



**A. Check Kit Contents**

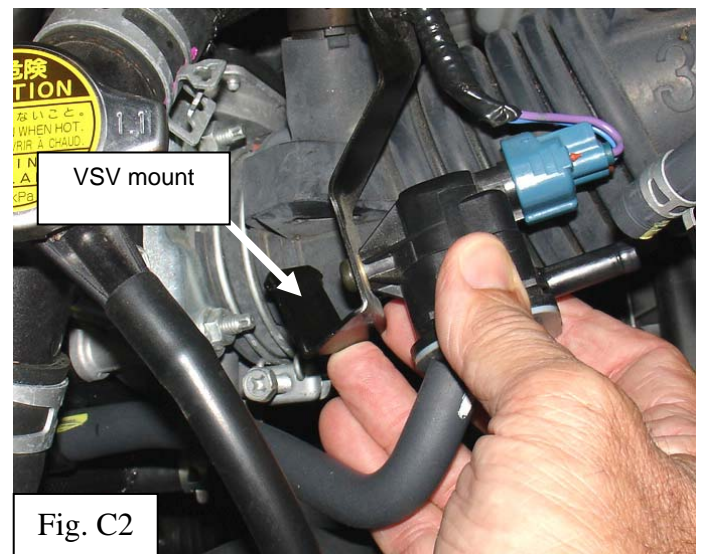
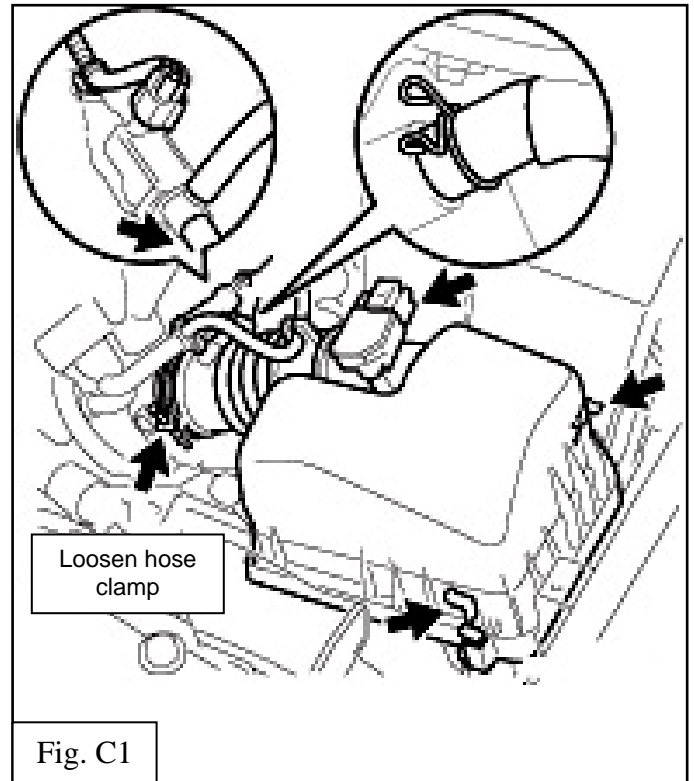
1. Check kit for contents and damage.

**B. Vehicle Preparation**

1. Use blankets to protect the front grille area and the front seat area.
2. Set parking brake.
3. Disconnect negative battery cable from battery.

**C. Removal Procedure: Air Filter Enclosure Assy.**

1. Disconnect the Mass Air Flow (MAF) sensor connector from the MAF sensor. (Fig. C1)
2. Separate the fuel vapor feed hose and fuel vapor feed hose No.1 from the Vacuum Switching Valve (VSV) assembly. (Fig. C1, top-left detail)
3. Remove the VSV assembly (w/mount) from the air filter hose by gently pulling VSV mount towards front of car. (Fig C2)
4. Remove the ventilation hose from the air filter hose. (Fig. C1, top-right detail)
5. Loosen the air filter hose clamp on the throttle body side. (Fig. C1)



Section II – Installation Procedure

6. Separate the MAF sensor wire loom mount from the air filter lid and the wire loom itself from the second bracket on the air filter lid. (Fig. C3)
7. Remove the air filter lid and air filter element.

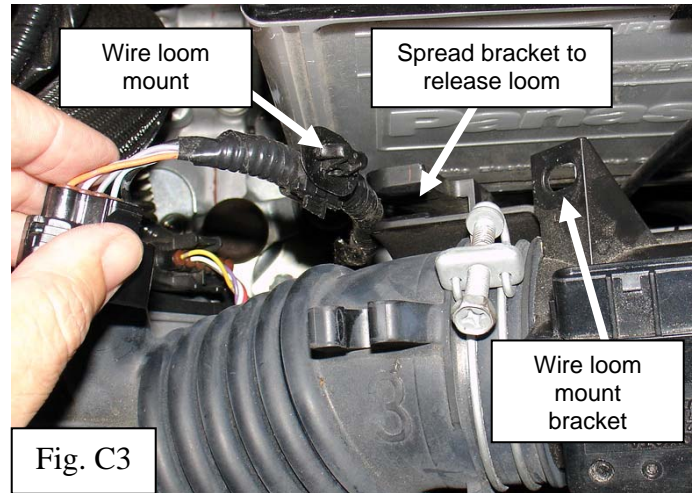


Fig. C3

8. Separate the wire harness clamp from the air filter case. (Fig. C4)
9. Remove the two 10mm bolts and remove air filter case with air filter inlet tube No. 1. (Fig. C4)

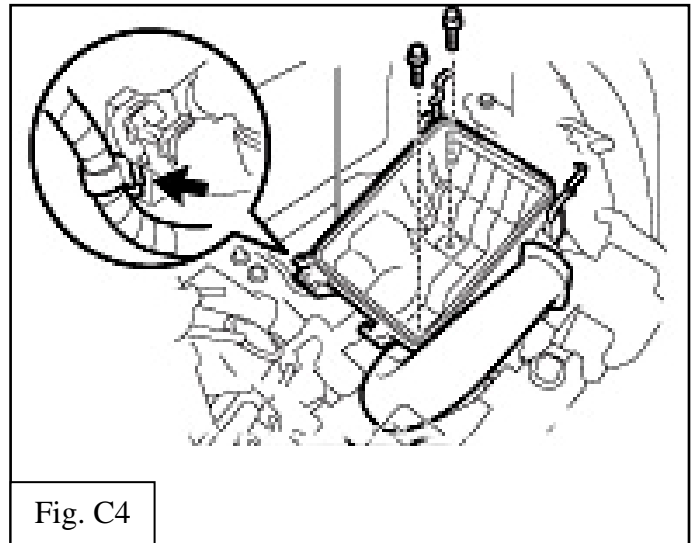
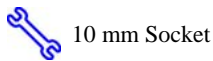


Fig. C4

**D. Removal Procedure: Transmission Cable Ends**

1. Disconnect the transmission control cable ends from the gear shift linkage on the transmission. (Fig. D1)
  - i. Remove transmission cable clips (4) and save for re-use. (Fig.D1)
  - ii. Use a marking pen to label each cable. Mark cable on the driver-side with a “D” and cable on the passenger-side with a “P”
  - iii. Remove large area washers under clip and save for re-use. (Fig. D1)
  - iv. Remove transmission cable ends from transmission linkage and set cable ends aside. (Fig. D1)

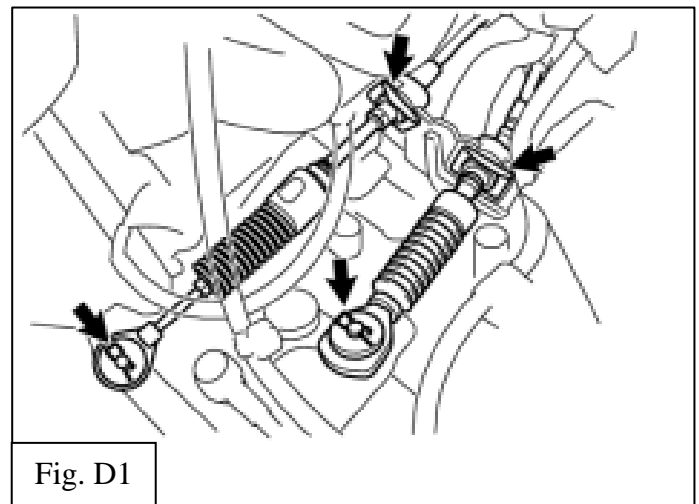


Fig. D1

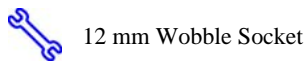
Section II – Installation Procedure

**E. Removal Procedure: Transmission Cable Bracket**

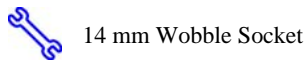
1. Raise vehicle on a lift to access the transmission cable bracket from the underside.

**Caution: If vehicle is raised by other methods than a lift; use jack stands to support vehicle.**

2. Remove 12mm bolt from wire harness bracket (Scion xD only). (Fig. D2)

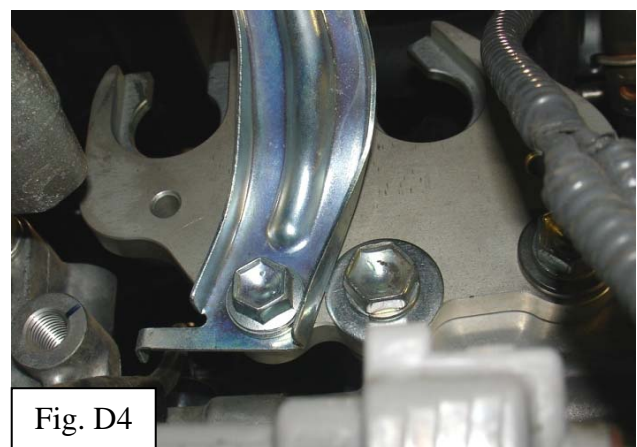
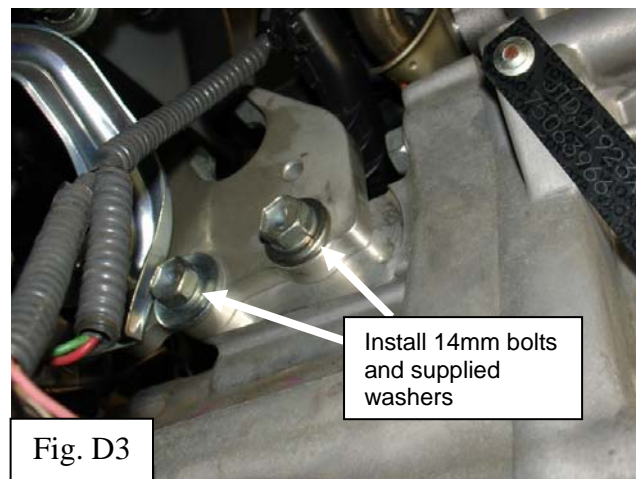
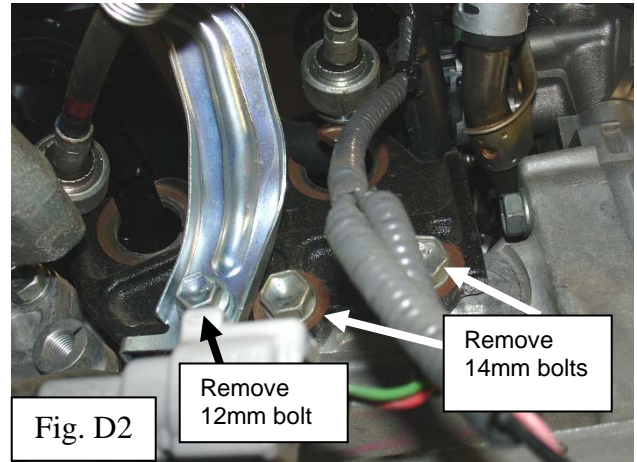


3. Remove (2) 14mm bolts that secure the transmission cable bracket.




**F. Installation Procedure: TRD Cable Bracket**

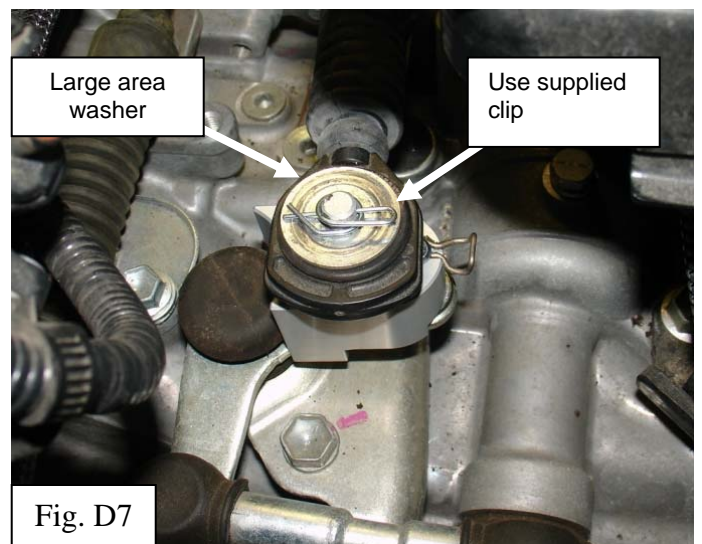
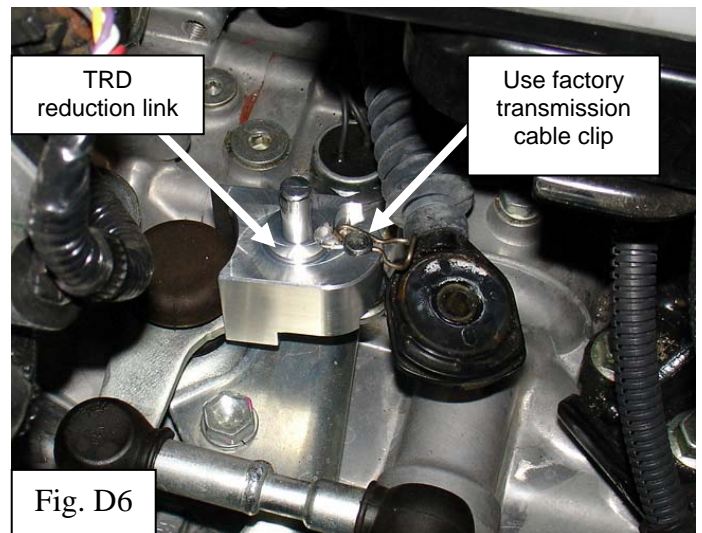
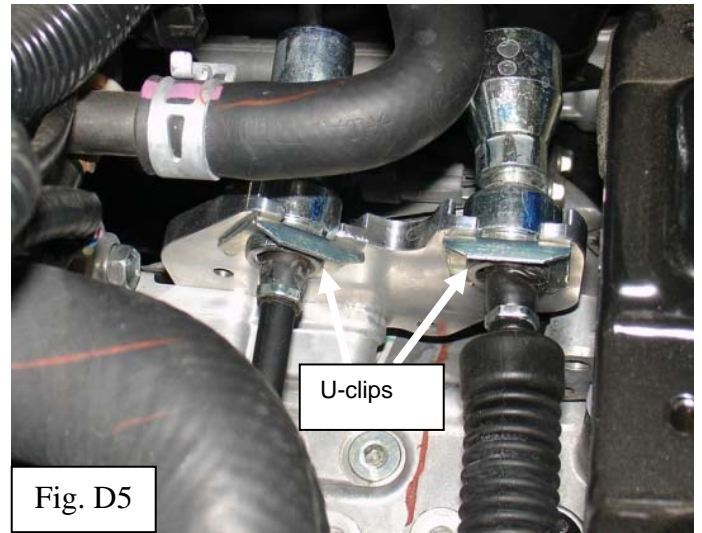
1. Install TRD cable bracket using the (2) 14mm factory bolts and (2) supplied washers. (Fig. D3)
  - i. Tighten bolts: Torque 25 N·m (255 kgf·cm, 18 lb·lbf).
2. Install wire harness bracket using the 12mm bolt. (Fig. D4)
  - i. Tighten bolt: Torque 13.5 N·m (138 kgf·cm, 10 lb·lbf).
3. Lower vehicle from lift or jack stands.



Section II – Installation Procedure

**G. Installation Procedure: TRD Quick Shift Assy.**


1. Reinstall transmission control cables into cable bracket. (Fig. D5)
  - i. Place cables into bracket making sure cable “D” is on the driver-side and cable “P” is on the passenger side.
  - ii. Inspect U-clips removed in Step D1 for possible damage.
    - (1) If U-clips are damaged; then replace with new factory clips (See page 1).
    - (2) If U-clips are good; then reuse U-clips to secure cables. (Fig. D5)
  
2. Install TRD Quick Shifter billet reduction adaptor as shown. (Fig. D6)
  - i. Slide TRD reduction adaptor over the post on the factory linkage. (Fig. D6)
  - ii. Reinstall the transmission cable clip to secure the TRD reduction adaptor to the factory linkage. (Fig. D6)
  
3. Reinstall cable end over TRD reduction adaptor. (Fig. D7)
  - i. Slide cable end over TRD reduction adaptor. (Fig. D7)
  - ii. Reinstall large area washer and use supplied clip to secure cable end as shown. (Fig. D7)
  
4.  Check gear engagement in all 5 forward gears and reverse.



## H. Installation Procedure: Air Filter Enclosure Assembly

1. Use the reverse procedure starting from Step C9 through Step C1 to reinstall the air filter enclosure assembly.
  - i. Tighten 10mm bolts: Torque 7.8 N·m (80 kgf·cm, 69 in·lbf).

## I. Post Installation

1. Re connect negative battery cable to battery terminal.
  - i. Torque 10mm nut: 5.4 N·m (55 kgf·cm, 48 in·lbf).
-  2. Start vehicle engine to ensure smooth idle.
  - i. If engine idle is smooth, shut off engine.
  - ii. If engine idle is not smooth or engine will not start; then review functional verification page and perform functional checks.
3. Remove vehicle protection from front grille area and front seat area.



Section III – Functional Verifications

Check: \_\_\_\_\_



Gear Engagement.



Start the vehicle.

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

Look For: \_\_\_\_\_

- Shifter will engage all 5 forward gears and reverse.
- Smooth idle and no MIL.
- Full engagement of MAF sensor connector.
- Tightness of all clamps.
- Correctly installed valve cover breather hose.