

Part Number(s): PTR03-89100

Kit Contents

Item #	Quantity Req'd.	Description
1	1	Air Filter (P/N: PTR43-00083)
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 Req'd.	Description
8	1	#52 Hose Clamp
9	1	#56 Hose Clamp
10	2	#72 Hose Clamp
11	1	Plastic Nipple, 1/8"
12	1	Plastic Nipple, 5/8"
13	1	Hose, 5/32" ID X 20"
14	1	Convuluted Split Loom , 15"
15	2	Air Box Clip
16	1	Filter Minder Grommet
17	1	Filter Minder
18	3	Nylon Tie Strap, Tree Mount
19	3	Nylon Tie Strap, 6"
20	1	Bracket, Wire Harness
21	1	Plug, Plastic Tree Clip
22	2	Bolt, Socket M4 X 0.7 X 8mm

Literature Bag Contents

Item #	Quantity Req'd.	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
1/4" drive ratchet	
1/4" drive extension	6" long
Phillips head screwdriver	#2
Screwdriver, std.	#2
Allen wrench	3mm
Torque wrench	in. lbf. (0 – 120 in. lbf.)
Special Chemicals	
Glass cleaner	
Silicone spray lubricant	

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1	1	Blue Thread Locking Fluid

General Applicability

FJ Cruiser: 2010 →
4Runner 2010→

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

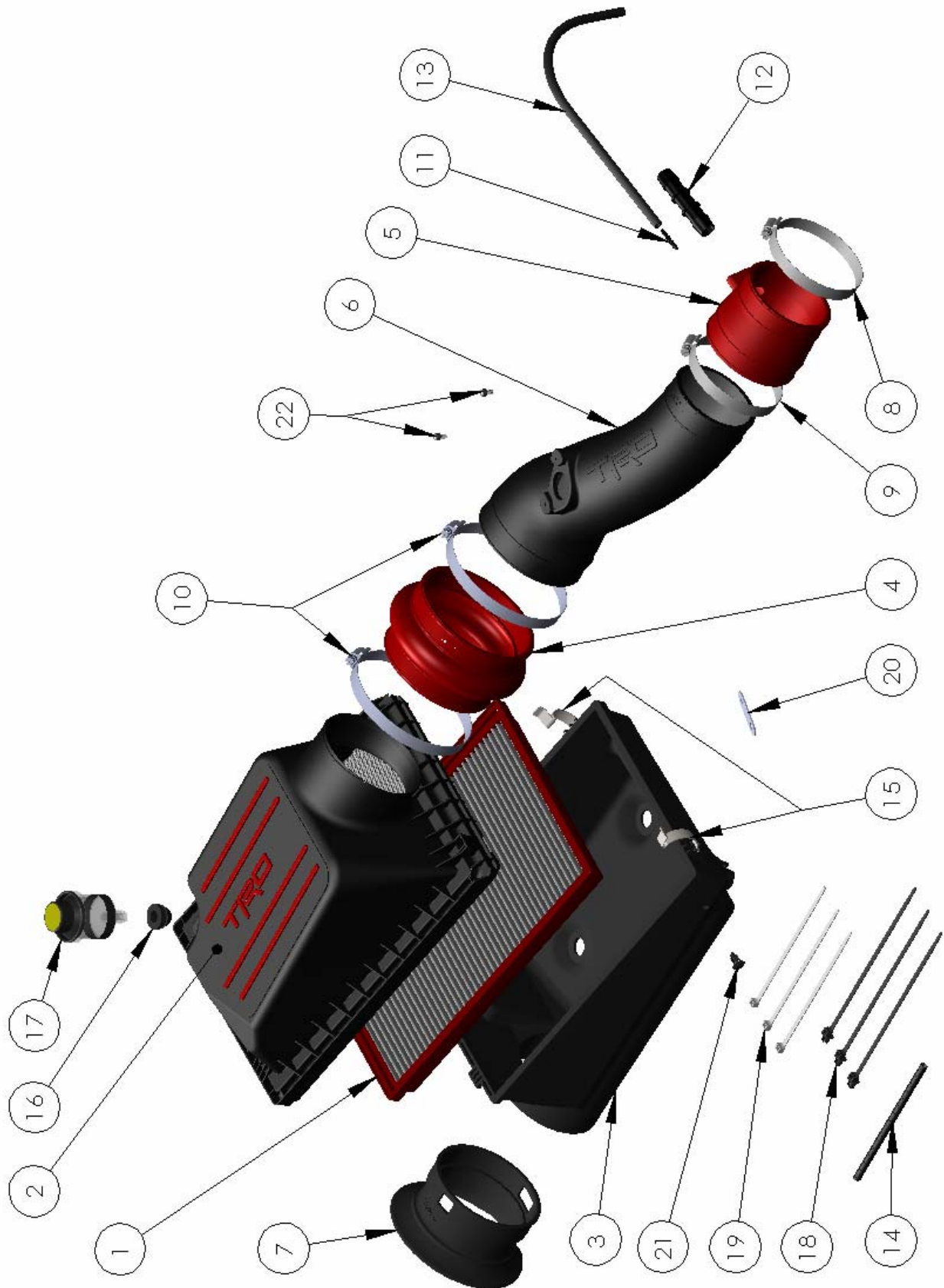
Legend

	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 and equipment required for this process


Please see page 17 for important “Care and Maintenance” information!

Torque Specifications:





- i. M8 Hardware: Tighten to 60 in. lbf. ± 5 in. lbf. (6.7 Nm ± 0.6 Nm).
- ii. M6 Hardware: Tighten to 40 in. lbf. ± 5 in. lbf. (4.5 Nm ± 0.6 Nm)
- iii. M4 Hardware: Tighten to 10 in. lbf. ± 2 in. lbf. (1.1 Nm ± 0.2 Nm)
- iv. Hose Clamp: Tighten to 30 in. lbf. ± 5 in. lbf. (3.4Nm ± 0.6 Nm)



A. Check Kit Contents

-  1. Check kit for contents and damage.

B. Vehicle and Parts Preparation

-  1. Completely read instructions and familiarize yourself with the installation before beginning.
2. Open hood.
-  3. Apply vehicle protection to prevent damage to painted surfaces.
-  4. Remove negative battery cable from terminal.
-  5. 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. Lift front of cover off studs and pull forward to disengage rear mounts.
2. Disconnect the MAF plug and wire harness clip. (Fig. C2)
3. Unclip the remaining wire harness clips. (Fig. C3)



Fig. C 1

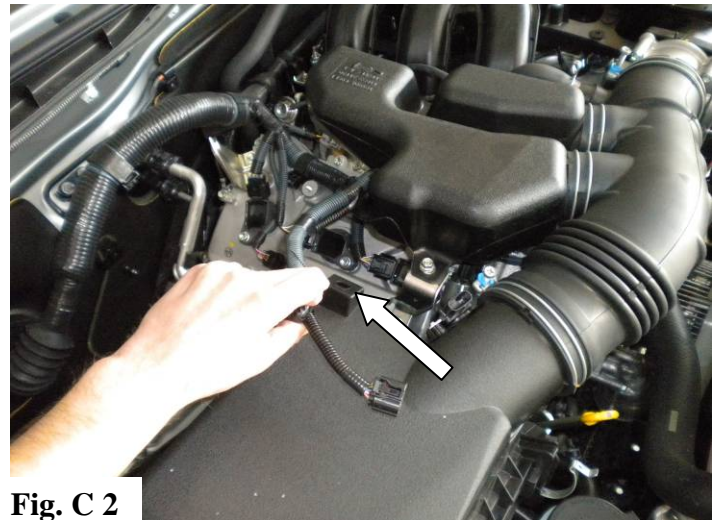


Fig. C 2

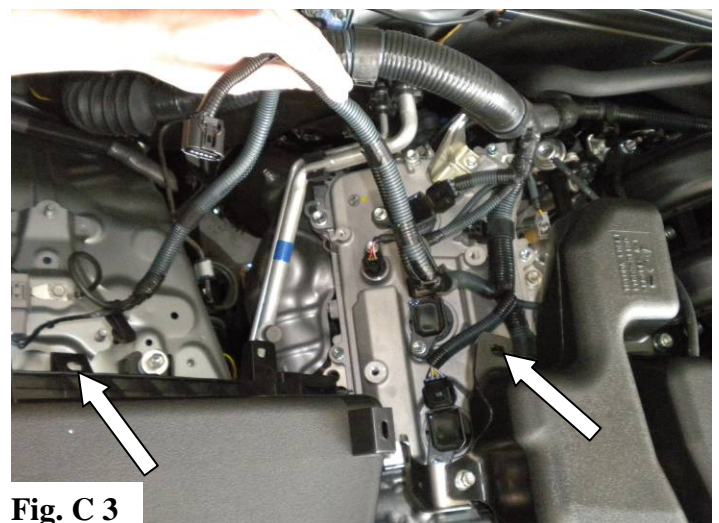


Fig. C 3

4. Loosen the factory hose clamp at the throttle body with a 10mm socket and ratchet assembly. (Fig. C4)
5. Disconnect the crank case vent and remove the M6 bolt and vacuum line from the resonator. (Fig. C4)

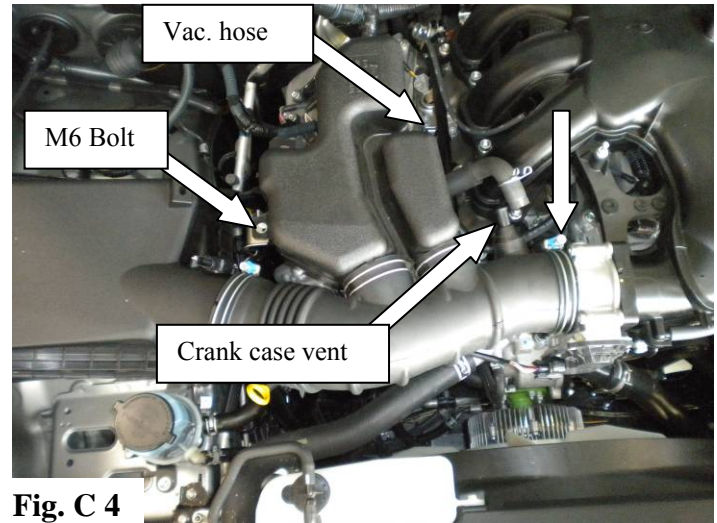


Fig. C 4

6. Unclip and remove the air box top with the intake tube and resonators. Remove the OEM resonator mounting bracket. (Fig. C5)
 - i. Remove the resonator bracket by removing one M6 bolt. (Fig. C5)

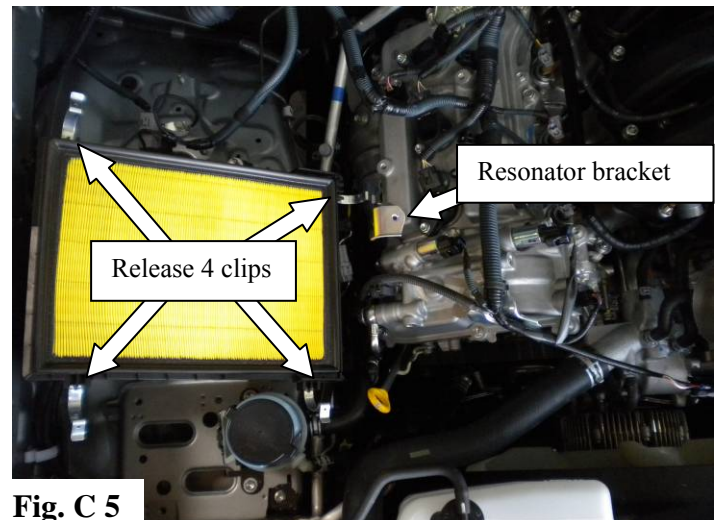


Fig. C 5

7. Remove the OEM filter, and the three M8 bolts securing the lower air box to the wheel well. (Fig. C6)

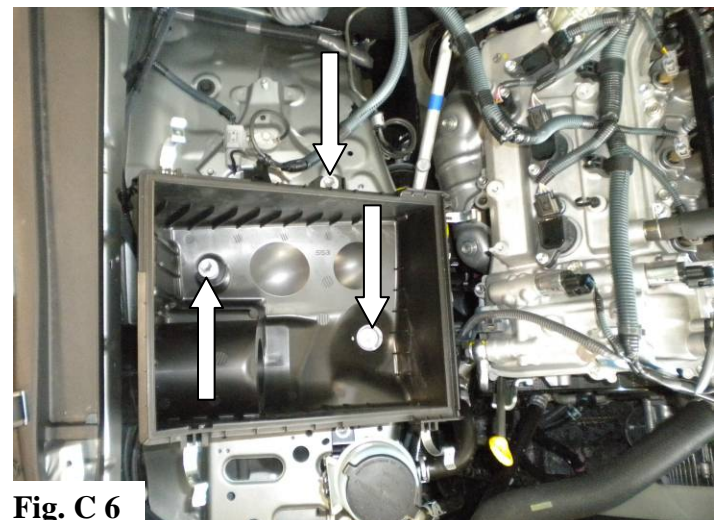
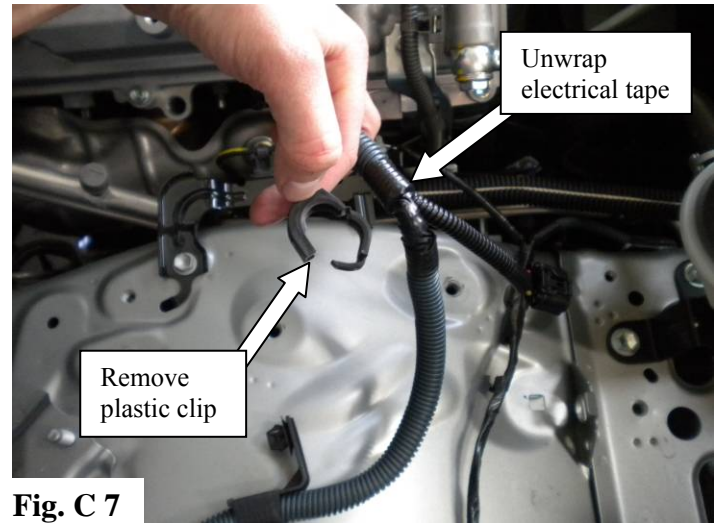
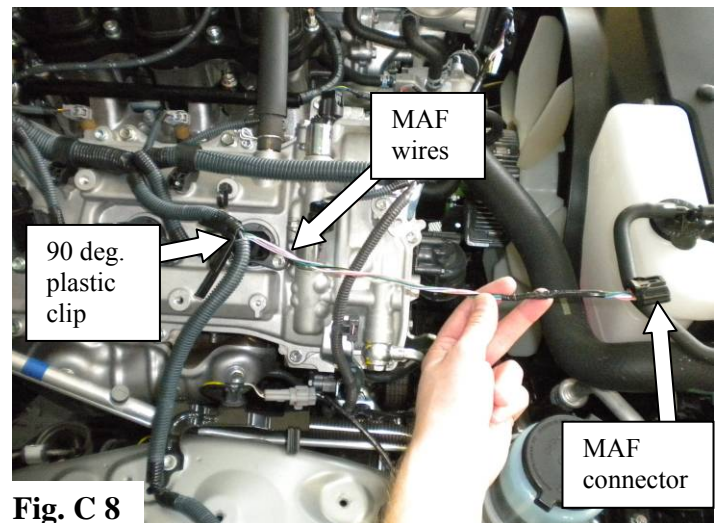






Fig. C 6

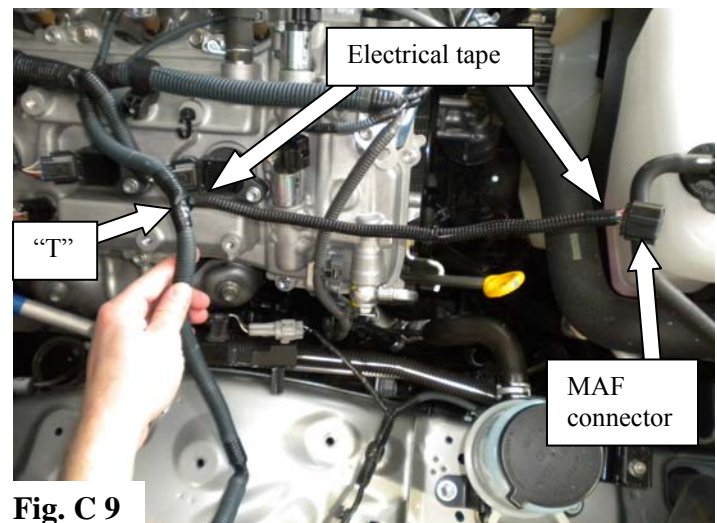
8. Unwrap the electrical tape from the MAF sensor wire harness and remove the plastic clip.
 - i. Take care not to damage any of the wires inside the wire harness. (Fig. C7)



9. Remove the MAF sensor wires from the main wire harness loom. (Fig. C8)
 - i. Bring the wires out of the split loom all the way back to the 90 deg. plastic clip as shown. (Fig. C8)



-  10. Carefully cut around the main wire harness loom to allow the MAF wires to be routed out and install the supplied split loom on the MAF wires. (Fig. C9)
 -  i. Take care not to cut any wires.
 - ii. Remove the 90 deg. plastic clip.
 -  iii. Tape the ends of the split loom with electrical tape to keep the loom in place.
 -  iv. Also tape the area where the MAF wires form a “T” with the main wire harness.



D. Install TRD Air Intake

1. Install the provided bracket and tree mount zip tie as shown. (Fig. D1)
 - i. Remove the M6 bolt and place the provided bracket on top of the OEM bracket.
 - ii. Use the M6 bolt to secure both brackets.

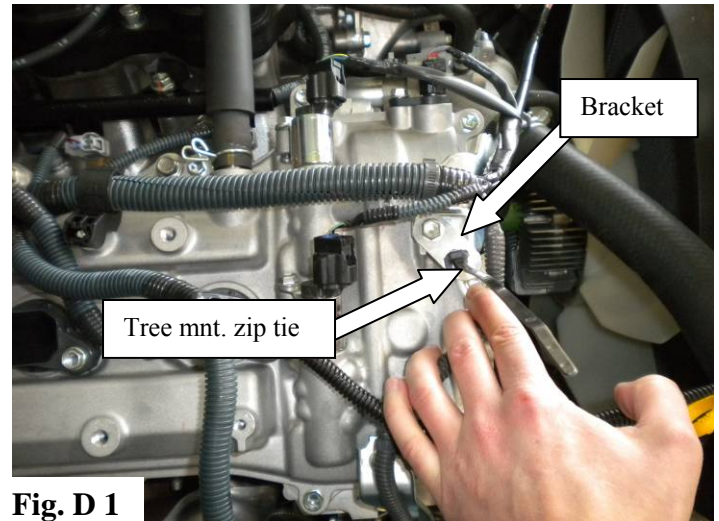


Fig. D 1

- ➔** 2. Install 2 tree mount zip ties in the M8 bolt holes on top of the passenger side valve cover as shown. (Fig. D2)

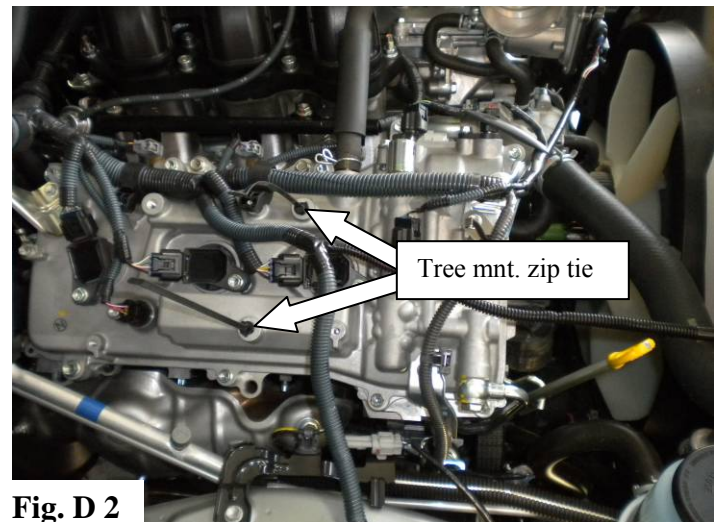


Fig. D 2

- ➔** 3. Use the zip ties installed in the previous steps to secure the wiring as shown. (Fig. D3).
 - i. Route the MAF wires under the other wires and attach with the tree mount zip tie installed in step D1. (Fig. D3)

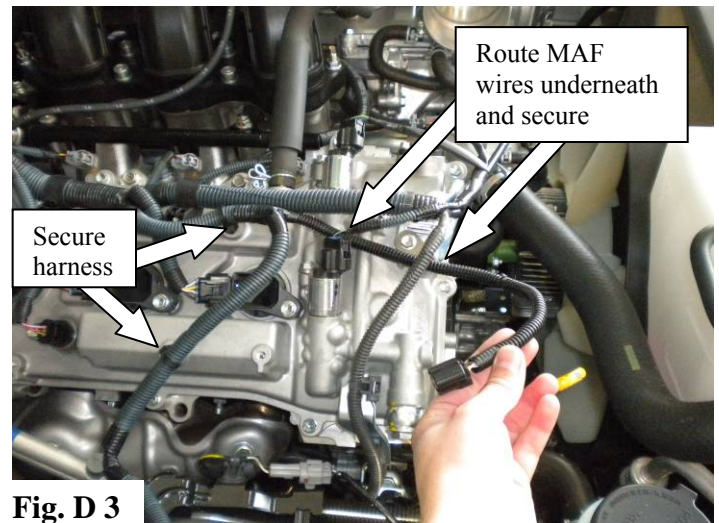


Fig. D 3

4. Remove the 3 rubber gromets and sleeves from the OEM lower air box. (Fig. D4)
 - i. Push the sleeve out first, then remove the rubber grommet. (Fig. D4)

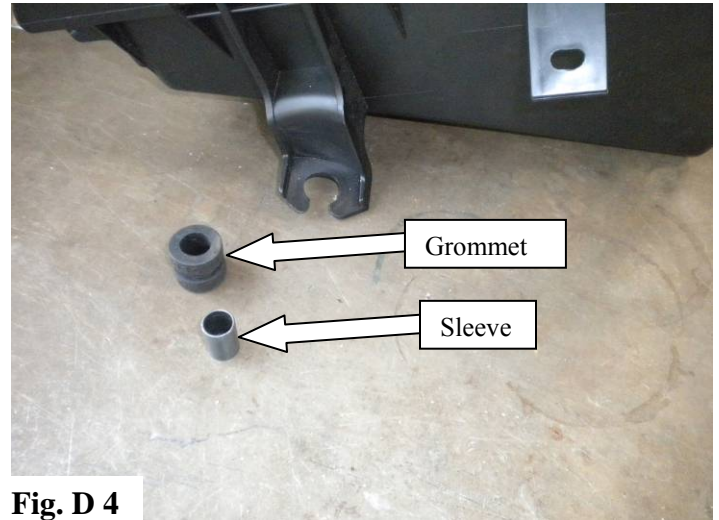


Fig. D 4

5. Install the three OEM rubber grommets and sleeves as well as the two supplied air box clips, in the TRD lower air box. (Fig. D5)
 - i. Install the rubber grommet first, then push the steel sleeve into place. (Fig. D5)
 - ii. Install the air box clips by pulling straight up on the clips to engage the air box. (Fig. D5)

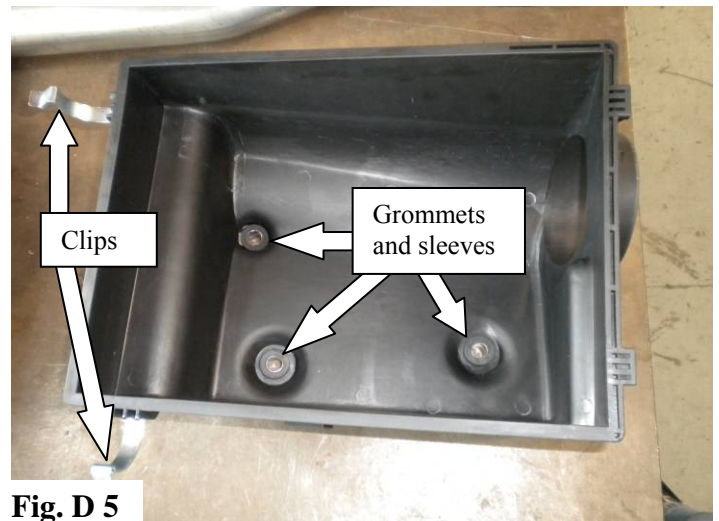


Fig. D 5

For installation on 4Runner, continue to step D12
The following steps are for FJ Cruiser ONLY

6. From under the passenger side front bumper, remove three screws holding the fender liner in place. (Fig. D6)

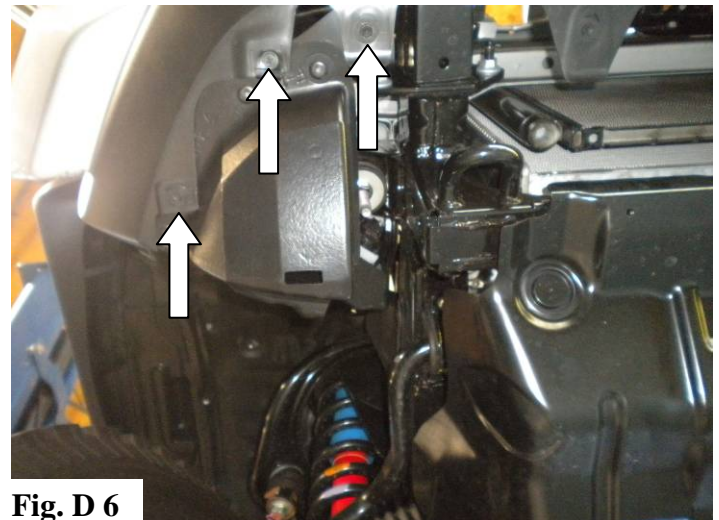
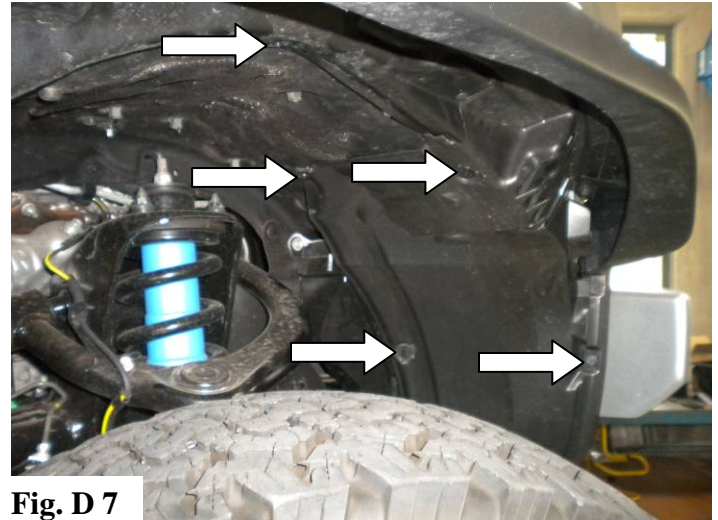


Fig. D 6

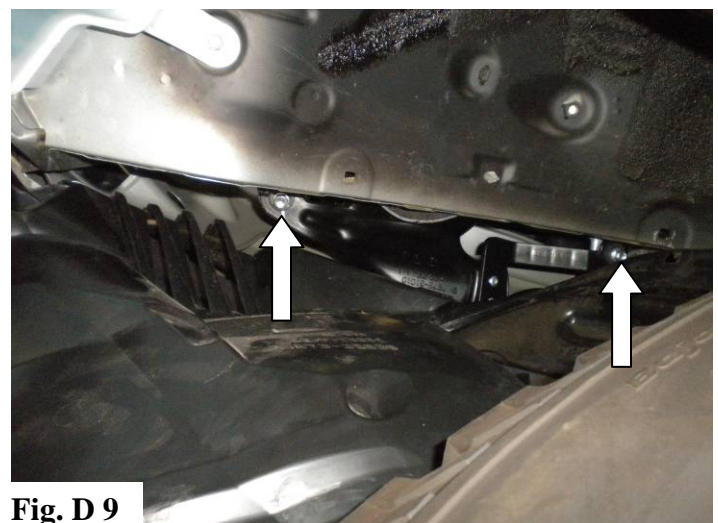
7. From inside the wheel well, remove the clips and screws in the locations indicated to allow access to the area above the fender liner. (Fig. D7)



8. Pull the inner fender liner out as shown to allow access to the area directly above the tire. (Fig. D8)



9. Remove the two M6 bolts holding the air inlet duct in place. (Fig. D9)



10. Remove the air inlet duct. (Fig. D10, D11)



Fig. D 10

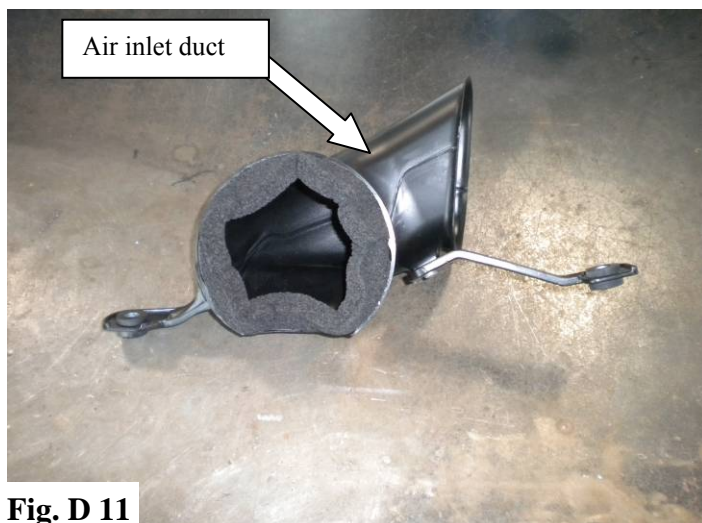


Fig. D 11

11. Reinstall the fender liner. (Fig. D12)



Fig. D 12

12. Insert the air flow accelerator into the air intake hole in the inner fender as shown. (Fig. D13)
 - i. Squish the air flow accelerator so that it fits through the hole.
 - ii. The TRD Logo should be facing up and into the engine compartment. (Fig. D14)



Fig. D 13

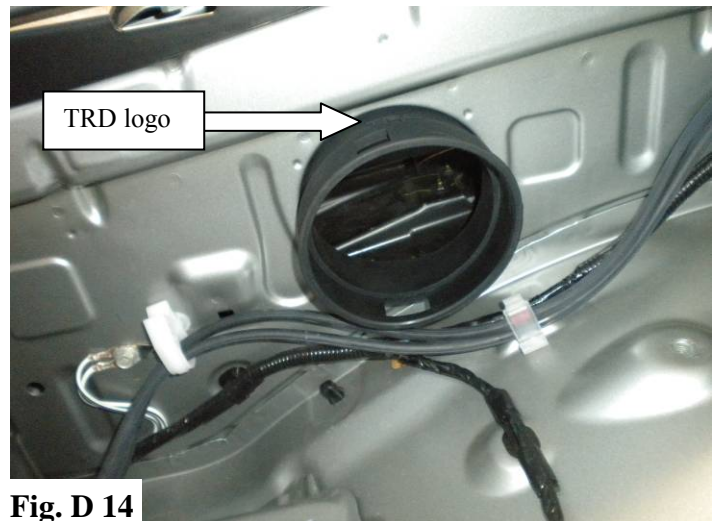


Fig. D 14

- ➔ 13. Slide the neck of the lower airbox into the air flow accelerator and be sure that the tabs on the air box line up with the notches in the rubber part. (Fig. D15)

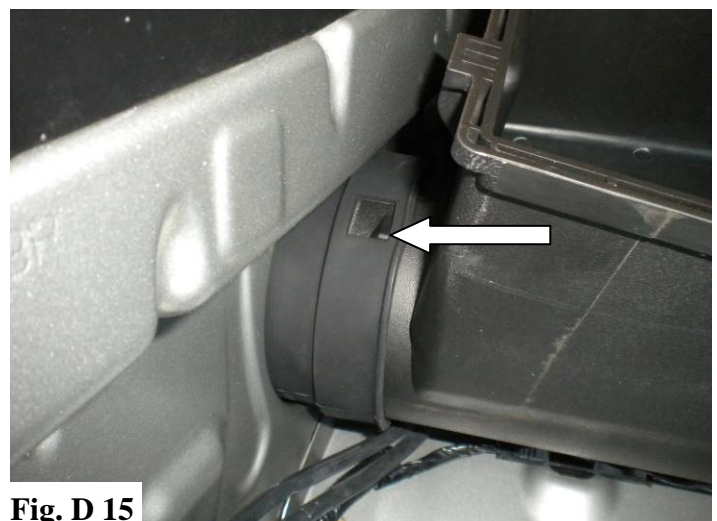



Fig. D 15

14. Secure the TRD lower air box with the three M8 bolts removed in step C 7. (Fig. D16)
 - i. Install the OEM clip removed in step C8 on the wire harness in the location shown. (Fig. D16)

-  15. Clip the wire harness to the side of the lower air box as shown. (Fig. D17)

16. Install the TRD air filter. (Fig. D18)
 - i. Press the air filter all the way down into the lower air box. (Fig. D18)

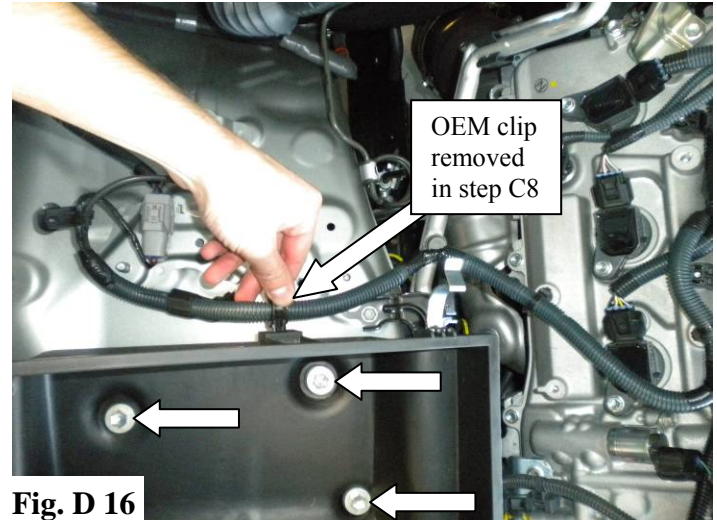


Fig. D 16

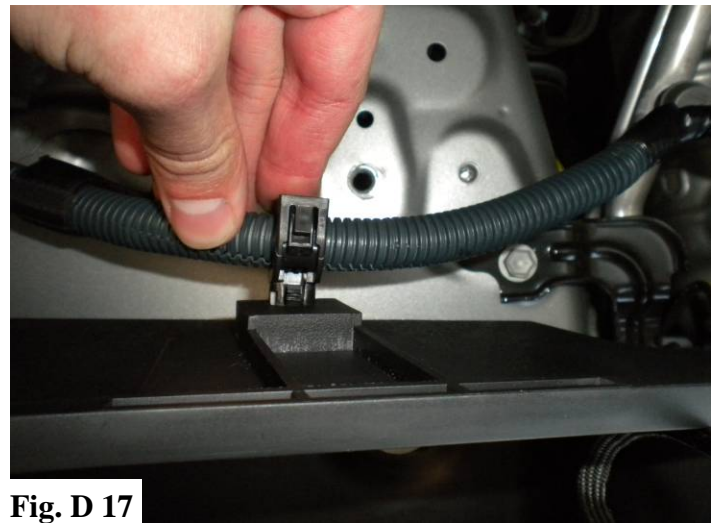


Fig. D 17



Fig. D 18

17. 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. D19)



Fig. D 19

18. Insert the filter minder into the grommet installed in step D17.

- 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. D20)



Fig. D 20

19. Install the hump hose coupler onto the upper air box using the two #72 hose clamps. (Fig. D21)

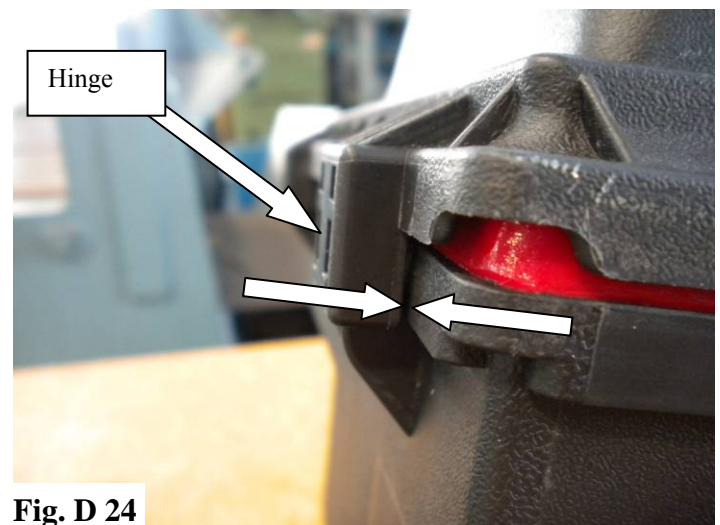
- Slide the coupler all the way onto the neck of the air box until it bottoms out on the lip inside the coupler.



Fig. D 21

- ⚠ 20. Install the upper air box by lowering the hinge side into place first. (Fig. D22)
 - ➡ i. Make sure that the hinge pieces on the upper air box fully engage with the corresponding pieces on the lower air box. (Fig. D22)
 - ➡ ii. To achieve proper fit, align the upper air box hinge pieces with the tabs on the lower air box, then slide toward the drivers side of the vehicle before rotating the upper air box down into position. (Fig. D22)

- ⚠ 21. Secure the upper air box with the two clips installed in step D5. (Fig. D23)
 - i. Make sure that the hinge side is fully engaged before attempting to close the clips. (Fig. D24)



22. Remove the MAF sensor from the OEM upper air box by removing the two philips head screws. (Fig. D25)

i. Take care to not damage the sensor.

23. Install the MAF sensor and throttle body coupler onto the TRD intake tube. (Fig. D26)



i. Install the MAF sensor with the two supplied M4 screws using a 3mm allen wrench. Take care to not damage the O-ring on the sensor.



ii. A small amount of blue thread locking fluid is recommended on the MAF screws to prevent them from loosening.

iii. Slide the throttle body coupler onto the end of the TRD inlet pipe with a #52, and a #56 hose clamp. (Fig. D26)



iv. With the hose clamps loose slide the coupler all the way onto the pipe as far as it will go. Use some silicone spray or similar lubricant to ease installation. (Fig. D26)

24. Install the intake pipe assembly first into the coupler on the air box as shown. (Fig. D27)

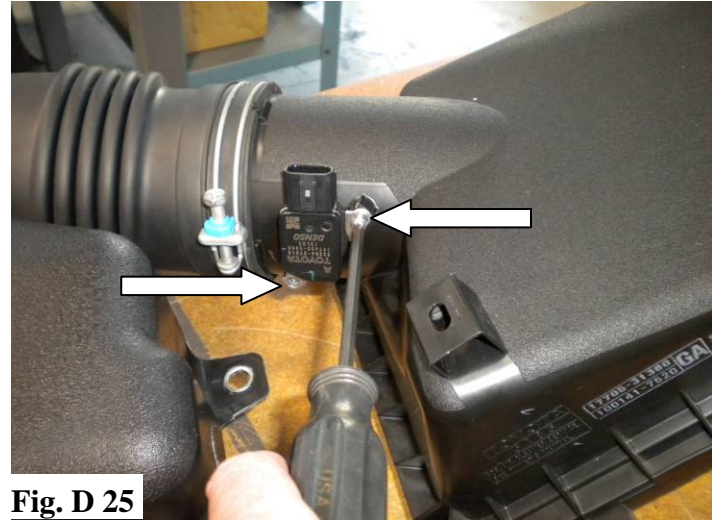


Fig. D 25

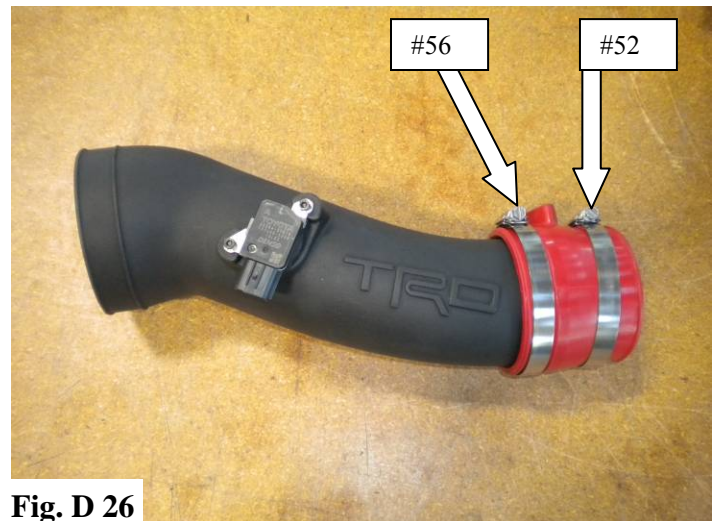


Fig. D 26

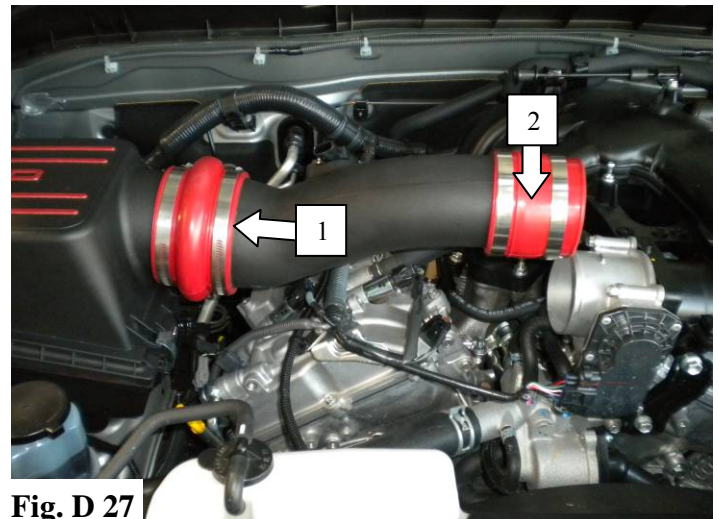



Fig. D 27

25. Rotate the intake pipe assembly down into position, and slide the throttle body coupler on to the throttle body. (Fig. D28)

- i. Slide the T.B. coupler all the way out until it hits the stops. (Fig. D28)

26. Install the two supplied plastic nipples into the T.B. coupler, and connect the OEM crank case vent hose. (Fig. D29)

-  i. Clock the T.B. coupler so that there is clearance between the crankcase vent hose, and the intake manifold. (Fig. D29)

27. Replace the OEM vacuum hose with the longer one supplied in the kit. (Fig. D30)



-  i. Connect the vacuum hose between the fuel pressure regulator and the small plastic nipple on the T.B. coupler. Secure the hose to the wire harness as shown using the supplied nylon tie strap (Fig. D30)
-  ii. Adjust the positioning of the intake tube until proper fit is achieved, then tighten all four hose clamps. (Fig. D30)



Fig. D 28

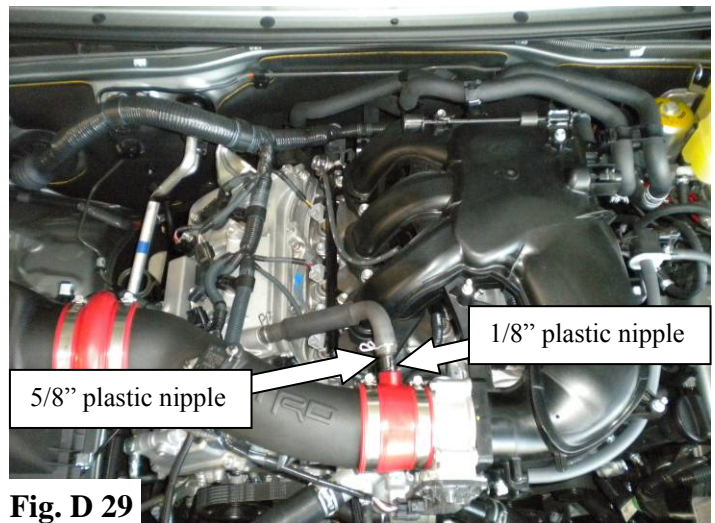


Fig. D 29

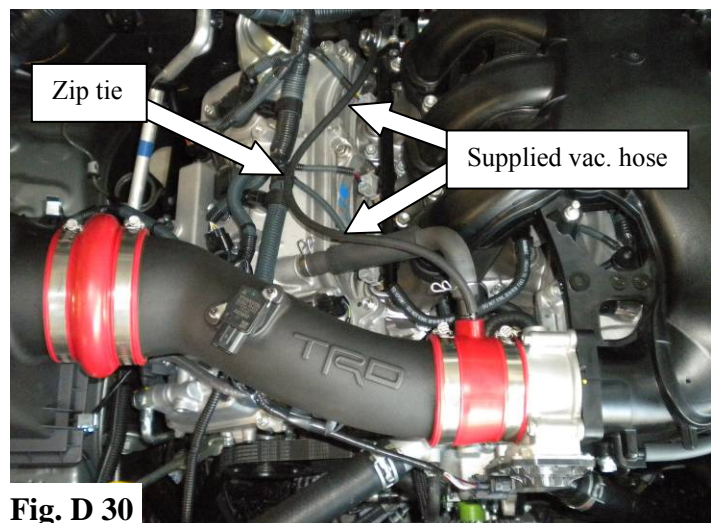




Fig. D 30

 28. Plug in the MAF sensor and do a final check that all hose clamps and hardware are tight. (Fig. D23)

29. Install the supplied plastic plug in the hole in the front of the lower air box as shown. (Fig. D32)

30. Do a final check over, and ensure that all hoses and wires are secure. Then install the engine cover by engaging the rear mounts, and rotating it down and snapping it onto the front mounts. (Fig. D33)

 31. Re-install negative battery cable to negative terminal. Tighten nut to 36 in. lbf. \pm 4 in. lbf. (4.0 Nm \pm 0.4 Nm)


 32. **Installer** – The installation manual contains important “**Care and Maintenance**” information. Place the entire instruction manual in the glove box for owner’s future reference.



Fig. D 31

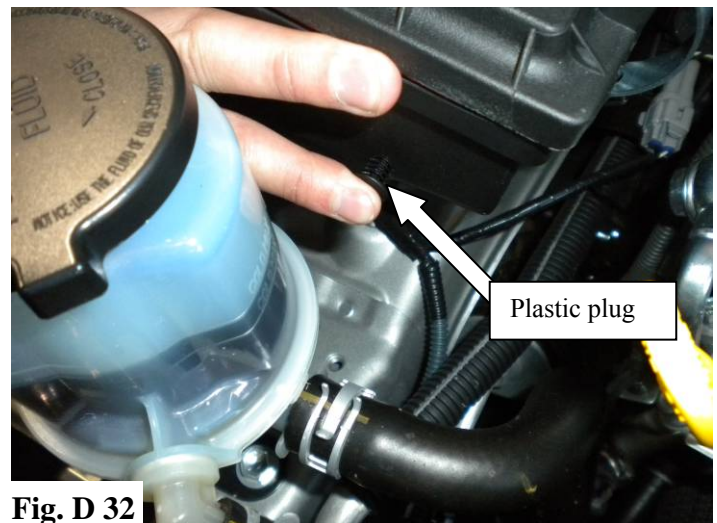


Fig. D 32



Fig. D 33

Air Filter Maintenance

Service Intervals: Your TRD Cold Air Intake System has an air filter restriction gauge that indicates when the air filter needs service. When the air filter restriction gauge yellow indicator reaches the service filter lettering, use TRD's filter cleaning system (Toyota p/n PTR43-00088) to service filter and maintain optimum performance.

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

How to read your air filter restriction gauge:



New Filter



Partially Dirty Filter
(Do Not Clean Now)



Service Filter Now



Push To Reset

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.

Check: _____

Accessory Function Checks

- Start the vehicle.
- If after you start the vehicle, or while driving, you encounter a Malfunction Indicator Lamp (MIL), check the following:

- Over-oiled Air Filter:

Look For: _____

- Full engagement of MAF sensor connector.
- Tightness of all clamps.
- Correctly installed valve cover breather hose.
- Over-oiled air filter.

- 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.

Vehicle Function Checks

- Start the vehicle
- If the lamp will not go off even after checking and/or repairing any of the above:

- Contact your Toyota dealer as soon as possible.