

TIME-SERT®

GEN III HEAD BOLT THREAD REPAIR

INSERT TYPE	APPLICATION	BOLT HOLE NUMBERS
M11 x 2.0 x 30mm	HEAD BOLTS	RIGHT BANK 511 THRU 520 LEFT BANK 611 THRU 620

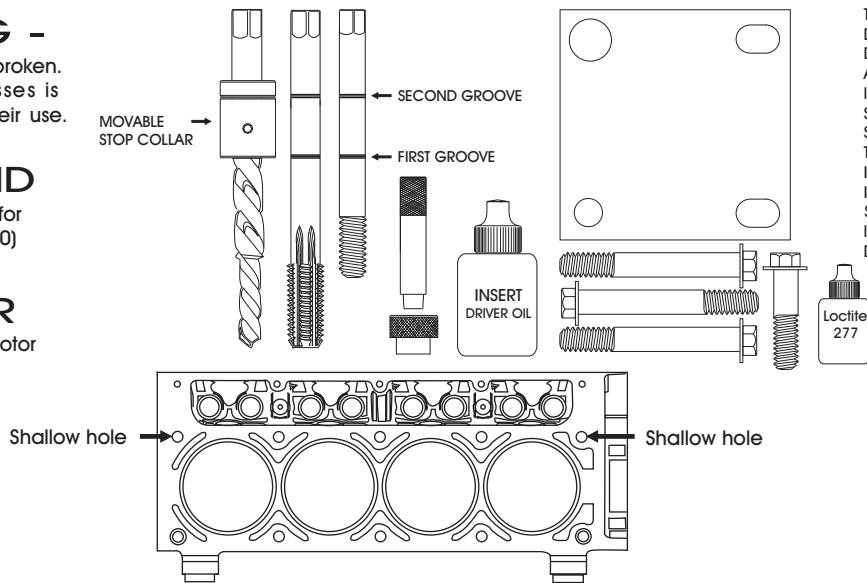
- WARNING -
Cutting tools may shatter if broken. The wearing of safety glasses is required in the vicinity of their use.

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.



FOR THE REPAIR OF THE (2) 30mm 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 (8) 85mm DEEP HOLES, REMOVE THE STOP COLLAR FORM THE DRILL AND STOP AT SECOND LINE OF THE TAP AND DRIVER

STEP 1

INSTRUCTIONS

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. REMOVE BUSHING AND FIXTURE. 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 277 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 ON THE DRIVER IS LINED UP WITH THE TOP OF THE BLOCK. REMOVE INSERT DRIVER, REPAIR IS COMPLETE.

CHECK FOR CORRECT LOCATION OF INSERT.

DECK SURFACE TO TOP OF INSERT.

SHALLOW HOLE APPROX. 30mm
DEEP HOLE APPROX. 85mm