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Full-Torque®

Permanent Thread Repair

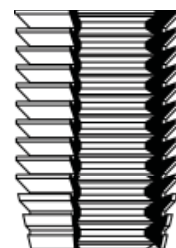
Instructions for Installing FFT/FFB-Style Thread Repair Inserts

NOTE: The Insert **MUST** be installed perpendicular to the surface – OR – aligned to the original bolt hole. Use the FTDIP Drill Plate and Drill Bushing to assure proper alignment when installing using a Hand Held Drill and Tap. Installing using a Drill Press, Magnetic Base Drill or Milling Machine is **BEST**, if possible.

Drill Bushing



Drill Plate



FFT (Through)



FFB (Blind)



1

If required, stitching pins can be used to repair cracks before beginning an Insert Installation.



2

Align the Drill Bit centered on the bolt hole to be repaired. Drill the hole to depth (or all the way through).

SET THE DRILL DEPTH:

A. In situation where you want the Insert to bottom in the tapped hole (such as the Cat 3208 main bolt hole, which is at an angle to the surface), you will want to set the drill depth for the Drill Bit so that the end of the drill (where the side of the drill meets the cutting lip) is 1/16" (1.5 mm) shorter than the Insert. This will assure that the Insert will bottom in the hole before the top of the Insert goes below the surface.

B. In most cases, you will want to drill the hole deeper than the length of the Insert to prevent it from contacting the bottom of the hole, so it can be installed flush to the surface. Drill the hole about 3/16" (4 mm) deeper than the length of the Insert.

3



Apply L750 Cutting Fluid prior to tapping.

4

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5

If your kit came with a roughing tap, use it first to tap the hole. Apply L750 Cutting Fluid again and tap the hole to its' full size with the finishing tap, making sure the tap touches the bottom of the hole.



6

(NOTE: If your kit included only a finish tap, the roughing tap step is not required.)



7

Apply anti-seize to the Installation Stud to prevent sealant from locking it to the insert during the installation process.



8

Screw the insert onto the Installation Stud, place the Drill Washer over the stud and screw the nut onto the stud.

TIP:

Adjust the depth of the Stud inside the Insert so that it contacts **as much** of the internal threads **as possible**, making sure that the Nut has full engagement on the top end of the Installation Tool.



Next, blow the shavings from the hole and apply LHC724 to the tapped hole.

NOTE: The thread sealant/locker will begin to set up immediately, so once you begin to tighten the insert, don't stop until it is completely seated.



9

Tighten the insert into the tapped hole until the washer firmly contacts the surface of the part.



10

Use a hex key or wrench to hold the stud while removing the nut to prevent the insert from turning.



11

Using the Drill Washer and Drill Tube, set the drill depth for the Locking Pin.



12

On the side of the repair with the maximum amount of material, drill the locking pin hole to depth.



13

Apply Sealant, place the pin in the hole . . .



14

. . . seat firmly with a hammer and drive it in flush.



15

Finished repair.