



**GENUINE ACCESSORIES  
INSTALLATION INSTRUCTIONS**

**PART NUMBERS:**

**APPLICABLE MODELS:**  
2009 > Mazda 6

**IMPORTANT NOTE  
BEFORE  
ORDERING PARTS**

Before you begin, vehicle's that contain a rain sensor will require a different mirror than vehicle's that do not contain a rain sensor. **YOU MUST** reference the correct part number below before proceeding.

Before you begin, this installation may require a supplemental Jumper Harness Kit (0000-8C-H25). To identify this potential, the vehicle's OEM Rear Main Harness will need to be verified. **YOU MUST** refer to page 2 of this instruction manual for the correct procedures.

- 0000-8C-Z02 Electrochromic Mirror w/ Compass w/ Homelink®
- 0000-8C-Z27 Electrochromic Mirror w/ Compass w/ Homelink® w/ Rain Sensor
- 0000-8C-H21 Compass / Homelink® Installation Kit
- 0000-8C-H25 Jumper Harness Kit

**REQUIRED COMPONENTS:**

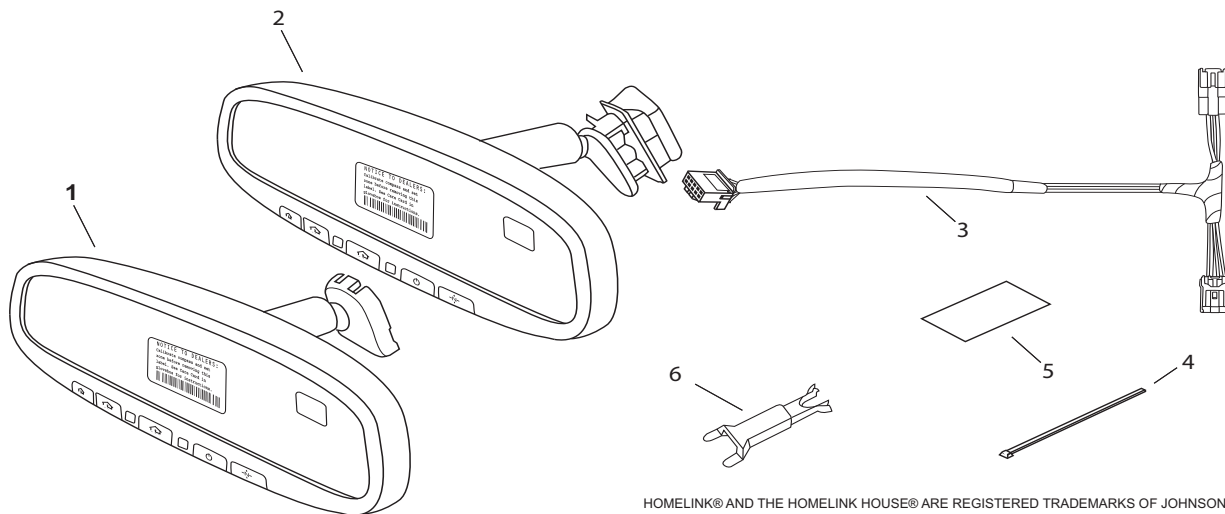
ITEM	QTY	DESCRIPTION	SERVICE PART NUMBER
1	1	Mirror Assembly w/ Compass / Homelink®	0000-8C-Z02

**OR**

2	1	Mirror Assembly w/ Compass / Homelink® w/ Rain Sensor	0000-8C-Z27
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**INSTALLATION KIT (0000-8C-H21) COMPONENTS:**

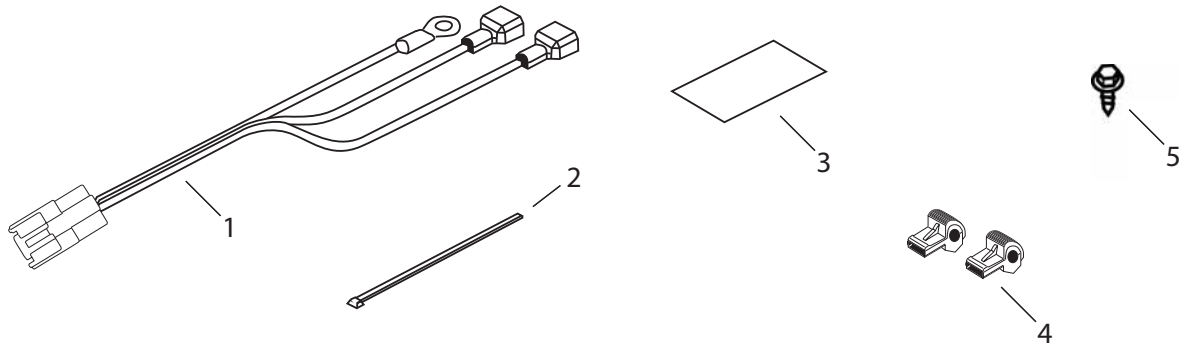
3	1	T-Harness Assembly - Power and Ground	--
4	4	Tie Wrap	--
5	2	Foam Tape	--
6	1	Wire Cover	0000-8C-H11
7	1	Installation Instructions	--
8	1	User Guide	--



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

## JUMPER HARNESS KIT (0000-8C-H25) COMPONENTS:

1	1	Jumper Harness	--
2	3	Tie Wrap	--
3	1	Foam Tape	--
4	2	Wire Tap	0000-8C-H09
5	1	Self-Tapping Hex Screw (8mm)	--



## TOOLS REQUIRED:

Clean Rag	Power Driver with:	Needle Nose Pliers	OEM Mirror Removal Tool
Fiberstick	- Socket Adapter	Wire Cutters	(Ref. page 5, step g and
#T20 Torx	- 8mm Socket	4mm Screwdriver	last page of instructions)

### 1 Identifying OEM Rear Main Harness Label

#### 1. Remove driver-side scuff plate.

- a) Use fiberstick to disengage clips. (Fig. 1-1)

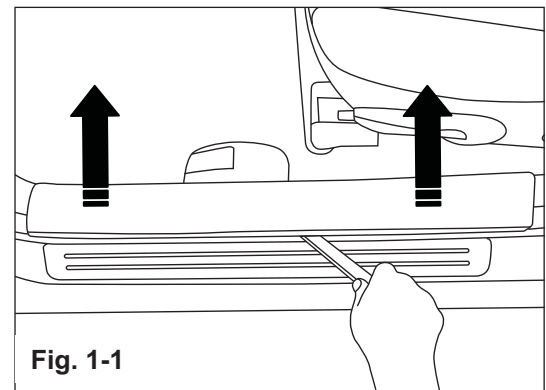


Fig. 1-1

#### 2. Identify OEM Rear Main Harness label part number.

- a) Locate the OEM Rear Main Harness label, attached to the OEM harness under the driver-side scuff plate. (Fig. 1-2)
- b) If the OEM Rear Main Harness label reads **GS4C-670-50**, an additional Jumper Harness Kit (**0000-8C-H25**) will be needed for this installation. If a different part number is present, no additional kits are required for this installation. Details for 0000-8C-H25 are found in section 5-2 of instructions.

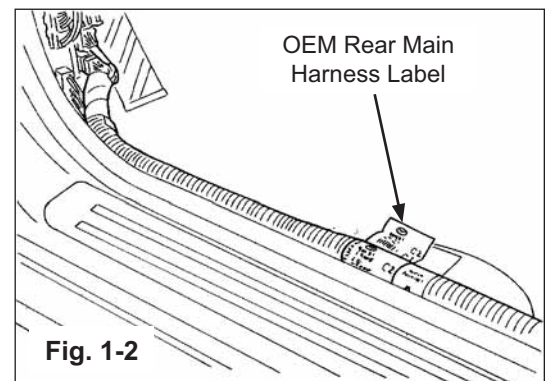


Fig. 1-2

## INSTALLATION PRECAUTIONS / NOTES:

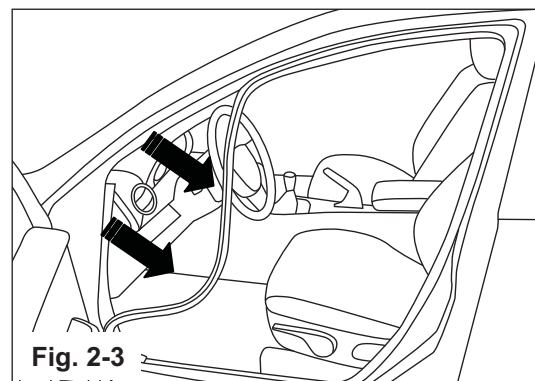
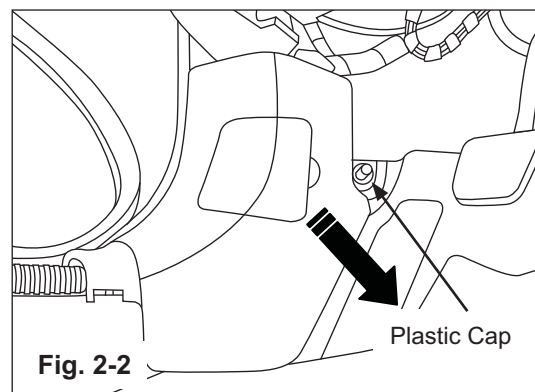
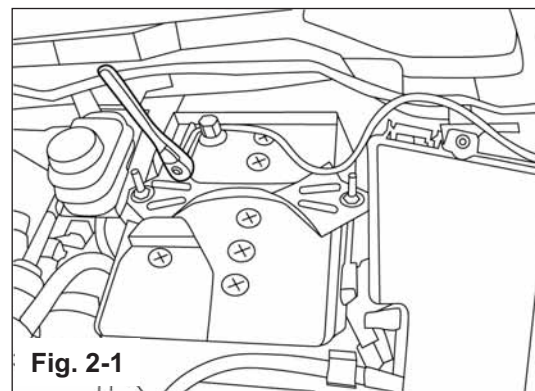
- Do not use excessive force when removing OE mirror from windshield.
- Do not place wire harness against objects with sharp edges that may cause electrical shorting.
- On vehicles equipped with “A” pillar air bag, verify mirror harness path remains clear of air bag. Harness should follow, and be tied to existing OEM wiring with tie wraps.
- 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.

Perform the following pre-installation steps:

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).

## 2 Preparation

1. Disconnect negative battery terminal.
  - a) Using 10mm socket, remove negative battery terminal. (Fig. 2-1)
2. If supplemental jumper harness is needed, remove driver-side kick plate.
  - a) Unscrew plastic cap.
  - b) Grasp kick plate at rear and pull out towards passenger-side of vehicle. (Fig. 2-2)
3. Remove driver-side door seal.
  - a) Pull back past top of A-pillar trim. (Fig. 2-3)



#### 4. Remove A-pillar trim.

- a) Pull out the top portion of A-pillar trim towards passenger-side of vehicle until A-pillar push-pin connector is extended approximately 1 and 1/2". (Fig. 2-4)
- b) Remove A-pillar push-pin connector from A-pillar trim. It is recommended to use your finger to slide A-pillar push-pin up off of A-pillar trim. (Fig. 2-4)

**NOTE**



**A-pillar push-pin will remain attached to vehicle body.**

- c) Remove A-pillar trim toward rear of vehicle.
- d) Ensure A-pillar push pin connector is extended fully.
- e) Using needle nose pliers, depress push-pin at base of A-pillar body and remove from A-pillar. (Fig. 2-5)

**NOTE**



**If damage occurs to A-pillar push-pin connector (part number GS3L-68-162A) replacement is required.**

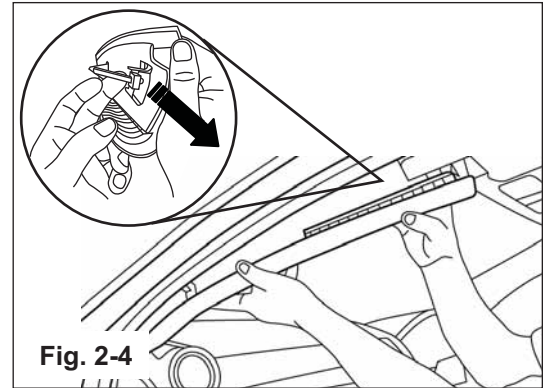
- f) Reinstall push-pin in A-pillar trim until securely fastened. (Fig. 2-6)

#### 5. Remove OE mirror.

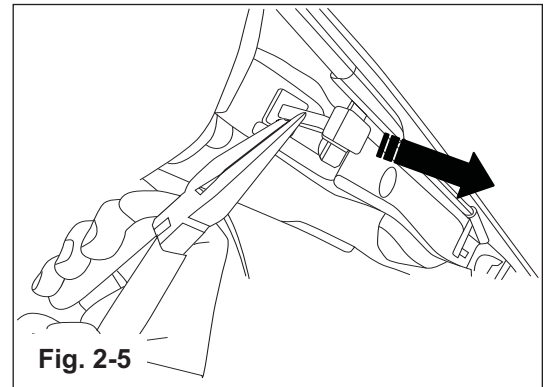
**FOR VEHICLE'S WITH RAIN SENSOR COVER, BEGIN AT STEP a, PAGE 4.**

**IF RAIN SENSOR COVER IS NOT PRESENT, SKIP TO STEP k, PAGE 6.**

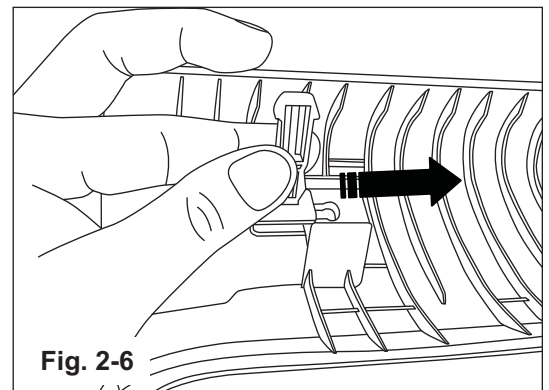
- a) Insert fiberstick between right side of factory rain-sensor cover and windshield. (Fig. 2-7)
- b) Push in on left side of rain-sensor cover and gently pry right side away from windshield to disengage clips. (Fig. 2-7)



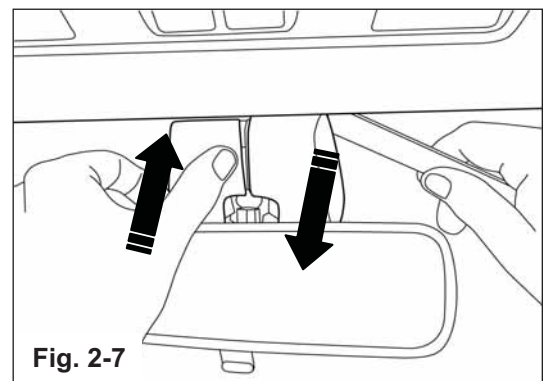
**Fig. 2-4**



**Fig. 2-5**



**Fig. 2-6**



**Fig. 2-7**

- c) Insert fiberstick in between two halves of rain-sensor cover at the top and pry both halves away from each other. (Fig. 2-8)

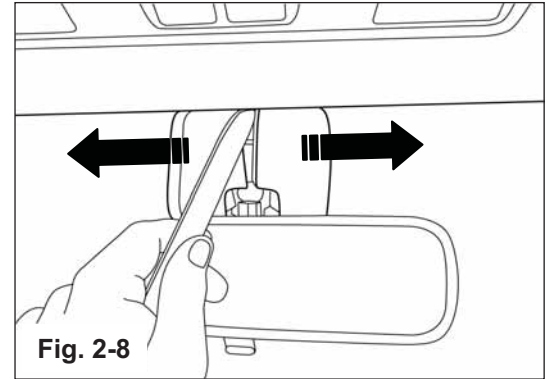


Fig. 2-8

- d) Remove both halves of rain-sensor cover.

**NOTE**

**!** Take special care not to damage rain sensor cover, as cover will be re-used during this installation.

- e) Using 4mm screwdriver, slide the two (2) locking tabs downward on the rain-sensor. (Fig. 2-9)

**CAUTION**

**!** Ensure both tabs are fully extended downward. Failure to extend both tabs downward may result in breaking the retaining tabs on lens, requiring windshield replacement.

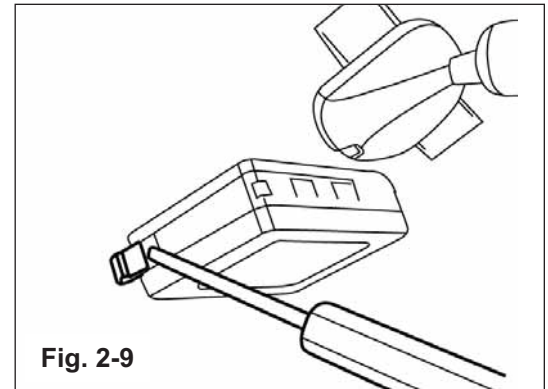


Fig. 2-9

- f) Insert fiberstick at corner of rain-sensor and gently twist and pry downward to remove. (Fig. 2-10)

**NOTE**

**!** Lens will remain mounted to windshield.

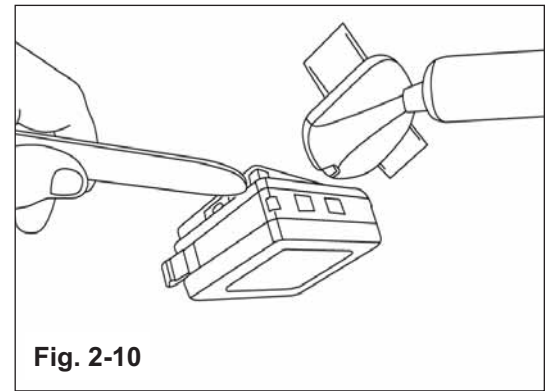


Fig. 2-10

- g) To complete removal of OEM mirror, it is easier to use special tool shown on page 19 of instructions. Figure 2-11 shows mirror removal using special tool.

**CAUTION**

**!** Do not pry or damage rain-sensor lens during mirror removal.

**CAUTION**

**!** Do not damage or use excessive force on inner components of rain-sensor lens. Damaging rain-sensor lens will require replacement of the entire windshield.

- h) Insert OEM mirror removal tool into notch at bottom of mirror mount and slide upward between windshield mounting button and mirror mount. (Fig. 2-11)

**NOTE**

**!** It is recommended to perform this operation from the passenger front seat.

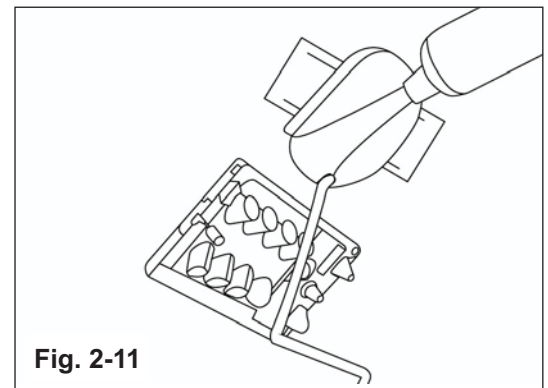
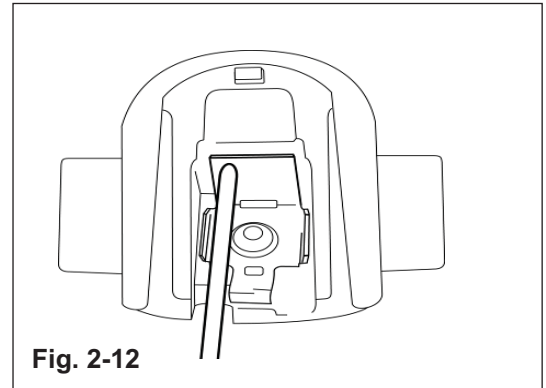
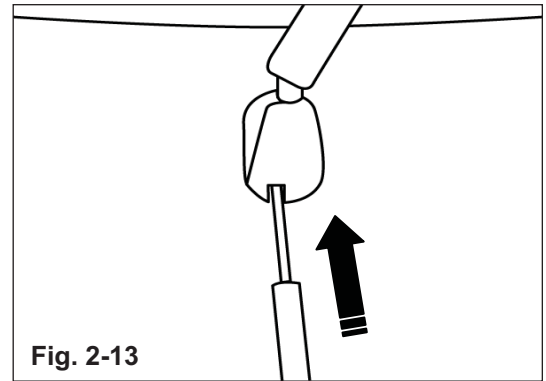


Fig. 2-11

- i) Push on locking tab while performing the next step. **(Fig. 2-12)**
- j) Grasp mirror head and gently wiggle it while pulling upwards to slide mirror off from windshield button.



- k) Insert 4mm screwdriver into notch at bottom of mirror mount and slide upward between windshield mounting button and mirror mount. **(Fig. 2-13)**
- l) Grasp mirror head and gently wiggle it while pulling upwards to slide mirror off from windshield button.

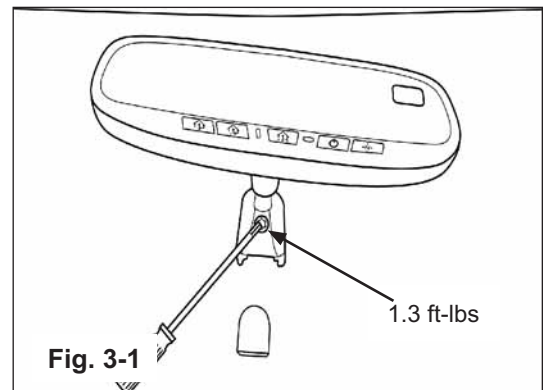


### 3

## EC Mirror Installation

### 1. Attach EC mirror.

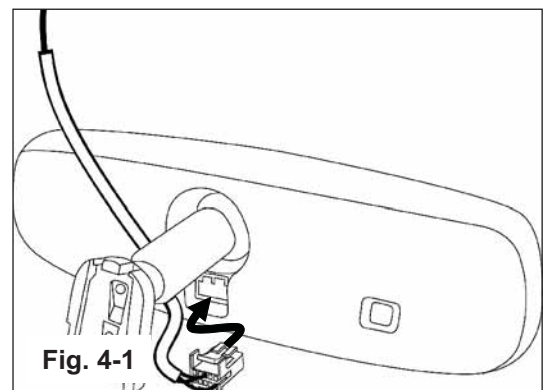
- a) Hold the mirror head and slide the mount downwards as far as possible over the windshield button, until fully seated.
- b) Using a #T20 Torx, tighten the mirror mounting bracket screw to 1.3 ft-lbs (17.8 kg-cm). **(Fig. 3-1)**



### 4

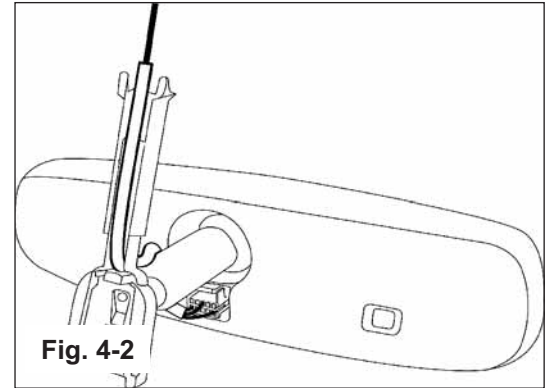
## Route EC Mirror Harness to Vehicle Power

- 1. Plug 10-pin connector into back of EC mirror. **(Fig. 4-1)**



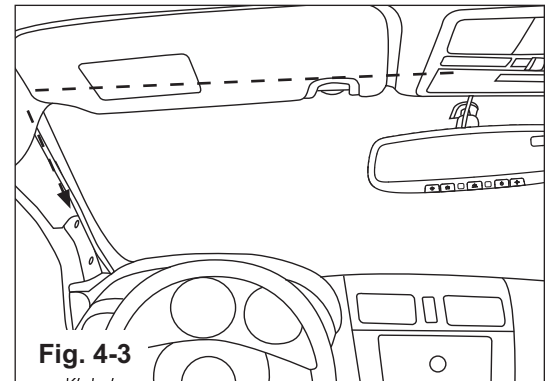
**2. Route EC harness from mirror to headliner.**

- a) Route power harness into groove of wire cover, and attach wire cover to mirror base. (Fig. 4-2)
- b) Slide upper portion of wire cover up to headliner so the “forks” are held by the headliner. (Fig. 4-2)



**3. Route EC harness to driver-side A-pillar.**

- a) Route power harness between vehicle headliner and roof to top of driver-side A-pillar area. (Fig. 4-3)



**4. Route EC harness down driver-side A-pillar.**

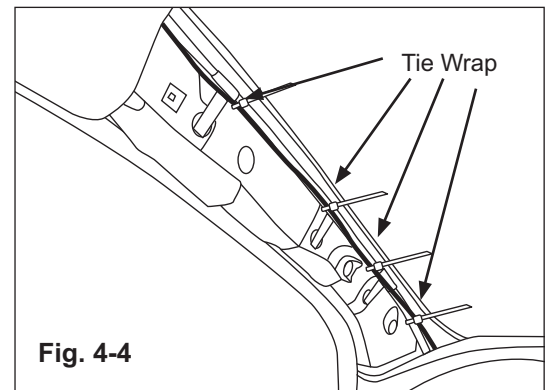
- a) Route harness down A-pillar and secure to OE harness with four (4) tie wraps as shown. (Fig. 4-4)

**CAUTION**

Verify mirror harness path is clear of airbag (if equipped).

**CAUTION**

Do not secure harness to plastic drain tube.



**5**

**Connect Harness to Power and Ground**

FOR VEHICLE'S REQUIRING ADDITIONAL JUMPER HARNESS KIT 0000-8C-H25, SKIP TO STEP 2, PAGE 10.

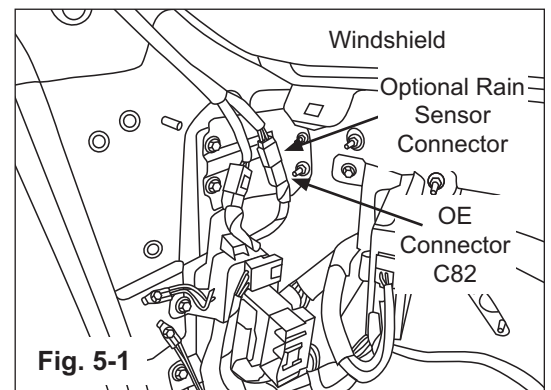
FOR VEHICLE'S WITH ALL OTHER OEM REAR MAIN HARNESS LABEL PART NUMBERS, PROCEED TO STEP 1, PAGE 7.

**1. Connect EC T-harness to OE connector.**

- a) Locate OE connector (C82) under driver side dash, near A-pillar. (Fig. 5-1)

**NOTE**

The vehicle's dash board has been removed to better show the location of OE connector (C82).



FOR VEHICLE'S WITH RAIN SENSOR, PROCEED TO STEPS b, PAGE 8.

FOR NON-RAIN SENSOR VEHICLE'S, BEGIN AT STEP h, PAGE 9.

- b) Using screwdriver, remove male portion from OE connector (C82). (Fig. 5-2)

**NOTE**



Utilizing a special tipped screwdriver may help ease the removal of the male portion from the OE connector.

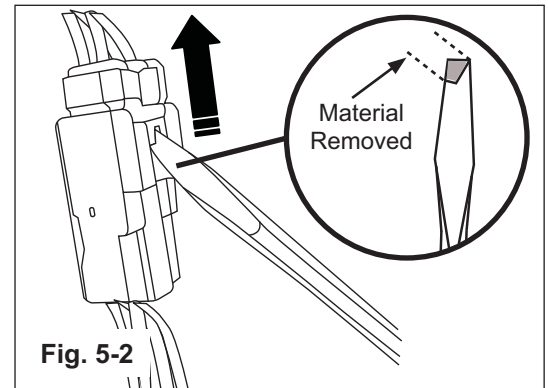


Fig. 5-2

- c) Route disconnected male portion of OE connector out from dash near A-pillar opening. (Fig. 5-3)

**NOTE**



This will aid in attaching T-harness connector in step d.

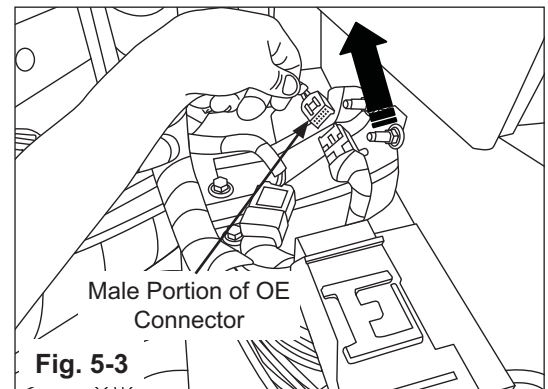


Fig. 5-3

- d) Connect female portion of T-harness to male portion of OE connector. (Fig. 5-4)

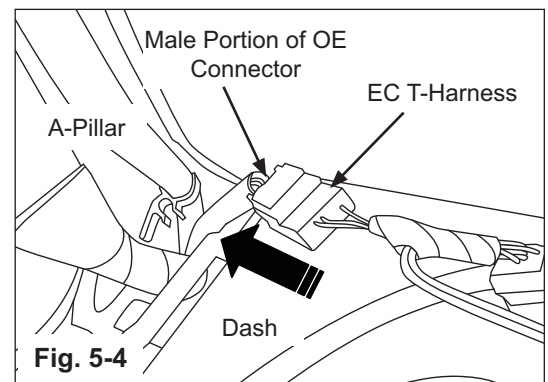


Fig. 5-4

- e) Route T-harness into center dash area. (Fig. 5-5)

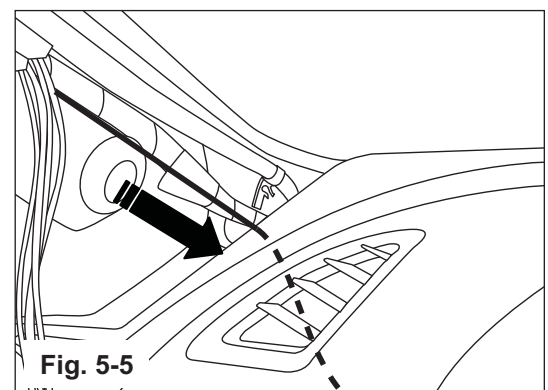
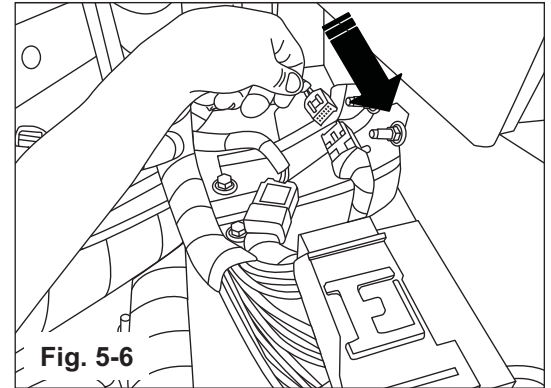


Fig. 5-5

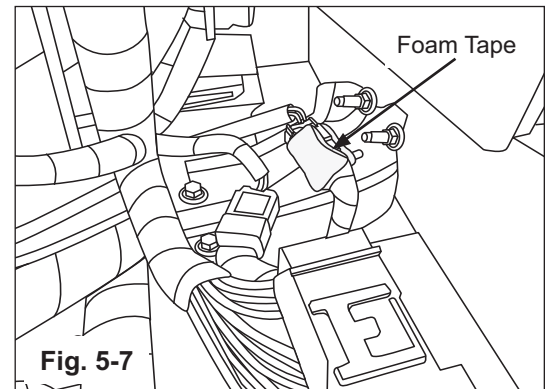


- f) Connect male portion of T-harness to female portion of OE connector. **(Fig. 5-6)**

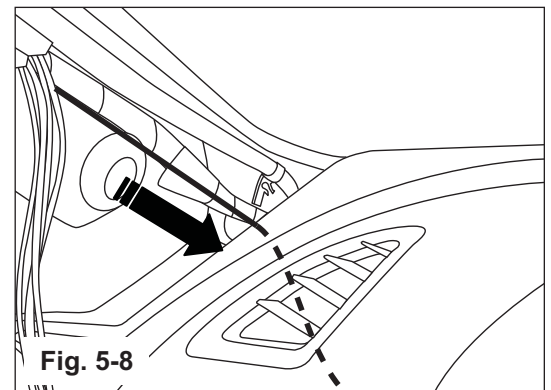


- g) Wrap two (2) pieces of foam tape around T-harness and male portion of OE connector previously connected in Fig. 5-4, to existing OE harness as shown. **(Fig. 5-7)**

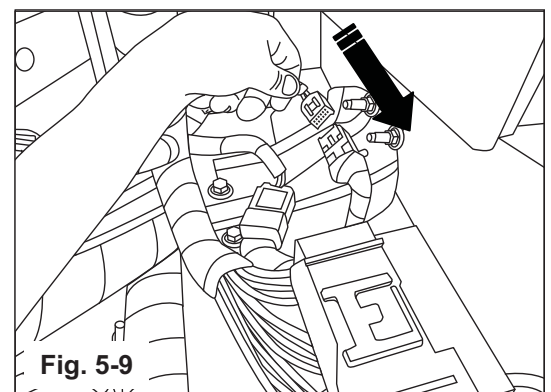
**SKIP TO STEP 6- TESTING, PAGE 13.**



- h) Route T-harness into center dash area. **(Fig. 5-8)**

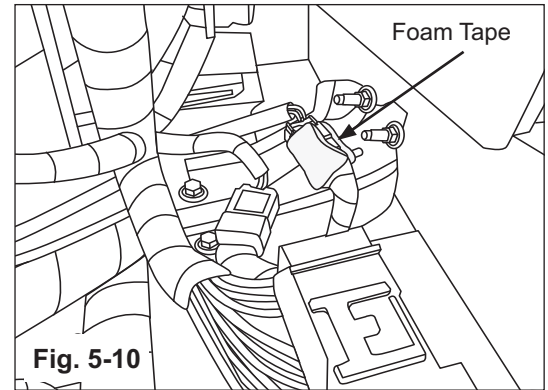


- i) Connect male portion of T-harness to female portion of OE connector. **(Fig. 5-9)**

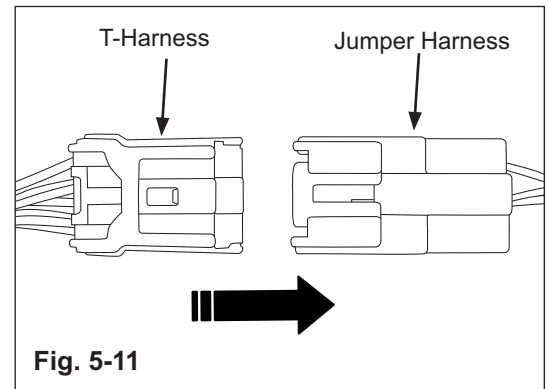


- j) Wrap two (2) pieces of foam tape around the unused female portion of the T-harness to existing OE harness as shown. (Fig. 5-10)

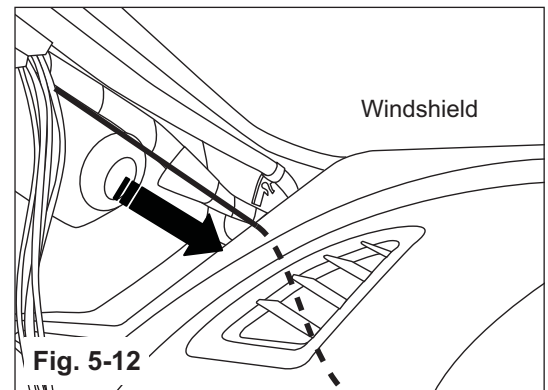
**SKIP TO STEP 6- TESTING, PAGE 13.**



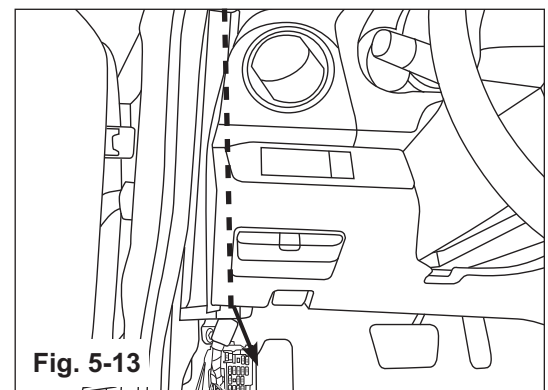
- 2. Connect jumper harness to male portion of T-harness. (Fig. 5-11)



- 3. Route T-harness into center dash area. (Fig. 5-12)



- 4. Route jumper harness down center dash and into kick plate area, just above the BCM. (Fig. 5-13)



5. Secure T-harness and jumper harness to OE harnesses under driver-side dash, near A-pillar.

**NOTE**

**!** The vehicle's dash board has been removed to better show the location of the OE harnesses.

- a) Wrap two (2) pieces of foam tape around the previously connected male and female connectors from page 10, step 2, and secure to OE harness as shown. (Fig. 5-14)
- b) Wrap one (1) piece of foam tape around the un-used female portion of the T-harness to existing OE harness as shown. (Fig. 5-14)
- c) Secure jumper harness to OE harness as shown with one (1) tie wrap. (Fig. 5-14)

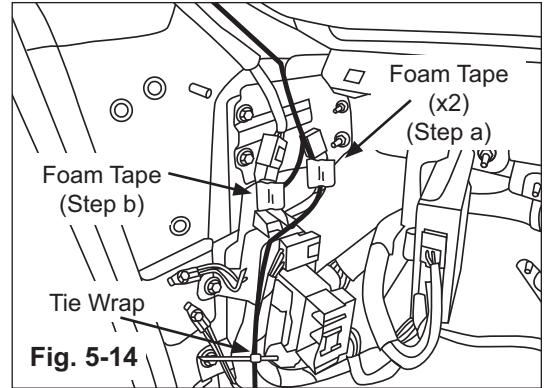


Fig. 5-14

6. Separate jumper harness power and ground wires.

- a) Pull power and ground wires apart approximately 6 inches. (Fig. 5-15)

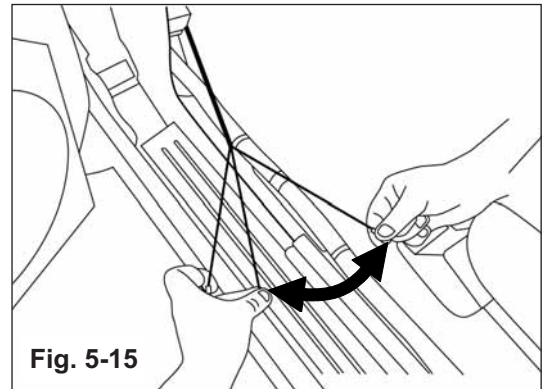


Fig. 5-15

7. Locate the BCM 6-pin connector (MR-AL-6F) in the driver side kick panel area. (Fig. 5-16)

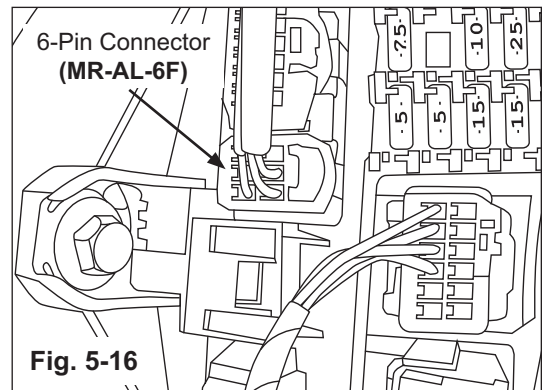


Fig. 5-16

8. Attach wire tap to +12V ignition

- a) Locate the Green / White-Striped wire in pin OA of the 6-pin connector. (Fig. 5-17)

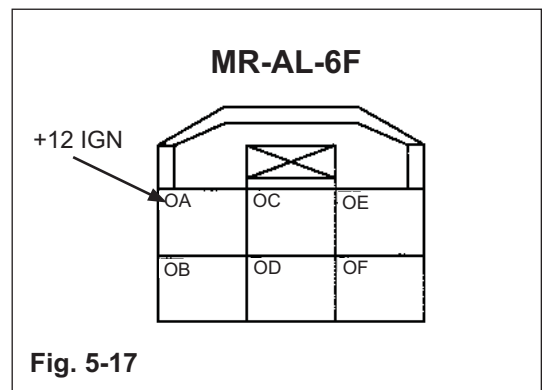


Fig. 5-17

- b) Attach wire tap connector to the **Green / White-Striped** wire in pin **OA** of the 6-pin connector. (Fig. 5-18)

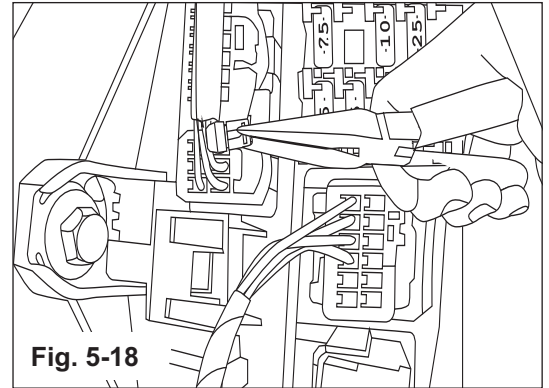


Fig. 5-18

**9. Connect jumper harness to +12V ignition**

- a) Insert male spade terminal of the **Black/White-Striped** wire into opening of wire tap on the **Green / White-Striped** wire. (Fig. 5-19)

**NOTE**

**!** Ensure male spade connector is fully inserted into wire tap.

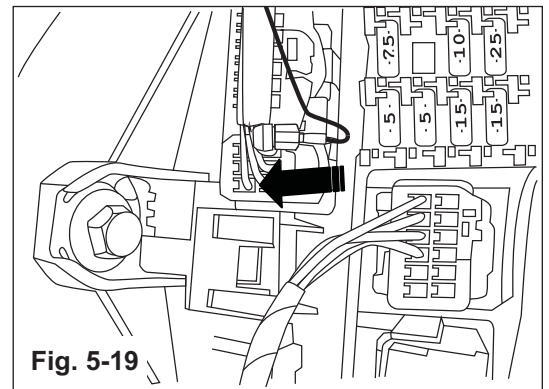


Fig. 5-19

**10. Attach wire tap connector to B+ constant**

- a) Locate the **Orange / Blue-Striped** wire in pin **OB** of the 6-pin connector. (Fig. 5-20)

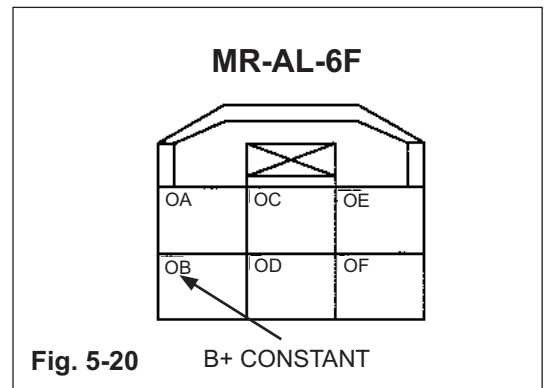


Fig. 5-20

- b) Attach wire tap connector to the **Orange / Blue-Striped** wire in pin **OB** of the 6-pin connector. (Fig. 5-21)

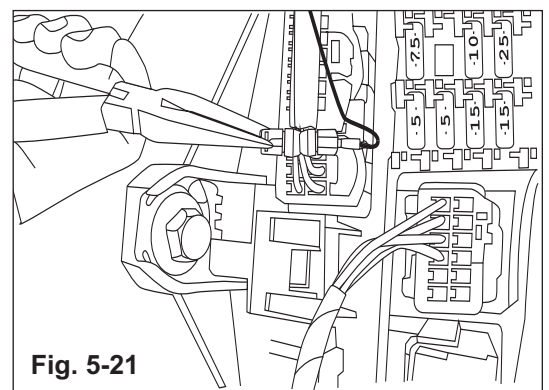


Fig. 5-21

11. **Connect jumper harness to B+ constant.**

- a) Insert male spade terminal of **Solid Black** wire into opening of wire tap on the **Orange / Blue-Striped** wire. (Fig. 5-22)

**NOTE**



**Ensure male spade connector is fully inserted into wire tap.**

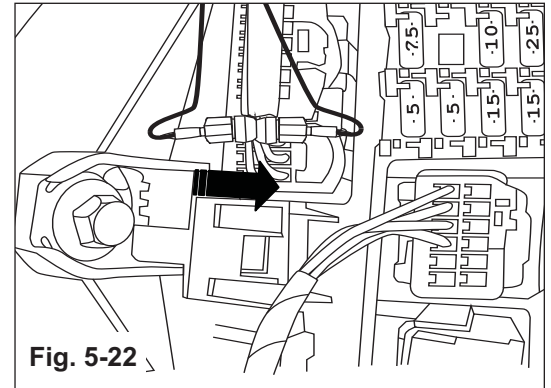


Fig. 5-22

12. **Connect EC power harness to ground.**

- a) Insert 8mm self-tapping screw from installation kit, through ground ring of EC harness ground wire. (Fig. 5-23)
- b) Using power driver and 8mm socket, drive screw into vehicle cowl area sheet metal as shown. (Fig. 5-23)

**NOTE**



**Before proceeding, cover carpet with shop rag to catch shavings.**

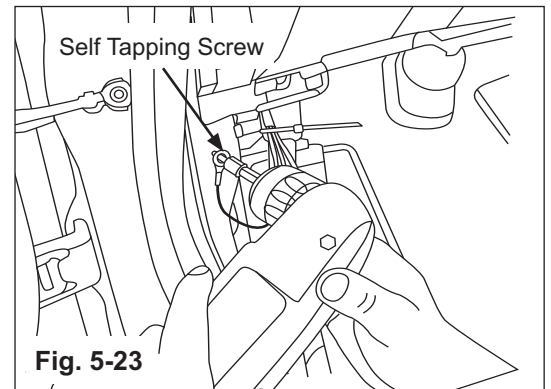


Fig. 5-23

**CAUTION**



**Do not over-tighten screw. This will result in stripping or potential intermediate grounding.**

13. **Bundle excess power harness and secure.**

- a) Bundle any excess power harness wires.
- b) Secure bundled harness wires to factory wire bundle with one (1) tie wrap. (Fig. 5-24)

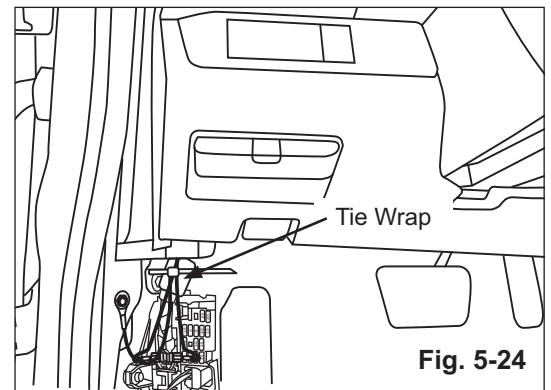



Fig. 5-24

**6**

**Testing**

- 1. **Reconnect negative battery cable.**
- 2. **Turn the ignition switch ON.**
- 3. **With the vehicle in a fairly well-lit area, perform the following:**
  - a) To make sure the auto-dimming feature is on, verify that the green LED to the left of the center switch is on. If it is not on, push the  switch to turn the green LED on. Cover the forward looking photocell on the back of the mirror with a dark cloth or towel. (Fig. 6-1)

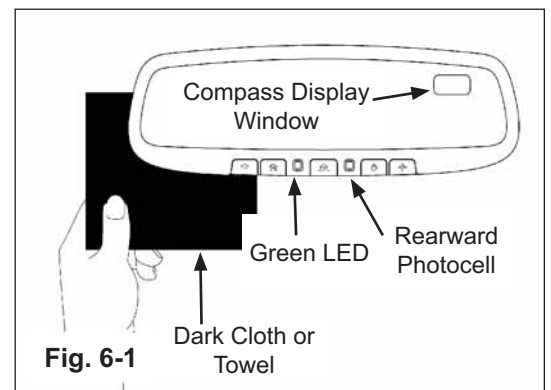



Fig. 6-1

**NOTE**

In a few seconds, the mirror will begin to darken.

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

- b) Remove the cover from the forward looking photo cell and the mirror will begin to clear.
- c) 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, vehicle's requiring additional jumper harness (0000-8C-H25) refer to page 11, step 7 through step 11 and recheck installation. For all other vehicle's begin on page 7, step 1 and recheck installation.

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

6. Testing is now complete.

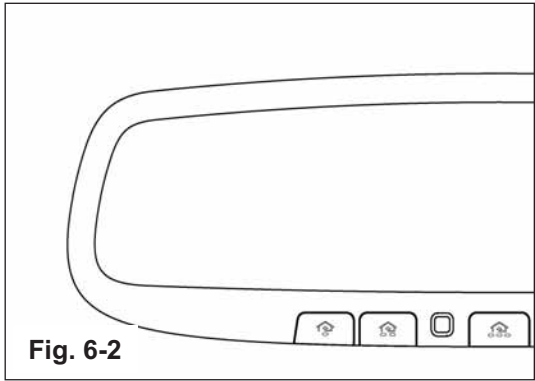


Fig. 6-2

**7**

**Installation of Removed Components**

1. For vehicle's equipped with a rain sensor, modify cover to allow for routing of EC mirror T-harness.

- a) Locate locking tabs on backside of rain sensor cover. (Fig. 7-1)

**NOTE**

**!** Ensure locking tabs do not get damaged during step b.

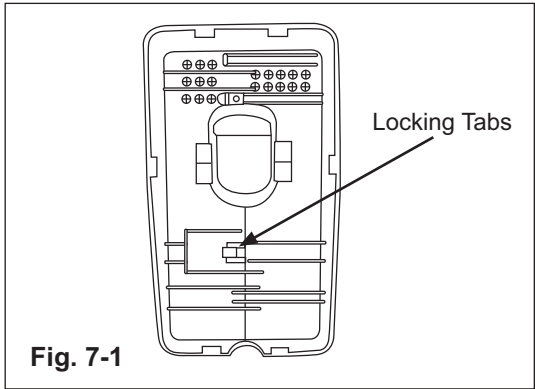


Fig. 7-1

- b) Using a 5/16" drill bit, drill a hole in location shown. (Fig. 7-2)

**NOTE**

**!** Ensure locking tabs on back side of cover are not damaged.

- c) Re-install rain sensor cover, ensuring EC mirror T-harness is routed in same location as rain sensor harness.

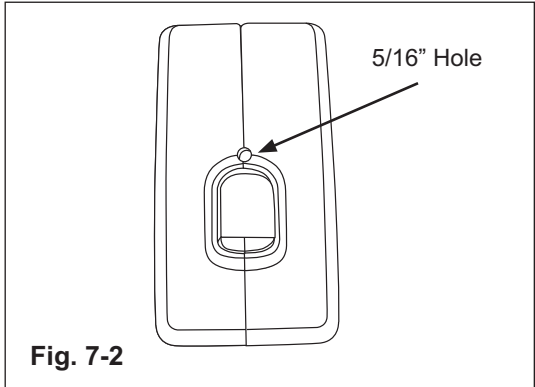


Fig. 7-2

- d) For vehicle's equipped with a rain sensor, re-install rain sensor onto vehicle.

**CAUTION**



Ensure mirror T-harness and rain sensor harness are not pinched or damaged during re-assembly of rain sensor cover. Damage could result in EC mirror or rain sensor malfunction.

2. Trim excess off all tie wraps.
3. Reinstall in reverse order, all trim pieces removed during installation.
4. Place User Guide in vehicle glove box. (Fig. 7-3)
5. Remove fingerprints, smudges, dirt, etc. from mirror.
6. Reprogram customer's programmed Radio/AM/FM/SAT stations and trip computer (if applicable).

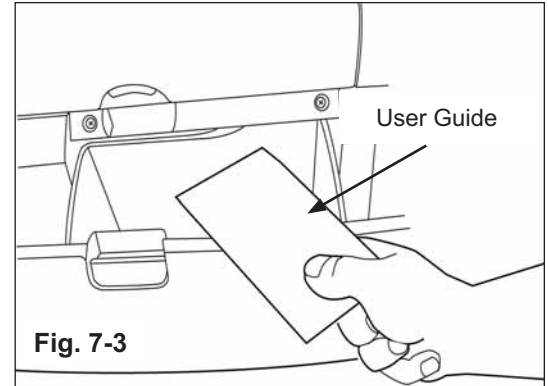


Fig. 7-3

## 8 Compass Zone Adjustment (Dealer Install ONLY)

1. 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 correct compass zone setting for your geographical locations. Use same map from User Guide.
  - 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.

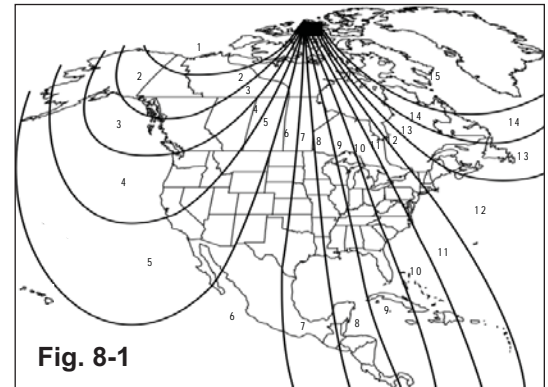


Fig. 8-1

## 9 Compass Calibration (Dealer Install ONLY)

1. Calibrate compass.
  - a) Drive to an open, level area, away from large metallic objects or structures.
  - b) Hold the power button for approximately 9 seconds until "C" text 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	
Driver-side scuff plate	O	O	O	
Driver-side kick plate	O	O	O	
Driver-side A-pillar 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 1.3 ft-lbs. (17.8 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 (key must be 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.**

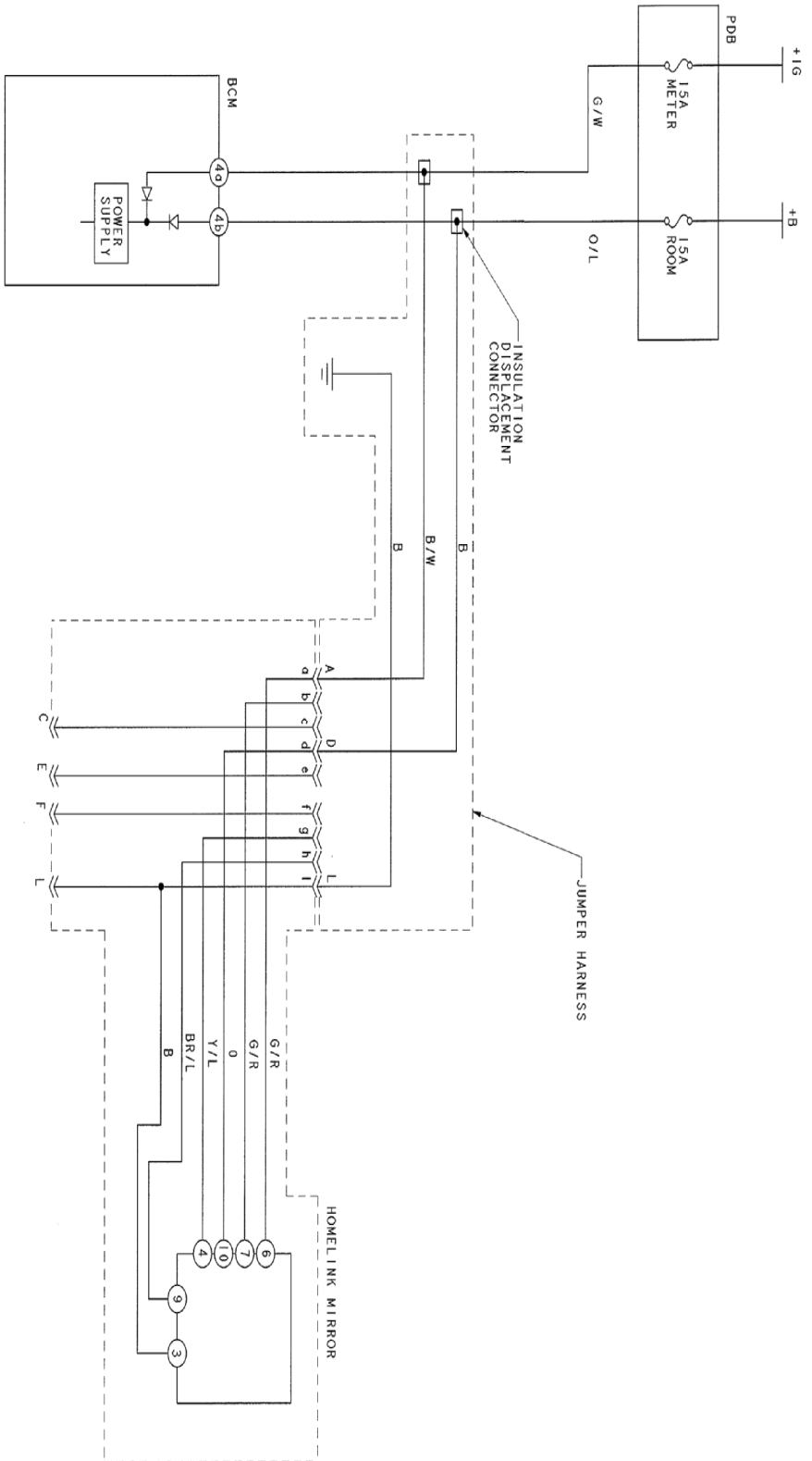
Carry out the following operation at driver seat first and passenger seat to restore normal operation:

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 (JUMPER HARNESS 0000-8C-H25 INCLUDED)**

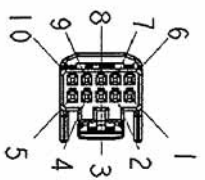


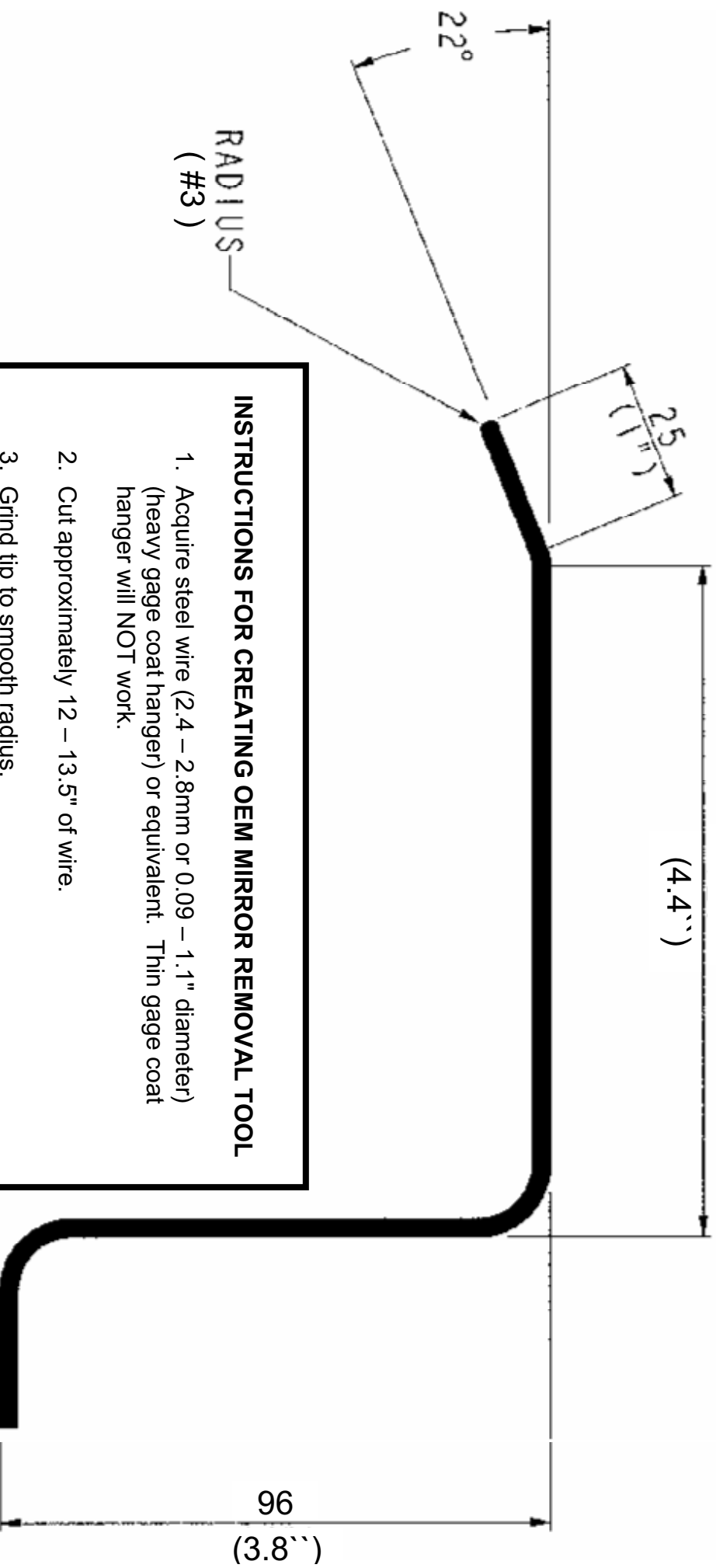
Verify the following:

- B+ harness wire (pin 10) is receiving +12V with ignition OFF.
- Switched harness wire (pin 6) is receiving +12V with ignition ON.
- Ground wire is securely attached.
- T-Harness is fully inserted into mirror.
- Harness is not pinched, cut or damaged.

**MIRROR CONNECTOR PIN-OUT**

NO.	GAGE	COLOR	FUNCTION
1			
2			
3	22	B	GROUND
4	22	Y/L	OEC FEED
5			
6	22	G/R	+12V/IGNITION
7	22	G/R	REVERSE OVERRIDE (+12V)
8			
9	22	BR/L	OEC RETURN
10	22	O	+12V BATTERY





**INSTRUCTIONS FOR CREATING OEM MIRROR REMOVAL TOOL**

- 1. Acquire steel wire (2.4 – 2.8mm or 0.09 – 1.1" diameter) (heavy gage coat hanger) or equivalent. Thin gage coat hanger will NOT work.
- 2. Cut approximately 12 – 13.5" of wire.
- 3. Grind tip to smooth radius.
- 4. Using pliers, bend wire to shape specified on drawing.

**OEM MIRROR HEAD REMOVAL TOOL**

**NOTES:**

- 1. MATERIAL: STEEL
- 2. DIAMETER: 2.4 - 2.8 (0.09 - 1.1")
- 3. MATERIAL LENGTH: 305 - 343 (12 - 13.5")