INSTALLATION INSTRUCTIONS

5578

REAR ANTI-SWAY BAR

06-UP DODGE MAGNUM

CONGRATULATIONS!

You were selective enough to choose a BELLTECH PRODUCT. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation.

Note:	Confirm that all of the hardware listed in the parts list is in the kit. **DO NOT** begin this installation if any part is missing. Read the instructions thoroughly before beginning this installation.
Warning:	**DO NOT** work under a vehicle supported by only a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.
Warning:	**DO NOT** drive the vehicle until all work has been completed and checked. Torque all hard ware to values specified.
Reminder:	Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!
Note:	It is very helpful to have an assistant available during the installation process.
Note:	We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

RECOMMENDED TOOLS:

- Properly rated floor jacks, support stands, and wheel chocks
- Combination wrench set
- Ratcheting socket wrench and socket sets
- Safety Glasses
- Air Ratchet

1. KIT INSTALLATION

a. Open the hardware kit and remove all of the contents. Refer to the part list (Page 5) to verify that all parts are present.

b. Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the FRONT wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1st gear (manual) or "Park" (automatic).

c. Using a properly rated floor jack, lift the REAR wheels of the vehicle off the ground. Place support stands, rated for the vehicle's weight, and in the factory specified locations. Refer to the vehicle Owner's Manual. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the chassis.

d. It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage! Make sure that the supports stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

e. We recommend using a vehicle lift hoist for this installation, which will ease install.

f. Slowly lower the vehicle onto the stands and, before placing the vehicle's entire weight on them, again check that they properly and securely contact the chassis as described above.

g. Location of these stands, are crucial, when extracting the original equipment Anti-Sway Bar, as to not interfere with any adjustment necessary during extraction. Check for possible interference with any lines, wires, cables, or other easily damaged components.

The following steps are in sequential order in which our R & D Techs have tested to simplify the process in which to install your new Belltech rear Anti-Sway Bar.

2. REAR SHOCK TOP MOUNT DIS-ENGAGEMENT

a. Locate the rear shock top mount, located up inside the rear fender well (Photo 1). Using a 13mm wrench or an air ratchet with a 13mm socket head, remove the mounting bolts completely. The rear shock top mount should stand freely.

3. EXHAUST MUFFLER MOUNT DIS-ENGAGEMENT

The exhaust muffler will need to be un-bolted and lowered slightly to gain access to the original equipment Anti- Sway Bar. Also the rubber mounts that the exhaust system hangs from will need to be removed. There are three (3) sets of mount hangers that only two (2) need to be un-bolted. On these two (nearest the rear bumper), leave the rubber mount attached to the hanger, just un-bolting the hanger from the undercarriage only.

a. Locate the mounting hardware for the exhaust muffler. Located near the rear bumper (Photo 2) and using a 13mm wrench or an air ratchet with a 13mm socket head, with an extension, un-bolt the hanger and let it hang off the rubber mount.

b. The other hanger mount is slightly upstream (Photo 3).

c. With the jack stands positioned underneath the exhaust, adjust them upward, letting the exhaust system rest atop the jack stands, supporting it (Photo 4).

d. The third set of hanger mounts is a little different in that the mounts are actually welded to the undercarriage. Remove the rubber mount only (Photo 5).

To ease the rubber mount removal, use a lubricant to spray on the hanger mount stud (Photo 6). Using a large screwdriver, pry the rubber mount off the hanger mount stud. The entire rear exhaust system should rest free atop the jack stands

4. REAR SUB-FRAME SUPPORT ARMS

With still not enough room to allow the original equipment Anti-Sway Bar to be removed, the rear sub-frame support arms need to be lowered from the frame chassis.

a. Locate the jack stands in a position where they securely support the rear sub-frame support arms (Photo 7). Adjust the jack stands upward so that there is tension on the support arms.

b. There are four (4) main mounting bolts that attach the rear sub-frame support arms to the frame chassis (Photo 8). Using an 18mm wrench or an air ratchet with 18mm socket head, remove all four bolts completely. Leave the jack stands as they are, not adjusting them yet.

5. END LINK REMOVAL

In order for the sub-frame to be lowered and to remove the original equipment Anti-Sway Bar, the top end link will need to be detached from the Anti-Sway Bar.

a. Locate the end link attachment at the original equipment Anti-Sway Bar (Photo 9). Actually using two different sizes of wrenches, a 15mm and 16mm, un-bolt the bolt and nut and remove them completely. Remove only the top end link connection.

6. BUSHING BRACKET REMOVAL

There are two original equipment bushing brackets that come equipped with the original equipment Anti-Sway Bar. These will need to be removed completely from their mounts.

a. Using a 15mm wrench, locate the mounting hardware and remove the bolts completely (Photo 10). Once the mounting bolts have been removed, remove the bracket which encases the bushing.

7. BRAKELINE MOUNTING BRACKET REMOVAL

a. Once the sub-frame support has been un-bolted, to avoid damage to the brake-lines, un-bolt the mounting hardware from the bracket and remove the bolt completely (Photo 11).

b. Using a 10mm wrench, un-bolt the hardware and remove completely.

8. REAR SUB-FRAME SUPPORT ARMS

a. With the jack stands in place, begin lowering the sub-frame support arms slowly. If one person is installing, alternate between jack stands, adjusting the support arms downward away from the frame chassis (PHOTO 12).

b. By adjusting the support arms, create enough space to allow for installation of the original equipment and the new Belltech Anti-Sway Bar

NOTE: With the rear exhaust system still supported by the jack stands also, lower the exhaust system down along with the rear sub-frame support arms.

9. ORIGINAL EQUIPMENT ANTI-SWAY BAR REMOVAL

a. Grabbing either end of the original equipment Anti-Sway Bar, from either side, slowly guide out the Sway Bar, being careful not to damage any lines.

b. Remove the Anti-Sway Bar completely.

10. ANTI-SWAY BAR INSTALLATION

a. Thoroughly lubricate the **inside** of your new hyper thane bushings using a high-grade lithium or silicone-based grease with molybdenum disulfide (moly) (Photo 13, 14).

b. To begin feeding the new Anti-Sway Bar through, begin with the ends of the Sway Bar facing down. This is actually the way the Anti-Sway Bar sits when installed, with the ends facing down and to the rear of the vehicle.

c. Feeding the new Anti-Sway Bar from one end, guide it through to the other side. Be careful not to damage any lines when feeding the new Anti-Sway bar through.

d. Once you have fed the new Anti Sway Bar through, place the new bushings onto the new Sway Bar in the locations where the bushing brackets will be re-installed. Install the bushing brackets atop the new hyper thane bushings. Re-install all mounting hardware and finger-tight at this time only.

e. Attach the end links to the ends of the Anti-Sway Bar and finger tight only (Photo 15).

11. **FINALIZING THE INSTALLATION**

Begin by working your way back, and re-tightening each area that was affected by the installation. Re-torque all hardware according to the manufacturer's specifications.

a. Bushing bracket – re-tighten to torque specs.
b. End links re-tighten to torque specs
c. Using the jack stands, adjust the rear sub-frame support arms upward to its respective position. Install the four mounting hardware and re-tighten to torque specs.
d. Rear shock mount – re-tighten to torque specs
e. Exhaust muffler mounts – re-tighten to torque specs
f. Exhaust muffler rubber mount – use a lubricant to slide the rubber mount back onto the hanger mount stud.
g. Brake line mounting brackets – re-tighten to torque specs.

12. Re-check that all components and fasteners have been properly installed, tightened and torqued.

13. Check brake hoses and other components for any possible interference.

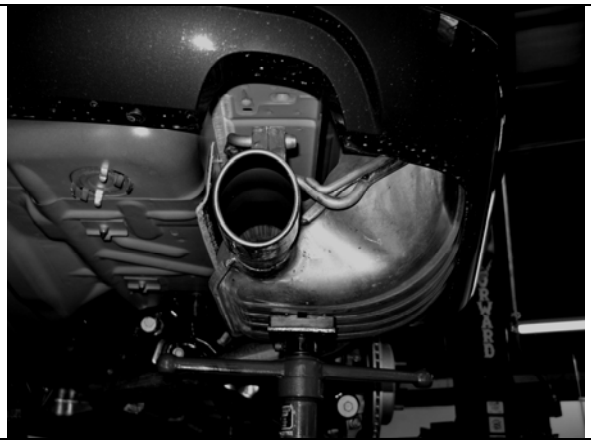
14. Lift the vehicle and remove the support jack stands. Carefully lower the vehicle to the ground.

15. Immediately test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.

16. Installation is complete. Check all of the hardware and re-torque at intervals for the first 10,100, 1000 miles.

PARTS LIST FOR ANTI-SWAY BAR KIT

PART No.	DESCRIPTION	QTY.
51504-300	REAR ASB	1
51404-020	Pivot Bushings	2
55000-10	Grease Pack	1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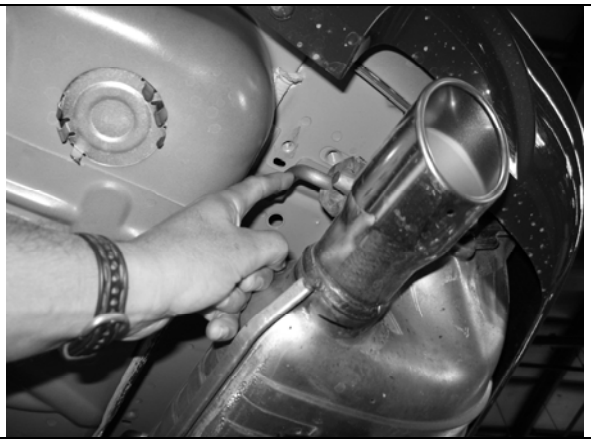	
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	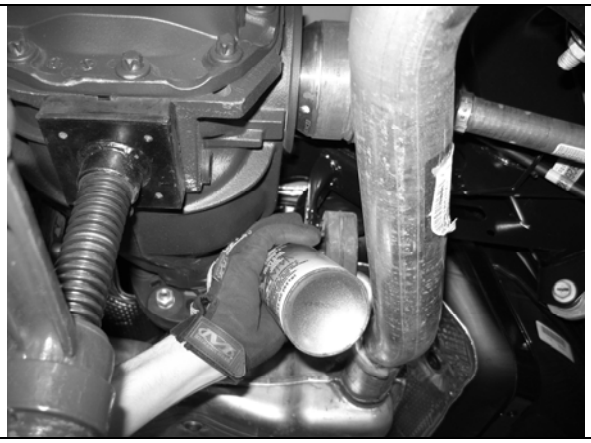
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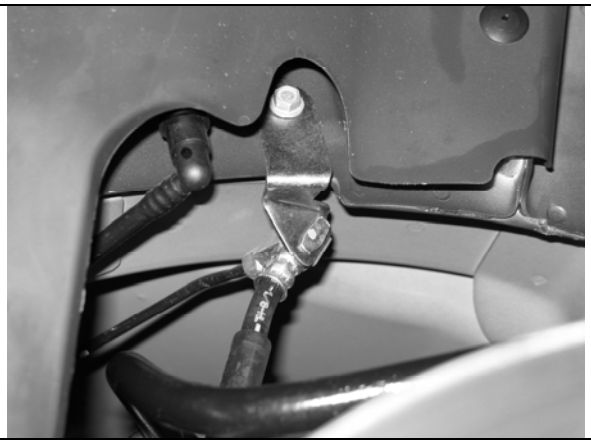
PHOTO 7	**PHOTO 10**
	
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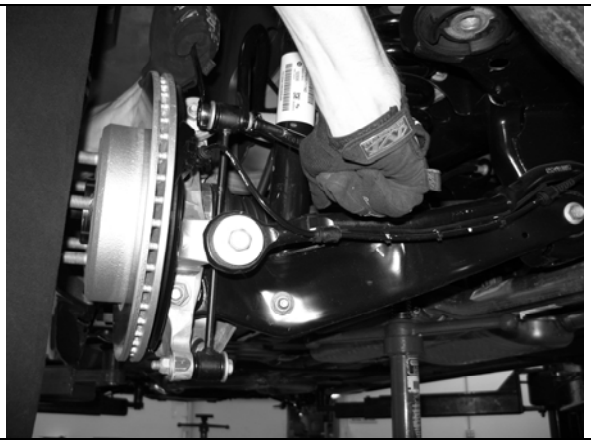	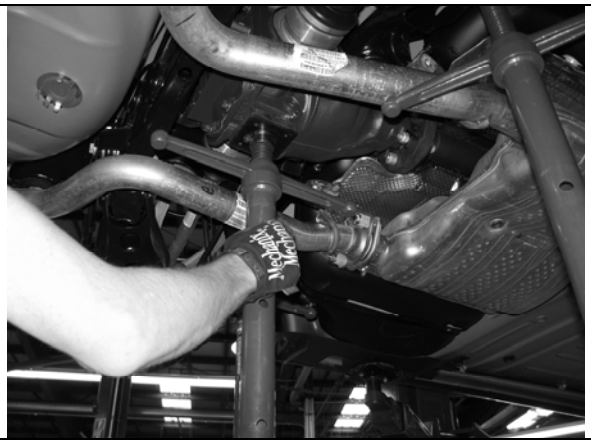
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	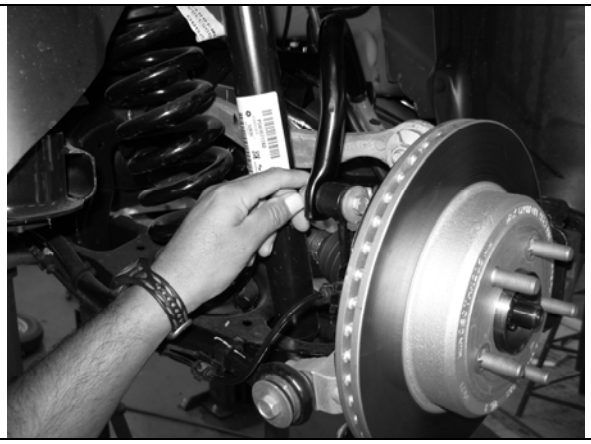
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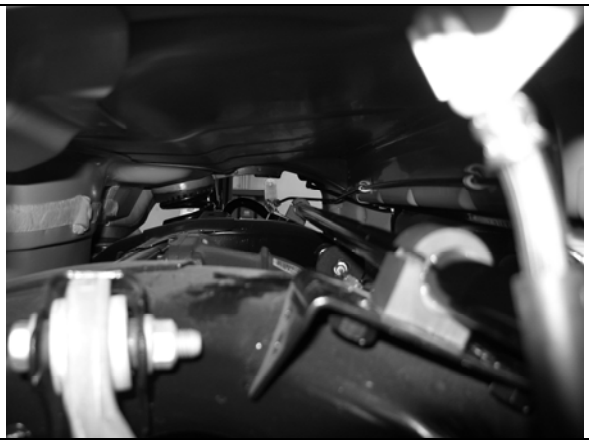	
PHOTO 14	