

Removed seats in preparation of a new carpet install to find the fore/aft power screw (PS) hardware to be degraded or missing leading to a lot of slop in the action and noisy operation. The following is what I did as a fix for my **1987 S4**. YMMV. Apologies in advance for pictures being oriented “out of whack”



According to Roger, replacement hardware does not appear to be available – I selected alternate parts from McMaster-Carr - <https://www.mcmaster.com/>



Dry-Running MDS-Filled Nylon Sleeve Bearing  
Light Duty, Flanged, for 5/16" Shaft, 1/2" Housing ID

4 required  
(2 seats)

For 5/16" Shaft Dia.

7/16"	3/8"	9/16"	1/16"	40 lbs. @ 120 rpm	33 lbs. @ 120 rpm	Black	-40° to 170°	6294K436	1.14
7/16"	7/16"	9/16"	1/16"	41 lbs. @ 120 rpm	29 lbs. @ 120 rpm	Black	-40° to 170°	6294K207	5.05
7/16"	1/2"	9/16"	1/16"	50 lbs. @ 120 rpm	33 lbs. @ 120 rpm	Black	-40° to 170°	6294K437	1.34
1/2"	3/8"	11/16"	1/16"	35 lbs. @ 120 rpm	40 lbs. @ 120 rpm	Black	-40° to 170°	6294K208	4.96

Product Detail

Dry-Running MDS-Filled Nylon Sleeve Bearing,  
Light Duty, Flanged, for 5/16" Shaft, 1/2" Housing ID

Each

ADD TO ORDER



Push-on External Retaining Rings  
for 1/2" OD, Black-Phosphate 1060-1090 Spring Steel

1 pack required

Style	For OD	OD	Thick.	Ht.	Min. Installation Dp.	Passivation	Min. Hardness	Magnetic Properties	Pkg. Qty.	Pkg.
<b>Black-Phosphate 1060-1090 Spring Steel</b>										
A	3/32"	21/64"	0.01"	1/32"	0.058"	—	Not Rated	Magnetic	100	98430A114 \$4.95
A	1/8"	3/8"	0.01"	1/32"	0.058"	—	Not Rated	Magnetic	100	98430A116 4.70
A	5/32"	13/32"	0.01"	1/32"	0.058"	—	Not Rated	Magnetic	100	98430A119 5.43
A	3/16"	29/64"	0.01"	1/32"	0.062"	—	Not Rated	Magnetic	100	98430A118 5.33
A	1/4"	17/32"	0.015"	3/64"	0.074"	—	Rockwell C47	Magnetic	100	98430A120 5.83
A	5/16"	19/32"	0.015"	3/64"	0.074"	—	Rockwell C47	Magnetic	100	98430A132 6.78
A	3/8"	21/32"	0.015"	3/64"	0.074"	—	Rockwell C47	Magnetic	100	98430A134 7.63
A	7/16"	3/4"	0.015"	3/64"	0.09"	—	Rockwell C47	Magnetic	100	98430A136 8.91
A	1/2"	53/64"	0.015"	3/64"	0.108"	—	Rockwell C47	Magnetic	100	98430A138 9.90

Product Detail

Push-on External Retaining Rings for 1/2" OD, Black-Phosphate 1060-1090 Spring Steel


Packs of 100

ADD TO ORDER

## Plastic Round Shims




An alternative to metal shims, these shims are low friction and handle aligning, leveling, and spacing on shafts and machinery in high-temperature applications.

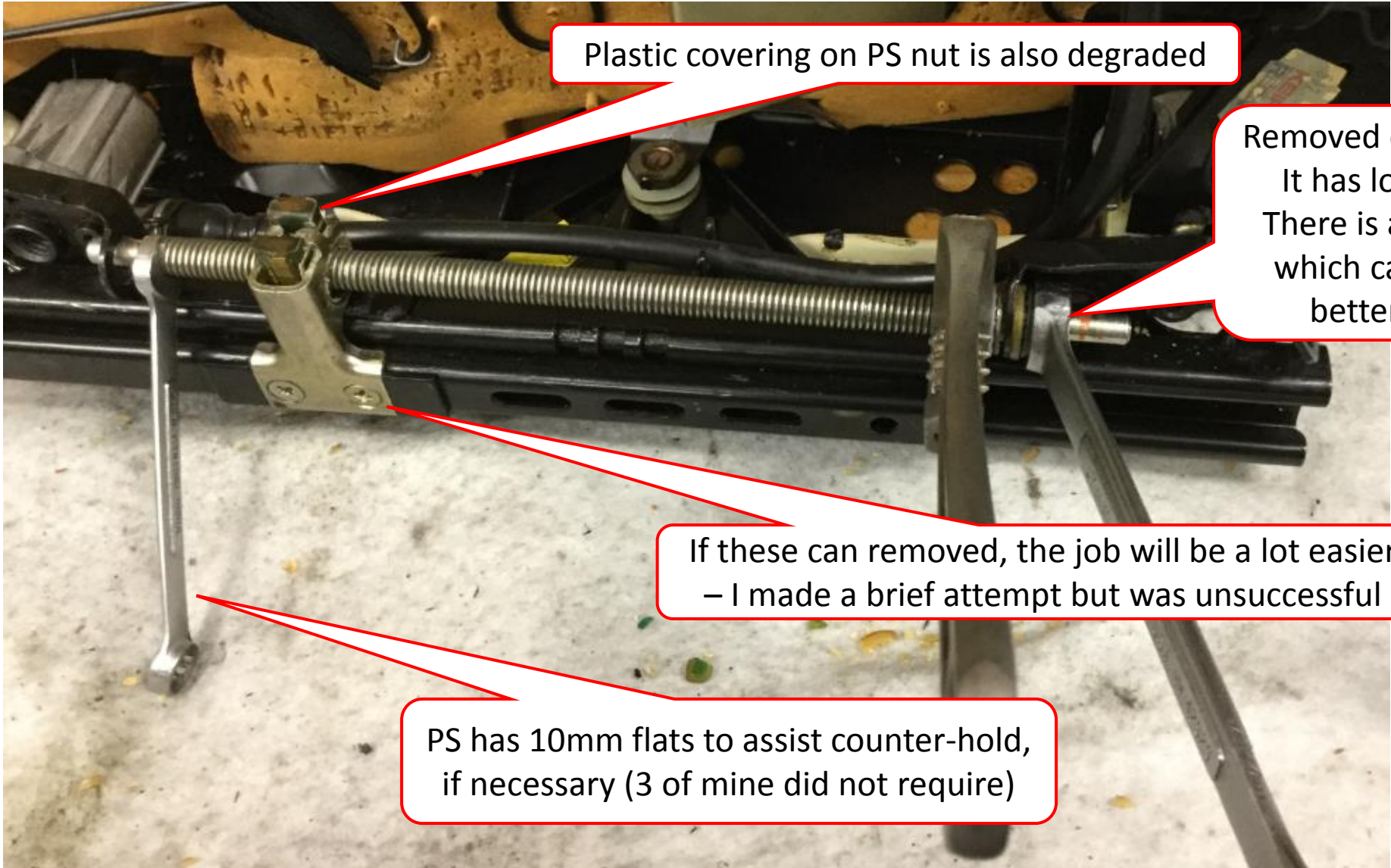
 For technical drawings and 3-D models, click on a part number.

ID	ID Tolerance	OD	OD Tolerance	Material	Color	Min. Hardness	Max. Temperature, °F	Pkg. Qty.	Pkg.
<b>0.005" Thick. (-0.001" to 0.001" Tolerance)</b>									
1/4"	0" to 0.015"	3/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	25	90334A111 \$12.49
1/2"	0" to 0.015"	3/4"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	25	90334A112 13.31
3/4"	0" to 0.015"	1 1/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	25	90334A113 15.11
1"	0" to 0.015"	1 1/2"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A114 8.55
<b>0.01" Thick. (-0.0015" to 0.0015" Tolerance)</b>									
1/4"	0" to 0.015"	3/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	25	90334A115 13.31
1/2"	0" to 0.015"	3/4"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	25	90334A116 14.14
3/4"	0" to 0.015"	1 1/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A117 7.57
1"	0" to 0.015"	1 1/2"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A118 8.88
<b>0.02" Thick. (-0.002" to 0.002" Tolerance)</b>									
1/4"	0" to 0.015"	3/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	25	90334A119 13.71
1/2"	0" to 0.015"	3/4"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A121 6.42
3/4"	0" to 0.015"	1 1/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A122 7.71
1"	0" to 0.015"	1 1/2"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A123 9.03
<b>0.03" Thick. (-0.003" to 0.003" Tolerance)</b>									
1/4"	0" to 0.015"	3/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A124 7.26
1/2"	0" to 0.015"	3/4"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A125 7.56
3/4"	0" to 0.015"	1 1/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A126 9.55
1"	0" to 0.015"	1 1/2"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	5	90334A127 8.85
<b>0.06" Thick. (-0.007" to 0.007" Tolerance)</b>									
1/4"	0" to 0.015"	3/8"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A128 9.88
1/2"	0" to 0.015"	3/4"	-0.01" to 0.01"	PTFE Plastic	White	Not Rated	500°	10	90334A129 10.52

1 pack of each required

Product Detail 

Plastic Round Shims, 0.06" Thick, 1/2" ID  Packs of 10



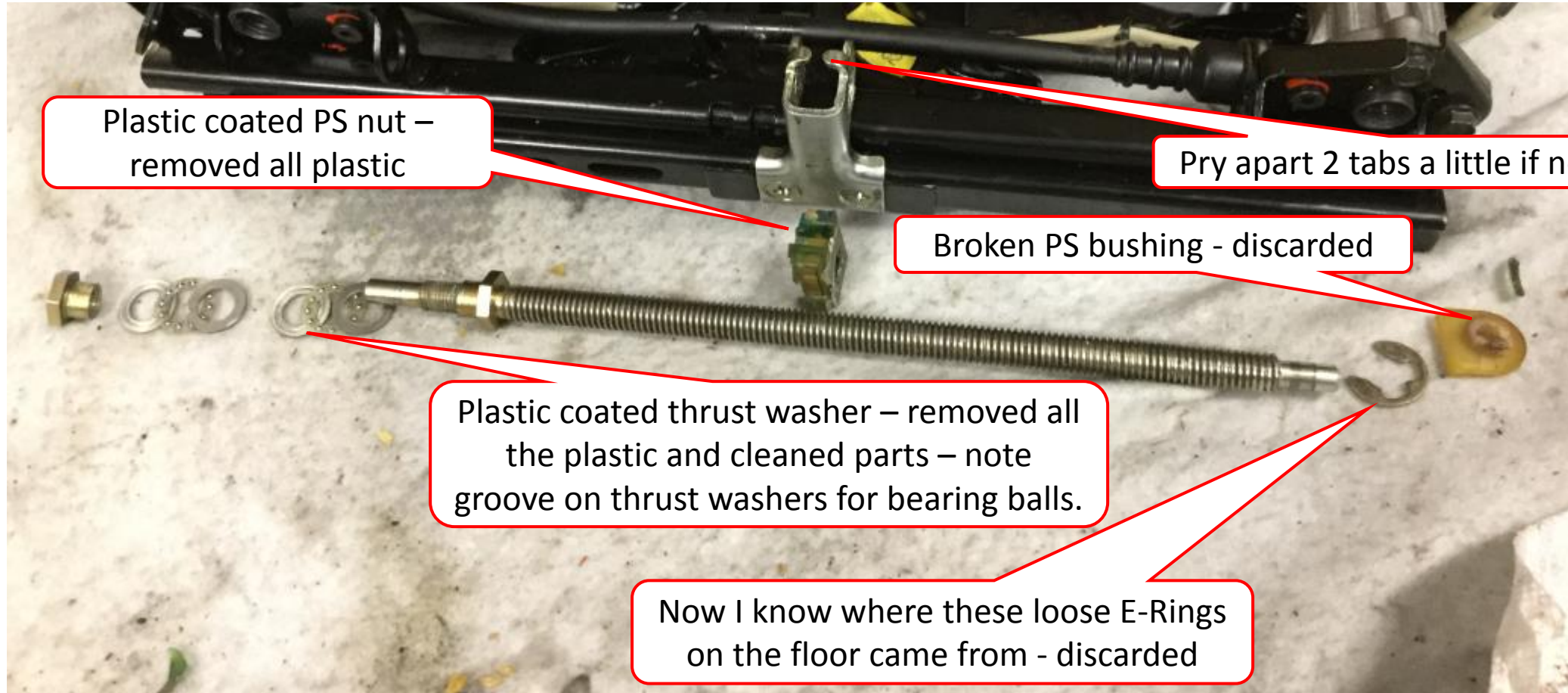
Plastic covering on PS nut is also degraded

Removed outer collar – 17mm  
It has locking compound.  
There is a cap screw nearby  
which can be removed for  
better wrench access

If these can removed, the job will be a lot easier  
– I made a brief attempt but was unsuccessful

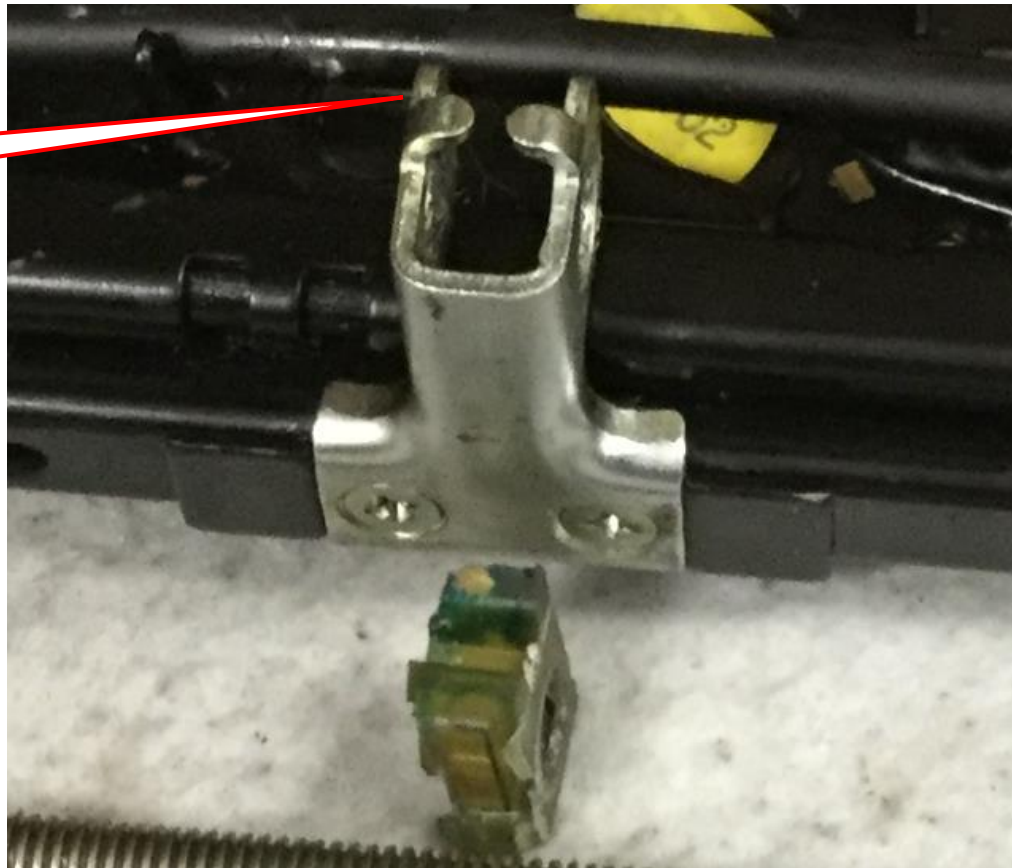
PS has 10mm flats to assist counter-hold,  
if necessary (3 of mine did not require)

Since I couldn't easily remove the nut carrier screws, I was able to remove the PS by threading it out. Move the nut/PS to the back of the seat, screw the PS rearward until the front clears the seat bracket, angle the PS out, away from the seat bracket at the front and thread the PS out. There is enough slop in the PS nut within the carrier to allow for enough angle to clear the seat bracket. Prying open the carrier at the 2 tabs may also help increase the angle, if necessary. Prying here also helps later with reassembly.

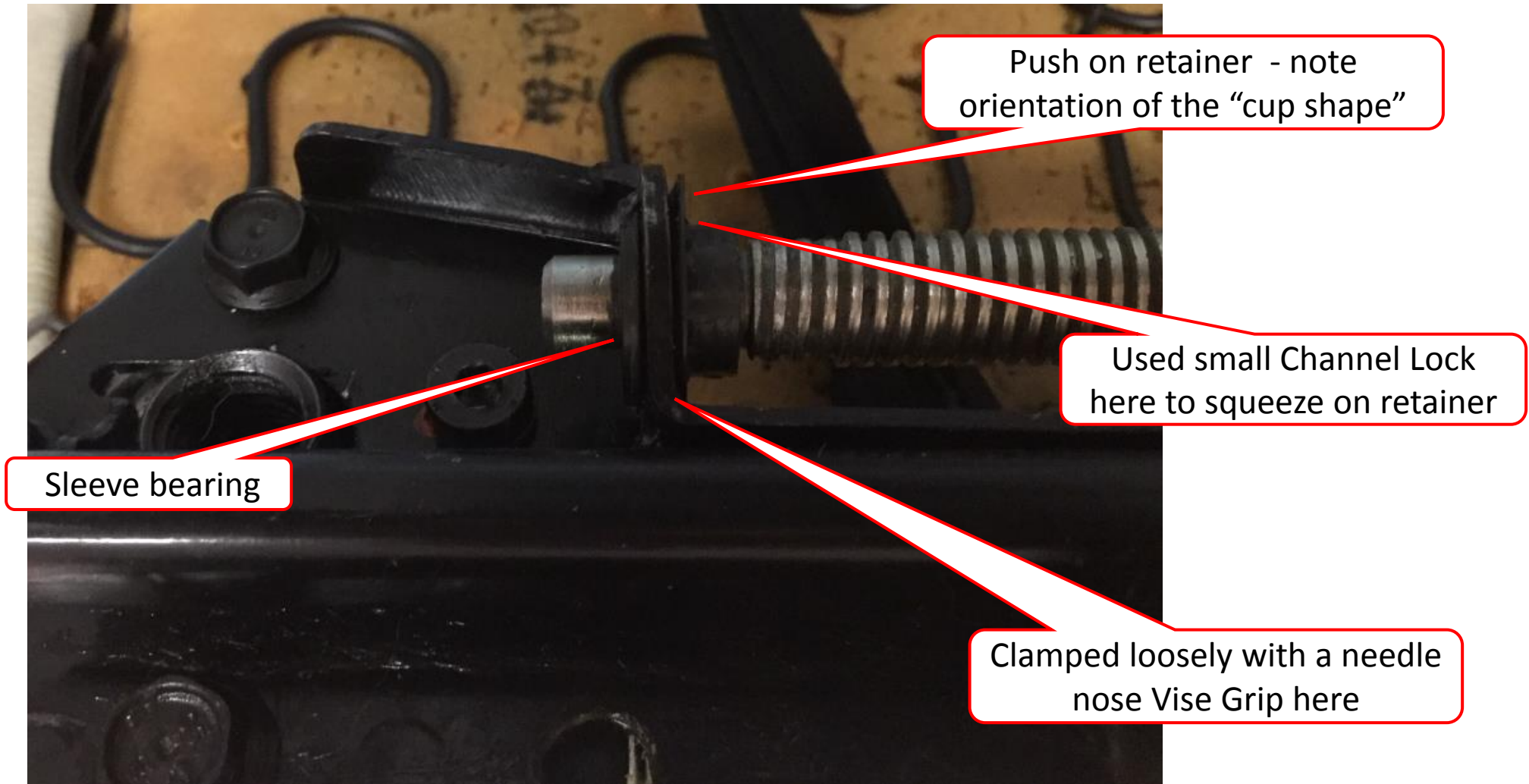


Unfortunately, I didn't take a picture of how I handled the PS nut. I originally ordered some slotted flat shims that I thought I would slide in place once the PS nut was reassembled. I didn't like how this was turning out, so did the following. First, I squeezed closed the nut carrier a bit so the 2 sides were parallel (note they are a little spread apart). Then, I stacked 2 of the rear bushing retainers together and added them to both sides of the nut (4 retainers total). Once slid into the nut carrier, the nut was tight within the carrier, but was able to angle to allow for the PS assembly. If one is able to remove the carrier, this is a non-issue. The retainers were added such that the largest diameter (of the "cup") was adjacent to both carrier walls.

Squeezed together to  
end up parallel



Trial fit the sleeve bearing – cleaned up surface of PS. Assembling the PS by threading it back in at an angle (not by removing the nut carrier) requires the retainer to be assembled before the front of the PS is located back into the seat bracket (at the front). To drive the retainer on to the sleeve bearing, I held it on with a Vise Grip on one side and used a Channel Lock plier on the opposite side to squeeze it home. I did this in stages rotating the bushing/retainer.



Trial fit the shim selection first - fully tightening to make sure the interface was tight (had no slop) yet rotated freely. The same shim configuration work at all 4 PS locations. Backed off collar and added locking compound to the threads and retightened. Spritzed bearings and PS with some grease.

