PROFESSIONAL



INSTALLATION METHOD FOR MAIN STUD KITS Part Number: 202-5402 Application: Nissan 2.0L (SR20) DOHC 4-cyl

Note: This kit has been revised from its original version due to insufficient clearance between the upper oil pan and the main studs on RWD vehicles. Please read and note the following changes before installation. **Caution:** Always check the clearance between main studs and the upper oil pan before installing the oil pan and modify the oil pan if necessary. The upper oil pan must sit flush with the oil pan rail on the engine block.

- 1. To ensure proper thread engagement and accurate torque readings, clean **ALL** threads in the block. Chase the threads if necessary with an ARP thread chaser, part number 912-0005 (M11 x 1.5).
- 2. Clean and inspect all hardware prior to installation. Look for obvious defects or shipping damages, plus proper fit, length and dimension.
- Screw the stude into the block "HAND TIGHT ONLY". Please refer to the main stud and washer mounting location chart and the bolt torque sequence diagram listed below.
 NOTE: LOCTITE MAY BE USED IF A PERMANENT MOUNTING OF THE STUDS IS PREFERRED. THE FASTENERS, HOWEVER, MUST BE TORQUED PRIOR TO THE LOCTITE SETTING UP.
- 4. Install the main caps and check for binding or misalignment.
- 5. Lubricate the stud threads, nuts and washers with ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT. Then install the washers and the nuts onto the studs and tighten them hand tight. ARP recommends using the ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT that is provided with each kit as opposed to motor oil. This is due to higher friction on the studs as well as inconsistencies in the clamping force of the fasteners when motor oil or other low quality lubricants are used.

PRELOAD (TORQUE) RECOMMENDATIONS

6. Following the manufacturers recommended torque sequence tighten the nuts in three equal steps to <u>80 ft lbs</u> 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 studs 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.

Main stud and washer mounting locations

#1, 5 & 9 in torque sequence – M11 x 4.910 in. long with.812 O.D. washer #2, 3, 4, 6, 7, 8 & 10 in torque sequence – M11 x 5.060 in. long with .812 O.D. washer

