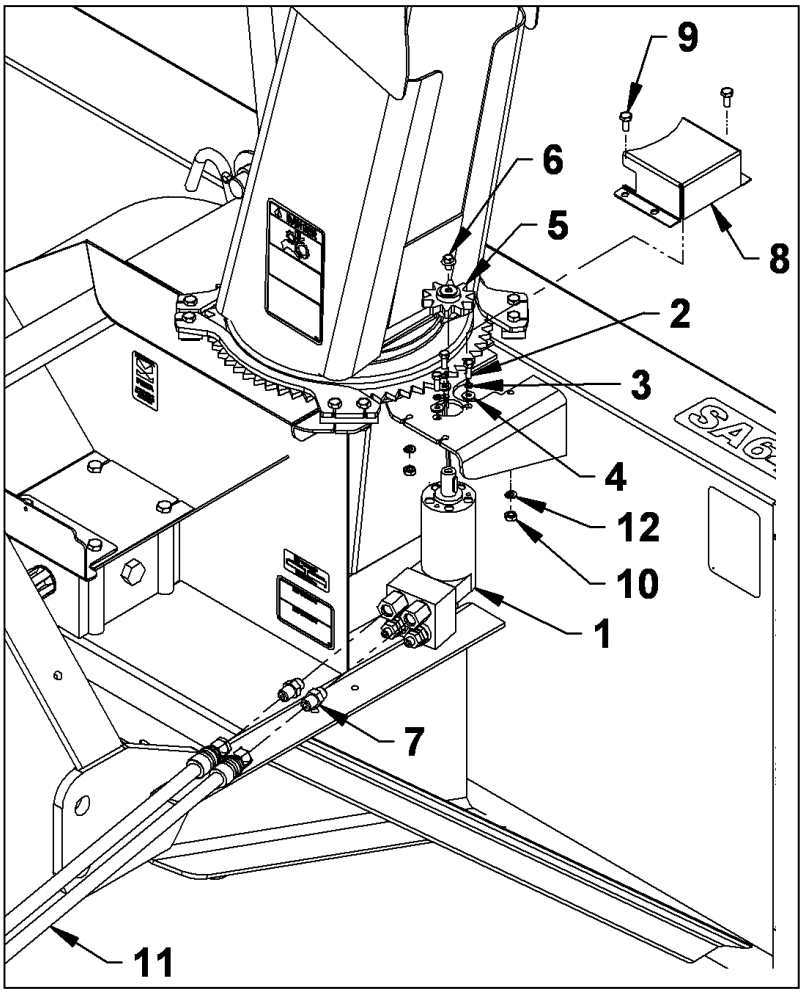
INSTRUCTION SHEET BER0017 – HYDRAULIC ROTATION

APPLICATION

SA54 and SA64 snowblowers

INSTALLATION

1. Install the motor (item 1) under the blower housing and secure with three M6 X 1.0 X 16mm (item 2), bolts, 6mm lockwashers (item 3) and 1/4" flat washers (item 4). Tighten slightly.
2. Place the 5mm key on the motor shaft, insert the motor gear (item 5) and secure with a M6 X 1.0 X 10mm serrated flange bolt (item 6).
3. Insert a 0.063" flow restrictor (item 7) in each port of the hydraulic motor.
4. Connect the two hydraulic hoses (item 11, not included) to the hydraulic motor (item 1).
5. Adjust the hydraulic motor by turning it until the gear teeth mesh together properly. Tighten the three M6 X 1.0 X 16mm bolts (item 2).
6. Connect the hoses (item 11) to the tractor and turn the chute left and right. If the rotation is not as it should be, readjust the motor.
7. Install the gear shield (item 8) with two 1/4" NC X 3/4" bolts (item 14), 1/4" lockwashers (item 12) and 1/4" hex nuts (items 10).



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PROBLEM: HYDRAULIC CHUTE ROTATION IS SLOW OR DOESN'T TURN

When activating the chute rotation, it turns very slowly or not at all.

WARNING

To avoid serious personal injury, always wear safety glasses while doing the instructions below.

SOLUTION:

1. Check if the tractor valve works well. Test it by plugging another equipment to the valve. If it does not work well, refer to the appropriate operator's manual.

2. **Figure A:** Check if the chute itself rotates well. To do so, remove the M6 x 1,00 x 10 mm serrated flange bolt (item 7) and the motor gear (item 6) attached to the motor shaft (item 4) and check if the chute rotates well in both directions by turning it by hand. If it does not rotate well, correct the problem by checking if there is some excess wear or debris locked between components.

Figure A

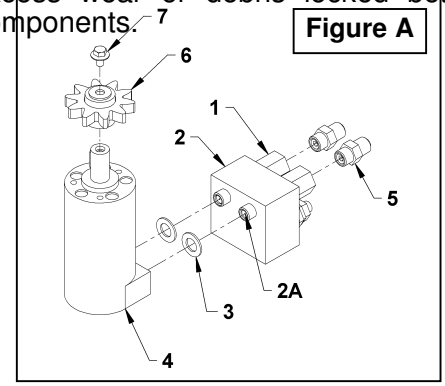
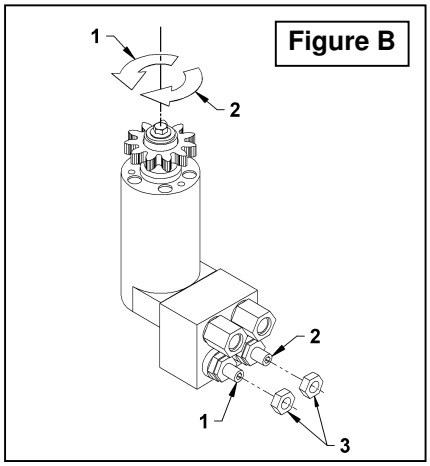


Figure B



3. **Figure A:** Check if there are residues in the hydraulic circuit. To do so, first verify if the chute rotates well in one direction. If so, remove the M6 x 1,00 x 10 mm serrated flange bolt (item 7) and the motor gear (item 6) attached to the motor shaft (item 4) and activate the rotation in the direction the motor turns well for approximately 1 minute to evacuate the residues. Then rotate the chute in the direction it did not turn well and check if the problem is resolved. - If not or if the chute does not rotate well in either direction, disconnect the motor hoses, remove the two flow restrictors (item 5) attached to the valve (item 2) and inspect the holes of the two flow restrictors carefully. Remove the residues if needed. If no residue is present, disconnect hoses and clean them with compressed air. - If the problem persists, disassemble the cross over relief valve (item 2) from the motor (item 4) by taking care to leave the plunging screws (item 1) in the cross over relief valve and check if there are residues inside the motor or in the holes of the plunging screws (item 2A). Clean with compressed air the inside of the two motor inputs and the holes of the two plunging screws. You can also turn the motor shaft in both directions while shooting compressed air.

   Note: The plunging screws (item 1) must be tightened at a torque of 53 ft*lb.

4. **Figure B:** Check the adjustment of the cross over relief valve pressure limiters. To do so, check which direction the chute rotates slowly and remove the associated jam nut (see figure B). Then completely tighten the adjusting screw (item 1 or 2) associated with the direction rotating slowly, unscrew precisely 5 turns and check if the chute rotates well. If not, tighten gradually, a maximum of 2 turns, while checking the effect on the chute.

   IMPORTANT: the adjustment must always be between 3 and 5 unscrewed turns. Never exceed those values.

   Note: The factory adjustment is of 4 1/4 turns unscrewed. After the adjustment, tighten the two jam nuts (item 3).

IMPORTANT: When removing connectors, always make sure to install the plugs and caps on the hoses and tractor valve connectors. This will prevent contamination of the hydraulic circuit and obstruction of the flow restrictor hole.

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PARTS

REF.	DESCRIPTION	QTY	PART #
1	Hydraulic motor assembly	1	3910017
1A	- Hydraulic Motor Eagle	1	3910014
	- Seal kit	1	3910015
1B	- Cross Over Relief Valve	1	3910018
	- Seal kit	1	3910025
2	Bolt hex. M6 X 1,0 X 16mm	3	0200096
3	Lockwasher M6, PTD	3	1200013
4	Flat washer #12 (1/4" int.) PTD	3	1400016
5	Gear	1	665969
6	Bolt serrated flange M6 X 1,0 X 10mm PTD	1	0200103
7	Flow restrictor 0,063" ass.	2	665690
8	Nut hex 1/4" NC, PTD	2	0900001
9	Gear shield	1	665970
10	Bolt 1/4" X 3/4" NC gr.5, PTD	2	0100003
11	Key 5mm (included w/ 3910014 & 3910017)	1	665441
12	Lockwasher 1/4", PTD	2	1200002