TIME-SERT®

SPARK PLUG REPAIR KIT EXTENDED WITH ASSORTED LENGTH INSERTS P/N 4490



KIT CONTENTS:

- 1) Wrench # 44192
- 2) Miniwrench#44192m
- 3) Step-Tap # 44191E
- 4) Driver # 44194E
- 5) Seat Cutter #44193E

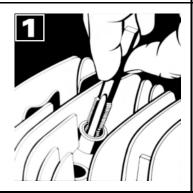
6) Sealer 6020 -WARNING-

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

Washer seat inserts			
Copper Color QTY 2 Each			
inch	MM	P/n	
.370	9.4 mm	44125	
.430	11.0 mm	44127	
.530	13.5 mm	44113	
.600	15.0 mm	44129	
.660	16.8 mm	44111	
.905	23.0 mm	44112	

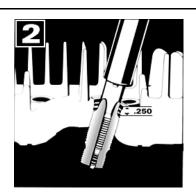
Taper seat inserts			
Silver Color QTY 2 Each			
inch	MM	P/n	
.400	10.0 mm	44183	
.620	15.7 mm	44185	
.660	16.8 mm	44186	
.950	24.0 mm	44187	
Sealer 6020 required on			

Sealer 6020 required on external threads for taper seat



Use WD40 for cutting or grease to help catch chips.

Start the step tap into the hole to be repaired keeping as straight as possible.



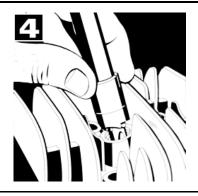
2. Using the wrench provided place wrench over tap and tap new threads. Continue to tap through until the cutting edges are approximately 1/4 inch below surface.

Leaving the tap ½ inch below the surface ensures that the seat cutter will not hit the back of the tap flutes.



3. Leave the step tap in the hole. Place the seat cutter over the shank.

The seat cutter does 2 operations. First the seat cutter will cut the countersink for the flange of the insert, then it cuts a new seat for the spark plug washer. This operation is the same for tapered seat.



4. Using the wrench provided rotate the seat cutter. After a few turns lift the seat cutter to inspect the seat. Repeat operation until the seat is completely cleaned up. Remove the step tap from the hole.

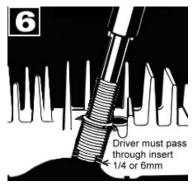


incomplete seat



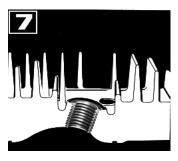


5. Make sure the hole is clean and dry. Lubricate the driver tool with Time-Sert driver oil.
Screw the insert onto the prepared hole.
Note: If repairing deep holes Lubricate the driver tool with Time-Sert driver oil or 30wt
Oil. Screw the insert onto the driver then into the prepared hole.



 Note: <u>Tapered Seat inserts</u> are silver plated and require sealer 6020 on external threads.

Rotate the driver through the insert. When the insert is seated the driver will tighten up. With increased pressure continue to rotate the driver through the insert until it loosens up. <u>USE CAUTION DO NOT SCREW THE DRIVER ALL THE WAY THRU THE INSERT AS WE DO NOT WANT THE DRIVER TO DROP INTO THE HEAD.</u>



-Section View-

7. Repair complete. Solid steel threads are square to the Reconditioned seat, insuring a good spark plug seal.

Measuring length of insert.

Measure from under the spark plug (Washer) or (middle of taper for tapered seat) to the last thread. (Not to the end of the electrode). This will give you the correct length.

