# Rear Vision System – Liftgate Emblem Camera for Aftermarket Display 2009-2012 Ford Flex (Kit part number 1008-6509)

#### **Kit Contents:**

Liftgate Emblem Mount with Camera

Chassis Harness with RCA (Note: In some cases a RCA extension may be required to connect to your aftermarket display.)

1 bag containing: Ford Emblem

1 bag containing:

2 Liftgate emblem retainers

2 Mounting Screws

1 bag containing:

25 Wire Ties (short)

Z-Tech (in a white bottle)

1 bag containing:

1 Template (along with these instructions)

#### **Tools Required:**

5.5mm, 7mm, 8mm, and 10mm Sockets

Phillips Screwdriver

Plastic Trim Removal tool

Pliers

Razor Knife or scissors

Wire Cutters

Soldering Iron

Small Brush

#### **Addtional Tools:**

Drill Bit

1¾ inch Center Hole Saw

Flat Metal File

Round File or Deburring Tool

NOTE: We strive to provide accurate and up-to-date installation instructions. For the latest full color instructions, as well as an installation video (use relevant portions of 1008-9520), please visit www.brandmotion.com





#### PRE-INSTALLATION VEHICLE CHECKLIST

**Before beginning,** determine how the vehicle is equipped and check appropriate boxes:

Determine whether the vehicle has the required two mounting holes and a camera harness opening behind the existing liftgate emblem. Refer to Steps 2-4 to remove inner liftgate panel, and use supplied 1008-9100-04 template to confirm whether the required holes are present in the panel.

- $\square$  No, use supplied 1008-9100-04 template to position the holes to drill and/or cut the liftgate.  $\square$  Yes, proceed to Section 2.
- ☐ Check kit contents are complete against the list above.

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# **Section 1: Camera Mount Preparation**

**1.** Remove grommets from the supplied chassis harness and camera harness. Remove tape and, taking care not to cut the supplied wiring, cut grommets off with a razor knife, scissors, or wire cutters (Figure 1). Discard grommets.

Figure 1



**2.** Raise liftgate. Using a plastic trim removal tool, pry off the two red plastic reflectors in the lower edge of the liftgate to expose four retaining screws (Figure 2).

Figure 2



**3.** Unfasten the four screws with a Phillips screwdriver and pry up on the edges of the liftgate lower trim panel to release it from the liftgate. Remove liftgate lower trim panel and set aside (Figure 3).

Figure 3



- **4.** Remove upper liftgate trim and set aside.
- **5.** If equipped with power liftgate opener, remove the top end of the power gas strut by prying off the bolt cover with a plastic trim tool to access one 10mm bolt. Use a 10mm socket to remove and push free end of strut aside.
- **6.** From the inside of the liftgate, verify whether two square mounting holes and a central camera pass through opening are present behind the factory emblem. If not, it will be necessary to drill and square two holes for camera mount retainers and a cut an opening for the camera and harness (Steps 10 & 11).
- **7.** Close the liftgate. Taking care not to damage the body panel, insert plastic trim removal tool into the base of existing emblem to pry it off (Figure 4).

Figure 4

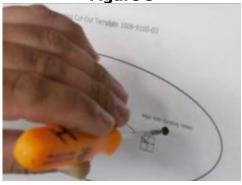




# **Section 1: Camera Mount Preparation continued**

- **8.** Remove any adhesive remaining on the liftgate.
- **9.** If two camera mounting holes and a camera harness opening were present in the existing liftgate, proceed to Section 2. If not, align the supplied 1008-9100-04 template to the two existing emblem locating holes and camera harness opening.
- **10.** Mark and center punch the location for the two retaining clip holes (Figure 5).

Figure 5



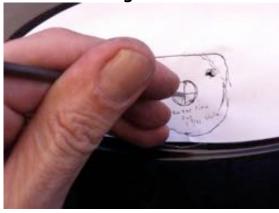
- **11.** Drill the two retaining clip holes with a 3/8 inch drill bit. Use a small flat file to square the drilled holes for the retaining clips (recommended method). Alternate method: Drill the two holes with a 1/8 inch drill bit and use sheet metal screws (not supplied in kit) to secure the camera mount.
- **12.** Apply supplied Z-tech to exposed bare metal with a small brush, and insert supplied retaining clips (Figure 6).

Figure 6



**13.** Mark, center punch, and drill a pilot hole for the camera mount harness opening (Figure 7). Using a 1¾ inch hole saw, cut the camera harness opening. Trial fit camera mount and file opening as necessary.

Figure 7



**14.** Clean the rough edges of the opening with a round file or deburring tool.



#### **Section 2: Camera Installation**

- **15.** Test fit the camera mount in the factory tailgate opening. If the camera mount does not fit flush, determine where the mount is contacting the edges of the opening and use a flat metal file to enlarge it. Work slowly, checking often for fit.
- **16.** Clean the rough edges of the enlarged opening with a deburring tool or round file.
- **17.** Apply supplied Z-tech to any exposed bare metal with a small brush (Figure 8).

Figure 8



- **18.** Route the camera harness through liftgate opening.
- **19.** Using the two supplied 7mm screws, attach camera mount to liftgate (Figure 9).



**20.** Route the light gray connector end of the camera harness along the inner liftgate structure toward the driver side of the liftgate opening.



# **Section 3: Chassis Harness Installation**

**21.** Using a plastic trim removal tool, loosen two access covers in the D-pillar trim panel to expose two 7mm bolts (Figure 10)

Figure 10



**22.** Remove the two bolts with a 7mm socket, and loosen the driver side upper D-pillar trim panel by peeling back weather stripping slightly and releasing the retaining clips (Figure 11).

Figure 11



**23.** If necessary, use a razor knife to cut a small slit in the liftgate wiring grommet to assist in the routing of the chassis harness wiring trough the grommet.

**24.** Run the RCA connector end of the chassis harness through the opening you cut in the grommet and out through the other open end of the grommet. A pair of pliers may be required to pull the connector and harness through the opening (Figure 12).

Figure 12



**25.** Route the light gray chassis harness camera connector end of the chassis harness toward the light gray connector on the camera harness and connect (Figure 13).

Figure 13





#### Section 3: Chassis Harness Installation continued

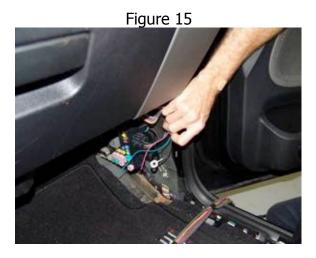
- **26.** Pull down rear edge of headliner slightly to route chassis harness inside and towards the driver side D-pillar.
- **27.** Remove driver side C-pillar trim panel with a trim removal tool (Figure 14).



- **28.** Partially unclip driver side lower quarter panel trim.
- **29.** Route chassis harness forward taking care not to bind the cable when replacing the trim.
- **30.** Remove the driver side rear door sill plate with a trim tool.
- **31.** Loosen driver side rear door weather strip.
- **32.** Remove 5.5mm screw and loosen driver side lower C-pillar trim.
- **33.** Loosen driver side lower B-pillar trim panel with hands.
- **34.** Continue routing chassis harness forward, taking care not to pinch wiring between trim pieces.
- **35.** Remove the driver side front door sill plate with a trim tool.
- **36.** Route remainder of chassis harness towards dash.

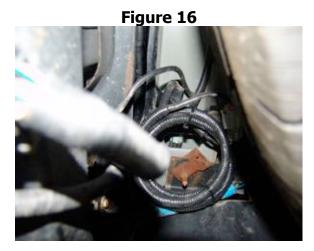
# **Section 4: Ignition, Reverse and Ground Locations**

- **37.** If needed, install aftermarket display or navigation display per instructions.
- **38.** Remove driver side kick panel.
- **39.** Splice the green reverse wire from the supplied chassis harness to the wire listed in Connector C925 diagram on page 8. Solder and cover the connection with tape or heat shrink tubing.
- **40.** Attach the black ground wire eyelet from the supplied chassis harness to sheet metal with an existing screw using an 8mm socket (Figure 15).



- **41.** Splice the red ignition wire from the supplied chassis harness to the wire listed in Connector C925 diagram on page 8. Solder and cover the connection with tape or heat shrink tubing.
- **42.** Connect the male RCA from the chassis harness to the camera IN on the aftermarket display or navigation display. In some cases a RCA extension may be required.

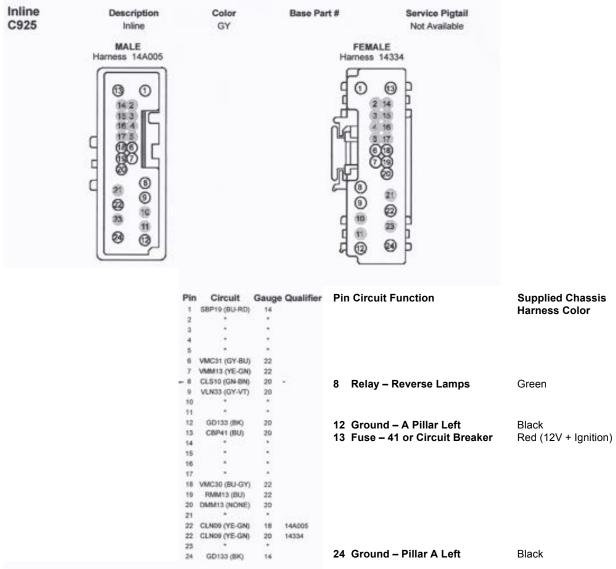
**43.** Coil and secure any excess chassis harness with remaining wire ties (Figure 16)



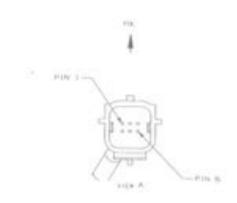
- **44.** Start the vehicle and shift into reverse. If all of the connections are correct an image will appear on the aftermarket display or navigation display.
- **45.** Reinstall all previously removed interior and exterior parts.
- **46.** Press the supplied emblem into the liftgate camera mount.

# **Section 4: Ignition, Reverse and Ground Locations continued**

#### Ignition and Reverse Locations - Connector C925 - 2009-2012 Ford Flex



Section 5: Reference – Supplied Camera & Chassis Harness Pinouts



PIN #	FUNCTION	CAMERA HARNESS COLOR	CHASSIS HARNESS COLOR
1	Video (+)	White	White
2	Shield	Blue	Blue
3	Reverse	Green	Green
4	Video (-)	Brown	Brown
5	Ground	Black	Black
6	Ignition	Red	Red

Loose wires provided in the Supplied Chassis Harness			
Function	Wire color		
Ground (-)	Black		
Reverse signal 12V	Green		
Ignition 12V	Red		