



**409S® Stainless Steel  
SYSTEM #817476  
2002-2005 DODGE RAM 1500 SERIES TRUCKS  
4.7L & 5.9L (NON-HEMI)**

06/10/11

**Removal:**

- 1) Raise the vehicle up on a hoist or rack to working height.
- 2) Using a hacksaw or sawsall, cut the stock tailpipe off where it exits the muffler. (This step is not mandatory, but will make removal easier.)
- 3) Remove the hanger at the rear of the tailpipe from the rubber mount on the vehicle. Remove the tailpipe and set aside.
- 4) Support the muffler with a stand and remove the two hangers at the rear of the muffler along with the hangers in front of the muffler from the rubber mounts on the vehicle. Loosen the clamp at the muffler inlet connections. Once this connection is loose, it may be necessary to heat this connection with a torch to facilitate removal. **Use caution when using a torch.** Remove the muffler and set aside.

**Installation:**

- 1) Before installing anything, prep the clamps supplied in the hardware kit by removing the nuts, and applying a thick lubricant such as white grease or anti-seize to the threads.
- 2) Place the inlet pipe assembly **#TB230S** in position on the front pipe from the catalytic converter and install the clamp hanger **#271HA**.
- 3) Connect the inlet of muffler **#8530552-Z** to the inlet pipe. Use a stand to support the muffler and install a 3" clamp. Tighten enough to hold but still allow for adjustment.
- 4) At the rear of the frame on the drivers side of the vehicle (next to the spare tire) there is an oversized slotted hole that goes through both sides of the frame. Using this hole, connect frame hanger **#226HA** to the frame using the 3/8" x 4" bolt, nut, washer and the **HA226** as a backing plate on the inside of the frame. Make sure the hanger is straight up and down. Tighten securely.
- 5) Place rubber hanger **#HA168** onto the bottom of frame hanger **#226HA**.
- 6) Place the right side tailpipe **#16399S** into position over the axle and slip into the right side muffler outlet. Connect the hangers at the front and rear of the pipe to the rubber mounts on the vehicle. Install a 2 1/2" clamp onto the muffler outlet. Tight enough to hold in place but still allow for adjustment. Repeat for the left side using tailpipe **#16312S**.

- 7) Place the front section of the left side tailpipe **#16380S** into the left side muffler outlet and connect the hanger on the pipe to the rubber mount on the frame. Place a provided 2-1/2" clamp onto the muffler outlet. Tighten enough to hold but still allow for adjustment.
- 8) Connect the rear section of the left side tailpipe **#16398S** onto the back of the front section by sliding the two sections together at the slip-fit connection over the rear axle. Place the hanger at the rear of the pipe into the rubber mount installed in step 4 above. Install a 2 1/2" clamp onto the over-axle slip-fit connection. Tighten enough to hold securely but still allow for adjustment.
- 9) Connect exit pipes **#16317S** or **#16397S** onto the ends of both over axle pipes. Place a provided 2 1/2" clamp onto these slip-fit connections. Tighten enough to hold but still allow for adjustment. Place the two stainless tips onto the exit pipes and tighten the clamps enough to hold but still allow for adjustment. Rotate the exit pipes and tips to the desired position and tighten just enough to hold in place.
- 10) Adjust the position of all pipes and muffler to provide a satisfactory fit. A minimum of 3/4" clearance around all parts of the system must be maintained; while also keeping suspension travel and vibration in mind.
- 11) Tighten all clamped connections down securely. After the system is secure, slide the 7/16" hanger keepers onto the end of the hangers at the rear of the vehicle on the drivers side. These will prevent the pipe hangers from sliding out of the rubber mounts.
- 12) For a more secure installation, we recommend welding all slip-fit connections.

### PACKING LIST

<u>Qty</u>	<u>Description</u>	<u>Part#</u>
1	Adapter pipe	TB230S
1	Muffler	8530552-Z
1	Right Tailpipe	16399S
1	Left Front Tailpipe	16380S
1	Left Rear Tailpipe	16398S
2	Rear Exit Pipe (R/L)	16397 S
2	Side Exit Pipe (R/L)	16317S
2	Stainless Tip	ST396
1	Parts kit	PK530
5	2 1/2" clamp	MC250BS
1	3" clamp	MC300BS
1	Frame Hanger	226HA
1	Clamp Hanger	393HA
1	Square spacer	HA226
1	Rubber hanger	HA168
1	3/8"x 4" Bolt	
1	3/8" Nut	
1	3/8" Lock washer	
2	3/8" Flat washers	
2	7/16" Hanger Keepers	



Installation diagram for:  
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**AMERICAN THUNDER**  
**409S Stainless Steel**

