

Challenger 2008- Current Solid Rear Crossmember Bushings

TOOLS REQUIRED:

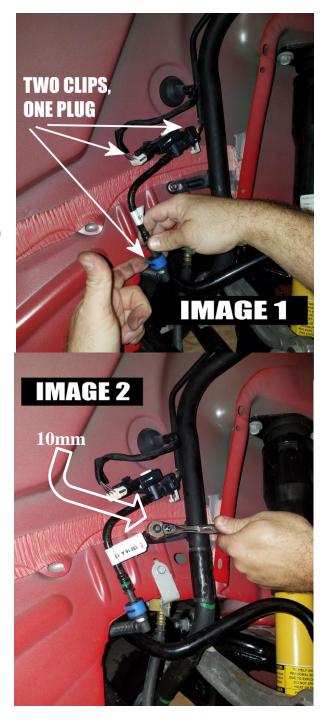
- Hydraulic jack and jack stands
- Wrenches and sockets 10mm, 16mm, 18mm
- 50 Torx Bit Socket
- Sawzall

NOTE: Before proceeding, take note of the following recommendations. Unfortunately, the entire rear Crossmember must be lowered to install this part to access the driver's side rear differential bolt. This install is very involved and not recommended for the novice home mechanic. We recommend that you read the installation procedure before proceeding to make sure it is within your capabilities.

NOTE: We removed the springs before documenting this installation to allow better visibility for illustrating each step of the install.

INSTALLATION:

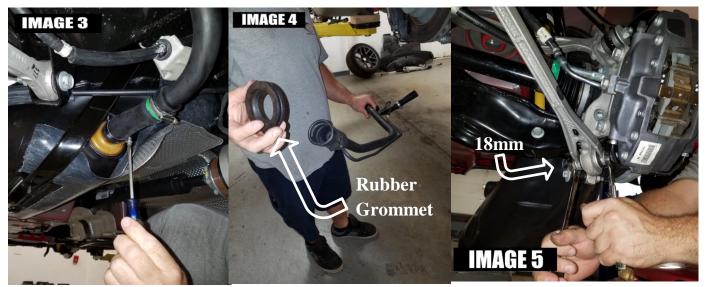
- 1. Lift the rear of the vehicle and safely support with jack stands under the rear jack points on the rockers. Make sure vehicle is high enough to lower the Crossmember approximately 6 inches. Remove wheel/tires to provide access to the work areas.
- 2. The first thing to remove is the entire exhaust, from the manifolds rearward. With the various exhausts offered from the factory, plus aftermarket options, we will not go into details of the removal process.
- 3. Next, disconnect the rear of the driveshaft from the front of the differential using a 50 Torx bit socket.
- 4. With the exhaust removed and the drive shaft disconnected and set aside, proceed to the driver side rear wheel well. Remove the 7 plastic clips and two 10mm nuts retaining the inner plastic wheel well. Towards the rear there are a few rivets that do not come out. Simply leave these attached and fold the wheel well out of the way to allow access to the gas filler tube.



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- 5. Next disconnect the small fuel tube shown in **IMAGE 1**. Release the 2 clips and unplug the sensor then set the fuel tube/sensor aside.
- 6. Using a 10mm socket, remove the nut holding the fuel fill tube to the inner wheel well. (IMAGE 2 On Page 1)
- 7. Remove the hose clamp on the rear of the tank as shown in **IMAGE 3**. Use a bucket to catch any gas Once the lower hose clamp is removed, the entire fill tube can be removed. Pull the tube out the bottom, through the lower control arm and trailing arm.

(NOTE: the tank has a check valve to hold the fuel in the tank but you will still drip whatever fuel is in the hose itself.)

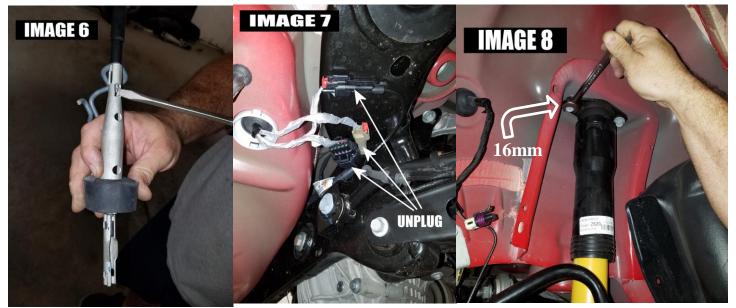
(NOTE: the upper part of the tube is only connected with a rubber grommet and pulls loose easily. IMAGE 4)

- 8. Next the calipers must be removed in order to lower the Crossmember. To eliminate the need to disconnect a brake hose, remove the outer trailing arm bolt using two 18mm wrenches as shown in **IMAGE 5**. This will allow sufficient room for the caliper to be fed through the linkages and hung to clear as the Crossmember as it is lowered.
- 9. Using an 18mm socket, remove the two caliper bolts then hang the caliper with a piece of wire or a zip tie.
- 10. The next step is to disconnect the emergency brake cables. This is difficult due to its location above the Crossmember. Follow the cable upward to where they connect together above the Crossmember. Using a small screwdriver or pick, release the spring steel retainers (**IMAGE 6 shown on page 3**) to separate the cables.
- 11. Remove the two small cable clamps using a 10mm wrench.
- 12. Locate the group of wiring harnesses on the passenger side and unplug the three harnesses shown in **IMAGE 7** shown on page 3.
- 13. Using a 16mm socket, remove the upper shock bolts. (IMAGE 8)
- 14. Place a jack under the rear Crossmember then loosen the four main Crossmember bolts using an 18mm socket and carefully lower it to the ground.

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15. When the Crossmember is removed, use a Sawzall to CAREFULLY cut out the Center of the four bushings as shown in **Image 9 & 10**, it is CRITICAL that you only cut through the thin web of the bushing and the sheet metal of the Bushing Case (**Image 11 on page 4**) and not into the Crossmember Sleeve. After being cut, you should be able to remove the bushings with a rubber mallet or a dead blow hammer)

(NOTE: Make sure when you are cutting the web of the bushing that you are cutting it <u>vertically</u> to reduce the risk of cutting into the Crossmember Sleeve.)



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16. Have an assistant hold the Crossmember on end while using a none-marring hammer to install the new solid bushings from the underside of the Rear Crossmember as in **Image 12**.



- 17. Image 13 shows a top view of the installed Machined Aluminum Bushings
- 18. Re-install the Rear Crossmember by following instructions 1-15 in reverse order using torque specs provided on the next page.

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Rear Suspension • Specifications

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SPECIFICATIONS

DESCRIPTION	N∙m	Ft. Lbs.	In. Lbs.
Brake Caliper Adapter Knuckle Bolts	115	85	_
Camber Link Crossmember Bolt	85	63	_
Camber Link Knuckle Bolt	98	72	_
Compression Link Crossmember Bolt	85	63	_
Compression Link Knuckle Bolt	81	60	_
Crossmember Mounting Bolts	180	133	_
Hub And Bearing Mounting Bolts	68	50	_
Hub Nut	213	157	_
Parking Brake Cable Knuckle Screw	8	_	71
Shock Absorber Mounting Bolts - Upper	52	38	_
Shock Absorber Mounting Bolt Nut - Lower	72	53	_
Spring Link Crossmember Bolt	108	80	_
Spring Link Knuckle Nut	142	105	_
Stabilizer Bar Isolator Retainer Bolts	61	45	_
Stabilizer Link Nuts	61	45	_
Tension Link Crossmember Bolt	85	63	_
Tension Link Knuckle Bolt	98	72	_
Toe Link Crossmember Nut	108	80	_
Toe Link Knuckle Bolt	95	70	_

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