

MOUNTING INSTRUCTIONS

093-916
093-016

MERCEDES

For gearbox produced since beginning 2002

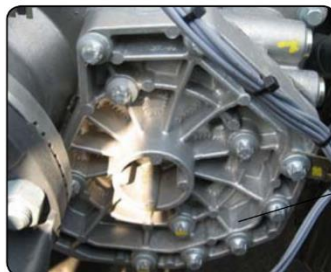
Complete kit	Composed by		Gearbox type	Original Mercedes shaft length without PTO
	Quill shaft	Lubrication kit		
093-916-00150	093-016-00015	094-004-00026	G 131...G 330	210
093-916-00249	093-016-00024		G 131... 330 + RETARDER	235
093-916-00338	093-016-00033		G 281-12 POWERSHIFT 3	226
093-916-00427	093-016-00042		G 281-12 POWERSHIFT 3 + AQUATARDER	250

For gearbox produced since beginning 2012

PRELIMINARY CHECK



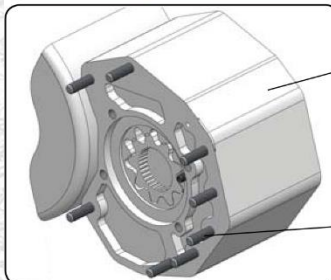
Make use of complete kits indicated in table (093-916-XXXXX) only if on the rear part of the gearbox has a cover like the one shown on this image. If the cover is different see page 8. Measure the original Mercedes shaft length and check its correspondence with above table. Follow mounting instructions carefully.



1) Remove the gearbox cover and make sure that the parts belonging to the oil lube pump are well located in their seats.



2) Clean carefully the gearbox surface.

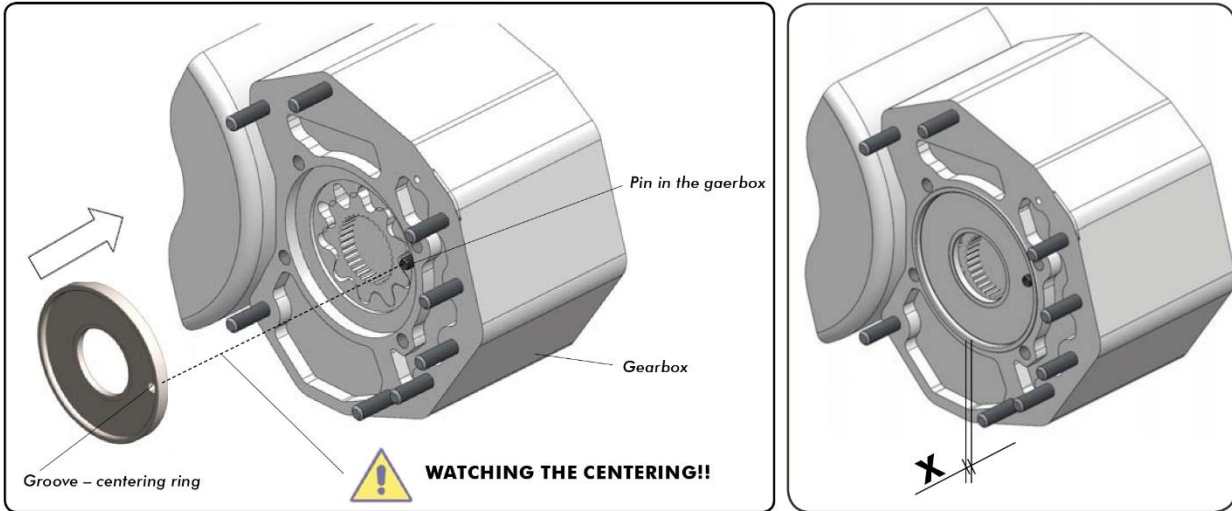


Gearbox

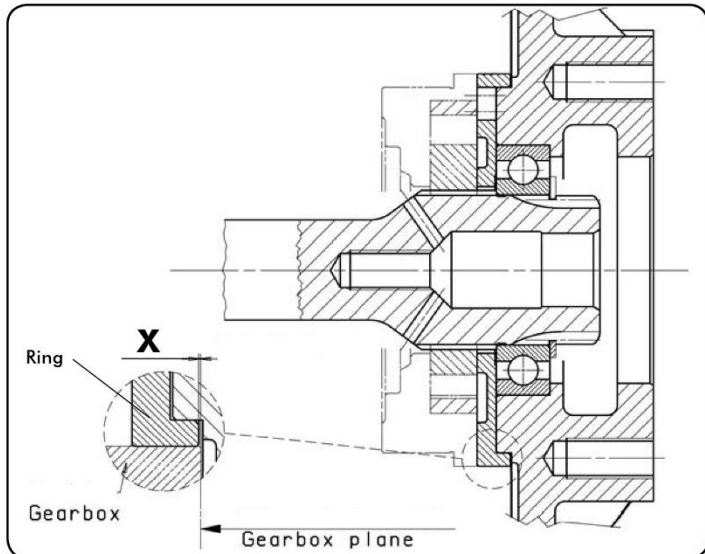
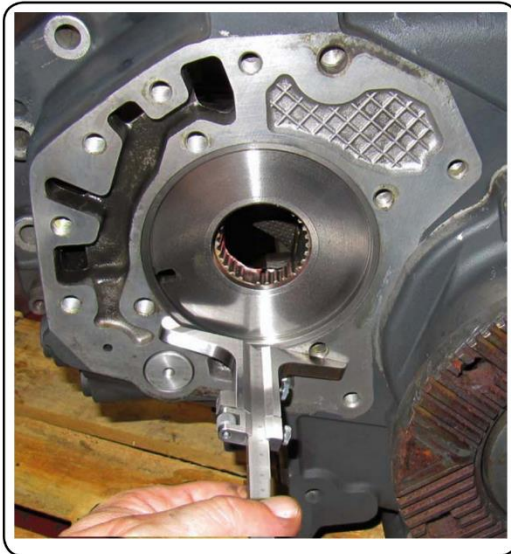
3) Tighten the 8 studs onto the plate – tightening torque = 20 Nm.

MOUNTING INSTRUCTION

- 4) Fit the centering ring paying attention to the correct mounting side and orientating the ring in such a way that the stickin pin available on the gearbox matches with the groove of the ring.

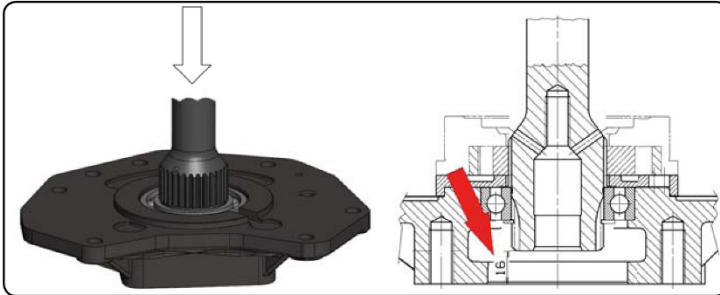


- 5) Keep the ring pressed into its seat and check the value between gearbox surface and ring surface (value **X**).

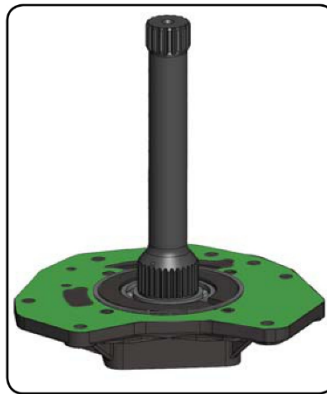
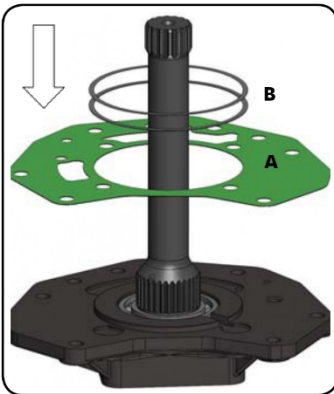


- 6) To ensure the best working conditions to the gearbox lube pump, the measured value **X** has to be within **0.0 ÷ 0.1mm**.
If larger, please proceed as follows:
- Complete the setting process as stated in the Mercedes PTO's directive, buying the spacers shown that must be installed below the pump body;
 - or alternatively**
 - Calculate the difference between the measured value **X** and the target value of **0.0 ÷ 0.1mm**. Therefore, make available as many shims **B** as needed to achieve the target value.
(The kit includes 3 shims having thickness of 0.2, 0.2, 0.3mm).

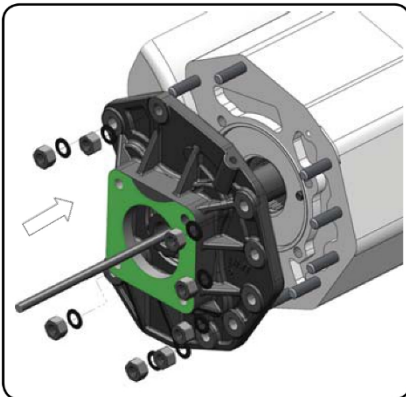
MOUNTING INSTRUCTION



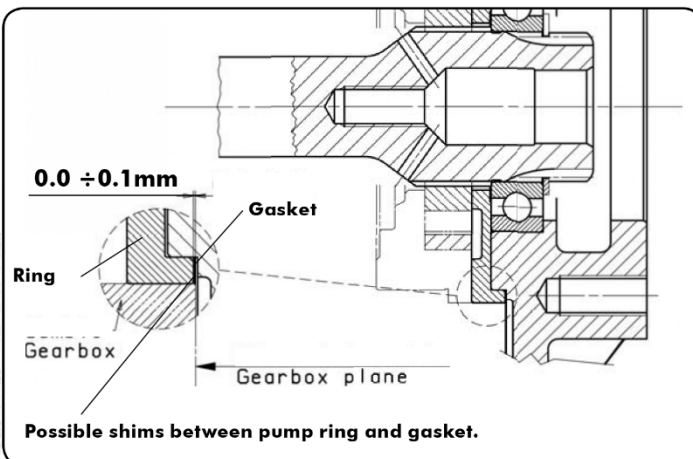
- On a flat surface, assemble the quill shaft along with the bearing in the plate making sure the given value is 16 mm.



- Following carefully the given sequence, firstly mount the gasket **A** on the plate, then the shims **B** needed as checked previously. At the end of each stage the final result has to be as shown in the picture on the right where the shims are **ON** the gasket.



Making sure that both gasket and shims stay in their positions (possible use some grease), carefully mount the full assembly composed of plate, quill shaft, gasket and shims into the gearbox. To match easily the toothing of the gearbox oil pump and the groove end of the shaft help yourself with a threaded rod or M12 stud screwed into the thread of the shaft itself. Tighten the nuts by applying 50 Nm torque. Remove the threaded rod / stud.



8) You can now fit the PTO required.

MI 09400400026



093-016-00015
093-016-00024

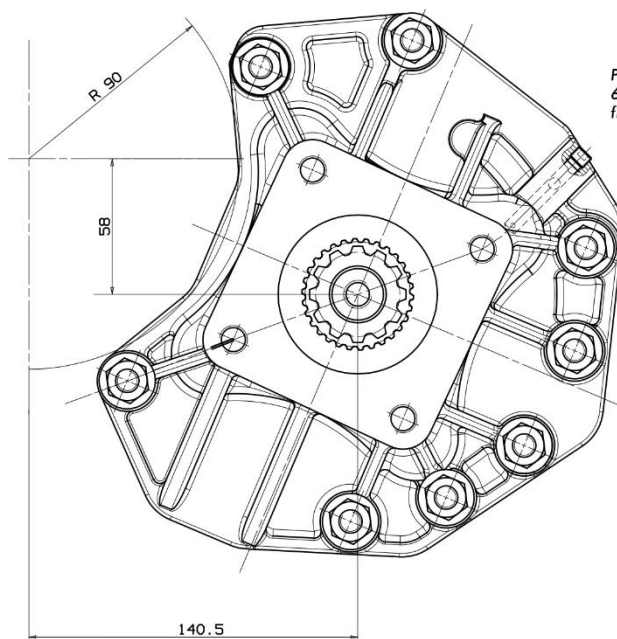
WITHOUT RETARDER
WITH RETARDER

MERCEDES
G150-G260

For gearbox produced until 2002



Check the rear of the gearbox to see whether it has a cover like the one illustrated in the photo, use P/N 93-16-15 for gearboxes without retarder or P/N 93-16-24 for gearboxes with retarder. Then follow the assembly instructions in 1-2-3 pages, without point 4 because there isn't the oil lube pump.
If the cover is different see page 5.



Please use MERCEDES 45x75x16 - ISO 6009 original bearing to be removed from the gearbox cover.

