

# **INSTALLATION INSTRUCTIONS**

# 2013-Current RAM Truck Rear Vision Parkline Camera with RCA and Factory Display Harnesses (Kit part number FLTW-7633)

## **Kit Contents:**

Chassis Harness 1 bubble bag containing: Tailgate Handle Camera 1 bag containing: 8.4" Factory Touch Screen Jumper Harness 2 pieces 1/2" glued heat shrink tube These instructions

# **Tools & Supplies Required:**

Socket Wrench or Socket Driver Plastic Trim Removal Tool Phillips and Flat Blade Screwdrivers Power Drill Center Punch Heat Shrink Tubing (recommended) or Electrical Tape Soldering Iron and Solder (optional) or T-taps Heat Gun Corrosion Inhibitor (recommended) Wire Ties (recommended)

## Note: We strive to provide accurate and up-to-date installation instructions. For the latest full color instructions, 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.
- Loosen negative battery cable bolt. Remove negative battery cable from terminal and position away from battery
- 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. Remove the Tailgate Access Panel. (Figure 1)

Figure 1



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

#### Figure 2



8. Remove Tailgate Handle using a Socket. (Figure 3)



9. 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



- 10. Route Tailgate Handle Camera connector down through Tailgate Handle opening then out through the hole at bottom of Tailgate.
- 11. Pull Tailgate Handle Camera connector through the pass-through hole in the rear of the pickup box.
- 12. Reinstall Tailgate Handle.

- 13. Reattach (2) plastic Latch Rod Retainer Clips using your fingers.
- 14. Reattach Tailgate Access Panel.
- 15. (If equipped), reinstall plastic Tailgate Protector.
- 16. Close Tailgate.

## **Chassis Harness Pass Through**

17. 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



- 19. Pull back driver side floor carpet.
- 20. Look for existing grommet or hole to run chassis harness through. If no existing hole is available make 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 1/2" Drill Bit to make a pilot hole. (Figure 7)

#### Figure 7



**21.Recommended:** Apply a corrosion inhibitor to the Chassis Harness pass through hole. (Figure 8)

#### Figure 8



22. Insert RCA connector end of supplied Chassis Harness through cab floor into cab. (Recommended: Silicon or Grommet to seal off hole.)

# **Connect & Secure Chassis Harness**

- 23. Plug the RCA connector end of the supplied Chassis Harness into Video In your display.
- 24. Route supplied Chassis Harness along existing chassis harness toward rear of vehicle, staying clear of body mounts. (Figure 12)

Figure 12



25. Connect supplied Chassis Harness to Tailgate Handle Camera harness. Use supplied glued heat shrink tube over RCA and Power connector to create seal between chassis and camera harness. (Figure 13)

# Figure 13



#### **Connect Chassis Harness to Vehicle Wiring**

26. Connect the supplied Chassis Harness Red and Black leads as directed in the chart appropriate for your vehicle below.

| Equipped with Factory 8.4" Touch Scree |          |          |  |
|--|----------|----------|--|
| Color                                  | Polarity | Function | Location   |
| Red                                    | (+)      | Ignition | Splice Red leads<br>to pink/yellow<br>wire in Cavity 19<br>of black under<br>dash Connector<br>I310 M adjacent<br>to parking brake<br>grommet<br>(Figures 2) |
| Black                                  | (-)      | Ground   | Chassis ground   |

## Chart A: Vehicles Equipped with Factory 8.4" Touch Screen

#### Figure 1

Use a digital multimeter to test for Ignition (12v +) signal at pink/yellow wire in Cavity 19.



Figure 2 Connector I 310 M (black)



- 27. If using this kit with an aftermarket mirror / display / NAV display, connect Chassis Harness male RCA to "Camera IN" on the aftermarket mirror / display/ NAV display. NOTE: A RCA extension may be required. Proceed to Step 43.
- 28. Use of this camera with the factory Ram 8.4" touch screen requires activation by a Chrysler/Dodge dealer. See below for Dealer Programming Instructions. If possible, have the dealer "enable" the camera option prior to installation.
- 29. Use a Plastic Trim Tool to remove shifter bezel and remove two screws from under the rubber mat using a Phillips screwdriver.
- 30. Use a Plastic Trim Tool to remove cup holder bezel.
- 31. Remove rubber mat on top of 8.4" screen to expose two screws and remove them using a T20 Torx bit.
- 32. Remove rubber mat in square cubby hole to expose one screw and remove it using a T20 Torx bit.
- 33. Use a Plastic Trim tool to remove radio bezel to expose the 4 screws securing the radio head unit and remove them using a 7mm socket.
- 34. Unplug all radio connectors from the radio head unit and set radio aside.

35. Connect supplied 8.4" Touch Screen Jumper Harness to RCA end of supplied Chassis Harness.



 Locate pin position 31 on the black 52-pin radio connector and insert Red terminal of 8.4" Touch Screen Jumper Harness until it clicks securely.



- 37. Insert Black terminal of 8.4" Touch Screen Jumper Harness into pin position 32 on the black 52-pin radio connector until it clicks securely.
- 38. Note: If the terminals, on the jumper harness, do not seat properly cut and splice loose wires provided in the small zip lock bag.
- 39. Reconnect all radio connectors and reinstall radio head unit and all trim removed in Steps 50-54.
- 40. Route Chassis Harness behind rear cab mount and out to the inside of the vehicle. RECOMMENDED: Use a Wire Tie to secure Chassis Harness between the cab and bed mount.



- 41. Continue to route supplied Chassis Harness next to the existing wiring harness along the inside edge of the frame rail. RECOMMENDED: Secure supplied Chassis Harness to the existing wiring harness with Wire Ties.
- 42. Once the Chassis Harness has been routed to the rear of the truck bed, coil and secure any excess length on the harness and tuck above the spare tire. Secure with Wire Ties (recommended) or Electrical Tape.
- 43. Plug Camera Harness connector into the Chassis Harness connector at the rear of the vehicle.
- 44. Start vehicle and shift into Reverse in order to check that all connections were made properly. If all of the connections are correct you will see the camera image displayed on your aftermarket mirror / display/ NAV display.
- 45. Reassemble all previously removed parts.

If you connected the camera to a factory 8.4" touch screen, and the vehicle has not been reprogrammed to "enable" the camera, have a Chrysler/Dodge dealer program the vehicle as follows:

#### Dealer Programming Instructions PARK VIEW REAR BACK-UP CAMERA VEHICLE CONFIGURATION

Vehicle VIN must be updated with the sales code of the added accessory in order to enable system functionality. Using the DealerCONNECT website and the scan tool, complete the procedure below:

- A. Log on to https://dealerconnect.chrysler.com.
- B. In the "Vehicle Option" screen under "Global Claims System" category in the "Service" tab, enter the VIN and add the following sales code: XAC (PARK VIEW REAR BACK-UP CAMERA) as a "Dealer Installed Option."
- C. Confirm that the new sales code has been successfully added to the VIN. With the scan tool connected to both the internet (via Ethernet port or wireless connection) and the vehicle, follow the steps below:
- D. Using the scan tool select the VEHICLE PREPARATION and then select RESTORE VEHICLE CONFIGURATION.
- E. Follow the step by step instructions on the scan tool to complete the Park View Rear Back-Up Camera vehicle configuration.
- 48. Start vehicle and shift into Reverse in order to check that all connections were made properly. If all of the connections are correct you will see the camera image displayed on your factory 8.4" touch screen.
- 49. Reassemble all previously removed parts.

# **CAMERA PARKLINE OPTION**

# The camera offers Park lines or non-Park lines options.

**Park line options:** Default setting **displays Park lines**. To remove the grid line display, pull back plastic convolute from end of camera harness and connect the two green wires.

**Display options:** Do not use white wires.



Green and White wires on the Camera Harness.