

TIME-SERT®

GEN3 MAINBEARING THREAD REPAIR

INSERT TYPE
M10 x 2.0 x 22mm

APPLICATION
MAINBEARING

BOLT HOLE NUMBERS
SHALLOW 301 THRU 310
DEEP 321 THRU 330

- WARNING -

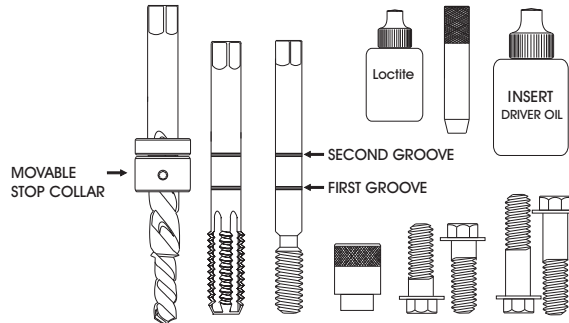
Cutting tools may shatter if broken. The wearing of safety glasses is required in the vicinity of their use.

CUTTING FLUID

A Cutting fluid is necessary for drilling and tapping. (WD40)

DRILL MOTOR

The use of a half inch drill motor is recommended for drilling.



Tools needed:
Drill fixture
Drill bushing
Alignment pin
long Bolts
Short Bolts
Step drill
Tap
Insert driver
Inserts
Stop collar
loctite
Driver oil

FOR THE REPAIR OF THE 1.5mm SHALLOW HOLES, USE THE MOVABLE STOP COLLAR ON THE DRILL AND STOP AT THE FIRST LINE ON THE TAP AND DRIVER.

FOR THE REPAIR OF THE 20.5mm DEEP HOLES, REMOVE THE STOP COLLAR FROM THE DRILL AND STOP AT THE SECOND LINE OF THE TAP AND DRIVER.

INSTRUCTIONS

STEP 1

PLACE LARGEST HOLE IN DRILL FIXTURE OVER THE HOLE TO BE REPAIRED. PLACE BUSHING IN FIXTURE, THEN PLACE LINE UP PIN IN BUSHING TO PICK UP HOLE. DO NOT FORCE PIN INTO HOLE. USE BOLTS AND TIGHTEN TO SECURE FIXTURE IN PLACE. REMOVE LINE PIN.

STEP 2

USE A SUITABLE DRILL MOTOR AND STEP DRILL THE HOLE UNTIL THE APPROPRIATE STOP COLLAR ON THE DRILL LINES UP WITH THE TOP OF THE DRILL BUSHING. THIS WILL REQUIRE REMOVING DRILL AND BUSHING SEVERAL TIMES TO CLEAR CHIPS. CLEAN OUT ALL CHIPS.

NOTE: If drill bushing turns while drilling hole, Remove drill and drill bushing, Clean out all chips.

STEP 3

TAP THROUGH THE DRILL BUSHING UNTIL THE APPROPRIATE GROOVE ON THE TAP LINES UP WITH THE TOP OF THE DRILL BUSHING. THIS WILL REQUIRE REMOVING THE TAP AND BUSHING SEVERAL TIMES TO CLEAR CHIPS. CLEAN ALL CHIPS USING BRAKE OR CONTACT CLEANER THAT WILL NOT LEAVE AN OILY RESIDUE, THE HOLE MUST BE CLEAN AND DRY. USE A FLASHLIGHT TO INSPECT THE HOLE FOR CHIPS AND CLEANLINESS.

STEP 4

USE INSERT DRIVER OIL (DO NOT USE WD40.)

OIL THE THREADS OF THE INSERT DRIVER. SCREW AN INSERT ONTO THE DRIVER, APPLY A SMALL AMOUNT OF LOCTITE ON THE BOTTOM OUTSIDE THREADS ON THE INSERT AND SCREW THE INSERT INTO THE PREPARED HOLE. WHEN THE HEAD OF THE INSERT IS SEATED THE DRIVER WILL TIGHTEN UP, USE A LITTLE MORE POWER TO SCREW THE DRIVER THROUGH THE INSERT, UNTIL THE APPROPRIATE GROOVE OF THE DRIVER LINES UP WITH THE TOP OF THE DRILL BUSHING. REMOVE INSERT DRIVER, BUSHING AND DRILL FIXTURE. REPAIR IS COMPLETE.

APPROXIMATE DECK SURFACE TO TOP OF INSERT.
SHALLOW HOLE APPROX. 1.5mm
DEEP HOLE APPROX. 20.5mm