D280-0004A Low Compliance Bushing Kit
Installation Instructions

Applications: 128i, 135i: E82, E88
325i, 328i, 330i, 335i: E90, E92, E93

PARTS LIST

Qty	Part No.	Description
2	D283-0004	Rubber Mounts Front
2	D283-0005	Rubber Mounts Rear
2	D283-0011	Tension Strut Bushings
2	31 10 6 767 496	Lock Nuts with clip
2	31 10 6 755 474	Lock Nuts with flange

REQUIRED TOOLS

Some BMW tools will be needed to remove and install the subframe mounts. The BMW-TIS instructions for removing the subframe mounts has the tech lower the subframe to remove and install the mounts. The differential can remain on the subframe. BMW recommends a specific subframe "securing fixture" which is the best way, alternatively, you can use a transmission jack and at least two screw jacks to support the subframe assembly.

- 83 30 0 492 397, Universal Support
- 83 30 0 494 927, Tool Kit
- 83 30 0 494 926, Tool Kit
- Tire Lube (slippery when wet then stays stuck when it dries). Do not use grease or silicone!

LOWER THE REAR AXLE CARRIER

1. Refer to the BMW TIS #33 31 503 procedure to carefully lower the subframe about 4". This should be enough room to allow you to remove the stock subframe mounts, and install the Dinan mounts. You may need more or less space depending on the tools you use to install the two front mounts.

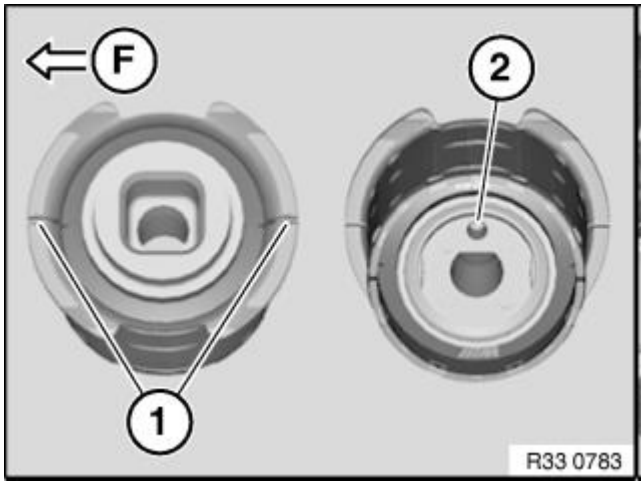
REMOVE THE STOCK SUBFRAME MOUNTS

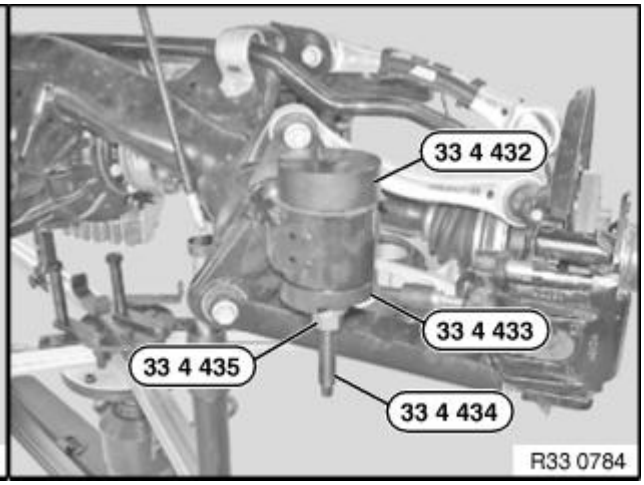
2. Refer to the TIS #33 33 101 procedure to remove the stock subframe mounts. **You can also use this procedure to <u>install the two rear Dinan mounts as they install from the bottom</u> same as the stock mounts. <u>The two front Dinan mounts must be installed from the top</u> and pulled down into the subframe unlike the stock bushings. Refer to the following steps.**

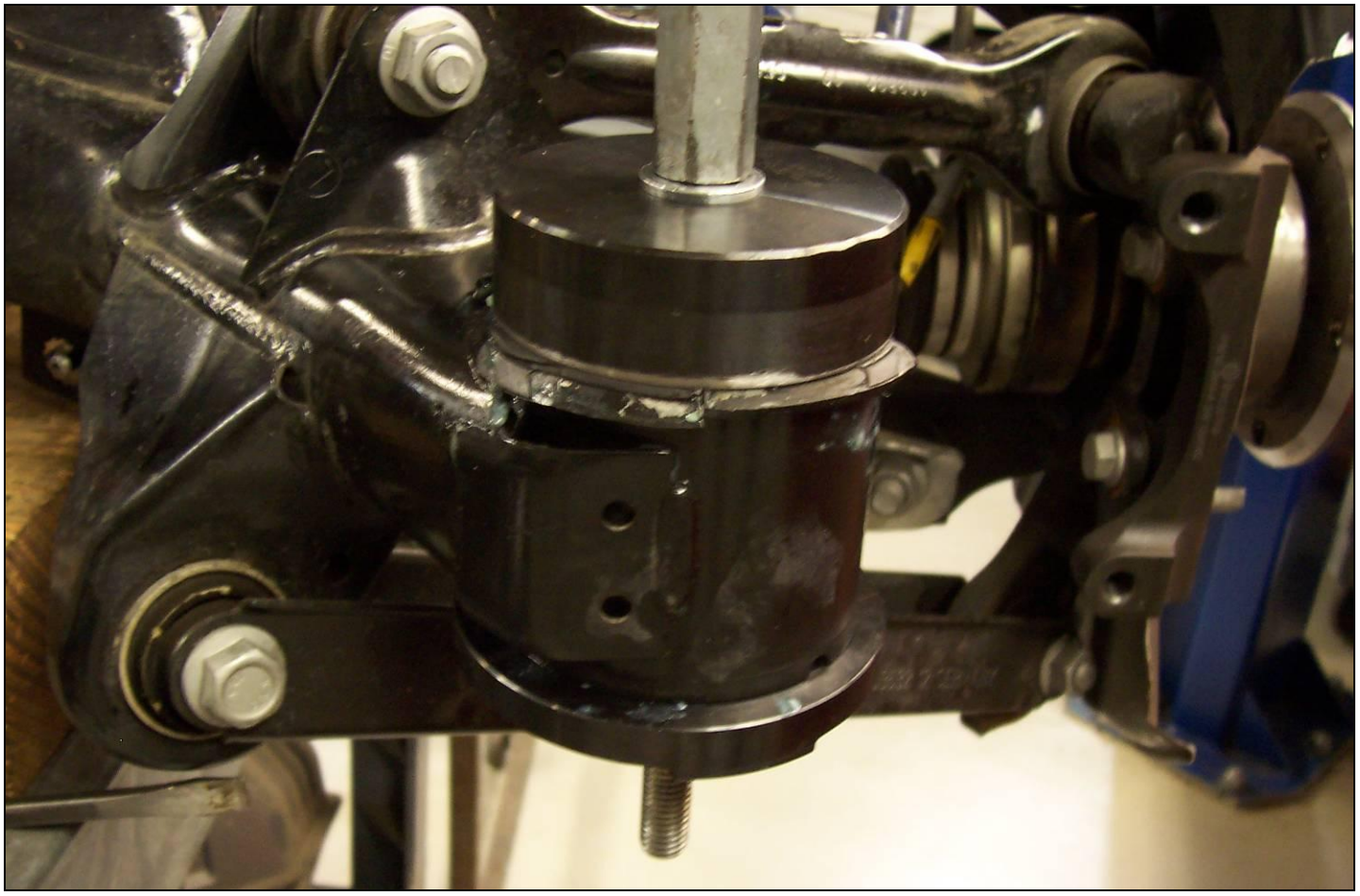
INSTALL THE TWO FRONT DINAN SUBFRAME MOUNTS

3. When you installed the two rear Dinan Subframe mounts the rounded edge of the bores help protect the rubber surface of the mounts during installation. Since the bore edges for the two front mounts are somewhat sharp, they often dig into the surface of the mount and damage the mount on the way in. For this reason, use a die grinder or at least a small half-round file to round off the top edge of the mount bore. The combination of this chamfering and liberal lubrication on the outside of the mount and the inside of the bore should make installation easy. Use the following photos to help you properly install the two front mounts. **Note:** The tools shown in the large photo are not exactly the same as the BMW tools, which were not available at the time of this writing.

   - *Important!*
   - Arrows (1) must point in direction of longitudinal axis!
   - Opening (2) on underside must point to left!







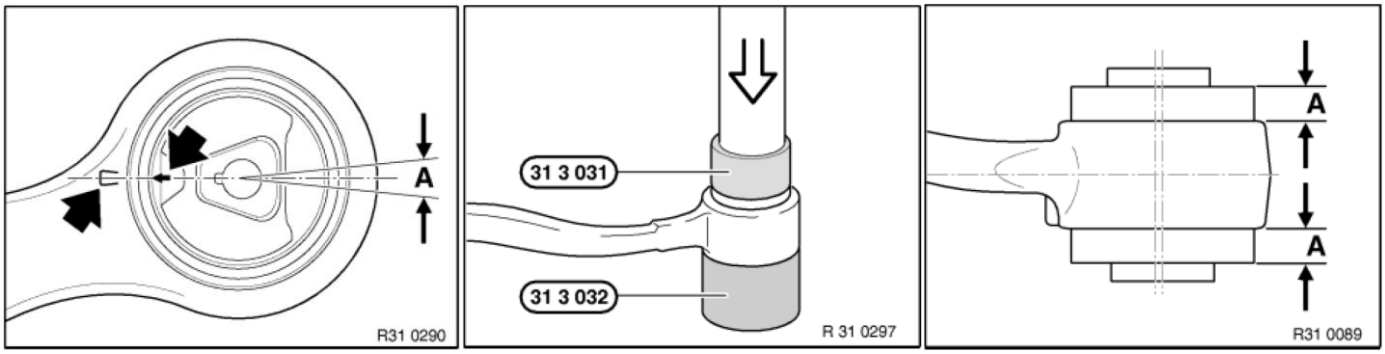
4. When you have all four of the new subframe mounts installed you can reinstall the subframe Assy in reverse order of removal.

INSTALL TENSION STRUT BUSHINGS

5. Refer to the BMW TIS # 31 12 138 procedure to R&R the Tension Strut bushings. The bushings may be replaced one time only. Follow the procedure to determine if the bushings may be replaced. If the bushings cannot be replaced, please contact Dinan for a complete tension strut with the low compliance bushing already installed.

6. Use suitable tools when removing the bushings to prevent damage to the tension strut.

7. Take care to align the bushings as shown in the procedure, and use suitable tools when pressing in the bushings to prevent damage.



8. Remember to torque the wheel bolts.

ALIGN SUSPENSION

9. An alignment must be performed after installation of this kit. Please use the specifications below.

Suspension Specifications

135i/335i with Low Compliance Bushings

Tire Pressures:

- Pressures are set with COLD tires.
- Front = 35 psi
- Rear = 35 psi

Alignment Settings:

- These specifications are for a vehicle with full fuel tank and no ballast inside the vehicle.
- During suspension installation, set the front guide supports at the maximum negative camber position (you must remove the locating pin).

Stage 1 or 2			**Stage 3 (with Dinan Camber/Caster plates)**		
FRONT	Setting	Tolerance	**FRONT**	Setting	Tolerance
Camber	-0.6°	±0.5°	Camber	-1.1°	±0.5°
Caster	6.5°	±0.5°	Caster	6.5°	±0.5°
Total Toe	0.07°	±0.07°	Total Toe	0.07°	±0.07°
REAR			**REAR**		
Camber	-1.6°	±0.4°	Camber	-1.8°	±0.4°
Total Toe	0.23°	±0.17°	Total Toe	0.23°	±0.17°