This system is for use on 4.6L, 5.4L, and 6.8 V-10 Ford Triton Engines.

It is recommended to have the following other tools for this job: borescope, air gun with extended end or hose, starter button to turn engine over, cutting oil, and shop rag. It is recommended that you have the right length extensions and socket picked out before starting. In some cases there is barley enough room to get your hands in, so make sure you have a quality air wrench before you even drill out the old threads.

- 1. Make sure the valves are closed and piston is down. You do not want shavings spread throughout the engine or to damage the piston with the drill. Use the cylinder leak dectector to make sure these 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 or feel air into the cylinder. The rubber cone "popping" out of the cylinder indicates the valves are closed.
- 2. Use a borescope to make sure that the piston is down at least 2" to 4"
- 3. Insert the guide into the cylinder. Insert Core Drill through the guide. It is important to use a quality air ratchet. Burr 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 hex end of tap through bottom of guide. Attach E-Clip on slot closest to hex end. Insert the guide into the cylinder. Use the air ratchet to tap the hole that was previously drilled. You can put cutting oil onto the threads of the tap. Completely tap hole to the E-Clip stop. Run tap up and down in threads to make sure they are cleans. Failure to do so will cause an incomplete tapped hole and not allow the spark plug to seat properly.
- 6. IMPORTANT!! Use the air gun to blow the shavings out of the cylinder. Use the bore scope to make sure that there is not any material left in the cylinder. Material left can cause engine damage
- 7. Screw the spark plug into the patented insert. Spread JB Weld or another heat resisting 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.