ATD-5400
Ford Spark Plug Cylinder Head Repair Kit
Instructions

This system is for use on 1996-2003 two-valve Ford Triton 4.6L, 5.4L V8 and 6.8 V-10 Ford Triton Engines. Please watch the video on the DVD included for comprehensive instructions on the proper use of this repair kit.

Recommended tools needed when performing this job: Correct length extensions and socket(s), Bore scope, QUALITY air ratchet, Air gun with extended end of hose, starter button to turn engine over, cutting oil and shop rag, JB Weld or another heat resisiting metal bonding material (DO NOT USE A QUICK SET VARIETY).

Before starting: Use spark plug to test inner threads of insert. It should be a smooth, secure fit. All good technicians pre-check all of the parts to every job before starting. If you ever find a defective insert, we will replace it, but we will NOT be responsible for mechanic error. You can also use a 3/4" die to clean up the threads. This system has been tested for 4 years without failure.

1) **Make sure the valves are closed and the piston is down**. You do not want shavings spread throughout the engine or to damage the piston with the drill. Use the cylinder leak detector to make sure the valves are closed. Plug the rubber stopper on the leak detector into the cylinder and connect to shop air. Use T-valve to let about 60 cu. ft. of air an hour or enough that you can hear and feel a volume of air going into the cylinder. The rubber cone "popping" out of the cylinder indicates that the valves are closed.

2) Use bore scope to make sure that the piston is down at least 2" to 4".

3) Insert the guide into the cylinder. Insert the core drill through the guide. It is important to use a quality air ratchet. Bore out old threads. Remove the core drill and guide.

4) **Use the air gun to blow out all the shavings in the cylinder.**

5) Insert the tap into the guide. Insert the guide into the cylinder. Use the air ratchet to tap the hole that was previously drilled. Use cutting oil on the threads of the tap.

6) ***IMPORTANT* Use the air gun to blow out all the shavings in the cylinder.** Use the bore scope to make sure that there is not any material left in the cylinder. Material left can cause internal engine damage.

7) Screw the spark plug into the patented insert. Spread JB Weld or another heat resisiting metal bonding material on the outer threads of the insert. **DO NOT USE A QUICK SET VARIETY.**

8) Use your air ratchet to run the spark plug and insert into the head. This insert will become part of the engine.

9) You can now reconnect the coil and the boot. The job is now complete.

PATENT# 6,668,784 - ASSEMBLED IN THE USA WITH GLOBAL COMPONENTS

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ITEM#	ORDERING PART#	PART DESCRIPTION
1	389-900	BLOW MOLDED CASE
2	389-400	GUIDE
3	ATD-5401	INSERT (SOLD AS EACHES)
4	389-200	CORE DRILL 11/16"
5	393-300	3/4" - 16 TAP
6	370-700	NEEDLE VALVE
7	390-200	RUBBER STOPPER #4
8	390-300	100 SERIES ADAPTER PLUG
9	390-400	SBR RUBBER TUBING 1/4" ID