

Preparation

Part #: PT923-00111

NOTE: Part number of this accessory may not be the same as the part number shown.

Conflicts: JBL Audio, Factory Navigation

Kit Contents: For kits manufactured on or after 19D0, installation kits will include BLU Logic Switch Decal. The manufacturing date code is on the part label of the packaging box and is printed as "DDMY". Please note that this manufacturing date is per Toyota standards and is in the format of DAY-DAY-MONTH-YEAR. Example: "31L8" date on label means "31st, December, 2008".

Item 1 	Item 2 	Item 3 	Item 4 	Item 5 	Item 6 	Item 7 	Item 8 
Item 9 	Item 10 						

Hardware Content

Item#	Quantity Req'd.	Description
1	1	Interface Module
2	1	Main Power Harness
3	1	BLU Logic Switch
4	1	Switch Extension Cable
5	1	Microphone
6	15	9.5" Lock Ties
7	2	Adhesive Foam Pad
8	1	Owner's Manual
9	33cm	1/4" Wire Split Loom
10	1	BLU Logic Decal

Additional Items (may be required)

Item#	Quantity Req'd.	Description

Recommended Sequence of Application

Item#	Quantity Req'd.	Description

Vehicle Service Parts (may be required for reassembly)

Item#	Quantity Req'd.	Description

General Applicability**Note:****Recommended Tools**

Personal & Vehicle Protection	Notes
Safety Goggles	
Seat Covers	
Floor Covers	
Special Tools	
Panel Clip Removal	SST # 00002-06001-01
Sockets	10 mm
Screwdriver	Phillips, #2
Side Cutters	
Torque Wrench	36 in-lbf (4.07 N.m): 7 ft-lbf (10N.m)
Installation Tools	Notes
Masking Tape	VDC Supplied
Foam Tape	VDC Supplied
Special Chemicals	Notes
Cleaner	VDC Approved Cleaner

Legend








-  **STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.
-  **CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle.
-  **OPERATOR SAFETY:** Use caution to avoid risk of injury.
-  **TOOLS & EQUIPMENT:** Used in Figures to call out the specific tools and equipment recommended for the process.
-  **REVISION MARK:** This mark highlights a change in installation with respect to previous issue.
-  **SAFETY TORQUE:** This mark indicates that torque is related to safety.
-  **VIDEO:** Video Available; click to Play

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Accessory Installation Practice (read before installation)

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the “Accessory Installation Practices” document.

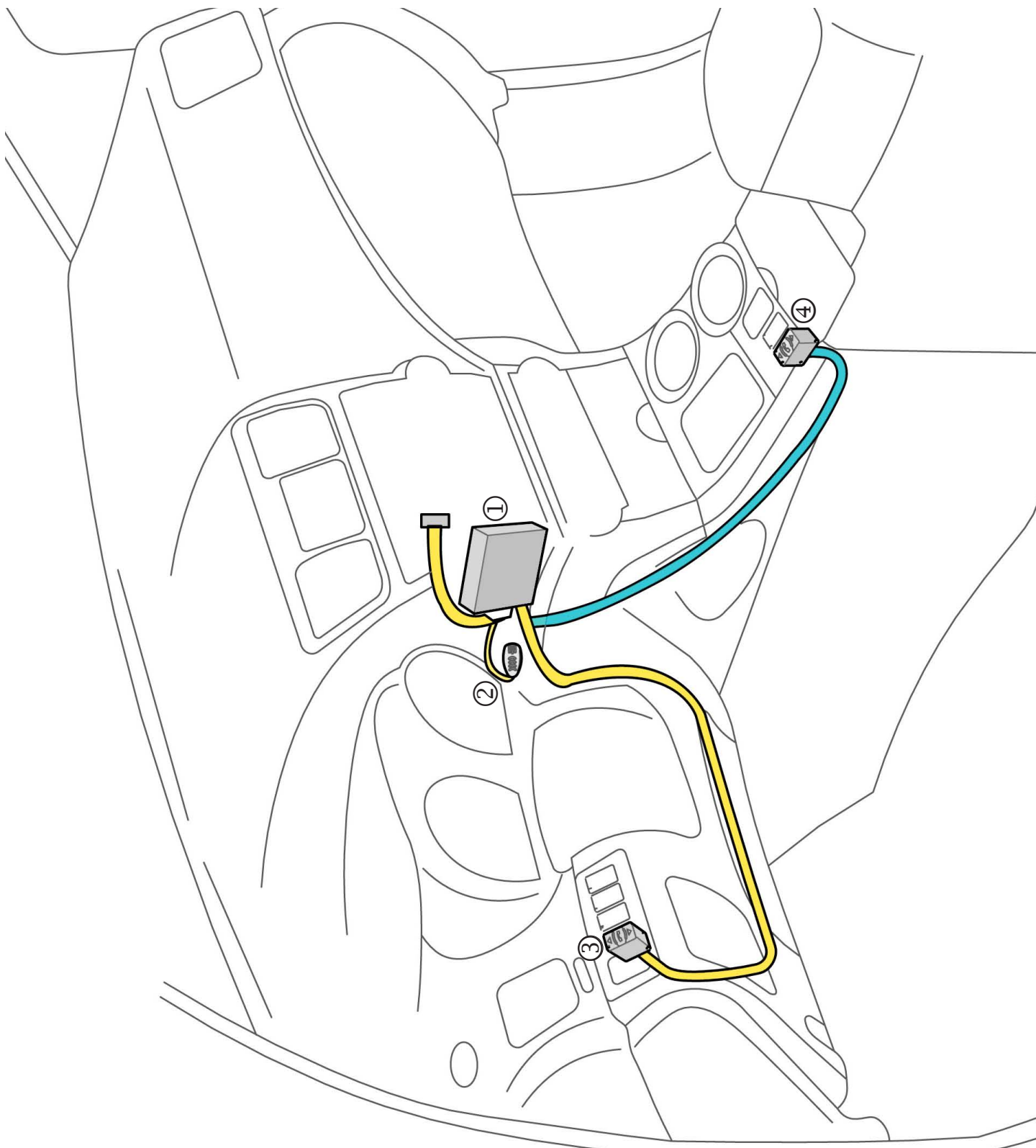
This document covers such items as:

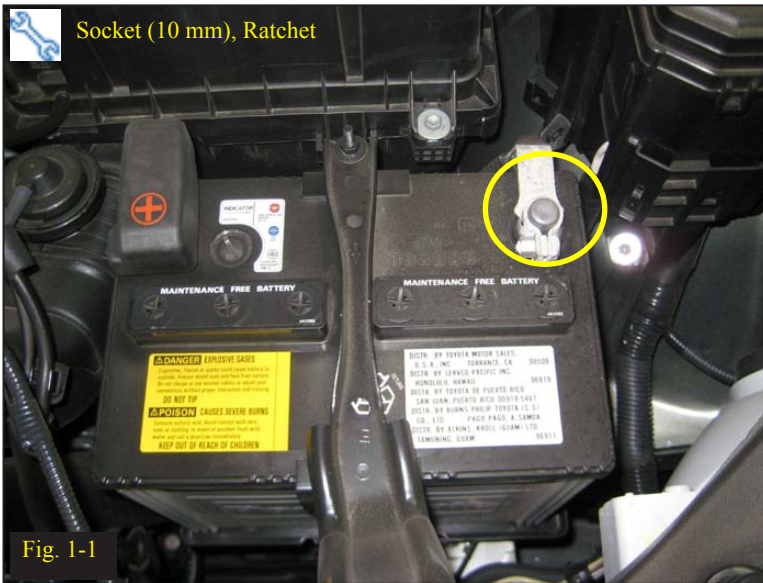
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking torque procedure, etc.)
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

Please see your Toyota/Scion/Lexus dealer for a copy of this document.

Preparation

Content Location	
1	Interface Module
2	Wired Microphone
3	BLU Logic Switch Location - Option I
4	BLU Logic Switch Location - Option II





1. Vehicle Preparation (Fig. 1-1)



- Apply parking brake.
- Protect fender before starting.
- Remove the negative (–) battery terminal.



CAUTION: Do not touch the positive terminal with any tool during removal.

- Using the protective blanket, cover front seat, side of the shift lever and center console.
- Place removed vehicle components on a protective blanket.

2. Vehicle Disassembly.

- Remove the upper HVAC air vent assembly.
 - Using hands or appropriate panel removal tool, disengage the clips and pull straight out (Fig 1-2).

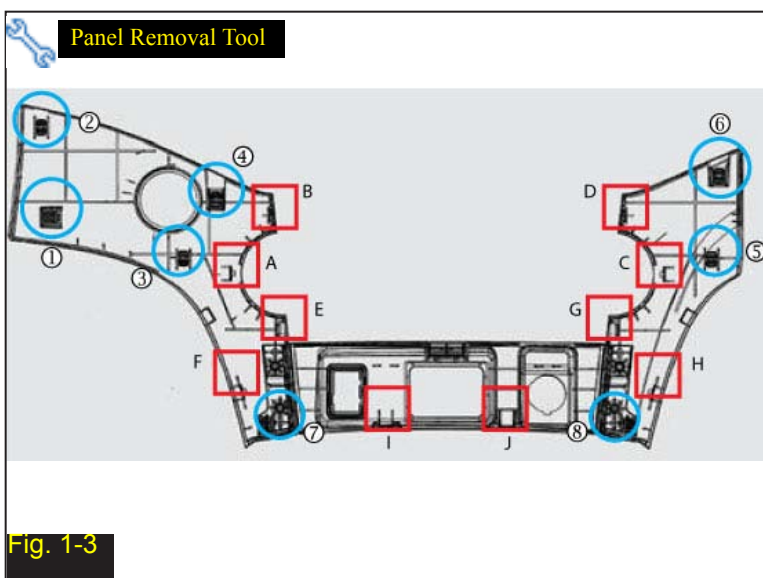
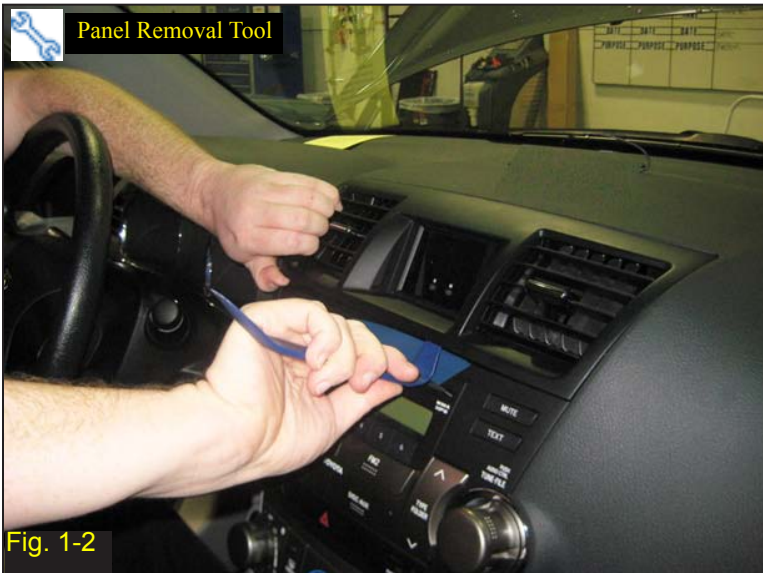
NOTE: Apply protective tape to any pry areas.

- Remove the center instrument cluster finish panel (Fig. 1-3).

- Apply protective tape to the area.
- Using a panel removal tool, disengage the clip 1 and 2.
- Using a panel removal tool, disengage the clip 3, 4 and claw A, B.

NOTE: In case of Smart Key System, prevent the surface from bending damage.

- Using a panel removal tool, disengage the clip 5, 6 and claw C, D.
- Disengage the claw E, F and clip 7.
- Disengage the claw G, H and clip 8.
- Disengage the claw I and J.





c. Remove the HVAC assembly.

1. Disengage the HVAC assembly by pulling straight out. (Fig. 1-4).
2. Disconnect all connectors and set aside.



d. Remove the radio assembly.

1. Remove two (2) bolts located above the radio assembly using a 10mm socket/ratchet (Fig 1-5).
2. Remove two (2) bolts below the radio assembly using a 10mm socket/ratchet (Insert Image).



3. Using your hands, carefully pull out the radio assembly (Fig. 1-6).



4. Support the radio on a support box (or with other appropriate means) to prevent any damage to the connections as well as preventing scratches.

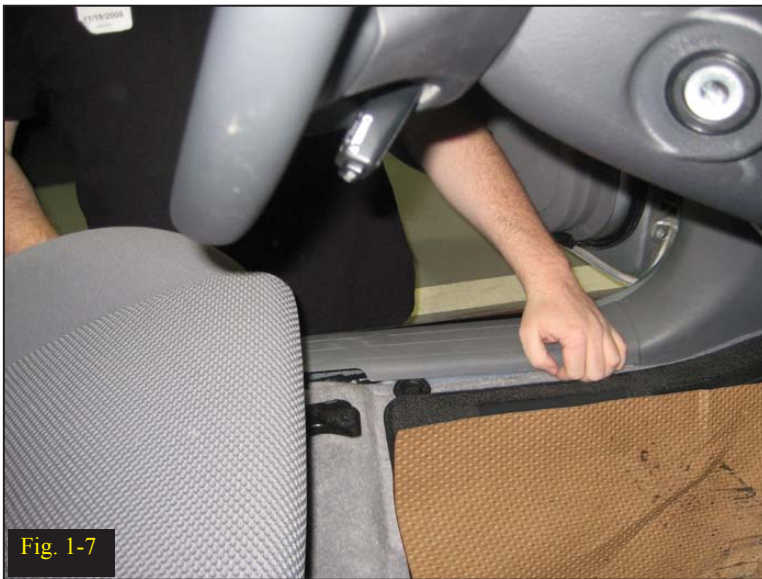


NOTE: Be careful not to put too much tension on the radio connections when pulling out the radio.

5. Disconnect any connectors.

Fig. 1-6

- e. Disengage driver side step cover and remove (Fig. 1-7).

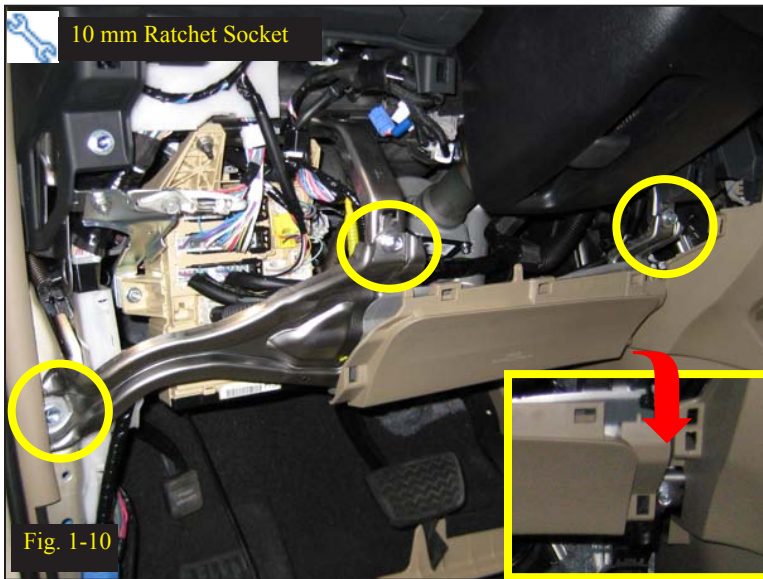


- f. Remove driver side kick panel.
1. Remove plastic lock nut (Insert Image).
 2. Disengage kick panel and remove. (Fig. 1-8).



- g. Remove knee panel.
1. Using a 10mm ratchet socket, remove two (2) bolts on the bottom of the knee panel (Fig. 1-9).
 2. Disengage the clips by gently pulling the bottom of the panel out (Fig. 1-9).
 3. Disconnect any connectors and remove.





h. Remove knee air bag assembly.

1. Remove four (4) bolts using a 10 mm ratchet/socket (Fig. 1-10).



NOTE: Use extreme caution when removing knee air bag assembly as edge are very sharp.



2. Carefully remove the air bag assembly and rest it on an appropriate protective cover/support.



NOTE: DO NOT disconnect air bag assembly.

3. Do not put too much tension on the Yellow ABS cable.

3. Interface Module Installation

a. Prep Interface Module

1. Apply approximately 3.0 inches (75mm) of foam tape to the corner of the ECU as shown in the photo (Fig. 1-11).

NOTE: Make sure not to cover the ventilation holes on the ECU marked by the red arrow.

2. DO NOT remove the protective foam wrap on the module.

b. Route main harness and microphone cable.

1. Connect main power harness, microphone and switch connector to interface module.

NOTE: The Red connector is connected to the matching Red connector on the module.

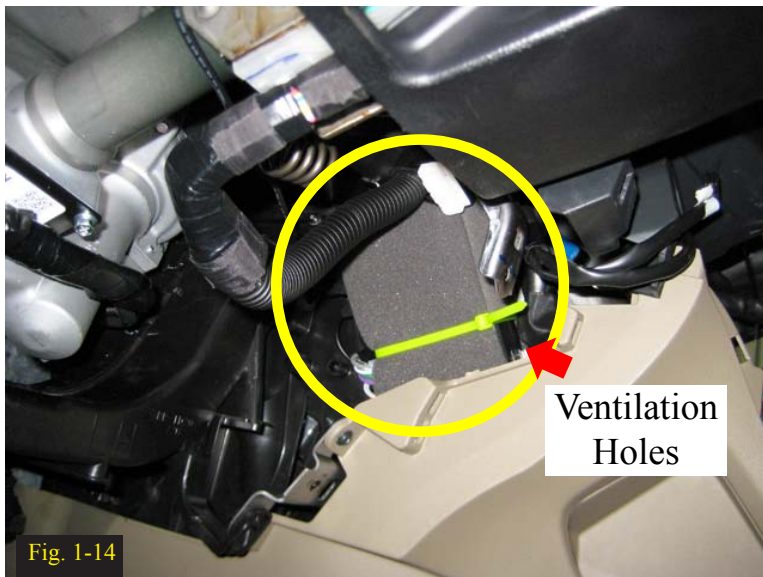
2. Feed the main harness and microphone from drivers knee panel area up into the radio compartment (Fig. 1-12).

NOTE: DO NOT route the switch cable at this time.





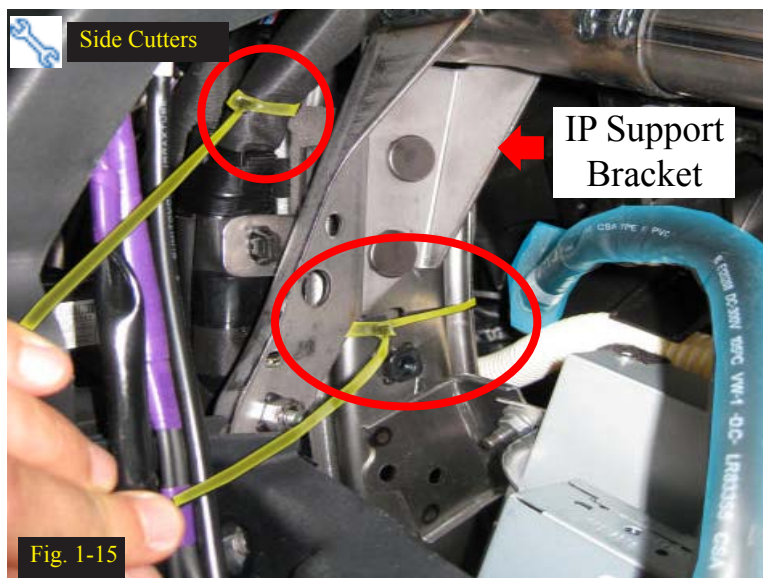
3. Continue to feed the main harness and microphone from knee panel up towards radio compartment (Fig. 1-13).



c. Mount Interface Module.

1. The ECU should be positioned to the left of the metal IP support bracket.
2. Make sure that the BLU Logic connectors are pointing toward the front of the vehicle and the air ventilation holes pointing down (Fig. 1-14).

NOTE: Make sure that the protective foam sleeve is properly in place to protect the ECU from rattles.

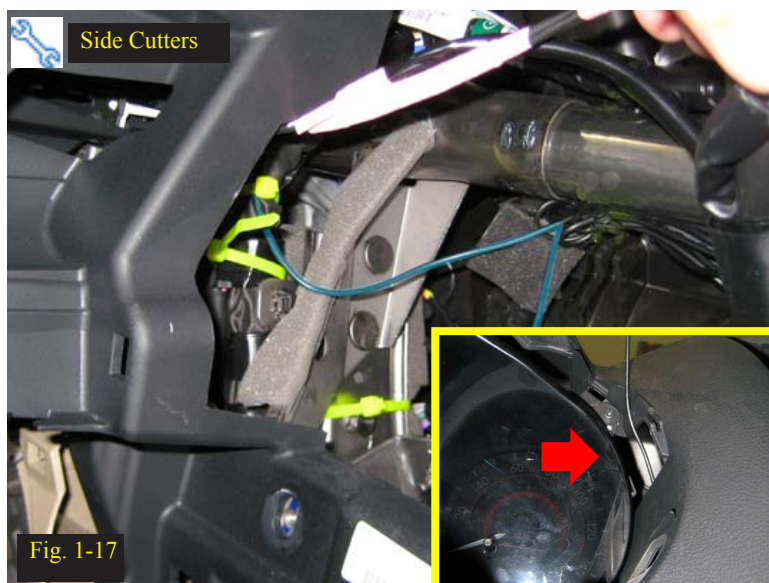


d. Attach the module in place with wire ties as follows:

1. Wire tie in upper corner of module connected to OE wire harness as shown (Fig. 1-15).
2. Inter lock two wire ties together to go around the module and secure it to the metal bracket in the location shown (Fig. 1-15).
3. Tighten both wire ties to assure the ECU is rigidly attached and will not rattle.
4. Cut off excess wire ties.

4. Microphone Installation

- a. Route the microphone cable.
 1. Using your hands, disengage the cluster bezel.
 2. Pull straight back to remove (Fig. 1-16).



3. Route the microphone over towards the opening of the cluster bezel.

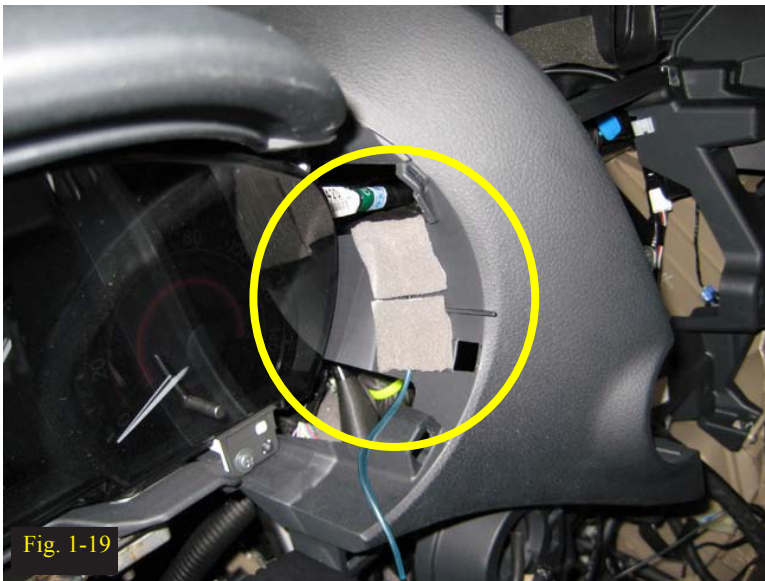
NOTE: Make sure the microphone goes through the top opening of the cluster bezel cavity pointed out by the RED ARROW (Insert Image).

4. Loosely secure the microphone cable to the wire loom left of the IP Support brace (Fig. 1-17).

NOTE: Wire tie will be secured later.

5. Apply a piece of adhesive foam pad to the face of the IP Support brace as shown (Fig. 1-17).
 6. Leave approximately 8.5" of slack on the microphone side and secure the wire tie from 4.a.4 (Fig. 1-18).
 7. Cut off excess wire ties.





b. Mount the Microphone.

1. Using 2-3 inches of adhesive foam pad, secure the microphone to the inner right of the cluster bezel cavity as shown (Fig. 1-19).



2. Clean the microphone mounting location with VDC approved cleaner.
3. Mount microphone on the bottom right side of bezel. Minimize the amount of exposed wire visible to the customer. 0-20 mm of exposed wire is acceptable (Fig. 1-20).

NOTE: The microphone should be level & flush with the silver trim. The wire portion, should be approximately 0-6 mm from the edge of the bezel.

4. Reinstall dash cluster bezel.

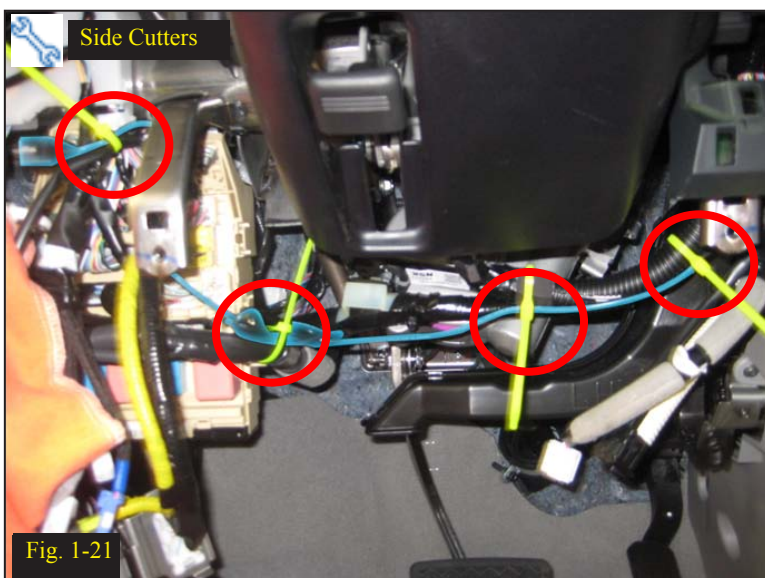
5. BLU Logic Switch Installation - Option I.

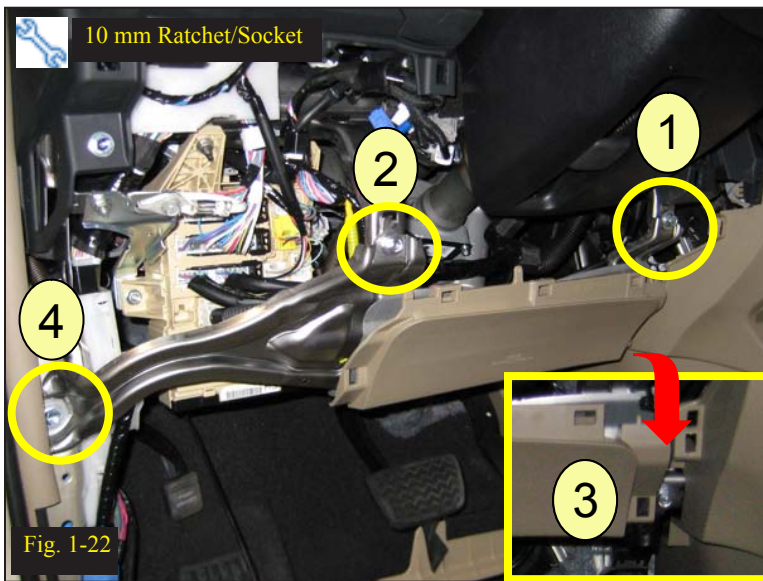


NOTE: Check to see if there is an open knock-out on the left switch panel. If blank knock-out is present, continue with Step #5. If blank knock-out is not present, skip to Step #6.

a. Route BLU Logic switch cable.

1. Route the switch cable (highlighted in blue) over towards the left switch panel (Fig. 1-21).
2. Leave a 3-4 inch pig tail that will be connected to the switch.
3. Secure the switch cable to the existing wire loom as shown (Fig. 1-21).
4. Cut off excess wire ties.





b. Reinstall knee air bag assembly.

1. Reinstall the four (4) mounting bolts using a 10 mm ratchet/socket in the sequence pointed out in the image (Fig. 1-22).
2. Torque the four (4) mounting bolts in the same sequence to 10 Nm (7 ft-lb).



c. Mount BLU Logic Switch.

1. Remove the center knock-out and mount BLU Logic switch (Fig. 1-23).
2. Make sure the solid arrow is pointing upwards.

NOTE: Use next available blank location if center location is occupied.

3. Connect to BLU Logic switch to the pigtail and reinstall knee panel, kick panel and side step cover.



6. BLU Logic Switch Installation - Option II

USE ONLY IF OPTION I IS NOT AVAILABLE.

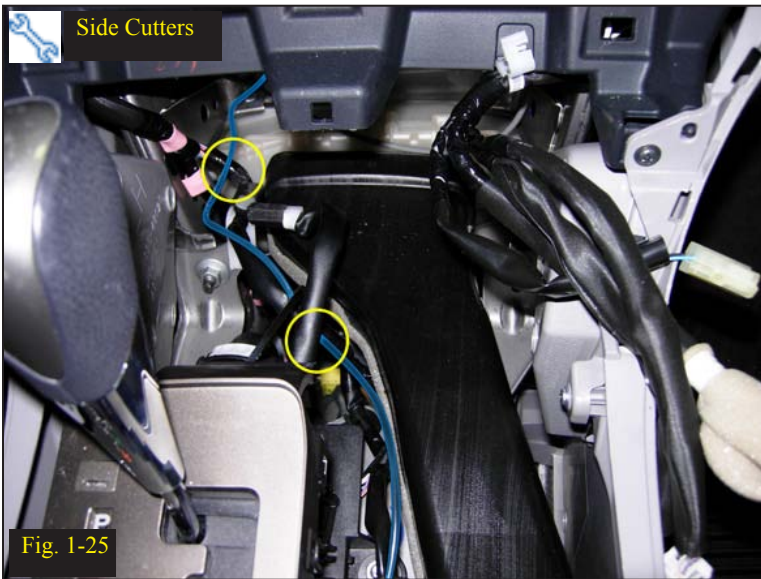
a. Remove center console subassembly.

1. Remove the shift knob (Fig. 1-24).
2. Using hands or appropriate panel removal tool disengage the console subassembly (Insert Image).

NOTE: Apply protective tape to any pry area.

3. Disconnect any connectors and set aside.



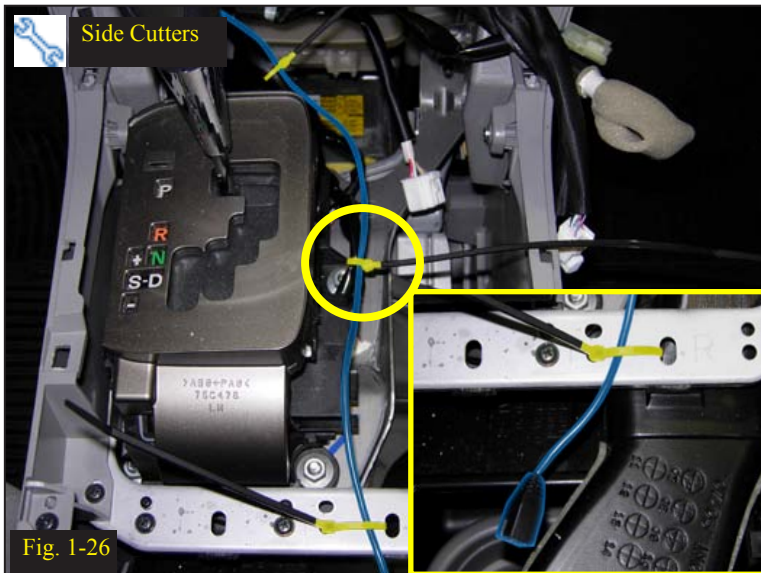


4. Secure the spare connector to the existing wire harness.
- b. Route BLU Logic Switch.

1. Route the switch cable up towards the interface module.

NOTE: Switch cable is highlighted in blue.

2. Remove the slack from the switch cable and wire tie in place with existing wire looms circled in yellow (Fig. 1-25).



3. Continue routing the switch cable to the right of the shifter assembly (Fig. 1-26).
4. Leave a 3-4 inch pig tail that will be connected to the switch, secure the switch cable to the existing wire loom using a wire tie (Fig. 1-26).
5. Use another wire tie and secure the switch cable to the cross brace (Insert Image).
6. Cut off excess wire ties.

- c. Mount BLU Logic Switch.

1. Remove the left blank knock-out (Fig. 1-27).





Fig. 1-28

2. Mount the switch in the location of the blank knock-out (Fig. 1-28).

NOTE: Make sure the solid arrow is pointing towards the front of the vehicle.

3. Reinstall center console subassembly.

- d. Finalize the Installation.

1. Connect main power harness to matching radio connections as needed.



NOTE: AVC-LAN (12 pin) connector may not be present on the vehicle's harness. Wire tie this connector to the harness unconnected, but ALWAYS connect the AVC-LAN (12 pin) connector into the radio.

If AVC-LAN (12 pin) connector is present on vehicle harness, connect to jumper provided with BLU Logic unit.

2. Bundle up excess main harness and microphone wire. Secure them to dash reinforcement bar with two (2) wire ties (Fig. 1-29).

- e. Reinstall radio assembly.



NOTE: If any other accessories are installed that connect to the head unit, BLU Logic should be the unit that plugs into the radio first.

- f. Reinstall HVAC Assembly.

- g. Reinstall HVAC Assemble center instrument cluster finish panel. (Fig. 1-30)



Fig. 1-29

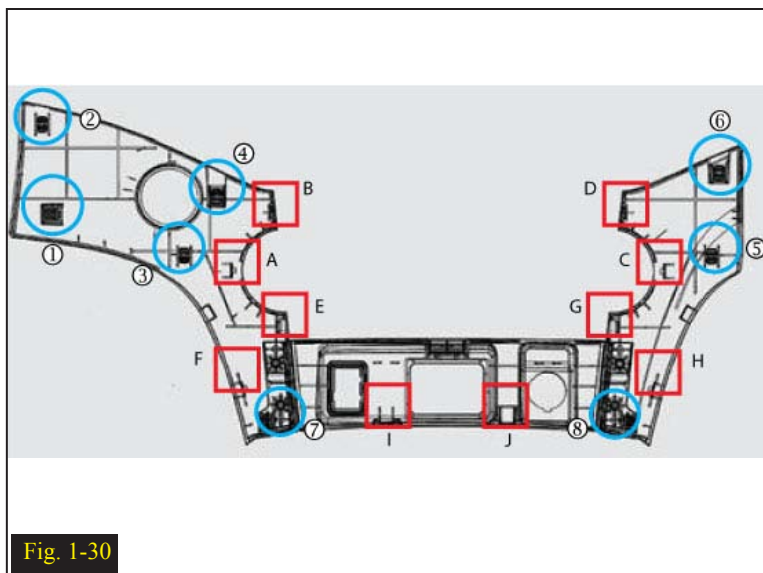
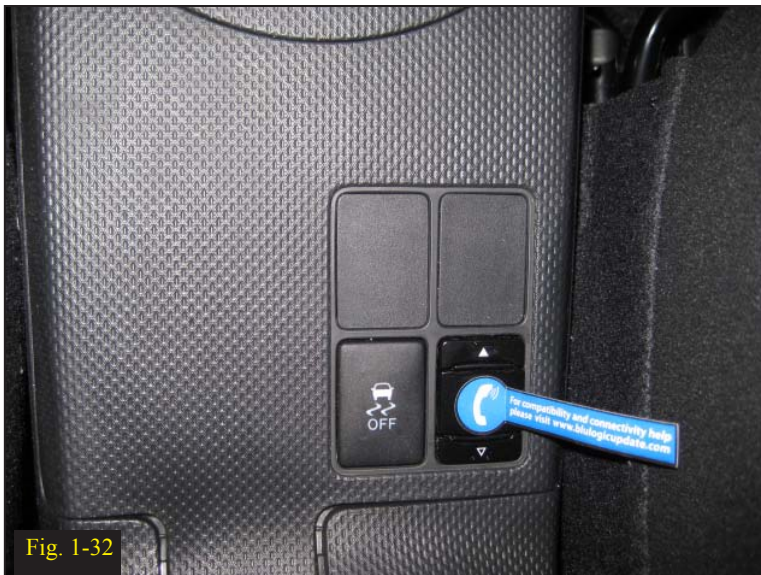


Fig. 1-30

1. Set the panel tentatively adjusting heat control dial position.
2. Confirming the top of clip 1~6 is close to the opposite hole, assemble clip 7 → claw F → claw E → claw I → claw J → clip 8 → claw H → claw G in order.
3. Pushing the left side of the panel, assemble clip 2 → clip 1 → clip 4 → clip 3 → claw A → claw B.
4. Pushing the right side of the panel, assemble clip 6 → clip 5 → claw C → claw D in order.



5. Check the gap all around the edge.
6. Ensure all edges are snapped down and aligned up to the mating panels
7. Check for dirt, scratch, damage (whitening) etc. on the surface of the panel.
- h. Reinstall air vent assembly.
- i. Position negative battery terminal at the original factory position (tighten the nut to 36 in-lbs (4.07 N.m).



CAUTION: Do not touch the positive terminal with any tool during installation.

- j. Place owner's manual in glove box.

7. Apply BLU Logic decal to BLU Logic switch.

(Only kits manufactured on or after the date code on the front page will include the BLU Logic decal).

- a. Remove the protective backing on the round portion of the BLU Logic sticker (Fig. 1-31).
- b. Apply it to the center of the switch so that the sticker hangs towards the right as shown in Fig. 1-32.

NOTE: Photo shown may not match the switch installation location for this vehicle and is for illustrative purposes.

TOYOTA HIGHLANDER/ HIGHLANDER HV 2008 -
CHECKLIST – these points MUST be checked to ensure a quality installation.

HANDS FREE BLU LOGIC

Make sure radio and interior lights (if applicable) are turned off. Install fuse (short pin) for the following function checks.

Accessory Function Checks

	Check:	Look For:
<input type="checkbox"/>	Factory Radio	Turn on the radio and verify that the BLU Logic Module will mute the audio. With the radio on, press the middle button on the BLU Logic switch and verify that the audio is muted.
<input type="checkbox"/>	Interface Kit	Verify the proper connection of the Interface kit by pressing and holding the middle button on the switch until you hear one (1) beep. NOTE: Pairing the module to a phone is not required. This is the customers (or dealers) responsibility.
<input type="checkbox"/>	Audio Output	Turn the radio to an AM or FM station and then turn the balance to the L and confirm the audio is coming from the left front speaker. Repeat for the right front speaker.
<input type="checkbox"/>	3 Button Switch	Cover the 3 Button Switch with your hand(s) to verify that all three lights on the switch illuminate.

Vehicle Function Check

	Vehicle Function		Vehicle Function Detail
<input type="checkbox"/>	Audio AM/FM	<input type="checkbox"/>	Verify the proper operation of audio AM/FM.
<input type="checkbox"/>	Hazard Switch	<input type="checkbox"/>	Verify the proper operation of the hazard switch.
<input type="checkbox"/>	HVAC	<input type="checkbox"/>	Verify the proper operation of the air conditioning system.
<input type="checkbox"/>	NAV System (if equipped)	<input type="checkbox"/>	Confirm navigation operation by AVN diagnostics.
<input type="checkbox"/>	Left & Right Seat Heater Switch (if equipped)	<input type="checkbox"/>	Verify the proper operation of the L&R heater switch.
<input type="checkbox"/>	SRS Warning Light	<input type="checkbox"/>	Confirm SRS warning light illuminates for approximately 6 seconds with the ignition ON, and then goes out.
<input type="checkbox"/>	Tire Pressure Monitoring System (TPMS)	<input type="checkbox"/>	<i>Prior to TPMS activation and Pre- delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on.</i> <i>After TPMS activation and PDS of the Vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.</i>

Turn off all components including radio and interior lights. Remove fuse (short pin) after function checks are complete. Check with your dealer/port to find out if this step is required.

Kit Service Information

	Item:	Location:
1	3-Amp in-line Fuse	The fuse is located behind the HVAC assembly. To replace, follow Step 1 through 4 to access the fuse location. NOTE: If the fuse is blown, the Hands Free BLU Logic will not turn on.