

## MITSUBISHI 4B11 TURBO 2.0L DOHC ENGINE M11x1.5 HEAD BOLT THREAD REPAIR

(11, M11x1.5 modified inserts are supplied in this kit)
This repair is designed to work with the following ARP® head studs or OEM head bolts:
ARP® STUD KIT P/N 207-4206 & ARP® STUD KIT P/N 207-4207 CA625+

<u>IMPORTANT!</u> Please read the "UNIVERSAL INSTALLATION GUIDE" provided in the kit in their entirety before proceeding. Details specific to repairing this engine regarding drilling & tapping depths along with insert installation depths are provided below.

- 1. When mounting the drill/tap jig, follow the instructions on pages 3&4 using the tall spacer provided (1½in. diameter x 1.62in. long), with the recessed end facing upward. If it is necessary to mount the jig to a hole that has just been repaired, make sure to use a new head bolt, otherwise an old head bolt may tighten up prematurely in the new insert since the threads of the bolt may be stretched out of pitch.
- 2. Drill the holes 3.900 (99mm) deep. To accomplish this, mark the drill, measuring from where the drill cuts the full diameter (<u>not</u> from the tip of the drill). This drill depth is especially critical in the 2 corner holes on the intake side of the engine due to oil passages close to the bottom of these holes.
- 3. Thread the holes about 3 600" (92mm) deep. *Note*: Due to the extra deep holes in the 4B11, an extended length tap is included in this kit. Start by tapping with the standard length 3 flute spiral point tap and tap about 3 inches deep. Then tap to the final depth with the extension tap. *The four flute bottom tap will not be required for this engine*.
- 4. Inserts are to be installed 1.850" (47mm) deep minimum from the deck surface to the top of the insert (see page 4, figure 4 of the Installation Instructions). Dry run the inserts to depth prior to adding thread lock to be sure the inserts will install to the correct depth. Otherwise, if you dry run the inserts with thread lock, there is a very good chance the thread lock will set up before your are able to remove them. Once you determine that the insert is able to be installed to the correct depth, remove the insert and add thread lock, then re-install to the correct depth.
- 5. Follow the stud manufactures installation instructions for installing and torquing studs.

Note: This kit is universal for many other engines as well since the outside thread size of the insert does not change. Inserts are also available with internal threads of M10x1.25, M10x1.5, M11x1.25, M11x2.0, M2x1.25, M12x1.5, M12x1.75 and 7/16-14.