

## Installation Instructions for: **SYSTEM #17476** 2002-2005 DODGE RAM 1500 SERIES TRUCKS

4.7L & 5.9L (NON-HEMI)

# THUNDER

### Removal:

7/06/09

1) Raise the vehicle up on a hoist or rack to working height. If you do not have access to a hoist or rack raise the vehicle and support securely with jack stands.

Using a hacksaw or sawsall, cut the stock tailpipe off where it exits the muffler. (This step is 2) not mandatory, but will make removal easier.)

Remove the hanger at the rear of the tailpipe from the rubber mount on the vehicle. Remove 3) 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:

Before installing anything, prep the clamps supplied in the hardware kit by removing the nuts, 1) and applying a thick lubricant such as white grease or anti-seize to the threads.

Place the inlet pipe assembly **#TB230** in position on the front pipe from the catalytic converter 2) and install the clamp hanger #271HA.

Connect the inlet of muffler **#530552** to the inlet pipe. Use a stand to support the muffler and 3) install a 3" clamp. Tighten enough to hold but still allow for adjustment.

At the rear of the frame on the drivers side of the vehicle (next to the spare tire) there is an 4) 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**.

Place the right side tailpipe #16399 into position over the axle and slip into the right side 6) 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 #16312.

7) Place the front section of the left side tailpipe **#16380** 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 **#16398** 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 **#16317 or #16397** 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.

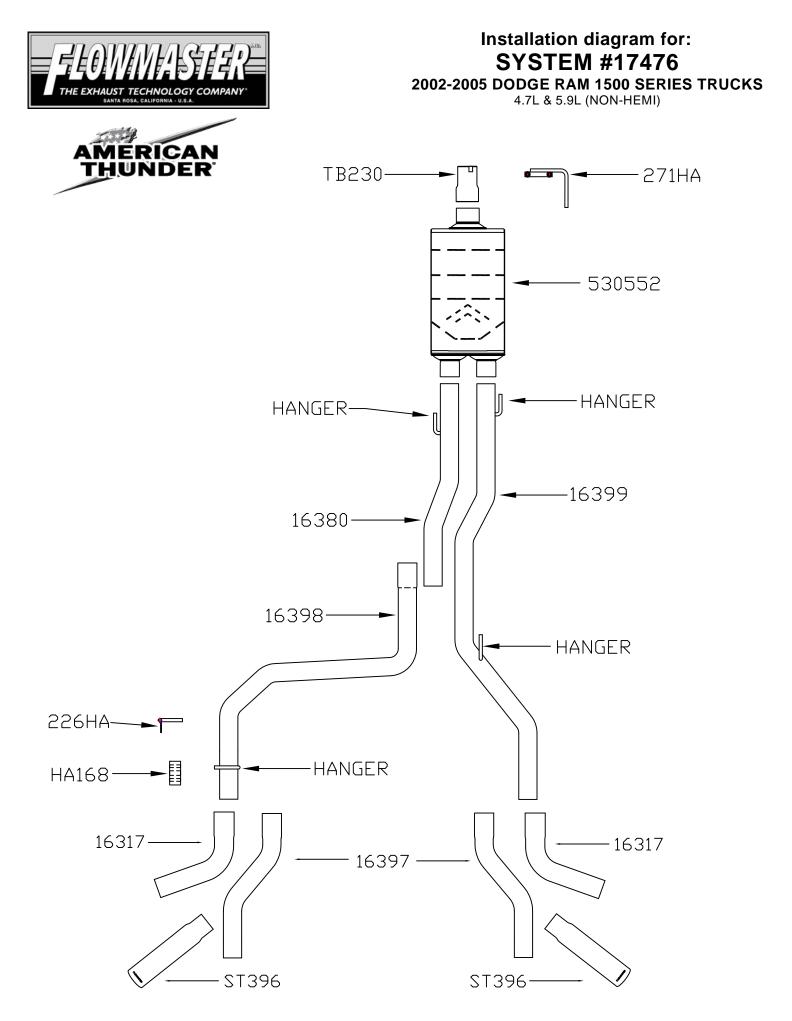
10) Adjust the position of all pipes and muffler to provide a satisfactory fit. A minimum of 3/4" clearance around all parts of the system must be maintained; while also keeping suspension travel and vibration in mind.

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 cleaner appearance and more secure installation, we highly recommend welding all slipfit connections. If you live in a geographical area that has harsh winters or sees a great deal of precipitation, the use of high temperature paint over the welded areas can help to prevent surface rust and premature corrosion.

<u>Qty</u> 1 1 1 2 2 2	5 1 1 1 1 1 1	Description Adapter pipe Muffler Right Tailpipe Left Front Tailpipe Left Rear Tailpipe Rear Exit Pipe (R/L) Side Exit Pipe (R/L) Stainless Tip Parts kit 2 1⁄2" clamp 3" clamp Frame Hanger Clamp Hanger Square spacer Rubber hanger 3/8"x 4" bolt 3/8" Nut	Part# TB230 530552 16399 16380 16398 16397 16317 ST396 PK392 MC250S MC300G 226HA 271HA HA226 HA168	
	1	6	1	
	1	3/8" Nut		
	1	3/8" lock washer		
	2	3/8" flat washers		
	2	7/16" Hanger Keepers		

#### PACKING LIST



Technical Support (707) 544-4761