

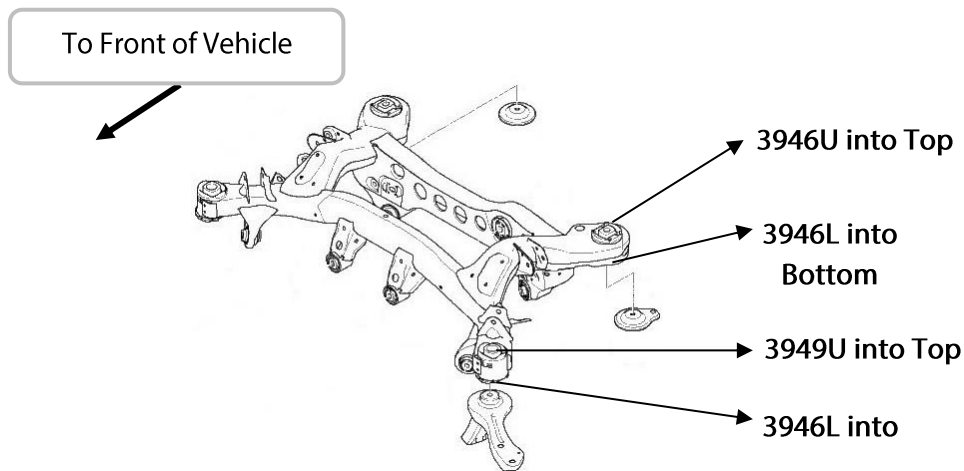
Fitting Instructions #3946IS

BMW 1 SERIES E81, E82, E87 & E88 / BMW 3 SERIES E90, E91, E92 & E93

BMW 1 SERIES F20, F21 / BMW 2 Series F22, F23, F87 / BMW 3 SERIES F30, F31, F35

BMW 4 SERIES F32, F33, F36, F82, F83 / BMW X1 E84 / BMW X3 E83

Rear Diff Mount Bushes replacement



- Jack vehicle up and put on stands/hoist, following manufacturer's recommendations, remove the rear sub frame and place it on separate jack stands then proceed to remove factory bushes;
- The factory subframe bushes are all rubber encapsulated. To remove the factory bushes you will need the following items: 1 x threaded rod and 2 matching nuts, (A) 1 x metal spacer where it's OD is slightly smaller than the ID/bore of the Subframe housing, (B) 1 x metal spacer where it's ID is slightly bigger than the ID/bore of the Subframe housing,

(C) heavy gauge washers one to sit outside on each of the metal spacer, (D) old pinion style bearing, 2 matching spanners;

- Set the tools up according to Figure 1 and draw the rear subframe front factory bush out. Make sure that the metal spacers are lined up correctly. Also, cover the bearing with a rag in case of failure, appropriate safety equipment must be used. You will need bigger size metal spacer to remove the rear subframe rear bush.

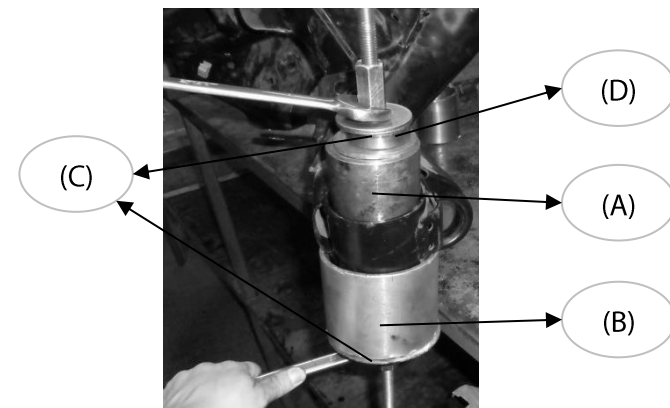


Figure 1: Tools setup for removing factory bushes (Refer to point 2).

Fitting Instructions #3946IS

- Clean housing areas to remove any old original bushing materials before installing new bushes. Apply the grease supplied to the housing and the outside of the bush, then push the new bushes in.
- To fit the crush tubes into the bushes, apply the grease supplied to the bore of the bush and the outside of the crush tube and push it in. To aid crush tube installation, you may use a pair of multi grip or slide a booker rod through the bore of the crush tube, two washer one on top of the crush tube and the other on the bottom of the bush flange, and two matching nuts (See figure 3(b)). Then, wind one of the nuts in clockwise direction ensuring the other spanner is holding the other nut. Repeat process to install the rest of the bush.
- Special note: For front mount, larger ID of the crush tube must face up on 3949U Bush
- For rear mount, make sure the recess of 3946U is position according to Figure 2(c)
- Refit the rear subframe to the vehicle and all other suspension member ensuring that you use manufactures torque settings on all fasteners and carry out a wheel alignment.

Rear Subframe - Rear Mount Installation

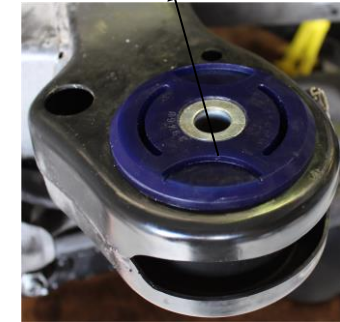


Figure 2: (a)



(b)

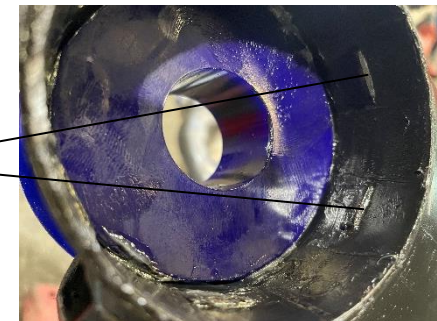
3946U: Note the recess Position of bush



(c)

To Front of Vehicle ↑

Note on the F Series vehicles, you may need to grind back the tabs to allow the bushing to be timed



Rear Subframe - Front Mount Installation



Figure 3: (a)



(b)



(c)

The larger ID of the crush tube must face on 3949U