



Philes' Forum

by Vic Lucariello

Hello Bimmerphiles. Sorry to have been absent from the February Bulletin. This time out we continue with our saga of replacing E30 rear-subframe bushings.

I still wish to receive copies of your NJMVC emissions-inspection reports. You can either mail a photocopy of your report [preferred], or simply e-mail the test data. [Include your name, too, if you want to be famous and be mentioned in *Philes' Forum!*] Please include both the test results and the pass/fail criterion for each pollutant along with your model and year, transmission type, and mileage. If you know at what mileages your oxygen sensor and spark plugs were last replaced, include that as well. Please indicate what, if any, modifications have been made to your motor [aftermarket chip or software, intake, exhaust, etc.] and your exact model number [e.g., 328i, not 3-Series].

A recent submitter of no fewer than 3 emissions-test results is bimmerphile James from Jersey City. Thanks, James, and please forgive me for losing the e-mail with your last name. If you would be kind enough to e-mail me again, I will be happy to give you proper credit for contributing to *Philes' Forum*.

In the January *Philes' Forum* we left a poor E30 up on the lift with the inner sleeve of a rear-subframe bushing broken off and stuck in the car's unibody. Yikes! See Photo #1.



Photo #1 Yikes!

The first step in removing the broken-off part of the bushing inner sleeve is to remove the bushing from the subframe. Photo #2 shows the Chapter's bushing tool doing just this. Be sure to remove the spacer washer from the upper end of the subframe bushing prior to fitting the removal fixtures. The bushing is pulled from the subframe by tightening the nut shown near the bottom of the photo. Be careful, because the bushing and heavy removal fixture will want to fall to the ground when the bushing pulls free of the subframe; so be sure to restrain them from doing so.



Photo #2 Extracting old bushing

Note that undue torque is not required to pull out the bushing. A high required torque probably indicates that part of the removal fixture is jamming in the subframe, putting the threads of the removal fixture at risk of stripping. So keep this in mind and realign the removal-fixture pieces as required.

With the bushing removed, you can chisel out the remains of the broken inner sleeve from the socket in the unibody using a long chisel applied upwardly through the space in the subframe vacated by the removed subframe bushing. I use a long chisel bit in the pneumatic hammer [See Photo #3], but it can be done by hand if you are patient and have a long enough chisel. Photo #4 depicts the socket in the unibody all cleaned out and ready to receive a coat of anti-seize compound and the new subframe bushing.



Photo #3 "The Remover"

After removing any detritus from the inside diameter of the subframe where the old bushing

resided, you are ready to press in the new bushing [BMW Part # 33-31-1-129-144]. See Photo #5, which shows the Chapter's bushing tool reconfigured to install the new bushing, again by tightening the nut near the bottom of the photo. Note that considerably less torque is required to press the new, lubricated bushing into place than was required to extract the old bushing. Photo #6 depicts the new bushing pressed fully into place.

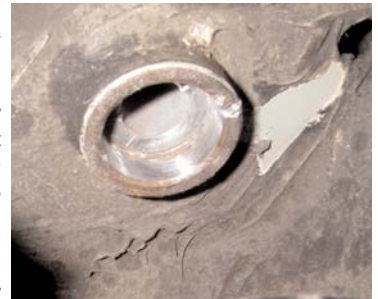


Photo #4 All dressed up and ready to go.

Prior to raising the subframe back into position, don't forget to reinstall the spacer washer that fits over the upper end of the subframe-bushing inner sleeve. I like to replace these washers [33-33-1-127-496; non-M3 or ix; about \$6 each] as they sometimes get deformed in being removed from the top of the old subframe bushing. Or you can upgrade to the M3 thicker washer [33-33-2-225-797; about \$23]. Also, don't forget to put some anti-seize compound in the unibody socket that will receive the subframe bushing inner sleeve when the subframe is raised back into position.



Photo #5 Installing the new bushing.

Raise the subframe, ensuring that the upper end of the subframe-bushing inner sleeve fits into the unibody socket. Then drop the 14-mm stud back down through the subframe bushing from inside the car, and reinstall the bushing-support plate. With the subframe-support jack still in place, install a new 14-mm nut [33-33-1-126-136] on the stud and torque to 140 newton-meters [101 lb.-ft.]. I like to retorque these after driving the car a bit.



Photo #6 New bushing pressed into place.

Except for the broken inner sleeve of the bushing, the job was a piece o' cake. Now, Alphonse, you get to do the other side by yourself.....

That is all for now, bimmerphiles. See you next time.

Anyone wishing to contribute to *Philes' Forum* should contact me at vic.sr@njbmwcca.org. I'm interested in tech tips, repair-maintenance questions and/or tips, repair horror stories, emissions inspection sagas, product evaluations, etc.

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