

INSTALLATION METHOD FOR HEAD STUD KITS

Part Number: 201-4304 Application: BMW 1.6L (N12/N14/N16/N18) Mini Cooper

1. **Always verify the part number for your application with the part number on the side of box and the part number on the instruction sheet. This will help ensure you have the correct installation procedure for your specific application before installing any components.**
2. Clean and inspect all hardware prior to installation. Look for obvious defects or shipping damages, plus proper fit, length and dimension.
3. To ensure proper thread engagement and accurate torque readings, clean ALL threads in the block. Chase if necessary with ARP Thread Chaser, part number 912-0003 (M10 X 1.5) and 912-0001 (M8 X 1.25).
4. If the cylinder head studs protrude into a water jacket, lubricate the block threads of the studs with ARP THREAD SEALER.
5. Screw 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.
6. Install the cylinder head(s) and check for binding or misalignment.
7. 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

8. 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. Final Tighten studs #1 thru 10 to 75 ft-lbs

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

Step 4. Tighten M8 studs #11 and 12 to 35 ft-lbs

Step 5. Tighten M8 bolt #13 to 25 ft-lbs

Note: ARP Ultra-Torque Fastener Assembly Lubricant has been specifically designed to reduce tension preload scatter and eliminate the need to cycle high performance engine fasteners before final installation. ARP Ultra-Torque far surpasses all requirements offered by previous ARP lubricants in terms of fastener preload repeatability and performance lubricating properties.

Bolt Torque Sequence

