



Installation Instructions
and Warranty Information
JBA Headers for 1998-2008
Ford Ranger with 3.0L V-6



Part# 1647S 1998-01 (with EGR)
Part #1647S-1 2002-08 (without EGR)



This Product has been granted a California Air Resources Board (CARB) "E.O" (Executive Order) Exemption, or is considered a Direct Replacement or Consolidated Replacement part. It is 50 State Legal when installed on the appropriate vehicle per the Manufacturer Application guide and Installation Instructions.

Read all instructions carefully before attempting installation.

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. Apply penetrating oil on all accessible fasteners and fittings before attempting to remove them.
3. From underneath the vehicle, loosen the bolts connecting the exhaust system to the exhaust manifolds. Move the exhaust system back about 1/2 "to gain work space.
4. From above loosen the air tube at the front of the driver side manifold.
5. Remove the fasteners attaching the Driver's side manifold to the head and remove the manifold.
6. The dipstick must now be removed. It has a separate mounting bolt on the head and uses an O-ring seal at the bottom. Use care to protect the O-ring.
7. Remove the fasteners attaching the Passenger's side manifold to the head and remove the manifold.
8. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface. The use of a gasket removal agent will ease the removal of any gasket material. Use care not to get debris into ports or spark plug holes. Clean excess carbon deposits from the Exhaust system mating flange.
9. Slip the dipstick into the driver's side header and guide it into the block as you maneuver the header into place. On 98-01 models, Start the EGR tube before bolting the header to the head. Apply anti-seize to the header bolts if installing on aluminum heads. Bolt the Driver's side header to the engine using the supplied gaskets, bolts, and lock washers. Torque to 30 lbs./in on iron heads 23 lbs./in on aluminum heads.
10. Install the passenger side header through the wheel well. Apply anti-seize to the header bolts if installing on aluminum heads. Bolt the header to the engine using the supplied gaskets, bolts, and lock washers. Torque to 30 lbs./in on iron heads, 23 lbs./in on aluminum heads.
11. Apply a thin coat of High Temperature, Sensor Safe Silicone on the header collector domes and re-connect the exhaust system to the headers using the hardware provided. Tighten to 35 ft./lbs.
12. Check that all bolts are tight. Make sure that all wiring, fuel lines, transmissions lines, brake lines etc are clear of the headers and the exhaust and relocate as necessary.
13. Reconnect the battery.
14. Start the engine, check for leaks and test drive. Then let engine cool and then re-torque the header bolts.
15. Periodically check and retighten the header bolts.

Parts List:

- (1) Driver's Side Header Assembly
- (1) Passenger's Side Header Assembly
- (2) Header flange gaskets
- (13) 8mm-1.25 x 25mm Header Bolts
- (13) 8mm lock washers
- (4) 3/8 -16 x 2" Collector bolts
- (4) 3/8" Nuts
- (1) CARB EO sticker

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.

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