

MAIN STUD KITS

STUDS vs. BOLTS

ARP recommends the use of main studs over bolts whenever possible for several key reasons. First is the ability to obtain more accurate torque readings because studs don't "twist" into the block. All clamping forces are on one axis. By the same token, there is less force exerted on the block threads, which contributes to improved block life (very critical on aluminum blocks). Finally, there are factors of easier engine assembly and proper alignment of caps every time.



There are many important reasons to use ARP main stud kits, including the elimination of main cap walk and fretting, as well as protecting the threads in your engine block. All kits come complete with hardened parallel-ground washers and high quality nuts. Some applications have provisions for mounting windage trays and have specially designed standoff studs with serrated lock nuts to position the windage tray and lock it securely in place. The studs are manufactured from 8740 chrome moly steel, heat-treated in-house to 200,000 psi tensile strength, and precision J-form threads rolled after heat-treat to create a fastener that has threads 1000% stronger than others.

TECH TIPS: MAIN STUD INSTALLATION

There are a number of important considerations when installing ARP main studs. First and foremost is making sure the block and studs are as clean as possible. Foreign matter and debris can easily affect the quality of thread engagement and cause erroneous torque readings. Do not re-cut threads in the block – use the special "chaser" taps as listed on page 87 of this catalog. This will preserve the integrity of the threads and provide better engagement. Calibrate your torque wrench – even new wrenches have been known to be off by as much as 10 foot pounds! Use consistent tightening techniques.



1. Clean and chase appropriate threads in block to ensure proper thread engagement and accurate torque readings.



2. All hardware (and caps) should be cleaned and inspected prior to installation, looking for any shipping damage or defects.



3. Screw studs into block, finger tight ONLY. For permanent installation, apply Loc-tite (or similar adhesive) sparingly to threads. Be sure and install the caps promptly before the cement sets to prevent misalignment of studs in block.



4. Install main caps, checking for binding and misalignment. Lubricate threads, nuts and washers with oil or ARP moly assembly lubricant before installation. Note that torque specs will vary by lubricant. Moly lube is most consistent. Have block align honed.



5. Following the engine manufacturer's torque sequence, tighten the nuts three times to the recommended torque value found on the instructions provided with each kit. NOTE: If using Loc-Tite or similar cement, proper pre-load must be achieved prior to it setting up.

Application	2-Bolt Main	4-Bolt Main
AUDI		
5-cylinder	204-5404	
BMC/TRIUMPH		
A Series	206-5401	
B Series (3 cap main)	206-5402	
B Series (5 cap main)	206-5403	
2.0L SOHC TR7	206-5404	
Austin Healey 6-cylinder	206-5405	
BMW		
M10 & S14 4-cylinder	201-5001	

Application	2-Bolt Main	4-Bolt Main
BMW (CONTINUED)		
M50, M52, S50US & S52US inline 6	201-5000	
S54 inline 6	201-5002	
BUICK		
V6 Stage I & II	123-5401	
V6 Stage II without windage tray		222-5602
V6 Stage II with splayed cap bolts		322-5802
215 cid aluminum V8	124-5401	
350 cid	124-5402	
401 cid (nail head)	124-5404	