

2008-09 CHALLENGER STRUT TOWER BRACE

INSTALLATION INSTRUCTIONS

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TOOLS NEEDED FOR INSTALLATION:

- 3/8" ratchet
- 13mm socket
- 8mm hex key socket
- 4" ratchet extension
- 17mm wrench
- 2.5mm and 8mm hex keys
- 13/32" or 10mm hole center punch
- 1/8", 5/16" and 13/32" drill bits
- Drill Motor
- Torque wrench
- Masking tape
- Sharpie

WARNING!

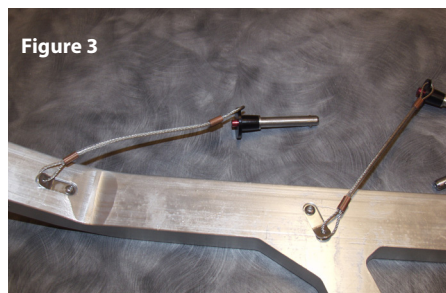
Always wear gloves and protective eye-wear when operating a drill of any kind.

WARNING!

If any part of this installation seems beyond your level of installation experience, please seek the help of a certified professional.

INSTALLATION:

1. Remove all components from the box and make sure everything is there.
See Figure 15 (Page 3)
2. First assemble the 2 strut tower mounts. Start by locating the stainless hex bolts, allen nuts, strut caps, and strut cap mounts. Apply anti-seize to threads of hex bolts and insert through the bottom of the strut caps and thru the holes of the strut cap mounts. **See Figure 1**. Install the allen nuts to retain the two pieces together. Take note of the orientation of the mounts. Snug allen nuts enough to allow the mount to firmly slide, but do not tighten. **See Figure 2**
3. Install the four quick release pins and lanyards to main brace using the small button head allen screws and a 2.5mm hex key. Take caution not to pinch the lanyard between the bracket and the brace when tightening. **See Figure 3**
4. With the car sitting on the tires and on a level surface remove the 3 nuts on both strut's studs using the ratchet, extension, and 13mm socket.
See Figure 4
5. Install the assembled strut tower caps onto the studs and reinstall the factory nuts, but do not yet tighten. **See Figure 5**
6. Place masking tape on the rear support bar for marking mount holes.
7. Install the main brace into the strut mounts using the quick release pins.
See Figure 6

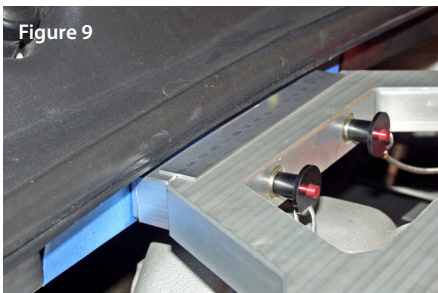


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8. Mark rear support bar to install rear mount spacer. Start by temporarily installing the rear mount spacer and secure with the quick release pins. **See Figure 7.** This is a good time to determine the shim stack you will need to fill any gap to the rear support brace by inserting the necessary shims to tightly fill the gap. Take note of the shims needed. **See Figure 8.** Use a flat edge to level the rear mount spacer with the top surface of the main brace. **See Figure 9.** Using a sharpie, mark the outside edges and bottom of the rear mount spacer on the masking tape. Once this is complete remove the rear mount spacer from the main brace followed by removing the main brace from the strut mounts and set aside.
9. Mount the rear mount spacer. Using the markings from the previous step, line up the rear mount spacer and hold with a clamp to the rear support bar. **See Figure 10.** It is critical to get this as accurate as possible. Use a 13/32" (or 10mm) hole center punch and hammer to mark the centers of the outer holes onto the rear support bar. **See Figure 11.** Remove the clamp and rear mount spacer. Start with a 1/8" drill bit and drill through the front and rear faces of the rear support bar at the marked locations. Make sure to drill as perpendicular to the bar as possible. Step up the drill hole by using a 5/16" drill bit and finished with a 13/32" drill bit. **See Figure 12.** Deburr the holes and remove the masking tape. Install the rear mount spacer and the predetermined shim stack with the provided M10 Socket head cap screws through the front and washers and nylock nuts to the rear using a 8mm hex key and 17mm wrench. Insert the necessary shims between the rear support brace and the rear spacer mount from the top. **See Figure 13.** Tighten until snug, but still adjustable.
10. Reinstall main brace into the strut mounts first and then the rear mount spacer using the quick release pins. Check to make sure everything lines up well and easily installs. It should be a tight and precise fitment. Make adjustments where necessary.
11. Remove the main brace again and torque the rear spacer mount bolts to 35 ft-lbs. Over tightening will crush the rear support tubing.
12. Reinstall the main brace for the last time and make any necessary adjustments. Tighten and torque the nuts on the strut mounts to 27 ft-lbs and then the allen nuts to 15 ft-lbs. **See Figure 14.**

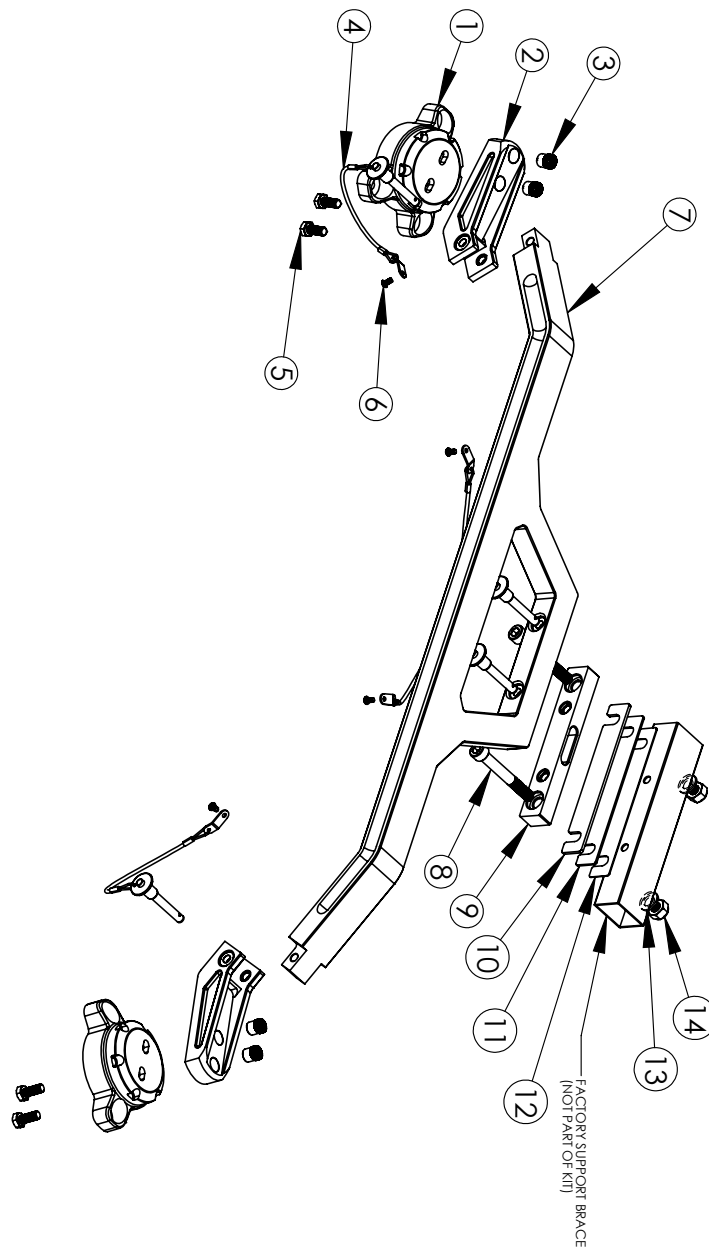


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Figure 15



ITEM NO.	DESCRIPTION	QTY
1	STRUT TOWER CAP	2
2	STRUT CAP MOUNT	2
3	M8 ALLEN NUT	4
4	QUICK RELEASE PIN/WILANYARD	4
5	M8 HEX BOLT	4
6	M4 SOCKET BUTTON HEAD SCREW	4
7	MAIN BRACE	1
8	M10 SOCKET HEAD CAP SCREW	2
9	REAR SPACER MOUNT	1
10	3MM SHIM	1
11	2MM SHIM	1
12	1MM SHIM	1
13	M10 WASHER	2
14	M10 NYLOCK NUT	2