

Staying in Your Lane

Is your Model A Ford a Nomad? Does it wander from one side of the lane to the other as you travel down the road? Do you consistently have to correct the steering to try to keep it going in a straight line? Many Model A folks complain about how difficult it is to keep their Model A going straight ahead. I get calls from owners who after rebuilding the suspension and steering, their Model A drives great around town but at faster speeds and especially when driving on the freeways, their Model A seems to wander all over the place. The tires are in good condition and balanced and the alignment is correct but the car seems to wander at speed. What is going on and how can this problem be corrected?

Model A's drove well when new, but most of the roads at the time were either graded dirt rural roads or paved roads in the cities and there were very few "high speed" highways where the speed of the cars would exceed 45 MPH. Today, more than 90 years after the Model A was first constructed, we have more challenging driving conditions to contend with, especially if we want to enjoy regional outings or extended touring in our Model A's. Here in Southern California, it is often necessary to sometimes use the freeways if we want to go on an extended tour. Freeway driving is where most owners complain about their Model A's wanting to "wander" and there is a very good reason for this. Most of our freeways have grooves cut into the surface to improve traction and help prevent skidding and hydroplaning when it rains. This is not a problem with modern cars with better suspension and wide tires but the Model A driver often finds himself consistently having to correct the steering to stay in the center of their lane which can be a little disconcerting when driving "at speed".

Why does this happen. The Model A chassis is designed with one cross spring at each end of the chassis which is attached in the center of the cross member above each axle. Swivel links or shackles, which allow for the necessary free up and down movement of the suspension, are used to attach each end of the spring to the outboard ends of the axle. This design will also allow for a small amount of side to side movement of the frame and body when the car is changing directions. Most of the time, this small side to side movement is not very noticeable and does not cause a problem but at speed, or when driving on the freeways with the grooved surfaces, this becomes very annoying and causes the driver to consistently have to make small corrections in the steering. For example, as the driver steers the car slightly to the left, the spring shackles will allow the frame and body to sway or move slightly to the right, relative to the center line of the axle. The driver then steers the car slightly to the right to compensate for the sway in the body

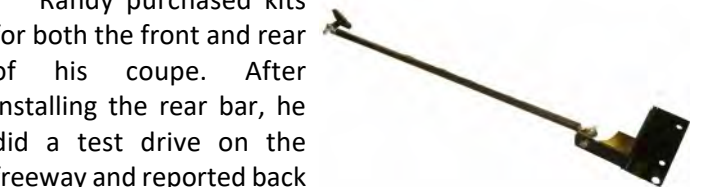
and the body will then sway to the left and the cycle is repeated. It is sort of like the tail wagging the dog.

What can be done about this problem? Limiting the side the side movement of the body and frame with a device such as a Panhard Bar will greatly help this situation. The Panhard bar is a very simple device, consisting of a rigid bar running sideways in the same plane as the axle. One end is connected to the frame and the other end to the axle on the opposite side of the vehicle. The bar attaches with a pivot on each end that will allow for up and down movement of the axle but restricts the side to side movement of the body and frame. Most of the better Model A Parts suppliers offer aftermarket Panhard Bar kits for both the front and rear of the Model A.

How well does this work? A few months ago, I received a call from one of our club members, Randy Harper. Randy had recently restored the front and rear springs and replaced the shackles on his Model A Coupe. He said the springs were all rusty and bound up and the shackles were worn out. When everything was all back together, the ride was much better but when he drove the car on the freeway, it seemed to wander and he had to consistently correct the steering to keep in its lane. He re-checked the alignment and made sure all the nuts and bolts were tight but nothing changed.

Randy asked me if the Panhard Bar kits that were available for our Model A's would help this problem. I advised him to give it a try, the principal was good and I had heard only positive comments from owners who had installed them. I had experience with installing Panhard bars on other cars but not on a Model A and was curious about how much improvement they may make.

Randy purchased kits for both the front and rear of his coupe. After installing the rear bar, he did a test drive on the freeway and reported back to me that "the difference was like day and night". Almost all of the wonder was gone and he felt much more confident driving "at speed". After installing the front bar, Randy said he did experience additional improvement but not as dramatic as when he installed the rear.



Ford used the same basic suspension design clear thru 1948. After the war, as the cars became heavier and highway speeds increased, Ford used Panhard bars and sway bars to help with the problem of the body and frame sideway movment relative to the axle. Installing Panhard bars on your Model A will improve the handling, especially if you plan to drive on the freeways and do some touring with your car.