

**Gen III (Grey) 3.4L V6 Supercharger
4Runner (1996-2002)
T100 (1997-1998)
Tacoma (1997-2004)
Tundra (2000-2004)**

SUPERCHARGER DRIVE ASSEMBLY REPLACEMENT

Part Number: 00602-17620-225

Section I – Installation Preparation

Kit Contents

Item #	Quantity Reqd.	Description
1	1 bottle	Gear lube (146 ml)
2	1	Fill nozzle
3	1 tube	Loctite Gasket Eliminator
4	1	Drive assembly
5	1	Phenolic drive adaptor
6	1	Fill plug

Additional Items Required For Installation

Item #	Quantity Reqd.	Description

Conflicts

Note:

Tools Required

Safety Tools	
Special Tools	
Installation Tools	

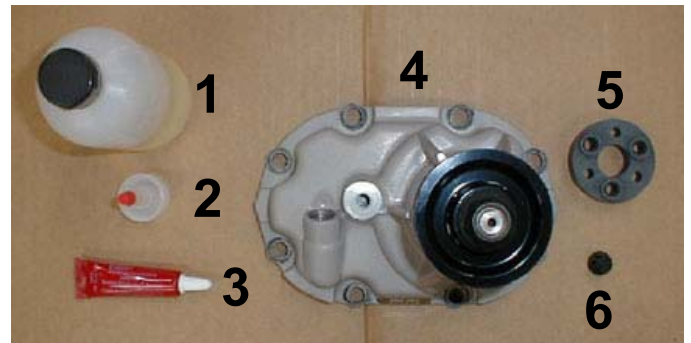


Figure 1

General Applicability

Gen. III (Grey) 3.4L V6 superchargers

Notes and Recommendations

1. Read through the entire instruction set before beginning work.
2. Let the engine cool completely.
3. Clean the area around the supercharger to prevent any contamination during removal. Use compressed air to remove dirt from the engine valley.
4. The procedure takes about 4 hours.



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TRD Nose Cone Kit Core Return Instructions

1. Call a TRD Technical Sales Representative at **1-800-688-5912** to get a Return Merchandise Authorization (RMA) Number assigned to you. Have handy your dealer code. The Core return Part Number for the 3.4L Supercharger Nose Cone is:

00602-17620-227

2. Drain and clean all of the Residual Oil in Nose Cone and return in sufficiently protected box (Same as Replacement Kit received).
3. Clearly mark the **RMA #** and **Dealer Code** on the outside of the Box.
4. Ship the core pre-paid, via ground, within 15 days after receipt of the RMA#. The Shipping address is:

**TRD U.S.A., Inc.
Attn: RMA
1382 Valencia Avenue
Tustin, CA 92780**

5. After the core return is confirmed your parts statement will be credited the core charge within the next two billing cycles. This covers the value of the core and your return freight charge.
6. If you have any additional questions contact a TRD Technical Sales Representative Mon. – Fri., from 8:00am to 4:30pm, Pacific Time at **1-800-688-5912**

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Section II – Supercharger Removal Procedure

NOTE: Pictures may vary slightly between applications.

1. Disconnect the negative battery cable from the battery.
2. Make a sketch or a note of all hoses & cables attached to the supercharger unit.
3. Remove the diagnostic plug, plug bracket and the ground connector from the driver's side of the supercharger (Figure 2).

NOTE: Not all vehicles have the diagnostic plug in this location. Only vehicles with it here need it removed.



Figure 2

4. Remove the transmission kickdown cable and throttle cable (if necessary, Figure 3).

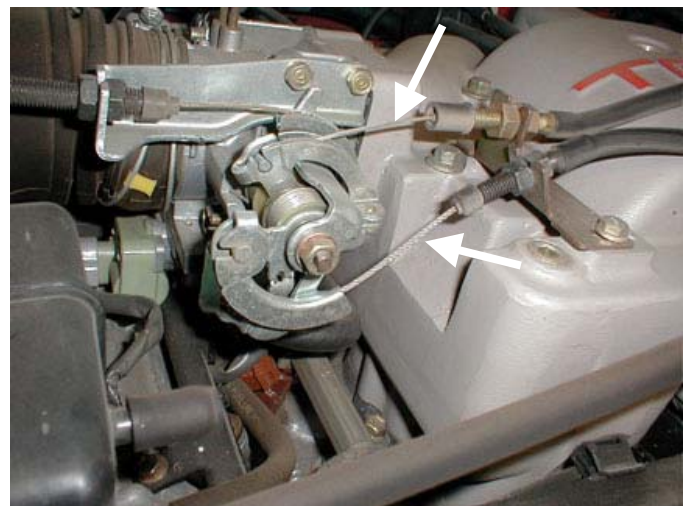


Figure 3

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5. Remove the mass airflow sensor and igniter wire harness from the air inlet tube (between the throttle body and air box). Remove the hoses and tubes.
6. Remove the air inlet tube (Figure 4).
7. Remove the PCV hose, throttle position sensor plug(s) and the IAC valve connector.
8. Remove the throttle body. Retain all hardware and the gasket, as they will be reused.



Figure 4

9. Remove the oil dipstick tube from the relocation bracket (Figure 5).

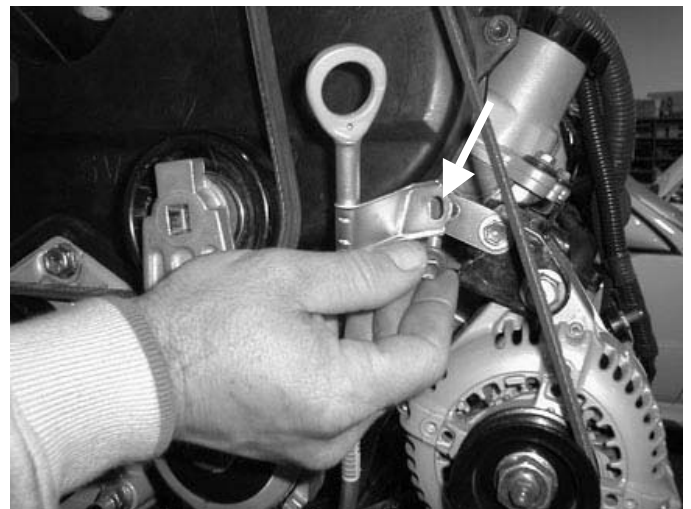


Figure 5

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SUPERCHARGER DRIVE ASSEMBLY REPLACEMENT

10. Use a 3/8" long-handle ratchet to rotate the dynamic tensioner counterclockwise to remove the supercharger drive belt from the supercharger pulley (Figure 6). It is not necessary to remove the belt from the vehicle completely.

NOTE: If the vehicle does not have a dynamic tensioner, loosen the upper alternator pivot bolt (Arrow A, Figure 7) and alternator tension lock bolt (Arrow B, Figure 7). Loosen the alternator tension bolt (Arrow C, Figure 7) to relieve enough tension to remove the supercharger drive belt. Remove the 3 idler bracket attachment bolts and remove the assembly (Arrow D, Figure 7). The dynamic tensioner upgrade (00602-17620-090) is a free upgrade under warranty and should be performed while replacing the supercharger drive assembly.

11. Remove the 3 bolts and 2 nuts retaining the supercharger manifold to the engine. If necessary, mark them to put them back in the same place.

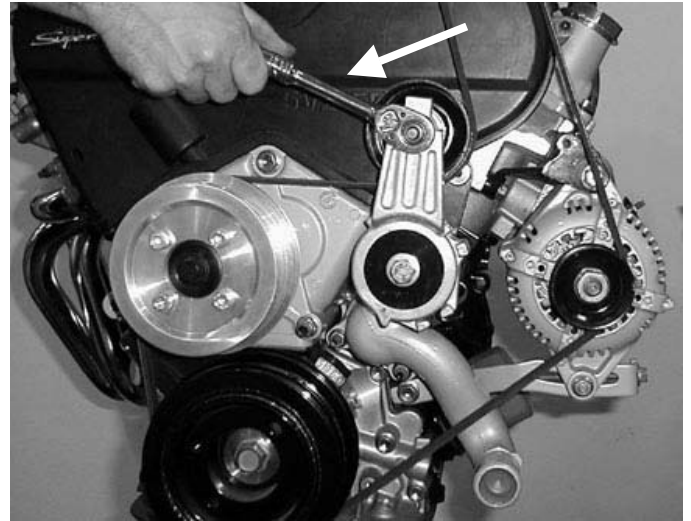


Figure 6

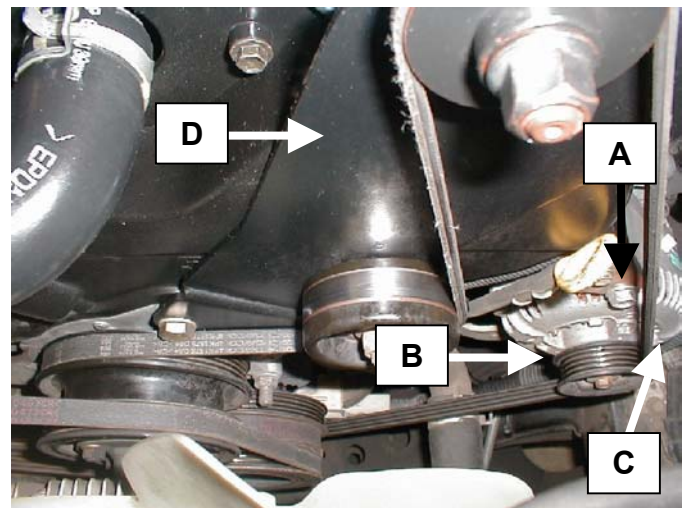


Figure 7

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12. Remove the manifold brace bolt and spacer from the driver's side of the manifold (Figure 8).
13. Remove the supercharger from the engine. Cover the intake ports with rags or tape to prevent foreign articles from falling into the engine.



Figure 8

Section III –Nose Drive Change Procedure

1. Use the pattern in Figure 9 to remove the nose drive attachment bolts.
2. Place the supercharger over a drain pan to catch the oil as the old nose drive is removed.
3. Use a soft rubber mallet to gently tap on perimeter edge of the nose drive to loosen the gasket seal. Use gradual back and forth motions to pull the nose drive assembly from the supercharger

NOTE: The nose drive assembly must be returned to TRD for a full core credit. Please see the return instructions on Page 2 for the procedure.

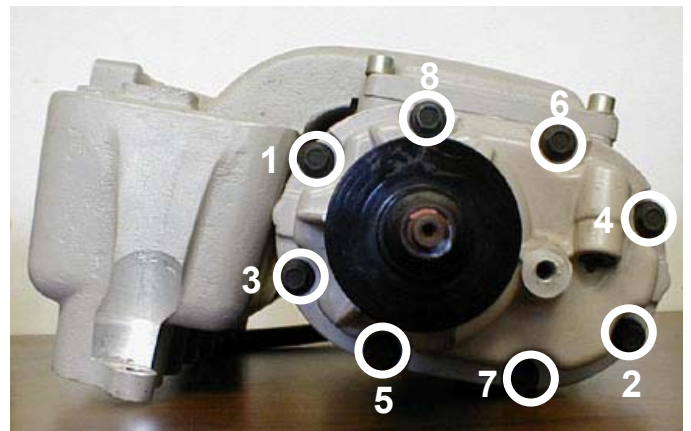


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4. Remove the Phenolic block from the supercharger gear by pulling it straight off of the attachment pins (Figure 10).
5. Wipe the gasket-sealing surface clean and remove all debris.

CAUTION: Avoid contaminating the supercharger gear housing with any debris.

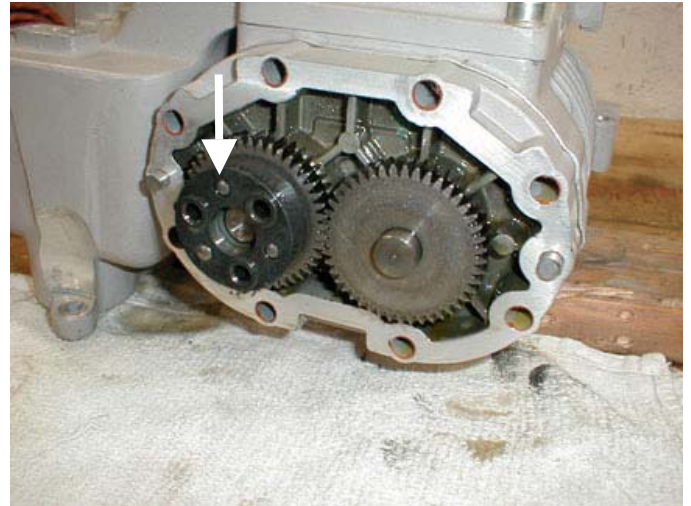


Figure 10

6. Insert the new Phenolic block over the attachment pins.

CAUTION: Insert the attachment pins only into the holes with flanged openings (Arrows, Figure 11). These flanges must touch the surface of the drive gear (refer to Figure 10).

7. Press the Phenolic block until it seats against the gear.

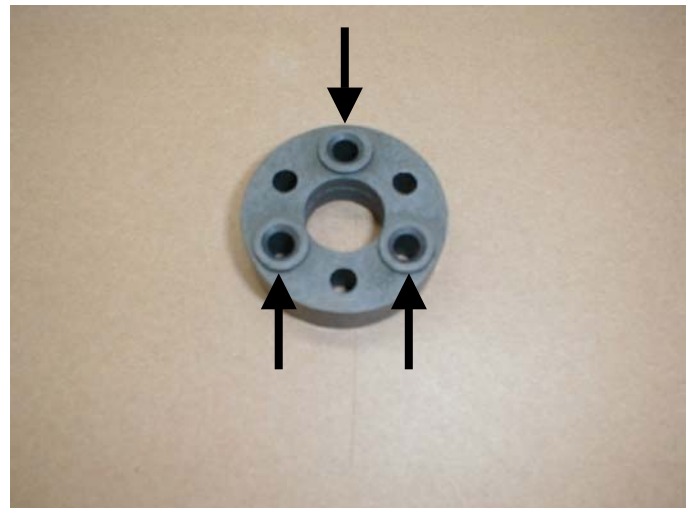


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8. Spread the TRD-supplied Loctite[™] Gasket Eliminator Sealant to the sealing surface of the nose drive assembly (Figure 12).
9. Align the nose drive gear pins (Figure 12) to the holes with flanged openings on the Phenolic block (refer to Figure 11) and press the block into position (Figure 13).
10. Replace the 8 bolts removed in Step 1 on Page 6. Use the pattern in Figure 9 to tighten the drive assembly evenly. Torque the bolts to 20 ft-lbs.



Figure 12



Figure 13

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11. Turn the supercharger assembly upside down. Use a 3/16" Allen wrench to remove the fill plug (see Figure 14).
12. Fill the reservoir with the supplied fluid (Figure 14). Use all of the oil provided (146 ml).
13. Install the new fill plug.



Figure 14

Section IV – Supercharger Installation

1. Remove the covers from the intake manifold and replace the supercharger. Make sure the gasket is properly placed and no hoses or wires are in the way. The ignition wires should be routed beneath the supercharger drive assembly (Figure 15).



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2. With the assembly sitting flat on the engine, install the TRD spacer and hand tighten the factory manifold brace (driver's side) bolt (Figure 16). Install the factory nuts on the studs at each end of the manifold and hand tighten them.
3. Install the 3 manifold bolts through the supercharger into the factory manifold. Alternate from one side to the other and torque the 3 bolts and 2 nuts to 13 ft-lbs. Tighten the manifold brace bolt installed in Step 2 above.



Figure 16

4. Retract the dynamic tensioner with a 3/8" ratchet and place the drive belt back over the supercharger pulley (Figure 17). Make sure the belt is routed properly and is centered on all pulleys.

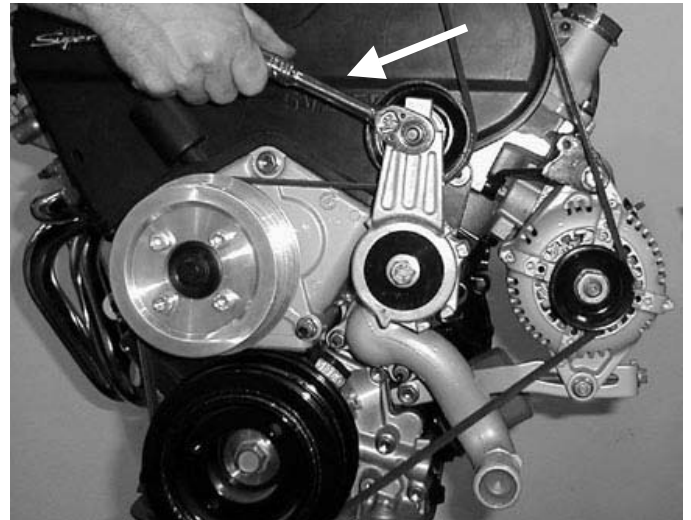


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5. Reposition the dipstick tube bracket and install the bolt removed in Step 9 on Page 4 (Figure 18). Torque the bolt to 10 ft-lbs.
6. Reinstall the throttle body. Make sure the gasket is used and in the correct orientation.
7. Reinstall the PCV hose, throttle position sensor plug(s) and the IAC valve connector.

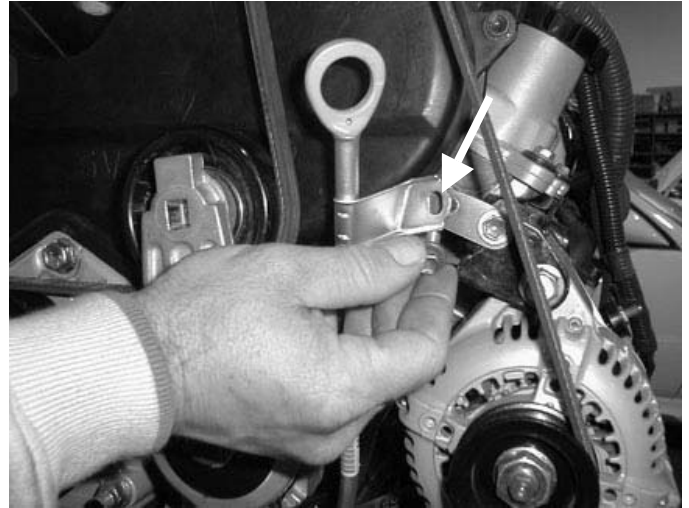


Figure 18

8. Replace the air inlet tube (Figure 19).
9. Replace the mass airflow sensor and igniter wire harness from the air inlet tube (between the throttle body and air box). Replace the hoses and tubes.



Figure 19

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10. Replace the transmission kickdown cable and throttle cable (if necessary, Figure 20).

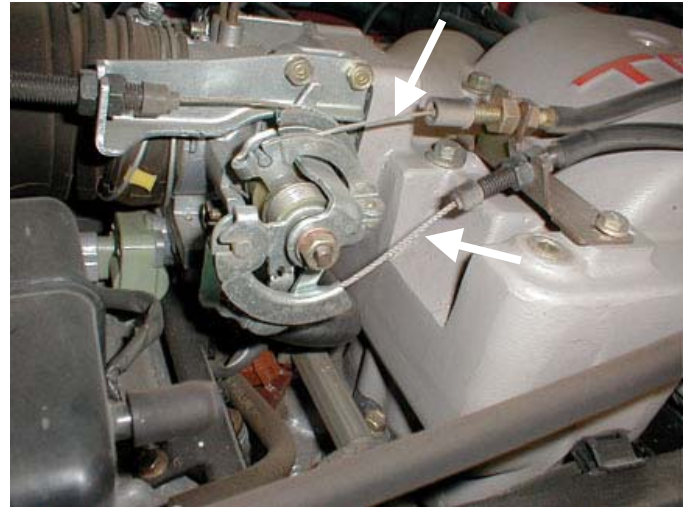


Figure 20

11. Replace the diagnostic plug bracket, plug and the ground connector from the driver's side of the supercharger (Figure 21).

NOTE: Not all vehicles have the diagnostic plug in this location.

12. Use the diagrams made in Step 2 on Page 3 to connect and check all vacuum hoses, cables and brackets.
13. Reconnect the negative battery cable.
14. Start the engine and check for leaks.



Figure 21