The Preventive Maintenance Series

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Pitman Arm Bushings

All cars of all years have one but FC vehicles do not; it is a pivot point where the steering box pitman arm is attached to the center link. It is comprised of a sleeve which contains a rubber bushing and an attaching bolt with a tapered end to force a pressed fit onto the pitman arm when the nut is tightened. The bushing assembly is also a press fit into the center link attaching hole. Along with being an attachment point, the bushing also helps prevent road shock from being transmitted into the steering box and when still in good condition it will add a small amount of "back to center" assist when you complete a turn. When the rubber section wears out, play in the steering wheel is the result.

The simple way to evaluate a bushing is to visually inspect that area (car on the ground) while your assistant takes up the play in the steering wheel, being careful not to overdo the wheel wiggle. Watch the bolt in the bushing and see if it moves in the rubber; any movement would mean replacement is necessary. At the same time, watch where the pitman arm itself is turning in the bronze bushing at the bottom of the box. If the box itself needs adjustment you will see the pitman arm move back and forth in the bronze bushing a small amount instead of actually turning. If that is the case and adjustment does not cure the excess play, then the bronze bushing may need replacement.



On the left is an old bushing that has been removed. In the center is a new bushing assembly with a homemade pusher (see PMS 113). On the right is an air hammer tool for removing the sleeve from the center link.



Close up of sleeve removal tool.

Bushing Assembly Replacement (As I Do It)

With the front end on high jack stands or lift, remove the cotter pin and nut from both the pitman arm bushing and the idler arm. Use a fork separator on both to drop the center link down. Push out the bolt and remaining rubber (should be easy) and use the angled sleeve pusher shown above and below to pop out the pressed in sleeve.



The pressed in sleeve has been removed with the center link still attached to the tie rods.



The new bushing can be pressed in however it works for you. I use a C-clamp with the homemade pusher mentioned above. Since you are not going to do this very often, I have a loaner tool for the asking.

The most important part of the bushing replacement operation is the correct installation of the new bushing bolt back into the pitman arm. First re-attach the idler arm to the center link and then line up the wheels so that they are perfectly straight ahead. Insert the bolt into the pitman arm, screw on the nut and tighten with an end wrench while keeping the wheels **straight ahead**. If you fail to have the wheels straight ahead you will have stiff steering to one side and no return on the other side as the rubber destroys itself. With both nuts tight and cotter pins inserted, you are ready to check the steering gear adjustment and enjoy tight steering.

One last note: Over the years I have replaced a lot of aftermarket plastic bushings that seized up on the bolt and put stress on the steering box as they resisted turning. Add that to the road shock that is transmitted into the box (without the rubber) plus a lack of any return to center assist, and I give a thumbs down to plastic bushings. Their only selling point is ease of installation.