

# #1 - FIREDRAGON Field Notes©

## #517 Nozzle Adapter Resurfacing Tool

Please follow these simple instructions for the proper use, and to ensure a long life for your nozzle adapter tool and please note that this tool is not a tapping tool, but will clear some minor thread damage.

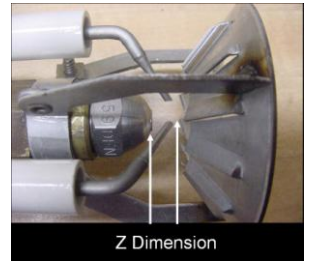
1. Carefully thread the chaser piece, see **Figure 1**, into the nozzle adapter, until the cutting edge comes into contact with the surface of the adapter.  
NOTE: If the chaser piece does not go in easily the adapter is probably stripped and the threads should be repaired using our #518 or the adapter replaced.
2. Turn the tee handle 1/16 to 1/8 turn. This exerts spring tension on the cutting edge.
3. Now turn the outer cutter wheel clockwise to produce a clean polished surface.
4. Reverse the above procedure to remove the tool. If it becomes stuck you can remove it with a wrench using the hex cap.
5. Clean out any metal filings from the adapter and oil line with fueloil or solvent.
6. Install a new nozzle and tighten with nozzle wrench.
7. Re-check the 'Z' dimension with ruler or proper gauge, see **Figure 2**.

### NOTES:

When using the nozzle adapter tool on any fixed 'Z' dimension burner like an older RIELLO, or newer CARLIN burners, the adapter should not be resurfaced more than twice without checking electrode dimensions. With these burners, the 'Z' dimension cannot be changed. The M.E.D. #517 Nozzle Adapter Tool is not a rethreading tool, and should not be used for this purpose, instead use the #518 Tap. However, it will resurface the adapter if it is not too badly damaged.



**Figure 1**



**Figure 2**

## #518 Nozzle Adapter Tap

If the threads of a nozzle adapter are found to be damaged or crossed use the #518, **Figure 3**, to repair the 9/16-24 UNEF-2A threads. A tap holder for proper use is suggested (not supplied).



**Figure 3**

## #519 Nozzle Wrench

To remove the existing nozzle simply place the tool, **Figure 4**, over the nozzle and nozzle adapter with the handles set about a quarter of a turn apart and turn the outer handle counter-clockwise.

To correctly install the new nozzle, insert the nozzle using only the outer hex part, never touch the orifice, face or strainer of the nozzle. Run the nozzle into the adapter until finger tight. If it doesn't go in easily, try our Nozzle Adapter Resurfacing Tool. After the nozzle is finger tight place the tool over the adapter until snug. Then place the outer handle and internal wrench so that the handles are about an eighth of a turn apart and tighten. **DO NOT OVERTIGHTEN!**



**Figure 4**

## #222 Universal Nozzle Socket Adapter

The adapter, **Figure 5**, simply replaces any standard nozzle and provides a 1/4" female hole that will allow you to install a gauge into the nozzle adapter, **Figure 6**. The adapter provides an easy way to check for leaks outside of the burner acting as a plugged nozzle. The adapter can also be used to verify fuel pump cutoff pressure. It is used outside the burner chassis and therefore does not require any additional hoses and adapters. Never over-tighten the adapter. Over-tightening can lead to potential damage to the nozzle adapter and #222 adapter.



**Figure 5**



**Figure 6**