

## 04-16 POLARIS ENGINE CASE M11X1.25 HEAD BOLT THREAD REPAIR.

## FITS: POLARIS ACE, RANGER, SPORTSMAN, RZR 570, 600,700 & 800cc WITH M11X1.25 THREADS

10 M11x1.25x1<sup>1</sup>/<sub>4</sub>" 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.

- 1. Mount the drill/tap jig following the instructions on pages 3&4 by using one of the Polaris head bolts along with the tall & short spacer stacked together (recessed end of the tall spacer facing downward if using it as the top spacer). See FIGURE 1A. (The spacers and jig together simulate the thickness of the cylinder head).
- 2. Drill the holes the entire length of the original hole depth (aprox. 1½" deep), on both the Single and Twin Cylinder engines.
- 3. Install the inserts about 1/16" (.062") deep below the deck (gasket) surface in the holes that <u>DO NOT</u> have the Alignment Sleeves and ½" (.250-.270") deep in the holes that <u>DO</u> have alignment sleeves (Twin cylinder engines only). See page 4, figure 4. To accomplish this, you will need to thread the holes about 1.312" (34mm) deep minimum in holes that <u>DO NOT</u> have the alignment sleeves and 1.500" (38mm) in holes that <u>DO</u> have the alignment sleeves (Twin Cylinder engines only).

NOTE: The inserts must be installed all the way to the bottom of the holes at the two corner dowel sleeve locations on the Twin Cylinder engines. This should put the insert  $\frac{1}{4}$ " below the deck (gasket) surface at these two locations allowing you to reinstall the dowel sleeves. If you can't quite get the insets  $\frac{1}{4}$ " (.250"- .270") below the deck (gasket) surface at the dowel locations, modify the hollow alignment dowels by grinding them down a little bit so that they don't stick up above the deck surface taller than the dowel hole recess in the cylinder.

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, M11X2.0, M12X1.25, M12x1.75 and 7/16-14.