



# GENUINE PARTS

## INSTALLATION INSTRUCTIONS

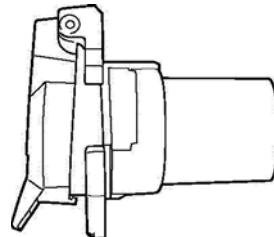
**DESCRIPTION:** Tow Hitch Wire Harness Kit  
**APPLICATION:** NV Cargo & Passenger  
**PART NUMBER:** 999T8 HW000  
 Installation of this accessory requires installation of additional part.  
 • Tow Hitch 999T8 HW010

**KIT CONTENTS:**

Item	Qty.	Part Description	Service Part Number
A	1	Wire Harness	999T8 HW000S1
B	1	7-pin connector assembly	24340 ZR10A
C	40	Plastic Ties	N/A
D	11	Plastic Ties\w Large clips	N/A
E	2	Plastic Ties\w Medium clips	N/A
F	1	Plastic Tie 145 mm (12 inches)	N/A
G	1	1M Relay	25230 79917
H	3	2M Relay	25230 7996A



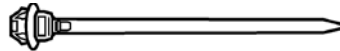
(A)



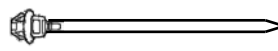
(B)



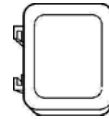
(C)



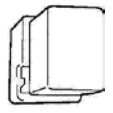
(D)



(E)



(G)



(H)



(F)

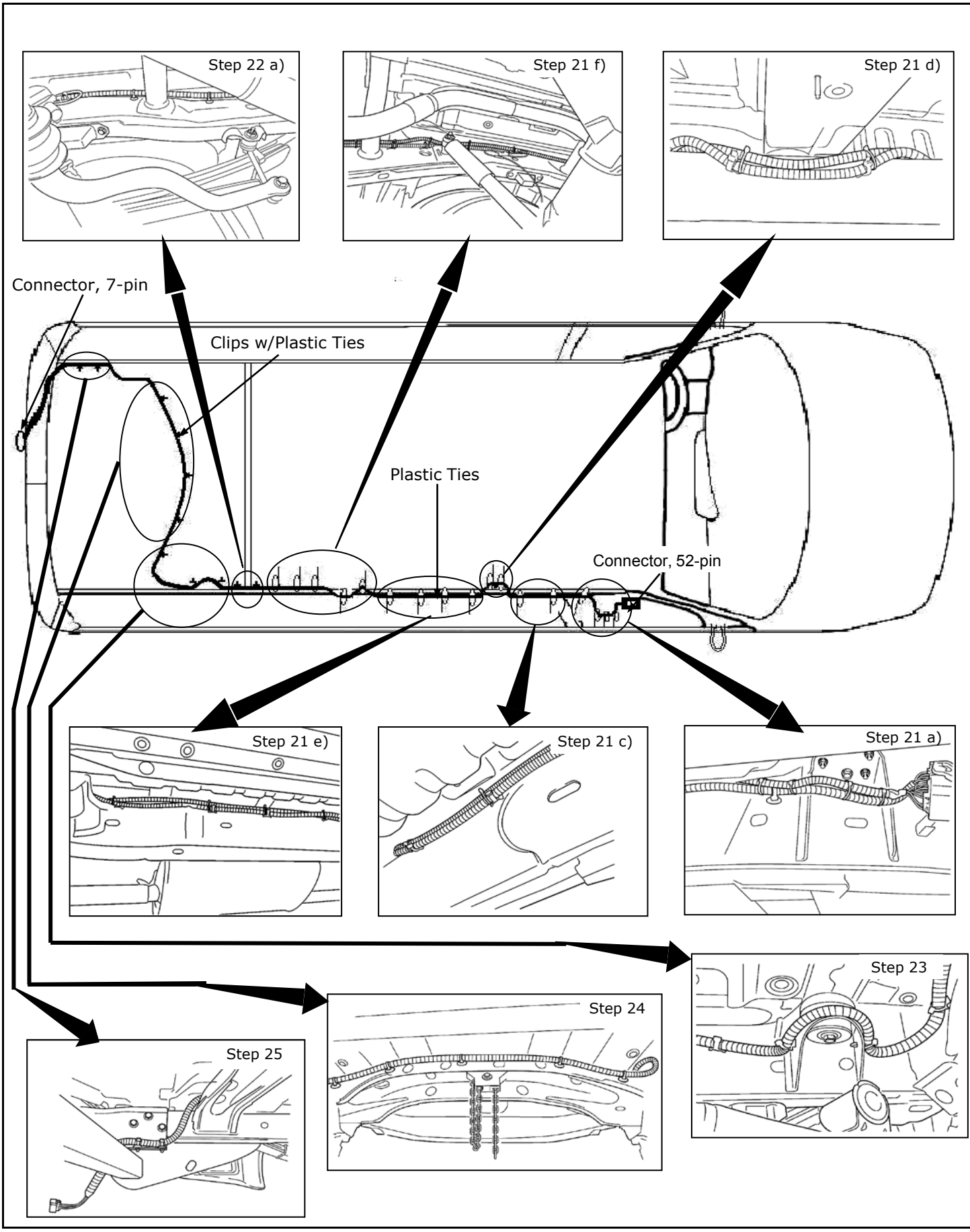
**TOOLS REQUIRED:**

- Small - Flat blade Screwdriver
- Wire Cutter
- Pick with 90 degree end
- 10mm Socket
- Ratchet
- Torque Wrench 15 Nm (150 in-lb)

**⚠ WARNING**

- If vehicle is raised with a floor jack or hoist, use safety stands to support the vehicle.

# INSTALLATION OVERVIEW:

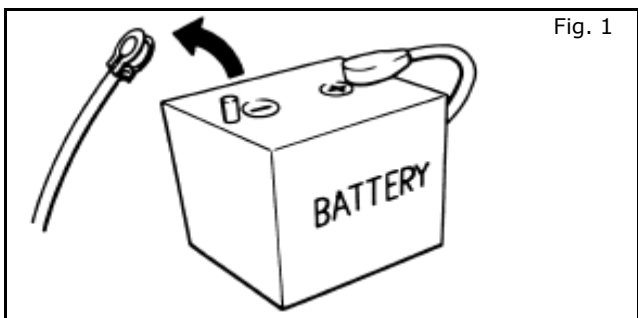


**INSTALLATION PROCEDURE:**

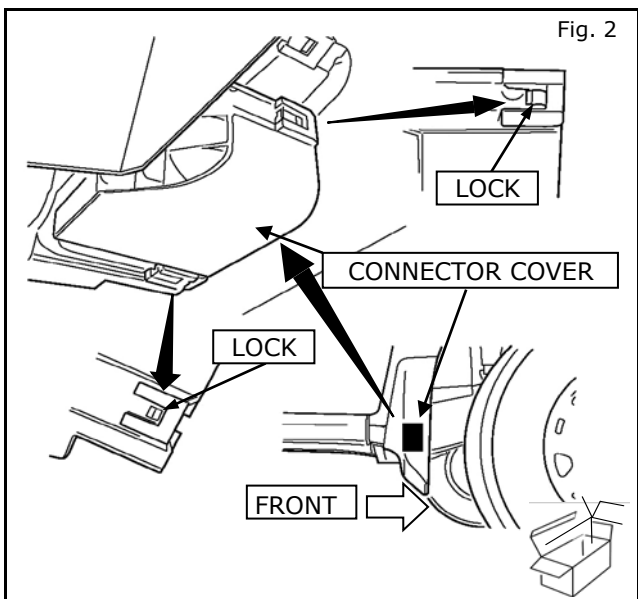
- 1) Apply parking brake
- 2) Turn ignition switch to "ON" position
- 3) Record the customer radio presets and other presets as required

Preset	1	1	2	3	4	5	6	

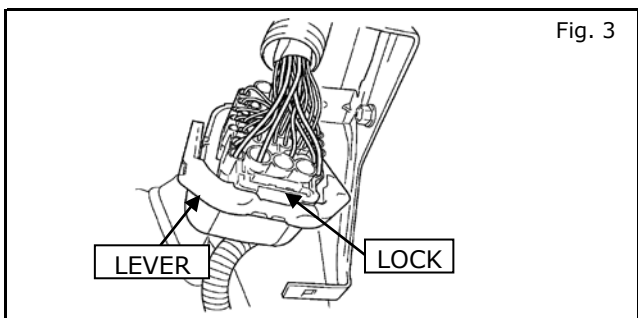
- 4) Put shift lever in "P" position.
- 5) Turn ignition switch to "OFF" position
- 6) Lower spare tire and set aside. (See owner's manual for tire lowering instructions.)
- 7) Disconnect the negative battery terminal.



- 7) Disconnect the negative battery terminal.

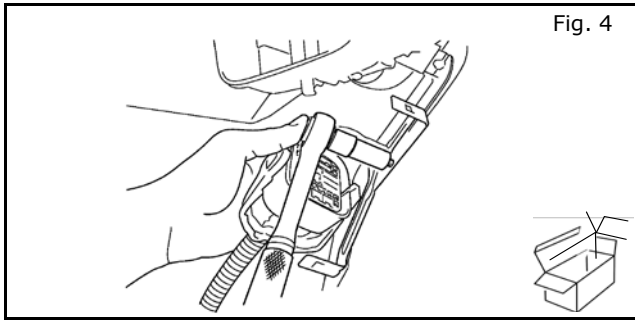


- 8) Remove the 52-pin connector cover (located underbody passenger side). Store the cover in a safe place.

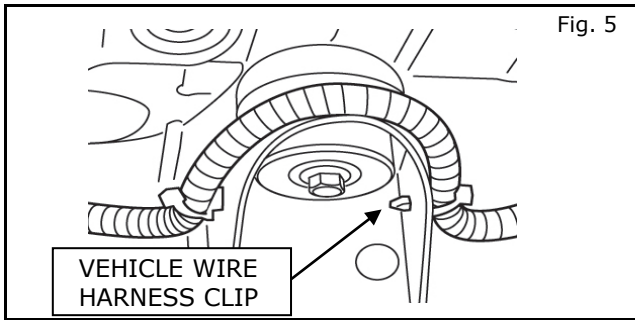


- 9) Unplug the 52-pin connector by releasing the lock and pushing back on the lever.

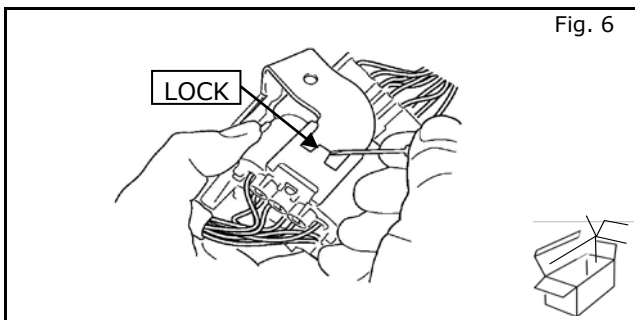
## INSTALLATION PROCEDURE:



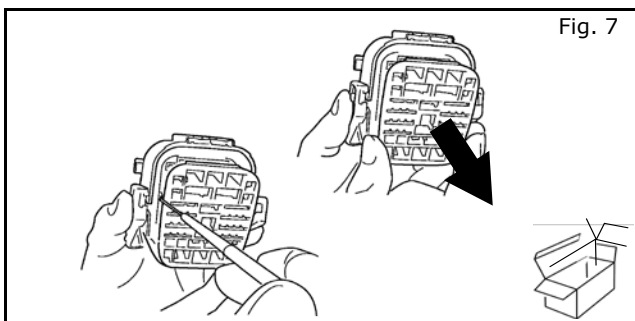
- 10) Remove and lower 52-pin connector bracket using 10mm socket. Store bolt in a safe place.



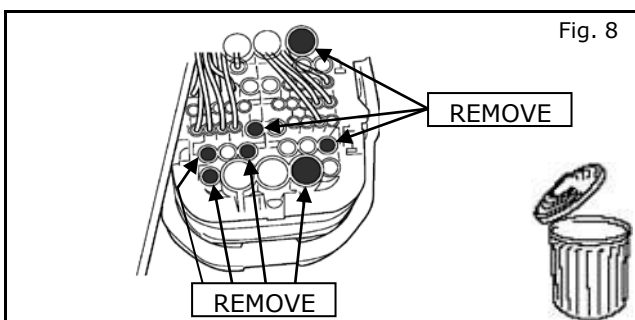
- 11) Release vehicle wire harness clip.



- 12) Lift up on 52-pin connector bracket lock with small screw driver to remove connector. Store bracket in safe place.

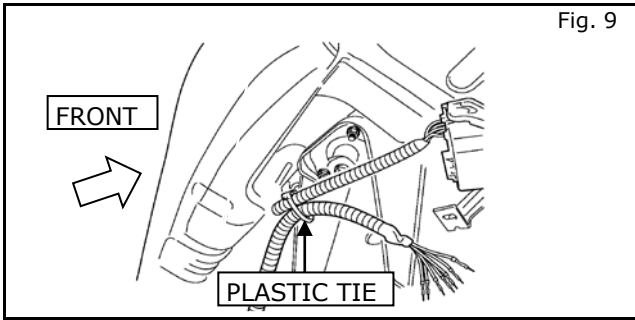


- 13) Remove connector lock plate from 52-pin connector. Store in a safe place.

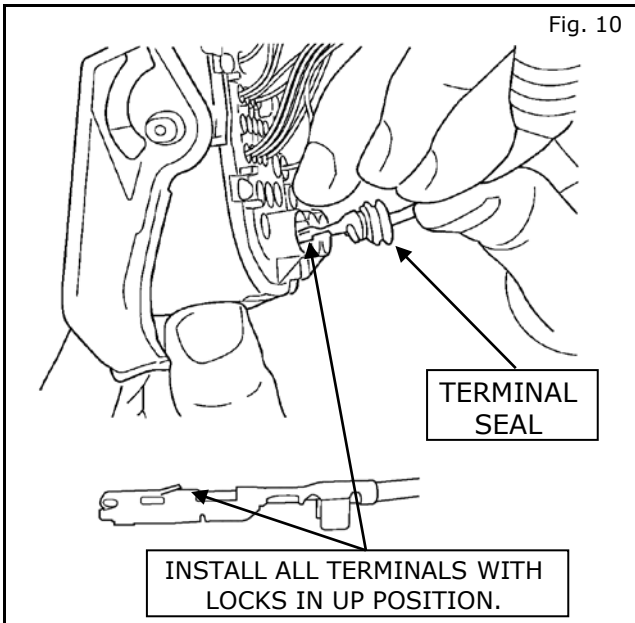


- 14) Remove seven (7) wire hole plugs from the rear of the 52-pin connectors and discard.

**INSTALLATION PROCEDURE:**



- 15) Loosely attach the tow hitch wire harness with one (1) plastic tie as shown.

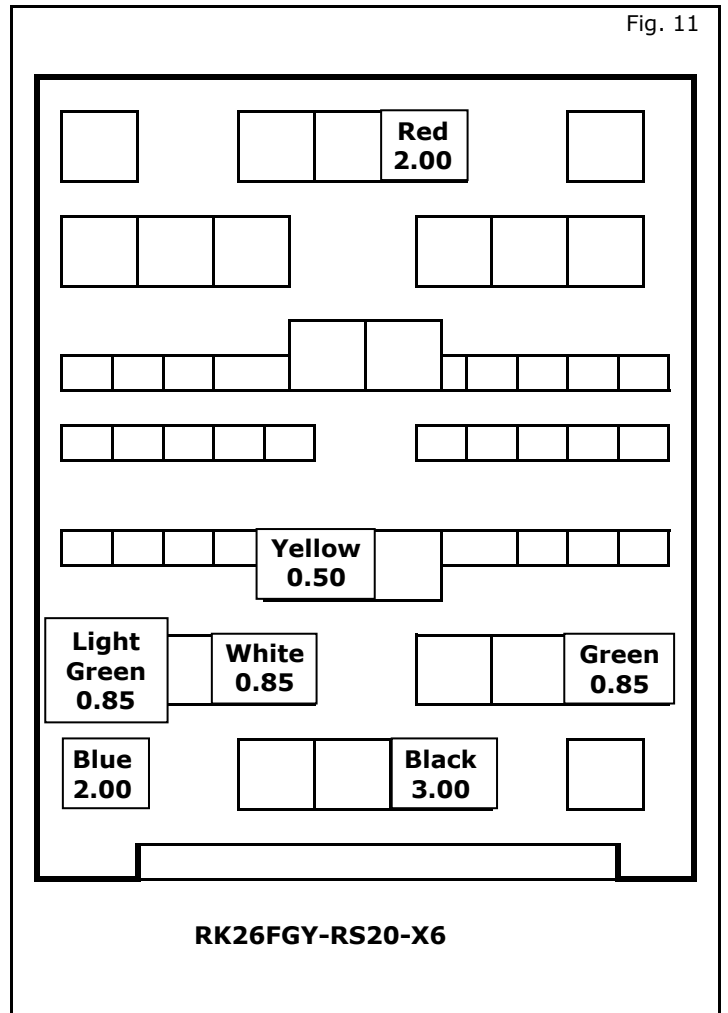


- 16) Insert the seven (7) wires from the tow hitch wire harness.
- Star with upper row.
  - Continue to each lower row. Begin at left.

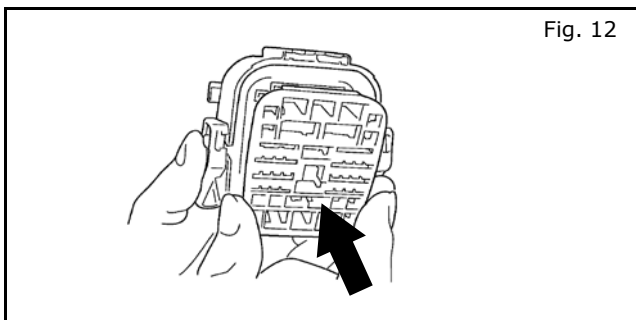
**CAUTION**

- Ensure terminals are fully inserted into the connector and terminal seals are in place to prevent water intrusion.

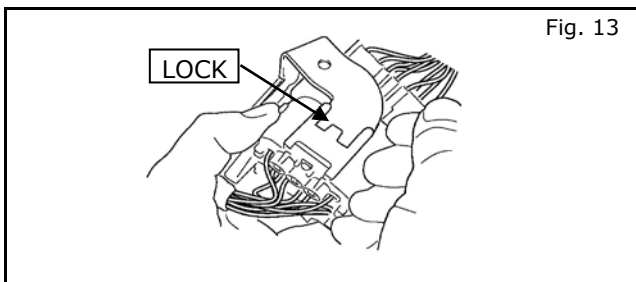
Pin	RK26FGY-RS20-X6	Color	Size
OT16	Reverse	Yellow	0.50
OT02	Tail Input	Light Green	0.85
OT25	Stop/Turn Right	White	0.85
OT24	Stop/Turn Left	Green	0.85
OT01	Brake	Blue	2.00
OTE3	Ground	Black	3.00
OT26	+B	Red	2.00



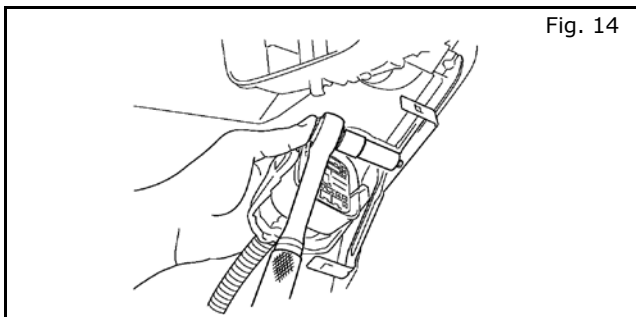
## INSTALLATION PROCEDURE:



- 17) Install previously removed connector lock plate into 52-pin connector.

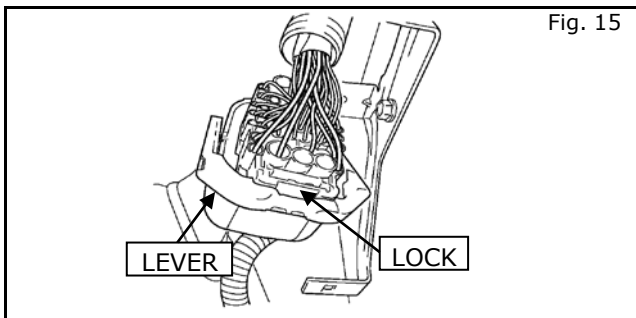


- 18) Attach 52-pin connector to mounting bracket.

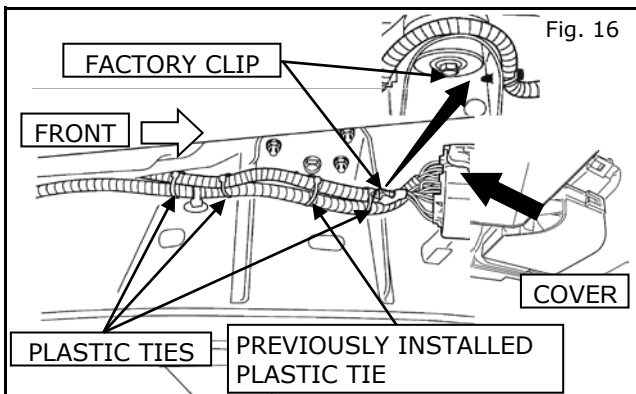


- 19) Attach 52-pin connector bracket to vehicle frame using a 10mm socket.

**Torque to 10 Nm (1 Kg-m, 88 in-lb)**

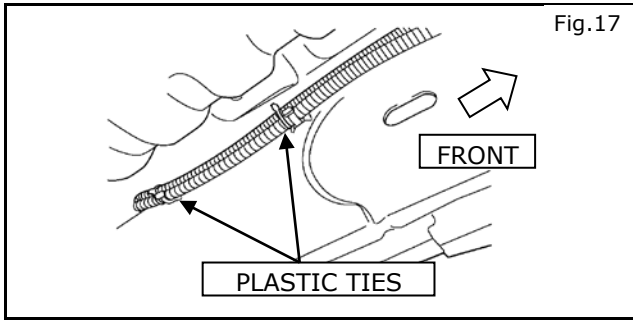


- 20) Connect the two (2) 52-pin connectors. Ensure lever is locked.

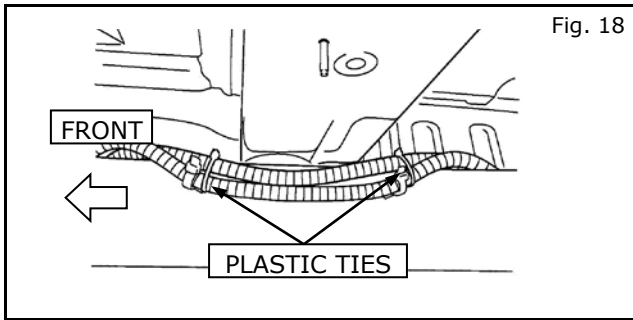


- 21) Install factory wire harness clip. Route the 7-pin tow hitch wire harness on top of the existing vehicle wire harness.
- a) Secure it with three (3) plastic ties and tighten the previously installed plastic tie. Align with existing factory clips.
  - b) Replace 52-pin connector cover.

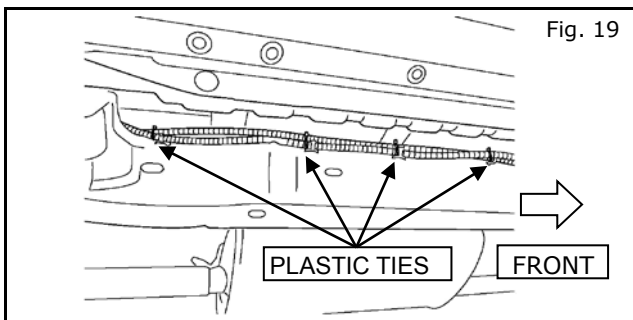
## INSTALLATION PROCEDURE:



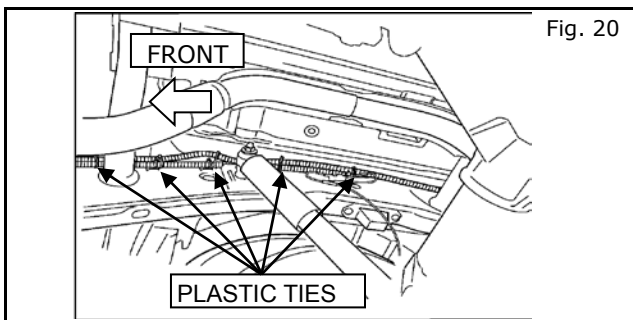
- 21) c) Secure with two (2) plastic ties. Align with existing factory clips.



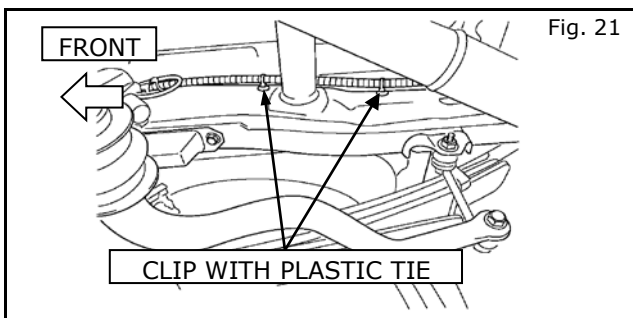
- d) Secure with two (2) plastic ties. Align with existing factory clips.



- e) Secure with four (4) plastic ties. Align with existing factory clips.



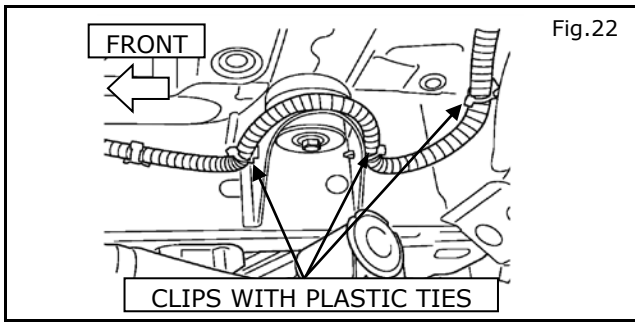
- f) Secure with five (5) plastic ties next to factory clips. Align with existing factory clips.



- 22) Route 7-pin tow hitch wire along the frame rail.  
a) Secure it using 2 clips with plastic ties.  
b) Insert the clip portion into the frame rail holes.

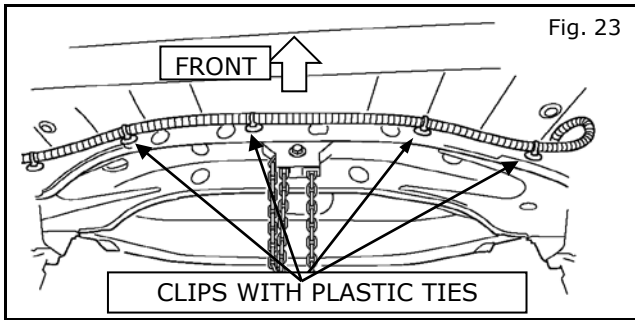
**Note: If the vehicle has an existing wire harness, route the 7-pin wire harness along the top of the existing wire harness and secure it with plastic ties next to the existing clips.**

## INSTALLATION PROCEDURE:



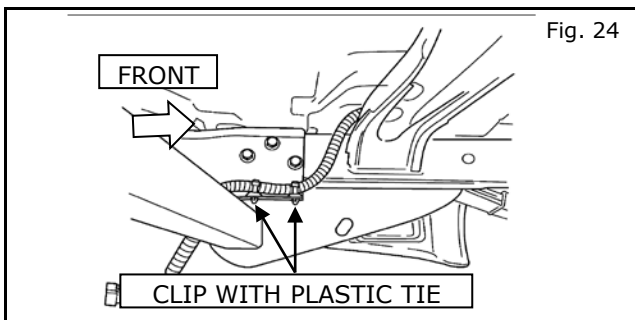
- 23) Route 7-pin tow hitch wire along the frame rail.
- Secure it using 3 clips with plastic ties.
  - Insert the clip portion into the frame rail holes.

**Note: If the vehicle has an existing wire harness, route the 7-pin wire harness along the top of the existing wire harness and secure it with plastic ties next to the existing clips.**



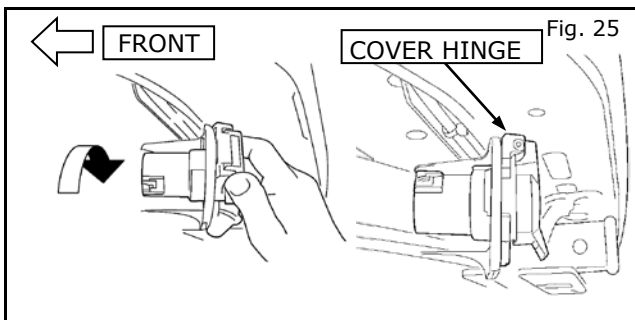
- 24) Route 7-pin tow hitch wire along cross member and over the cross member towards the rear of the vehicle.
- Secure it using 4 clips with plastic ties.
  - Insert the clip portion into the frame rail holes.

**Note: If the vehicle has an existing wire harness, route the 7-pin wire harness along the top of the existing wire harness and secure it with plastic ties next to the existing clips.**

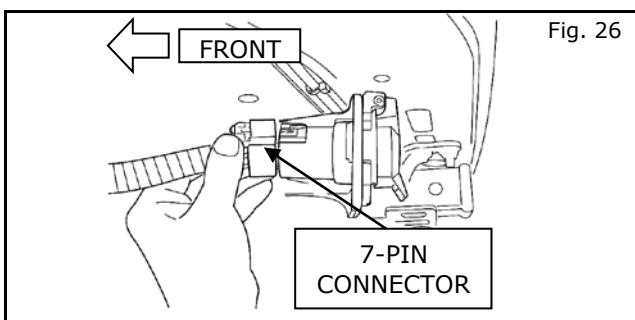


- 25) Route 7-pin tow hitch wire along tow hitch member.
- Secure using 2 clips with plastic ties.
  - Insert the clip portion into frame rail holes.

**Note: If the vehicle has an existing wire harness, route the 7-pin wire harness along the top of the existing wire harness and secure it with plastic ties next to the existing clips.**



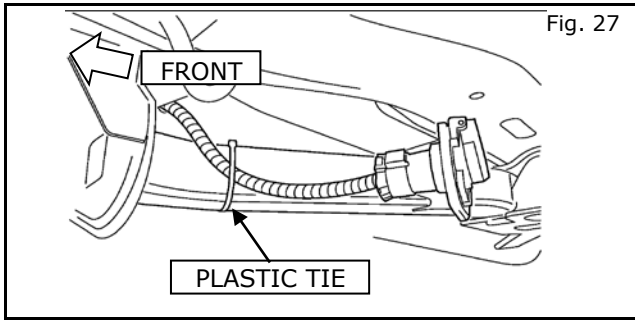
- 26) Install 7-pin Connector
- Insert 7-pin Connector into tow hitch member mounting bracket (cover hinge should be in the "9 O'clock" position.)
  - Rotate it clockwise to "12 O'clock" position until it locks.



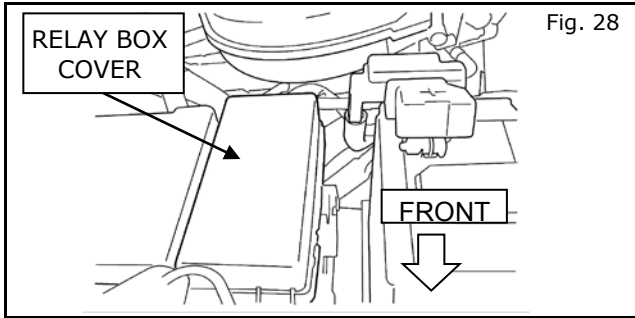
- 27) Connect tow hitch wire harness 7-pin connector to 7-pin connector assembly. Ensure connector is locked.



## INSTALLATION PROCEDURE:

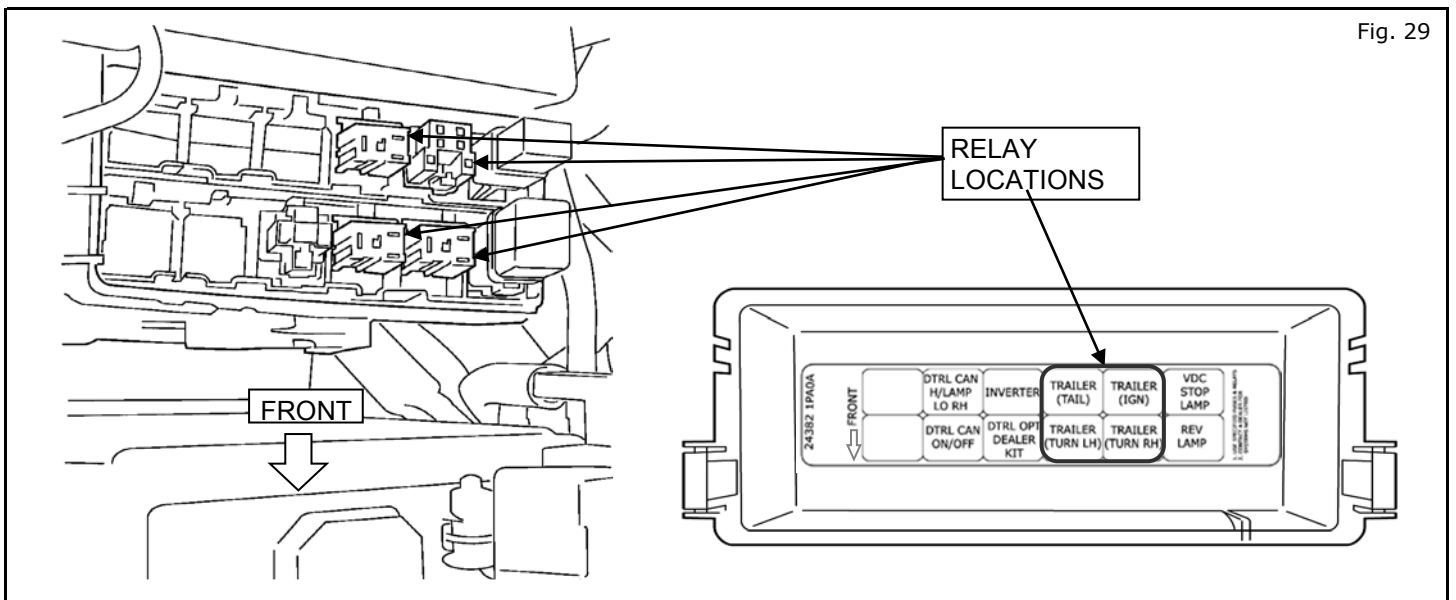


- 28) Secure the 7-pin wire harness to the hitch using the 145mm (12 inch) plastic tie.



- 29) Remove the Relay Box cover.

- 30) Install the one (1) 2M Relay and three (3) 1M Relays.



## INSTALLATION OF REMOVED PARTS

- 1) Install Relay Box Cover.

**ACCESSORY CHECK:**

- Verify all wiring is secure and not exposed.
- Trim all excess plastic ties flush.
- Connect the battery negative terminal and tighten the nut to appropriate torque.
- Turn ignition switch to "**ON**" position and the engine stopped.
- Confirm tow hitch wire harness functions:

**Operational Verification:**

The following checks are to be performed with the ignition switch in "**ON**" position and the engine stopped. Electric Brake Controller must be plugged in for Electric Brake Signal.

Check	Condition
Turn on headlamps.	Marker and tail lights on both the vehicle and tester are lit.
Turn on left turn signal.	Left turn lights on both the vehicle and tester are flashing.
Turn on right turn signal.	Right turn lights on both the vehicle and tester are flashing.
Apply foot brake.	Stop lights on both the vehicle and tester are lit.
Turn on left turn signal and apply foot brake.	Left turn lights on the vehicle and left turn light on the tester are flashing, the right stop light on the vehicle and tester are lit.
Turn on right turn signal and apply foot brake.	Right turn lights on the vehicle and right turn light on the tester are flashing, the left stop light on the vehicle and tester are lit.
Turn on hazard lights switch.	All turn signal lights are flashing on both the vehicle and tester.
With hazard lights switch on, apply the foot brake.	All stop lights on the vehicle are lit, both turn lights on the vehicle are flashing and turn/stop lights on the tester are flashing.
Battery voltage at the Battery (B+) terminal.	Ignition on, engine not running.
Reverse lights.	Place the gear shift lever in the reverse position (with engine not running and parking brake applied), battery voltage at the reverse terminal.

**Operational Verification:**

The following checks are to be performed with the ignition switch in "**ON**" position and the engine stopped. Electric Brake Controller must be plugged in for Electric Brake Signal.

Check	Condition
Ground continuity.	Less than 0.2 ohms from ground terminal and vehicle ground.
Battery voltage at the Brake terminal.	Apply foot brake with Electric Brake Controller plugged in.

**Operational Verification:** (Cont.)

The following checks are to be performed with the ignition switch in "**OFF**" position and the engine stopped. Electric Brake Controller must be plugged in for Electric Brake Signal.

Check	Condition
Turn on headlamps.	Marker and tail lights on both the tester and vehicle are lit.
Apply foot brake.	Stop lights on both the vehicle and tester are lit.
Turn on left turn signal.	Left turn lights on both the vehicle and tester are <b>not</b> lit.
Turn on right turn signal.	Right turn lights on both the vehicle and tester are <b>not</b> lit.
Turn on left turn signal and apply foot brake.	All stop lights are lit and <b>not</b> flashing on both the vehicle and tester.
Turn on right turn signal and apply foot brake.	All stop lights are lit and <b>not</b> flashing on both the vehicle and tester.
With hazard lights switch on, apply the foot brake.	All stop lights on the vehicle are lit. Both turn lights on the vehicle are flashing and both turn/stop lights on the tester are flashing.
Turn off the hazard light switch, apply foot brake.	All stop lights on the vehicle are lit. Both turn/stop lights on the tester are lit, but <b>not</b> flashing.
No battery voltage at the Battery (B+) terminal	Ignition OFF.
Reverse lights.	Place the gear shift lever in the reverse position (with engine not running and parking brake applied), no battery voltage at the reverse terminal.
Battery voltage at the Brake terminal.	Apply foot brake with Electric Brake Controller plugged in.

**FINAL INSPECTION:**

- Re-program radio presets and other vehicle settings to the recorded settings.
- Start engine and verify that there are no new Diagnostic Trouble Codes. Turn ignition switch to "**OFF**".
- Place the Owner Manual, Quick Reference Guide, and/or other Manual in the glove box.