

## Installation Instructions **717946** 1994-02 RAM 1500/2500/3500 3.9L, 5.2L & 5.9L ENGINE 2/4 Wheel Drive & All Wheelbases

## **OVERVIEW:**

1. Take a moment to read and understand these instructions before installing your Flowmaster performance system.

**NOTE:** Please inventory all parts now before continuing and if necessary, report any missing items to our tech line. This will avoid potentially stranding your vehicle until any missing replacement parts arrive.

ITM #	PART #	DESCRIPTION	QTY.
1	TB230M	Adapter Pipe	1
2	86093M	Extension Pipe	
3	72288-Z	FlowFX Muffler	
4	16124M	Left Rear Tailpipe	
5	16127M	Right Tailpipe 1	
6	16128M	Left Front Tailpipe 1	
7	16317M	Side Exit Pipe	2
8	ST507B	Тір	2

## **REMOVE STOCK EXHAUST SYSTEM:**

 Raise vehicle up on a hoist or rack to working height. If you don't have access to a hoist or rack, support vehicle with jack stands.

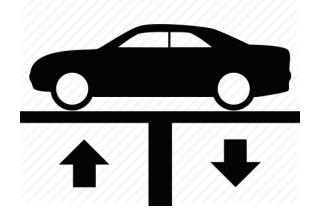
#### WARNING:

Avoid serious burns! Allow your vehicle time to cool completely before touching any factory engine components.

#### To ease preparation and installation of your new kit:

- Apply penetrating lubricant to mounts, bolts and clamps before you remove them.
- Use stands as necessary to support parts as you detach them from your vehicle and again as you install new parts.

ITM #	PART #	DESCRIPTION	QTY.
N/A	PK1044	Hardware Package includes:	1
9	522HA	Front Hanger	1
10	465HA	Front Hanger	1
11	391HA	Clamp Hanger	
12	208HA	Rear Hanger	
13	211HA	Rear Hanger	1
14	MC250BS	2 <sup>1</sup> / <sub>2</sub> " Stainless Band Clamp	5
15	MC300BS	3" Stainless Band Clamp	1
16	HA168	Red Rubber Hanger	2
17	HW204	5⁄16 x 1" Bolt	2
18	HW102	5∕16" Nut	2
19	HW308	⁵⁄₁₅" Lock Washer	2
20	HW202	¼ x 1" Bolt	2
21	HW306	1/4" Split Lock Washer	2
22	HW101	¼" Nut	2
23	HW502	‰" Hanger Keeper	8
24	HW216	¾ x 1¾" Shoulder Bolt	2
25	HW303	¾" Flat Washer	2



3. Using a hacksaw or sawsall, cut stock tailpipe off where it exits muffler.



4. Separate wire hangers from isolators behind muffler. Remove bolt and hanger connecting stock tailpipe to vehicle frame (as shown, depending on your application). Remove tailpipe section from vehicle.



5. Remove clamp on muffler inlet, then remove muffler and set aside.

**NOTE:** Because connection may be significantly crimped by clamp, it may be necessary to heat it for ease of removal. If this does not work, use a hacksaw or sawsall to cut muffler off right after inlet pipe hydrosize, then remove excess.



## INSTALL FLOWMASTER EXHAUST SYSTEM

6. Remove nuts from stock and Flowmaster clamps, apply anti-seize compound to bolts and re-install nuts.

**NOTE:** The image in this step is intended for illustrative purposes only and may or may not accurately reflect components included in your kit.

 Every slip fit connection in this kit must seat 3" deep except for muffler connections which must seat 2" deep. Find all slip fit components in your kit and mark them accordingly so your Flowmaster exhaust system fits properly onto your vehicle.

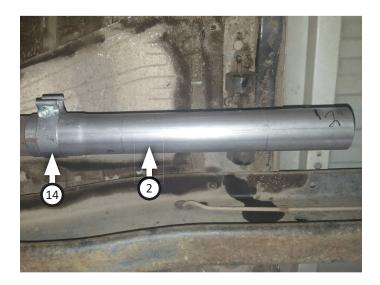


8. Identify your vehicle within the specifications listed, then apply the corresponding modifications or assembly combinations to ensure this kit will install properly.

WHEEL BASE	INLET ASSEMBLY:	MODIFICATION
119"	Adapter Pipe	No modification necessary.
135"	Extension + Adapter Pipe	Trim 20" from extension pipe.
139"	Extension + Adapter Pipe	Trim 16" from extension pipe.
155"	Extension + Adapter Pipe	No modification necessary.

9. If applicable, place clamp (14) onto extension pipe (2) then connect it to stock front pipe, lining extension notch up to stock pipe tab. Tighten clamp just enough to allow for adjustment.





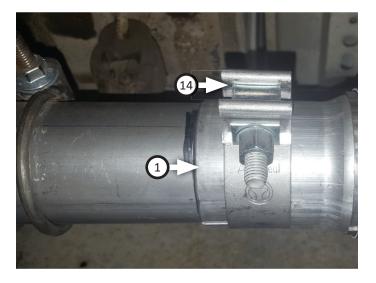
**NOTE:** If your vehicle has a 135" wheelbase, use **front** hanger (9). Otherwise, use **front** hanger (10).

10. Place **front hanger (9 or 10)** onto extension pipe then connect them to isolators.

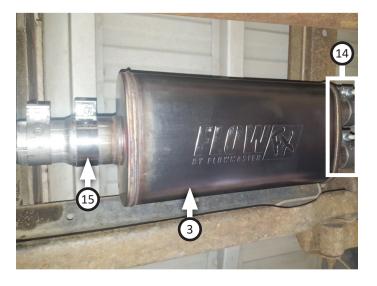




11. Place **clamp (14)** onto **adapter pipe (1)** then connect it to extension or factory exhaust. Tighten clamp just enough to allow for later adjustment.



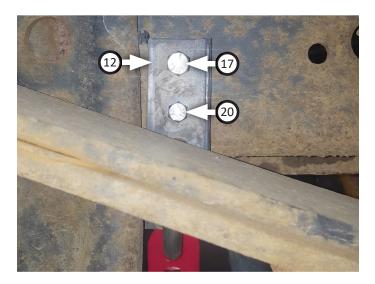
12. Place **clamp (15)** onto **muffler (3)** and connect it to adapter pipe then tighten clamp just enough to allow for adjustment. Place (x2) **clamps (14)** onto muffler outlets.



**NOTE:** Complete this step for both sides of vehicle unless the holes (indicated below) only exist on passenger side of your vehicle. If so, move on to step 14 for driver side mount.

13. Mount rear hanger (12) with bolts (17, 20), nuts (18, 22) and washers (19, 21).





**NOTE:** Complete step on drivers side if your vehicle has (x2) holes on bottom edge of frame, 18" forward of rear bumper.

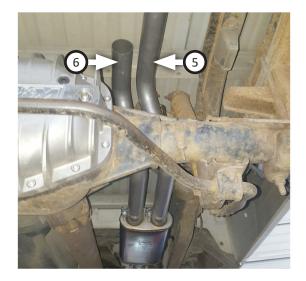
14. Mount rear hanger (13) using forward hole with bolt (17), nut (18) and lock washer (19).





**NOTE:** If you have an aftermarket tow hitch (such as Drawtite), we have included (x2) **bolts (24)** that will allow you to fasten **rubber hanger (16)** directly to side of tow hitch. There are (x2) holes located on side of hitch where mounting arms narrow toward front of vehicle. Place **rubber hanger (16)** up to forward hole and insert bolt with **flat washer (25)** through rubber hanger from inside of hitch. Use **lock washer (19)** and **nut (18)** to secure hanger in place. Repeat step for passenger side of vehicle.

15. Route **left front (6)** and **right tailpipes (5)** over axle then connect them to muffler. Insert their wire hangers into isolators then tighten clamps just enough to allow for adjustment.



16. Place **clamp (14)** onto **left rear tailpipe (4)** then connect it to left front tailpipe. Insert wire hanger into rubber hanger then tighten clamp just enough to allow for later adjustment.



 Place clamp hanger (11) onto side exit pipe (7) then connect it to right tailpipe and hang wire into isolator. Place tip (8) onto exit pipe and tighten inlet. Complete step on left rear tailpipe.



- Adjust exhaust components for fit; maintaining ½" clearance and compensating for suspension, travel and vibration, then tighten all clamps. Finally, fit (x8) hanger keepers (23) onto each sideways hanger.
- 19. Recommended: Secure slip-fit connections with a 1-inch tack weld then spray high-temp paint over each weld to prevent rust and premature corrosion.

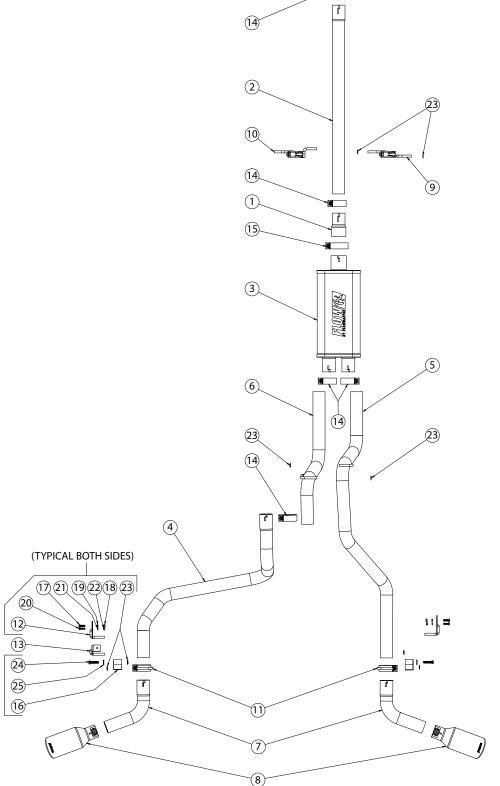


Congratulations, the installation of your FLOWMASTER performance exhaust system is now complete!





Installation Diagram 717946 1994-02 RAM 1500/2500/3500 3.9L, 5.2L & 5.9L ENGINE 2/4 Wheel Drive & All Wheelbases



www.flowmastermufflers.com Technical Support (866) 464-6553



# **Flowmaster® Product Warranty Details**

Lifetime Limited Warranty applies to Flowmaster stainless steel mufflers (excluding FlowFX series), all stainless steel exhaust systems (including FlowFX series), stainless steel pipes, air intake kits and oiled type filters (except cleaning kits), and other stainless steel exhaust accessories (except exhaust tips and racing products).

Three (3) Year Limited Warranty applies to Flowmaster aluminized steel mufflers, aluminized steel exhaust systems, aluminized steel pipes, exhaust tips and other non-race exhaust accessories.

Two (2) Year Limited Warranty applies to Delta Force Dry air intake filter elements.

**One (1) Year Limited Warranty** applies to FlowFX series mufflers, Elite Series exhaust headers and electronic components such as Delta Boost modules.

Flowmaster, Inc. ("Flowmaster") extends the following limited warranty to the original purchaser of its mufflers, exhaust systems, pipes, exhaust tips, headers and other non-race accessories (hereafter "products"), excluding catalytic converters sold under the Flowmaster brand.

Flowmaster warrants the products mentioned above against defects in materials and workmanship for the period set forth below, when they are owned by the original purchaser and remain installed on the vehicle on which they were originally installed. This warranty is void if the product was not installed properly on the vehicle, was installed on a vehicle for which it was not designed, or was removed from the vehicle on which it was originally installed and reinstalled on another vehicle. This warranty shall not apply to normal wear, including interior/exterior sound levels, cosmetic issues such as coatings and material discoloration, any product that was installed on a racing vehicle, installed improperly or contrary to Flowmaster instructions, altered, misused, repaired, damaged from an accident, collision, undercarriage road impact or debris, or willful or negligent act. Note that all "straight-through" mufflers which use sound absorbing material inside the muffler to cancel sound...will degrade over time. This degradation of sound absorbing materials is considered "normal wear"...not a material defect.

The warranty set forth herein for Flowmaster stainless steel mufflers (except FlowFX), all stainless steel exhaust systems, stainless steel pipes, stainless steel exhaust accessories (except exhaust tips) and air intake kits and oiled type filters (except cleaning kits), extends for a period of the life of the original vehicle the product was installed on. The warranty set forth herein for Flowmaster aluminized steel mufflers, aluminized steel pipes, all exhaust tips and non-race exhaust accessories and commercial applications of aluminized steel products or stainless steel products extends for a period of three (3) years from the date of original purchase and the original vehicle it was installed on. The warranty set forth herein for Flowmaster Exhaust headers, FlowFX mufflers, and Delta Boost modules extends for a period of one (1) year from the date of original purchase and the original vehicle it was installed on. Header warranty does not cover damages caused by exhaust insulating wrap, and is void if the product was installed on a new or rebuilt engine during the initial break-in period.

To make any claim under the terms of this limited warranty, the original purchaser **MUST** either return the product to the original retailer or directly to Flowmaster. If the original purchaser elects to return the product to Flowmaster directly, he or she must first contact Flowmaster and obtain a Returned Material Authorization (RMA) number. Once the RMA number is received, the original purchaser may return the product to the address provided by Flowmaster, along with the **RMA number and Proof of Purchase** of the covered product. The Proof of Purchase must clearly show the place of purchase, purchase price, product purchased, and date of purchase. If upon inspection by Flowmaster the product is found to be defective in material or workmanship, Flowmaster shall at its option, either exchange the product for new product with the same part number or refund the original purchase price.

This warranty is not contingent upon the purchaser's completion of the Warranty Registration Form found on the Flowmaster website. If however the purchaser completes and submits that form at the time of purchase, Flowmaster will keep that form on file which may serve as an aid in determining warranty coverage in the event of the loss of the original purchase receipt.

Flowmaster's liability is expressly limited to the replacement of the product or refund of the purchase price as described herein. Flowmaster shall have no liability for the cost of installation or removal of the defective product, the cost of labor or any additional parts required to complete the installation of the replacement product, towing or transportation costs, or return shipping costs. In no event shall Flowmaster be liable for any direct, indirect, special, incidental or consequential losses and/or damages, including but not limited to interruption of business or loss of business or loss of profit or damage to related components resulting from the use of or inability to use the product, or any breach of warranty or any defect in the product, even if Flowmaster shall have been advised of the possibility of such potential losses or damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights which may vary from state to state.

The warranties set forth herein are exclusive and unless otherwise required by applicable law no other warranties are made by Flowmaster or are authorized to be made with respect to the product. Rev. 2/5/18