



PERFORMANCE HEADERS

Part Number: 00602-17141-007

Section I – Installation Preparation

Kit Contents

Item #	Quantity Req'd.	Description
1	1	Right Exhaust Header (1 Pc.)
2	1	Left Exhaust Header (2 Pcs.)
3	1	Main Collector Pipe (Y-Pipe)
4	1	Catalytic Converter Flange

Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	1	Gasket - Large
2	2	Gasket - Conical
3	7	Gasket - Small
4	3	8mm Serrated Nut
5	2	10mm x 1.25 x 30mm Bolt
6	4	10mm x 1.25 x 60mm Bolt
7	6	10mm Crimp Nut
8	1	Auto Trans Relocation Bckt
9	1	8mm x 1.25 x 15mm Bolt
10	1	8mm Lock Washer
11	4	Bolt Spring
12	1	EO Sticker

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1	1	Permatex Ultra Copper by Loctite, SENSOR-SAFE, High-Temp. RTV Silicone
2	1	High-Temperature Anti-Seize Thread Application

Conflicts

Note:

Tools Required

Safety Tools	
Eye Protection	
Special Tools	
Welder	
Installation Tools	
Phillips Head Screwdriver	Needle Nose Pliers
Channel Locks	
12mm Wrench	14mm Wrench
Metric Socket Set	
Swivel Ratchet	Ratchet Extensions
10mm Short & Deep Sockets	12mm Short & Deep Sockets
14mm Short & Deep Sockets	

General Applicability

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Recommended Sequence of Application

Item #	Accessory	

*Mandatory

Notes and Recommendations

1. It is recommended that a hoist or lift be used to install the headers.
2. Check all hoses, lines, etc. and make sure that they are away from any heat source. Adjust if necessary.
3. Remove the front tires and the flexible splash liner on the inside of the wheel well. This allows for ease of the removal of the manifolds and mounting of the headers.

NOTE: Do not use any air-tools such as an impact wrench to tighten the nuts and bolts on the TRD Exhaust Headers. Doing so will bend the ears on the flanges **CAUSING EXHAUST LEAKS**. Adhere to the torque values given. If any flange ear bends, remove the component and straighten the ear out. Use extreme care during the tightening sequence.

Section II – Removal Procedure

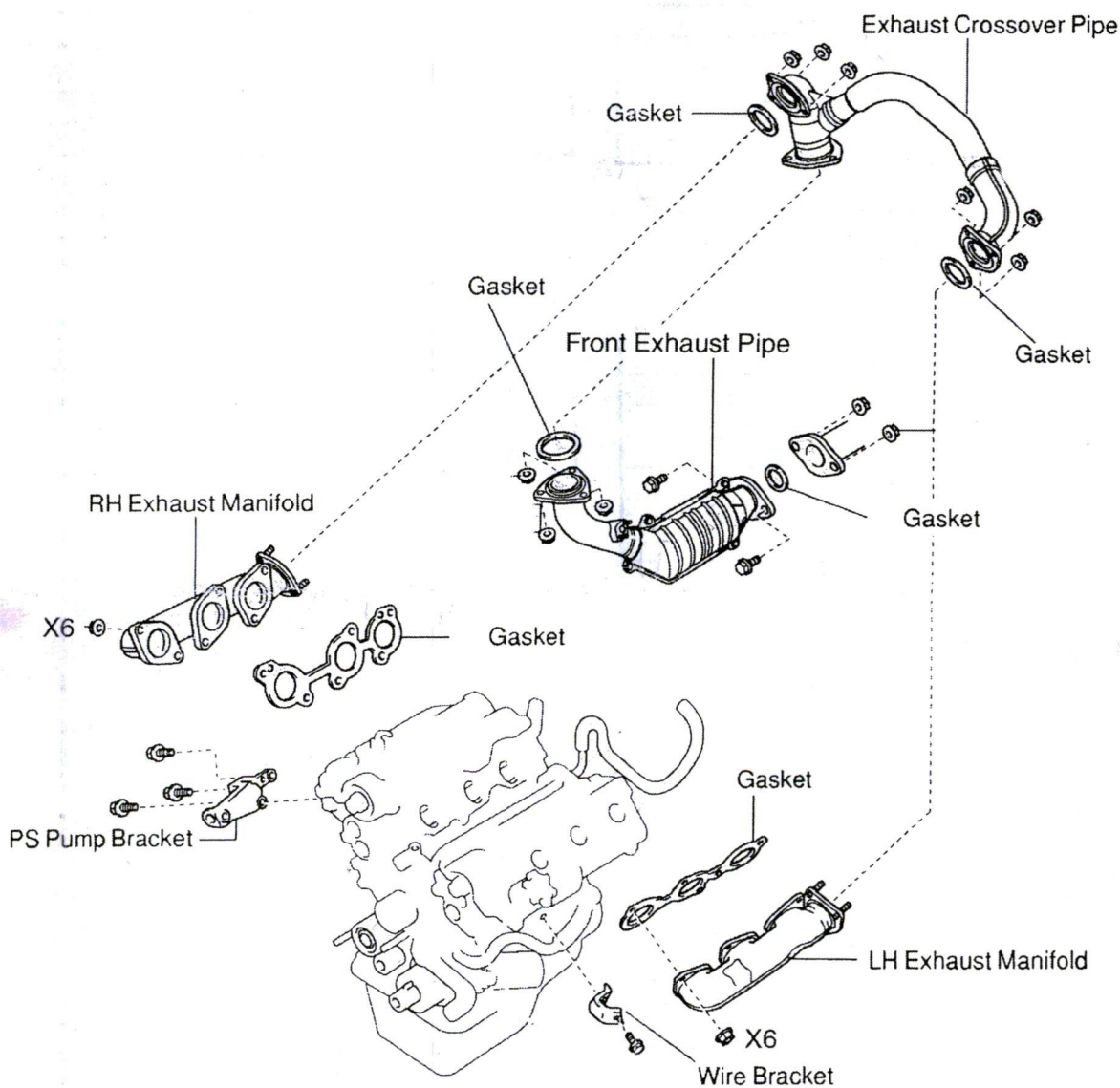


Figure 1

PERFORMANCE HEADERS

A. Preparation for Removal of Factory Exhaust Manifold.

NOTE: To ease the removal of the factory exhaust manifolds, it is recommended that the vehicle be raised.

TIP: Label all hoses, cables, and brackets so that they can be installed in their original position when the installation is complete.

- Before you begin, pre-fit 6 TRD-supplied small gaskets on both the left and right side header surfaces. Apply a thin layer of copper high-temp silicone on both sides and allow to set before installing.
- Disconnect the following cables (if applicable) from their mounting brackets (Figure 2).
 - Cruise control cable.
 - Automatic transmission throttle cable.

NOTE: Measure the stock location and loosen only one nut to remove the cable from the bracket and make sure to tighten that same nut when installing. This ensures that the throttle and cruise control positions do not shift.

- Disconnect the brake booster hose from the air intake chamber (A) in Figure 3.
- Remove the throttle cable bracket attached to the air intake chamber (B) in Figure 3.
- Disconnect the fuel return hose (A) in Figure 4.

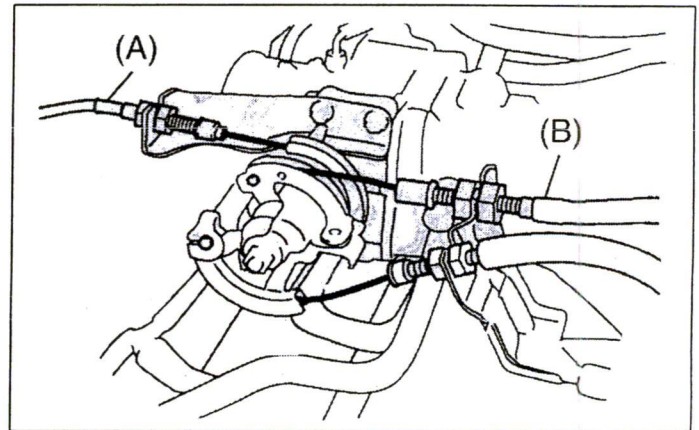


Figure 2

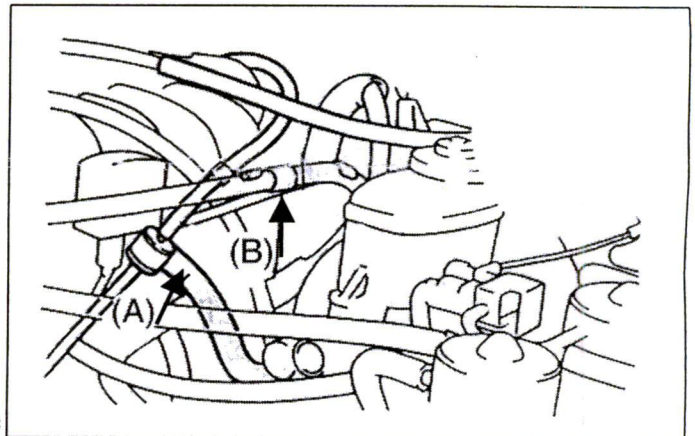


Figure 3

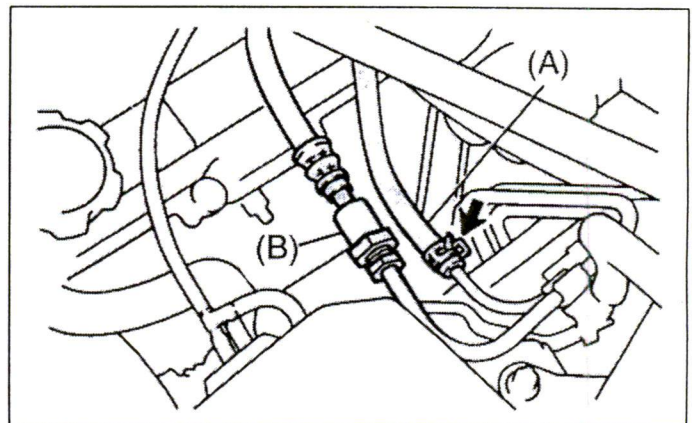


Figure 4

6. DO NOT REMOVE the fuel inlet line (B) shown in Figure 4.

7. Working from above the vehicle, unplug all corresponding hoses, cables and clamps between the air filter box and air intake chamber assembly. Remove the air cleaner hose (Figure 5).

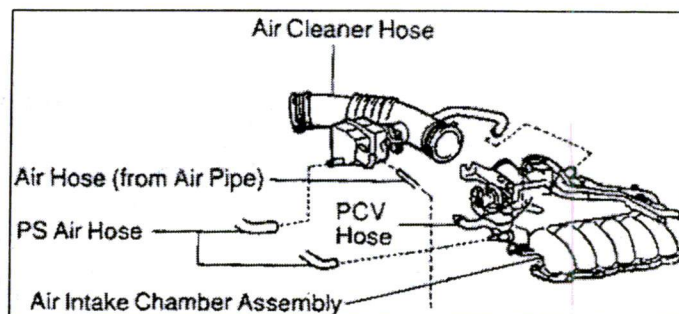


Figure 5

8. Remove the intake chamber stay located on the driver side of the vehicle (Figure 6).
9. Remove the splash guards from bottom of vehicle.

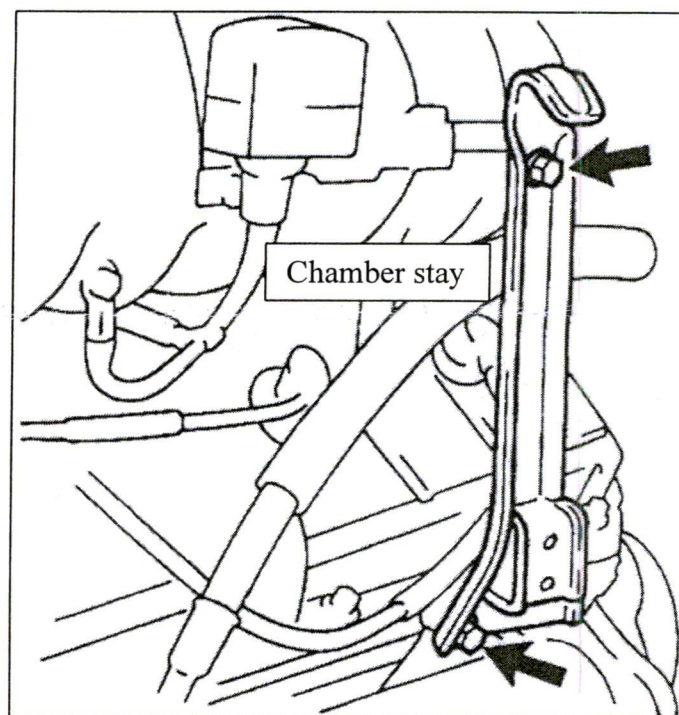


Figure 6

B. Removal of OE Exhaust Manifolds.

NOTE: The following steps will often refer to Figure 1. Please review Figure 1.

TIP: Spray WD-40 or Liquid Wrench on all nuts and bolts to make them easier to remove. Keep all nuts and bolts. They will be reused in the installation procedure.

1. Disconnect the wire connector and remove the oxygen sensor (O₂) from the front exhaust pipe (Figure 7).
2. Remove the 3 nuts that connect the front exhaust pipe to the crossover pipe and the 2 bolts connecting the catalytic converter to the exhaust system and remove the front exhaust pipe from underneath the vehicle (Figure 1).
3. Cut the front exhaust pipe in front of weld (just before the catalytic converter) as shown in Figure 7. This need not be done right now, but must be done before Step 5 on Page 9. The pipe you just cut in front of the catalytic converter will not be reused. Set the catalytic converter to the side for installation later.
4. Loosen the wire bracket on the PS pump bracket in order to have easier access to the right side manifold flange nuts (Figure 8).
5. Loosen the other wire bracket on the left side of the vehicle in order to have easier access to the manifold flange nuts (Figure 1).

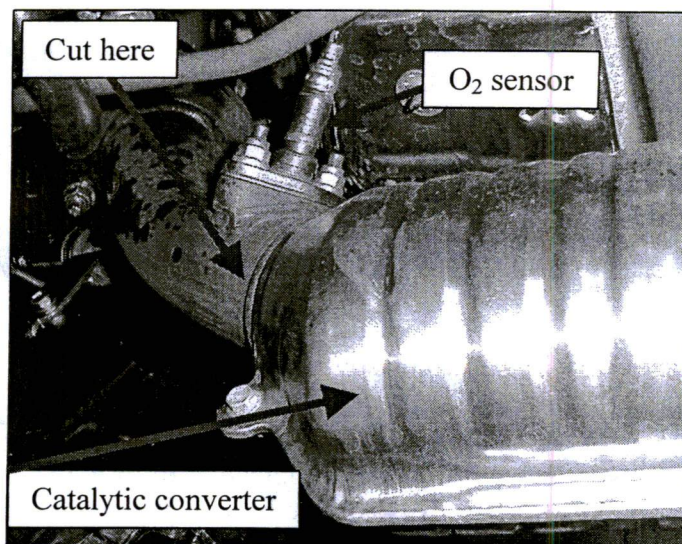


Figure 7

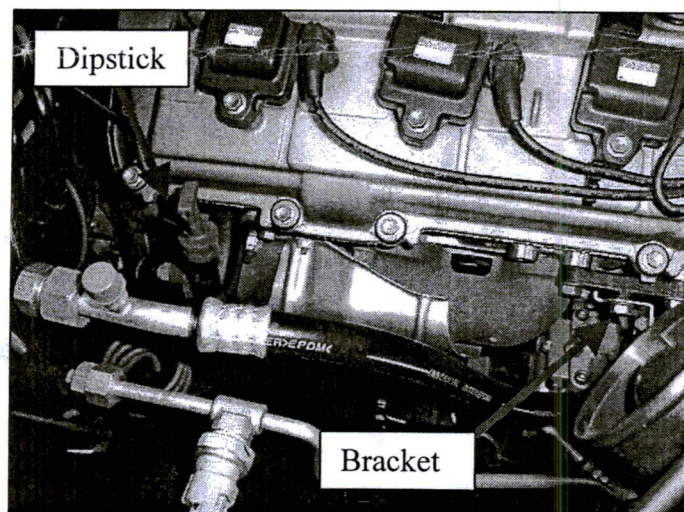


Figure 8

6. If your vehicle is equipped with an automatic transmission, then remove the A/T dipstick and unbolt the dipstick housing from the engine block (Figure 8).
7. Remove a total of 6 nuts connecting both the LH and RH exhaust manifolds to the crossover pipe (Figure 9).
8. Guide the crossover pipe from underneath the right side (passenger side) of the vehicle until it comes out. It may be necessary to remove the transmission mount bolts and lift it to gain clearance between the back of the engine and the firewall. Be sure to replace the transmission mount bolts once crossover pipe is removed.

NOTE: 2001 and later model year vehicles may require that the exhaust manifold be removed prior to crossover pipe removal.

9. Remove a total of 12 nuts connecting both the LH and RH manifolds to the engine and remove each manifold with its gasket (Figure 10).

NOTE: Steps 10– 11 apply only to 4-Runner and Tacoma 4WD and Pre-Runner models.

10. Support the engine at the oil pan with a rubber pad and a screw jack (Figure 11).

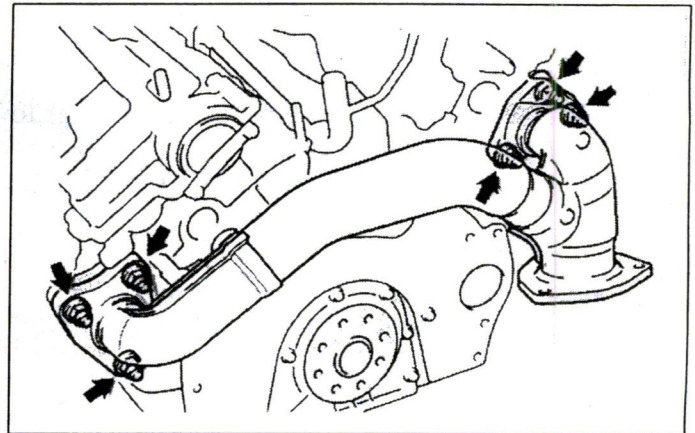


Figure 9

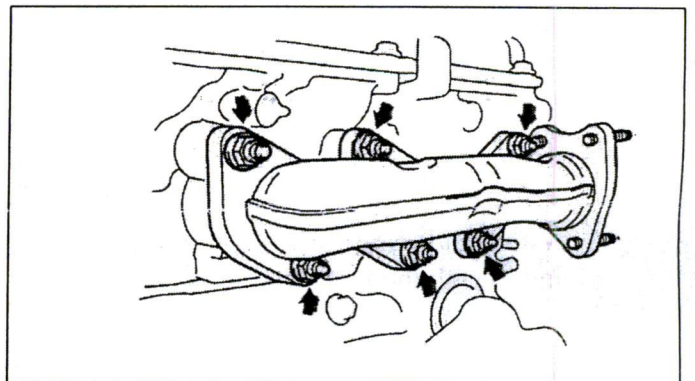


Figure 10

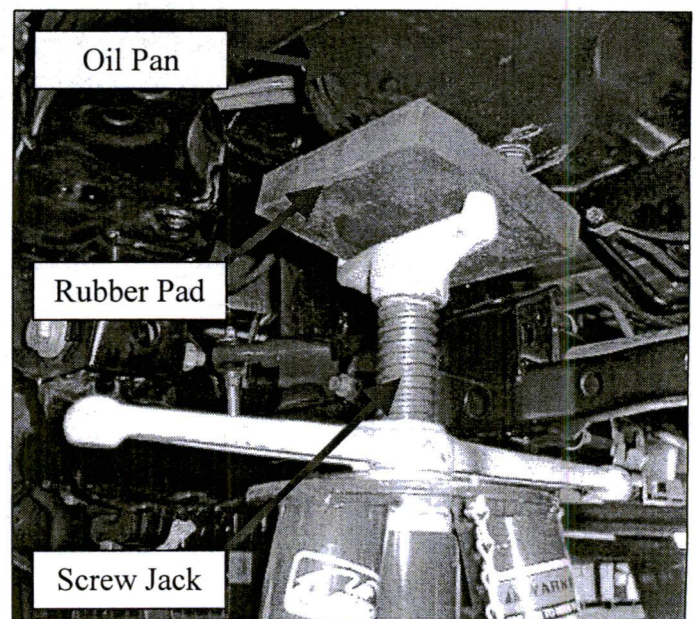


Figure 11

**2001 Tacoma V6 - All**

HE-4RN-002-C, HE-TAC-002-C, HE-TUN-002-C

2000 Tacoma V6 - 2WD & 4WD, VZN150 All, VZN170 & 195 LEV Spec. Only**2000 Tundra V6 - 2WD & 4WD, LEV Spec. Only****1999-2001 4-Runner V6 - 2WD & 4WD, LEV Spec. Only****PERFORMANCE HEADERS**

11. Remove the nut from the right side engine mount (Figure 12).

12. Raise the engine by adjusting the screw jack enough to allow installation of the RH header assembly.

NOTE: Do not raise the engine so much that the engine mount comes off of the stud indicated in Figure 12. The engine will become misaligned and the threads will be ruined.

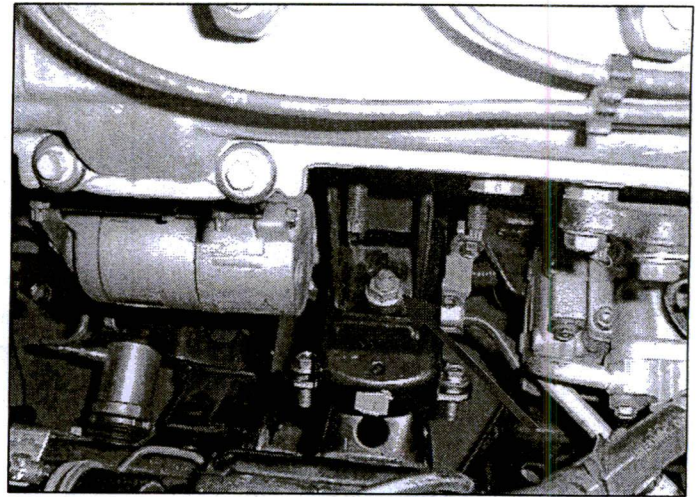


Figure 12

Section III – Installation Procedure

A. Installation of TRD Performance Exhaust Headers.

NOTE: Before installing headers, clean studs and nuts with a wire brush in order to remove any rust, dirt, etc. and also clean the area around the exhaust ports on the engine block to remove any residue.

1. Pre-fit the TRD-supplied gaskets on both the left and right side mating surfaces on the engine. Apply a thin layer of copper high temp silicone on the header.
2. Beginning with the passenger side, carefully slide the exhaust header from underneath the vehicle, and mount the flanges to the engine using 6 OE exhaust flange-to-engine nuts. **LOOSELY HAND-TIGHTEN** the 6 header-to-engine nuts (Figure 13). Make sure the small gaskets are in place.
3. Lower the engine and reinstall the nut on the RH engine mount (4-Runner and Tacoma 4WD and Pre-Runner models only). **Torque the nut to 32 Ft-Lbs.**

NOTE: Install the chamber stay from Figure 6 while the header is loose and tighten the connection.

4. Next, working on the driver's side of the vehicle, note that there are two pieces that make up the driver's side header. Disassemble the single tube (drop-out pipe) from the driver's side header. Now, install the main header (with 2 pipes) flanges to the two exhaust ports closest to the firewall using 4 OE exhaust flange to engine nuts (Figure 14). Make sure the small gaskets are in place.

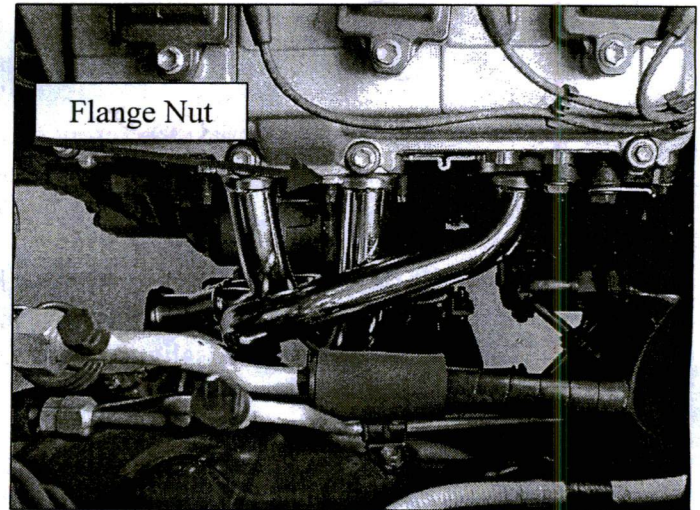


Figure 13

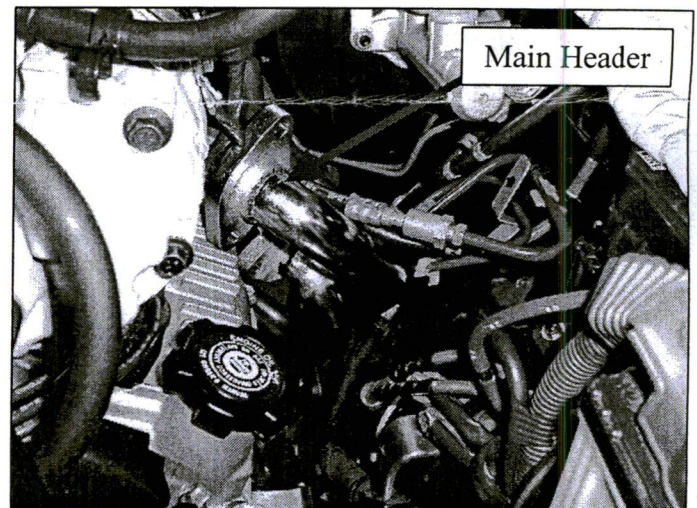
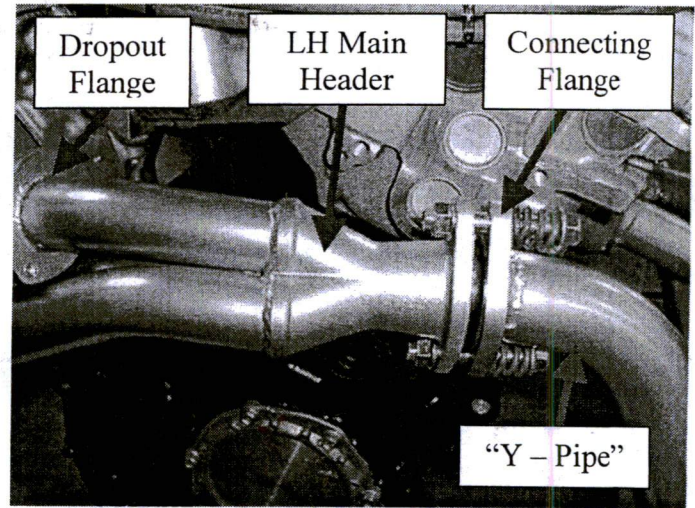
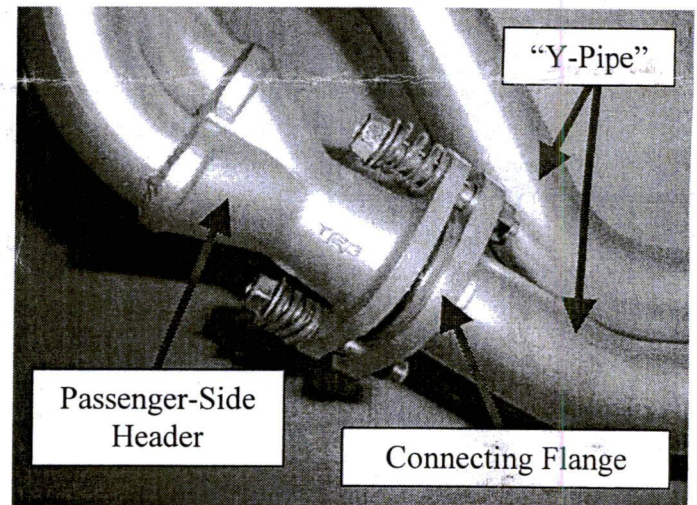


Figure 14

PERFORMANCE HEADERS

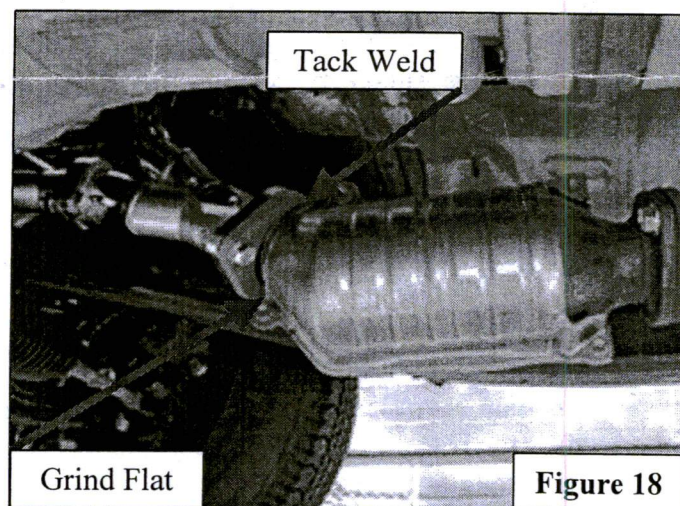
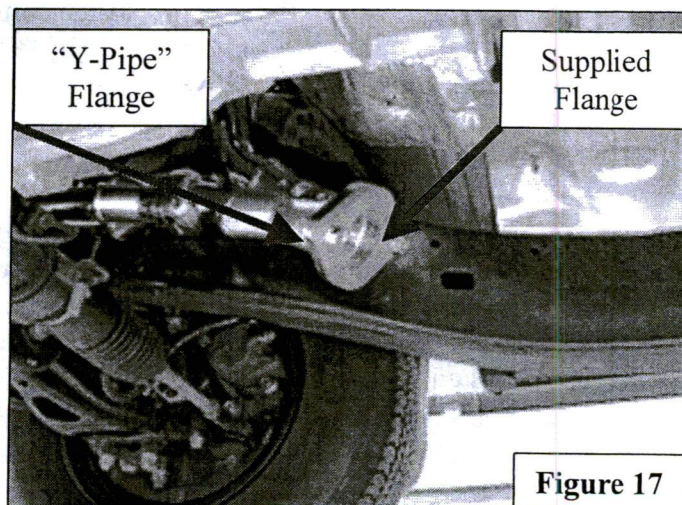
5. The single pipe with flange is next and should be mounted on simultaneously connecting it to the studs on both the front exhaust port of the engine using 2 OE nuts and the dropout flange connection on the LH main header (Figure 15). Don't forget to include the TRD-supplied small gasket on the dropout flange and apply some copper high-temp silicone. **LOOSELY HAND-TIGHTEN** the 6 header-to-engine nuts.
6. Next, install two supplied 8mm serrated nuts onto the dropout flange studs. Fully tighten the dropout flange on the backside of the engine near the firewall and **torque to 16-18 Ft-Lbs. DO NOT OVER-TIGHTEN OR A LEAK WILL OCCUR.**
7. Insert the flanged end of the conical gaskets into the driver and passenger side headers. Make sure the flat surface of the gasket is fully seated against the header flange. Then, from below the vehicle, position the upper Y-pipe flange against the rounded end of the conical gasket at the driver's side header. After aligning the flanges, pass 2 of the 10mm x 1.25 x 60mm bolts with bolt springs attached, through the flanges from the Y-pipe side. Install the 10mm x 1.25 flange head nuts to the bolts and only hand tighten for now (Figure 15).
8. Position the passenger's side Y-pipe flange against the rounded end of the conical gasket on the passenger's side header. After aligning the flanges, pass the 2 remaining 10mm x 1.25 x 60mm bolts with bolt springs attached, through the flanges from the header side. Install the 10mm x 1.25 flange head nuts to the bolts and only hand tighten for now (Figure 16).
9. Next, fully tighten all nuts connecting the driver and passenger side headers to the engine and torque to 30 ft.-lbs. Then fully tighten the upper and lower Y-pipe flange connections to 25 ft.-lbs. **DO NOT OVER-TIGHTEN OR A LEAK WILL OCCUR.**

**Figure 15****Figure 16**

NOTE: Do not use any air-tools such as an impact wrench to tighten the nuts and bolts on the TRD Exhaust Headers. Doing so will bend the ears on the flanges **CAUSING EXHAUST LEAKS**. Adhere to the torque values given. If any flange ear bends, remove the component and straighten the ear out. Use extreme care during the tightening sequence.

B. Installation and Welding of Flange to Catalytic Converter.

1. Insert the TRD-supplied large gasket onto the "Y-Pipe" flange and pre-fit the supplied flange that will be welded to the catalytic converter with two 10mm bolts and serrated nuts (Figure 17).
2. Grind the cut end of the catalytic converter flat. (Figure 18). Reinstall the catalytic converter onto the exhaust system for flange fitting.
3. Carefully line up the flange with the catalytic converter and tack weld the ground end to the flange (Figure 18).
4. Remove the catalytic converter from the vehicle for final weld assembly.
5. Once welding is complete, reinstall the catalytic converter onto the vehicle and tighten both flange nuts and bolts to **22-24 Ft-Lbs.** Apply some copper high temp silicone to both sides of the TRD-supplied large before installing.



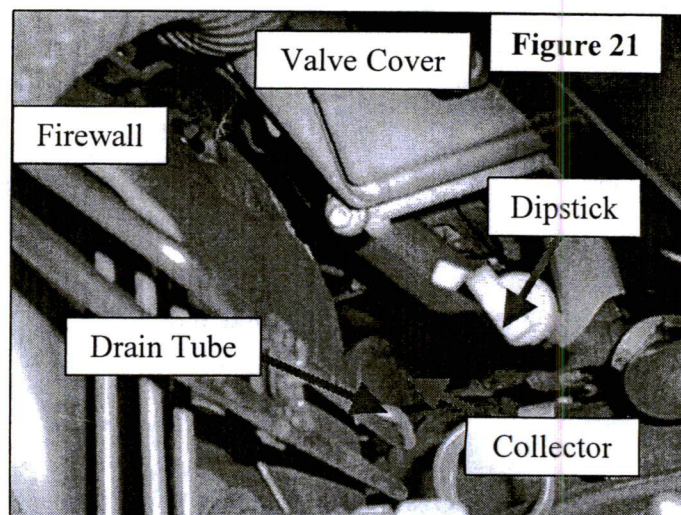
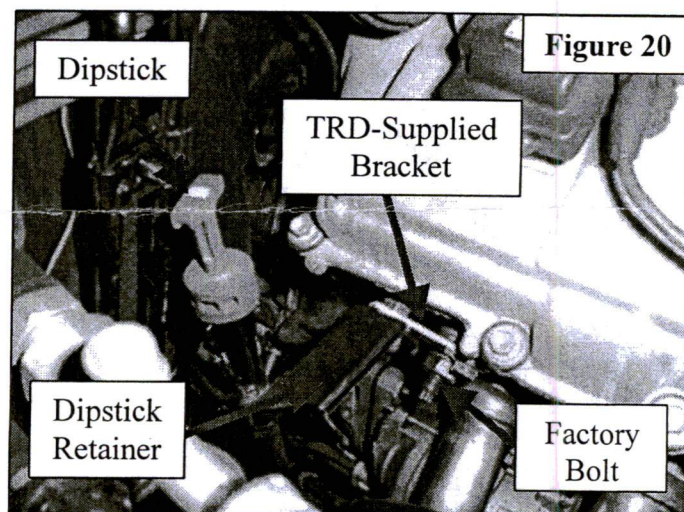
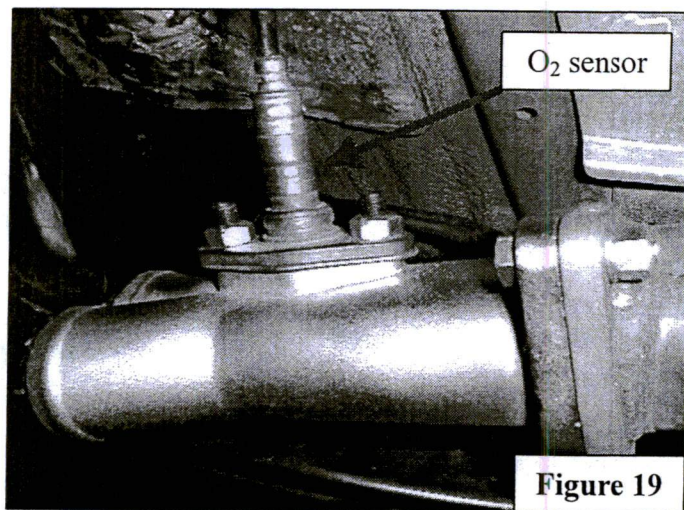
PERFORMANCE HEADERS

6. Reinstall the oxygen sensor (O₂) onto the new header system using two 8mm serrated nuts and apply some anti-seize compound onto the threads (Figure 19). **Torque to 14 Ft-Lbs.**

NOTE: On manual transmission models, it may be necessary to release the oxygen sensor (O₂) wire clip from the transmission in order for the wire to have enough slack to reach the sensor.

NOTE: If your vehicle is equipped with an automatic transmission, do as follows:

- a) Using the TRD-supplied bolt, washer and nut, bolt the dipstick to the TRD-supplied bracket (Figure 20).
 - b) Bolt the TRD-supplied bracket to the factory dipstick mounting location on the cylinder head using the factory bolt (Figure 20).
7. Finally, repeat Steps 2-7 of Part A in Section II in the reverse order and make sure that everything has been connected properly.
 8. Place the Executive Order (EO) sticker on the underside of the hood. This will notify state inspectors that the TRD Performance Headers have been certified emissions legal in all 50 states.
 9. Verify that the air conditioner condenser drain tube does not point at the collector. It should point straight down or slightly towards the passenger-side wheel well so it will drip on the frame rail (Figure 21).



IV. Installation Procedure Checklist

1. Vehicle preparation.
2. Label all hoses, cables and brackets.
3. Disconnect cables that are only applicable to model.
4. Remove OE manifolds and keep all factory nuts and bolts.
5. Install TRD performance headers and apply copper high-temp silicone to gaskets.
6. Grind flat cut end of catalytic converter.
7. Pre-fit and tack weld flange onto catalytic converter. Remove and weld.
8. Repeat Part A in Section II in the reverse order.
10. Check to make sure that everything has been properly installed and is in its correct place and position.
11. Mount EO sticker on underside of hood.

