



**2009-2014 Challenger / Charger / 300  
5.7L V8, 304SS, 1 3/4" Shorty Headers  
70302301-RHKR  
Installation Instructions**



Thank you for making HOOKER HEADERS your choice in a high-performance exhaust system. Extensive dyno/track testing has enabled HOOKER to offer the most advanced design in exhaust systems. The installation while not complex, will take a certain amount of time and patience. However, the additional horsepower and improved performance will more than justify your efforts. Proper installation and maintenance will ensure long life and maximum performance from your HOOKER HEADER exhaust system.

**BEFORE STARTING:**

Your vehicle must be raised a minimum of 24 inches. A floor hoist is ideal and recommended. If no hoist is available, we strongly urge the use of axle stands as a safety measure. **Please read and understand these instructions and disclaimer in their entirety before attempting installation.** This installation requires a moderate amount of mechanical ability and a good selection of hand tools to make installation less difficult. If you are not confident in your mechanical ability or lack the tools listed below please allow a professional to perform the installation of your BLACKHEART headers.

**CAUTION! WORK ONLY ON A LEVEL SURFACE. USE JACKS /JACKSTANDS OF SUFFICIENT CAPACITY TO LIFT AND SUPPORT YOUR VEHICLE. NEVER WORK UNDER A VEHICLE SUPPORTED BY A FLOOR OR BUMPER JACK.**

**INCLUDED HARDWARE:**

Accessory Pack Contents:			Tools Needed:	
P/N	Qty.	Description		
505R21	15	8mm x 1.25 x 25mm Bolts	3/8" Drive Metric Socket Set	16mm Deep Well Socket
540R21	1	Dipstick Bushing	<b>*13mm Compact Swivel Socket*</b>	15mm Deep Well Socket
199R10842	1	Instruction Sheet	10mm Compact Swivel Socket	14mm Deep Well Socket
			<b>*24" Long 3/8 Drive Extension*</b>	13mm Deep Well Socket
<b>Parts List:</b>	1	Left Side Shorty Header	3" long 3/8 Drive Extension	Metric box wrench set
	1	Right Side Shorty Header	3/8" Drive Universal	Penetrating Oil / WD40®
	1	Accessory Pack		

\* OEM Dodge Manifold Gaskets recommended: **5.7L** PN: 5045495AA / 5045496AA

**PRE-INSTALLATION:**

**NOTE:** Presoak the studs to the catalytic converters and Manifold Bolts with WD-40® or equivalent prior to starting installation.

1. Place vehicle on flat solid surface set parking brake and block front wheels.
2. **Disconnect the negative terminal of the battery.** Lift the vehicle a minimum of 24 inches and support with jack stands.
3. Remove both front wheels (NOT NECESSARY BUT HELPFUL).
4. Remove the (X4) bolts securing the engine service cover under car.

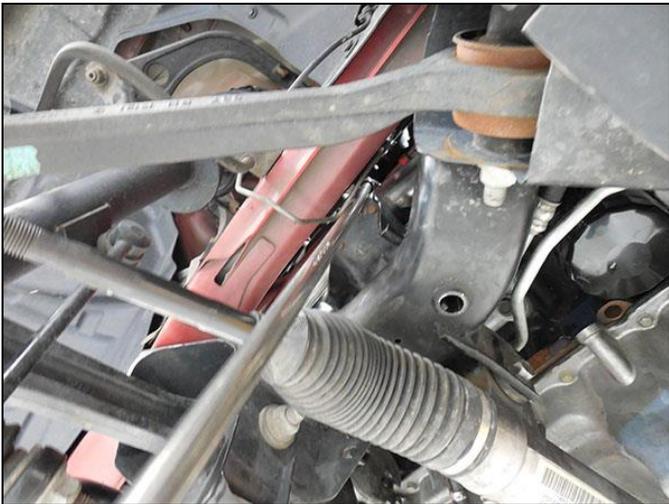
## 5.7L EXHAUST MANIFOLD REMOVAL:

1. Unplug the (x2) pre catalyst O2 sensors and (x2) post catalyst O2 sensors.
2. Remove the catalytic converters and down pipes from the manifolds and exhaust system.
3. Remove the (x4) 10mm nuts (1 at each corner of each manifold) that attach the heat shield.
4. Remove the alternator support bracket (passenger's side).
5. Remove the dipstick tube.
6. Support the engine with a screw jack or floor jack. Only lift the engine slightly to take the weight off the engine mount and hardware. **CAUTION! Do not support the engine from the oil pan.**
7. Remove the **driver's side** engine mount pedestal assembly from the block and rubber mount (only necessary to remove the heat shield for access to the manifold bolts) and remove the heat shield.
8. Remove the (x8) bolts securing the exhaust manifold to the cylinder head. Remove the exhaust manifold and gasket. Clean any debris from the cylinder head surface in preparation for the new gasket (gaskets not supplied).
9. Re-install the driver's side engine mount pedestal assembly.
10. Remove the **passenger's side** engine mount pedestal assembly from the block and rubber mount (only necessary to remove the heat shield for access to the manifold bolts) and remove the heat shield.
11. Remove the (x9) bolts securing the exhaust manifold to the cylinder head. Remove the exhaust manifold and gasket. Clean any debris from the cylinder head surface in preparation for the new gasket (gaskets not supplied).
12. Re-install the passenger's side engine mount pedestal and rubber mount assembly.
13. Remove the passenger's side knock sensor.

## INSTALLATION OF HEADERS:

1. Clean the exhaust port sealing surface to remove any dirt or gasket material that may affect the sealing performance of the gasket and cause leaks. **Repair any damaged threads or broken bolts.**
2. Install the purchased new Dodge exhaust manifold gasket with the supplied 8mm x 1.25 Flange bolts on the bottom 4 holes. Install bolts just a few threads.
3. Hang the **RIGHT** 70302301-RHKR header assembly on to the bolts and install the four remaining top bolts. Access to most of the header bolts can be done with the 24" extension and a 13mm swivel socket through the primary tubes. Adding an additional swivel and 3" extension with a standard 13mm socket is helpful with accessing the top center two bolts over top of the primary tube (See **Figures 1 & 3**).
4. Use a 13 mm box wrench to tighten the bottom two bolts closest to the starter. Tighten the bolts evenly in steps from the center out until all the bolts are tight. Repeat this process several times. For vehicles mounting the dipstick tube to the manifold bolt, reuse the O.E.M studded bolt and the supplied spacer to mount the dipstick in the factory location (See **Figure 4**).
5. Install the purchased new Dodge exhaust manifold gasket with the supplied 8mm x 1.25 Flange bolts on the bottom 4 holes. Install bolts just a few threads.
6. Hang the **LEFT** 70302301-RHKR header assembly on to the bolts and install the four remaining top bolts. Access to most of the header bolts can be done with the 24" extension and a 13mm swivel socket through the primary tubes. Adding an additional swivel and 3" extension with a standard 13mm socket is helpful with accessing the top center two bolts over top of the primary tube (See **Figures 2 & 3**). Tighten bolts evenly in steps from the center out until all the bolts are tight. Repeat this process several times.
7. Install the left and right pre-catalyst O2 sensors in the header collectors and connect to the O2 sensor harness.
8. Install the dipstick tube after checking the condition of the O-ring (replace if necessary). Vehicles with the dipstick tube mounted to the exhaust manifold bolt will re-use the factory studded bolt and the supplied spacer (**Figure 4**) to install the dipstick in the factory location. **VERIFY THE TUBE IS IN THE ENGINE BLOCK!!!**
9. Install the alternator support bracket. Install the passenger's side knock sensor.
10. Install the left and right catalytic converters and down pipes. Install the secondary O2 sensors and plug in the harness. Install the starter heat shield.

11. Recheck all connections and hardware to be sure all work is complete.
12. Check for proper clearance on all wiring harnesses, hoses, and lines around the headers to prevent damage from hot exhaust pipes.
13. Start the vehicle and check for leaks
14. Remove the jack stands and lower the car.
15. **After the first 50 miles**, re-check all connections and clamps. Re-torque the header collector bolts to the catalytic converters.



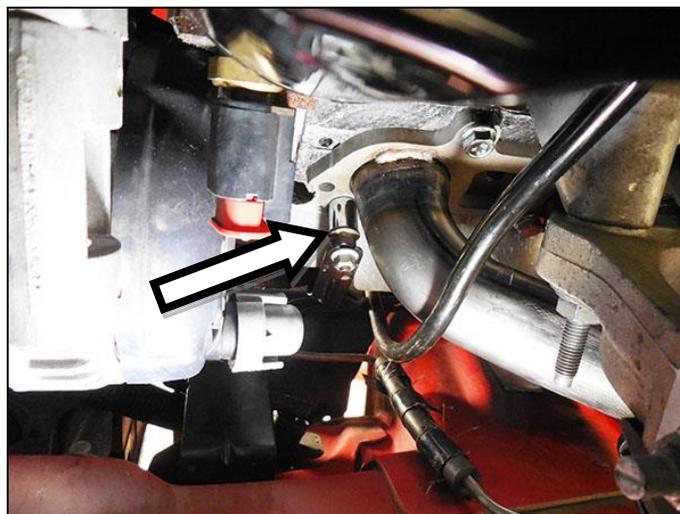
**Figure 1** – Access to top bolts passenger's side



**Figure 2** – Access to top bolts driver's side



**Figure 3** – Top Bolt Extension



**Figure 4** – Dipstick tube mounting bracket spacer w/ OEM bolt

**NOTE:** It is normal for your new Blackheart exhaust system to emit smoke for the first few minutes of operation.