



***DOWNLOAD COLOUR  
INSTALL MANUALS AT  
[www.bddiesel.com](http://www.bddiesel.com)***



# **BD Ram 5.7L HEMI Exhaust Manifold Kit**

<b>1041463</b>	<b>Exhaust Manifold Kit</b>
<b>1041464</b>	<b>Passenger Side Single Manifold Kit</b>
<b>1041465</b>	<b>Driver Side Single Manifold Kit</b>

This exhaust manifold replaces the problematic OEM exhaust manifold on Ram pick-ups with the 5.7L Hemi engine. The kit includes everything needed to correctly install the manifold.

## Vehicle Fitment

Please ensure this kit fits your vehicle before installing.

<b>2009-2022</b>	Ram 1500 5.7L* *Only fits classic (DS) body styles for 2019+ vehicles
<b>2009-2018</b>	Ram 2500 5.7L
<b>2013-2018</b>	Ram 3500 5.7L
<b>2011-2015</b>	Ram 3500 5.7L Cab and Chassis

## Table of Contents

Vehicle Fitment .....	2
Table of Contents.....	2
Kit Contents .....	2
Introduction .....	3
Tools Required for Installation .....	3
Installation.....	4
OEM Exhaust Manifold Removal .....	4
Right side Manifold Removal .....	6
Right Side Manifold Installation.....	7
Left Side Manifold Removal .....	8
Left Side Manifold Installation .....	9

## Kit Contents

1041463 Full Exhaust Manifold Kit				
<b>1401464</b>	<b>1401466</b>	<b>1451460</b>	<b>1451461</b>	<b>1403009</b>
				
Passenger Side Exhaust Manifold	Passenger Side Exhaust Manifold Gasket, Single	M8-1.25x60mm Hex Flange Bolt	M6-1.0x12mm Hex Flange Bolt	Spacer 15mm
<b>Qty: 1</b>	<b>Qty: 1</b>	<b>Qty: 20</b>	<b>Qty: 10</b>	<b>Qty: 20</b>
<b>1401465</b>	<b>1401467</b>	<b>1451463</b>	<b>1451462</b>	
				
Driver Side Exhaust Manifold	Driver Side Exhaust Manifold Gasket, Single	Nut; 3/8-16 FHCS	3/8"-16x2.50 Hex Flange Bolt	
<b>Qty: 1</b>	<b>Qty: 1</b>	<b>Qty: 4</b>		

<b>1041464 Passenger Side Exhaust Manifold Kit</b>			
1401464	1401466	1451460	
			
Passenger Side Exhaust Manifold	Passenger Side Exhaust Manifold Gasket, Single	M8-1.25x60mm Hex Flange Bolt	
<b>Qty: 1</b>	<b>Qty: 1</b>	<b>Qty: 10</b>	
1451462	1451463	1403009	1451461
			
3/8"-16x2.50 Hex Flange Bolt	Nut; 3/8-16 FHCS	Spacer, 15 mm	M6-1.0x12mm Hex Flange Bolt
<b>Qty: 2</b>	<b>Qty: 2</b>	<b>Qty: 10</b>	<b>Qty: 5</b>

<b>1041465 Driver Side Exhaust Manifold Kit</b>			
1401465	1401467	1451460	
			
Driver Side Exhaust Manifold	Driver Side Exhaust Manifold Gasket, Single	M8-1.25x60mm Hex Flange Bolt	
<b>Qty: 1</b>	<b>Qty: 1</b>	<b>Qty: 10</b>	
1451462	1451463	1403009	1451461
			
3/8"-16x2.50 Hex Flange Bolt	Nut; 3/8-16 FHCS	Spacer, 15 mm	M6-1.0x12mm Hex Flange Bolt
<b>Qty: 2</b>	<b>Qty: 2</b>	<b>Qty: 10</b>	<b>Qty: 5</b>

**Introduction**

BD's exhaust manifold kit for the Ram 5.7L pick-up trucks replace the problematic OEM manifold, adding spacers to reduce the stress on the bolts to prevent them from breaking.

**Tools Required for Installation**

- 10-16mm Socket & Wrench
- 7/8" Deep Socket
- Screwdriver
- Torque Wrench
- Retainer Clip Remover
- Broken Stud Removal Tool
- 90 degree hand drill

## Installation

### OEM Exhaust Manifold Removal

Disconnect the vehicle battery and safely position the vehicle on a hoist before installation for safety.

Remove the driver and passenger side fender-liners and wheels.



Apply penetrating fluid on all exhaust pipe retaining, heat shield mounting bolts, and studs.

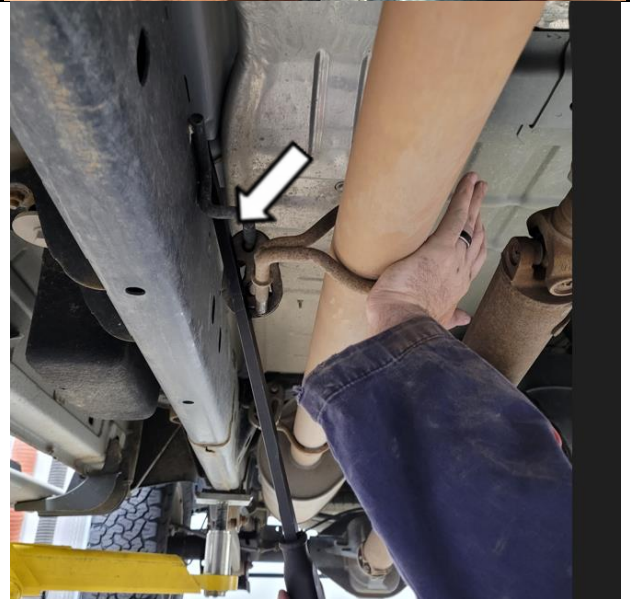
Let sit for 5 minutes, then remove these 4 bolts from passenger and driver side manifold using **9/16 in** socket.



Remove the 4 flange bolts from passenger and driver side manifold to collector flange using **9/16 in** socket.



To gain more space for removal of the manifold remove the mid-pipe exhaust hanger as shown.



## Right Side Manifold Removal

Using a **10 mm** socket wrench remove the **four (4)** heat shield nuts. Carefully remove the heat shield to prevent it from bending.



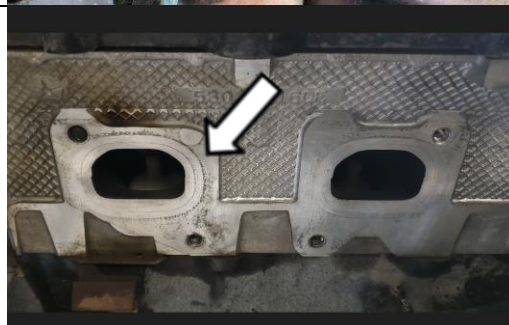
Use size **10 mm & 13 mm** socket to undo the bolts securing the manifold to the vehicle.

Remove the manifold and gasket from the vehicle carefully.

**Note: if needed, remove all broken bolts/studs from the engine block.**



Clean and Inspect mating surfaces of exhaust manifold for flatness with a straight edge.



# Right Side Manifold Installation

Position the exhaust manifold gasket and manifold.

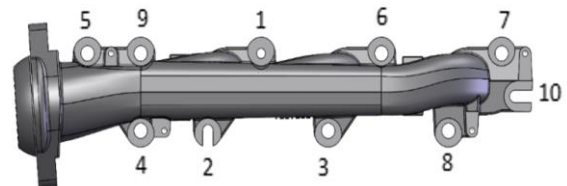
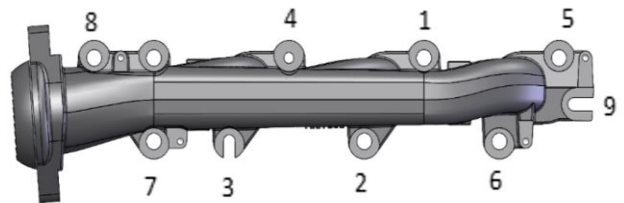
Install the supplied M8 bolts along with the spacers (1403009) as shown.



Using the sequence shown, tighten the bolts as shown.

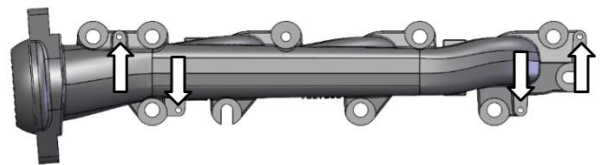
Torque to **25 N-m (18 ft-lb)**.

**Note:** early production has 9 bolts, and late production has 10 bolts.



Using the provided M6 bolts, install the OEM heat shield on the new mounting locations on the BD manifold.

Torque to **10 N-m (89 in-lb)**.



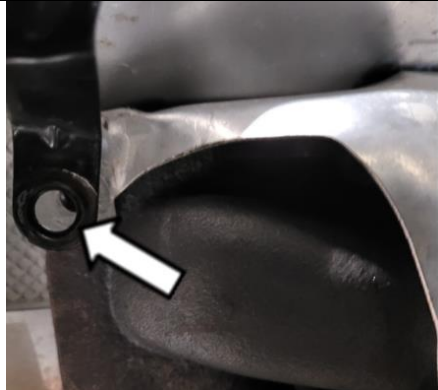
## Left Side Manifold Removal

Disconnect the steering shaft linkage.  
Mark the steering shaft position as shown before removing the bolt.

**Note:** Removing this allows for ease of removal of the manifold.



Remove the nut securing the oil dipstick tube and heat shield to the stud. This will allow the dipstick to be positioned aside when necessary



Using a **10mm** socket, remove the **three (3)** remaining heat shield nuts.

Carefully remove the heat shield to prevent it from bending.



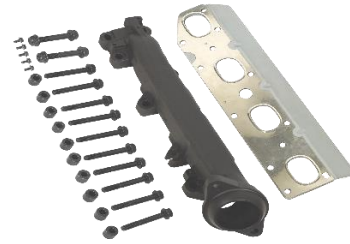
Using **10 mm & 13 mm** socket, remove the left side exhaust manifold bolts. Remove the manifold and gasket carefully

**Note:** if needed, remove all broken bolts/studs from the engine block.





# Left Side Manifold Installation



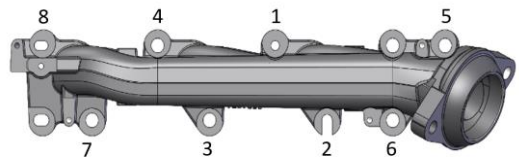
Ensure all gasket mating surfaces are clean and free of any debris.



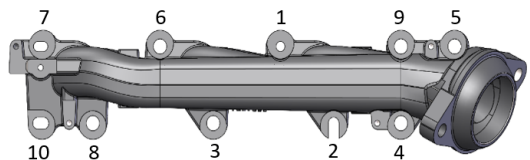
Set the manifold into position, then slide the corresponding gasket between the manifold and cylinder head.



Position the manifold with the gasket into place and install the supplied M8 bolts along with supplied spacer (1403009).



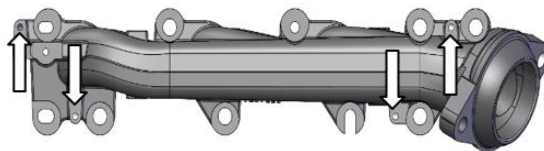
Using the sequence shown, tighten the bolts as shown.



Torque to **25 N-m (18 ft-lb)**.

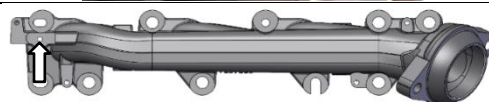
**Note:** early production has 8 bolts, and late production has 10 bolts.





Using the provided M6 bolts (1401462), install the OEM heat shield on the new mounting locations on the BD manifold. Use size 10mm wrench.

Torque to **10 N-m (89 in-lb)**.



On the driver side manifold, install the dipstick support bracket onto the new mounting location using the supplied M6 bolt.

Torque to **10 N-m (89 in-lb)**.



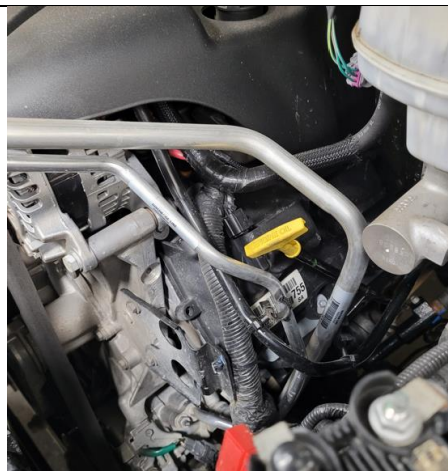
Align the previously created marking and insert the upper steering shaft into lower and tighten the bolt.

Torque to **50 N-m (37 ft-lb)**.



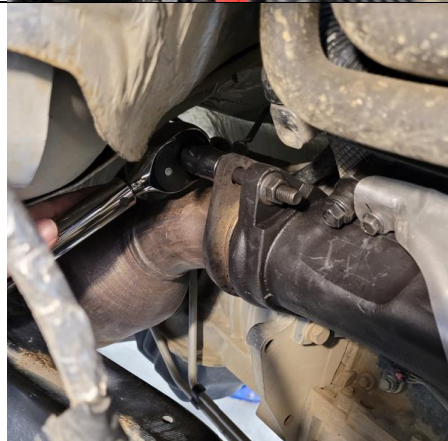
Check oil dipstick-for clearance against the hard lines after it was relocated.

If the dipstick is touching, gently push on it to adjust the mounting bracket.



Install the new supplied 3/8"-16x2.50 exhaust pipe retaining bolts and 3/8"-16 nuts in to both sides.

Torque to **32 N-m (24 ft-lb)**.



Connect the battery.  
Start the engine and check for leaks  
Install the inner fender liners  
Install wheels