

HEADER INSTALLATION INSTRUCTIONS D3353, D3353-1, D3353-2 & D3353-3 APPLICATION

1999 -2001 GM PICK-UP 2 Wheel Drive 4.8L, 5.3L, 6.0L V8

The product accompanying this document has been granted a California Air Resources Board (CARB) exemption, an "E.O." number, or is a direct or consolidated replacement part. It is 50-state legal, when installed on the appropriate vehicles per the manufacturer's application guide.

PerTronix thanks you for choosing **DOUG'S 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. Most installations require some welding. If you are uncomfortable with welding operations, we recommend that you contact a professional exhaust system specialist to install your new headers.

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.

DISASSEMBLY

- 1. Disconnect the negative battery cable from the battery.
- 2. If a car lift is not available, raise the vehicle 2 feet or higher and support it with adequate safety stands. Make sure the vehicle is on a flat solid surface and is stable. If you use the leveling jacks to raise the vehicle place safety stands under the vehicle also.
- 3. Apply penetrating oil to all nuts and bolts to be removed.
- 4. Unplug O² sensor wire and remove O² sensor from head pipe. Use care to not damage the wire or the sensor. Do not lose the gasket.
- 5. Cut the head pipe about just ahead of the weld on the inlet side of the catalytic converter. Unbolt and remove the head pipe.
- 6. Remove the air cleaner assembly and ducting.

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- 7. Make note of the location and arrangement of the spark plug wires and carefully remove them. Use a twisting motion while pulling away from the plug. Pull the boot and not the wire.
- 8. Remove the spark plugs.
- Disconnect the E.G.R. and A.I.R. lines (if equipped) from the exhaust manifolds.
- 10. Unbolt and remove the engine oil dipstick and tube.
- 11. Remove the exhaust manifolds. It is usually easier to do this from the bottom of the vehicle.
- 12. Replace the spark plugs finger tight so debris will not get into the cylinders while cleaning the head surface. We recommend the use of a gasket scraper, wire brush, and sanding block to adequately clean the surface.
- 13. After cleaning is complete remove the spark plugs again.

ASSEMBLY

- Apply a **THIN** film of Ultra Copper Hi-Temp Sensor-Safe Silicone Sealer to each side of 1. the header flange gasket. Allow the silicone to setup for 5 minutes or so.
- Stick the flange gaskets to the headers. (A small piece of masking tape will aid in 2. holding the gasket to the header).
- Reuse the factory header bolts as they use a special thread that prevents them from 3. loosening.
- 4. Install the headers from under the vehicle and bolt them to the heads using the factory header bolts. Tighten all the bolts evenly to factory spec.
- On the drivers side: Connect the A.I.R. lines (if equipped) 5.
 - a. Install the O² sensor and reconnect the wire. Use a small amount of anti-seize on the threads, and make sure the gasket is in place.
- 6. On the passenger side: Connect the E.G.R. and A.I.R. (if equipped)
 - a. Install the dip stick tube and dip stick.
 - b. Install the O² sensor and reconnect the wire. Use a small amount of anti-seize on the threads, and make sure the gasket is in place.
 - c. Install the air cleaner box assembly.
- 7. Apply a small amount of anti-seize to the threads of the spark plugs, check the gap and install the spark plugs. If the plugs have many miles on them or they appear to be worn, this is a good time to replace them.
- 8. Connect the appropriate spark plug wire to the proper spark plug and reattach any looms that were removed during disassembly.
- Install the appropriate connector pipe on the appropriate side of the vehicle and attach them to the headers using the gaskets and hardware provided.
- 10. Weld the connector pipes (reducers) to the Catalytic Converters.
- 11. Connect the battery cable.

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IMPORTANT CHECK LIST

- Be sure that all brake lines and fuel lines are clear of headers and/or connector pipes.
- All spark plug wires, battery cables, or other electrical components should be clear of headers and/or connector pipes.
- If dipstick tube was removed, make sure it is installed properly and that the dipstick has been replaced.
- Double-check the tightness of all bolts including brackets and accessories.
- Perform these checks again after the first 1000 miles.

START THE ENGINE

Start the engine and allow it to warm up to operating temperature. Check for any unusual noises or exhaust leaks. If every thing is OK, stop the engine and tighten all bolts while the engine is still warm.

NOTE: Check the bolts periodically to make sure they have not loosened. Re-tighten after the first 500 miles and then again at 1000 miles.

PARTS LIST

D3353-1 & D3353-3

Qty.	Description
1	Right side header
1	Left side header
1	Right side reducer
1	Left side reducer
2	Header flange gasket
2	2 ½", 3 bolt collector gasket
1	1", 2 bolt, E.G.R. gasket
2	9/16", 2 bolt A.I.R. gasket
6	3/8"-16 x 2 1/4" hex bolts
6	3/8"-16 hex nuts
22	3/8" lock-washers
6	5/16"-18 x 1" Flange bolts
6	5/16"-18 Hex nuts
6	5/16" Lock-washer
1	Sticker (C.A.R.B., E.O., D-57-19)

This vehicle is equipped with: Dougs Headers # D33XX JBA Headers # 18XXS 440 E. Arrow Hwy. San Dimas, CA 91773 (909) 599-5955 This vehicle is equipped with: Dougs Headers # D33XX JBA Headers # 18XXS Legal for sale and installation in California CARB EXECUTIVE ORDER D-57-19 & D-57-25

D3353 & D3353-2

Qty.	Description
1	Right side header
1	Left side header
1	Right side reducer
1	Left side reducer
2	Header flange gasket
2	2 ½", 3 bolt collector gasket
1	1", 2 bolt, E.G.R. gasket
6	3/8"-16 x 2 1/4" hex bolts
6	3/8"-16 hex nuts
22	3/8" lock-washers
6	5/16"-18 x 1" Flange bolts
6	5/16"-18 Hex nuts
6	5/16" Lock-washer
1	Sticker (C.A.R.B., E.O., D-57-19)

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.

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