

BMW F3x Poly Rear Subframe Bushing Set Installation Instructions - [ES4304572](#)



Thank you for purchasing your new ECS Tuning Poly Rear Subframe Bushing Kit, we appreciate your business!



These installation instructions have been broken up into several sections:

- 1) Subframe Removal**
- 2) Front Bushing Installation**
- 3) Rear Bushing Installation**
- 4) Reassembly**

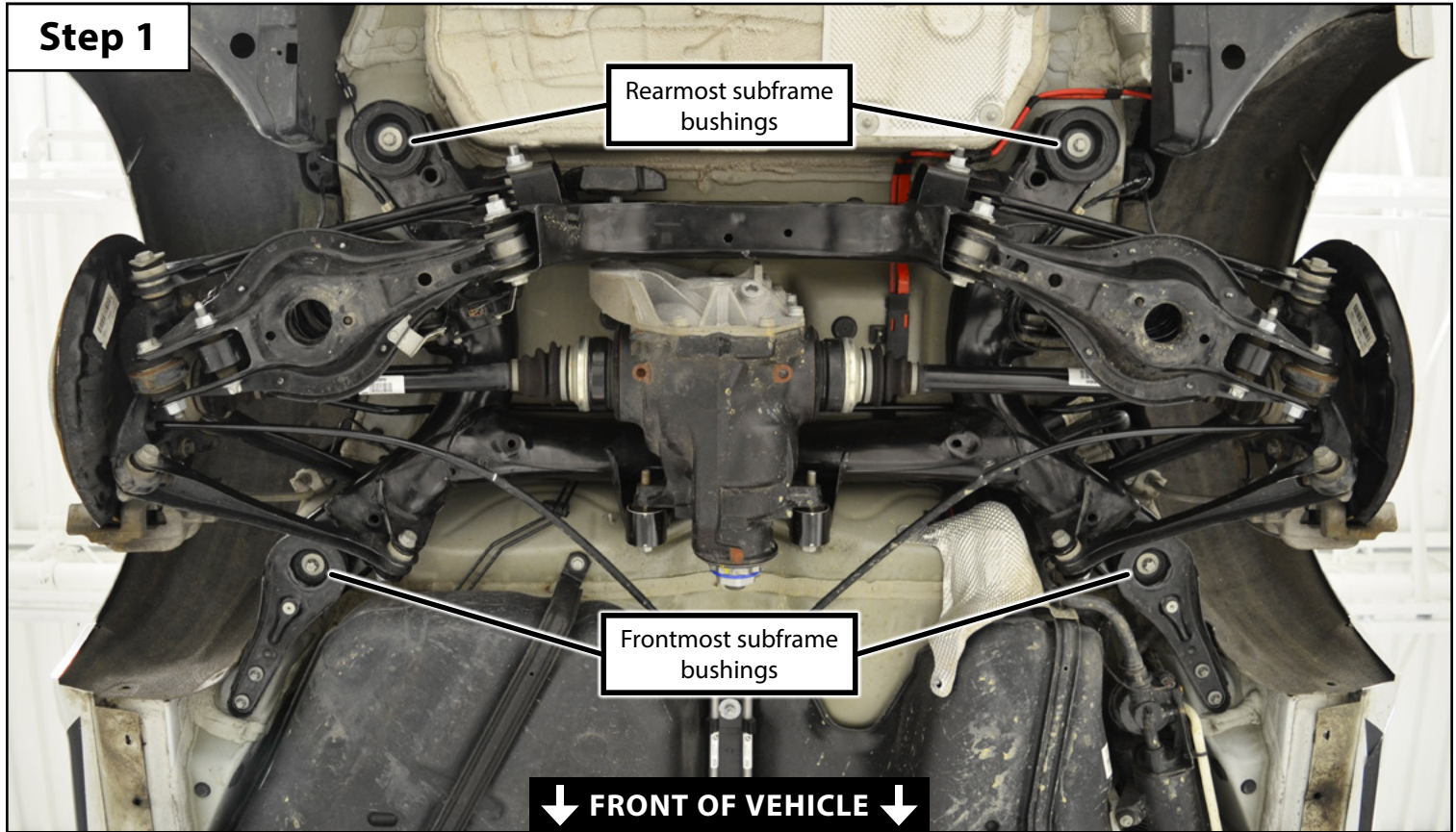
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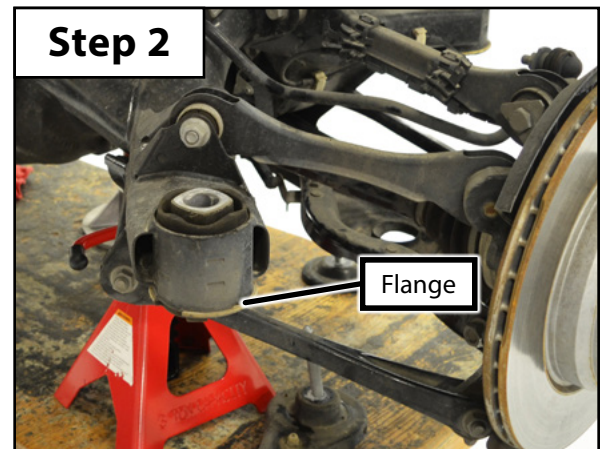
Section 1: Subframe Removal



- Step 1**
- Remove the subframe from the vehicle (reference **Step 1 Photo**). This will include the following steps:
 - Remove the rear wheels
 - Remove the exhaust system and heat shields
 - Remove all applicable underbelly panels
 - Disconnect the driveshaft from the differential
 - Disconnect the rear vehicle level sensor from the LCA (if applicable)
 - Remove the rear coil springs
 - Disconnect the rear brake pad sensor
 - Remove and safely support the rear brake calipers
 - Disconnect the parking brake cables from the drums inside the rear rotors
 - Disconnect all wiring harness connections between the subframe and the chassis
 - Support the subframe from below
 - Remove the subframe bolts and brackets
 - Lower the subframe and safely support it

- Step 2**
- Remove the stock subframe bushings (**Step 2 Photo**). There are two ways of doing this:
 1. Use the BMW tool or equivalent
 2. Use a chisel to break off the plastic flanges, then use a press to remove them.

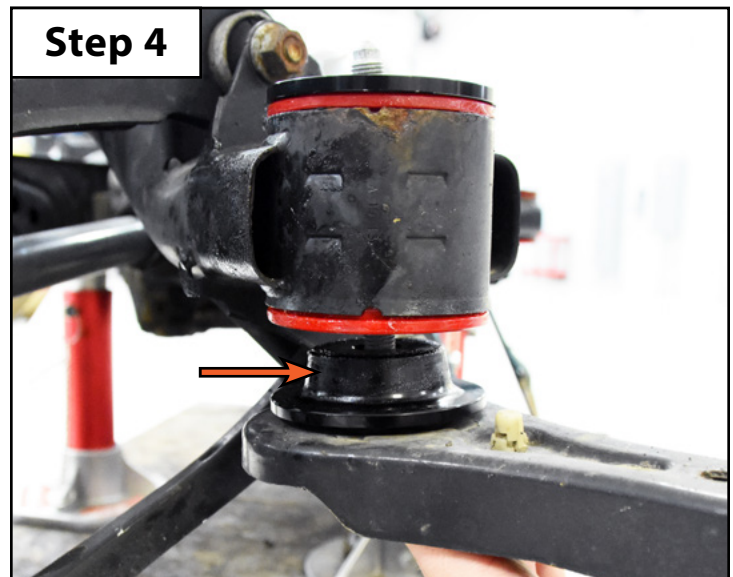
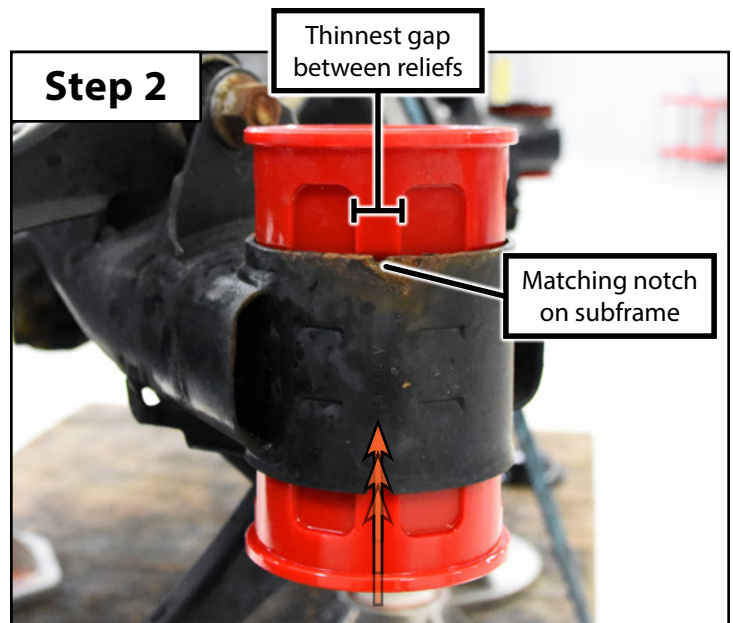
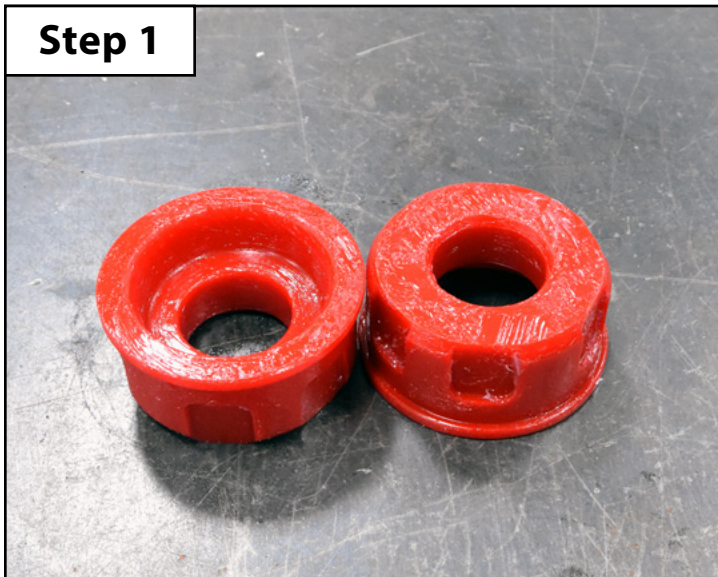
NOTE: Be sure to note their orientation before removal.
NOTE: Be careful not to deform the subframe.



- Step 3**
- Prep the subframe.
 - Clean, remove rust and paint if necessary.
 - Remove leftover bushing material.
 - Be careful not to damage the bushing mount surface.

Section 2: Front Bushing Installation

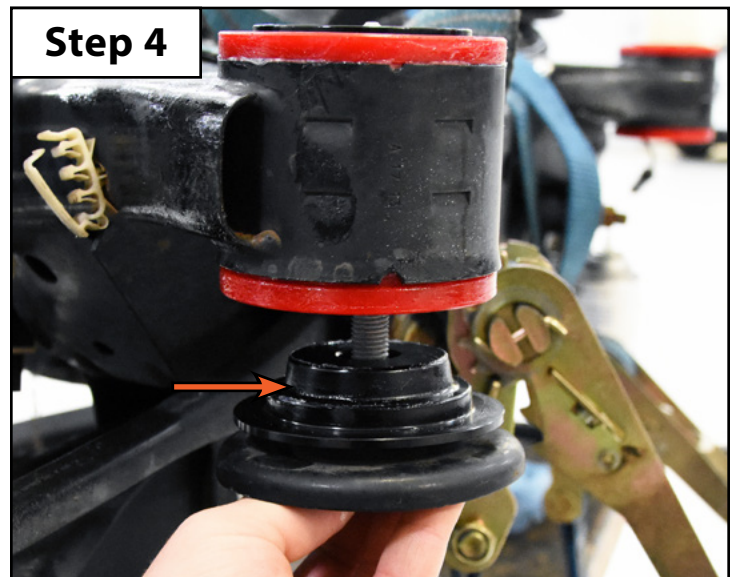
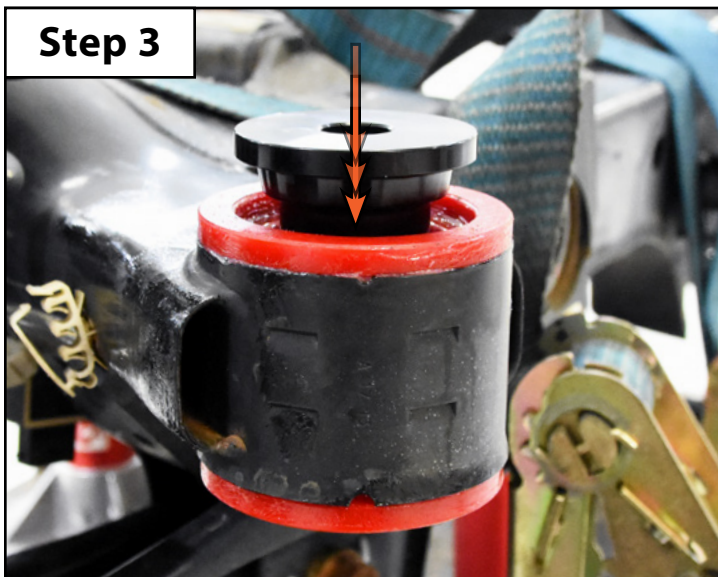
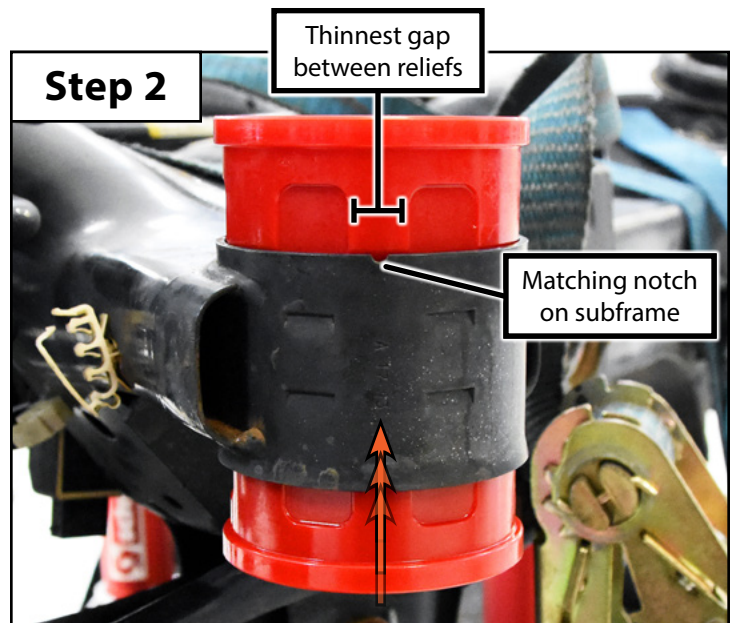
- Step 1** • Apply the supplied poly grease to the entire surface of the (smaller) front subframe bushings (**Step 1 Photo**).
- Step 2** • Press the front bushings into the bushing bores as shown (**Step 2 Photo**).
- Our bushings are designed with reliefs cut into the poly to allow the teeth in the bushing bore to pass through the poly without damaging it.
 - Inspect the bushings and identify the two reliefs which are closest together, the gap between these reliefs must be aligned with the alignment notch on the subframe bushing bore as shown.
 - Press the bushing into the bore until the bushing flanges are just flush to the subframe, **DO NOT** attempt to press them in any further.
- Step 3** • Press the upper insert down into the bushing as shown until it is fully seated (**Step 3 Photo**).
- Step 4** • Slide the lower insert onto the subframe brace as shown, these inserts will be secured to the bushing by the subframe bolts (**Step 4 Photo**).



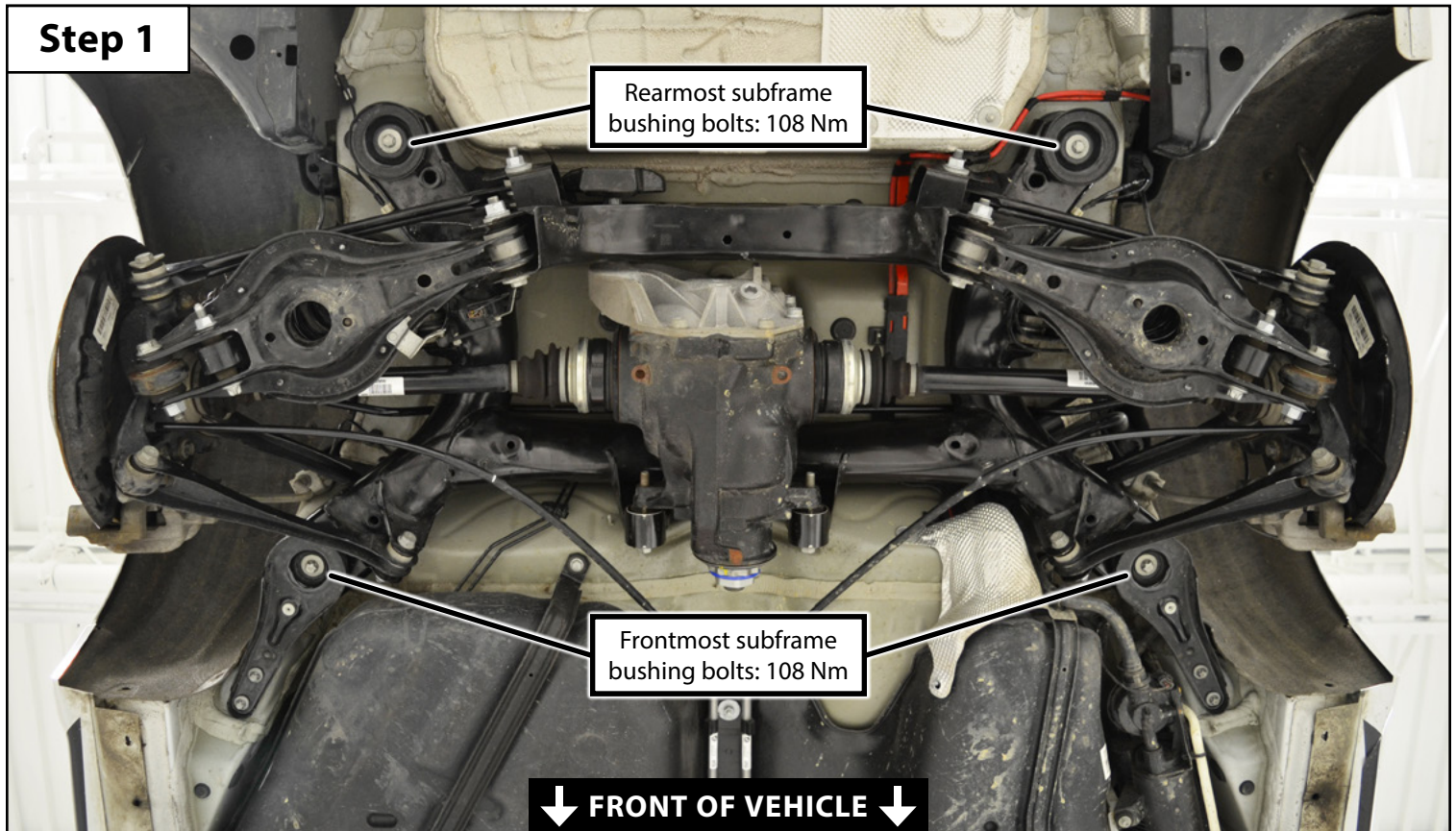
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Section 3: Rear Bushing Installation

- Step 1** • Apply the supplied poly grease to the entire surface of the (larger) rear subframe bushings (**Step 1 Photo**).
- Step 2** • Press the rear bushings into the bushing bores as shown (**Step 2 Photo**).
 - Our bushings are designed with reliefs cut into the poly to allow the teeth in the bushing bore to pass through the poly without damaging it.
 - Inspect the bushings and identify the two reliefs which are closest together, the gap between these reliefs must be aligned with the alignment notch on the subframe bushing bore as shown.
 - Press the bushing into the bore until the bushing flanges are just flush to the subframe, **DO NOT** attempt to press them in any further.
- Step 3** • Press the upper insert down into the bushing as shown until it is flush with the bushing surface (**Step 3 Photo**).
- Step 4** • Slide the lower insert onto the subframe bushing cup as shown, these inserts will be secured to the bushing by the subframe bolts (**Step 4 Photo**).



Section 4: Reassembly



- Step 1**
- Reinstall the subframe into the vehicle in the reverse order of removal (**Step 1 Photo**).
 - Tighten all suspension arms and shock absorber fasteners to final torque with the suspension set to ride height.
 - Test the parking brake and adjust if needed.
 - Perform a 4-wheel alignment.