## Rear Vision System – Aftermarket Display 2007-Current Chevrolet Silverado, Silverado HD; GMC Sierra, Sierra HD (Kit part number 9002-9560)

### **Kit Contents:**

Camera/Module/Bezel Assembly
Chassis Harness with RCA
1 bag containing:
 30 Wire Ties
1 bag containing:
 Anti-Corrosion Coating (in a white bottle)
 Lock Plug (optional)
1 bag containing:
 Template (along with directions for these instructions)

### **Tools Required:**

Socket Wrench
13mm Socket
Torx Bits, T15 and T20
Torque Wrench
Screwdrivers
Drill Motor
25.4mm (1") Hole Saw
29mm (1-1/8") Hole Saw
Deburring Tool
Center Punch
Vehicle Hoist



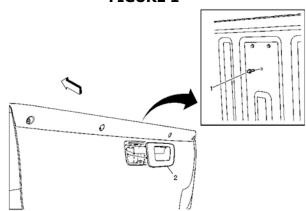
### **Preparation**

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

### **Install Camera into Endgate**

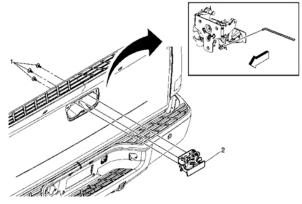
5. Lower Endgate and remove center bezel mounting bolt (1), using 13mm socket. Figure 1.

### FIGURE 1



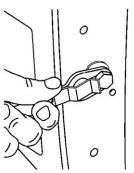
- Release, by hand, the three retainer clips securing the bezel (2) to the Endgate outer panel. Lift the Endgate latch handle in order to aid in the removal of the latch handle bezel. Figure 1.
- 7. If the Truck is not equipped with Endgate Lock (&A60), remove the two upper Endgate Latch Handle Bolts (1) from the Endgate Latch Handle (2), using 13mm socket. Figure 2. Release Rods before removing (inset). If equipped, skip this step.

### FIGURE 2

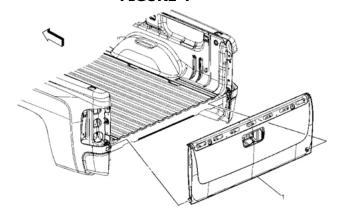


- 8. Prepare a work surface for the Endgate, as it will be removed.
- 9. Disconnect the two Endgate support cables. Figure 3.

### FIGURE 3

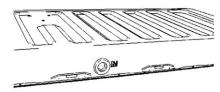


10. With the aid of an assistant, remove the Endgate and locate to clean work surface. Figure 4.



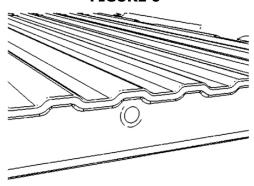
- 11. Locate the supplied Template Sheet for the Endgate and Pickup Box Sill.
  - Note: For Model Year 2009 and forward, some vehicles may already have a flanged hole, in this location. If this is the case, remove the flange from the front side of the sill and skip to step 16.
- 12. Cut out Endgate Template and attach to Endgate using tape. Using the Center Punch, mark the center of hole.
- 13. Cut out Sill Plate Template and attach to Pickup Box Sill using tape. Using the Center Punch, mark the center of hole.
- 14. Using a drill motor and a 29mm (1-1/8") Hole Saw, cut out the harness pass-through in the Endgate. Figure 5.

### FIGURE 5



15. Using a drill motor and a 29mm (1-1/8") Hole Saw, cut out the harness pass-through in the Pickup Box Sill. Figure 6.

#### FIGURE 6

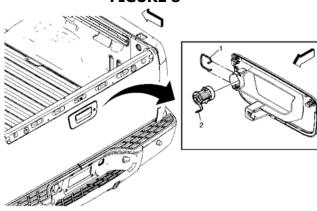


- 16. Clean rough edges using a deburring tool.
- 17. Lubricate the two cut outs with the provided Anti-Corrosion Coating.
- 18. Locate the provided Rear Vision Camera Bezel Assembly. Figure 7.

#### FIGURE 7

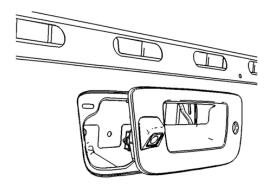


19. If the Truck is equipped with a factory Endgate Lock, remove the lock cylinder from the original Endgate Bezel. Remove the Endgate Lock Cylinder Retaining Clip (1) and then the Endgate Lock Cylinder (2). Figure 8.



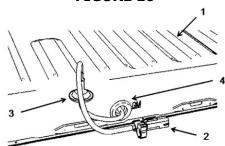
- If equipped, insert the Endgate Lock
   Cylinder (2) into the new Endgate Bezel and
   re-attach the Endgate Lock Cylinder
   Retaining Clip (1). Figure 8.
  - a. If the Truck is not equipped with factory Endgate Lock, install Lock Plug.
  - If locking features are desired an Endgate Latch Handle (part number 25775280) and an Endgate Lock Cylinder (part numer 25775278) are available through GM dealer.
- 21. Install the new Endgate Bezel Assembly, by first routing the Camera Assembly harness pigtail through the Endgate Bezel opening down through the Endgate to the 29mm hole at the bottom of the Endgate. Figure 9.

### FIGURE 9



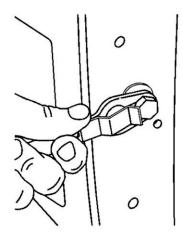
22. Pull connector (2), first grommet (3), and second grommet (4) through new Endgate (1) pass-through. Figure 10.

FIGURE 10



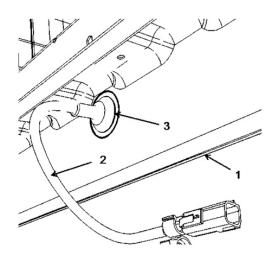
- 23. Snap the Endgate Bezel Assembly into the Endgate.
- 24. Seat the second grommet (4) securely around opening. Figure 10.
- 25. Install remaining Endgate Latch Handle Bolt in Endgate and tighten all three 13mm bolts to 25 N·m (18 lb ft).
- 26. If present, remove the Rear License Plate.
- 27. With the help of an Assistant, re-install the Endgate onto the Pickup Box, carefully routing the Camera harness through the opening on the Pickup Box Sill.
- 28. Re-attach Endgate Support Cables and close Endgate. Figure 11.

FIGURE 11



29. Through the License Plate Opening pull the Camera Assembly Harness (2) until the first grommet (3) is properly seated in the Pickup Box Sill (1). Figure 12.

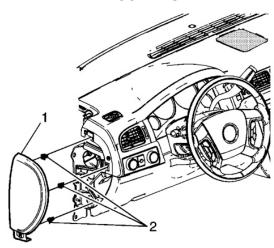
FIGURE 12



# <u>Cut Accessory Pass-Through in Front-of-Dash</u>

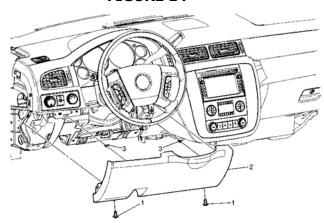
30. Remove Left Instrument Panel Outer Trim Cover (1). Figure 13.

### FIGURE 13



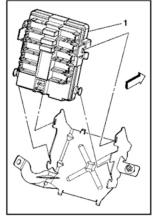
31. Remove the Parking Brake Release Handle Bolt and then the Handle. Remove the two Knee Bolster Assembly Screws (1) and the Knee Bolster Assembly (2). Figure 14.

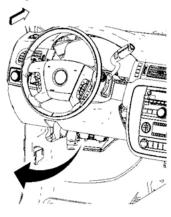
FIGURE 14



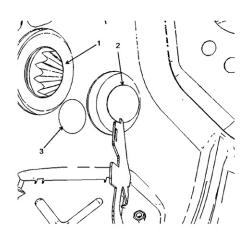
- 32. Disconnect the electrical connections, if applicable.
- 33. Remove the M-BEC cover.
- 34. Disengage the M-BEC (1) from support bracket. Figure 15.

### **FIGURE 15**





- 35. Relocate M-BEC up into the IP to gain access to Front-of-Dash Matte Opening behind M-BEC.
- 36. Locate cut-out in dash matte. Locate the dimple in the sheet metal and then use a center punch to help start a drill bit as close as possible to dimple. Using a drill motor and a 25.4mm (1") hole saw, drill out the chassis harness pass-through (2). Figure 16.



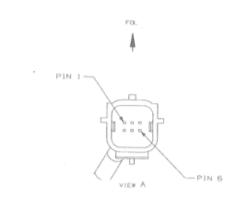
- 37. If this location is occupied by Trailer Brakes (&JL1) or another Accessory, drill a new Chassis Harness pass-through (3) between the IP Harness (1) and Trailer Brake (2) pass-through grommets. Figure 16.
- 38. Clean rough edges using a deburring tool. Figure 16.
- 39. Apply Anti-Corrosion Coating to the opening. Figure 16.

- 40. If needed, install aftermarket display/ Navigation display as per instructions.
- 41. Connect the male RCA from the chassis harness to the camera IN on the aftermarket display/ Navigation display.
- 42. Connect the remainder of the leads from the chassis harness as per Chart A on vehicle wiring.

### Chart A

Color	Polarity	Purpose	Connect to	
			Reverse	
Green	+	Reverse	lamp trigger	
			Ignition	
			Controlled	
Pink	+	Ignition	power	
Black	-	Ground	Chassis	
White	-	Shield	Chassis	
RCA	AC	Video Out	Monitor	

## CHART B (REFERENCE ONLY) Camera and Chassis Harness Pinout



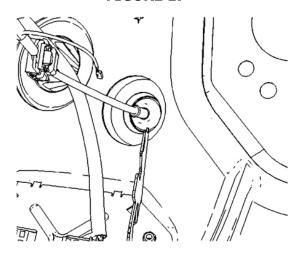
PIN NO	NAME	CAMERA HARNES COLOR	CHASSIS HARNESS COLOR
1	Video Signal	Yellow	Gray/Dark Blue
2	Shield	White	White
3	Backup Lamp	Blue	Green
4	Video Ground	Brown	Gray/Orange
5	Power Ground	Black	Black
6	Ignition	Red	Pink

43. Re-install the Knee Bolster Assembly.
Tighten Screws to 2 N·m (18 lb in). Reinstall Parking Brake Release Handle and
Bolt, tighten to 9 N·m (80 lb in). Figure 14.

44. Re-install Instrument Panel Outer Trim Cover. See Figure 13.

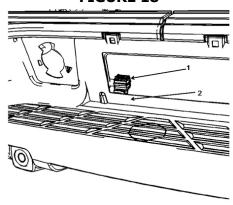
### **Chassis Harness Install**

- 45. Locate the provided Rear Vision Camera Chassis Harness with RCA.
- 46. Route the grommet-end of the Chassis Harness through the Driver's Side Wheel Housing and then through the opening in the Front-of-Dash. Figure 17.



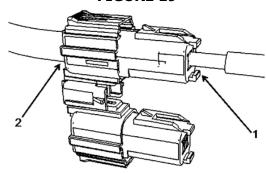
- 47. From the inside of the cab pull the Chassis Harness through until the grommet is properly seated.
- 48. Connect the Chassis Harness RCA to the Camera Input of the Aftermarket Radio and secure harnesses with wire ties.
- 49. Install the MBEC into the Support Bracket. Figure 15.
- 50. Install the MBEC cover onto the MBEC.
- 51. Raise the Truck up on a hoist to route the Chassis Harness.
- 52. Route the Harness, working towards the rear of the vehicle, along the existing Chassis Harness, routing away from Body Mounts.
- 53. Clip the Chassis Harness (1) onto the lower License Plate frame (2), orientating the plug below the primary connector and being 25mm from the corner. Figure 18.

### FIGURE 18



54. Connect the Chassis Harness Connecto the Camera Assembly Harness C (1). Figure 19.

FIGURE 19



- 55. Secure the Rear Vision Camera Harness along the existing Chassis Harness using wire ties every 200mm. Note: Depending on the vehicle wheelbase there may be excess length in the Rear Vision Camera Chassis Harness. Loop, and secure with wire ties, any excess harness length along the Body Frame away from Mechanical areas.
- 56. Lower the truck.
- 57. Re-Install Rear License Plate, if necessary.
- 58. Connect the negative battery terminal. Tighten the negative cable nut to 5 N·m (44 lb in).
- 59. Test System Functionality.