



**GENUINE PARTS**

## INSTALLATION INSTRUCTIONS

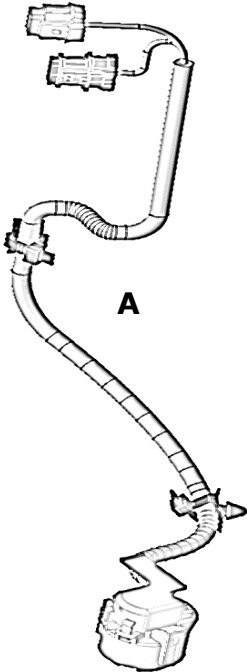
**DESCRIPTION:** Trailer Tow Harness Kit (4/7)-PIN

**APPLICATION:** Frontier

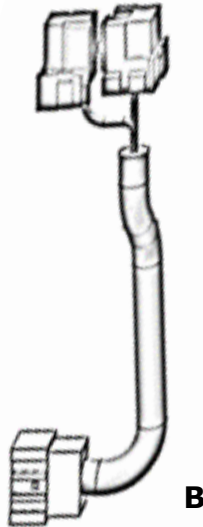
**PART NUMBER(S)  
REQUIRED FOR  
INSTALLATION:**

**T99T8 9BU0A TOW HARNESS KIT (4/7-PIN)**

### KIT CONTENTS:



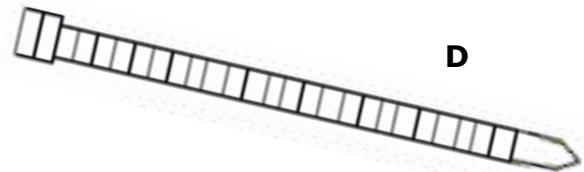
**A**



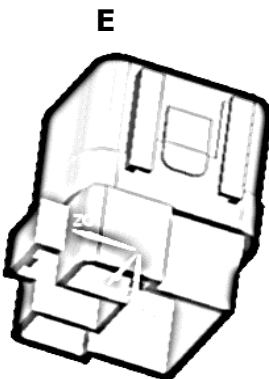
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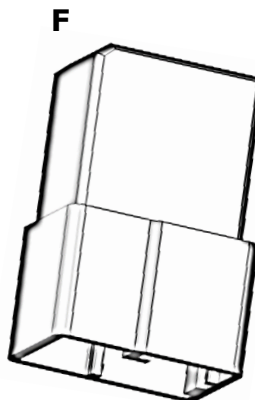
**C**



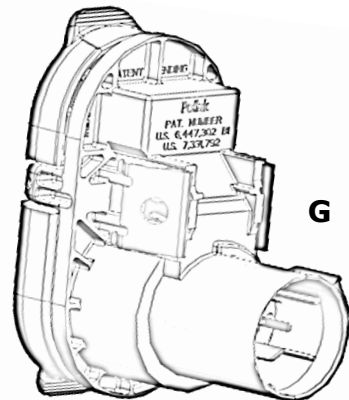
**D**



**E**



**F**



**G**



**Important: Read Before Installation!**

Dealer Installation Recommended.

#### **WARNING**

- To avoid serious personal injury or property damage, obtain Installation Instructions before attempting to install this accessory. The Installation Instructions provide the necessary procedures for a safe installation.

#### **CUSTOMER INTERNET DOWNLOAD INSTRUCTIONS:**

Customers can obtain Installation Instructions for Infiniti or Nissan vehicles at [www.Infiniti-Techinfo.com](http://www.Infiniti-Techinfo.com) or [www.Nissan-Techinfo.com](http://www.Nissan-Techinfo.com) respectively. From the home page, select Accessory Instructions. Select your Model, Model Year, and Accessory Type or search for your Model, and or Model Year, and or Accessory Type including Keyword or Part Number, then locate the Instructions for your accessory.

**H**

#### **DEALER ASSIST DOWNLOAD INSTRUCTIONS:**

Dealership technicians can locate the Installation Instructions for this accessory by scrolling to and select, 'Acc. Install Instructions' tab. Always download and use latest version of the Installation Instructions.

Installation Instructions Replacement Template 999V2 AW000 Rev. 07/12/15

**PART NUMBER(S)  
REQUIRED FOR  
INSTALLATION:**

**KIT CONTENTS:**

Item	Level	QTY	Description	Nissan Part Number
Kit	1	1	Trailer Tow Harness Kit (4/7-PIN)	T99T8 9BU0A
A	2	1	Exterior Harness Jumper	NA
B	2	1	Interior Harness Relay Jumper	NA
C	2	1	Urethane (foam) tape	999T8 BR100
D	2	2	185mm wiring cable tie strap	NA
E	2	1	Relay (brown colored)	25230 7996A
F	2	1	Relay (blue colored)	25230 79917
G	2	1	4/7-PIN Bumper connector with mounting clips	24340 EZ00B-C1
H	2	1	Installation Instructions Replacement Template	999V2 AW000
		NA 0	Installation Instructions (Nissan Website)	T99T8 9BU0A II

**TOOLS REQUIRED:**

- Screwdriver #2 Philips
- Trim Removal Tool, Nylon
- Rotary cutting (Dremel)-or-high speed right angle tool
- Cutting Disc's / Bit
- Work Light
- Pliers, Wire Cutting
- Safety goggles
- ~50mm = 2" Wide Shipping / Clear Packaging type tape
- Vinyl electrical tape
- Nissan Anti corrosion product:
  - Part # 999MP 9G001P Genuine Nissan Wax Sealer
  - Part # AP716-2100330 Genuine Nissan Mag 1 Anti-Rust 330

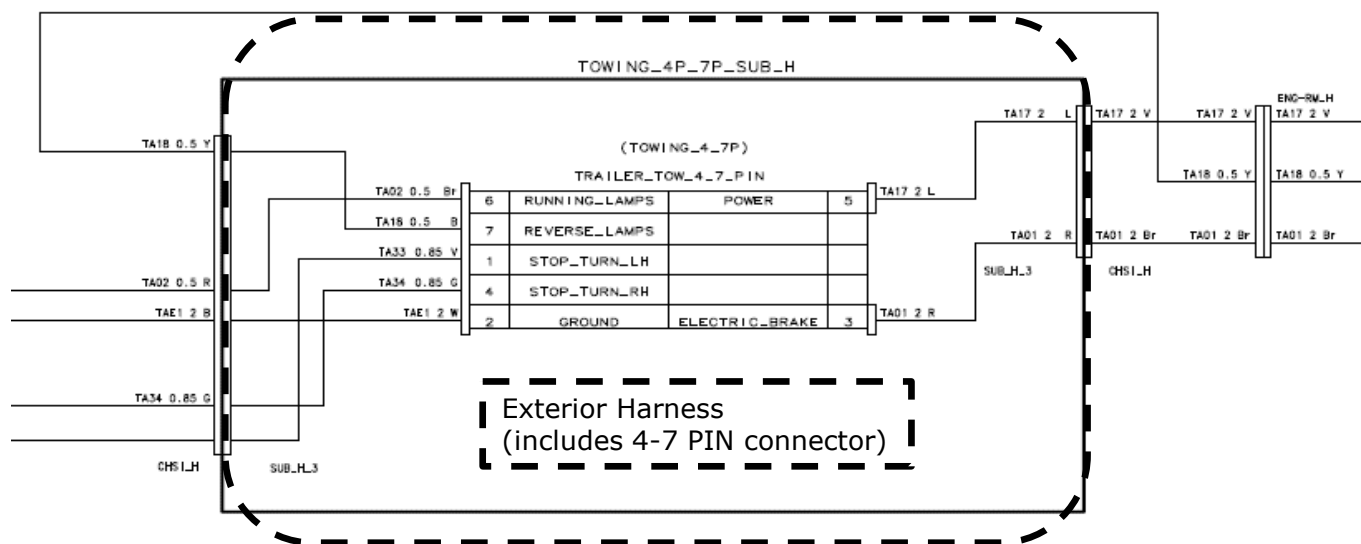
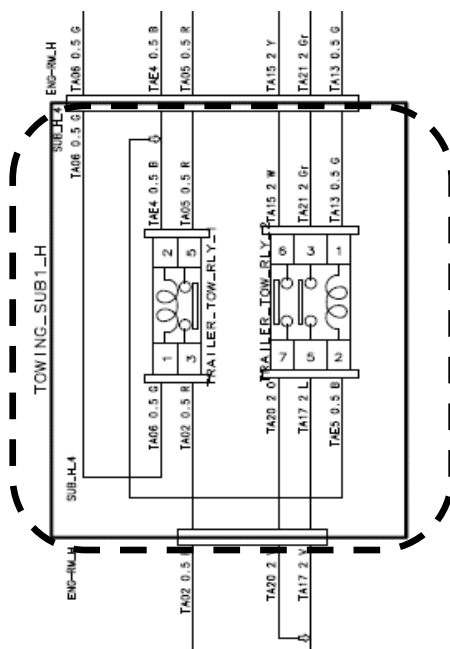
**INSTALLATION CAUTIONS:**



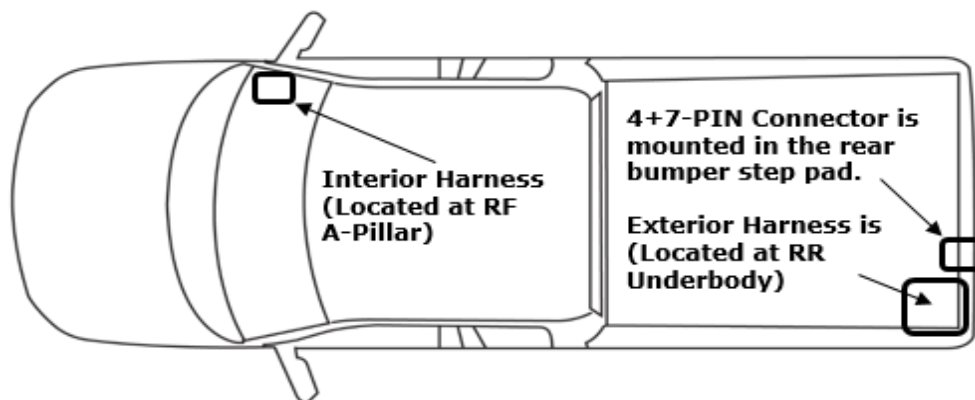
**CAUTION**

- Dealer installation recommended. Instructions may refer to Service Manual.
- Please read this instruction carefully before installing this product for correct installation.
- Please DO NOT use or install the part in ways other than what is described.
- Always use floor, seat and steering wheel protection.
- Parts utilizing adhesion as method of attachment are to be installed at surface temperature of 15-38° C
- Apply masking tape as needed to protect areas that may be scratched or damaged by tools.
- Always remove vehicle parts in the sequence directed. Improper procedure can damage parts.
- Take care not to scratch or damage any component during the removal or re-installation process.
- Trim pieces found to have witness marks or broken clips ARE NOT to be reinstalled.
- Store removed parts in a safe manner.
- If a problem occurs during installation, please contact Nissan dealer where product was purchased.

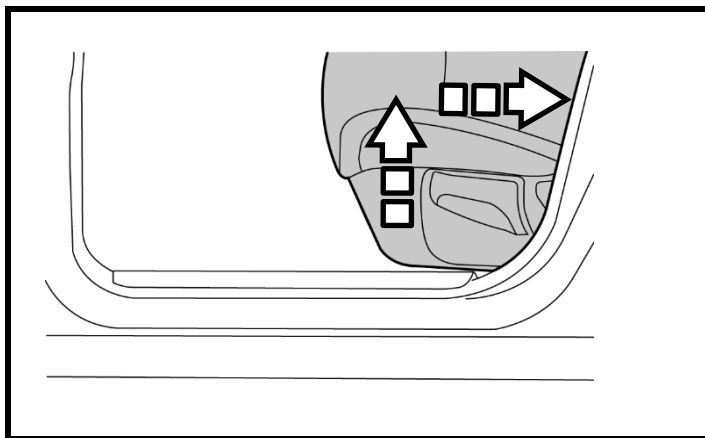
## 1.1) SYSTEM



1.2) VEHICLE

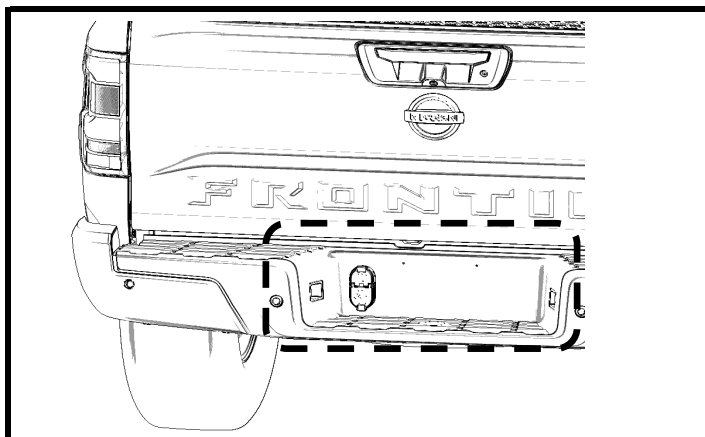


## SECTION 2 - VEHICLE PREPARATION



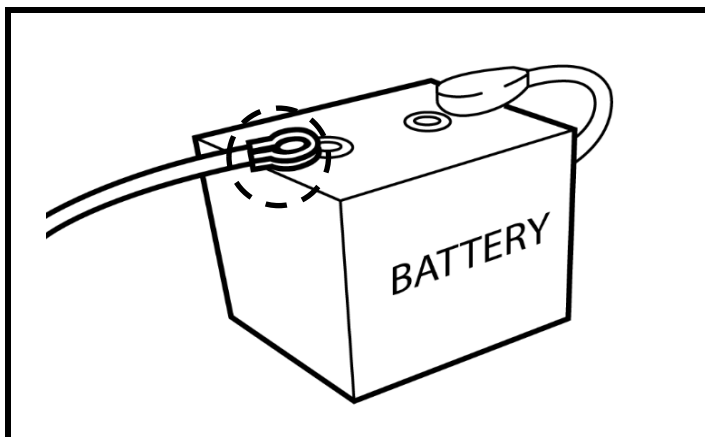
2.1) Move seats.

- a ) Move both front seats to the full rearward position.
- b ) Roll both front windows down.



2.2) Prepare the vehicle for installation.

- a ) Vehicle should be on a hoist to install the exterior harness and the rear bumper connector.
- b ) Vehicle should be off the hoist to allow the RF door to fully open for access when installing the interior harness.



2.3) Disconnect battery terminal

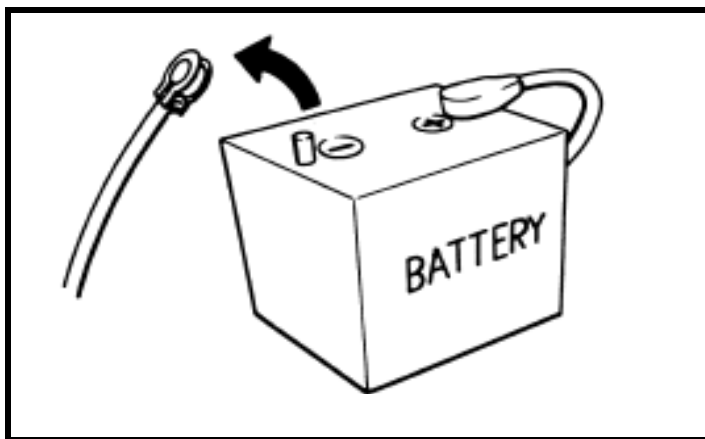
- a ) Locate negative battery terminal.
- b ) Loosen nut with 10mm socket

**Battery Terminal Nut**



**⚠ CAUTION**

- Allow 3 min after key off with doors closed for vehicle power to time out.



2.4) Disconnect battery terminal

- a ) Lift negative battery terminal off stud.
- b ) Isolate negative battery terminal.

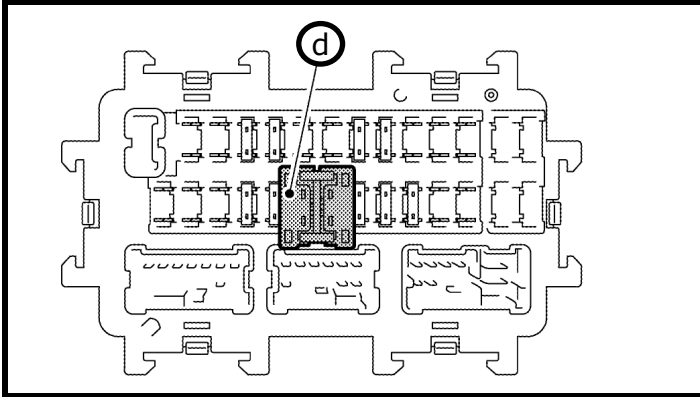
**⚠ CAUTION**

- Allow 3 min after negative terminal disconnect before separating any electrical connectors.

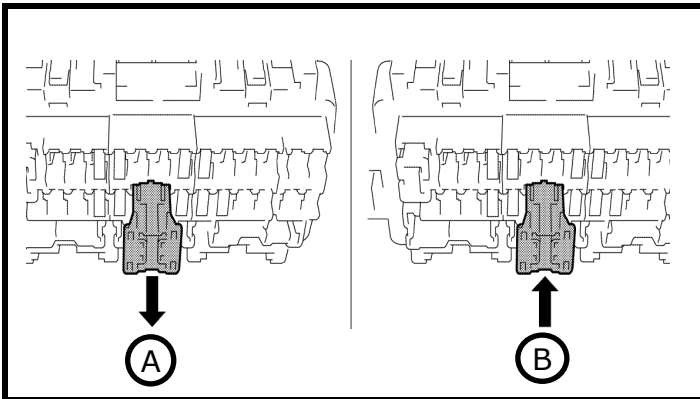


## CAUTION

- Always confirm the ignition is in the "OFF" position before changing the E.S.S. position.
- If E.S.S. is not in Customer Mode, there will be a loss of normal vehicle operation, preventing accessory function check.



- 2.5) Check Extended Storage Switch Position
- Put shift lever in "P" position for A/T and CVT or "1st" for M/T .
  - Apply park brake.
  - Place ignition in "OFF" mode.
  - Locate Extended Storage Switch in cabin fuse block as shown.
  - Confirm Extended Storage Switch is in "Customer" (In/Engaged) position.
  - If ESS is not In/Engaged, then proceed to step 2.2 .



- 2.6) Changing ESS Position
- To disengage Customer Mode, pull out in **A** direction as shown.
  - To engage Customer Mode, press in **B** direction as shown.

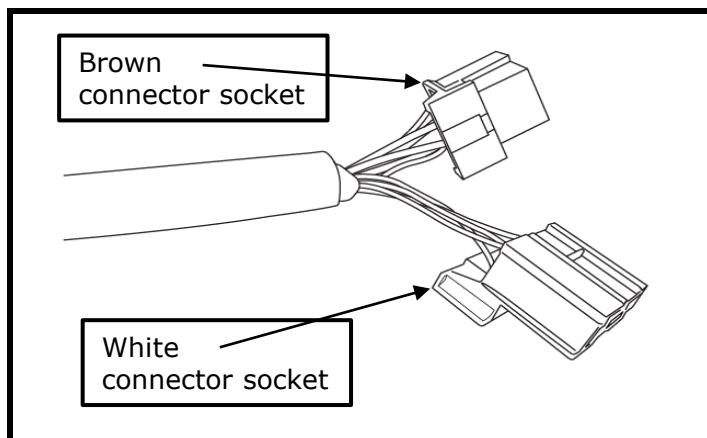
Condition	Switch Position	Note
Vehicle is delivered to the dealer	Transit (OUT)	
Vehicle is being stored at the dealer	Transit (OUT)	
Vehicle is delivered to customer	Customer (IN)	

- 2.7) Record Customer Presets
- Place ignition in "ON" mode.
  - Record the customer radio presets and other presets as required.

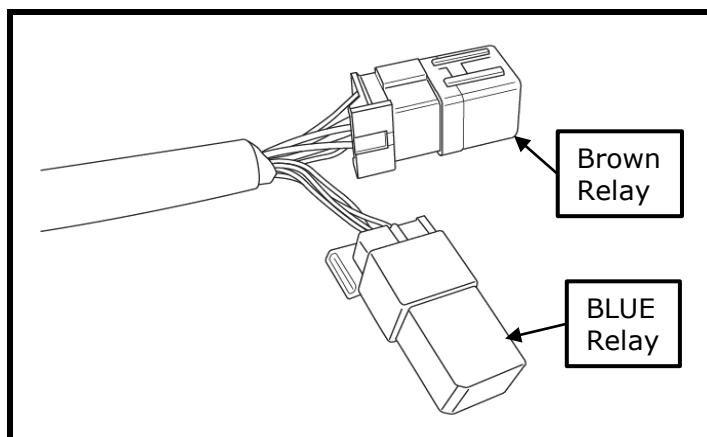
Preset	1	2	3	4	5	6	7	8	9	10

- Place ignition in "OFF" mode.

## SECTION 3 - INTERIOR HARNESS INSTALL PREPARATION



- 3.1) Prepare the Interior (Relay jumper) harness
- a ) Locate the relay socket connectors
  - b ) The square Brown relay connector socket is for the brown relay.
  - c ) The rectangular White relay connector socket is for the blue relay.

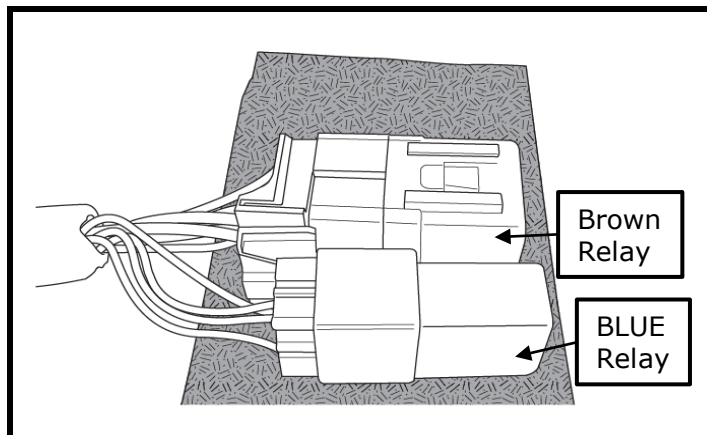


- 3.2) Install relays into their sockets
- a ) Install the Brown relay into the brown square socket.
  - b ) Install the Blue relay into the white rectangular socket.



### CAUTION

Be sure that the relays are fully seated into their respective sockets.

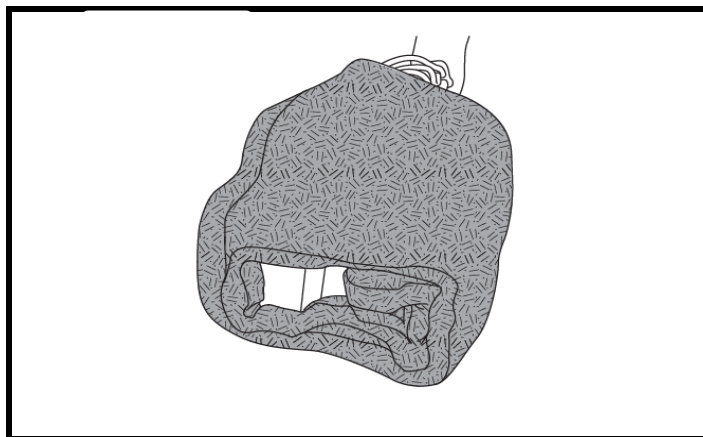
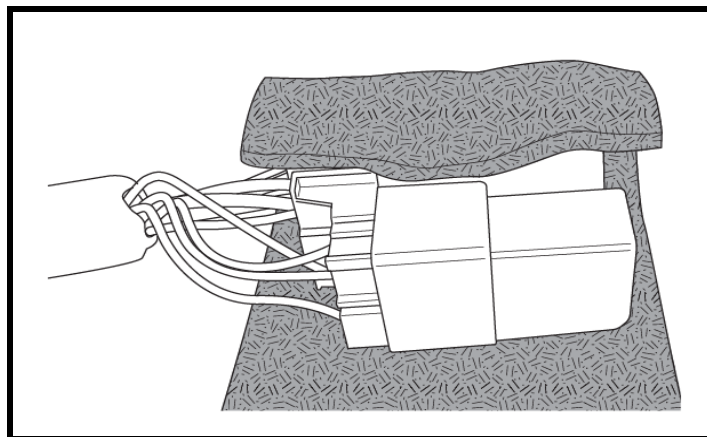


- 3.3) Wrap the relays with foam tape
- a ) Align the relay sockets as shown.
  - b ) Peel the foam tape backing and place relays as shown onto the sticky side of foam tape.
  - c ) Tightly wrap remaining foam tape around the relays and pinch over the tops as shown below.

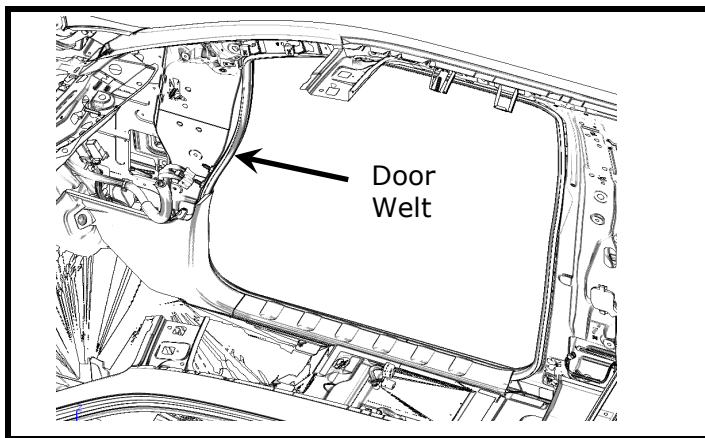


### CAUTION

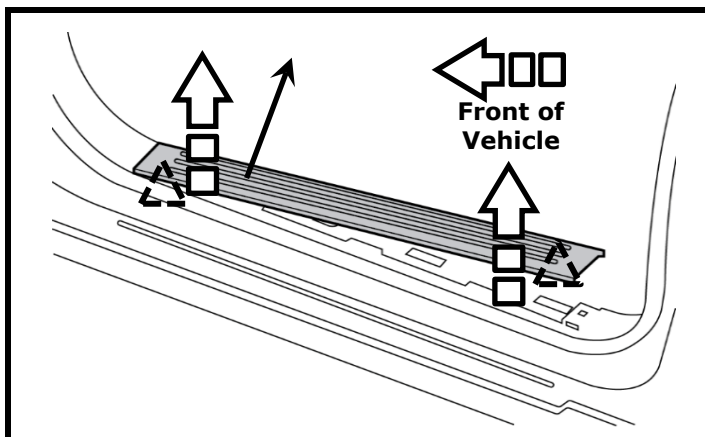
Position sockets backs together as shown and wrap all the foam tape tightly around the relays and sockets.



## SECTION 3 - INTERIOR HARNESS INSTALL PREPARATION



- 3.4) Locate the RF door and open for installation.
- a ) The interior harness will be installed.
  - b ) Do **not** remove any of the RF door welt for this installation.

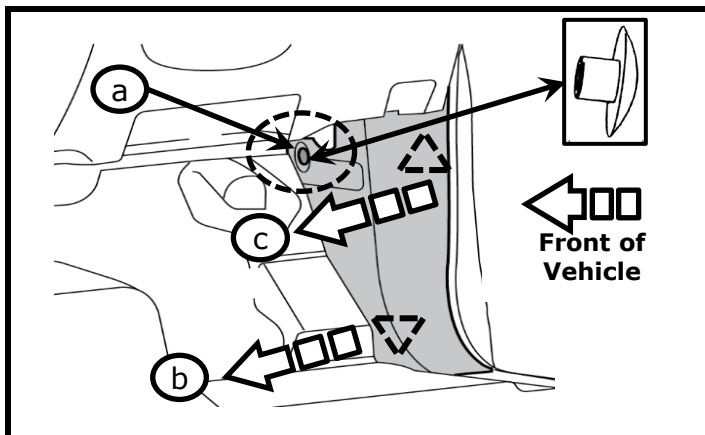


- 3.5) Locate and remove the RF door kick plate.
- a ) Using trim removal tool at rearward end of inner kick plate, pry inner kick plate up to disengage the trim clips.
  - b ) Using trim removal tool at forward end of inner kick plate, pry inner kick plate up to disengage clips.

**Clip**



- c ) Store the inner kick plate in a safe place.



- 3.6) Locate the RF door inner dash side finisher
- a ) Remove trim retaining fastener from lower kick trim with flat screwdriver

**Trim Fasteners**



- b ) Disengage lower trim pawl by pulling toward interior as shown.

**Upper Pawl**



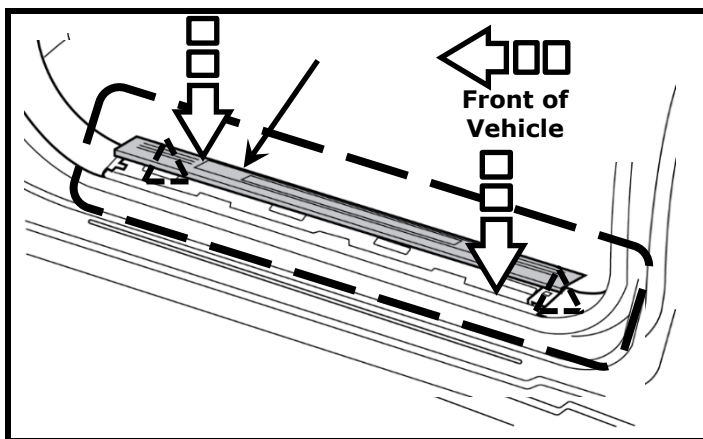
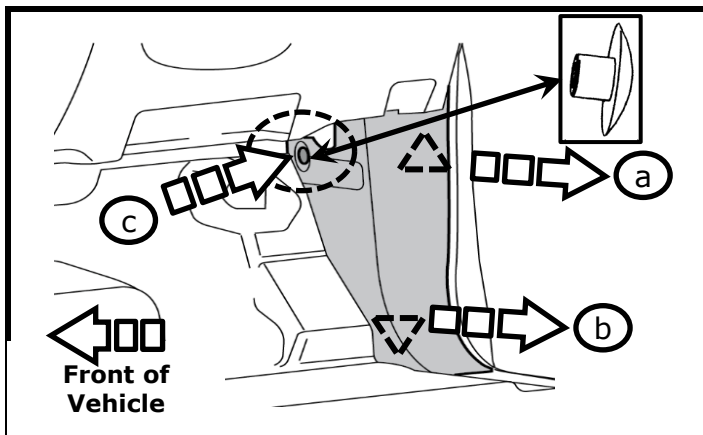
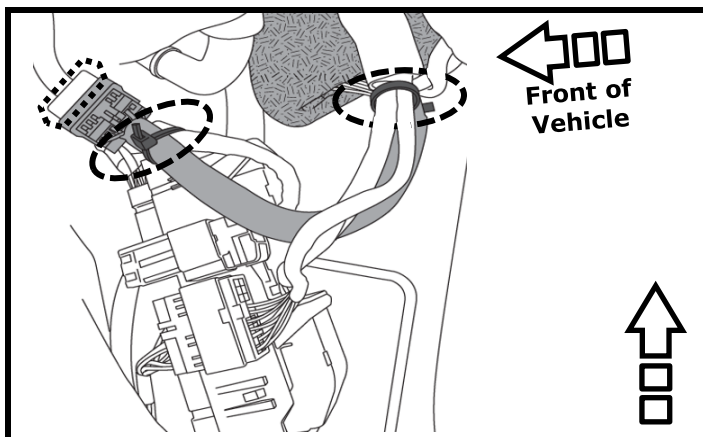
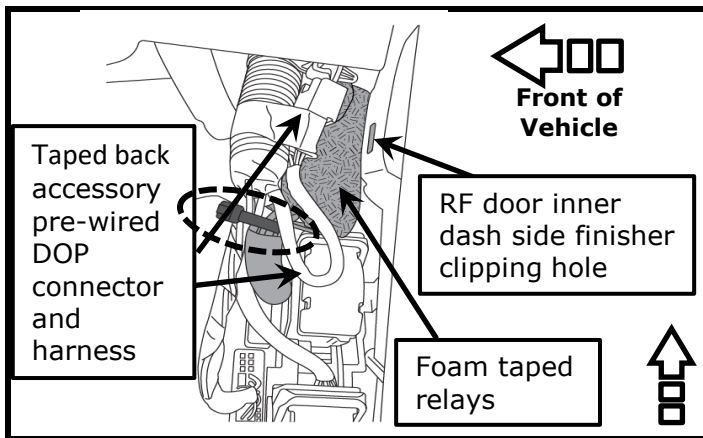
- c ) Disengage upper trim pawl by pulling toward interior as shown.

**Lower Pawl**





## SECTION 4 - INTERIOR HARNESS RELAY JUMPER - INSTALLATION PROCEDURE



### 4.1) Install foam taped relays and route harness

- Install foam taped relays between the main harness and the inner sheet metal, routing the interior harness wiring down, behind and forward of main harness as shown.
- Route wire bundle forward and outboard of the Accessory pre-wired DOP connector as shown.
- Cable strap below the relays to main harness as shown.



## CAUTION

- Be sure that relays are forward and clear of RF door inner dash side finisher clipping hole as shown.
- Do not cable strap around accessory pre-wired DOP connector or harness.

### 4.2) Connect and finish interior harness routing

- Locate the 12-PIN prewire connector taped back onto the interior section of the engine harness and release for use. It is located near to the inline connector bracket. The prewired connector is taped back. Break the tear tape to gain access to the connector.

#### 10-PIN Prewire Connector



- Insert the 12-PIN vehicle side prewire connector into the interior harness mating the 12-PIN connectors.
- Route interior harness along the existing vehicle engine harness and cable tie strap it with one strap on the relays and one in the center of the jumper.

### 4.3) Reinstall the RF door inner dash side finisher

- Engage upper trim pawl by pushing outward.
- Engage lower trim pawl by pushing outward.
- Install trim retaining fastener to lower kick panel trim by hand.

Pawls:



Lower



## CAUTION

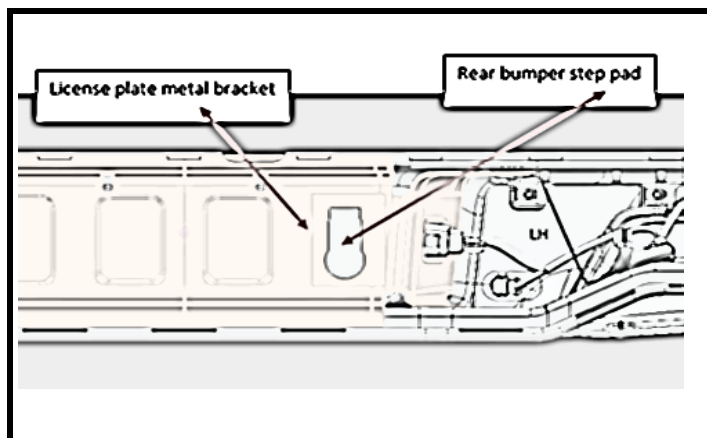
Be sure that RF door inner dash side finisher stays fully positioned and not opened at the top.

### 4.4) Reinstall Kick Plate - RH

- Starting at forward end, press down to engage all lower clips.
- Lastly, press down to fully engage all clips into floor metal and side trim pieces.



## SECTION 5 - 4/7-PIN CONNECTOR INSTALL OVERVIEW

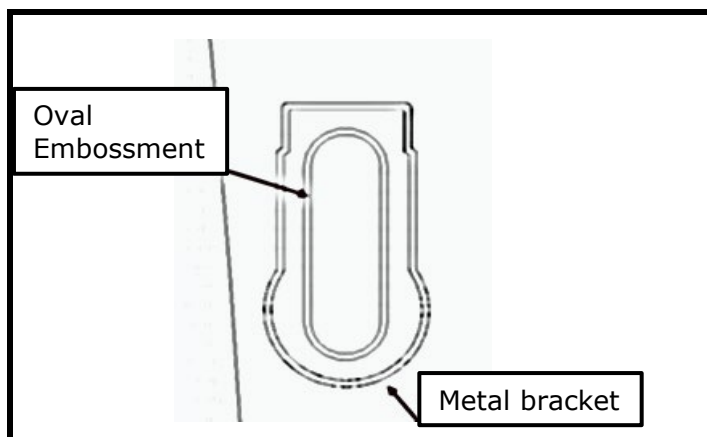


- 5.1) Target underbody view of license plate bracket.
- Locate the metal license plate bracket behind the rear bumper step pad.

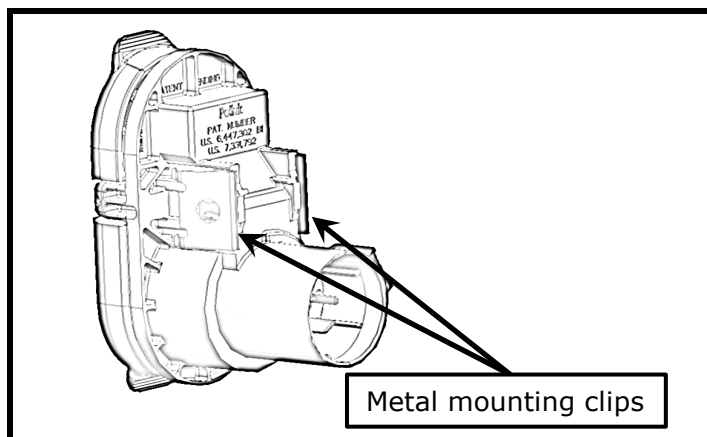


### CAUTION

- The rear bumper connector is installed without the need for removing the plastic bumper step pad from the vehicle.
- Do not scratch the bumper pad around the cutout throughout this installation.



- 5.2) Metal cutout in relation to embossed oval
- Viewed from the rear of the bumper the object is to cut the bumper pad out to match the metal rear license plate bracket.
  - The paper template cut out is located on the last full page. Print it out as actual size for correct scaling as shown below:

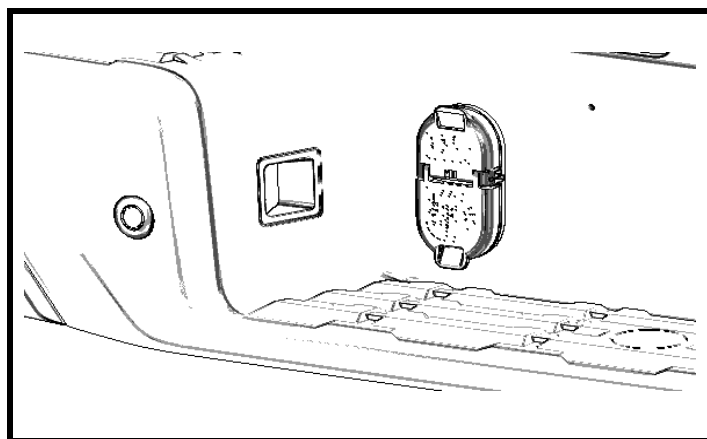


- 5.3) Bumper connector with mounting clips
- The provided 4/7-PIN bumper connector with mounting clips will install into the bumper step pad once the hole is cutout.
  - The metal connector mounting clips will snap and fit onto the metal license plate bracket when the connector is installed.



### CAUTION

Once installed if the connector needs to be removed squeeze the metal clips to release them from the rear metal license plate bracket.



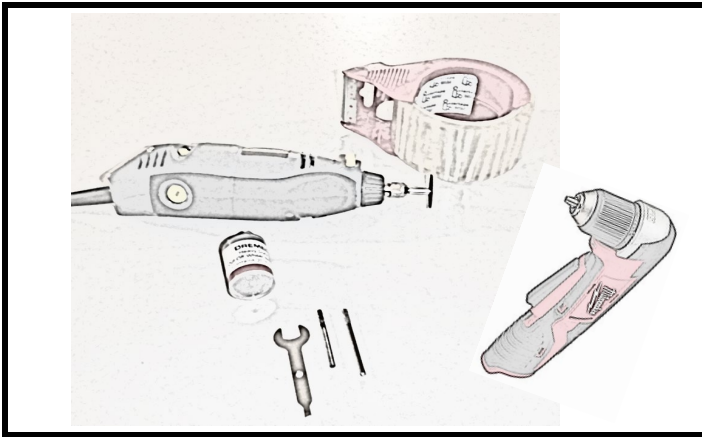
- 5.4) 4/7-PIN bumper connector
- The bumper connector installs into the rear bumper cutout as shown.



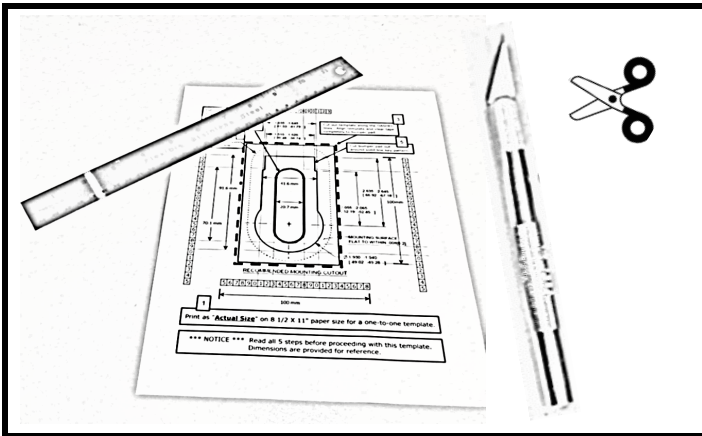
### CAUTION

A proper Nissan anti-corrosion product must be used to prevent rusting and/or corroding on the complete cut edge.

## SECTION 6 - PREPARATION - CUTTING THE REAR BUMPER STEP PAD



- 6.1) Gather supplies and tools required.
  - a ) Use of 2" wide clear shipping tape is preferred to tape the cut out template to the rear bumper step pad.
  - b ) Use of a rotary cutting tool is used for cutting the hole into the rear bumper step pad. Dremel manufactures a rotary tool such as this.
  - c ) Rotary tool cutting disk and bits as shown are recommended for cutting out the necessary hole into the rear bumper step pad.
  - d ) Obtain a straight edge (ruler), X-Acto knife (utility knife, precision knife or hobby knife) to cut out the inside and scissors to cut the outside of template.



### NOTICE

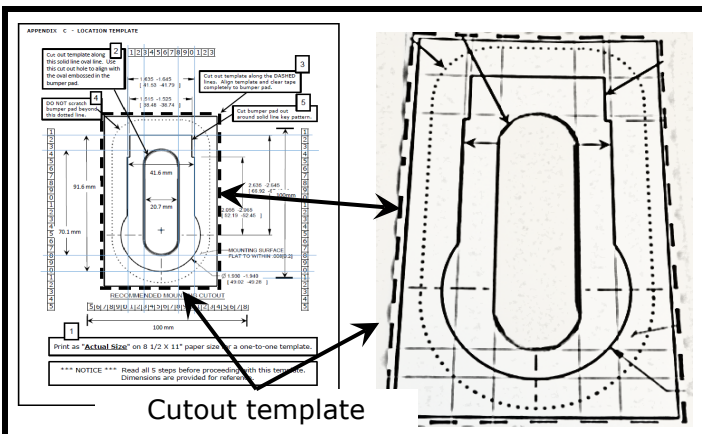
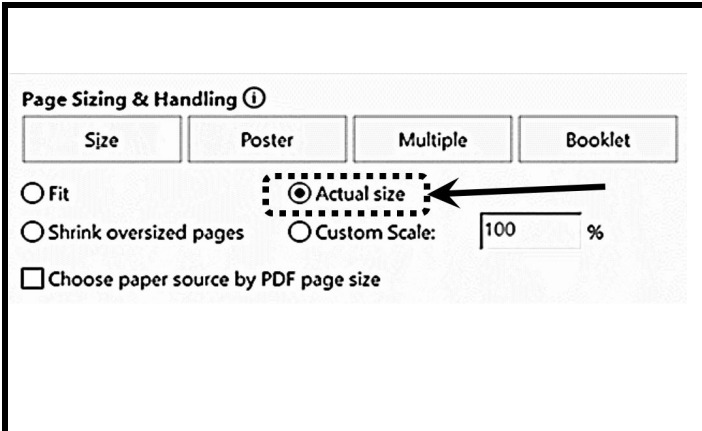
- These instructions are for using the template and cutting from the rear of the bumper pad.
- Alternatively a high speed right angle drill with the cutting bit can be used to cut the rear bumper step pad by tracing the metal key hole in the metal license plate bracket.

- 6.2) Obtain cutout template for cutting the step pad
  - a ) Print the Location Template that is located in Appendix B as actual size.



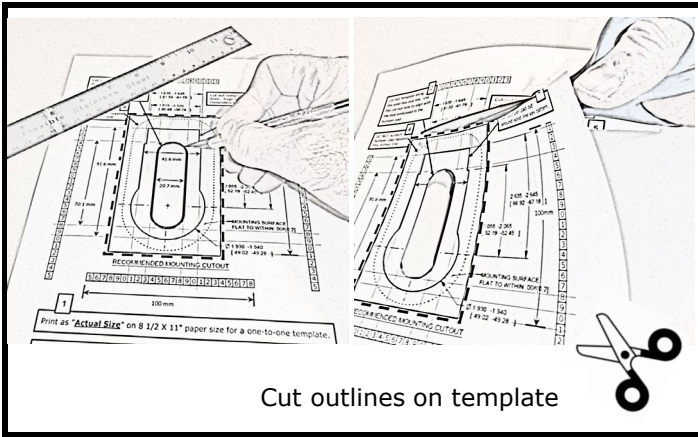
### CAUTION

- Print as "Actual Size" on 8 1/2 X 11" paper size for a one-to-one template.
- Read all 5 steps before proceeding with this template.
- Dimensions are provided as reference.



- b ) This template is used to cut the bumper step pad out from the rear side of the bumper.
- c ) Template sequence of steps that are included on the template and maintain a copy as an installation reference.

## SECTION 6 - PREPARATION - CUTTING THE REAR BUMPER STEP PAD



6.3) Cut out the template.

- a ) Cut out the template as described using the straight edge (ruler), X-Acto knife (utility knife, precision knife or hobby knife) to cut out the inside and scissors to cut the outside of template.



### CAUTION

Follow the instructional sequence of steps that are written on your reference template during this cutting process.

6.4) Locate the 4/7-PIN Bumper connector install location on the rear bumper

- a ) Locate oval embossment on rear side of the rear bumper step pad to the left of the rear license plate.
- b ) If necessary remove the license plate for cutting access.



### CAUTION

Follow the numbered sequence of steps that are included on your reference template during this cutting process.

6.5) Install the prepared cutting template onto the rear bumper step pad.

- a ) Align oval in the cutout template with the oval embossment on the rear bumper pad.
- b ) Use a few strips of clear packaging tape to tape over the whole template onto the bumper pad.



### CAUTION

A few strips of two inch wide clear packaging tape allows you to fully apply the template to the rear bumper step pad, and serves to protect it from scratches during cutting.

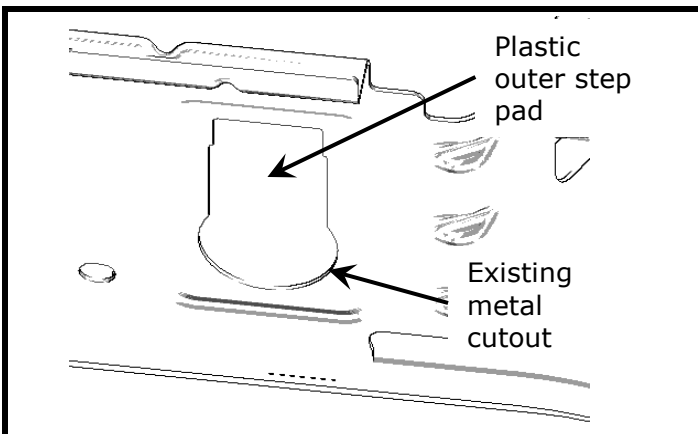
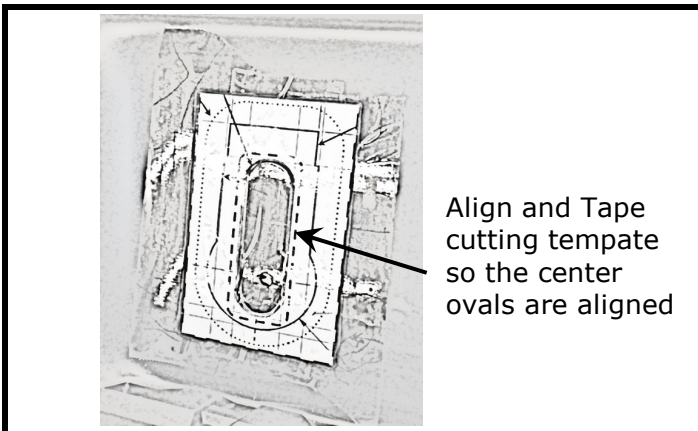
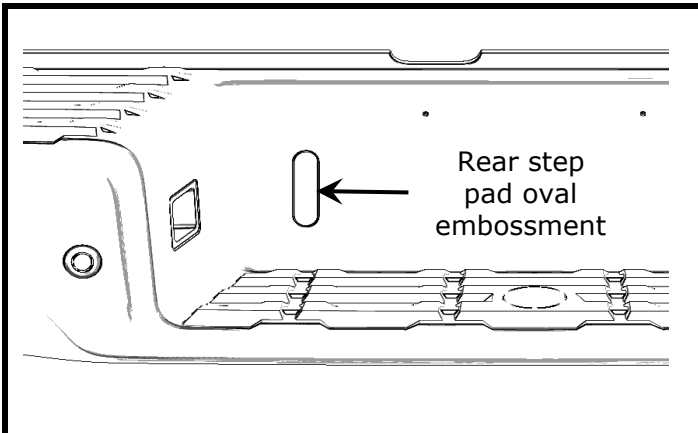
6.6) Underbody rear facing view of steel license plate bracket where the tow connector mounts into.

- a ) Notice view of step pad through the steel license plate with tow connector cutout.

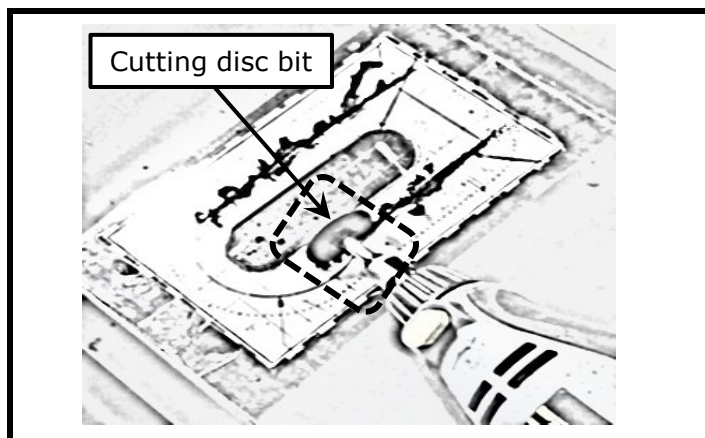


### CAUTION

- When cutting the rear bumper pad be sure to not scratch this metal license plate bracket cutout edge.
- If the bracket cutout gets scratched cover the damaged area with the proper Nissan anti-corrosion product to prevent rusting.



## SECTION 7 - EXTERIOR HARNESS - CUT THE REAR BUMPER STEP PAD



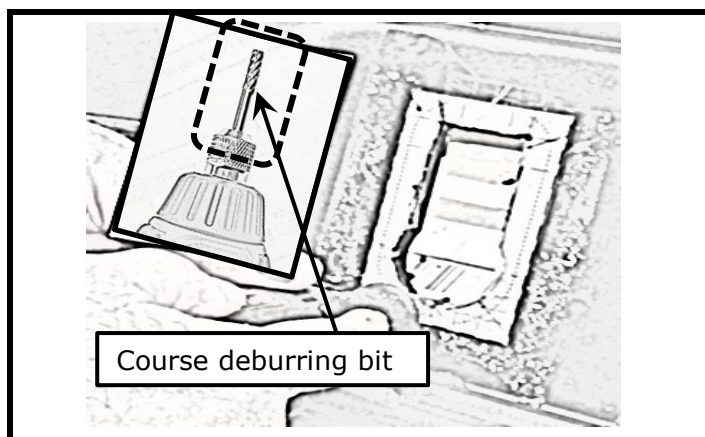
7.1) Cut out the rear bumper step pad.

- a ) Using the rotary (Dremel) cutting tool, with the cutting disc cut out bumper step pad and using straight line cuts as close to the template cutout dashed line.



### CAUTION

- Wear safety goggles to protect your eyes.
- Be sure not to go out of the bounds indicated on the template.
- Be careful not to scratch the bumper pad with cutting tool.



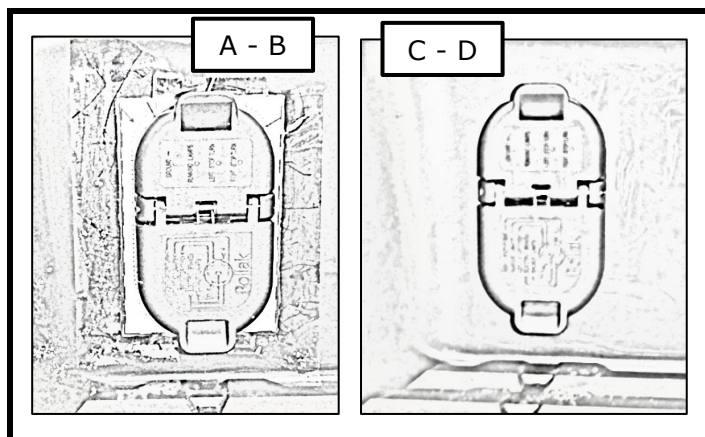
7.2) Cut out the rear bumper step pad (continued)

- a ) Using the rotary (Dremel) cutting tool, with a course deburring cutting bit cut out the remaining bumper step pad up to the template cutout dashed line.



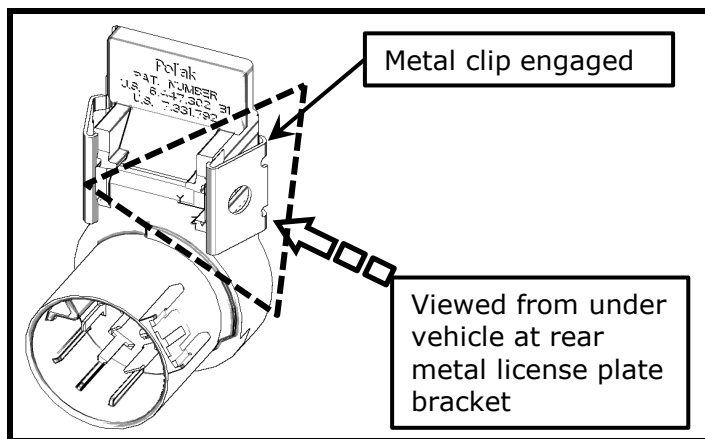
### CAUTION

- Wear safety goggles to protect your eyes.
- Be sure not to go out of the bounds indicated on the template.
- Be careful not to scratch the bumper pad with cutting tool.



7.3) Trim cut out for connector fitment

- a ) Using the 4/7-PIN bumper connector check the cutout for fit.
- b ) Continue to trim the cutout with the deburr bit until the 4/7-PIN bumper connector can be push through the bumper step pad.
- c ) Once the connector can clear the bumper step pad, remove the paper template and deburr and clean the sight.
- d ) Insert the 4/7-PIN bumper connector pushing it until you hear the metal clips engage into the rear metal license plate bracket.



7.4) Fully seat the 4/7-PIN bumper connector

- a ) Visually check that the 4/7-PIN bumper connector metal clips are fully engaged onto the rear metal license plate bracket.

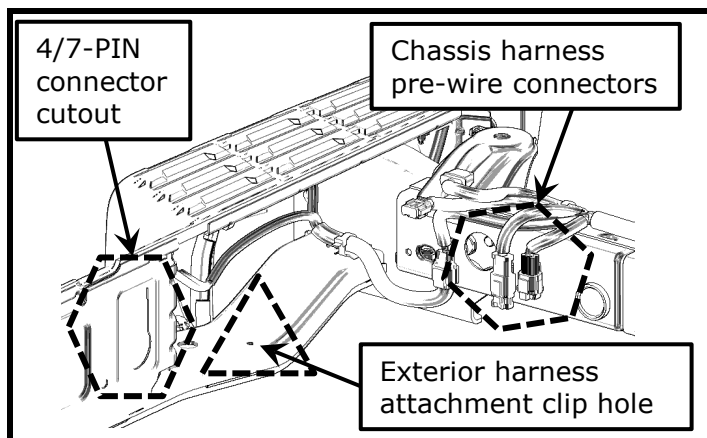


### CAUTION

- Check from under the vehicle that the metal clips on the 4/7-PIN bumper connector are fully engaged into the rear metal license plate bracket as shown.
- If the connector needs to be removed squeeze the metal clips to release them from the rear metal license plate bracket.



## SECTION 8 - EXTERIOR HARNESS - INSTALLATION PROCEDURE



### 8.1) Overview

- a ) Raise vehicle on a hoist to install the exterior harness to the vehicle.
- b ) Locate 4/7-PIN connector already installed into the rear license plate bracket 4/7-PIN connector cutout.
- c ) Locate 4/7-PIN exterior harness clip mounting hole in the top of the cross member as shown.
- d ) Locate the two capped with dummy plugs chassis harness pre-wired connectors as shown.

### 8.2) Install 4/7-PIN exterior harness connector

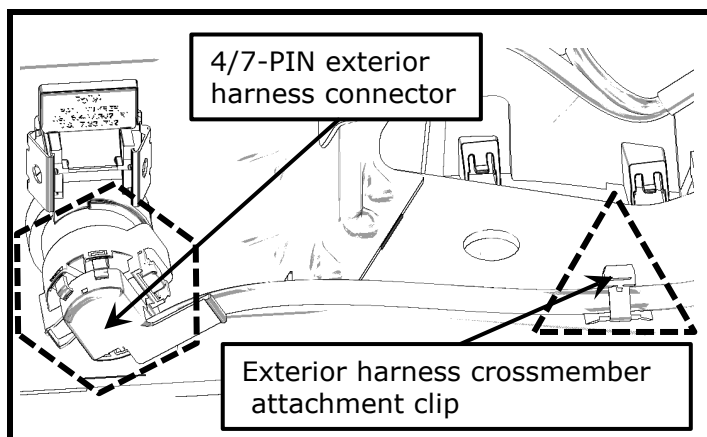
- a ) Install the 4/7-PIN exterior harness connector into the 4/7-PIN bumper connector as shown.



## CAUTION

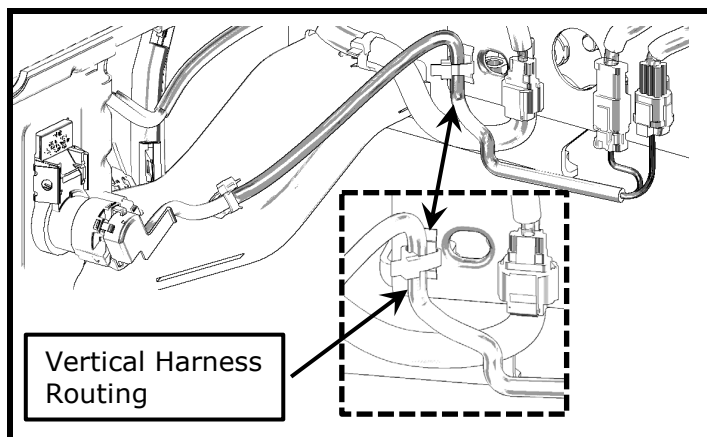
When mating **all** connectors make sure they're fully seated. Perform installation with a physical push-audible click-pull process.

- b ) Route exterior harness and install the first harness attachment clip into the provided hole in the top of the rear cross member.



### 8.3) Install exterior harness to inline connectors

- a ) Remove the two dummy plugs from the inlines shown on the chassis harness side (already in the truck). Using a screw-driver, push the tab in and slide the plug out.
- b ) Route the exterior harness around the chassis harness and attach the two inline connectors (make sure the connectors are fully inserted and secured) and routed as shown.



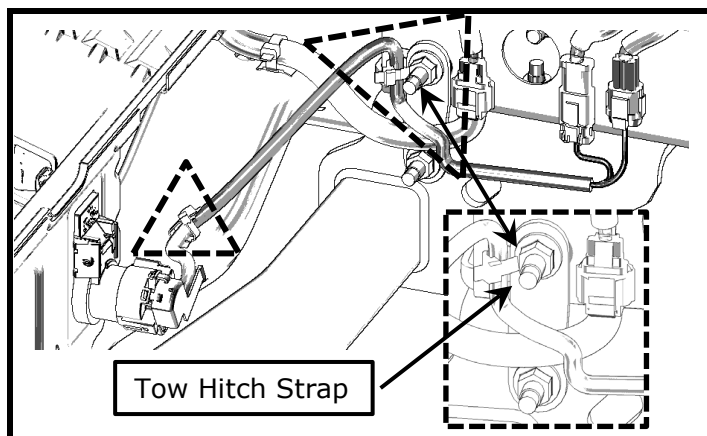
### 8.4) Finish Exterior harness installation

- a ) Attach the second harness clip into the rear frame rail rotating the harness CW to gain access to the frame hole as shown.
- b ) Position exterior harness vertically to clear the tow hitch straps as shown.

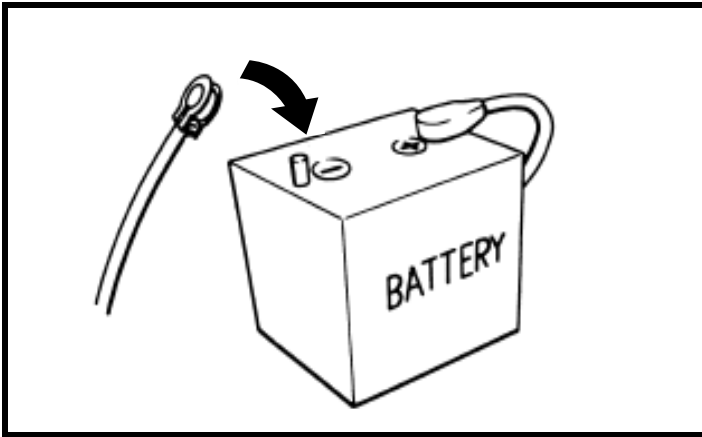


## CAUTION

Rotate exterior harness CW as necessary to allow the second harness clip to clear the tow hitch strap and fully seat into the frame hole.



## SECTION 9 - FINISHING THE INSTALLATION



### 9.1) Reconnect the 12V battery

- Re-connect negative battery cable.
- Tighten Negative battery terminal nut to 8 N·m (+/- 1) [71 in·lbs (+/- 9)]



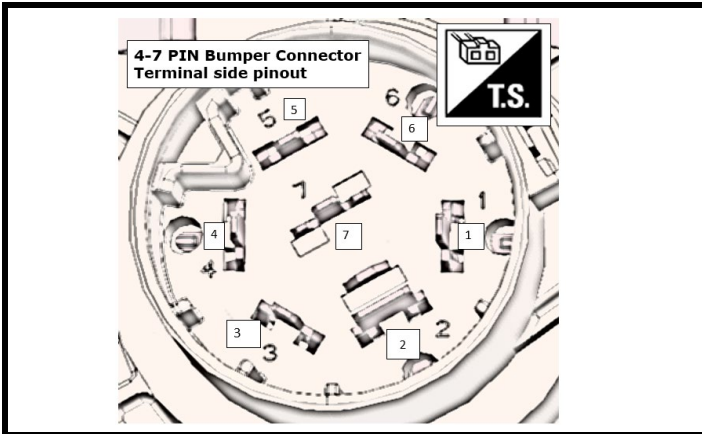
## CAUTION

Check that customer's radio settings are still active. If not restore the recorded customer presets from step 2.3 b



### 9.2) Trailer Brake Electrical Connector Location

- The pre-wire connector for adding a trailer brake controller unit with jumper is located in the left lower steering column area, near the diagnostic connector. This branch is taped back, break the tape to access the connector.
- For trailer brake function, install trailer brake controller using controller manufactures instructions and the adapter harness specified in the application notes. Plug the adapter harness to the vehicle connector shown in the photo

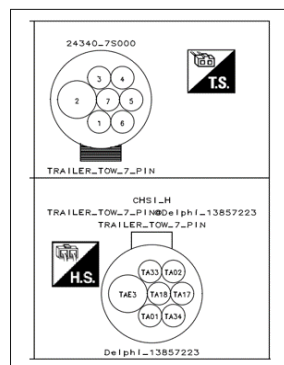


### 9.3) Electrical function check

- Visual check vehicle lighting functions for brake lights, turn, tail and backup. Test light, check power to trailer connector for brake light, turn signal lights and tail lights, and to trailer brake circuits if trailer brake controller was installed.
- The 7-PIN connector terminal view is provided and the circuits are also identified below. The 4-PIN connector is internally wired inside the 4/7-PIN connector so it does not need to be checked.

#### **Frontier 7-PIN Connector:**

- Pin-1 = TA33 = Stop\_Turn-LH  
 Pin-2 = TAE3 = Ground  
 Pin-3 = TA01 = Brake  
 Pin-4 = TA34 = Stop\_Turn-RH  
 Pin-5 = TA17 = 12V (30A)  
 Pin-6 = TA02 = Running\_Lamps  
 Pin-7 = TA18 = Reverse



TRAILER_TOW_7-PIN					
TA02 0.5 R	6	RUNNING_LAMPS	POWER	5	TA17 2 W/L
TA33 0.75 LG/B	1	STOP_TURN-LH	REVERSE	7	TA18 0.5 Y/R
TA34 0.75 Y/B	4	STOP_TURN-RH			
TAE3 2 B	2	GROUND	BRAKE	3	TA01 2 BR/W



## **CAUTION**

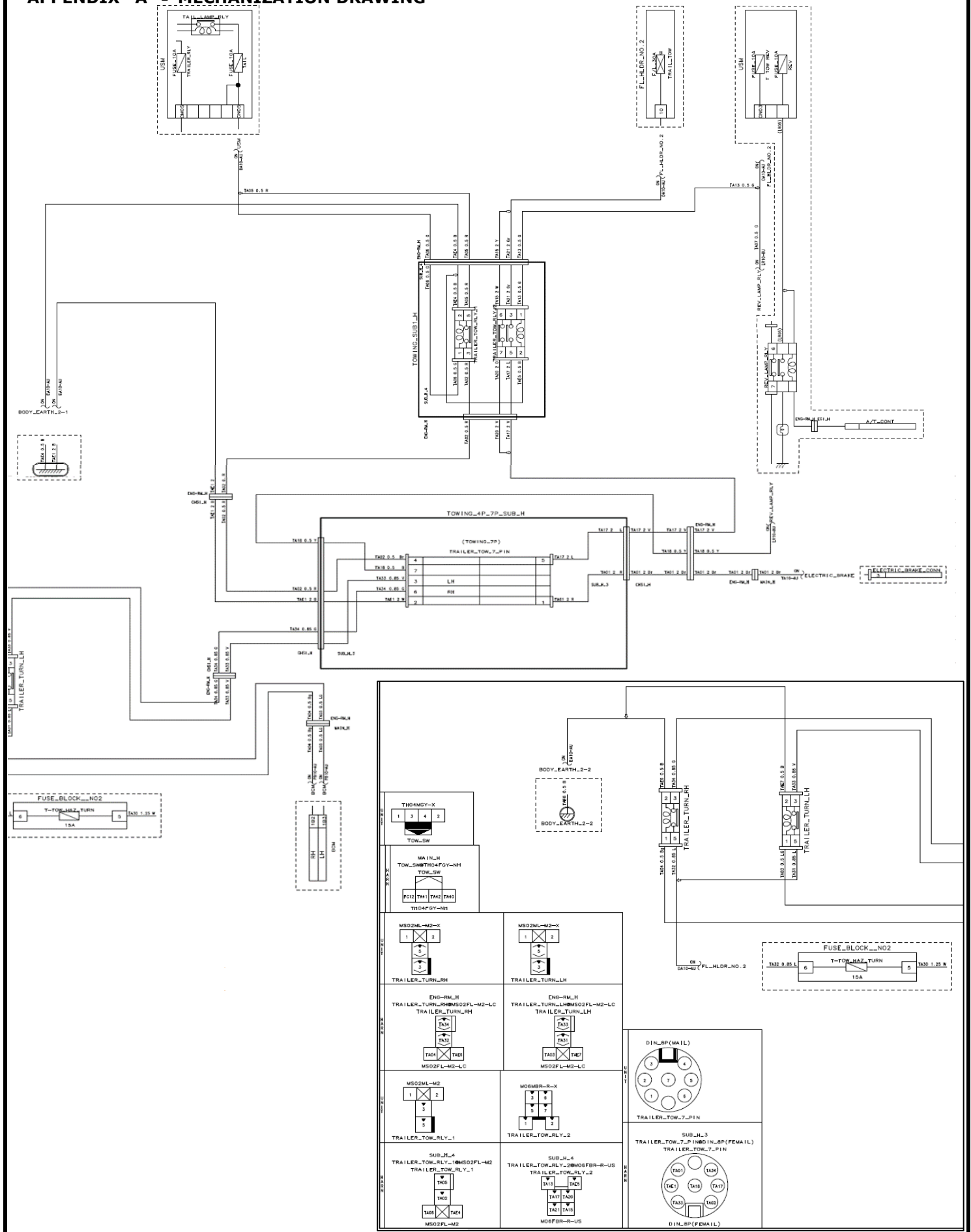
Take care not to scratch or damage any component during the removal or re-installation process. Trim pieces found to have witness marks or broken clips should be replaced with new parts.

### 10.1) Complete checklist:

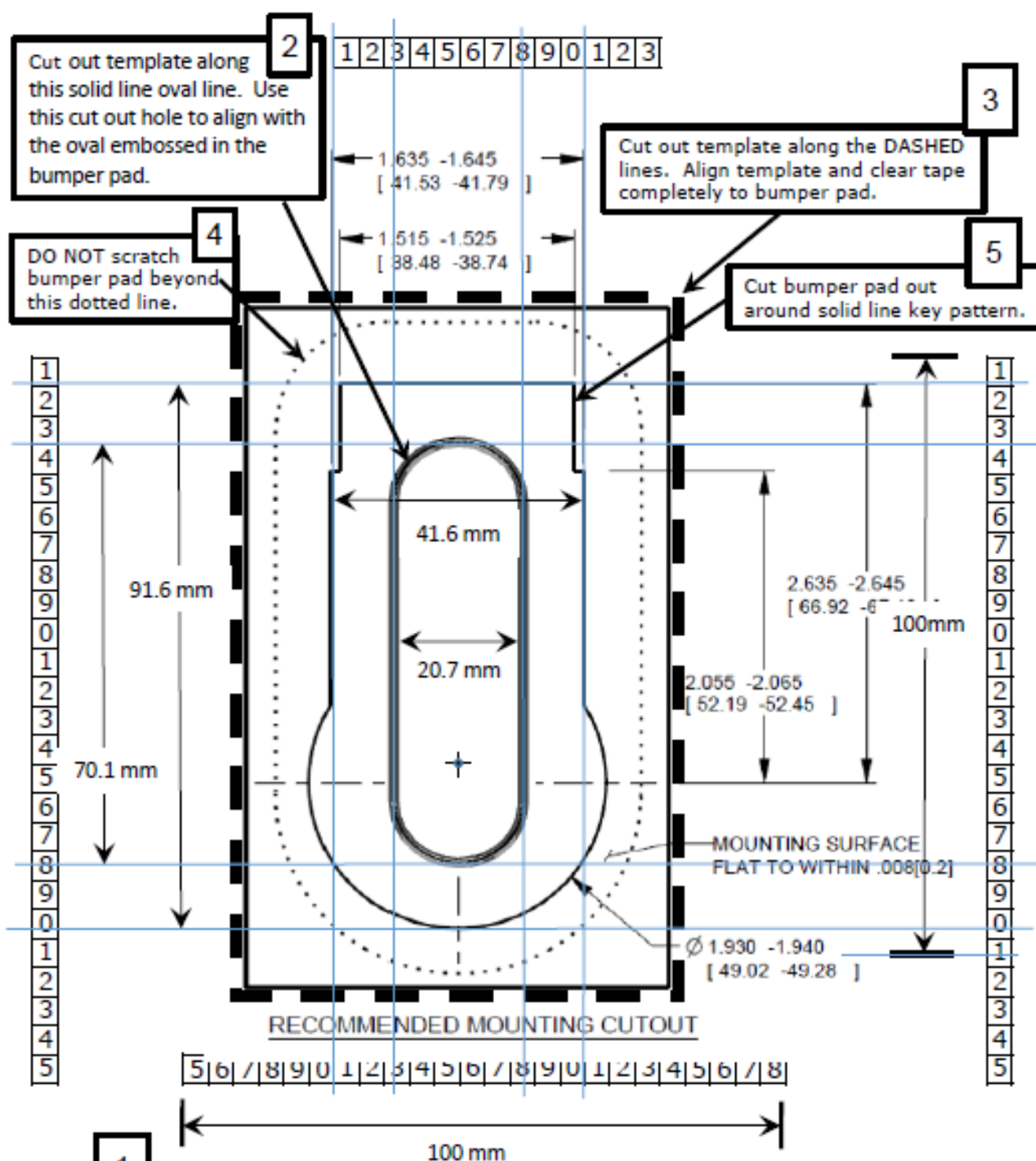
- ☐ Tighten Negative battery terminal nut to 5.0 N.m (0.51 kg-m, 44 in-lb)
- ☐ Verify re-installed trim parts for proper fit (no gap, waviness, etc.), particularly the door sill weather
- ☐ Verify all windows and sunroof (if equipped), one touch operation and perform the reset procedure if necessary. Refer to the vehicle Service Manual for more details.
- ☐ Verify customers radio presets and other vehicle settings are all set as when initially received.
- ☐ If this vehicle will be returned to a dealer lot or showroom for an extended period of time, be sure the Extended Storage Switch is placed in the Transit position. See step 2.5
- ☐ Remove all tools, templates, and other debris from interior and bed of vehicle.
- ☐ Verify vehicle headliner, seat, steering wheel, center console, carpet, etc. are not soiled.
- ☐ Verify interior and exterior are not damaged.



# APPENDIX A - MECHANIZATION DRAWING



# APPENDIX B - MECHANIZATION DRAWING



Print as "Actual Size" on 8 1/2 X 11" paper size for a one-to-one template.

\*\*\* NOTICE \*\*\* Read all 5 steps before proceeding with this template.  
Dimensions are provided for reference.