



Differential Mount Bushings – Pontiac G8 and 2010-present Camaro BK001

Required Tools:

- Hydraulic jack and 2 stands (lift optional but recommended)
- Wrenches – 18mm, 21mm
- Sockets – 10mm, 13mm, 18mm, 21mm
- Pry-bar
- Drill with 2” hole saw

Installation:

1. Lift vehicle and support with stands under the rocker jack points shown in **Image 1**.
2. Remove both rear wheels.



3. Using a 15mm socket, remove the driveshaft tunnel brace. See **Image 2**.
4. Unplug the rear O2 sensors as shown in **Image 3**.

Differential Mount Bushings (Cont.)

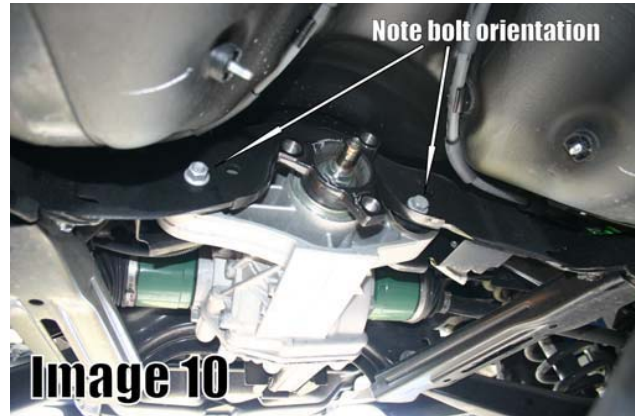


5. Using a 13mm socket, remove the two bolts that hold the rear two muffler brackets in place. Remove 4 bolts total, 2 per side. See **Image 4** above.
6. Using a 15mm socket, remove the 4 front flange bolts on the exhaust (2 per side). See **Image 5** above.
7. Remove center 15mm exhaust hanger bolt in rear. See **Image 6** above.
8. Using a helper, remove the entire exhaust assembly.
9. Using a 10mm socket, remove the front driveshaft tunnel exhaust shield. See **Image 7** above.
10. Using an 18mm wrench and socket, remove the 3 bolts that connect the driveshaft flex joint to the differential. See **Image 8**. NOTE: Remove the appropriate bolts so that the rubber flex joint remains attached to the driveshaft, NOT the differential. Using a pry-bar, pry the joint off the alignment dowel allowing the shaft to hang out of the way. (**Image 9**).



Differential Mount Bushings (Cont.)

11. Using a 10mm socket, remove the rear driveshaft tunnel exhaust shield.
12. Place a jack under the rear of the differential.
13. Note the orientation of the differential mounting bolts and make notes for proper re-assembly (**Image 10**). Using an 18mm wrench and socket, remove the (3) mounting bolts.



14. Place some rags between the inner CV boots and the cradle to protect the boot then lower the differential to gain access to the front mounting bushings.
15. Using a 2" hole saw, drill the front rubber bushings out of the bushing shells. See **Image 11**.
16. Using a screwdriver, pry the aluminum bushing shell out of the differential housing. See **Image 12**.
17. Insert the BMR bushing halves into the housing. Grease the inside of the bushing then knock the sleeves into the bushings.
18. Raise the front back up into the mount and allow the rear to hang until the rear bushing is accessible. Duplicate the above procedure for the rear mount. See **Image 13**.



Differential Mount Bushings (Cont.)

19. Lift the differential back into place and insert the bolts in the same orientation as recorded in step 13. Torque bolts to 85 ft/lbs.
20. Re-install both heat shields.
21. Re-install the driveshaft.
22. Re-install the exhaust.
23. Re-install driveshaft tunnel brace and lower the vehicle.



Rear Cradle Bushings BK002

Required Tools:

- Hydraulic jack and 2 stands (lift optional but recommended)
- Wrenches – 18mm, 21mm
- Sockets – 10mm, 13mm, 18mm, 21mm
- Pry-bar

Installation:

1. Lift vehicle and support with stands under the rocker jack points shown in **Image 1**.
2. Remove both rear wheels.
3. Using a 15mm socket, remove the driveshaft tunnel brace. **Image 2**.
4. Unplug the rear O2 sensors as shown in **Image 3**.
5. Using a 13mm socket, remove the two bolts that hold the rear two muffler brackets in place. Remove 4 bolts total, 2 per side. See **Image 4**.



Rear Cradle Bushings BK002 (Continued)

- Using a 15mm socket, remove the 4 front flange bolts on the exhaust (2 per side). See **Image 5** on previous page.
- Remove center 15mm exhaust hanger bolt in rear. See **Image 6**.
- Using a helper, remove the entire exhaust assembly.
- Un-plug the fuel pump wiring harness located on the passenger side of the car next to the front cradle bushing. See **Image 7** above.
- Support the cradle with a hydraulic jack or adjustable frame stands.
- Using a 21mm socket, remove the (4) cradle mounting bolts as shown in **Image 8**.

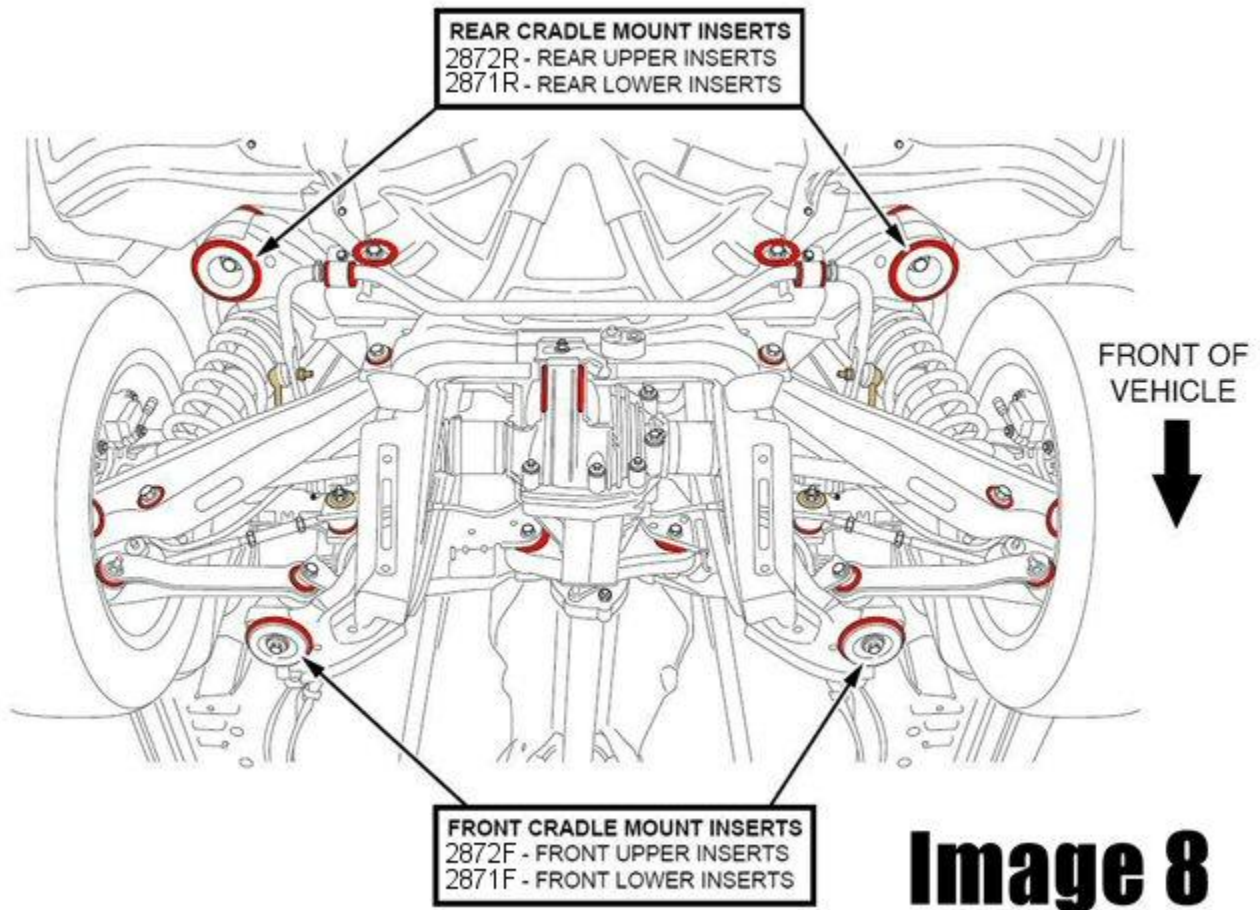


Image 8

Rear Cradle Bushings BK002 (Continued)

12. Using a pry-bar, remove the lower bushing cup washers. See **Image 9**.

13. Lower the cradle to allow access to the upper portion of the cradle mounts. NOTE: The rear cradle mounts have alignment dowels that extend through the mount. The cradle must be lowered far enough to clear the dowels. See **Images 10a and 10b** below.

14. Remove the isolator (**Image 11**) from the top of the front bushings to make work space and set aside. The BMR bushings do not replace the factory bushings, they are designed to fit over the OE bushings and take up the excess space in the OE bushing. Each BMR bushing is labeled with its own unique part number. Lube the bushings using the supplied grease and insert them using the chart shown in **Image 8** on the previous page. The tabs on the BMR bushings should fit into the slots of the OE bushings. It may be helpful to insert a screwdriver or socket extension into the center hole and pry the OE bushing around while applying pressure to the BMR bushing to get it to seat properly. When installed properly, the bushings should look similar to **Image 12**.

15. Re-install the front rubber isolators.



Rear Cradle Bushings BK002 (Continued)

15. Lift the cradle back up against the body taking care to properly align the rear dowels.
16. Insert the factory cup washers and bolts and tighten all four mounting bolts to 130 ft/lbs. **Image 13.**
17. Plug the fuel pump wiring harness back in.
18. Re-install the exhaust.
19. Reconnect the O2 sensors.
20. Bolt the driveshaft tunnel brace back into place and torque to 45 ft/lbs.
21. Install the rear wheels and lower the vehicle.



Rear Outer Control Arm Bushings BK004

Required Tools:

- Hydraulic jack and 2 stands (lift optional but recommended)
- Wrenches – 15mm, 18mm
- Sockets – 18mm, T30 Torx
- Pry-bar

Installation:

1. Lift vehicle and support with stands under the rocker jack points shown in **Image 1**.
2. Remove both rear wheels.
3. Using an 18mm wrench and socket, remove the outer mounting bolt on the trailing arm then pull down the arm to provide access to the control arm. See **Image 2** below.



4. Using an 18mm wrench and socket, remove the lower shock mounting bolt from the control arm. See **Image 3** above.
5. Disconnect the sway bar end-links using a 15mm wrench and T30 torx bit. See **Image 4**.
6. Using an 18mm wrench and socket, remove the outer mounting bolt on the control arm and lower the control arm to provide access to the bushing.



NOTE: it may be easier to put a bottle jack under the spindle and raise the spindle to gain access to the bushing.

Rear Outer Control Arm Bushings BK004 (Continued)

7. Using a bushing removal tool, press the OE bushing out of the spindle.
8. Insert the BMR polyurethane bushing halves.
9. Lube the inside of the BMR bushings then install the center sleeve.
10. Lift the control arm back into place and insert the bolt.
11. Torque to 85 ft/lbs.
12. Insert the shock bolt and torque to 85 ft/lbs.
13. Re-connect the sway bar end-link and tighten
14. Mount the trailing arm and insert the mounting bolt. Tighten to 85 ft/lbs.
15. Mount wheels and lower vehicle.



Rear Upper Control Arm Bushing BK005

Required Tools:

- Hydraulic jack and 2 stands (lift optional but recommended)
- Wrenches – 18mm, 21mm
- Sockets – 10mm, 13mm, 18mm, 21mm
- Pry-bar

Installation:

1. Lift vehicle and support with stands under the rocker jack points shown in **Image 1**.
2. Remove both rear wheels.



3. Using a 15mm socket, remove the driveshaft tunnel brace. See **Image 2**.



4. Unplug the rear O2 sensors as shown in **Image 3**.

5. Using a 13mm socket, remove the two bolts that hold the rear two muffler brackets in place. Remove 4 bolts total, 2 per side. See **Image 4**.



Rear Upper Control Arm Bushing BK005 (Continued)

- Using a 15mm socket, remove the 4 front flange bolts on the exhaust (2 per side). See **Image 5**.



- Remove center 15mm exhaust hanger bolt in rear. See **Image 6**.
- Using a helper, remove the entire exhaust assembly.



- Using a 10mm socket, remove the front driveshaft tunnel exhaust shield. See **Image 7** above.
- Using an 18mm wrench and socket, remove the 3 bolts that connect the driveshaft flex joint to the differential. See **Image 8** above. NOTE: Remove the appropriate bolts so that the rubber flex joint remains attached to the driveshaft, NOT the differential. Using a pry-bar, pry the joint off the alignment dowel (**Image 9** below).
- Un-plug the fuel pump wiring harness located on the passenger side of the car next to the front cradle bushing. See **Image 10** below.
- Support the cradle with a hydraulic jack or adjustable frame stands.



Rear Upper Control Arm Bushing BK005 (Continued)

13. Twist the emergency brake cable while pulling up to “release” it from the bracket attached to the upper control arm on each side.
Image 11.

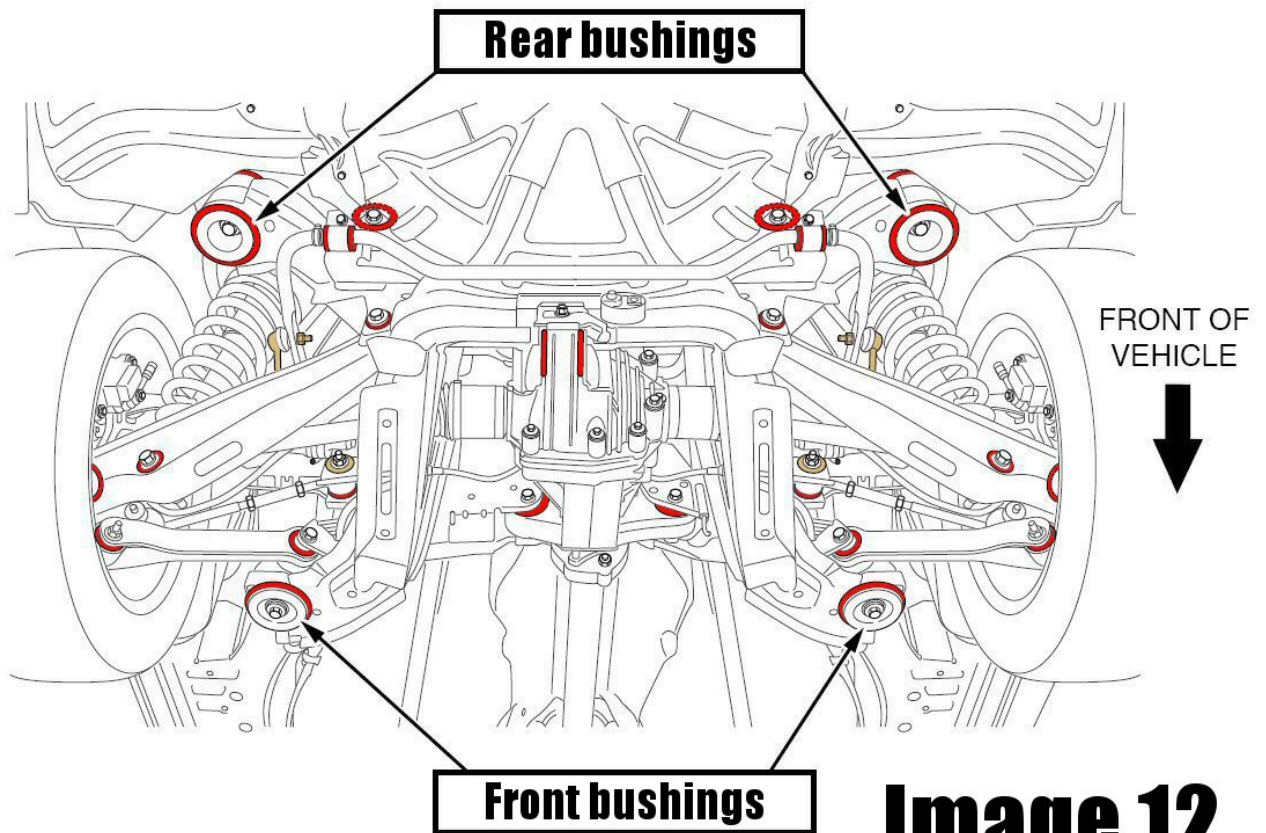


Image 12

13. Using a 21mm socket, remove the 4 cradle mounting bolts. See **Image 12** above. Lower the cradle approximately 2-3 inches.
14. Using a 21mm wrench and 21mm socket, remove the inner front bolt on the upper control arm. See **Image 13** to the right.



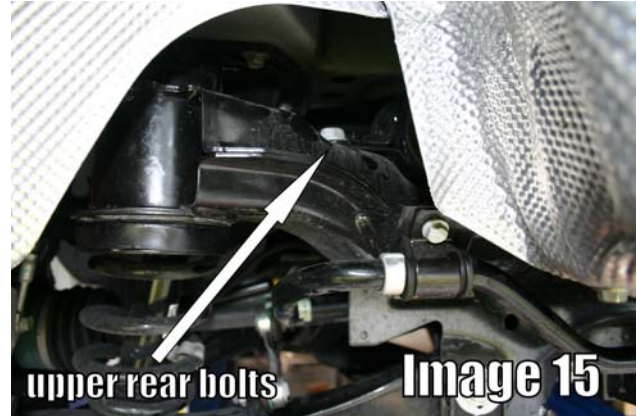
Image 13

Inner front bolt

Rear Upper Control Arm Bushing BK005 (Continued)

15. Using an 18mm wrench and 18mm socket, remove the outer bolt on the upper control arm. See **Image 14** below.

16. Remove the two 18mm bolts at the rear of the upper control arm. See **Image 15**.



17. Remove the upper control arm.

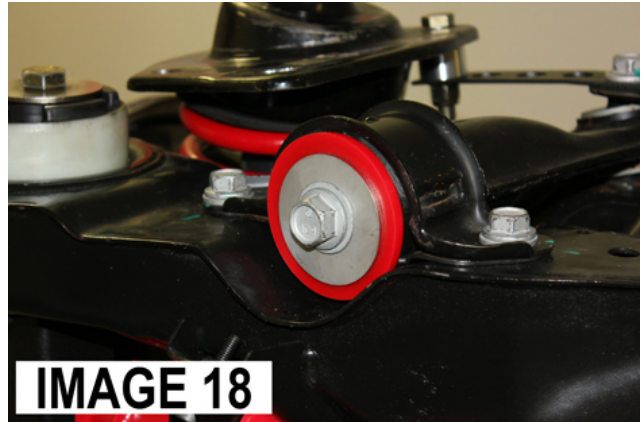
18. Note the orientation of the rear bushing saddle on the control arm before removing the bushing. Using a 21mm socket, remove the bushing retainer bolt as shown in **Image 16** above.

19. Using a hydraulic press, remove the OE bushing from the saddle. See **Image 17**.



Rear Upper Control Arm Bushing BK005 (Continued)

20. Position the bushing shell to match the original orientation then push the BMR bushing into the shell with the flange of the bushing towards the outside of the A-arm. Insert the provided sleeve then attach the assembly to the upper control arm. Place the provided washer over the bolt then tighten the bolt to 130 ft/lbs. See **Image 18** for assembled view.



21. Re-install control arm using the OE mounting hardware. Torque the rear saddle bolts to 85 ft/lbs. Torque the front inner mount to 130 ft/lbs. Torque the outer bolt to 85 ft/lbs.
22. Lift the cradle up against the frame making sure that the rear alignment dowels are seated properly then insert the 4 mounting bolts. Torque all bolts to 130 ft/lbs.
23. Re-install the emergency brake cable to the bracket.
24. Plug the fuel pump wiring harness back in.
25. Bolt the driveshaft back into place and torque the three bolts to 85 ft/lbs.
26. Re-install the driveshaft tunnel exhaust shield.
27. Re-install the exhaust.
28. Reconnect the O2 sensors.
29. Bolt the driveshaft tunnel brace back into place and torque to 45 ft/lbs.
30. Install the rear wheels and lower the vehicle.



Rear Outer Trailing Arm Bushings BK006

Required Tools:

Hydraulic jack and 2 stands (lift optional but recommended)
Wrenches – 18mm, 21mm
Sockets – 10mm, 13mm, 18mm, 21mm
Pry-bar

Installation:

1. Lift vehicle and support with stands under the rocker jack points shown in **Image 1**.
2. Remove both rear wheels.
3. Using an 18mm wrench and socket, remove the outer mounting bolt then pull down the trailing arm to provide access to the bushing. See **Image 2**.
4. Using a bushing removal tool, press the OE bushing out of the spindle.
5. Insert the BMR polyurethane bushing halves.
6. Lube the inside of the BMR bushings then install the center sleeve.
7. Lift the trailing arm back into place and insert the bolt.
8. Torque to 85 ft/lbs.
9. Mount wheels and lower vehicle.





STEERING RACK MOUNTING BUSHING

BK008

NOTE: This bushing will not fit vehicles equipped with electric steering.

REQUIRED TOOLS:

- Hydraulic jack and 2 stands (lift optional)
- 15mm socket
- Pry-bar

INSTALLATION:

1. Lift vehicle and support with stands under the rocker jack points or K-member.
2. Remove passenger side front wheel.
3. The most accessible position to access the bushing is through the passenger side wheel well. Using a 15mm socket, remove the (2) rack mounting bolts on the passenger side.
4. Pry the saddle off the OE bushing.
5. Lift up on the rack and remove the OE mounting bushing. *NOTE: Loosening the driver's side mounting bolts makes this step much easier but is not necessary.*
6. Install the BMR polyurethane mounting bushing into position and re-install the OE saddle.
7. Re-install the OE mounting bolts and torque to 45 ft/lbs.
8. Install wheel and lower vehicle.



Front Lower Control Arm Bushings BK009

Required Tools:

- Hydraulic jack and 2 stands (lift optional but recommended)
- Wrenches – 18mm
- Sockets – 18mm, 21mm
- Pry-bar
- Brass hammer

Installation:

1. Lift vehicle and support with stands under the rocker jack points or K-member.
2. Remove both front wheels/tires.
3. Using an 18mm socket and wrench, remove the inner mounting bolt on the lower control arm.
4. Using a 21mm socket, remove the outer ball joint nut.
5. Knock the ball joint loose from the spindle using a brass hammer or equivalent.
6. Remove the control arm.
7. Using a bushing removal tool or hydraulic press, remove the OE rubber bushing from the control arm.
8. Insert the BMR polyurethane bushings into the radius rod. Lube the inside of the bushing and insert the center sleeve.
9. Re-install the control arm duplicating the above steps. Tighten the inner mounting bolt to 85 ft/lbs.
10. Install wheels/tires. Lower vehicle.





Front Radius Rod Bushings BK010

Tools Required:

Hydraulic jack and 2 stands (lift optional but recommended)
Wrenches – 18mm
Sockets – 18mm, 21mm
Pry-bar
Brass hammer

Installation:

1. Lift vehicle and support with stands under the rocker jack points or K-member.
2. Remove both front wheels/tires.
3. Remove the (2) Phillips head screws and (10) plastic clips that retain the plastic inner wheel well. A small screwdriver will “pop” the clips out by prying the center of the clip out then removing the clip. See **Image 1**.
4. Using an 18mm socket and wrench, remove the inner mounting bolt on the lower radius rod. See **Image 2** for reference.
5. Using a 21mm socket, remove the outer ball joint nut. See **Image 3**.
6. Knock the ball joint loose from the spindle using a brass hammer or equivalent.
7. Remove radius rod.



FRONT RADIUS ROD BUSHINGS (Continued) BK010

8. Using a bushing removal tool or hydraulic press, remove the OE rubber bushing and sleeve from the radius rod. See **Image 4**.
9. Lube the inside of the bushing and insert the center sleeve.
10. Re-install the radius rod duplicating the above steps. Tighten the inner mounting bolt to 85 ft/lbs.
11. Install wheels/tires. Lower vehicle.





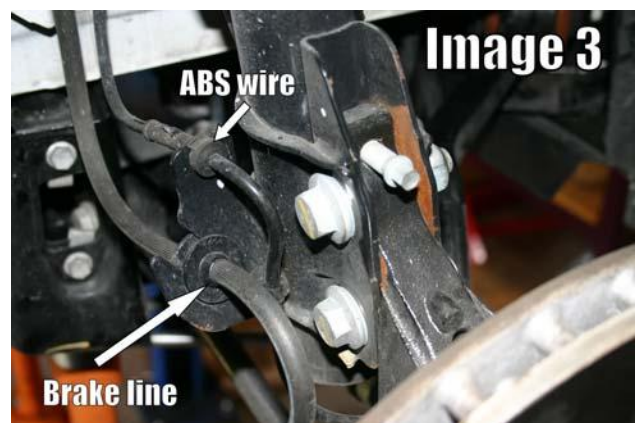
Front Strut Mount Bushings BK011

Required Tools:

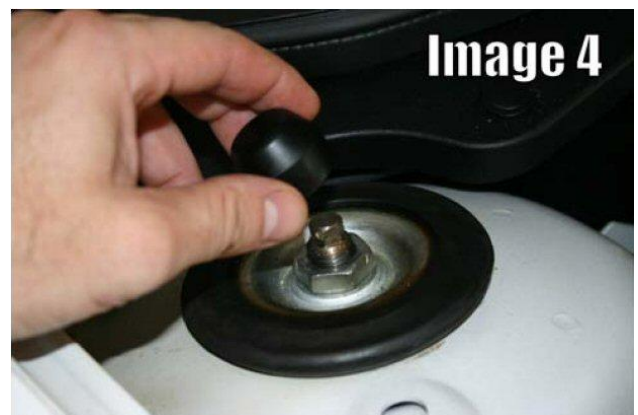
- Hydraulic jack and 2 stands (lift optional but recommended)
- Wrenches – 14mm, 17mm, 19mm
- Sockets – 22mm, 24mm

Installation:

1. Lift vehicle and support with stands under the rocker jack points or K-member.
2. Remove both front wheels/tires.
3. Remove the (2) Phillips head screws and (10) plastic clips that retain the plastic inner wheel well. A small screwdriver will “pop” the clips out by prying the center of the clip out then removing the clip. See **Image 1**.
4. Using a 14mm wrench and a 17mm wrench, remove the sway bar end links as shown in **Image 2** above.
5. Disconnect the rubber brake line from the strut by twisting the line and pulling up. Disconnect the ABS wire. See **Image 3** above.



6. Using a 19mm wrench and 22mm socket, remove the two mounting bolts that retain the strut to the spindle. See **Image 3** above.
7. Pry the plastic cap off the upper strut mount to expose the retaining nut. See **Image 4**.



Front Strut Mount Bushings BK011 (Continued)

8. Using a 24mm socket, remove the upper retaining nut and lower the strut assembly.
NOTE: this nut only holds the strut/spring assembly in the vehicle, it will not unload the spring. See Image 5.

9. Use an outside spring compressor to compress the spring until there is enough “slack” in the spring to remove the upper mount. See **Image 6** below.

10. Using a 24mm socket, remove the nut on the upper strut shaft. Remove the OE strut mount and re-assemble using **Image 7** below as a guide.

11. Lift the strut/spring assembly back up into the strut tower and replace the upper formed washer and nut.

NOTE: due to the significantly stiffer polyurethane strut mount, seating the bushing in the strut tower will be more difficult. It is not uncommon to only have a few threads exposed up top during re-assembly. This should be of no concern as the nut will pull the mount up into the strut tower when tightened.

12. Replace the plastic nut caps in the engine bay.

13. Reconnect the strut to the spindle and tighten to 130 ft/lbs.

14. Re-connect sway bar.

15. Connect the brake line and re-connect the ABS wire.

16. Re-install the inner fender.

17. Install wheels/tires and lower vehicle.

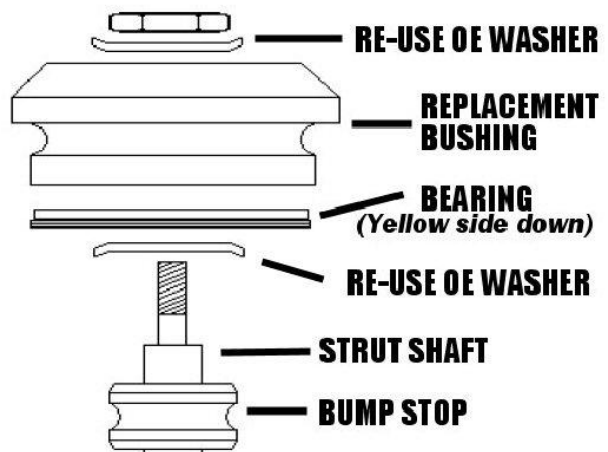


Image 7