

Tech Sheet 004

Adjustment of pinion projection and ring gear clearance

It may be necessary to install internal shims within the starter to reduce starter pinion projection and increase ring gear clearance.

1.0kw – 2.2kw starters (800, 900 and 2200 series) with rotatable mounting plates and the front clutch bearing retained in the intermediate housing, can have the pinion projection reduced by removing the 2 cap head bolts, removing the mounting plate and installing the circular 2mm aluminium shim supplied between the mounting plate and intermediate housing. Reassemble and recheck clearance.

Some 1.0kw and 1.4kw starters (100 and 700 series) with rotatable mounting plates have the front clutch bearing retained in the front or mounting plate and will require the addition of 2 circular 1mm fibre shims fitted on top of the front bearing as well as the addition of one circular 2mm aluminium shim between the two housings. Remove the 2 or 3 cap head bolts and remove the front plate, install the supplied shims and reassemble. Do not hammer the front plate on as this may force the inner ball race of the front clutch bearing into the clutch assembly, locking the sprag and causing clutch slippage.

If clearance needs to be increased by more than 2mm, a second aluminium shim can be obtained from Roadrunner Starters and installed.



