

Part Number: 08921-35870

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

Kit Contents

Item #	Quantity Reqd.	Description
1	1	Converter
2	1	Wire harness
3	1	Plastic tie (black)
4	1	Plastic tie (brown)
5	2	Packing
6	2	Bolt (M6)
7	2	Bolt (M5)
8	2	Fuse
9	1	Towing tail relay
10	1	Owner's manual

Special Chemicals	Notes
None	

General Applicability

All FJ Cruiser with tow hitch

Recommended Sequence of Application

Item #	Accessory
1	Trailer hitch
2	Trailer wire harness

*Mandatory

Hardware Bag Contents #1

Item #	Quantity Reqd.	Description
1		
2		





Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Reqd.	Description
1		
2		
3		

Hardware Bag Contents #2

Item #	Quantity Reqd.	Description
1		
2		

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.

Additional Items Required For Installation

Item #	Quantity Reqd.	Description
1		
2		

Conflicts

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Recommended Tools

Personal & Vehicle Protection	Notes
Safety goggle	
Seat covers	
Floor protectors	
Special Tools	Notes
LED tester	SST 00002-62195
Installation Tools	Notes
Torque wrench	
Ratchet 3/8" drive	
12" extension	
8 mm socket	
10 mm socket	
Side cutter	

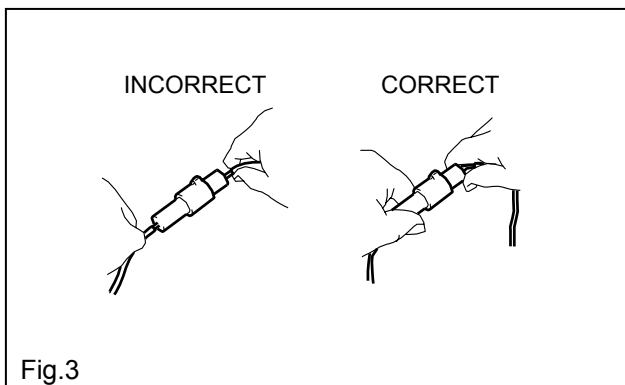
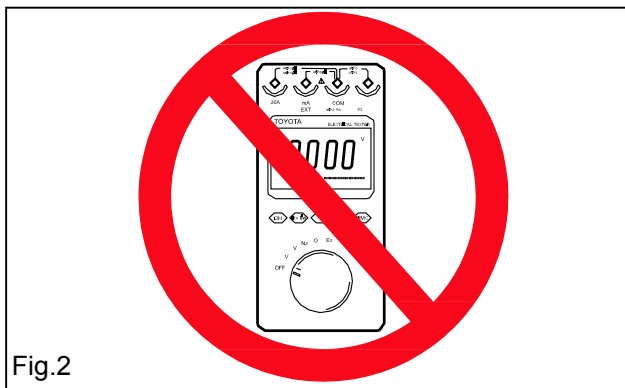
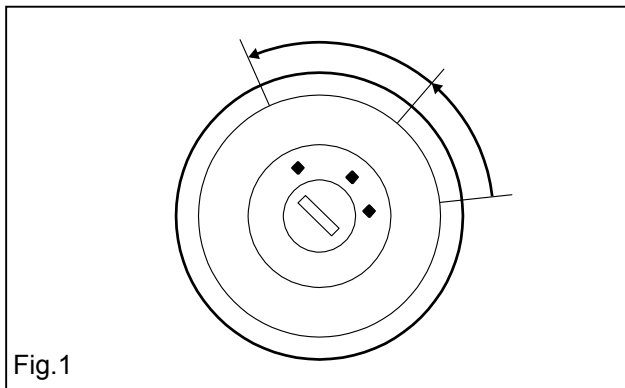
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.



1. Supplemental Restraint System SRS

- (a) Failure to carry out procedures listed below could result in possible deployment of airbag, personal injury, or unnecessary repairs to SRS.
- (b) Turn the key switch to the LOCK position. (Fig. 1)
- (c) Remove the key from the ignition switch.
- (d) Never use a voltmeter to trouble shoot any of the harnesses or connector to the SRS. Accidentally probing the connectors to the SRS can lead to deployment of the airbag. (Fig. 2)
- (e) SRS wire harness loom/cover is bright yellow in color.

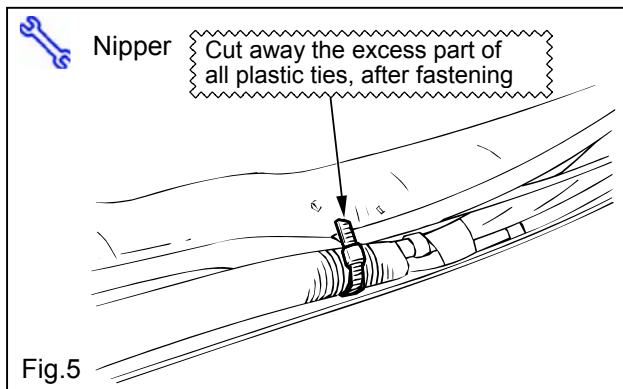
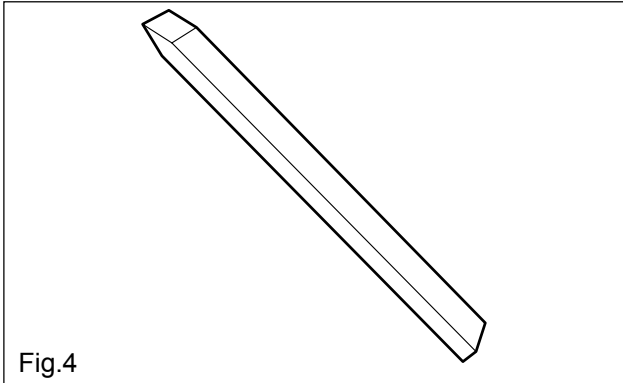
2. Wiring Precautions

- (a) DO NOT pull on vehicle wires and/or wire harness. To uncouple electrical connectors, pull only on the connector itself. (Fig. 3)
- (b) Use nylon ties and adhesive foam strips to secure the vehicle harness and the trailer wire harness.
- (c) Ensure all wires are properly insulated from ground.

- (d) When installing the trailer wire harness make sure it is not cut or perforated by any sharp metal objects.

3. General Practices and Procedures

- (a) Before starting installation, refer to the supplemental restraint system procedures in Section 1.
- (b) Take care not to scratch any part of the vehicle. Bind the tips of tools (clip remover, slot screw driver, etc.) with vinyl tape to prevent damage to any part of the car, or use a nylon removal tool (resin based prying tool). (Fig. 4)
- (c) Use a small parts container to store removed bolts and tapping screws so that they can be reassembled correctly.
- (d) Ensure seat/floor protectors are in position.
- (e) After fastening plastic ties, clip away all the excess of the ties using diagonal pliers. (Fig. 5)



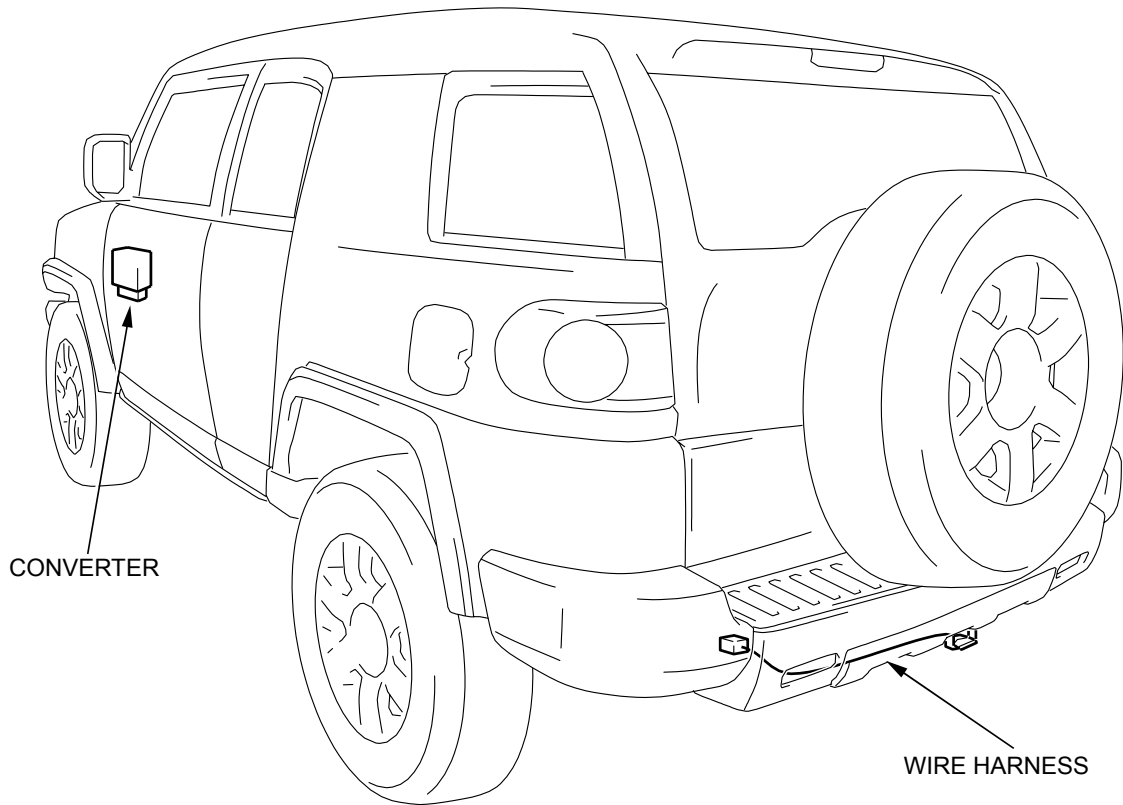
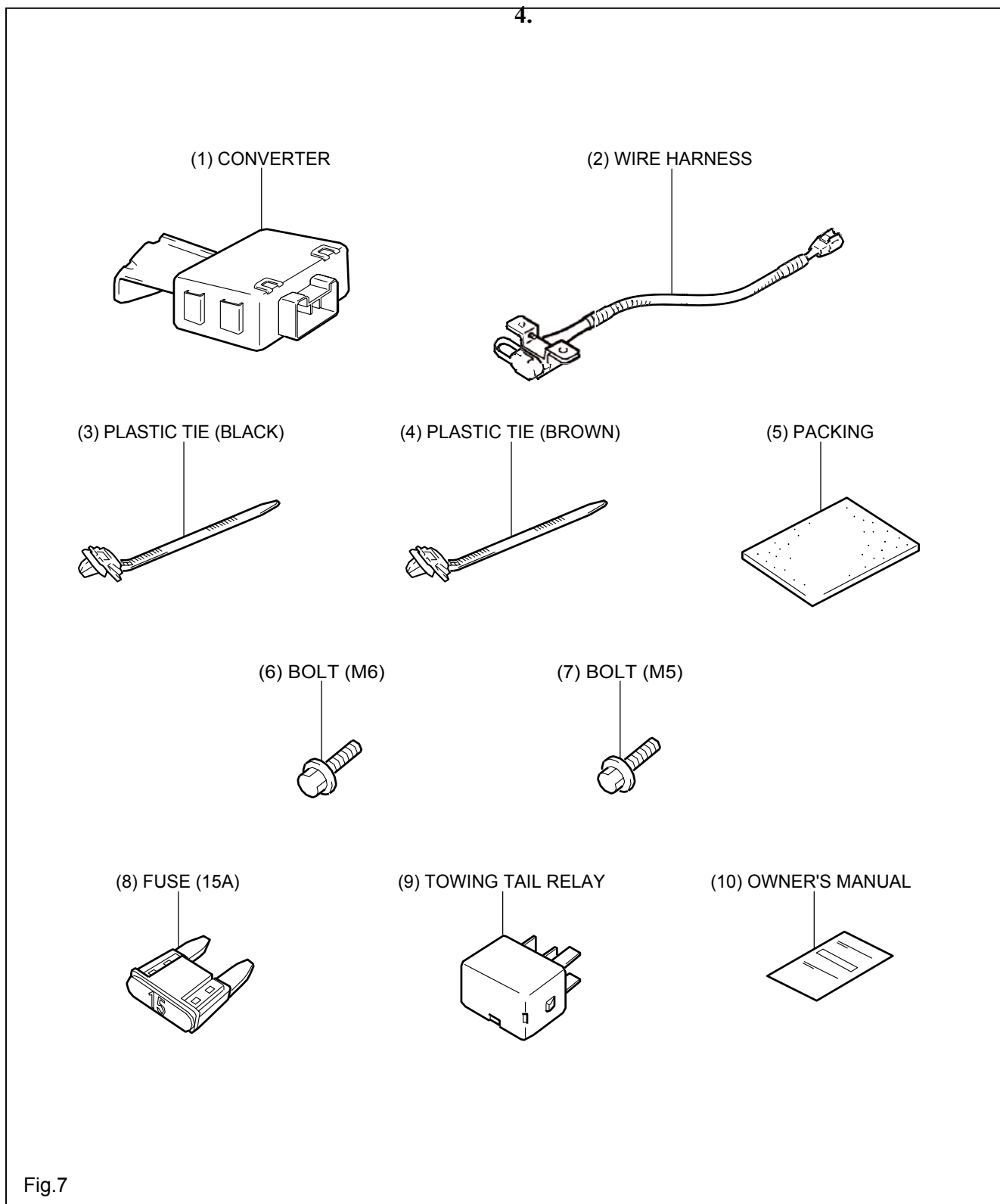
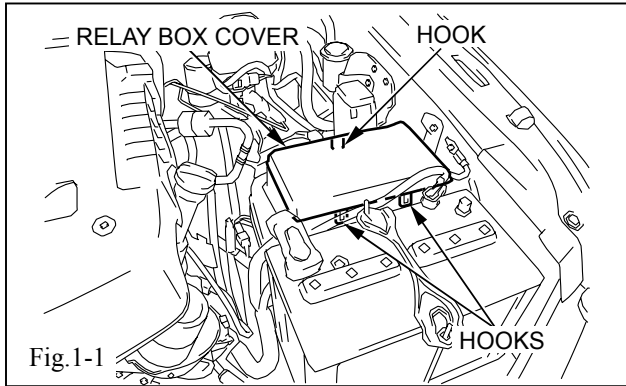


Fig. 6





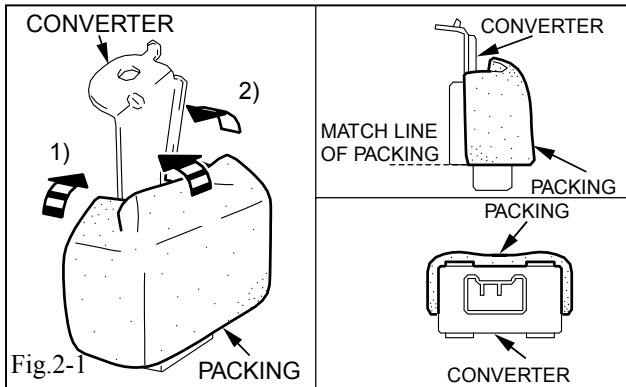
1. Parts Removal.

(a) Relay box cover.

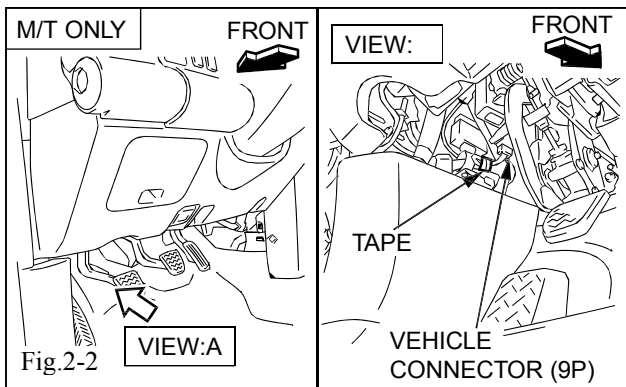
(1) Remove relay box cover. (Fig. 1-1)

2. Converter Installation.

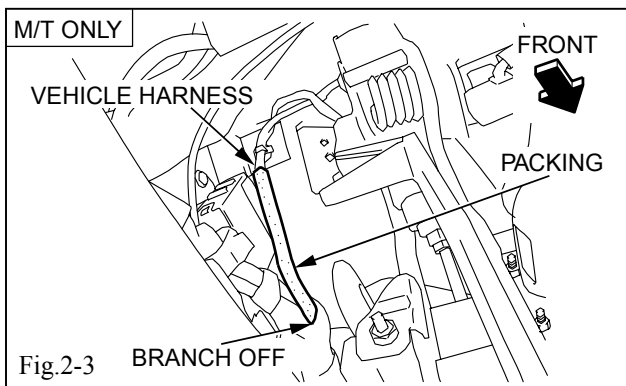
(a) Install the packing to the converter as shown. (Fig. 2-1)



(b) M/T vehicle only (c) – (h).



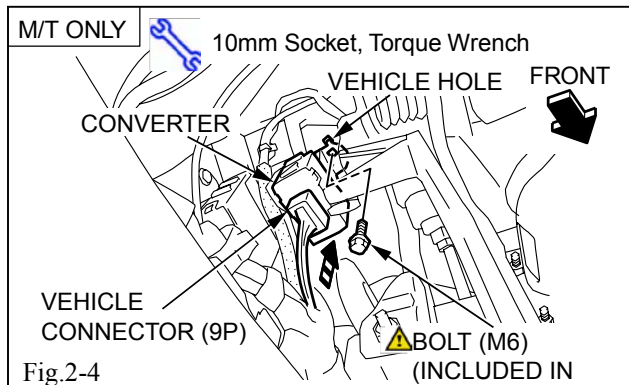
(c) Remove the tape that holds the vehicle connector. (Fig. 2-2)



(d) Install the packing to the vehicle harness as shown. (Fig. 2-3)



(e) Wrap the packing around the vehicle harness starting at the base of where the vehicle harness branches off.



(f) Put the converter bracket hook into the vehicle hole and attach it with the bolt (M6) included in the kit. (Fig. 2-4)



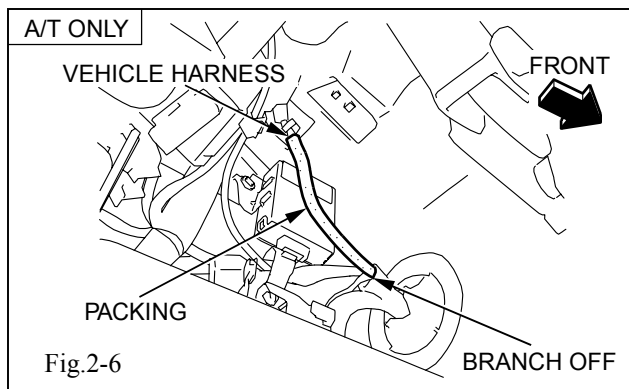
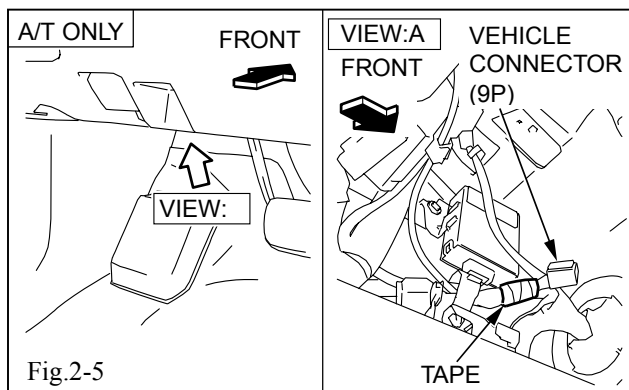
(g) Tighten the bolt with 8 N-m (71 lbf-in) of torque. (Fig. 2-4)

(h) Connect the vehicle harness (9P) to the converter (9P). (Fig. 2-4)



(i) A/T vehicle only (j) – (o)

(j) Remove the tape that holds the vehicle connector (9P). (Fig. 2-5)



(k) Install the packing to the vehicle harness as shown. (Fig. 2-6)



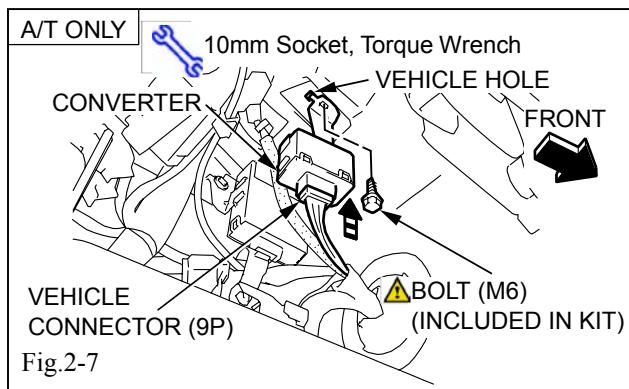
(l) Wrap the packing around the vehicle harness starting at the base of where the vehicle harness branches off. (Fig. 2-6)

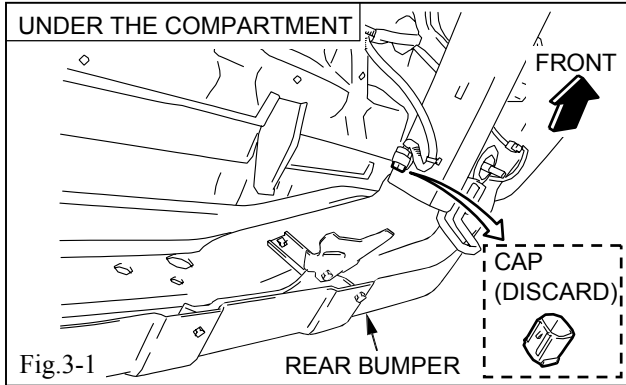
(m) Put the converter bracket hook into the vehicle hole and fix it with the bolt (M6) included in the kit. (Fig. 2-7)



(n) Tighten the bolt with 8 N-m (71 lbf-in) of torque. (Fig. 2-7)

(o) Connect the vehicle harness (9P) to the converter (9P). (Fig. 2-7)

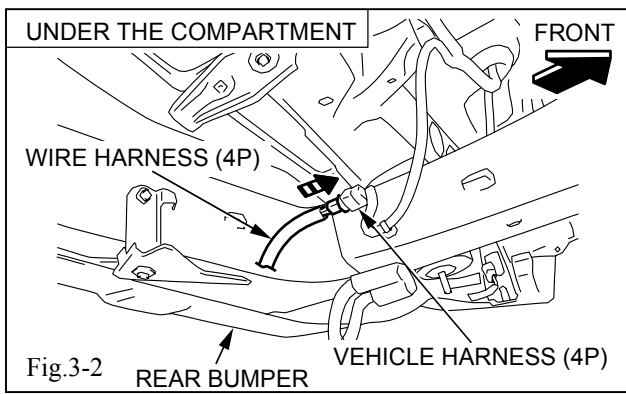




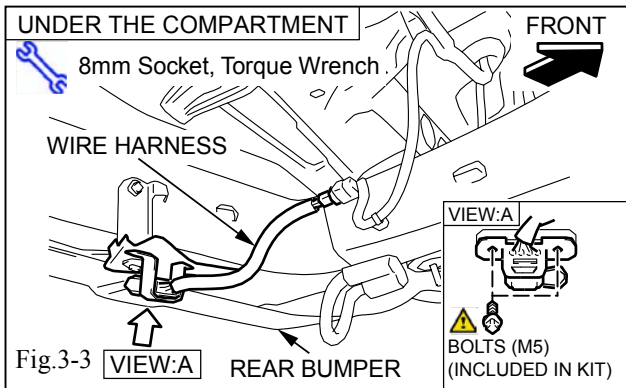
3. Wire Harness Installation.

(a) Cap.

- (1) Remove the cap from vehicle harness. (Fig. 3-1)



(b) Connect the wire harness (4P) to the vehicle harness (4P). (Fig. 3-2)

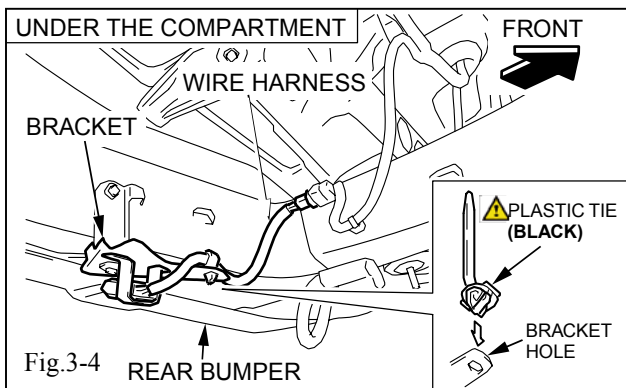


(c) Fastening flat (4P) connector of wire harness.

- (1) Fasten flat (4P) connector of wire harness with two (2) bolts (M5) included in kit. (Fig. 3-3)



- (2) Tighten the bolt with 3.9 N-m (36 lbf-in) of torque.

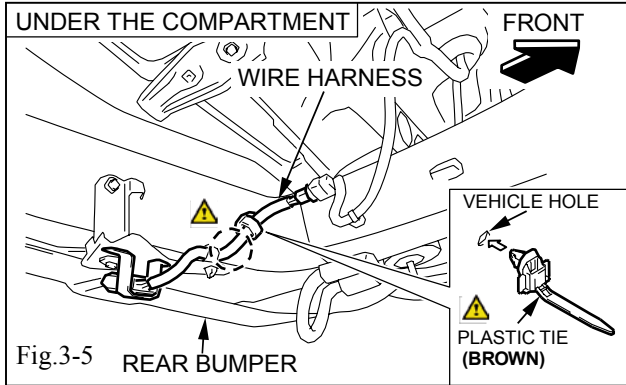


(d) Secure the wire harness as shown to the bracket with the plastic tie (black). (Fig. 3-4)



(e) Be sure to use a black plastic tie. Do not use a brown one. (Fig. 3-4)

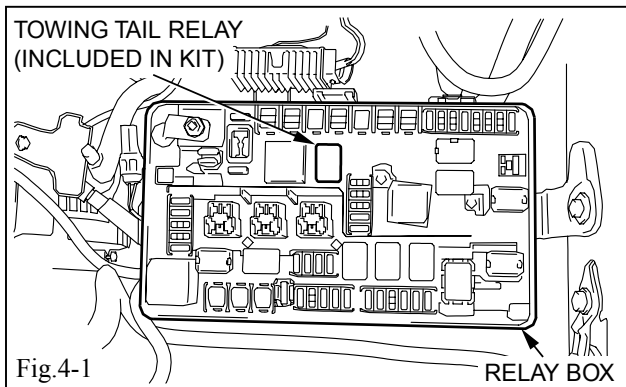
(f) Secure the wire harness as shown to the vehicle hole with the plastic tie (brown).



- ⚠ (g) Be sure to use a brown plastic tie. Do not use a black one. (Fig. 3-5)
- ⚠ (h) Be sure not to have any slack in vehicle harness when securing it with a plastic tie (brown). (Fig. 3-5)

4. Installing the Fuse and Relay.

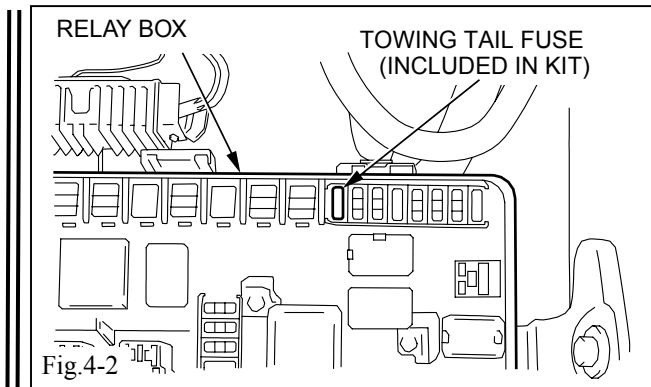
- (a) Install the towing tail relay (included in kit) to the position as shown. (Fig. 4-1)



- ⚠ (b) Pay attention to the following points when handling the towing relay:
 - ⚠ (1) Avoid striking the towing tail relay.

Never use a relay that has been dropped.

Do not strike or use undue force when installing the towing tail relay to the vehicle. It may damage the vehicle.



- ⚠ (2) Do not touch the terminal directly with fingers.

NOTE: Contamination of any oils or grease may impair the operation of the towing tail relay. (This includes oils from hands).

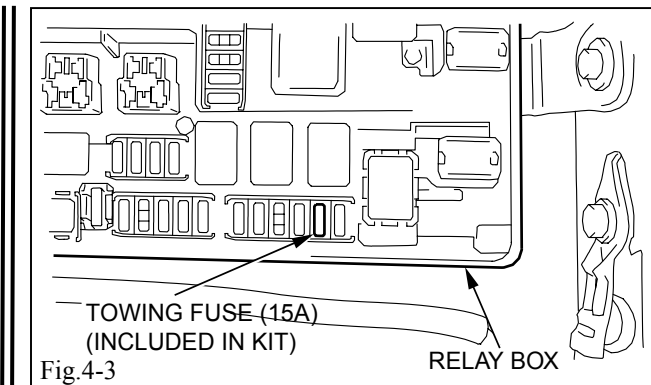
- ⚠ (3) Do not apply lubrication oil or grease to the terminal.

NOTE: Terminal generates heat and it may lead to internal overheating and failure.

- (c) Install two (2) fuses (15A) (included in kit) to the position as shown. (Figs. 4-2 and 4-3)

5. Reinstallation.

- (a) After functional verification, reinstall all temporarily removed parts.



TOYOTA FJ CRUISER 2007 - TRAILER WIRE HARNESS
Checklist - these points **MUST** be checked to ensure a quality installation.

<u>Check:</u>	<u>Look For:</u>
<p><u>Accessory Function Checks</u></p> <ul style="list-style-type: none"><input type="checkbox"/> Faults in the wiring harness installation<input type="checkbox"/> Converter mounting<input type="checkbox"/> Wire harness<input type="checkbox"/> Plastic tie locations	<p>Correct routing of the wire harness</p> <p>Pushing or pulling of the converter by any outside force</p> <p>Pinching of the wire harness</p> <p>Positioning of the plastic tie locations</p>
<p><u>Vehicle Function Checks</u></p> <ul style="list-style-type: none"><input type="checkbox"/> Removed parts <p>With the Special Service Tool (SST) (Part Number 00002-62195) attached to the trailer sub wire harness plug and with the engine running, perform the following steps:</p> <p>Caution: Be sure the exhaust gas is completely ventilated.</p> <p>Caution: Be sure the vehicle is in "Park" and that the parking brake is applied.</p> <ul style="list-style-type: none"><input type="checkbox"/> Turn on headlamps<input type="checkbox"/> Turn on left turn signal<input type="checkbox"/> Turn on right turn signal<input type="checkbox"/> Apply foot brake<input type="checkbox"/> Turn on left turn signal and apply foot brake	<p>Scratches or other damage</p> <p>Marker and tail lights on both SST and vehicle are lit</p> <p>Left turn lights on both SST and vehicle are flashing</p> <p>Right turn lights on both SST and vehicle are flashing</p> <p>Stop lights on both SST and vehicle are lit</p> <p>Left turn lights are flashing and right stop lights are lit on both SST and vehicle.</p>

TOYOTA FJ CRUISER 2007 - TRAILER WIRE HARNESS

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- Turn on right turn signal and apply foot brake
- Turn on hazard lights switch
- With hazard lights switch on, apply the foot brake
- Turn off the hazard light switch, apply the foot brake

The following checks are to be performed with the ignition switch off and the engine stopped.

- Turn on headlamps
- Apply foot brake
- Turn on left turn signal
- Turn on right turn signal
- Turn on left turn signal and apply foot brake
- Turn on right turn signal and apply foot brake
- With hazard lights switch on, apply the foot brake
- Turn off the hazard light switch, apply foot brake

Look For:

- Right turn lights are flashing and left stop lights are lit on both SST and vehicle
- All turn signal lights are flashing on both SST and vehicle
- Both stop lights on the vehicle are lit, both turn/stop lights on the SST and the turn lights on the vehicle are flashing
- Both turn/stop lights on the SST and the stop lights on the vehicle are lit.

- Marker and tail lights on both SST and vehicle are lit
- Stop lights on both SST and vehicle are lit
- Left turn lights are not lit on both SST and vehicle
- Right turn lights are not lit on both SST and vehicle
- Both stop lights are lit and not flashing on both SST and vehicle
- Both stop lights are lit and not flashing on both SST and vehicle
- All turn signal lights are flashing on both SST and vehicle
- Both stop lights on the vehicle and the turn/stop lights on the SST are lit, but not flashing

