



## REPAIRS 04-15 GM LS SERIES GEN III 2<sup>nd</sup> DESIGN & GEN IV ALUMINUM ENGINES WITH SAME LENGTH INNER M11X2.0 HEAD BOLT HOLES.

FITS: 4.8 VORTEC, 5.3 LS4, 5.7 LS1&LS6, 6.0 LS2, 6.2 LS3, AND 7.0 LS7  
(Not for LS9 engines)

*(21 M11X2.0 inserts are supplied in this kit)*

Note: If using ARP® head bolt kit 134-3610, the insert will need to be installed 1" deep rather than the ¾" depth specified below since they will have less threads than OEM bolts.  
Please contact us at 717-880-1888 for more information.

***PLEASE READ THE INSTRUCTIONS FOR THE CADILLAC NORTHSTAR PROVIDED IN THE KIT IN THEIR ENTIRETY BEFORE PROCEEDING.***

***\*\*\* WE RECOMMEND USING OEM FACTORY HEAD BOLTS. DO NOT RE-USE OLD 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. Aftermarket head bolts are often not tempered correctly and or the threads are not formed correctly, causing them to bind in the inserts.*

The instructions supplied in the kit for the Cadillac Northstar should be followed for repairing the above engines with the following exceptions:

1. When mounting the drill/tap jig, follow the instructions on pages 3&4 using the tall spacer provided (1½in. diameter x 2-5/8in. Long), with the recessed end facing downward along with one of the head bolts made for the engine being repaired. 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 old bolt may be stretched out of pitch.
2. Drill the holes the entire length of the original hole depths (aprox. 2¾" or 70mm), making sure to remove all factory threads .
3. The inserts are to be installed ¾" (19mm) deep from the deck surface to the top of the insert (see page 4, figure 4). To accomplish this, you will need to thread the holes about 2¼" (57mm) deep. An extension tap is included, but not required for this application. (97-03 LS GEN III 1<sup>st</sup> design requires an extension tap for the 16 deep holes).

***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, M11x1.5, M12x1.5 and 7/16-14.***