

**Part Number: PT374-48090**

**Kit Contents**

Item #	Quantity Reqd.	Description
1	1	AD Mirror Assembly w/ Compass
2	1	Hardware bag

**Hardware Bag Contents**

Item #	Quantity Reqd.	Description
1	2	T-tap Connectors, Red 3M™
2	1	Wire Cover
3	1	EC Wire Harness
4	3	Foam Tape
5	2	Wire Ties, small
6	1	Corrugated tubing
7	1	Operation Instruction Card

**Additional Items Required For Installation**

Item #	Quantity Reqd.	Description

**Conflicts**

Limited models come with factory auto dimming mirror.

**Recommended Tools**

<b>Personal &amp; Vehicle Protection</b>	<b>Notes</b>
Blankets, Towels	
<b>Special Tools</b>	<b>Notes</b>
None	
<b>Installation Tools</b>	<b>Notes</b>
Ratchet	
Socket	10 mm
Torx Head Driver	T20
Pliers	Needle Nose
Side cutters	
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Dark Towel or Cloth	For Testing
Torque Wrench	36 lbf-in
Electrical Tape	

<b>Special Chemicals</b>	<b>Notes</b>
Cleaner	3M™ Prep Sol-70

**General Applicability**

Non-limited Highlander models.

**Recommended Sequence of Application**







Item #	Accessory
1	Security System
2	RES
3	Satellite Radio
4	EC Rearview Mirror

\*Mandatory

**Vehicle Service Parts** (may be required for reassembly)

Item #	Quantity Reqd.	Description

**Legend**

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

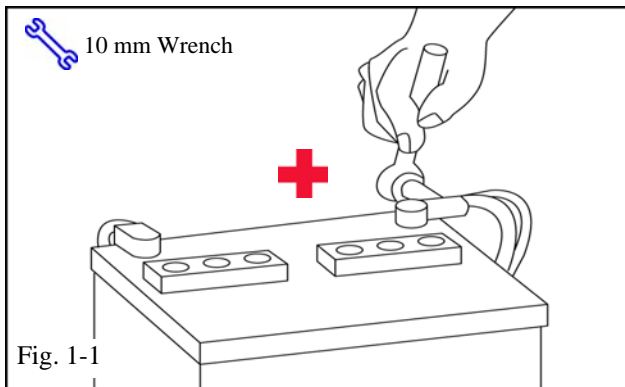
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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



This document covers such items as:-

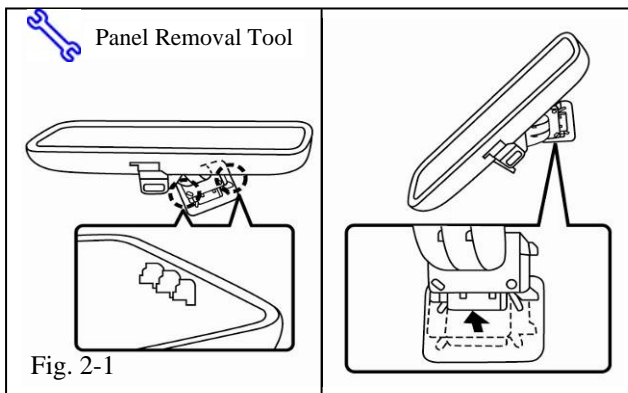
- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

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



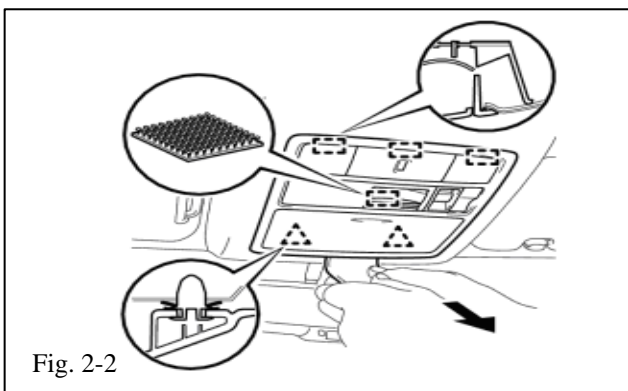
**1. Remove Battery Cable.**

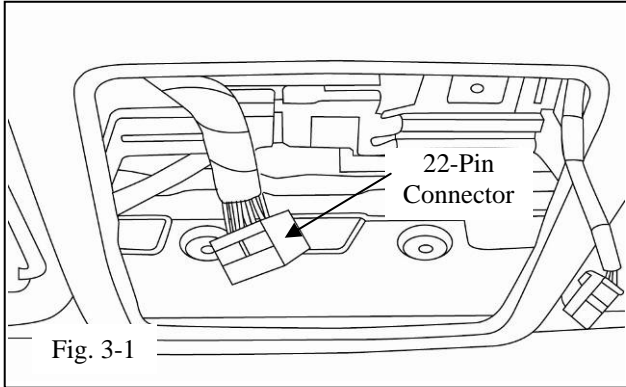
-  (a) Protect fender before starting.
-  (b) Do not touch the positive terminal with any tool when removing cable.
- (c) Remove the negative battery cable. (Fig. 1-1)



**2. Vehicle Disassembly.**

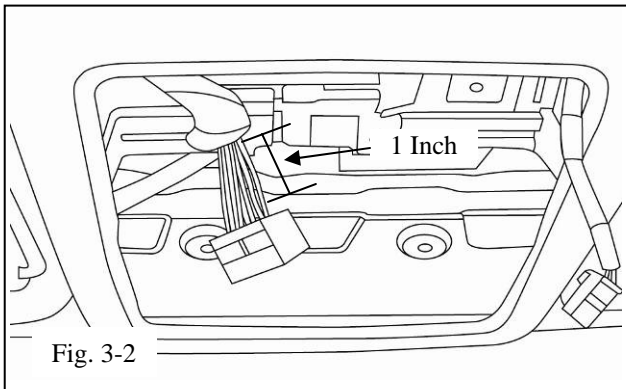
- (a) Remove the OE mirror.
  - (1) Disengage the two claws and remove the mirror cover from the mirror base. (Fig. 2-1)
  - (2) Pull the lever in the direction indicated by the arrow shown in the illustration and slide the inner rear view mirror assembly upward to remove it. (Fig. 2-1)
- (b) Using panel removal tool remove overhead console from headliner. (Fig. 2-2)
  - (1) Disconnect any connectors connected to the overhead console.



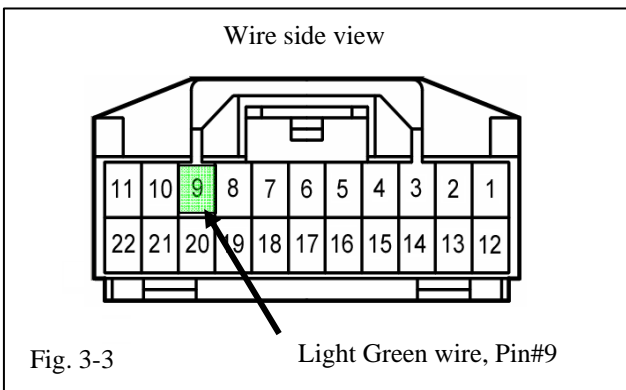


3. Install T-taps.

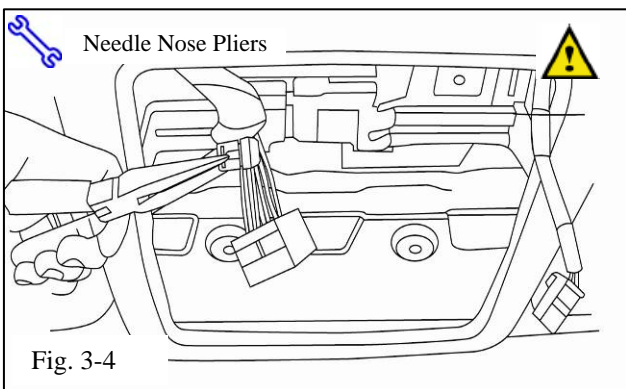
- (a) Locate the disconnected 22-pin overhead console connector. (Fig. 3-1)



- (b) Peel back or cut approximately one inch of the wire cover. (Fig. 3-2)



- (c) Locate the LIGHT GREEN wire in pin #9 on the 22-pin connector. (Fig. 3-3)



- (d) Attach T-tap connector to LIGHT GREEN wire (pin #9) on the 22-pin connector with needle-nose pliers about 1 inch from the connector. (Fig. 3-4)



- (1) Ensure both halves of T-tap connector are snapped together.

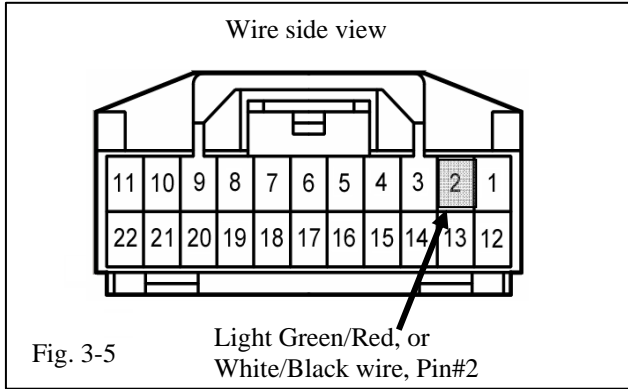


Fig. 3-5

- (e) Locate the LIGHT GREEN/RED (or WHITE/BLACK) wire in pin #2 on the 22-pin connector. (Fig. 3-5)

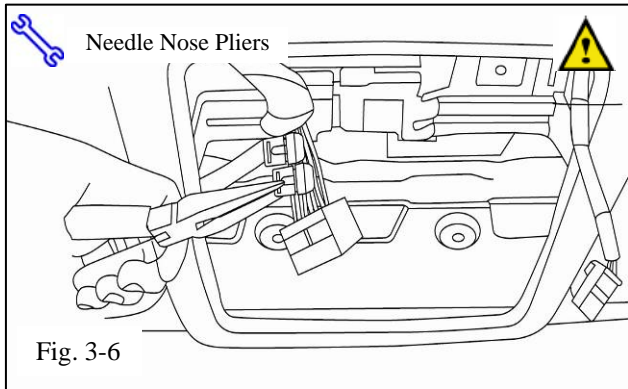


Fig. 3-6

- (f) Attach T-tap connector to LIGHT GREEN/RED (or WHITE/BLACK) wire (pin #2) on the 22-pin connector with needle-nose pliers about 1 inch from the connector. (Fig. 3-6)



- (1) Ensure both halves of T-tap connector are snapped together.

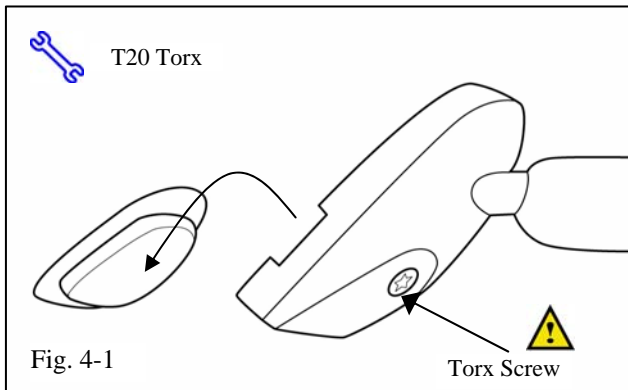


Fig. 4-1

**4. Install EC Mirror.**

- (a) Slide the EC mirror onto the mounting button on windshield. (Fig. 4-1)



- (b) Tighten the screw in the mirror mounting bracket with torque wrench to 1.75 N-m (15.5 lbf-in).

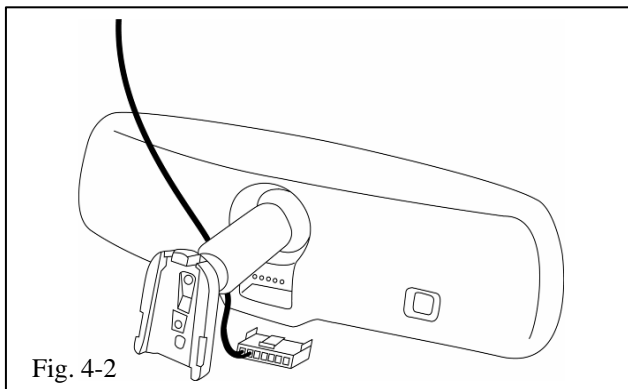
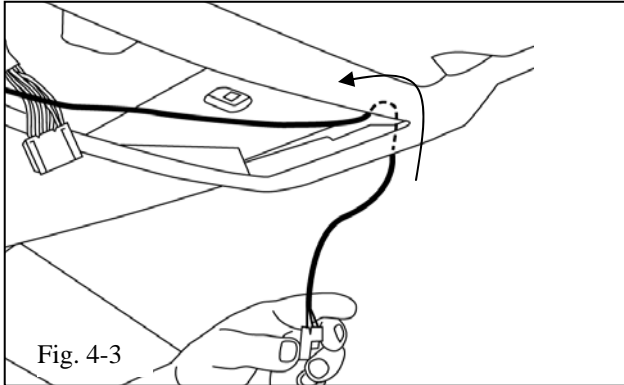


Fig. 4-2

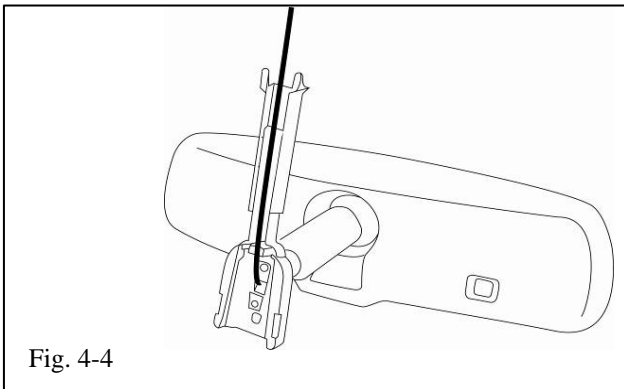
- (c) Plug the EC mirror harness into the mirror. (Fig. 4-2)



- (d) Route the EC mirror harness into the center of the head liner and to the overhead console opening. (Fig. 4-3)

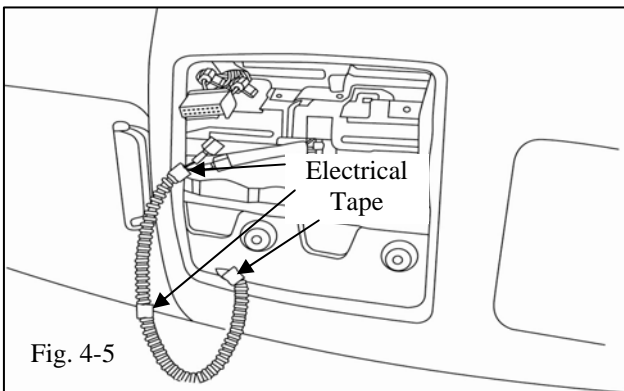


- (1) Use caution when working with the headliner to prevent it from creasing.



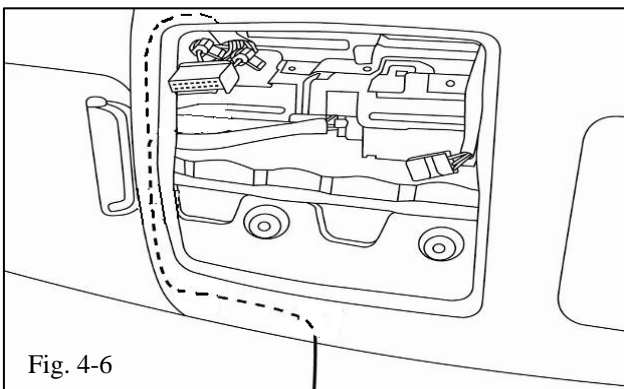
- (e) Install the wire harness cover over the wire harness. (Fig. 4-4)

- (1) Seat the bottom cover to the mirror.
- (2) Extend the top of the cover fully into headliner.



- (f) Apply corrugated tube to the end of the remaining wire. (Fig. 4-5)

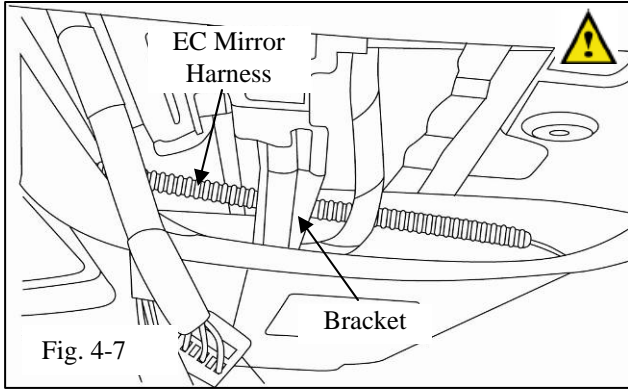
- (1) Use electrical tape to secure the tube to the wire at the top, in the middle, and at the bottom of the tube.



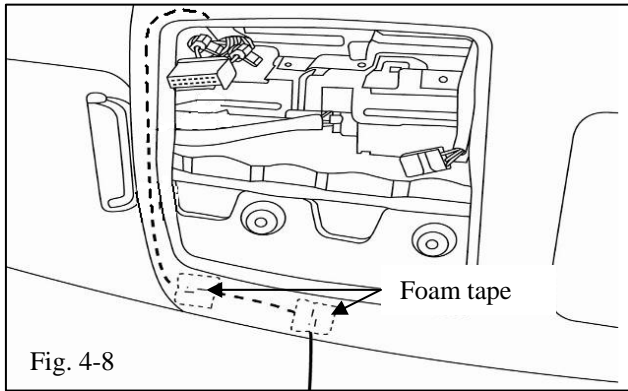
- (g) Route the EC mirror harness around the overhead console opening towards the driver side of the vehicle. (Fig. 4-6)



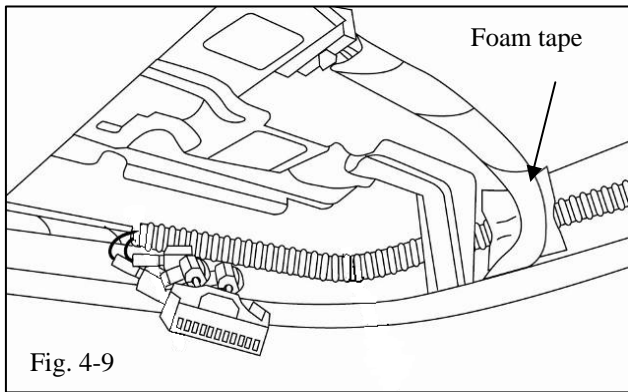
- (1) Use caution when working with the headliner to prevent it from creasing.



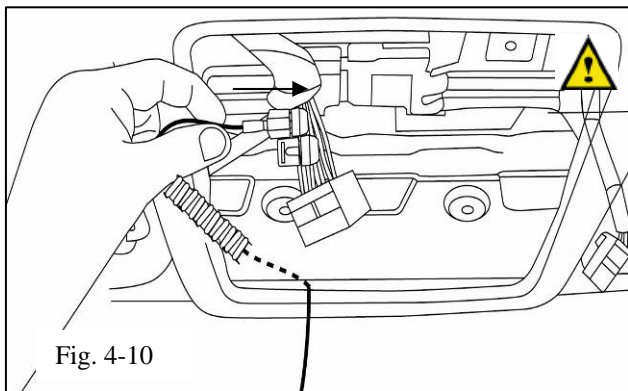
- (2) Make sure the harness is routed behind the metal bracket located on the driver side of the console opening. (Fig. 4-7)



- (3) Secure EC mirror harness to headliner with two (2) pieces of foam tape in locations shown. (Fig. 4-8)

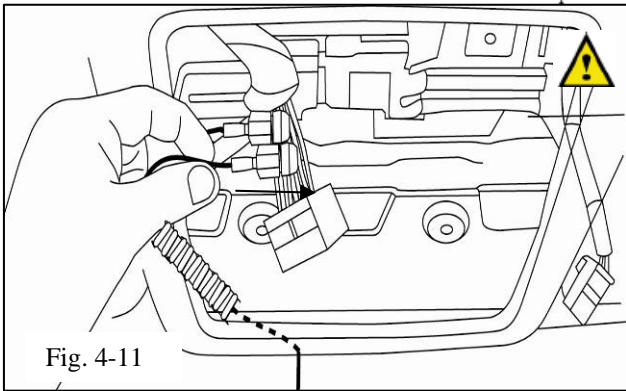


- (4) Secure the harness to the side of the headliner behind the metal bracket with one (1) piece of foam tape. (Fig. 4-9)



- (h) Plug the SMOOTH BLACK wire (or black wire with blue dot) spade end of the EC mirror harness into T-tap connector on the LIGHT GREEN wire. (Fig. 4-10)

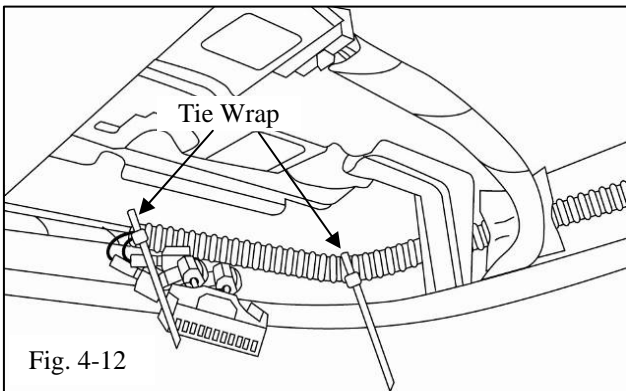
- (1) Ensure that the spade end is properly seated in the T-tap.



- (i) Plug the RIBBED BLACK wire spade end of the EC mirror harness into T-tap connector on the LIGHT GREEN/RED (or WHITE/BLACK) wire. (Fig. 4-11)

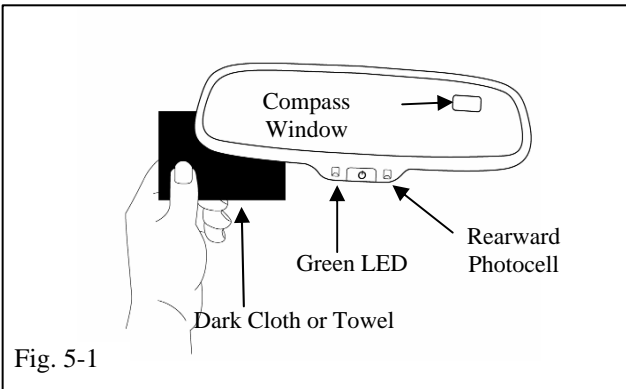


- (1) Ensure that the spade end is properly seated in the T-tap.



- (j) Secure EC mirror harness to OE wire harness with two (2) tie wraps in locations shown. (Fig. 4-12)

## 5. Testing



- (a) If not installed, install the short pin located in the engine compartment fuse box.
- (b) Temporarily reconnect the vehicle's negative battery cable.
- (c) Turn ignition switch to ON.
- (d) With the vehicle in a fairly well lit area, perform the following test:
- (e) Auto Dimming Feature:
  - (1) To make sure the auto-dimming feature is on, verify that the LED indicator light is on. If it is not on, push the "On/Off" button for 3 seconds, or until the LED is illuminated.
  - (2) Cover the forward-looking light sensor located on the back of the mirror with a dark cloth or towel. (Fig. 5-1)

(3) In a few seconds, the mirror will begin to darken (time may vary with ambient light levels).

(4) Remove the cover from the forward-looking light sensor and the mirror will begin to clear.

(b) Compass Feature:

(1) Push and release the "On/Off" button in less than 3 seconds to toggle the directional heading display On and Off.

(2) Compass is enabled when a direction or a "C" appears in the mirror display window.

(c) Turn ignition OFF.

(d) Disconnect the negative battery terminal.

(e) Replace short pin to original position if required.

## 6. Final Assembly.

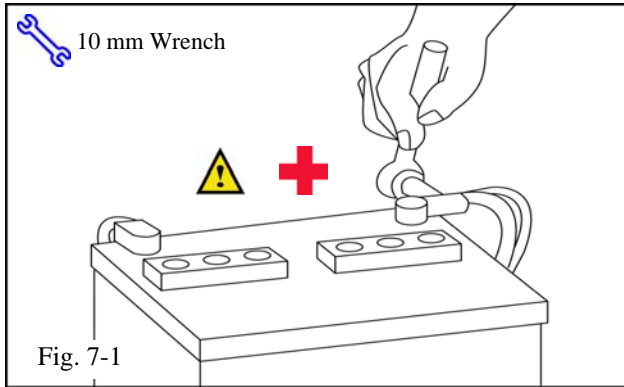
(a) Trim excess off all tie wraps.

(b) Reconnect the overhead console connectors and install the overhead console.

(c) Place the operation instruction card in the vehicle glove box.

(d) Remove fingerprints, smudges, dirt, etc. from mirror and windshield with a 3M™ Prep Sol-70.

(e) Verify each reinstalled component for proper fit and function.

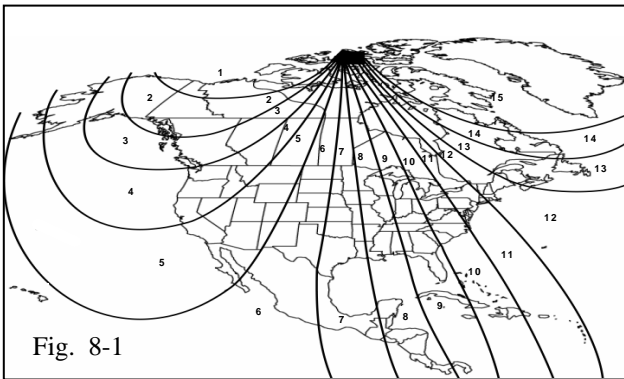


**7. Reconnect Negative Battery Cable.**

- (a) Reconnect the vehicle's negative battery cable. (Fig. 7-1)



- (1) Tighten the nut to 4.1 N-m (36 lbf-in)
- (2) Do not touch the positive terminal with any tools when replacing the cable.



**8. Compass Zone Setting.**

- (a) With display turned ON, push the mirror button for 3 seconds or until a number is displayed in the display window.
- (b) Refer to the Zone Map and toggle button until correct zone is displayed. (Fig. 8-1)
- (c) Release button.
- (d) The display will return to normal compass mode (showing either a "C" or a directional heading) within 10 seconds of no switch activity.

**9. Calibrate Compass.**

- (a) If a "C" is displayed in window, drive the vehicle in one circle at less than 5 mph.
- (b) Correct compass heading should now be displayed.

**NOTE:** Correct compass zone must be selected prior to compass calibration to ensure accurate calibration. If the vehicle is driven in a new zone, repeat zone selection procedure.

**TOYOTA Highlander 2008 - EC REARVIEW MIRROR**

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

Look For:

Accessory Function Checks

**Vehicle should be in a fairly well lit area.**

Turn ignition (ACC power) to ON.

**Auto-dimming feature:**

- Cover the forward-looking light sensor (located below the wire harness connection on the back of the mirror).

**Mirror clears:**

- Remove cover from photocell.

**Compass Feature:**

- Push the Compass Button.
  
- Operation Instruction Card

Verify green LED is on. If it is not ON press On / Off button - confirm LED is ON.

Verify mirror darkens.

Mirror returns to clear state.

"C" is displayed.

Placed in the vehicle glove box.

Vehicle Function Checks

- Check dome light.
- Check sunroof if equipped.
- Shift area light.

Verify dome light functions properly.

Verify sunroof functions properly.

Verify shift area light functions properly.