



**GENUINE ACCESSORIES  
INSTALLATION INSTRUCTIONS**

550-0021 Rev. AAB



**PART NUMBER:**

0000 8C Z08

**APPLICABLE MODELS:**

2010 > Mazda2

**REQUIRED COMPONENTS:**

ITEM	QTY	DESCRIPTION	Usage Chart
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**MIRROR ASSEMBLY:**

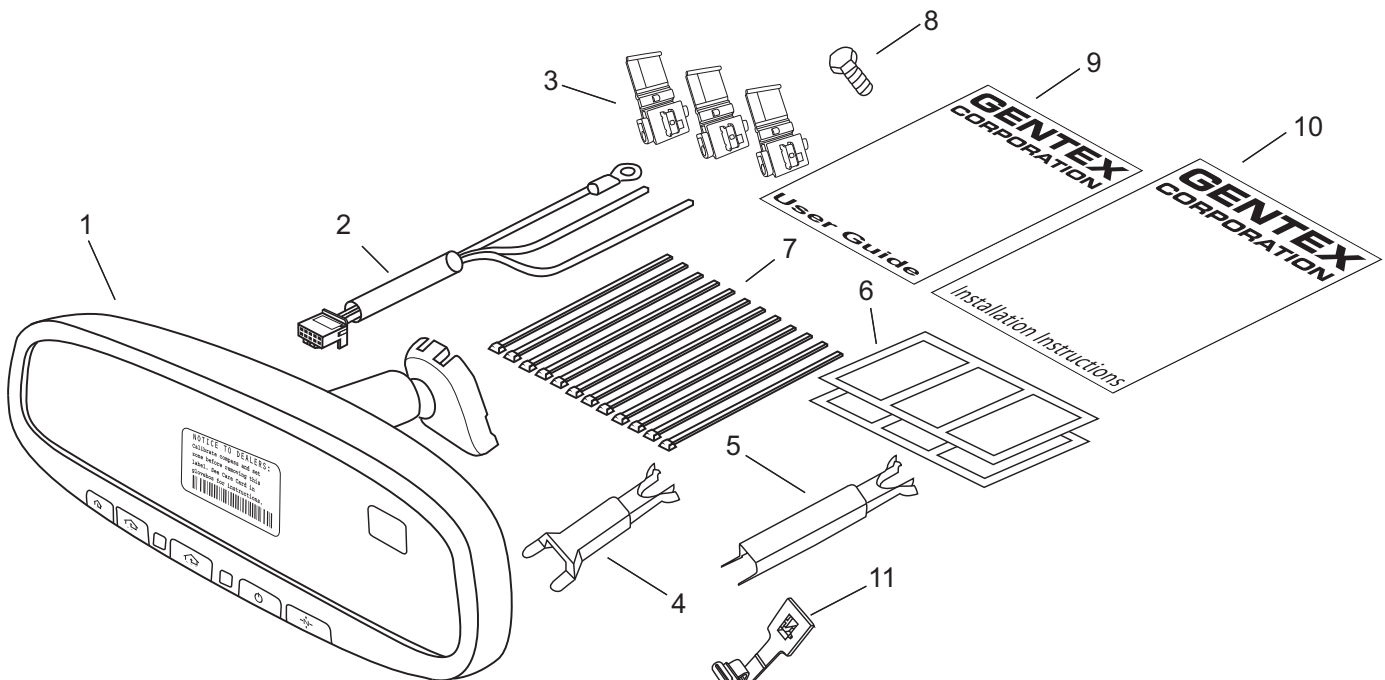
1	1	Mirror Assembly w/ Compass & Homelink®	①
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**INSTALLATION KIT:**

2	1	EC Harness - Power and Ground	①
3	3	IDC Wire Connector	②
4	1	Wire Cover (Short)	①
5	1	Wire Cover (Long)	X
6	6	Foam Tape	X
7	12	Wire Tie	⑨
8	1	Ground Bolt (8mm)	①
9	1	User Guide	①
10	1	Installation Instructions	①
11	1	A-Pillar Tether Clip (D651-68-162A)	①

\*\*Installation kit may have more components than necessary. Please refer to the chart above and the instructions for required components.

Not Used with this Application	X
Used (Including Amount)	⑫



HOMELINK® AND THE HOMELINK HOUSE® ARE REGISTERED TRADEMARKS OF JOHNSON CONTROLS, INC.

**TOOLS REQUIRED:**

Clean Rag	#T20 Torx	Pliers	10mm Socket
Fiberstick	4mm Flat Screwdriver	Wire Cutters	Ratchet

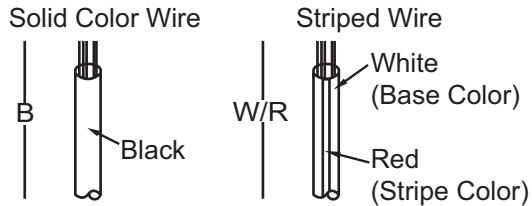
## WIRE CODES

Two-color wires are indicated by a two-letter symbol. The first indicates the base color of the wire, the second indicates the color of the stripe. For example:

W/R = White wire with a red stripe

BR/Y = Brown wire with a yellow stripe

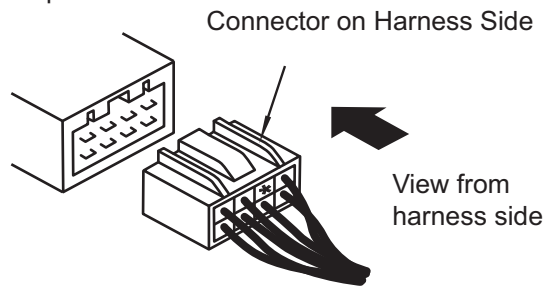
Symbol (Example):



## CONNECTOR DIAGRAMS

Connector diagrams show connectors on the harness side. The terminal indicates the view from the harness side.

Example:

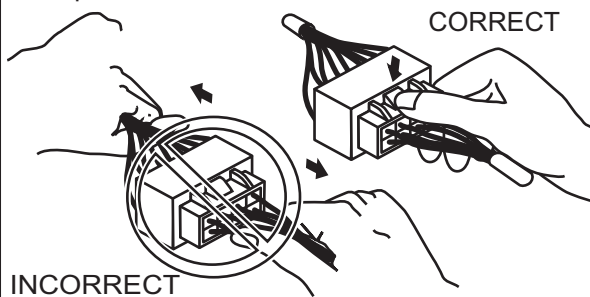


Unused terminals are indicated by "\*"

## DISCONNECTING CONNECTORS

When disconnecting the wires, grasp the connectors, not the wires.

Example:



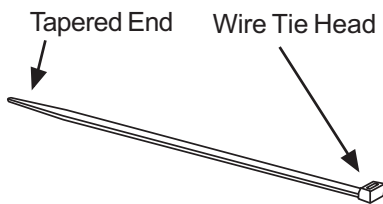
## LOCKING CONNECTORS

When locking connectors, listen for a click, indicating they are securely locked.

Example:

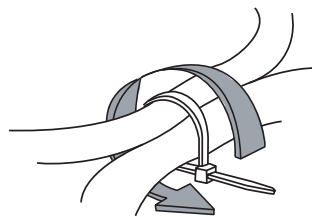


## WIRE TIE PROCEDURE

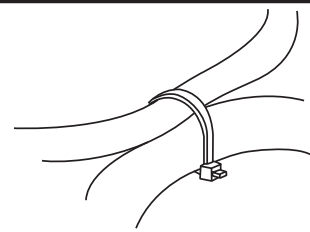


Wrap wire tie around the harness you wish to secure together.

Insert the Tapered End of the wire tie into the Wire Tie Head.

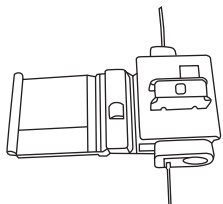


Pull the Tapered End through the Wire Tie Head until the wire tie is snug.

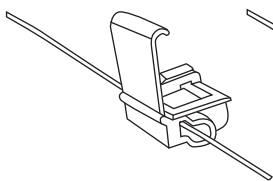


Trim wire tie end after tightening.

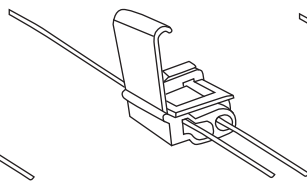
## IDC WIRE TAP PROCEDURE



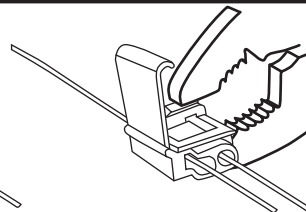
Place IDC on Vehicle Wire.



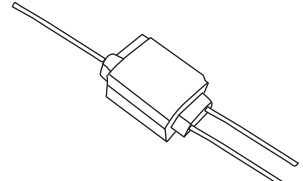
Close side of IDC.



Insert EC Mirror Harness wire into IDC.



Crimp IDC metal tab over both wires until flush with top of IDC.



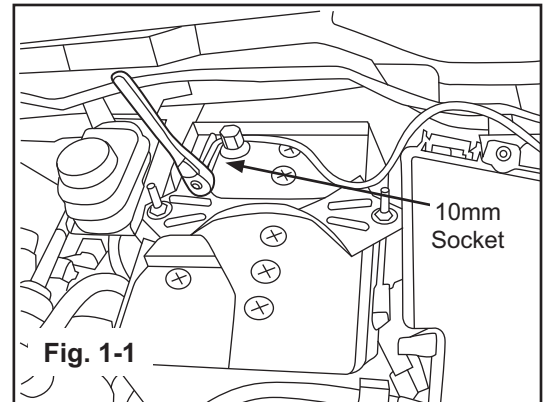
Close top of IDC.

## INSTALLATION PRECAUTIONS / NOTES:

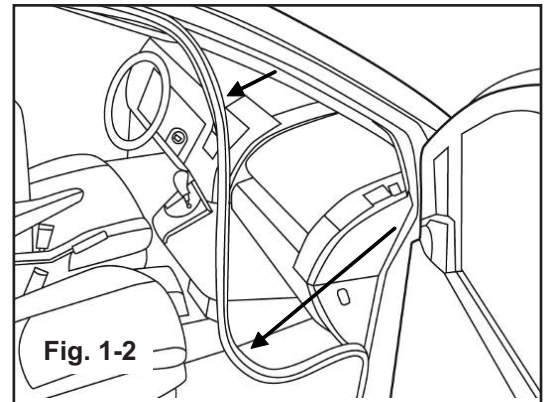
- If using fish wire, use caution to avoid damage to existing components.
- Do not place wire harness against objects with sharp edges that may cause electrical shorting.
- Verify that power harness path will not interfere with brake, clutch, emergency brake or air bag operation. Use tie wraps to hold the wiring away from critical locations.

### 1 Preparation

1. Place kit components on a clear, padded surface and inspect for damage, defects, or missing components.
2. Record customer's programmed Radio/AM/FM/SAT stations and trip computer (if applicable).
3. Disconnect negative battery terminal.
  - a) Using 10mm socket, remove negative battery terminal. (Fig. 1-1)



4. Remove passenger-side door seal.
  - a) Pull back past top of A-Pillar trim. (Fig. 1-2)

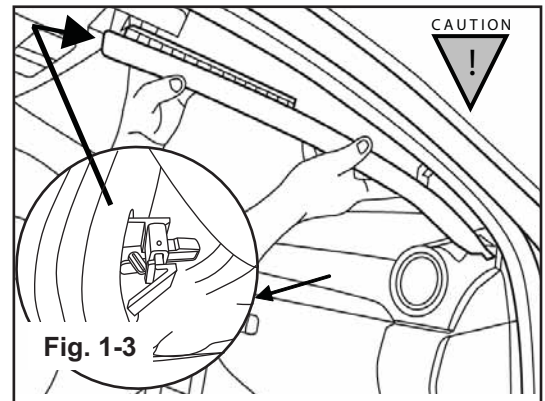


5. Remove passenger-side A-pillar trim.

#### NOTE

**Do not use excessive force. A-pillar could be damaged.**

- a) Pull out the top portion of A-pillar trim towards driver-side of vehicle until A-pillar connector is extended approximately 1/2".
- b) Use needle nose pliers to grasp tab of A-pillar connector. Rotate tab 90 degrees and push down through slot in A-pillar trim. (Fig. 1-3)
- c) After A-pillar trim is detached from connector, pull firmly to detach lower clips.



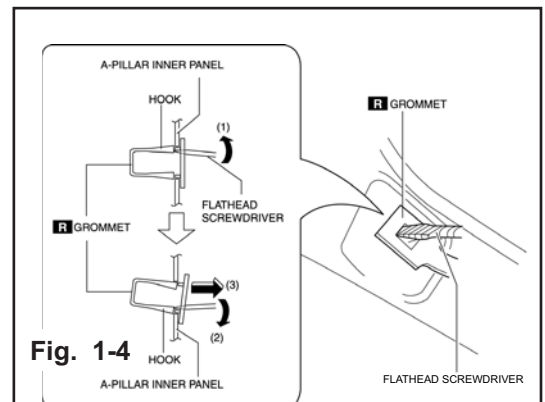
#### NOTE

**A-pillar connector will remain attached to vehicle body. (Fig. 1-3)**

#### NOTE

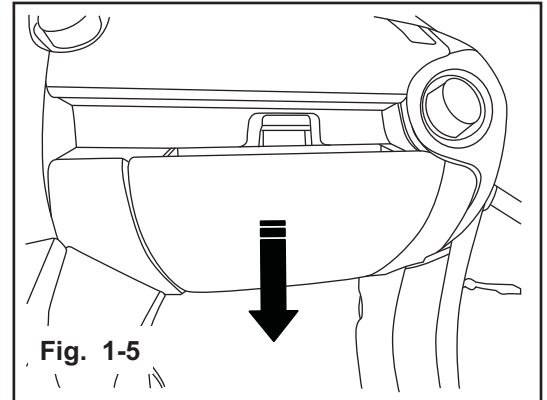
**A-pillar connector must be replaced with the supplied tether clip (11).**

- d) Move the hook in the direction of arrows (1) and (2) using a Flat-head screwdriver and detach it from the A-pillar inner panel. (Fig. 1-4)
- e) Remove the grommet in the direction of the arrow (3). (Fig. 1-4)
- f) When installing the A-pillar, install the new clip and grommet to the

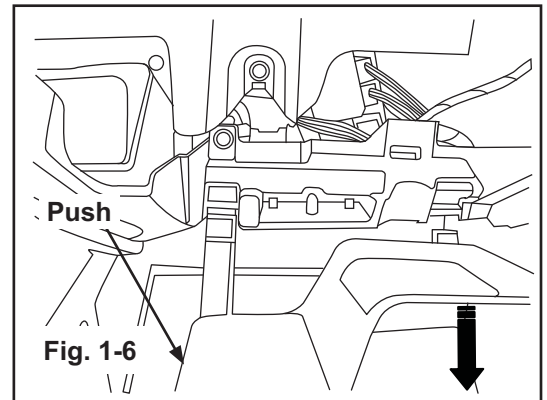


## 6. Remove Glove Box.

- a) Grasp handle and pull open glove box. (Fig. 1-5)

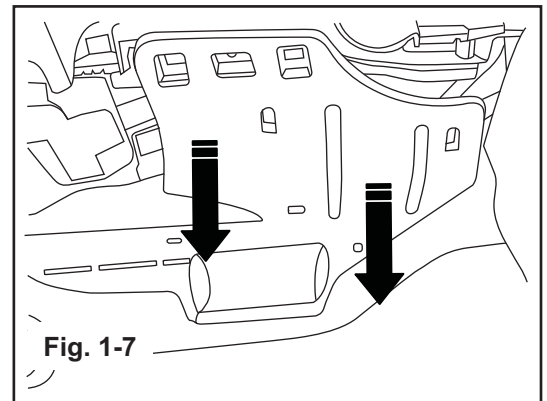


- b) Squeeze in both sides of glove box and pull down to remove. (Fig. 1-6)



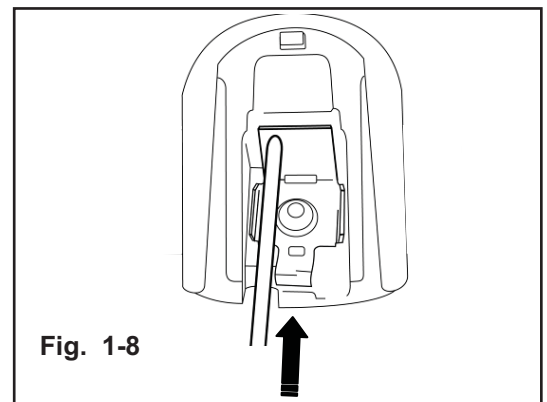
## 7. Remove Under Dash Trim Panel.

- a) Use fiberstick to disengage clips. Pull under dash trim panel down to remove. (Fig. 1-7)



## 8. Remove OE Mirror.

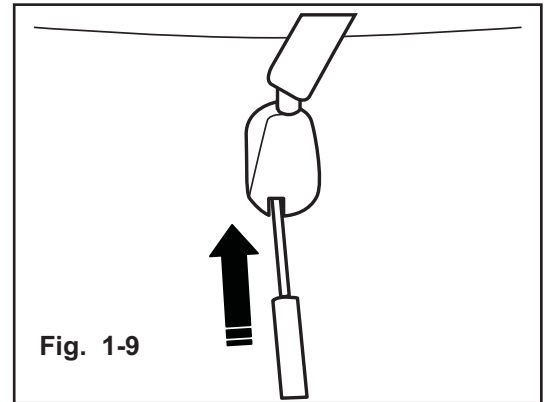
- a) Push on locking tab while performing the next step. Tab is not visible while mirror is in place and is part of the mirror mount. (Fig. 1-8)



- b) Insert 4mm screwdriver into notch at bottom of mirror mount and slide upward between windshield mounting button and mirror mount. (Fig. 1-9)
- c) Grasp mirror mount at the tube, and gently pull upwards parallel to the windshield to carefully slide mirror off windshield button.

**CAUTION**

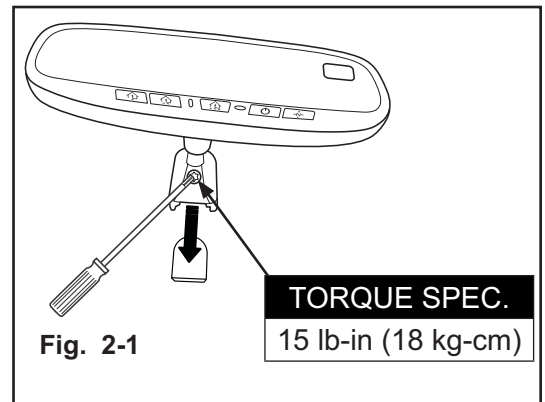
**!** DO NOT rotate mirror, turn mirror side to side, or pull mirror away from the windshield. Rotation, side to side movement, or pulling of mirror on windshield button could damage or break the windshield and button, requiring windshield replacement.



## 2 EC Mirror Installation

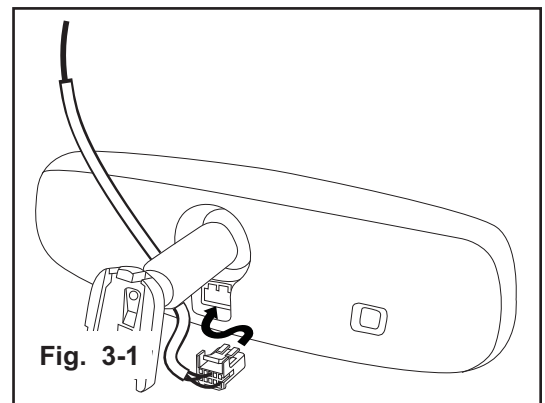
### 1. Attach EC mirror.

- a) Hold the mirror head and slide the mount downwards as far as possible over the windshield button, until fully seated. (Fig. 2-1)
- b) Using a #T20 Torx, tighten the mirror mounting bracket screw to 15 lb-in.



## 3 Route EC Harness to Vehicle Power

### 1. Plug EC harness connector into back of mirror. (Fig. 3-1)

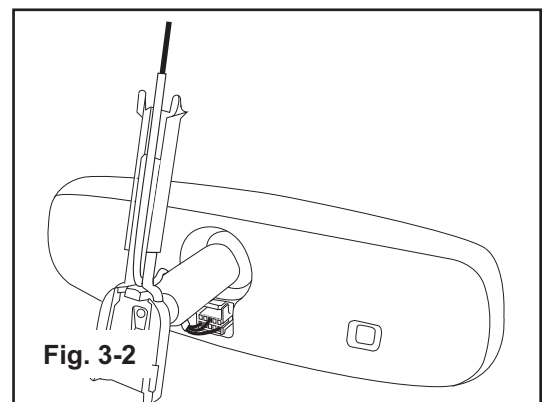


### 2. Route EC harness from mirror to headliner.

- a) Route EC harness into groove of wire cover and attach wire cover to mirror base. (Fig. 3-2)
- b) Slide upper portion of wire cover up to headliner so the “forks” are held by the headliner. (Fig. 3-2)

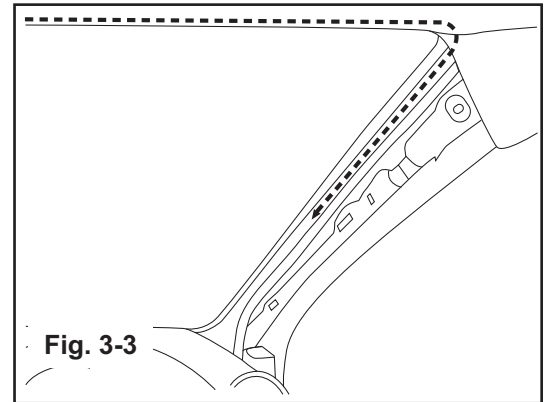
**NOTE**

**!** Use **SHORT WIRE COVER** for this application.



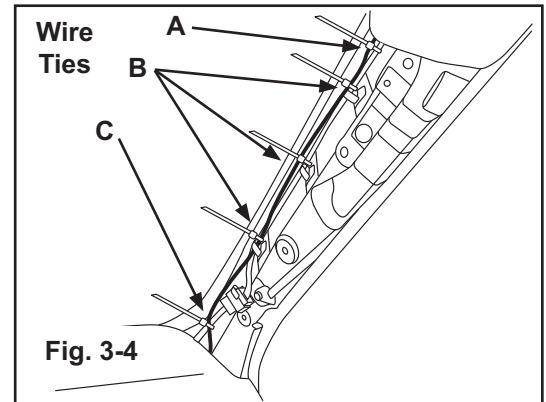
### 3. Route EC harness to passenger-side A-pillar.

- a) Route EC harness between vehicle headliner and roof to top of passenger-side A-pillar area. (Fig. 3-3)



### 4. Route EC harness down passenger-side A-pillar.

- a) Route EC harness down A-pillar and secure with (5) wire ties as shown. (Fig. 3-4)
- b) Place (1) wire tie "A" as close to headliner as possible and around the OEM wire harness.
- c) Place (3) wire ties "B" next to OEM clips.
- d) Place (1) wire tie "C" around the OEM harness just below the connector.
- e) See Wire Tie Procedure on Page 2 for detailed instructions and images of proper wire tie installation techniques.



#### CAUTION

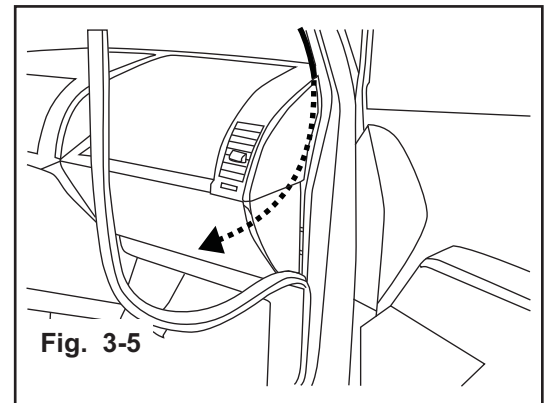
! Verify EC harness path is clear of air bag (if equipped).

#### CAUTION

! Do NOT secure EC harness to plastic drain tube.

### 5. Route EC harness through dash towards BCM.

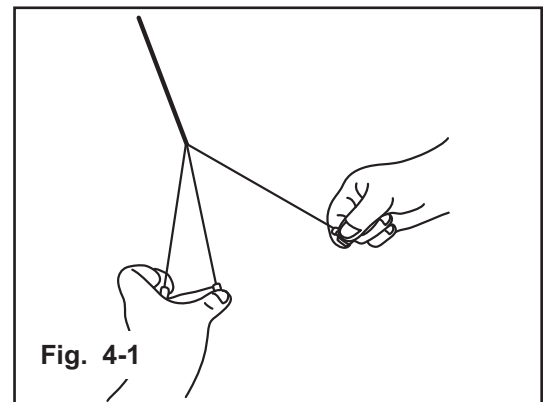
- a) Route EC harness through passenger-side outer dash panel and into foot well area near BCM. (Fig. 3-5)



## 4 Connect EC Harness Power and Ground

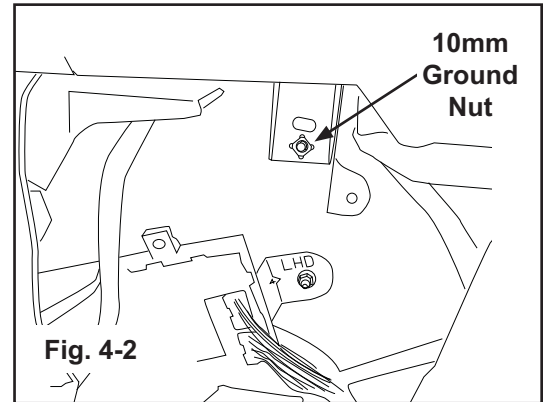
### 1. Separate EC harness power and ground wires.

- a) Pull power and ground wires apart approximately 16 inches. (Fig. 4-1)

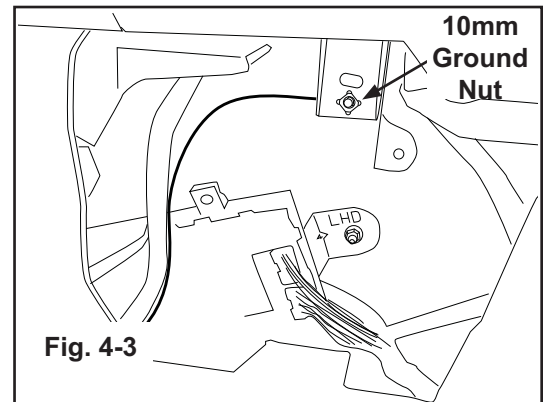


## 2. Connect EC harness to ground.

- a) Locate tab for 10mm ground nut under passenger-side dash. Located in top right side behind glove box. (Fig. 4-2)

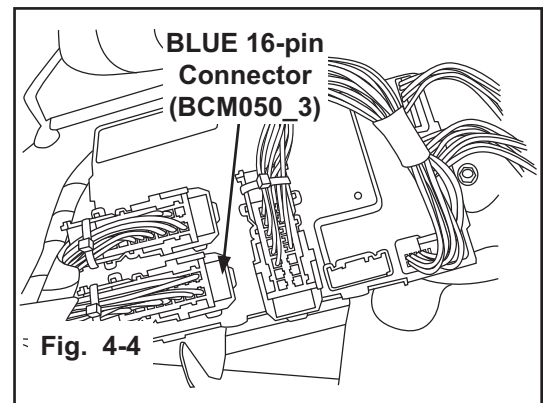


- b) Place ground ring of EC harness over bolt, from the hardware kit, and install into ground nut on vehicle. (Fig. 4-3)
- c) Tighten bolt to 90 lb-in.

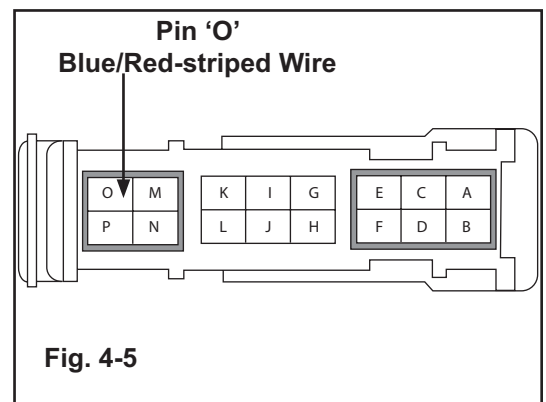


## 3. Attach wire tap connector to +12V constant battery.

- a) Locate the BLUE 16-pin connector (BCM050\_3) in the bottom left side of the BCM, located behind the glove box. (Fig. 4-4)

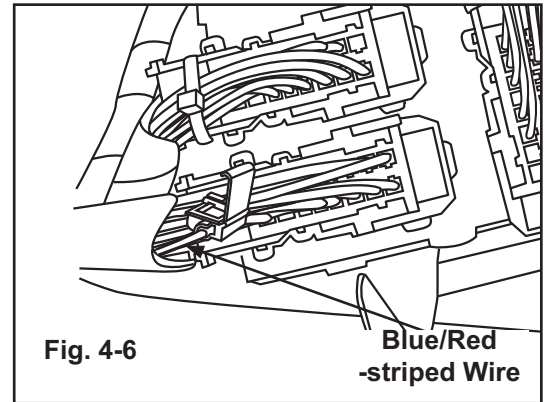


- b) Locate the Blue/Red-striped wire in pin 'O,' of the BLUE 16-pin connector. (Fig. 4-5)



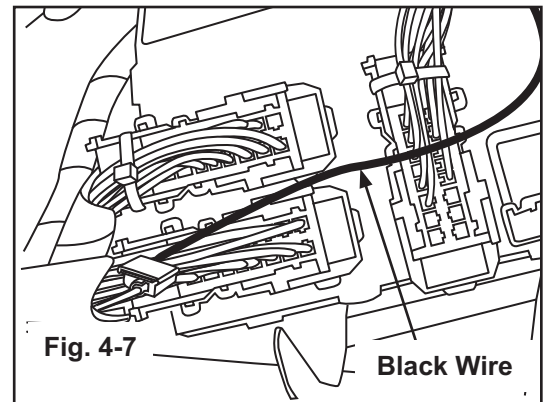


- c) Cut wire tie holding wires to connector.
- d) Attach IDC connector to **Blue/Red-striped wire** in pin 'O,' of the BLUE 16-pin connector. (Fig. 4-6)
- e) See IDC Wire Tap Procedure on Page 2 for detailed instructions and images of proper wire tap installation techniques.



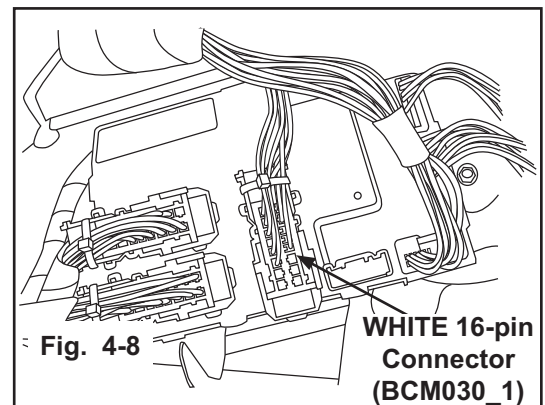
**4. Connect EC harness to +12V constant battery.**

- a) Insert end of **Black wire** of the EC harness into opening of IDC connector on the **Blue/Red-striped wire**. (Fig. 4-7)
- b) Using Pliers, crimp IDC tab and then close plastic top. (See IDC Wire Tap Procedure on Page 2)

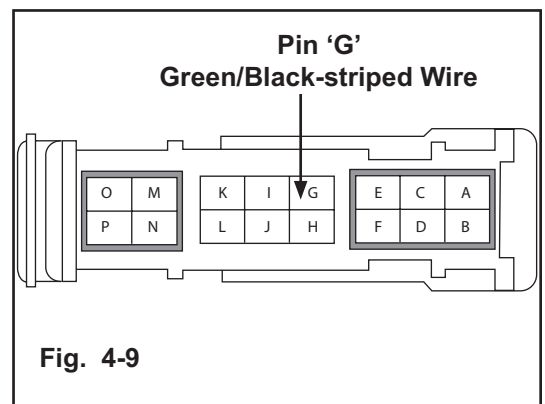


**5. Attach wire tap connector to +12V ignition.**

- a) Locate the **WHITE 16-pin connector (BCM030\_1)** at the bottom center of the BCM, located behind the glove box. (Fig. 4-8)

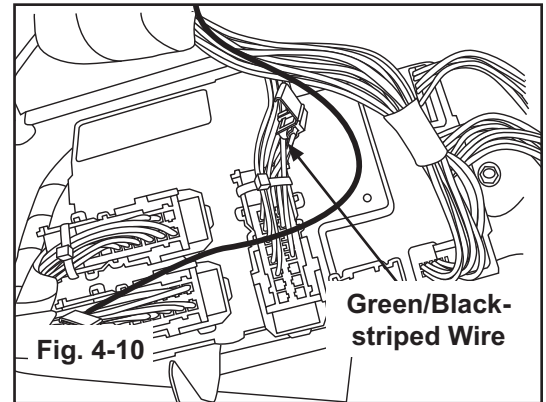


- b) Locate the **Green/Black-striped wire** in pin 'G,' of the WHITE 16-pin connector. (Fig. 4-9)



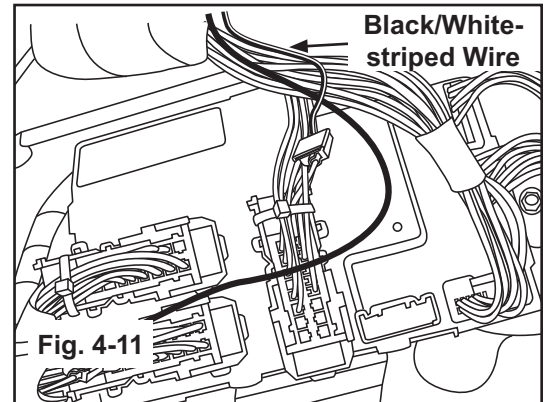


- c) Attach IDC connector to **Green/Black-striped wire** in pin 'G,' of the WHITE 16-pin connector. (Fig. 4-10)
- d) See **IDC Wire Tap Procedure on Page 2** for detailed instructions and images of proper wire tap installation techniques.



**6. Connect EC harness to +12V ignition.**

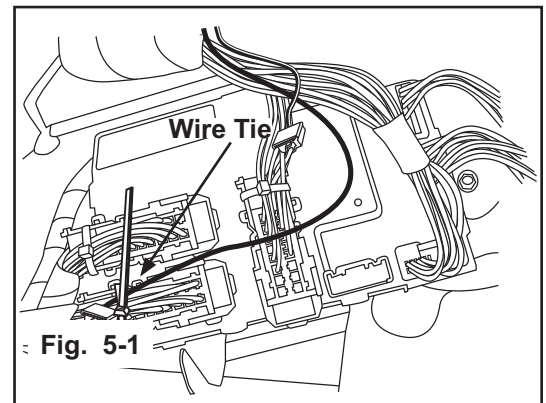
- a) Insert end of **Black/White-striped wire** of the EC harness into opening of IDC connector on the **Green/Black-striped wire**. (Fig. 4-11)
- b) Using Pliers, crimp IDC tab and then close plastic top. (See **IDC Wire Tap Procedure on Page 2**)



**5 Secure Remaining EC Harness Wires**

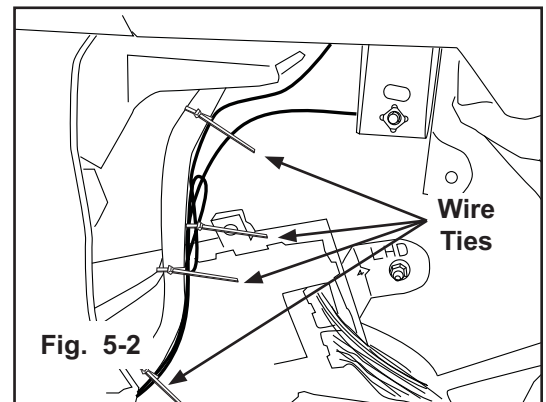
**1. Re-wrap Wire Tie Around EC harness and BLUE Connector**

- a) Secure EC harness to BLUE 16-pin connector using (1) wire tie. (Fig. 5-1)



**2. Bundle excess EC harness wires.**

- a) Secure EC harness wires to OE harness with (3) wire ties. (Fig. 5-2)
- b) Bundle excess EC harness wires with (1) wire tie. (Fig. 5-2)
- c) See **Wire Tie Procedure on Page 2** for detailed instructions and images of proper wire tie installation techniques.



## 6 Testing

1. Reconnect negative battery cable.
2. Turn the ignition switch to ON.
3. With the vehicle in a fairly well-lit area, perform the following:
  - a) Verify the shift light on the bottom of the mirror is on and orange.
  - b) Verify button images are lit with orange back-lighting.
  - c) To make sure the auto-dimming feature is on, verify that the green LED to the left of the center button is on. If it is not on, push the "☺" button to turn the green LED on.
  - d) Cover the forward looking photocell on the back of the mirror with a dark cloth or towel. (Fig. 6-1)
  - e) In a few seconds, the mirror will begin to darken.

### NOTE

**!** Time to darken will vary with ambient light level.

- f) Remove the cover from the forward looking photocell and the mirror will begin to clear.
- g) Verify that either a direction, such as NE, or "C" is displayed in the display window. If not, ensure the feature is turned ON by pressing the "☺" button.

4. Turn the ignition key to the OFF position.

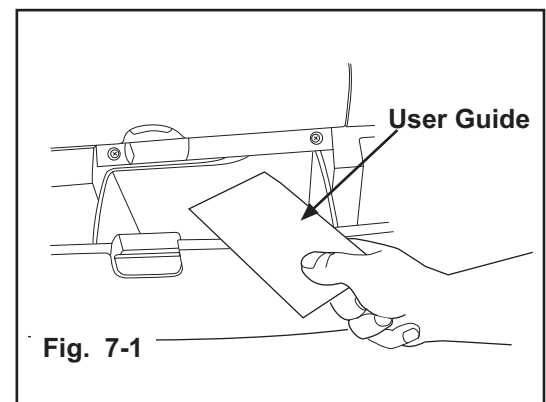
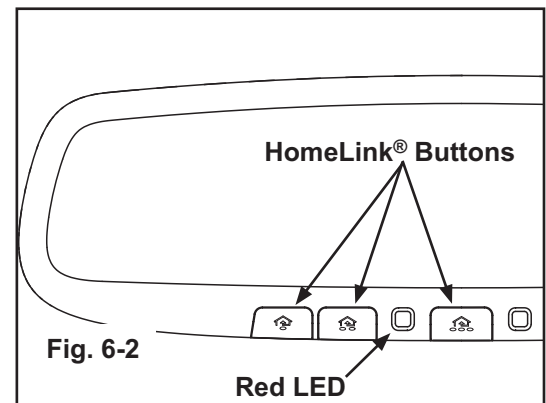
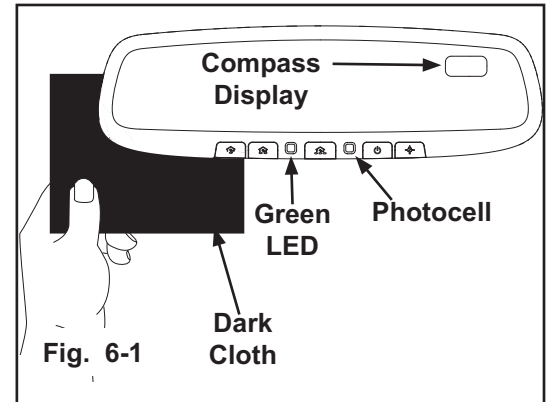
### NOTE

**!** If compass remains on, refer to pages 7-9 and recheck proper wiring installation.

5. Push each HomeLink® button, one at a time, and verify that the LED indicator to the left of the center button illuminates red. (Fig. 6-2)
6. Testing is now complete.

## 7 Installation of Removed Components

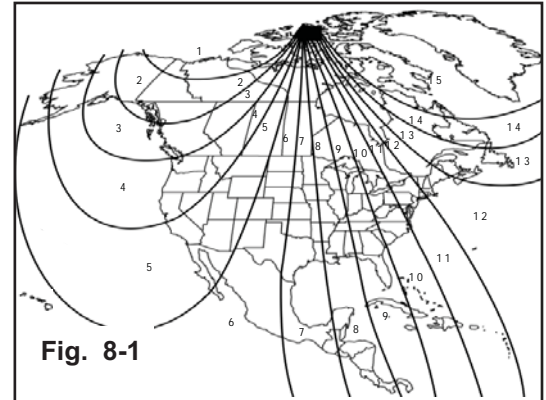
1. Trim excess off all tie wraps.
2. Reinstall in reverse order, all trim pieces removed during installation.
3. Place User Guide in vehicle glove-box. (Fig. 7-1)
4. Remove fingerprints, smudges, etc. from mirror.
5. Verify each reinstalled component for proper fit and function.



## 8 Compass Zone Adjustment (Dealer Install ONLY)

### 6. Adjust compass zone after EC mirror installation.

- a) The zone setting is factory preset to zone 8. Refer to Compass Calibration Zone Map (**Fig. 8-1**) to find the correct compass zone setting for your geographical location. Same map is in User Guide as well.
- b) To change the zone setting, push and hold the right button until a number appears in the display. Press button repeatedly until desired compass zone number is reached.



## 9 Compass Calibration (Dealer Install ONLY)

### 7. Calibrate compass.

- a) Drive to an open, level area, away from large metallic objects or structures.
- b) Hold the right, compass display button for approximately 9 seconds, until "C" test appears in the display. Release the right button to enter the calibration mode.
- c) Drive slowly in up to 3 circles until the "C" disappears and a directional heading is displayed. The compass is now calibrated.

## 10 Inspection

Inspection Parts	Inspection Items (O)			
	Clearance / Fit	Scratches / Dirt / Harness Interference	Installation / Tightening / Engagement	Operation Check
Negative battery terminal			O	
Passenger-side Door Seal	O	O	O	
Passenger-side A-pillar trim	O	O	O	
Glove Box	O	O	O	
Passenger-side Under Dash Trim	O	O	O	
EC mirror torx screw			*1 O	
EC mirror harness connector			O	
EC mirror features:				
- auto-dimming				*2 O
- compass display				*3 O
- Homelink®				*4 O
User guide			*5 O	

**O : Applicable**

\*1: Tightened to 15 lb-in (18 kg-cm) .

\*2: Mirror dims (key must be in ON position).

\*3: Displays either "C" or directional heading (key must be in ON position).

\*4: Red LED illuminates when each button is pushed (test with key in OFF position).

\*5: In vehicle glove-box.

### CAUTION



**When the battery is disconnected, the DSC may stop operating.**

(The DSC OFF indicator will flash at this time, and the TCS/DSC operation indicator will illuminate.)

Carry out the following procedure to reactivate DSC:

1. Turn the ignition switch to "OFF" and then turn it back to "ON".
2. Turn the steering wheel clockwise as far as it will go, and then turn it back counterclockwise as far as it will go.
3. Check that the TCS/DSC operation indicator is turned off.
4. Turn the ignition switch to "OFF" and then turn it back to "ON".
5. Check that the TCS/DCS operation indicator is turned off. If the TCS/DSC operation indicator is still illuminated or the DSC indicator is not turned off when the ignition switch is turned back to "ON", contact your Mazda dealer.

### CAUTION



**If the battery is disconnected, the power windows may no longer fully open or fully close automatically.**

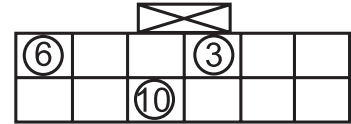
Carry out the following operation at driver seat first and passenger seat to restore normal operation:

1. Turn the ignition key to the "ON" position.
2. Press the power window switch to fully open the power windows.
3. Lift up the power window switch to fully close the power windows, and keep it pulled up for approximately 2 seconds.
4. Position the engine switch at "OFF", and then at "ON" again. When the function doesn't work after these procedures, please contact your Mazda dealer.

## BASIC INSTALLATION TROUBLE-SHOOTING

### Verify the following:

1. B+ harness wire (pin 10) is receiving +12V with ignition OFF and ON.
2. Switched harness wire (pin 6) is receiving +12V with ignition ON and 0V with ignition OFF.
3. Ground wire is securely attached.
4. EC harness is fully inserted into mirror.
5. EC harness is not pinched, cut or damaged.
6. Ensure IDC connectors are properly installed. Check to see that the blade in the connector did not miss either wire.



PIN	FUNCTION	NOTE
1		
2		
3	GROUND	
4		
5		
6	+12 VDC SWITCHED	IGNITION
7		
8		
9		
10	+12 VDC	BATTERY

