TOYOTA TRUCKS/SUVs

Section I – Installation Preparation





Part Number(s): PTR03-35090

Kit Contents

Item #	Quantity Reqd.	Description	
1	1	Air Filter	
2	1	Upper Air Box	
3	1	Lower Air Box	
4	1	Hump Coupler	
5	1	Throttle Body Coupler	
6	1	Air Inlet Tube	
7	1	Air Flow Accelerator	

Hardware Bag Contents

Item #	Quantity Regd.	Description
1	2	#52 Hose Clamp
2	2	#72 Hose Clamp
3	1	Plastic Nipple, 1/8"
4	1	Bolt, M8 X 1.25 X 30mm
5	1	Hose, 5/32" ID X 20"
6	1	Washer, M8
7	2	Air Box Clip
8	1	Filter Minder Grommet
9	1	Filter Minder
10	1	Nylon Tie Strap, Tree Mount
11	2	Nylon Tie Strap, 6"
12	1	Plastic Nipple, 5/8" X 90deg.
13	1	Bracket, Wire Harness
14	1	Bolt, M6 X 1.0 X 12mm
15	1	Plug, Plastic Tree Clip
16	2	Bolt, Socket M4 X 0.7 X 8mm

Literature Bag Contents

Item #	Quantity Reqd.	Description	
1	1	Instructions	
2	1	C.A.R.B E.O. Decal	

Recommended Tools

Safety Tools			
Vehicle Protection	Blankets or Fender Covers		
Special Tools			
None Required			
Installation Tools			
Nut driver	8mm or 5/16"		
10mm socket	¹ / ₄ " drive		
12mm socket	¹ / ₄ " drive		
13mm socket	¹ / ₄ " drive		
¹ / ₄ " drive ratchet			
1/4" drive extension	6" long		
Phillips head screwdriver	#2		
Screwdriver, std.	#2		
Allen wrench	3mm		
Socket, External Torx E6			
Torque wrench	in. lbf. (0 – 120 in. lbf.)		
Special Chemicals			
Glass cleaner			

Additional Items Required For Installation

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Item #	Quantity Reqd.	Description	
1	1	Blue Thread Locking Fluid	

General Applicability

Tacoma w/1GR-FE V6 engine: 2005 →
FJ Cruiser: 2007 → 2009
4Runner w/1GR-FE V6 engine: 2003 - 2009

Conflicts

Note: None

Recommended Sequence of Installation

If any other accessories are to be installed, it is recommended they be installed in the order described below to ease installation and/or avoid redundant work.

Item #	Accessory	

*Mandatory

Legend



STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.



OPERATOR SAFETY: Use caution to avoid risk of injury

CRITICAL PROCESS: Proceed with caution to ensure



a quality installation.

GENERAL PROCESS: This highlights specific



processes to ensure a quality installation.

TOOLS & EQUIPMENT: This calls out the specific

TOOLS & EQUIPMENT: This calls out the specific tools and equipment required for this process

Please see page 13 for important "Care and Maintenance" information!

Torque Specifications:

i. M8 Hardware: Tighten to 60 in. lbf. \pm 5 in. lbf. (6.7 Nm \pm 0.6 Nm).

ii. M6 Hardware: Tighten to 40 in. lbf. \pm 5 in. lbf. (4.5 Nm \pm 0.6 Nm)

iii. M4 Hardware: Tighten to 10 in. lbf. \pm 2 in. lbf. (1.1 Nm \pm 0.2 Nm)

iv. Hose Clamp: Tighten to 30 in. lbf. \pm 5 in. lbf. (3.4Nm \pm 0.6 Nm)

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Section II – Installation

4.0L V6 (1GR-FE)

A. Check Kit Contents



Check kit for contents and damage.

B. Vehicle and Parts Preparation

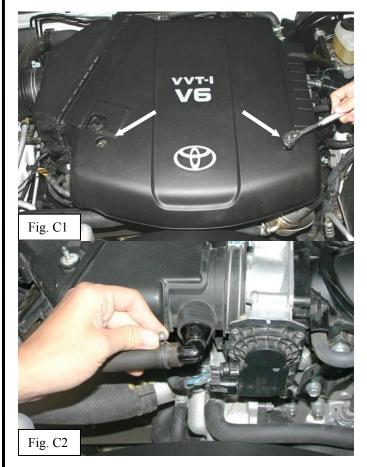
Completely read instructions and familiarize yourself with the installation before beginning.

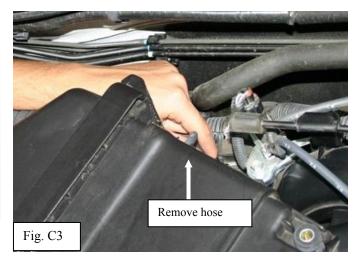
- 2. Open hood.
- Apply vehicle protection to prevent damage to painted surfaces.
- Remove negative battery cable from terminal.
- Prior to installation, make sure all parts of the cold Air Intake are clean and free of debris.
 - i. Blow out the inside of the tube and air box with compressed air.

C. Remove Factory Components

Operations Performed in the Engine Compartment

- 1. Remove engine cover. (Fig. C1)
- i. Use a 10mm socket and ratchet assembly to remove (2) M6 nuts.
- ii. Lift front of cover off studs and pull forward to disengage rear mounts.
- 2. Disconnect breather hose from factory air filter assembly. (Fig. C2)
- 3. Disconnect the vacuum hose from rear of air box. (Fig. C3)





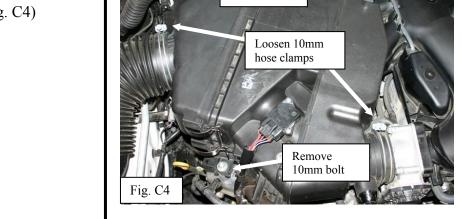
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TRO

Section II – Installation

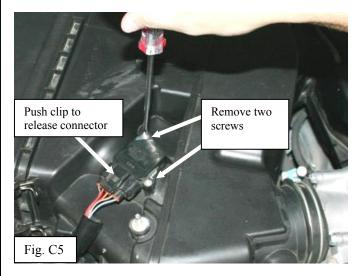
4.0L V6 (1GR-FE)

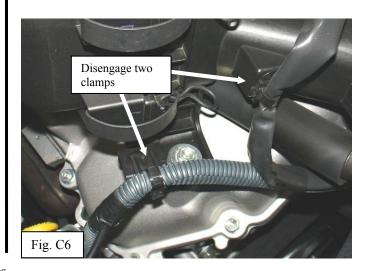
- 4. Loosen the two factory hose clamps with a 10mm socket and ratchet assembly. (Fig. C4)
- 5. Remove the two M6 bolts. (Fig. C4)



Remove 10mm bolt

- 6. Disconnect MAF sensor connector. (Fig. C5)
- i. Push clip to release connector.
- Remove the MAF sensor from the air filter lid by unscrewing the (2) Phillips head screws. Set the MAF sensor aside. (Fig. C5)
- Do not touch the internal sensor surfaces.
- Protect the sensor from damage.
 - 8. Disengage the two wire harness clamps from air box. (Fig. C6)
 - 9. Disconnect the air filter inlet hose and remove the air filter housing assembly.







4.0L V6 (1GR-FE)

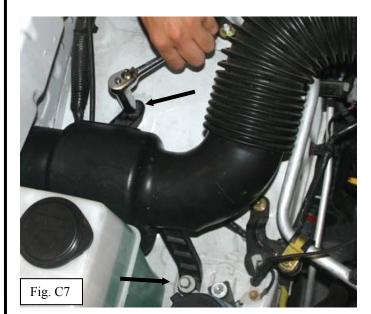
10. Remove intake air tube from inner fender



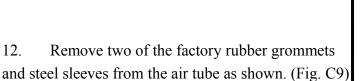
Remove two M8 bolts. (Fig. C7)



- On FJ Cruiser Model, remove the additional piece of the stock inlet air tube that is attached to the outside of the engine compartment.
- iii. Lower the inner fender liner by removing the 5 screws.
- Remove the plastic air duct by iv. removing the two M8 bolts securing it to the outside of the apron.
- Re-install the inner fender liner before V. proceeding.



11. Remove one of the factory rubber grommets and steel sleeve from the air filter assembly as shown. (Fig. C8)







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Section II – Installation

4.0L V6 (1GR-FE)



4.0L V6 (1GR-FE)

D. Install TRD Air Intake

1. Insert the taller rubber grommet and sleeve removed in step C11 into the TRD lower air box in the location shown. (Fig. D1)

Insert rubber grommet first, then push sleeve into place.



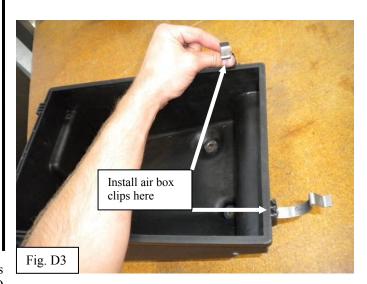
2. Insert rubber grommets and sleeves removed in Step C12 into TRD air filter housing as shown. (Fig. D2)

Insert rubber grommets first, then push sleeves into place.



3. Install air box clips by clipping them onto the mounts as shown. (Fig. D3)

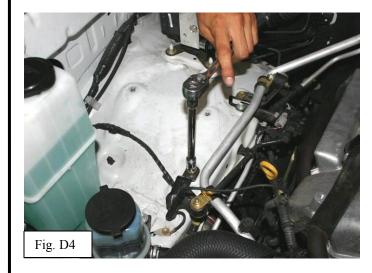
If necessary, use pliers to gently tighten the closed end of the clip so that it clips onto the mount securely.





4.0L V6 (1GR-FE)

4. Remove M8 bolt that secures the factory AC line mounting bracket. (Fig. D4)



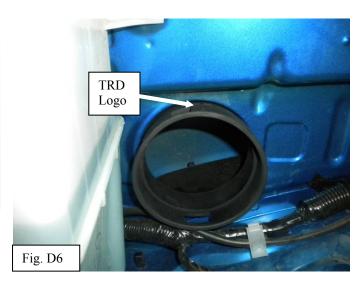
5. Install the TRD intake flow accelerator by squeezing it through the hole in the inner fender as shown. (Fig. D5)



The TRD logo should face up. (Fig.

D6)







4.0L V6 (1GR-FE)

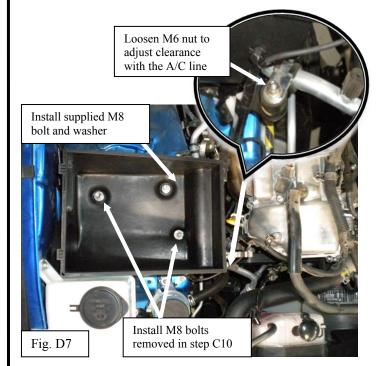
6. Install TRD lower air box.

Insert the neck of the lower air box into the intake flow accelerator installed in step D5. Make sure that the intake flow accelerator is rotated such that the cut outs engage the barbs on the neck.

- ii. Align TRD lower air box so that factory rubber grommets are directly over the mounting holes in the inner fender well. (Fig. D7)
- iii. Secure the lower air box using the two M8 bolts removed in step C10, and the supplied M8 bolt and washer. (Fig. D7) If necessary, use an M8 X 1.25 tap to clean paint / undercoat from the threaded holes.

between the A/C line and the lower air box, loosen the M6 nut on the clamp, and slide the A/C line away from the air box until there is sufficient clearance. (Inset – Fig. D7)

- 7. Install TRD panel filter and wire harness bracket. (Fig. D8)
- i. Make sure that the filter sits all the way down in the lower air box.
- ii. Install the supplied wire harness bracket and M6 bolt on the head cover where indicated in Fig. D8. Clip the factory wire harness into the oblong hole on the bracket.





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4.0L V6 (1GR-FE)

8. Insert the filter minder grommet into the air box lid as shown in the picture. A small amount of silicone spray, or similar lubricant may aid installation. (Fig. D9)



- 9. Insert the filter minder into the grommet installed in step D8.
- i. Press the filter minder all the way down until it bottoms out on the grommet. A small amount of silicone spray, or similar lubricant may aid installation. (Fig. D10)



- 10. Install the hump hose coupler onto the upper air box using the two #72 hose clamps.
- i. Slide the coupler all the way onto the neck of the air box until it bottoms out on the lip inside the coupler.





4.0L V6 (1GR-FE)

- 11. Install the upper air box by lowering the hinge side into place first. (Fig. D12)
- i. Make sure that the hinge pieces on the upper air box fully engage with the corresponding pieces on the lower air box.
- To achieve propper fit, the upper air box needs to be aligned correctly, then slid toward the drivers side of the vehicle before rotating the upper air box down into place.
- 12. Secure the upper air box with the two clips installed in step D3. (Fig. D13)
- i. Secure the wiring to the hole in the airbox using the supplied tree-mount tie strap.





13. Use an E6 Torx socket to remove the stud in the factory air filter housing as shown. (Fig. D14)



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Section II – Installation

4.0L V6 (1GR-FE)

14. Install the factory MAF sensor into the TRD intake pipe using a 3mm allen wrench and the supplied M4 screws. Also install the M6 stud removed in step D13 using the E6 socket. (Fig. D15)

Use a small amount of blue thread locking fluid on the M4 screws to prevent them from working loose.



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Section II – Installation

4.0L V6 (1GR-FE)

- 15. Assemble the throttle body coupler and plastic nipples. (Fig. D18)
- i. Install the plastic nipples by firmly pressing them into place as shown. A small amount of silicone spray, or similar lubricant may aid installation
- ii. Slide the throttle body coupler onto the end of the TRD inlet pipe with the two #52 hose clamps.
- With the hose clamps loose slide the coupler all the way onto the pipe as far as it will go.
- 16. Install the inlet pipe assembly by inserting the big end of the pipe into the hump coupler first, then lower the small end into position. (Fig. D19)
- i. Leave the hose clamps loose for now.

- 17. Slide the throttle body coupler over the throttle body until it reaches the stops.
- i. On N/A applications, the pipe end of the coupler should approximately line up with the middle bead on the pipe. (Fig. D20)
- ii. On Super Charged applications, the pipe end of the coupler should approximately line up with the inner bead on the pipe.







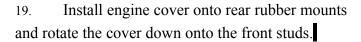
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TRO

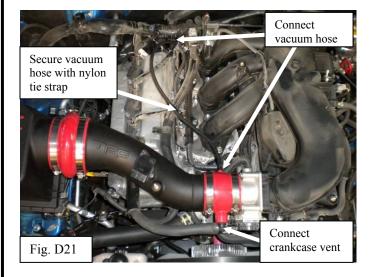
Section II – Installation

4.0L V6 (1GR-FE)

- 18. Connect the factory crank case vent and vacuum hose. (Fig. D21)
- i. Replace the factory vacuum hose with the longer one supplied in the kit. Connect it between the fuel pressure regulator and the small plastic nipple on the throttle body coupler. Secure the hose to the wire harness where indicated using the supplied nylon tie strap.



- Adjust the positioning of the TRD inlet tube until the mounting studs line up with the holes in the engine cover. (Fig. D22)
- ii. Remove the engine cover and tighten all hose clamps.
- 20. Plug in the MAF sensor and do a final check that all hose clamps and hardware are secure. (Fig. D23)







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Section II – Installation

4.0L V6 (1GR-FE)

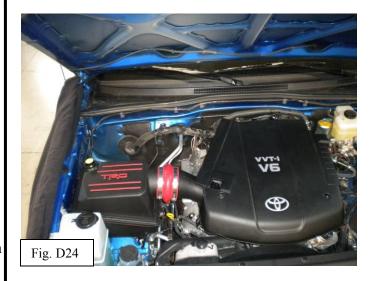
21. Reinstall the engine cover and secure it with the original M6 nuts that were removed in step C1. (Fig. D24)



Tighten nuts to 40 in. lbf. \pm 4 in. lbf. (4.5 Nm $\pm 0.45 \text{ Nm}$

Re-install negative battery cable to negative terminal. Tighten nut to 36 in. lbf. ± 4 in. lbf. (4.0 Nm) $\pm 0.4 \text{ Nm}$

Installer – The installation manual contains important "Care and Maintenance" information. Place the entire instruction manual in the glove box for owner's future reference.



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Section III – Care and Maintenance

4.0L V6 (1GR-FE)

Section III – Care and Maintenance

Air Filter Maintenance

Service Intervals- Service your TRD filter element with TRD's filter cleaning kit (Toyota p/n PTR43-00088). We recommend that TRD filter elements be serviced every 30,000 miles (or sooner if needed) on off-road and high-performance street applications.

If you live in a region with extremely fine dust (arid or desert climates for example), follow the recommended schedule for off-road and high-performance vehicles.

Always inspect your filter element whenever you change your oil.

Do not over-oil the filter. This could contaminate the MAF sensor and cause the MIL (Malfunction Indicator Lamp) to illuminate and require nonwarrantable repairs.

Caring For The Finish On Your TRD Cold Air Intake.

TRD intake systems have a natural finish on the tube and air filter housing.

To clean your TRD intake system, simply spray with window cleaner and wipe with a soft, clean terry-cloth towel.

NEVER use harsh chemicals or metal polish on TRD intake systems. Harsh chemicals and metal polishes will permanently damage the finish.

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TOYOTA TRUCKS/SUVs

Section IV – Trouble Shooting

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COLD AIR INTAKE 4.0L V6 (1GR-FE)

Check:		Look For:
Start the vehicle.		
If after you start the vehicle, or while driving, you encounter a Malfunction		
Indictor Lamp (MIL), check the following:	0	Full engagement of MAF sensor connector.
	0	Tightness of all clamps.
	o hose.	Correctly installed valve cover breather
	0	Over-oiled air filter.
Over-oiled Air Filter:	0	Clean the air filter as indicated in the TRD Filter Cleaning Kit and apply the proper amount of oil. Replacement (non-warrantable) of the MAF sensor may be required.
Start the vehicle		
If the lamp will not go off even after checking and/or repairing any of the above:	0	Contact your Toyota dealer as soon as possible.