



GENUINE ACCESSORIES  
INSTALLATION INSTRUCTIONS

550-0773 Rev. AAB



**PART NUMBER:**

VA40V7210 (DIO) / VAS0V7210 (PIO)

**REQUIRED COMPONENTS:**

ITEM	QTY	DESCRIPTION	Usage Chart	Service Part Number
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**MIRROR ASSEMBLY:**

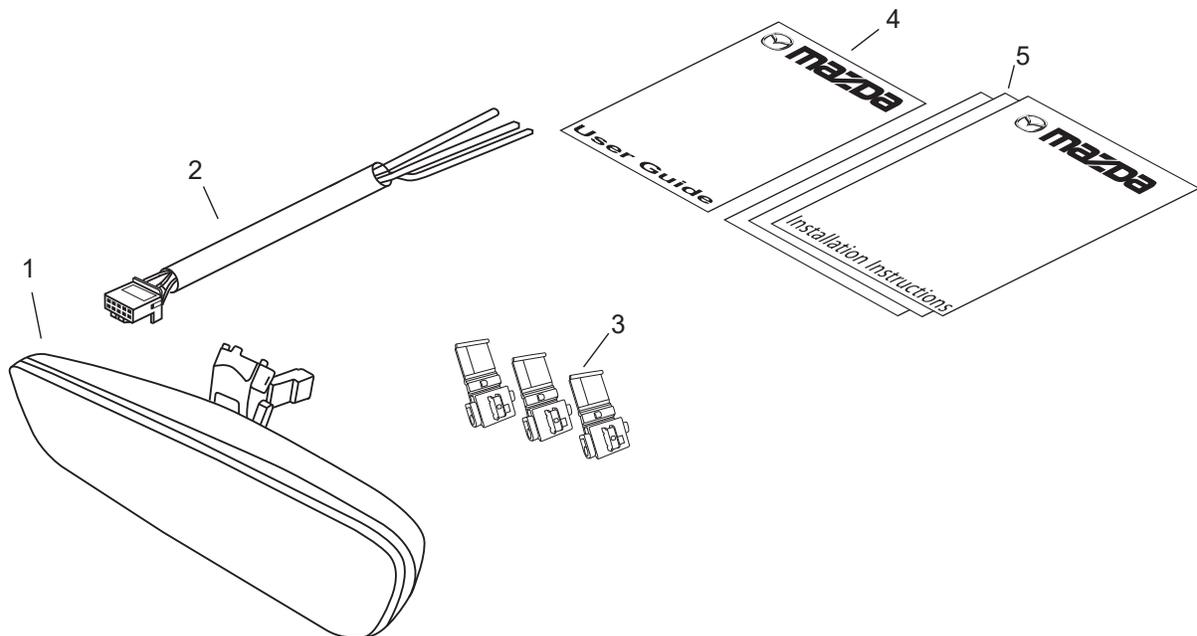
1	1	Mirror Assembly	①	VA40V7210
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**INSTALLATION KIT:**

2	1	SA Harness - 3 Conductor	①	VA40V7210
3	3	Electro-Tap(wire connector)	③	
4	1	User Guide	①	
5	1*	Installation Instructions-English, Spanish, French	①	

\*Installation Instructions not included in VAS0V7210.

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



**TOOLS REQUIRED:**

HOMELINK® AND THE HOMELINK HOUSE® ARE REGISTERED TRADEMARKS OF GENTEX CORPORATION.

10mm Socket	Ratchet	Nylon Pry Tool	Needle Nose Pliers
4mm Flat Screwdriver	Clean Rag	Wire Cutters	Pliers
#2 Phillips Screwdriver			

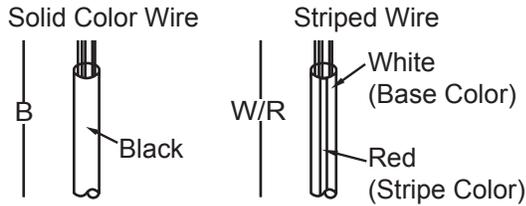
## WIRE CODES

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

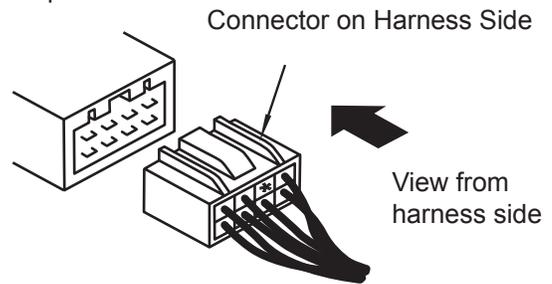
Symbol (Example):



## CONNECTOR DIAGRAMS

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

Example:

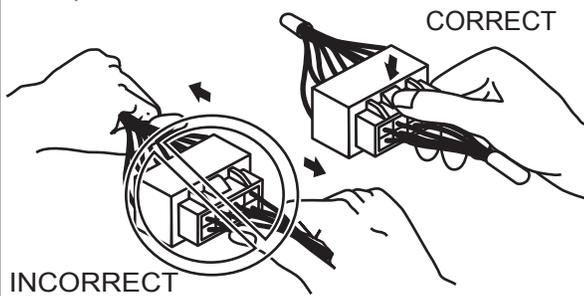


Unused terminals are indicated by "\*"

## DISCONNECTING CONNECTORS

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

Example:



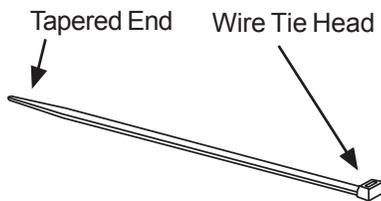
## LOCKING CONNECTORS

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

Example:

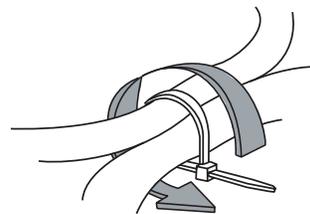


## WIRE TIE PROCEDURE

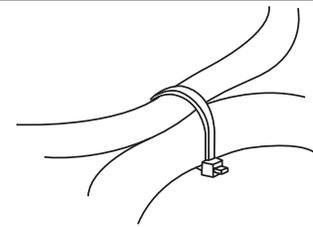


Wrap wire tie around the harness you wish to secure together.

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

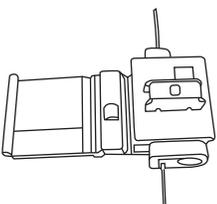


Pull the Tapered End through the Wire Tie Head until the wire tie is snug.

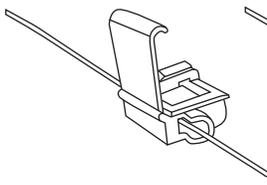


Trim wire tie end after tightening.

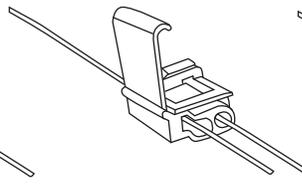
## IDC WIRE TAP PROCEDURE



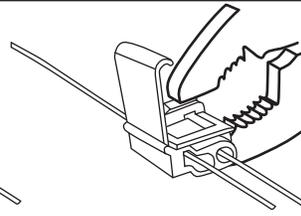
Place IDC on Vehicle Wire.



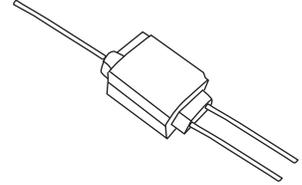
Close side of IDC.



Insert EC Mirror Harness wire into IDC.



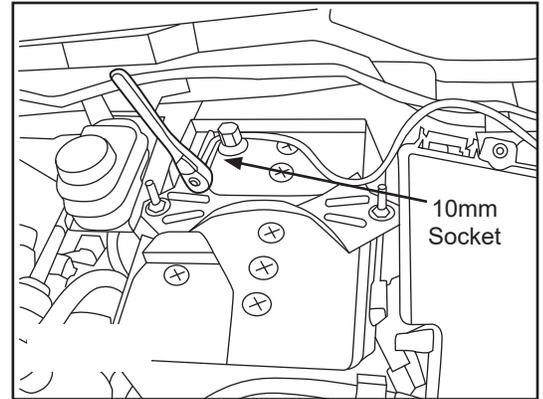
Crimp IDC metal tab over both wires until flush with top of IDC.



Close top of IDC.

## Prepare Vehicle

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.

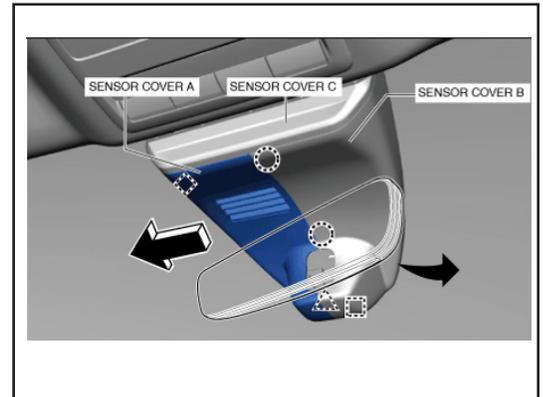


### 4. Remove Sensor Covers.

- a) Pull sensor cover A to the left and remove it.

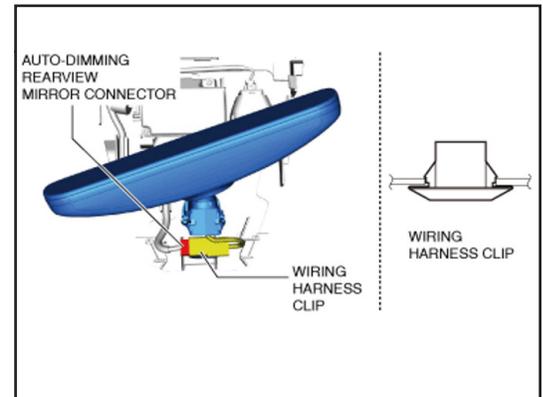
**Hint-** Pressing a nylon tool into the split between the two halves will make this process easier

- b) Slide sensor cover B to the right and remove it.



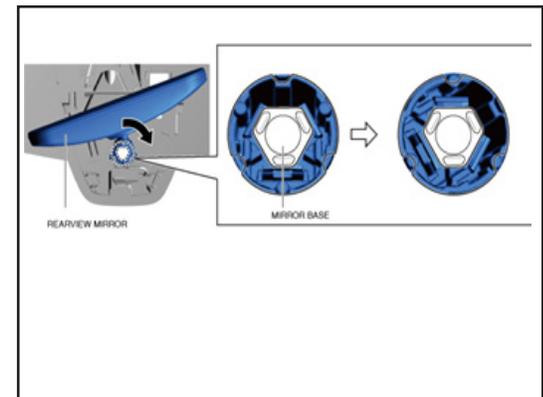
### 5. Remove Rear View Mirror.

- a) Disengage wire harness clip if vehicle is equipped with framed auto dimming mirror.



- b) Rotate base of rearview mirror 60 deg. and detach the rearview mirror from the mirror base

**Caution-** Hold the rearview mirror to prevent it from falling and causing damage.



#### CAUTION

**DO NOT** pull mirror away from the windshield while it is engaged on the windshield button. This could damage or break the windshield and button, requiring replacement.

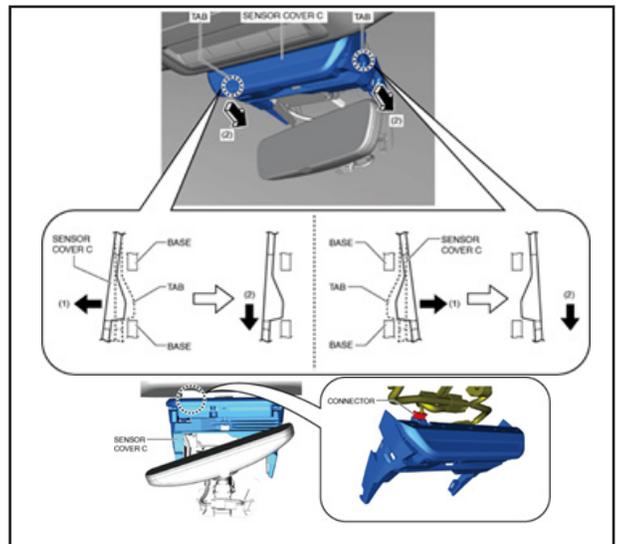
**Note: If replacing a framed Auto Dimming Mirror, re-use vehicle wire harness to plug into new mirror. Skip to step 14**

**6. Remove sensor cover C**

- a) Disengage side locking tabs with small flat blade screwdriver while lightly pushing the sensor cover C forward as shown.

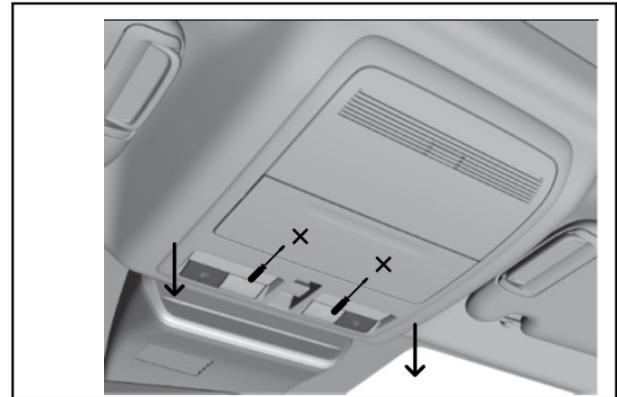
- b) Disconnect the wire connector.

**Hint-** You will crimp wires to this harness later.



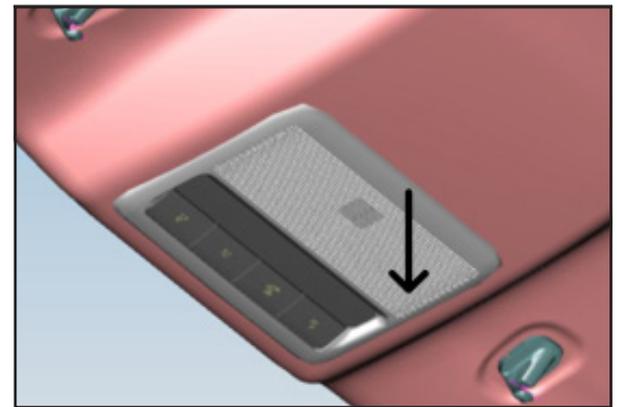
**7. Remove Overhead Console (w/Sunglass Holder)**

- a) Open sunglass holder door.
- b) Remove two (2) Philips screws.
- c) Grip sides of console towards the **front** of the assembly and pull down firmly.
- d) Disconnect three (3) wire harness connectors from console.



**8. Remove Overhead Console (w/out Sunglass Holder)**

- a) Pull assembly down from the rear edge of the console.
- b) Disconnect three (3) wire harness connectors from console.

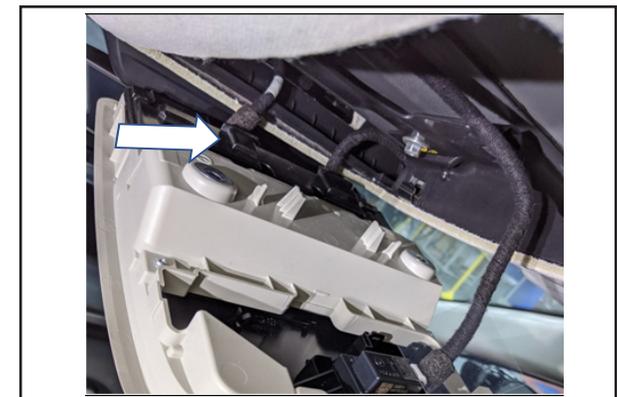


**Install Supplied Mirror Wire Harness**

**9. Attach B+ (blue wire) mirror wire to white 8 pin connector.**

- a) Cut back foam and cloth tape from white 8 pin connector harness to expose 15mm of wire.

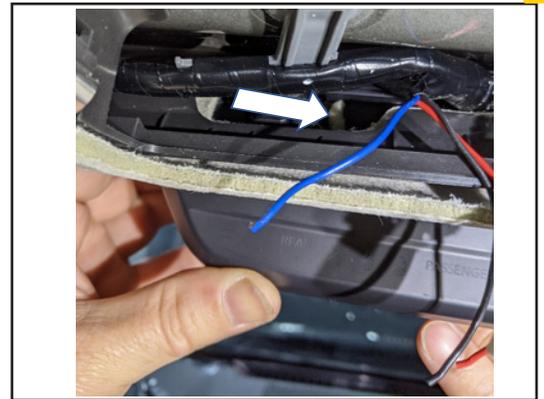
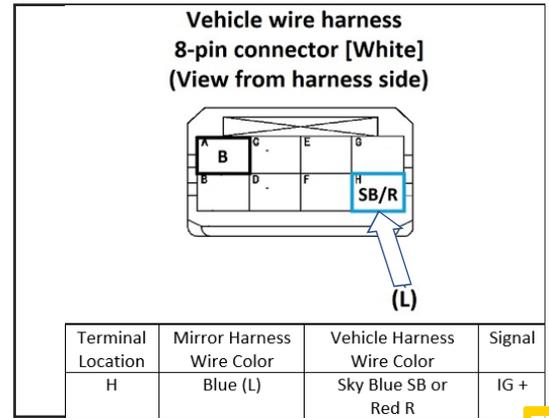
**Caution:** Take great care to not damage wires.



- b) Connect IDC wire tap connector to the Sky Blue or Red wire. IDC wire opening should face away from the connector.



- c) Feed provided wire harness over front edge of headliner into the upper console area.



- d) Crimp blue mirror wire into IDC connector and close IDC connector



**10. Attach IG+ (red wire) and Ground (black wire) to sensor cover C wire harness, black five (5) pin connector.**

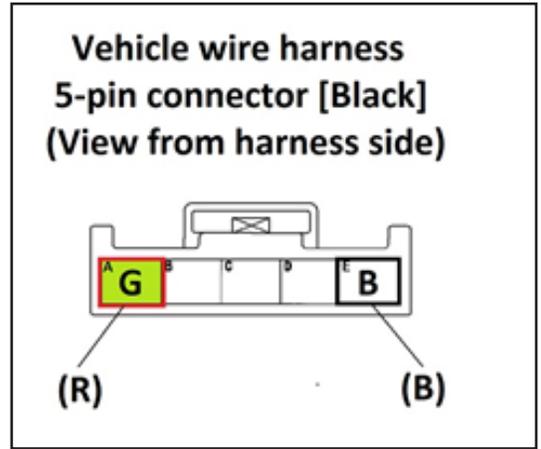
- a) Pull wire harness slack forward towards the windshield.
- b) Cut back tape behind sensor cover C wire harness

**Caution: Take great care to not damage wires.**



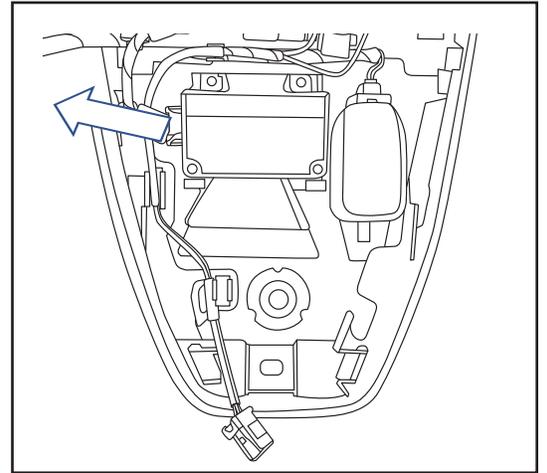
- c) Install IDC wire taps on the green and black wires (position A and E). 2nd wire openings should face away from connector.
- d) Crimp black mirror wire in IDC connected to the black wire in the harness (terminal E).
- e) Crimp the red mirror wire to the IDC connected to the green wire in the harness (terminal A).

Terminal Location	Mirror Harness Wire Color	Vehicle Harness Wire Color	Signal
A	Red (R)	Green G	B+
E	Black (B)	Black B	GND

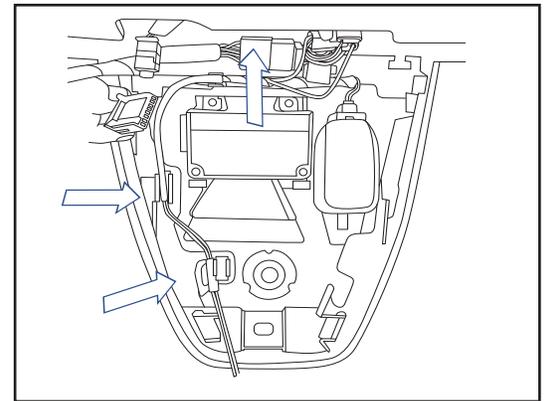


### Route Wire Harness to Mirror

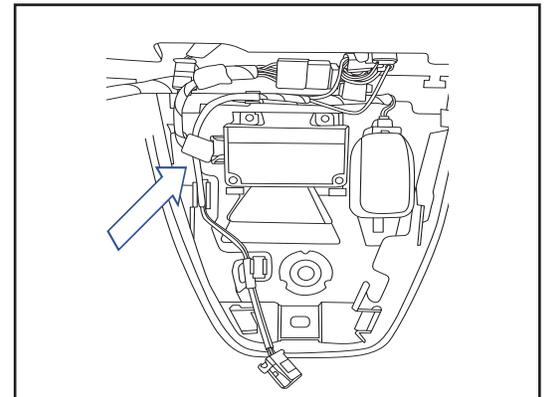
11. Disconnect forward sensing camera connector if equipped with one.



12. Route mirror harness through guide channels on windshield bracket.

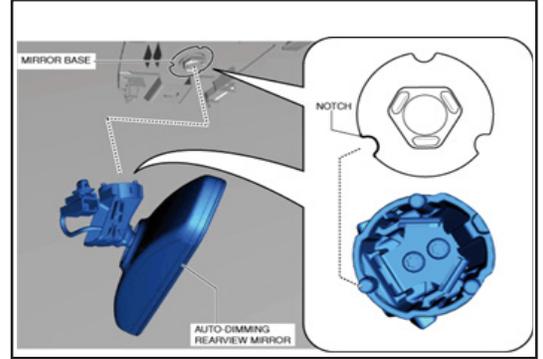


13. Reconnect forward sensing camera connector, if equipped with one.

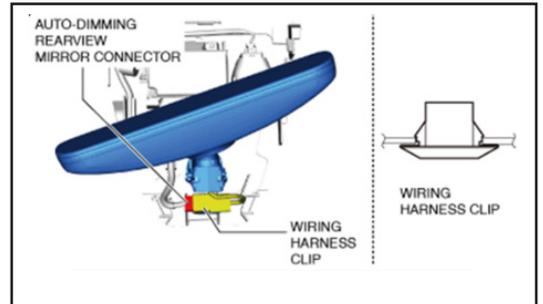


## Install EC Mirror

14. Align the auto dimming mirror round bosses with the mirror base notches.
15. Once seated flush against mounting base, turn 60 degrees to lock mirror in place.



16. Attach harness clip and connectors.
  - a) Attach the wire harness clip to the mirror mounting bracket.
  - b) Connect mirror harness connector.



17. Install sensor cover C.
  - a) Reconnect sensor cover C wire harness.
  - b) Fully seat cover against windshield before sliding rearward.

**Caution: Do not force, mounting tabs on windshield are fragile.**

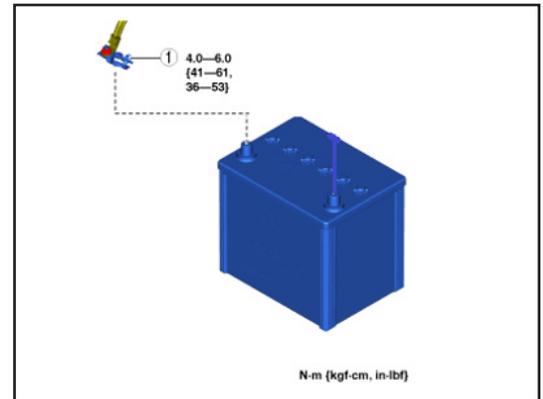
18. Install Sensor Covers A & B in reverse order of removal.
19. Install center roof console in reverse order of removal.

**Note: Ensure longer harness reaching to the rear of roof console is tucked above the plastic console support bracket.**



20. **Reconnect battery.**
  - a) Fully seat ground wire clamp onto battery terminal.
  - b) Torque fastener on battery terminal.

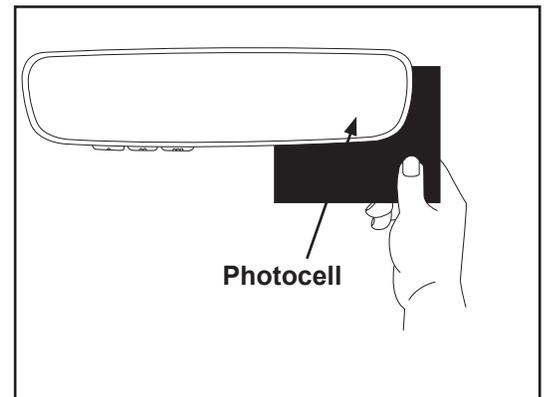
**Torque: 36-53 IN-LBF**



### Mirror Function Confirmation

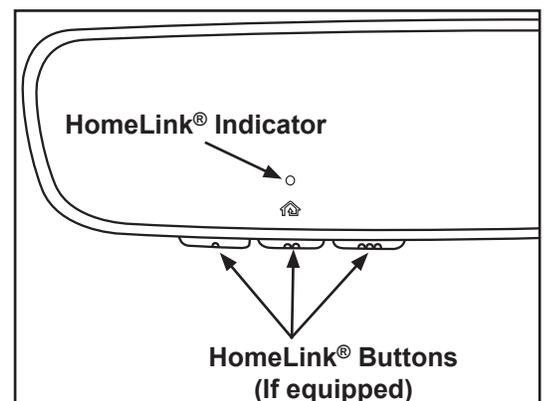
**Note: If vehicle has not received Pre-delivery Inspection yet, Room Fuse will need to be installed in main fuse block found in engine bay for function confirmation.**

21. With the vehicle in a well-lit area, cover the forward looking photocell on the back of the mirror and in a few seconds the mirror will begin to darken.
22. Remove the cover from the forward looking photocell and the mirror will begin to clear.
23. Turn the ignition key to the OFF position.
24. Push each HomeLink<sup>®</sup> button, one at a time, and verify that the HomeLink<sup>®</sup> indicator blinks orange.



**Testing is now complete.**

25. Place User Guide in vehicle glove-box.
26. Remove fingerprints, smudges, etc. from mirror and verify each component for proper fit and function.



**NOTE**

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

## Inspection

Inspection Parts	Inspection Items (O)			
	Clearance / Fit	Scratches / Dirt / Harness Interference	Installation / Tightening / Engagement	Operation Check
Negative battery terminal			36-53 in. lbf	
EC mirror mount spring			O	
EC harness connector			O	
EC mirror features:				
- auto-dimming				*1
- Homelink®				*2
User guide			*3	

**O : Applicable**

**\*1: Mirror dims (key must be in ON position).**

**\*2: Orange circle blinks through the glass when each button is pushed (test with key in the OFF position).**

**\*3: 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.)

If DCS OFF indicator is flashing, 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.

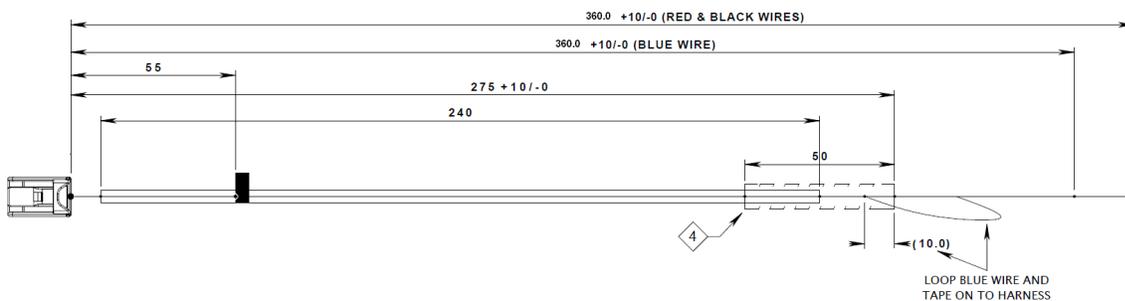
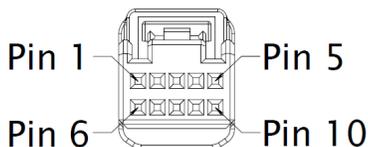
**CAUTION****If the battery is disconnected, the power windows may no longer fully open or fully close automatically.**

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 Troubleshooting:**

1. If equipped with HomeLink, B+ harness wire (pin 10 terminal side) is receiving +12V with ignition OFF and ON.
2. Switched harness wire (pin 5 terminal side) is receiving +12V with ignition ON and 0V with ignition OFF.
3. Ground wire (pin 6 terminal side) is securely attached.
4. Mirror harness is fully inserted into mirror.
5. Mirror 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.

**View A (Terminal Side)****View A**

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