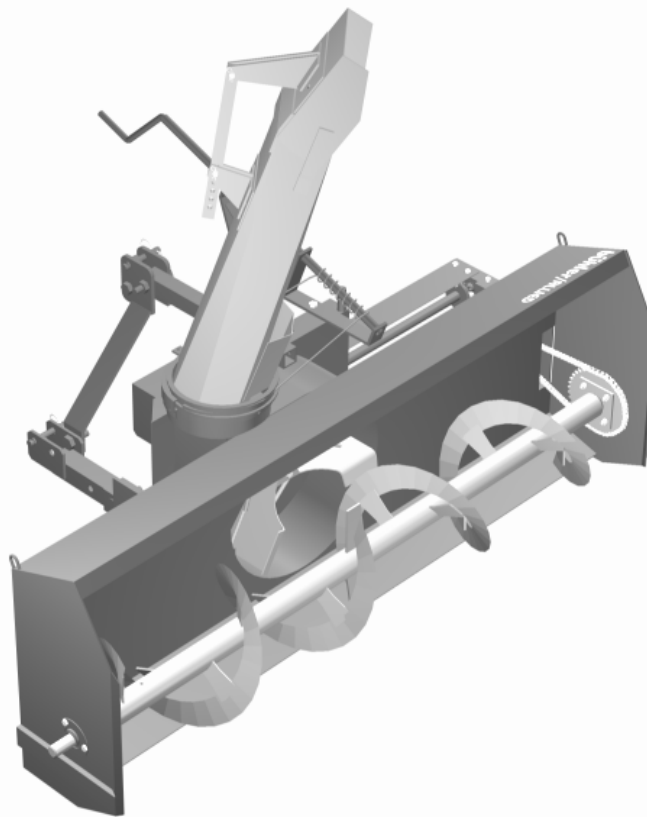


bühler

allied



74" Snowblower

Operator's and Parts Manual
FK331

2007

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WARRANTY POLICY

Buhler Manufacturing products are warranted for a period of twelve (12) months (90 days for commercial application) from original date of purchase, by original purchaser, to be free from defects in material and workmanship under correct, normal agricultural use and proper applications.

Buhler Manufacturing's obligations under this warranty shall be limited to the repair or exchange, at Buhler Manufacturing's option, of any Buhler Manufacturing product or part which proves to be defective as provided. Buhler Manufacturing reserves the right to either inspect the product at the buyer's location or have it returned to the factory for inspection.

The above warranty does not extend to goods damaged or subject to accident, abuse or misuse after shipment from Buhler Manufacturing's factory, nor to goods altered or repaired by anyone other than an authorized Buhler Manufacturing representative.

Buhler Manufacturing makes no Express Warranties other than those, which are specifically described. Any description of goods, including any references and specifications in catalogues, circulars and other written material published, is for the sole purpose of identifying goods and shall conform to such descriptions. Any sample or model is for illustrative purposes only and does not create an Express Warranty that the goods conform to sample or model shown.

The purchaser is solely responsible for determining suitability of goods sold. This warranty is expressly in lieu of all other warranties expressed or implied. Buhler Manufacturing will in no event be liable for any incidental or consequential damages whatsoever. Nor for any sum in excess of the price received for the goods for which liability is claimed.

WARRANTY CLAIMS:

Warranty requests must be prepared on Buhler Manufacturing Warranty Claim Forms with all requested information properly completed. Warranty Claims must be submitted within a thirty (30) day period from date of failure repair.

WARRANTY LABOR:

Any labor subject to warranty **must** be authorized by Buhler Manufacturing. The labor rate for replacing defective parts, where applicable, will be credited at 100% of the dealer's posted shop rate. Defective parts will receive an extra 10% discount to assist with freight or other incidental costs.

GOVERNMENT LEGISLATION:

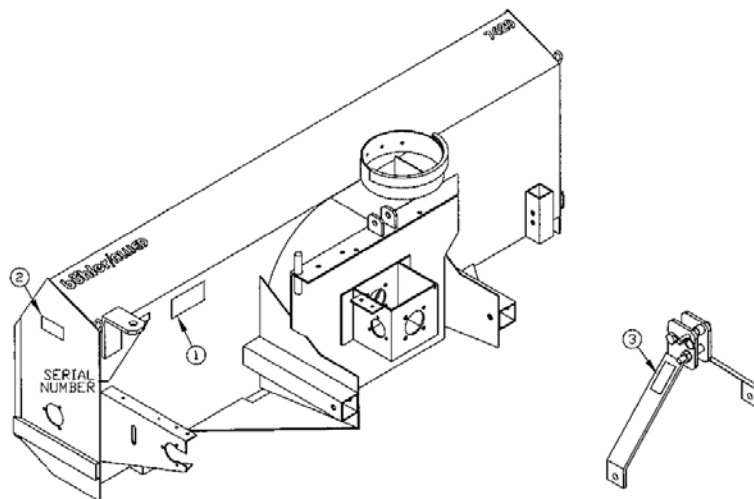
Warranty terms and conditions are subject to Provincial or State legislation.

IMPORTANT FACTS:

Buckets and Bucket Tines Carry No Warranty
Bent Spears Carry No Warranty
Snowblower Fan Shafts Carry No Warranty
Mower Blades Carry No Warranty
Portable Auger Parts Have Two (2) Year Warranty
Loader Parts Have Two (2) Year Warranty

IMPORTANT NOTE: This warranty does not apply to rentals

This manual is for 74" snowblowers with an open gear gearbox. When ordering parts, specify model number and serial number. The snowblower is the push type and will mount to a tractor with a 540 rpm PTO. It is supplied with category 1 pins and also bushings, which convert the pins to a category 2. A category 1 Quick Hitch also fits on this snowblower. This 74" wide snowblower comes with a hydraulic chute control as standard equipment. A hand crank chute control is available. There is a shear bolt on the auger and on the PTO shaft to protect the machine from damage if a large object is picked up. Any smaller objects in the snow will be thrown with it and could cause serious injury. Do not let anyone stand behind the tractor in the area of the discharged snow.



SB-04



CAUTION

1. Keep all shields in place.
2. Disengage all power when servicing or unplugging machine.
3. Keep hands and clothing away from all moving parts.

963206

#1

WHEN ORDERING PARTS

Always give your dealer the Model and Serial Number of your machine to assist him in ordering and obtaining the correct parts. Use the exploded view and tabular listing of the area of interest to exactly identify the required part.



**STAND CLEAR WHEN
MACHINE IN OPERATION**

102893

#2



WARNING

**CHECK PTO SHAFT LENGTH
BEFORE RAISING OR LOWERING
IMPLEMENT. SHAFT MUST NOT
BOTTOM OR SEPERATE (SEE MANUAL)**

108431

#3

OPERATING INSTRUCTIONS

1. Do not operate the blower in the fully raised position. The three-point hitch on some tractors raises high enough to cause the PTO shaft to bind. This can cause damage to the PTO shaft and/or to the hitch and pins.
⚠ ALERT: PTO shaft angle should not exceed 20 degrees for optimum performance and life. Damage may occur to PTO and/or snowblower if angle becomes more extreme.
2. Depth of cut can be partially controlled by tilting the blower forward or backward. Adjust the top link of the tractor hitch so the snowblower is just slightly tilted back when resting on the ground. **⚠ CAUTION:** Excessive backward tilt may cause the "U" joints to flutter resulting in PTO shear bolt failure.
3. Adjust the lower link sway chains or blocks on the tractor to restrict side movement of the blower when operating.
4. Run the blower at low rpm to check operation before blowing snow.
5. The snowblower has two shear bolts to protect the tractor and blower in case a large object enters the blower. PTO shear bolt (Two 5/16" x 1"-Grade 5) Auger shear bolt (1/4" x 1"-Grade 5). Shear bolts should be fastened with a lock nut or two jam nuts. These bolts must be kept tight to prevent wear of the bolt and bolt holes.
6. Never run PTO shaft at over 600 rpm.
7. Chain tension: Slack on the lower side of the chain should be 3/8 to 1/2".
8. Lubrication:
 - a) The spout clamps and rings should be periodically lubricated with gun grease.
 - b) PTO shaft universal joints and square shaft slide should be greased daily.
 - c) Regularly oiling the chain will significantly increase the life of the chain.
 - d) The grease fitting on the hydraulic spout swivel arm should be kept lubricated.
9. Periodically check all bolts for tightness. The bolt holding on the fan and the bearing bolts are of particular importance.
10. **⚠ DANGER:** Always stop blower for servicing or unplugging. The PTO should be disengaged before dismounting from the tractor.
11. **⚠ CAUTION:** Always check to see that both ends of the PTO shaft are securely attached as per instructions every time you are preparing to use the snowblower.
12. Shear Sprocket: The Shear Sprocket (#52) should be checked at the beginning of every season to make sure it will spin freely. With time this sprocket could corrode and seize which will not allow the shear bolt to break if something jams in the snowblower auger. Clean to loosen if necessary.
13. When replacing bearings or tightening a loose bearing collar, always tighten collar in the direction of shaft rotation using a center punch or a similar tool.

ASSEMBLY INSTRUCTIONS

1. Turn the bottom tube weldments (#9) as shown in drawing and slide them into the sleeve welded to the main body. These tubes have holes for two positions. The correct position for each individual tractor will be determined when mounting the snowblower on the tractor. These tubes are connected to the tractor with a $\frac{3}{4}$ " x 4 $\frac{1}{4}$ " pin (#96) and a hairpin clip (#104).
2. Bolt the left (#20) and the right (#21) a-frames to the inside of the plates welded to the hitch tubes using $\frac{7}{8}$ " x 2 $\frac{1}{2}$ " hex bolts (#102) and lock nuts. Join the top of the hitch arms by bolting a 1" O.D. x 2" spacer (#100) between the top plates using a $\frac{3}{4}$ " x 4" bolt, lock washer and hex nut through the lower outside holes. Bolt the upper hitch tube weldment (#47) between the same plates using the same size of bolt. Use the inside holes on the top plates for the upper tube. The other end of the top hitch tube bolts between the welded brackets on the top edge of the fan housing with the same hardware. Tube must be turned as shown in drawing. Tighten all hardware.
3. A category 1 top link pin (#18) is fitted in the top holes of the hitch arm plates. This pin is used for standard three-point hitch only. The bushing in the lower holes is used for the quick hitch.
4. Mount the discharge spout (#6) using the spout clamps (#59) bolted to the spout ring on the snowblower. Lubricate the spout ring and clamps.
5. Hydraulic spout swivel:
 - a) Mount the swivel arm (#60) onto the swivel pin welded to the back corner of the fan housing using a 1" I.D. washer (#29) and a $\frac{3}{16}$ " x 1 $\frac{1}{2}$ " cotter pin (#62).
 - b) Wrap cable (#61) around spout and clamp to the ends of the swivel using $\frac{3}{16}$ " cable clamps (#17).
 - c) With the swivel in extended position (i.e. cylinder fully extended) and the spout turned to the right, clamp the cable to the spout cable anchor using a $\frac{1}{4}$ " cable clamp (#84).
Ensure that the spout is not jammed and that there is no slack in the cable.
 - d) Use a standard 8" stroke cylinder (20 $\frac{1}{4}$ " min., 28 $\frac{1}{4}$ " max. pin centers).
 - e) **Note:** A hydraulic cylinder and hose kit to control the spout deflector is available as an option.
6. Hand Crank (Option):
 - a) Fasten crank assembly (#5) using two $\frac{1}{2}$ " x 1 $\frac{1}{4}$ " hex bolts, lock washers and hex nuts.
 - b) Thread cable (#7) through hole in hand crank to even lengths and wrap around the tube to each side of the hole four turns in opposite directions.
 - c) Turn spout to center forward position and clamp cable to cable anchor on far side of spout using clamp (#84).

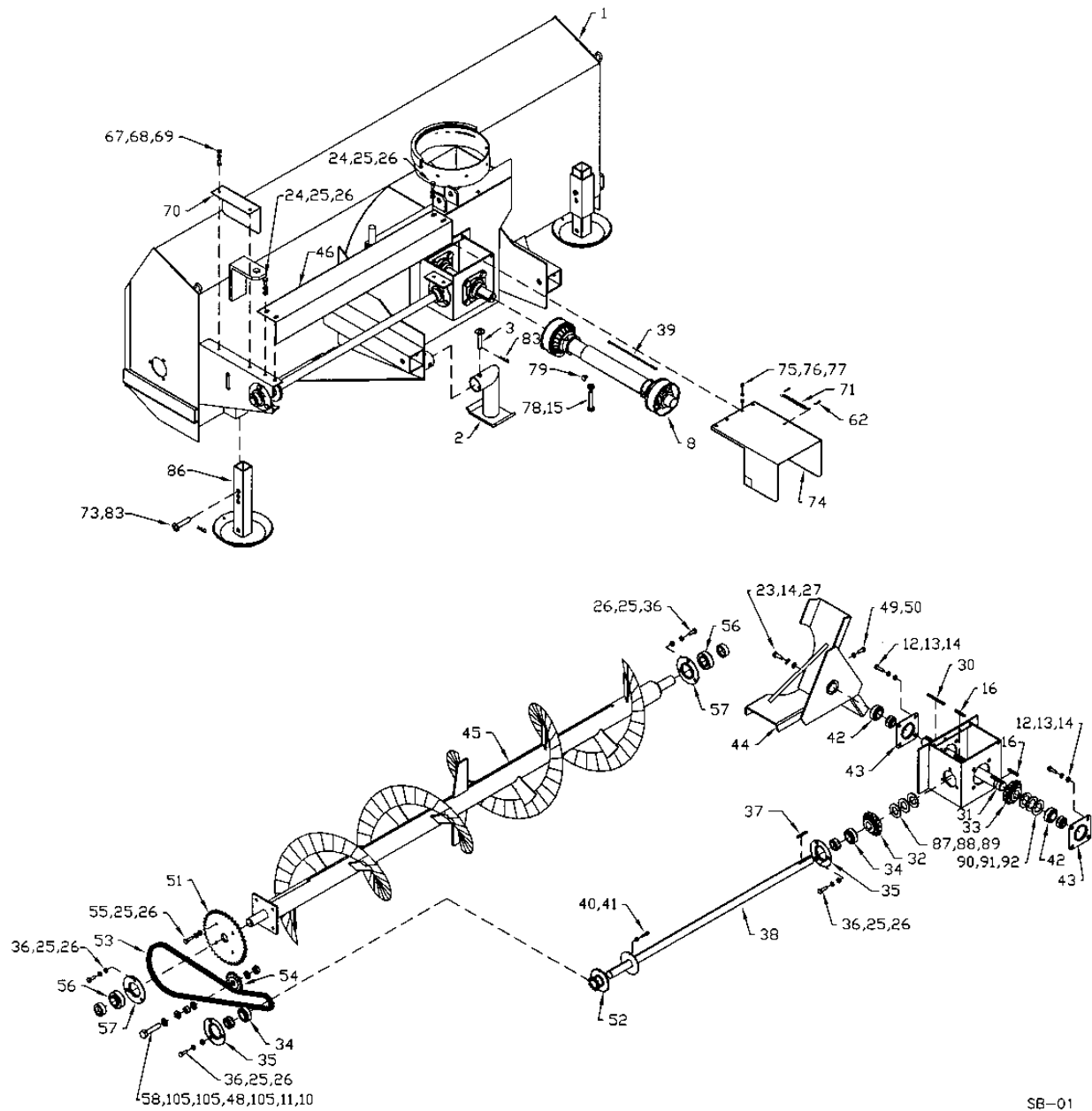
ASSEMBLY INSTRUCTIONS – cont'd.

7. Mounting blower on tractor:

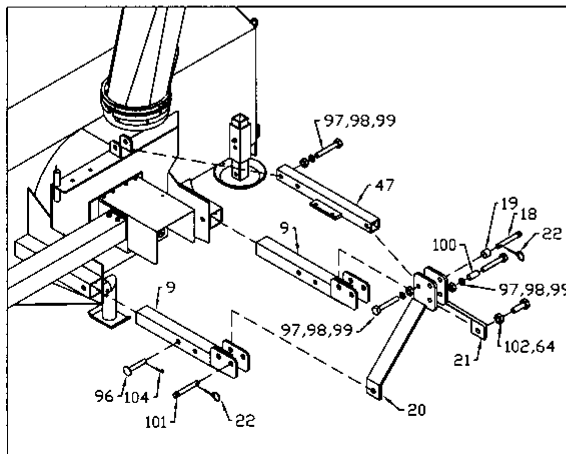
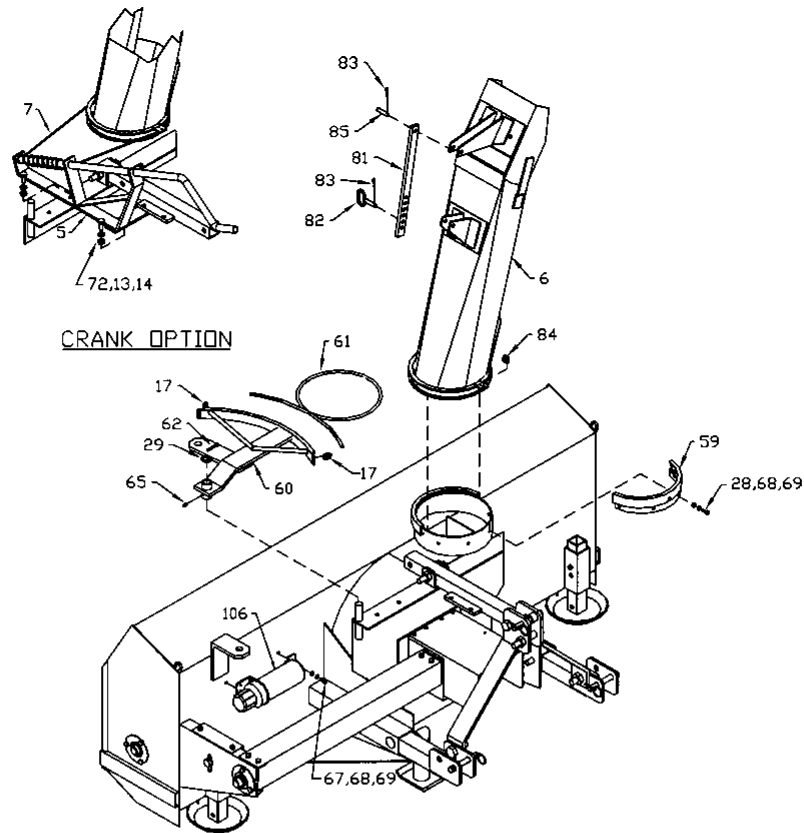
- a) Mount the blower on a tractor with a category 1 or category 2 hitch.
- b) Using tape or bright colored marking pen, mark on the outer shields the position where the shaft is completely pushed together and the position where you have a 4" overlap. Watch these marks when moving the blower through all possible operating angles to see that the PTO shaft stays within this range.
- c) With the engine on the tractor shut off, attach the PTO shaft. The tractor end has a standard 6-spline end with a spring loaded locking collar. The Snowblower end has a clamp-style yoke with a 3/8" keyway. Slide the yoke onto the gearbox shaft with the 3/8" key supplied. Lock the yoke in place with the 1/2" x 3" hex bolt and lock nut fitted through the groove in the gearbox shaft. After tightening the bolt, insert and tighten the 3/8" socket set screw supplied. **⚠ CAUTION:** Always check to see that both ends of the PTO shaft are securely attached every time the Snowblower is used. This should always be done with the Tractor engine off.
- d) Check that the PTO shaft does not bottom or separate with the blower in the extreme high and low positions. A longer optional PTO shaft is available if the standard shaft is too short. Check for free movement of all parts in various raised positions; particularly the PTO shaft.

8. PTO Shield: All snowblowers are supplied with a PTO shield. Bolt the shield (#74) to the hinges on the top of the gearbox on the snowblower using 1/4" x 1/2" hex bolts, lock washers and hex nuts. Insert a 3/16" cotter pin in the hole in the shield and in the hole at the bottom corner of the gearbox. Fold back the cotter pins to hold them in place. Hook the ends of the spring (#71) into these cotter pins to hold the shield down. Bolt the PTO shield to the gearbox plate using these same bolts. Insert a 3/16" cotter pin in the hole in the shield and fold to lock in place. Hook one end of the spring (#71) into this cotter pin and the other end into a hole in the lower gearbox plate to hold the shield in place.

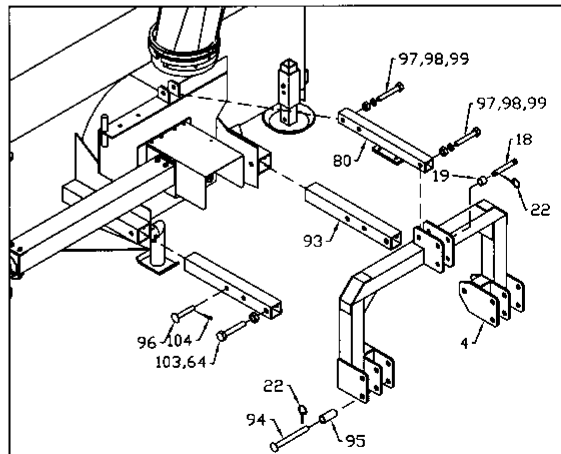
⚠ CAUTION: Do not run the snowblower without this shield in place.



SB-01



STD. - CAT. 1 (A-FRAME)



OPT. - CAT. 1 & 2 (HEAVY FRAME)

WHEN ORDERING PARTS

Always give your dealer the Model, Color and Serial Number of your machine to assist him in ordering and obtaining the correct parts. Use the exploded view and tabular listing of the area of interest to exactly identify the required part.

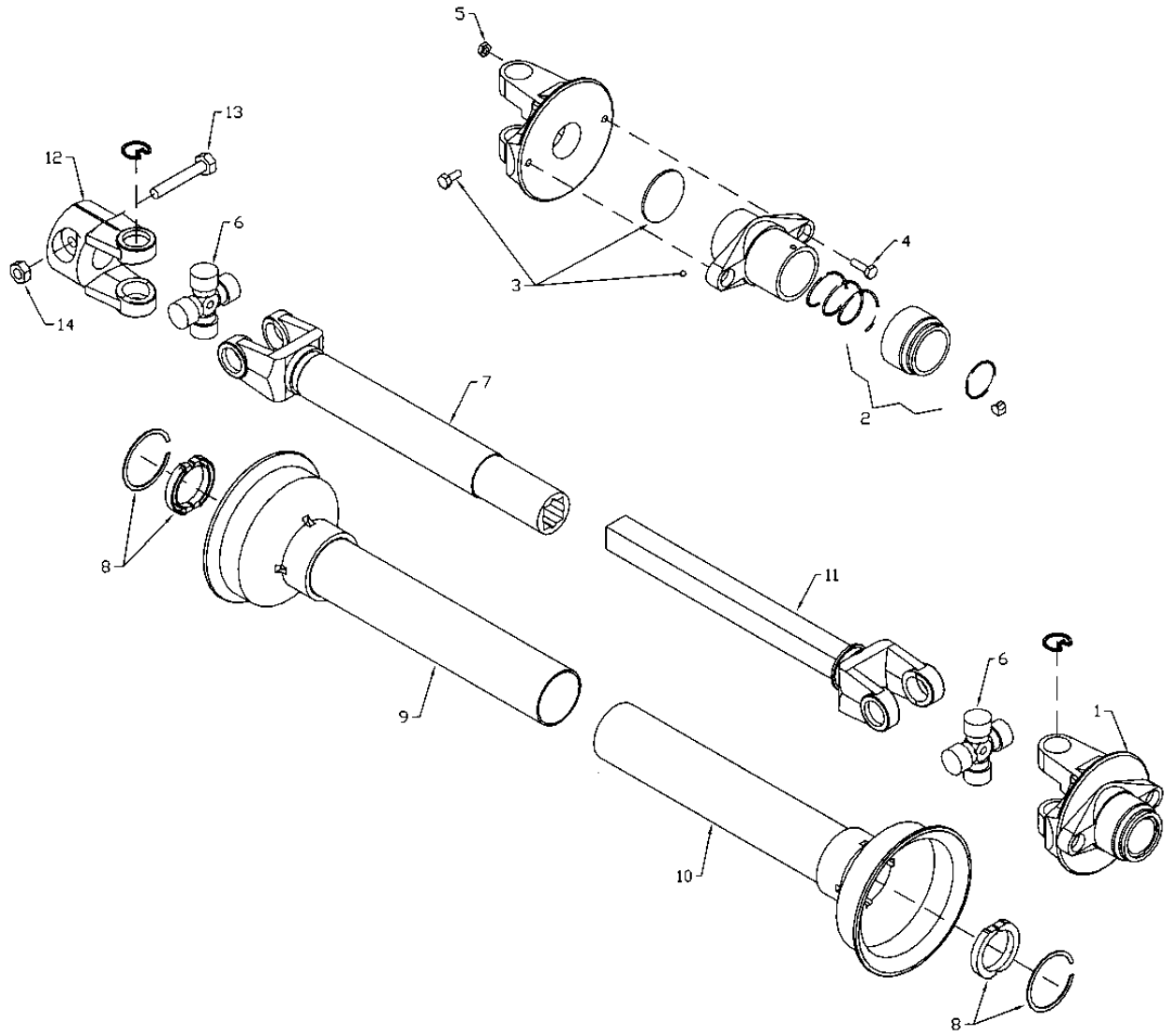
74" SNOWBLOWERS

ITEM	PART #	DESCRIPTION
1	907241A	Main Body
2	907244A	Stand Weld't - 8" Tall
3	965294A	Stand Pin 9/16" x 2 7/8"
4	F0570	Hitch Weld't (Cat 1 & 2) (optional)
5	965803	Hand Crank
6	965653	Discharge Spout
7	965927	3/16" Cable x 100" Long
8	F842	PTO Shaft (Standard)
	F844	PTO Shaft (Optional Long)
9	907213A	Btm Tube Weld't 20 5/8" Lg
10	81676	5/8" Hex Nut (pl)
11	81677	5/8" Lock Washer (pl)
12	81619	1/2" x 1" Hex Bolt (pl)
13	81636	1/2" Hex Nut (pl)
14	81637	1/2" Lock Washer (pl)
15	81627	1/2" x 3" Hex Bolt (pl)
16	965821	3/8" x 1 3/4" Key
17	965806	3/16" Cable Clamp
18	965807	Top Link Pin (Cat.1)
19	965808	Top Link Pin Bushing (Cat.1-2)
20	907214	A-Frame LH (Cat 1)
21	907215	A-Frame RH (Cat 1)
22	965911	7/16" Linch Pin
23	84277	1/2" x 1 1/2" Hex Bolt (pl)
24	84072	3/8" x 3/4" Hex Bolt (pl)
25	81593	3/8" Lock Washer (pl)
26	81592	3/8" Hex Nut (pl)
27	81638	1/2" B.S. Flat Washer (pl)
28	812026	5/16" x 1" Hex Bolt (pl)
29	967140	1" x 10Ga Narrow Rim Washer (pl)
30	902377	3/8" x 4 3/4" Key
31	965835	Fan Shaft, 1 1/2" x 16 3/4"
32	965816	Bevel Gear - 1 1/4" Bore
33	965817	Bevel Gear - 1 1/2" Bore
34	965818	1 1/4" Bearing w/ Collar

35	961637	Bearing Retainer (Set)
36	86170	3/8" x 1" Hex Bolt (pl)
37	901940	5/16" x 1 1/4" Key
38	965413A	Drive Shaft 1 1/4" x 37 1/4"
39	936402	PTO Safety Chain
40	81527	1/4" x 1" Hex Bolt (pl)
41	84498	1/4" Lock Nut (pl)
42	968627	1 1/2" Bearing With Collar
43	967260	1 1/2" Bearing Retainer (Set)
44	965822	Fan (Standard 3-Blade)
	965447	Fan (Optional 4-Blade)
45	965414	Auger
46	965415A	Drive Shaft Guard
47	907218A	Hitch Tube Weld't 22" Lg
48	965834A	Idler Spacer, 5/8" Long
49	84111	1/2" x 1 1/4" Sq. Hd. Set Screw (pl)
50	984077	1/2" Jam Nut (pl)
51	965825	40 Tooth Sprocket, #50
52	965826A	13 Tooth Sprocket, #50 (Shear)
53	965827	Roller Chain (#50 x 98 Link w/ Conn)
54	965844A	15 Tooth Idler Sprocket, #50
55	86171	3/8" x 1 1/4" Hex Bolt (pl)
56	965917	1 3/8" Bearing With Collar
57	961675A	Bearing Retainer (Set)
58	84289	5/8" x 3" Hex Bolt (pl)
59	965416A	Spout Clamp
60	907820	Swivel Arm
61	965832	3/16" x 62" Cable
62	9812433	3/16" x 1 1/2" Cotter Pin (pl)
64	907674	7/8" Lock Nut
65	967164	Pound-In Grease Nipple
67	81549	5/16" x 3/4" Hex Bolt (pl)
68	81569	5/16" Lock Washer (pl)
69	81568	5/16" Hex Nut (pl)
70	965968A	Idler Shield
71	960135A	PTO Shield Spring
72	87553	1/2" x 1 3/4" Hex Bolt (pl)
73	900712	Skid Pin Weldment
74	965410A	PTO Shield
75	81523	1/4" x 1/2" Hex Bolt (pl)
76	81545	1/4" Lock Washer (pl)
77	81544	1/4" Hex Nut (pl)
78	812364	1/2" Lock Nut (pl)
79	988999	3/8" x 3/8" Socket Set Screw

80	907221A	Upper Hitch Tube Weld't 21" Lg (Cat 1 & 2)
81	965646	Spout Adjustment Bar
82	903523	1/2" x 1 1/2" Adjustment Pin Weldment
83	961012	#16 Hair Pin Clip
84	961658	1/4" Cable Clamp
85	961876	1/2" x 1 1/2" Clevis Pin (pl)
86	902407	Skid Plate Weldment
87	9812487	1 1/4" x 10ga Narrow Rim Washer (pl)
88	967110	1 1/4" x 14ga Narrow Rim Washer (pl)
89	9812439	1 1/4" x 18ga Narrow Rim Washer (pl)
90	967135	1 1/2" x 10ga Narrow Rim Washer (pl)
91	9812444	1 1/2" x 14ga Narrow Rim Washer
92	9812443	1 1/2" x 18ga Narrow Rim Washer
93	907250A	Hitch Inner Tube 20 5/8" Lg (Cat 1 & 2)
94	907315A	Pin 7/8" x 7 3/4" (Cat 1 & 2)
95	907316A	Pin Sleeve 1 1/8" x 2 7/8"Lg (Cat 1 & 2)
96	905821	Pin Rod 3/4" x 4 1/4" Lg
97	84336	3/4" x 4" Hex Bolt (pl)
98	81701	3/4" Lock Washer (pl)
99	81700	3/4" Hex Nut (pl)
100	965808A	Sleeve 1" OD x 2" Lg
101	967361A	Pin 7/8" x 4" Lg
102	966527	7/8" x 2 1/2" Lg Hex Bolt
103	811826	7/8" x 5" Hex Bolt
104	12779	#9 Hair Pin Clip
105	81678	5/8" Flat Washer (pl)
106	909277	Manual Hldr

ALLIED SNOWBLOWER PTO



SB-12

SNOWBLOWER PTO (STANDARD)

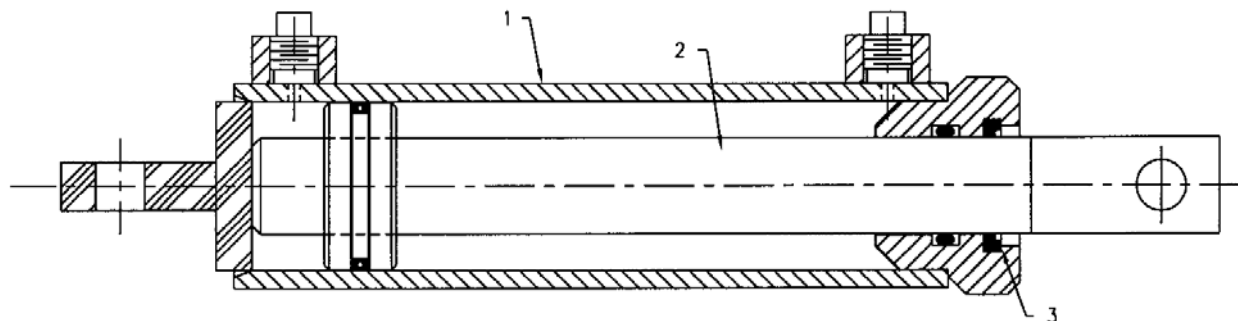
Item #	Part #	Description
	F842	Shaft Complete
	936263	Tractor Half of PTO (Shear)
	936264	Implement Half of PTO (Clamp Yoke)
1	936277	Shear Assembly
2	936199	Safety Slide Lock Repair Kit (Collar, Spring, Ret. Ring, 2-Pawls)
3	936249	Shear Assembly Repair Kit (3/8" x 1/2" Bolt, Lube, Blank, 31 - 1/4" Balls)
4	903296	Shear Bolt - 5/16" x 1" (Grade 5) (Pack of 10)
5	812362	5/16" Lock Nut
6	936025	Repair Kit (Option)
	906504	Extended Life Repair Kit (Std)
7	936270	Yoke & Tube
8	936319	Bearing & Snap Ring Kit
9	936272	Inner Shield
10	936273	Outer Shield
11	936274	Yoke & Shaft
12	936269	Clamp Yoke
13	81627	1/2" x 3" Hex Bolt (pl)
14	812364	1/2" Lock Nut (pl)

SNOWBLOWER PTO (OPTIONAL LONG)

Item #	Part #	Description
	F844	Shaft Complete
	936285	Tractor Half of PTO (Shear)
	936280	Implement Half of PTO (Clamp Yoke)
1	936277	Shear Assembly
2	936199	Safety Slide Lock Repair Kit (Collar, Spring, Ret. Ring, 2-Pawls)
3	936249	Shear Assembly Repair Kit (3/8" x 1/2" Bolt, Lube, Blank, 31-1/4" Balls)
4	903296	Shear Bolt - 5/16" x 1" (Grade 5) (Pack of 10)
5	812362	5/16" Lock Nut
6	936025	Repair Kit (Option)
	906504	Extended Life Repair Kit (Std)
7	936281	Yoke & Tube
8	936319	Bearing & Snap Ring Kit
9	936282	Inner Shield
10	936283	Outer Shield
11	936284	Yoke & Shaft
12	936269	Clamp Yoke
13	81627	1/2" x 3" Hex Bolt (pl)
14	812364	1/2" Lock Nut (pl)

1.75 X 5 CYLINDER ASSEMBLY

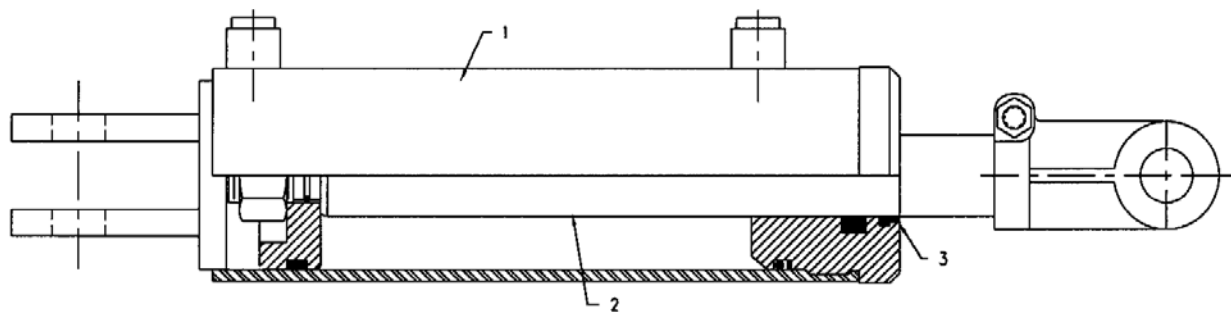
Item #	Part #	Description
1	24930	Cyl Complete
2	115367	Tube Weldt
2	112104	Shaft Weldt 1.0 Dia
3	X2669	Seal Kit



24930

3.5 x 8 CYLINDER ASSEMBLY

Item #	Part #	Description
1	24803	Cyl Complete
1	24804	Tube Weldt
2	113934	Piston Rod 1.5 Dia
3	X2098	Seal Kit



24803

74" ALLIED SNOWBLOWER BUNDLES

QUANTITY	BUNDLE NO.	DESCRIPTION
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74" Snowblower w/hydraulic chute control, 3-blade fan-YC7420

1	F0460	Body Assembly
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74" Snowblower w/hydraulic chute control, 4-blade fan – YC7420-4

1	F0461	Body Assembly
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OPTIONS AVAILABLE:

F844	36" Optional Long PTO
F842	Standard PTO
FX9102	Hand Crank Kit
F0573	Hydraulic Chute Control Kit
F9116	Hydraulic Cylinder & Hose Kit for Spout Swivel
F9117	Spout Deflector Cylinder and Hose Kit

DIVISION LOCATIONS

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Scotland
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