

Hydraulic Brakes

by Tom Endy

Keep it original:

Being somewhat of a purist I like to keep things on a Model A Ford as original as Henry intended. However, the more I fool around with a Model A and drive them in modern traffic it becomes apparent to me that a modification here and there adds to safety and convenience. Years ago I yielded to an overdrive and most definitely the installation of seat belts. Hydraulic brakes are another matter. I was of the opinion that well restored mechanical brakes with new cast iron drums were as good as hydraulics.

The 1929 Coupe:

A couple of years ago I purchased a 1929 Standard Coupe that had been restored in the 1970's and had been sitting in a garage for most of that time. When I bought the car it had not been operated in a number of years and was in bad need of attention to make it road worthy. Much to my dismay I discovered the car had been converted to hydraulic brakes. My first instinct was to covert them back to mechanicals. However, as I surveyed the situation I saw that though they were in need of attention, most of the hard to find and expensive hardware was there. Therefore I decided to keep them.

Good grief:

The condition of the brake system was deplorable. When I finally got the car to run and took it around the block a few times I discovered just how bad they were. The master cylinder and all four wheel cylinders were plugged up with crud and were badly pitted. All had to be either rebuilt or replaced. Fortunately this is not a killer expensive project. However, I also discovered how poorly constructed was the brake line system. The unknown conversion person had also whacked off the shock arm balls on both rear axle housings and welded on extension brackets. Since I planned to rebuild the rear end anyway, I found another pair of housings and replaced the molested ones.

The conversion:

If you have ever contemplated installing hydraulics on your Model A, you will soon learn that the brake system has to come from a 1939 to 1948 Ford.

There is a slight difference between the 1939-1942 and 1946-1948 years. The next thing you will learn is that as you try to fit this system on your Model A, everything gets in the way. You will find yourself altering this and that in order to make things fit. When you are finished you will end up with a compromise that not only compromises the installation, but also compromises **safety**.

Cling's:

A friend of mine, who is an ardent Model A Ford hydraulic brake fan, told me about Cling's. Cling's is a company owned by Dennis Cling that specializes in hydraulic brake system kits for Model A Fords. You can buy a complete system from him or you can buy portions of it in kit form.

The emergency brakes:

Once I got the cylinders rebuilt the first problem I encountered was that the emergency brakes did not work correctly. The pull lever that had been jury rigged into the car pulled an off center cable. This resulted in the left brake coming in ahead of the right brake and somewhere down the road it had caused the left radius rod to become bent. I ordered Cling's emergency brake kit and installed it and it worked like a dream. I also replaced the bent radius rod.

The rear backing plates:

The next area of grief was that everything conflicted with the two rear wheel cylinders. Especially after I had installed a set of unmolested rear axle housings. Cling's offers an exchange of 1939-1948 rear backing plates that have been machined and slightly rotated so as to fit the Model A rear axle housing mounting flanges. These too were ordered.

The hydraulic lines:

Further grief was the brake lines themselves. They were bent all over the place and were difficult to connect up to the wheel cylinders. Cling's offers a hydraulic line kit. This kit is complete in every detail. It installs on a Model A Ford very easy, and like all of Cling's products, you do not have to drill holes or alter the Model A Ford in any way.

The master cylinder:

Fortunately for me I did not need to throw out the master cylinder installation on the coupe. The unknown conversion person had done a reasonably good job of installing a Ford 39-48 master cylinder. I did have to do some rework to the installation, but it worked well enough to leave in place. Should a problem develop with it down the road, out it will come and in its place will go a Cling's master cylinder kit. A few years later a problem did develop and I have since installed Cling's master cylinder kit.

On the road with hydraulics:

Finally, I had the coupe on the road for real. I am very pleased with the hydraulic brake conversion. The car stops like a modern car and I have a lot more confidence out on the road in traffic. I have given some passing thought to installing a hydraulic system on Miss Vic. However, this would be a costly project since I would have to start from scratch and locate reasonable backing plates and drums from a 1939 to 1948 Ford, then probably have to buy new drums that are not turned out past their limits, not to mention replacing or rebuilding the wheel cylinders. I would certainly purchase all of Cling's kits and do the job properly.

Cling's Aftermarket Products:

If you are giving any thought to putting hydraulic brakes on your Model A, my recommendation is to do the job right. You don't want to compromise on a brake system. The project is pricey; you are looking in the neighborhood of about \$3,000 for the conversion.

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All of Cling's kits come with complete installation instructions. Cling's also offers a complete instruction guide for Model A Ford hydraulic brake conversion. Dennis Cling is also a nice fellow to do business with.☺