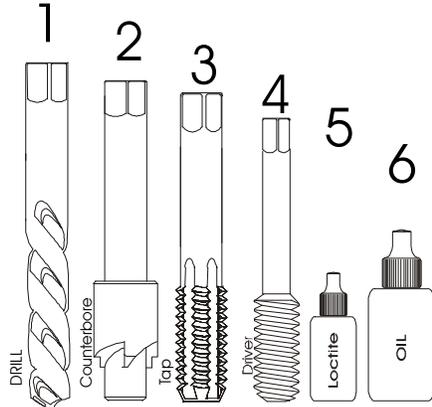


TIME-SERT®

SAE 9/16-18 PORT REPAIR KIT P/n 1682



We Recommend you repair the threads in a fixture application.

KIT CONTENTS

1. Drill
2. Cbore
3. bottom
4. Driver
5. Sealer
6. Oil
7. 2) Inserts p/n 16821
2) Inserts p/n 16823
2) Inserts p/n 16825

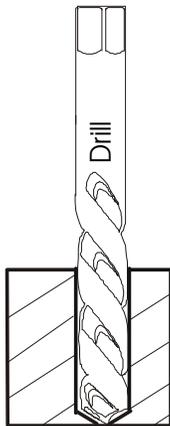
-WARNING-
Cutting tools may shatter if broken. The wearing of safety glasses is required in the vicinity of their use.

(BLIND HOLES: Measuring for depth)

If the hole is a blind hole repair (does not pass thru) Read below note.

A) Start by measuring the depth of the hole.

B) Mark the drill, tap, driver tools so you do not bottom out tools in hole.

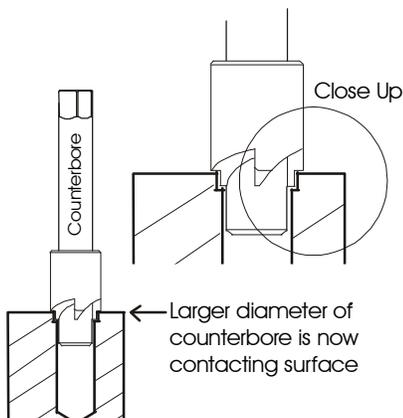


1. DRILL out old threads keeping drill square to surface of hole.

Use WD40 for drilling

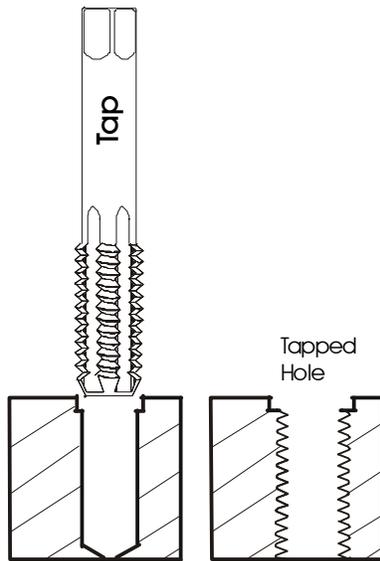
(Blind hole note)

If you have marked the drill for blind holes, drill down until your mark is level with the surface.



2. COUNTERBORE the hole to the full depth permitted by the tool. The counterbore tool has 4 cutting teeth and a larger diameter which is the stop.

When the larger diameter contacts the surface a full 360 degrees this is the full depth.

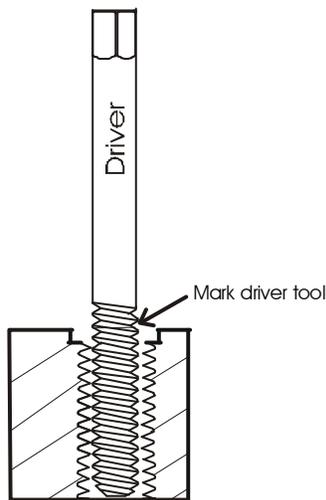


We recommend using a "tap wrench" when tapping holes.
Use WD40 for tapping

3. TAP new threads to the full depth of hole using Tap p/n 49683. Hold tap square to surface of the hole.

Bottom tap note:
There is an Included Bottom Tap if needed.

(Blind hole note)
If you have marked the tool for blind holes, tap down until your mark is level with the surface.

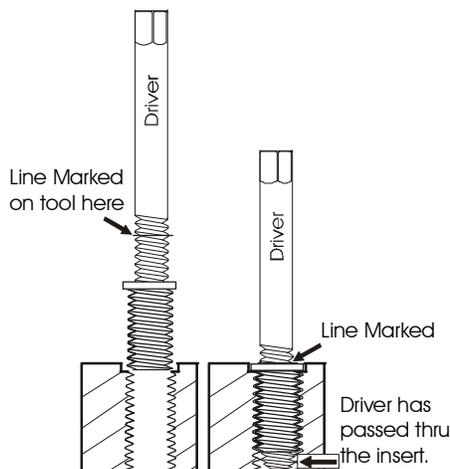


4. DRIVER TOOL

Note: If repairing a blind hole

Before installing the insert with the driver tool. Place the driver in the hole to touch the bottom of hole and **MARK** the driver so you have a visual Mark to know where the bottom of the hole is. You do not want to bottom the driver tool out in the hole on installation.

The driver needs to pass thru the insert about 1/4 inch or 6mm to fully form the threads.



We recommend using a "tap wrench" when installing inserts

5. Oil threads of DRIVER TOOL

Using a few drops driver oil or 30wt motor oil. Screw the insert onto the driver then place a bead of Loctite on the external threads of the insert top and bottom.

Screw the insert into the the prepared hole. While screwing the driver thru the insert, the driver will start to tighten up as it expands the bottom few threads of the insert. Continue until the driver loosens up OR you reach the **MARK** on the driver tool you **MARKED** previously. This way you will not bottom the driver tool out in the hole.

Remove driver repair is complete.