



VW 4Motion Rear Diff Bushing Insert Kit Installation Instructions



Thank you for purchasing your new ECS Tuning 4Motion Rear Diff Bushing Insert Kit, we appreciate your business!



Billet 6061-T6 Aluminum Bushing Cap:

- Black anodizing on the cap looks awesome and provides a durable and corrosion resistant finish.
- Designed to fill the voids left in the stock rubber diff bushing.



RED Polyurethane Bushing Insert:

- Designed to fill the voids left in the stock rubber diff bushing.
- Increased drivetrain rigidity and response.
- Significant reduction in rear diff movement.



When you put the pedal to the metal, you want the vehicle to respond. We're not talking slow, mushy, eventually get there response, we're talking about crisp, immediate, put you back into the seat **instant response**. You know what we're talking about.

What's one of the biggest things to steal this response time right out from underneath you? Your drivetrain mounts. The stock soft, cushy, original rubber mounts have a habit of absorbing power and keeping it from where you want it - on the asphalt. At ECS Tuning, we've engineered the perfect solution with our rear diff bushing inserts for your VW 4Motion, and these installation instructions will show you how it's done!

These installation instructions have been broken up into several sections:

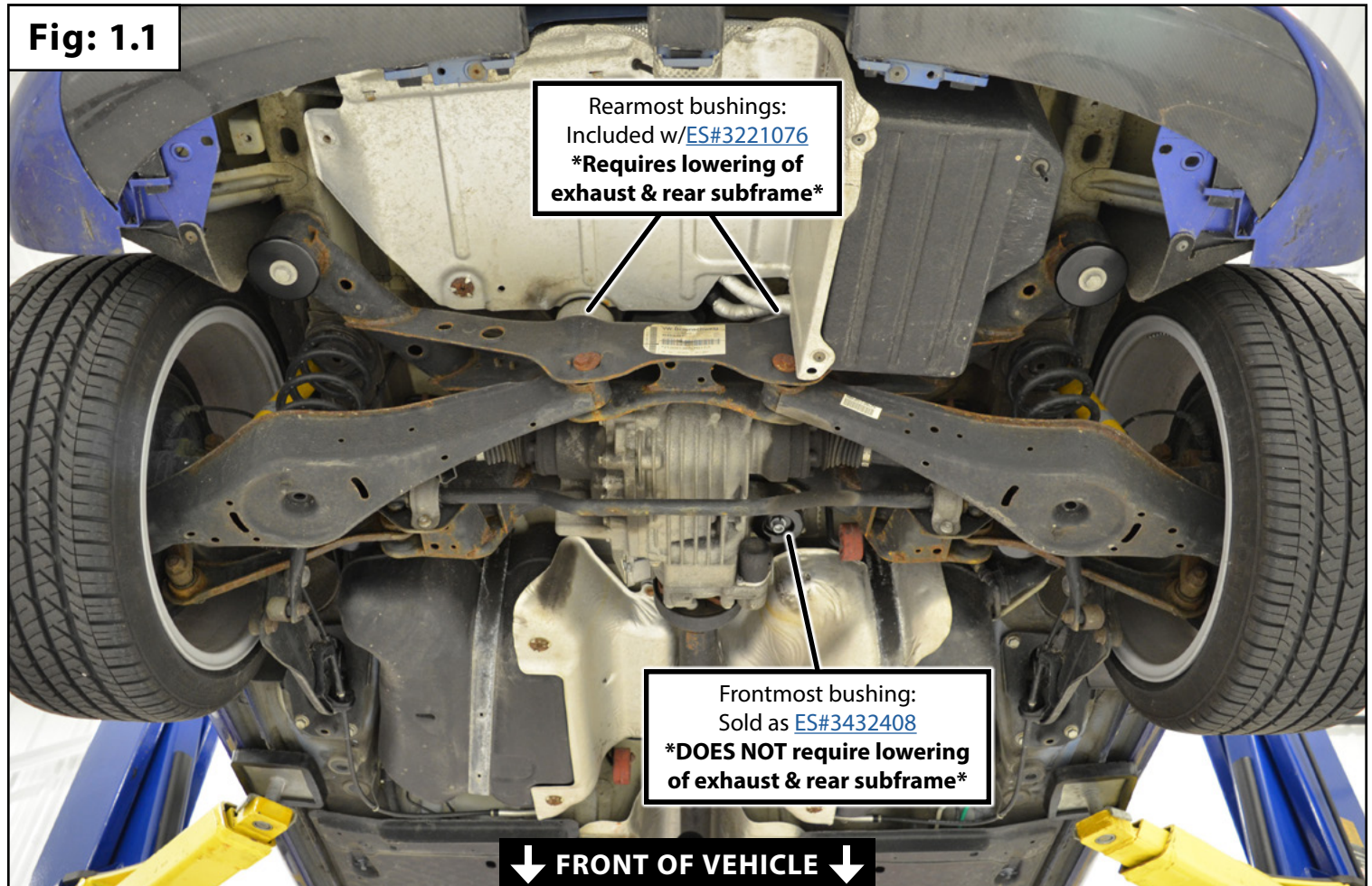
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Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

Section 1: Introduction

There are a total of three rear diff bushings on MK5, MK6 and MK7 4Motion vehicles, and the difficulty of each install varies depending on your application.

Before we begin, take a moment to look over the photo below (**Fig: 1.1**) and familiarize yourself with the locations of the diff bushings, and the difficulty descriptions/ratings at the bottom of the page.



- MK5, MK6 and MK7 4Motion vehicles all share the same installation procedure for the **frontmost** bushing insert. This procedure is outlined on pages 3-4, and it is rated as an **EASY** install.
- It is possible on MK5 and MK6 4Motion vehicles to install the **rearmost** bushing inserts without completely lowering the subframe. This procedure is outlined on pages 5-6, and it is rated as a **MODERATE** install.
- MK7 4Motion vehicles require the subframe to be lowered in order to install the **rearmost** bushing inserts. This procedure is outlined on pages 7-8, and it is rated as an **ADVANCED** install.

Difficulty Level:

1 - Easy



Difficulty Level:

2 - Moderate



Difficulty Level:

3 - Advanced



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Section 2: Frontmost Bushing Insert Installation (MK5, MK6 & MK7)



Step #1

- Use a jack to support the diff, with a block of wood to distribute the load.
- Ensure that your support jack is holding the diff in a stable, safe manner.

Step #2

- Remove and discard the M12x75mm bolt which secures the bushing to the chassis with an M14 Triple Square socket and breaker bar (**Fig: 2.1**).

Step #3

- Pry the stock bushing cap out of the bushing with a flat blade screwdriver (**Fig: 2.1**).

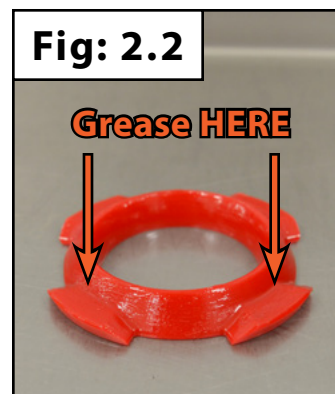
Step #4

- Remove the factory washer from between the diff bushing and the chassis (**Fig: 2.1**).

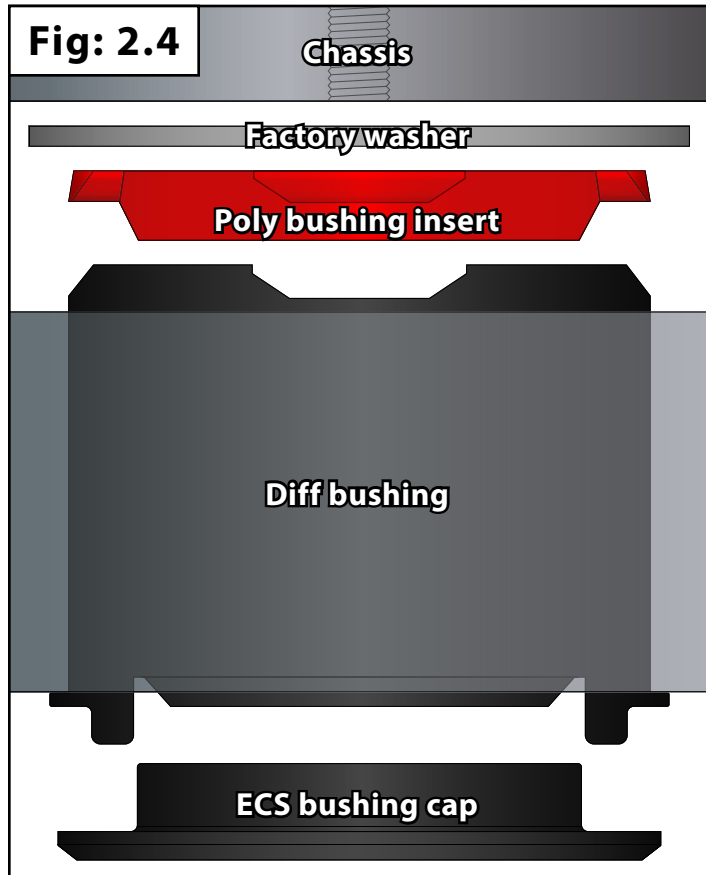
Step #5

- Apply a thin coat of the included poly bushing grease to the inside surfaces and fingers of the poly bushing insert (**Fig: 2.2**).
- **Do not** apply any of the grease to the surface which contacts the factory washer we removed in step 4 (**Fig: 2.3**).

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THE NEXT PAGE:**



Section 2: Frontmost Bushing Insert Installation (MK5, MK6 & MK7)



Step #6

- Align the fingers of the poly bushing insert with the grooves in the bushing, then slide the insert in by hand until it bottoms out (**Fig: 2.4**).

Step #7

- Reinstall the factory washer between the diff bushing and the chassis (**Fig: 2.4**).

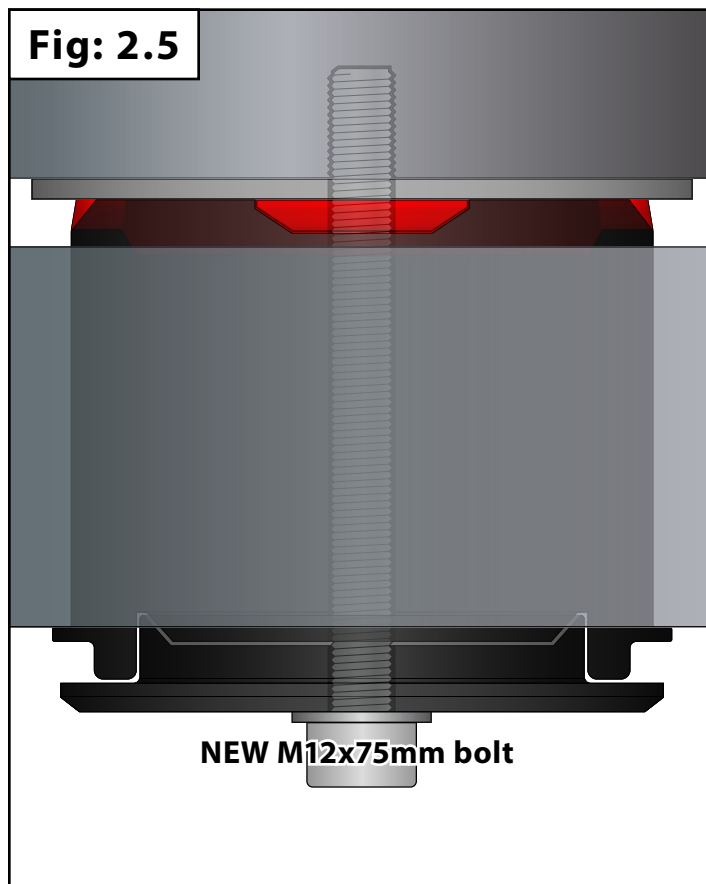
Step #8

- Align the new bushing cap with the other end of the diff bushing and push it in by hand until it stops (**Fig: 2.4**).

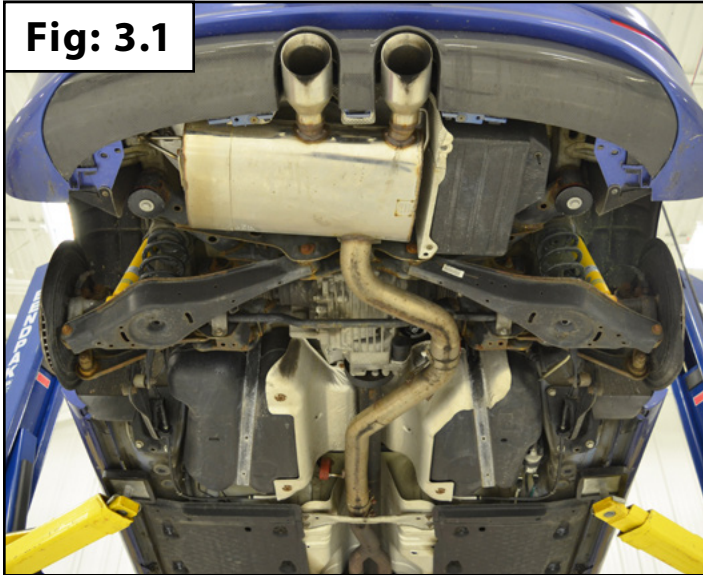
Step #9

- Thread the new M12x75mm bolt in by hand (**Fig: 2.5**).
- Torque the new diff mount bolt to 60 Nm (44 Ft-lbs) + 180° (**Fig: 2.6**).

Your MK5, MK6 & MK7 frontmost bushing insert installation is complete!



Section 3: Rearmost Bushing Insert Installation (MK5 & MK6 only)



Step #1

- Remove the exhaust system (**Fig: 3.1**).

Step #2

- Remove the heat shield (**Fig: 3.2**).
- Use a jack to support the subframe with a block of wood to distribute the load.
- Remove and discard the rearmost subframe bolts and lower the subframe approximately 2" inches (**Fig: 3.2**).
 - Be careful to not stretch or kink the wiring, brake hoses, cables, etc.

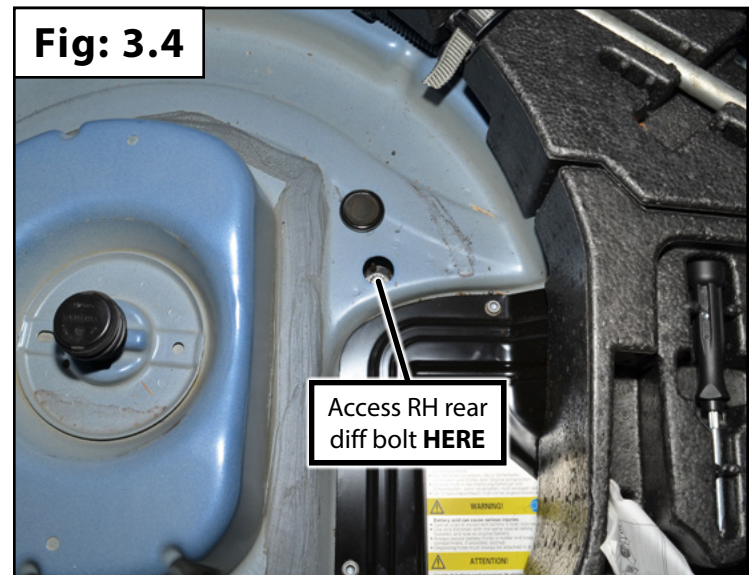
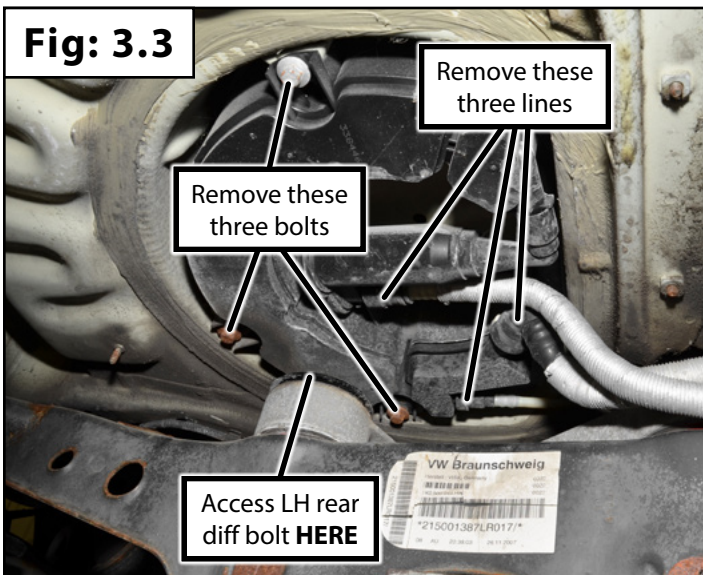
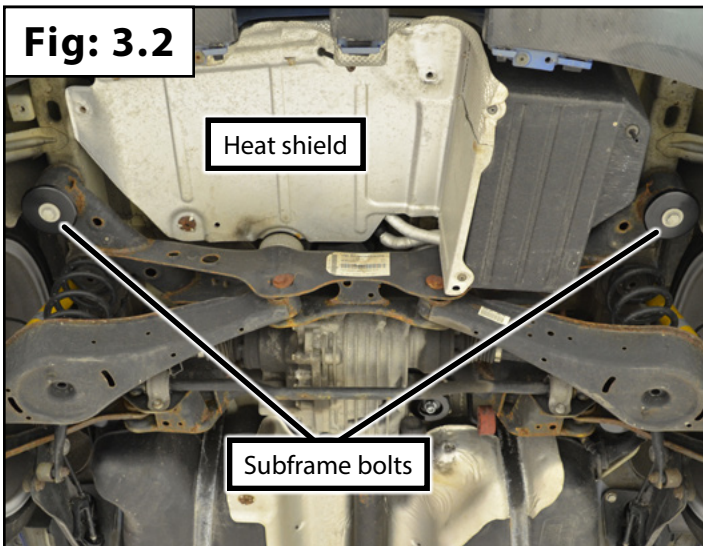
Step #3

- Disconnect all of the vent lines from the EVAP canister (**Fig: 3.3**).
- Remove the bolts from the EVAP canister (**Fig: 3.3**).
- Release the retaining tabs and remove the EVAP canister (**Fig: 3.3**).
- You will now have enough room to remove the LH rear diff mount bolt.

Step #4

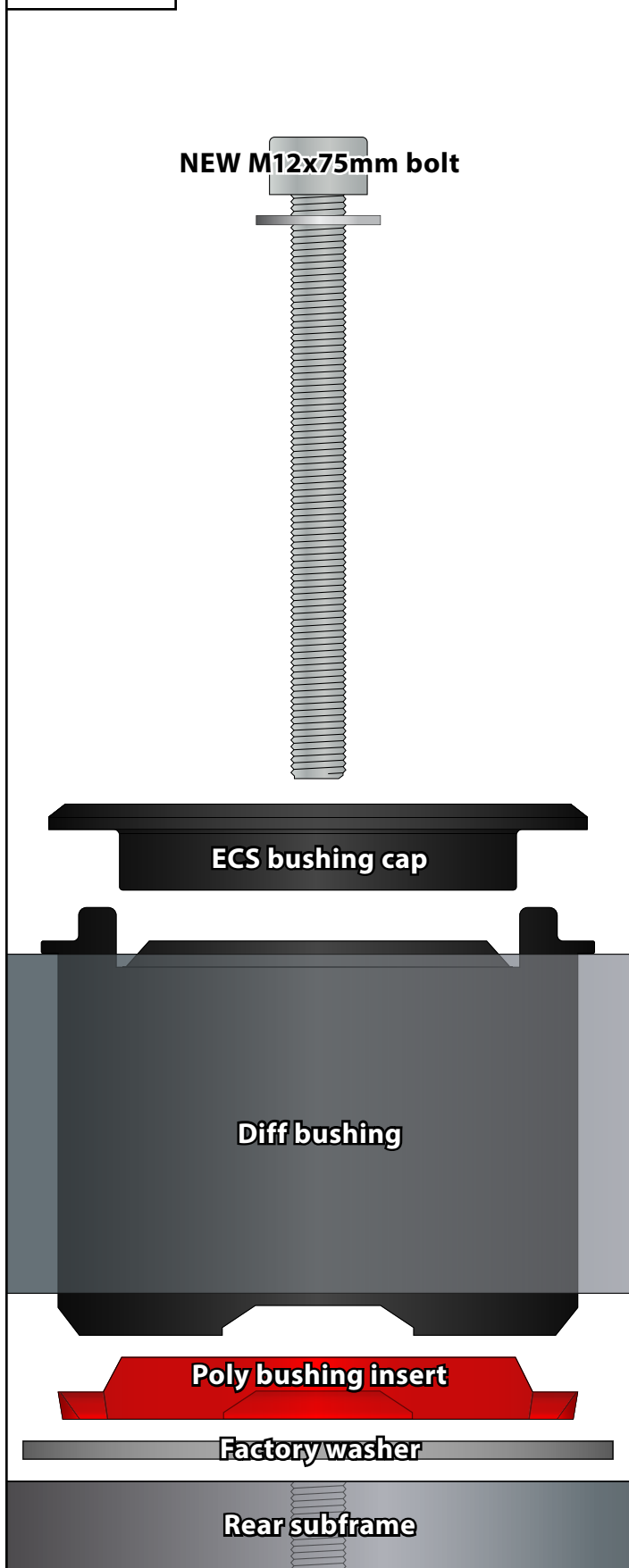
- Remove the grommet in the trunk floor to access the RH rear diff mount bolt (**Fig: 3.4**).

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Section 3: Rearmost Bushing Insert Installation (MK5 & MK6 only)

Fig: 3.5



Step #5

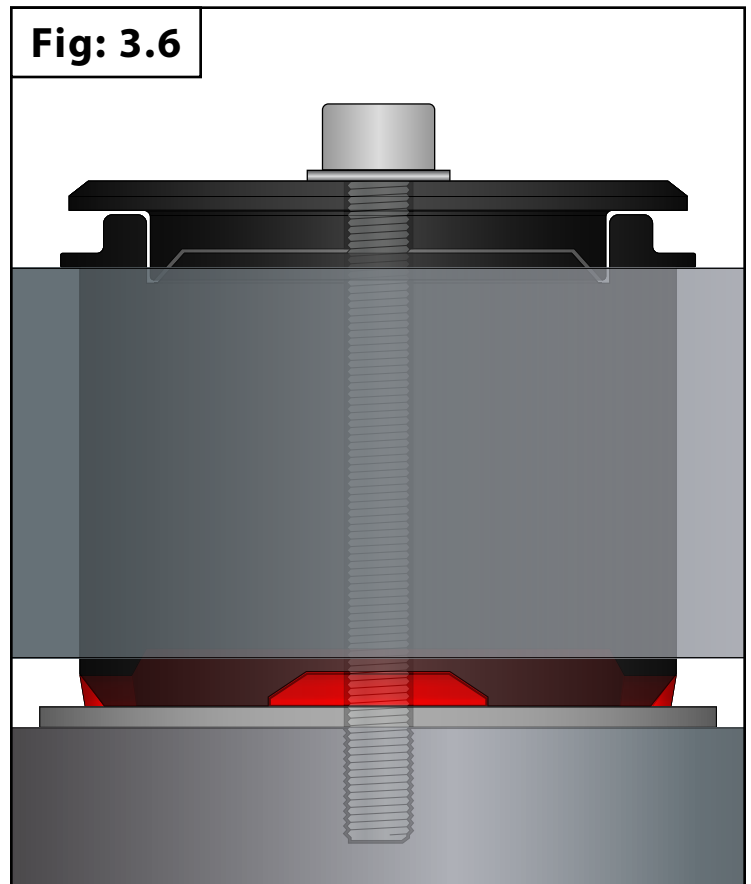
- Follow Section 2, steps 2-9 to install the rearmost diff bushing inserts. Note that these bushings are oriented 180° when compared with the frontmost diff bushing, and the factory washer is located between the diff bushing and the subframe, not the chassis (**Fig: 3.5 & 3.6**).

Step #6

- Reassemble in reverse order of removal.
- Torque the EVAP canister bolts (**Fig: 3.3**) to 8 Nm (6 Ft-lbs).
- Torque the **new** subframe bolts (**Fig: 3.2**) to 90 Nm (66 Ft-lbs) + 90°.

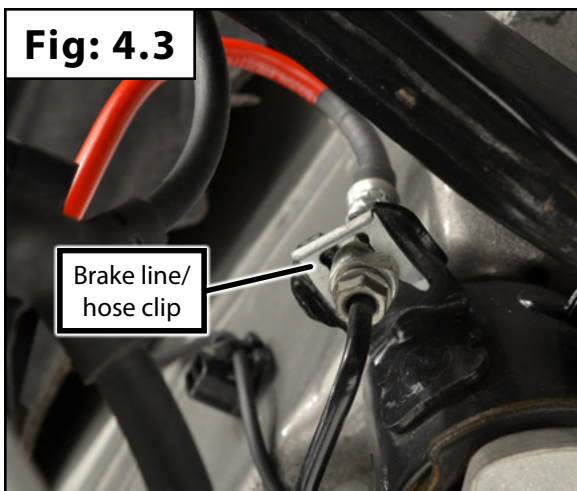
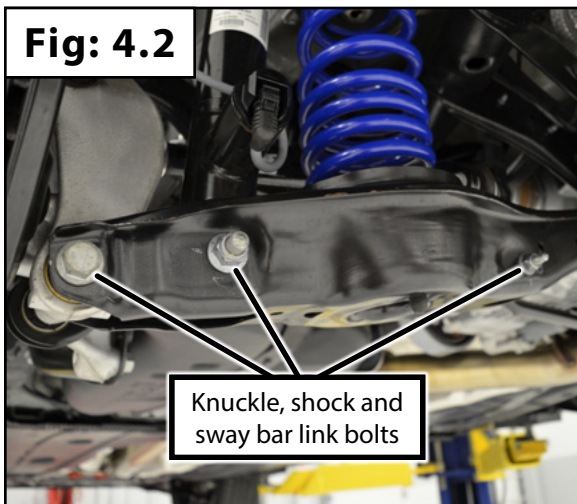
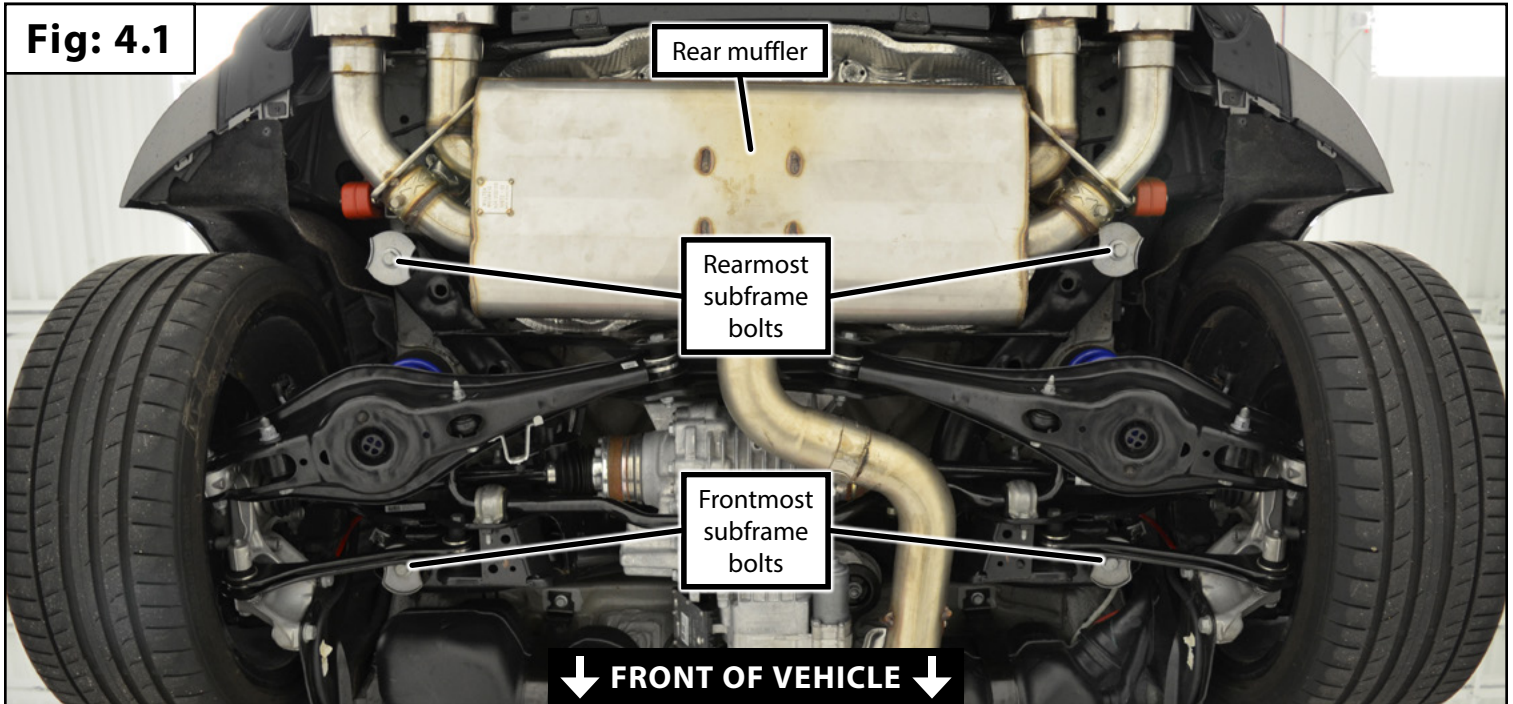
Your MK5 & MK6 rearmost bushing insert installation is complete!

Fig: 3.6



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Section 4: Rearmost Bushing Insert Installation (MK7 only)



Step #1

- Remove the rear wheels and the rear muffler (**Fig: 4.1**).

Step #2

- Support the rear lower control arm from below with a jack.
- Remove the ride height sensor (if equipped).
- Remove and discard the knuckle bolt and nut (**Fig: 4.2**).
- Remove and discard the shock bolt and nut (**Fig: 4.2**).
- Remove and discard the sway bar link bolt and nut (**Fig: 4.2**).
- Lower the control arm slowly with the jack and remove the rear coil spring. Repeat this process on the other coil spring.

Step #3

- Remove the clip which secures the brake line/hose to the subframe.
 - Do not disconnect the brake line from the hose (**Fig: 4.3**).

Step #4

- Use a jack to support the subframe with a block of wood to distribute the load.
- Loosen **but do not remove** the frontmost subframe bolts (**Fig: 4.1**).
- Remove and discard the rearmost subframe bolts (**Fig: 4.1**).

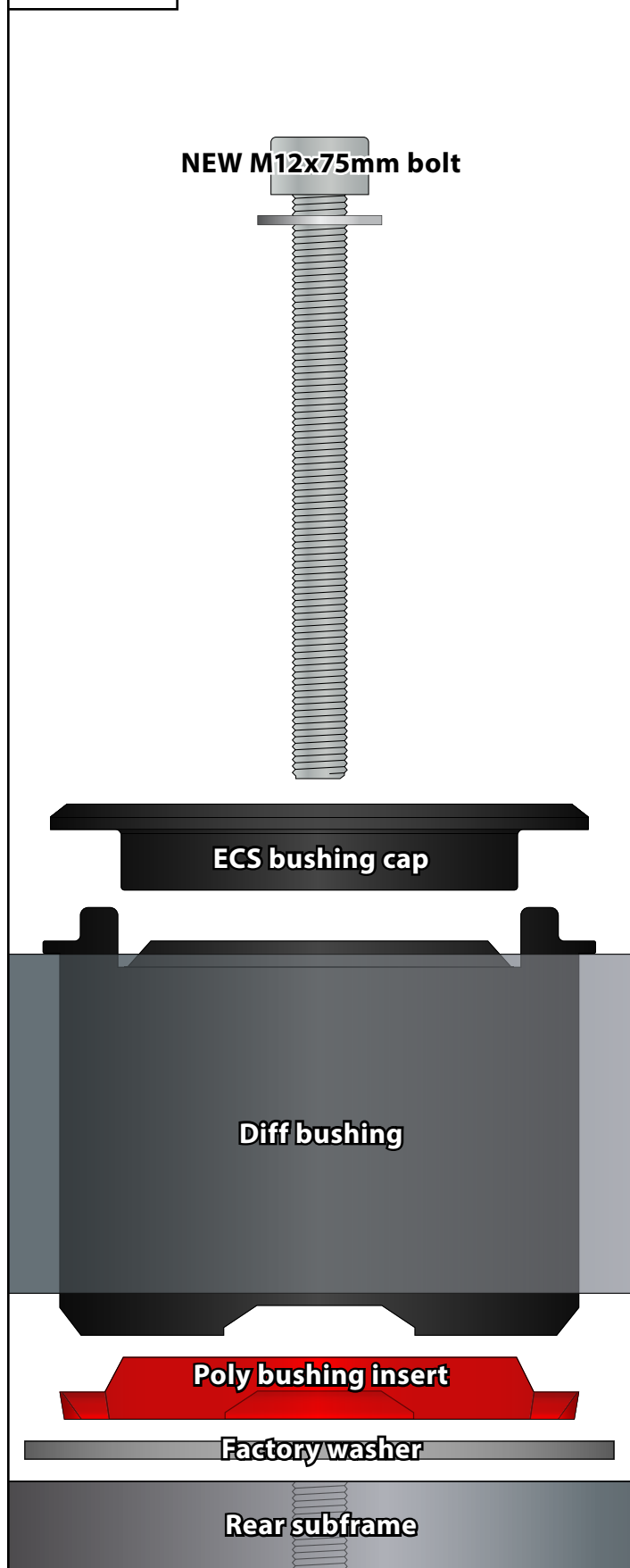
Step #5

- Lower the subframe 3-4" **slowly and carefully**, do not allow any hoses, wires, cables or lines to stretch or get pinched in the process.
- Support the subframe from below with jack stands.

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Section 4: Rearmost Bushing Insert Installation (MK7 only)

Fig: 4.4



Step #6

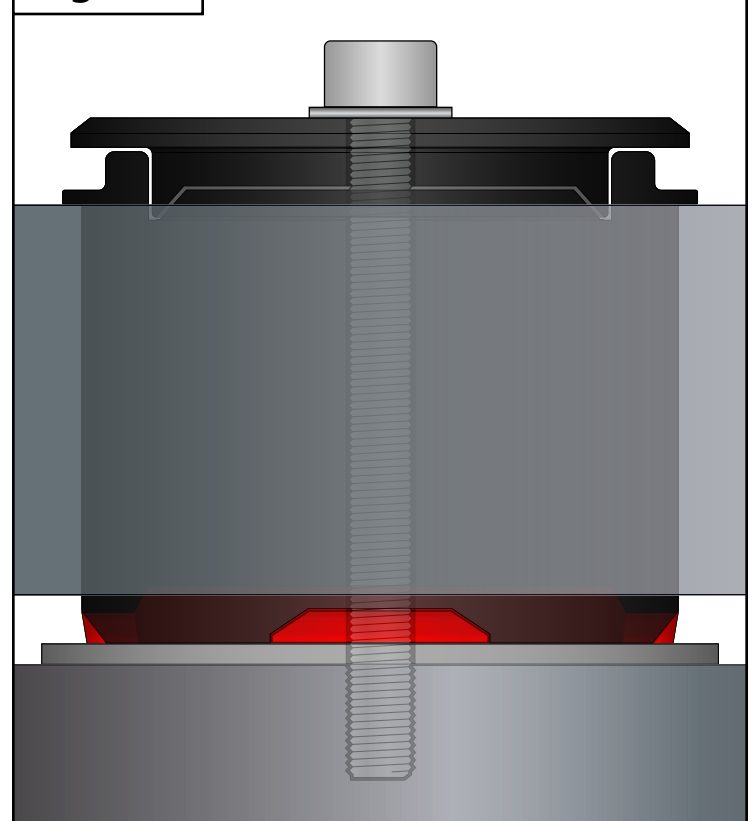
- Follow Section 2, steps 2-9 to install the rearmost diff bushing inserts. Note that these bushings are oriented 180° when compared with the frontmost diff bushing, and the factory washer is located between the diff bushing and the subframe, not the chassis (**Fig: 4.4**).

Step #7

- Reassemble in reverse order of removal.
- Torque the **new** subframe bolts to 70 Nm (52 Ft-lbs) + 180° (**Fig: 4.1**).
- Torque the **new** knuckle bolt and nut to 70 Nm (52 Ft-lbs) + 180° (**Fig: 4.2**).
- Torque the **new** shock bolt and nut to 70 Nm (52 Ft-lbs) + 180° (**Fig: 4.2**).
- Torque the **new** sway bar link bolts and nuts to 20 Nm (15 Ft-lbs) + 180° (**Fig: 4.2**).
- Torque the leveling sensor bolt to 5 Nm (4 Ft-lbs) (**Fig: 4.2**).
- Torque the wheel bolts to 120 Nm (89 Ft-lbs).

Your MK7 rearmost bushing insert installation is complete!

Fig: 4.5



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