

Rear Vision System – Mirror Display 2014-current Chevrolet Silverado and GMC Sierra (Kit part number 9002-1010)

Kit Contents:

- Chassis Harness
- Mirror Harness
- Inside Rearview Mirror (ISRVM)
- 1 bubble bag containing:
 - Tailgate Handle Camera
- 1 bag containing:
 - 30 Wire Ties
 - Z-Tec (in a white bottle)
- 1 bag containing:
 - These instructions

Tools Required:

- Socket Wrench or Socket Driver
- 10mm Socket
- T10, T15, and T20 Torx Bits
- Torque Wrench
- Plastic Trim Removal Tool
- Phillips and Flat Blade Screwdrivers
- Delphi Terminal Tool 12094429 or a small flat blade watch repair screwdriver
- Power Drill
- 25.4mm (1") Hole Saw
- Center Punch
- Measuring Tape
- Deburring Tool
- Electrical Tape
- Soldering Iron and Solder (optional) or T-taps

IMPORTANT: Verify kit contents are complete against list above before beginning installation.

Preparation

1. Ensure all lamps and accessories are OFF.
2. Ensure ignition switch is in the OFF position.
3. Loosen negative battery cable bolt. Remove negative battery cable from terminal and position away from battery
4. Wait one (1) minute prior to working on vehicle to assure SIR roof rail airbag system has been disabled for your safety

Install Camera into Tailgate

5. Lower Tailgate and (if equipped) remove plastic Tailgate Protector.
6. Use a T15 Torx bit to remove (8) screws retaining the Tailgate Access Panel and remove the panel. (Figure 1)

Figure 1



- Disengage (2) plastic Latch Rod Retainer Clips using your fingers. (Figure 2)

Figure 2



- Remove (2) Bolts securing the Tailgate Handle using a 10mm Socket. (Figure 3)

Figure 3



- Use your fingers to press down on the (2) retainer clips securing the Tailgate Handle to the Tailgate outer panel. Lift the Tailgate latch handle in order to aid in removing the Tailgate Handle.
- Remove lock cylinder from original Tailgate Handle. Remove Tailgate Lock Cylinder Retaining Clip and then Tailgate Lock Cylinder and reinstall into supplied Tailgate Handle Camera. (Figure 4)

Figure 4



INSTALLATION INSTRUCTIONS

- Route gray Tailgate Handle Camera connector down through Tailgate Handle opening then out through the hole at bottom of Tailgate.
- Pull gray Tailgate Handle Camera connector through the pass-through hole in the rear of the pickup box.
- Engage (2) clips of Tailgate Handle Camera Assembly into Tailgate until it clicks into place and reinstall (2) Bolts using a 10mm Socket.
- Reattach (2) plastic Latch Rod Retainer Clips using your fingers.
- Reattach (8) screws securing Tailgate Access Panel using a T15 Torx bit.
- (If equipped), reinstall plastic Tailgate Protector.
- Close Tailgate.

Drill Chassis Harness Pass Through

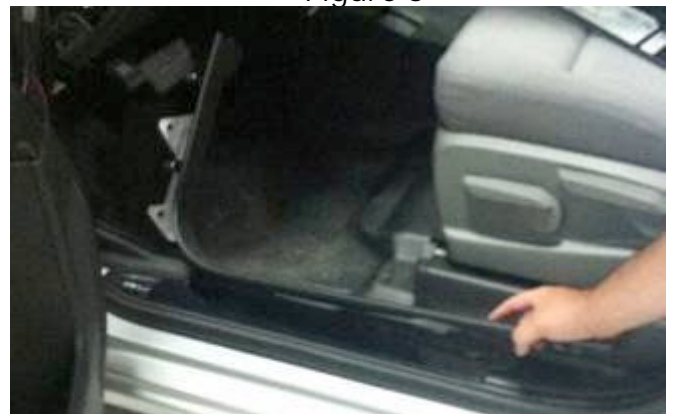
- Using a Plastic Trim Removal Tool, remove Left Instrument Panel Outer Trim Cover. (Figure 5)

Figure 5



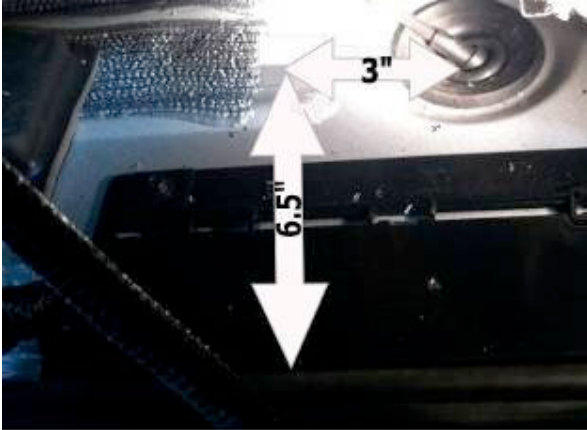
- Remove driver side door sill cover/kick panel cover. (Figure 6)

Figure 6



20. Pull back driver side floor carpet.
21. Use a Measuring Tape to measure the center of the Chassis Harness pass through opening approx. 6.5 inches to the right from the driver side door weather strip and 3 inches forward of the center of the existing grommet. (Figure 7)

Figure 7



22. After making sure that there is nothing on the back side of pass through opening (wiring, parking brake cable, etc), mark center with a Center Punch and use a 1/8" Drill Bit to make a pilot hole. (Figure 8)

Figure 8



23. Use a 1" Hole Saw to cut the Chassis Harness pass through. (Figure 9)

Figure 9



INSTALLATION INSTRUCTIONS

24. Insert gray 6-pin connector end of supplied Chassis Harness through cab floor using the Chassis Harness pass through. Carefully pull the grommet through the opening but do not seat the grommet yet.
25. Apply supplied Z-tec to the Chassis Harness pass through. (Figure 10)

Figure 10



26. Seat Chassis Harness grommet by pulling it snug with the floor. (Figure 11)

Figure 11



Install Supplied Mirror

27. Remove upper mirror wire cover from vehicle mirror, (Figure 12). Note: wire covers will not be reused.

Figure 12



28. Use a T20 Torx Bit to loosen the screw that secures the mirror and carefully slide mirror upward to remove. (Figure 13)

Figure 13



29. Remove the 10-pin mirror connector from back of vehicle mirror.
30. Open sunglass storage compartment of vehicle overhead console to gain access to the rear edge of the center panel and gently release the retaining clips of the center panel. (Figure 14)

Figure 14



INSTALLATION INSTRUCTIONS

31. Use a T10 Torx driver to remove (2) screws securing the overhead console. (Figure 15)

Figure 15



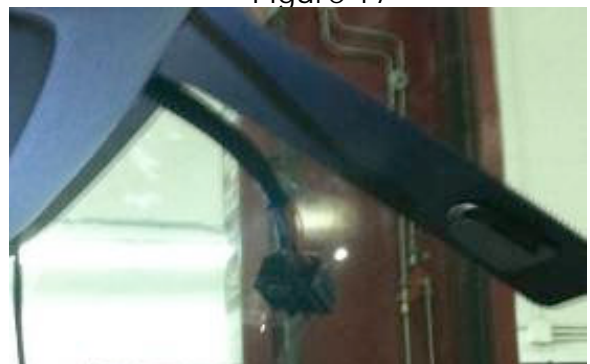
32. Attach 10-pin mirror connector of supplied Mirror Harness to vehicle 10-pin connector. (Figure 16)

Figure 16



33. Using your fingers, pull down on the windshield header edge of the headliner and route the 10-pin connector portion of the mirror harness back toward the center of the overhead console.
34. Route 16-pin connector of supplied Mirror Harness through the center of the overhead console, out the front edge of the headliner. (Figure 17)

Figure 17



35. Remove driver side A-pillar cover using a Plastic Trim Removal Tool. Work slowly, starting at the headliner and moving down to the dash. (Figure 18)

Figure 18



36. Taking care not to interfere with existing airbag harness or other wiring, route the supplied mirror harness down the A-pillar and secure with supplied Wire Ties. (Figure 19)

Figure 19



37. Route Mirror Harness through the end of dash cover opening and toward the supplied Chassis Harness. (Figure 20)

Figure 20



INSTALLATION INSTRUCTIONS

57. Remove green lock tab from the Chassis Harness mirror connector by inserting the tip of Delphi Terminal Tool 12094429 or a small flat blade screwdriver between the lock tab and connector and prying the tab out. (Figure 21)

Figure 21



38. Connect Chassis Harness to Mirror Harness and reinstall the green lock tab. Secure both harnesses to existing vehicle wiring using supplied Wire Ties. (Figure 22)

Figure 22



39. Insert 16-pin mirror connector of supplied Mirror Harness into supplied Mirror until it clicks into place. (Figure 23)

Figure 23



40. Slide supplied Mirror onto mounting tab and use a T20 Torx bit to tighten the mirror screw (3). CAUTION: Torque mirror screw (3) to 1.8 N*m (16 lb in).

NOTE: Only Use Steps 41 - 47 if power is not provided from Factory 10 Pin mirror connector!

Wire Supplied Mirror Harness

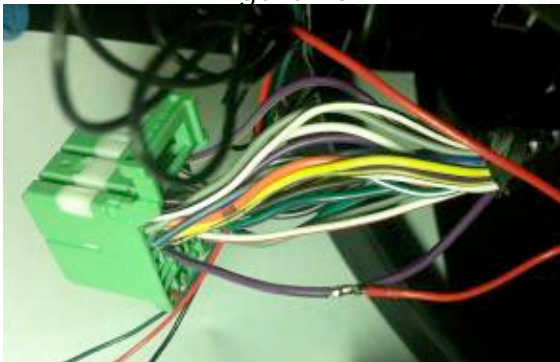
41. Use a T15 Torx bit to remove the (2) bolts securing the driver side knee bolster.
42. Locate the Body Control Module (BCM) below the dash just to the left of the steering wheel. Note: the BCM connectors face toward the firewall. (Figure 24)

Figure 24

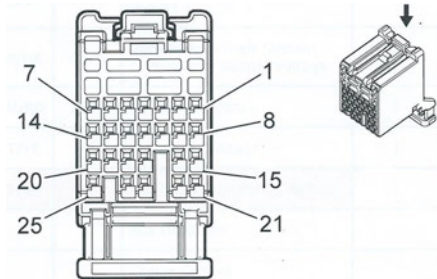


43. Remove green BCM X3 Connector from the BCM. (Figure 11). Splice Red Ignition wire of the Mirror Harness to the Violet/Black wire in Pin 6 of the connector (Recommended: Solder and cover with Heat Shrink Tubing. (Figure 25)

Figure 25



Green BCM Connector X3 Pinout



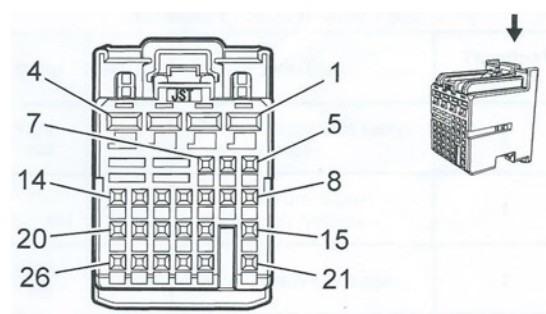
INSTALLATION INSTRUCTIONS

44. Reinsert green BCM X1 connector in the BCM.
45. Remove the brown BCM X5 Connector from the BCM. (Figure 11) Splice Green Reverse wire of the Mirror Harness to the Dark Blue/Brown wire in Pin 26 of the connector (Recommended: Solder and cover with Heat Shrink Tubing. (Figure 26)

Figure 26

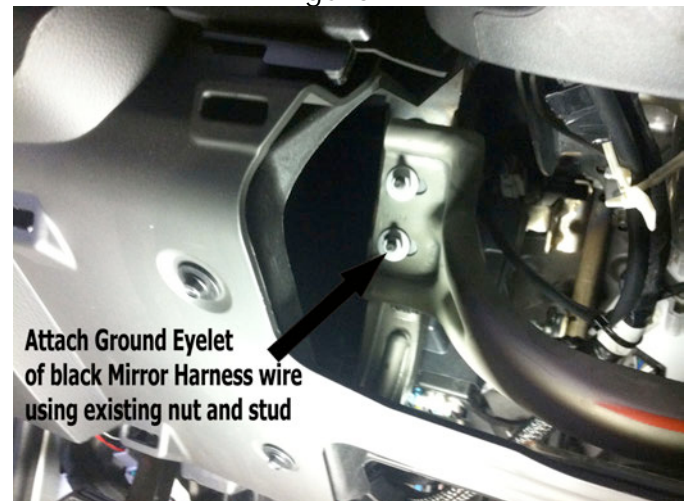


Brown BCM Connector X5 Pinout



46. Reinsert brown BCM X5 connector in the BCM.
47. Attach Ground Eyelet of the black Ground wire on the supplied Mirror Harness to chassis ground using the stud located behind the knee bolster indicated in Figure 27.

Figure 27



INSTALLATION INSTRUCTIONS

Route & Secure Chassis Harness

48. Route supplied Chassis Harness along existing chassis harness toward rear of vehicle, staying clear of body mounts. (Figure 28)

Figure 28

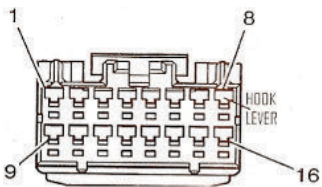


49. Connect supplied Chassis Harness to Tailgate Handle Camera harness.
50. Secure supplied Chassis Harness along the existing Chassis Harness using Wire Ties every 200mm (approximately 8"). Note: Depending on vehicle wheelbase there may be excess length in the Chassis Harness. Loop, and secure with Wire Ties, any excess harness length along the Body Frame away from Mechanical areas.
51. Reconnect negative battery terminal. Tighten negative cable nut to 5 N·m (44 lb in).
52. Test system functionality: start vehicle, apply brake, and shift into Reverse. The camera image should appear in the Mirror display.
53. Re-install all previously removed trim.

Mirror Harness Connector Pinouts

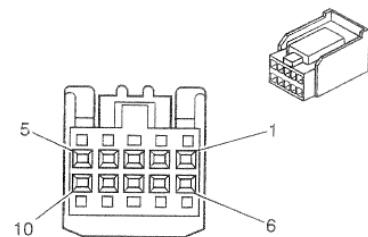
WIRE COLOR	FUNCTION	16-PIN CONNECTOR PIN #	10-PIN CONNECTOR PIN #
N/A	N/A	1 - 4	-
Gray	Auto Dimming (+)	5	9
White	Video (+)	6	-
Brown	Video (-)	7	-
Black	Ground	8	5
Dark Green	Reverse Signal 12V+	9	1
N/A	N/A	10	10
Purple	OnStar Keypad Output	11	3
Dark Blue	OnStar Keypad Power	12	4
Pink	Ignition Controlled 12V+	13	2 (Red & Pink)
Yellow	OnStar LED Green Signal	14	6
Orange	OnStar LED Red Signal	15	7
Red	Auto Dimming (-)	16	8

16-pin Mirror Connector

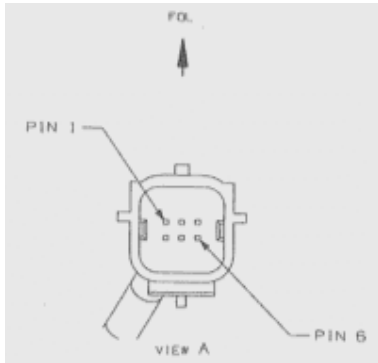


Note: 16-pin cavities are numbered on the back side of the mirror connector. Additionally, Brandmotion identifies Cavity 1 with a white mark.

10-pin Mirror Harness Connector



Camera, Chassis, and Mirror Harness Pinouts (Reference only)



PIN #	FUNCTION	CAMERA HARNESS COLOR	CHASSIS HARNESS COLOR	MIRROR HARNESS COLOR
1-A	Video (+)	White	White	White
2-B	Shield	Blue	Blue	White
3-C	Reverse	Green	Green	Green
4-D	Video (-)	Brown	Brown	Brown
5-E	Ground	Black	Black	Black
6-F	Ignition (+)	Red	Red	Pink