



## Installation Instructions

# 717900

## 2009-20\* RAM 1500

## 5.7L HEMI ENGINE

### With Factory Dual Tailpipes

\*Will carry on through 2020 for Ram 1500 Classic Models Only

### 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	8430162-550	Direct Fit Muffler with Valve	1
N/A	PK1018	Hardware Pack includes:	1
2	GA157	0.5 x 2.25L 3M Two-Sided Tape	2
3	EV208	Actuator Mount Assembly	1
4	EV501	Valve Spring	1
5	EV700	Actuator Motor	1

ITM #	PART #	DESCRIPTION	QTY.
6	EV701	Control Unit, Key FOB	1
7	EV704	Wire Assembly	1
8	MC300BS	3" Band Clamp	1
9	MC225BS	2¼" Band Clamp	2
10	HW283	M6 x 1.0 x 18mm Screw Assy	5
11	HW269	¼"-20 x ½" BTNHD Screw	1
12	HW332	¼" Split Lock Washer	1
13	HW124	18-8 Stainless ¼-20 Hex Nut	1
14	HW545	Nylon Cable Tie (Black)	10
15	HW546	16 GA 5" Micro2 Inline Fuse Holder	1
16	HW547	7.5 Amp Micro Fuse	1
17	HW549	Stp-dwn Butt Cnctr 16-14 to 22-18	1
18	HW551	Blue 18-14 Piercing Wire Tap	1
19	EV613	Exhaust Valve Fiber Washer	2
20	EV614	Exhaust Valve Fiber Spacer	1

### REMOVE STOCK EXHAUST SYSTEM:

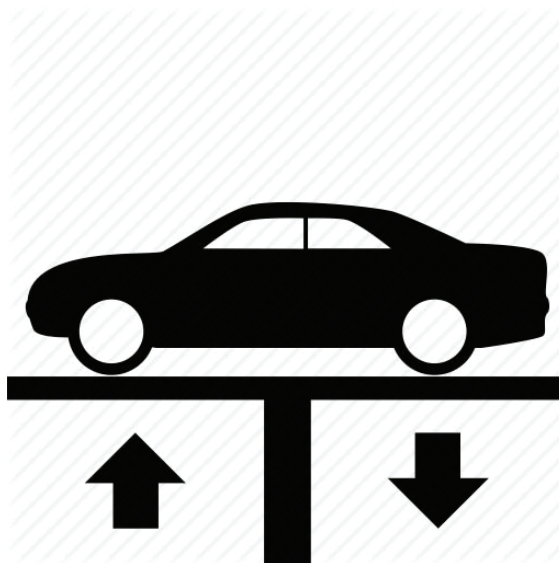
2. Raise vehicle up on a hoist or rack to working height. If you don't have access to a hoist or rack, support vehicle with jack stands.

#### 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.



3. Loosen clamps and remove both exhaust pipes from muffler exits. If necessary, disassemble wire hangers from isolators to make this easier.



4. Loosen clamp at front of muffler, unclip ground wire and disassemble muffler from mounts. Remove muffler from vehicle, making sure isolators stay attached.



#### INSTALL DIRECT FIT MUFFLER WITH VALVE:

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

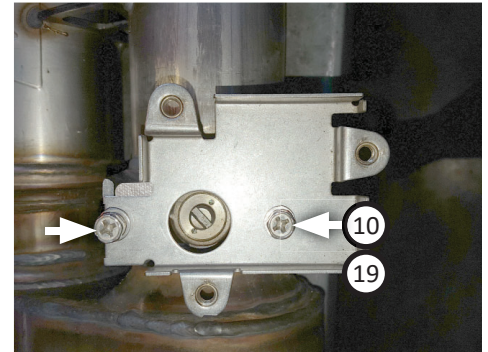
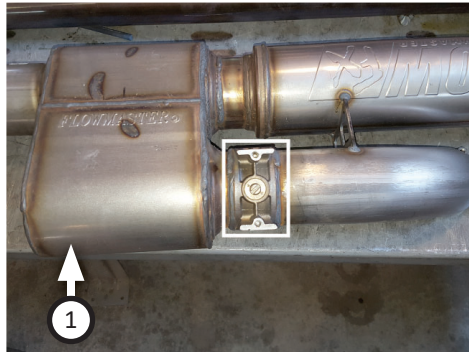
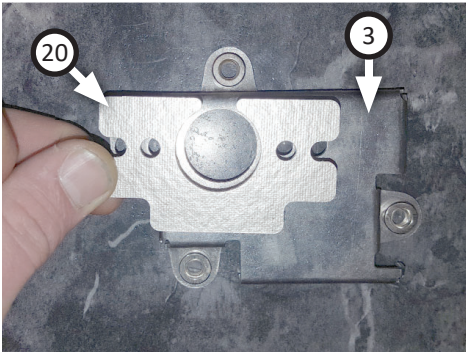
**NOTE:** The image in this step is intended for illustrative purposes only and may or may not accurately reflect components included in your kit.

6. Each muffler slip fit connection must seat 2" deep. Mark muffler accordingly so your Flowmaster exhaust system fits properly onto your vehicle.

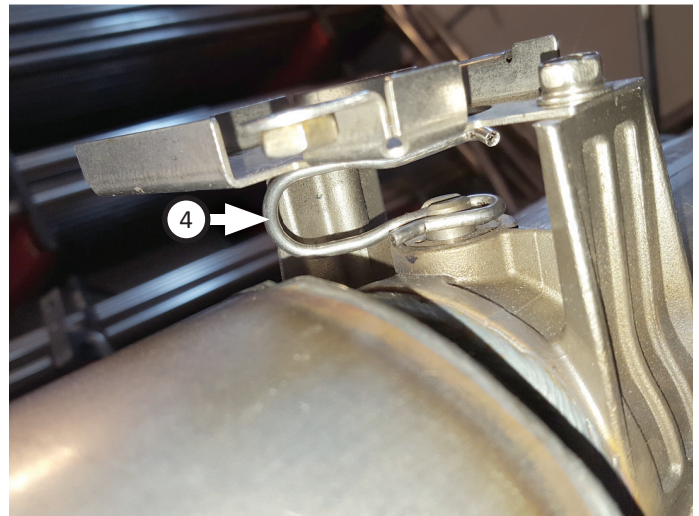
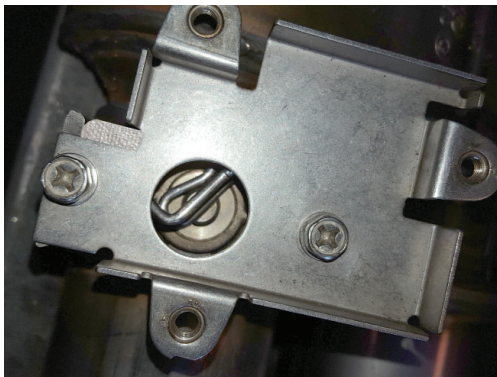




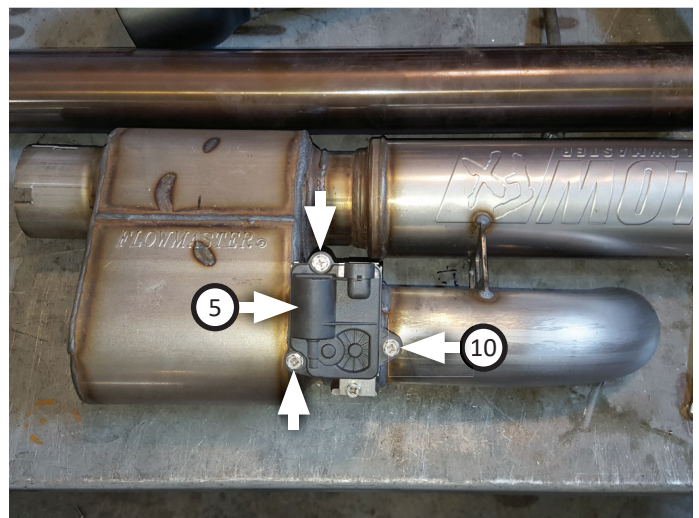
7. Place **fiber spacer (20)** onto **actuator mount assembly (3)**, then fasten them onto **muffler (1)** with (x2 ea.) **fiber washers (19)** and **bolt assemblies (10)**.



8. Set **valve spring (4)** into place on muffler valve underneath actuator mount assembly.

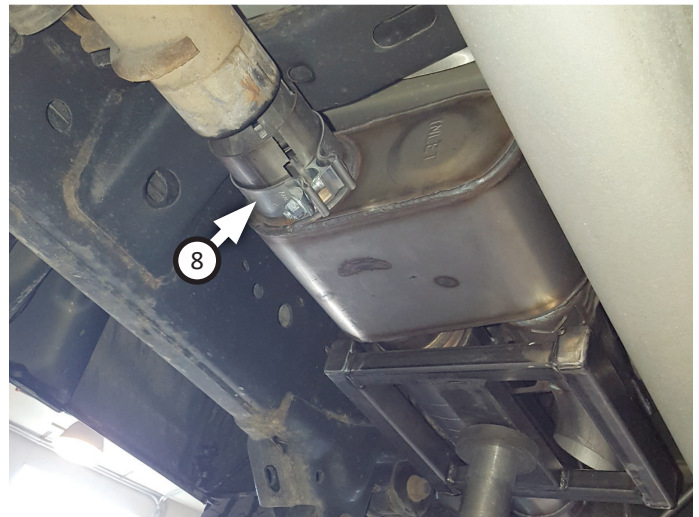


9. Set **actuator motor (5)** into actuator mount assembly, letting valve spring rest in notch. Fasten components together using (x3) **screw assemblies (10)**.





10. Place **clamp (8)** onto muffler inlet then connect it to factory inlet exhaust pipe, lining inlet pipe notch up to front pipe tab. Tighten clamp just enough to allow for adjustment.



11. Transfer isolators from factory muffler to direct fit muffler hangers to secure it in place. Then clip grounding wire to hanger wire as shown.



12. Place (x2) **clamps (9)** onto direct fit muffler outlets then connect factory tailpipes to them. Adjust muffler and exhaust system until it is oriented correctly then tighten all clamps just enough for later adjustment.





## PREPARE VEHICLE FOR WIRING:

13. Remove console top compartment cover then unscrew fasteners (x2) and retain them for later use.



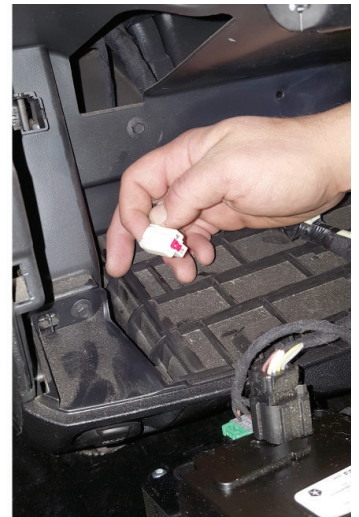
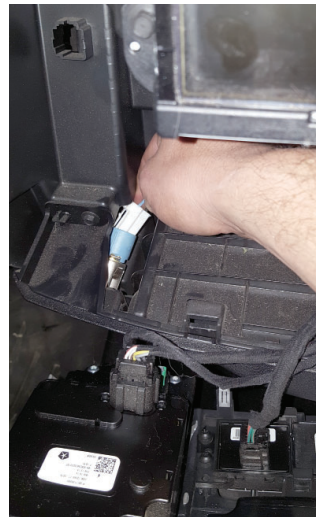
14. Remove console center compartment cover and fastener; retain them for later use.



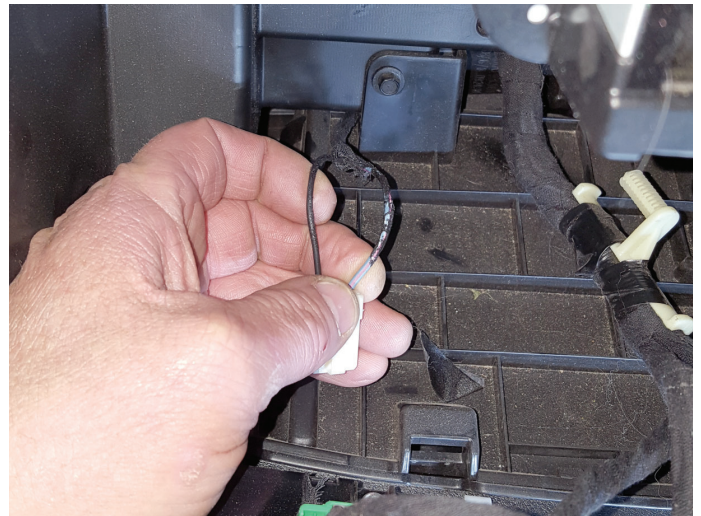
15. Pull center console front off of dashboard just enough to gain access behind it. Leave all wiring attached.



16. Unplug connector plug for 12V DC socket in lower left corner of console.

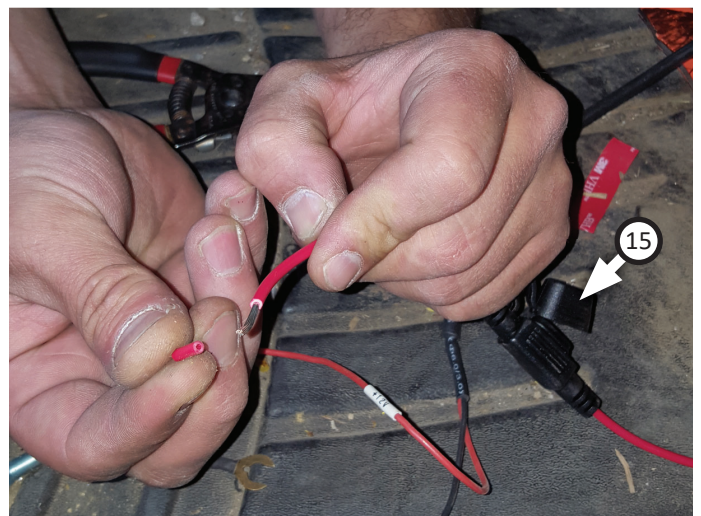
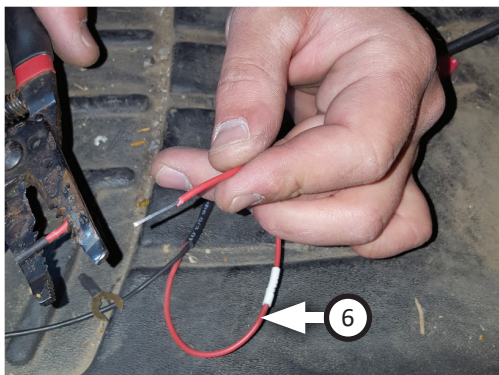


17. Remove or trim 12V DC socket wire wrap until you have enough wire to splice into.



#### ASSEMBLE AND INSTALL ACTUATOR WIRING:

18. Strip red wire on **control unit (6)** and one end of **fuse holder (15)**.

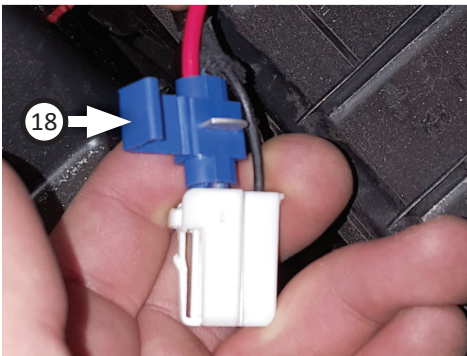




19. Insert stripped ends of fuse holder and control unit into **butt connector (17)**. Crimp connection, then apply heat to middle of butt connector to seal wires together.



20. Place **wire tap (18)** onto fuse holder then close them around blue socket wire. Pinch fuse holder to splice fuse wire in with socket wire, then close fuse holder to encase connection.



21. Open fuse holder cap, plug in **micro fuse (16)**, then replace cap.

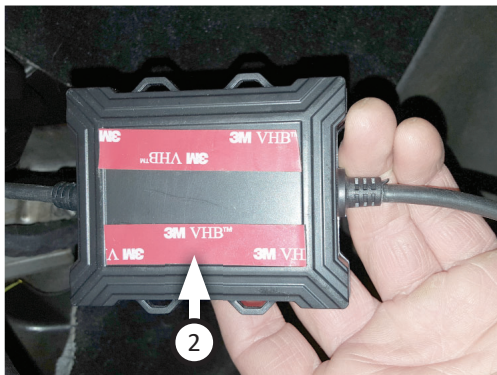




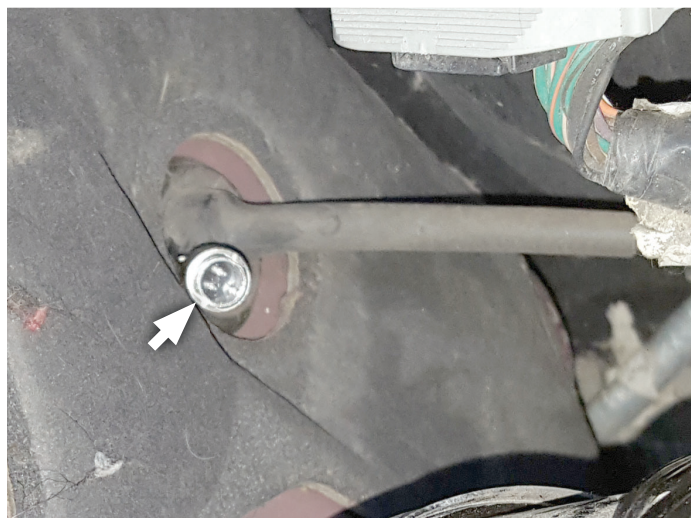
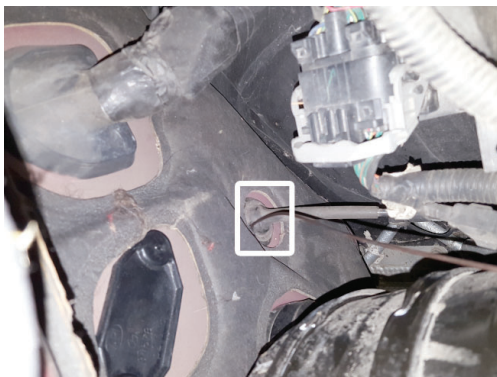
22. Fasten control unit ground wire (black) to vehicle frame near center console using **screw (11)**, **split lock washer (12)** and **nut (13)**.



23. Stick **two-sided tape (2)** to bottom of control unit then place it in cab where it will not interfere with operation of vehicle.



24. Find accessory point (behind battery on driver side), cut slit or x in it and insert a coat hanger wire through into cab. Attach control unit connector to wire, apply lubricant to it then draw it into engine compartment.





## CONNECT MUFFLER VALVE TO WIRING:

25. Connect **wiring assembly (7)** to actuator valve on direct fit muffler. Route wire length over muffler to driver side, then up front to engine compartment to connect it to control unit connector.



26. Adjust muffler for proper fit then tighten all clamps. Secure wiring beneath vehicle, tucking away any slack behind heat shields and securing it to frame as necessary to maintain clearance from moving and heated components. Repeat this for wire inside cab as well, utilizing (x10) **zip ties (14)** to secure slack.
27. 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

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