

1953 Mack Restoration Update

Received 2/19/05

We filled the radiator with water and checked for any leaks. The cooling system checked out okay in that regard. We will drain and refill with antifreeze/rust inhibitor now that we know the system is in good shape.

We were unable to remove the drain plug from the fuel tank so we decided to at least chip at the rust surrounding it and spray it with Liquid Wrench. We siphoned out about seven gallons of stale gas from the tank. When siphoning no longer was sufficient, I attached an out board motor primer pump to the fuel line at the engine end of things and was able to suck the last drop of old gas from the tank. This also proved the fuel line was not clogged and was not leaking. There was about a half cup of water in about ten gallons of gas. There was absolutely no dirt, rust or any other contaminants of any kind found in the tank. This was after pouring some of the old gas back into the tank and double-checking. We pumped the old gas into empty plastic water jugs, which made the inspection process very thorough.

With a two hundred amp charger/booster plugged into the truck's electrical system the Mack was cranked over with a one-gallon jug of fresh gas stuck directly into the fuel pump. Wah! La! It fired and sputtered ran a bit and quit. So far, so good. The choke cable seemed very stiff and on close inspection, was found to be nearly frozen in place. Replaced with a new cable the choke was still nearly impossible to move in or out. We removed the air intake to the carburetor and found the choke valve stiff as a board and almost impossible to move by hand. Now that is a problem. We removed the choke shaft cover plate on the one side that was accessible and sprayed it with penetrating oil. The other side we just sprayed the best we could reach. I know better than to remove the choke butterfly valve and risk dropping those little screws in the intake manifold. Auto shop 101, first page.

The next morning the choke flopped back and forth just like new. I reconnected the choke cable and it worked perfectly. We went through the starting sequence again and got the engine running. Although it ran smoothly, the speed was not right. It was too fast and refused to idle down to a normal range then it would stall out. We knew the choke was not at fault and when we saw raw gas dripping from the air intake we suspected a stuck float or some sort of bowl level problem. I went to the shop manual and reviewed how to get into the carburetor floats and attempted a look see. The manual says to remove the fuel line and the four screws holding down the top section of the carb. This I did. It also says to remove the intake filter next to the fuel line which I also did although except for the obvious inspection purpose, I don't know what if anything that would have to do with flooding. I know better than try to out guess "Mother Mack" and did what I was told. The filter looked clean as if it were brand new. No dirt, crud or anything but the screen. I put it back and attempted to remove the bowl cover from the carburetor. I could only get the cover to raise about 1/4 inch off the top. Something was hanging up the process. After due diligence with the shop manual, I decided the metering valve must be stuck into the valve seat which is inside the cover. That would account for the flooding, as the valve would be wide open regardless of the throttle position. Trying to balance my demure 260 pound frame on top of the right fender I could not see under the cover and into the carburetor. It was getting near quitting time so we decided to spray the valve by shooting some de-stickum sauce right down the fuel line intake. This, we decided, would get the cleaning action right where it needed to be.

Next morning: We easily removed the carburetor cover to find two stuck floats. Valve open all the way. After a half hour in the carburetor dip tank, we flushed it out with hot water and a blast of air. Reassembled and installed, we ran the start sequence perfect. We ran the engine for about 10 minutes when Bud Jones discovered fuel squirting from the bottom of the fuel pump. It looks like the diaphragm is damaged. The pump is an AC Delco 4582. We either need a rebuild kit or a new fuel pump. Later, I took my problem to Napa and they didn't have the pump or a rebuild kit. Napa did, however, give me a phone number of an outfit that supplies pump kits for older equipment. I gave them a call and they do have the kit for that pump. Better to go kit wise than pop for a whole new pump. So we wait for a few days for the rebuild kit and find other thing that needed doing.

At the same time I have been on the web scouting up what I thought was the correct air cleaner for the ENF 707B gas engine. I was referred to Cal Little who dabbles in old Mack truck parts. He told me that if the engine were in a fire truck configuration it would not have the big oil filled type filter. He said it would just be a small one-foot round mushroom shaped deal that attached only to the air intake port. Guess what? That is exactly what is on there. All I'll need to do is pack it with some fresh brass wool and we are all set on this issue. The big filter can was only used on over the road trucks with that same engine. The Mack manual indicated the wrong air cleaner. Ha. Thank you Cal.

During the ten-minute test run we did build up plenty of air break pressure in the reservoir. They worked in a stationary mode at least. We will revisit the break system when we get the engine running normally.

In another crusade, I dreamed up what I wanted in the form of license plates for the front and back. In three lines it will say

ANTIQUÉ FIRE APPARATUS
1953 MACK QUAD PUMPER
85SL NUMBER 1686

The plates will be red letters on a white background, made of metal and be standard license plate size.

Having access to the Internet and a phone, the research on this project moves right along.

Another update coming soon.

Happy Times,
Dave