



# GP312S-C CERAMIC HEADER

**04-05 DODGE RAM STR-10 1500 PICKUP  
8.3L , 10CYL 2WD AUTOMATIC**

**GIBSON HEADERS ARE 50 STATE SMOG LEGAL**

*Thank you very much for purchasing our Gibson header  
for your vehicle.*

*If you need further assistance, please do not hesitate  
to call our Technical Department at (800) 528-3044  
Monday through Friday  
8:00 a.m. to 5:00 p.m. PST.*

*1270 WEBB CIRCLE CORONA, CA 92879*

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WHEN THESE INSTRUCTIONS ARE FOLLOWED PRECISELY, YOU WILL FIND THE INSTALLATION OF YOUR EXHAUST SYSTEM TO BE RELATIVELY SIMPLE. WE CANNOT OVER EMPHASIZE THE IMPORTANCE OF ADHERING STRICTLY TO THIS PROVEN APPROACH, AS IT WILL VIRTUALLY ELIMINATE ANY DIFFICULTIES, WHICH YOU MIGHT OTHERWISE ENCOUNTER.

**NOTE:** INSTALLATION OF HEADERS ON VEHICLES WITH CATALYTIC CONVERTERS AND/OR OTHER EMISSION CONTROL EQUIPMENT MUST BE ACCOMPLISHED IN ACCORDANCE WITH ALL GOVERNMENT REGULATIONS PERTAINING TO SUCH EMISSIONS STANDARDS.

**WARNING:** MAKE CERTAIN YOU HAVE ENOUGH CLEARANCE AROUND BRAKE, FUEL, AND ELECTRICAL LINES, ETC. IN SOME CASES, IT MAY BE NECESSARY TO RELOCATE ITEMS WHICH MIGHT BE ADVERSELY AFFECTED BY EXHAUST HEAT.

**WARNING:** INSTALLATION OF ANY TYPE OF "WRAPPING" MATERIAL ONTO THE HEADERS WILL DESTROY THE HEAT DISSIPATION PROPERTIES OF THE TUBING, CAUSING PREMATURE DETERIORATION OF THE METAL AND SUBSEQUENT FAILURE. USE OF ANY "WRAPPING" MATERIAL WILL VOID THE WARRANTY.

## SUGGESTED TOOLS

13mm, 12mm" WRENCHES (VARIOUS LENGTHS)

12mm, 13mm" SOCKETS (SHALLOW AND DEEP)

9/16" WRENCHES (VARIOUS LENGTHS)

9/16" SOCKETS (SHALLOW AND DEEP)

5/8" SPARK PLUG SOCKET

15MM DEEP SOCKET

15MM BOX END WRENCH

3", 6", AND 12" EXTENSIONS FOR SOCKETS

HIGH TEMP SILICONE (ULTRA COPPER BY PERMATEX)

GOOD RUST PENETRANT

# INSTALLATION INSTRUCTIONS

## STAINLESS SHORTY HEADERS

**NOTE:** Installation of these headers requires an adequate workspace, general mechanic's tools general mechanical "know how". You should carefully read these instructions before attempting to install these headers. This part is legal on Emission Controlled Vehicles.

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. 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. Use safety glasses.

2. Spray WD-40 on all accessible fasteners and fittings before attempting to remove them.

3. From underneath the vehicle loosen the bolts that hold up the y-pipe assembly on both driverside and passengerside.



4. Starting at the top, to remove the driver's side manifold first remove the driverside heat shield on the manifold. Then remove the manifold hardware through the top of the engine compartment.



5. Using a scraper, remove all carbon deposits and high spots from head surface. Apply a high temperature gasket sealer to exhaust pipe flare in order to avoid problems due to lack of space later in the installation.

6. Recommended to remove steering shaft for easier installation of header. **Note:** Mark alignment of shaft. Install driver's side header using new head gasket + bolts. Use a high temp gasket sealer (O2 sensor safe) on head gasket. Install header through the top of engine compartment. You might have to move hoses, wires and steering shaft out of the way for easier installation. Starting from the center bolts in and working your way out. Torque all fasteners to 30 to 35 pounds. Then, after installation of header is done, wrap steering shaft with supplied heat-wrap and wire strips on vehicle. As shown in the picture.

7. Starting at the top, to remove the passengierside manifold first remove the passengierside heat shield on the manifold. Then remove the manifold hardware through the top of the engine compartment.



8. Using a scraper, remove all carbon deposits on head surface. At this time apply a high temperature sealer (O2 sensor safe) to exhaust pipe flare in order to avoid problems due to lack of space later on in the installation.

9. Install passengierside header using new head gasket + bolts. Use a high temp gasket sealer (O2 sensor safe) on head gasket. For easier installation pry the inner fender wheel away from header. Towards the tire for installation of header and hardware. NOTE: Last top bolt use 3/8" or 1/4" extension & socket to install hardware for easier installation. Torque all fasteners 30 to 35 pounds. Tighten all bolts starting from the center and working your way out.

10. Pull heater hose away from header and clamp using zip ties provided to keep from resting on header.

11. Reconnect the y-pipe assembly to the header using the hardware provided torquing to 50 lbs.



12. Check to make sure there is adequate clearance on battery cables, wire looms, brake lines, etc.

13. Re-connect the battery cables.

14. Recheck and tighten everything!

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.

**YOU MUST RE-TORQUE ALL HEADER BOLTS AFTER 100 MILES AND THEN PERIODICALLY CHECK.**

NOTE: IT IS NOT UNUSUAL WHEN INSTALLING HEADERS TO GET A BURNING SMELL. THIS IS NORMAL AND IT WILL GO AWAY!

**PART LIST:**

<u>Part #</u>	<u>Qty.</u>	<u>Description</u>	<u>Part #</u>	<u>Qty.</u>	<u>Description</u>
GP312D 3/4"	1	DRIVERSIDE HEADER	9535	6	FLAT WASHER 3/8" X
GP312P	1	PASSENGERSIDE HEADER	9033	6	3/8" LOCK WASHER
9251	2	PASENGERSIDE/DRIVERSIDE GASKET	5057	6	3/8" X 16" NUT
951	20	5/16" X 1" HEADER BOLTS	345	6	3/8" X 2 1/2" BOLTS
225	20	5/16" STAR WASHERS	ZIP	4	ZIP TIES

IT IS CRITICAL THAT ALL BOLTS BE RE-TIGHTENED HOT AFTER ABOUT 20 MINUTES OF OPERATION TO PREVENT GASKET FAILURE.

NOTE: HEADERS ARE NOT MEANT TO SERVE AS "EXHAUST SYSTEM SUPPORT HANGERS". ADDITIONAL HANGERS MAY NEED TO BE ADDED AT THE TIME OF THE INSTALLATION OF THE HEADERS SO THAT THE EXHAUST SYSTEM SUPPORTS ITSELF WHEN THE COLLECTOR BOKTS

ARE REMOVED. HEADERS THAT HAVE "SAGGED" DUE TO THE LACK OF SUFFICIENT EXHAUST SYSTEM SUPPORT WILL NOT BE REPLACED UNDER WARRANTY.

**NOTE:** HEADER BOLTS SHOULD BE INSPECTED FOR TIGHTNESS FROM TIME TO TIME TO ENSURE OPTIMUM GASKET LIFE. THE BOLTS WILL STRETCH SOME AT FIRST DUE TO THE EXHAUST HEAT; SO, THEY'LL LOOSEN WITHOUT TURNING UNTIL THEY "TAKE A SET". (BOLTS HARD ENOUGH NOT TO STRETCH WOULD BREAK!) WE'VE EXPERIMENTED WITH THE VARIOUS "LOCKING DEVICES" ON THE MARKET, WHICH PREVENT BOLTS FROM TURNING. THEY DON'T WORK ON HEADER BOLTS, AND THEY GREATLY COMPLICATE THE PROCESS OF RE-TIGHTENING THE BOLTS WHEN IT'S NECESSARY.

#### **WHAT DOES WORK IS THIS:**

GO OVER THE BOLTS AGAIN AFTER THE FIRST DAY OF DRIVING (OR ABOUT 100 MILES- WHICHEVER COMES FIRST) THEN AFTER THE FIRST WEEK, AFTER THE FIRST MONTH, AND THEN EVERY 6 MONTHS. OUR EXCLUSIVE GASKETS ARE SPECIALLY MADE SO THAT THE CYLINDER HEAD SHOULD BEGIN TO MELT BEFORE THE GASKETS CAN BURN UP. ABOUT THE ONLY WAY TO KILL THE GASKETS IS TO LET THE HEADERS GET LOOSE AND THEN KEEP DRIVING WITH A LEAK.

DUE TO VARYING CONDITIONS BETWEEN GEOGRAPHICAL LOCATIONS AND USAGE, WE STRONGLY RECOMMEND HAVING THE ENGINE RE-TUNE AT A REPUTABLE TUNE-UP SHOP AFTER THE INSTALLATION OF THE HEADERS. DOING SO WILL ENSURE THAT YOU GET THE MAXIMUM BENEFIT FROM THE INSTALLATION OF THE HEADERS.

GIBSON PERFORMANCE STRIVES TO DELIVER THE HIGHEST QUALITY MATERIALS, WORKMANSHIP, AND SERVICE. PLEASE SO NOT HESITATE TO CALL OUR TECHNICAL LINE IF YOU HAVE A QUESTION OR EXPERIENCE A PROBLEM.