DIY Spark Plug Thread Repair - Posted by SteveY

As you know, many of these old heads have, get bad threads. Short of welding up and re-cutting fresh seat and threads for the spark plug, the best thread insert set I have found is 'Time-Sert'.

Pic 1 is the 2 step tap. Get it started with the old threads and then keep threading all the way thru with the tap until it falls into the chamber.

Pic 2 shows the tap in the new threaded hole, the T-handle driver, and the silver radius cutter for cutting a recessed radius in the head that the insert sits in
Pic 3 with the tap screwed into the head and the top shoulder screwed in below the head surface, the radius cutter slides over the tap and then the drive handle installed. Turn clockwise until the cutter bottoms out.

You are now ready to install the one piece thread insert. I use the solid cooper, one piece. I've heard all the poop about steel inserts, cooper, etc. Bottom line, the engine doesn't know what's in there and all the blah,blah about heat dissipation in different thread materials is over-rated.

I use Loctite green, bearing and sleeve retainer on the outside of the thread insert. and screw it in until it seats in the recess.
To secure insert I turn the head over and use a solid dead center to bell-mouth the bottom of the insert. Then I run a thread tap thru the new threads. I always use a little anti-seize on the threads. End of problem.

* If you own a Ford with the Triton engine, Ford motor co didn't put anti-seize on the spark plug threads from the factory. When these engines are reaching 80-100K miles and it's time for a tune-up, the spark plugs are taking the aluminum threads with them when you un-screw the plugs (Whoops). The repair bill can reach $1,000 and owners are not happy.