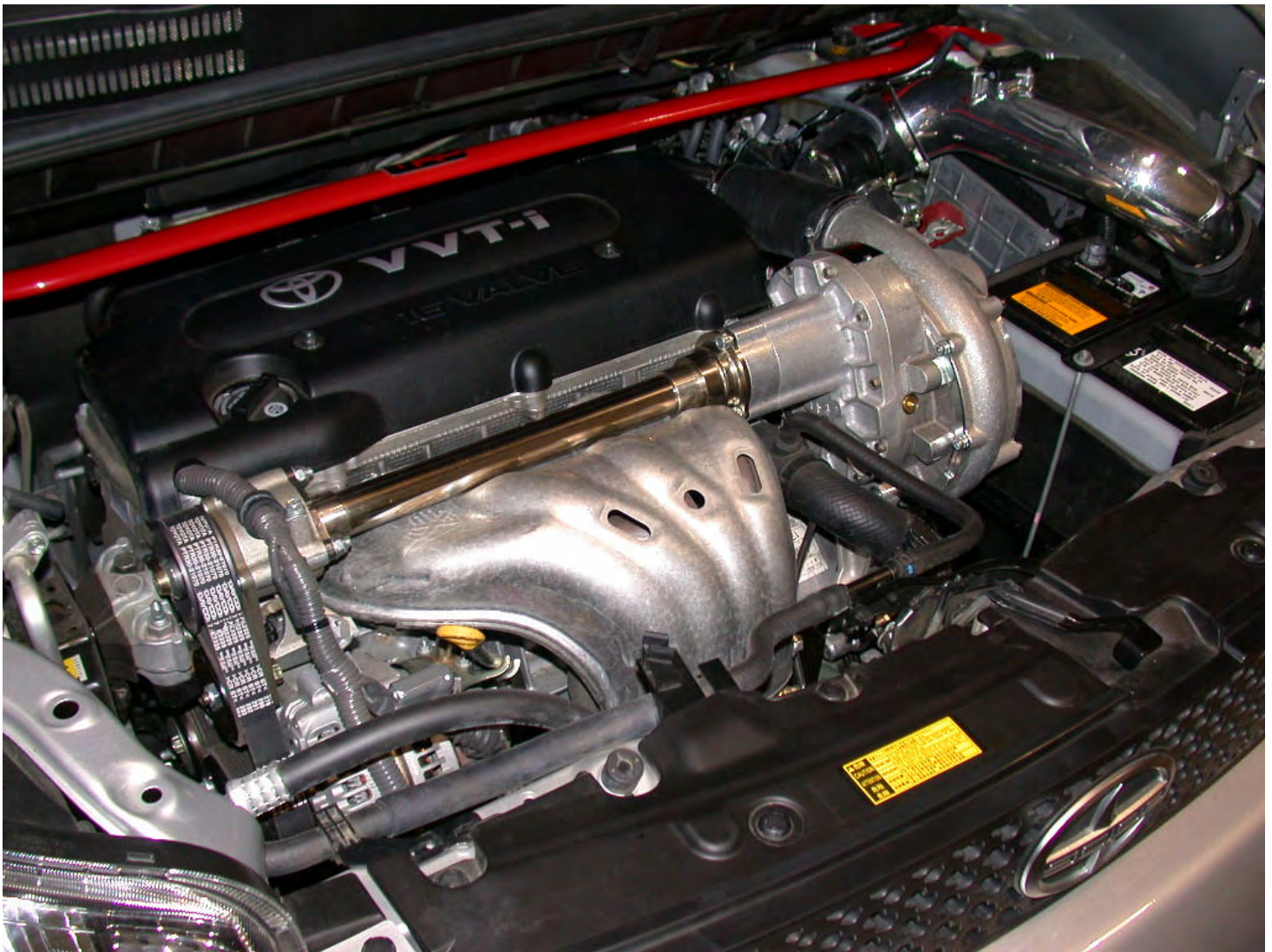




2008-- Scion xB Supercharger – 2.4L Installation Instructions



Part Number: PTR41-52080

NOTE: Part number of this accessory may not be the same as the part number shown

Kit Contents

Item	Qty	Description
1	1	Literature Assembly*
2	4	Fuel Injectors, TRD
3	1	Airbox, Lower TRD
4	1	Air Filter, Toyota 17801-03010
5	1	Airbox, Cover
6	1	CPS Extension Wire
7	1	Belt, 7 Rib 91.5"
8	1	Oil Feed Hose
9	1	VSV Rubber Bracket
10	1	Fitting, Hexagonal "T" Oil Feed
11	2	Airbox Clip
12	1	Airbox Mounting Bracket
13	1	Airbox Steady Bracket
14	6	Screw, Pan Head, #8 HI-LO, 5/8"
15	1	Air Inlet Grill
16	1	VSV Adapter
17	1	Discharge Tube
18	1	Hose, MAF Pipe to SC Intake
19	1	Screw, Crank, M14, high-strength
20	3	Clip, Harness Band
21	1	Wire Loom 3/4" dia. x 7 inch length
22	1	Wire Loom 3/4" dia. x 13 inch length
23	1	Wire Loom 1/2" dia. x 8 inch length
24	3	Bolts, 3/8-16 UNC x 1" x 5/16 Allen WF
25	2	Bolts, SHCS 12 x 1.25 x 80 x 10mm AllenWF
26	3	Bolts, SHCS 6 x 1.0 x 16 x 5 mm Allen WF
27	5	Washer, 6mm
28	1	1/4" x 3/16" branch vacuum tee
29	1	1/8 NPT Straight X -4 JIC Fitting Steel
30	1	Adel Clamp, 3/4" ID, 1/4" Eyelet
31	2	Clamp, Spring, .75"
32	1	O-Ring for SC Inlet Manifold 3.237 " ID
33	1	Hose, 3/16" vacuum, Bypass to Throttle Body 16" long
34	2	Zip Ty-Wrap, Small
35	2	Zip Ty-Wrap, 7 inch/Medium TY525MX
36	4	Clamp, Zebra, 60-80mm
37	3	Clamp, Zebra, 25-40mm
38	4	Clamp, Zebra, 70-90mm
39	1	Screw, M10 X 1.25 X .25 Flange Head
40	1	Poly braid sleeve, 3/4" dia. x 12 inch length
41	4	Spark Plugs, TRD / Denso K22PR-U
42	1	Thermostat , 71°C (160°F)
43	1	Bypass Valve, Bosch
44	1	Hose, Ø1",Bypass Valve to Air Inlet Manifold
45	1	Discharge Sleeve, W/ bypass port
46	1	Sleeve, discharge

47	1	MAF Pipe
48	1	Hose, Airbox to MAF Pipe
49	1	Rubber Mount, Cylindrical .75" long
50	1	Screw, M6 1.0 X 8mm, Socket Head
51	1	Nut, M6 x 1.0, standard
52	2	Washer, 1/4" X .032" Thick
53	2	Screw, M4 X 0.7 X 6mm Socket Head
54	1	Exhaust Heat Shield, Formed
55	1	Supercharger Assembly W/Drive
56	1	Bracket, Supercharger Mount
57	1	Hose Assy., Oil Return Hard Line
58	1	Intake Manifold, Cast Aluminum TRD
59	1	Oil Pan w/ return tube braze-in
60	1	Battery Mount
61	1	Battery Hold Down
62	1	Clutch Accumulator Bracket (manual trans.)
63	1	Shield, Clutch Slave (manual trans.)
64	1	Strap, Negative Battery Extension
65	1	Clutch Accumulator Line (manual trans.)
66	1	Battery Tray Spacer
67	1	Spacer, Clutch Line (manual trans.)
68	3	Screw, M6 X 1.0 X 12mm Flange Head
69	1	Screw, M6 X 1.0 X 30mm Flange Head
70	1	Stud, Battery Hold Down
71	2	Nut, M6 x 1.0, Nylock
		<i>*ALL ITEMS CONTAINED IN LITERATURE ASSEMBLY</i>
	3	Emblem, "Supercharged"
	3	Emblem, "TRD"
	1	Decal, CARB EO # D-425-19
	1	Decal, Belt Routing Label
	1	Manual, instruction, 2008 Scion xB
	1	Warranty Card, TRD Supercharger
	1	Decal, Premium Fuel WARNING
	1	Envelope, Printed, TRD
	1	Decal, TUNE-UP

Additional Items Required For Installation

Item #	Description	NOTES
1	A/T Sub Kit, PTR41-52091	Transmission Dipstick Tube, S/C Spacers

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	ANSI Z-71 or better
Fender Blankets	Non-Marring
Protective Gloves	Gasoline and Brake Fluid Resistant
Special Tools	Notes
Toyota TIS Techstream	Version 2.20.015 or later
Battery Charger	
Serpentine Belt tool	09249-63010
Crankshaft Pulley Holder	09213-54015-01
Pulley Holder Lever Arm	09330-00021
Gasket Seal Cutter	09032-00100
Oil Filter Wrench	09228-06501 or equivalent
Installation Tools	Notes
Mechanic's Hand Tools Wrenches, Sockets and Hex (Allen) Keys	Metric AND Standard
½" Torque Wrench-150ft/lb	For crank pulley bolt install
19 mm 12-point socket ½" drive	For crank pulley bolt install
Special Chemicals	Notes
Anti-Seize Assembly Lube	For Spark Plugs
Toyota Seal Packing (FIPG) 08826-00080 or 00295-00102 or 00295-00103	Or equivalent for oil pan reinstallation.
Loctite 242 Blue Threadlock	Or equivalent
Loctite 567PST Teflon Paste	Or equivalent

General Applicability

(2008) Scion xB (2AZ-FE – 2.4L I4)

Recommended Sequence of Application






Item #	Accessory
1	Instruction Review, Vehicle Preparation
2	R&R Oil Pan, Crank Bolt
3	Remove OE Intake System and Area
4	Prepare Engine
5	Install Supercharger
6	Install TRD Intake System
7	Re-Flash ECU with TRD Map
8	Test

*All Sequences Are Mandatory

Vehicle Service Parts (required for reassembly)

Item #	Quantity Req'd.	Description
1	1	Oil Filter , 90915-YZZF1
2	1	Oil Drain Gasket 90430-12031
3	4.0 ~ 4.8 Quarts	Oil, SAE 5W-30
4	1 roll	Black Electrical Tape, 600 V

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.
	CAUTION: A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.
	TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.
	REVISION MARK: This mark highlights a change in installation with respect to previous issue.

Kit Contents



Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Toyota dealer for a copy of this document.



12 mm Wrench



1. Installation review and vehicle preparation.

(a) Review entire installation instructions provided with this supercharger kit before beginning the installation.

(b) Review parts list/kit contents to ensure that all parts are present before beginning the installation. If any items are missing contact Technical Support at **(800) 688-5912** before proceeding.



(c) **Remove any low-octane fuel from vehicle. Ensure that ONLY Premium Unleaded Gasoline 91 Octane or higher is used.** (Octane Method (R+M)/2). **Use EXTREME CAUTION if draining is necessary.**



(d) Place vehicle onto vehicle hoist. Place fender protection blankets over fenders and front of vehicle to protect cosmetics of vehicle.

(e) **Disconnect Negative Battery Terminal (-).** (10mm wrench) *Then* disconnect battery positive terminal. Remove battery hold down strap. Remove battery and plastic tray from engine compartment. **(Caution:** Batteries contain an acid solution, be sure to wear eye protection and gloves when handling the battery. Place battery onto workbench until replacement later. **Do not the place battery on cement or concrete floors.)**



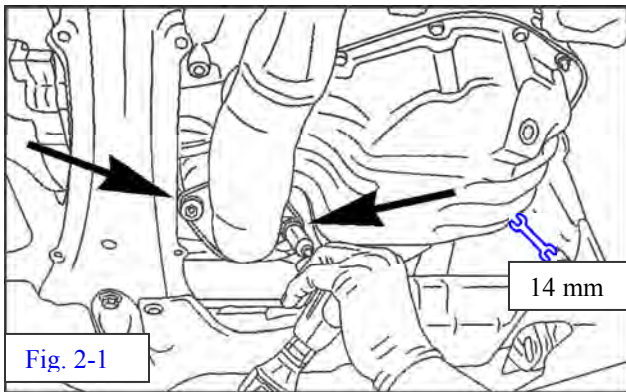


Fig. 2-1

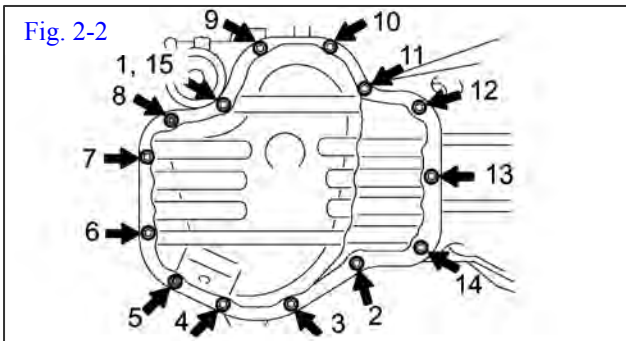


Fig. 2-2

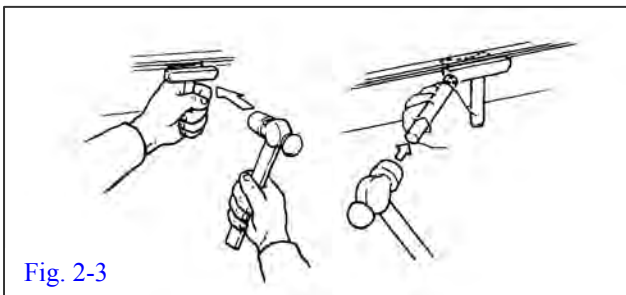


Fig. 2-3

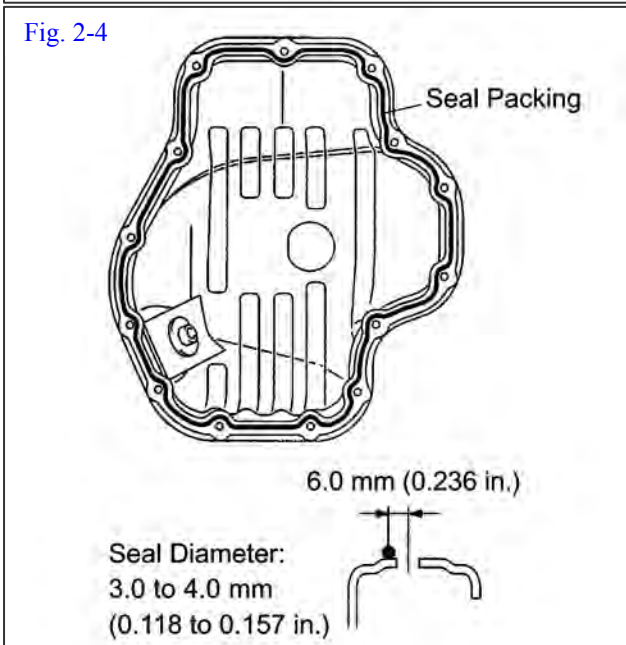


Fig. 2-4

2. Oil Pan Parts Removal & Replacement.

- (a) Drain engine oil (**14 mm wrench**) into proper receptacle. The OE oil pan will be removed and replaced with a TRD supplied oil pan after draining.
 - (b) Remove the 2 exhaust bolts and let exhaust pipe hang down low in order to gain access to oil pan bolts. (Fig. 2-1).
 - (c) Remove the oil pan by removing the 12 bolts and 2 nuts. (Fig 2-2). Use SST **09032-00100** to remove pan from crankcase. See Figure 2-3.
- Caution:** Be careful not to damage the sealing surface of the crankcase, chain cover, or oil pan.
- (d) Carefully clean the mating surfaces on the crankcase, chain cover and TRD supplied oil pan.
 - (e) Apply a continuous bead of **00295-00103 FIPG** seal packing (3.0 to 4.0 mm in diameter) to the sealing surface of the oil pan as shown in Figure 2-4. **CAUTION:** Remove **ANY** and **ALL** oil residue from the sealing surfaces first. Install the oil pan **within 3 minutes** of applying sealant. **Do NOT put engine oil into the engine for at least 2 hours after installing the oil pan.**
- CAUTION:** Remove **ANY** and **ALL** oil residue from the sealing surfaces first. Install the oil pan **within 3 minutes** of applying sealant. **Do NOT put engine oil into the engine for at least 2 hours after installing the oil pan.**
- (f) Uniformly tighten the fasteners on the oil pan in the sequence shown in Figure 2-2. **Torque to 80 in-lbs.**
 - (g) Re-attach exhaust pipe, and re-install 2 exhaust bolts removed previously. **Torque to 32 ft-lbs.** Install oil drain plug and new drain plug gasket. **Torque plug to 30 ft-lbs.** Clean off any excess oil from engine, oil filter, pan and exhaust. Replace oil filter as needed. Prime new oil filter with **SAE 5W-30.**

Procedure

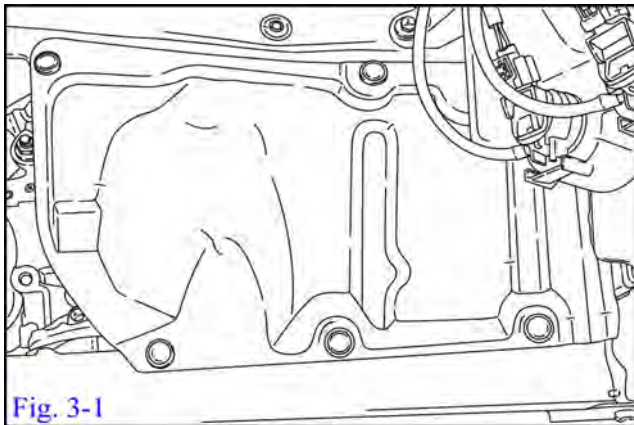


Fig. 3-1

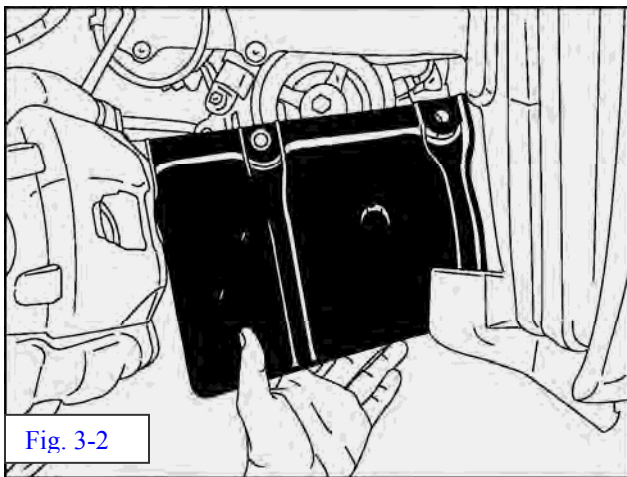


Fig. 3-2

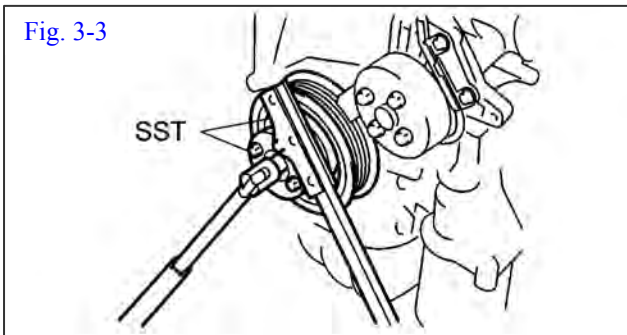


Fig. 3-3

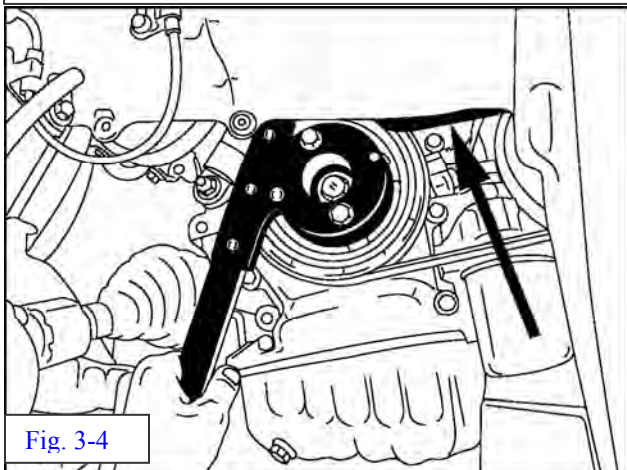


Fig. 3-4

3. Crankshaft Pulley Bolt and Panel Removal.

- (a) Remove passenger side front tire/wheel assembly in order to properly access fender shroud and crankshaft pulley bolt. (Fig. 3-1)
- (b) Remove passenger side plastic body/fender shrouds in order to gain access to crankshaft pulley. (Fig. 3-1 and Fig. 3-2). Use a small screwdriver to remove the 5 plastic clips. **NOTE:** The inner fender lining has been removed to expose the two forward clips.)
- (c) Remove factory crankshaft pulley bolt. Utilize **SST 09213-54015-01 and 09330-00021**. (Fig. 3-3). **CAUTION:** be careful not to damage OE power steering hard line when working with crankshaft pulley. See arrow in Fig. (3-4).

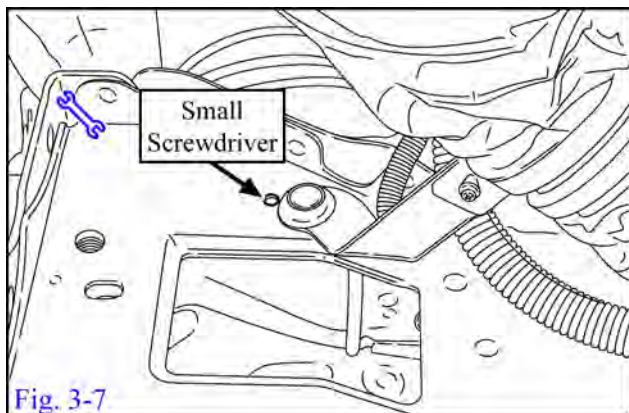
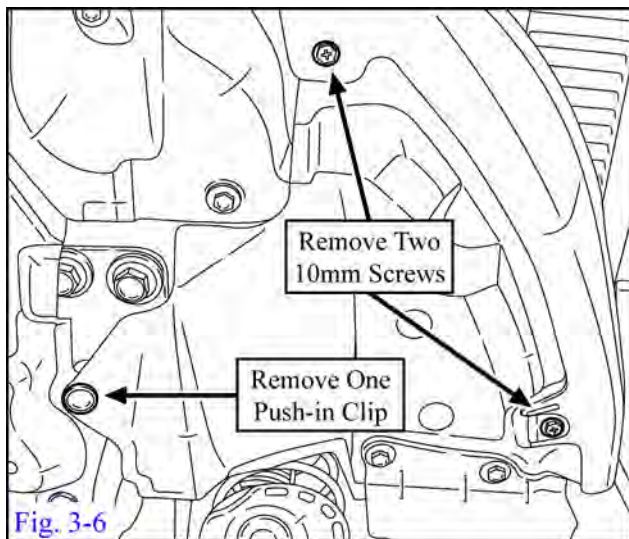
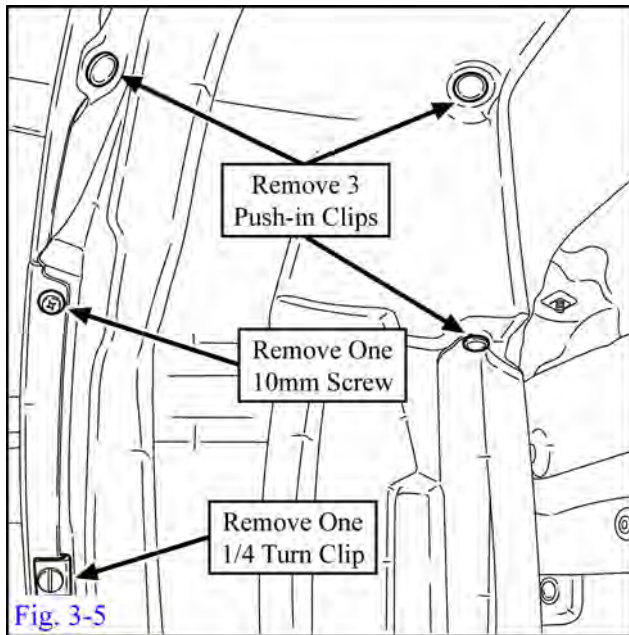


- (d) **DO NOT remove pulley from the crankshaft!** Remove **ONLY** the retaining bolt. **NOTE:** some crankcase oil may drip out. This is normal.



- (e) Clean and coat the threads of the TRD Hi-Strength 12-Point M14 Bolt with **Red Loctite 272** Thread Locking Compound or equivalent. Install into crankshaft pulley. Using the SSTs and a 1/2 inch drive **TORQUE WRENCH**, **Torque to 150 ft-lbs.**

Procedure



(f) Leave passenger side plastic body/fender shroud and fasteners off until the very end of the installation. This will make it much easier to install the TRD supplied serpentine belt later on. You should leave the passenger side front wheel assembly off as well to install the plastic shroud after the belt is installed.

(g) Remove the front driver's side wheel/tire. (Fig. 3-5)

(h) Partially remove the front driver side fender liner to expose the area behind the front fascia. (Fig 3-5)

- (1) Remove three push-in clips.
- (2) Remove one 10mm screw.
- (3) Remove one 1/4 turn clip.

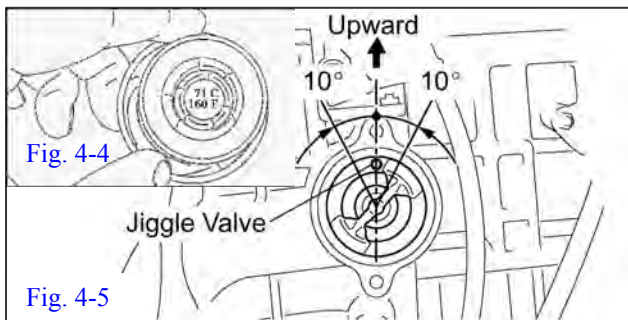
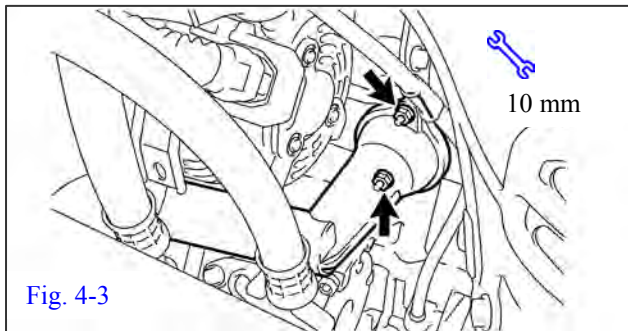
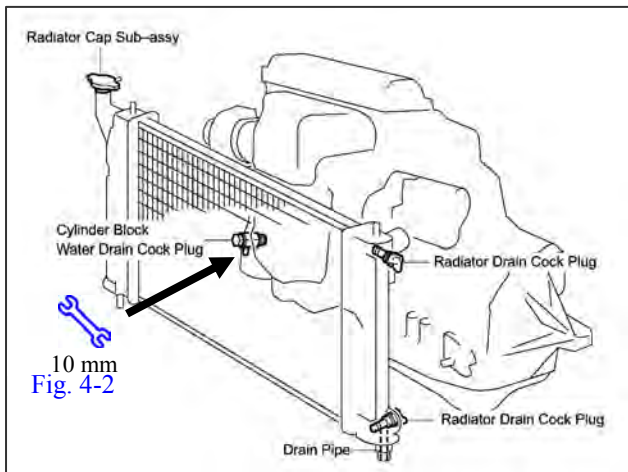
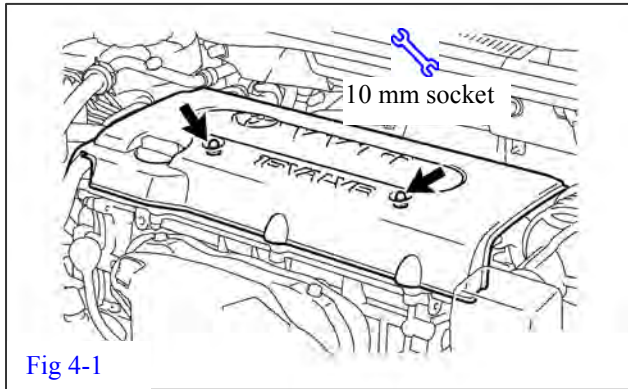
10 mm Socket
& small screwdriver

(4) Remove two 10mm screws. (Fig. 3-6)

(5) Remove one push-in clip. (Fig. 3-6)

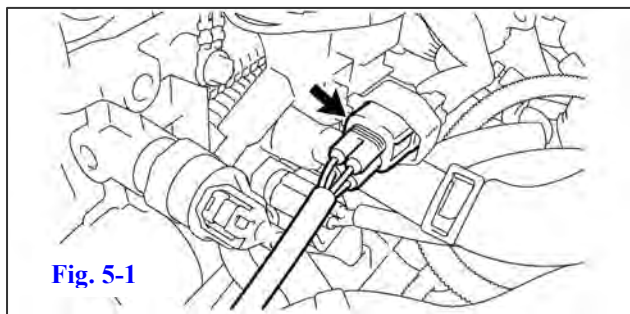
(6) Remove the clip holding the inlet tube to the fender. (Fig 3-7)

(7) Leave the wheel off and the inner fender loose until the TRD air cleaner has been installed.



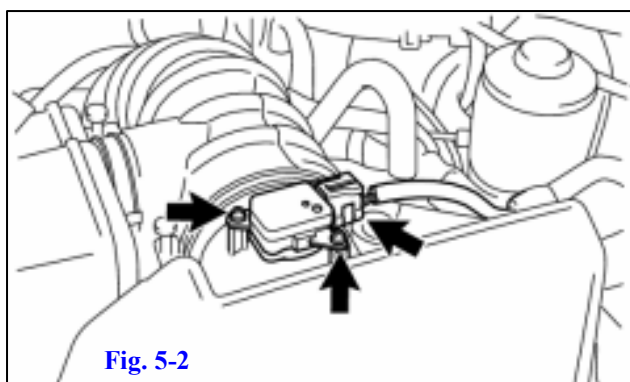
4. Coolant System Parts Removal & Installation.

- (a) Remove top engine cover. 10 mm socket. Remove under engine covers. (Fig.4-1)
- (b) Drain engine coolant into a clean receptacle for re-use later. **Caution:** Be sure to wear eye and hand protection. Also, be sure to allow radiator and engine to cool sufficiently before opening system to drain. Loosen Radiator Drain Cock Plug and Cylinder Block Water Drain Cock Plug. (10 mm wrench-Fig 4-2)
- (c) Remove OE Thermostat housing and factory 82° C (180°F) thermostat. (Fig. 4-3). Note: You may need to temporarily remove oil dipstick for better access. Use OE rubber thermostat gasket and place onto the TRD supplied 71°C (160°F) thermostat. (Fig.4-4)
- (d) Install TRD 71° C (160°F) thermostat. Be sure jiggle valve is in the 12 O’Clock position within +/- 10 degrees. (Fig. 4-5). Replace thermostat housing. (Torque to 80 in-lbs)
- (e) **Close all water drain valves.** Tighten the radiator drain **hand tight only.** Torque the engine block drain to 80 in-lbs.

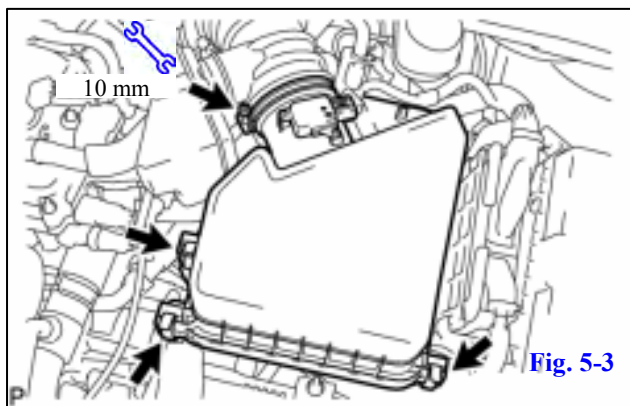


5. Engine Preparation: Intake System and Area.

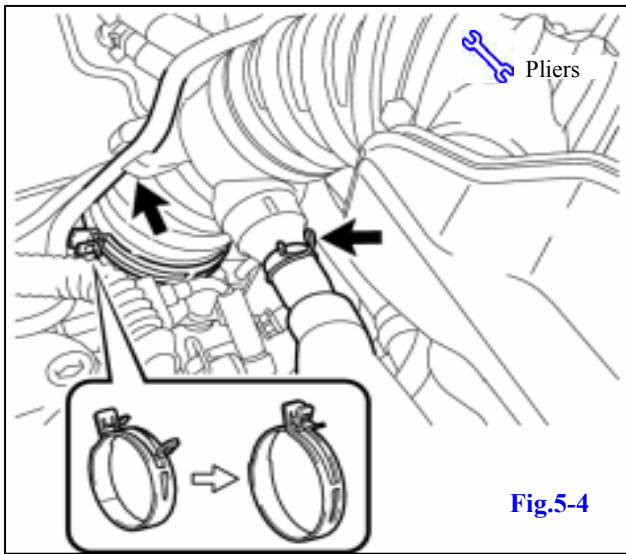
- (a) Disconnect Air Fuel Ratio (AFR) Sensor at the electrical connector (Fig 5-1).



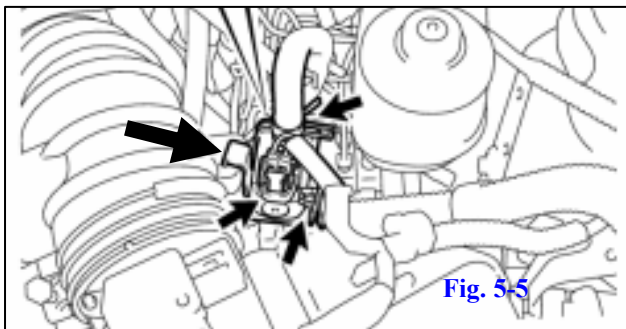
- (b) Unplug the Mass Air Flow Sensor harness connector. Remove wire harness from the air cleaner lid. Remove the two screws holding the sensor in place. Remove the sensor from the air cleaner lid. **CAUTION:** Be careful not to drop or damage the sensor. (Fig. 5-2)



- (c) Loosen the air inlet hose clamp (10mm). (Fig. 5-3)
- (d) Unfasten the 3 hook clamps. (Fig. 5-3)
- (e) Remove the air cleaner lid and air filter.

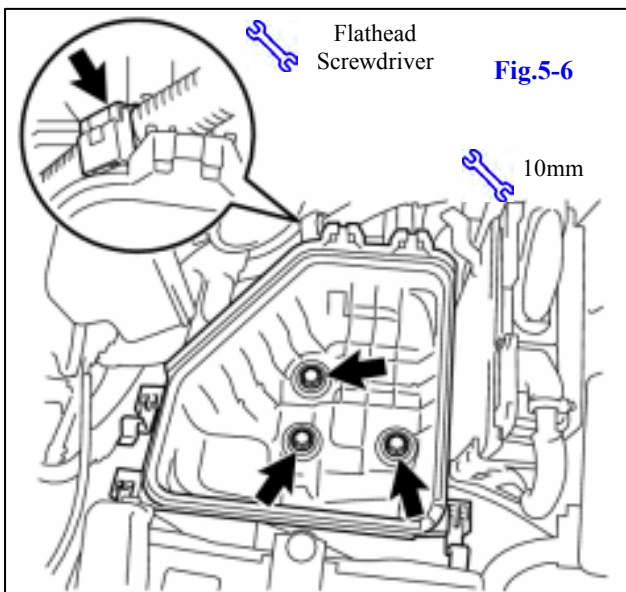


- (f) Squeeze and lock the spring clamp located at the throttle body. This will release the clamping pressure on the hose. Release the spring clamp for the crankcase breather tube and disconnect the hose. (Fig. 5-4). Unclip the vacuum hose from the air inlet tube.

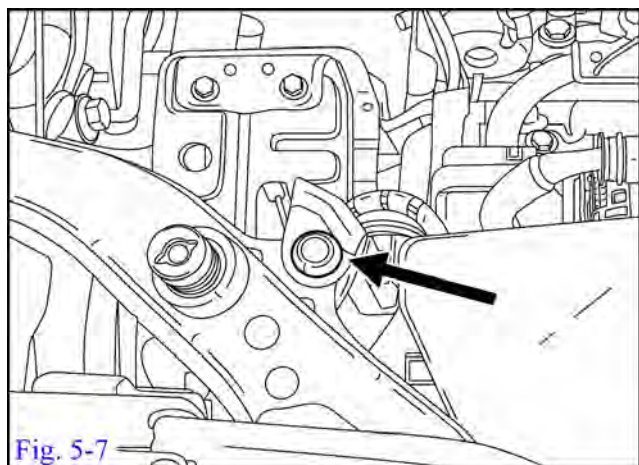


- (g) Remove the Vacuum Switched Valve (VSV) bracket from the slot in the air inlet tube by pulling straight up. (Fig. 5-5, Large Arrow)

- (h) Remove the air inlet tube.



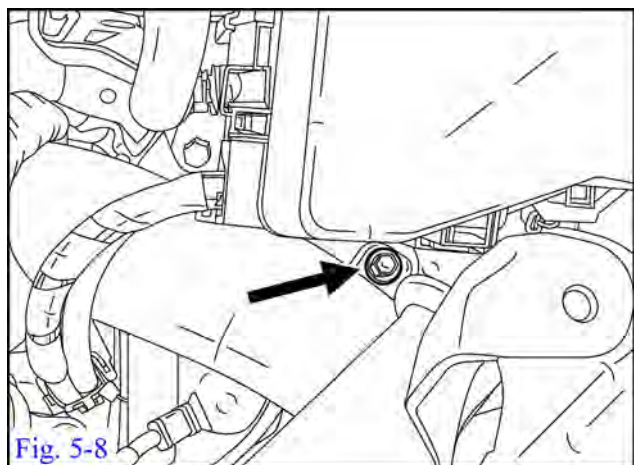
- (i) Remove the three (3) mounting bolts from the air cleaner bottom. (Fig. 5-6)(10mm)
- (j) Remove the harness clip from the air cleaner bottom and set aside. (Fig. 5-6)
- (k) Remove the air cleaner bottom.



- (l) Remove the push-in clip. (Fig. 5-7)



Flathead
Screwdriver

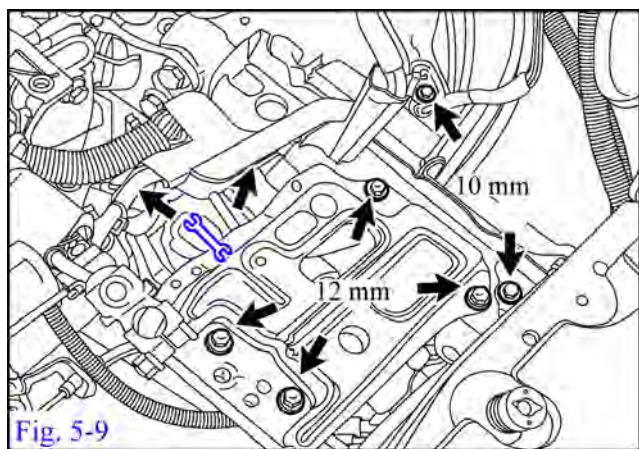


- (m) Remove the bolt from the mounting tab of the lower inlet duct. (Fig. 5-8)



10 mm Socket & 10"
long extension

- (n) Remove the air inlet duct from below.



- (o) Unclip the two locks that hold the wire harness protector to the battery tray. Remove battery tray (4 bolts, 12mm) save this hardware to be reinstalled later. Remove negative battery cable from body. Save the battery cable and bolt as these will be re-used later. Remove the bolt holding the body ground strap. The bolt will be re-used after the battery tray is installed. (Fig. 5-9)

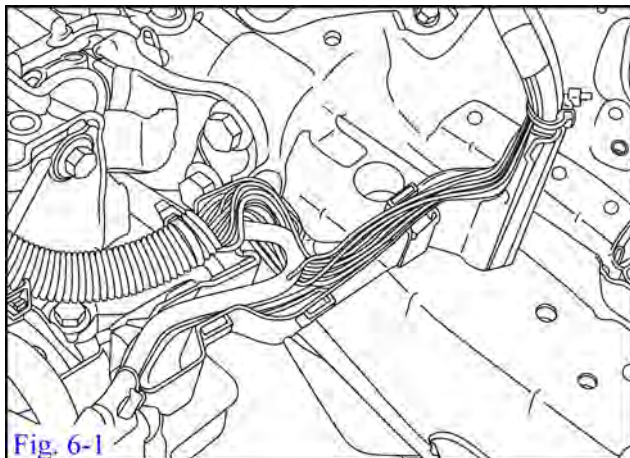
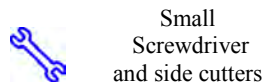


Fig. 6-1

6. Electrical

- (a) Separate the two halves of the plastic wire harness protector by unclipping the 10 clips holding the two halves together. Cut the three zip ties holding the wires to the lower protector. (Fig. 6-1)



Small
Screwdriver
and side cutters

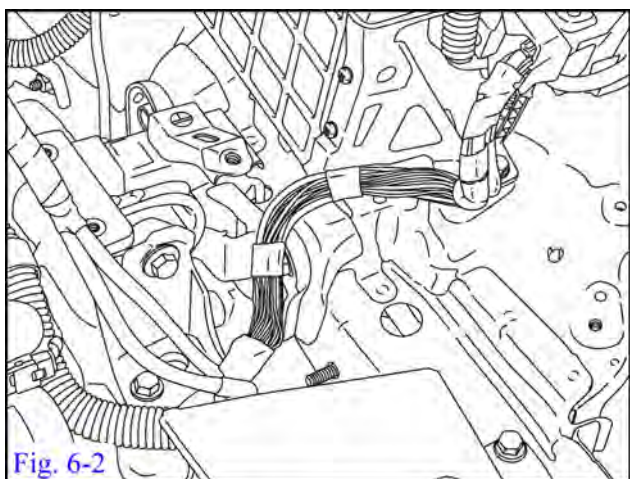
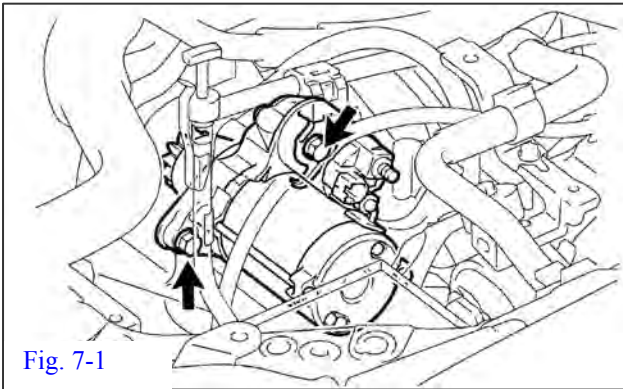


Fig. 6-2

- (b) Re-shape and route the wire harness as shown. (Fig. 6-2) Wrap the wire harness, and battery cables with electrical tape. Install 3/4" x 13" convolute loom wrap to the wiring from the fuse box to the battery cable split. Install 3/4" x 7" convolute loom wrap to the battery cables. Secure all convolute loom wrap to the wiring with electrical tape and wrap the convolute.

CAUTION: Ensure that all wires are covered by the convolute or electrical tape to prevent accidental wire rubbing on metal components. Use additional tape for insulation as necessary.

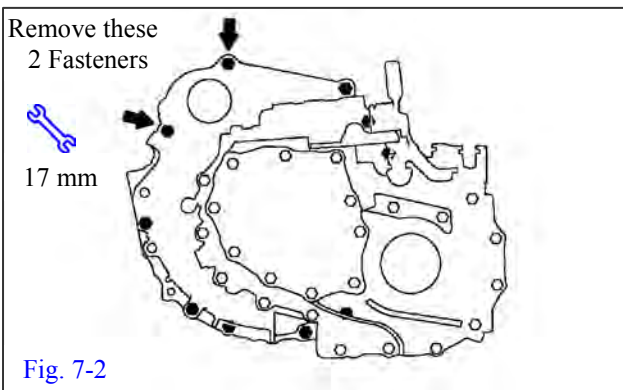
7. Starter and Hardware Removal



- (a) Disconnect starter motor wires (12mm socket) and remove the two starter-motor mounting bolts (14mm socket). Remove the starter motor and set it aside for now. (Fig. 7-1).

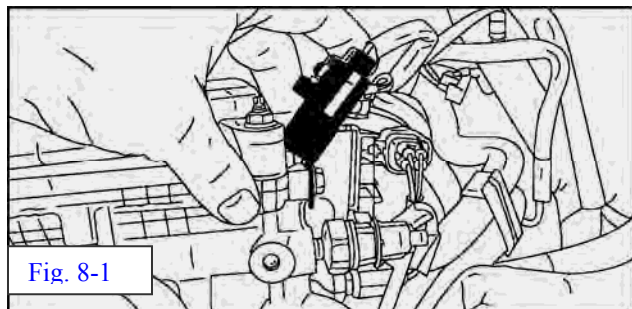


14 & 12mm
sockets

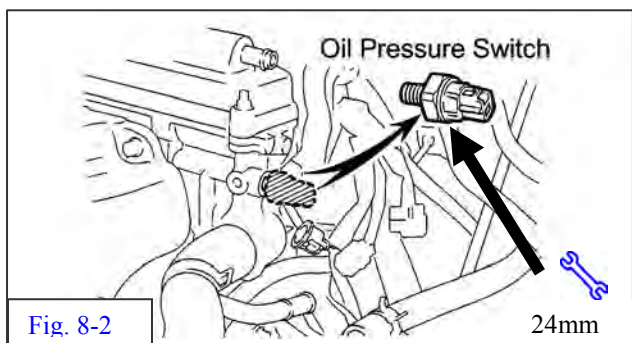


- (b) Remove two OE transmission bell-housing bolts (17 mm wrench) as shown in Figure 7-2. These will NOT be re-used.

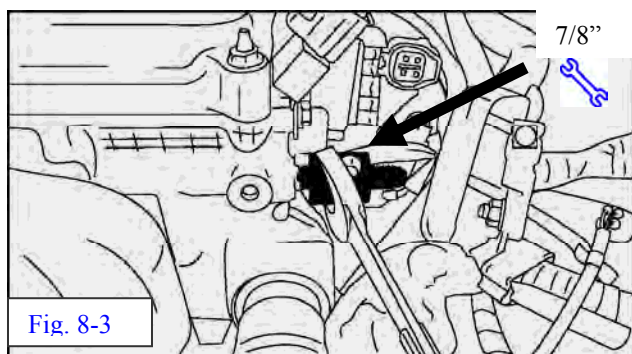
8. Oil Pressure Switch Adapter Installation



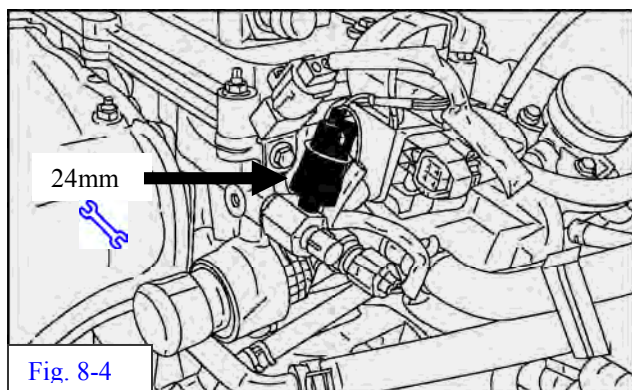
- (a) Rotate radio noise suppressor up at approximately a 45 degree angle. (Fig. 8-1).



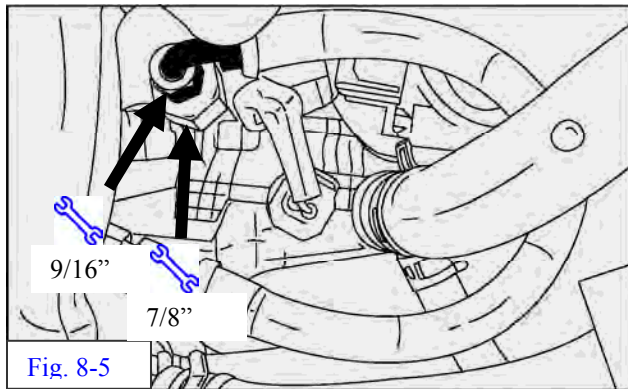
- (b) Unplug oil pressure switch. Remove OE oil pressure sending unit. Use a deep 24 mm (or 15/16") socket to remove. (Fig. 8-2).



- (c) Locate the TRD supplied hexagonal T fitting. Place a small amount of Teflon paste onto the threads and insert. (Torque to 11-ft-lbs). **NOTE:** The female threads need to be pointing upwards within about +/- 10 degrees from the 1:00 O 'Clock position. You will need a 7/8 inch wrench. (Fig. 8-3)



- (d) Place a small amount of Teflon paste onto threads and thread in OE Oil Pressure Switch into the top of TRD hexagonal T fitting. (Torque to 11-ft-lbs). Reconnect electrical connector. (Fig. 8-4). Be sure that the wires are in a relaxed, strain-free position.



- (e) Place a light coat of oil to the AN threads on the oil feed fitting. Attach the 90 degree side of the oil feed hose to the oil "t"-fitting (9/16" wrench).
- (f) Thread the oil line between the heater hoses as shown in (Fig 8-5). Tighten the AN fitting while holding the "t" fitting in position with a 7/8" wrench. **Do NOT use Teflon tape on AN fittings.** Cover open end of line until connection is made in later step.

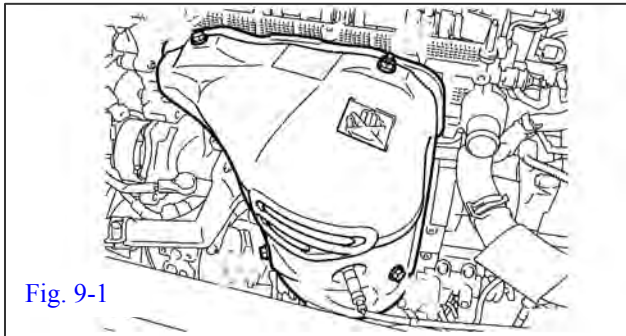


Fig. 9-1

9. Heat Shield Replacement (Manual transmission applications skip step 9.a and proceed to step 9.b)

(a) **Auto. trans vehicles only:** Detach the wire harness on the trans. dipstick tube. Remove transmission dipstick tube from transmission using 10 mm wrench. **Use caution to avoid debris from entering the hole in the transmission.** Install TRD supplied dipstick tube. **Torque bolt to 80 in-lbs.** Reattach wire harness to the new dipstick tube.



(b) Replace OE heat shield with TRD provided pre-bent heat shield. (See Fig 9-1). You will need to remove 4 bolts, **CAUTION:** The sheet metal heat shield has many sharp edges! Care should be taken when handling to avoid getting cut.

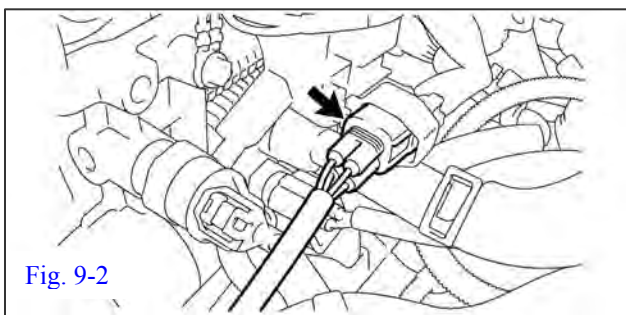


Fig. 9-2

(c) After all of the fasteners are removed, carefully remove the OE heat shield.

(d) Now install the TRD supplied heat shield. Secure heat shield with the 4 O.E. bolts **Torque to 9 ft-lbs.**

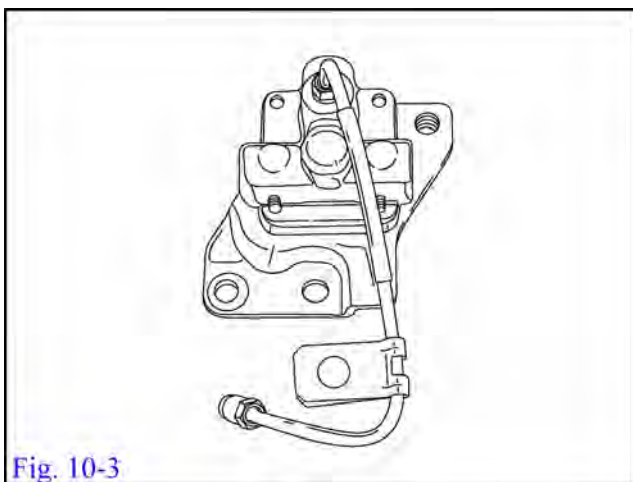
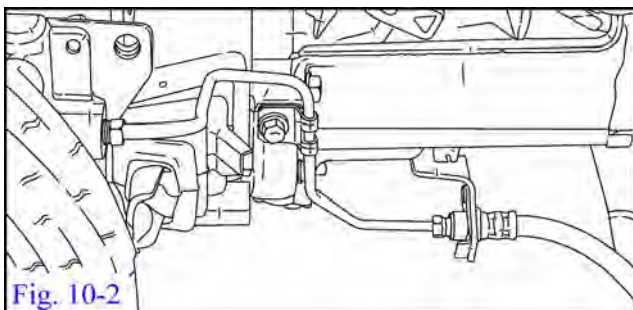
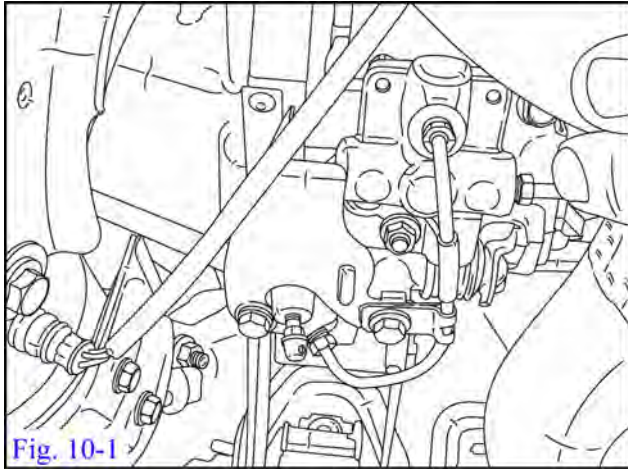
(e) Reconnect the AFR sensor wire connector and secure wires to radiator hose with OE wire clip. (See Fig 9-2).

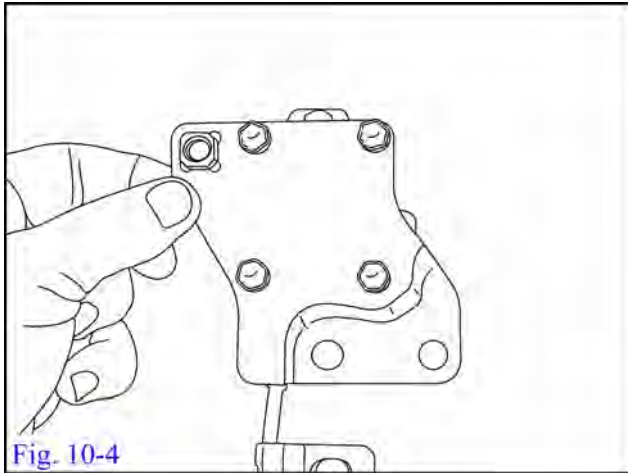
Auto Transmission: Skip this step and proceed to step 11.

10. Clutch Cylinder – Manual Transmission Only

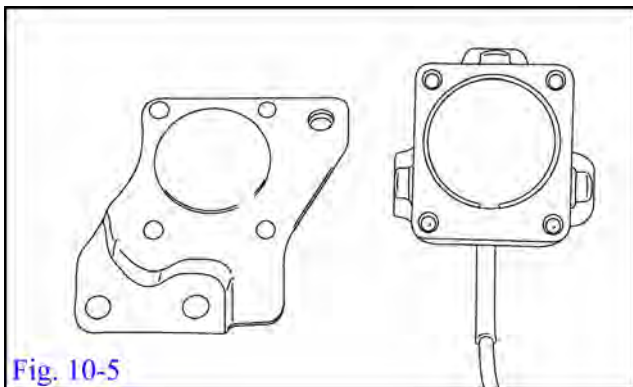
- + CAUTION:** The following steps will cause a leakage of brake fluid. Use appropriate personal protection gear (gloves and safety glasses) to avoid personal injury. When completed, remove any residual brake fluid from painted surfaces with water as brake fluid can damage painted surfaces. Do not allow water to get into the brake system!

- (a) Place a line clamp on the soft clutch slave feed line to prevent unnecessary loss of brake fluid first.
- (b) Remove the heat shield from the accumulator using a 12mm socket. Save the bolts. The shield will NOT be re-used. (See Fig 10-1).
- (c) Remove the clutch hard line clamp on the transmission, leaving the bracket attached to the line (10 mm socket). Loosen the remaining line bracket (where the hard and soft lines connect), but leave attached to the transmission (12 mm socket). (See Fig 10-2).
- (d) Disconnect the hard clutch line between the transmission and the accumulator inlet. (See Fig 10-2).
- (e) Remove the clutch hard line between the slave cylinder and accumulator outlet. (See Fig 10-3).
- (f) Remove the 2 nuts holding the accumulator and bracket to the clutch slave cylinder (12mm Socket). (See Fig 10-3).

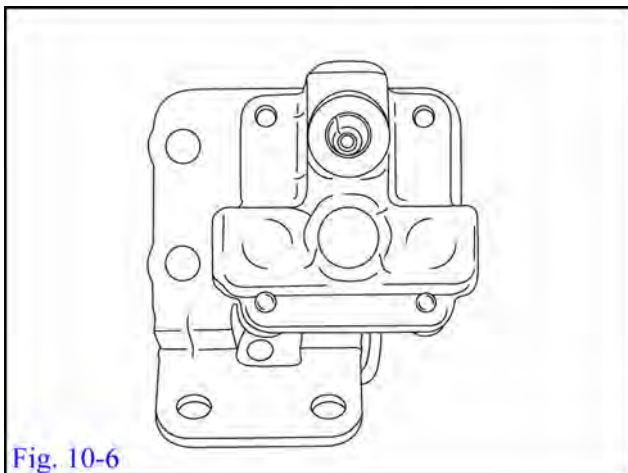




- (g) Remove the 4 bolts holding the clutch accumulator to the accumulator bracket. (See Fig 10-4). (10mm Wrench) **CAUTION:** Make sure the ring on the back side of the accumulator does not fall out. (See Fig 10-5). Fluid will leak out during use if the ring is not in place when reinstalled.



- (h) Replace the accumulator bracket with the TRD supplied bracket (See Fig 10-6). **Torque the four bolts to 80in-lbs.** (10mm socket)
- (i) Cover all open lines and ports. The clutch accumulator assembly will be re-installed after the supercharger unit is installed. Set this assembly aside for now.



11. Engine Preparation: Drive Belt Side.

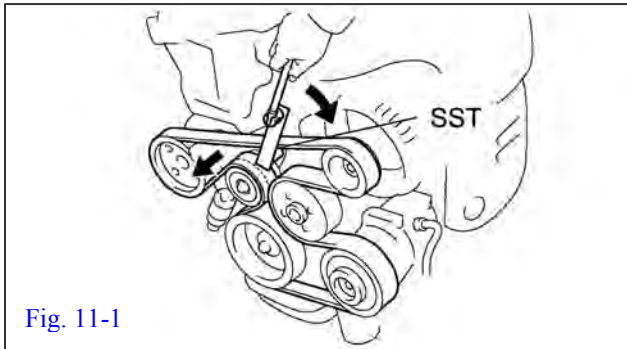


Fig. 11-1

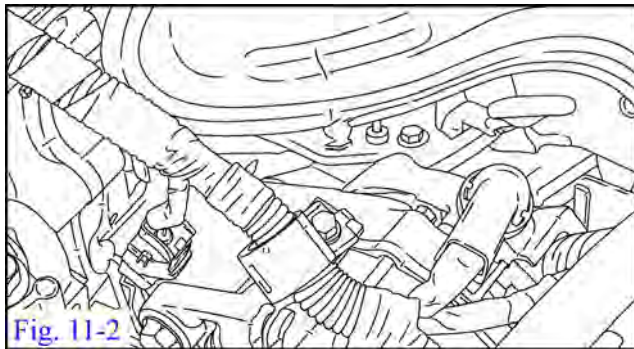


Fig. 11-2

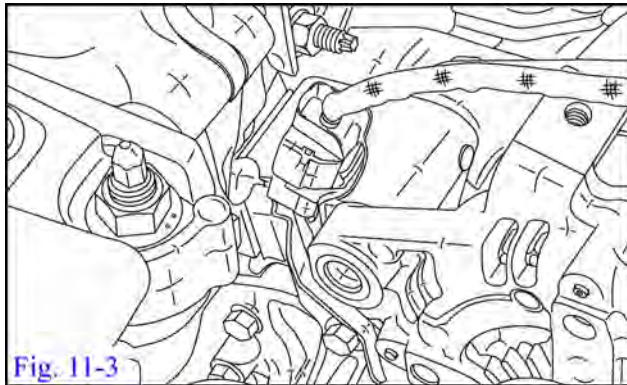


Fig. 11-3

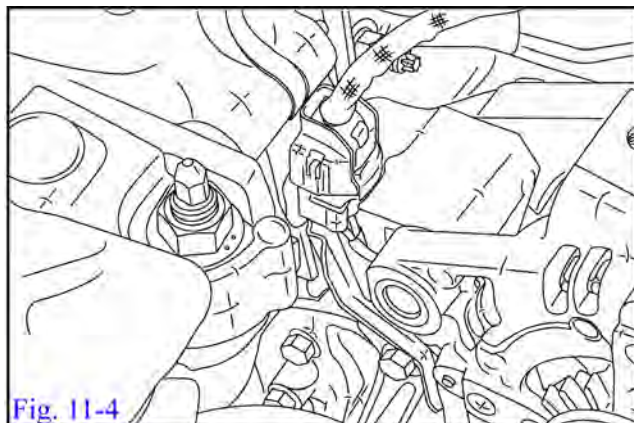
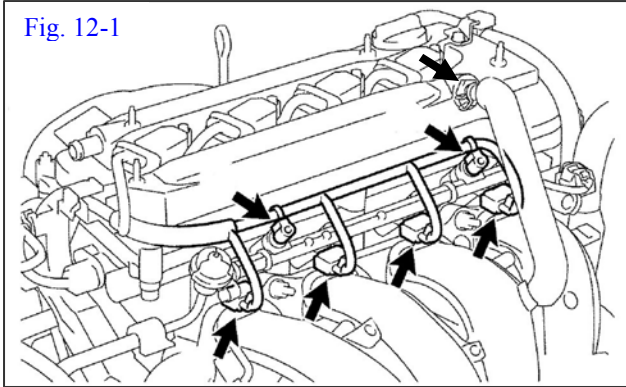


Fig. 11-4

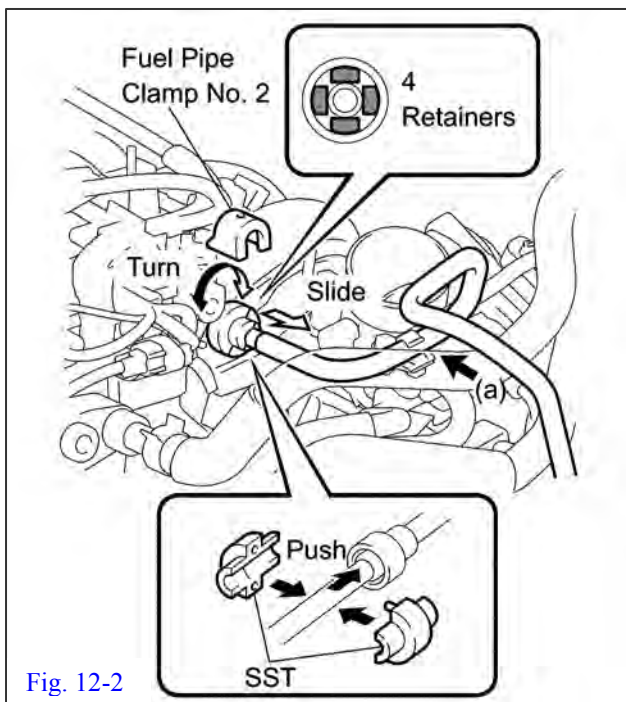
- (a) Remove factory serpentine drive belt. Utilize **SST 09249-63010** leverage tool with 19mm, 6-point socket and lever arm or ratchet. (See Fig 11-1). The tensioner moves slowly. While applying medium tension, allow the tensioner to “float” forward. **CAUTION:** Applying too much tension or forcing the tensioner can cause the assembly to break.
- (b) Using a small flat blade tool, remove the plastic retainer clip from the wire harness on the alternator. Remove and discard the harness bracket attached to the top of the alternator. Retain the fastener for reuse later. (Fig. 11-2).
- (c) Disconnect Alternator wiring. (See Fig 11-2).
- (d) Add TRD-supplied CPS extension wire to connector on the engine.
- (e) Loosen, but do not remove, the CPS connector bracket from engine (10mm wrench) figure 11-3. Rotate the bracket toward the engine so the connector is facing up at the 12 o'clock position. Allow slight clearance between the engine and the connector. Tighten metal bracket while holding the bracket in place. **Torque to 80 in-lbs.**
- (f) Remove alternator pivot bolt see figure 11-3.& 11-4 (14mm Socket).

Fig. 12-1



12. Fuel System.

(a) Disconnect the rear valve cover ventilation hose from the cam cover, the 2 wire harness zip-tie clamps from the fuel rail and the 4 fuel injector electrical connectors. (Fig. 12-1). Blow dirt and debris away from fuel injectors and cylinder head to prevent dirt from getting into engine.



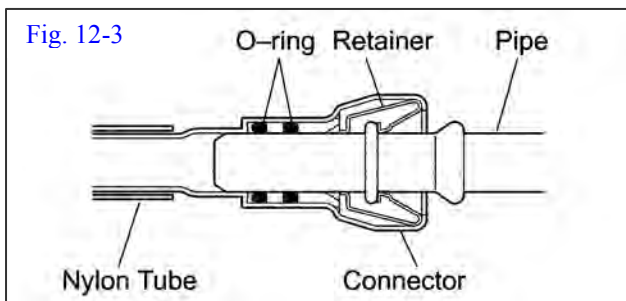
(b) Disconnect factory fuel supply hose. Use SST 09268-21010. **Caution: Fuel system is under high pressure. Cover area with dry shop rags and be sure to wear approved eye and hand protection before beginning removal.** See Figures 12-2 and 12-3. Remove fuel line from vehicle hard line.

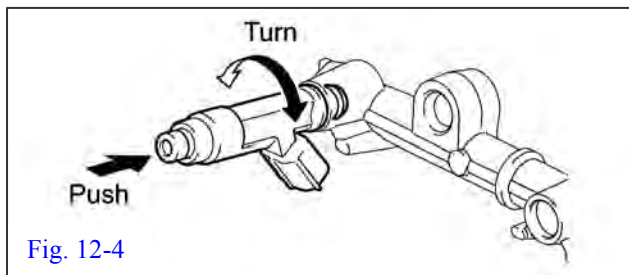
(c) Remove fuel rail fasteners (12 mm wrench) and then remove the fuel rail along with the 4 OE fuel injectors. Be careful not to drop the fuel injectors while removing the assembly. **CAUTION: The fuel rail will still have gasoline in it. Use appropriate personal protection (gloves and safety glasses). Use shop rags to contain any spilled fuel.**

Fig. 12-2

(d) Remove factory fuel injectors from the fuel rail. Check to ensure all o-rings have been removed from the cylinder head

Fig. 12-3





- (e) Apply a light coat of gasoline or motor oil to the fuel injector o-rings as needed. Install o-rings into cylinder head. Carefully install the four TRD hi-flow fuel injectors into the fuel rail. (Fig. 12-4).
- (f) Install the fuel rail assembly. Be sure that the two O.E. spacers and the o-rings are properly seated in place. Check that the fuel injectors rotate freely and then evenly tighten fuel rail fasteners. (**Torque to 15 ft-lbs**). Re-check fuel injector for freedom of rotation. If rotation is not possible, check for binding.
- (g) Install the fuel supply hose. **Be sure it locks properly and securely into place.** Install the factory Fuel Line Clamp over the connection at the fuel rail and O.E. fuel hard line.
- (h) Reconnect fuel injector electrical connectors and ventilation hose.



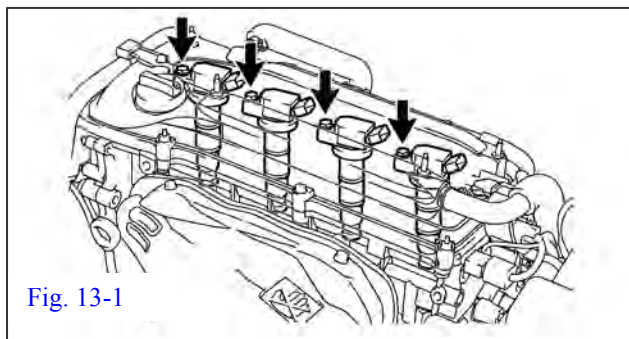


Fig. 13-1

13. Spark Plug Replacement.

(a) Unplug ignition coil connectors and remove the ignition coils. (10 mm socket). (Fig. 13-1).

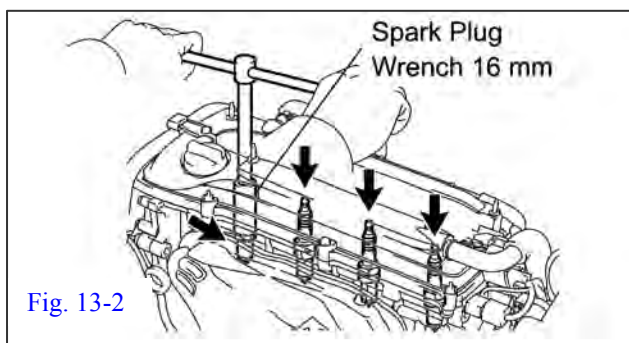


Fig. 13-2

(b) Remove factory spark plugs. Use a 16 mm or 5/8" spark plug socket. (Stock spark plug is: **Denso SK20R11** or **NGK IFR6A11**) (Fig. 13-2).

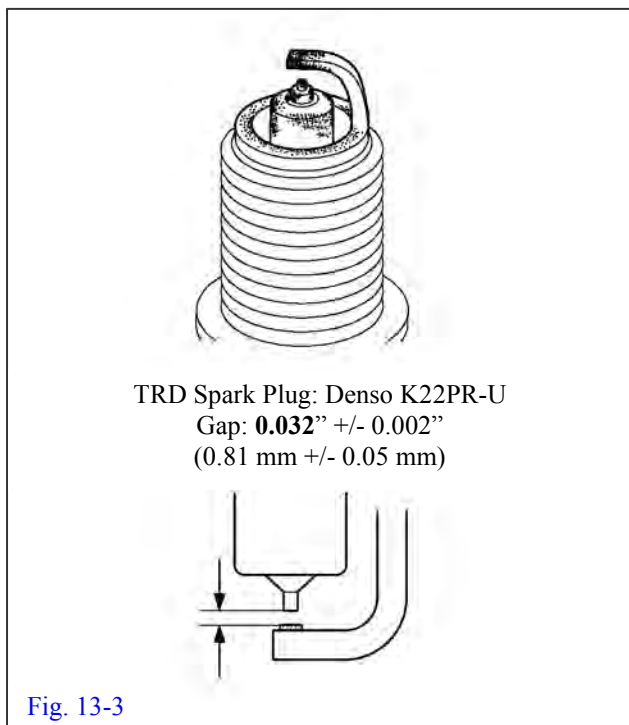


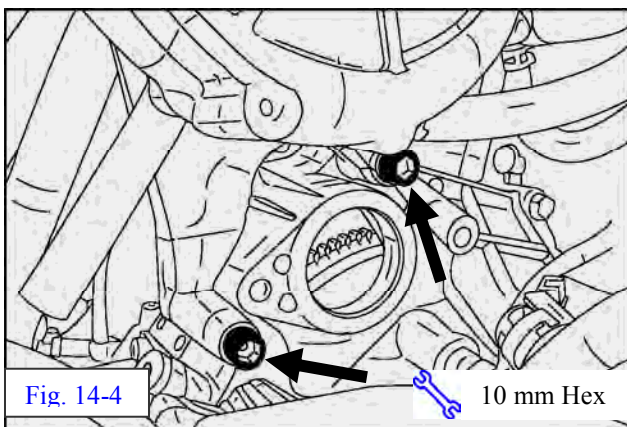
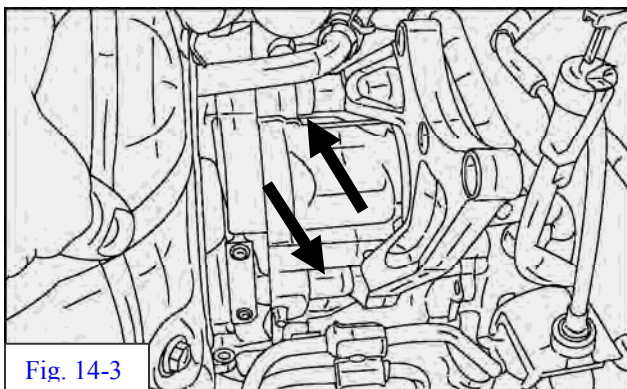
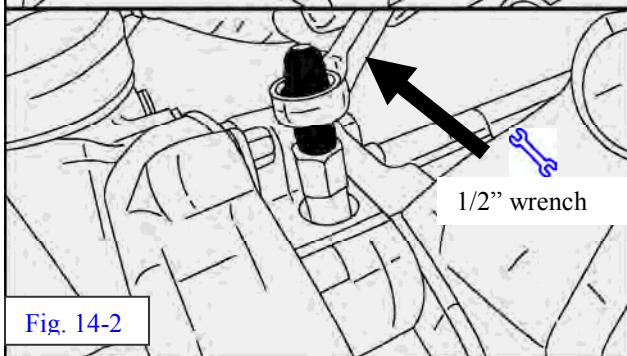
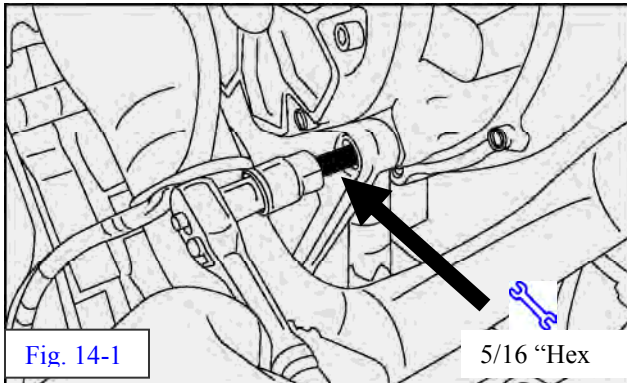
Fig. 13-3

(c) Ensure that all TRD (P/N PTR24-21050) **Denso K22PR-U** spark plugs are **gapped to 0.032"** (0.81mm) prior to installation. (Fig. 13-3).

(d) Apply a small amount of anti-seize to the spark plug threads prior to installation. Install TRD spark plugs. Be sure to use a spark plug socket to install so as to prevent damage to the spark plug gap and/or electrode. **Torque to 14 ft-lbs.**

(e) Re-install ignition coils and secure. (10 mm socket). **Torque to 80 in-lbs.** (Fig. 13-1).

(f) Reconnect spark plug ignition coil connectors.



14. Supercharger drive / unit installation

- (a) Remove supercharger assembly from packaging and place onto a workbench.
- (b) Install the three 3/8"-16 UNC x 1" Socket Head Cap Screws that mount the supercharger to the engine/bell housing bracket. 5/16 inch Allen wrench. (Fig. 14-1). **Torque bolts to 25 ft-lbs.**
- (c) Apply a very small amount of Teflon paste to the tapered threads of the TRD Supercharger Oil Feed Fitting. Attach the oil feed fitting to the Supercharger oil nozzle using a 1/2" box wrench. (Fig. 14-2). **NOTE:** Use a second 1/2" wrench to hold the supercharger fitting in place as you tighten the TRD fitting into it.
- (d) Set the supercharger assembly onto the bell-housing (**Note:** The supercharger unit is removed from the bracket for clarity only.) with the supercharger drive pulley side on the outside of the alternator. (Fig. 14-3). **NOTE:** While placing the supercharger unit on the engine, thread the previously installed CPS extension wire through the drive pulley bracket opening.
- (e) Install two 12 x 1.25 x 80 SHCS TRD bolts provided (10 mm "LONG" Allen wrench). **Leave bolts loose for now.** (See Fig 14-4).
>**NOTE:** All auto. trans. applications require two supplemental spacers to be installed between the s/c bracket and the vehicle trans. housing. The short spacer fits onto the upper screw and the longer spacer is to be placed at the lower mount location.

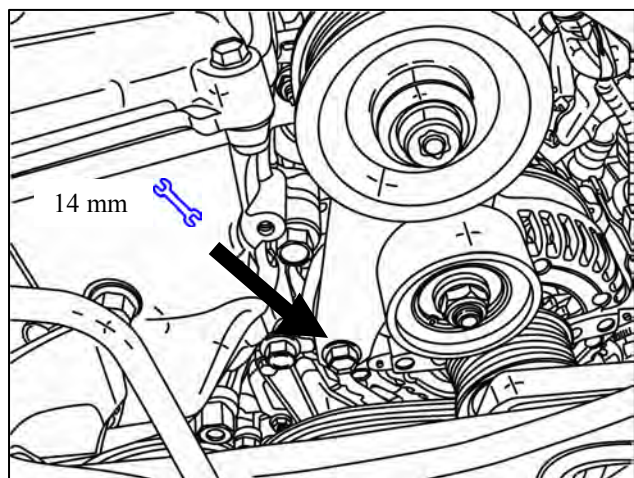


Fig. 14-5

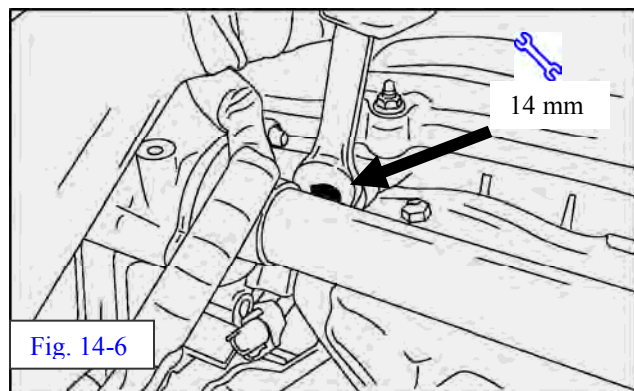


Fig. 14-6

(f) Place OE alternator bolt through supercharger bracket and thread into alternator. **Leave bolt loose for now.** (Fig. 14-5) **NOTE: ONLY** if holes do not align, see **“Alignment Procedure”**.

(g) Thread in TRD M10 x 1.25 x 25 flange head bolt into cylinder head. 14 mm wrench. **Leave bolt loose for now.** (Fig. 14-6).

(h) Ensure supercharger drive tube assembly and brackets are properly aligned or “seated”. Turn the supercharger pulley by hand to confirm that the rotation is smooth and does not bind or exhibit any “tight” spots.



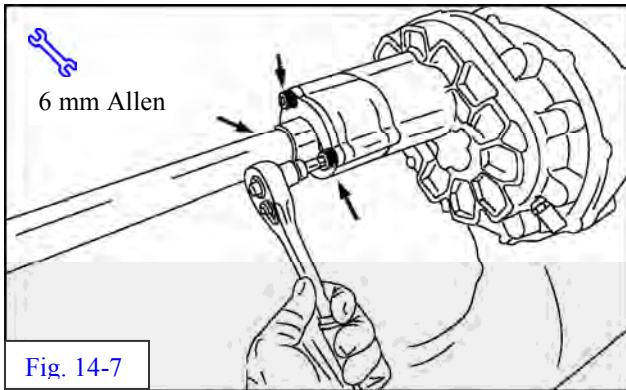
NOTE: If assembly does not turn smoothly, then you have a misalignment issue that will likely cause unit failure if it is not addressed. See **“Alignment Procedure”**.

(i) Proceed to uniformly tighten ALL supercharger fasteners in the specified order at this time. First snug, then torque fasteners **in sequence** as follows:

1. OEM Alternator Pivot Bolt: 16 ft-lbs
2. TRD M10 Flange Head Bolt: 16 ft-lbs
3. TRD S/C Rear Bracket Bolts: 47 ft-lbs

(NOTE: Split bushings installed in rear bracket are meant to self adjust as the unit is secured to the transmission. When tightening, observe that the bushings slide freely in the bracket and contact the transmission evenly. Do not force bushing as damage to the bracket may occur.)

***Alignment Procedure:** See next page.



Note: Only perform the following alignment steps if a bolt and hole alignment or binding issue is observed.

***Alignment Procedure:** Leave the rear mounting bolts in the supercharger and transmission installed, but loose to maintain bracket alignment. Temporarily loosen the three bracket fasteners a few revolutions, as shown in Fig. 14-7. 6mm Allen wrench. **Do NOT take the bolts out of their respective holes.** Line up the alternator pivot bolt and thread in a few turns. Re-tighten the 3 bracket fasteners Fig 14-7. (**NOTE:** A wobble drive Allen wrench may be the preferred tool here.) Then tighten the Alternator pivot bolt, then the front bracket bolt to cylinder head, then last, the supercharger rear bracket bolts.

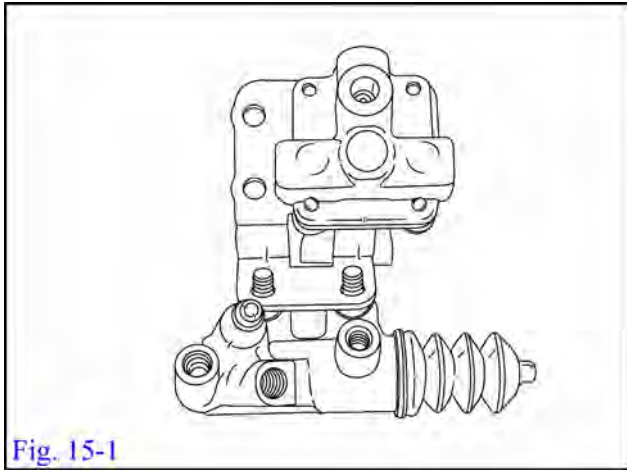


Fig. 15-1

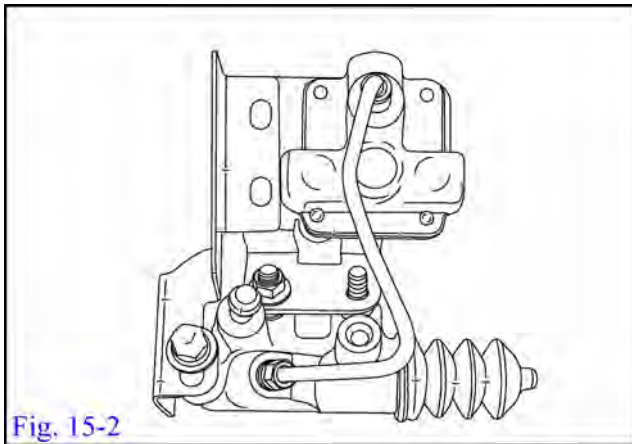


Fig. 15-2

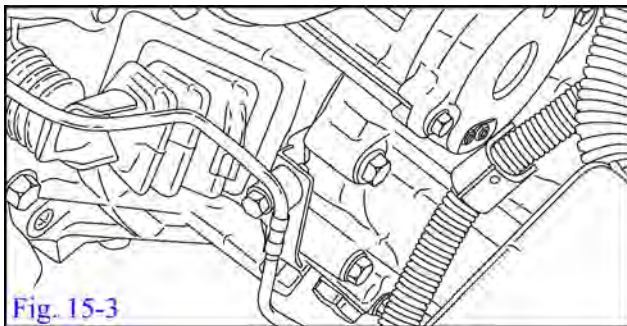

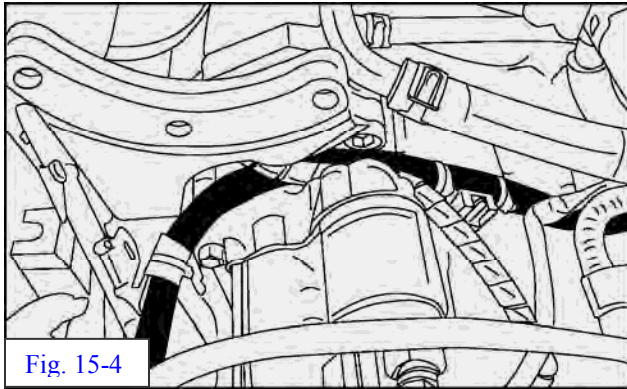


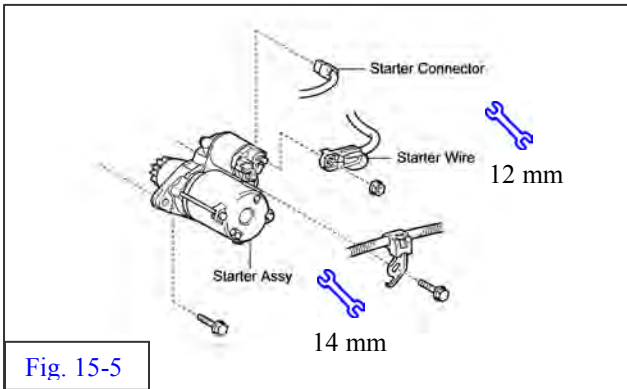
Fig. 15-3


15. Clutch Cylinder Re-Assembly (steps 15a.-15g. apply to manual transmission vehicles ONLY)

- (a) Bolt the accumulator/TRD bracket assembly to the clutch slave studs, re-using the 2 nuts removed. **Torque to 16ft-lbs** (Fig. 15-1, shown out of vehicle for clarity only).
- (b) Use one of the heat shield bolts, two M6 screws and the TRD accumulator heat shield to complete the installation of the accumulator bracket to the slave cylinder. (10mm & 12mm sockets) **Torque to 80 in-lbs** (10mm) & **16ft-lbs**. (12mm) (Fig. 15-2, shown out of vehicle for clarity only).
- (c) Install the new clutch hard line from the clutch accumulator to the clutch slave cylinder and tighten. (Fig. 15-2)
- (d) Attach the clutch hard line to the accumulator inlet. Leave loose for now.
- (e) Using the supplied bolt and spacer, re-attach the clutch hard line to the transmission and secure. (10mm socket) **Torque to 16ft-lbs**. (Fig. 15-3)
- (f) Tighten the hard clutch line to the accumulator, and tighten the hard line to flex line bracket. **Torque to 16ft-lbs**.
- (g)  Bleed the clutch hydraulic system as per the Repair Manual. With another person operating the clutch pedal, visually inspect the clutch accumulator/slave area for leaks.

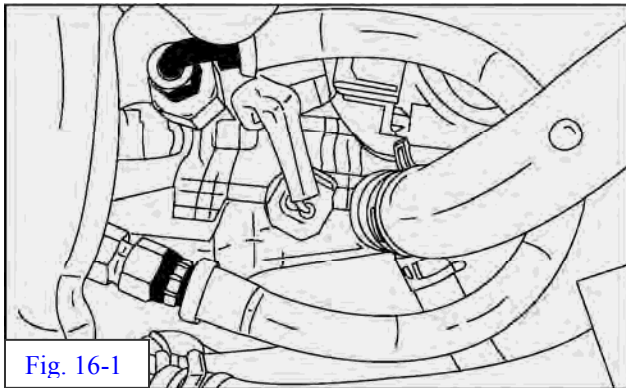


- (h) Route the wiring loom and automatic transmission breather hose (if applicable) before and/or during starter motor installation. (See Fig. 15-4). **NOTE:** Supercharger is removed in photo for clarity.

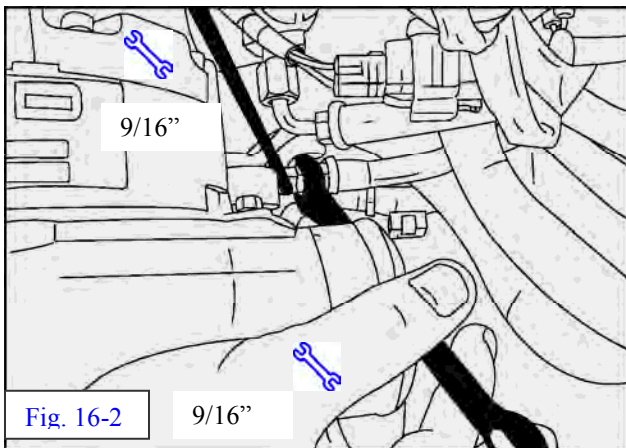


- (i) Reinstall starter motor and starter motor wires. Tighten starter motor mounting bolts. 14 mm wrench. **Torque to 27 ft-lbs (Fig. 15-5)**
 **NOTE:** Ensure that no wires or hoses are pinched and remain strain-free.
- (j) Re-connect Starter Connector wire plug and main Starter Wire. (12 mm wrench.) **Torque to 7 ft-lbs. (Fig. 15-5)**

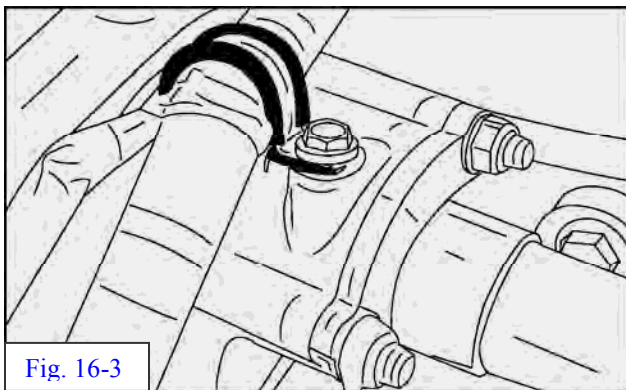
16. Oil Feed Line & A/C Harness.



- (a) Attach open end of the previously installed TRD Oil Feed Line to supercharger fitting. Leave hand tight for now. (See Fig 16-1.) **Do not use Teflon paste on flared fittings.** The feed tube should route between heater hoses.
- (b) Adjust (rotate 90 degrees) the water line clamp as needed so that it does not interfere with Oil Feed Line.



- (c) Now **carefully** tighten both ends of the Oil Feed Line (9/16" wrench) and recheck for clearance around line. Loosen and re-clock as needed until line is clear and then re-tighten into place. (Fig. 16-2). **Do not over-tighten flared fittings!**
- (d) Reconnect Alternator and Crank Position Sensor wires.



- (e) Add wire clamp to alternator-a/c harness at the supercharger front bearing bracket. Re-use O.E. 6mm bolt removed from alternator in previous step to fasten clamp to cast aluminum SC bracket. Use 2 small TRD-provided zip ties to secure CPS wire to wire loom. Keep wires and wire connectors strain-free and away from the exhaust manifold heat and drive pulley as much as possible. **Torque to 80 in-lbs** (See Fig. 16-3)

17. Oil Return Line.

- (a) Attach supercharger Oil Return Line between TRD oil pan and oil fitting on bottom of supercharger housing. (Fig. 17-1).

NOTE:

- (1) You will need to place the TRD supplied hose clamps onto the hose ends before installing assembly onto the motor.
- (2) **Manual transmission applications only:** Slide the supplied plastic braided sleeve (3/4" dia.) onto the return line at the supercharger end. After line installation, position the sleeve so that it protects the line from chaffing on the clutch accumulator line and fittings.

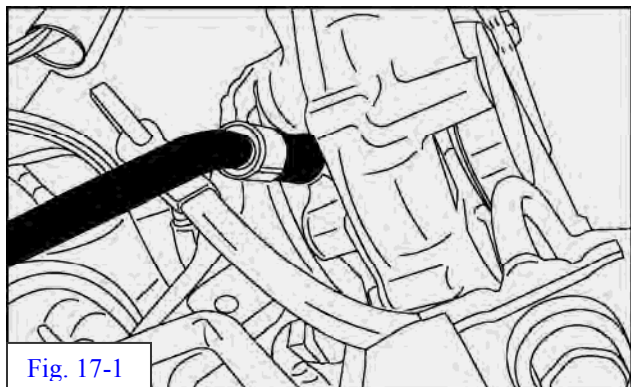


Fig. 17-1

- (b) Be sure hose clamps are secure and in place. (Fig. 17-2)
- (c) Fasten Oil Return Line mounting bracket to OE engine mount with the OE hardware. Remove the upper flange head screw that secures the steel mount to the bellhousing. Sandwich the TRD return line between the OE screw and the mount. **Torque to 35 ft-lbs.**

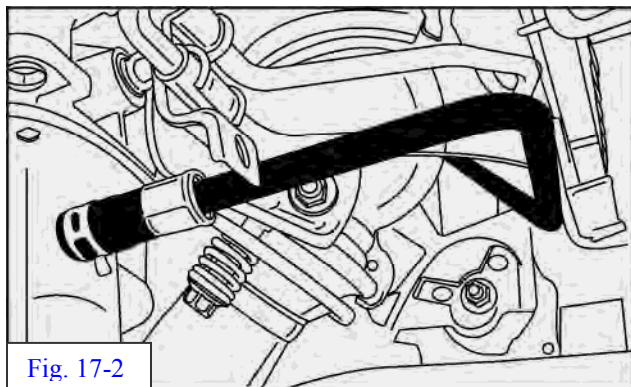
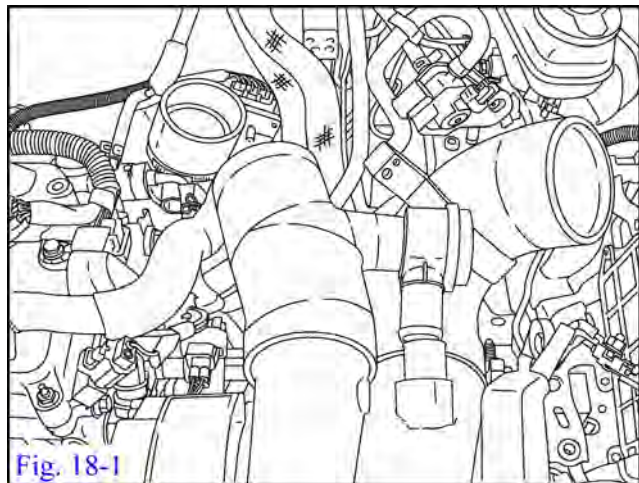


Fig. 17-2

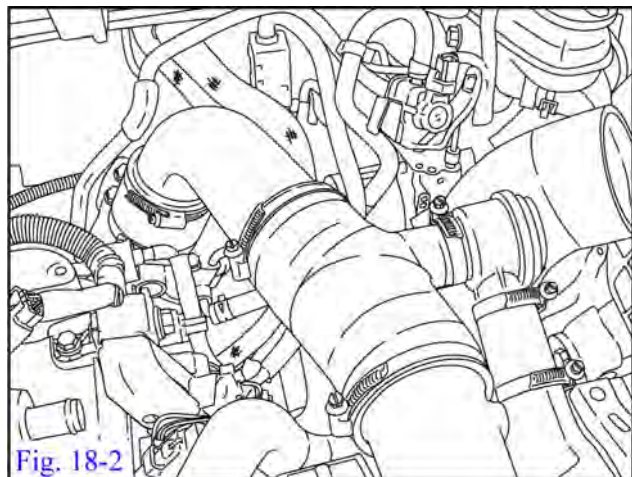
Visually check that Oil Return Line is free of abrasion and interference with any other item.

⚠ **IMPORTANT: The oil drain line MUST allow oil from the supercharger to drain “downhill” into the oil pan. Any uphill sections may influence improper drainage resulting in supercharger damage. DO NOT overfill engine oil.

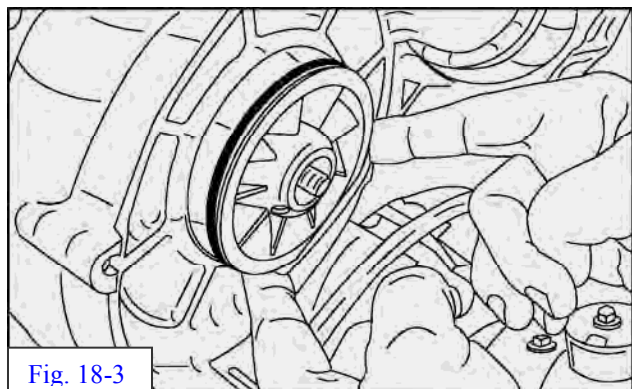
Procedure

**18. Air Inlet and Discharge System**

- (a) Install the $\text{Ø}2.5'' \times 2.25''$ long sleeve onto the throttle body and secure using the provided clamp. (Fig 18-1).
- (b) Locate the molded $\text{Ø}2.5'' \times 45^\circ$ sleeve and attach the longer leg to the supercharger. Position as shown and rotate as needed and secure. (Fig 18-1).



- (c) Connect the two sleeves using the $\text{Ø}2.5 \times 90^\circ$ aluminum tube and secure using the supplied 60-80mm hose clamps. (See Fig 18-2).



- (d) Fit intake manifold O-Ring to supercharger assembly. Be sure to use some assembly lube or motor oil on O-Ring prior to installation. (Fig. 18-3).

Procedure

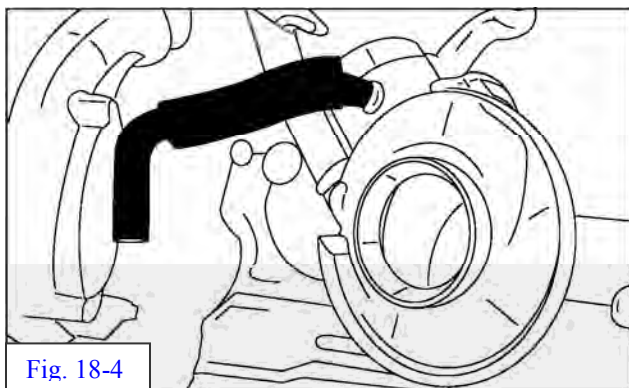


Fig. 18-4

- (e) Install O.E. valve cover breather hose and O.E. clamp onto cast aluminum TRD intake manifold. Install intake with bypass hose to bypass valve. Do not tighten hose clamps yet. (Fig. 18-4).

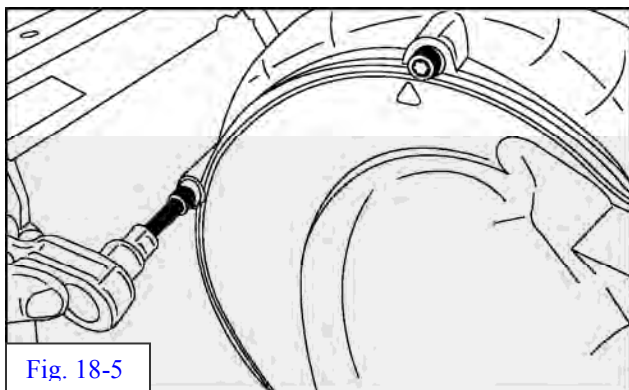


Fig. 18-5

- (f) Fit TRD inlet manifold to supercharger. NOTE: Use a small amount of motor oil or equivalent to lubricate the intake bore and O-ring surface interface prior to assembly. Be sure to align manifold so that all hoses are free from kinks and away from any sharp edges. (Fig 18-5).

- (g) Utilizing the 3 TRD supplied 6 x 1.0 x 16mm SHCS and three 6 mm flat washers, clamp down TRD inlet manifold to supercharger assembly. 5 mm Allen wrench. (Fig. 18-5). **Torque to 15 inch-lbs.**

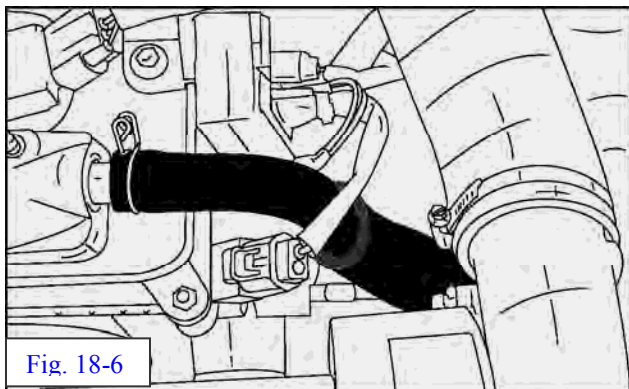
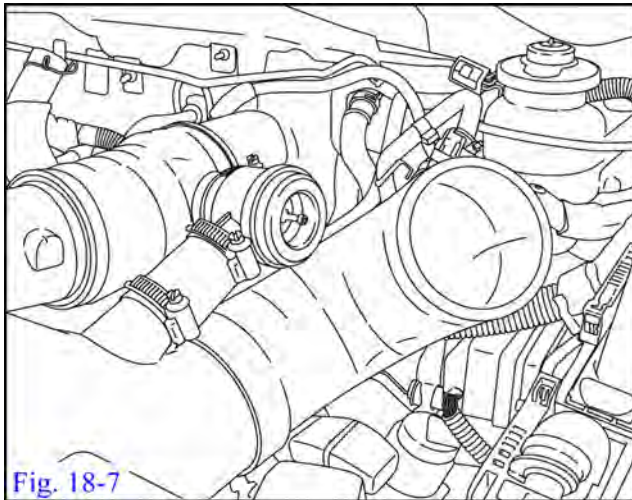


Fig. 18-6

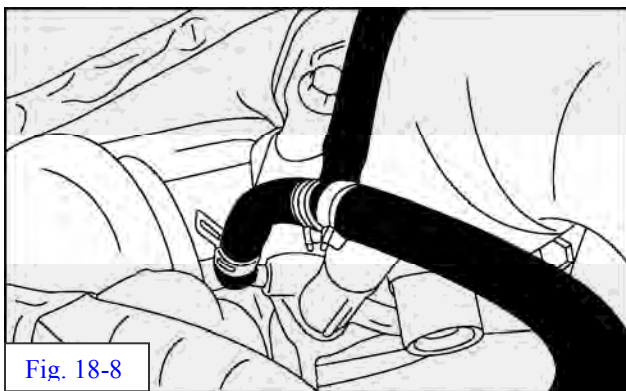
- (h) Install valve cover breather hose onto valve cover. Be sure hose is not kinked. Re-adjust as necessary. (Fig. 18-6).

Procedure

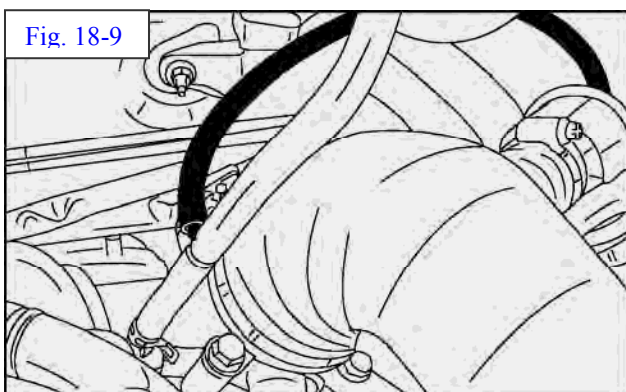


(i) Install the intake hose onto inlet manifold and secure with hose clamp. (NOTE: Proper orientation of intake hose is with large diameter end attached to aluminum intake manifold.) (Fig. 18-7).

(j) Attach bypass valve to discharge tube and secure with hose clamp. Connect bypass valve discharge to intake tube with the 2 ½ in rubber hose and the appropriate hose clamp. Adjust TRD inlet manifold as needed. Tighten all hose clamps for bypass and discharge hoses.



(k) Cut O.E. vacuum line near throttle body and insert TRD-provided plastic T fitting and TRD-provided vacuum hose. (Fig 18-8).



(l) Connect other end of TRD-provided vacuum hose to nipple on end of bypass valve. (Fig. 18-9).

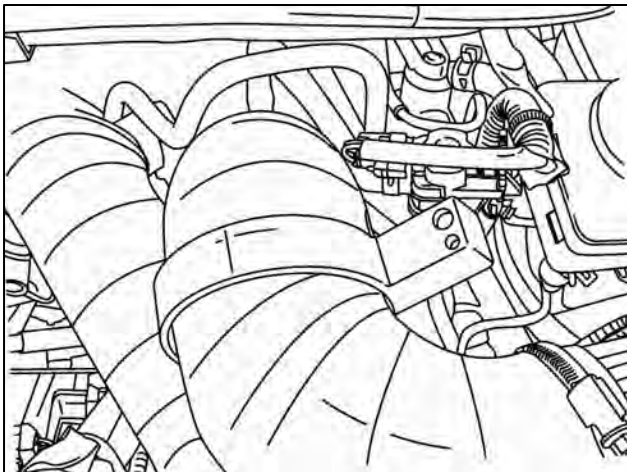


Fig. 18-10

- (m) Install TRD-provided rubber VSV mount to intake hose. (Fig. 18-10).

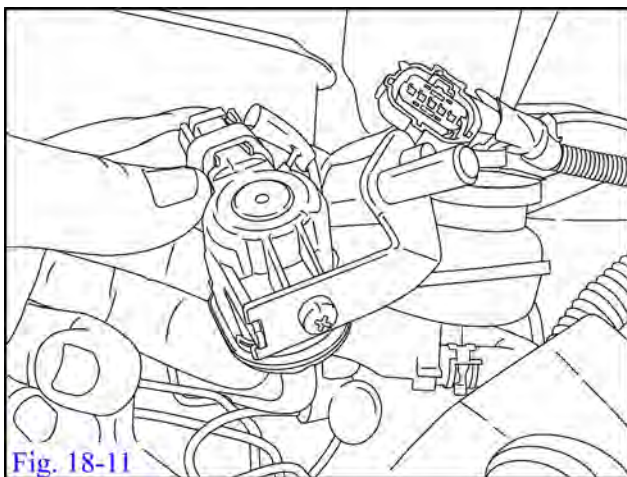


Fig. 18-11

- (n) Remove the factory VSV bracket from the VSV. Replace bracket using the supplied TRD bracket and secure using the factory fastener. (Fig. 18-11).

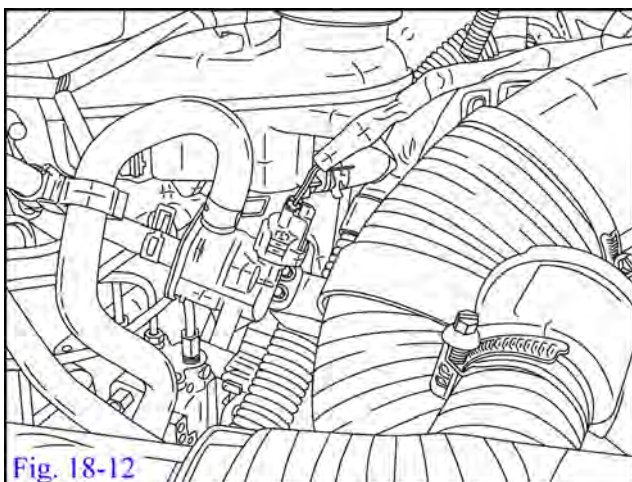
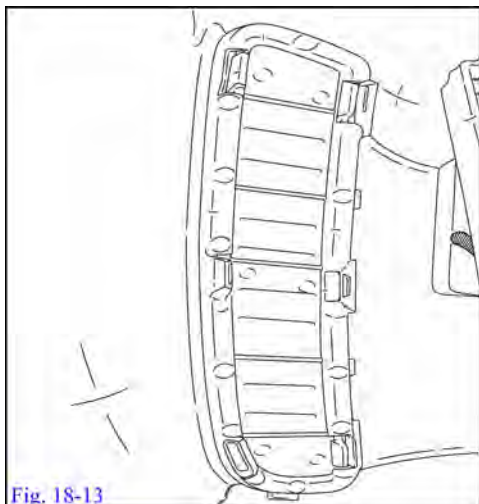
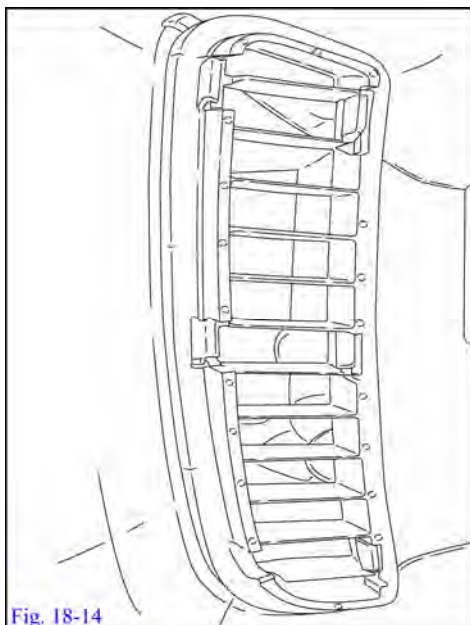


Fig. 18-12

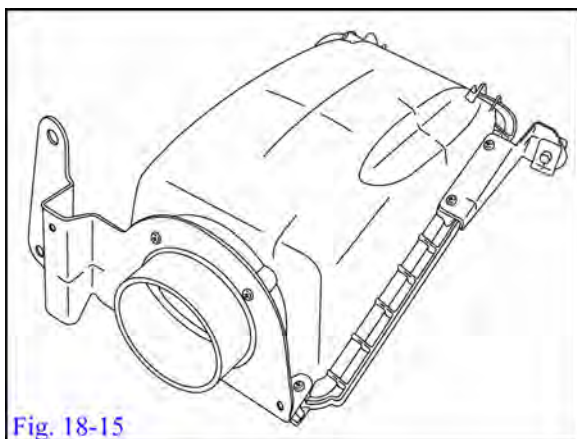
- (o) Re-use 90 degree O.E. vacuum line and attach to VSV.
- (p) Attach the VSV to the VSV mount as seen. Adjust hoses as necessary for a relaxed fit free of any kinks and with out contact to other assemblies. (Fig. 18-12).



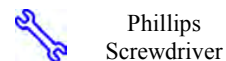
- (q) Remove driver side bumper vent cover. (Fig 18-13)




- (r) Install the TRD air inlet grille by snapping it into place using the OE tabs. (Fig 18-14)

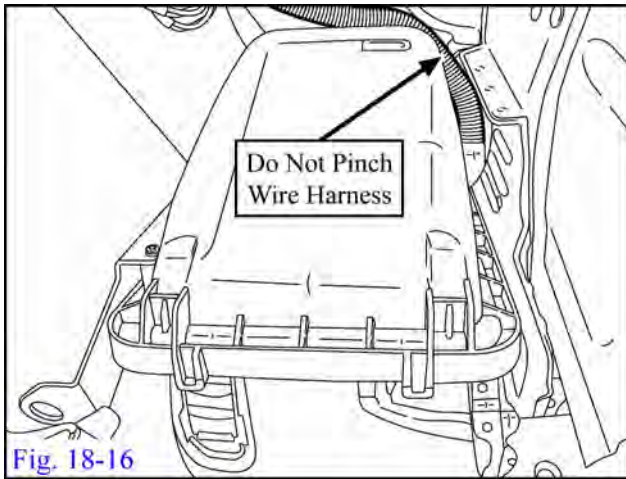


- (s) Install the supplied brackets onto the TRD air cleaner outlet using the six provided screws. (Fig 18-15)

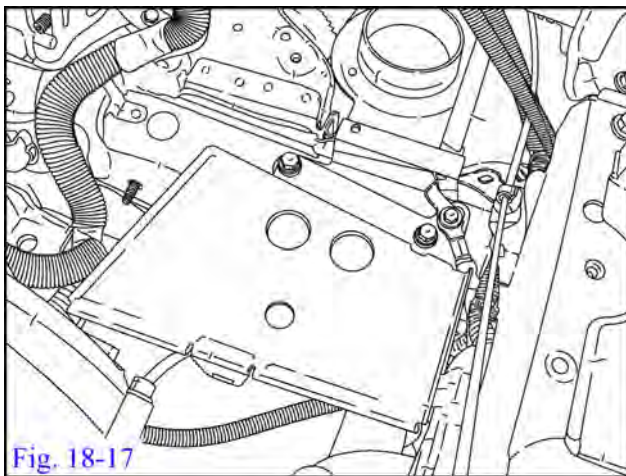


Phillips
Screwdriver

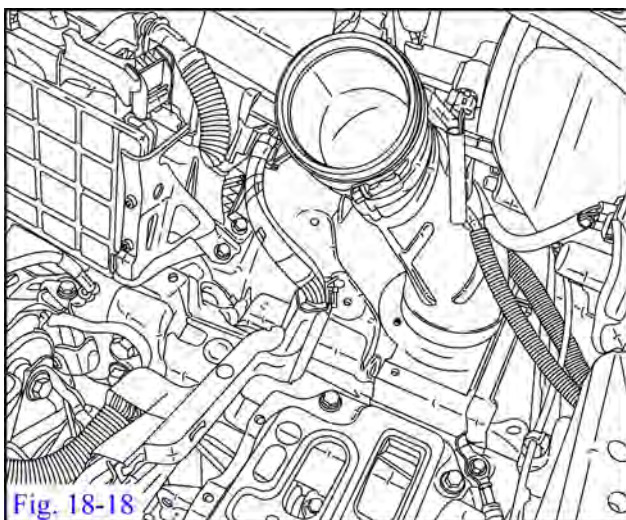
CAUTION: Do not use an air or electrical  powered tool to tighten the Phillips head screws. **HAND-TIGHTEN ONLY.**



- (t) Install the TRD air cleaner outlet assembly.
 - (1) Install from the bottom of the car.
 - (2) Route the wire harness so it does not get pinched between the vehicle frame and the outlet assembly. (Fig. 18-16)



- (u) Install air cleaner outlet assembly with the bracket under the battery carrier. (Fig 18-17)
- (v) Secure the supplied TRD battery carrier to the sub-frame using the four 12mm factory bolts. (Fig 18-17). **Torque bolts to 14 in-lb.**
- (w) Install chassis electrical ground using OE 10mm bolt. **Torque bolt to 48 in-lb.**



- (x) Install the TRD rubber inlet tube onto the TRD air cleaner outlet using the supplied hose clamp. (Fig 18-18)
 - (1) Clock inlet tube so there is clearance to the fuse box cover and also the wire loom located on the back side of the headlamp. (Fig. 18-18)
 - (2) **Torque clamps to 12 in-lb.**

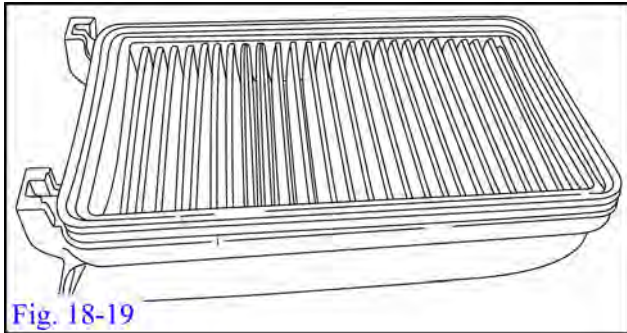


Fig. 18-19

- (y) Install supplied TRD air filter into air cleaner inlet. (Fig. 18-19)
 - (1) The filter gasket should seal flush with the air cleaner inlet.

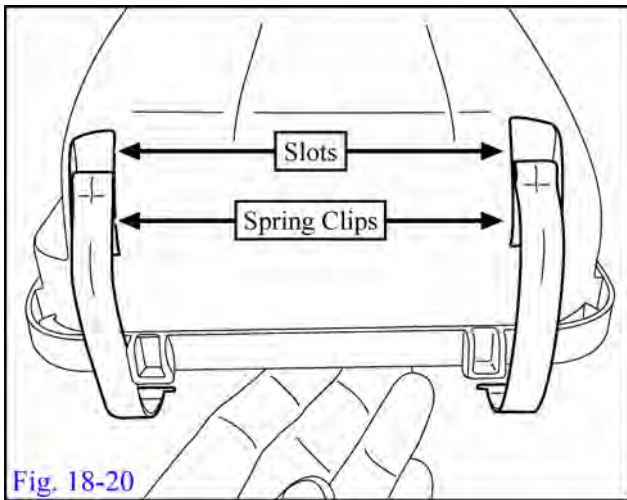


Fig. 18-20

- (z) Install two supplied spring clips into the open slots on the air cleaner inlet as shown. (Fig. 18-20)

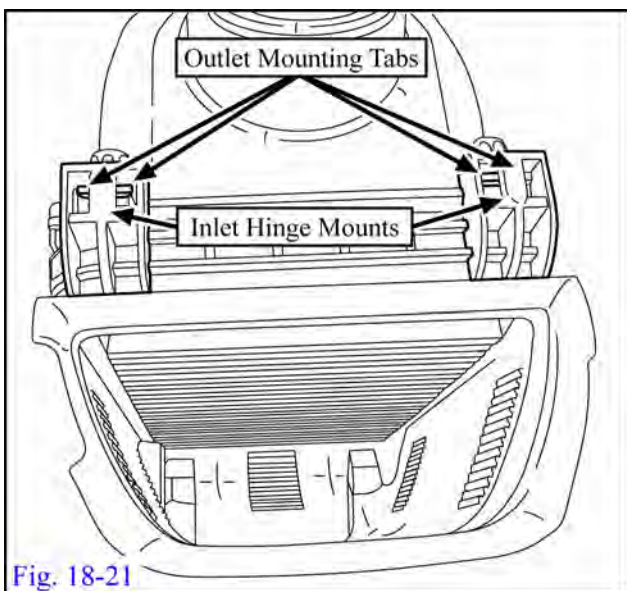
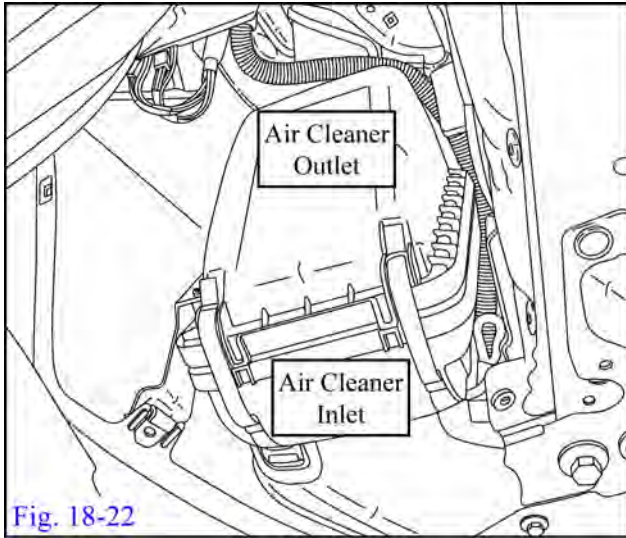


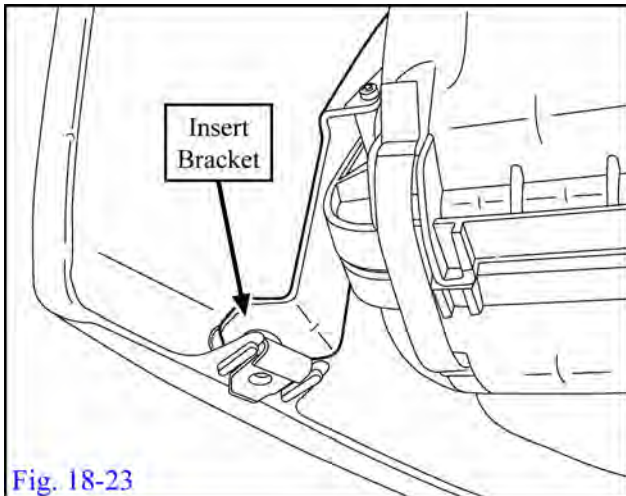
Fig. 18-21

- (aa) Figure 18-21 shows the correct installation of the air cleaner inlet to the air cleaner outlet on the bench.
 - (1) **Note:** Hinge mounts on air cleaner inlet fit over mounting tabs on air cleaner outlet.
 - (2) Figure 18-21 is provided for reference only to understand the hinge and tab mounting points.

NOTE: Assembling the air cleaner inlet hinge mounts to the air cleaner outlet tabs is more difficult when the air cleaner outlet is mounted in the vehicle, but is the recommended method.

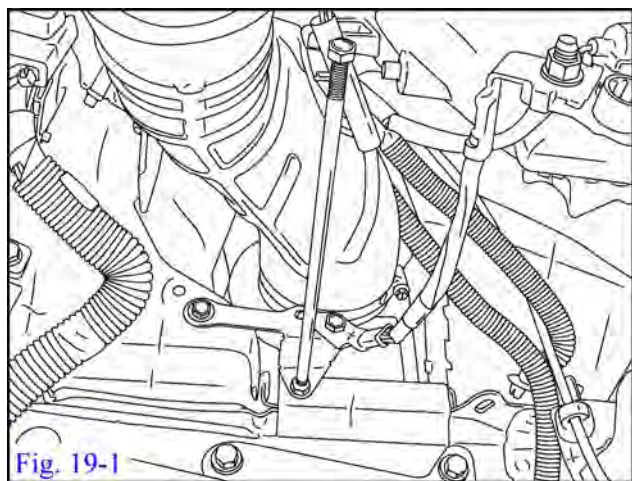


- (bb) Assemble the hinge mounts on the air cleaner inlet over the tabs on the air cleaner outlet.
- (cc) The lower side of both the air cleaner inlet and outlet should be even with each other.
- (dd) Snap both spring clips into place to secure the inlet to the outlet side. (Fig. 18-22)

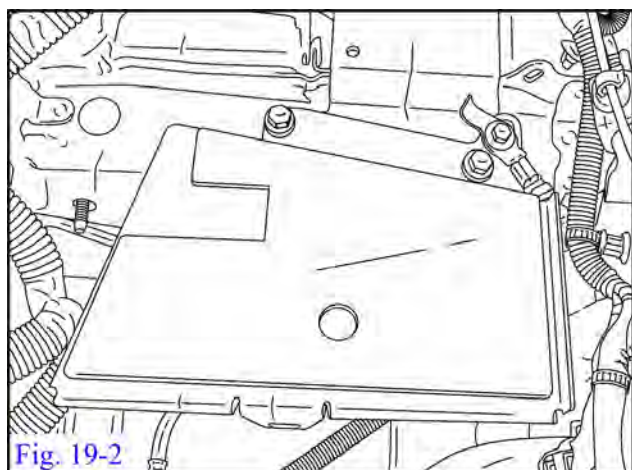


- (ee) Insert air cleaner assembly steady bracket into factory plastic clip as shown. (Fig. 18-23)
- (ff) Reinstall the driver side inner fender.

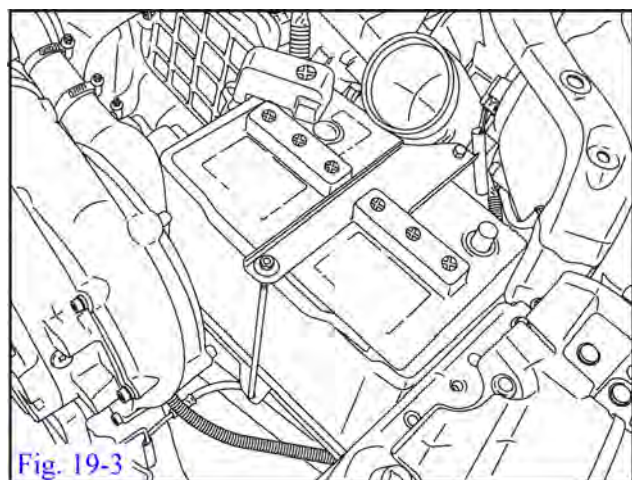
19. Battery Relocation-Installation



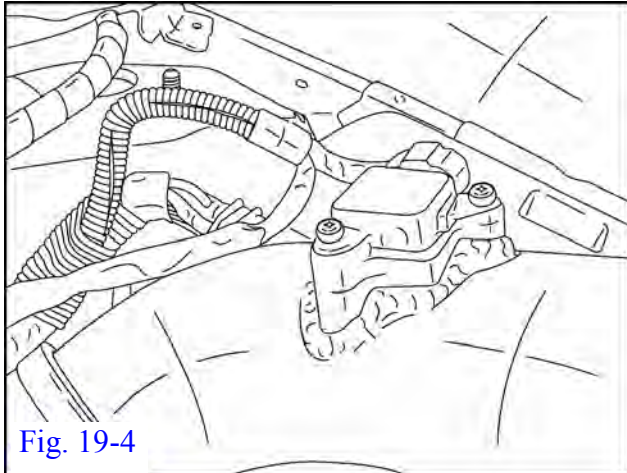
- (a) Loosely install the supplied TRD battery ground cable relocation bracket to the vehicle using the O.E. fastener (Fig. 19-1)
- (b) Install the supplied battery hold-down stud with washer and jam nut through the ground cable relocation bracket and into the air inlet bracket. Tighten the jam nut and O.E. fastener at this time. **Torque O.E. fastener to 80 in-lbs. (Fig. 19-1)**



- (c) Using the 6mm flange-head screw provided, secure the O.E. ground cable to the relocation bracket. **Torque fastener to 80 in-lbs. (Fig. 19-1)**
- (d) Install the supplied plastic battery tray spacer. (Fig. 19-2)



- (e) Reinstall the battery plastic tray, battery, and battery cover, and secure it with the TRD supplied battery tie down bracket and hardware. **Torque fastener to 80 in-lbs.**
NOTE: Be sure to locate battery in battery tray all the way forward AND all the way toward the driver side of the tray to allow maximum supercharger clearance. (Fig. 19-3)



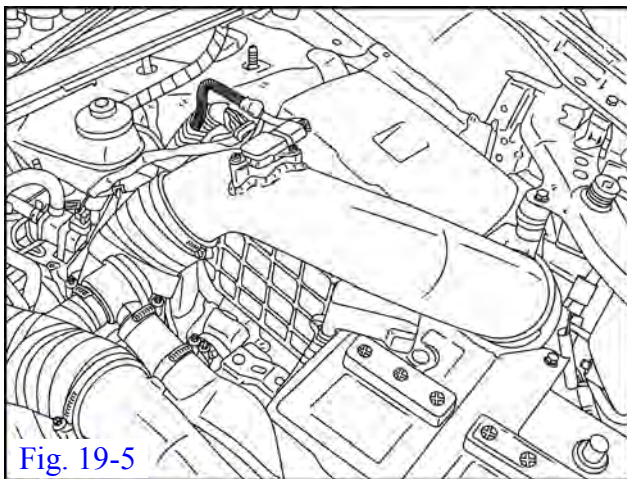
- (f) Install the factory MAF sensor onto the TRD MAF tube, with the provided 4mm screws. (Fig. 19-4)



Make sure the MAF sensor O-ring is not pinched and is fully seated inside the MAF sensor mount on the tube.



2.5mm Allen wrench



- (g) Install the aluminum MAF tube between the rubber inlet tube and the s/c inlet elbow. Secure using the supplied rubber isolator spacer, 6mm hardware and the provided hose clamps. **USE HAND TOOLS ONLY.** (Fig. 19-5)
- (h) Split the factory MAF harness to gain the necessary length for the MAF plug to reach the relocated MAF element. Wrap wire section with electrical tape.
- (i) Reconnect the MAF sensor connector. **Torque to 80 in-lbs.** (Fig. 19-5)

20. Final Assembly

- (a) Be sure both coolant system drain cocks are closed. Engine block drain cock should be **torqued to 9 ft-lbs**. Pour any remaining OE coolant back into radiator filler mouth. Use only Toyota Super Long Life Coolant or equivalent. Fill system up with coolant/water mix (approximately 50-50). Close bleeder port when done. Cap radiator. Wipe up any spilled or excess coolant.

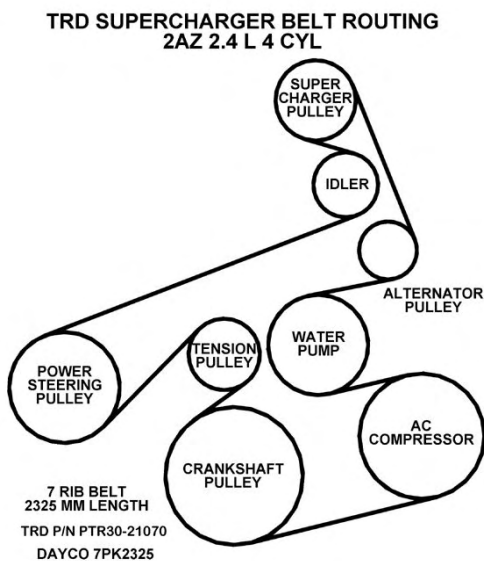
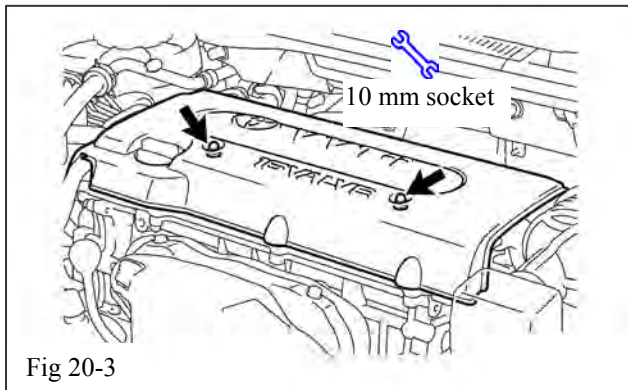


Fig. 20-1

- (b) Install TRD Supercharger Serpentine Drive Belt. As before, utilize **SST 09249-63010** leverage tool with 19mm, 6-point socket and lever arm, or ratchet. (Fig 20-1)
TRD Part Number: PTR30-21070
Note: BE SURE that the belt is properly seated into ALL of the pulleys.
- (c) Reinstall passenger side inner fender panels and tire/wheel assembly. Refer to figures on page 7.
- (d) **ADD ENGINE OIL!!!** Use SAE 5W-30, 4 U.S. Quarts minimum. Check oil level on engine dipstick. Add oil as needed.



****IMPORTANT: DO NOT overfill the engine with oil. Excessive oil fill level may cause supercharger seal and engine damage.**



- (e) Replace engine cover. **Torque to 62 in-lbs.** Verify engine cover to drive belt clearance, adjust as necessary. (Fig 20-3)
- (f) Select a suitable location under the vehicle hood and install the **Belt Routing Label**, the **CARB EO Emissions Compliant Label**, and the **TRD Tune-Up Label**. Clean the area first of any dirt or contamination so that the labels will adhere properly. **NOTE:** Do NOT cover over any OE labels.
- (g) Install **Premium Fuel Only** decals. Place one on dash near fuel gage AND also one near fuel filler cap.
- (h) Connect Battery Positive. **Be sure to route Battery (+) cable safely away from engine components, supercharger components, abrasive surfaces, and any sharp objects.**
- (i) Connect Battery Negative.

21. ECU Re-flash

- (a) The proper procedure to re-flash the ECU (Engine Control Unit) is explained in a Technical Service Bulletin ([SS002-07](#)) titled “Techstream ECU Flash Reprogramming Procedure” located on T.I.S. (Toyota Information System).
- (b) Download your correct vehicle ECU Calibration Update from TIS (See chart below) into the Techstream Tool using the TIS Calibration Update Wizard.

Note: Your Techstream system must be updated to at least operating version 2.20.015 or higher. Failure to do so may result in a no re-flash condition.

Model	Model Year	Target Calibration ID	Supercharger Calibration ID
Scion xB M/T	2008	31247000	3YWJ0100
Scion xB A/T	2008	31248000	3YWJ0200

- (c) Follow the re-flashing procedure outlined in [T.S.B. SS002-07](#).

NOTE: The GR8 Battery Charger MUST be used in Power Supply Mode to maintain battery voltage at 13.5 volts while flash reprogramming the vehicle.

For details on how to use the GR8 Battery Charger please refer to the GR8 Instructions Manual located on TIS, Diagnostics-Battery.



NOTE: The vehicle WILL NOT operate properly without this ECU update.

22. Testing and Evaluation.

(a) Start the engine and let it idle.



(b) Check the fuel system for any leaks.



(c) **IMPORTANT:** Check the serpentine belt drive systems for correct alignment on ALL pulleys, especially the TRD idler pulley.

(d) Check the coolant system for any leaks.

(i) Set the A/C system as follows:

Fan Speed Any setting except OFF

Temperature Toward Warm / Hot

A/C Switch OFF

(ii) Maintain the engine speed at 2,000 to 2,500 rpm and warm up the engine until the cooling fan operates.

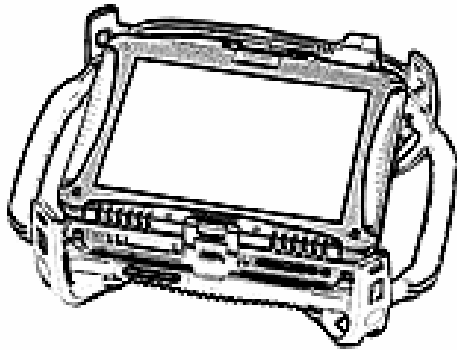
(iii) Squeeze the inlet and outlet radiator hoses several times by hand while warming up the engine.

(e) Check the air intake system to ensure there are no leaks and for tightness.

(f) Stop the engine and wait for the coolant to cool down.

(g) Carefully remove the radiator cap and check the coolant level inside the radiator and add coolant if necessary. Reinstall the radiator cap.

(h) Test drive the vehicle. If all is okay, park and proceed with the next step. If not, troubleshoot as necessary.



- (i) Use the diagnostic Techstream tool to check for ECU error codes.
- (j) Complete and mail the warranty registration card. **Note: The installation of the Supercharger is not complete until this card has been returned to TRD.**
- (k) Place all removed factory hardware, components, and this instruction sheet into the original TRD kit box and give to the customer and / or place it in the vehicle cargo compartment.



- (l) **IMPORTANT:** Review with the customer/end-user that the supercharger will have a slight rattling and or chirping sound especially at idle and that **these are normal noises** for this type of supercharger.



- (m) **IMPORTANT:** Review with the customer/end-user that it is imperative that only **91 octane (or higher)** fuel be used after the supercharger is installed. Performance will suffer and engine damage is possible otherwise.

Procedure

Accessory Function Checks Use of 91 Octane Fuel (R+M / 2)

Use 91 Octane Unleaded Fuel (R+M /2)

 All Fluid Levels & Leaks

Inspect Engine Cooling System and Supercharger Cooling System for Proper Fluid Type and Level.

 Serpentine belt alignment

Inspect Serpentine Belt Drive Belts for Proper Alignment, Tension, and Clearance from Engine Compartment Items.

 Fuel Line connections

Inspect all Fuel Rails, Injectors, Injector Seals, Pressure Regulator, and Fuel Line Connectors for Leaks.

 Engine ECU Reflash

Ensure the Proper Calibration File was used for the Vehicle.

Vehicle Function Checks Fuel leak

No Fuel leaks are present

 Coolant leak

No coolant leaks are present

 Drive test

Vehicle starts Up Easily, No DTC Trouble Codes are Present, Drivability is Smooth and Predictable.

Air Filter Maintenance

Service Intervals- Service your TRD filter element with TRD's filter cleaning system (Toyota p/n PTR05-00000-CL) at least every 50,000 miles to maintain optimum performance. We recommend that TRD filter elements be serviced every 30,000 miles for 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.

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.

23. Caring For The Finish On Your TRD Air Intake & Discharge System

- TRD intakes have a protective clear powdercoat finish that ensures a maintenance free shine.
- To clean your TRD intake, simply spray with window cleaner and wipe with a soft, clean terry-cloth towel.
- NEVER use harsh chemicals or metal polish on TRD intakes. Harsh chemicals and metal polishes will permanently damage the finish of your intake.

