

## 2010-2019 M11X1.5 JAGUAR/LAND ROVER 3.0 & 5.0L HEAD BOLT THREAD REPAIR

(5.0L FROM S/N 11122107525 AND UP ONLY)

NOTE: 5.0L ENGINES UP TO S/N 11122107525 HAVE M10X1.5 THREADS. THESE WILL REQUIRE KIT #1010A

21 M11x1.5 Modified inserts are supplied in this kit.

**IMPORTANT!** 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.

## \*\*\*DO NOT RE-USE OLD HEAD BOLTS \*\*\*

The threads on the old head bolts are often stretched out of pitch from torquing, causing them to tighten prematurely in the new inserts.

- 1. When mounting the drill/tap jig, follow the instructions on pages 3&4 using the short spacer provided (1½in. diameter x 1¼ in. [32mm])Long), along with a head bolt made for the engine being repaired and a couple washers if necessary to prevent the head bolt from running out of threads before the jig is tightened down. If it is necessary to mount the jig to a hole that has just been repaired, make sure to use a <u>new</u> head bolt, otherwise an old head bolt may tighten up prematurely in the new insert since the threads of the old bolt may be stretched out of pitch.
- 2. Drill the holes a minimum of 4 1/4" (108mm) deep to remove factory threads (may need to go 41/2" [115mm] on the 5.0L). Failure to do so may cause the head bolts to stub on the old threads as they protrude through the bottom of the insert, causing the head bolt to tighten prematurely before reaching their final depth.
- 3. Install the inserts 2"- 2¼" (51-57mm) deep from the deck surface (see page 4, figure 4 of the Installation Guide). To accomplish this, you will need to thread the holes with 4in. (102mm) of full threads from the deck surface. A 6in extension tap is included in this kit. Always start by threading the hole with the standard length 3 flute Spiral Point tap, and thread the hole about 3 inches deep. Short taps are stronger than extension taps since they twist less. Then carefully thread to the final depth with the 6" extension tap. The 4 flute bottom tap will not be used for application.

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, M12x1.25 M12X1.5, M12X1.75 and 7/16-14.