



PERFORMANCE PRODUCTS, INC.

05-04-20

INSTALLATION INSTRUCTIONS

4340 MATERIAL

PRO SERIES "I" BEAM CONNECTING ROD WITH ARP BOLTS AND ARP LUBE

The following guidelines will insure excellent service and longevity from this set of premium connecting rods.

FITTING IN BLOCK

Clearance must be checked to maintain a minimum of .060" between the connecting rod and the engine block and camshaft.

CHECKING CLEARANCES

The following clearances must be maintained to insure proper connecting rod performance.

The big end housing bore is sized to provide proper bearing "crush". Connecting rod bearing to crankshaft clearance should be set at a minimum of .002" and a maximum of .003".

Side clearance should be a minimum of .015" to a maximum of .025" per pair, subject to engine builder preference.

The recommended wrist pin clearance is .0008" minimum to .0015" maximum. In some cases, depending on actual wrist pin diameter, the rods may require sizing at the time of installation.

FASTENERS

PROPER FASTENER INSTALLATION WILL HELP TO PREVENT A ROD FAILURE! The vast majority of all rod failures are due to incorrect fastener installation. The parting line area and threads should be thoroughly cleaned prior to assembly and be sure to seat the rod cap to the rod body evenly, otherwise the cap can become cocked and could result in cross threading of the fastener(s). This is best achieved by alternately tightening the fasteners until the cap is fully seated to the rod body. Apply the supplied lube to threads and under head of fasteners before assembly. Additional ARP lube can be purchased separately as Manley part number 40170 (1/2 OZ.).

When tightening the fastener, bolt stretch is the singular most important value to be considered. Torque the fastener within the indicated torque range until specified stretch is achieved. When the desired stretch has been achieved by applying a torque load that falls within the allowable range, the fastener is properly tightened.

Table with 7 columns: Description, Bolt Part No., Material, Under Head Length, Recommended Torque Value Range w/ARP Lube in ft./lbs., Recommended Bolt Stretch Value, Torque Value w/ARP Lube During Final Assembly at Manley Performance. Rows include various engine models like Ford 4.6L, SB Chev, Small Block Chevy, BBC, Duramax, etc.

If recommended bolt stretch is only achieved by applying torque that is outside of the recommended torque range, there is a problem either with the fastener, the bolt threads, the application of the lube, or the torque wrench. IMPORTANT: Free length of fasteners should be measured and recorded prior to installation. If free length of fasteners increases by more than .001" at any time the fastener in question should be replaced immediately or failure may result. NOTE: It is not recommended to remove any material from the connecting rod cap for balancing purposes.