

Repairing the Model A Distributor

When in good repair, the Model A ford is usually very reliable and trouble free. But occasionally, problems do occur that need to be taken care of. One component that needs to be in good condition is the distributor. The Model A distributor is actually a very simple and straight forward device but for some reason is often misunderstood. But properly restored, the distributor will provide many thousands of miles of trouble free service. There are several "improvements" that are being offered that are intended to improve the reliability and extend the service life of the distributor but not all of these "improvements" are actually a good thing.

The upper distributor shaft with the added oil hole is a very good improvement. As originally designed, the upper distributor bushing did not receive sufficient oil from the side oiler and would wear prematurely. The added oil hole in the distributor shaft allows oil to get to the upper bushing greatly extending its life. Just do not over oil the upper bushing, one drop every couple thousand miles should be sufficient.



Distributor shaft with oil hole

Another good improvement is the currently available "Burn out proof condenser". The original condensers were soldered where the ground tab is affixed to the case. Because this tab is close to the exhaust manifold, under some conditions, the heat from the exhaust manifold will melt the solder.

*Burn out proof condenser
(2 views)*



Note 3 spot weld marks on tab

The "burn out proof condenser" has this tab spot welded to the case and the internals are made of better materials that greatly improve the reliability of this very important component.

Currently available are new distributor cams that are made to the same specifications as the cam for the later Model B distributor. The profile on the Model B cam is designed so the points will be closed longer during the rotation of the cam which results in more coil saturation and a hotter spark. The Model B cam is an improvement over the original Model A distributor cam and is available from most of the better parts suppliers.



*New design Model B
distributor cam*

One "improvement" that **SHOULD NOT BE USED** is the "Wireless Contact", upper and lower distributor plate set. For the distributor to work correctly the points, which are mounted on the upper plate, have to be connected to the buss bar in the lower plate. As originally designed, a special wire is used to complete this connection. Because the upper plate needs to be able to rotate a few degrees as the spark timing is adjusted, this wire must be able to continue to flex without failing. The factory used a special wire with a lot of very fine strands that is designed to flex and not fail. Often these wires were replaced with ordinary automotive wire with fewer but larger strands. This type wire is not designed to continually flex and will fail. To overcome this "problem" a wireless upper to lower plate connector that eliminates the "troublesome" wire has been on the market for many years now. This wireless contact design depends on a brass tab on the upper plate making contact with a brass ring on the lower plate. Initially, this works OK but with time and use, the contact between the tab and ring will develop a worn track that will become pitted and corroded and the connection will become intermittent or lost completely. Often you will find yourself on the side of the road when trying to diagnose this problem. The better Model A parts suppliers have the correct multi-stranded wire or you can purchase "test lead" wire which is used to make test leads for electrical test equipment.

For good reliability, be sure to always solder the connections on both ends of the wire.



Lower plate with correct connecting wire

One “improvement” that works but may not longer be necessary is the use of “modern points and condenser”. Years ago, parts suppliers started to offer upper plates designed to be used with “modern”, points and condensers. The idea was to relocate the condenser to a location adjacent to the points where it would not be near the exhaust manifold and to use components that were more readily available. The use of modern points and condenser worked well except the points were very difficult to adjust. Today, the use of these modern components really has no advantage because good quality original design Model A points are available and the “burn out proof” Model A condensers have all but completely eliminated the problem of the condensers proximity to the exhaust manifold.

A properly restored distributor with the added oil hole in the shaft, a Model B cam, good quality original style points, a “burn out proof” condenser and the correct interconnecting wire will provide many years of trouble free service.

Tech Tip

For best results, use only quality electrical components available from most of the better Model A parts suppliers. Standard or Borg Warner brand Model A points are also available from some local auto parts stores. DO NOT use electrical components manufactured in CHINA.

FROM THE OTHER BENCH

On the Road Fanbelt Repair

By Bob Harbicht

There is nothing that will bring a sublime ride through the countryside to a halt quite like a broken fanbelt. Within a very few minutes after the break your radiator will be boiling and your forward progress brought to a halt.

Some Model A's carry an extra fanbelt for just such an emergency. Of course, replacing a broken fanbelt (the broken one, by the way, is at least two miles down the road behind you) requires that you have the proper tools on board. These include a ½-inch wrench, another ½-inch wrench, several rags, a strip of leather to bite on and muffle any curses which might offend the delicate ears of your significant other, a pint of Gojo Natural Orange Pumice Hand Cleaner, Chris Wickersham's phone number, and a couple of other things I'm sure I've forgotten.

But take heart! There is an alternative: rubber bands. Rubber bands need no tools or special mechanical knowledge. Rubber bands, you say? A rubber band can be stretched out to go over the fan and hook around the water pump pulley, generator, etc. Now, admittedly, you will need quite a few of them.

Rubber bands can be ordered online from Aero Rubber Company. You will want the natural latex, 3 ½ X 1/16 size. They come in orange, blue-green and tan. Order the tan; orange or blue-green would have Henry turning over in his grave. By the way, this is the exact rubber band model used by your postman. If he's not off for *Pride Month*, *Indigenous People Day*, or one of the other unending holidays that our federal employees get off (with pay), while we work (to pay them), you might ask him if he can spare a few thousand.

For this job, you will need around 5,000 rubber bands. These can be carried quite nicely in a medium toolbox (Bauer Modular Rolling Toolbox, \$69.99 from Harbor Freight works perfectly). Unfortunately, the average person can only install about three rubber bands at a time, so this can be a time-consuming job. I carry a bottle of wine in the tool box with the rubber bands for an occasional break.

If you apply yourself diligently, you should be back on the road in a day or two. Only rarely is a second set of rubber bands required before you get safely back in your garage.

