

Preparation

Part Number: PT228-89460**NOTE:** Part number of this accessory may not be the same as the part number shown.**Kit Contents**

Item #	Quantity Req'd.	Description
1	1	High Assembly
2	1	Wiring Harness Bracket
3	1	Hardware Bag
4	1	Hitch Cover
5	2	Frame Spacer
6	2	Center Spacer
7	1	Close-out Panel

Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	4	M12 x 1.25 x 45 Hex Flange Bolt (Black)
2	4	M12 x 1.25 x 35 Hex Flange Bolt (Black)
3	4	M8 x 1.25 x 25 Bolt w/Trapped Washer (Black)
4	2	M8 x 1.25 x 20 Bolt w/Trapped Washer (Black)
5	2	M6 x 1.00 x 20 hex Flange Bolt (Black)
6	1	Harness Clamp/Cable tie (P/N 82711-16830)

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1		
2		

Conflicts

Note:

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Vehicle Protection	Cloth (Shop Towel)
Special Tools	Notes
None	
Installation Tools	Notes
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Ratchets	½" and ¾"
Sockets (Deep Well)	10 mm, 12 mm, 13 mm, 17 mm
Socket Wrench	
Extensions	6" min.

Torque Wrench (x2)	0-100 lbf-ft, 0-100 lbf-in
Exhaust Hanger Removal Tool	e.g. Snap On P/N YA3202
Special Chemicals	Notes
None	

General Applicability

Note: All V-8 4-Runner vehicles

Recommended Sequence of Application

Item #	Accessory
1	
2	
3	

*Mandatory

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Req'd.	Description
1		
2		
3		

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.

Procedure

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. Inspection.



- (a) Inspect parts for damage.

2. Prepare Vehicle for Hitch Installation.



- (a) Cover exhaust pipe with clean shop towel.
(Fig. 2-1).



- (b) Caution muffler may be sharp and or hot.

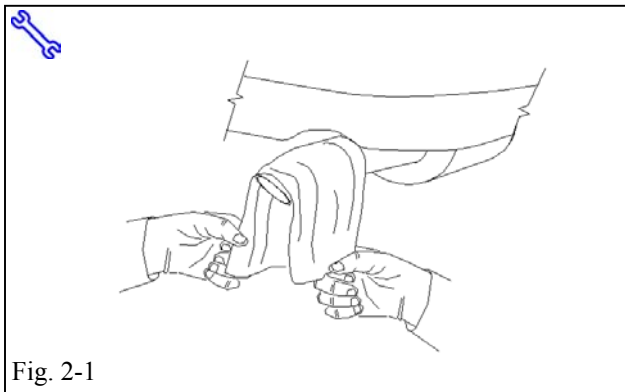


Fig. 2-1

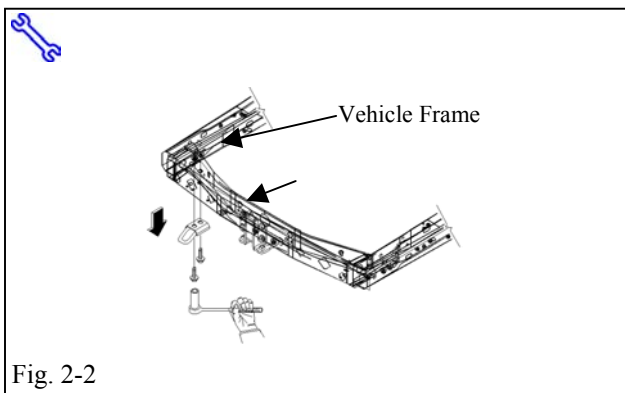


Fig. 2-2

- (c) Remove and save tie-down. Discard the two (2) bolts removed from the vehicle.
(Fig. 2-2)

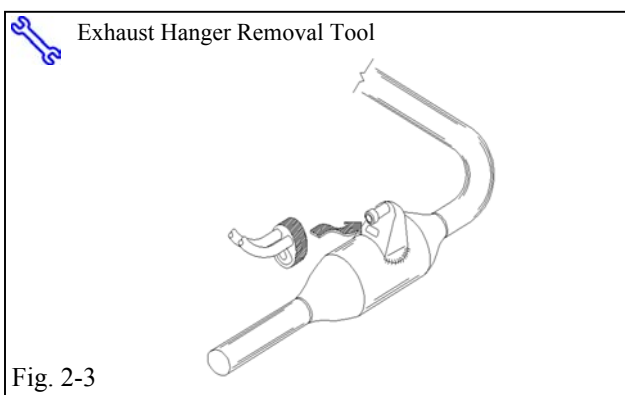
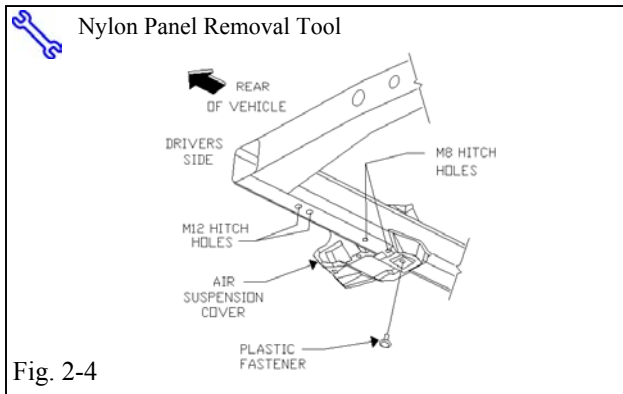
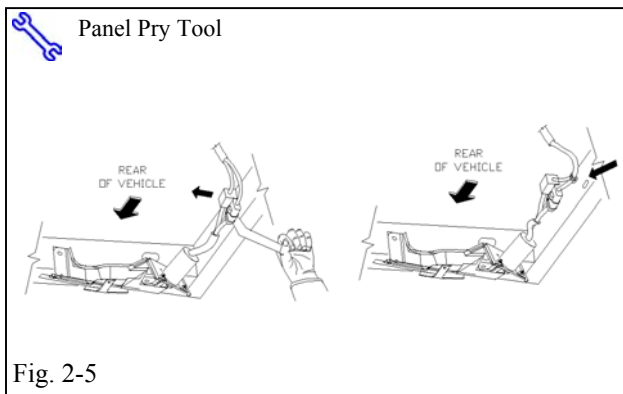


Fig. 2-3

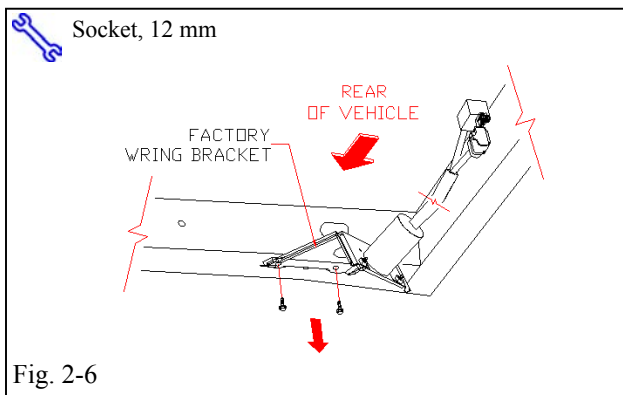
- (d) Lower exhaust by disconnecting the rubber exhaust hanger from one of the connection points. (Fig. 2-3)



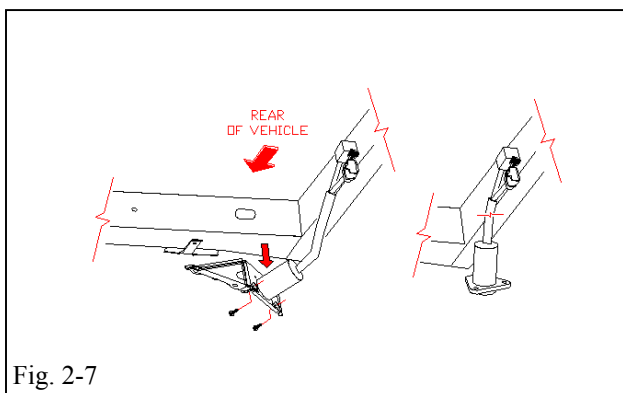
- (e) For vehicles equipped with air suspension, loosen the air suspension cover by removing the plastic fastener. Save fastener for reinstallation. (Fig. 2-4)



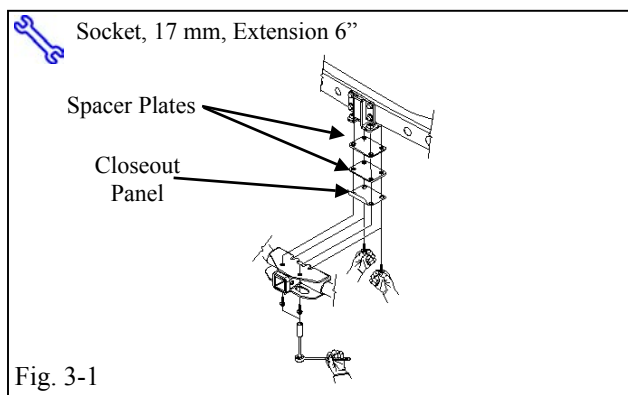
- (f) Using panel pry tool, unclip harness from the frame. Install harness clamp close to harness connector (around black wrap). Secure harness to frame and trim excess on cable tie. (Fig. 2-5)



- (g) Remove the two (2) M8 bolts securing the factory wiring bracket to the frame. Discard the two (2) bolts. (Fig. 2-6)

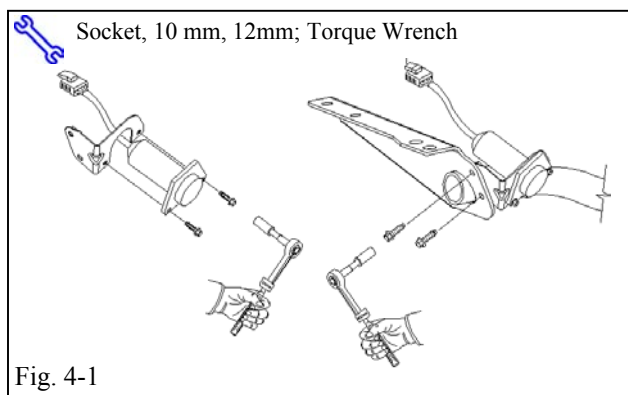


- (h) Remove the two (2) M6 bolts connecting the 7-pin plug to the bracket, slide the plug from the bracket. Discard the bolts and factory wiring bracket. (Fig. 2-7)



3. Attach Hitch Center to Vehicle.

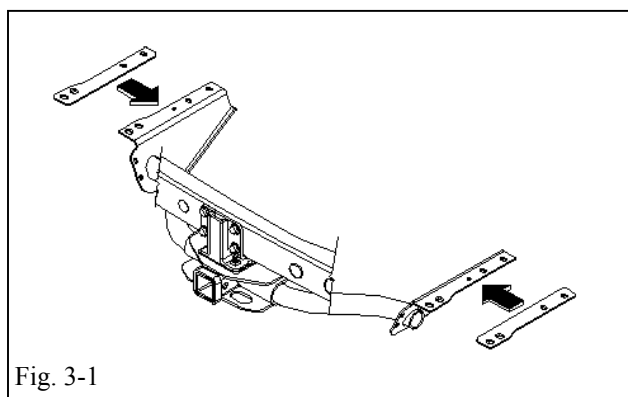
- Install closeout panel and (2) spacer plates to center attachment bracket by hand starting (2) M12-1.25x45 black bolts through closeout panel and spacer plates into forward most set of holes. (Fig. 3-1)
- Slide hitch onto pre-installed bolts using open ended slots to support the hitch. (Fig. 3-1)
- Hand start two (2) M12-1.25x45 black bolts to rear most position to secure the hitch and spacer plates using a socket extension and a 17mm socket. Bolts can be fed through chain holes. Do not tighten. (Fig. 3-1)



4. Install 7-Pin Wire Harness to Hitch.

- Install 7-pin wiring harness (removed in Step B. 8.) to the provided wiring bracket using two (2) M6-1.00x20mm bolts. (Fig. 4-1)
- Install wiring bracket to inside surface of the driver side hitch bracket using two (2) M8x1.25x20 black bolts with trapped washers. (Fig. 4-1)

- Be sure to feed wiring between the hitch tube and the vehicle cross member.
- Tighten the M8 bolts to 19 ± 4 lbf•ft (25 ± 5 N•m). (Fig. 4-1)
- Tighten M6 bolts to 94 ± 19 lbf•in (10.4 ± 2 N•m). (Fig. 4-1)



5. Place Frame Spacers.

- Place frame spacers between hitch brackets and vehicle frame. (Fig. E-1)

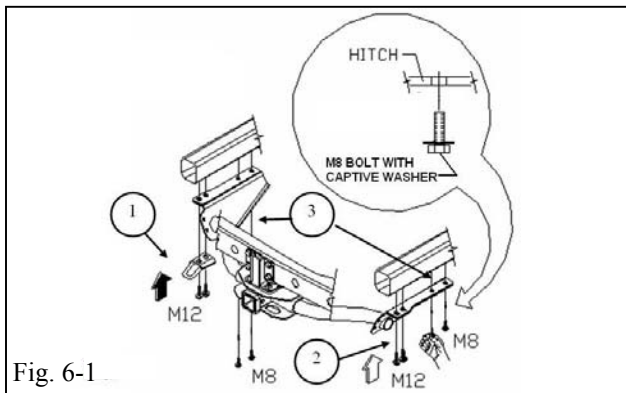


Fig. 6-1

6. Install Hitch to Frame Rail.

- Reinstall tie-down bracket to hitch using two (2) M12 x 1.25x35 black bolts in driver side rear most frame locations. (Fig. 6-1, Step 1)
- Secure hitch to frame using two (2) M12 x 1.25x35 black bolts in passenger side rear most frame locations. (Fig. 6-1, Step 2)
- Hand start four (4) M8 x 1.25 x 25 black bolts in forward most frame locations. (Fig. 6-1, Step 3)



- Ensure all bolts engage frame spacers and the spacers do not impede on frame welds.

7. Visually Center Hitch

- Visually center hitch so that closeout panel is centered in fascia cut out. (Fig. 7-1)

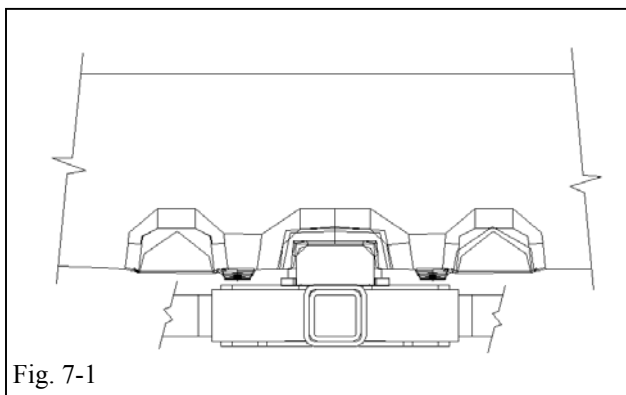


Fig. 7-1

8. Tighten Remaining Hitch Hardware.



- Tighten four (4) M12 bolts in the center to 60 ± 12 lbf-ft (80 ± 15 N-m). (Fig. H-1, Steps 1 - 4)



- Tighten four (4) M12 bolts on the frame rail to 60 ± 12 lbf-ft (80 ± 15 N-m). (Fig. H-1, Steps 5 - 8).



- Tighten four (4) M8 bolts to 19 ± 4 lbf-ft (25 ± 5 N-m). (Fig. H-1, Steps 9 - 12)

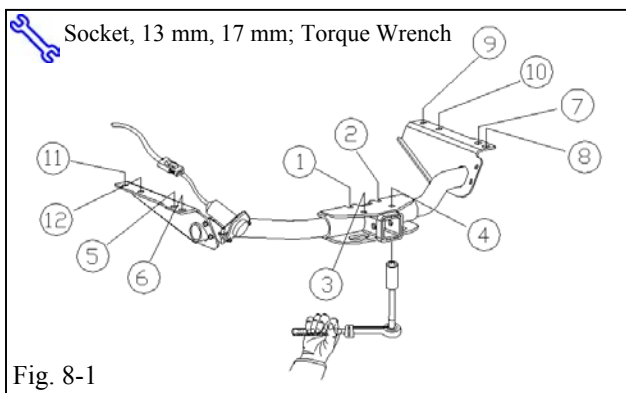
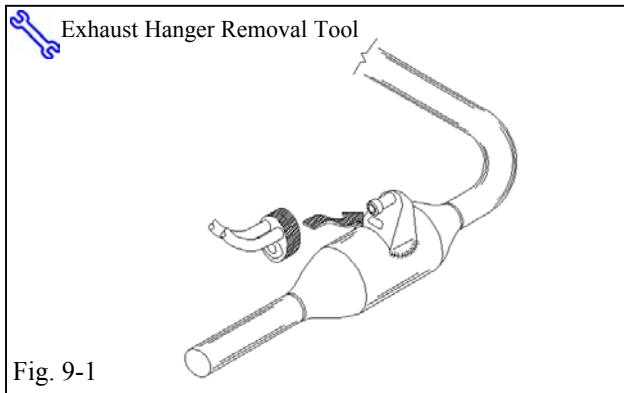
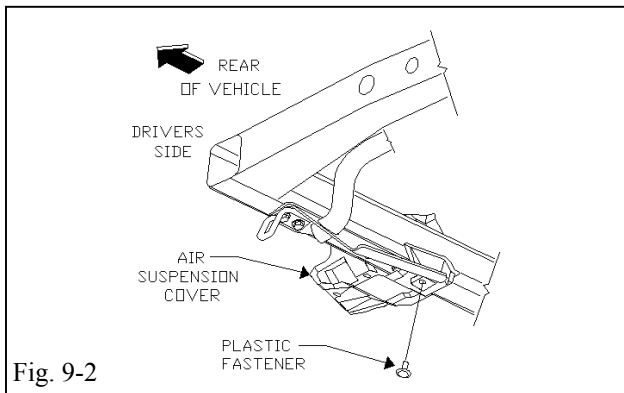


Fig. 8-1



9. Reinstall Vehicle Components.

- (a) Reconnect exhaust to the exhaust hanger ensuring to fully engage the hanger. (Fig. 9-1)



- (b) Reinstall the air suspension cover by replacing the one fastener. (Fig. 9-2)
 - (1) If fastener is damaged fit a new fastener, (P/N 90467-09185).



- (c) Place the hitch plug in the glove box.

TOYOTA 4-RUNNER 2006 - TOWING HITCH

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

Check:	Look For:
<u>Accessory Function Checks</u>	
☐ Inspection torque (M12 bolts)	60 ± 12 lbf-ft (80 ± 15 N-m)
☐ Inspection torque (M8 bolts)	19 ± 4 lbf-ft (25 ± 5 N-m)
☐ Inspection torque (M6 bolts, 7-pin to bracket)	94 ± 19 lbf-in (10.4 ± 2 N-m)
☐ Frame Spacers	Installed and off of welds
☐ Wiring Bracket	Installed and fed between hitch and cross member.
☐ Hitch Plug	Placed in glove box