EVALUATE THE CONDITION OF **MUSTANG**

~ Paul Moroni

It was a nice day, so I decided to evaluate the condition of my Mustang tractor purchase.

When I first looked at it, I pulled on the fan to see if the engine would turn and it did. But, due to the last one of these engines I worked on (that sat for a long time) I learned the consequences of spinning the engine without knowing if the valves were rusted. The result is the camshaft will break with the force of the cam lobe on the lifter.

So, the next thing I did was to remove the carburetor, then the governor, and finally the lifter cover on the side of the motor. Using a screwdriver, I lifted each of the lifter adjusting studs (the valve adjuster) and found out which ones were stuck. I found three of them.

I removed the loader from the machine, the sheet metal around the motor, and then the spark plugs. One of the problems is the rainwater sits around the plugs and after ten plus years, they get rusted badly. Three of them came out okay, but with the fourth one, I snapped the ratchet head right off the handle! I started to think just how bad this can go. I had to get out the ½ drive bar and socket and a lot of BP blaster. I started wiggling it back and forth very slowly until it finally came out. And luckily the threads in the head were still good.

With a liberal amount of spray down all the spark plug holes and the lifter cover removed, I pushed the valve stems up that were stuck until I had enough room to grab the valve stem with the Vise Grips. I turned the stems back and forth and tapped the valve head through the spark plug hole to move it down. Then I pushed it back up from the lifter side and sprayed and twisted and tapped until it moved freely. You have to do this easy, so that you don't damage anything.

Once all the valves are loose, you can spin the engine over a couple of turn to make sure there is no binding. I ran some jumper cables from the truck to the battery cables of the tractor and tested the starter button and spun the engine over and make sure we had oil pressure.

Next thing was to remove the gas tank because the fuel sediment bowl had deteriorated at the stem and broke off. After that, I washed the inside of the tank.

I disassembled the carburetor and cleaned it. The choke shaft was sticking, and I had to find a spring for the back side of the choke plate. The inside also needed a good cleaning. If it runs, then maybe a kit for the carb.

I put the carb back on the then put in an ignition switch I had from something else. I had the old spark plugs from my 44 on the shelf that weren't in bad shape, so those got put to use. Next step was to remove the distributor cap and look at the points. I did a little filing on those and turned the engine till the points were closed. Then turned on the ignition and separated the points and snapped them shut and no spark. So, I did a better job cleaning the points and gave them another open and close, and it sparked.

Next test was to turn to engine with the starter and re-check the spark and all was good. I did not have a sediment bowl, so I used a plastic squeeze bottle with a nozzle cap on it and poured the fuel into the brass elbow in the carb to fill the carb bowl. (Not the most recommended procedure.) It's funny how long it takes to fill it up going through the needle and seat of the carb.

So, four hours later and test time, the person I bought the tractor from said it sat for ten years, and we all know that means 15, but we all do that. I hit the button and on the third try it started up and ran. Boy, all that PB blaster makes a lot of white smoke! I looked at the oil pressure gauge and noticed the charging system was working and it had oil pressure.

Now the tractor made it into the shop for some work, first thing that needed to be addressed was the shifter handle that was rusted in the ball socket. When we were moving the tractor to the trailer, the handle fell off. I removed the shifted tower with the shift fork and found that the water had run in the top of the shifter handle ball socket and rusted the forks in the case. That led to a lot of cleaning and rust removal and welding a pin in the hollow shifter handle to make a good weld seam. And then a new boot to keep the water out.

The carb was removed again for a better cleaning and a new choke cable installed. I had to make an air cleaner tube from the carb to the air cleaner because it was missing. The air cleaner was missing the oil cup. Luckily, I had one on the shelf.

The exhaust system was a piece of flex pipe so that needed to be fixed. The problem was it was an under-hood muffler with a tail pipe. I made the muffler because you cannot buy them and the tail pipe. I made a pattern and had the muffler shop bend one for me.

The tractor did not have the correct hydraulic line on it from the pump to the control valve. That meant bending new steel lines with the correct flare nut ends on them.

The three-point hitch needed a lot of work because the tractor had a large brush mower on it and they must have clipped a tree at a fast rate of speed; and pulled the bracket backward so hard that you could see that steering wheel had two bends in it from holding on for dear life. So new wheel, too.

The tractor wheelbase width was set all the way out, so I moved the wide front end all the way in and moved the back wheels in as well. The front rims were from a car and would not hold air. A friend had some used rims, and I got new front tires and tubes. The rear tires had good tread but were weather cracked. I will just replace the rear rims because they had fluid in them and the rims were rotted.

I removed the water pump and installed new bearing inside it because you could hear them making noise.

This project was put on the back burner for now to get some other projects done.