Tech-Nickel Tips

My 5¢ Worth

by O. Pinion

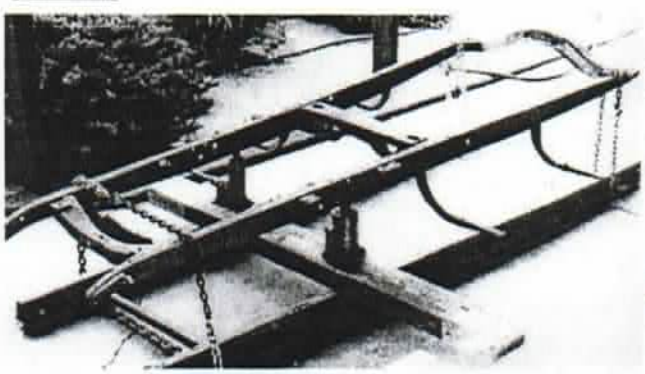


March 1999 Topic:
FRAME STRAIGHTENING

If you are doing a frame-off restoration it is absolutely imperative that you straighten the frame! Why? Because if the frame hasn't been straightened it is sagging in the motor mount area--- they all are. Over the decades all Model A frames have developed a sag. You may inspect the frame closely and think that it is straight, or straight enough. Wrong!

If the frame isn't perfectly straight you will have a very tough time ever getting the hood and doors to fit correctly and if you have gone to all the time , trouble, and expense of a complete restoration you will be very disappointed at that point.

If the frame is only drooping 1/4 inch in this area with the engine & transmission out, it will probably be down 1/2 inch when the engine & transmission are reinstalled. That may not sound like much, and you may be thinking that you can shim the cowl and body to make up the difference. In some cases you can, but, it is a whole lot easier to start with a straight frame than to shim, and in most cases it is virtually impossible to get it right by shimming. If the frame is sagging 1/2 inch you would have to add a **whole inch** of shims.



NOW! Straightening the Frame. It is surprisingly easy to do. You can still find some body shops that will do it for you for a nominal charge, those that are not exclusively unibody. However, you can do it yourself without much effort and no expense. All you need are a couple rails (railroad rails, I-Beams or strong timbers), some chains, and a couple hydraulic jacks. The accompanying photo is a good depiction of the set up.

Tie the frame to the rails with the chains at the four corners and raise the frame rails at the motor mount area with the hydraulic jacks. Stretch a string the full length of each rail so you can gauge the movement as you jack up each side slowly. Without the string it's pretty hard to tell how much you have moved it. When you are done the frame should be 1/4 inch high at the motor mount area to allow for flexing back down when you reinstall the engine and transmission.

If you aren't doing a frame-off restoration, but your hood doesn't align with the cowl, you can still straighten the frame using this method even with the body on the car. It will take a little more time and effort but it can be done and it is worth doing.

If you are still apprehensive about tackling this project, in spite of the above explanation, remember: Your fellow club members are a fantastic resource for additional information, guidance and physical help. Several of them have straightened frames and several of them have wished they had when they have tried to shim the cowl and body. If you need help--just ask.

A sample of members who can discuss this subject in depth are: Marith McCoul, Tom Carnegie (Antique Auto Ranch), Steve Schmauch, Larry Seemann and several others.

Remember: We welcome suggestions for subjects to be addressed in this column. If you have a topic you would like us to discuss please E-Mail the club, snail mail a note, or call the editor, Paul Seemann.