

INSTRUCTION SHEET

APPLICATION: BER0110 for SA88 & SA92-L snowblowers
BER0111 for SA88TRC to SA104TRC snowblowers

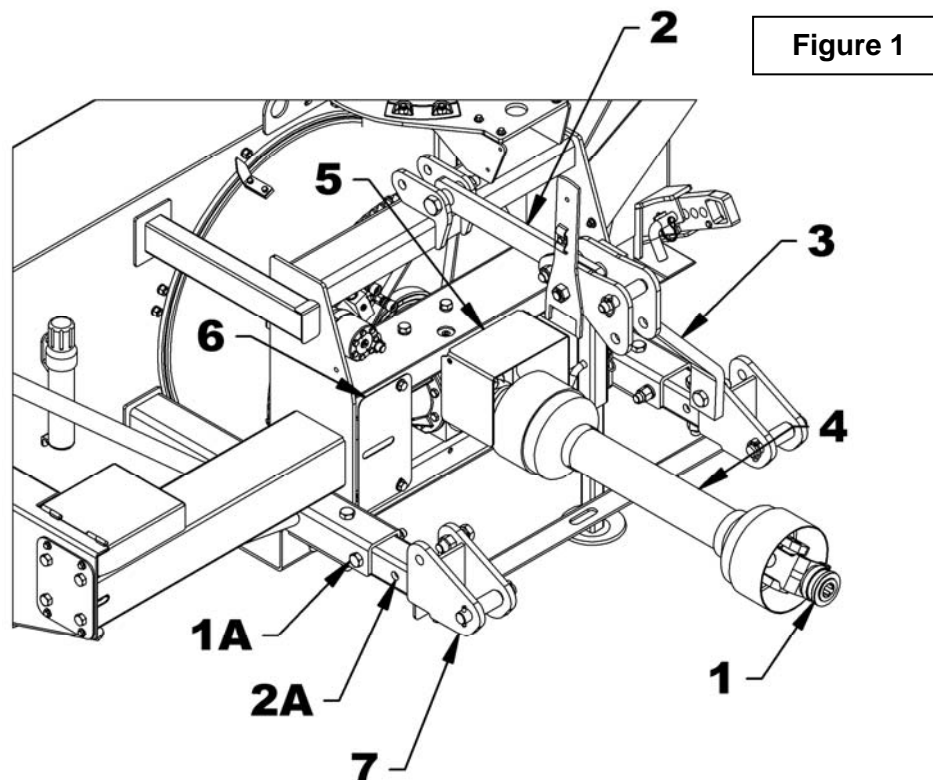
INSTALLATION

IMPORTANT: The reducer gearbox does not contain any oil. It must be filled with either SAE 80W90 oil, AGMA 5EP extreme pressure oil or the equivalent. If the reducer is operated without any oil the warranty will be nullified.

NOTE: Before proceeding with the installation, check the type of PTO on the tractor and if needed, order the appropriate yoke (Fig. 1, item 1) from your distributor.

1. Park the tractor on a flat surface, put in neutral, put on the parking brake, disengage the PTO, lower the snowblower to the ground, turn off the engine and remove the ignition key.
2. Remove the snowblower from the tractor.
3. **Figure 1:** To make installation easier, it is recommended to remove the upper hitch (item 2) as well as the left and right hitches (item 3).

4. **Figure 1:** Remove the driveline (item 4) from the snowblower. Remove the PTO protector (item 5); it will no longer be used with the gearbox.
5. **Figure 1:** Remove the cover plate (item 6) temporarily.
6. **Figure 1:** Before installing the reducer gearbox make sure the right and left lower hitches (item 7) are in the 1A position as shown in the figure.



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ATTENTION: The assembled reducer gearbox weighs more than 100 lb; it is therefore recommended to install wooden blocks under the snowblower input shaft (item 1) to support the reducer gearbox during installation.

7. **Figure 2:** Remove the 1/2" x 1" serrated flange nuts (item 2) and the 1/2" nuts (item 3) already installed on the support brackets (item 4).

8. **Figure 2:** Slightly loosen the six 1/2" nuts (item 5) holding the support brackets (item 4) to the support (item 6).

For snowblowers for former serial#, the bolts should be in **position A**.

For snowblowers for new serial#, the bolts should be in **position B**.

9. **Figure 2:** Install the assembled reducer gearbox on the snowblower carefully aligning the input shaft (item 1) with the gearbox shaft.

10. **Figure 2:** Slide the reducer shield (item 7) between the left bracket (item 4) and the snowblower to its original position.

11. **Figure 2:** Make sure that the sides of the support brackets (item 4) are as vertical as possible and secure with the 1/2" x 1" serrated flange nuts (item 2) and the 1/2" nuts (item 3). Tighten the bolts at 88 ft-lb or 119 N-M.

12. **Figure 2:** Push the reducer gearbox towards the front of the snowblower until it rests completely against the snowblower and tighten the six 1/2" nuts (item 5) holding the brackets (item 4) to the support (item 6). Tighten the bolts at 88 ft-lb or 119 N-M.

13. **Figure 1:** Install the upper hitch (item 2) as well as the left and right hitches (item 3).

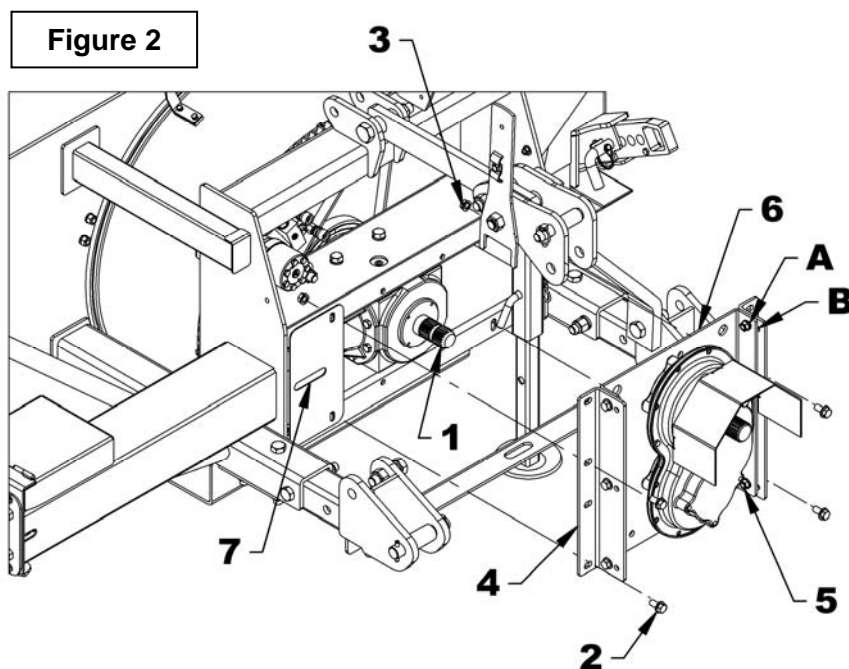
IMPORTANT: Before installing the driveline, it is very important to recheck its length to ensure it is not too long. This operation is necessary since the snowblower input shaft is now closer to the tractor. Refer to the snowblower's manual for more details.

14. Replace the driveline shearbolt :

The M12 X 65 gr.8.8 by a 7/16" x 2 1/2" gr.2 bolt for SA88 & SA92-L snowblowers

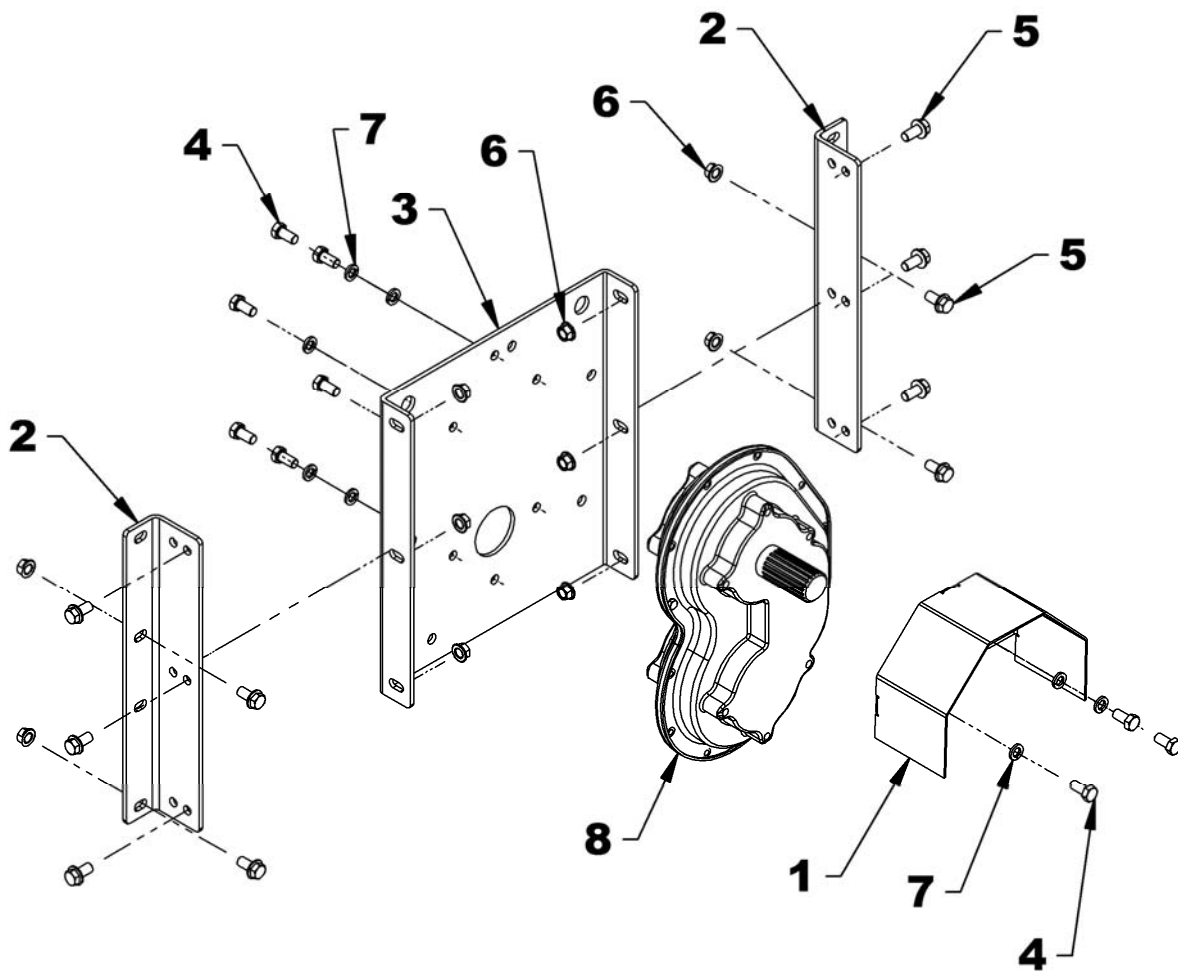
The M10 X 1.5 x 55 gr.8.8 by a 3/8" x 2 1/4" gr.2 bolt for SA88TRC to SA104TRC snowblowers.

15. Install the driveline on the snowblower.



INSTRUCTION SHEET
PARTS

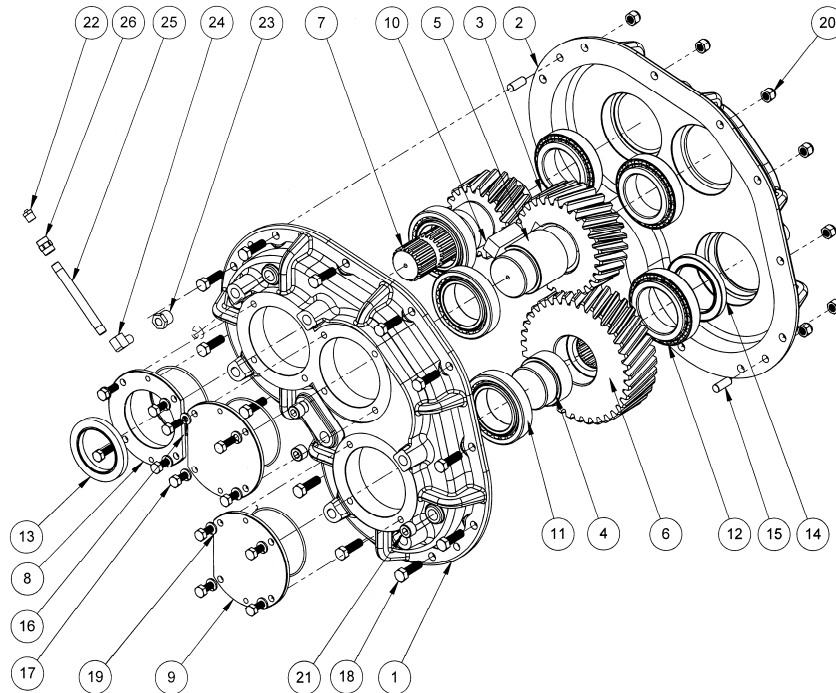
REF.	DESCRIPTION	QTY	PART#
1	Reducer shield	1	671172
2	Reducer support bracket	2	671173
3	Reducer support	1	671174
4	Bolt hex 1/2"NC x 1" gr.5 PTD	9	O/L
5	Bolt serrated flange 1/2"NC x 1" gr.5 PTD	10	O/L
6	Nut serrated flange 1/2"NC PTD	10	O/L
7	Lockwasher 1/2" PTD	9	O/L
8	Reducer gearbox 1000 @ 540 - 1 3/8" 6 splines - for BER0111	1	4500088
	Reducer gearbox 1000 @ 540 - 1 3/8" 6 splines - for BER0110	1	4500089



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REDUCER GEARBOX – 4500088

REF.	DESCRIPTION	QTE	#PIECE
1	Half casing	1	----
2	Half casing	1	----
3	Gear 28 teeth	1	4500090
4	Adaptor	1	4500093
5	Middle shaft	1	4500094
6	Gear 36 teeth	1	4500091
7	Gear 20 dents	1	4500092
8	Open cap	1	4500095
9	Solid cap	2	4500096
10	Key 0.75" x 2"	1	4500097
11	Roller bearing with cup- metric	5	4300077
12	Roller bearing with cup - metric	1	4300078
13	Seal	1	4300079
14	Seal	1	4300080
15	Pin 3/8" x 1"	2	4500098
16	O-ring	3	4300081
17	Bolt hex. 5/16" x 7/8"	12	O/L
18	Bolt hex. 3/8" x 1 1/2"	12	O/L
19	Lockwasher 5/16"	12	O/L
20	Stover nut 3/8"	12	O/L
21	Plug 3/8" NPT	2	661265
22	Breather 1/8"	1	654927
23	Adapter 3/8" NPT - 1/8"NPTF	1	655317
24	Elbow 1/8"NPT x 1/8"NPTF	1	4500125
25	Nipple 1/8"NPT x 4"	1	4500126
26	Union 1/8"NPT	1	4500127



INSTRUCTION SHEET

REDUCTION GEARBOX – 4500089

REF.	DESCRIPTION	QTY	PART #
1	Half casing	1	----
2	Half casing	1	----
3	Gear 28 teeth	1	4500090
4	Gear 36 teeth	1	4500113
5	Gear 20 dents	1	4500114
6	Adaptor	1	4500093
7	Middle shaft	1	4500094
8	Open cap	1	4500095
9	Solid cap	2	4500096
10	Key 0.75" x 2"	1	4500097
11	Roller bearing with cup- metric	6	4300077
12	Pin 3/8" x 1"	2	4500098
13	O-ring	3	4300081
14	Bolt hex. 5/16" x 7/8"	12	O/L
15	Seal	2	4300079
16	Bolt hex. 3/8" x 1 1/2"	12	O/L
17	Lockwasher 5/16"	12	O/L
18	Stover nut 3/8"	12	O/L
19	Plug 3/8" NPT	2	661265
20	Breather 1/8"	1	654927
21	Adapter 3/8" NPT - 1/8"NPTF	1	655317
22	Elbow 1/8"NPT x 1/8"NPTF	1	4500125
23	Nipple 1/8"NPT x 4"	1	4500126
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