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## **Installation Instructions and Warranty Information**

2005-09 Dodge Magnum 6.1L HEMI  
2006-09 Dodge Charger 6.1L HEMI  
2005-09 Chrysler 300C 6.1L HEMI  
2008-09 Dodge Challenger 6.1L & 5.7L HEMI



**P/N 6965S**

These headers are legal for Off Highway use (except in California or states that have adopted California emission standards) or Racing use (which may never be used on a Highway), or for use on pre emission controlled motor vehicles/motor vehicle engines (pre 1974 domestic vehicles certified to California standards, pre 1974 domestic vehicles certified to Federal standards and all pre 1974 Foreign vehicles) Only.

**Read all instructions carefully before attempting installation.**

Rev. 04/09

**PerTronix© thanks you for choosing JBA HEADERS, the best fitting, highest quality header on the market. In order to realize the full potential of our good fit, please read and understand these instructions completely prior to starting work.**

**Check to make sure you received the proper parts for your application. The header number will be stamped on the engine flange. If you are unsure you have received the proper parts call before you start work.**

**Be sure to work safe! Whenever you work under the vehicle be sure that it is located on level, solid ground and is supported by adequate safety stands! Remember: Hot asphalt will not support most jack stands!**

**Many factors affect the installation of headers, some of which are broken or aftermarket motor mounts, accidents that impact the configuration of the frame, and/or the installation of different engines or aftermarket cylinder heads.**

**Attention Customers breaking in new engines: Due to the extreme heat generated during the break-in process, the appearance of the ceramic coating may be altered in certain areas. The protection characteristics and thermal barrier properties of the coating is never compromised. It is recommended that a cast iron manifold or old set of headers be used for this process.**

**Notice: The coating of these headers can be marred or scratched during installation. If the header needs to be returned and is damaged, you will be charged for recoat.**

JBA uses sealing beads on all its headers. We have found that when installed correctly, the raised bead around each port increases the pressure exerted on the gasket directly adjacent to the port and effectively prevents leaking gaskets. It is normal for the flange to be raised off the cylinder head the thickness of the sealing bead. It is important when installing the header, to install all bolts loosely, then tighten evenly to ensure the flat installation of the flange. The torque sequence from one flange to another will vary, but generally every bolt on a header should be first fit snug, starting from the inside of the flange working out, alternating from top to bottom so that the bolt connects the flange to the manifold to the point where they barely touch. Second, using the same inside-out pattern, tighten each bolt until finished. This method will help prevent leakage and will give the user the best possible performance out of their pair of headers.

1. Place vehicle in a location where the floor is solid and flat, with adequate lighting. Do not attempt to work on a hot engine. Heat causes metal to expand and makes removal of fasteners difficult at best. Disconnect the battery cables from the battery. Raise the front of the vehicle to obtain adequate access to the bottom exhaust manifold flanges. Use large-base jack stands to support the vehicle. Do not rely on the jack! Block the tires to prevent the vehicle from rolling off the jack stands.
2. Spray WD-40 or some type of penetrating oil on all accessible exhaust manifold fasteners and fittings before attempting to remove them.
3. Remove plastic shield from under side of frame.
4. Loosen the exhaust system, apply lubricant to the rubber hangers, slip exhaust off of front exhaust pipes.
5. Unplug O2 sensors, Unbolt front exhaust pipes from manifolds. Remove from car.

#### **DRIVER'S SIDE:**

6. Remove the O2 sensor from factory exhaust manifold.
7. Remove the two 18mm nuts, and studs attaching the motor mount to the frame.
8. Raise the engine about 1".
9. Remove the four 15mm headed bolts attaching motor mount bracket to the engine block. Then remove the motor mount.

10. Remove the four 10mm nuts from the heat shield on the exhaust manifold. Then remove the heat shield.
11. Remove the bolts attaching the manifold to the head. Remove manifold.
12. Scrape and carbon build up from head, being careful not to gouge the head surface.
13. Install the new JBA header using the supplied gasket and hardware provided.
14. Re-install the motor mount. Then lower the engine and re-install studs attaching motor mount to frame.
15. Install O2 sensor into the header with a carefully placed dab of anti-seize on the threads.

**PASSENGER SIDE:**

16. Remove the O2 sensor from the manifold, then remove the two 18mm nuts and studs attaching the motor mount to the frame.
17. Remove the two 10mm headed bolts attaching the heat shield to the motor mount bracket. Remove heat shield.
18. Remove the nut at the rear, and the bolt at the front of the brace stretching between the motor mount and the alternator bracket. Remove brace.
19. Loosen 10mm nut on the manifold heat shield, and remove Oil Dipstick.
20. Raise the engine about 1”.
21. Remove the two bolts attaching the motor mount to the engine bracket. Remove the motor mount.
22. Remove the four 10mm nuts attaching the heat shield to the exhaust manifold. Remove the heat shield.
23. Remove the bolts attaching the manifold to the head. Remove manifold.
24. Scrape carbon build up from head, being careful not to gouge head surface.
25. Install header using gasket and hardware provided, along with an original stud and new spacer at the dipstick bracket position.
26. Re-install motor mount. Lower engine, re-install studs attaching motor mount to frame.
27. Re-install dipstick, using an original nut.
28. Re-install the brace connecting the alternator bracket to the motor mount. Re-install the motor mount heat shield.
29. These headers were designed to be used with JBA Mid Pipes 69XXSY, Or 69XXSYC. If using one of those, Install the front exhaust pipes using the hardware provided. Re-connect the lower O2 sensors. If not, build a couple of pipes to connect the headers to the exhaust.

**Exhaust:**

30. Apply a small amount of O2 sensor safe, Hi-temp RTV silicone sealer to the flared area of the exhaust pipe.
31. Install the front exhaust pipes using the hardware provided. Re-connect the lower O2 sensors.
32. Re-connect the exhaust system to the front exhaust pipes. Align and tighten securely.
33. Re-check everything.
34. Start engine, check for leaks.
35. Replace plastic shield.

- Parts List:
- (1) Driver side header
  - (1) Passenger side header
  - (2) Head flange gaskets
  - (17) 8mm x 25mm bolts
  - (17) 8mm lock washers
  - (4) 3/8 x 2 \_ bolts
  - (8) 3/8 flat washers
  - (4) 3/8 lock washers
  - (4) 3/8 nuts
  - (1) 5/8 x 1 1/8 spacer

### **LIMITED ONE YEAR WARRANTY**

All JBA HEADERS and exhaust products are guaranteed, to the original purchaser, to be free of defects in materials and workmanship for one year. This warranty covers the replacement or repair of the product only and does not cover the cost of removal and installation, customer applied aftermarket coatings or any discoloration or corrosion of finished surfaces.

Damage or product failure resulting from collision, improper installation, off-road use, road hazards, the use of exhaust insulating wrap or like products or rust occurring after installation, is not covered by the warranty. The warranty extends only to the original purchaser.

Should a part become defective it should be returned to the original selling retailer and must be accompanied with the sales receipt. If there is no retailer in your area, call the factory for a return authorization and return your part prepaid to the factory for inspection. PerTronix reserves the rights to replace or repair the alleged defective part and return the part freight collect.

