

### THY-309-C / THY-309-S-C

2002-2013 CHEVY / GMC TRUCK & SUV 4.8L-6.2L (no Air Inj.), 2WD/4WD



## PARTS INCLUDED

Ref.	Part Number	Description Qty	
1)	00-901-01070	Driver Side Header, Ceramic Coated 1	
2)	00-901-01071	Passenger Side Header, Ceramic Coated 1	
3)	07-31-48277	3-Bolt Flange Gasket Kit (Driver & Passenger) 1	
5)	01-10061616-2-27	Hex Head Bolt, 3/8-16x2" 3	
6)	01-10061612-2-27	Hex Head Bolt, 3/8-16x1-1/2" 3	
7)	01-310616-27	Hex Nut, 3/8-16 6	
8)	01-4006-27	Flat Washer, 3/8" 6	
9)	01-4606-27	Lock Washer, 3/8" 6	
10)	07-34-38524	Nylon Wire Tie	6

NOTE: Purchase of alternate spark plug wires is recommeded for installation of headers on 2006- model year vehicles. See installation Step #19 for more details.

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# TOOLS REQUIRED

Ref.	Description	Ref.	Description
1)	3/8" Drive Ratchet	6)	8mm Wrench
2)	Ratchet Extensions	7)	10mm Wrench
3)	9/16" Socket	8)	13mm Wrench
_ 4)	15mm Socket	9)	Rust Penetrant
5)	Torque Wrench	10)	Rubber Mallet

## WARRANTY NOTES

- 1) The utmost care is taken at Doug Thorley Headers to maintain the highest standards of quality. However, Doug Thorley Headers cannot control the installation of the product. For this reason, the Doug Thorley Headers warranty covers only the replacement of the components - not the labor for the installation.
- 2) The use of any type of "header wrapping" immediately voids the warranty. Using any sort of wrapping material on the headers destroys the tubing's ability to dissipate heat, causing very rapid deterioration of the metal and the subsequent failure of the headers.
- 3) The chrome plating applied to all Doug Thorley headers is a high-nickel chrome finish applied to retard corrosion. This is a "heat" chrome to preserve the metal. This finish is not "show chrome" intended for the sake of appearance. This high-nickel chrome turns colors and approaches black as it cooks into the metal. The brilliance of the chrome finish is not covered under the warranty. Contamination of the surface by foreign substances may produce other color patterns. This can be prevented by routine cleaning.
- 4) Retain all paperwork pertaining to the purchase of your Doug Thorley product. Save your receipt! Your limited warranty is not valid without a receipt of purchase.

# LEGALITY NOTE

The installation of headers onto any vehicle must be performed in accordance with all governmental regulations that might pertain to the particular vehicle receiving the headers. Please call your Thorley Headers distributor if there are any questions regarding the legality of the installation. **The Executive Order ("E.O.") number for this part number is D-540-3.** 

### INSTALLATION NOTES

- 1) It is important that you read the entire instruction sheet before initiating any installation.
- 2) Thorley headers are designed to fit only factory installed engine and transmission combinations. We cannot guarantee that Doug Thorley brand headers will fit in the case of "engine swaps" or "transmission swaps".

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### INSTALLATION NOTES

- 3) Due to restricted room in the engine compartment, your headers may come close to certain body and chassis components. This is normal for an installation of this type. However, a careful inspection must be completed to insure that the distances and placement are reasonable and logical, especially with regard to electrical, fuel, and brake components.
- 4) Because of the requirement to raise the engine to facilitate header installation, the engine mounts should be carefully inspected at that point of the installation. It is highly recommended that questionable or deteriorated engine mounts be replaced during the installation of the headers. In some cases, the engine mounts need to be loosened and repositioned to provide optimum header clearance from some components.
- 5) Because of car-to-car variations, Thorley Headers strongly recommends that these headers be installed by a competent exhaust shop that has welding and fabrication capabilities.
- **WARNING!** Do not rely on bumper jacks or chassis jacks for support during header installation. The subject vehicle should be raised and supported with jacking equipment and jack stands or ramps intended for undercarriage auto maintenance. It is extremely dangerous to work under an improperly raised and/or supported vehicle.
- **NOTE:** These procedures are documented on factory standard-equipped vehicles with original configuration compliance. Any modification of the subject vehicle may dictate modification to these procedures.

## INSTALLATION PROCEDURE

- 1) Disconnect the battery.
- 2) Spray all exhaust component fasteners with rust penetrant and allow to soak thoroughly to prevent possible breakage of bolts.
- 3) Starting with the passenger side, move water lines above the oil filler neck and out of the way. Remove water line bracket attached to the front coil mount on the valve cover. Set aside for now.
- 4) Carefully remove all spark plug wires.
- 5) Remove oil dipstick bracket using a 15mm socket. Wiggle dipstick tube out and set aside.
- 6) Remove all stock manifold bolts and save for Doug Thorley header install.
- 7) Remove battery terminal bracket located in front of the manifold.

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## INSTALLATION PROCEDURE

- 8) Raise the front of the vehicle approximately 24 inches and support it with jack stands or other suitable supports.
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- **9)** Using a 15mm socket and long extension, loosen and remove the factory collector bolts. Remove the factory manifolds and gaskets through the top of the vehicle.
- **10)**Inspect the cylinder head surfaces and clean any traces of carbon from the sealing surface. Clean the factory header gaskets, they are re-usable.
- **11)**Using a rubber mallet you will need to tap the heat shield back a little to clear new header. (The heat shield is located on the fire wall just below th A/C condenser).
- **12)**Using the original header bolts, install the new headers and factory header gaskets from above the vehicle.
- **13)**After all header bolts are in, secure by beginning in the middle and working your way outward. Tighten all bolts to factory specs.
- 14) Re-install factory dipstick tube and tighten. Install dipstick.
- 16) Re-install water line bracket.
- 17) Using the supplied 3/8-16x2.00" hex bolts and 3/8" hardware, connect the factory PASSENGER side catalytic converter assembly to the Doug Thorley header with factory donut gasket and tighten the collector bolts securely. (USE ONLY THE DOUG THORLEY SUPPLIED COLLECTOR GASKET IF YOUR VEHICLE IS NOT EQUIPPED WITH A DONUT STYLE GASKET)
- **18)**Using the supplied 3/8-16x1.50" hex bolts and 3/8" hardware, connect the factory DRIVER side catalytic converter assembly to the Thorley header with factory collector gasket and tighten the collector bolts securely.

(USE THE DOUG THORLEY SUPPLIED COLLECTOR GASKET TOGETHER WITH THE FACTORY O-RING GASKET)

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## INSTALLATION PROCEDURE

**19)**Re-install the battery terminal bracket.

**20)**Re-install all spark plug wires. Use the supplied nylon wire ties to secure the spark plug wires away from the header.

NOTE: If your vehicle is a 2006- model we recommend that you purchase new spark plug wires designed to fit a 2002-05 GM model. This is a precautionary measure to keep the plug wires from burning on the header.

- 21) Reconnect the battery. Start the engine and check for any exhaust leaks.
- **22)**Because the header bolts will initially stretch when hot, we recommend adhering to the following steps:

a) Retighten the header bolts to 35 lb-ft after approximately twenty minutes of operation. *NOTE: Remember the engine will be hot at this time. Protect yourself accordingly.* 

b) Check and retighten the header bolts to factory specs after the first month of operation.