



# BACKUP CAMERA KIT

## JEEP GRAND CHEROKEE

### INSTALLATION INSTRUCTIONS

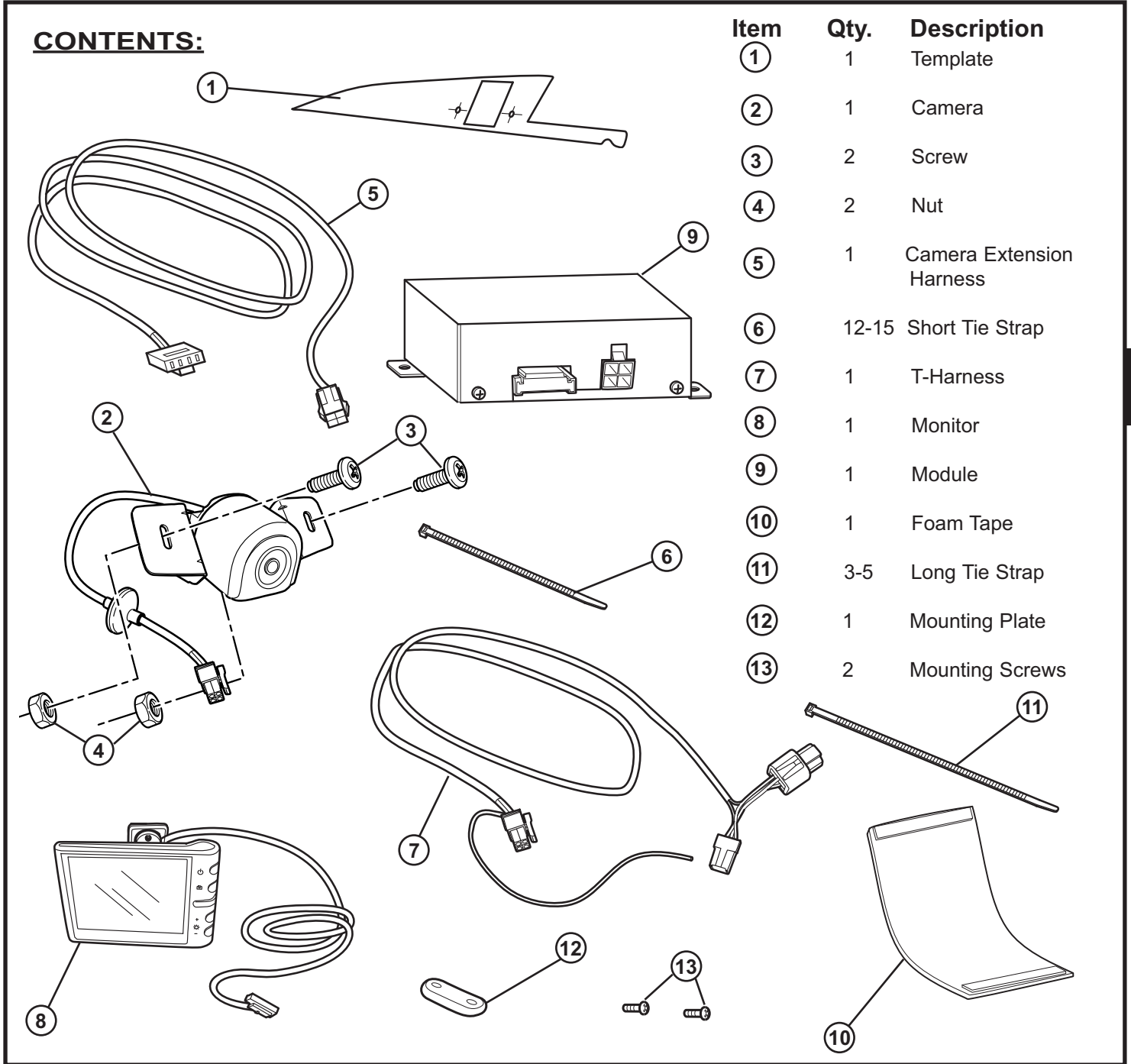
Read entire instructions thoroughly before starting.

#### TOOLS REQUIRED:

- Hook Tool • Phillips screwdriver • T10, T20 Torx drivers • Socket wrench with extension
- 10,16mm Socket • Scissors • Small Saw • File • Solder • Soldering Iron • 5/8" Hole Saw
- Drill • 1/8" Drill Bit • 3/8" Drill Bit • Electrical Tape • Wire Stripper

#### CONTENTS:

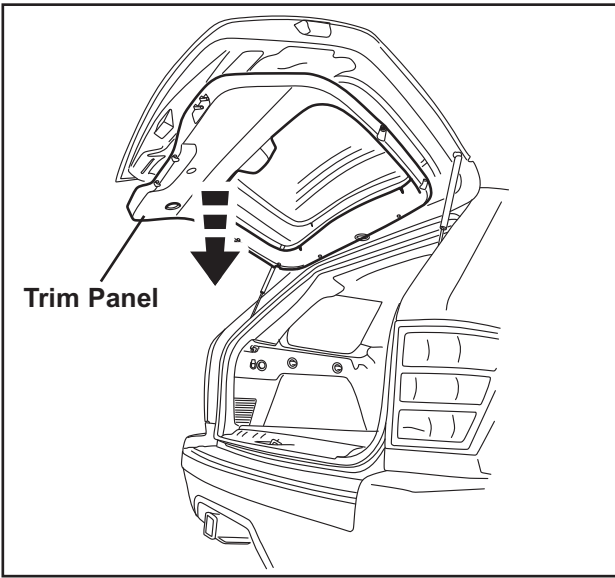
Item	Qty.	Description
①	1	Template
②	1	Camera
③	2	Screw
④	2	Nut
⑤	1	Camera Extension Harness
⑥	12-15	Short Tie Strap
⑦	1	T-Harness
⑧	1	Monitor
⑨	1	Module
⑩	1	Foam Tape
⑪	3-5	Long Tie Strap
⑫	1	Mounting Plate
⑬	2	Mounting Screws



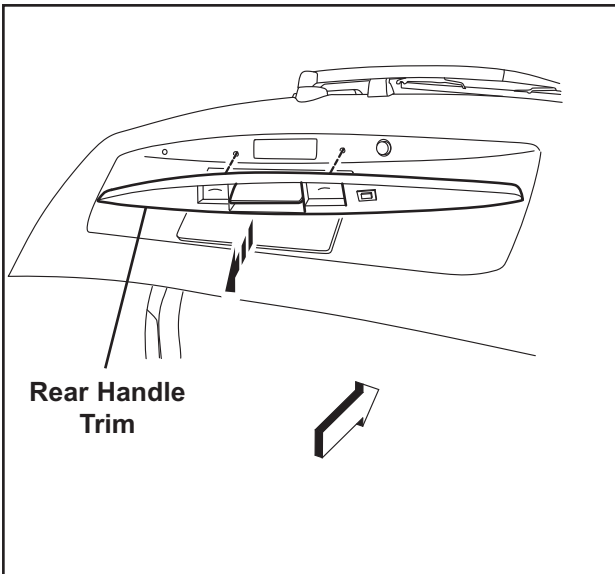
- 1) Disconnect and isolate negative battery cable.

**A - Tailgate Trim Removal:**

- 2) Remove interior trim panel (ten phillips screws/ phillips screwdriver).

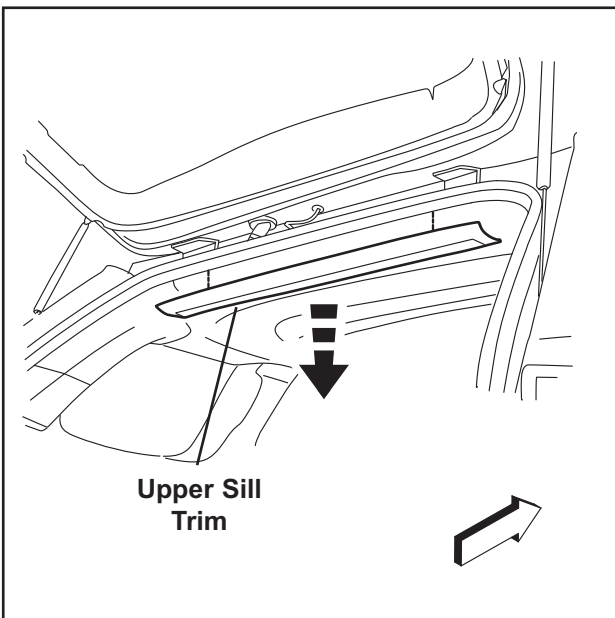


- 3) Remove rear handle trim from exterior sheet metal, disconnect lamp harness (two 10mm bolts, 2 trim clips/10mm socket and wrench and hook/ pry tool) .

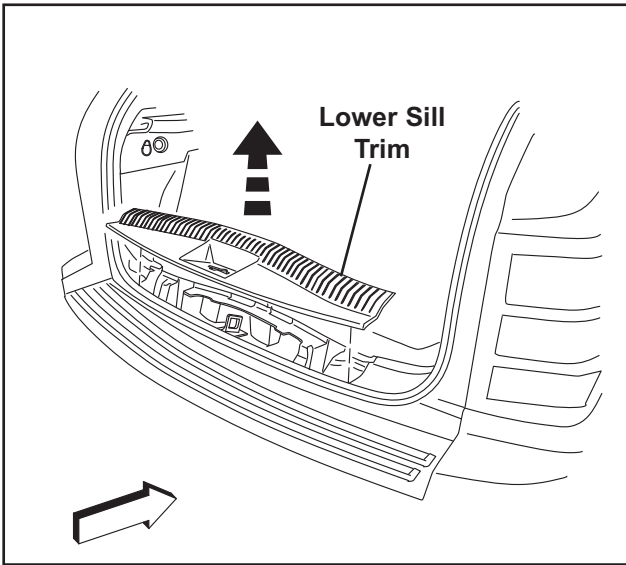


**B – Interior Cargo Area Trim Removal:**

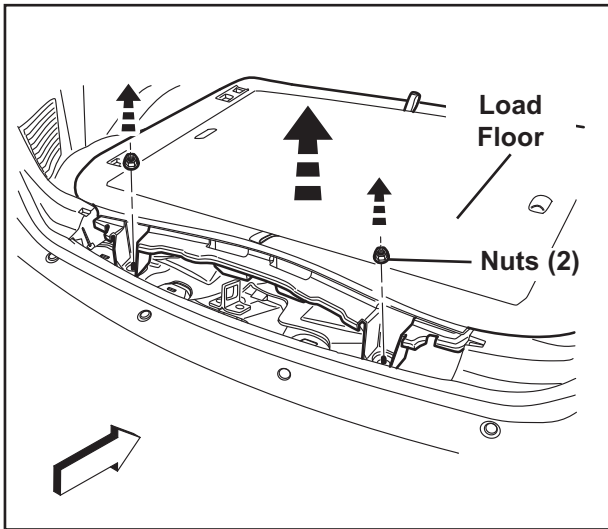
- 1) Remove Upper Sill Trim (three trim clips, hook/pry tool).



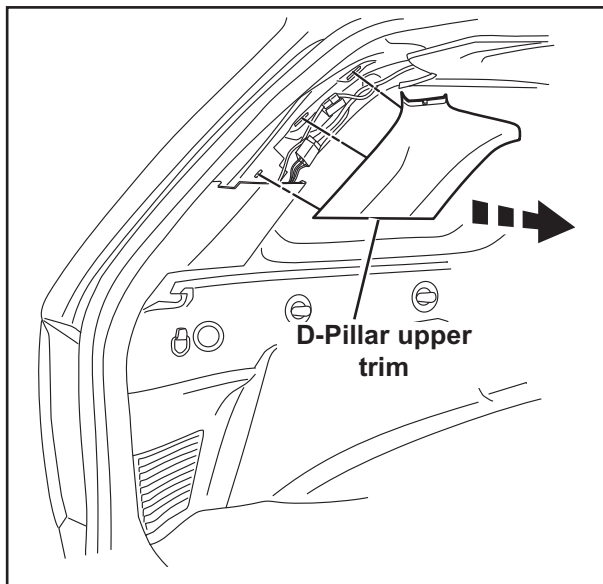
2) Remove lower sill trim ( hook/pry tool).



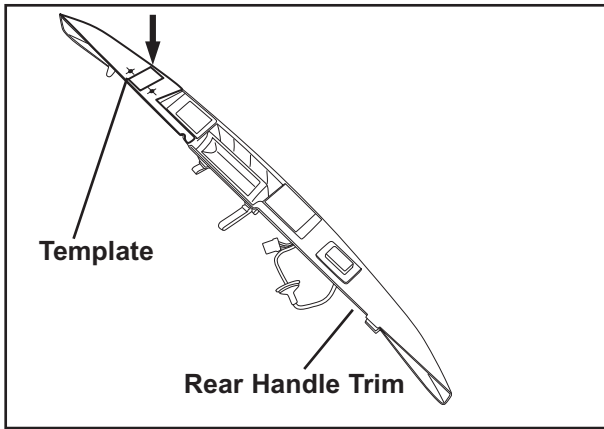
3) Remove load floor (two 10mm nuts, 10mm socket and wrench).



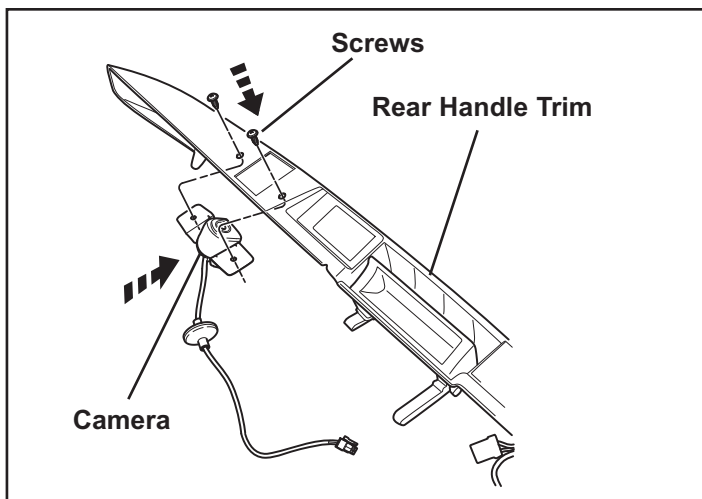
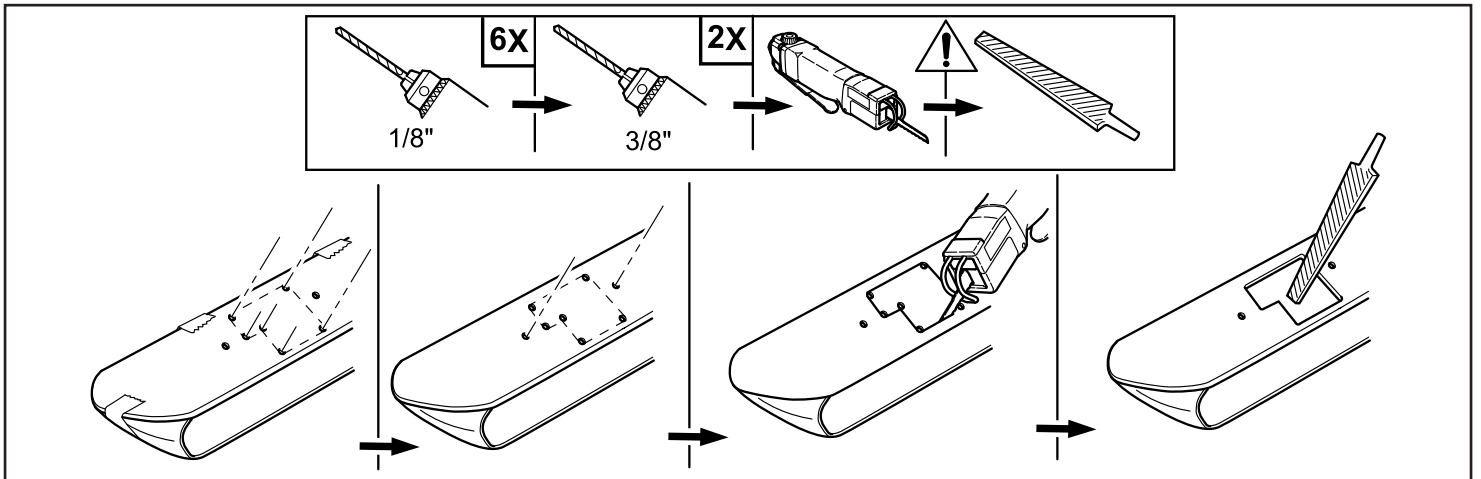
4) Remove D-Pillar upper trim (hook/pry tool).



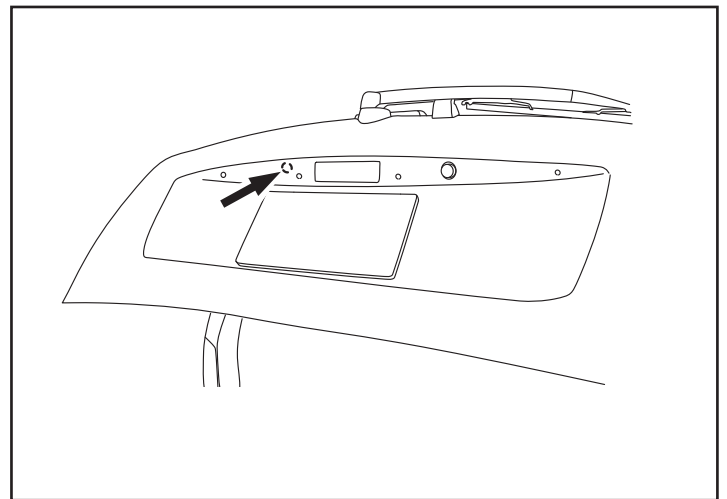
### C – Install Camera and Extension Harness:



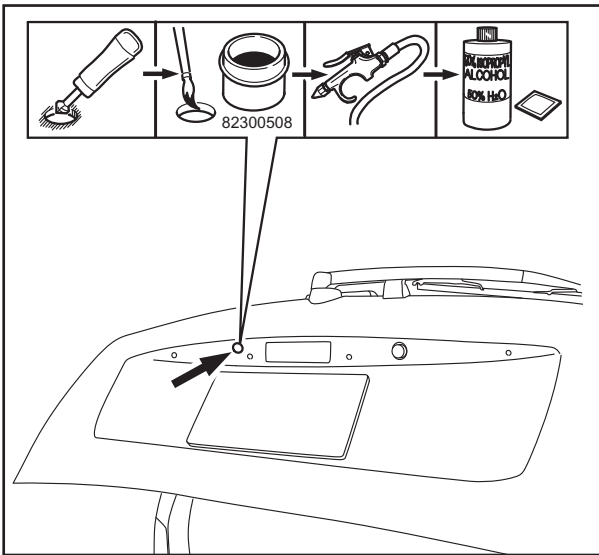
- 1) Place template (Item 1) on rear handle trim as shown and secure. (tape).
- 2) Drill holes in rear handle trim, cut out center section and file edges smooth as noted in below diagram. (1/8" drill bit, 3/8" drill bit, drill, saw and file).



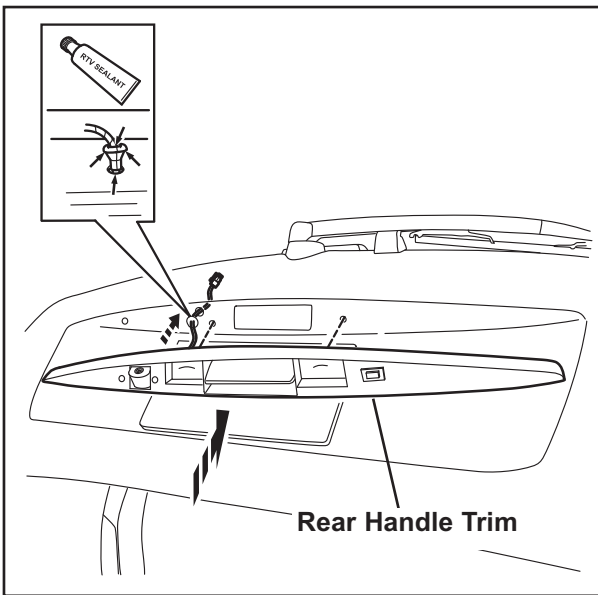
- 3) Install Camera (Item 2) to rear trim handle Using two Screws (Item 3) and Nuts (Item 4) (phillips screwdriver).



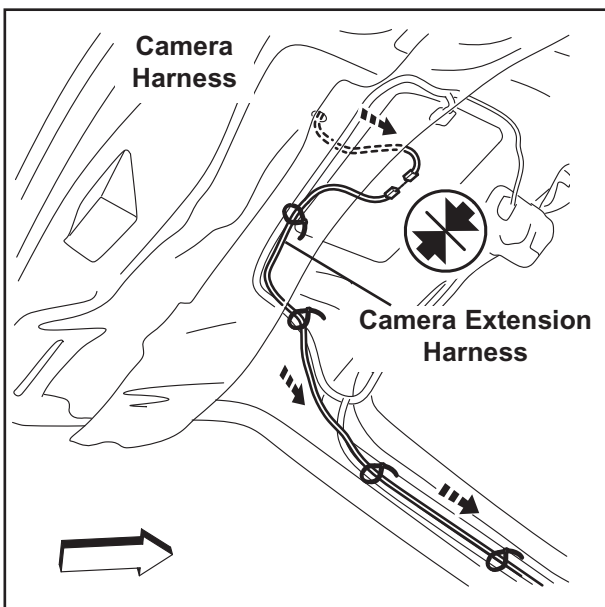
- 4) Measure 1" to the right from first hole on the left.
- 5) Drill hole in sheet metal (5/8" Hole Saw only).



- 6) Clear out all particles from the drilled hole.
- 7) Apply anti-corrosion coating to the drilled hole.

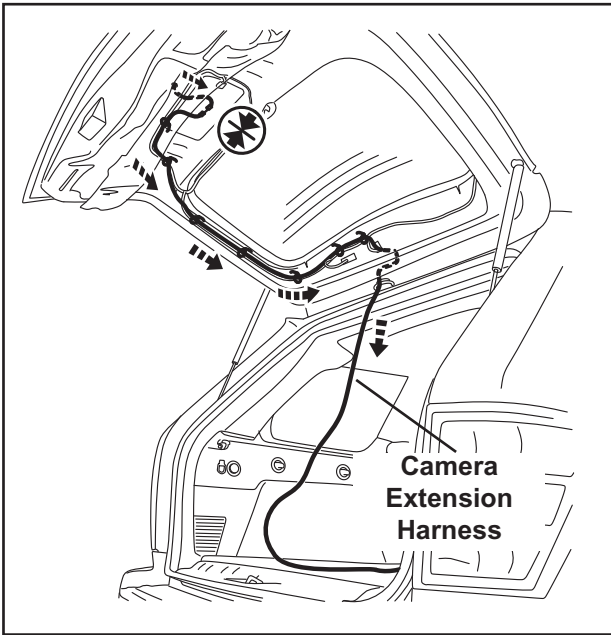


- 8) Inject RVT sealant in the outer grommet groove before being inserted in the drilled hole. Also inject RVT sealant to the inner hole of the grommet (around the camera wire).
- 9) Re-install rear handle trim to tailgate outer, routing camera harness through new hole in sheet metal, re-connect lamp harness. (10mm socket and wrench).

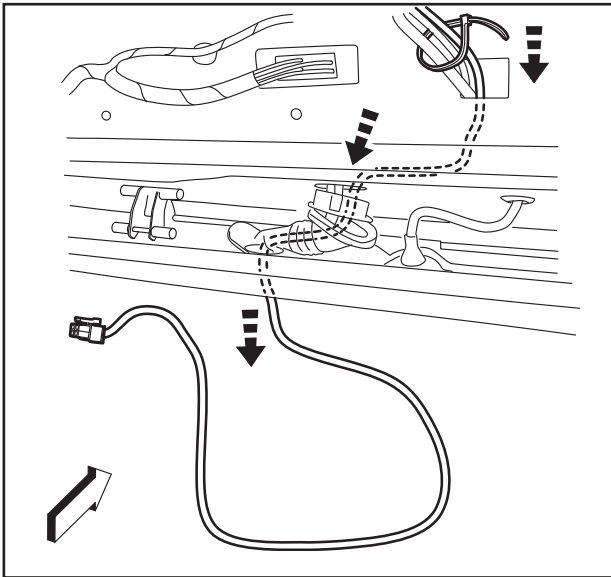


- 10) Connect camera to Camera Extension Harness (Item 5) and route as shown, secure as needed using Tie Straps (Item 6).

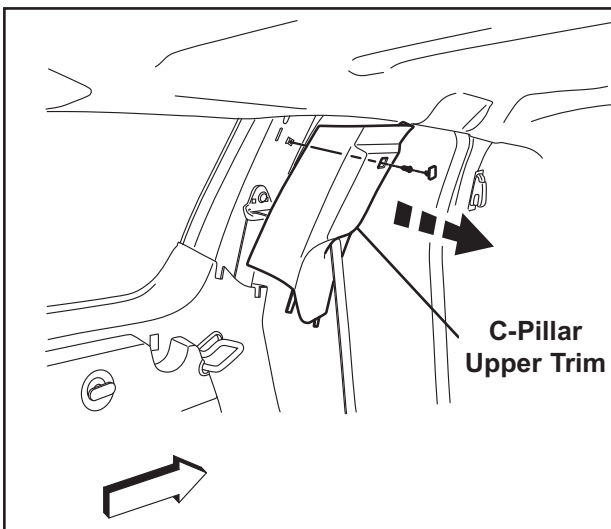
- 11) Route camera extension harness as shown into roof cavity, tie strap as needed.

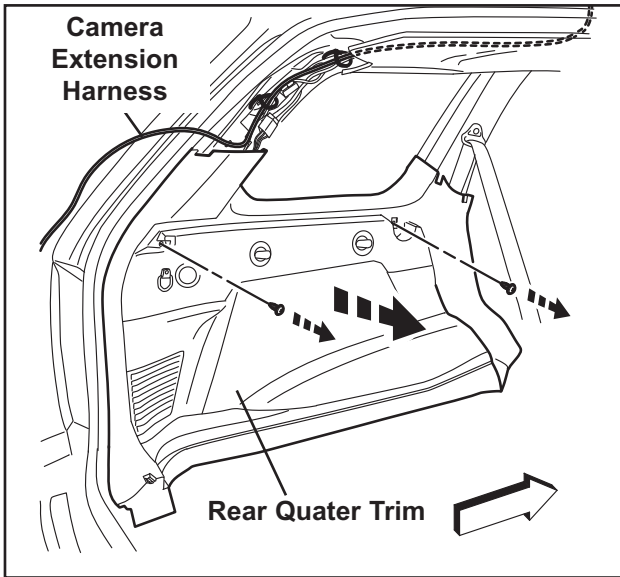


- 12) Route Camera Extension Harness through grommet.

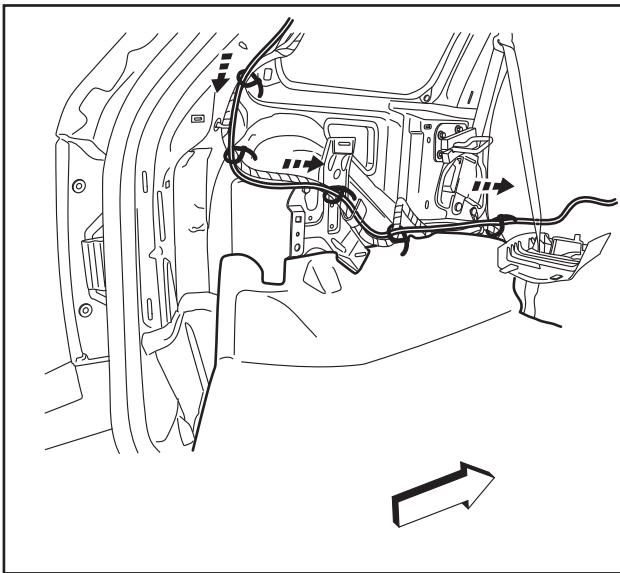


- 13) Route Camera Extension Harness as shown, tie strap as needed.

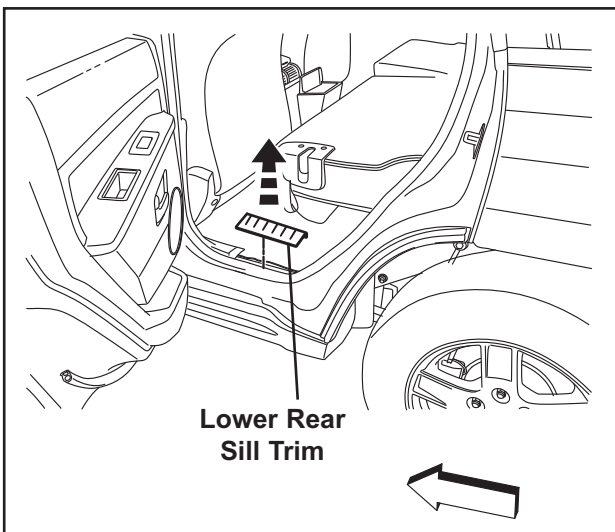




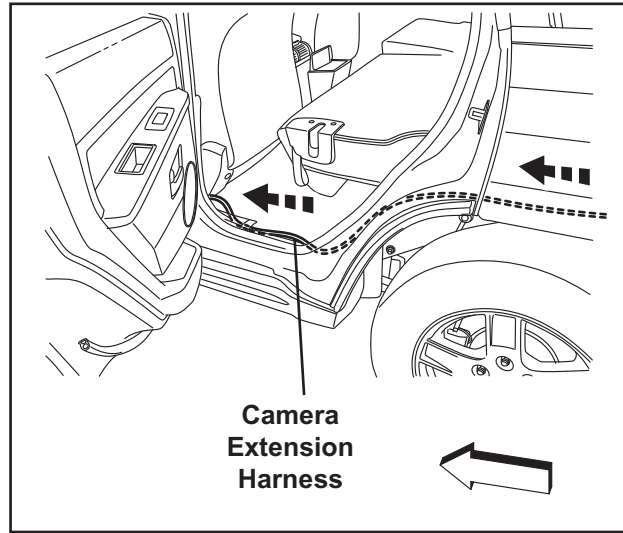
- 14) Remove rear quarter trim (hook/pry tool, 10mm socket and wrench).
- 15) Route Camera Extension Harness as shown, tie strap as needed.



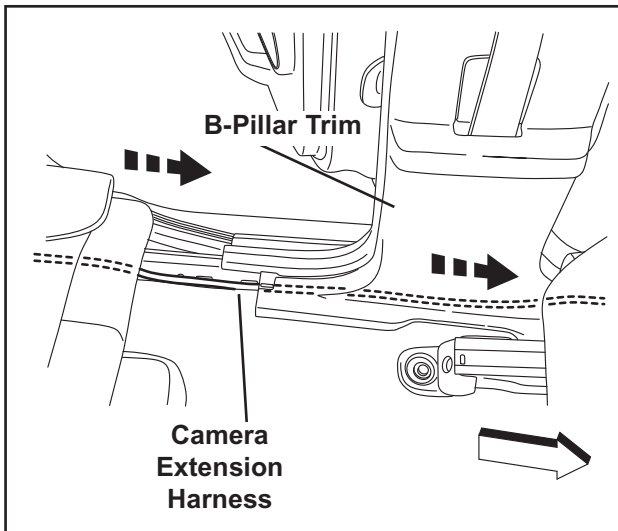
- 16) Route Camera Extension Harness forward as shown, tie strap as needed.



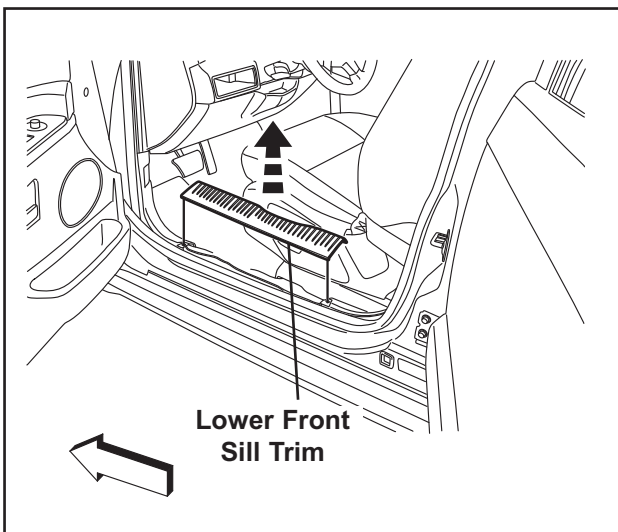
- 17) Remove lower rear sill trim (hook/pry tool).



- 18) Route Camera Extension Harness forward as shown tucking harness under the edge of the carpet.



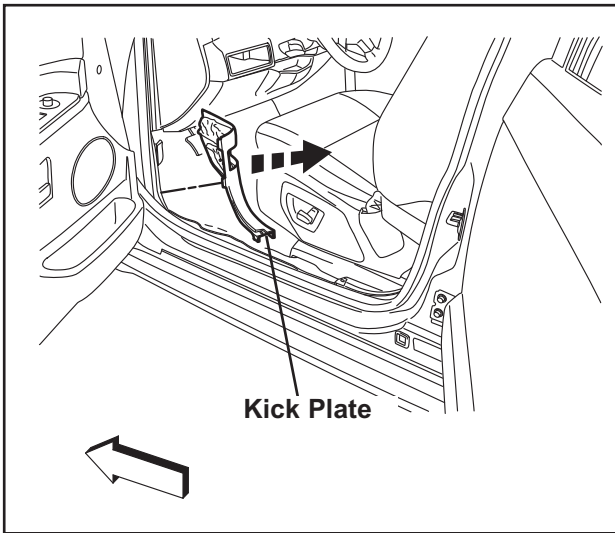
- 19) Route Camera Extension Harness forward. Tuck harness under bottom edge of B-Pillar trim.



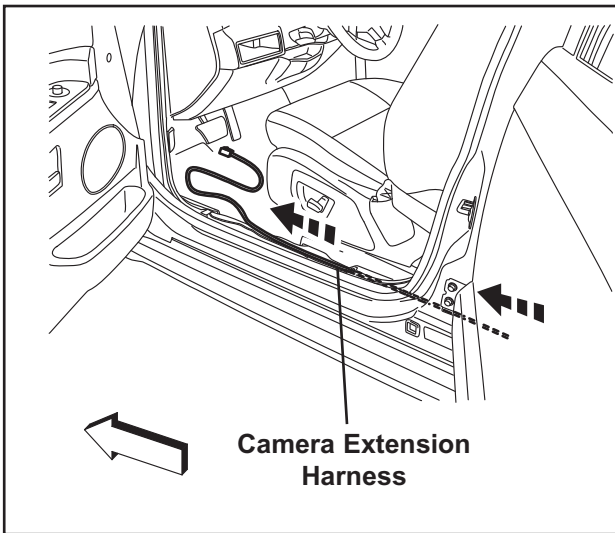
- 20) Remove lower front sill trim (hook/pry tool).



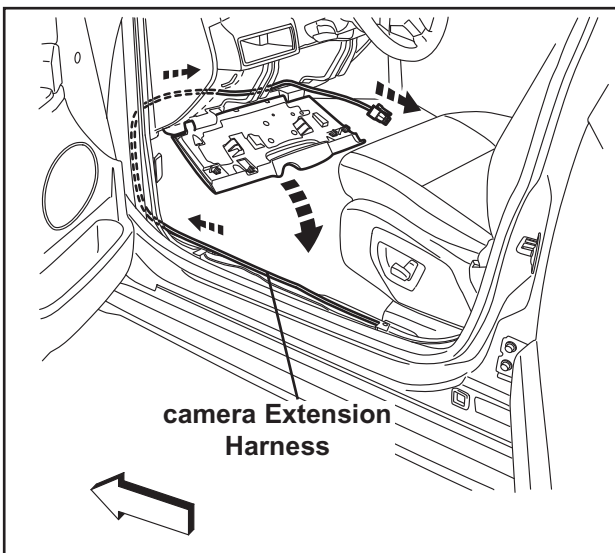
21) Remove kick plate (hook/pry tool).



22) Route Camera extension harness as shown.

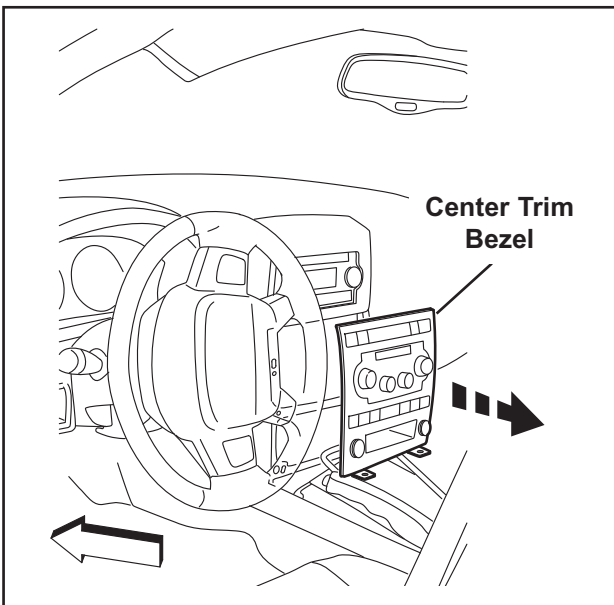


23) Lower knee bolster and route Camera Extension Harness as shown (hook/pry tool).

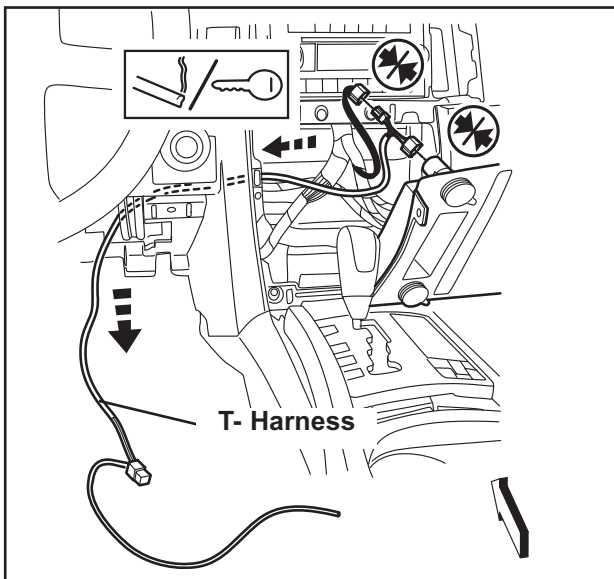


**D – Install T-Harness, Monitor and Module:**

1) Remove center trim bezel from I/P (hook/pry tool).

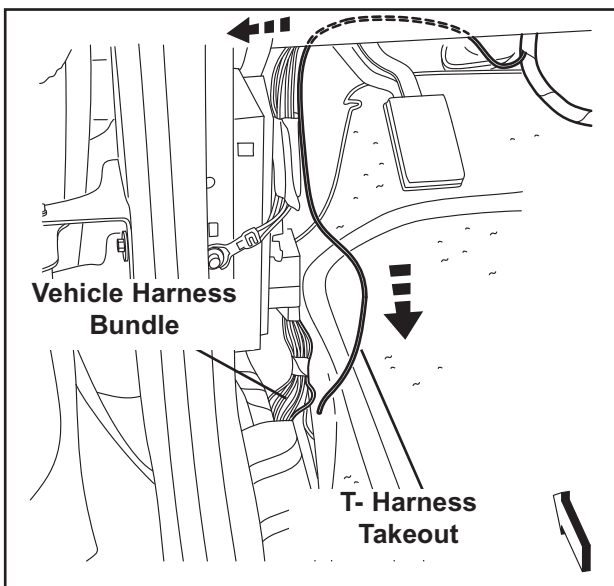


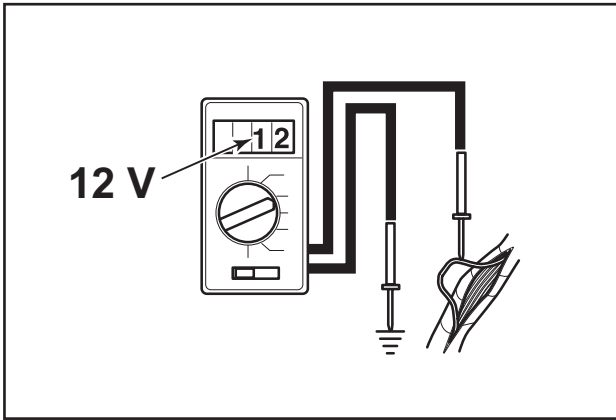
2) Route T-harness (Item 7) as shown. Disconnect the ignition/cigarette lighter jack. Connect the smaller T-harness connector between ignition feed/cigarette lighter jack. Make sure it is not the accessory power jack.



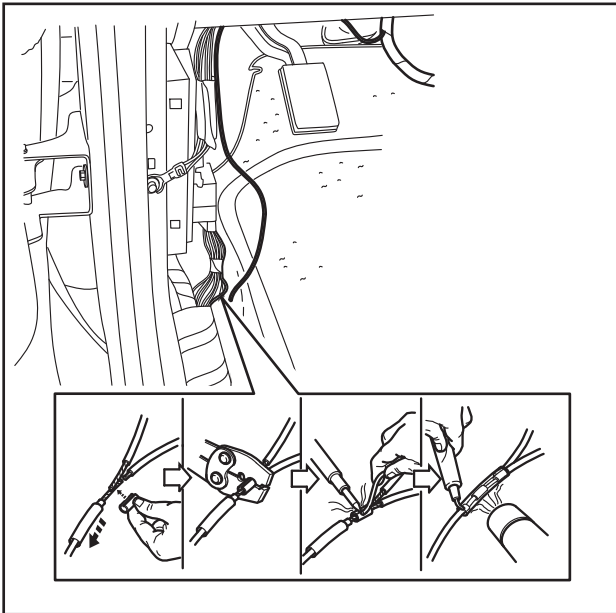
3) Locate smaller takeout harness from the T-Harness and route along as shown.

4) Locate white/green wire from vehicle harness bundle.

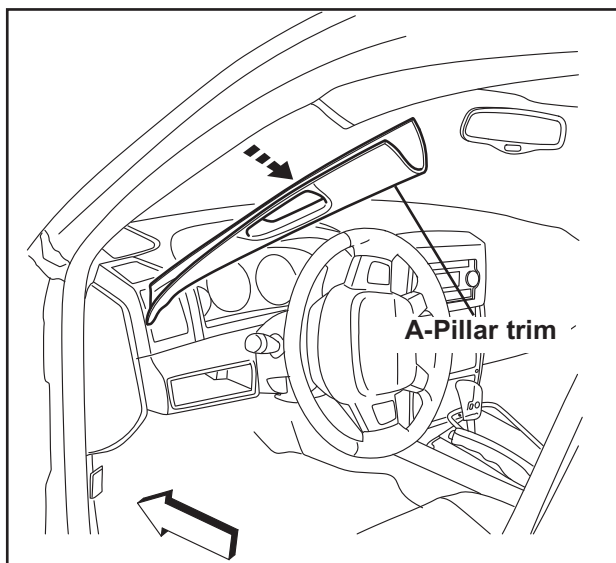




- 5) Re-connect battery
- 6) Perform test procedure, 12 volt reading when vehicle is engaged in reverse, 0 volts in any other position (12 volt Multimeter).
- 7) disconnect battery.

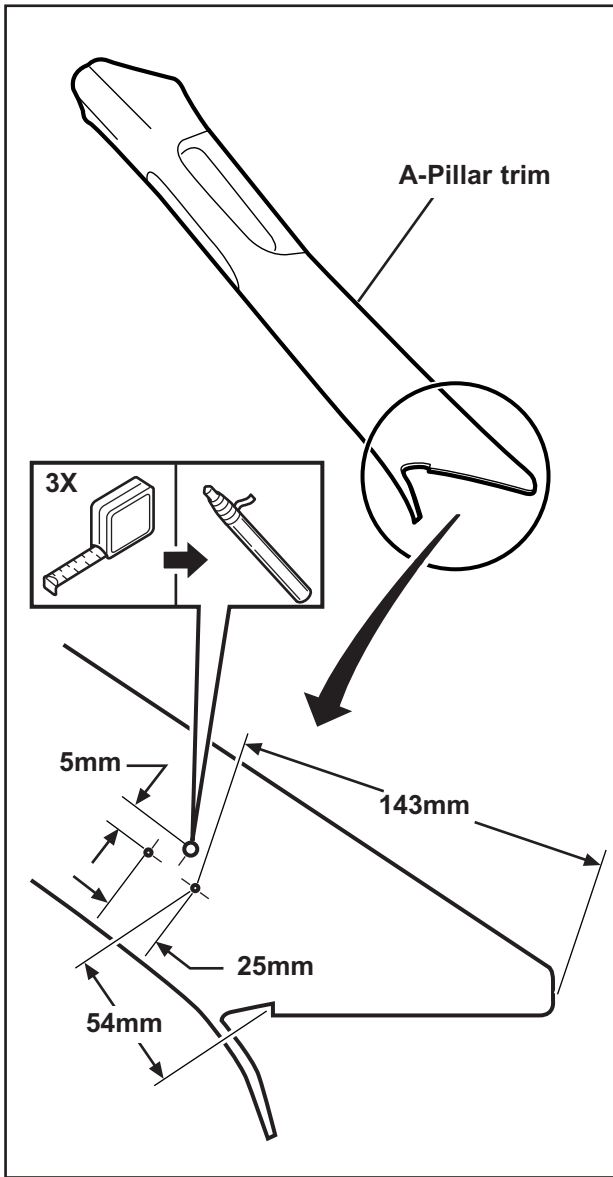


- 8) Splice T- Harness Takeout to white/green wire from vehicle harness bundle (Wire Strippers,Solder / Soldering Iron, electrical tape).

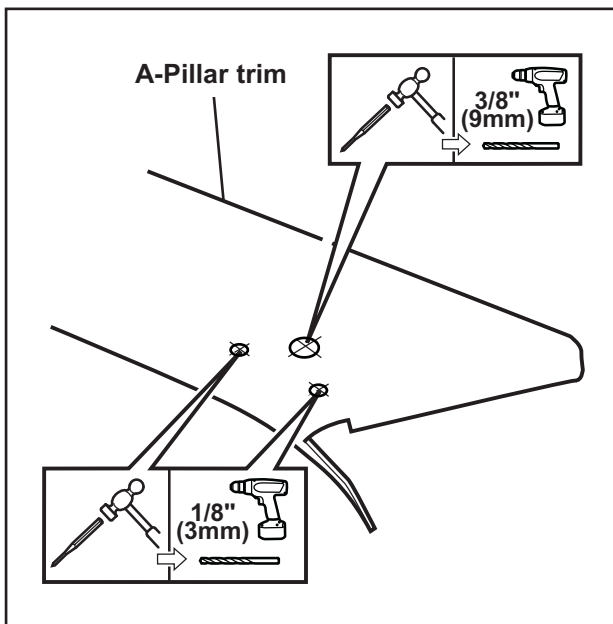


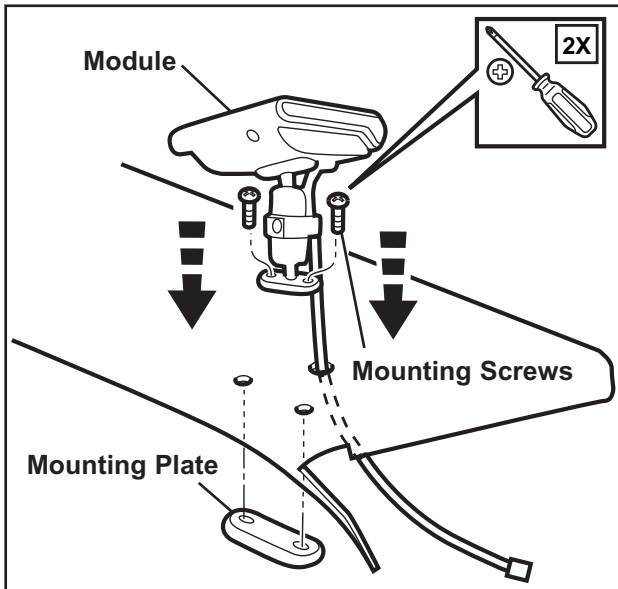
- 9) Remove A-Pillar trim (hook/pry tool).

10) Mark initial drill point as shown, from initial drill point, mark additional drill points as shown.

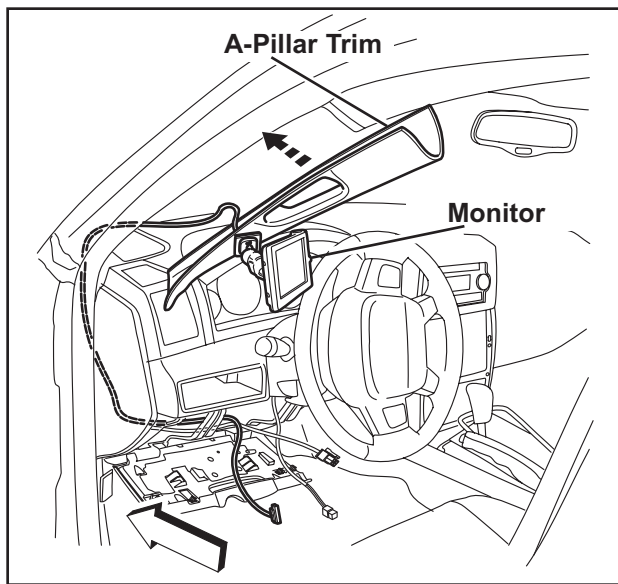


11) Punch and drill holes as shown, (1/8" drill bit for lower holes, 3/8" drill bit for upper hole).

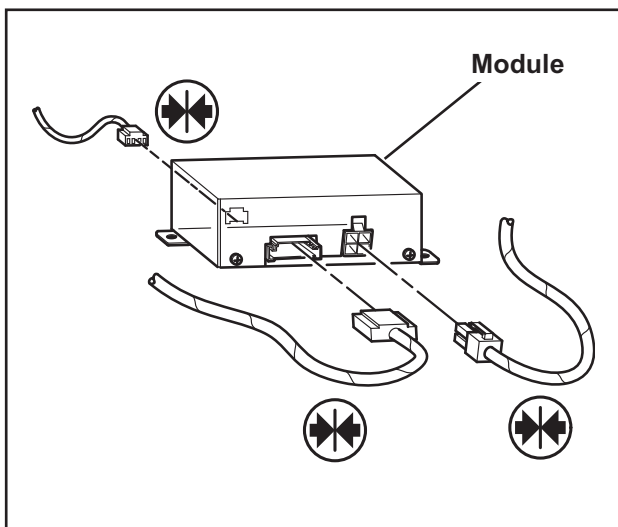




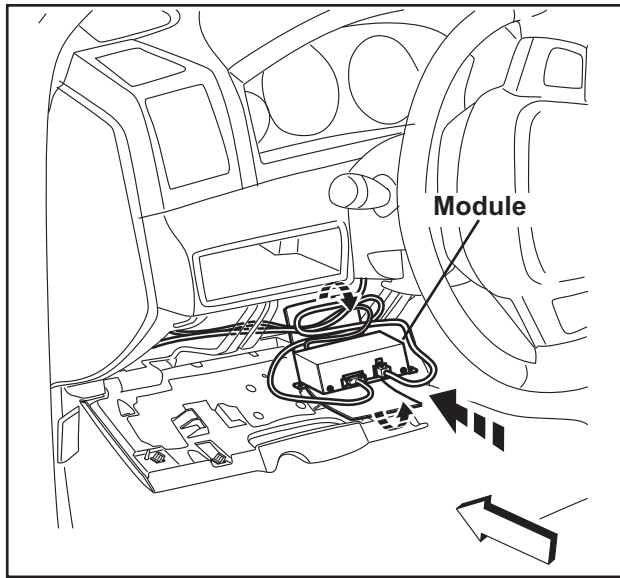
12) Route harness from monitor (item 8) through A-pillar as shown. Mount monitor to A-pillar using screws (item 13) with philips head screw driver to mounting plate (item 12).



13) Route harness from Monitor (Item 8) through I/P as shown.

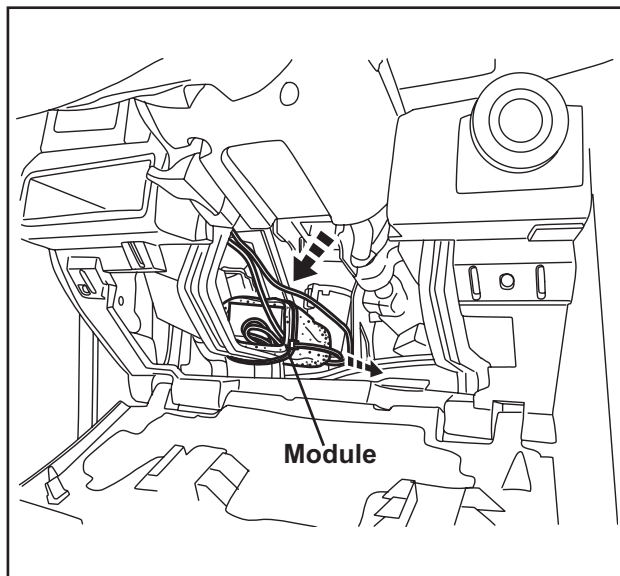


14) Connect harness connectors from monitor, t-harness and Camera Extension Harness to Module (Item 9).



- 15) Bundle module/excess harness with foam tape (Item 10).

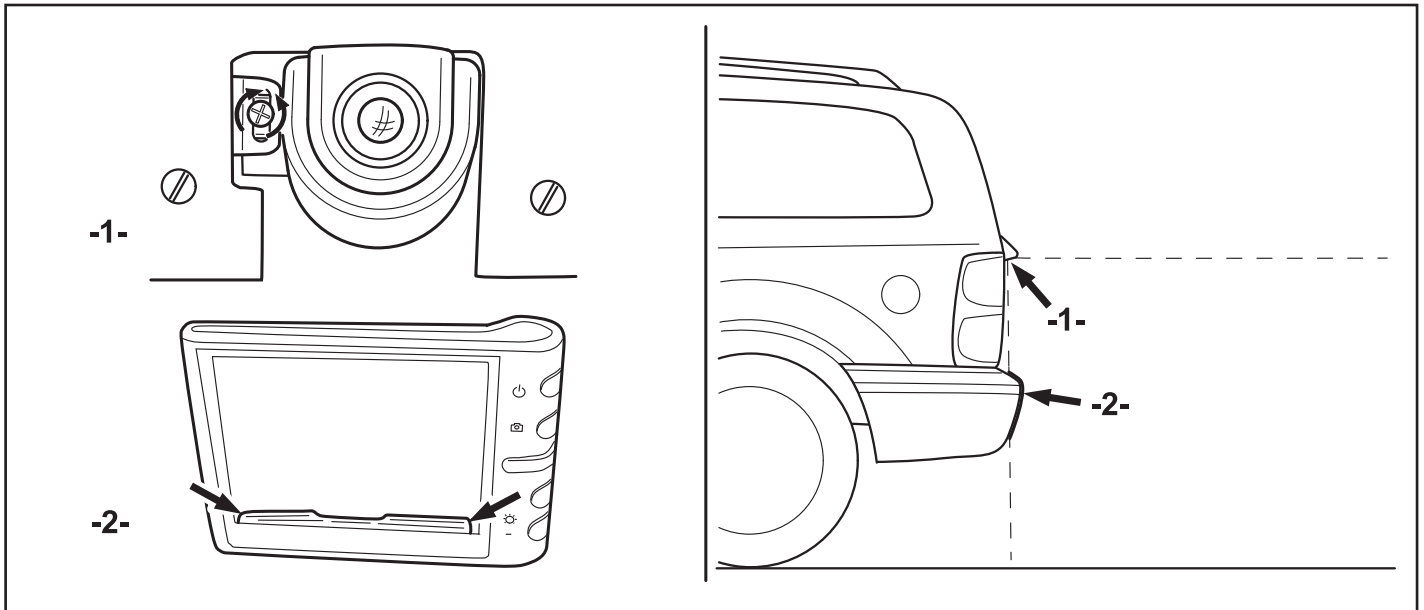
**Note:** Placement of this module is critical for safety.



- 16) Secure module to knee bolster brace to the left of the steering wheel using Tie Straps (Item 11).

### ***E – Final Assembly:***

- 1) Re-install knee bolster, center I/P trim bezel, A-pillar trim, lower front sill trim, lower rear sill trim, rear quarter trim, upper C-pillar trim, upper D-pillar trim and tailgate trim .
- 2) Re-connect vehicle battery.



### **F – Camera Adjustment:**

- 1) To adjust the camera view angle, turn the screw right to lower the camera and turn the screw left to raise the camera, located on the left of the camera by using a phillips screw driver.
- 2) Check the camera view on the monitor. The camera angle be set to view the bumper and the horizon.

**Note:** Due to the wide angle of the camera, objects shown on the monitor are closer than they appear.