



PERFORMANCE EXHAUST

A PerTronix Performance Brand ~ www.pertronixbrands.com ~ 909 599-5955

Installation Instructions & Warranty Information

- 1630S 86-87 Ranger/Bronco II 2.9L
- 1632S 88-91 Ranger/Bronco II 2.9L Auto
- 1632S-1 88-90 Ranger/Bronco II 2.9L Manual
- 1633S-1 90-94 Ranger 4.0L
- 1634S 95-97 Ranger/Explorer 4.0L
- 1646S 91-93 Ranger 3.0L/Mazda B3000

Cat4ward® Headers



1633S-1JS Shown



This product has been granted a California Air Resources Board (CARB) Executive Order (EO Number) Exemption. It is 50 State Legal when installed on the appropriate vehicle per the Manufacturer's Application Guide and Installation Instructions.

WARNING:

This product can expose you to chemicals including Lead, Nickel, Cadmium and Chromium which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

PLEASE READ BEFORE PROCEEDING

PerTronix® thanks you for choosing a JBA Performance Exhaust Product. To realize the potential of JBA's engineering and excellent fit, Please Read and Understand these instructions completely prior to starting the installation.

Check that you received all the parts listed on the parts list, if you have any concerns, please contact PerTronix before continuing. Headers will have the part number stamped in the flange.

Work Smart – Work Safe! Most Header and Exhaust Installation are best performed on a lift. If a lift is not available, raise the vehicle and support on quality Jack Stands on level ground. Do not rely on a jack!

We use sealing beads on all our headers. The raised bead creates a better seal virtually eliminating leaks if installed properly. It is important to install all header bolts lightly snug and then tighten to factory torque specs starting in the center and working outward.

Before starting, allow the vehicle to cool, disconnect the battery, and spray a penetrating oil on all hardware and fittings that will need to be removed. Once you remove your manifold, clean the sealing surface on the head of any old gasket debris or carbon build up.

1. Disconnect the spark plug wires by grasping and gently twisting the spark plug wire boots.
2. Unbolt the muffler assembly from the rear of the catalytic converter. Complete removal of the muffler assembly is not required. However, the muffler assembly needs to be dropped to provide clearance to remove the Catalytic Converter assembly. Unbolt the Catalytic Converter assembly from the Y-Pipe. Remove the Catalytic Converter assembly by sliding it rearward from the engine. Save all fasteners for re-installation.
3. Unplug the O2 Sensor wire(s). Access to the O2 sensor plug(s) may be obscured by the transmission. Loosening the Y Pipe from the factory manifolds should make access easier. Remove the O2 sensors using either a box wrench or a special O2 sensor socket which can be purchased at most auto parts stores. Take care not to drop the O2 sensors. Finish removing the bolts and maneuver the factory Y-Pipe out from under the vehicle.
4. If equipped remove the EGR tube from the EGR valve and the exhaust manifold.
5. Unbolt the dipstick tube bracket from the engine. Carefully slide the dip stick tube upward to remove. Unbolt the Driver's side exhaust manifold and remove from the top side. 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.
NOTE: '90-'94 4.0 Explorers and '90 to '92 Rangers use a single O2 sensor and no EGR. '93 to '94 Rangers utilize two O2 sensors and an EGR fitting. The 1633-1 header has fittings to accommodate these differences. The supplied plugs should be used to close any unused fittings.
6. 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. Tighten evenly from the center out.
7. Models with EGR fittings only. Remove the EGR adapter fitting which adapts the EGR tube to the fitting on the factory manifold. This adapter must be reused. Thread the adapter into the fitting on the header and reconnect the EGR tube. (Note: 3.0L Models may or may not have this adapter)

8. Clean all grease or oil from the outside of the dip stick tube. Apply a small amount of silicone sealant to the outside of the dip stick tube where it slip-fits into the engine. Reinstall the dip stick tube. Make sure that the dipstick tube is not too close to the header tubes.
9. If equipped, remove the heat riser tube from the passenger side manifold. Unbolt the passenger side manifold and remove from the underside of the vehicle. Remove the gaskets and any gasket material or any carbon deposits that remain on the head surface.
10. Maneuver the passenger side header into place from under the vehicle. 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. Tighten working from the center out. Re-attach the heat riser tube.
11. Install the O2 sensor(s) in the new Y-pipe. Apply a thin coating of High Temperature, Sensor Safe, Silicone Sealant to the collector domes of the Headers. Apply a small amount of sealant to the Driver's side half of the Y-Pipe where it slip fits into the Passenger side half of the Y-Pipe and slide the two halves together. Loosely bolt the Y-Pipe to the headers. Plug the O2 sensor wire(s) in. Loosely bolt the Y-Pipe clamp in place .
12. Make sure that the mating surface of the Catalytic Converter flange is clean. The gasket may be reused if undamaged. Apply High Temperature, Sensor Safe, Silicone Sealant to both surfaces of the gasket. Slide the catalytic converter assembly into its mount and loosely bolt the Y-pipe to the catalytic converter. Re-attach the muffler assembly. After checking to insure that all components are aligned properly, tighten all bolts to factory specs.
13. Reinstall the spark plug wires and looms taking care not to let any wires come into contact with the headers. Reinstall the battery cable. Make sure that the battery cable is routed away from the headers.
14. 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.
15. Start the engine and let it warm up. Check for leaks. Shut engine off and let it cool down. Check to make sure all fasteners are tight.
16. Periodically check & retighten the header bolts.

Parts List:

- | | |
|------------------------------------|--------------------------------------|
| (1) Driver's Side Header Assembly | (2) Header gaskets (Head flange) |
| (6) Collector Bolts | (1) Passenger's Side Header Assembly |
| (6) Collector Nuts. | (1) 2-Piece Y-Pipe |
| (1) Y-Pipe Clamp | (12) 8mm header bolts |
| (1) O2 Sensor Plug (some models) | (12) 8mm lock washers |
| (1) EGR Fitting Plug (some models) | (1) CARB Sticker |



440 E. Arrow Hwy.
San Dimas, CA 91773
(909) 599-5955

This vehicle is equipped with:

Dougs Headers # D66XX

JBA Header # 10XXS

Legal for sale and installation in California

**CARB EXECUTIVE ORDER
D-57-27, D-57-31**

WARNING

This label is required to aid in passing the California smog check program. This label must be installed in an underhood location that is readily visible.

JBA LIMITED 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.