

# Installation Instructions for TRD's 3.4-liter V6 Supercharger Kit

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1997-2000 Tacoma, 1997-1998 T-100,  
1996-2000 4Runner



## Section 1: Installation Preparation Kit Contents

Qty	Description	Connection or Installation Location	Page	Part Number
1	<b>Supercharger/Manifold Assembly</b>	Main Assembly - Bolts directly to OE Manifold	10	00602-17620-207
1	<b>Supercharger Belt</b>	Replaces OE Alternator Belt	11	00602-17620-026
1	<b>Assembly, Idler Plate and Pulley</b>	Installed on front of engine	9	00602-17620-010*
1	<b>Kit, Idler Plate Installation Hardware</b>			
1	Stand-off, Idler Plate	Between the Idler Plate and the Supercharger at Bolt Hole A	11	
1	Washer, Gold Finish 8mm ID x 21mm OD	Bolt Hole A	11	
1	Bolt, 8 x 1.25 X 70mm Hex	Bolt Hole A	11	
1	Bolt, 10 x 1.25 x 100mm Hex, 14 mm Wrench Flat	Bolt Hole B	9	
1	Socket Head Cap Screw, 10 x 1.25 x 80mm	Bolt Hole C	9	
1	Washer, 10mm Flat	Bolt Hole C	9	
1	<b>Kit, Literature</b>			
1	Manual, 3.4 Installation - Revision 2			00602-05100-221
1	Gasket, 3.4 S/C Throttle Body	Between OE Throttle Body and TRD Supercharger	12	00602-17620-032
1	EO Sticker	Place underneath hood	13	
1	Warranty Card	Fill out and send in to TRD	-	
1	Warranty Certificate	Keep in red envelope, in glove compartment	-	
1	Red Plastic Envelope	Use to keep supercharger printed materials in glove compartment	-	
1	Decal, Supercharger	Place as desired. Usually placed on OE Timing Belt Cover	-	00602-17620-042
1	Template for Cutting Front Cover	Use to modify OE Timing Belt Cover	8	00602-17620-2TP
1	Belt Routing Sticker	Under hood	13	
1	Premium Fuel Sticker	Place one on or near fuel gauge, the other inside fuel filler door	13	
3	Set, TRD S/C Emblems	Place as desired on external surfaces of vehicle	13	00602-17620-SCE
	Supercharger Brochure, Catalogs, Promo. Matl.	-		
1	<b>Hose, Connector and Hardware Kit</b>			
1	Vacuum Hose - 5/32" x 5" long	Connects Fuel Pressure Regulator to 1/8" barb on reducer	16-19	
1	Vacuum Hose - 1/2" x 34" long	Connects Air Tube to Cam Cover	16-19	
1	Vacuum Hose - 7/32" x 20" long	Connects Intake Silencer to 1/4" barb on reducer for Fuel Pressure Regulator	16-19	
1	Vacuum Hose - 3mm x 11" long	Connects Vacuum Throttle Opener to Intake Manifold	16-19	
1	Reducer - 7/32" to 3mm	Connects 7/32" and 3mm hose for Fuel Pressure Regulator	16-19	
2	Hose Clips, Black Plastic	Retains Evaporative Canister Hose to Throttle Cable	12	
1	Vacuum Adapter Tee - 5/16" x 5/16" x 1/4"	4WD Only - See Hose Routing Schematic Figure B	17	
1	Valve, IAC, Check	Installed near IAC Valve	10, 19	00602-17620-065
1	Spacer, Manifold Support Bracket	Installed between manifold and OE Support Bracket on driver's side	10	
1	Bolt, 8 x 1.25 x 35mm Flange Head	Used to secure OE Support Bracket, through above spacer, to S/C Manifold	10	
1	Bolt, Hex, 8 x 1.25 x 170 w/10mm Wrench Flat	Installed through the top of supercharger to the OE manifold	10	
4	Socket Head Cap Screws, 8 x 1.25 x 65mm	Attaches Throttle Body to TRD S/C Manifold	12	
4	Washer, 8mm Flat	1 per Socket Head Cap Screw used to attach Throttle Body to TRD S/C Manifold	12	
1	Bracket, Accelerator and Transmission Cable	Used on all applications except 4WD, Manual-Transmission Tacoma	12	
1	Bracket, Accelerator Cable 4WD MT Tacoma Only	Used on 4WD, Manual-Transmission Tacoma only	12	
2	Bolt, Hex, 6 x 1.0 x 12mm	Used to attach Accelerator Cable Brackets to S/C Manifold	12	
2	Washer, Flat, 6mm	Used with bolts to attach Accelerator Cable Brackets to S/C Manifold	12	
1	<b>EGR Kit</b>			
1	Vacuum Hose - 7/32" x 7" long	Connects EGR Valve to EGR Vacuum Modulator	16-19	
2	Vacuum Hose - 3mm x 20" long	Connects EGR Valve to VSV1 and VSV2 (See Toyota Repair Manual)	16-19	
1	Bracket, VSV #2	Used to mount rear VSV to firewall	4	
1	Washer, Flat, 6mm	To secure VSV Bracket to firewall or front VSV to cover	4	
1	Bolt, Hex, 6 x 1.0 x 12mm	To secure VSV Bracket to firewall or front VSV to cover	4	
1	Nut, Nylock, 6 x 1.0mm	To secure VSV Bracket to firewall or front VSV to cover	4	

\*Replacement idler pulley - 00602-17620-019

### Tools Recommended

**Basic Tools**

- Basic Metric Socket, Allen & Open-End Wrench Sets
- Pencil & Paper for Drawing Schematics of Cable Routing
- 1/2" Wide Masking Tape for Labeling Hardware, Parts and Belts
- 2" Wide Masking Tape for Covering Intake Manifold while Working on Engine
- A Clean Work Bench
- A Parts Tray
- Rags or Shop Towels

### Safety Tools

Safety Goggles

### Special Tools

Tensionometer (available from Kent-Moore, 1-800-345-2233) **See figure 29**  
 14 mm Angled (22.5 degrees) Flat Ratchet for Power Steering Belt Adjuster Bolt  
 Scribe for Marking Outline on Timing Belt Cover  
 Coping Saw Blade or other Flexible Saw for Cutting Plastic Timing Belt Cover  
 Toyota Repair Manual (available from Toyota, 1-800-622-2033)

## Section 2: Removal Procedure

### A. Preparation for Removal of Stock Intake Manifold

- Before you begin, TRD recommends that you thoroughly clean the engine and engine compartment. If you don't, grease buildup on parts could become dislodged during the procedure and fall into the engine.
- Make sure the engine has cooled fully before you begin.
- To help you later, we suggest you draw diagrams of your engine's cable routing before you disconnect anything. You can do the same for the vacuum hoses; however, some of the vacuum connections on your stock manifold may not be the same as those on the supercharger. To ensure the proper hose connections, refer to the diagrams in the back of this manual.
- The TRD supercharger kit has been designed to reuse most of the stock nuts and bolts. Therefore, as you remove them, keep them with their components or label them for location. This will assure a faster, easier installation.

### B. Removal of Stock Intake Manifold (figure 1)

1. Disconnect the battery ground cable.
2. With tape or a permanent marker, mark the **forward** edge of the power steering and the air conditioning compressor drive belts (**figure 2**). This will ensure that the belts will be returned to their original positions and that they will rotate in the same direction. If you reverse the direction of rotation, it may cause the belts to fray.
3. If you don't have a drive belt tensionometer, make note of each belt's deflection at a point midway between its pulleys. You will need to approximate this tension during reassembly (**see figure 29**).

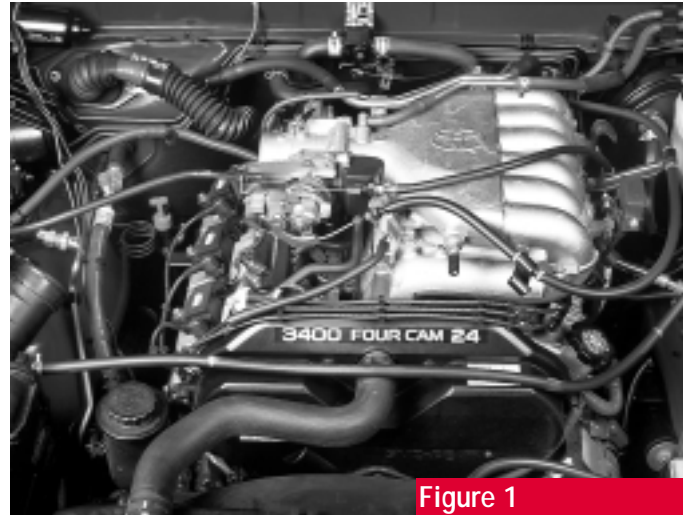


Figure 1

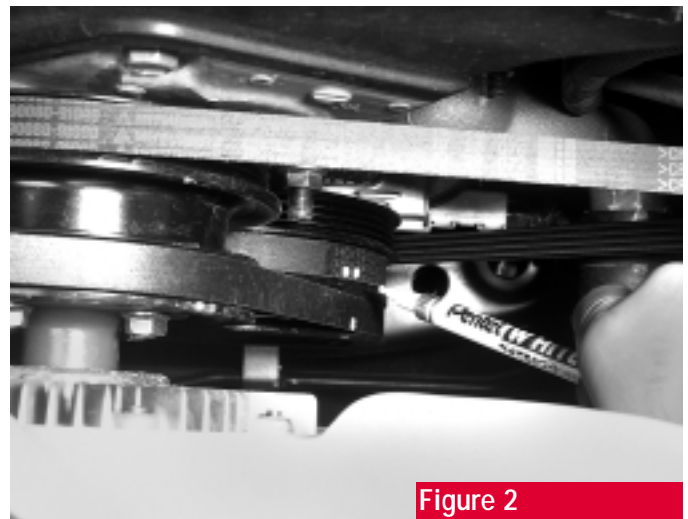


Figure 2

## Installation Instructions for 3.4-liter V6 Supercharger Kit

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4. If equipped, remove the gravel guard from beneath the radiator (**figure 3**). This will give you access to the A/C belt adjuster.

*TIP: The gravel guard consists of two pieces but it's much easier to install if you remove it as a one-piece assembly.*

5. Loosen the pinch bolt in the center of the A/C compressor belt pulley and loosen the adjuster bolt enough to loosen the belt (**see arrow, figure 4**).
6. Using the angled flat ratchet, loosen the pivot bolt and adjuster bolt for the power steering pump.
7. Remove the two belts.
8. Loosen the alternator pivot and adjusting bolts and remove the alternator belt. During the installation procedure, it will be replaced with a belt supplied with the supercharger.
9. Loosen the air intake tube clamps at the throttle body and the Mass Air Flow Sensor (MAF).

*CAUTION: The air sensor (**see pointer, figure 5**) is fragile so be careful when working around it.*

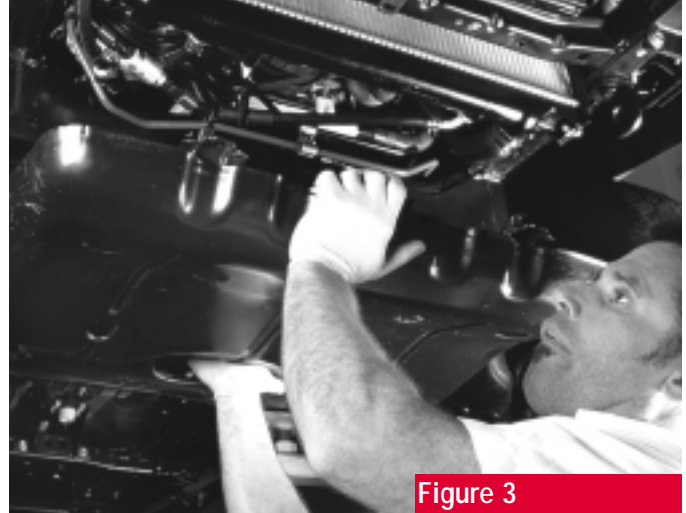


Figure 3

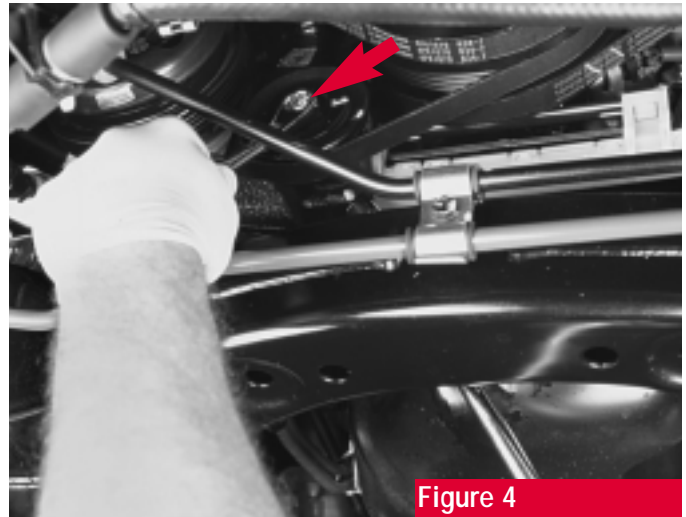


Figure 4

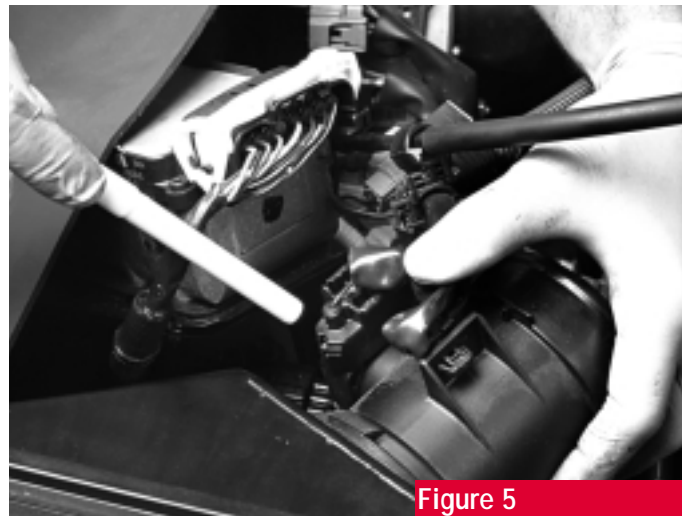


Figure 5

10. Remove any connections from the air intake tube and remove the tube (**figure 6**).
11. Some trucks are equipped with one or two Vacuum Switched Valve (VSV) assemblies. To locate yours, consult the appropriate diagrams on **pages 16 through 19**. If the valve is mounted on the rear of the engine, it should be relocated to the firewall with the bracket supplied. Remove the vacuum lines from the VSV and set them aside. If your vehicle has a VSV at the passenger's front side of the engine, move it to the timing belt cover. Drill a small hole in the cover and install the bracket with the bolt, washers and nut supplied.
12. Note the tension and adjustment of the throttle cable and the transmission throttle-pressure (kickdown) cable (if equipped with an automatic transmission). You will need to re-create these adjustments during the assembly procedure. To help you remember, look for the small metal bead (the stake stopper) on the kickdown cable (**see arrow, figure 7**). If the cable is properly adjusted, the bead should be flush with the end of the cable's rubber sheath (**see arrow, figure 8**).

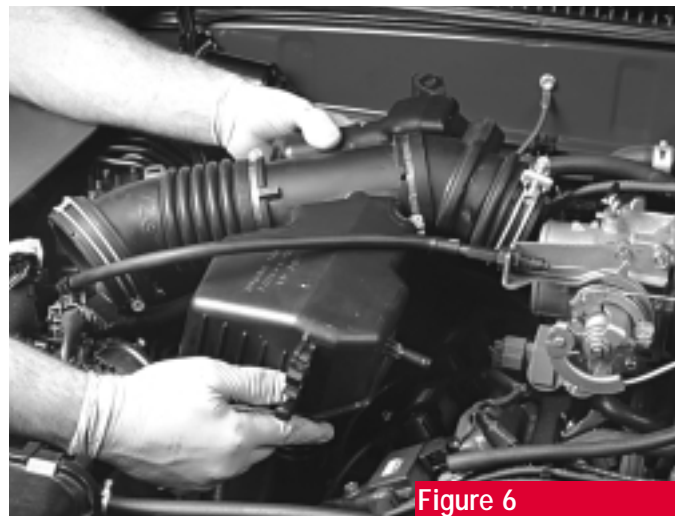


Figure 6

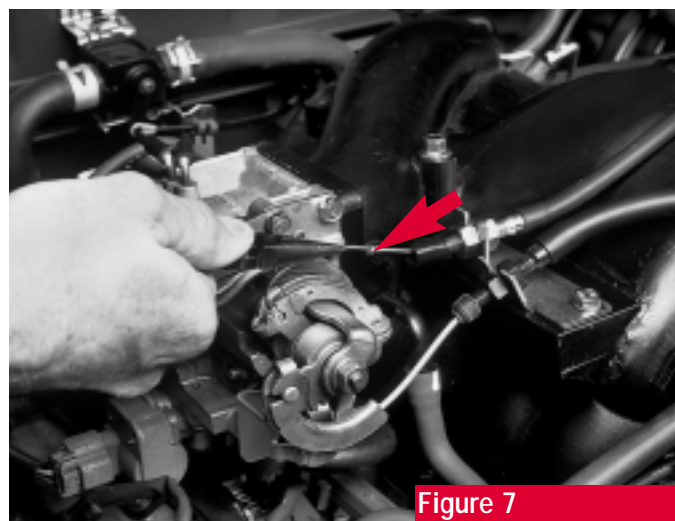


Figure 7

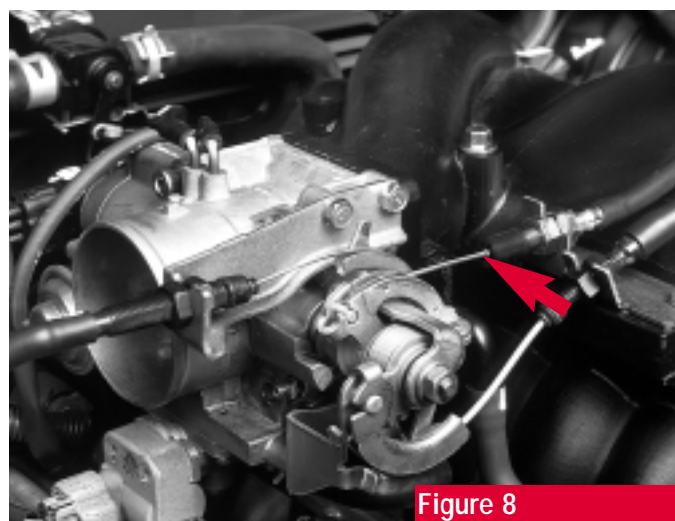


Figure 8

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The throttle cable has no stake stopper. As a substitute, mark the throttle cable (with a marker or a piece of tape) where it enters its sheath (**see arrow, figure 9**). During assembly, these cables should be adjusted to duplicate the original cable-to-sheath positioning.

13. Loosen but **don't remove** the cable nuts (**figure 10**). Slide the cables from their brackets and remove the cable ends from the throttle-body levers.

*TIP: If your vehicle is equipped with cruise control, do not remove the cruise cable from the throttle body. If you do, you will have to readjust it later.*

14. Unplug the throttle-position sensor connector (A) and the IAC (Idle Air Control) valve connector (B) (**see arrows, figure 11 and diagram on page 19**).

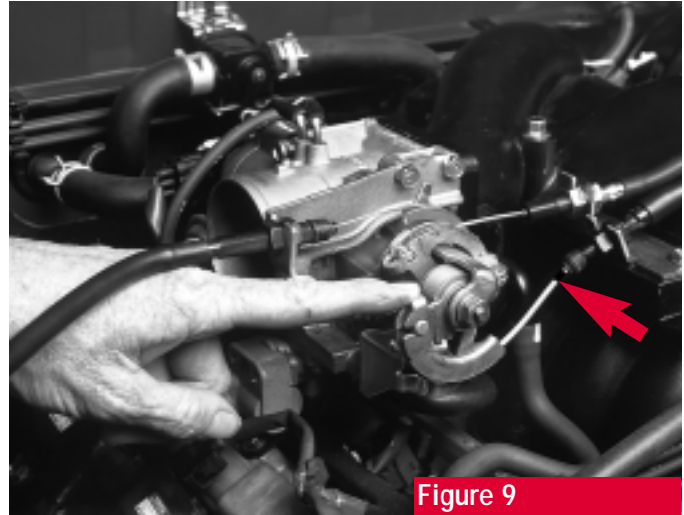


Figure 9

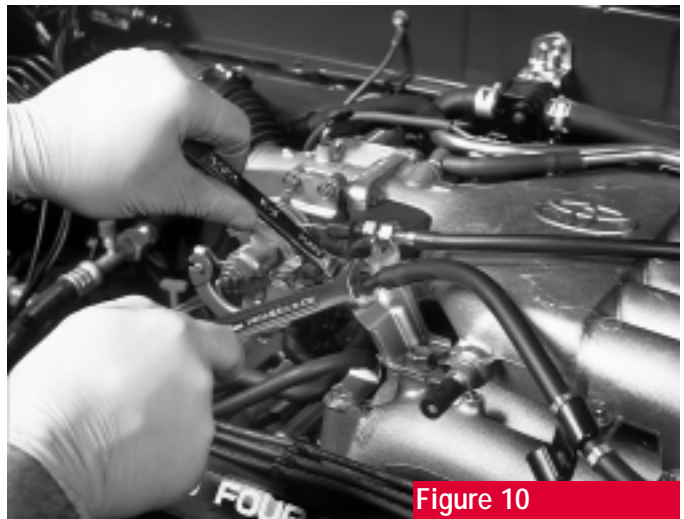


Figure 10

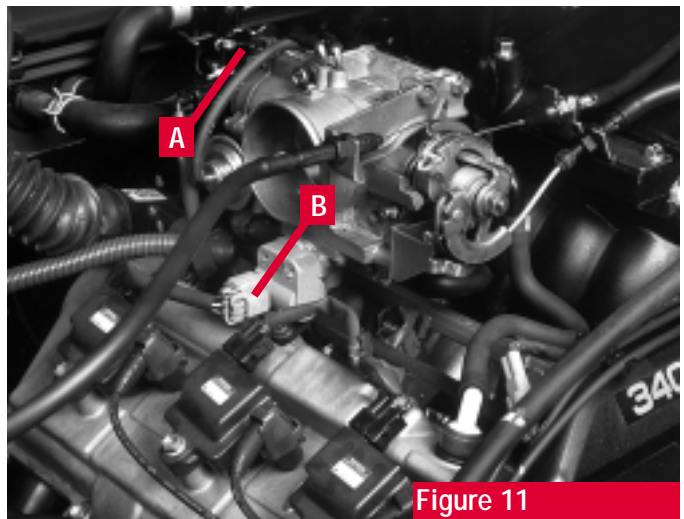


Figure 11

15. Remove vacuum lines from the throttle body but **don't remove the two coolant hoses (figure 12)**.

*TIP: The coolant hoses have clamps (see arrows, figure 12), the vacuum hoses do not.*

16. Remove the throttle body **with** attached coolant hoses and cruise control cable (if equipped) and set to one side (**figure 13**).
17. At the driver's side of the engine, remove the diagnostic plug from its mounting bracket (**see arrow, figure 14**) and set it aside. Remove the bolt and bracket that holds the diagnostic connector to the stock manifold and save for reassembly. Remove the ground wire and move it to one side.
18. Remove the vacuum hoses for the power brake, PCV and EVAP from their tubes on the upper manifold.

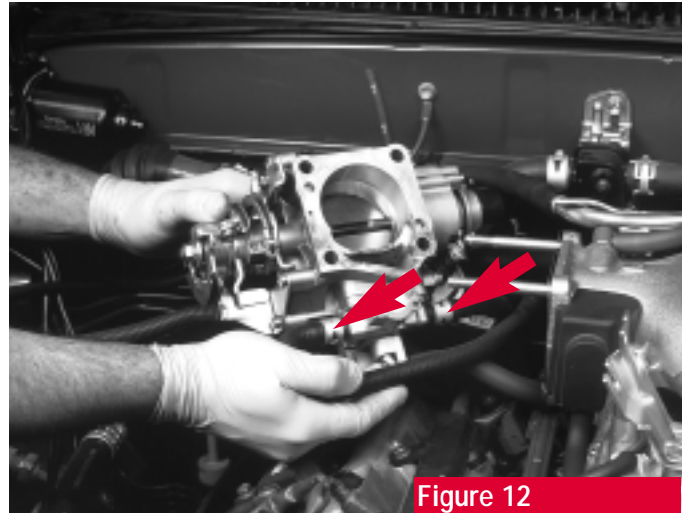


Figure 12

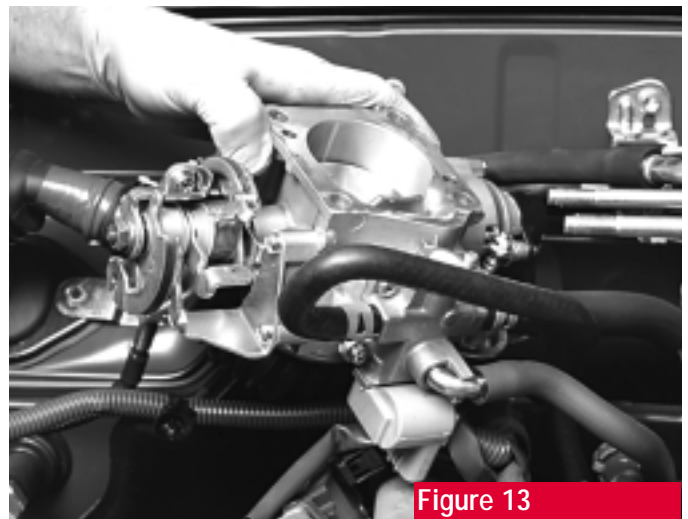


Figure 13

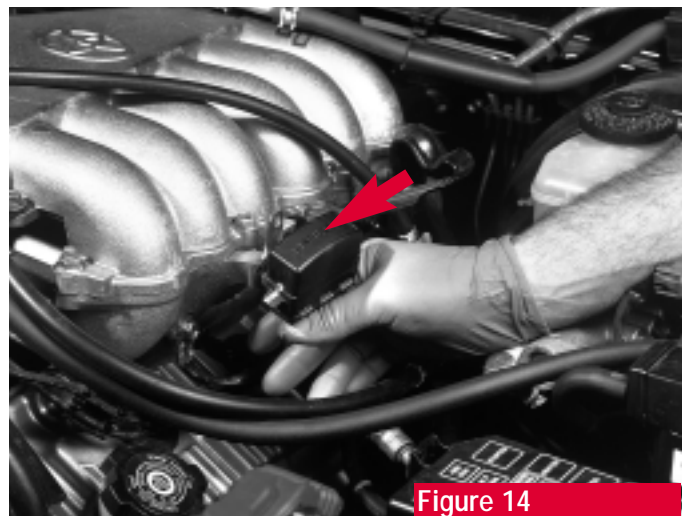


Figure 14

## Installation Instructions for 3.4-liter V6 Supercharger Kit

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19. Your pre-2000 Tacoma or T-100 may be equipped with an EGR valve. To be sure, look for this tube (**see arrow, figure 15**) on the driver's-side exhaust manifold. Remove the valve according to the procedure on page 14.
20. Remove the bolt holding the manifold to the intake chamber stay (**see arrow, figure 26**). Save the bolt.
21. Remove the upper half of the intake manifold and set it aside (**figure 16**).
22. Disconnect the fuel-return line bracket (**but don't disconnect the fuel hose**) from the driver's side of the lower manifold and remove the bolt from the wire-loom bracket.
23. Remove the bolts and nuts from the lower manifold.

*TIP: The nuts at the far ends of the manifold will be reused during installation. To avoid losing them, pick them up with a magnet.*

24. Remove the lower manifold (**figure 17**) and save the factory nuts, washers and two short bolts, as they will be reused.
25. Inspect the gasket. If it's in good shape, reuse it; if not, replace it with a new one (part# 17176-62040).

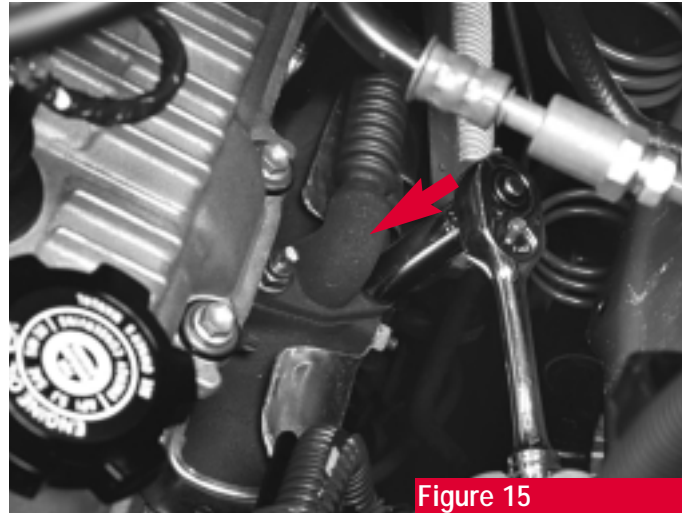


Figure 15

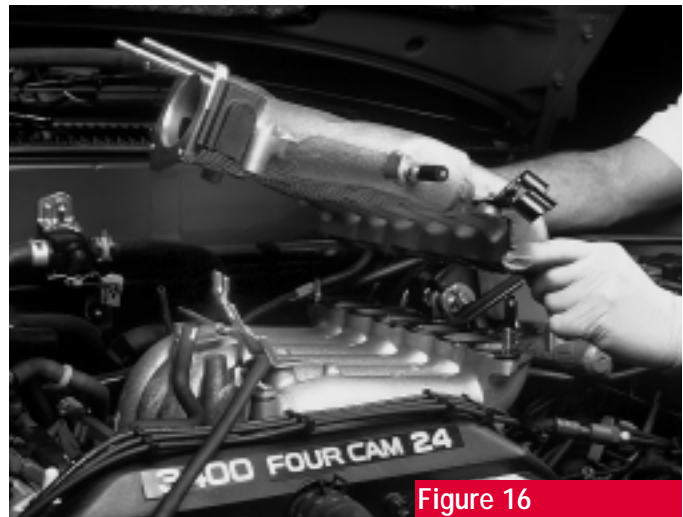


Figure 16

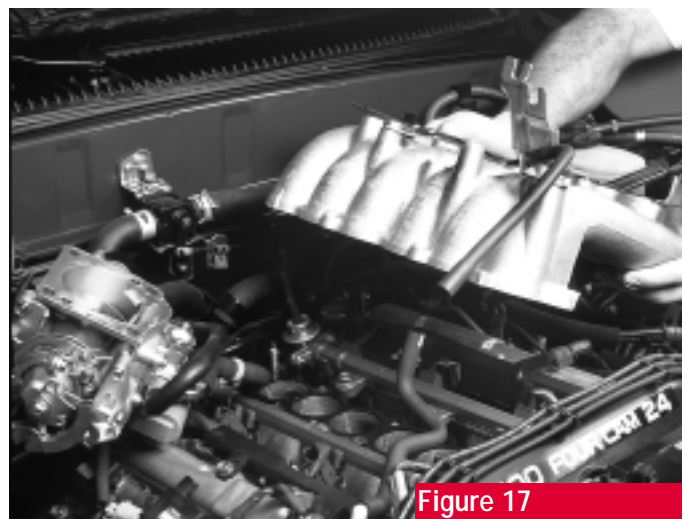


Figure 17



## Installation Instructions for 3.4-liter V6 Supercharger Kit

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26. Tape over the engine manifold ports to keep out debris (**figure 18**).
27. Using the template supplied and a scribe or marker, mark the top of the timing belt cover around the template (**figure 19**).
28. Move any wires out of the way and with a coping saw blade or flexible saw, cut along the scribe mark (**figure 20**) and discard the cut-out piece. This cutaway will provide the clearance for the drive housing of the supercharger.

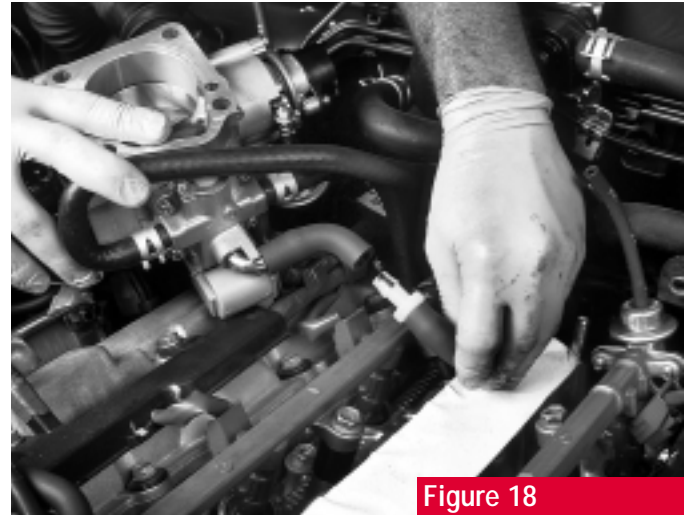


Figure 18



Figure 19



Figure 20

29. Attach the plastic wire looms to the cut edge of the front cover (**figure 21**). The ignition wires will go beneath the supercharger drive housing.

### Section 3: Installation Procedure

#### A. Installation of TRD Idler-Pulley Assembly

1. From your engine, remove the upper water pump bolt (see arrow, **figure 22**).
2. Install the pulley assembly (**figure 23**) using the TRD bolt in Location B (10 x 1.25 x 100mm) and the bolt and washer supplied in Location C (10 x 1.25 x 80mm). Hand tighten for now.



Figure 21

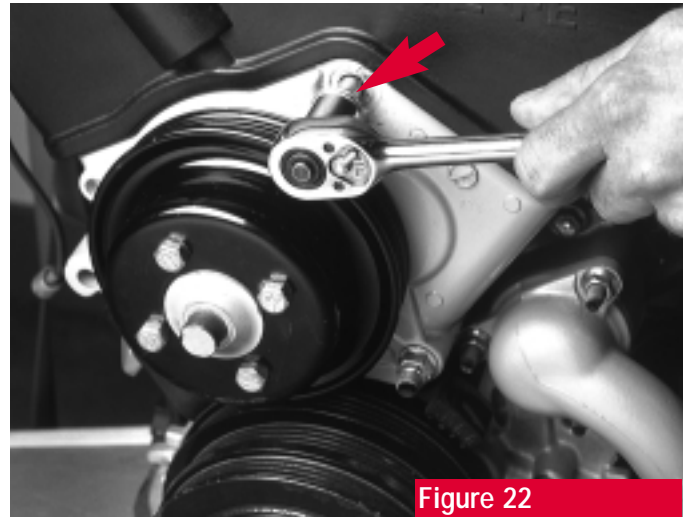


Figure 22

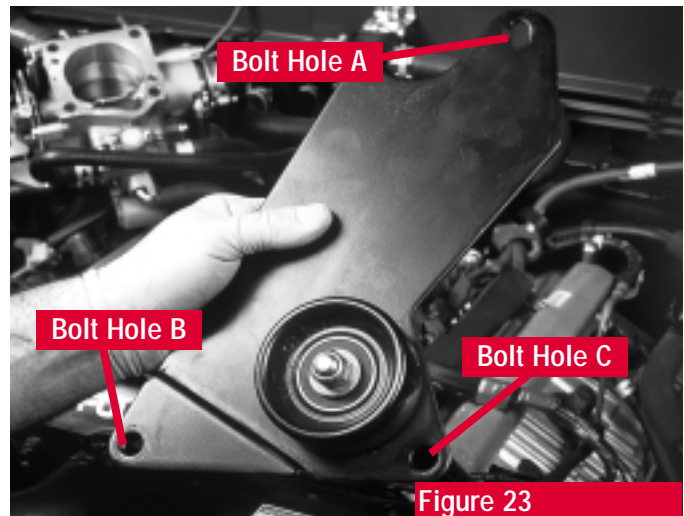


Figure 23

## B. Installation of TRD Supercharger and Manifold Assembly

1. Cut the hose leading to the IAC valve connector at the location shown, and insert the kit's one-way valve into the straight part of the hose. The black end of the valve (**see arrow, figure 24 and diagram on page 19**) is closest to the throttle body.

*IMPORTANT: The IAC hose and the coolant hoses are similar in size. Don't cut the wrong one. The coolant hoses have clamps, the IAC hose does not.*

2. Remove the tape from the intake manifold and reinstall the stock gasket.
3. Lower the supercharger and manifold into place making sure there are no hoses or wires in the way. The ignition wires should be routed beneath the supercharger's drive housing (**see arrow, figure 25**).
4. If the assembly sits flat on the engine, put the stock manifold brace (driver's side) bolt in first (**see arrow, figure 26**) and then install the stock nuts on the studs at each end of the manifold and hand tighten.
5. Install the TRD-supplied long manifold bolt (8 x 1.25 x 170mm) through the supercharger to the stock manifold followed by the two stock bolts. Alternating from one side to the other, torque the bolts and two nuts to the specs provided in the Toyota Repair Manual.

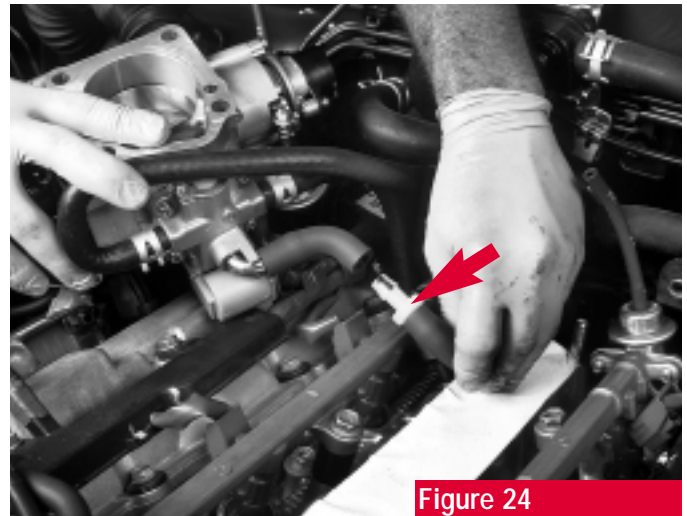


Figure 24

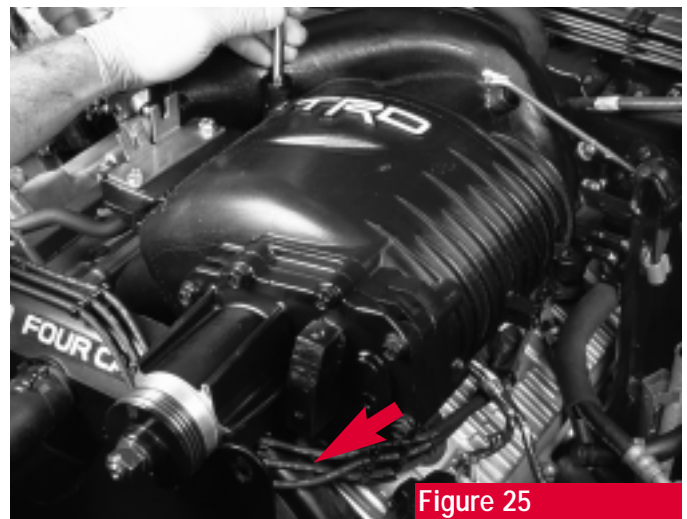


Figure 25

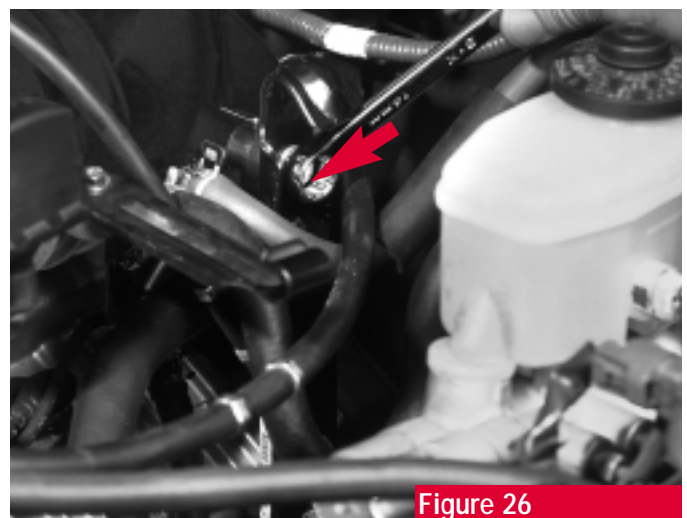


Figure 26

6. Install the bolt and spacer (standoff tube) supplied to Location A (**figures 23 & 27**) of the idler pulley assembly. Slide the assembly upward until it contacts and supports the supercharger's drive housing and tighten Allen bolt C enough to hold the assembly in place.
7. Tighten the bolt in Location A followed by B and C (**see figure 23 for locations**) and torque all three to the following specs:  
Bolt A: 12 ft. lbs.  
Bolts B & C: 18 ft. lbs.

### C. Belt Installation

1. Install TRD's supercharger belt as shown (**figure 28**) making sure that it's properly seated in the grooves of each pulley. Using the alternator belt adjuster and a tensionometer (Kent-Moore type shown), tighten the belt to the high side of the "new" range (120 lbs.) (**figure 29**).

*NOTE: Proper belt tension is critical to the supercharger's operation; therefore, don't estimate belt tightness, use a tensionometer. Home mechanics—if you don't have a tensionometer, rent or buy one or tighten the belt enough to drive your truck to the closest Toyota dealer. And be sure to take these instructions with you.*

2. Install the power steering and A/C compressor belts according to the marks you made before removal. If you don't have a tensionometer, tighten them according to the measurements you made earlier. If you have a tensionometer, tighten them to the following specs: **used belts, 90 lbs.** (a belt operated more than 10 minutes is considered used), **new belts, 120 lbs.**

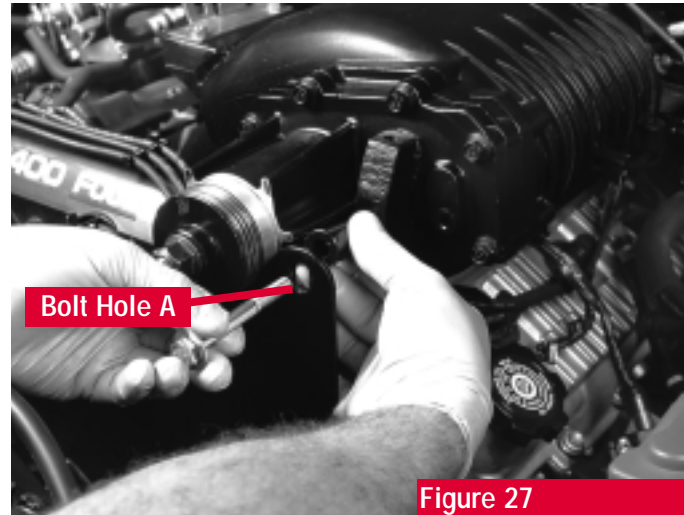


Figure 27

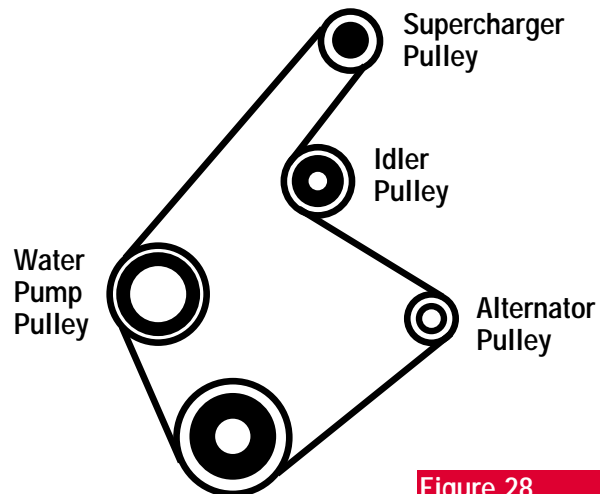


Figure 28



Figure 29

#### D. Throttle Body and Air Tube Installation

- Using the gasket, the Allen bolts and washers supplied, install the throttle body onto the supercharger's manifold.

**IMPORTANT:** Do not reuse the OE metal gasket (A, figure 30) on the throttle body. It will reduce boost output by 1½ lbs. Use the gasket supplied with the kit (B). And make sure that it is positioned properly. Its shape must coincide with that of the throttle body. If not, you will create a vacuum leak.

- Torque each bolt to the specs provided in the Toyota Shop Manual. Do not overtighten.
- Install the throttle position sensor plug, the coil plug (if removed), and the IAC valve connector.
- Attach the PCV hose to the PCV valve on the passenger's side of the engine.
- Install the air inlet tube to the throttle body and Mass Air Flow Sensor and reconnect its hoses and tubes. Be careful not to damage the sensor (figure 31).
- Install the proper cable bracket to the top of the manifold. TRD supplies two throttle cable brackets. The bracket with only one U-shaped cable mount is to be used **only** on Tacoma 4WD manual-transmission vehicles. The bracket with two U-shaped cable mounts is to be used on **all** other models.
- Remove the transmission cable clamp from the manifold support. Clamp is no longer needed.
- Remove the throttle cable/evaporative canister hose bracket and bolt from the stock manifold (figure 16). Install the bracket on to the supercharger as shown (see arrow A, figure 32). Insert the throttle cable and evaporative canister hose, and install the supplied hose clips on the throttle cable and evaporative canister hose as shown (see arrows B, figure 32).

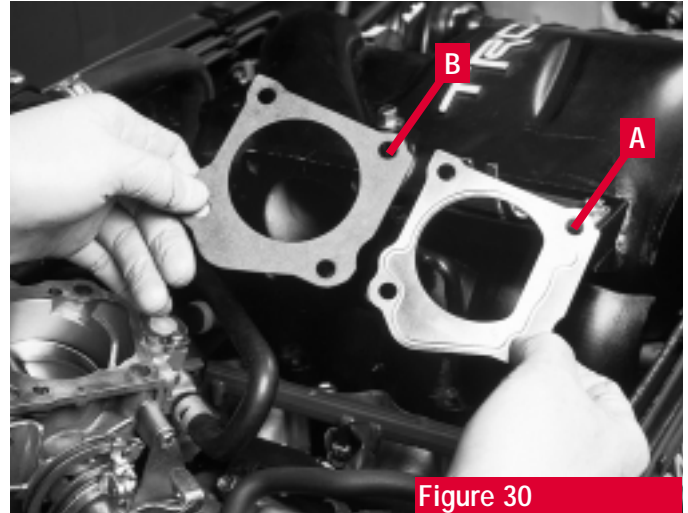


Figure 30

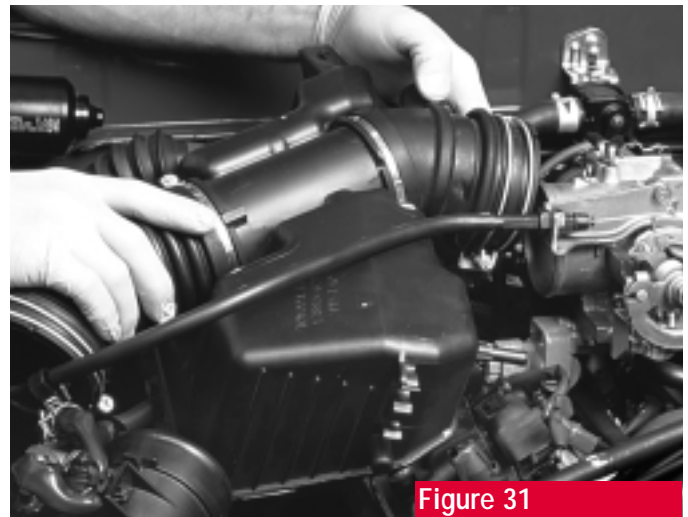


Figure 31

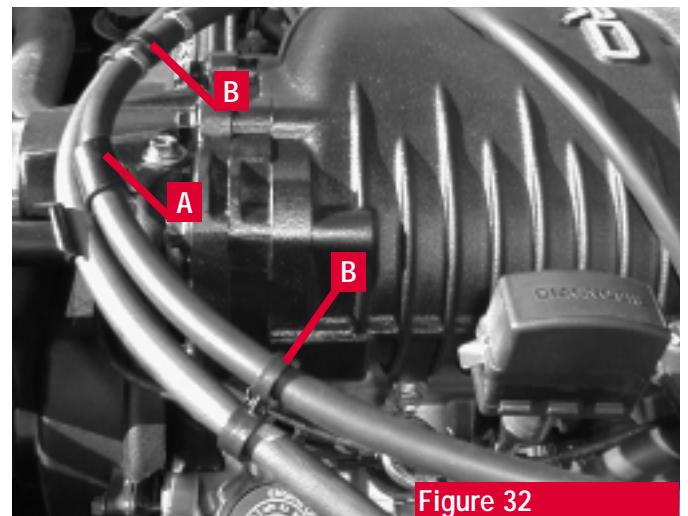


Figure 32

9. Place the throttle and automatic transmission kickdown cable ends in their original throttle body levers.
10. Install the transmission kickdown cable sheath (**see arrow A, figure 33**) and throttle cable sheath (B) in the bracket and when you have re-created the adjustment noted earlier (see step 12 under "Removal of Stock Intake Manifold"), tighten the nuts.
11. Install the diagnostic plug bracket and the ground connector to the driver's side of the supercharger. Install the diagnostic plug (**see arrow A, figure 34**).
12. Install the fuel return line bracket to the driver's side of the manifold (**see arrow B, figure 34**).
13. Using your diagrams, and those in the back of this manual, double check the routing of vacuum hoses, cables and brackets and correct any problems (**figure 35**).
14. Install the gravel guard.
15. Attach the ground cable to the battery.
16. Run the engine for 15 minutes or so and read just the belt tension to 90 lbs.
17. Apply the premium-fuel stickers to the fuel gauge and fuel filler door.
18. Apply a TRD belt routing sticker and the Executive Order (EO) label to the underside of the hood. The EO will alert state smog inspectors that the TRD supercharger has been certified emissions legal in all 50 states.
19. The kit also includes three "TRD" badges and three "Supercharged" emblems. They should be applied to your truck's front fenders and tailgate but, before you do, make sure the paint surface is clean and dry. Any dirt, grease or wax will cause the badges to stick poorly.

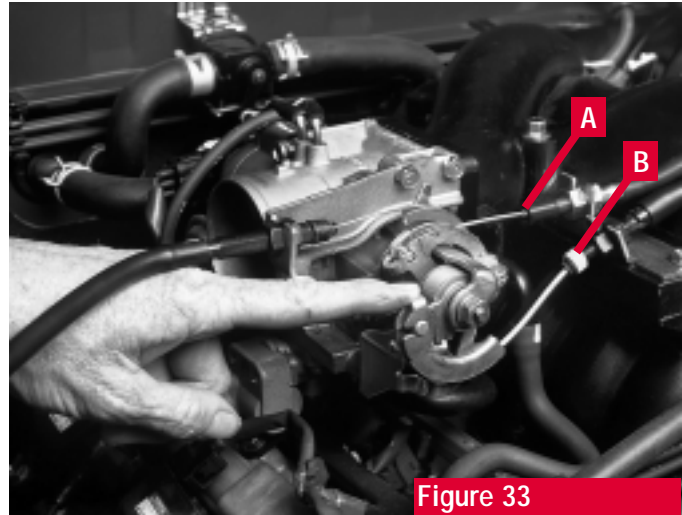


Figure 33

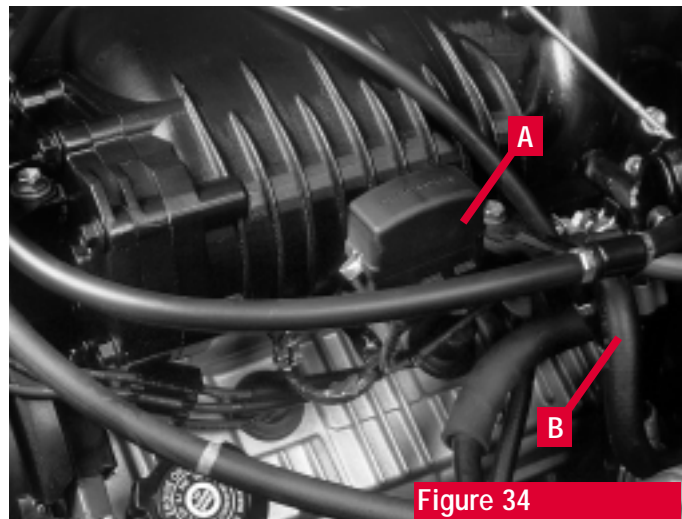


Figure 34

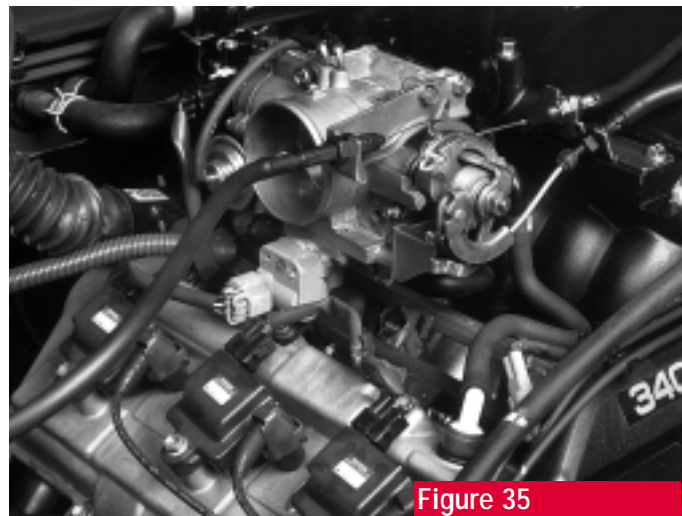


Figure 35

## Section 4: EGR Removal and Installation

If your Tacoma or T-100 is equipped with an Exhaust Gas Recirculation (EGR) valve (see arrow, figure 36), you will need to remove the valve from the stock intake manifold and reattach it to the TRD supercharger manifold. Here's how:

### A. Removal

1. Loosen the EGR pipe from the driver's side exhaust manifold. This will ease the removal and installation procedures (figure 36).
2. Loosen or remove the clamp holding the pipe to the back of the engine.
3. Remove the two nuts holding the EGR pipe to the EGR valve and separate the two.
4. Remove the two nuts holding the valve and its gasket to the studs on the intake manifold.
5. Remove the EGR valve and gasket from the intake manifold and set to one side. If necessary, remove the EGR hose and vacuum hose but **don't disconnect** the two water bypass hoses. They're the ones with the spring clamps.

### B. Installation

1. With the supercharger bolted to the engine, attach the EGR valve to the EGR pipe and hand tighten with the original nuts (see arrow A, figure 37).
2. Remove the EGR block-off plate from the two studs on the supercharger manifold and using these nuts and washers, install the EGR valve and gasket to the manifold and hand tighten (see arrow B, figure 37).
3. Tighten the nuts holding the EGR pipe to the exhaust manifold (figure 36) and torque them to the specs provided in the Toyota Repair Manual.
4. Torque the EGR-pipe-to-EGR-valve nuts and the EGR-valve-to-manifold nuts to the specs provided in the Toyota Repair Manual.
5. Install the pipe clamp to the stud on the back of the engine and tighten the nut.

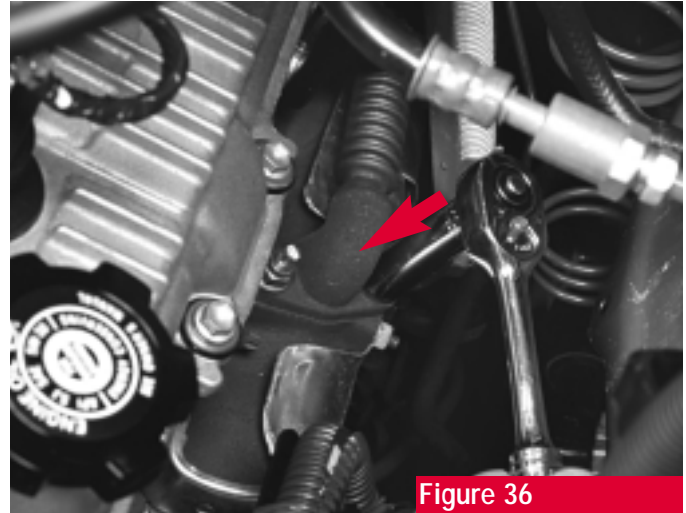


Figure 36

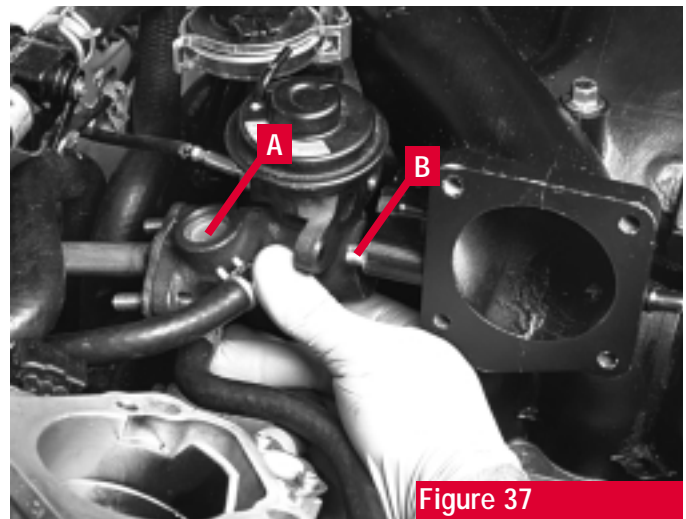


Figure 37

## Supercharger Instruction FAQ's

**1. Would it be a good idea to install a fuel pressure regulator along with the supercharger?**

No. After extensive testing, TRD has learned that the fuel system has sufficient capacity to deliver the additional fuel to match the additional air induced by the supercharger.

**2. I have heard of some incidents of the supercharger causing engine pinging because of inadequate fuel supply. I've also heard that the Kenne Bell Boost-A-Pump may be a solution for this issue.**

The Toyota Electronic Control Unit's (ECU) program constantly "learns and adjusts." When the driving style changes—as when a supercharger is installed—the ECU will require a few hundred miles to learn and adjust for the difference. During this period, under certain transitory conditions (rapid throttle opening, for example), the engine may "ping" for a second while the ECU adjusts fuel enrichment and ignition timing. Unless the "pinging" continues over a period of sustained driving, this does not pose a problem. The Boost-a-Pump product raises the voltage supplied to the vehicle's electric fuel pump, which can increase the pump's theoretical output capacity and delivery pressure. The Toyota OE fuel pump has adequate delivery capacity, and the fuel pressure regulator is unchanged when the supercharger is installed. This means that the system will still be regulated at approximately 48-52 psi, so there's no need for higher output.

**3. What air filter does TRD recommend?**

There are many different types of aftermarket air filters. During TRD's dyno testing, we compared the results of several, and found the best performance results came from a new OE Toyota filter, available from your Toyota dealer.

**4. What is the added benefit if I also installed TRD headers and an exhaust system?**

Additional power can be gained from headers and a performance exhaust system. At the time of this printing, TRD offers all stainless-steel-headers and cat-back exhaust systems for most vehicles equipped with the 5VZFE engine.

**5. There has been some confusion as to which vehicles the supercharger works best on. Please clarify.**

While the supercharger will fit the engine, the Electronic Control Units (ECUs) used in 1995 and 1996 T-100 and Tacoma trucks do not respond as well to supercharging as do the 1997 and later vehicles. For this reason, TRD does NOT recommend the supercharger for the 1995 and 1996 Tacoma and T-100 trucks.

**6. I don't see an EGR setup on my truck. How do I know if I have one?**

Refer to figures 15, 36 and 37 in the instruction manual.

**7. How will installing a supercharger affect my gas mileage?**

During part-throttle driving, around town and highway cruise, for example, the supercharger should not noticeably affect gas mileage. Overall fuel mileage decreases with increased full throttle operation, and decreases more when supercharged. Simply put, additional power requires additional fuel and during boosted, full-power operation, the fuel mileage will decrease more than when the engine is normally aspirated.

**8. I would like to install the supercharger myself. Does it hurt the stock warranty or does the warranty stay for everything but the supercharger?**

Regardless of whether the supercharger is installed by the Toyota dealer or by you, the Toyota New Car Warranty is unaffected. If the supercharger is installed at the dealership, the warranty on the supercharger is for either 5 years or the remaining vehicle warranty, (whichever comes first), If the supercharger is installed by other than a Toyota dealership, the warranty on the supercharger is for one year. Each supercharger kit includes a warranty card, which fully explains the details. **After reading the warranty information, please fill out the card and mail it back to TRD!!**

**9. Do I have to change my exhaust system?**

No. Upgrading your exhaust system after installing the supercharger is strongly recommended for best performance, but not required.











Symptom	Possible Causes	Corrective Action
Idles rough, "pings" (Trouble Code P0171—Lean Code)	Lean condition— vacuum leak	Check vacuum line connections for leaks and cracked ends.  Review factory service manual for proper factory vacuum routing.  Review instructions for proper vacuum line routing.  Check installation of the TRD throttle body gasket. If gasket is installed improperly, a vacuum leak will occur.  Recheck torque on throttle body bolts.  Leak at manifold gasket.  Recheck torque on intake manifold bolts.
Pings during acceleration	Low octane fuel  Computer has yet to adjust to supercharger  Insufficient fuel delivery	Fill tank with premium fuel. <b>BE SURE TO USE 92 OCTANE FUEL.</b>  Drive several hundred miles in different driving modes (Not all steady-state highway cruising, for example).  Fuel filter old—replace. Follow factory diagnosis and replacement procedures.  Fuel pressure low. Follow factory diagnosis and replacement procedures.  Injector(s) clogged. Follow factory repair/replacement procedures.
Low boost	Belt slipping  Air filter dirty  Throttle not fully opened	Recheck belt tension using tensionometer.  Check condition of belt—oily, worn, high mileage.  Check/replace air filter. A dirty filter restricts the air intake. TRD dyno tests have shown that the TRD air filter is among the best on the market for flow and filtering characteristics.  Recheck and adjust the throttle cable and transmission cable. Be sure that full depression on the gas pedal achieves full throttle opening at the throttle body.
Makes a moderately loud noise under full throttle—intake noise	Normal supercharger sound	No remedy. Superchargers are an air pump and the pumping action is impossible without some noise. Call TRD for further diagnosis.
Rattling at idle—goes away at just above idle	Normal supercharger sound	Slight rattle at idle is normal, but only if noise sharply decreases at 400-500 rpm above idle. Call TRD for further diagnosis.
Rattling above idle—gets louder with higher rpm or louder with more boost pressure	Drive housing bearing wear or backlash  Idler pulley bearing wear or excessive freeplay  Belt too loose	Call TRD for further diagnosis.  Diagnose by removing belt from supercharger and running engine for less than 30 seconds. If noise continues, source of problem is not within supercharger.  Check and re-tension belt as necessary. <b>BE SURE TO USE A TENSIONOMETER.</b>
Throttle cable does not properly line up	Incorrect bracket installed	The TRD Supercharger kit has two brackets. The single cable with throttle lever mount bracket is for use on Tacoma trucks with 4WD and manual transmission. These vehicles have a slightly different throttle arm. All other vehicles should use the two-cable mount. Manual transmission vehicles leave the transmission cable mount empty.
Supercharger belt jumps across pulley grooves	Misaligned pulley/idler  Damaged pulleys  Loose pulleys	Check to be sure that the crankshaft pulley is properly tightened. Re-tighten to specifications given, follow the procedure in the factory manual.  Be sure that the pulleys all run true—no eccentricity.  Check to be sure that the crankshaft pulley is properly tightened. Re-tighten to specifications given, follow the procedures in the factory manual.
Supercharger belt leaves grey/black powder on drive housing and other areas	Normal break-in residue	No corrective action. Belt should be fully broken in after 2000 miles.
Supercharger appears to leak oil from drive housing	Front seal not fully broken in	No immediate corrective action. Seal should be fully mated to pulley after 2000 miles. If leaking continues, contact TRD.



\*PTC's i-Series software, specifically Pro/ENGINEER 2000i, is the exclusive CAD/CAM/CAE engineering solution used by TRD.\*



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