



## GENUINE PARTS

### INSTALLATION INSTRUCTIONS

<b>DESCRIPTION:</b>		Bluetooth Hands-Free (JCI BlueConnect)					
<b>APPLICATION:</b>		Sentra without Moon-roof					
<b>PART NUMBER:</b>		BlueConnect Kit 999Q3 LZ001					
<b>KIT CONTENTS:</b>		<b>Service Part Number</b>					
Item	Qty.	Part Description		S1	S2	S3	S4
A	1	User Interface Assembly	999Q3 LZ000	X			
A	1	• User Interface Board (UIB)		X			
B	1	• Standoff Bezel (Cover)		X			
C	1	• Retainer		X			
D	1	Hands-Free Module Assembly (HFM)	999Q3 MZ000		X		
E	1	Harness Kit	999Q3 LZ000			X	
E	1	• Wire Harness				X	
F	6	• Cable Ties				X	
G	3	• Posi-Tap				X	
H	2	• Closure Screws (#8x1")		X		X	
I	4	• Retainer Screws (#6x1/2")		X		X	
J	3	• Foam Tape Strip (3 1/8" x 1 1/8" x 1/4")				X	
K	2	• Round Spacer (#8 7/16"L, 1/4"O.D.)		X		X	
L	1	• Flocked Tape (1"x1-1/2")		X		X	
M	1	Installation Template-Clear	999Q3 LZ000				X
N	1	Routing Template					X
O	1	Installation Instructions Replacement Template					X
P	2	A-Pillar Tether Clip	76988 3DN0A				
Q	1	Accessory Service Connector (NOT INCL. IN KIT)	999Q9 AY000				

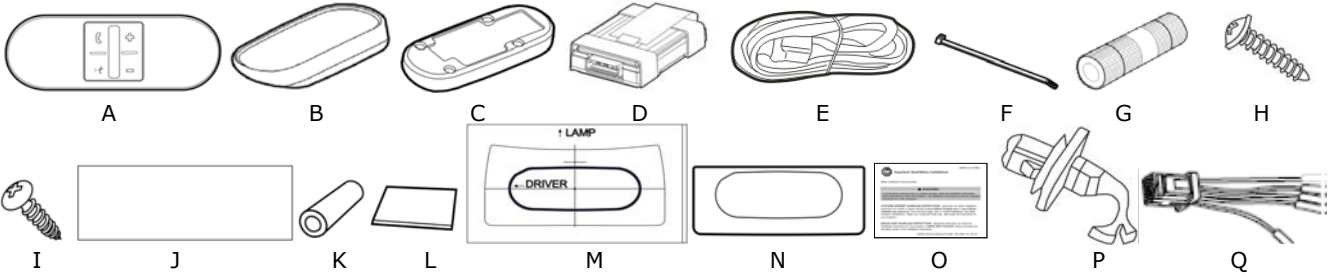


Diagram illustrating the components included in the kit, labeled A through Q:

- A: User Interface Assembly
- B: Standoff Bezel (Cover)
- C: Retainer
- D: Hands-Free Module Assembly (HFM)
- E: Harness Kit
- F: Cable Ties
- G: Posi-Tap
- H: Closure Screws (#8x1")
- I: Retainer Screws (#6x1/2")
- J: Foam Tape Strip (3 1/8" x 1 1/8" x 1/4")
- K: Round Spacer (#8 7/16"L, 1/4"O.D.)
- L: Flocked Tape (1"x1-1/2")
- M: Installation Template-Clear
- N: Routing Template
- O: Installation Instructions Replacement Template
- P: A-Pillar Tether Clip
- Q: Accessory Service Connector (NOT INCL. IN KIT)

#### TOOLS REQUIRED:

- Safety glasses
- Compressed air with blow nozzle
- Plastic trim tool
- Phillips #2 screw driver
- Ratchet with 10mm Socket
- Torque screw driver (0-25 in-lbs)
- Side cut pliers
- Rectangular Clip Removal Tool
- Hand drill
- 3mm(1/8") & 6mm(1/4") drill bits
- 1" Hole saw bit
- Spiral cutting tool
- Flex cable (optional)
- SABRECUT Zip® Bit (1/8"metal and plate)
- Electrical Tape

#### PRE-INSTALLATION WARNINGS, CAUTIONS, CRITICAL STEPS, and NOTES:

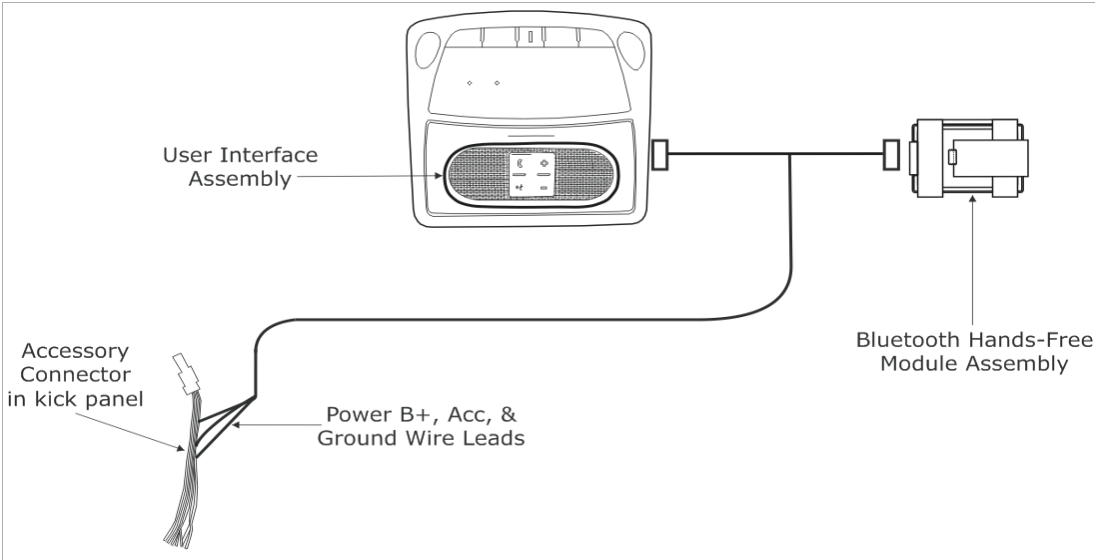
- Dealer Installation Recommended. Instructions may refer to Service Manual.

#### CAUTION

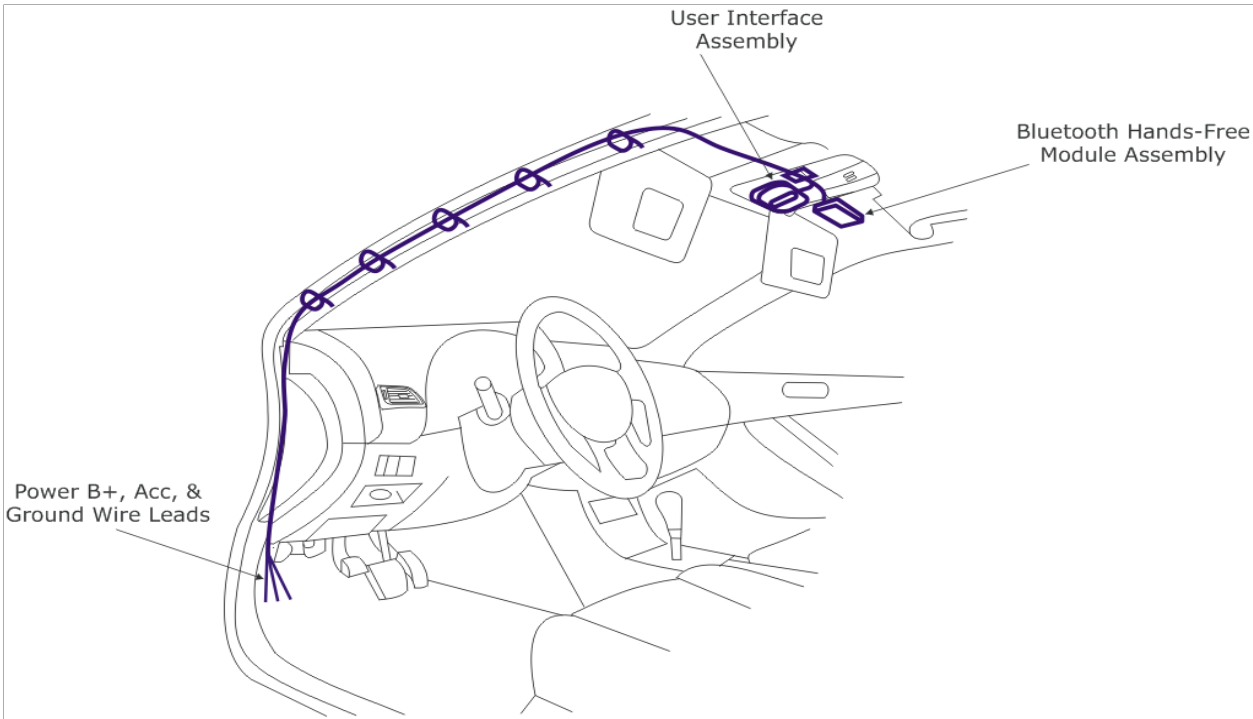
- For Installation/Technical Support Contact AutoIntelligence at 1-888-454-4440.
- This accessory will eliminate the use of the sunglasses holder.
- Check the customer's cell phone make, model and carrier to make sure it is compatible with BlueConnect before starting the installation ([www.jciblueconnect.com](http://www.jciblueconnect.com)).

**INSTALLATION OVERVIEW:**

**System Block Diagram**

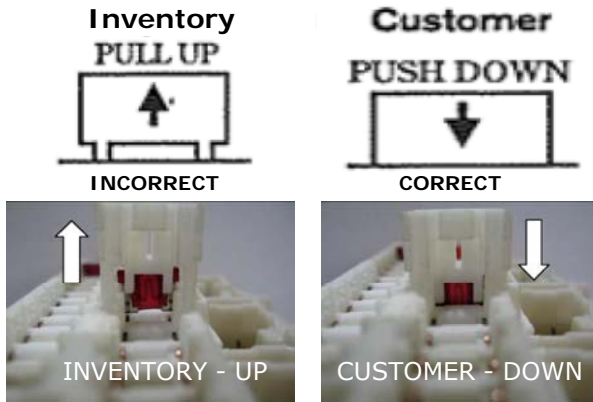


**Vehicle outline with installation overview**



## INSTALLATION PROCEDURE:

- 1) Apply parking brake.
- 2) Confirm the vehicle is no longer in the default shipping state (Extended Storage Switch Pulled Up and BCM in Transit Mode). Failure to confirm the vehicle has been removed from this state will result in the loss of normal vehicle operation. The confirmation requires two checks:
  - 2a) Locate the Extended Storage Switch in the cabin fuse block. Once located, check that it is in the "Customer" position. See below for reference.
  - 2b) To remove transit mode is by doing as follows:
    1. Remove fuse cover lid
    2. Push down shorting pin
    3. Ign On 2 times without turn the vehicle on



To put transit mode back is by doing as follows:

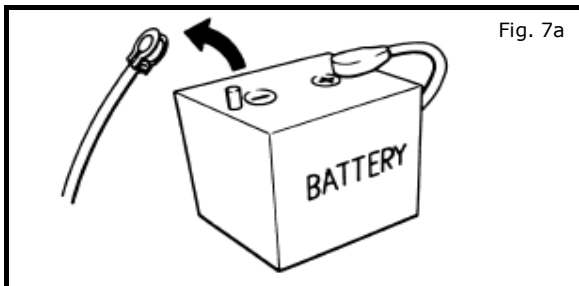
1. Ign Off
2. Remove fuse cover lid
3. Pull up shorting pin
4. Assemble fuse cover lid
5. Ign On 2 times without turn the vehicle on
6. Confirm transit mode condition on meter

Note: Typical vehicle condition shown above. Switch is easily identifiable by the permanent, push-pull fuse holder. Actual position on the fuse block may vary, vehicle to vehicle.

- 3) Turn ignition switch to "**ON**" position.
- 4) Record the customer radio presets and other presets as required.

Preset	1	2	3	4	5	6		

- 5) Put shift lever in "**P**" position for A/T and CVT or "1st" for M/T.
- 6) Turn ignition switch to "**OFF**" position.

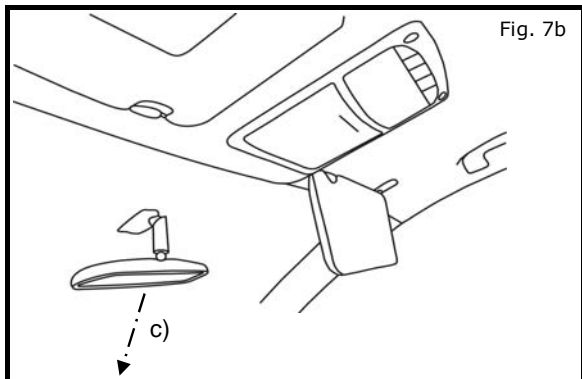


- 7) Prepare for installation / disassembly.
  - a) Disconnect the negative battery terminal.

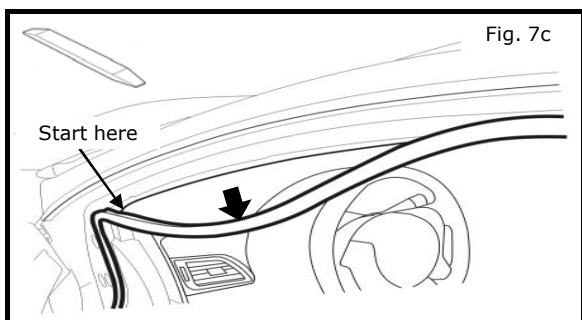


## CAUTION

- Take care not to scratch or damage any component during the removal or reinstallation process.
- Trim pieces found to have witness marks or broken clips are not to be reinstalled.

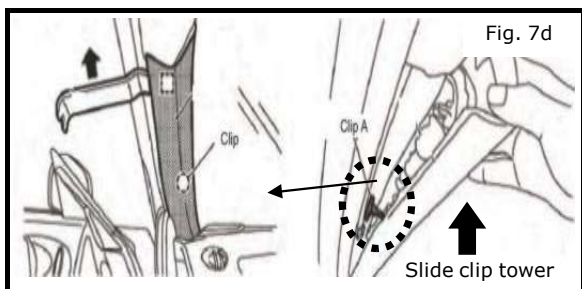


b) Tilt rear view mirror down toward windshield.

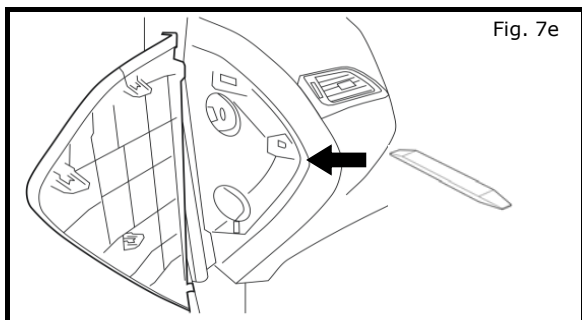


**Note: Use caution not to tear, scratch or deform welt.**

c) Pull driver's front body side welt loose from A-pillar between top of door opening and dash level.

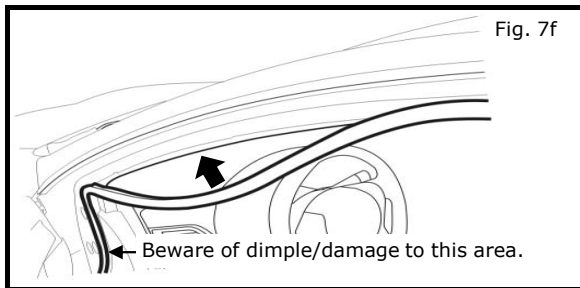


d) Remove driver's side A-pillar trim, by prying away from body. Snip both A-Pillar Tether Clips from trim cover. Remove clips from body and A-Pillar trim cover.

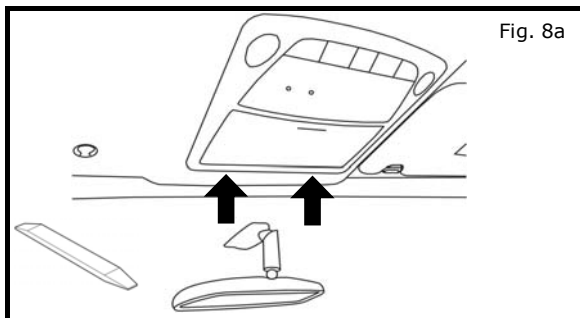


e) Remove dash side cover.

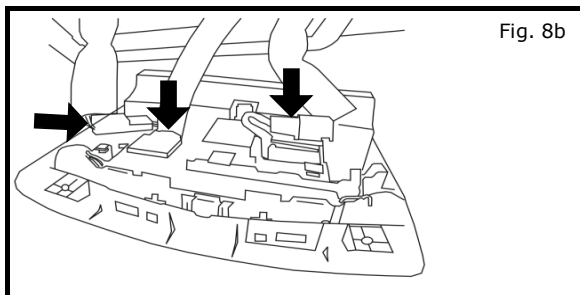
**INSTALLATION PROCEDURE:** (continue)



- f) Reinstall driver's front body side welt on A-pillar to prevent dimple/damage.

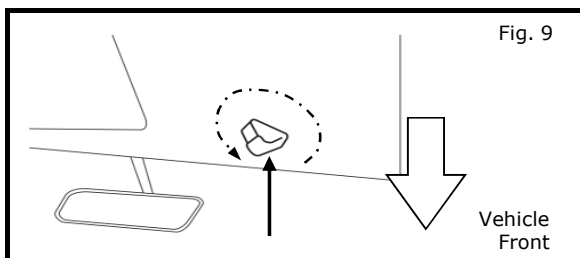


- 8) Map Lamp Assembly Removal
- a) Using plastic tool, relieve two clips from roof, at front of map lamp.



- b) Carefully support lamp/switch assembly. Disconnect all three (3) harnesses from lamp assembly.

**Note: Use caution not to bend or crease headliner.**



- 9) Turn anchor 90 degrees counter clockwise and pull down to remove. Repeat this process on the passenger side.

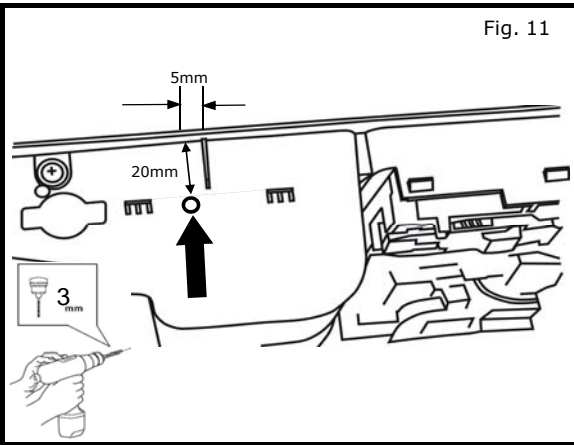


**CAUTION**

- Do not attempt to process or disassemble front map lamp assembly in vehicle.
- Work area should be clean, scratch proof, and free of debris to avoid damage of any component.
- Safety glasses must be worn during front map lamp assembly processing operations.

# INSTALLATION PROCEDURE: (continue)

Fig. 11



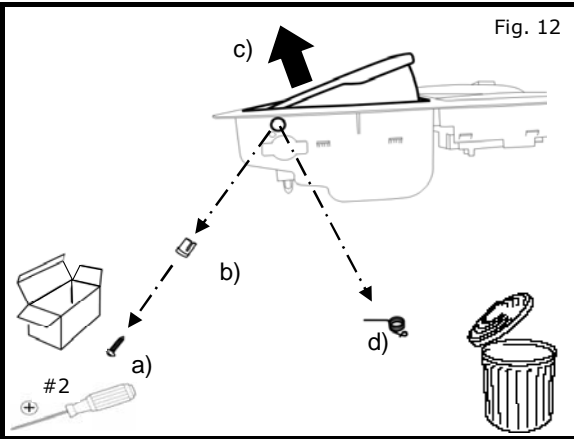
- 10) Take map lamp assembly to work area to process.
- 11) Drill pilot hole for door closure screws on sides of front map lamp assembly.
  - a) Mark location of pilot hole for closure screw.
  - b) Repeat on other side.
  - c) Drill through front map lamp assembly and bin door making two (2) pilot holes with 3mm (1/8") drill bit.

## **NOTE:**

**Drill must penetrate both walls.**

- d) Repeat on other side.

Fig. 12



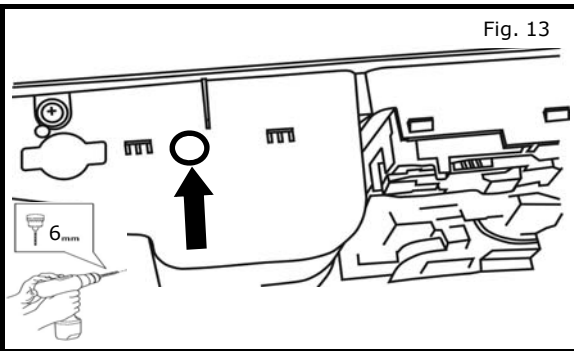
- 12) Remove sunglass bin door from front map lamp assembly.

- a) Remove screw. Retain for reassembly.
- b) Remove pivot bushing. Retain for reassembly.
- c) Tilt sunglass bin door up and remove. Set aside.
- d) Remove and discard pivot spring.

## **NOTE:**

**Work area should be clean, scratch proof, and free of debris to avoid damage of any component.**

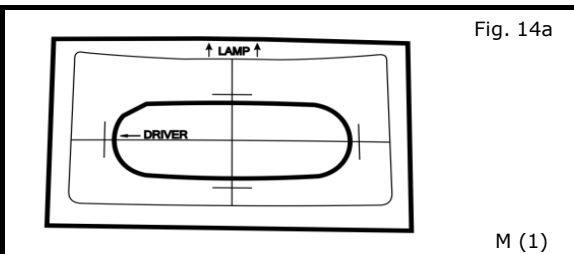
Fig. 13



- 13) Enlarge hole for round spacer on sides of front map lamp assembly.

- a) Drill pilot hole made in step 12 with 6mm (1/4") drill bit to enlarge.
- b) Repeat on other side.

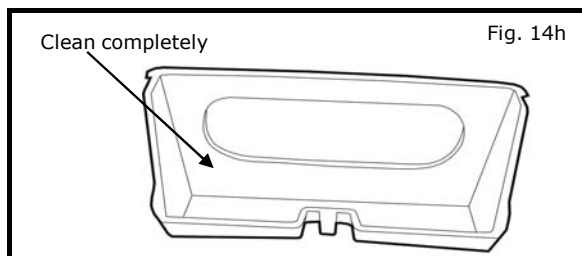
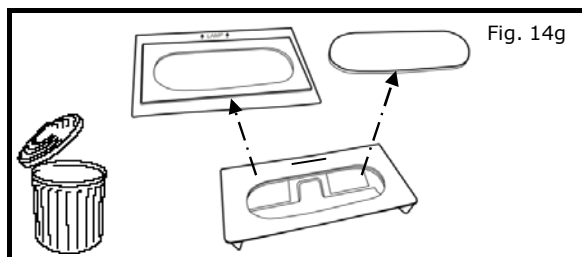
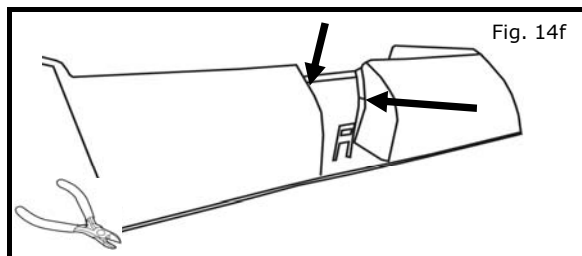
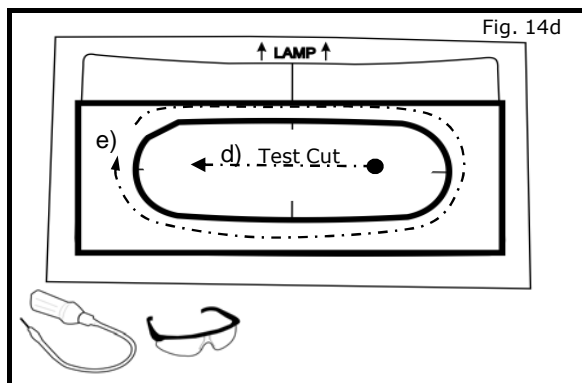
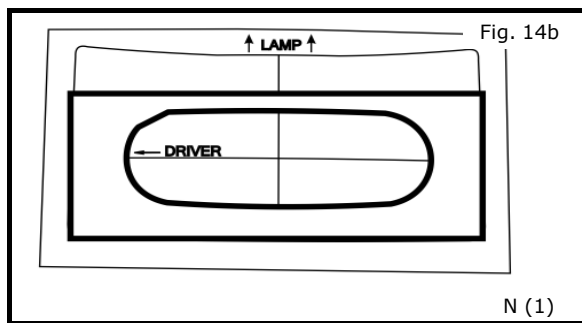
Fig. 14a



- 14) Cut opening in sunglass bin door.

- a) Align and apply clear template (M) to sunglass bin door.

# **INSTALLATION PROCEDURE:** (continue)



b) Align and apply metal template (N) on top of clear template.

c) Turn on rotary cutter. Recommended RPM range 15,000 to 20,000.

d) Test cut in center of sunglass bin door. Check for proper cut feed rate. To minimize bit chatter, adjust RPM accordingly.

Place spiral bit in center of cutout area. Apply slight downward pressure to start cut in bin door surface.

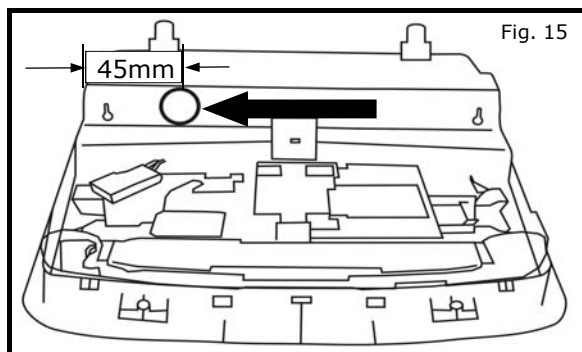
e) Move cutter until it comes in contact with metal template opening. Then continue cutting the opening in a **CLOCKWISE DIRECTION** with gentle pressure.

f) Using side cut pliers remove remainder of cut out near bin door latch. Do this on either side of latch area. This must be done in order to properly install retainer.

g) Discard oval section of sunglass bin door. Remove and discard both templates.

h) Clean all debris from inside sunglass bin door & front map lamp assembly with compressed air. Set aside for next step.

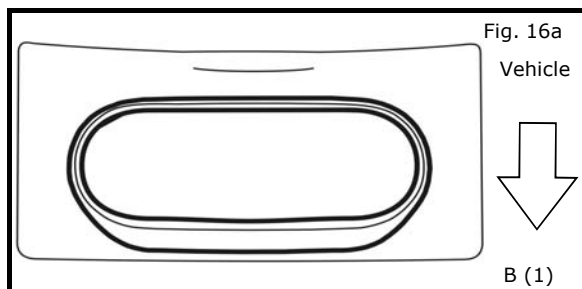
# **INSTALLATION PROCEDURE:** (continue)



- 15) Measure 45mm (1 3/4"), from driver side of map lamp assembly, on lower channel. Using a 25mm (1") Hole saw bit, cut wire routing hole in back of Map Lamp Assembly to create access for wire harness.

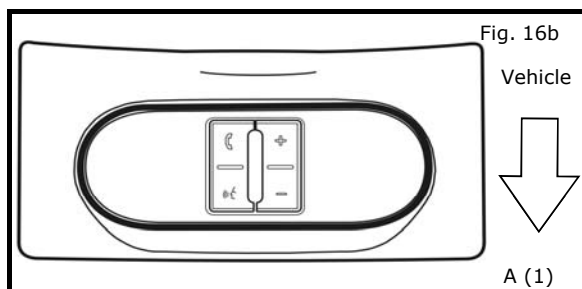
## **NOTE:**

**It is important that ALL debris has been completely removed.**



- 16) Install user interface assembly in sunglass bin door.

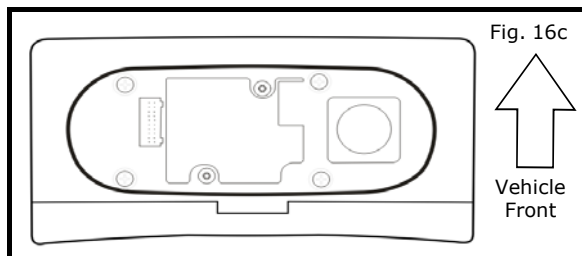
- a) Place standoff bezel (B) on sunglass bin door in correct orientation, see drawing.



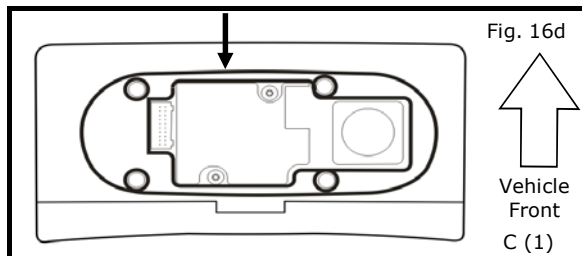
- b) Place user interface board (A) on standoff bezel (B) and sunglass bin door in correct orientation, see drawing.

## **NOTE:**

**Flat area on UIB should align with flat area on sunglass bin door hole.**



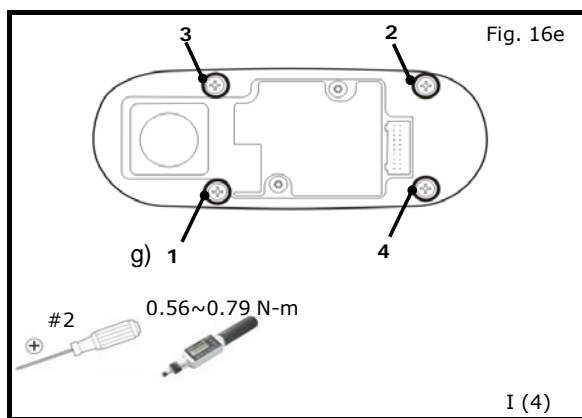
- c) Hold user interface board, standoff bezel, and sunglass bin door together and turn face down on clean surface.



- d) Place retainer (C) on back side of user interface board in correct orientation, see drawing.



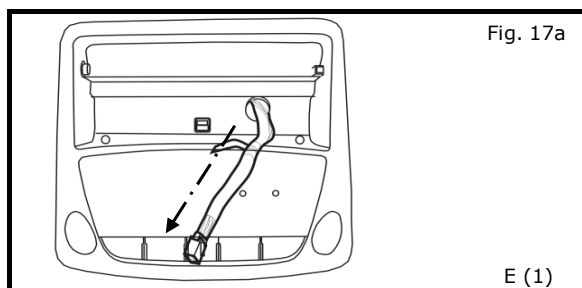
# **INSTALLATION PROCEDURE:** (continue)



- e) Place four (4) retainer screws (I) through retainer and insert tip of each screw in the user interface board holes. Start each screw by tightening two (2) full turns with screwdriver.
- f) Check alignment of user interface board in sunglass bin door cutout. It should be centered and parallel to edge of sunglass bin door. Check for gaps and bezel alignment.
- g) Follow sequence in drawing and tighten screws to 0.56~0.79 N-m (5~7 inch pounds) using screw torque wrench.

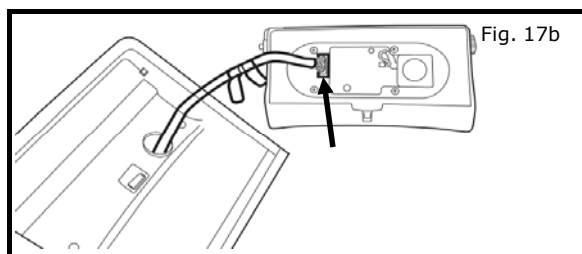
## **NOTE:**

**DO NOT over tighten screws.**

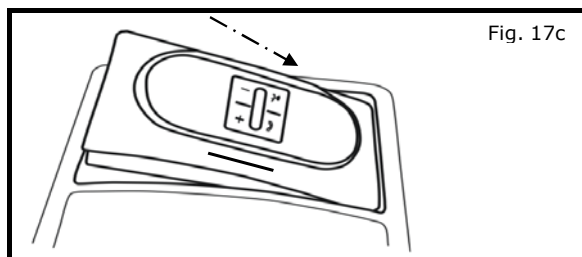


- 17) Reassemble sunglass bin door in front map lamp assembly.

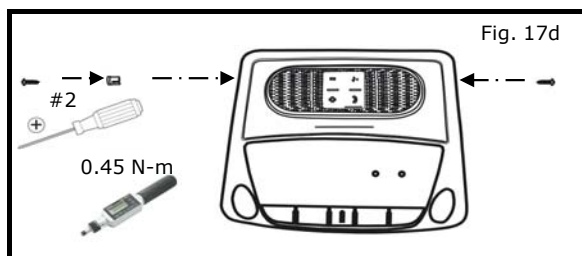
- a) Pass smaller white connector of wire harness (E) through access hole in front map lamp assembly.



- b) Plug wire harness connector into user interface assembly. Press firmly until "click" is heard.



- c) Place pivot post end of sunglass bin door in front map lamp assembly pivot hole.

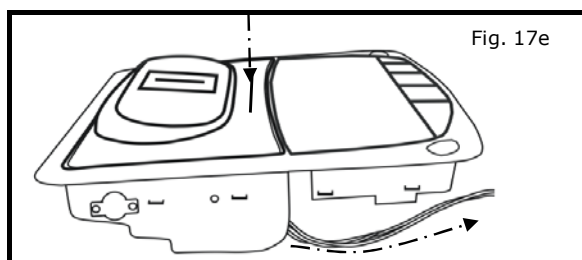


- d) Align pivot bushing post with front map lamp assembly pivot hole and insert bushing. Install pivot screws and tighten to 0.45 N-m (4 inch pounds).

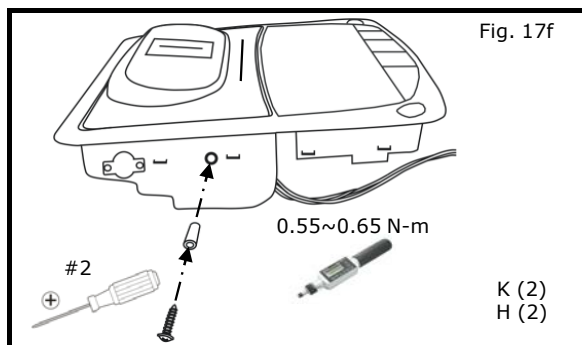
## **NOTE:**

**DO NOT over tighten screws.**

# **INSTALLATION PROCEDURE:** (continue)

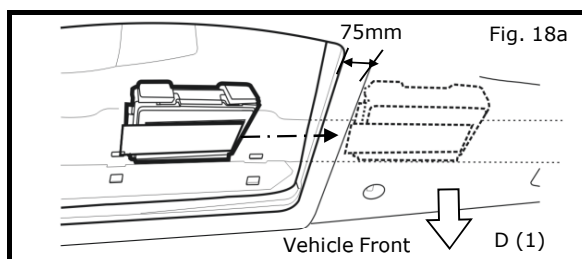


- e) Close sunglass bin door taking care to route wire harness through access hole.



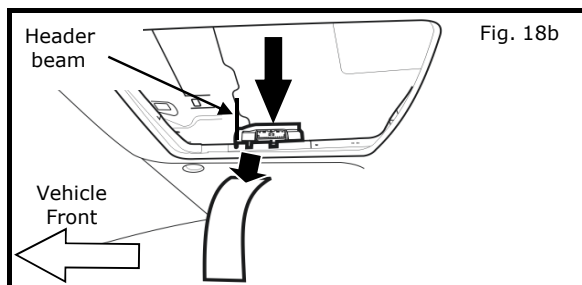
- f) Insert two (2) closure screws (H) into two (2) round spacers (K) and install in drilled holes on sides of front map lamp assembly. Install passenger side screw first, tighten to 0.55~0.65 N-m (4.92~5.76 inch pounds), then proceed with the driver side screw.

**NOTE:**  
**DO NOT over tighten screws.**

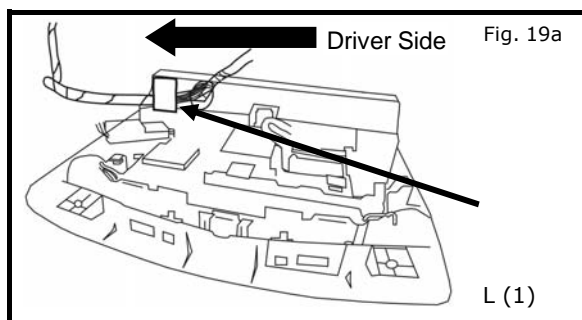


## 18) Install hands-free module assembly.

- a) Fold adhesive backing on hands-free module assembly (D) back and hold in place. Place hands-free module assembly between the headliner and roof panel on passenger side of opening approximately 75mm (3") inward. Align with adhesive tape down toward headliner.



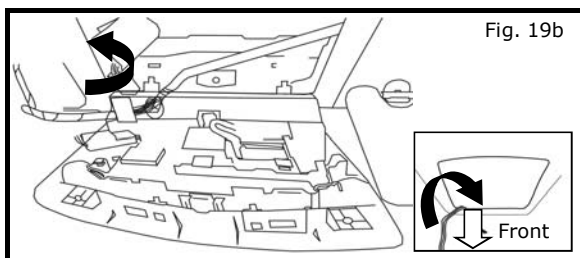
- b) Position hands-free module against header beam. Pull adhesive backing to remove and press firmly into place against the headliner being careful not to crease the headliner.



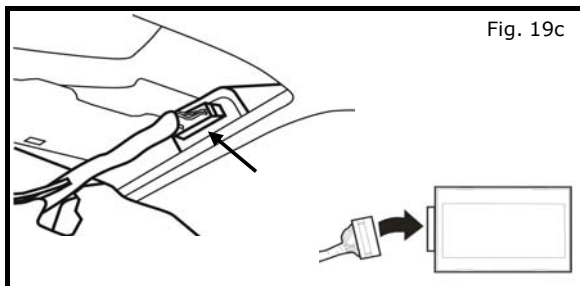
## 19) Install front map lamp assembly.

- a) Route wire harness power/ground leads toward driver side of vehicle and apply flocked tape (L) to secure, as shown.

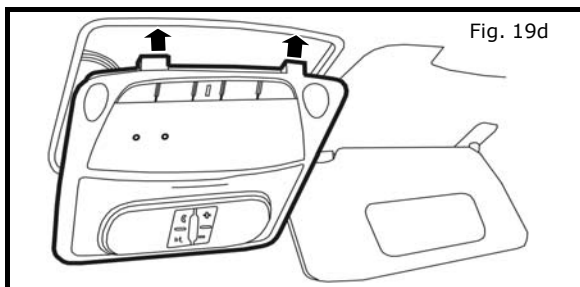
**INSTALLATION PROCEDURE:** (continue)



- b) Route wire harness power/ground leads between headliner and roof beam above rear view mirror and let hang down. Reconnect three wire harnesses to map lamp assembly from step 8b.



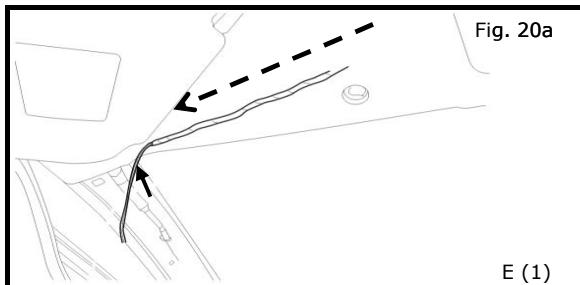
- c) Support front map lamp assembly and connect wire harness large connector to hands-free module assembly.



- d) Insert front map lamp assembly in headliner opening taking care to route wire harness out of way. Insert two (2) alignment tabs at rear, then insert two (2) clips in roof. Snap in place.

**NOTE:**

**Route harness out of way.**

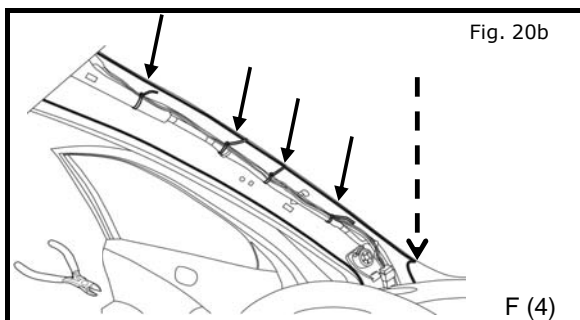


- 20) Route wire harness lead wires.

- a) Route wire harness (E) lead wires from front map lamp assembly area behind sun visor anchor, to top of A-pillar. Tuck wires between headliner and vehicle roof beam. Avoid pinching wires near anchor by following dotted arrow.

**NOTE:**

**Be careful not to bend or crease headliner.**

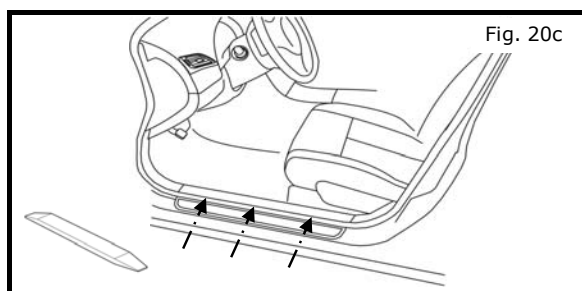


- b) Route wire harness lead wires down A-pillar to the lower kick panel. Make sure lead wires are parallel to the vehicle harness. Secure to anchor points using four cable ties (F). Trim excess on cable ties. Install new A-Pillar Tether Clip onto A-pillar trim then install into vehicle A-Pillar.

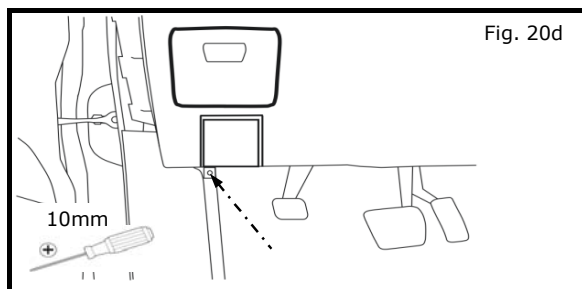
**NOTE:**

**Secure the cable ties to plastic harness anchor points, to vehicle harness.**

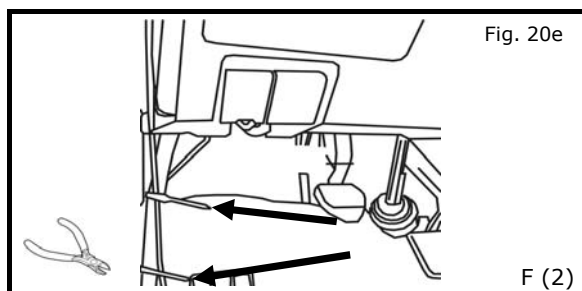
# **INSTALLATION PROCEDURE:** (continue)



- c) Using a plastic tool, remove driver sill plate by releasing three (3) tabs.



- d) Using a 10mm socket, remove nut in lower left kick panel, then remove kick panel.



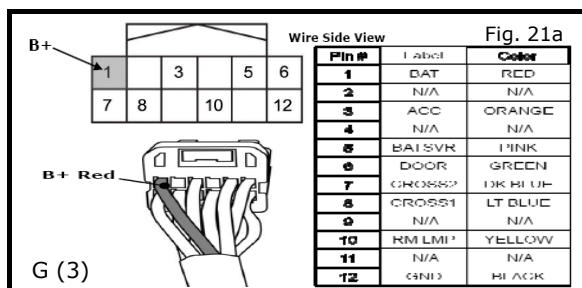
- e) Route wires to the driver side lower dash assembly. Secure wire harness lead wires to factory harness using two (2) cable ties (F). Trim excess on cable ties.



## **CAUTION**

- Color(s) given in illustration(s) are for reference only. Use location(s) where color deviates.
- Do not pinch the harness between trim when re-installing vehicle trim pieces.

See Posi-tap Installation Detail, steps 1 - 5, on page 14.



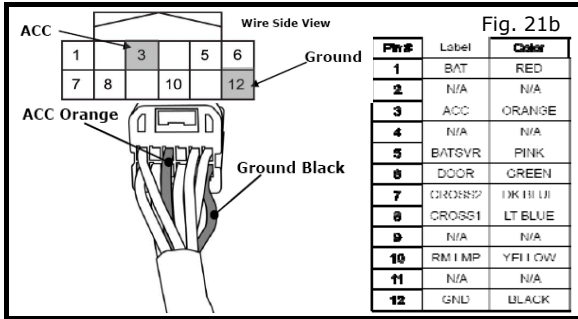
- 21) Connecting to Accessory Connector.

- a) Using a posi-tap, connect the Red (B+) wire to the Red wire on the accessory connector.

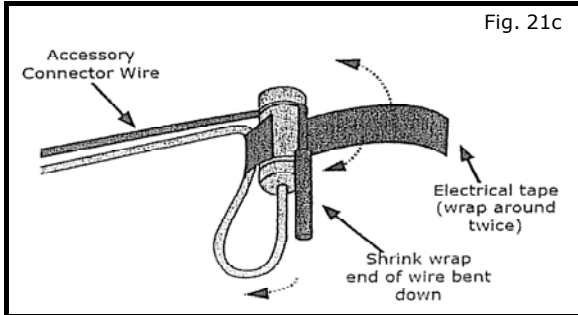
### **NOTE:**

Be sure NOT to posi-tap through the shrink tubing. If this is the first tap of the accessory connector be sure to tap next to the shrink tube. If a previously installed accessory is present, carefully remove accessory connector harness from the accessory connector plug before installing posi-taps. Install all posi-taps before reattaching the accessory connector harness to the plug.

# INSTALLATION PROCEDURE: (continue)



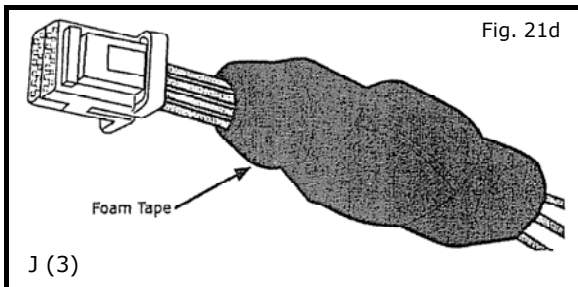
- b) Using a posi-tap, connect the Black (Ground) wire to the Black wire, and the Yellow (Accessory) wire to the Orange wire on the accessory connector.



- c) Follow this finishing procedure on all posi-taps. Leave a short length of wire extended past the posi-tap and bend down as shown. Use electrical tape to secure the extra wire against the posi-tap with at least two (2) revolutions.

## NOTE:

Make sure that the end of the wire is completely covered by the tape.



- d) Wrap the posi-taps with foam tape to prevent rattle.

## POSI-TAP INSTALLATION DETAIL:

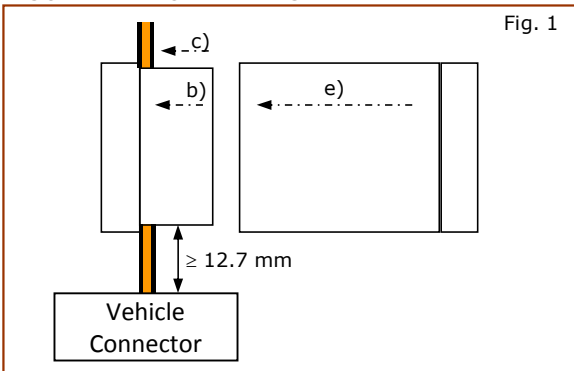


Fig. 1

- 1) Tap vehicle wire.
  - a) Identify and confirm (test if necessary) the correct vehicle wire to be tapped.
  - b) Remove cap (slot side) from tap body.
  - c) Slide cap around single vehicle wire.
  - d) Position cap  $\geq 0.5"$  (12.7mm) away from the back of the vehicle connector.
  - e) Tighten the tap **TIGHT** with finger pressure.
  - f) Tighten by another quarter turn.

### NOTE:

**Figures are not to scale. Do not re-use the tap.**

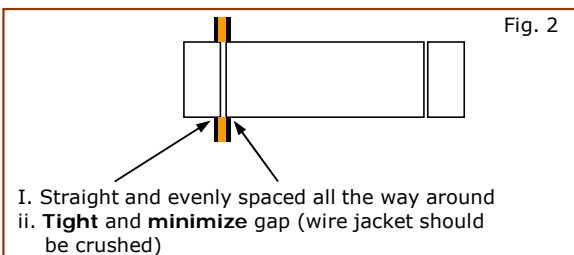


Fig. 2

- 2) Inspect the tap to ensure correct installation.

### NOTE:

**Avoid putting pressure on the vehicle wire and tap for the remainder of the installation.**

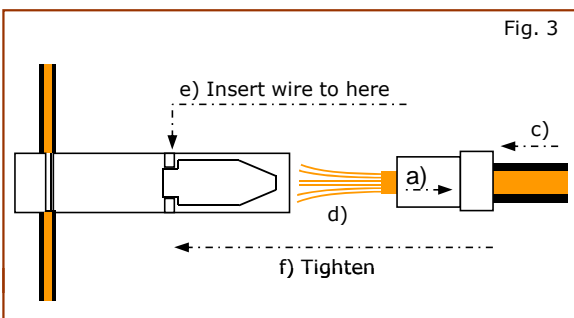


Fig. 3

- 3) Tap accessory wire.
  - a) Remove tap (non-pierce) side from tap.
  - b) Remove the protective stub from the wire.
  - c) Insert wire through the non-pierce side opening.
  - d) Spread the individual strands into fan shape.
  - e) Insert wire into the tap body and ensure that it is all the way in.
  - f) Tighten the tap **TIGHT** with finger pressure.
  - g) Tighten by another quarter turn.

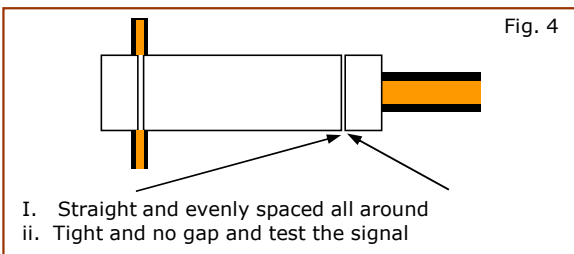


Fig. 4

- 4) Confirm the tapped accessory wire.
  - a) Pull on the wire lightly to ensure connection.
  - b) Inspect the tap to ensure correct installation.
  - c) Test the signal to ensure that it is working properly.

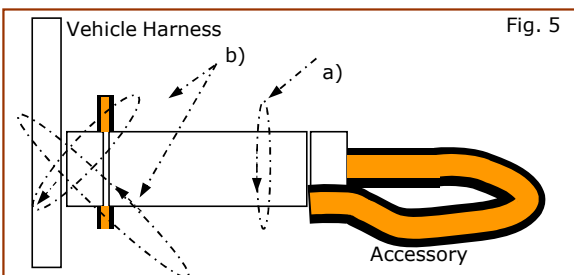


Fig. 5

- 5) Secure the tap.
  - a) Secure the tapped wire on the non-pierce side to the body of the tap with electrical tape ( $\geq 2$  revolutions).
  - b) Secure the body to harness where vehicle wire is being tapped with electrical tape ( $\geq 2$  revolutions).

Posi-Tap™ is protected by patent # 5,228,875 5,695,369 5,868,589 6,692,313 Jap 2881414 Aus 708700 Tia 103534 Can 2204826 Mex 200626 Korea 477279 China Z197105562.9 & others pending.

#### ACCESSORY CHECK:

- ☐ Connect the battery negative terminal and tighten the nut to appropriate torque.
- ☐ Check all **Critical Installation Steps**.
- ☐ Check all **torque** values.
  - ☐ Retainer screws (I) tighten to 0.68 N-m (6 inch pounds) average. (see step 16g, page 9)  
Allowable range for torque is 0.56~0.79 N-m (5~7 inch pounds).
  - ☐ Pivot screws tighten to 0.45 N-m (4 inch pounds). (see step 17d, page 9)
  - ☐ Closure screws (H) tighten to 0.60 N-m (5.3 inch pounds). (see step 17f, page 10)  
Allowable range for torque is 0.55~0.65 N-m (4.92~5.76 inch pounds).
  - ☐ Battery negative cable tightens to 5.39 N-m (48 inch pounds) average. (see step 7a, page 3)
- ☐ Verify all wiring is secure and not exposed. Check Posi-Tap by pulling lightly on wires to confirm that tap point is secure and visually confirm that single wire is tapped. Verify the correct wire is tapped.
- ☐ Trim all excess cable ties flush.
- ☐ Turn ignition switch to "**ACC**" position.
- ☐ Confirm accessory main features and functions. See diagnostic flow chart on the next page for troubleshooting.
- ☐ Confirm accessory voice prompt current language is set to English. See diagnostic flow chart function check on the next page.

#### RE-INSTALLATION OF REMOVED PARTS:

- ☐ Re-install left visor anchor first to properly position headliner.
- ☐ Re-install all removed vehicle parts. Refer to the vehicle service manual as necessary.
- ☐ Place vehicle back in transit mode for shipping. Refer to page 3, Fig. 2b)



#### CAUTION

Use caution when re-installing interior components to avoid damage, scratches, or breaking of mounting clips. Refer to the vehicle service manual for more information.

#### FINAL INSPECTION:

- ☐ Verify no rattles exist by tapping on the Headliner, A-Pillar, and Map Lamp.
- ☐ Verify re-installed trim parts for proper flush fit (no gap, no waviness, etc.).
- ☐ Verify all clips are fully engaged and locked.
- ☐ Verify re-installed trim parts are free from cracks, scratches or stress marks.
- ☐ Verify vehicle headliner, seat, steering wheel, center console, floor carpets, etc. are not soiled.
- ☐ Verify interior and exterior is not damaged.
- ☐ Turn ignition switch to "ON" and confirm proper operation of Vehicle Systems
  - ☐ If equipped, verify all window and sunroof one touch operation and perform the reset procedure if necessary. Refer to the vehicle service manual for more details.
  - ☐ Confirm proper audio function (AM, FM, SAT, CD and AUX).
- ☐ 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 and Quick Reference Guide in the glove box.
- ☐ 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 "inventory" position. Refer to the Extended Storage Switch verbiage at the beginning of the 'INSTALLATION PROCEDURE' section.

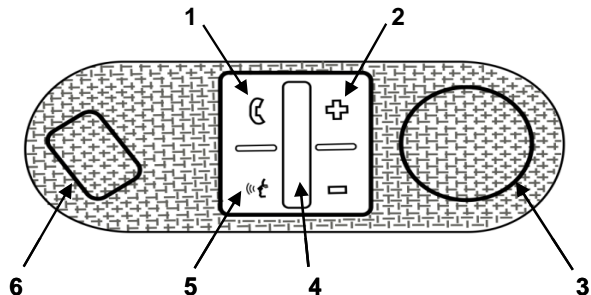
## DIAGNOSTIC FLOW CHART:

For Installation/Technical Support Contact AutoIntelligence at 1-888-454-4440.

### Function Check

Items To Be Checked		Results of the Check
✓	<b>BLUECONNECT POWER CHECK:</b> Turn the ignition to ACC position. Check BlueConnect operating buttons.	The white operating buttons on the BlueConnect User Interface assembly should illuminate white. Confirm the BlueConnect works when the key is in the ACC position.
✓	<b>BLUECONNECT FUNCTION:</b> Allow 15 seconds after ignition is turned to ACC position for unit to complete self check. Push the volume (+) button three times. Repeat for volume (-) button.	The blue center bar should illuminate blue each time button is pushed and volume tone should increase or decrease.
✓	<b>SPEAKER FUNCTION:</b> With ignition turned to ACC position, push the phone button to activate the system.	The blue center bar should illuminate blue. "BlueConnect Ready" should be heard. Push the phone button again to cancel when done.
✓	<b>MICROPHONE FUNCTION:</b> With ignition turned to ACC position, push the phone button to activate the system. Listen for voice prompt and BEEP, then say "Setup."	BlueConnect should recognize and accept voice command. "Select one of the following..." should be heard. Push the phone button again to cancel when done.
✓	<b>CURRENT LANGUAGE:</b> With ignition turned to ACC position, push the phone button to activate the system. Listen to language voice prompt.	BlueConnect voice prompt should be in English and "BlueConnect Ready" should be heard. If Spanish or French, listen for beep, then say "English." Listen for confirmation prompt and answer "Yes." Push the phone button again to cancel when done.

### BlueConnect® UIB (User Interface Board)



#### 1) Phone Button or Activation/ Deactivation Button

- Push to set up and program unit.
- Push to receive an incoming call.
- Push to make a call if not on a call.
- Push to end a call.
- Push to accept an incoming call when on another call.
- Push & hold the button until you hear a beep, while the BlueConnect is in standby. The "SYSTEM OFF" feature is activated.

#### 2) Volume Up & Down Buttons

- Push (+) to increase the volume.
- Push (-) to decrease the volume.
- Push either button to the desired volume level when the unit is not activated. Audible beeps indicate the current volume level.

#### 3) Speaker

#### 4) Blue L.E.D. Light

- A Blue light comes on indicating that the unit is activated or when there is an incoming call. It also comes on when you are on a call.

#### 5) Voice Recognition (VR) or Barge-In Button

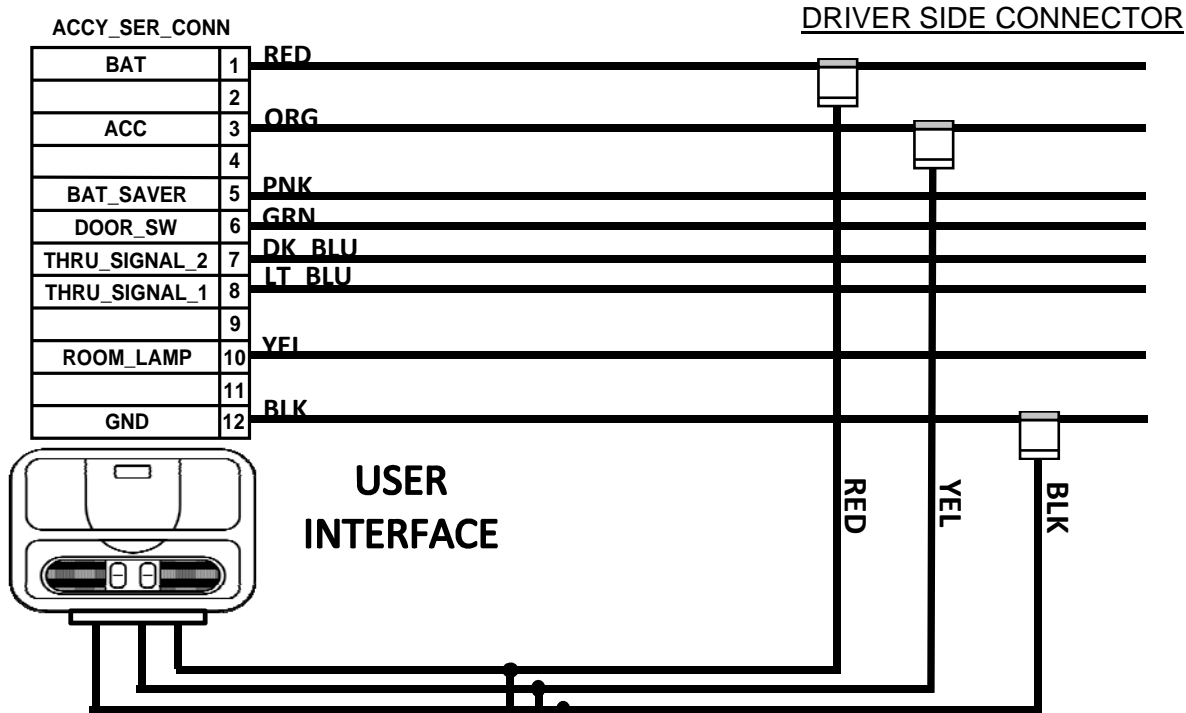
- Push to input a command without having to listen for a prompt.
- Push and say "TRANSFER CALL". This allows you to transfer your call back to your cell phone in the event you want privacy or are exiting the vehicle. Repeat to transfer call back to BlueConnect.

- Push and say "MUTE" to mute the phone.
- Push to send the DTMF tones. (Dual-Tone Multi-Frequency) tones.

#### 6) Directional Microphone



# **HARNESS DIAGRAM: Accessory Connector (999Q9-AY000)**

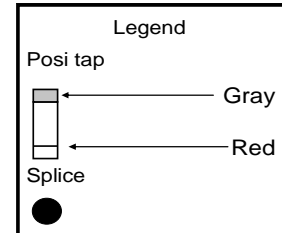


**Note: Splices are completed by supplier, installer will only Posi tap.**

1	2	3	4	5	6
7	8	9	10	11	12

**TH12FW-NH**

**Pin location is referenced looking into wire side of connector.**



# HARNESS DIAGRAM: BlueConnect Harness (999Q3 VZ031)

