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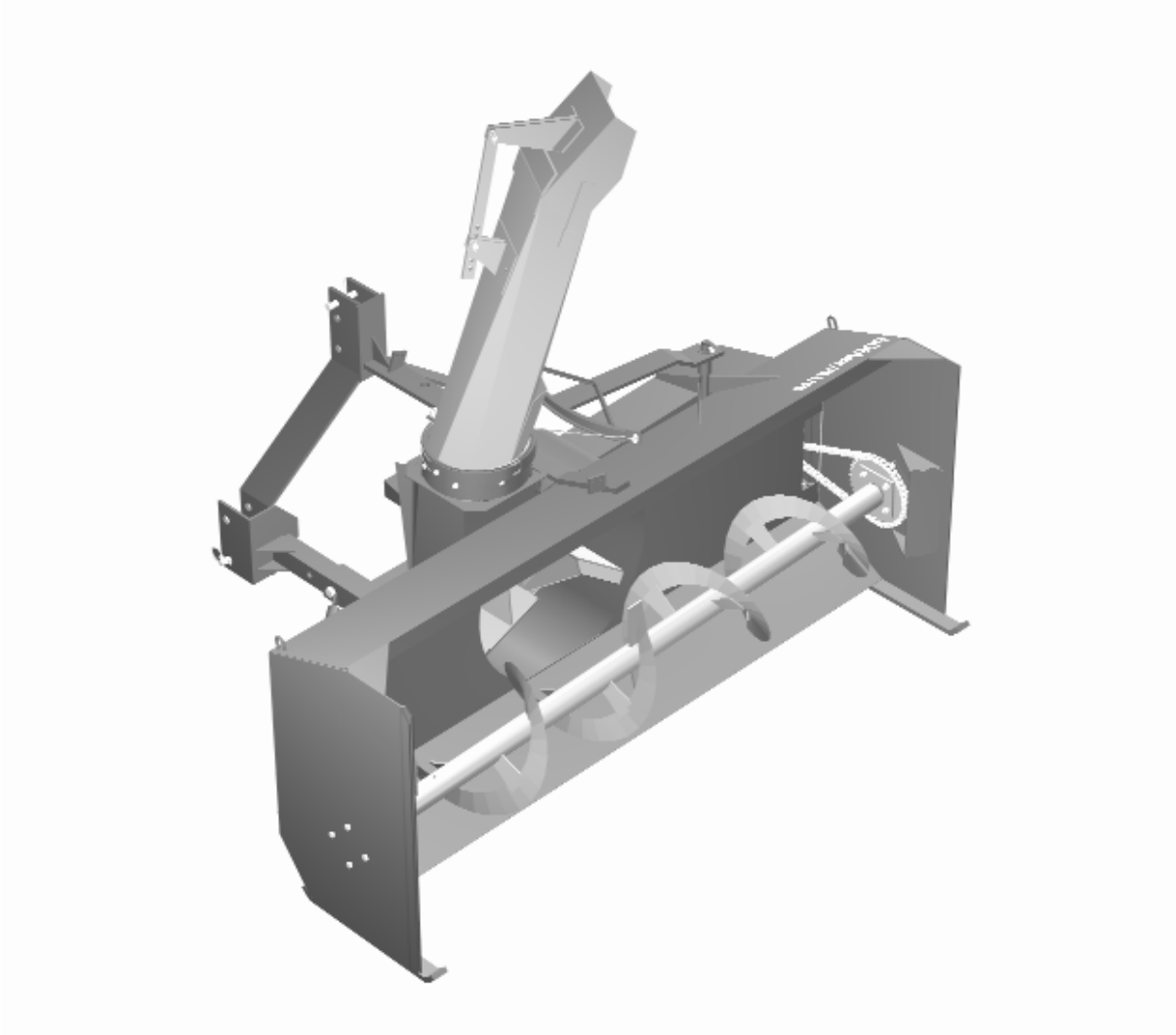


85" Snowblower

Operator's and Parts Manual
FK314

2008

TABLE OF CONTENTS

DESCRIPTION	PAGE
Warranty	1
Safety Instructions	2
Safety Sign Locations	3
Assembly Instructions	4
Operating Instructions	5
85” Allied Snowblower Drawings	6
85” Allied Snowblower Parts List	8
Manual Chute Control Instructions & Drawing	10
Manual Chute Control Parts List	11
Hydraulic Chute Control Instructions & Drawing	12
Hydraulic Chute Control Parts List	13
85” Allied Snowblower PTO Drawing	14
85” Allied Snowblower PTO Parts Lists	15
Gearbox Assembly Drawing	17
Gearbox Assembly Parts List	18
Cylinder Assembly Drawings & Parts Lists	19
Shipping Kit and Bundle Numbers	20

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**

CAUTION

1. Always review operator’s manual before starting new machine.
2. Do not let inexperienced operators or children run this equipment.
3. Never service or clean unit while it is running.
4. Do not remove shields.
5. Stay clear of augers.
6. Stay clear of discharge chute. Rocks can be picked up and thrown.
7. Poor judgment results in accidents. Always be careful.
8. Remember a careful operator is the best insurance.

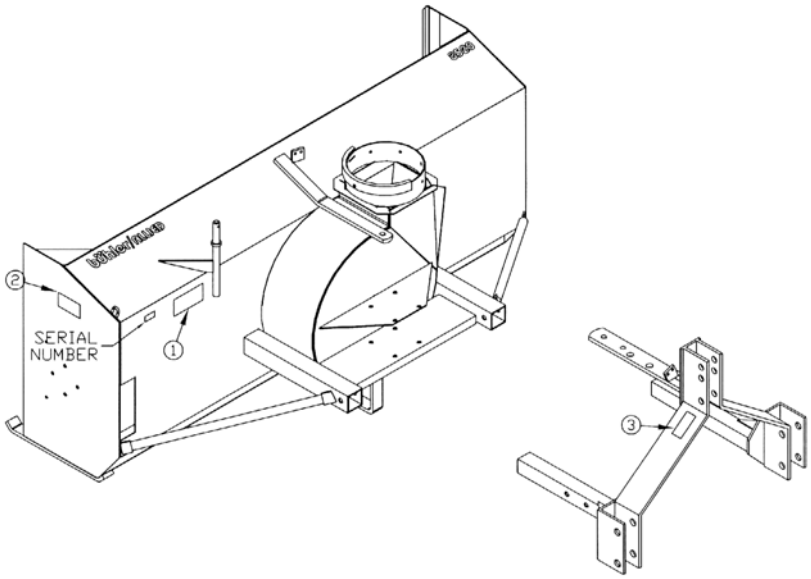
THIS SYMBOL MEANS

STAY ALERT! WATCH FOR IT!

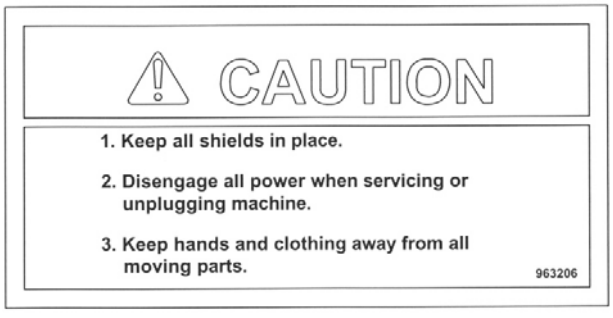
SNOWBLOWER

This manual covers the 85” model snowblower. When ordering parts, be sure to list the serial number of your unit and blower width. The snowblower is the push type and will mount to a tractor with a category 1 or 2 three point hitch and 540 rpm PTO. The 85" model has a single auger and comes with a hydraulic control for the chute with a manual control available as an option.

The auger and the blower are equipped with shear bolts to protect the machine from damage in case a large object is picked up. Any gravel picked up in the snow will be thrown with it and could cause serious injury. Be careful when operating the snowblower. Do not let children play behind the tractor or in the area of the discharged snow.



SB-16



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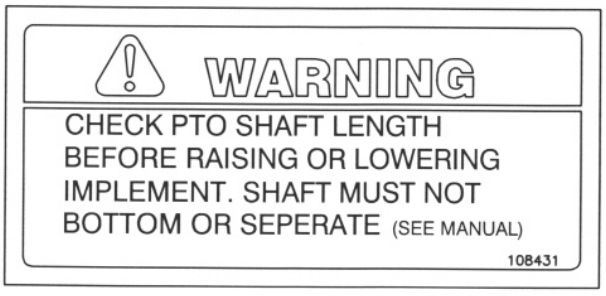
Replace safety signs immediately should they become damaged, torn or illegible. Obtain replacements from your authorized dealer using the part numbers shown.



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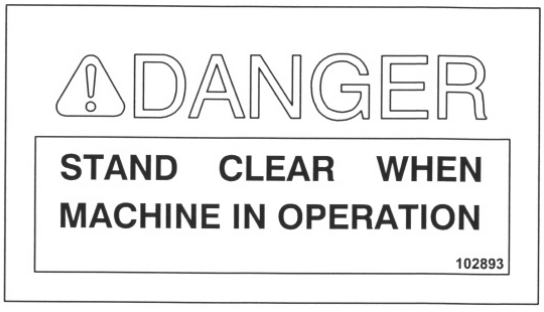

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BASIC ASSEMBLY INSTRUCTIONS

STEP 1. Assemble the snow chute, referring to instructions under the appropriate heading for “manual chute” or “hydraulic chute”.

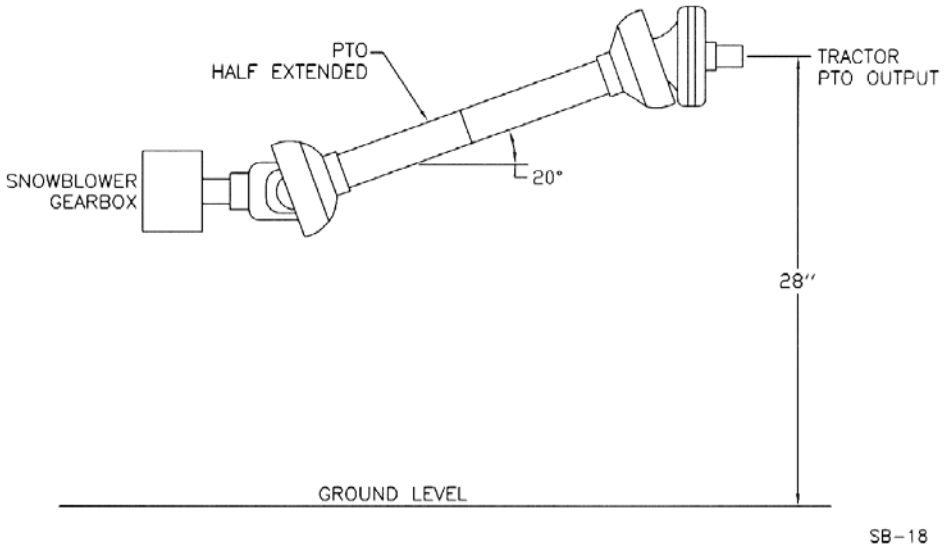
STEP 2. The snowblower is shipped with lower three point hitch pins for a category 2 hitch.

STEP 3. Using tape or bright colored marking pen, mark on the outer shields of the PTO, 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.

STEP 4. 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” shaft supplied. Lock the yoke in place with a ½” 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 shut off.

STEP 5. Check that the PTO shaft does not bottom or separate with the snowblower 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.

STEP 6. **NOTE:** Excessive u-joint wear and shear pin failure may result if the PTO angle exceeds 20°. The drawing below gives an approximate way to check this angle. With the PTO half extended, the tractor output should not be over 28 inches high. Use 30 inches if the PTO is nearly fully extended and 26 inches if it is nearly compressed.



OPERATING INSTRUCTIONS

1. Adjust the top link of the tractor hitch so that the snowblower is level when resting on the ground.

2. Adjust the lower link sway chains or blocks on the tractor to restrict side movement of the blower when operating.

3. Run the blower at low RPM to check operation.

4. 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 - 5/16" x 1 ¼” (grade 5). These bolts must be checked every five operating hours and kept tight to prevent wear of the bolts and bolt holes.

5. Daily check the auger bearing bolts on each side of the snowblower, the drive sprocket bearings and the bolt holding the blower fan on the gearbox shaft.

6. Grease the PTO and bearings every 40 hours of operation.

7. A little engine oil applied to the chain daily can double the life of the drive chain.

8. Occasionally apply a light winter grade oil to the chute bottom ring to ease turning.

9. Always disengage the PTO before dismounting from the tractor.

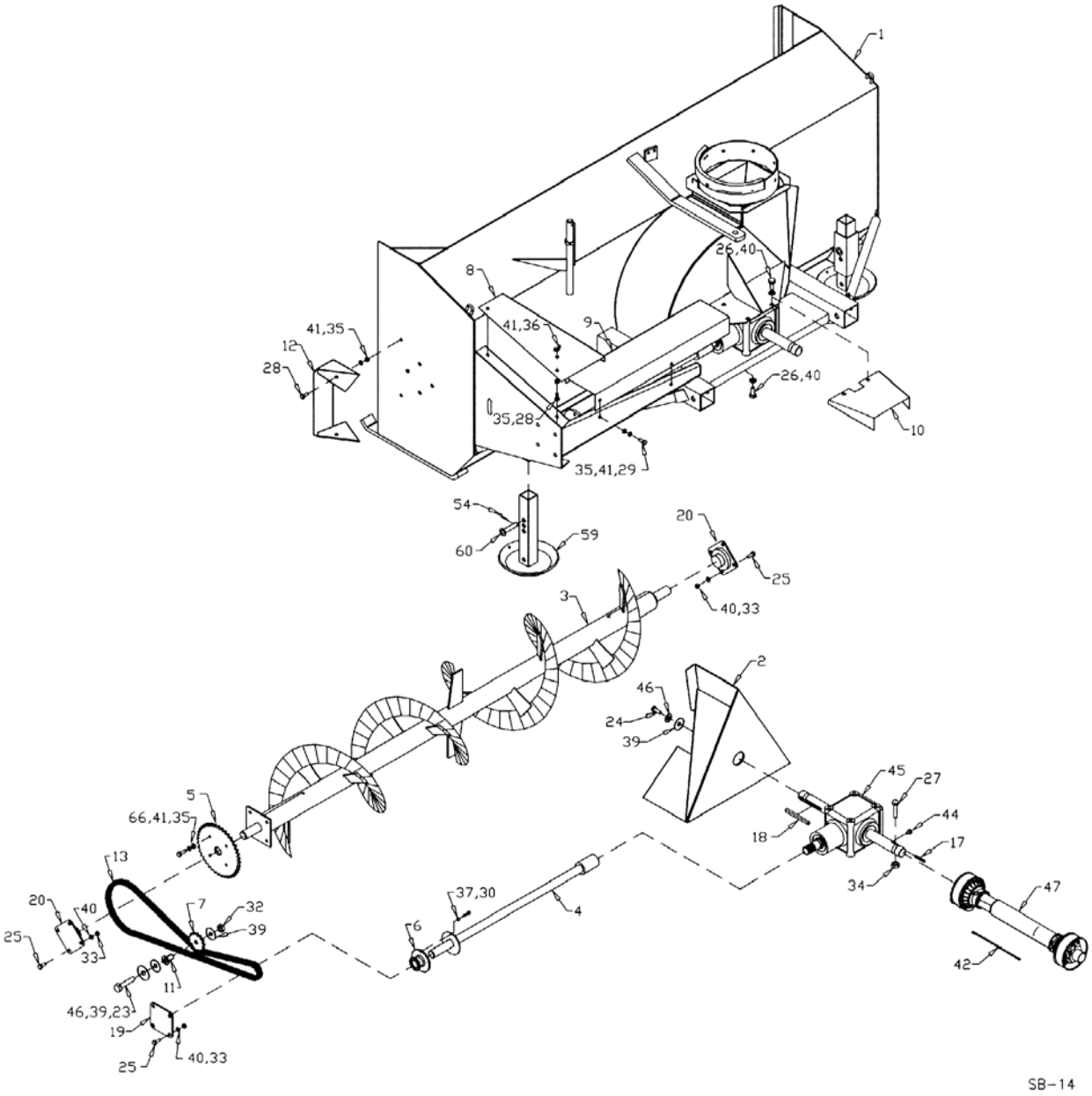
10. ⚠ **CAUTION:** Always check to see that both ends of the PTO shaft are securely attached as per instructions every time you are preparing to use the snowblower.

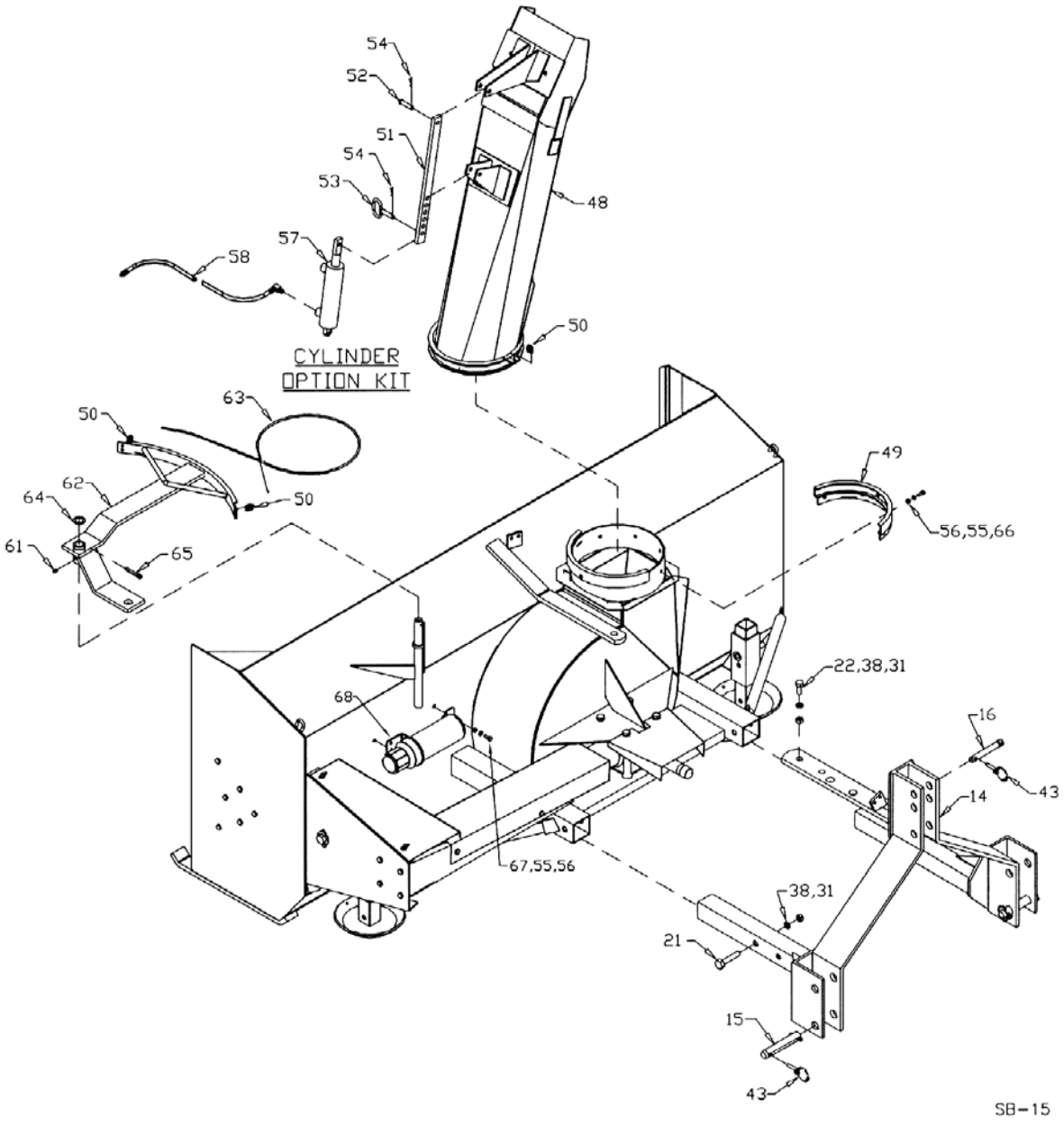
11. Shear sprocket: The shear sprocket (#6) should be checked at the beginning of every season to make sure it will spin freely. With time this sprocket could corrode and seize which will not allow the shear bolt to break if something jams in the snowblower auger. Clean to loosen if necessary.

12. Gearbox: Use any 80-90 gear oil or multigrade with 80 minimum.

13. When replacing bearings or tightening a loose bearing collar, always tighten collar in the direction of shaft rotation using a center punch or similar tool.

85" ALLIED SNOWBLOWER

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CYLINDER
OPTION KIT
63
50
62
64
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61
65
49
56,55,66
22,38,31
68
16
43
14
67,55,56
38,31
21
15
43
SB-15

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.

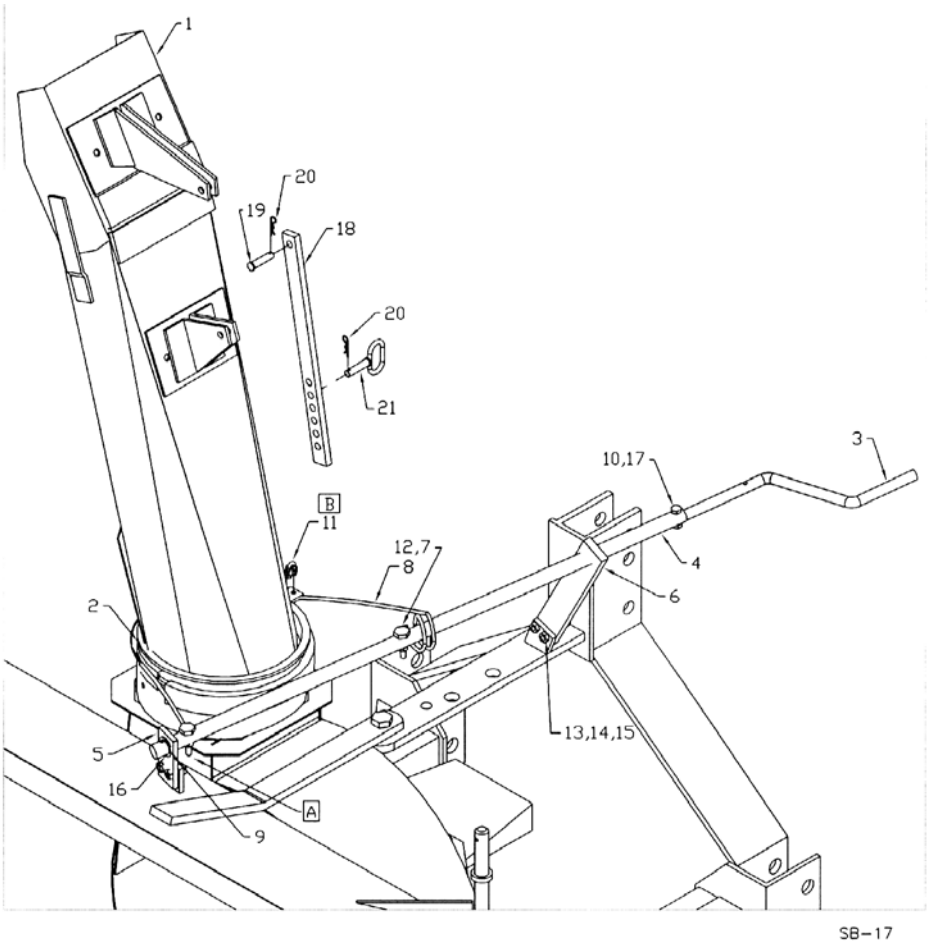
85" ALLIED SNOWBLOWER PARTS LIST

Item #	Part #	Description
1	905612	Snowblower Main Weldment
2	21598	Fan Weldment
3	965418	Auger Weldment
4	965420	Drive Shaft
5	965912	40T Sprocket, #60 1 3/8" Bore
6	965914	13T Sprocket, #60 1 1/4" Bore
7	965962	Idler Sprocket, 13T, #60, 5/8" Bore
8	23393	Shear Pin Shield
9	23395	Drive Shaft Shield
10	109585	PTO Gearbox Shield
11	965969	Idler Spacer
12	22695	Chain Cover
13	965423	Roller Chain (#60 x 98 Link w/ Conn)
14	FX9700	Hitch Weldment
15	965966	Quick Hitch Lift Pin (Cat. 2)
16	965910	Top Link Pin (Cat. 2)
17	101528	Drive Shaft Key (3/8" x 1 5/8")
18	902377	Key (Fan) (3/8" x 4 3/4")
19	965433	1 1/4" Bearing Assembly (UCF207-20)
	961676	1 1/4" Bearing Only
	810754	Flange Housing
20	965426	1 3/8" Bearing Assembly
	965430	1 3/8" Bearing Only
21	84336	3/4" x 4" Hex Bolt (pl)
22	84467	3/4" x 2" Hex Bolt (pl)
23	81671	5/8" x 4" Hex Bolt (pl)
24	84268	5/8" x 1 1/2" Hex Bolt (pl)
25	84277	1/2" x 1 1/2" Hex Bolt (pl)
26	81619	1/2" x 1" Hex Bolt (pl)
27	81627	1/2" x 3" Hex Bolt (pl)
28	86170	3/8" x 1" Hex Bolt (pl)
29	84072	3/8" x 3/4" Hex Bolt (pl)
30	81552	5/16" x 1 1/4" Gr. 5 Hex Bolt (pl)
31	81700	3/4" Hex Nut (pl)

32	81676	5/8" Hex Nut (pl)
33	81636	1/2" Hex Nut (pl)
34	812364	1/2" Lock Nut (pl)
35	81592	3/8" Hex Nut (pl)
36	84217	3/8" Wing Nut (pl)
37	812362	5/16" Lock Nut (pl)
38	81701	3/4" Lock Washer (pl)
39	81678	5/8" B.S. Flat Washer (pl)
40	81637	1/2" Lock Washer (pl)
41	81593	3/8" Lock Washer (pl)
42	936402	PTO Safety Chain
43	965911	7/16" Linch Pin
44	988999	3/8" x 3/8" Socket Set Screw
45	BU50505	Gearbox w/o Oil
46	81677	5/8" Lock Washer (pl)
47	F842	PTO Assembly (#242-16216)
48	965648	Spout Weldment
49	965970A	Spout Clamp
50	961658	1/4" Cable Clamp
51	965646	Spout Adjustment Bar
52	961876	1/2" x 1 1/2" Clevis Pin (pl)
53	903523	Adjustment Pin Weldment
54	961012	#16 Hair Pin Clip
55	81569	5/16" Lock Washer (pl)
56	81568	5/16" Hex Nut GR2 (pl)
57	24930	Cylinder 1.75"Dia x 5.0 - 9/16" ORB
58	115370	3/8" x 108 Hyd Hoses C/W Fittings
59	902407	Skid Plate Weldment
	F6707	Skid Plate Bundle
60	900712	Skid Pin Weldt (pl)
61	967164	Pound-In Grease Nipple
62	108979	Swivel Arm
63	107780	Chute Cable 1/4" x 71"
64	967140	1" x 10ga Rim Washer (pl)
65	81210	1/4" x 2" Cotter Pin (pl)
66	812026	5/16" x 1" Hex Bolt (pl)
67	81549	5/16" x 3/4" Hex Bolt (pl)
68	909277	Manual Holder

MANUAL CHUTE CONTROL

1. Remove spout clamp and install chute.
2. Mount handle brackets to snowblower & hitch.
3. Insert handle extension, placing a 1” flat washer on both sides of the front handle bracket; secure with 3/16 cotter pin.
4. Attach handle to handle extension.
5. Turn chute away from handle.
6. Attach end of cable with cable bolt.
7. Wrap cable clockwise around chute and attach cable to tab on chute with cable clamp.
8. Wrap cable around handle extension 5 complete turns. Then secure other cable bolt.



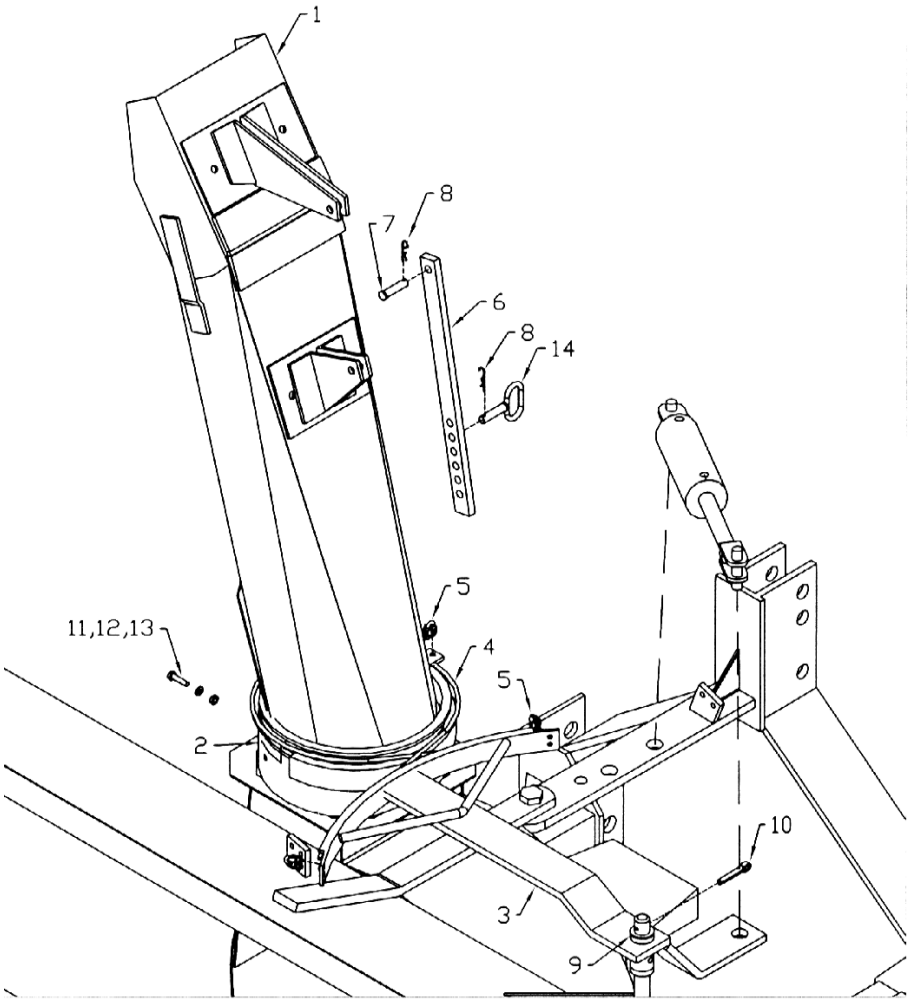
85'' Manual Chute Control

Item #	Part #	Description
1	965648	Spout Weldment
2	965970A	Spout Clamp
3	102157	Crank Handle
4	108014	Handle Extension
5	108015	Handle Bracket
6	108020	Handle Bracket
7	108019	Cable Bolt
8	108265	Chute Cable 3/16'' x 66''
9	81207	3/16'' x 2'' Cotter Pin
10	811631	1/4'' x 1 1/2'' Hex Bolt (pl)
11	961658	1/4'' Cable Clamp
12	812363	3/8'' Lock Nut (pl)
13	81552	5/16'' x 1 1/4'' Hex Bolt (pl)
14	81568	5/16'' Hex Nut (pl)
15	81569	5/16'' Lock Washer (pl)
16	84522	1'' SAE Flat Washer (pl)
17	84498	1/4'' Lock Nut (pl)
18	965646	Spout Adjustment Bar
19	961876	1/2'' x 1 1/2'' Clevis Pin
20	961012	#16 Hair Pin Clip
21	903523	Adjustment Pin Weldment

HYDRAULIC SNOW CHUTE

NOTE: Before mounting chute, apply a heavy coating of light grease to chute ring.

1. Remove spout clamp and mount chute.
2. Mount pivot arm. **NOTE**: Flat Washers are supplied for height spacer if required.
3. Connect one end of cable to pivot arm with cable clamp.
4. Wrap cable completely around chute ring. Then return to pivot arm and connect with cable clamp.
5. Turn chute 90° from position illustrated so opening of chute is facing opposite direction of pivot arm.
6. Attach cable to tab with ¼” cable clamp.
7. Connect 8” stroke hydraulic cylinder between hitch and pivot arm.
8. NOTE: A hydraulic cylinder and hose kit to control the spout deflector is available as an option.



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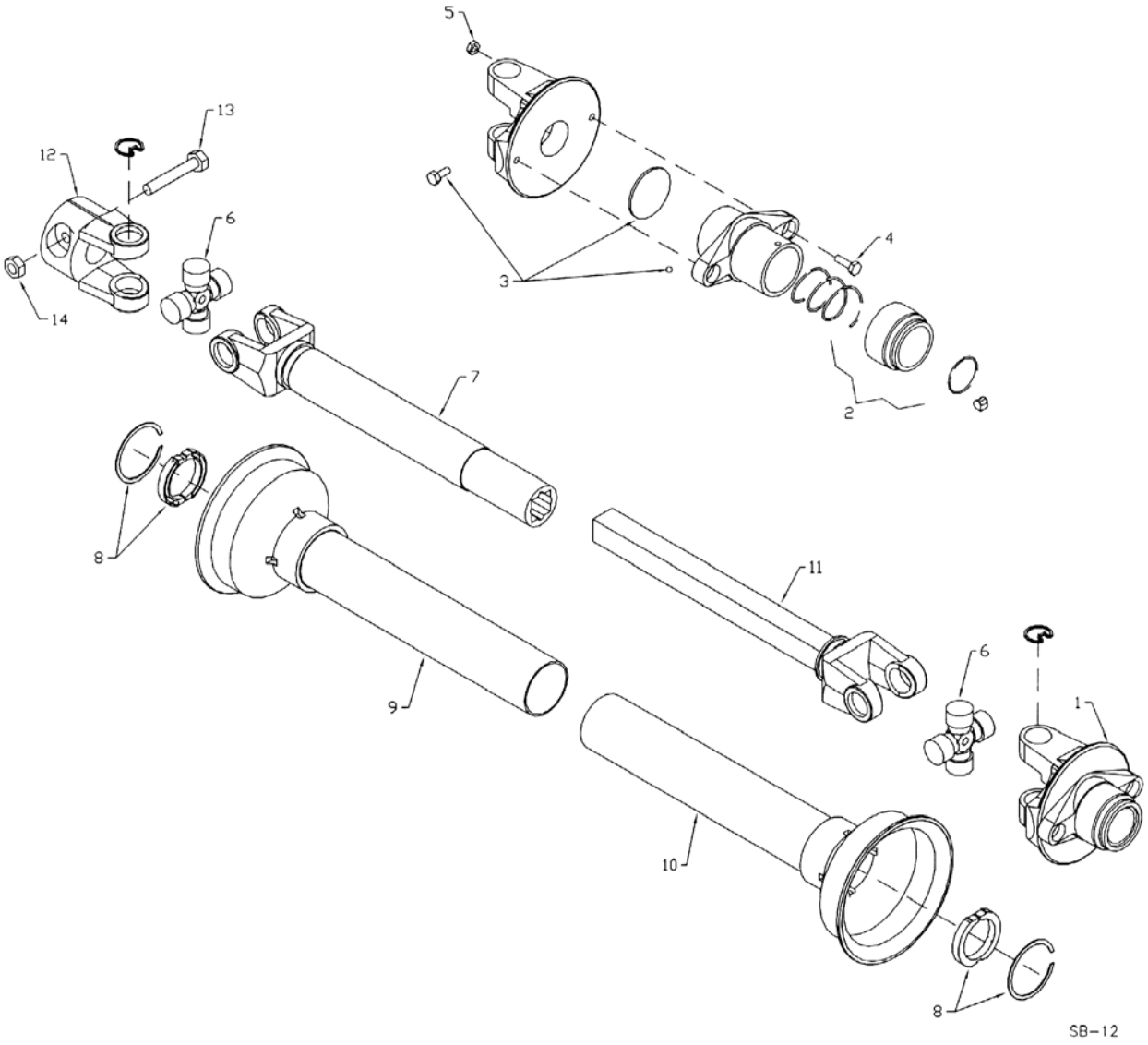
85" Hydraulic Chute Control

Item #	Part #	Description
1	965648	Discharge Chute
2	965970A	Spout Clamp
3	108979	Cable Pivot Arm
4	107780	Chute Cable
5	961658	1/4" Cable Clamp
6	965646	Spout Adjustment Bar
7	961876	1/2" x 1 3/8" Clevis Pin
8	961012	#16 Hair Pin Clip
9	967140	1" Flat Washer
10	812435	1/4" x 1 3/4" Cotter Pin
11	81552	5/16" x 1 1/4" Hex Bolt (pl)
12	81569	5/16" Lock Washer (pl)
13	81568	5/16" Hex Nut (pl)
14	903523	Adjustment Pin Weldment

85” ALLIED SNOWBLOWER PTO



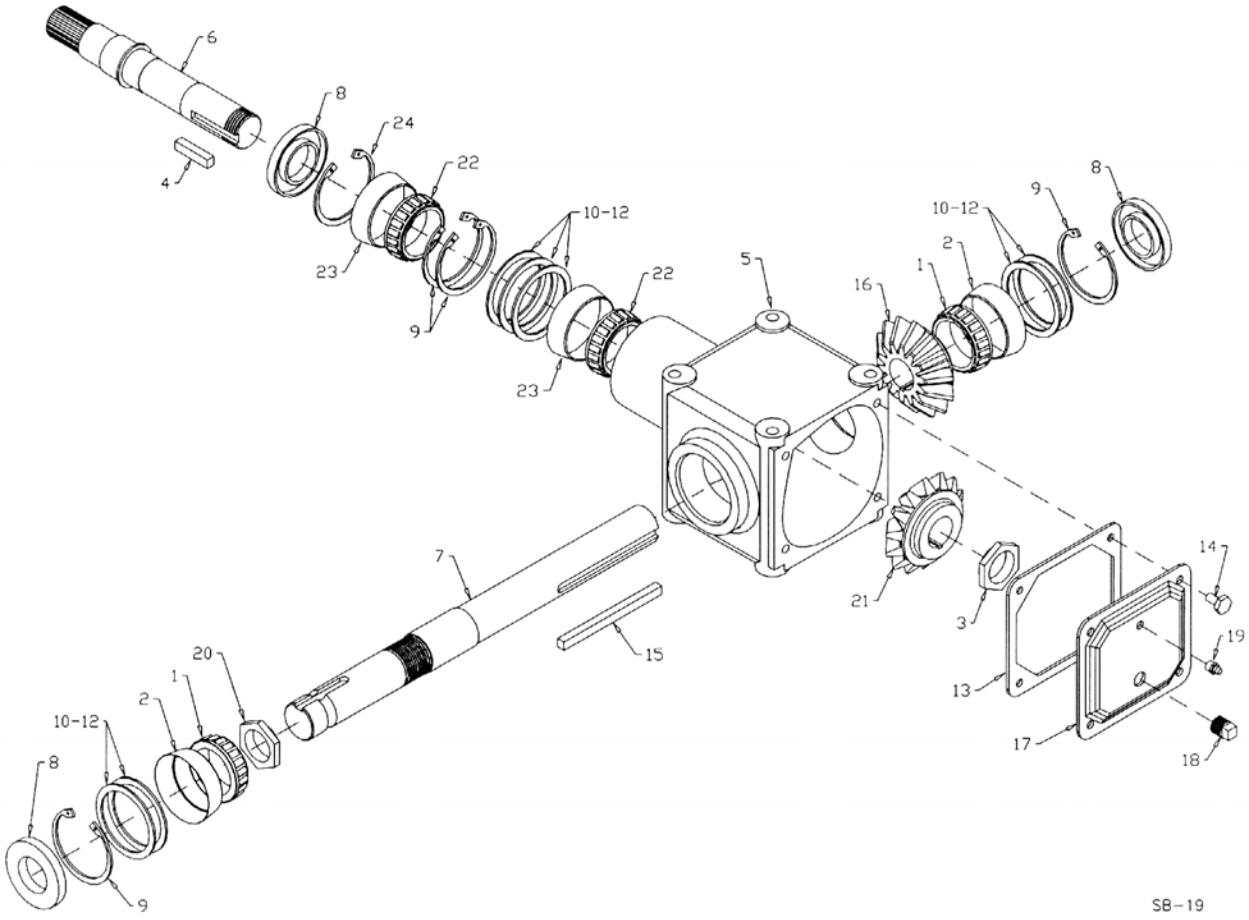
SNOWBLOWER PTO (STANDARD)

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)

GEAR BOX ASSEMBLY

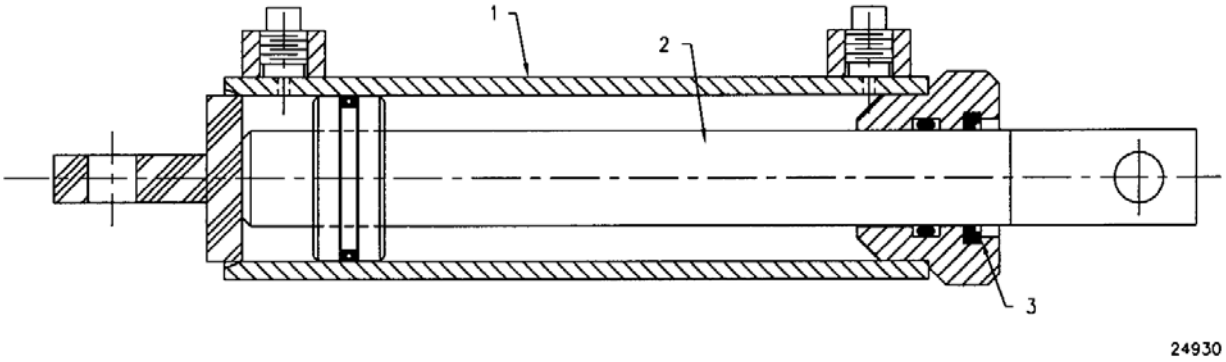


GEARBOX ASSEMBLY PARTS LIST - BU50505

Item #	Part #	Description
1	BU575901	Bearing Cone (13687)
2	BU575902	Bearing Cup (13620)
3	BU50444	Staking Lock Nut
4	BU50417-1	Key
5	BU50310	Gear Box Casting
6	BU50502	Pinion Shaft
7	BU50507	Cross Shaft
8	BU50422-1	Oil Seal
9	BU50415	Retaining Ring
10	BU50414-1	0.005 Shim
11	BU50414-2	0.010 Shim
12	BU50414-3	0.020 Shim
13	BU50458	Gasket
14	BU500397-6	5/16" x 5/8" Hex Bolt
15	BU50429	Key
16	BU50329	Bevel Gear
17	BU50457	Cover Plate
18	BU500089-3	3/8" Pipe Plug
19	BU500167-1	1/8" Relief Valve
20	BU50428	Staking Lock Nut
21	BU50331	Bevel Gear
22	BU575906	Bearing Cone (14137A)
23	BU575907	Bearing Cup (14276)
24	BU278811	Retaining Ring

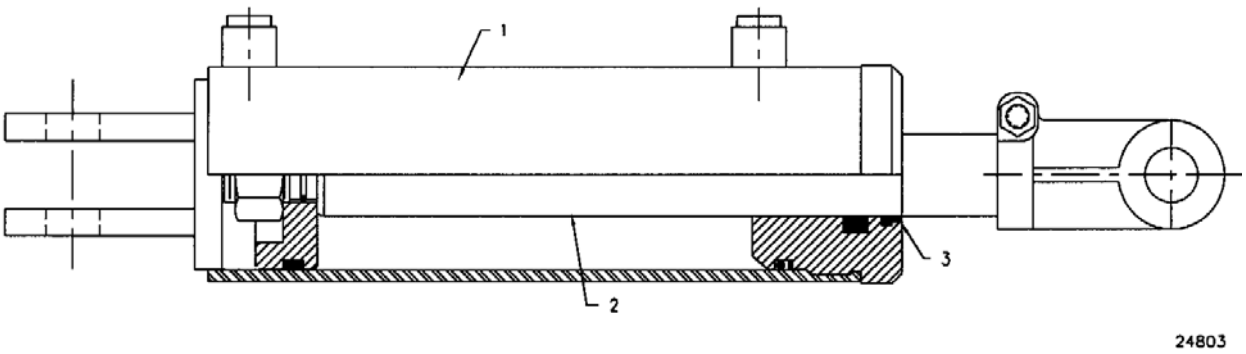
1.75 X 5 CYLINDER ASSEMBLY

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



3.5 x 8 CYLINDER ASSEMBLY

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



SHIPPING KIT AND BUNDLE NUMBERS

The following is a list of kit numbers for this product and the bundle numbers, descriptions, and quantities for each kit.

QUANTITY	BUNDLE NO.	DESCRIPTION
YC8520	**85" SNOWBLOWER W/HYDRAULIC CONTROL**	
1	FX0091	Body Assembly
1	FX9700	Quick Hitch

OPTION BUNDLE NUMBERS

The following is a list of options available for the Kits listed above.

FX8044	Hand Crank Kit for 85” only
FX7880	Hydraulic Chute Control Kit (85")
F842	Standard PTO for 85” only
F844	36" Optional Long PTO
F9116	Hydraulic Cylinder & Hose Kit
F9117	Spout Deflector Cylinder & Hose Kit

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DIVISION LOCATIONS

Farm King Division
301 Mountain Street S.
Morden, MB R6M 1X7
Ph.: (204) 822-4467
Fax: (204) 822-6348

Allied/Inland Division
1260 Clarence Avenue
Winnipeg, MB R3T 1T2
Ph.: (204) 284-6100
Fax: (204) 477-2325

B.I.I. Division
1330 43rd Street N.W.
Fargo, ND 58102
Ph: (701) 282-7014
Fax: (701) 282-5865

U.S. WAREHOUSES

AR, West Memphis
(870) 732-3132

GA, Stone Mountain
(770) 908-9439

ID, Meridian
(208) 887-6006

IN, Clarksville
(812) 284-3376

KS, Wichita
(316) 265-9577

MN, Lakeville
(952) 469-5267

MT, Billings
(406) 248-7771

ND, Bismarck
(701) 223-1886

ND, Fargo
(701) 282-7003

NE, Blair
(402) 426-8211

OH, Youngstown
(330) 793-0862

OR, Beaverton
(503) 641-1865

SD, Huron
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