# TIME-SERT®

### STAND ALONE TRIPLE OVERSIZED M14x1.25x16.8mm Reach SPARK PLUG TAPER SEAT REDUCER

repairs holes from 17mm to 18.5mm or (.670 inches) to (.730 inches)

#### - 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 reaming and tapping. (WD40) Use grease to help catch chips.

#### - AIR RATCHET -

Use of an air ratchet at slow speed will help speed up the operation on Reamer tool



Qty	Kit includes

M18 Wrench Triple oversized
Optional Counterbore for RF-1L2E

Optional Counterbore for RF-1M18 Reamer Triple oversized

M18 Tap Triple oversized

1 M18 Driver Triple oversized

5 M18 Inserts Triple oversized

1 Setting tool with ring

5 M14x1.25 insert fully threaded

1 M14x1.25 driver tool

1 Oil (J-42385-110)

l Sealer

1 1/8 hex key small

3/16 x 6" hex key long

The kit installs 2 inserts to reduce hole to M14x1.25 Spark plugs must be ¾ reach and fully threaded.

### Stop: Check that the valves are not open!

The only 100% way to know the valves are not open is to remove the valve cover and inspect the cam, making sure that it is not depressing the valves on the damaged sparkplug hole.

# An optional way to check that the valves are closed. This is a 2 man job.

Have someone turn the engine over by hand with a 18mm socket from the front of the engine. Turn the engine over until it is going up on the <u>compression stroke</u>. Place your thumb at the top of the sparkplug hole at the same time to block off the air. When you feel the engine compression stop pushing air against your thumb the piston will be top dead center. Turn the engine over more so the piston is all the way on the <u>down stroke</u>, both valves should be closed at this point, and the piston should be all the way down.

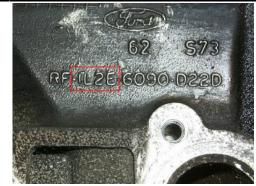
# OPTIONAL TOOL: Only required for FORD Romeo 2001 and up RF-1L2E heads.

FORD SPECIAL NOTE: Use only on Ford 2001 and up RF-1L2E heads, you will need to use this optional tool p/n 55518 counterbore BEFORE STARTING the instructions. This counterbore will remove a step of material found in these heads.

Place the counterbore tool p/n 55518 in the head. Place a mark on the wrench and manually go down 5/16 or 7.8mm to remove the step found in these heads.



P/n 55518 counterbore FORD ONLY F-1L2E



Casting number above RF-1L2E.

# INSTRUCTIONS START HERE

This repair can be done without removing the heads.

1) Place the Reamer tool p/n 55900 into wrench and tighten set screw.

Ream the hole to the full depth permitted by the reamer tool.

**Tip:** Packing the flutes with grease will help to catch stray chips from going into the cylinder.



This tool has a stop collar.

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3)Place the Tap p/n 55521 into the wrench and tighten set screw. Tap the hole, there is a pilot at the front of the tap to help guide it straight into the hole.

The tap will free up as it taps full threads.

Use contact or brake cleaner to thoroughly clean out any remaining chips and oil.



A: Place the driver tool into the wrench, tighten the set screw.

Oil the bottom threads of the <u>driver tool</u> with driver oil p/n J-42385-110.

B: Screw the larger insert p/n 55522 onto the M18x1.5 driver.



**Mechanics Tip 1:** Packing the flutes with grease will help to catch any stray chip from going into the cylinder.

Mechanics Tip 2: Using a shop-vac with a thin hose taped to the nozzle is helpful removing any remaining chips in the cylinder.



A:



B:

# 5) Loctite

Place Lock-tite around the bottom few threads of the insert.

Screw the insert into the prepared hole.



#### 6) Install

While screwing the driver into the insert you will feel the driver start to tighten up, with a little more power continue through the insert until it loosens up.

The triple oversized insert is now ready to accept the M14x1.25 Big-Sert insert.



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Setting tool.

A: Screw the setting tool into the insert.

B: lightly tighten the socket cap screw.





C: Using the wrench provided place the setting tool into the wrench.

D: Place Lock-tite around the middle of the insert and into the clean prepared hole.

Screw the insert into the hole until the flange of the insert is seated to the head. This is approximately 20 foot pounds.





E: Hold the wrench, and in a counterclockwise rotation, untighten the cap screw with the 6" allen key provided. This will allow the setting tool to spring in which will release itself from the insert.

F: You can now un-screw the setting tool from the insert using a counter clockwise rotation.





Driver tool M14x1.25:

G: Using the wrench provided, place the driver tool p/n 55514 into the wrench and tighten the setscrew.

H: Oil the bottom threads of the driver with a few drops of driver oil.





H:

Screw the driver into the insert. While screwing the driver into the insert you will feel the driver start to tighten up, with a little more power continue through the insert until it loosens up. The driver will cold roll the last few threads of the insert.





Remove driver, repair is complete.

Use only fully threaded spark plugs.