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[Performance Engine Parts](#)

INSTALLATION METHOD FOR HIGH PERFORMANCE SERIES MAIN BOLT KITS

180,000 PSI

1/2 inch Diameter

1. To ensure proper thread engagement and accurate torque readings, clean **ALL** threads in the block. Chase the threads if necessary with ARP Thread Chaser.
2. Clean and inspect all hardware prior to installation. Look for obvious defects or shipping damages, plus proper fit, length and dimension.
3. Position the chamfered side of the washer on the bolt so it faces the bolt head. This is done to clear the radius on the under head of the bolt. **Note:** Improper installation of the washer will cause premature bolt failure.
4. Install the main caps and check for binding or misalignment.
5. Lubricate the under head of the bolt, the washers and the bolt threads with ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT. Then install the bolts into the cylinder block and tighten them hand tight. **ARP recommends using the ARP ULTRA-TORQUE FASTENER LUBRICANT that is provided with each kit as opposed to motor oil. This is due to higher friction on the bolts as well as inconsistencies in the clamping force of the fasteners when motor oil (or low quality lubricant) is used.**

PRELOAD (TORQUE) RECOMMENDATIONS

6. Following the manufacturers recommended torque sequence tighten the bolts in three equal steps to 100 ft lbs with **ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT**.

FOOTNOTE: When changing from factory fasteners to high strength fasteners, clamping force and tolerances will change, therefore it will be necessary to check the main bearing bores for proper size and out of round condition after installation of the bolts and align hone the cylinder block if necessary. The main bores should always be align honed using the same fasteners and lubricant which will be installed during final engine assembly at the recommended preload.



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INSTALLATION METHOD FOR HIGH PERFORMANCE SERIES MAIN BOLT KITS

180,000 PSI

3/8 inch Diameter

1. To ensure proper thread engagement and accurate torque readings, clean **ALL** threads in the block. Chase the threads if necessary with ARP Thread Chaser.
2. Clean and inspect all hardware prior to installation. Look for obvious defects or shipping damages, plus proper fit, length and dimension.
3. Position the chamfered side of the washer on the bolt so it faces the bolt head. This is done to clear the radius on the under head of the bolt. **Note:** Improper installation of the washer will cause premature bolt failure.
4. Install the main caps and check for binding or misalignment.
5. Lubricate the under head of the bolt, the washers and the bolt threads with ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT. Then install the bolts into the cylinder block and tighten them hand tight. **ARP recommends using the ARP ULTRA-TORQUE FASTENER LUBRICANT that is provided with each kit as opposed to motor oil. This is due to higher friction on the bolts as well as inconsistencies in the clamping force of the fasteners when motor oil (or low quality lubricant) is used.**

PRELOAD (TORQUE) RECOMMENDATIONS

6. Following the manufacturers recommended torque sequence tighten the bolts in three equal steps to **45** ft lbs with ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT.

FOOTNOTE: When changing from factory fasteners to high strength fasteners, clamping force and tolerances will change, therefore it will be necessary to check the main bearing bores for proper size and out of round condition after installation of the bolts and align hone the cylinder block if necessary. The main bores should always be align honed using the same fasteners and lubricant which will be installed during final engine assembly at the recommended preload.