

Does your Model A keep its cool?

This month we will discuss the Model A fan. Having a good fan installed on the end of the water pump shaft will help to keep your engine cool. Under some driving conditions however, it is not absolutely necessary to even have a fan at all. When a Model A is running along at a reasonable speed of say 25 MPH or more and it is not extremely hot, there will be enough air passing thru the radiator to keep the engine cool. A fan is necessary in stop and go traffic or when going up a long steep hill but most of the time, the fan does little to actually keep the engine cool.

A few years ago on a tour, one Model A had a fan blade break off which caused a severe vibration. This happened on a very busy highway with little room on the shoulder to get over and make repairs. As an emergency measure, we just broke the other fan blade off and the driver continued on his way. He not only continued for the rest of the day but for the rest of the tour, a distance of about 500 miles. The only problem encountered was when he became stuck in traffic and the coolant temperature started to climb. A brief wait on the shoulder of the road allowed the engine to cool down enough where he could continue on his way.

Let us now consider the best fan to use. There are several choices that you should consider using and a few you should stay away from.

First is the original 2 blade fan that would have been installed at the factory. If you currently are running an original 2 blade fan on your Model A, PLEASE do not drive your car until it has been replaced. These fans, while being a very efficient design, are VERY prone to failure. Corrosion will start to take place between the 2 pieces of metal that make up the blades which will eventually lead to failure, often with little or no notice. This is what took place with the Model A on the tour when a fan blade broke off. These fans are only good for display on the wall of your garage.

The fan I like to use is an original Ford Factory replacement 4 blade fan. These fans work very well and still have a "Vintage" look to them. Just be sure you purchase a good one that is not rusty, pitted or damaged. Any fan that is rusty or pitted should not be used. The blades will fatigue and fail where they meet the hub.

Please note that currently available aftermarket 4 blade fans with blades secured to the hub with bolts is a very poor design and should not be used. They are not very efficient and the blades are weak and prone to failure.

Another good choice is a new reproduction aluminum 2 blade fan. These closely resemble the original Model A Fan but are new and do not have the corrosion and potential failure problem. Many of your fellow Model A owners are using these fans with good success.

You may also want to consider a multi blade plastic fan with a separate steel hub and pulley. While these look more modern, they work well and are reliable. Both the Aluminum reproduction and multi-blade fans are available from most major suppliers.



Ford factory 4 blade fan



Reproduction aluminum 2 blade fan



Replacement plastic multi blade Fan

Tech Tip

Be sure the fan on your Model A is tight on the water pump shaft. This is especially important when using an aluminum fan or a fan with an aluminum hub. Always use a flat washer under the nut to keep the nut from wearing into the aluminum. Adjust the fan belt so it is snug but not too tight. An excessively tight fan belt will add unnecessary stress to the fan hub, shaft and front water pump bearing which could cause the fan to become loose on the shaft or the front bearing to prematurely fail.