

Subject: Assembly of starter and starter mount

Affected engines: Engines of the following types:

L 1700 EA, ED
L 2000 EA, DA
L 2400 EE, DE

If the starter or the starter mount is to be replaced, their position to the starter ring gear must be readjusted to get a satisfactory gear backlash.

Checking the backlash

Turn the starter pinion to the right until it is completely engaged. Measure backlash with a feeler gauge or dial gauge. At least two teeth of the gearwheels must be completely in mesh. Backlash must be 0,3 - 0,6 mm. If this is not the case the starter mount has to be adjusted.

Backlash adjustment

1. Dismount the starter.
2. Dismount the starter mount. Remove the old gaskets and clean sealing surface. Mount starter with new gasket(s). Screw the fastening screws of the starter mount until it can be moved with a plastic tip hammer.
3. Mount the starter.
4. Engage the starter pinion with the starter ring gear and move the starter mount until the gears have the required backlash. The starter shaft must be parallel course to the crankshaft. If the adjustment range of the starter mount is not sufficient it can be increased by placing an additional gasket underneath.
5. Tighten the accessible fastening screws of the starter mount.
6. Dismount the starter.
7. Tighten the last fastening screw of the starter mount und mount the starter again.
8. Check backlash and correct if necessary.

Adjustment of a new starter mount

1. Fasten the starter mount with gasket to the crankcase so that it still remains moveable with a plastic tip hammer.
2. Mount the starter.
3. Engage the starter pinion with the starter ring gear and move the starter mount until the gears have the required backlash. The starter shaft must be parallel course to the crankshaft. If the adjustment range of the starter mount is not sufficient it can be increased by placing an additional gasket underneath.
4. Dismount the starter.

5. **Caution: Be sure that the magneto is removed from the engine and the battery wires are disconnected before welding. Consult maintenance instruction no. 18.x for reinstallation.**

Mount the support of the starter mount and spot-weld it with an electric welding machine.

6. Dismount the starter mount. Firmly weld the starter support and lacquer the starter mount with black paint.
7. Mount the starter mount with the corresponding number of gaskets as determined under paragraph 3 so that it remains moveable with a plastic tip hammer.
8. Mount the starter.
9. Engage the starter pinion with the starter ring gear and move the starter mount until the necessary backlash is reached. The starter shaft must be parallel course to the crankshaft.
10. Dismount the starter.
11. Tighten the fastening screws of the starter carrier and mount the starter.
12. Check backlash and correct if necessary.

Note: On engines which are equipped with the starters SJCE 0.9 kW (Part-No.: 202.143.020.000), MAGNETON 1 kW (Part-No.: 202.143.030.000) or BOSCH 1.4 kW (Part-No.: 245.143.005.000) steps 5 thru 10 are omitted.

Notice:

This document has been translated to the best of our knowledge. In case of doubt, however, only the German original shall be considered as authoritative.