

## **Rear Vision System – Mirror Display** 2014-current Chevrolet Silverado Work Truck and GMC Sierra WT (Kit part number 9002-1015)

**COMPATIBILTY NOTE:** This kit can only be installed on non-OnStar vehicles equipped with Manual Dimming Mirrors. Please contact Brandmotion Tech Support for assistance.

#### **Kit Contents:**

Manual Dimming Mirror with 3.5" Video Display Mirror Harness Chassis Harness 1 bubble bag containing: Tailgate Handle Camera 1 bag containing: These instructions

### **Tools & Supplies Required:**

Socket Wrench or Socket Driver 10mm Socket T10 & 15 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 Heat Shrink Tubing (recommended) or Electrical Tape Soldering Iron and Solder (optional) or T-taps Corrosion Inhibitor (recommended) Wire Ties (recommended)

#### Note: We strive to provide accurate and up-to-date installation instructions. For the latest full color instructions, as well as an installation video, please visit www.brandmotion.com

**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



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

Figure 2



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



- 9. 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.
- 10. 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)



## **INSTALLATION INSTRUCTIONS**

- 11. Route gray Tailgate Handle Camera connector down through Tailgate Handle opening then out through the hole at bottom of Tailgate.
- 12. 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.
- 14. Reattach (2) plastic Latch Rod Retainer Clips using your fingers.
- 15. Reattach (8) screws securing Tailgate Access Panel using a T15 Torx bit.
- 16. (If equipped), reinstall plastic Tailgate Protector.
- 17. Close Tailgate.

### **Drill Chassis Harness Pass Through**

18. 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)

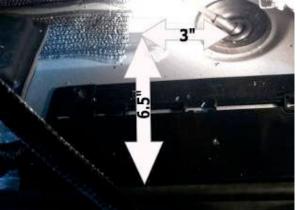
Figure 6



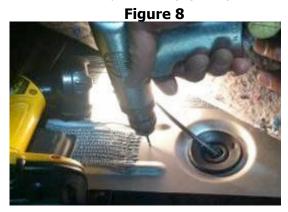


- 20. Pull back driver side floor carpet.
- 21. Use a Measuring Tape to measure the center of the Chassis Harness pass through opening approx. 6.5 inches to the right from the driver side door weather strip and 3 inches forward of the center of the existing grommet. (Figure 7)

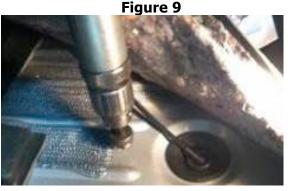




22. After making sure that there is nothing on the back side of pass through opening (wiring, parking brake cable, etc), mark center with a Center Punch and use a 1/8" Drill Bit to make a pilot hole. (Figure 8)



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



# INSTALLATION INSTRUCTIONS

- 24. Insert RCA 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. **Recommended:** Apply a corrosion inhibitor to the Chassis Harness pass through hole. (Figure 10) **Figure 10**



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

Figure 11



### **Install Supplied Mirror**

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



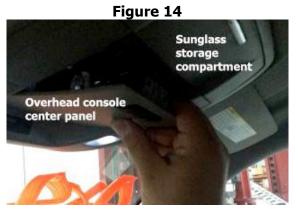


28. Use a T10 Torx Bit to loosen the screw that secures the mirror and carefully slide mirror upward to remove. (Figure 13)

Figure 13



29. 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)



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



Figure 15

## INSTALLATION INSTRUCTIONS

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

Figure 16



- 32. Route RCA connector of supplied Mirror Harness through the center of the overhead console, out the front edge of the headliner.
- 33. 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 17)





- 34. Taking care not the interfere with existing airbag harness or other wiring, route supplied Mirror Harness down the A-pillar and secure with Wire Ties (recommended).
- 35. Route supplied Mirror Harness through the end of dash cover opening and toward the supplied Chassis Harness. (Figure 18)





- Plug Chassis Harness RCA into Mirror Harness RCA. Secure both harnesses to existing vehicle wiring using Wire Ties (recommended).
- 37. Slide supplied Mirror onto mounting tab and use a T10 Torx bit to tighten the mirror screw (3).
  CAUTION: Torque mirror screw (3) to 1.8 N<sup>.</sup>m (16 lb in).

#### Wire Mirror & Chassis Harnesses

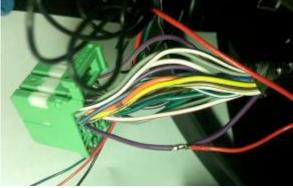
- 38. Use a T15 Torx bit to remove the (2) bolts securing the driver side knee bolster.
- 39. Locate the Body Control Module (BCM) below the dash just to the left of the steering wheel. Note: the BCM connectors face toward the firewall. (Figure 19)

Figure 19



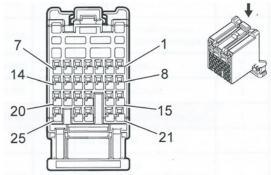
 Remove green BCM X3 Connector from the BCM. (Figure 11). Splice Red Ignition wires of the Mirror & Chassis Harnesses to the Violet/Black wire in Pin 6 of the connector (Recommended: Solder and cover with Heat Shrink Tubing. (Figure 20)

Figure 20



## INSTALLATION INSTRUCTIONS

#### **Green BCM Connector X3 Pinout**

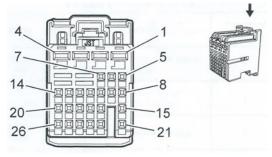


- 41. Reinsert green BCM X1 connector in the BCM.
- 42. Remove the **brown** BCM X5 Connector from the BCM. (Figure 11) Splice **Green** Reverse wires of the Mirror & Chassis Harnesses to the Dark Blue/Brown wire in Pin 26 of the connector (**Recommended**: Solder and cover with Heat Shrink Tubing. (Figure 21)

Figure 21

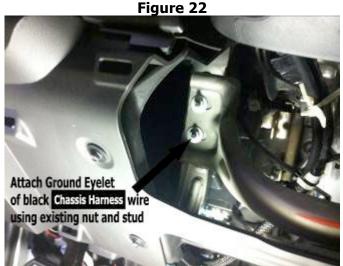


#### **Brown BCM Connector X5 Pinout**



- 43. Reinsert brown BCM X5 connector in the BCM.
- 44. Strip **black** Ground wire of the supplied Mirror Harness and attach to the **Ground Eyelet** of the **black** Ground wire on the supplied Chassis Harness. Secure Ground Eyelet to chassis ground using the stud located behind the knee bolster indicated in Figure 22.





#### Secure Chassis Harness & Connect Camera

45. Route supplied Chassis Harness along existing chassis harness toward rear of vehicle, staying clear of body mounts. (Figure 23)

Figure 23



## INSTALLATION INSTRUCTIONS

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

### **MIRROR OPERATION**

- 1. To dim mirror, twist tab on bottom of mirror forward. To undim mirror, twist tab backward
- 2. Temporary Monitor Manual Shut Down:

If while in reverse you require to turn OFF the camera monitor, simply press and release the POWER button on the back side of the mirror. (Note: Once reverse is disengaged the mirror will go back to normal operation and will turn ON next time reverse is engaged).