

## INSTALLATION METHOD FOR MAIN STUD KITS

**Part Number: 157-5401 Application: Rover 4.0L & 4.6L V8**

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, part number 911-0005 (1/2-13) and 912-0003 (M10 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.
3. Screw the studs into the block "HAND TIGHT ONLY".  
**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 to the following specifications with ARP ULTRA-TORQUE FASTENER ASSEMBLY LUBRICANT.

**Step 1. Tighten studs 1 thru 10 to 25 ft-lbs**

**Step 3. Tighten studs 1 thru 10 to 75 ft-lbs**

**Step 2. Tighten studs 1 thru 10 to 50 ft-lbs**

**Step 4. Final Tighten studs 9 and 10 to 90 ft-lbs**

**Step 5. Tighten M10 side bolts 11 thru 20 to 45 ft-lbs**

**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.

### Bolt Torque Sequence

