INSTALLATION INSTRUCTIONS FOR NEW MDS (SELF-LUBRICATING) NYLON STEERING COLUMN SUPPORT BUSHING...

Please read the entire installation instructions before proceeding. If you're like me it's really hard, so read on... Thanks.

Brief description of how this bushing works – the bushing is a special self-lubricating MDS nylon bearing material. The bushing is a light/press fit on the inner race of the factory roller bearing and has a precision ID allowing your steering shaft to turn in a lubricated bushing/bearing surface. You will note that this bushing is considerably longer than the factory bushing giving you a greater bearing surface.

For Porsche cars 1974 - 1989
1. REMOVAL OF STEERING WHEEL, CIR CLIP AND STAR WASHER

a. **Do not use the ignition key lock as a stop** for undoing the 27mm nut. It’s better to use a 6” extension or a deep socket on the 27 mm nut. Also either have a second set of hands to hold the wheel while the other loosens the nut. Or, I take a 3’ broom handle and place one end under the dash and between the spoke of the wheel with the other end under my arm pit to hold the wheel while loosening and tightening the wheel nut, it’s not pretty, but gets the job done. For this operation I would suggest having or borrowing a ¾” breaker bar, 6” extension and socket. If you don’t have a 27 mm socket try 1-1/16” socket. Do not loosen the steering wheel nut with a torque wrench...

Just in case you decided to do the work before reading all of the directions be sure to do the following!

b. **Scribe hub to steering shaft.** It has been suggested by one of our members to lift the steering wheel so the top of hub is flush with the top of the steering shaft, then scribe a line across the hub and shaft so you can relocate the steering wheel when replacing it. You’ll be surprised how easy it is to be one spline off.

**Note:** Before you remove the wheel be sure to mark (index) the steering wheel hub to the steering shaft so you know on which spline to re-install the wheel.

c. I would **disconnect the battery** or **pull the horn fuse** (3rd from the ft. of the car) or place a piece of masking tape over the female spade that connects the horn wire to the steering wheel pad. This will prevent you from grounding the horn and scaring the peejeebers out of yourself.
d. **Remove the “C” clip from the steering post.** Placing a very small screwdriver between the “C” clip and the steering post and prying outward can accomplish this. Be careful not to let the “C” clip fly away, it has the capabilities of flying great distances at Mach II speeds.
e. **Remove the large external star washer.** You can pry up the tangs and it will pop out. Keep this for your parts bin, but you won’t need it with the new bushing.

f. **Scribe hub to steering shaft.** It has been suggested by one of our members to lift the steering wheel so the top of hub is flush with the top of the steering shaft, then scribe a line across the hub and shaft so you can relocate the steering wheel when replacing it. You’ll be surprised how easy it is to be one spline off.

g. **Factory bushing** – If remnants of the factory bushing still exist, do your best to pick out the pieces. When you install the new bushing some of the old factory bushing will be pushed down the steering tube. That has not caused any problems… If any remnants of the old bushing are still there try vacuuming the parts out.
Refer Photo 3

Shows Cir-clip, factory insert or 928 sleeve, and star washer that must be removed prior to installing new column support bushing.

2. INSTALLATION OF NEW BUSHING

*No grease is necessary

PHOTO 4

a. You will note that the bushing has two holes opposite each other on the face of the bushing. Inside these holes are Allen set screws (8-32). These screws can be turned in to lift or remove the bushing from the steering wheel hub if it becomes necessary.

b. Just tap the bushing into place with a wooden dowel, tap around the bushing, not just in one place. Once the bushing has clearance below the “C” clip groove in the steering column and you have a dead sound while tapping on the bushing you’ll know you’ve driven the bushing “home”. Peter from Austin had a 10” piece of 1” PVC with an end cap hanging around that worked perfectly for a setting tool.
Note: If you’re not sure of the steering wheel location on the steering shaft leave the 27mm nut lose and drive the car first to be sure the steering wheel is clocked correctly. It’s easy to be off one spline!

c. Re-install the “C” clip, I have found that I can get it started with my fingers then take pump pliers and squeeze it home. I’ve also been successful using a large screwdriver placed on the “C” clip and tapping on the screwdriver with a light hammer. Be careful the “C” clip has wings and can explode off the steering column at the slightest miscue.

Note: if the “C” clip has opened up from the removal process you might have to squeeze it down a tad with pliers to maintain a firm fit around the steering shaft.

d. Bentley’s calls for torque on the steering wheel 27 mm nut of 36 ft.lb. 50 Nm. Best you use two people; one to hold the wheel; the other to torque the nut. Trying to do both by your self can result in the torque wrench slipping off the nut and having it hit the windshield.

e. To remove the bushing use a 5/64” Allen wrench, turn the Allen wrench clockwise to screw the Allen set screw down on to the factory roller bearing, this will lift the nylon bushing off the steering column if it becomes necessary.

For any questions or if you have any suggestions on how the installation instructions might be improved, please contact Mitch Leland: mitchleland@austin.rr.com