

**Part Number: PT228-60540**

Section I - Installation Preparation

**Kit Contents**

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

**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		

**Conflicts**

Note: Not to be installed on vehicles WITHOUT tow package (TO).

**Recommended Tools**

<b>Safety Tools</b>	
Safety Glasses	
Vehicle Protection	Cloth (Shop Towel)
<b>Special Tools</b>	
None	
<b>Installation Tools</b>	
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST # 00002-06001-01
Ratchets	1/2" and 3/8"
Sockets (Deep Well)	10 mm, 12 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
None

**General Applicability**


Note: GX470 with Towing Hitch Bracket only


**Recommended Sequence of Application**


Item #	Accessory
1	
2	
3	


\*Mandatory


**Legend**

 **STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.

 **OPERATOR SAFETY:** Use caution to avoid risk of injury.


 **CRITICAL PROCESS:** Proceed with caution to ensure a quality installation. These points will be audited on a completed vehicle installation.

 **GENERAL PROCESS:** This highlights specific processes to ensure a quality installation. These points will be audited during the accessory installation.









 **TOOLS & EQUIPMENT:** Calls out the specific tools and equipment recommended for this process.

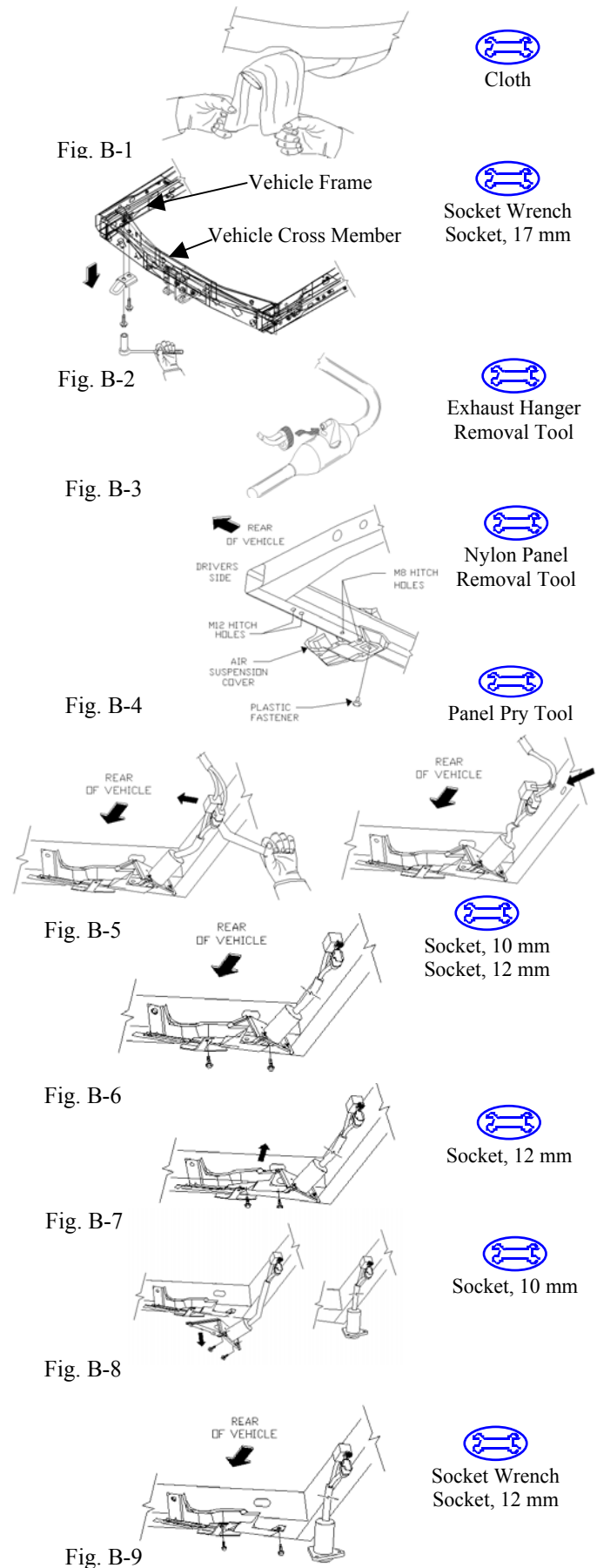
Section II - Installation Procedure

**A. Inspection.**


-  1. Inspect parts for damage.

**B. Prepare Vehicle for Hitch Installation.**



-  1. Cover exhaust pipe with clean shop towel. (Fig. B-1).
-  2. Caution muffler may be sharp and or hot.
-  3. Remove and save tie-down. Discard the two (2) bolts removed from the vehicle. (Fig. B-2)
- 4. Lower exhaust by disconnecting the rubber exhaust hanger from one of the connection points. (Fig. B-3)
-  5. For vehicles equipped with air suspension, loosen the air suspension cover by removing the plastic fastener. Save fastener for reinstallation. (Fig. B-4)
-  6. Using panel pry tool, unclip harness from the frame. Install harness clamp close to harness connector (around black wrap). Secure harness to upper hole in frame and trim excess on cable tie. (Fig. B-5)
-  7. Remove the vertical M8 bolt attaching fascia bracket to frame. Remove one (1) M6 bolt that attaches the fascia tab to the bracket. Carefully push the bracket forward to gain clearance for removal of wire bracket bolts. Save bolts for later reinstallation. (Fig. B-6)
- 8. Remove the two (2) M8 bolts securing the factory wiring bracket to the frame. Discard the two (2) bolts. (Fig. B-7)
-  9. 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. B-8)
- 10. Carefully push fascia bracket back into original position. (Fig. B-9)
  -  i. Reinstall the M8 bolt. Tighten to 19 +/- 5 lbf-ft (25 +/- 5 N-m).



## Section II - Installation Procedure

-  ii. Reinstall the one (1) M6 bolt. Tighten to 71 +/- 18 lbf-in (8 +/- 2 N-m).

**C. Attach Hitch Center to Vehicle.**

-  1. Hand start two (2) M12-1.25x45 black bolts through two (2) spacer plates into forward most set of holes. (Fig. C-1)
2. Slide hitch onto pre-installed bolts using open ended slots to support the hitch. (Fig. C-1)
-  3. 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. C-1)

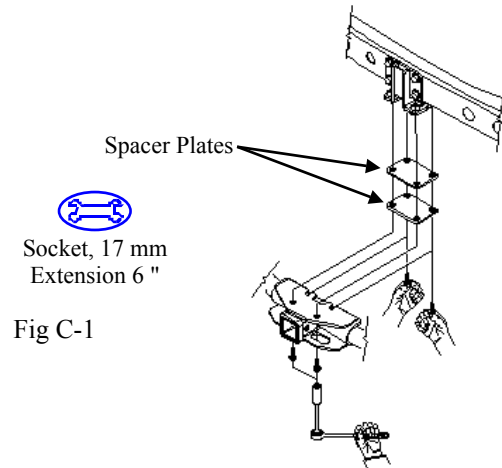







Fig C-1

**D. Install 7-Pin Wire Harness to Hitch.**

-  1. Install 7-pin wiring harness (removed in Step B. 8.) to the provided wiring bracket using two (2) M6-1.00x20mm bolts. (Fig. D-1)
-  2. Install wiring bracket to inside surface of the driver side hitch bracket using two (2) M8x1.25x20 black bolts with trapped washers. (Fig. D-1)
-  3. Be sure to feed wiring between the hitch tube and the vehicle cross member.
-  4. Tighten the M8 bolts to 19 +/- 4 lbf-ft (25 +/- 5 N-m). (Fig. D-1)
-  5. Tighten M6 bolts to 94 +/- 19 lbf-in (10.4 +/- 2 N-m). (Fig. D-1)

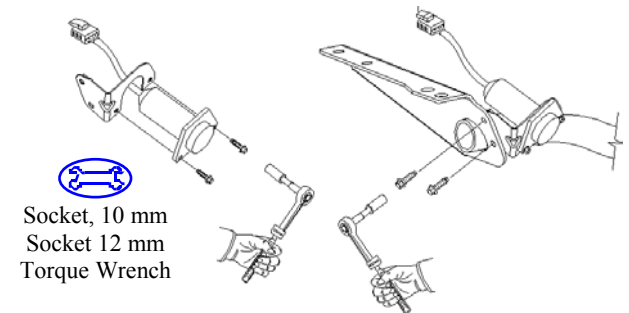



Fig D-1

**E. Place Frame Spacers.**

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

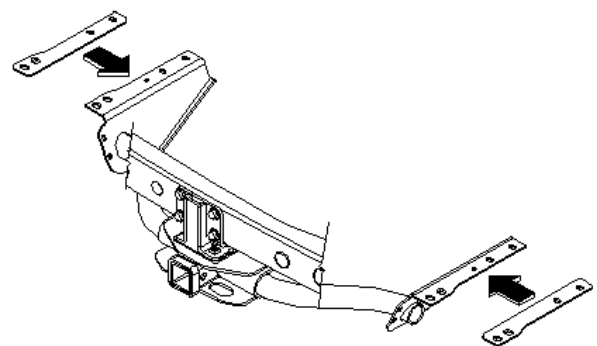











Fig. E-1



**F. Install Hitch to Frame Rail.**

-  1. Reinstall tie-down bracket to hitch using two (2) M12 x 1.25x35 black bolts in driver side rear most frame locations. (Fig. F-1, 1)
  -  2. Secure hitch to frame using two (2) M12 x 1.25x35 black bolts in passenger side rear most frame locations. (Fig. F-1, 2)
  -  3. Hand start four (4) M8 x 1.25 x 25 black bolts with trapped washers in forward most frame locations. (Fig. F-1, 3)
  -  4. Ensure all bolts engage frame spacers and the spacers do not impede on frame welds.
-  **NOTE:** Ensure that the air compressor bracket is not sandwiched between the frame and the hitch bracket before tightening bolts.
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**G. Tighten Remaining Hitch Hardware.**

-  1. Tighten four (4) M12 bolts in the center to 60 +/- 12 lbf-ft (80 +/- 15 N-m). (Fig. G-1, 1 - 4)
-  2. Tighten four (4) M12 bolts on the frame rail to 60 +/- 12 lbf•ft (80 +/- 15 N-m). (Fig. G-1, 5 - 8).
-  3. Tighten four (4) M8 bolts to 19 +/- 4 lbf-ft (25 +/- 5 N-m). (Fig. G-1, 9 - 12)

**H. Reinstall Vehicle Components.**

- 1. Reconnect exhaust to the exhaust hanger ensuring to fully engage the hanger. (Fig. I-1)
-  2. Reinstall the air suspension cover by replacing the one fastener. (Fig. I-2)
  - i. If fastener is damaged fit a new fastener, (P/N 90467-09185).
-  3. Place the hitch plug in the glove box.

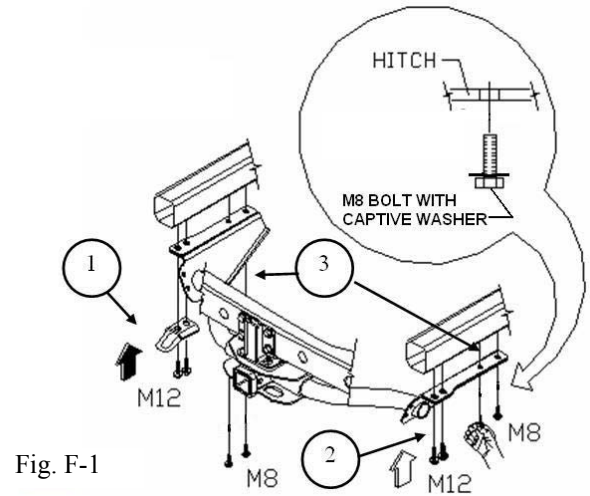


Fig. F-1

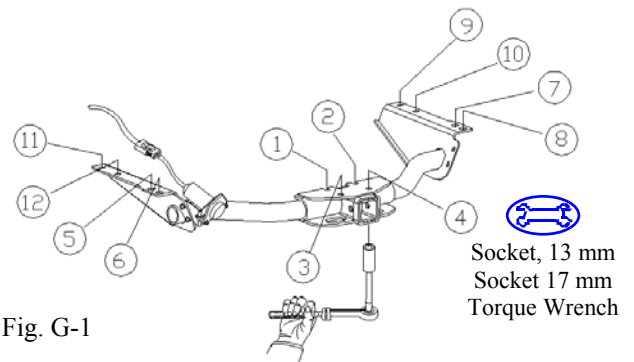


Fig. G-1

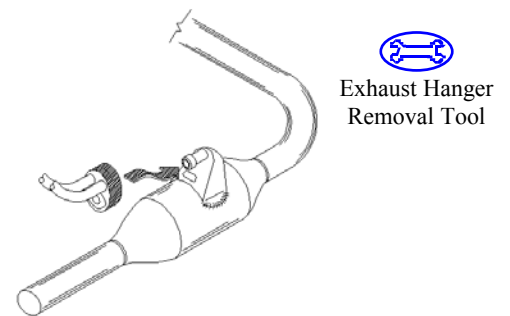


Fig. H-1

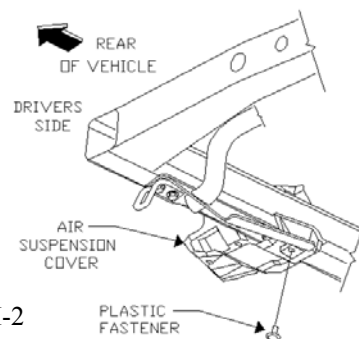







Fig. H-2



Section III - Functional Verifications

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

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

-   Inspection torque (M12 bolts)
-   Inspection torque (M8 bolts)
-   Inspection torque (M6 bolts, 7-pin to bracket)
-   Inspection torque (M6 bolts, fascia tab to bracket)
- Frame Spacers
-   Wiring Bracket

60 +/- 12 lbf-ft (80 +/- 15 N-m)

19 +/- 4 lbf-ft (25 +/- 5 N-m)

94 +/- 19 lbf-in (10.4 +/- 2 N-m)

71 +/- 18 lbf-in (8 +/- 2 N-m)

Installed and off of welds

Installed and fed between hitch and cross member.