Never permit anyone to stand in front of blower when engine is running.

When snow drifts are high and hard-packed, the side plate extensions may be removed, to prevent the tractor from being pulled sideways into the drift.

LUBRICATION

The drive chain should be oiled with a light grade of machine oil. All other bearings and movable parts should be oiled frequently. In storing the Snow Thrower, it is advisable to coat the auger with a heavy machine oil to prevent rust.



6-9111 SNOW THROWER - COMPLETING PACKAGE

When ordering parts always list Part No. and Name of Part.

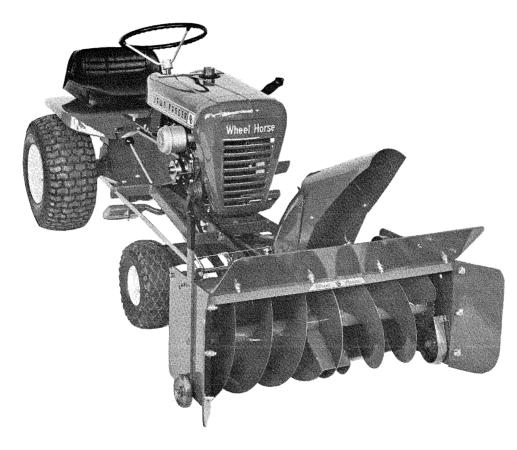
(Specifications subject to change without notice.)

item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description	No. Req'd
1	6424	Mounting Frame Ass'y	1	17	6420	Idler Arm Ass'y	1
2	1982	Spacer	2	13	6651	Spring	1
3	900854-4	Bolt Square Head $\frac{3}{8}$ -16 x $8\frac{1}{2}$	1	19	4974	Pulley Idler	1
4	915113-6	Nut 3/8-16 Nylok	11	20	6740	Pulley Idler	1
5	908033-4	Bolt Hex 3/8-16 x 7/8	4	21	4567	Ball Bearing	2
6	4795	Cable	1	22	936024	Snap Ring 13/8 Bore	2
7	6413	Crank	1	23	8231	Belt — Drive	1
8	932016-4	Cotter Pin 1/8 x 3/4	2				'
9	920011-4	Washer 1/2 SAE	4	24	6423	Bracket — Belt Guide	1
10	4569	Tube — Rubber	1	25	6309	Spacer	2
11	2354	Spring	1	26	908037-4	Bolt Hex $\frac{3}{8}$ -16 x $1\frac{3}{4}$	2
12	6427	Tube and Bar Ass'y	T	27	7672	Spacer	2
13	1986	Lift Rod Ass'y	1	28	6426	Support Crank	1
14	933504-4	Hairpin Cotter	3	29	908032-4	Bolt 3/8-16 x 3/4	4
15	270 <i>7</i>	Pulley — Drive Shaft	1	30	5982	Bushing - Nyliner	1
16	909862-5	Set Screw 5/6-18 x 3/6 Nylok	2	18	7494	Bar — Reinforcing	2



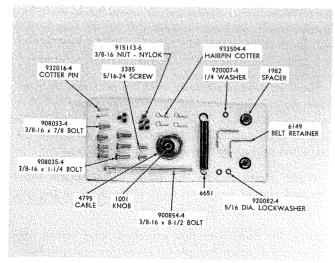
SNOW THROWER MODEL 6-3211

(Formerly STR-324)



ASSEMBLY

To identify the parts mentioned in the assembly instructions refer to Fig. I and Fig. II.



SIDE PLATE

77497
TOP PLATE

5305
MOUNTING
FRAME

S504
CONTROL GUIDE
BRACKET

S507
LIFT LINK

45772
CRANK

45772
CRANK

LIFT TUBE

FIG. I

FIG. II

Install mounting frame to the main assembly and secure with four $\frac{3}{8}$ -16 x $\frac{7}{8}$ bolts, part 908033-4 and nylok nuts, part 915113-6. Fasten control guide bracket part 5504 to mounting frame. Secure with two $\frac{3}{8}$ -16 x $\frac{11}{4}$ bolts, part 908035-4 and $\frac{3}{8}$ -16 nylok nuts, part 915113-6. See Fig. III.

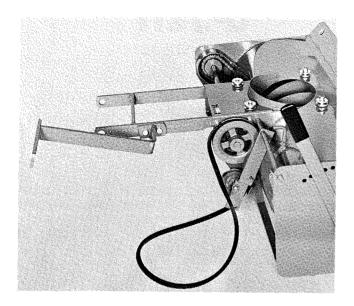


FIG. III

Install the shroud assembly in the grooves of the front and rear rollers. Adjust rear rollers by sliding forward. Be sure rollers turn freely and shroud turns freely. See Fig. IV.

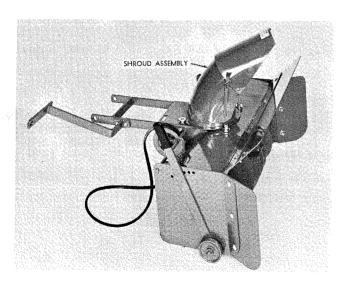


FIG. IV

Move wheel adjustment lever all the way forward so wheels are down. Roll the unit to the tractor and secure with two mounting spacers, part 1982 and one $\frac{3}{8}$ -16 x $8\frac{1}{2}$ bolt, part 900854-4 and nylok nut, part 915113-6 thru first hole in tractor frame. See Fig. V. Slide the belt over the control guide bracket and in the pulley groove nearest the tractor.

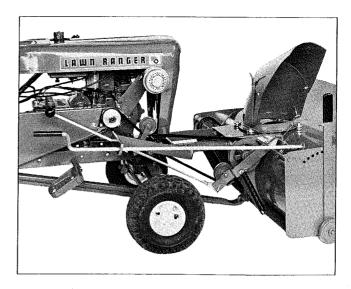


FIG. V

Install crank, part 4572 thru the hole in the control guide, and thru the hole in the bracket on the wrapper assembly, and secure with cotter pins, $\frac{1}{8} \times \frac{3}{4}$, part 932016-4. Bend both ends around the crank.

Bolt the idler bracket assembly to the R.H. frame rail with $\frac{3}{8}$ -16 x $1\frac{1}{4}$ bolt, part 908035-4 through second hole from the end of the frame. Secure with $\frac{3}{8}$ -16 nylok nut, part 915113-6.

The idler rides on top of upper V belt and the belt guide extends down along side both strands of belt. See. Fig. V.

Install clutch rod, part 4573 thru slot in control guide and secure to idler bracket, with hairpin cotter, 933504-4, as shown. Install the knob, part 1001. Hook the spring to the main assembly and the idler arm, it is held in place with a $\frac{1}{4}$ dia. washer, 920007-4 and hairpin cotter 933504-4. See Fig. V.

Fasten the two belt retainers to the engine with the $\frac{1}{16}$ -24 screws, part 3385 and $\frac{1}{16}$ lockwasher, part 920082-4.

Adjust belt retainers so that it holds the belt when the attachment clutch rod is declutched. (NOTE: Belt stop bracket should not touch the belt when running.)

Place lift tube, part 3093 over pin on snow thrower wear plate. Secure with $\frac{1}{2}$ " flat washer, part 920011-4 and cotter pin, part 932034-4. Slide lift rod, part 1986 into lift tube. Install lift-link, part 5370 on pin of lift rod with the link extended forward.

(NOTE: Holes in link are offset towards one side. This side should be down so that the thickest portion is up.) Secure with hairpin cotter.

Raise lift Rod (with link attached) and install liftlink on pin of lawn Ranger lift lever. Secure with hairpin cotter, part 933504-4.

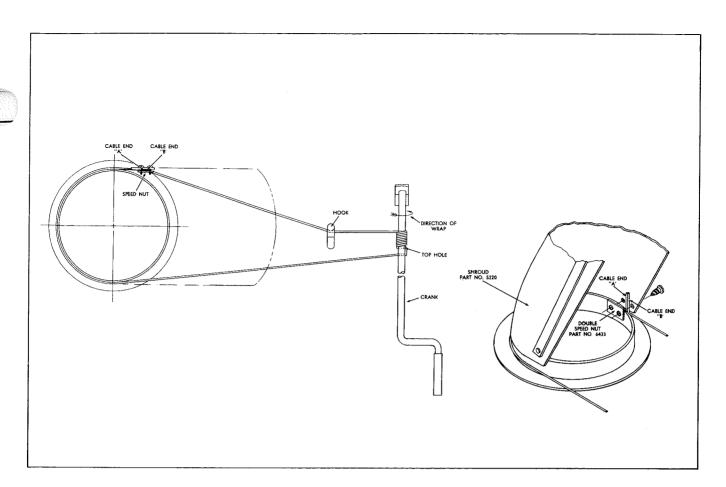


FIG. VI

CABLE WRAPPING INSTRUCTIONS:

- 1. Face Shroud assembly to the right. (See Fig. VI.)
- 2. Thread Cable, Part No. 4795, end "A" up under the Double Speed Nut, Part No. 6433, and tighten screws just enough to retain cable.
- 3. Pull cable around the shroud and thread end "B" of cable through top hole in Crank, and then wrap eight (8) complete turns in direction shown in Fig. VI. Finish last turn on bottom of crank. Pull cable end "B" behind the hook on the wrapper assembly and thread up under the double speed nut. Retighten screws just enough to retain cable.
- Face shroud forward and grip both ends of cable with pliers and pull until cable is tight. Tighten screws in speed nut securely.

OPERATION

The adjustable shroud allows the operator to control the direction the snow may be thrown by turning the convenient pivot crank. The upper part of the snow shroud is adjustable to deflect the snow in an

upward or downward direction depending upon conditions. There are wheels on each side for raising or lowering to prevent the Snow Thrower from catching on uneven surfaces. Under some conditions it will be necessary to coat the auger, shroud and the inside with paraffin or wax to prevent snow and ice from sticking. Best results are obtained with slow forward movement of the tractor and high auger speed.

CAUTION — Engage clutch gently, do not snap into engagement. Be especially careful after the blower has set out doors after use. The auger could be frozen to the deck. Always shut off the engine before making any adjustment or lubrication.

After the first hour of use recheck all bolts, nuts, and set screws — tighten securely. Check chains and belt alignment. Keep children and pets away while operating, there may be rocks or metal in the snow which could be thrown forward or out the chute. Never permit anyone to stand in front of blower when engine is running.

LUBRICATION

The drive chain should be oiled with a light grade of machine oil. All other bearings and movable parts should be oiled frequently. In storing the Snow Thrower, it is advisable to coat the auger with a heavy machine oil to prevent rust.

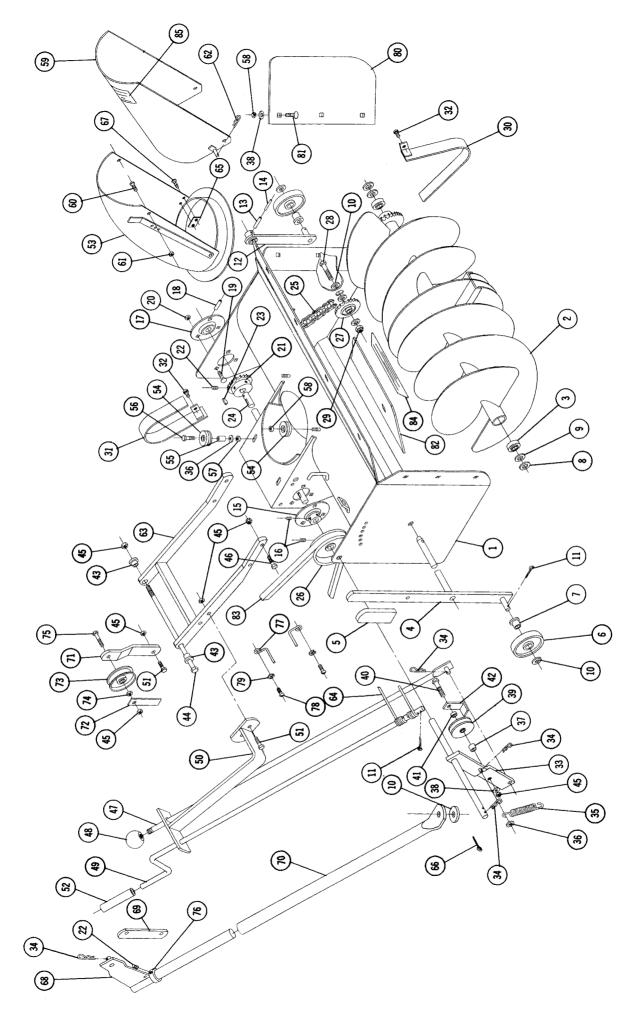
SNOW THROW PARTS LIST 6-3211

Formerly STR-324

When ordering parts always list Part No. and Name of Part.

All specifications subject to change without notice.

Item No.	Part No.	Description	No. Req'd.	ltem No.	Part No.	Description	No. Req'd
1	2170	Ass'y Wrapper	1	44	900854-4	Bolt Square Head 3/8-16 x 81/2	1
2	2172	Ass'y Auger	1	45	915113-6	Nut 3/8-16 Nylok	10
3	5493	Bearing	2	46	908033-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{7}{8}$	4
4	5155	Ass'y Auger Shaft	1	47	4573	Ass'y Rod — Clutch	1
5	5359	Grip	1	48	1001	Knob	1
6	1987	Wheel	1	49	4572	Crank	1
7	1974	Bushing Nylon	1	50	5504	Control Guide Bracket	1
8	920225-4	Washer 080 Thick	2	51	908035-4	Bolt Hex $\frac{3}{8}$ -16 x $1\frac{1}{4}$	3
9	1278	Washer .050 Thick	2	52	4569	Tube	1
10	920011-4	Washer ½ SAE	6	53	5220	Ass'y Shroud	1
11	932016-4	Cotter Pin 1/8 x 3/4	4	54	1973	Roller	4
12	5157	Ass'y Wheel Support	1	55	2163	Spacer	2
13	933215	Roll Pin 1/4 x 11/4	1	56	908006-4	Bolt Hex $\frac{1}{4}$ -20 x 1 $\frac{1}{4}$	2
14	933173	Roll Pin 3/2 x 11/4	1	57	915111-6	Nut Nylok 1/4-20	2
15	5269	Bearing — Flanged	1	58	915663-4	Nut 3/8-16 Elastic Stop	11
16	909862-5	Set Screw 1/6-18 x 1/6 Nylok	4	59	2165	Ass'y Deflector	1
17	4571	Bearing Flanged	1	60	909052-4	Bolt Round Head 1/4-20 x 1/2	2
18	933216	Roll Pin 1/4 x 13/8	1	61	915661-4	Nut ½-20 Elastic	2
19	900037-4	Bolt Carriage $\frac{5}{16}$ -18 x $\frac{3}{4}$	6	62	933503-4	Hairpin Cotter	1
20	915112-6	Nut Nylok 3/6-18	6	63	5365	Ass'y. Mounting Frame	1
21	2176	Sprocket	1	64	4795	Cable	1
22	909848-5	Set Screw 1/4-20 x 1/4 Nylok	3	65	6433	Speed Nut — Double #10	1
23	937014	Key #9 Woodruff	2	66	932034-4	Cotter Pin 3/6 x 1	1
24	2083	Shaft — Drive	1	67	926306-4	Screw #10-16 x ½ Self Tap	2
25	2175	Chain	1	68	1986	Ass'y Lift Rod	1
26	5499	Pulley Drive Shaft	ī	69	5370	Link — Lift	1
27	2174	Sprocket Idler	1	70	3093	Ass'y Tube and Bar	1
28	908060-4	Bolt Hex 1/2-13 x 13/4	1	71	.5619	Bracket — Idler	1
29	915115-6	Nut ½-13 Elastic Stop	1	72	5368	Bar Belt Guide	1
30	2089	Ass'y Guard — Inner	1	73	MW-8821	Pulley — Idler	1
31	2162	Ass'y Guard — Outer	1	74	915236-4	Nut Hex 3/8-16 Jam	1
32	1391	Screw 1/4-20 x 3/8 Sems	4	75	908038-4	Bolt Hex $\frac{3}{8}$ -16 x 2	1
33	4576	Ass'y Idler Bracket	1	76	1085	Collar	1
34	933504-4	Hairpin Cotter	6	77	6149	Retainer — Belt	2
35	6651	Spring	1	78	3385	Screw — Round Head 5/16-24 x 3/4	2
36	920007-4	Washer 1/4 SAE	3	79	920082-4	Lockwasher 5/16 Dia.	2
37	6309	Spacer	1	80	5502	Plate — Side Extension	2
38	920009-4	Washer 3/8 SAE	11	81	900063-4	Bolt — Carriage 3/8-16 x 1	10
39	1623	Pulley — Idler	1	82	7497	Plate — Top Extension	1
40	908038-6	Bolt Hex 3/8-16 x 2 Nylok	1	83	1589	Belt — Drive	1
41	1967	Spacer 3/16 Long	1	84	4498	Decal — General Caution	1
42	3760	Bracket Belt Guide	1	85	5604	Decal — Attachment	1
43	1982	Spacer	2				





SNOW THROWER MODEL 6-1211

(Formerly ST-376)

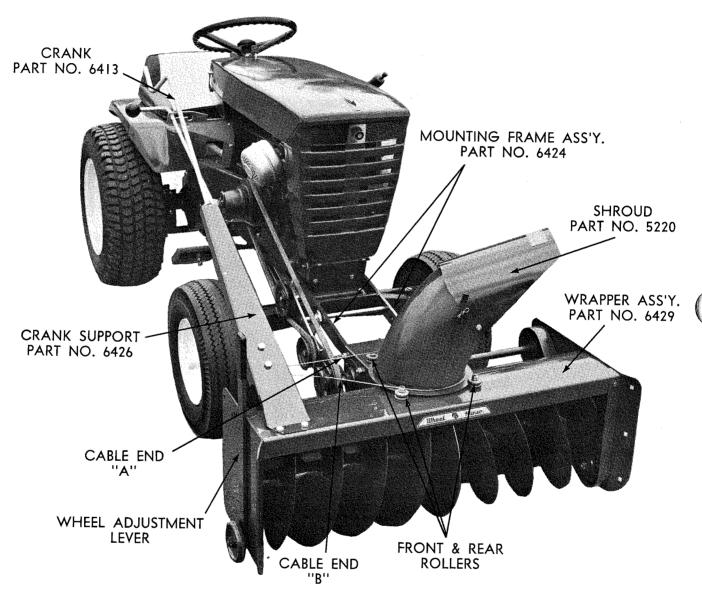


Figure 1

ASSEMBLY

Remove Snow Thrower and all parts from carton and place on a clean flat surface.

- 1. Fasten the Mounting Frame Assembly, Part No. 6424, to the Wrapper Assembly, Part No. 6429 with four $\frac{3}{8}$ " x $\frac{7}{8}$ " Hex Head Bolts, Part No. 908033-4 and secure with the four $\frac{3}{8}$ " Nylock Nuts, Part No. 915113-6.
- 2. Install Crank Support, Part No. 6426 to the Wrapper Assembly, Part No. 6429 with four $\frac{3}{8}$ " x $\frac{3}{4}$ " Bolts, Part No. 908032-4 and secure four Elastic Stop Nuts, Part No. 915663-4.
- 3. Install the Shroud Assembly, Part No. 5220, in the grooves of the Front and Rear Rollers, Part No. 1973. Be sure the Rollers, Part No. 1973, and Shroud, Part No. 5220 turn freely. To adjust slide rear rollers,

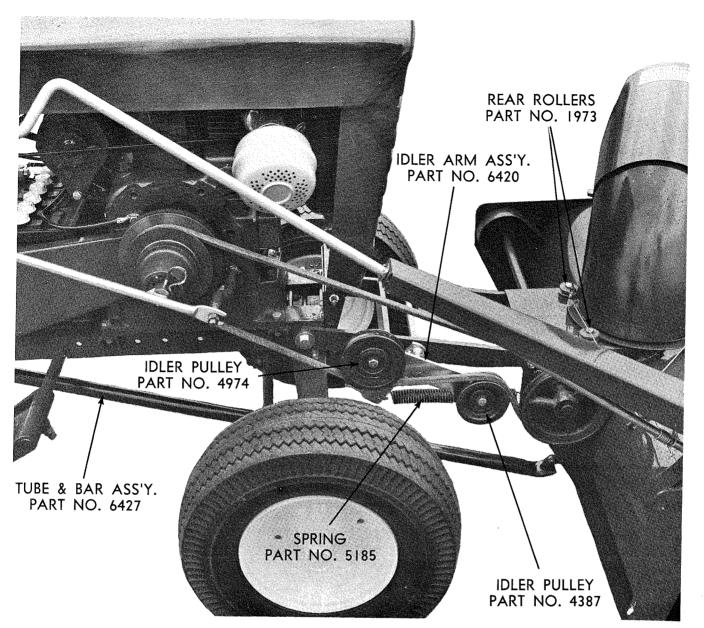


Figure 2

ASSEMBLY (Continued)

forward or back and secure by tightening the two Nylock nuts on the rear rollers.

- **4.** Install Nylon Bushing, Part No. 5982, in hole of upper end of the Crank Support, Part No. 6426. Now with the $\frac{1}{2}$ " S.A.E. Washer, Part No. 920011-4 on the Crank, Part No. 6413, slide crank down through the nylon bushing and insert it in hole in the bracket of the wrapper assembly. Secure with two $\frac{1}{8}$ " x 1" Cotter Pins, Part No. 932016-4 through holes in Crank, Part No. 6413. Bend both ends of cotter pins around crank rod.
- 5. Place Tube and Bar Assembly, Part No. 6427, over pin located at lower rear center of wrapper assembly. Now secure with $\frac{5}{6}$ " Flat Washer, Part No. 920013-4 and $\frac{3}{16}$ " x 1" Cotter Pin, Part No. 932034-4. Insert Lift Rod Assembly, Part No. 1986, in to end of Tube and Bar Assembly, Part No. 6427.

Move wheel adjustment lever all the way forward so the Wheels, Part No. 1987 are down.

- **6.** Roll unit to the tractor and secure with two Mounting Spacers, Part No. 1982, and $\frac{3}{8}$ " x $8\frac{1}{2}$ " square head Bolt, Part No. 900854-4 and Nylock Nut, Part No. 915113-6 in the first hole of the tractor frame.
- 7. Install power take-off clutch as per instructions which came with the P.T.-6 package.
- 8. Install Spring, Part No. 6651, between arm on Idler Arm Assembly, Part No. 6420 and hole in wrapper assembly (Fig. 2). Place Belt Idler Pulleys, Part Nos. 4974 and 4387 and in inner groove on the power take-off clutch. Make sure that the Belt Guide Bracket, Part No. 6423 is correctly positioned to retain belt in groove of the pulley without rubbing back of belt. CAUTION: Check for proper alignment of pulleys.

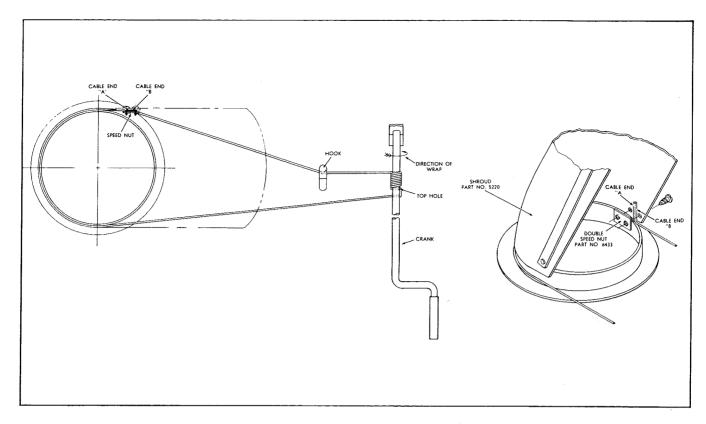


Figure 3

CABLE WRAPPING INSTRUCTIONS:

- 1. Face Shroud, Part No. 5220 to the right. (See Fig. 3.)
- 2. Thread Cable, Part No. 4795, end "A" up under the Double Speed Nut, Part No. 6433, and tighten screws just enough to retain cable.
- 3. Pull cable around the shroud and thread end "B" of cable through top hole in Crank, Part
- No. 6413, and then wrap eight (8) complete turns in direction shown in Fig. 3. Finish last turn on bottom of crank. Pull cable end "B" behind the hook on the wrapper assembly and thread up under the double speed nut. Retighten screws just enough to retain cable.
- Face shroud forward and grip both ends of cable with pliers and pull until cable is tight. Tighten screws in speed nut securely.

9. Install Lift Rod, Part No. 1986, into top hole in bottom arm of tractor lift lever and secure with Hairpin Cotter, Part No. 933504-4.

OPERATION

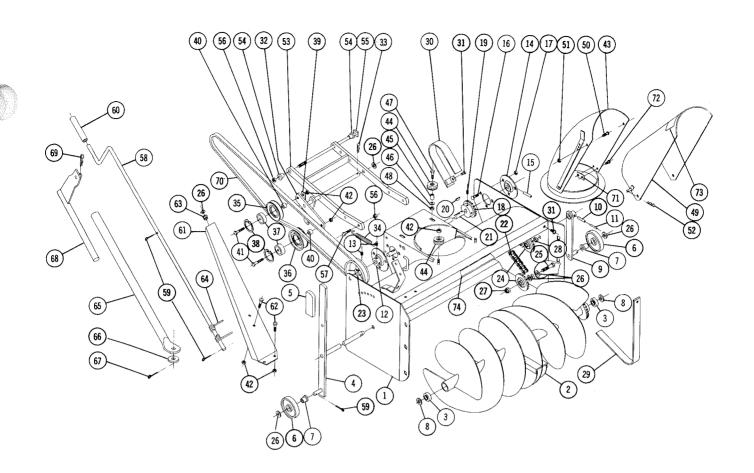
The adjustable shroud allows the operator to control the direction the snow may be thrown by turning the convenient pivot crank. The upper part of the snow shroud is adjustable to deflect the snow in an upward or downward direction depending upon conditions. There are wheels on each side for raising or lowering to prevent the Snow Thrower from catching on uneven surfaces. Under some conditions it will be necessary to coat the auger, shroud and the inside with paraffin or wax to prevent snow and ice from sticking. Best results are obtained with slow forward movement of the tractor and high auger speed, therefore under normal conditions the tractor should be operated in first gear with full throttle.

CAUTION — Engage clutch gently, do not snap into engagement. Be especially careful after the blower has set out doors after use. The auger could be frozen to the deck. Always shut off the engine before making any adjustment or lubrication.

After the first hour of use recheck all bolts, nuts, and set screws — tighten securely. Check chains and belt alignment. Keep children and pets away while operating, there may be rocks or metal in the snow which could be thrown forward or out the chute. Never permit anyone to stand in front of blower when engine is running.

LUBRICATION

The drive chain should be oiled with a light grade of machine oil. All other bearings and movable parts should be oiled frequently. In storing the Snow Thrower, it is advisable to coat the auger with a heavy machine oil to prevent rust.



PARTS LIST

When ordering parts always list Part No. and name of parts

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd
1	6429	Ass'y. Wrapper	1	38	936024	Snap Ring — 13/8 Bore	2
2	4467	Ass'y Auger	1	39	6423	Bracket — Belt Guide	1
3	5493	Bearing — Ball	2	40	2233	Spacer	
4	4477	Ass'y, Auger Shaft	1	41	908037-4	Bolt Hex 3/8-16	2 2
5	5359	Grip	1	42	915663-4	Nut Elastic Stop 3/8-16	8
6	1987	Wheel	1	43	5220	Ass'y. Shroud	9
7	1974	Bushing - Nylon	1	44	1973	Roller	
8	2090	Washer — Auger	2	45	2163	Spacer	2
9	51 <i>5</i> 7	Ass'y. Wheel Support	1	46	920007-4	Washer 1/4 SAE	2
10	933215	Roll Pin $\frac{1}{4} \times 1\frac{1}{4}$	1	47	908006-4	Bolt Hex 1/4-20 x 11/4	2
11	933173	Roll Pin 32 x 11/4	1 1	48	915111-6	Nut 1/4-20 Nylok	2
12	5269	Bearing — Flanged Ball	i	49	2165	Ass'y. Deflector	2
13	909862-6	Set Screw 16-18 x 1/6 Nylok	4	50	909052-4	Bolt 1/4-20 x 1/2 Round Head	2
14	4571	Bearing — Flanged Ball	1	51	915661-4	Nut 1/4-20 Elastic Stop	2
15	933216	Roll Pin 1/4 x 13/8	ī	52	933503-4	Hairpin Cotter	1 7
16	900037-4	Bolt — Carriage 5/6-18 x 3/4	6	53	6424	Ass'y. Mounting Frame	
17	915112-6	Nut - Nylok 3/6-18	6	54	1982	Spacer	2
18	6415	Sprocket	li	55	900854-4	Bolt $\frac{3}{8}$ -16 x $8\frac{1}{2}$ Square Head	4
19	909848-6	Set Screw 1/4-20 x 1/4 Nylok	2	56	915113-6	Nut 3/8-16 Nylok	-
20	937014	Key #9 Woodruff	2	57	908033-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{7}{8}$	3
21	4757	Shaft — Drive	1	58	6413	Crank	4
22	6416	Chain	l i	59	932016-4	Cotter Pin $\frac{1}{8} \times \frac{3}{4}$	
23	2707	Pulley — Drive Shaft	1	60	4569	Tube	4
24	2174	Sprocket — Idler	2	61	6426	Support — Crank	;
25	908060-4	Bolt Hex $\frac{1}{2}$ -13 x 1 $\frac{3}{4}$	2	62	908032-4	Bolt Hex $\frac{3}{8}$ -16 x $\frac{3}{4}$	
26	920011-4	Washer ½ SAE	5	63	5982	Bushing — Nyliner	1 7
27	915665-4	Nut ½-13 Elastic Stop	2	64	4795	Cable	
28	6417	Spacer	1	65	6427	Ass'y, Tube & Bar	1 :
29	6418	Ass'y, Guard — Inner	1	66	920013-4	Washer 5/8 SAE	;
30	2162	Ass'y. Guard — Outer	1	67	932034-4	Cotter Pin $\frac{3}{16} \times 1$;
31	1391	Screw — Sems $\frac{1}{4}$ -20 x $\frac{3}{8}$	4	68	1986	Ass'y. Lift Rod	
32	6420	Ass'y idler Arm	1	69	933504-4	Hairpin Cotter	
33	933504-4	Hairpin Cotter	1	70	1576	Belt — Drive	;
34	6651	Spring	1	71	6433	Speed Nut (Double)	1
35	4974	Pulley — Idler	1	72	962306-4	Screw #10-16 x ½ Self-Tap	2
36	4387	Pulley — Idler	l i	73	4498	Decal — Gen. Caution	1 4
37	4567	Bearing — Ball	2	74	5604	Decal — Attachment	

SUPPLEMENTAL SHEET FOR 6-1211 (ST 376) SNOW THROWER

For Mounting To Wheel Horse Tractors
Long Wheel Base (45½").

In order to provide our customers with the most up to date improvements the following changes have been made since the ST 376 Manual was published;

Refer To the Parts List, Back Page.

REF. NO	SHOULD	BE DES	SCRIPTION	REQ'D.
42	91511:	3-6 Nut, 3/8	3-16 Nylok	2
New	*7672	Spacer	•	2
New	749 5	Plate-	Top Extension	1
New	5502	Plate-	Side Extension	2
* These	spacers fit on	the bolts with	spacers #2233	(Ref #40)

SUPPLEMENT INSTRUCTIONS:

To obtain proper belt alignment it is necessary to check the following before attaching the Snow Thrower Unit to a Tractor:

The spacers between the Idler Pulleys (Ref #35&36) and Idler Arm (Ref #32) should be located as follows:

FOR CHARGER AND RAIDER TRACTORS WITH 45½" WHEEL BASE:

Two spacers are to be between the Idler Pulleys and the Clutch Arm.

One #7672 Spacer 1/8 inch long and one #2233 Spacer ½ inch long.

Make sure the Driver Pulley (Ref #23) is aligned with the Idler Pulleys.

FOR ALL OTHER 45½ INCH WHEEL BASE TRACTORS

One Spacer 1/2 inch long (Ref #40) is to be between the Idler Pulley and the Clutch Arm. Place the 1/8" Spacers next to the Heads of the Idler Pulley Mounting Bolts.

Wheel Horse

KIT - 6070



This Kit 6070 Has Been Designed to Adapt the ST-376 Snow Thrower to Standard Frame 8 and 10 H.P. Tractors.

Items To Be Removed From ST-376 Snow Thrower:

- 1. Remove Spring Part No. 6651 and discard.
- Remove Snow Thrower Drive Belt, Part No. 1576, and discard.
- Remove Pulley, Part No. 2707 from Drive Shaft, Part No. 4757 and discard.
- Remove Idler Arm Ass'y. Part No. 6420 complete with Idler Pulleys.
- Remove both Idler Pulley Assemblies from Idler Arm, Part No. 6420 and install on new Idler Arm Ass'y., Part No. 6911. Now discard Idler Arm Part No. 6420.
- 6. Cut 43/8" from the rear end of the Tube and Bar Ass'y., Part No. 6427.

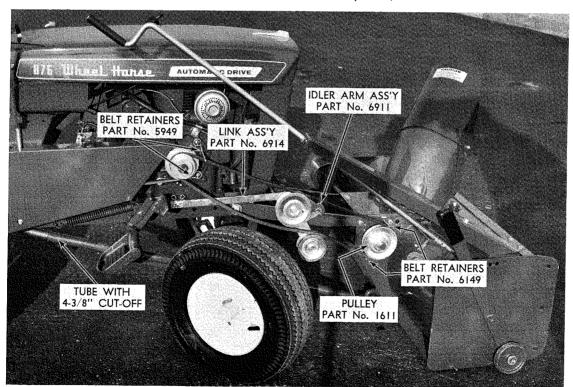
Items To Be Installed on ST-376 Snow Thrower:

 Install Idler Arm Ass'y., Part No. 6911 in Mounting Frame Ass'y., Part No. 6424 and secure with (2) Hairpin Cotters one on each side of frame.

- Install Drive Pulley, Part No. 1611 on to Drive Shaft, Part No. 4757, make sure pulley is in line with idlers and secure with set screw provided.
- 3. Install new Drive Belt, Part No. 1588.

MOUNTING INSTRUCTIONS

- See assembly instructions, paragraphs 1 thru 6, of the ST-376 Instruction Sheet. Disregard paragraphs 7 and 8.
- Install Drive Belt over Engine Pulley using inner groove.
- 3. Install both Belt Retainers, Part No. 5949 on engine using screws provided. Position the retainers approximately ½" from belt with attachment clutch engaged. (See photo.)
- Install both Belt Retainers, Part No. 6149 under the front and bottom nuts of the Flanged Ball Bearing, Part No. 5269. Position as instructed in Step 3.
- Attach Link Ass'y., Part No. 6914 to the Idler Arm Ass'y., Part No. 6911 and then to tractor attachment clutch link. Now secure with Hairpin Cotters. (See photo.)



PARTS LIST

Part No.	Description	No. Req'd
6911	Idler Arm Ass'y	1
6914	Link Ass'y.	1
1611	Pulley — Drive	i
5949	Belt Retainer	;
6149	Belt Retainer	2

Part No.	Description	No. Req'd.
1588	V-Belt — Drive	1
933504	Hairpin — Cotter	4
909846	Set Screw	i
909070	Rd. Hd. Screw (10 H.P.)	2
909084	Rd. Hd. Screw (8 H.P.)	2



SNOW THROWER MODEL 6-2211

(Formerly ST-326)

CLUTCH CONTROL ROD PART NO. 4573 MOUNTING FRAME ASS'Y, PART NO. 2168 **SHROUD PART NO. 5220** WRAPPER ASS'Y. **PART NO. 2170** SIDE PLATE **EXTENSION** CONTROL GUIDE **BRACKET PART NO. 5504** CRANK **ROLLERS** PART NO. **PART NO. 1973** 4572 WHEEL ADJUSTMENT LEVER

Figure 1

ASSEMBLY

Remove Snow Thrower from carton and fasten Control Guide, Part No. 5504 to Mounting Frame, Part No. 2168. Secure with two $\frac{3}{8}$ -16 x $1\frac{1}{4}$ Bolts, Part No. 908035-4 and $\frac{3}{8}$ -16 Elastic Nuts, Part No. 915663-4. (NOTE: Be sure the Drive Belt, Part No. 1589 is on the inside of bracket toward the tractor.)

Install mounting frame to Wrapper Assembly, Part No. 2170 and secure with four $\frac{3}{8}$ -16 x $\frac{7}{8}$ Bolts, Part No. 908033-4 and Elastic Nuts, Part No. 915663-4.

Install the Shroud, Part No. 5220 in the grooves of the front and rear Rollers, Part No. 1973. Adjust rear rollers by sliding forward. Be sure rollers and shroud turn freely. Secure with two $\frac{1}{4}$ -20 x $\frac{11}{4}$ Bolts, Part No. 908006-4 and Hex Nylock Nuts, Part No. 915111-6.

Move wheel adjustment lever all the way forward so wheels are down. Roll the unit to the tractor and secure with two Mounting Spacers, Part No. 1982 and one $\frac{3}{8}$ -16 x $8\frac{1}{2}$ Bolt, Part No. 900854-4 and Nylock Nut, Part No. 915113-6.

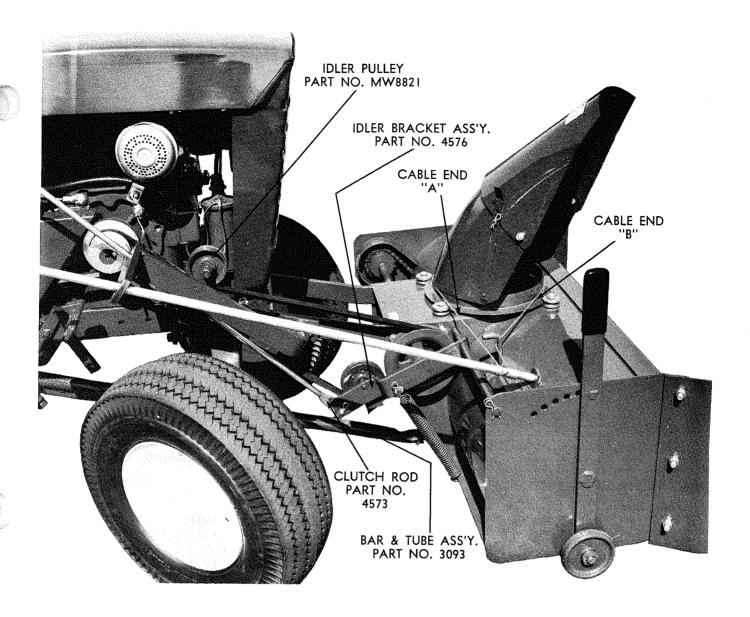


Figure 2

ASSEMBLY (Continued)

Install Crank, Part No. 4572 thru the hole in the control guide, and thru the hole in the bracket on the Wrapper Assembly, Part No. 2170. Secure with Cotter Pin, $\frac{1}{8}$ x 1, Part No. 932017-4. Bend both ends around the crank.

Install Drive Belt, Part No. 1598 on inside groove on the tractor engine pulley.

Install the Idler Bracket, Part No. 5619 with the $\frac{3}{8}$ -16 x $\frac{1}{4}$ Bolt, Part No. 908035-4 in the second hole from the end of the tractor frame. The belt should ride on the bottom of Idler Pulley, Part No. MW8821. The Spacer, Part No. 4937, fits between bracket and pulley (as shown on parts drawing). Install Clutch Rod, Part No. 4573 thru slot in control guide and secure to idler bracket, with Hairpin

Cotter, Part No. 933504-4 (Fig. 2). Install Lift Rod, Part No. 1986 to top hole in bottom arm of tractor lift lever and secure with Hairpin Cotter, Part No. 933504-4.

The top hole in the tractor lift lever must be enlarged to $^{13}\!\!/_{32}$ in diameter on all 701, 552, 502, and 702 tractors.

Slide Tube and Bar Assembly, Part No. 3093 over Lift Rod, Part No. 1986 and over pin located at lower rear center of Snow Thrower, secure with $\frac{1}{2}$ " Flat Washer, Part No. 920011-4 and Cotter Pin, Part No. 932034-4.

Fasten the Belt Retainers, Part No. 6149 to the engine with $\frac{5}{16}$ -24 x $\frac{3}{4}$ Screws, Part No. 3385 and $\frac{5}{16}$ Lock Washer, Part No. 920082-4 on all tractors with Lauson engines, tractors with 6, 7 and 8 H.P. Kohler engines use $\frac{3}{8}$ -16 x $\frac{3}{4}$ Screws, Part No. 909084-4 and $\frac{3}{8}$ Lock Washers, Part No. 920083-4.

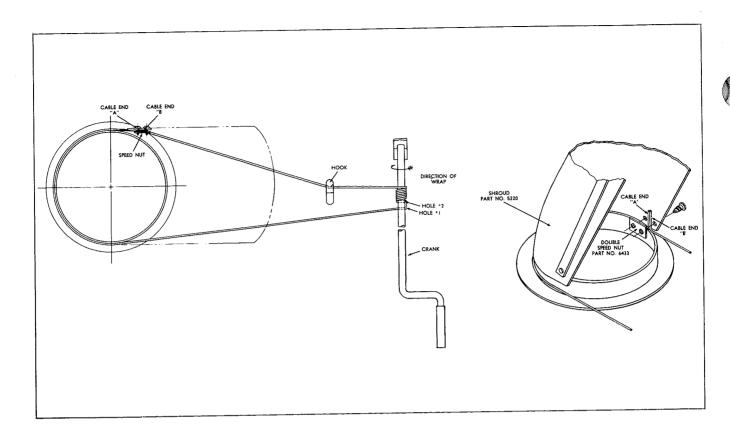


Figure 3

CABLE WRAPPING INSTRUCTIONS:

- 1. Face Shroud, Part No. 5520 to the right. (See Fig. 3.)
- 2. Thread Cable, Part No. 4795, end "A" up under the Double Speed Nut, Part No. 6433, and tighten screws just enough to retain cable.
- 3. Pull cable around the shroud and thread end "B" of cable through hole #1 then back through hole #2 in Crank, Part No. 4572, and then wrap
- seven (7) complete turns in direction shown in Figure 4. Finish last turn on top of crank. Pull cable end "B" behind the hook on the wrapper assembly and thread up under the double speed nut. Retighten screws just enough to retain cable.
- Face shroud forward and grip both ends of cable with pliers and pull until cable is tight.
 Tighten screws in speed nut securely.

To increase snow removal width mount side Extension Plates, Part No. 5502 to the sides of the Wrapper Assembly, Part 2170. Secure Extension Plates, Part No. 5502 with the three $\frac{3}{8}$ -16 x 1 Carriage Bolts, Part No. 900063-4, and $\frac{3}{8}$ diameter Washers, Part No. 920009-4 and $\frac{3}{8}$ -16 Elastic Nuts, Part No. 915663-4.

OPERATION

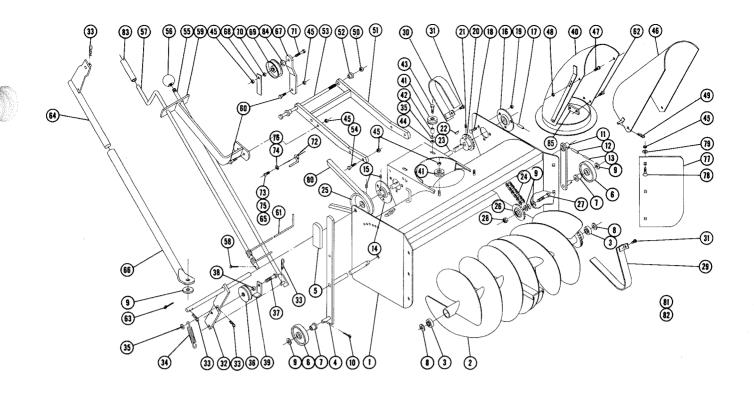
The adjustable shroud allows the operator to control the direction the snow may be thrown by turning the convenient crank. The upper part of the snow shroud is adjustable to deflect the snow in an upward or downward direction depending upon conditions. There are wheels on each side for raising or lowering to prevent the Snow Thrower from catching on uneven surfaces. Under some conditions it will be necessary to coat the auger, shroud and the inside with paraffin or wax to prevent snow and ice from sticking. Best results are obtained with slow forward movement of the tractor and high auger speed, therefore under normal conditions the tractor should be operated in first gear with full throttle.

CAUTION — Engage clutch gently. Do not snap into engagement. Be especially careful after the blower has set outdoors after use. The auger could be frozen to the deck. Always shut off the engine before making any adjustment or lubrication.

After the first hour of use recheck all bolts, nuts, and set screws — tighten securely. Check chains and belt alignment. Keep children and pets away while operating, there may be rocks or metal in the snow which could be thrown forward or out the chute. Never permit anyone to stand in front of blower when engine is running.

LUBRICATION

The drive chain should be oiled with a light grade of machine oil. All other bearing and movable parts should be oiled frequently. In storing the Snow Thrower, it is advisable to coat the auger with a heavy machine oil to prevent rust.



PARTS LIST

When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'o
1	2170	Ass'y. Wrapper	1	45	915113-6	Nut 3/8-16 Nylok	15
2	2172	Ass'y. Auger	1	46	2165	Ass'y Deflector	1
3	5493	Bearing	2	47	909052-4	Bolt - Rd. Hd. 1/4-20 x 1/2	2
4	5155	Ass'y. Auger Shaft	1	48	915661-4	Nut 1/4-20 Elastic Stop	2
5	5359	Grip	1	49	933503-4	Hairpin Cotter	ī
6	1987	Wheel	2	50	915113-6	Nut 3/8-16 Nylok	1
7	1974	Bushing - Nylon	2	51	2168	Ass'y Mounting Frame (TS-326)	i
8	1278	Washer — Auger	2	52	1982	Spacer	2
9	920011-4	Washer ½ S. A. E.	5	53	900854-4	Bolt - Square Hd. 3/8-16 x 81/2	ī
10	932016-4	Cotter Pin 1/8 x 3/4	2	54	908033-4	Bolt - Hex. 3/8-16 x 7/8	1
11	5157	Ass'y. Wheel Support	1	55	4573	Ass'y, Rod - Clutch	l i
12	933215	Roll Pin 1/4 x 11/4	i	56	1001	Knob	;
13	933173	Roll pin 32 x 11/4	1	57	4572	Crank	;
14	5269	Bearing - Flanged Ball	i	58	932016-4	Cotter Pin 1/8 x 3/4	2
15	909862-5	Set Screw \\ \frac{5}{6}-18 \times \frac{5}{6} \text{ Nylok}	1 4	59	5504	Ass'y Bracket - Control Guide	1
16	4571	Bearing — Flanged Ball	l i	60	908035-4	Bolt - Hex. 3/8-16 x 11/4	3
17	933216	Roll Pin 1/4 x 13/8	1	61	4795	Cable	ī
18	900037-4	Bolt - Carriage 1/6-18 x 3/4	6	62	926306-4	Screw - Round Hd. Mach. #10-16 x 1/2	2
19	915112-6	Nut - Nylok 5/6-18	6	63	932034-4	Cotter Pin 3/6 x 1	1 1
20	2176	Sprocket	l i	64	1986	Ass'y, Lift Rod	l i
21	909848-5	Set Screw 1/4-20 x 1/4 Hex. Soc. Nylok	2	65	909070-4	Screw Round Hd. 16-18 x 3/4	•
22	937014	Key #9 Woodruff	2	00	707070-4	(Kohler 10 H.P.)	2
23	2083	Shaft - Drive	ī	66	3093	Ass'y. Tube & Bar	1 7
24	2175	Chain	1	67	5619	Bracket - Idler	;
25	5499	Pulley - Drive Shaft	ī	68	5368	Bar - Belt Guide	i
26	2174	Sprocket - Idler	1	69	MW8821	Pulley - Idler	
27	908060-4	Bolt Hex. 1/2-13 x 13/4	i	70	915236-4	Nut - Hex. 3/8-16 Jam	;
28	915115-6	Nut 1/2-13 Elastic Stop	i	71	908039-4	Bolt - Hex. $\frac{78}{8}$ -16 x $2\frac{1}{4}$	
29	2089	Ass'y, Guard - Inner	i	72	6149	Belt Retainer	2
30	2162	Ass'y Guard - Outer	i	73	3385	Screw Round Hd. 1/6-24 x 3/4 (Lauson)	2
31	1391	Screw - Sems 1/4-20 x 3/8	4	74	920082-4	Lockwasher $\frac{1}{16}$ Dia. (Lauson)	2
32	4576	Ass'y. Idler Bracket	1	75	909084-4	Screw Round Hd. 3/8-16 x 3/4	
33	933504-4	Hairpin Cotter	6	/3	707004-4	(Kohler 7 H.P.)	2
34	6651	Spring	ĭ	7,	000000 4		
35	920007-4	Washer 1/4 S. A. E.	3	76	920083-4	Lockwasher 3/8 Dia. (Kohler)	2
36	1623	Pulley - Idler	ī	77	5502	Plate - Side Extension	2
37	908035-6	Bolt 3/8-16 x 11/4 Hex. Nylok	i	78	900063-4	Bolt - Carriage 3/8-16 x 1	6
38	1536	Spacer 3/6 Long	i	79	920009-4	Washer 3/8 Dia. S. A. E.	6
39	3760	Bracket - Belt Guide	i	80	158 <i>9</i>	Belt - Drive	1
10	5220	Ass'y. Shroud	į	81	7637	Decal — General Caution	1
11	1973	Roller	4	82	5604	Decal - Attachment	1
12	2163	Spacer	2	83	4569	Tube (Rubber)	1
13	908006-4	Bolt - Hex. 1/4-20 x 11/4	2	84	4937	Spacer	i
14	915111-6	Nut Nylok 1/4-20	2	85	6433	Speed Nut - Double #10	2

SUPPLEMENTAL SHEET FOR 6-2211 (ST 326) SNOW THROWER

For Mounting To Wheel Horse Tractors
Short Wheel Base (41½").

In order to provide our customers with the most up to date improvements the following changes have been made since the ST326 Manual was published;

Refer to the parts list, back page.

REF. NO.	SHOULD BE	DESCRIPTION	REQ 'D.
37	908038-4	Bolt-3/8-16x2 Hex Hd.	1
38	1967	Spacer-(5/16) *	1
New	6309	Spacer-(12") *	1
New	920009-4	Washer - 3/8 SAE	1
New	915113-6	Nut - 3/8-16 Nylok	1
New	7497	Plate-Top Extension	1

^{*}See Supplement Instructions for location of Spacers.

SUPPLEMENT INSTRUCTIONS:

To obtain proper belt alignment it is necessary to check the following before attaching the Snow Thrower Unit to a Tractor:

Check the spacer location on the belt clutch Idler Pulley.

FOR GEAR DRIVE TRACTORS:

The ½" spacer (longest) is to be between the Clutch Arm #4576 (Ref. #32) and the Idler Pulley (Ref. #36). The shorter spacer is to be between the Idler Pulley and the Belt Guide (Ref. #39). Make sure the Driver Pulley (Ref. #25) is aligned with the Idler Pulley.

FOR WHEEL-A-MATIC TRACTORS:

The shorter spacer is to be between the Clutch Arm #4576 (Ref. #32) and Idler Pulley (Ref. #36) and the $\frac{1}{2}$ " (longer) is to be between the Idler Pulley and the Belt Guide (Ref. #39). Make sure that the Driver Pulley (Ref #25) is aligned with the Idler Pulley.

PARTS LIST AND INSTRUCTIONS **TURNEL HOUSE** WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

42" DOZER BLADE

MODEL 6-7111



DESCRIPTION

The 42" dozer blade is designed to work with Commando and Charger V7 and V8 models 1-4741, 1-7741, 1-7841, and 1-4841. It is quickly installed and removed to do a variety of snow and earth moving chores. The dozer blade is protected by an automatic trip device. If the blade strikes a solid object, it will tilt forward as it slides over the object and then return to normal operating position.

ASSEMBLY AND MOUNTING

1. The blade is shipped complete in one carton. There are three (3) main parts in the carton: the blade assembly, frame assembly, and hardware package. Remove the parts from the carton.

2. Position the blade and frame assemblies as shown in Figure 1, and insert the lower pivot rod through matching holes in the sector and blade brackets. Secure with hairpin cotters.

3. Raise the trip return springs against the back of the blade and insert the trip pivot rod through the holes in the lugs and inner angles on the back of the blade. Secure with hairpin cotters.

The tilt of the blade is determined by the hole in which the trip pivot rod is placed. The second hole from the bottom is for general use. Tilt forward for earth spreading; tilt back for more aggressive action.

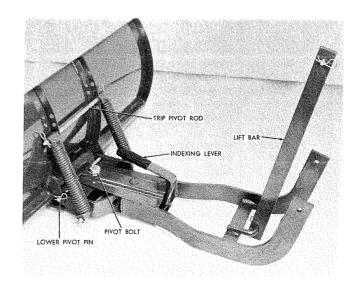


FIGURE 1

- **4.** Assemble the end of the lift bar to the frame lift bracket as shown in Figure 1. Secure with a flat washer and hairpin cotter. Slide the assembly under the tractor from the front until the upturned ends of the frame lift arms are to the rear of the steering tie rods.
- 5. Remove a hairpin cotter and withdraw the attachment pivot rod, Figure 2. Raise the frame lift arms between the tractor frame side rails to align the attachment pivot holes with corresponding holes in the tractor frame. Reinsert the attachment pivot rod and secure with hairpin cotters.
- 6. Raise the free end of the lift bar alongside to the right of the tractor lift plate. By moving the tractor lift lever as necessary, align the hole in the end of the bar with the rear hole in the tractor lift plate. Insert the clevis pin through the bar and plate and secure with a flat washer and hairpin cotter.

REMOVAL

- 1. Lower the blade with the tractor lift lever on the left side of the tractor. Remove the hairpin cotter, flat washer, and clevis pin to release the blade lift bar from the tractor lift plate.
- 2. Remove the hairpin cotter and withdraw the attachment pivot rod from the tractor frame to lower the blade lift arms. Reinstall the attachment pivot rod in the tractor frame and secure with the hairpin cotter. The tractor and blade may now be moved away from each other.

OPERATION

The blade operating angle is adjustable to three positions: right, left, and straight ahead. To change the angle, raise the blade with the tractor lift lever,

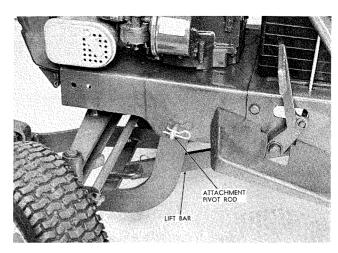


FIGURE 2

depress the indexing lever, Figure 1, and swing the blade to the desired position. Release the lever and allow the indexing pin to lock the blade in place.

LUBRICATION AND MAINTENANCE

Before operation, make sure all bolts are tight and cotters are in place. Excessive play in the pivot sector can be removed by tightening the large pivot bolt. (Figure 1.)

The blade edge is reversible and replaceable. When the edge becomes worn, remove the blade edge plate attaching bolts and turn the blade edge plate over, providing a new cutting edge.

A light grade of machine oil should be applied to all moving parts before operation, and after every ten hours of use.

PARTS LIST

When ordering parts always list Part No. and name of Part.
(Specifications subject to change without notice.)

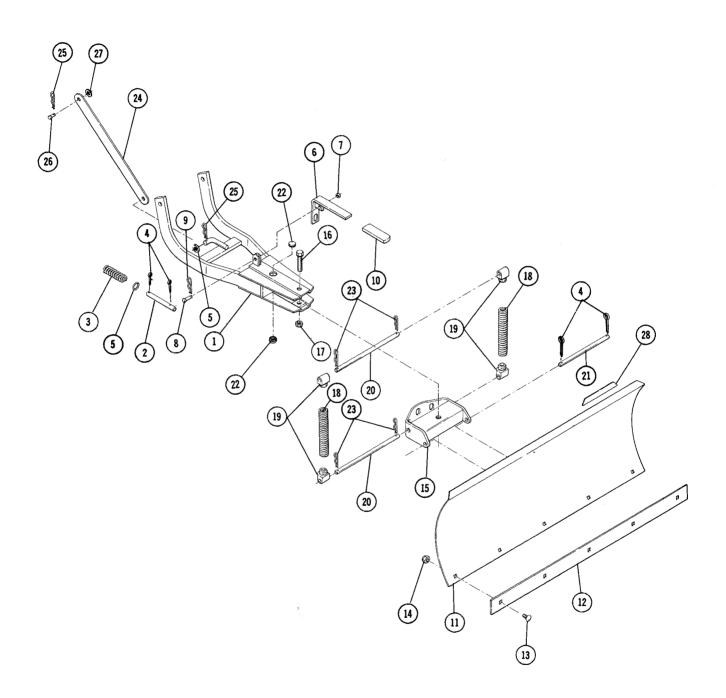
Item No.	Part No.	Description	No. Req'd.	Item No.	Part No.	Description
7	8164	Frame	1	15	5102	Sector and Channel
2	5127	Pin — Indexing	1	16	908256-4	Bolt Hex 3/4-16 x 33/4
3	2354	Spring	1	17	915640-4	Nut Hex 3/4-16 Elastic Stop
4	932017-4	Cotter Pin 1/8 x 1"	4	18	5117	Spring Trip Return
5	920013-4	Washer 5/8 Flat	2	19	5125	Lug
6	8169	Lever — Indexing	1	20	5120	Rod — Trip Pivot
7	920008-4	Washer	1	21	4564	Rod — Lower Pivot
8	932121-4	Pin	1	22	4944	Plug — Button
9	933503-4	Hairpin Cotter	1	23	933512-4	Pin — Hairpin Cotter
10	5359	Grip — Handle	1	24	8172	Bar — Lift
11	5109	Blade	1	25	933505-4	Pin Hairpin Cotter
12	2346	Plate Blade Edge	1	26	932122-4	Pin
13	900062-4	Bolt — Carriage 3/8-16 x 3/4	5	27	920009-4	Washer
14	915662-4	Nut 3/8-16 Elastic Stop	5	28	5604	Decal
	1		1		1	



No. Req'd.

1

1 2

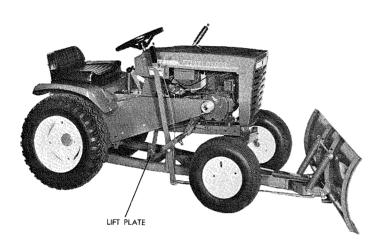


PARTS LIST AND INSTRUCTIONS **Tilheel House**

WHEELHORSE PRODUCTS, INC. - SOUTH BEND, IND.

DOZER BLADE MODEL 6-4111



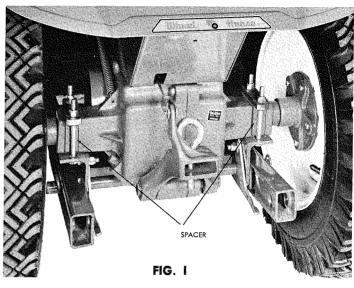


ASSEMBLY AND MOUNTING

- The Dozer Blade is shipped complete in one carton. There are three main parts in the carton. The Frame Assembly, Blade Assembly, and a box of parts.
- 2. Remove contents from carton.
- 3. Install the mounting bracket assembly (see Fig. 1). The bracket should be centered on the axle housing. Secure in place with the links and 3/8-16 x 33/4" carriage bolts and 3/8-16 elastic stop nuts. Angle spacers, item No. 42 on the exploded view drawing, are used on all models where required except the Automatic Transmission (Wheel-A-Matic) type tractors. The angle spacer fits under the link and a hole is provided for one of the carriage bolts. (See Fig. I.)

A ½" spacer plate No. 7920 (item No. 45 on the exploded view drawing) is provided. On some models it may be necessary to use Spacer No. 7920 to provide additional clearance between the Bracket Mounting Assy. No. 7710 Item 43 and the transmission case. The Spacers No. 7920 are mounted directly on top of the angle brackets of the No. 7710 Bracket Mounting Assy. See the exploded view drawing. The frame cross shaft fits in the end hole on all tractors that have 45½" wheel base, all others use the second hole as shown in Fig. I.

- 4. Slide the frame assembly under the tractor. Insert the rear cross shaft on the frame assembly in the mounting bracket and latch. Be sure the index lever on the frame assembly is up and out of the way before the frame is locked in position.
- 5. Fit one end of the lift bar in the second hole (hole nearest the driver) of the tractor lift arm. The



- other end fits into a hole or a slot on the lift plate. The slot is used for Models 1046, 1056, 1076, 1276, 1057, 1257, 1077, 1277, Chargers and Raiders. All other models use the hole.
- 6. Bolt the Pivot Sector, Part No. 5102, to the frame assembly using the Hex Bolt, Part No. 908256-4, and Part No. 915640-4, elastic stop nut. (NOTE: Apply a liberal coat of grease before installing.) Insert the bolt from the bottom and tighten, leaving it loose enough for the blade to swing free (see exploded view drawing).
- 7. Attach the Blade Assembly, Part No. 5109, to the pivot sector using Part No. 4564, lower pivot rod, and two ½" x 1" cotter pins, Part No. 932017-4. Next, install the two springs with the Pivot Rods, Part No. 5120. Fasten to the Pivot sector first, with two of the hairpin cotters. Insert the other pivot rod in the blade angles. The angle of the blade will be determined by the hole in which the pivot rod is placed. For general use, the second hole down from the top is used. Tilt forward for earth spreading; tilt back for more aggressive action.
- 8. The blade control rod, Part No. 7702, is inserted through the bottom of the pivot sector, and through the back side of the lever. Secure with two hairpin cotters (see exploded view drawing).

OPERATION

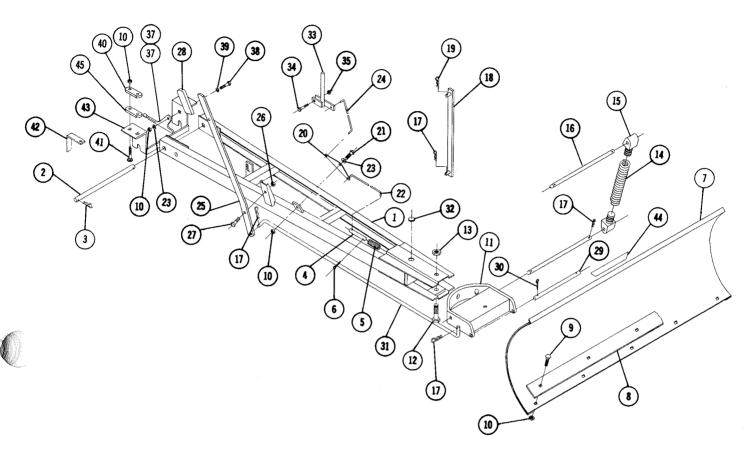
This dozer is equipped with a spring trip device. If the blade should strike a solid object, it will tilt forward and slide over. The dozer blade is adjust-

able and may be locked in three different positions: straight, right angle, and left angle. These adjustments are easily accomplished from the tractor seat by operating the convenient turn lever. The blade is adjusted up and down with the lift lever.

Before operation, make sure that all bolts are tight and cotter pins opened. Excessive play in the pivot sector may be removed by tightening the large pivot bolt. The blade edge is reversible and replaceable. After the edge is worn, remove the five bolts securing it to the blade and turn it over, providing a new cutting edge.

A light grade of machine oil should be applied to all moving parts, before operation, and after every 10 hours of use.

(**CAUTION**: Avoid hitting solid objects with the blade, as this could result in damage to the blade and injury to the operator.



PARTS LIST

When ordering parts always list Part No. and name of parts

All specifications subject to change without notice

Item No.	Part No.	Description	No. Req'd.	ltem No.	Part No.	Description	No. Req'd
ī	<i>7</i> 716	Ass'y, Frame	1	24	7714	Rod — Upper Index	
2	7701	Shaft — Mounting	1	25	7703	Lever Index	!
3	933506-4	Hairpin Cotter	2	26	915238-4	Nut Hex 1/2-13 Jam	1 1
4	5127	Pin Index	1	27	908057-4		1
.5	2354	Spring	1 1	28	5359	Bolt Hex ½-13 x 1	1
6	932017-4	Cotter Pin 1/8	i	29	4564	Grip	1
7	5109	Ass'y Blade	li	30	932017-4	Rod Lower Pivot	1
8	2346	Plate — Blade Edge	l i	31		Cotter Pin 1/8 x 1	2
9	900062-4	Bolt Carriage 3/8-16 x 3/4	5	32	7702	Rod Blade Control	1
10	915663-4	Nut 3/8-16 Elastic Stop	12		4944	Plug Button	2
11	5102	Ass'y. Sector and Channel	1	33	5107	Ass'y, Lever	1
12	908256-4	Bolt Hex 3/4-16 x 33/4	l i	34	908005-4	Bolt Hex 1/4-20 x 1	1
13	915640-4	Nut Hex 3/4 Elastic Stop	;	35	915111-6	Nut Nylok 1/4-20	1
14	5117	Spring — Trip Return		36	7704	Plate Latching R.H.	1
15	5125	Lug	1 4	37	7705	Plate Latching L.H.	1
16	5120	Rod — Trip Pivot	4	38	908034-4	Bolt Hex $\frac{3}{8}$ -16 x 7	2
17	933512-4	Hairpin Cotter	2	39	920083-4	Lockwasher 3/8	2
18	7706	Ass'y, Lift Bar	,	40	7711	Link	2
19	933505-4		1 1	41	900074-4	Bolt Carriage $\frac{3}{8}$ -16 x $3\frac{3}{4}$	4
20	3770	Hairpin — Upper	1 1	42	7713	Spacer Axle	2
21	908034-4	Plate Index	1	43	7710	Ass'y. Bracket Mounting	1
22		Bolt Hex 3/8-16 x 1	1 1	44	5604	Decal Attachment	1
23	3771	Rod — Low	!	45	7920	Spacer	1
23	920009-4	Washer 3/8 SAE	Ī			•	1

PARTS LIST AND INSTRUCTIONS **TUlheel House**

WHEELHORSE PRODUCTS, INC. • SOUTH BEND, IND.

DOZER BLADE MODEL 6-3111

(Formerly BDR-385)



ASSEMBLY

- 1. The Blade is shipped complete in one carton. There are three (3) main parts in the carton: The Blade Assembly, Frame Assembly and Hardware Package.
- 2. Remove contents from carton and place on clean flat surface.
- **3.** Align tube of main frame ass'y., Part No. 5853 with holes in braces on back of blade ass'y., Part No. 5857.
- 4. Place pivot pin ass'y., Part No. 4883 down through holes.
- 5. Align hole in flat part of pivot pin ass'y., Part No. 4883 with small hole to the right. Secure with bolt $\frac{3}{8} \times 16$, Part No. 908031-4 and elastic nut, $\frac{3}{8}$ -16, Part No. 915663-4.

MOUNTING

1. Attach the mounting plates, Part No. 4123 in the second and fourth holes of each side of the tractor frame using hex head bolt $\frac{3}{8} \times 16 \times \frac{5}{8}$, Part No. 908031-4 and elastic nut, $\frac{3}{8}$ -16, Part No. 915663-4. Do not tighten, now place the cross shaft

of the frame ass'y., Part No. 5853 in the holes of the mounting plates and then tighten bolts.

2. Place the upper lift link ass'y., Part No. 5868 in the front hole of tractor lift lever assembly and secure with hairpin cotter, Part No. 933505-4.

OPERATION

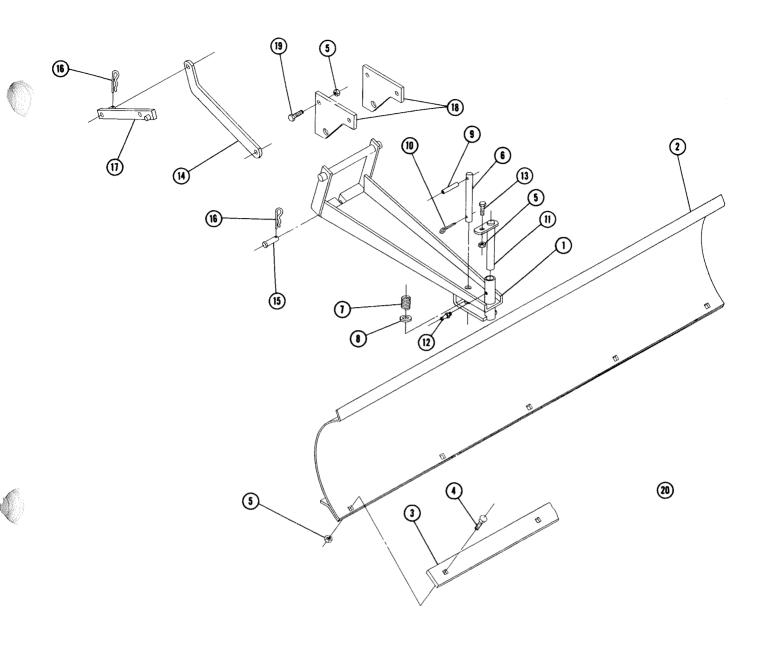
Caution: Grease pivot pin assembly before use. The blade is adjustable and may be locked in three different positions: Straight, right angle, and left angle. These adjustments are made by pulling up on the "T" pin (located at end of frame assembly) and then turn the blade by hand to desired position. When "T" pin is released it locks the blade into position.

Down pressure is applied by pushing down on tractor lift lever.

Light weight oil should be applied to all moving parts before operation and after every 10 hours of use, also grease pivot pin, after 10 hours of use.

Caution: Avoid hitting solid objects with corners of blade.





PARTS LIST

When ordering parts always list Part No. and name of part.

Ref. No.	Part No.	Description	No. Req'd.	Ref. No.	Part No.	Description	No. Req'd
1	5853	Ass'y, Frame	1	11	4883	Ass'y, Pivot Pin	1,
2	5857	Ass'y. Blade	1	12	1030	Fitting — Grease	
3	5863	Wear Plate	1	13	908031-4	Bolt — Hex 3/8-16 x 5/8	;
4	900062-4	Bolt — Carriage 3/8-16 x 3/4	5	14	5867	Link — Lower Lift	;
5	915663-4	Nut — Elastic 3/8-16	10	15	933122	Pin Clevis	;
6	5682	Pin — Pawl	1	16	933505-4	Hairpin	;
7	5683	Spring — Compression	1	17	5868	Ass'y. Link Upper	i
8	920013-4	Washer 5/8 SAE	1	18	4123	Plate — Mtg. Bracket	;
9	933223	Roll Pin $\frac{1}{4} \times 2\frac{1}{2}$	1	19	908032-4	Bolt — Hex 3/8-16 x 3/4	1
10	932017-4	Cotter Pin 1/8 x 1	1	20	5604	Decal — Attachment	7



SNOW ATTACHMENTS