



2003-2004 Sequoia
2003-2004 Tundra

4.7L V8 SUPERCHARGER ECU

Part Number: 00602-17620-611 2003 Tundra V8
00602-17620-612 2003 Sequoia
00602-17620-620 2004 Tundra V8 (non D-Cab)
00602-17620-622 2004 Tundra D-Cab
00602-17620-624 2004 Sequoia

Section I – Installation Preparation

Kit Contents

Item #	Quantity Reqd.	Description
1	1	TRD ECU
2	1	TRD ECU Adaptor
3	1	Wiring Harness
4	1	Mounting Strip
5	1	30-Amp Fuse
6	1	Additional Injectors Harness
7	1	Air Duct
8	4	Wire Tie

Additional Items Required For Installation

Item #	Quantity Reqd.	Description
1	1	Wire Hanger or similar material
2	1 Can	Silicon Lubricating Spray
3	1 Roll	Electrical Tape

General Applicability

2003 4.7L V-8 Tundra (611)
2003 Sequoia (612)
2004 4.7L V-8 Tundra, non D-Cab (620)
2004 Tundra, D-Cab (622)
2004 Sequoia (624)

Notes and Recommendations

<p>1. These instructions are critical for proper supercharger performance. Any variation from them could seriously damage your vehicle. TRD recommends you read through the entire document before starting the installation.</p>
<p>2. ECU and Harness installation may be performed either before or after the supercharger installation.</p>

Section II – Interior Removal Procedure

1. Remove the 2 screws and the Glove Compartment door (A, Figure 1).
2. Remove the 3 screws and the Finish Panel (B, Figure 1).

NOTE: Unplug the Glove Compartment light as you remove the Finish Panel.

3. Slide the Duct to the left and then remove it to gain access to the factory ECM (C, Figure 1).

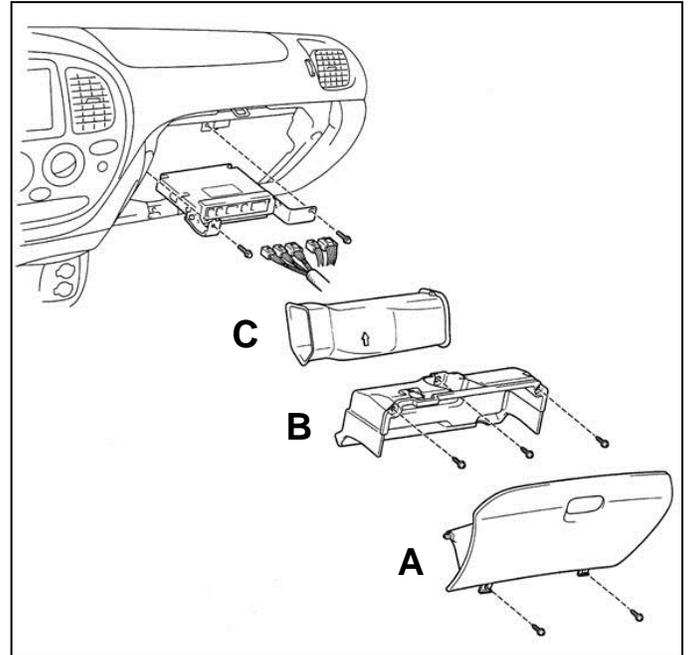


Figure 1

Section III – Installation Procedure

A. Engine Compartment

1. Remove the 2 nuts retaining the wire harness boot to the firewall. Also remove the factory wire clamp (Figure 2).



Figure 2

2. Remove the factory gray electrical tape that seals the wire harness sleeve to the wire harness boot that is attached to the firewall (Figure 3).



Figure 3

3. Carefully clip the wire tie on the opposite end of the wire harness sleeve (Figure 4).



Figure 4

- Slide the wire harness sleeve to the center of the wire harness and remove the inner wrapping of gray electrical tape (Figure 5).



Figure 5

- Spray some silicon spray in the wire harness boot that is attached to the firewall. This will significantly aid in feeding the additional wire (Figure 6).
- Create a feeding tool out of a wire clothes hanger or similar material. It should be about 10" long to feed the wire from the harness boot in the engine bay into the passenger compartment near the factory ECM.



Figure 6

7. Securely attach the TRD Injector Wire Harness (Figure 7) to the feeding tool created in the previous step.

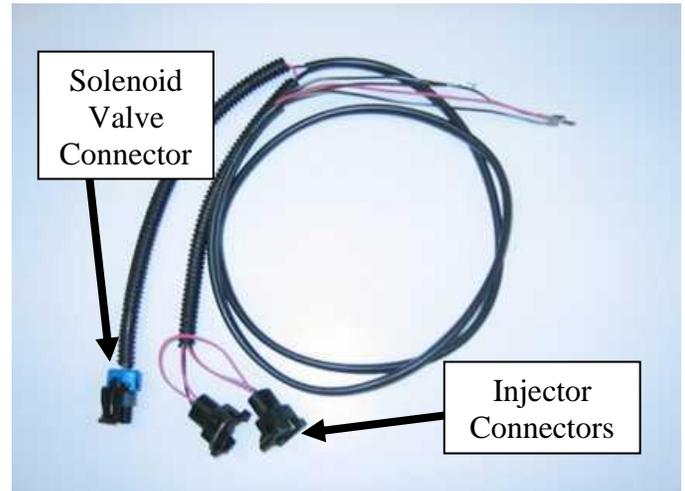


Figure 7

8. Feed the TRD Injector Wire Harness through the wire harness sleeve in the engine bay starting at the engine and feeding towards the firewall boot (Figure 8).



Figure 8

9. Feed the wire through the firewall boot (Figure 9).



Figure 9

10. Now feed the wire through the firewall into the passenger compartment (Figure 10).



Figure 10

11. Continue feeding the wire into the passenger compartment until a 14" section remains at the open end of the wire harness sleeve (Figure 11).



Figure 11

12. Tuck the TRD Injector Wires next to the tab on the factory hard plastic wire harness sleeve (Figure 12).



Figure 12

13. Slide the factory wire harness sleeve over the tab on the factory hard plastic wire harness sleeve and replace the wire tie removed in Step 3 on Page 3 (Figure 13).



Figure 13

14. Replace the electrical tape removed in Step 4 on Page 4 that seals the wire harness boot to the wire harness (Figure 14).



Figure 14

15. Replace the electrical tape removed in Step 2 on Page 3 that seals the wire harness sleeve to the wire harness boot (Figure 15).
16. Replace the wire harness bracket and the 2 nuts retaining the wire harness boot to the firewall removed in Step 1 on Page 2. Refer to Figure 2 if necessary.



Figure 15

17. Protect the 14" of wire extending from the factory wire harness sleeve with the TRD-supplied harness wrap (Figure 16).
18. Plug the TRD Injector Harnesses into the 9th and 10th Injectors on the back of the supercharger (after supercharger installation if doing the wiring first).
19. Plug the male 2-pin connector into the Solenoid Valve that is mounted to the Bypass Actuator Bracket (after supercharger installation if doing the wiring first).



Figure 16

B. Passenger Compartment

1. The TRD ECU Harness is shown in Figure 17.

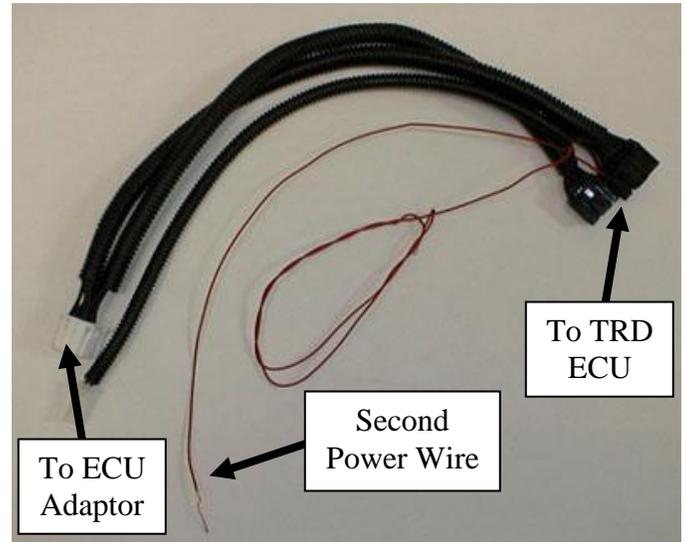


Figure 17

2. Pry up the white pin-locking bar on the 31-way connector of the TRD ECU Harness (Figure 18).

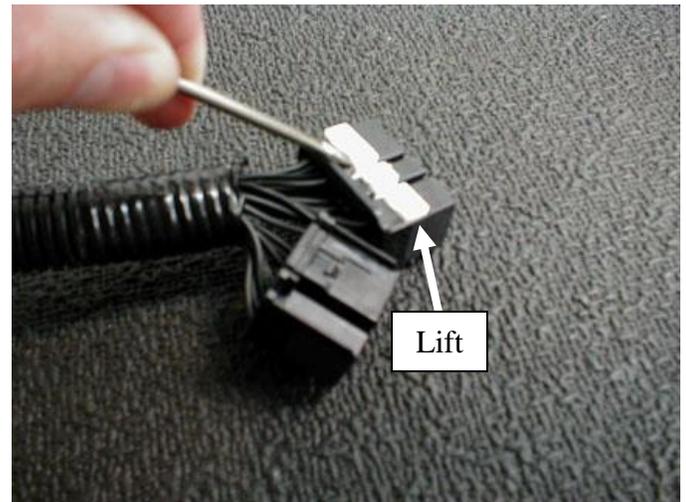


Figure 18

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3. Insert the Pink wire of the TRD 9th & 10th injector harness in the A2 (counting from the right) pin location on the 31-way connector of the TRD ECU Harness (Figure 19). Make sure you press it in until you hear a "click."
4. Insert the Black wires with White Stripes in the A5 and A6 pin locations (Figure 19, A5 wire not shown).
5. Insert the Black wire with Red Stripe in the A7 pin location (Figure 19).
6. Press the white pin-locking bar back into place (Refer to Figure 18 on Page 10).
7. Remove the 5 connectors from the Factory ECM (Figure 20).

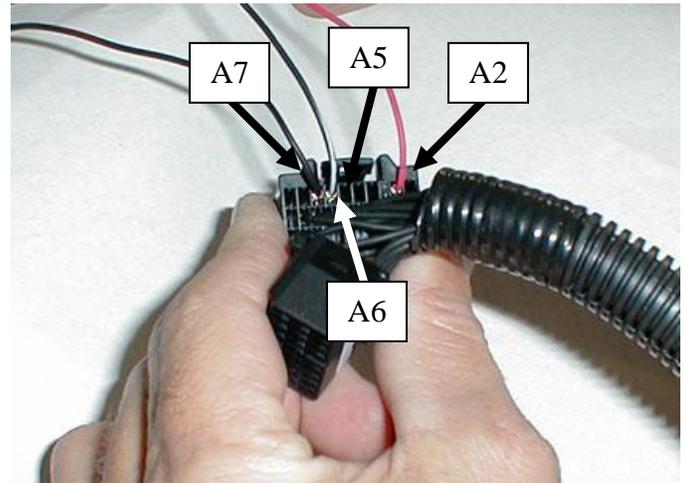


Figure 19

8. Solder the short Red wire (ends at A1 of the TRD black 31-way connector) into the factory "Ignition On" wire (Black with Orange Stripe) that terminates in Connector E3, Pin 9 of the Factory ECU (Figure 21).



Figure 20

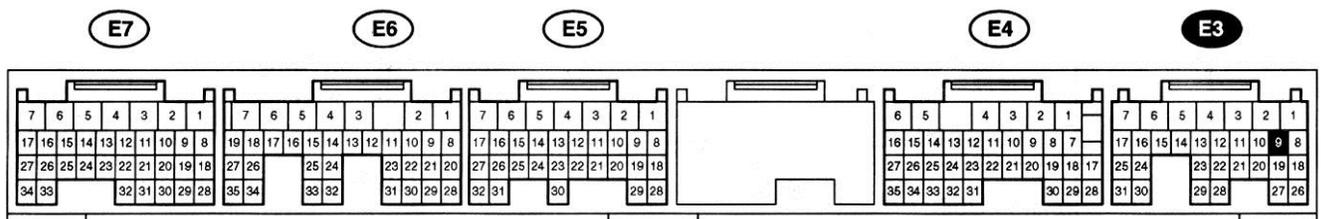


Figure 21

9. Plug the 2 black connectors of the TRD ECU Harness into the TRD ECU (Figure 22).

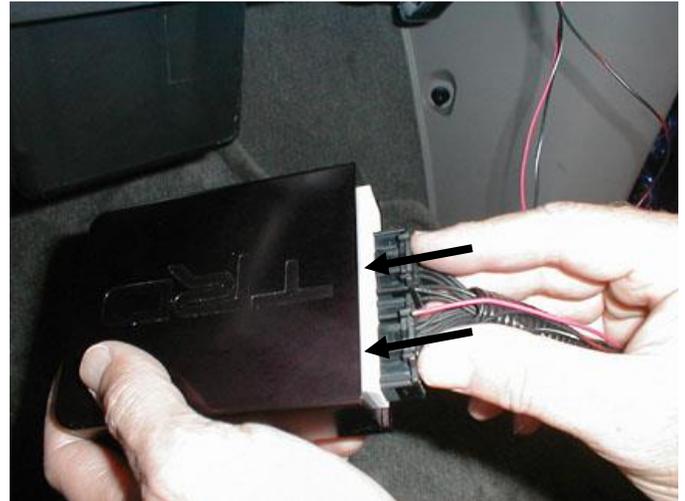


Figure 22

10. Clean the top of the Factory ECM and peel the backing from the fastener on the TRD ECU. Place the TRD ECU on top of the Factory ECM (Figure 23).

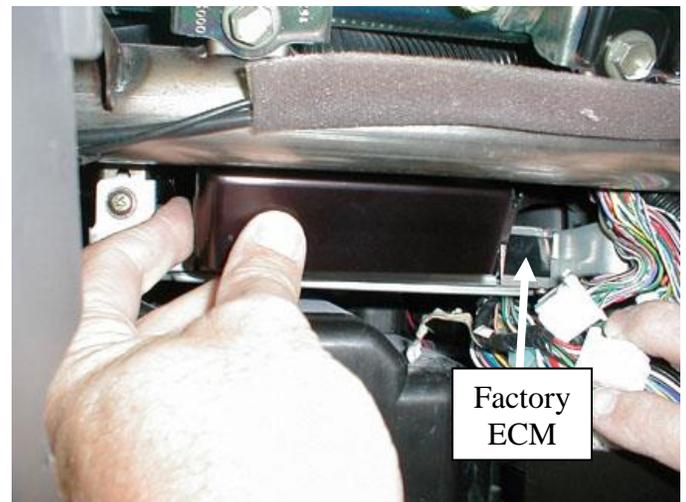


Figure 23

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11. Insert the TRD-supplied Air Duct into the factory location (arrow out and pointing up) and slide it to the right (Figure 24, also refer to Figure 1 on Page 2).
12. Plug the large white connector from the TRD ECU into the TRD ECU Adaptor.

NOTE: The small connector and long red wire will not be used at this time.

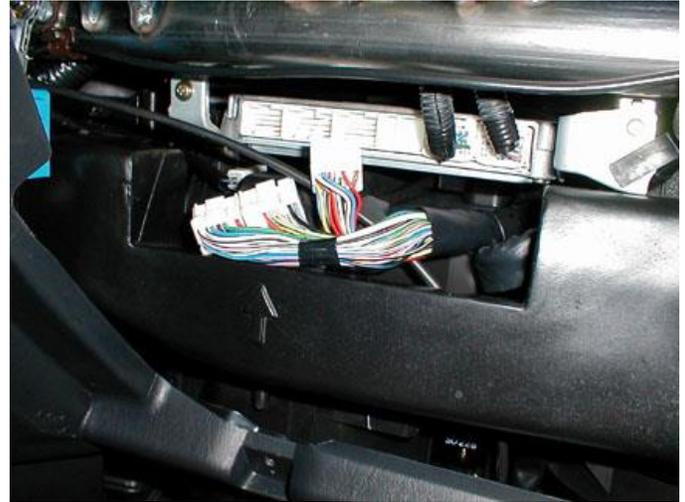


Figure 24

13. Plug the Factory 5, 6 and 7 connectors (Figure 25 below) into the TRD ECU Adaptor (Figure 26).
14. Plug the TRD ECU Adaptor into the Factory ECU (Figure 26).

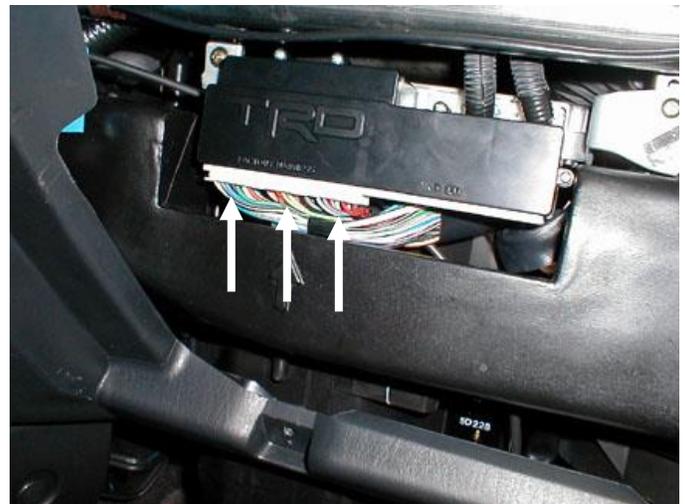


Figure 26

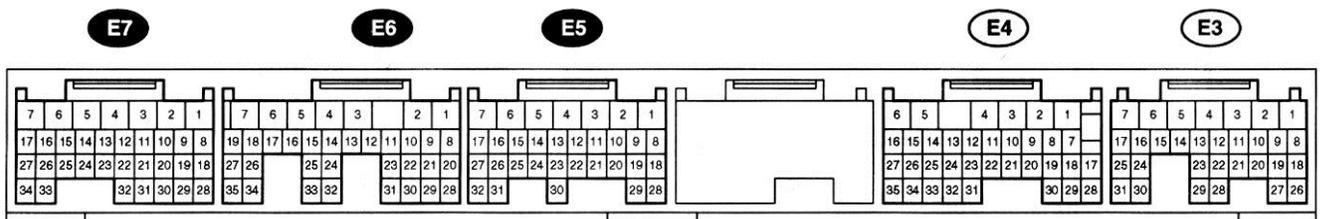


Figure 25

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15. The complete layout can be seen in Figure 27.
Double-check that all the connections are correct so the unit works properly.
16. Replace Finish Panel B (Refer to Figure 1 on Page 2). Be sure to plug the Glove Compartment Light in.
17. Replace the Glove Compartment Door (Refer to Figure 1 on Page 2).

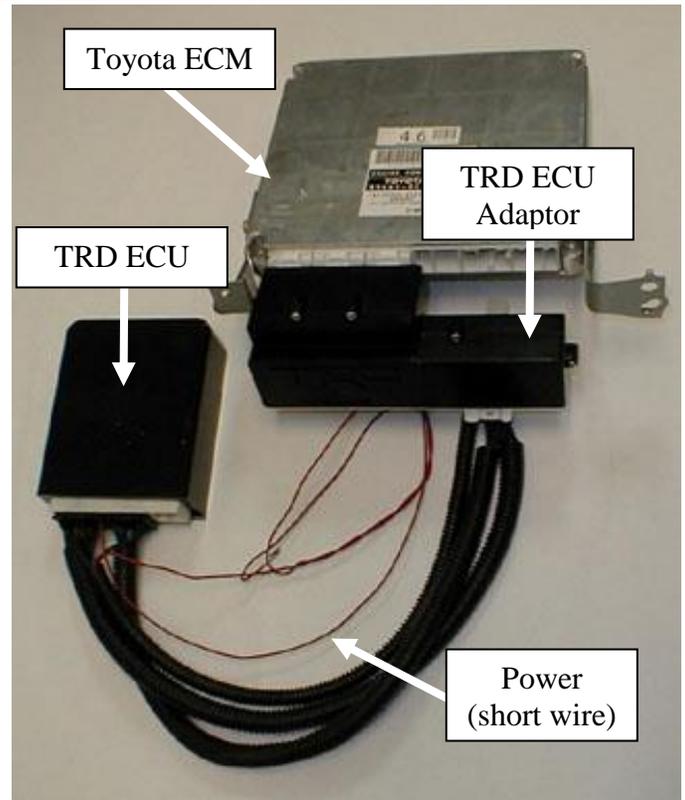


Figure 27

18. **SEQUOIA ONLY:** Locate the fuse panel in the driver's side foot well of the passenger compartment (Figure 28). Replace the factory IGN2 20A fuse with the TRD-supplied 30A fuse.

Section IV – OBD-I Codes

1. The TRD ECU interfaces as an OBD-I system. Connect a test light lead into Pin 4 of the small white connector (otherwise unused, Figure 29) and read the flash pattern to determine the problem area as outlined in the chart below.

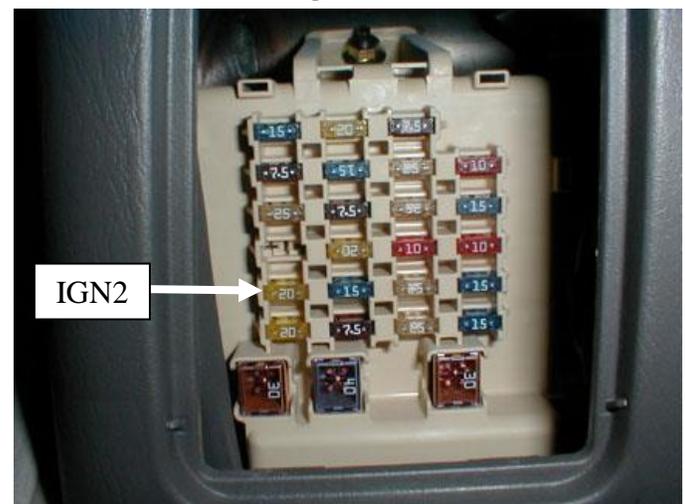


Figure 28

TRD
Toyota Racing Development
TRD ECU Trouble Codes

21 NE	27 ECT
23 VG In	31 OX1
24 VG Out	32 OX2
25 VTA	34 9 th Injector
26 THA	

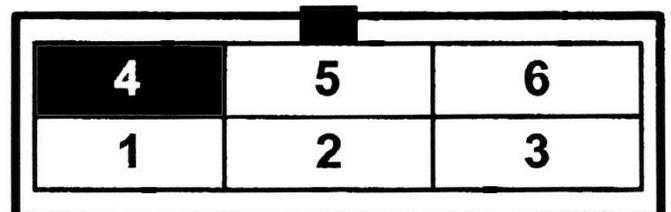


Figure 29