



XAT Racing ARP Stud Kits for 1UZ, 2UZ, 3UZ Engines

Thank you for your purchase of the XAT Racing UZ series V8 ARP stud kit. Included in your new kit is 100% ARP hardware custom packaged for the Toyota/Lexus UZ series V8 engine.

1UZ / 2UZ / 3UZ Head Stud Kits:

- 20 ARP studs
- 20 ARP washers
- 20 ARP nuts
- 2 packets of ARP LUBE
- 1 thinner washer to be used under the scissor gear

1UZ / 3UZ Main Stud Kit

- 20 ARP studs
- 20 ARP washers
- 20 ARP nuts
- 10 ARP side main bolts
- 2 packets of ARP LUBE

2UZ Main Stud Kit includes:

- 10 ARP studs
- 10 ARP washers
- 10 ARP nuts
- 1 packet of ARP LUBE

First and foremost, clean and inspect all hardware before inspection. Make sure there's no damaged parts. Make sure all block threads are still healthy and usable before installing, and run a chaser to clean out the threads. Screw in studs HAND TIGHT into the block. The allen broach in the stud is NOT for tightening, it is for ease of installation/removal only.

Some builders prefer to install dry. We personally *strongly* recommend using the included ARP lube on all fasteners and washers. This is very important for keeping consistent hardware preload!

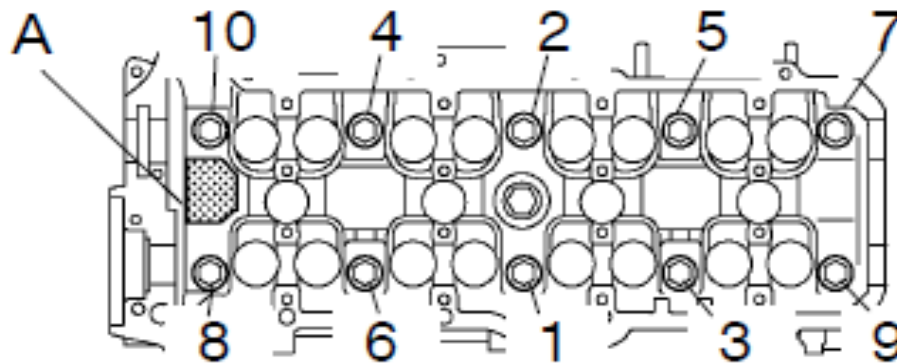
When installing HEAD STUD KIT on ALL UZ V8 engines:

Please note you may need to slightly shorten the **top** of the nuts/studs (not affecting threads) under the scissor gear on some applications. **IF YOU DO NOT, YOU CAN AND WILL BREAK THE CAMSHAFTS**. This is a known issue with all UZ engines under the scissor gears on the cams. **The provided single thin washer should be used at this stud** to give enough clearance to not touch the gear. Double check clearance with the scissor gear **before** torquing down the camshafts!

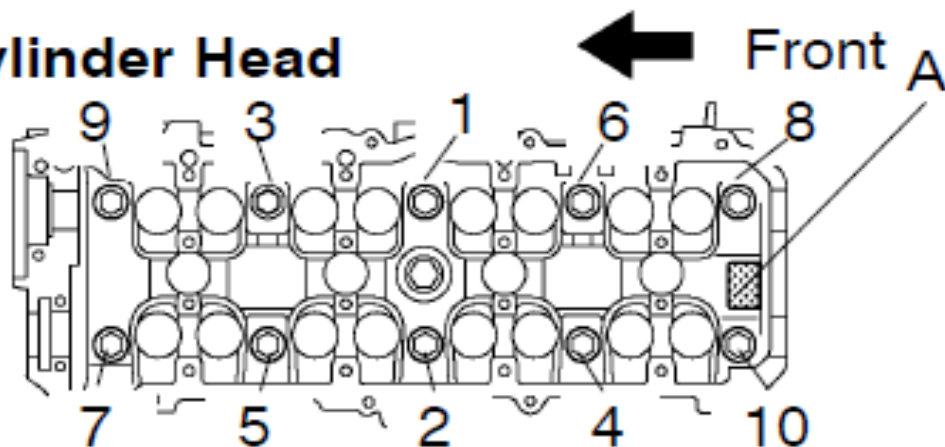
ALL "base" head stud kits Torque to **60 FT LBS in 3 equal steps** (20-40-60 ft lbs) using supplied ARP lube and TOYOTA torque pattern as seen in the TSRM. **ARP2000 head studs will get torqued to 70 ft lbs in 3 equal steps** (23-47-70 ft lbs).

2UZ HEAD STUD KITS: This kit includes 9 longer studs to be used on the exhaust side, plus one short stud. The 10 shorter studs are for the intake side. **Intake studs need to be installed upside down** in the block, as ARP does not make a stud the correct length in that pattern. Bagged nuts are for the longer exhaust side studs. They are a different thread pitch from the intake side nuts. The **left front most exhaust stud** will also need to be one of the **shorter studs** like the intake in order to clear the scissor gear.

RH Cylinder Head



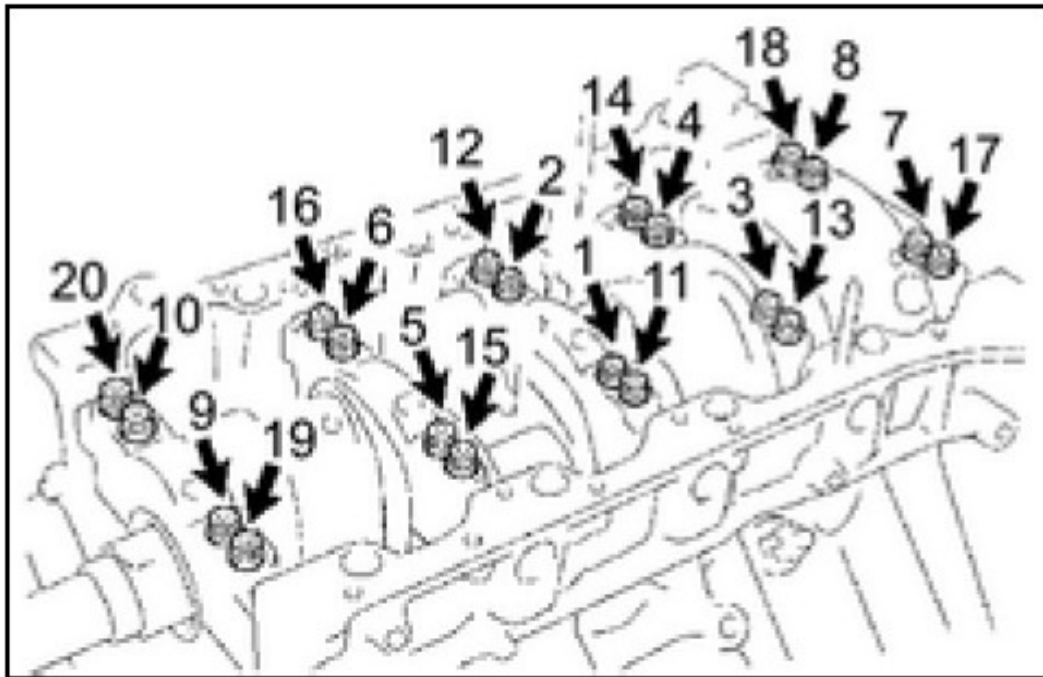
LH Cylinder Head



1UZ / 3UZ MAIN STUD KITS: TORQUE TO **60 FT LBS in 3 equal steps** (20-40-60) using ARP lube and TOYOTA torque pattern as seen in the TSRM.

We highly recommend checking line bore when installing, as the torque value to the caps has been changed. Use OEM sealing washers on the side main bolts (1UZ and 3UZ only). Torque to TOYOTA recommended value for the main cap **side bolts**. (**36 ft lbs**).

Non-VVTi 1UZs will also need to either run washers on or shorten the outer studs, or drill/tap the block further. We recommend the first 2 options.



2UZ MAIN STUD KIT: TORQUE TO **80 FT/LBS in 3 equal steps** (27-54-80) using ARP LUBE. Torque using TOYOTA recommended pattern. We highly recommend checking line bore when installing, as the torque value to the caps has been changed.

