

Stud Kits



Atomic Competition Fasteners Head/Main Stud Kits

Necessity is the Mother of Invention, or so goes the saying, but we didn't invent head or main studs - they have been around for quite some time, fastening together highly stressed engine components far more efficiently than bolts. All we did was tool up to produce our own high quality H-11 Tool Steel studs for applications in cases where they were either priced outrageously or were simply unavailable.



Ford 6 cyl engines have the disadvantage of only having 4 bolts per cylinder, so head studs are subjected to higher loadings compared to engines with 5 bolts per cylinder. And with the advancements made in turbocharger technology over the past 4-5 years, massive cylinder pressures are produced, which in turn produce prodigious power levels in the order of 7.5 HP per cubic inch and beyond.

Atomic has responded to the challenges of the onslaught of this generation of "engine killer" turbos by upgrading the material of our studs to H-11 Tool Steel. This material is the premier choice for highly stressed studs and is marketed under a number of different names by other fastener manufacturers.

A new feature of our next generation studs is a bottoming tab on the end that threads into the block. This allows the engine builder to ensure the stud achieves the correct thread purchase into the block, the correct thread preload whilst also providing a simple way to adjust the installed height. This requirement is due to the factory variations in the depth of the threads (up to 10.0mm variation). Not only that, Atomic studs fit! No need to modify sumps or cut down excessively long studs when fitting our kits.

Another recent addition to our arsenal of hard core components are our Oversize head stud washers. We have recently witnessed Ford cylinder head bolt bosses crushing down when subjected to extremely high boost and/or detonation, which substantially reduces the fastener's preload. To overcome this issue we now manufacture oversize/extra thick head bolt washers which spread the combustion load over the entire head bolt boss area, rather than concentrating it with a small OD washer. Conventional washers are only 23-24mm OD, whereas our new Oversize washers are 28mm OD to encompass the entire head bolt boss. CNC machined from 4140 chrome moly bar stock, hardened to HRC 45 and blackened for appearance, they come in two sizes: to suit M12 or M14 studs.



All Atomic Competition Fastener kits come complete with detailed installation instructions, molybdenum disulfide EP lubricant, 6 or 12 point nuts and hardened/double ground washers.

Ford 6 Cylinder

#306651

BA-on Ford DOHC 6 cylinder Head stud kit 12mm

#306652

EB-AU Ford SOHC 6 cylinder Head stud kit 12mm

#306653

BA-on Ford DOHC 6 cylinder Head stud kit 14.3mm Includes 28.00mm OD x 4.00mm thick washers.

#306654

EB-AU Ford SOHC 6 cylinder Head stud kit 14.3mm

#306670

BA-BF Ford DOHC 6 cylinder Main stud kit 12mm (will also fit SOHC engines when fitted with an Atomic girdle)

#306671

FG-on Ford DOHC 6 cylinder Main stud kit 12mm

Nissan RB Series 6 Cylinder**#356650**

Nissan RB30 6 cylinder with RB25 or 26 cylinder head stud kit 12.7mm

#356670

Nissan RB30 6 cylinder main stud kit 10mm

Oversize Head Bolt washers**#306675**

Oversize head bolt washers suit M12 studs. 28mm OD x 12.4mm ID x 4.0mm thick.

#306676

Oversize head bolt washers suit M14 studs. 28mm OD x 14.4mm ID x 4.0mm thick.