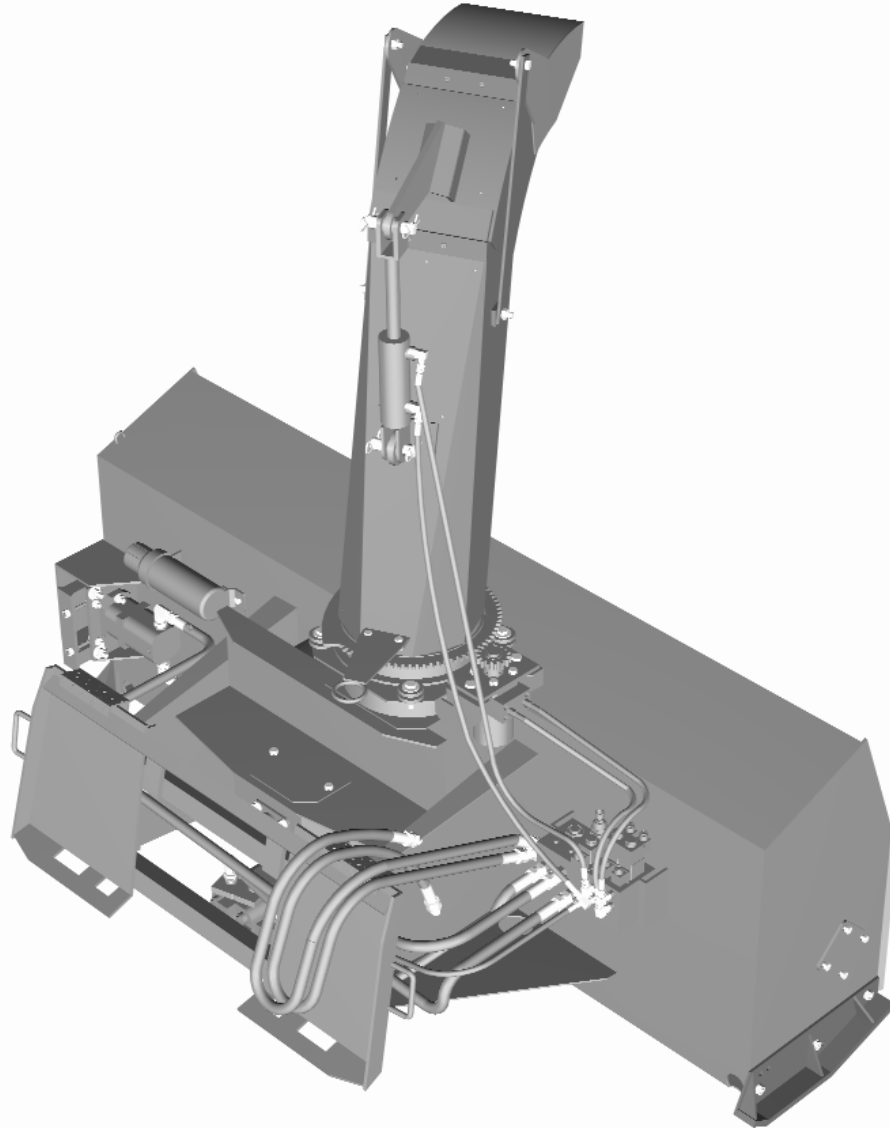


bühler



Commercial Series Snowblower

Operator's and Parts Manual
FK348

2008

TABLE OF CONTENTS

DESCRIPTION	PAGE
WARRANTY	1
INTRODUCTION	2
SAFETY	3
Safety	3
General Safety	4
Start Up Safety	4
Operation Safety	5
Transport Safety	5
Service & Maintenance Safety	5
Storage Safety	6
Safety Signs	6
Safety Sign Installation.....	6
ASSEMBLY	
Assembly Instructions	8
START UP	11
OPERATION	12
Theory of Operation	12
Operating Instructions	13
Specifications	15
Hydraulic Control Block Drawing & Parts List....	16
MAINTENANCE	17
Hydraulic Snowblower Wiring Schematic.....	17
Troubleshooting	18
Bolt Torque	
PARTS LISTS	
Hydraulic – 22” Housing Drawings	20
Hydraulic – 22” Housing Parts List	22
Hydraulic – 24” Housing Drawings	25
Hydraulic – 24” Housing Parts List	27
Snowblower Assembly Drawing	29
Snowblower Assembly Parts List	30
PTO Series – 24” Housing Drawings	31
PTO Series – 24” Housing Parts List	33
PTO Drive PTO Drawing & Parts List.....	35
Cylinder Drawings & Parts Lists	36
PTO Drive – Gearbox Drawing & Parts List	37
SHIPPING KIT AND BUNDLE NUMBERS	38

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

INTRODUCTION

For more than a generation, Buhler has been building the most popular Snowblowers used on farms, airports, and municipalities throughout the North American snow-belt. Now, all that experience brings you the rugged commercial blowers to handle more demanding snow clearing jobs.

These hydraulically driven blowers are offered in 60", 66", 74" and 84" sizes and four series. Oil flow ranges from 13 to 32 gallon per minute, with 2000 P.S.I. to ensure there is a model to match the horsepower of your machine. A hydraulic motor engages a direct ring gear for smooth, positive rotation of the chute.

The Buhler Commercial Blower is totally operated by hydraulics – fan, auger, chute rotator and deflector. The key to efficient snow blowing is the design of the fan and housing. Four blades with tight clearance at the circumference and a replaceable UHMW liner makes this an excellent design. The heart and soul of these hydraulic Snowblower is the load sensing manifold which keeps all four functions operating efficiently, even as the snow gets deeper and more packed. One set of remotes is all you need. Adjustment ports allow you to fine tune the flow and route of oil to ensure that the primary oil supply goes to the fan and auger, secondarily to the chute rotator and deflector. A cushioning feature in the valve body softens the speed of the rotation when it reaches the end of its rotating arc. The remote in-cab control allows the operator to divert oil flow to the chute controls. This 3-point hitch, TO driven blower is build with the same durable strength and features of the front mounted hydraulic models shown here. Equipped with the same chute rotator as the hydraulically driven models, it also features a telescopic hitch, replaceable cutting edge, adjustable skid shoes, 4 blade fan, and replaceable UHMW poly liner in the fan housing and spout.

Keep this manual handy for frequent reference. All new operators or owners must review the manual before using the equipment and at least annually thereafter. Contact your Buhler Dealer if you need assistance, information, or additional copies of the manual. Visit our website at www.buhler.com for a complete list of dealers in your area.

The directions left, right, front and rear, as mentioned throughout this manual, are as seen facing in the direction of travel of the implement.

SAFETY

Remember, YOU are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that everyone operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

The alert symbol is used throughout this manual. It indicates attention is required and identifies hazards. Follow the recommended precautions.



The safety alert symbol means...

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

CAUTION

The caution symbol indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

WARNING

The Warning Symbol indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

DANGER

The Danger Symbol indicates an imminently hazardous situation that, if not avoided will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

GENERAL SAFETY INSTRUCTIONS

Have a first-aid kit available for use and know how to use it.

Have a fire extinguisher available, stored in a highly visible location, and know how to use it.

Wear appropriate protective gear. This list may include but is not limited to:

- Hard hat
- Protective shoes with slip resistant soles
- Protective glasses or goggles
- Heavy gloves
- Wet weather gear
- Hearing protection
- Respirator or filter mask

Read and understand the Operator's Manual and all safety signs before operating, servicing, adjusting, repairing, or unplugging the equipment.

Do not attempt any unauthorized modifications to your Buhler product as this could affect function or safety, and could affect the life of the equipment.

Never start or operate the Snowblower except from the operator's station on the power unit.

Inspect and clean the working area before operating.

Keep hands, feet, clothing, and hair away from moving parts.

Ensure bystanders are clear of the area before operating.

START UP SAFETY

Do not let inexperienced operators or children run this equipment.

Place all tractor and machine controls in neutral before starting.

Operate only with ROPS and seatbelt equipped tractors.

Do not operate inside a building unless there is adequate ventilation.

Ensure all shields are in place and in good condition before operating.

Stay clear of PTO shaft and machine when engaging PTO.

OPERATION SAFETY

Do not permit riders.

Do not wear loose fitting clothing during operation.

Stay clear of Snowblower augers.

Stay clear of Snowblower discharge chute. Rocks or debris can be picked up and thrown.

TRANSPORT SAFETY

Review Transport Safety instructions in tractor manual before moving.

Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.

Make sure the SMV (Slow Moving Vehicle) emblem and all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.

Never have the equipment in operation during transport.

Always travel at a safe speed.

SERVICE AND MAINTENANCE SAFETY

Stop engine, set brake, remove ignition key, and wait for all moving parts to stop before servicing, adjusting, repairing, or unplugging.

Support the equipment with blocks or safety stands before working beneath it.

Follow good shop practices including

- Keep service area clean and dry
- Be sure electrical outlets and tools are properly grounded
- Use adequate light for the job

Use only tools, jacks, and hoists of sufficient capacity for the job.

Replace and secure all shields removed during servicing before operating.

Use heavy leather gloves to handle sharp objects.

Check hydraulics regularly for leaks. Use cardboard to look for leaks, and use hand and eye protection.

Relieve pressure on hydraulic system before repairing or adjusting.

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.

STORAGE SAFETY

Store the unit in an area away from human activity.

Do not permit children to play on or around the stored machine.

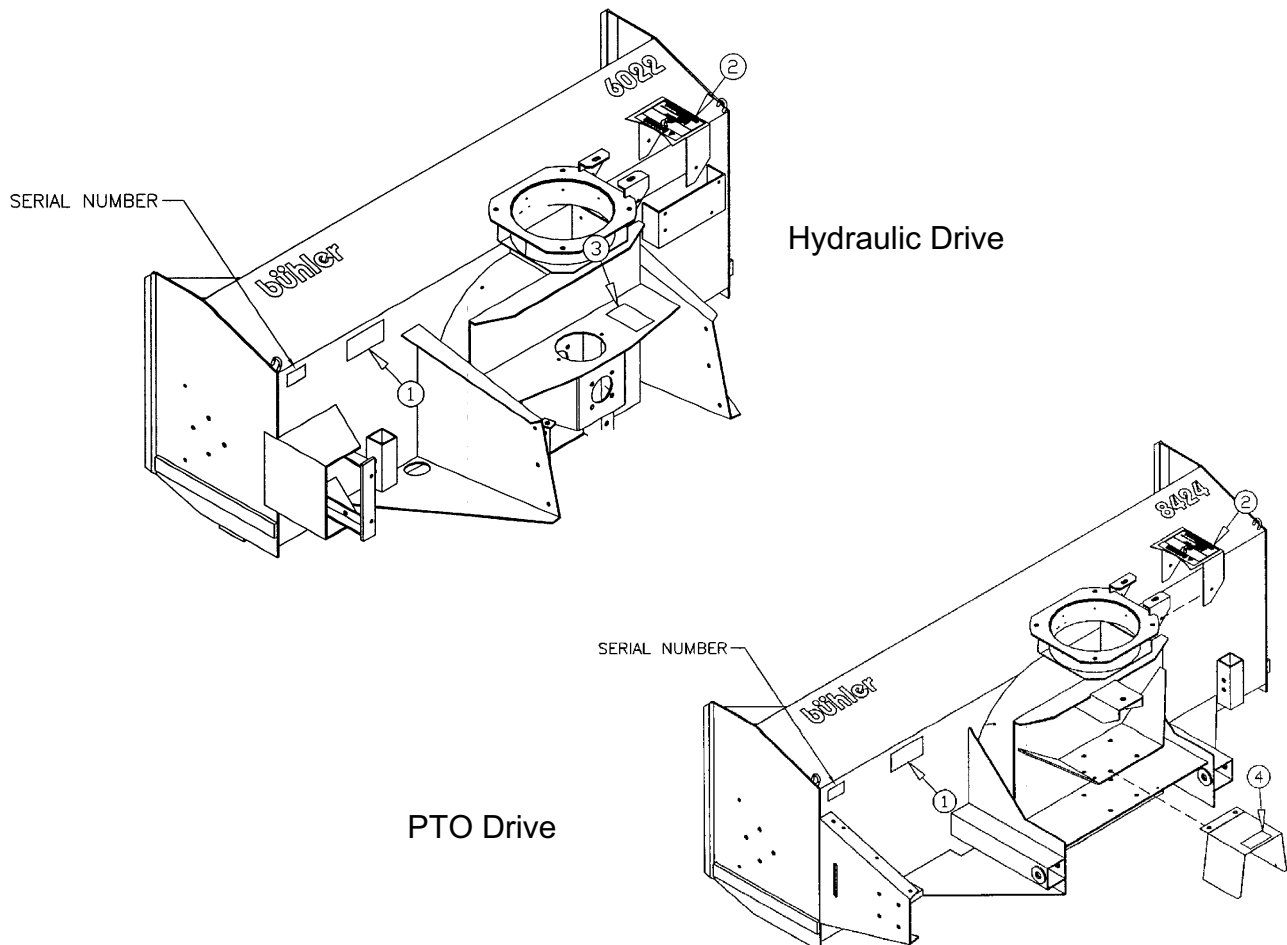
Support the frame on stands and blocks to provide a secure base.

SAFETY SIGNS

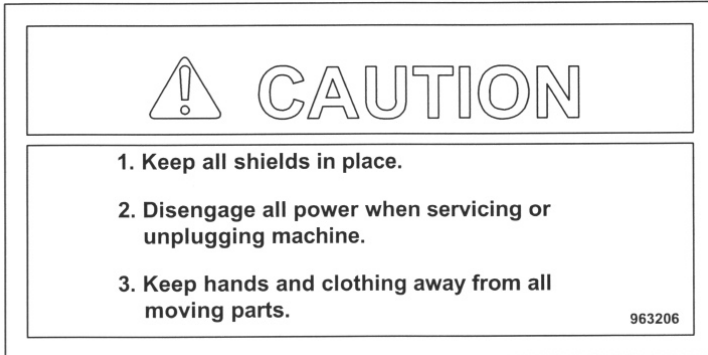
The following illustration shows the approximate location and detail of safety signs. Keep all safety signs clean and legible and replace any that are damaged or missing. When original parts are replaced, any safety signs affixed to those parts should be replaced as well. Replacement safety signs are available from your local dealer.

INSTALLATION

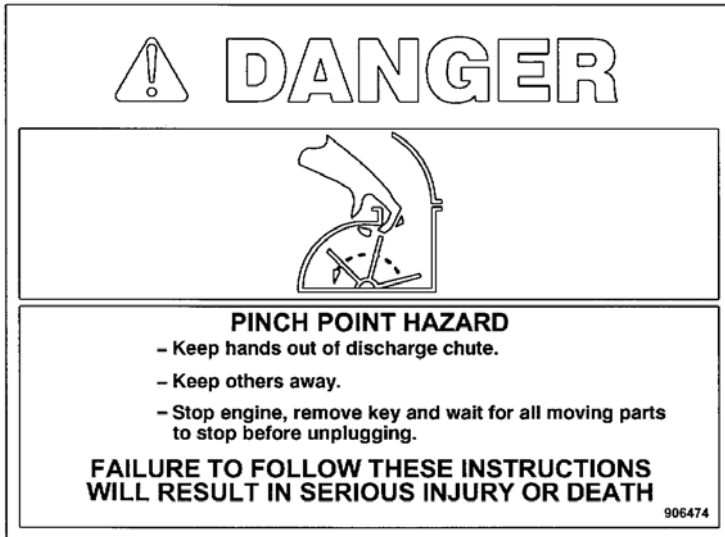
To install safety signs, ensure the installation area is clean and dry. Decide on the exact position before you remove the backing paper. Remove the smallest portion of the split backing paper and align over the specified area. Carefully press in place. Slowly peel back the remaining paper and smooth the remaining portion in place. Small air pockets can be pierced with a pin and smoothed out.



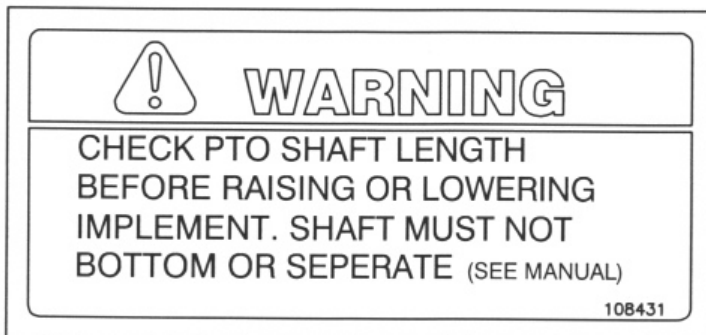
SAFETY SIGNS



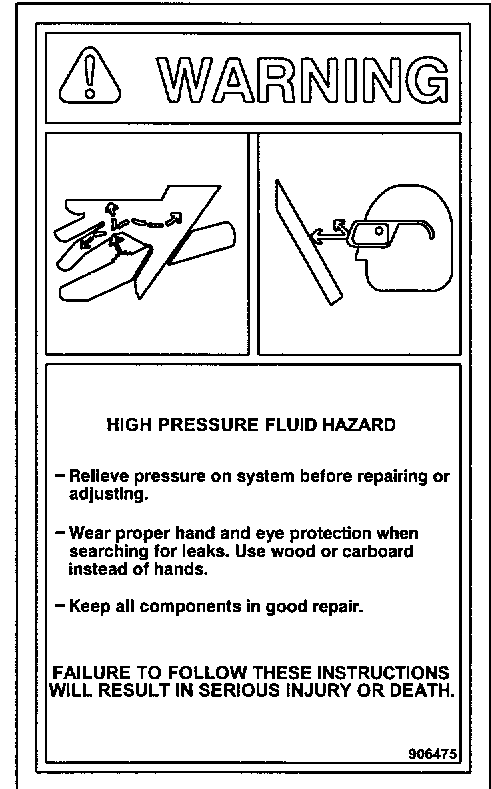
#1



#3



#4



#3

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

ASSEMBLY INSTRUCTIONS

1. SPOUT ASSEMBLY FOR ALL SNOWBLOWERS: Remove two of the grooved spout rollers to mount the discharge spout. Replace the two rollers to hold spout in place. Install the 2 ½" x 8" cylinder on the spout using the pins supplied.

2. HYDRAULIC DRIVE: (Page 29 & 30) The 80" long hydraulic lines (#14) for the spout deflector cylinder should be connected to the two ports on the hydraulic block labeled C1 and C2 (see Page 16 for block drawing). The 30" long lines (#15) from the spout control motor connect to the two ports labeled M1 and M2 on the hydraulic block. The ¾" diam. x 84" main lines (#21) connect to the implement. **NOTE:** The customer must supply the appropriate tips to connect the main lines to the implement. A two-piece wiring harness is supplied with all hydraulic snowblowers. The 45" part of the harness (#6) is mounted on the snowblower. One end of this wire connects to the control block. The plug end mounts on a bracket welded to the top edge of the quick hitch. The 155" part (#1) of the harness with the switch is connected to the plug on the harness mounted on the snowblower. A switch mounted in the cab controls the spout and the deflector. The alligator clips attach to the battery which acts as a power source. A schematic of the wiring harness is included in this manual. (See page 17)

3. PTO DRIVE: (Page 31-34)
 1. Slide the two hitch adaptor weldments (#17) into the sleeves on the body. These tubes are adjustable to three different positions. The correct position for each individual tractor will be determined when mounting the snowblower on the tractor (see section on mounting blower on tractor). Start with the tubes pulled out to the last hole. Connect to the snowblower using pins (#71) and lynch pins (#73).

Mount the hitch Weldment (#7) to the body. The top arm of the hitch bolts on top of the bracket on the body using a ¾" x 1 5/8" bolt, lock washer and hex nut. The bottom of the hitch bolts to the outside of the two hitch adaptors using 5/8" x 1 ¾" hex bolts, flat washers, lock washers and hex nuts.

2. Connect two 108" hoses (#76) to the hydraulic spout control motor and two 108" hoses (#76) to the cylinder on the discharge spout. Connect these hoses to the tractor after mounting the snowblower on the tractor.

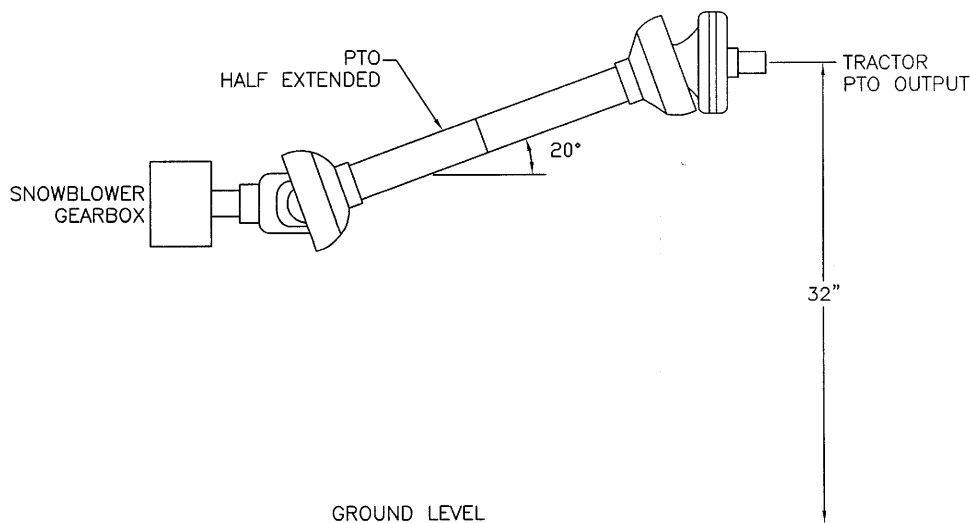
3. Mounting blower on tractor:
 - a) The pins supplied with the snowblower are for a category 2 quick hitch. The quick coupling hitch has two holes both at the top of the hitch and at each lift arm. When using a quick coupler, the pins must be in the inside set of holes. Use the outside set of holes with a standard three-point hitch.

ASSEMBLY INSTRUCTIONS – cont'd.

- b) Using tape or a 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" key way. Slide the yoke onto the gearbox shaft with the 3/8" key (#67) supplied. Lock the yoke in place with the 1/2" x 3" bolt (#39) and lock nut (#40) fitted through the groove in the gearbox shaft. After tightening the bolt, insert and tighten the 3/8" socket set screw (#74) 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.
- e) **NOTE:** Excessive U-joint wear and shear pin failure may result if the tractor 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 32 inches high. Use 34 inches if the PTO is nearly compressed.



SC-11

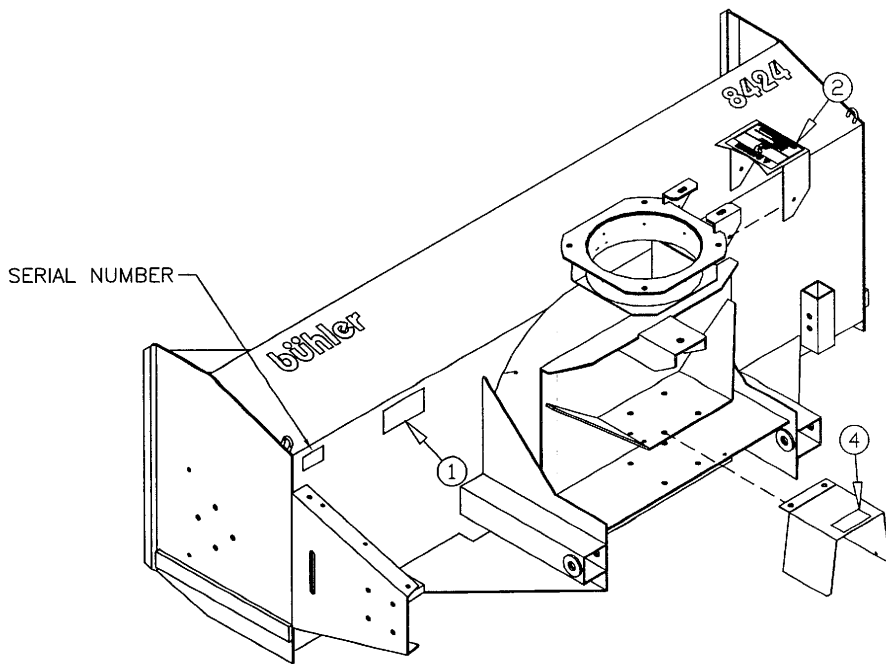
ASSEMBLY INSTRUCTIONS – cont'd.

4. PTO SHIELD: All PTO snowblowers are supplied with a PTO shield (#18). To install, remove the two rear bolts at the top of the gearbox (#34). Bolt the PTO shield to the gearbox by the hinges using these same bolts. A utility spring (#68) keeps the shield in place. Hook one end of the spring in the hole in the shield and the other end to the hole in the brace under the gearbox.



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

REFILLING GEARBOX WITH OIL: If the gearbox requires refilling with oil because of repairs to the gearbox, add oil to the level shown in drawing. Check the level regularly using the plug in the lid. The correct level is even with the bottom of the plug.



SC-09

START UP

HYDRAULIC CONTROL BLOCK

NON-STALLING-FAN FEATURE:

The Hydraulic Snowblower has a unique modulating element that keeps the blower fan from stalling in an overloaded condition. This is accomplished by starving the hydraulic flow to the front auger motor (which then stops feeding the fan) and diverts all of the flow (and energy) to the main fan motor. As the fan clears itself, and the pressure drops, the auger again begins feeding according to load. When the system is set up properly the fan motor should not stall or plug up.

MODULATING ELEMENT SETUP:

For optimum performance the modulating element (#4) (page 16) must be adjusted to match the system pressure of the tractor being used. The factory setting is for a 2800-3000 psi system. If your system is less, you should make adjustments accordingly. For adjustment:

Loosen the LOCK NUT (on the MODULATING VALVE (#4) (page 16) and back off the adjusting screw till the screw turns freely by hand, and then turn it in till you feel the screw making contact with the pressure spring. One turn sets the pressure up by about 600 psi.

For 2100 psi turn the screw in 3 ½ turns.

For 2400 psi, turn in 4 turns

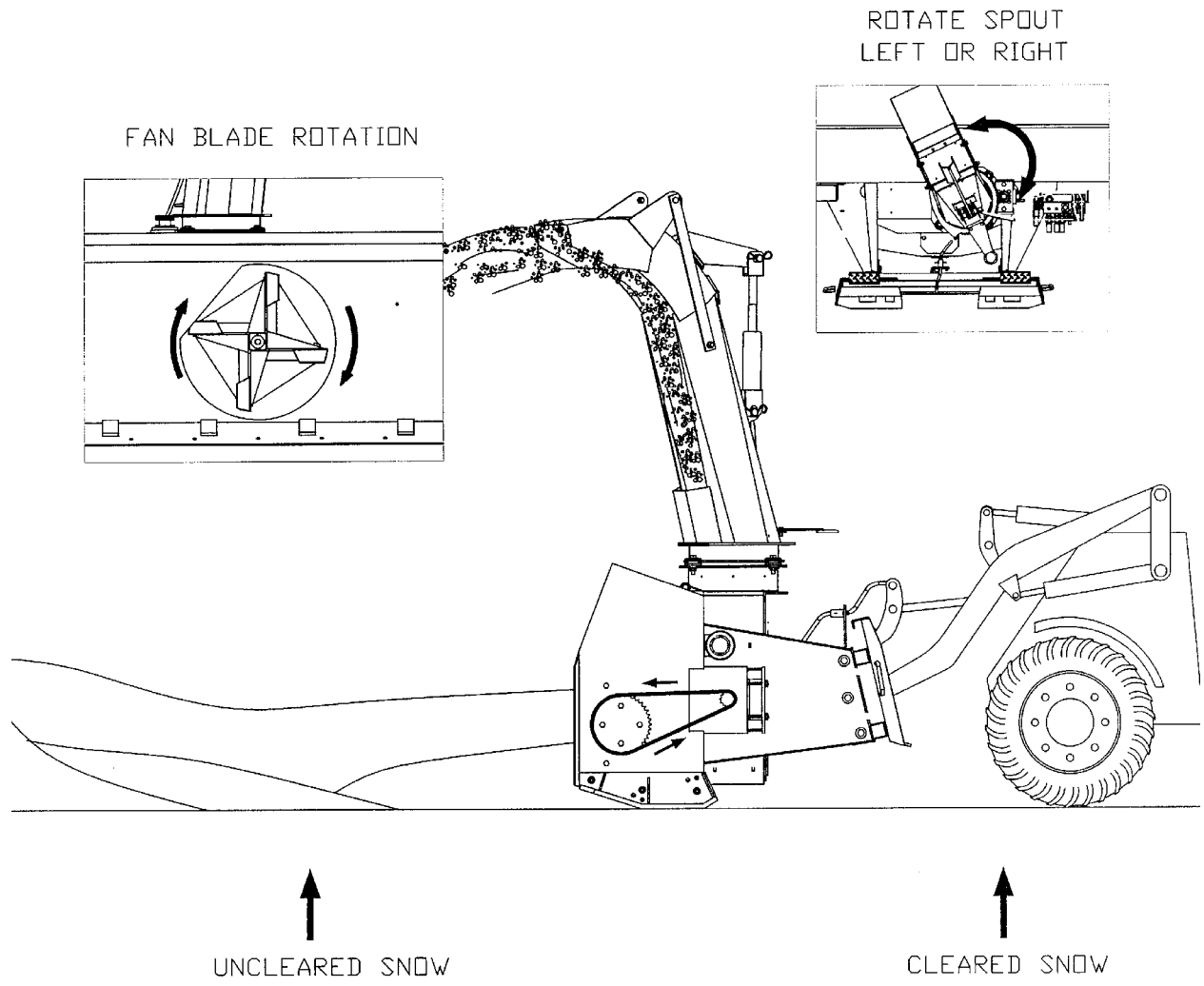
For 2700 psi, turn in 4 ½ turns

For 3000 psi, turn in 5 turns.

If the fan stalls (in an over load condition), the (#4) (page 16) element is set too high. If the Auger slows and stops too soon, it is set too low. Once it is set it should not need to be adjusted any more.

Since there are a number of unknown variables that are unique to almost every situation, it is difficult to give an exact setting for a particular model. The variables are: hose size and length, type and size of quick couplers, etc.

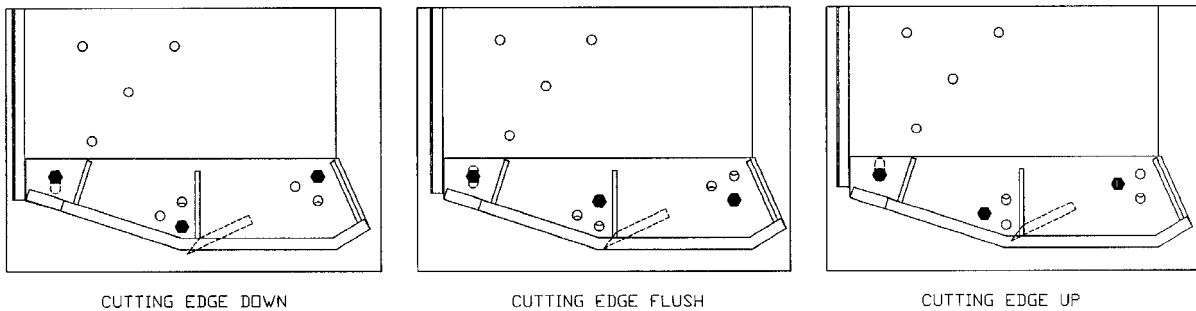
THEORY OF OPERATION



SB-16

OPERATING INSTRUCTIONS

1. HYDRAULIC DRIVE: All snowblower hydraulic blocks are set at the factory for a 2800 - 3000 psi system. Refer to the section on the hydraulic control block if your system does not fall into this range.
2. ALL: Depth of the cut can be partially controlled by tilting the Snowblower forward or backward.





SC-15

66" ONLY: Depth of cut can be controlled by bolting the skid shoe in one of the following positions.

3. PTO DRIVE: 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.
4. PTO DRIVE: The inside holes on the hitch are spaced to fit a category 2 quick hitch using the pins supplied. The hitch will also fit category 2 three point arms or category 3 if you add bushings.
5. PTO DRIVE: Adjust the lower link sway chains or blocks on the tractor to restrict movement of the blower when operating.
6. ALL: All snowblowers have a hydraulic control spout and spout deflector. Refer to the hydraulic control block section. The pressure to the chute control is regulated by the two torque limit controls (#13b and #13c). Each controls the hydraulic pressure in one direction. They are set at the factory to about 2 ½ turns. If the pressure is too low, the chute won't turn. If the pressure is too high you could damage the teeth on the spout control ring. To adjust the pressure, you loosen the lock nut on the modulating valve and back off the adjusting screw till the screw turns freely by hand. Turn the screw in till you feel it making contact and turn in 2 ½ turns. Start with this setting to do any fine adjustment if necessary. Pressure should not go over 1000 psi.

The deflector cylinder pressure is regulated by no-load control (#13a). It is set at the factory to about 2 turns. If pressure is too low it will not operate. Excess heat will be generated if it is set too high. Adjust if necessary as per previous paragraph. Operating pressure should be about 700 psi.

OPERATING INSTRUCTIONS – cont'd.

7. ALL: Run the snowblower at low rpm to check operation before blowing snow.
8. PTO DRIVE: The blower has three 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 8); auger shear bolt – 5/16" x 1 1/4" (grade 5). Shear bolts should be fastened with a lock nut or two jam nuts. These bolts must be tight to prevent wear of the bolts and bolt holes.
9. PTO DRIVE: Never run PTO at over 600 rpm.
10. ALL: Chain tension on auger chain should be set at 3/8" to 1/2" slack.
11. LUBRICATION:
 - a) ALL: The gear teeth on the chute control should be periodically lubricated with gun grease.
 - b) PTO DRIVE: PTO shaft universal joints and square shaft slide should be periodically lubricated with a grease gun.
 - c) ALL: Regularly oiling the chain will significantly increase the life of the chain.
 - d) PTO DRIVE: Use any 80-90 gear oil or multigrade with 80 minimum in the gearbox up to the level plug height.
12. ALL: Periodically check all bolts for tightness. The bolt holding on the fan and the bearing bolts are of particular importance.
13. HYDRAULIC DRIVE: Always use goggles and gloves when checking for hydraulic leaks. Use a piece of cardboard instead of your hands to look for leaks.
14. ALL:  Always shut off snowblower for servicing or unplugging. Disengage hydraulics or PTO shaft.
15. PTO DRIVE: Check the shear sprocket at the beginning of every season to make sure it will spin freely. Clean to loosen if necessary.
16. ALL: 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.
17. HYDRAULIC DRIVE:  **WARNING:** The locking pins must extend through the holes in the attachment when mounting the snowblower to an implement. Levers must be fully down and locked. Failure to secure pins can allow attachment to come off and cause injury or death.

SPECIFICATIONS

MODEL	B6022HSB-1 B6022HSB-2 B6022HSB-3	B6622HSB-1 B6622HSB-2 B6622HSB-3	B7422HSB-1 B7422HSB-2 B7422HSB-3 B7422HSB-4	B7424HSB-3 B7424HSB-4	B8424HSB-2 B8424HSB-3	B84SB (PTO Drive)
Cutting Width	60"	66"	74"	74"	84"	84"
Cutting Height	28"	30"	30"	30"	30"	30"
Fan Housing	Replaceable UHMW Liner	Replaceable UHMW Liner	Replaceable UHMW Liner	Replaceable UHMW Liner	Replaceable UHMW Liner	Replaceable UHMW Liner
Fan	4-Blade	4-Blade	4-Blade	4-Blade	4-Blade	4-Blade
Fan Diameter	21.5"	21.5"	21.5"	23.5"	23.5"	23.5"
Fan Depth	7.5"	7.5"	7.5"	7.5"	7.5"	7.5"
Auger Diameter	20"	20"	20"	20"	20"	20"
Auger Center Diameter	3"od x .250 wall	3"od x .250 wall	3"od x .250 wall	3"od x .250 wall	3"od x .250 wall	3"od x .250 wall
Auger Thickness	3/8"	3/8"	3/8" "	3/8"	3/8"	3/8"
Drive Fan	Hyd w/#80 Chain	Hyd w/#80 Chain	Hyd w/#80 Chain	Hyd w/#80 Chain	Hyd w/#80 Chain	PTO Gearbox
Drive Auger	Hyd w/#60H Chain	Hyd w/#60H Chain	Hyd w/#60H Chain	Hyd w/#60H Chain	Hyd w/#60H Chain	#60H Chain
Body Housing	10ga	7ga	10ga	10ga	7ga	7ga
Hitch Type	Skid Steer-fixed	Ski Steer fixed	Skid Steer-fixed	Skid Steer-fixed	Skid Steer-fixed	Cat. 3 –3 pt.
Hitch Adjustment	No	No	No	No	No	3 position
Chute Rotator	Hydraulic-230	Hydraulic-230	Hydraulic-230	Hydraulic-230	Hydraulic-230	Hydraulic-230
Chute Deflector	Hyd.	Hyd.	Hyd.	Hyd.	Hyd.	Hyd.
Cutting Edge	½" x 4" Beveled replaceable	½" x 4" Beveled replaceable	½" x 4" Beveled replaceable	½" x 4" Beveled replaceable	½" x 4" Beveled replaceable	½" x 4" Beveled replaceable
Skid Shoes	Cup Type – adjustable	Side mount Fixed	Cup Type – adjustable	Cup Type – adjustable	Cup Type – adjustable	Cup Type – adjustable
Truckloading Spout	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
System Controls & Drive	Hyd. Load Sensing Block flow adjustable	Hyd. Load Sensing Block flow adjustable	Hyd. Load Sensing Block flow adjustable	Hyd. Load Sensing Block flow adjustable	Hyd. Load Sensing Block flow adjustable	PTO w/shear pin
Hyd. Requirements	13-26 gpm 2000 psi Min.	13-26 gpm 2000 psi Min.	13-32 gpm 2000 psi Min.	20-32 gpm 2000 psi Min.	20-32 gpm 2000 psi Min.	10 gpm 1000 psi Min.
Approx. Weight	1070 lbs.	1260 lbs.	1178 lbs.	1193 lbs.	1209 lbs	1307 lbs.

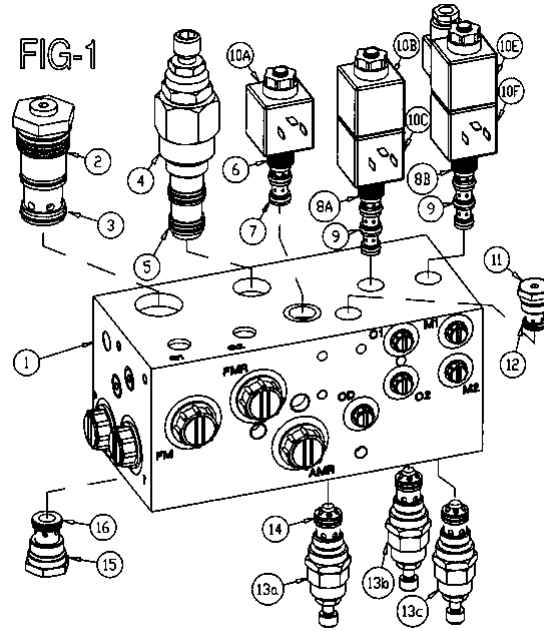
Hydraulic Snowblower Fan RPM to GPM Rating

Series I 13 – 17 gpm 2000 psi min. (6.2 cu.in./rev)
 Series II 16 – 22 gpm 2000 psi min. (8 cu.in./rev)
 Series III 20 – 26 gpm 2000 psi min. (9.6 cu.in./rev)
 Series IV 24 – 32 gpm 2000 psi min (11.9 cu.in./rev)

gpm x psi = hp

1714

HYDRAULIC CONTROL BLOCK DRAWING AND PARTS LIST



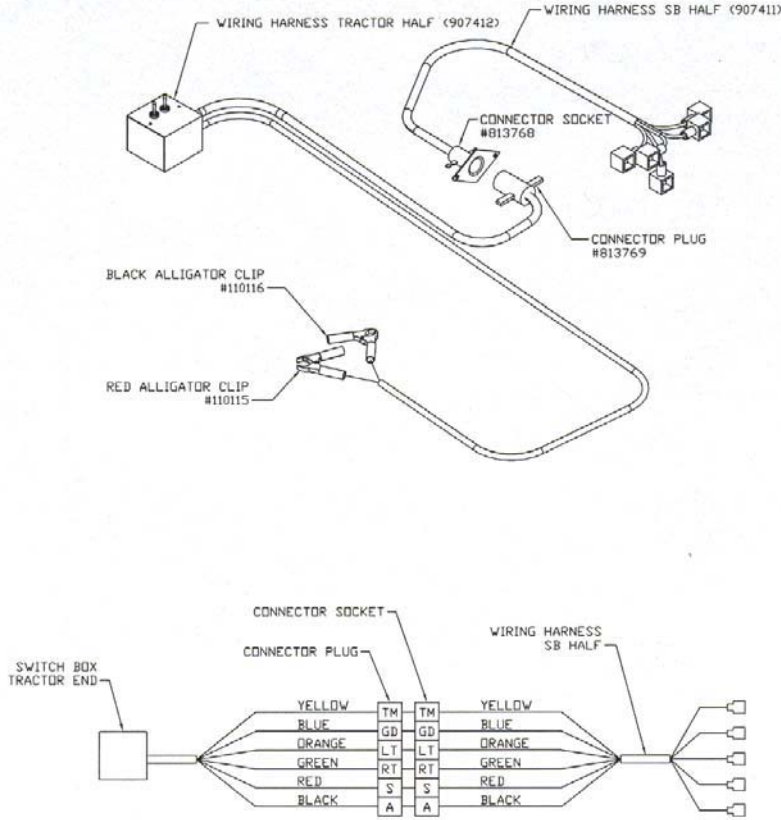
SC-10

HYD MANIFOLD ASSEMBLY

Item #	Part #	Description
1	905669	Main Block
2	813922	Logic Element
3	X2732	Element Seal Kit
4	813923	Control Valve
5	X2733	Seal Kit
6	813924	No-Load Valve
7	X2734	Seal Kit
8ab	813925	Chute Cont. Valves
9	X2735	Seal Kit
10a	813926	No-Load Press. Coil
10bc	813926	Chute Up Down Coil
10ef	813926	Chute Left Right Coil
11	813929	Check Valve
12	X2736	Seal Kit
13a	813930	No-Load Control
13bc	813930	Torque Limit Control
14	X2737	Seal Kit
15	813931	Check Valve
16	X2745	Seal Kit

MAINTENANCE

HYDRAULIC SNOWBLOWER WIRING SCHEMATIC X2572



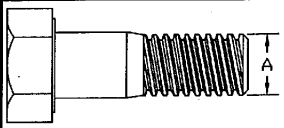
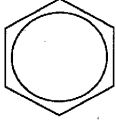


5C-13

HYDRAULIC SNOWBLOWER MOTOR REQUIREMENT CHART

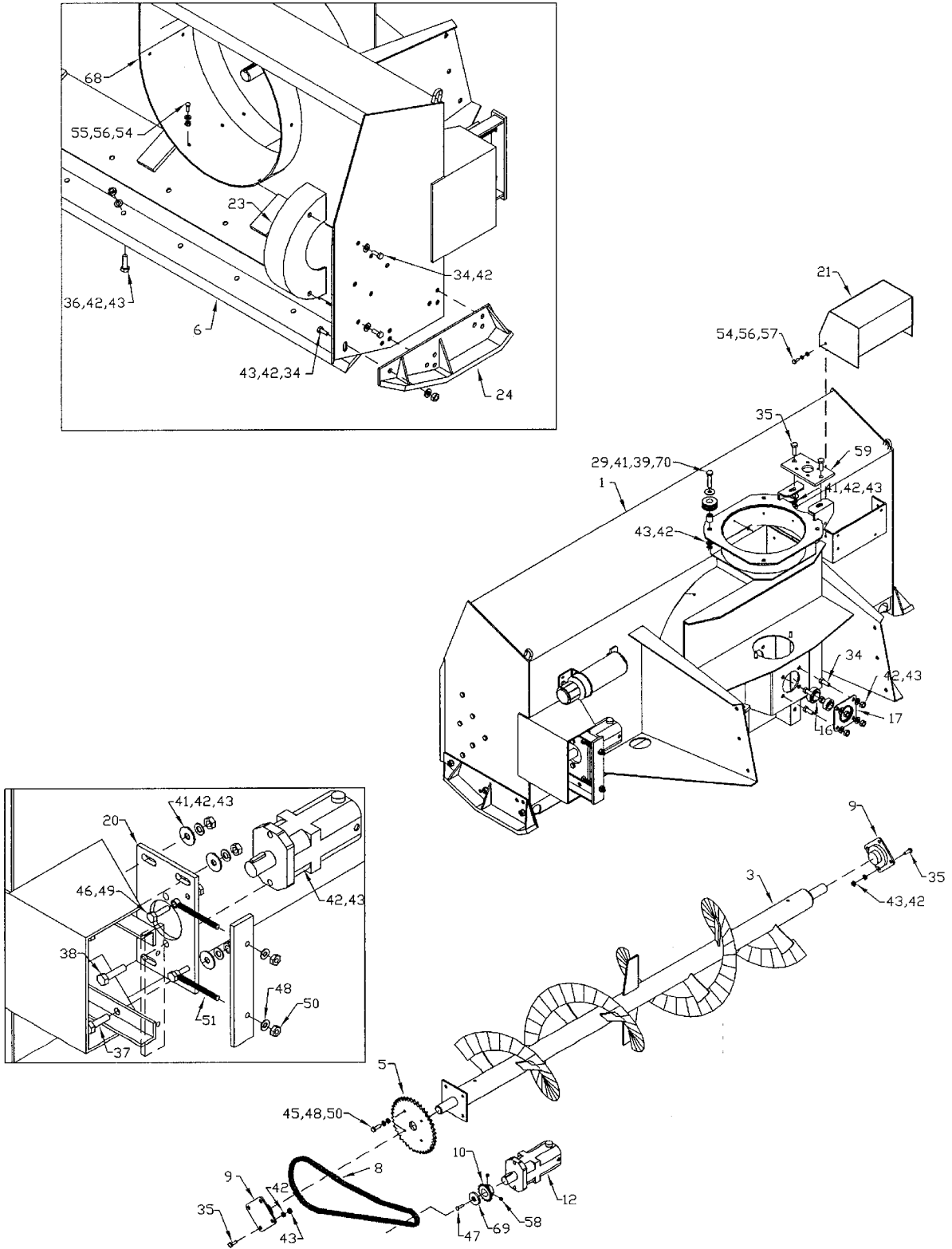
Category	Motor Cu/in/rev	GPM	Motor RPM	HP @ 2000	HP @ 3000 psi	Shaft Type Flange Mtg.	Eaton Motor Part #'s	Buhler Part #
Group #1	6.2	12	447	12	18	1.25" Straight	1 1/16-12 ORB	905623
		16	596	16	24	2 bolt	104-1062	
Group #2	8	17	491	17	25	1.25 Straight	1/16/=12 ORB	905694
		20	578	20	29	2 bolt	104-1063	
Group #3	9.6	20	481	20	29	1.25 Straight	1 16/-12 ORB	905695
		24	578	24	35	2 bolt	104-1064	
Group #4	11.9	21	408	21	31	1.25 Straight	1 116-12 ORB	905624
		28	544	28	41	1.25 Straight	104 - 1065	
spout motor 146-1028-002								905625

TROUBLESHOOTING

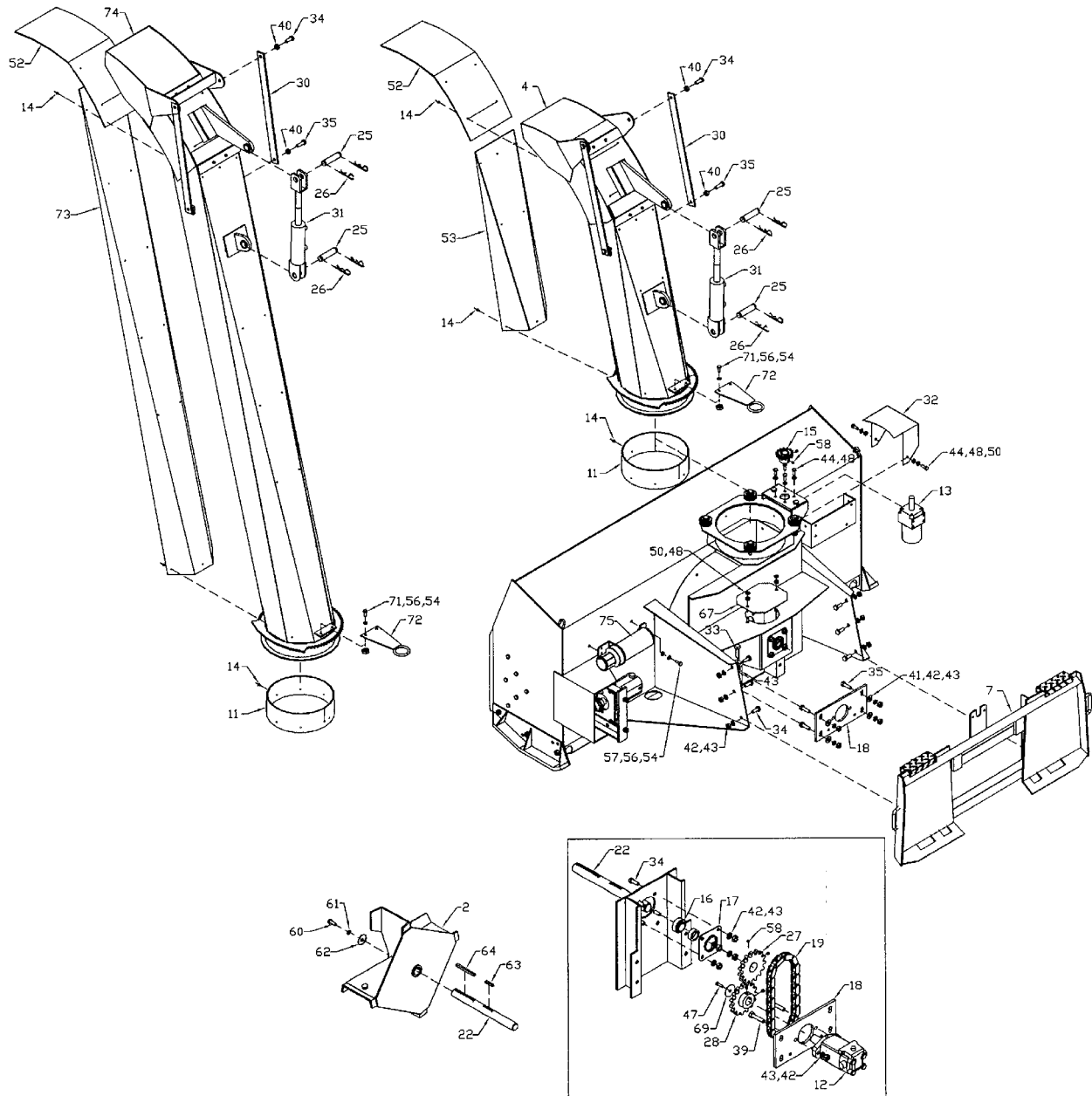
SYMPTOM	PROBABLE CAUSE	REMEDY
D1 Nothing Works	<u>Hydraulic Circuit Not Complete</u> 1. Hydraulic Valve not engaged 2. 1 or more quick couplers not completely engaged. 3. Defective quick coupler 4. Hydraulic pump low on fluid	1. Engage valve to full detent 2. Fully engage all couplers 3. Replace defective quick couplers 4. Top up fluid level
D2 Auger Rotates backwards, and fan does not rotate	<u>Hydraulic Circuit Reversed</u> 1. Main valve is in reverse 2. Quick couplers are connected backwards.	1. Reverse valve direction or 2. Switch hose connections to the machine.
D3 Fan turns too slow	1. Inadequate hydraulic flow for this motor size. 2. Wrong motor for your system.	1. Check the gpm of your system. 2. Contact your dealer.
D4 Fan motor stalls	Valve #4 (Fig. 1) set too high	See MODULATING ELEMENT SET UP
D5 Auger motor slows or stalls too quickly	Valve #4 (Fig. 1) set too low	See MODULATING ELEMENT SET UP
D6 Fan & Auger work but chute controls do not work properly	<u>Electrical Problem</u> 1. Electrical connections to battery 2. Breaker is tripped. 3. Connector from Sw to block not contacting. 4. Connection to No-Load Valve #6 (Fig. #1) is not making 5. Diodes in switchbox are defective. 6. Solenoid Valve Spool is stuck	1. Ensure that the clamps are making proper connection. 2. Reset breaker. 3. Ensure the connector is fully engaged. Check for broken wires. 4. Check all items in D6 5. Check for voltage through diodes 6. Replace #8a or 8b solenoid cartridge.
D7 Chute controls do not work properly in no-load conditions.	1. The No-Load pressurizing valve #14a (Fig. #1) set too low. 2. <u>Electrical:</u> Switch, harness, connectors, coil 10a, diodes 3. Polarity of the system is reversed. 4. Diodes in switchbox defective. 5. Defective Coil #10a (Fig. #1) 6. Defective Valve #6 (Fig. #1)	1. Back of the adjuster-screw till it rotates freely by hand. Then turn in till you feel it contacting the spring. Then turn in 2 turns. 2. Check the No-Load Circuit #5 in Fig. #2 3. Red Alligator clip must be on the <u>Positive Terminal</u> 4. Replace defective diodes. 5. Replace Coil. 6. Replace Valve.
D8 Chute Rotation seems to lack power to turn.	1. See D7-1 2. Valve #14b or #14c set too low.	1. Same as D7-1. 2. Back of the adjuster-screw till it rotates freely by hand then turn in till you feel it contacting the spring. Then turn in 2 turns.

Bolt Torque						
						
Bolt Diameter	SAE2		SAE5		SAE8	
"A"	N.m	lb-ft	N.m	lb-ft	N.m	lb-ft
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	70	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970

HYDRAULIC COMMERCIAL SERIES SNOWBLOWER – 22" HOUSING



SC-02



SC-03

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.

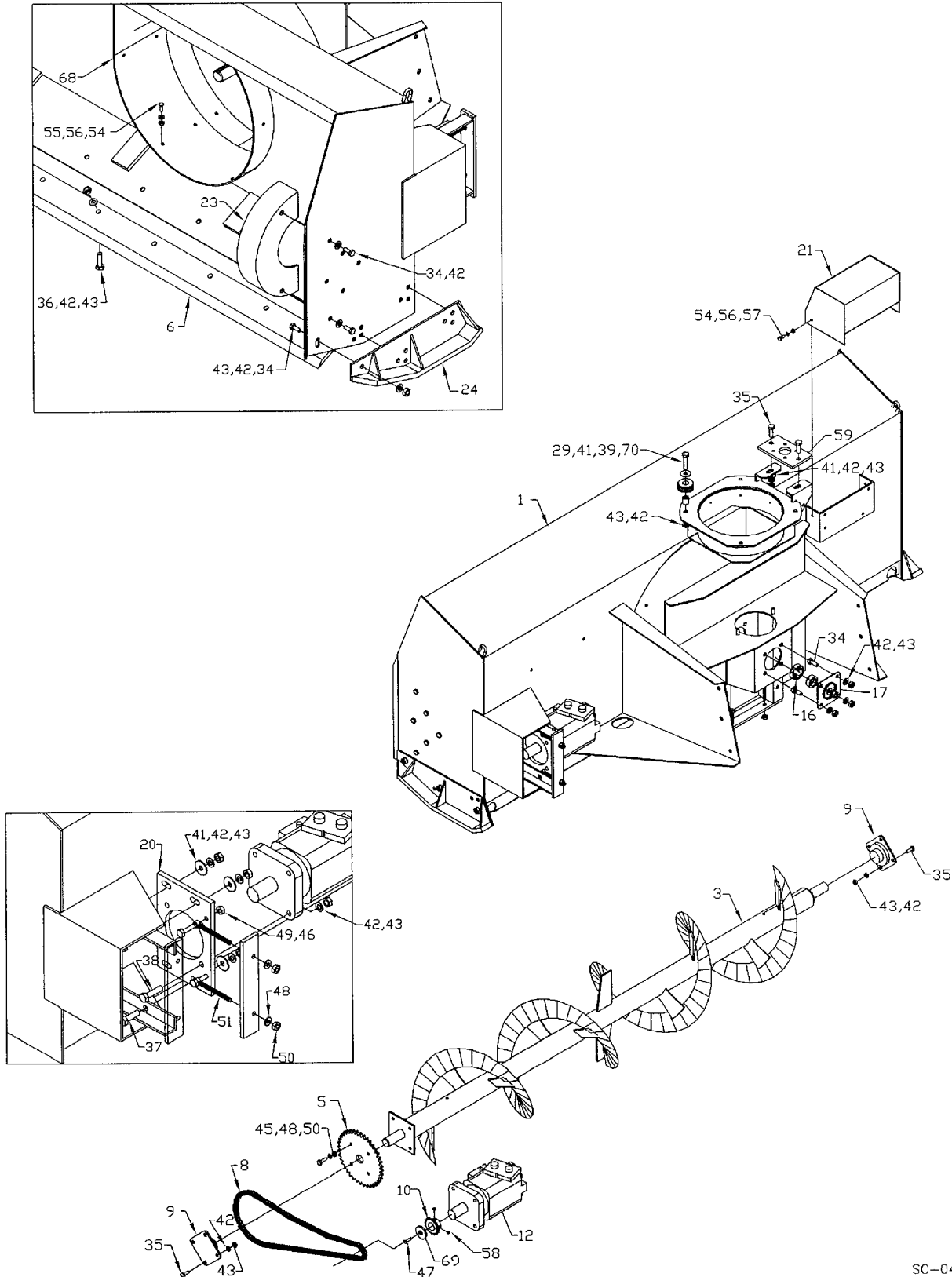
Hyd Commercial Series Snowblower - 22" Housing

Item #	Part #	Description
1	909863	Main Body Weldment - 74"
	909590	Main Body Weldment - 66"
	909853	Main Body Weldment - 60"
2	905226	Fan Weldment - 22"
3	905206	Auger Weldment - 74"
	909606	Auger Weldment - 66"
	905210	Auger Weldment - 60"
4	905550	Spout Weldment
5	909608	48 Tooth Sprocket #60, 1 3/8" Bore
6	909887	Cutting Edge (74")
	909592	Cutting Edge (66")
	909856	Cutting Edge (60")
7	905291	Adaptor
8	909678	Roller Chain (#60H x 76 Links w/ Connector)
9	965426	1 3/8" Housing W/ Bearing
	965430	1 3/8" Bearing W/ Stainless Steel Lock
10	906322	Auger Sprocket 15T #60 (1 1/4" Bore) (Ser 1 - 3)
	906323	Auger Sprocket 15T #60 (1 1/2" Bore) (Ser 4)
11	906332	Spout Liner
12	905623	Fan Motor - 2 Hole (Ser 1)
	905694	Fan Motor - 2 Hole (Ser 2)
	905695	Fan Motor - 2 Hole (Ser 3)
	905624	Fan Motor - 4 Hole (Ser 4)
13	906335	Spout Motor
14	967440	Pop Rivet SD68BSLF
15	905241	Spout Gear Weldment
16	968627	1 1/2" Bearing w/ Collar
17	967260	1 1/2" Bearing Flange (Set)
18	902869	Fan Motor Mount Plate (Ser 1-3)
	905289	Fan Motor Mount Plate (Ser 4)
19	905362	Roller Chain (#80H x 30 Links w/ Connector)
20	905299	Auger Motor Mount Plate (Ser 1-3)
	905528	Auger Motor Mount Plate (Ser 4)
21	906311	Hydraulic Box Shield Weldment
22	905224	Fan Shaft 1 1/2" x 15 1/4"
23	909593	Chain Cover

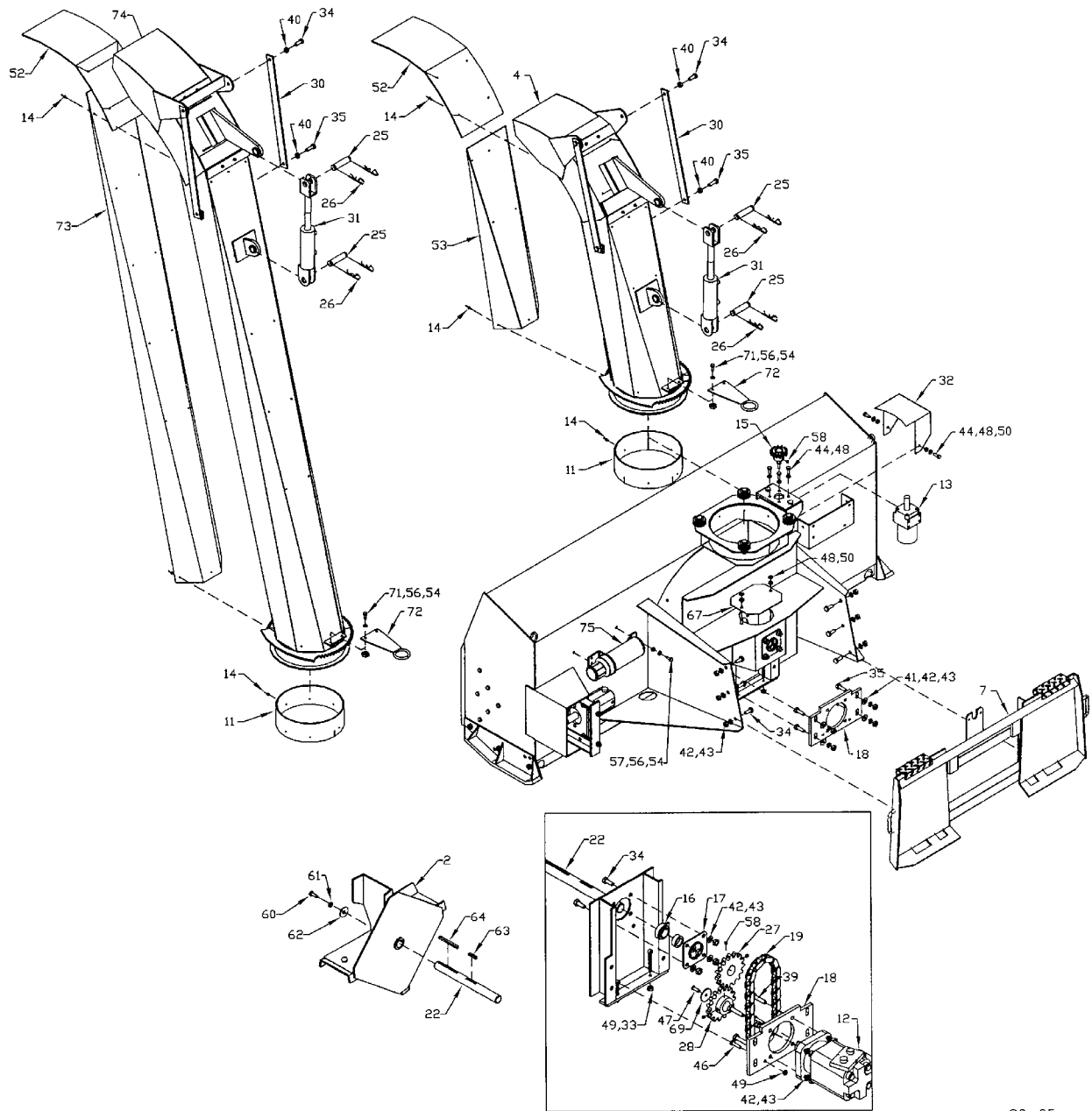
24	909594	Skid Plate Weldment Left Hand
	909610	Skid Plate Weldment Right Hand
25	103753	Cylinder Clevis Pin 1" x 4"
26	12779	Hair Pin Clip #9 Western Wire
27	960719	Sprocket 15T, #80, 1 1/2" Bore
28	905309	Sprocket 15T, #80, 1 1/4" Bore (Ser 1-3)
	960719	Sprocket 15T, #80, 1 1/2" Bore (Ser 4)
29	909430	Spout Roller
30	905181	Spout Link 22"
31	24981	Cylinder 2 1/2" Dia x 8"
32	905554	Spout Sprocket Cover
33	906660	1/2" x 2" Sq Hd Set Screw
34	81620	1/2" x 1 1/4" Hex Bolt
35	84277	1/2" x 1 1/2" Hex Bolt
36	909821	1/2" x 2" Flat Head Bolt
37	87553	1/2" x 1 3/4" Hex Bolt
38	87553	1/2" x 1 3/4" Hex Bolt (pl) (Series #1-3)
	81624	1/2" x 2 1/4" Hex Bolt (pl) (Series #4)
40	812364	1/2" Lock Nut
41	81638	1/2" BS Flat Washer Std
42	81637	1/2" Lock Washer
43	81636	1/2" Hex Nut
44	86170	3/8" x 1" Hex Bolt
45	86171	3/8" x 1 1/4" Hex Bolt
46	811792	3/8" x 1 1/2" Hex Bolt
47	967431	3/8" x 1" Flat Bolt (skt)
48	81593	3/8" Lock Washer
49	812363	3/8" Lock Nut
50	81592	3/8" Hex Nut
51	905543	3/8" x 4" Auger Chain Bolt Weldment
52	905648	Spout Liner Middle
53	905647	Spout Liner Bottom
54	81568	5/16" Hex Nut
55	906393	5/16" x 3/4" FI Hd Bolt (skt)
56	81569	5/16" Lock Washer
57	81549	5/16" x 3/4" Hex Bolt
58	988999	3/8" x 3/8" Socket Set Screw
59	902874	Spout Motor Mount Plate
60	84268	5/8" x 1 1/2" Hex Bolt
61	81677	5/8" Lock Washer
62	81678	5/8" BS Flat Washer Standard
63	965821	3/8" x 1 3/4" Key
64	905310	3/8" x 4 1/2" Key

67	905278	Cover Plate
68	905336	Fan Housing Liner 68"
69	906348	Motor Washer 13/32" hole x 2" OD
70	906574	Bronze Bushing 7/8" OD x 1"
71	812026	5/16" x 1" Hex Bolt (pl)
72	907590	Spout Hose Holder
73	908966	Spout Liner Bottom (truckloader)
74	907689	Spout Weldment (truckloader)
75	909277	Manual Holder

HYDRAULIC COMMERCIAL SERIES SNOWBLOWER – 24" HOUSING



SC-04



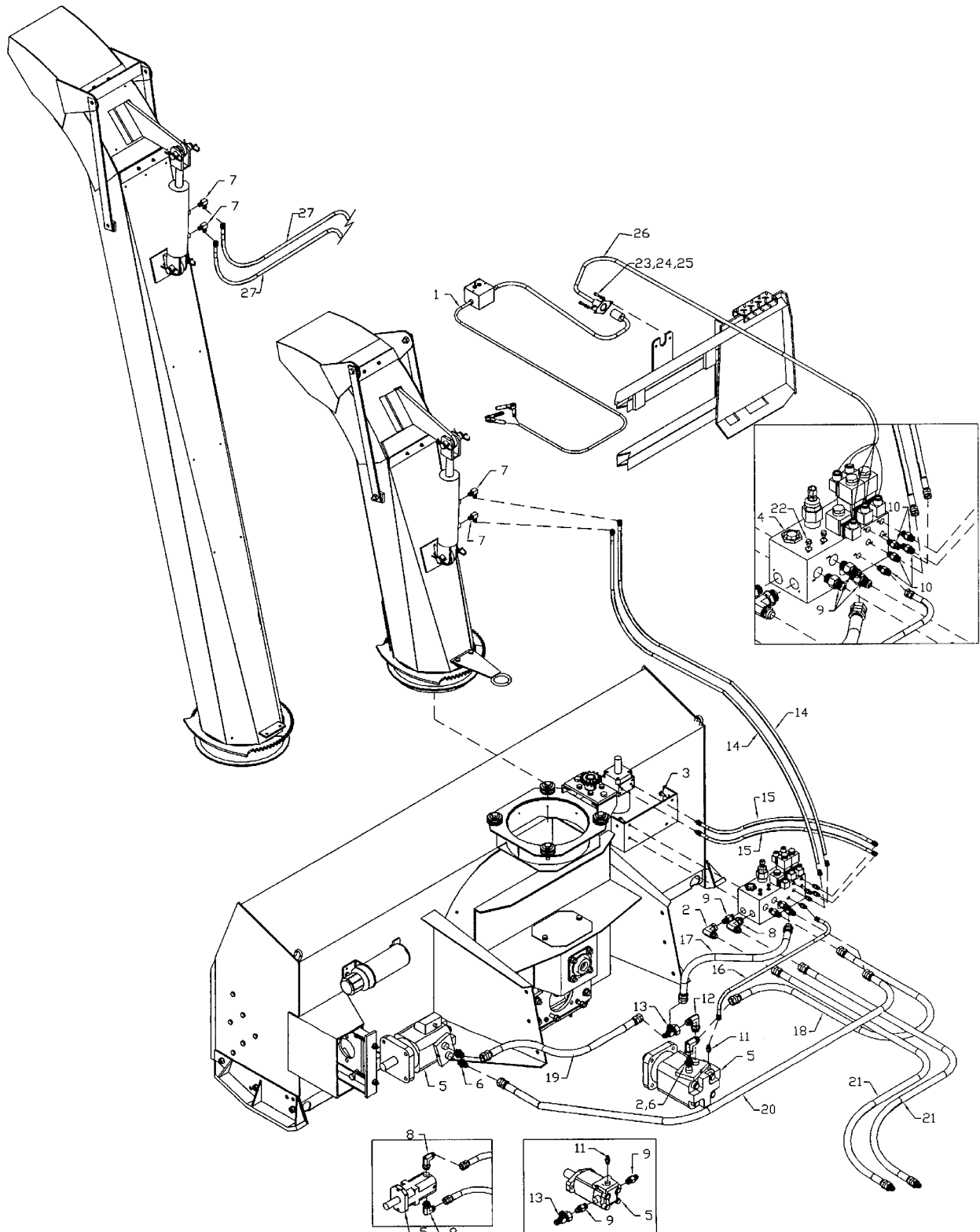
SC-05

Hyd Commercial Series Snowblower - 24" Housing

Item #	Part #	Description
1	909891	Main Body Weldment - 84"
	909865	Main Body Weldment - 74"
2	905225	Fan Weldt - 24"
3	905202	Auger Weldment - 84"
	905206	Auger Weldment - 74"
4	905550	Spout Weldment
5	909608	48 Tooth Sprocket #60, 1 3/8" Bore
6	909893	Cutting Edge (84")
	909887	Cutting Edge (74")
7	905291	Adaptor
8	909678	Roller Chain (#60H x 76 Links w/ Connector)
9	965426	1 3/8" Housing W/ Bearing
	965430	1 3/8" Bearing W/ Stainless Steel Lock
10	906322	Auger Sprocket 15T #60 (1 1/4" Bore) (Ser 3)
	906323	Auger Sprocket 15T #60 (1 1/2" Bore) (Ser 4)
11	906332	Spout Liner
12	905695	Fan Motor - 2 Hole (Ser #3)
	905624	Fan Motor - 4 Hole (Ser #4)
13	906335	Spout Motor
14	967440	Pop Rivet SD68BSLF
15	905241	Spout Gear Weldt
16	968627	1 1/2" Bearing w/ Collar
17	967260	1 1/2" Bearing Flange (Set)
18	902869	Fan Motor Mount Plate (Ser 3)
	905289	Fan Motor Mount Plate (Ser 4)
19	905362	Roller Chain (#80H x 30 Links w/ Connector)
20	905299	Auger Motor Mount Plate (Ser 3)
	905528	Auger Motor Mount Plate (Ser 4)
21	906311	Hyd Box Shield Weldment
22	905224	Fan Shaft 1 1/2" x 15 1/4"
23	909593	Chain Cover
24	909594	Skid Plate Weldment L.H
	909610	Skid Plate Weldment R.H
25	103753	Cylinder Clevis Pin 1" x 4"
26	12779	Hair Pin Clip #9 Western Wire
27	960719	Sprocket 15T, #80, 1 1/2" Bore
28	905309	Sprocket 15T, #80, 1 1/4" Bore (Ser 3)
	960719	Sprocket 15T, #80, 1 1/2" Bore (Ser 4)
29	909430	Spout Roller
30	905181	Spout Link 22"
31	24981	Cylinder 2 1/2" Dia x 8"

32	905554	Spout Sprocket Cover
33	905246	3/8" x 3" Fan Bolt Weldment
34	81620	1/2" x 1 1/4" Hex Bolt
35	84277	1/2" x 1 1/2" Hex Bolt
36	909821	1/2" x 2" FI Hd Bolt (skt)
37	87553	1/2" x 1 3/4" Hex Bolt
38	87553	1/2" x 1 3/4" Hex Bolt (Series #3)
	81624	1/2" x 2 1/4" Hex Bolt (Series #4)
39	81624	1/2" x 2 1/4" Hex Bolt
40	812364	1/2" Lock Nut
41	81638	1/2" BS Flat Washer Standard
42	81637	1/2" Lock Washer
43	81636	1/2" Hex Nut
44	86170	3/8" x 1" Hex Bolt
45	86171	3/8" x 1 1/4" Hex Bolt
46	811792	3/8" x 1 1/2" Hex Bolt
47	967431	3/8" x 1" Flat Bolt (skt)
48	81593	3/8" Lock Washer
49	812363	3/8" Lock Nut
50	81592	3/8" Hex Nut
51	905543	3/8" x 4" Auger Chain Bolt Weldment
52	905648	Spout Liner Middle
53	905647	Spout Liner Bottom
54	81568	5/16" Hex Nut
55	906393	5/16" x 3/4" FI Hd Bolt (skt)
56	81569	5/16" Lock Washer
57	81549	5/16" x 3/4" Hex Bolt
58	988999	3/8" x 3/8" Socket Set Screw
59	902874	Spout Motor Mount Plate
60	84268	5/8" x 1 1/2" Hex Bolt
61	81677	5/8" Lock Washer
62	81678	5/8" BS Flat Washer Standard
63	965821	3/8" x 1 3/4" Key
64	905310	3/8" x 4 1/2" Key
67	905278	Cover Plate
68	905337	Fan Housing Liner 73 1/2"
69	906348	Motor Washer 13/32" hole x 2" OD
70	906574	Bronze Bushing 7/8" OD x 1"
71	812026	5/16" x 1" Hex Bolt
72	907590	Spout Hose Holder
73	908966	Spout Liner Bottom (truckloader)
74	907689	Spout Weldment (truckloader)
75	909277	Manual Holder

SNOWBLOWER ASSEMBLY



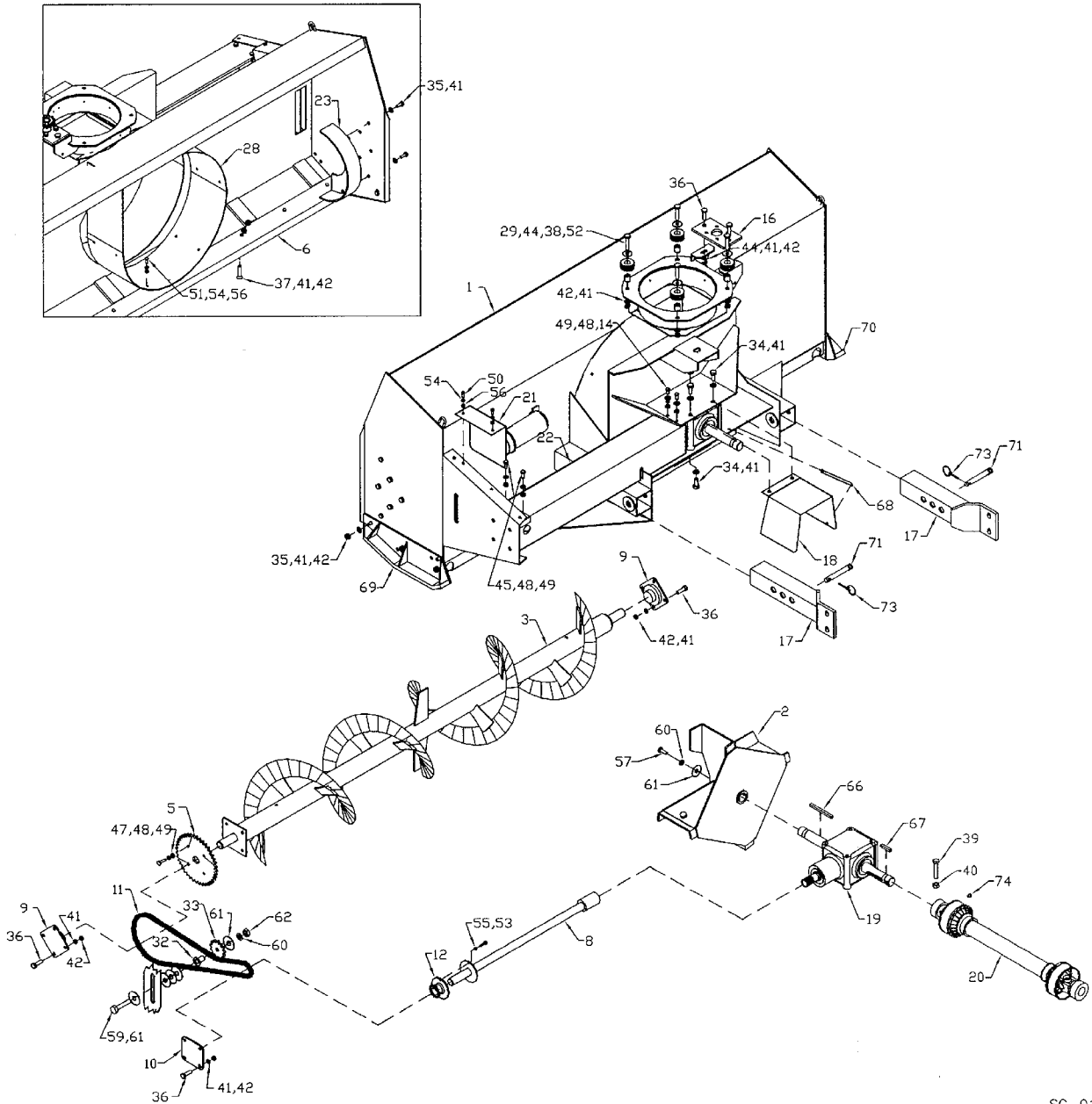
FOR SMALL MOTOR (SERIES #1-3)

SC-06

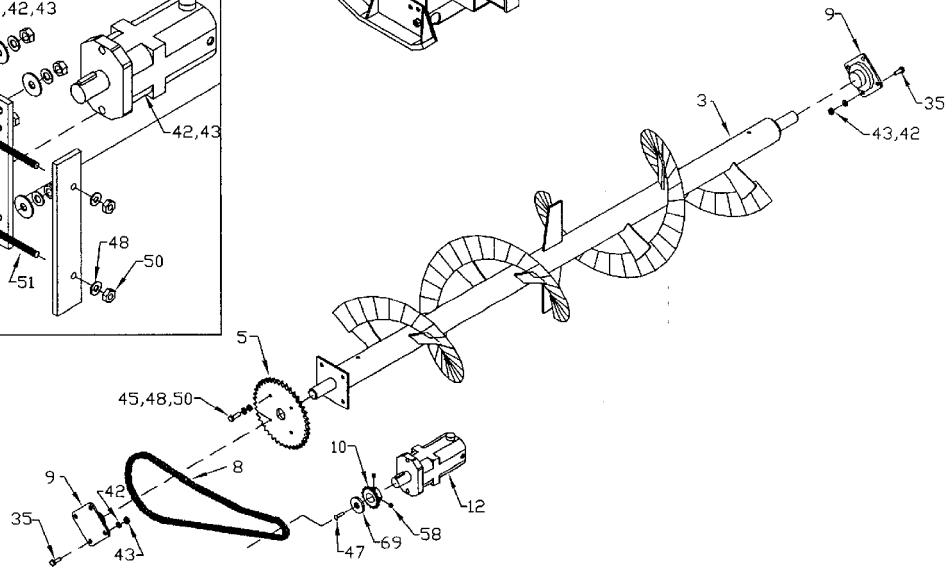
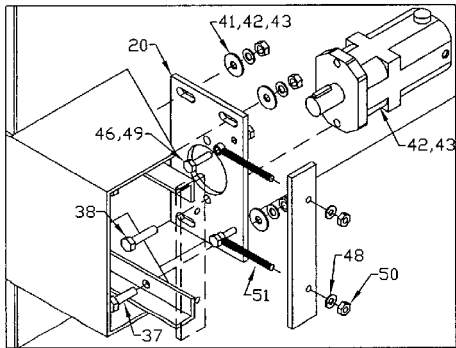
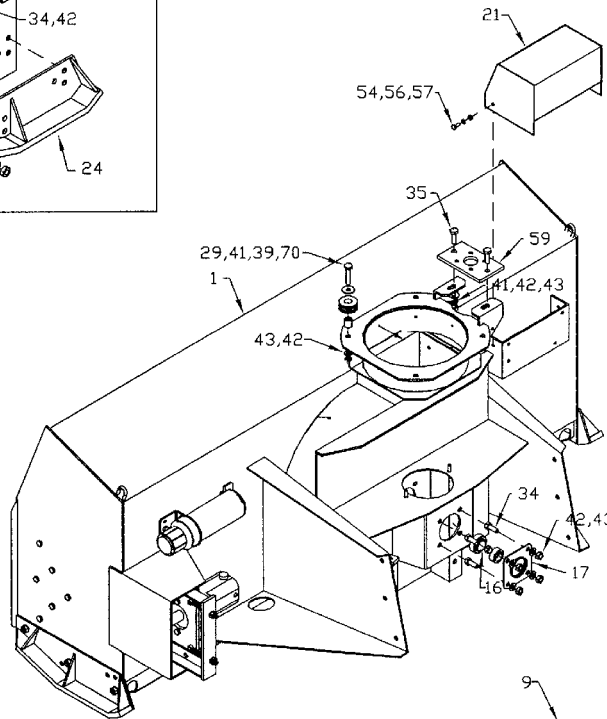
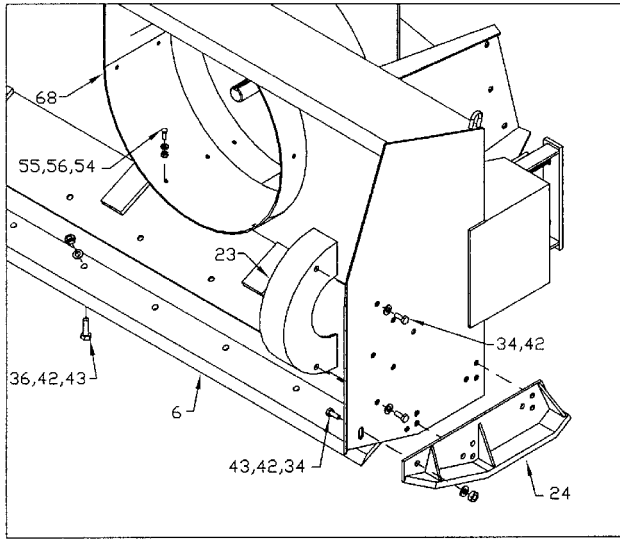
HYD COMMERCIAL SERIES SNOWBLOWER ASSEMBLY

Item #	Part #	Description
1	907412	Wiring Harness - Tractor Half
2	890082	1 1/16 SWFJIC x 1 1/16 MJIC Elbow 90
3	JDF19M7866	HFL Bolt M8 x 20 (10.9) (pl)
4	905669	Hyd Manifold Assembly
5	905623	Series #1 Motor - 2 Holes (Already Assembled)
	905694	Series #2 Motor - 2 Holes (Already Assembled)
	905695	Series #3 Motor - 2 Holes (Already Assembled)
	905624	Series #4 Motor - 4 Holes (Already Assembled)
6	906589	1 5/16 MORB x 1 1/16 MJIC Adaptor Straight
7	811918	9/16 MJIC x 9/16 SWMORB Elbow 90
8	812647	1 1/16 MJIC x 1 1/16 MORB Elbow 90
9	812661	1 1/16 MORB x 1 1/16 MJIC Adaptor Straight
10	812086	9/16 MORB x 9/16 MJIC Adaptor Straight
11	812838	7/16 MORB x 9/16 MJIC Adaptor Straight
12	813756	1 1/16 MJIC x 1 5/16 MORB Elbow 90
13	887575	1 1/16 SWFJIC X 1 1/16 MJIC x 1 1/16 MJIC Tee
14	IN29068	3/8" x 80" Hose 9/16 SWFJIC x 9/16 SWFJIC
15	115796	3/8" x 30" Hose 9/16 SWFJIC x 9/16 MORB
16	115618	3/8" x 45" Hose 9/16 SWFJIC x 9/16 SWFJIC - 84"
	115619	3/8" x 40" Hose 9/16 SWFJIC x 9/16 SWFJIC-74"&60"
17	115611	3/4" x 52" Hose 1 1/16 SWFJIC x 1 1/16 SWFJIC-84"
	115612	3/4" x 42" Hose 1 1/16SWFJICxSWFJIC-60"&(74" Ser #4)
	115614	3/4" x 48" Hose 1 1/16 SWFJIC x SWFJIC-74" Ser #1-3
18	115614	3/4" x 48" Hose 1 1/16 SWFJIC x 1 1/16 SWFJIC - 84"
	115616	3/4" x 40" Hose 1 1/16 SWFJIC x SWFJIC - 74" Ser #1-3
	115615	3/4" x 36" Hose 1 1/16 SWFJICxSWFJIC-60"&(74" Ser #4)
19	115612	3/4" x 42" Hose 1 1/16 SWFJIC x 1 1/16 SWFJIC - 84"
	115616	3/4" x 40" Hose 1 1/16 SWFJIC x SWFJIC - 74" Ser #1-3
	115615	3/4" x 36" Hose 1 1/16 SWFJICxSWFJIC-60"&(74" Ser#4)
20	115608	3/4" x 86" Hose 1 1/16 SWFJIC x 1 1/16 SWFJIC - 84"
	115609	3/4" x 74" Hose 1 1/16 SWFJIC x 1 1/16 SWFJIC - 74"
	115610	3/4" x 68" Hose 1 1/16 SWFJIC x 1 1/16 SWFJIC - 60"
21	115617	3/4" x 84" Hose 1 1/16 SWFJIC x 1 1/16 MORB
22	811922	9/16" ORB Steel Plug
23	81525	1/4" x 3/4" Hex Bolt
24	81545	1/4" Lock Washer
25	81544	1/4" Hex Nut
26	907411	Sb Wiring Harness - Sb Half
27	116699	3/8" x 166" Hose 9/16 SWFJIC x 9/16 SWFJIC

PTO COMMERCIAL SERIES SNOWBLOWER – 24 “ HOUSING



SC-01



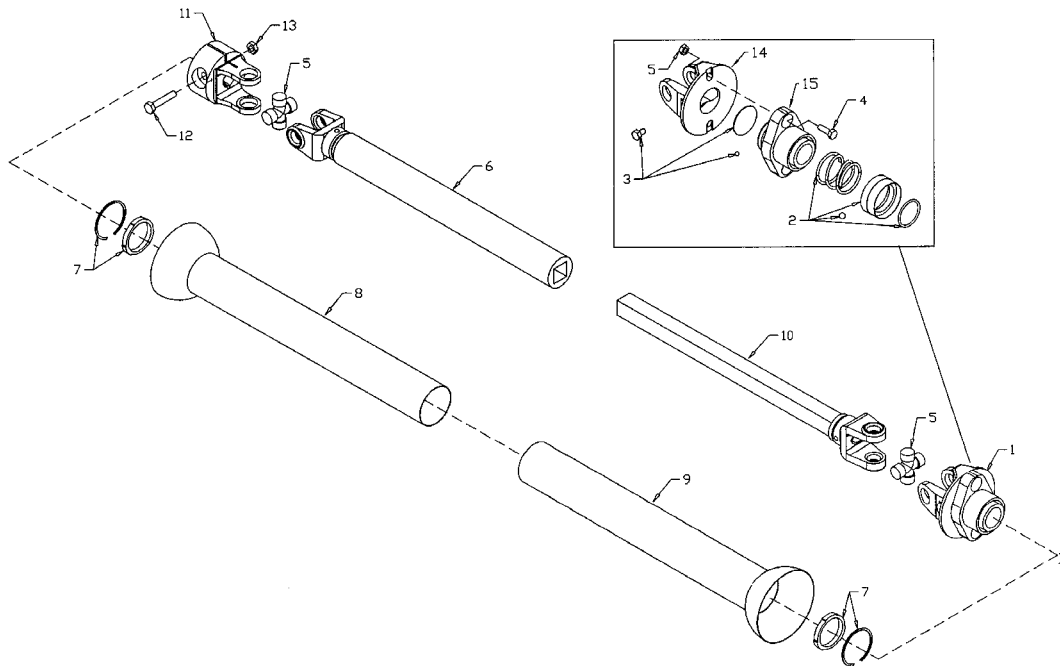
SC-02

PTO Commercial Series Snowblower - 24" Housing

Item #	Part #	Description
1	909894	Main Body Weldment
2	905225	Fan Weldment - 24"
3	905202	Auger Weldment
4	905550	Spout Weldment
5	909608	48 Tooth Sprocket #60, 1 3/8" Bore
6	909893	Cutting Edge
7	F0328	Hitch
8	905196	Drive Shaft
9	965426	1 3/8" Housing W/ Bearing
	965430	1 3/8" Bearing W/ Stainless Steel Lock
10	965433	1 1/4" Housing W/ Bearing (UCF207-20)
	961676	1 1/4" Brg W/ Collar
11	909895	Roller Chain (#60H x 96 Links W/ Connector)
12	965914	13T Sprocket, #60 1 1/4" Bore
13	906335	Spout Motor
14	84072	3/8" x 3/4" Hex Bolt
15	905241	Spout Gear Weldment
16	902874	Spout Motor Mount Plate
17	905214	Hitch Adaptor Weldment
18	908715	PTO Shield
19	BU50505	Gearbox without Oil
20	F0585	PTO Shaft
21	905227	Idler Shield
22	905199	Drive Shaft Guard
23	909593	Chain Cover
25	103753	Cylinder Clevis Pin 1" x 4"
26	12779	Hair Pin Clip #9 Western Wire
27	905554	Spout Sprocket Cover
28	905337	Fan Housing Liner 73 1/2"
29	909430	Spout Roller
30	905181	Spout Link 22"
31	24981	Cylinder 2 1/2" Dia X 8"
32	965969	Idler Spacer
33	965962	Idler Sprocket, 13T, #60, 5/8" Bore
34	81619	1/2" x 1" Hex Bolt
35	81620	1/2" x 1 1/4" Hex Bolt
36	84277	1/2" x 1 1/2" Hex Bolt
37	909821	1/2" x 2" Fl Hd Bolt (skt)
38	81624	1/2" x 2 1/4" Hex Bolt
39	81627	1/2" x 3" Hex Bolt
40	812364	1/2" Lock Nut

41	81637	1/2" Lock Washer
42	81636	1/2" Hex Nut
43	812086	9/16 MORB x 9/16 MJIC Adaptor Str
44	81638	1/2" BS Flat Washer
45	86170	3/8" x 1" Hex Bolt
46	906332	Spout Liner
47	86171	3/8" x 1 1/4" Hex Bolt
48	81593	3/8" Lock Washer
49	81592	3/8" Hex Nut
50	81549	5/16" x 3/4" Hex Bolt
51	906393	5/16" x 3/4" FI Hd Bolt (skt)
52	906574	Bronze Bushing 7/8"OD x 1"
53	81552	5/16" x 1 1/4" Hex Bolt
54	81569	5/16" Lock Washer
55	812362	5/16" Lock Nut
56	81568	5/16" Hex Nut
57	84268	5/8" x 1 1/2" Hex Bolt
58	84270	5/8" x 1 3/4" Hex Bolt
59	81671	5/8" x 4" Hex Bolt
60	81677	5/8" Lock Washer
61	81678	5/8" BS Flat Washer Std
62	81676	5/8" Hex Nut
63	967437	3/4" x 1 5/8" Hex Bolt
64	81701	3/4" Lock Washer
65	81700	3/4" Hex Nut
66	902377	3/8" x 3/8" x 4 3/4" Key
67	968807	3/8"x 3/8" x 2" Key
68	960135	Spring
69	909594	Skid Plate Weldment Left Hand
70	909610	Skid Plate Weldment Right Hand
71	965910	Top Link Pin (Category 2)
72	965966	Quick Hitch Lift Pin (Category 2)
73	965911	Linch Pin 7/16"
74	988999	3/8" Dia x 3/8" Socket Set Screw
75	811918	9/16 MJIC x 9/16 SWMORB Elbow 90
76	115370	3/8" x 114" Hose 9/16 SWFJIC x 1/2 MNPT
77	905648	Spout Liner Middle
78	905647	Spout Liner Bottom
79	967440	Pop Rivet SD68BSLF
80	812026	5/16" x 1" Hex Bolt
81	907590	Spout Hose Holder
82	908966	Spout Liner Bottom (truckloader)
83	907689	Spout Weldment (truckloader)
84	116699	3/8" x 166" Hose 9/16" SWFJIC x 9/16" SWFJIC
85	812320	1/2" MNPT x 9/16" MJIC Straight
86	909277	Manual Holder

PTO DRIVE COMMERCIAL SNOWBLOWER – PTO

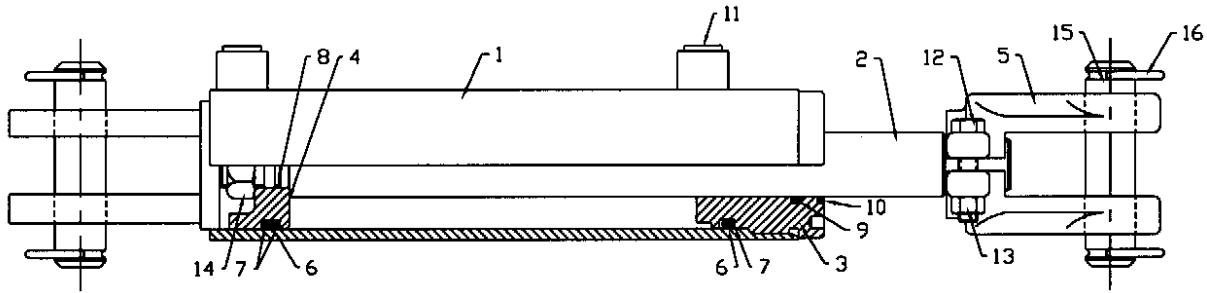


SC-12

PTO DRIVE COMMERCIAL SNOWBLOWER PTO

Item #	Part #	Description
	F0585	Shaft Complete
	907987	Tractor Half of PTO (Shear)
	907988	Implement Half of PTO (Clamp Yoke)
1	907989	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	903297	Shear Bolt - 5/16" x 1" (Grade 8) (Pack of 10)
5	936197	Repair Kit (Option)
	906548	Extended Life Repair Kit (Std.)
6	907994	Yoke & Tube
7	907991	Nylon Bearing
8	907993	Inner Shield
9	907992	Outer Shield
10	907990	Yoke & Shaft
11	907995	Clamp Yoke
12	81627	1/2" x 3" Hex Bolt (pl)
13	812364	1/2" Lock Nut (pl)
14	908002	Shear Yoke
15	936411	6 Spl. Shear Hub

2 1/2" x 8" CYLINDER ASSEMBLY

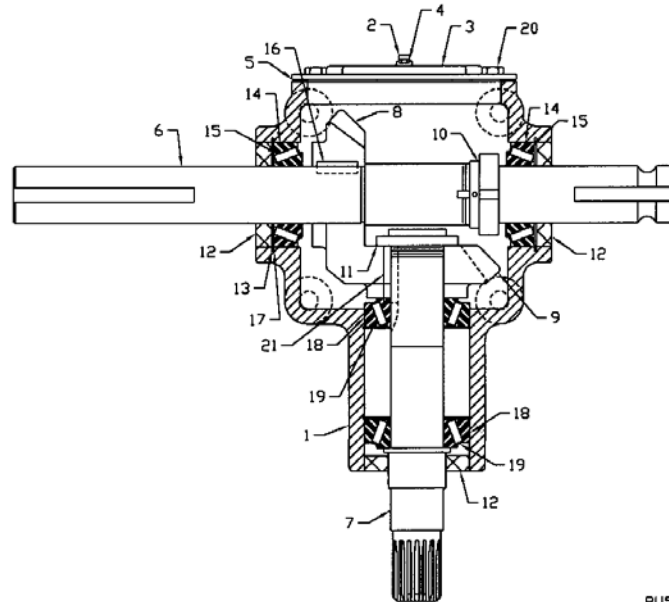


24981

2 1/2" x 8" CYLINDER ASSEMBLY

Item #	Part #	Description
1	24982	Tube Weldment
2	108655	Shaft 1.25 dia x 15.54 Lg
3	23156	2.50 Dia Headplate
4	13109	2.50 Dia Piston
5	13090	Piston Rod Clevis (Cast)
6	82330	2.50 OD x e Sect O-Ring
7	83330	2.50 OD x o Sect Backup Washer
8	82018	0.88 OD x 0.06 O-Ring
9	812200	1.50 OD x 1.25 ID x o Sect Seal
10	81901	1.50 OD x 1.25 ID Dust Seal
11	811922	0.56 MORB Plug
12	81578	3/8" x 1 3/4" Hex Bolt (pl)
13	81592	3/8" Hex Nut
14	104314	7/8" Jam Lock Nut (Steel) (pl)
15	103753	Clevis Pin 1" x 4"
16	12779	Hair Pin Clip
17	22370	Hyd Cyl Decal

PTO DRIVE GEARBOX



BU50505

PTO DRIVE GEARBOX

Item #	Part #	Description
	BU50505	Gearbox Complete
1	BU50310	Gearbox Casting Only
2	BU500089-3	Pipe Plug
3	BU50457	Gearbox Cover
4	BU500167-1	Relief Valve
5	BU50458	Gearbox Gasket
6	BU50507	Cross Shaft
7	BU50502	Pinion Shaft
8	BU50329	Bevel Gear - 1 1/2" Bore
9	BU50331	Bevel Gear - 1 3/8" Bore
10	BU50428	Staking Lock Nut
11	BU50444	Staking Lock Nut
12	BU50422-1	Oil Seal (3 used)
13	BU50415	Retainer Ring (4 used)
14	BU575902	Bearing Cup (2 used)
15	BU575901	Bearing Cone (2 used)
16	BU50429	Key
17	BU50210X	Shim Set
18	BU575907	Bearing Cup (2 used)
19	BU575906	Bearing Cone (2 used)
20	BU500397-6	Hex Bolt 5/16" NC x 5/8" GR5 (pl)
21	BU50417-1	Key

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
B6022HSB-1	60" HYDRAULIC DRIVE W/22" FAN SERIES 1	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0887	Snowblower
B6022HSB-2	60" HYDRAULIC DRIVE W/22" FAN SERIES 2	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0888	Snowblower
B6022HSB-3	60" HYDRAULIC DRIVE W/22" FAN SERIES 3	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0889	Snowblower
B6022HSB-3	60" HYDRAULIC DRIVE W/22" FAN SERIES 3	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0889	Snowblower
B6622HSB-1	66" HYDRAULIC DRIVE W/22" FAN SERIES 1	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0842	Snowblower
B6622HSB-2	66" HYDRAULIC DRIVE W/22" FAN SERIES 2	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0798	Snowblower
B6622HSB-3	66" HYDRAULIC DRIVE W/22" FAN SERIES 3	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0843	Snowblower
B7422HSB-2	74" HYDRAULIC DRIVE W/22" FAN SERIES 2	
1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0872	Snowblower

SHIPPING KIT AND BUNDLE NUMBERS – cont'd.
B7422HSB-3 74" HYDRAULIC DRIVE W/22" FAN SERIES 3

1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0873	Snowblower

B7422HSB-4 74" HYDRAULIC DRIVE W/22" FAN SERIES 4

1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0874	Snowblower

B7424HSB-3 74" HYDRAULIC DRIVE W/24" FAN SERIES 3

1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0892	Snowblower

B7424HSB-4 74" HYDRAULIC DRIVE W/24" FAN SERIES 4

1	F0324	Spout Assembly
1	F0325	Snowblower
1	F0893	Snowblower

B8424HSB-3 84" HYDRAULIC DRIVE W/24" FAN SERIES 3

1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0894	Snowblower

B8424HSB-4 84" HYDRAULIC DRIVE W/24" FAN SERIES 4

1	F0324	Spout Assembly
1	F0325	Crate of Parts
1	F0895	Snowblower

B84SB 84" PTO Drive W/24" FAN

1	F0324	Spout Assembly
1	F0626	Crate of Parts
1	F0328	Hitch
1	F0896	Snowblower
1	F0585	PTO

OPTIONAL BUNDLE NUMBERS

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

F4119	Truckloading Spout
-------	--------------------

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
(605) 352-8616

TX, Houston
(713) 928-2632

UT, Salt Lake City
(801) 972-4321

WI, Portage
(608) 742-1370

CANADIAN WAREHOUSES

B.C., Abbotsford
(604) 864-2665

AB, Edmonton
(780) 962-6991

SK, Regina
(306) 781-2300

ON, Woodstock
(519) 539-0435

QC, Dorion
(450) 455-4840

OFFSHORE WAREHOUSES

Burando Hill
Katanning
W. Australia
011-618-98-214422

Chihuahua, Mexico
011-52-158-90306

John Kerr Equipment Ltd.
Wilcoxholm Farm
Linlithgow, W. Lothian
Scotland
011-441-506-842280

Skovde, Sweden
011-46-500-452651

Naestved, Denmark
011-45-557-29511

bühler

Buhler Manufacturing

**301 Mountain Street S.
Morden MB.
R6M 1X7
Ph.: (204) 822-4467
Fax: (204) 822-6348
www.buhler.com**