# FLOWMASTER MANERICAN THUNDER

**SYSTEM #17429** 1994-2001 DODGE RAM TRUCK V-8 <sup>1</sup>/<sub>2</sub> TON - 119", 135" AND 139" W.B. (WITH D.O.S./D.O.R. EXIT TAILPIPES)

### **Removal:**

4/17/06

- 1) Raise the vehicle and support with jack stands.
- 2) Using a hacksaw or sawsall, cut the stock tailpipe off where it exits the muffler. (This step is not mandatory, but makes removal much easier.
- 3) Separate the two rubber hangers on the tailpipe, just behind the muffler, from their rubber mounts on the vehicle. Then remove the two bolts at the rear of the tailpipe that connect the stock tailpipe hanger to the frame of the vehicle. Remove the tailpipe and set aside.
- 4) Support the muffler with a stand, remove the clamp in front of the muffler. Once the clamp is removed it may be necessary to heat this connection with a torch for ease of removal. **Please use extreme caution when using a torch!** If torching does not work take a sawsall or hacksaw and cut muffler off right after hydrosize on inlet pipe. Take a saw and slice excess off the inlet pipe.
- 4) Remove the muffler and set aside.

### **Installation:**

- 1) Place inlet pipe #TB230 in position on the front pipe from the catalytic converter, install one of the 2 <sup>1</sup>/<sub>2</sub>" clamps provided, but do not tighten yet.
- 2) Connect the inlet of the muffler #530552 to the inlet pipe. Use a stand to support the muffler, and install a 3" clamp, but do not tighten yet.
- 3) Due to the frame variations of model years, we have included two different rear tailpipe hangers for the left side of the vehicle. To determine which to use, look on drivers side of the frame, just behind the rear wheel. Look for a large slotted hole, (small on the 2000 model) with a smaller (1/4" dia.) About 1" below it. If these two holes are present, use hanger #208HA, with 5/16" bolt, nut and washer for the top hole and the 1/4" bolt, nut and washer for the bottom hole.

If these holes are not there, look on bottom edge of frame at about 18" forward of the rear bumper. There should be two holes side-by-side at about 3/4" apart. Use hanger #211HA, with 5/16" bolt, nut and washer to mount the hanger to the forward hole.

If you have an aftermarket tow hitch, such as Drawtite, etc. We have included two 5/16"shoulder bolts that will allow you to bolt rubber hanger #HA168 directly to the side of the tow hitch. As the mounting arms of the hitch begin to narrow toward the front of the vehicle, there will be two holes located on the side of the hitch, place HA168 up to the forward hole and insert the shoulder bolt with the 3/8" washer through HA168 from the inside of the hitch. Use the 5/16"lock washer and nut to secure the hanger into place. Repeat this step for the passenger side of the vehicle.

- 4) Take the two rubber hangers #HA168 and slide them onto the bottom of either #208HA or #211HA. Then take the clamp hangers #209HA and slide them into the bottom of rubber hanger #HA168. The kit diagram shows which way to insert the hangers.
- 5) Place right side tailpipe #16127 in position over the axle and slip into the right side muffler outlet and insert the hanger into the right rubber hanger mount on the frame, then place the rear of the tailpipe into the  $2 \frac{1}{2}$ " clamp hanger.
- 6) Place the front section of the left side tailpipe #16128 into the left side muffler outlet and insert hanger into the left rubber hanger mount on the frame.
- 7) Connect the rear section of the left side tailpipe #16124 onto the back of the front section by sliding the two sections together at the slip-fit connection over the rear axle. Then place the rear of the tailpipe into the  $2\frac{1}{2}$ " clamp hanger. Install a  $2\frac{1}{2}$ " clamp on the over-axle slip-fit connection.
- 8) Then slide side exit pipes 16317 for the left / right side or16397 for the rear exit through the clamp hangers and onto the back of the tail pipes. Adjust the position of the tail pipes and tighten the clamp assemblies to hold them in place.Next place ST396 stainless tips onto the exit pipes and tighten them firmly but still allowing for adjustment.
- 9) Adjust the position of all the pipes and muffler to provide a satisfactory fit. A minimum of 3/4''clearance around all parts of the system must be maintained; while keeping suspension travel and vibration in mind.
- 10) Tighten all clamped connections securely. For a (cleaner) appearance, connections can be welded and the clamps removed.
- 11) After the system is secure, slide the 7/16" hanger keepers onto the end of the two hangers behind the muffler and also onto all round hanger mounts. These will prevent the rubber hangers from sliding off.

# We strongly recommend welding all slip-fit connections.

## PACKING LIST

<u>Qty</u>	Description	Part#	
1	1 1 1	B230	
1		530552	
1		16127	
1	Tailpipe (Front L)	16128	
1	Tailpipe (Rear L)	16124	
2	Exit Pipe (side)	16317	
2	Exit pipe (rear) 1	6397	
2	Stainless Tip S	ST396	
1	Parts kit	PK302	
4	2 <sup>1</sup> /2" clamp		MC250S
1	3" clamp		MC300G
2	Frame Hanger		208HA
2	Clamp Hanger		209HA
1	Frame Hanger		211HA
2	Rubber hanger		HA168
2	5/16" x 1" Bolt		HW204
2	5/16" Nut		HW102
2	5/16" lock washer		HW308
2	1/4" x 1" Bolts		HW202
2	1/4" Lock Washers		HW307
2	1/4" Nuts		HW101
6	7/16" Hanger Keepers		HW502
2	3/8" x 1 3/4" Shoulder Bolts		HW216
2	3/8" Flat Washers		HW303

