

The Rear Spring!

by Tom Endy

Removing the rear end from a Model A:

The rear spring when installed in a Model A Ford contains a tremendous amount of energy and it can be lethal. During the many decades since the production of the Model A, many owners have been pulling the rear end by removing the two U-bolts that attach the spring to the frame. The rear end is then pulled out with the spring still attached. This is like having a loaded gun sitting around with the safety off. The 3\8" center bolt is the only thing containing the energy packed into the spring. The bolt was not designed to contain that much energy, and if the head is rusted on a possibly 75-year-old bolt it can easily break.

Horror stories:

Over the years since I have been rebuilding Model A rear ends I have heard a number of horror stories of how people have had some near misses with this spring and how some have been hurt. One fellow wrote that after he had pulled the rear end out with the spring still attached, he installed a spring spreader and was in the process of spreading the spring when the center bolt broke. All but the bottom leaf flew 20 feet in the air missing his head by inches. "I had enough sense to run like the devil, because I knew they were coming back down", he said. Another fellow told me that while trying to remove the spring it hit him in the face and broke his nose, his glasses, and knocked him unconscious. Another fellow reported that while trying to remove the spring it broke loose and flew into his neighbor's yard. Luckily no one was hurt.

The safe method:

It is best to leave the spring safely attached to the frame and drop the rear end loose from the shackles. A suitable spring spreader should be used to contain the energy of the spring. The spring spreader can be left in place for as long as the rear end is out of the car. If the effort is to also rebuild and restore the spring, the spring spreader should be collapsed and removed. All the lethal energy of the spring is then removed and it can be safely removed from the frame.

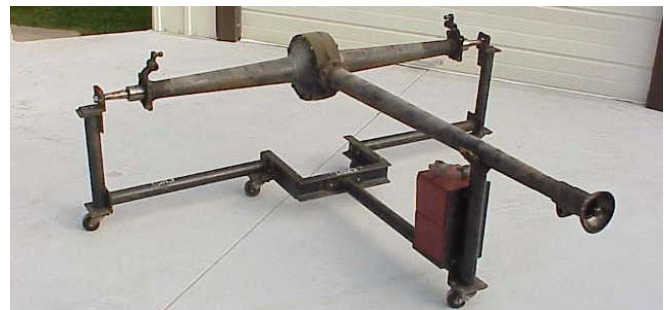


A proper spring spreader

Most Model A suppliers carry a proper spring spreader. They are made by Pete Weschler, the former owner of AC&R. He specializes in making unique tools for the Model A Ford. They are supplied in a standard and a deluxe version. Both are extremely well made and safe to use. The deluxe model is equipped with two thrust bearings that make it easier to turn the adjusting nuts and they have spring-loaded foot retainers to keep the two feet in place. The one pictured above is the standard model.

When installing the spring spreader it is important that the slots in each foot be carefully placed around the base of the shackle support at each end of the spring. This is very important, as a misplaced foot could cause the spring spreader to launch and become a medieval ballistic missile.

When installing a spring, bolt it to the frame first, then apply the spring spreader and spread the spring sufficiently to accommodate the installation of the rear end.



The rear end removed without the spring

Safety should be a primary concern when working on a Model A. Pulling the rear end with the spring left in the car is no more difficult and is certainly the safe way to go. A standard model A spring spreader sells for under \$100. It is cheap insurance. ☺