

INSTALLATION INSTRUCTIONS

Rear Vision System – Tailgate Handle Camera Mirror Display 2004-2014 Ford F-150 and 2008-2015 Ford Super Duty (Kit part numbers 9002-9521)

Kit Contents:

- Mirror
- Tailgate Handle with camera and harness
- Interior (shorter) Harness
- Chassis (longer) Harness
- 2 Foam pieces (if needed and optional)
- 1 bag containing:
 - 25 Wire Ties (short)
 - 7 pairs of T-taps (optional)
(Splice, solder & heat shrink recommended.)
 - Z-Tech (in a white bottle)
- 1 bag containing:
 - 2 Templates (along with these instructions)
 - 2 Wire Ties (long and optional)

Tools Required:

- T20 and T30 Torx Drivers
- 8mm and 10mm Sockets
- Flat Blade Screwdriver
- Phillips Screwdriver
- Plastic Trim Removal tool
- Drill Bit
- 1 inch Center Hole Saw
- Soldering Iron
- Small brush
- Round file (if needed)
- Mirror removal tool # OTC8200
(Required for non-screw type mirrors)
- Deburring Tool
- Electrical Tape or Heat Shrink

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

Preparation

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

PRE-INSTALLATION VEHICLE CHECKLIST

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

Start vehicle and note location of compass display. Unplug mirror connector from back of mirror.

- If compass display on the dash shows (- -) the compass module must be relocated (refer to Section 6).

Determine whether the vehicle has an opening in the center of pickup bed close to opposite of the opening in the bottom of the tailgate.

- Yes, skip Section 1.
- No, tailgate must be removed to drill an opening for the camera harness (refer to Section 1).
- Vehicle does NOT have an auto dimming inside mirror (refer to Section 7).

Determine the connector style used on the existing inside rearview mirror:

7-pin or 16-pin. For past models additional information, please see Section 10B (reference).

- Check kit contents are complete against the list above.

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INSTALLATION INSTRUCTIONS

Section 1: Cut Pickup Bed Opening

Follow Steps 1 through 4 only if the vehicle does not have an opening in the bed above the license plate per Figure 1

Figure 1



1. Prepare a clean, flat work surface for tailgate. Remove tailgate retaining straps with a screwdriver. With an assistant, remove the tailgate by lifting away from lower tension pins, and set tailgate aside.
2. Measure 21 inches from the left edge and 1¼ inches from the top and make a temporary mark on the pickup bed (Figure 2).

Figure 2



3. Center punch the mark and drill a pilot hole. Next, cut a 1/2 inch opening with a hole saw (Figure 3).

Figure 3



4. Clean the rough edges of the opening with a deburring tool. Apply supplied Z-tech with a small brush (Figure 4). Reinstall tailgate.

Figure 4



INSTALLATION INSTRUCTIONS

Section 2: Install Camera

5. Remove tailgate handle by loosening two nuts with a 10mm socket (Figure 5).

Figure 5



6. Remove lock cylinder from tailgate handle by pulling out wire spring clip (Figure 6).

Figure 6



7. Install lock cylinder into supplied tailgate camera handle with by pushing cylinder into handle. Secure the cylinder with the wire spring clip.
8. Route camera harness through handle opening in tailgate to the hole in the bottom of the tailgate (Figure 7).

Figure 7



9. Install supplied tailgate handle camera into tailgate by tightening two nuts with 10mm socket (Figure 8).

Figure 8



INSTALLATION INSTRUCTIONS

Section 3: Modify Rain Sensor

(If equipped)

Follow Steps 10 and 12 on this page only if you have a rain sensor module mounted on your inside rear view mirror.

- 10.** Remove rain sensor by pulling down and remove connector (Figure 10).

Figure 10



- 11.** Using a round file, open up the rain sensor opening for mirror by 0.46mm so the supplied mirror fits (Figure 11).

Figure 11



Section 4: Remove Mirror

- 12.** If you did not already do so previously, start the vehicle and note location of compass display. Unplug the mirror connector from mirror (Figure 12).

Figure 12



- 13.** If the compass display on the dash shows (- -) the compass module must be relocated. This operation is described in Section 6.
- 14.** Loosen the screw that attaches the existing rear view mirror to the windshield mounting button with a T20 Torx driver (Figure 13).

CAUTION: Removing the mirror from the windshield can cause damage to the windshield. **It is highly recommended to contact either a Ford dealership or a windshield replacement company.** Otherwise, slide the mirror upwards and towards the rear to remove it from the windshield (Figure 13).

Figure 13



NOTE: On some models without screws, Mirror Removal Tool # OTC8200 is required.

INSTALLATION INSTRUCTIONS

Section 5: Install Interior Harness

- 15.** Remove driver side dash panel end cap by pulling away weather-stripping and pull end panel to release clips from the dash panel (Figure 14).

Figure 14



- 16.** Remove driver side A-pillar by pulling with hands to release clips from sheet metal (Figure 15).

Figure 15



- 17.** Remove both sun visor anchors (either side of roof console) by removing one screw with a Phillips screwdriver (Figure 16).

Figure 16



- 18.** Remove roof console with hands to remove the clips from the sheet metal. Then remove both connectors (Figure 17).

Figure 17



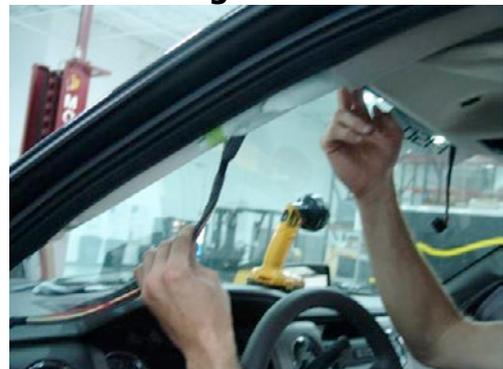
- 19.** Route the supplied interior harness under leading edge of the driver side headliner by gently separating the headliner from the windshield and tucking the harness into the gap with your fingers (Figure 18).

Figure 18



- 20.** Route the supplied interior harness down the driver side A-pillar (Figure 19).

Figure 19



INSTALLATION INSTRUCTIONS

Section 5: Install Interior Harness continued

21. Route the supplied interior harness through the dash (Figure 20).

Figure 20



INSTALLATION INSTRUCTIONS

Section 6A: Remove the Compass Circuit Board (if required)

Follow the steps in Section 6A only if your compass displayed (- -) when the mirror connector was unplugged in Section 4.

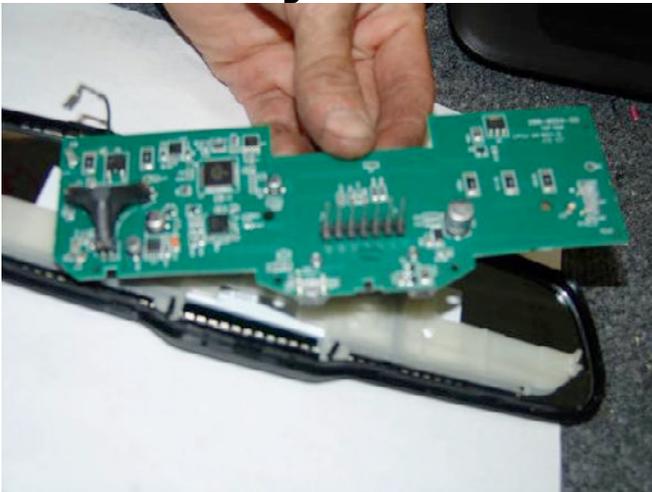
22. Pry mirror apart with a screwdriver (Figure 21).

Figure 21



23. Remove the circuit board from the mirror by disengaging both connectors. Mark the top of the circuit board with a permanent marker to insure proper plug connection later (Figure 22).

Figure 22



24. Wrap the mirror circuit board in the supplied foam pieces, and cut an opening for the connector terminals (Figure 23).

Figure 23



25. Make sure ignition is off. Remove the original vehicle mirror harness connector by cutting the harness wires 2 inches from the connector. Cut wires one at a time and strip the insulation from each as these will be spliced to the supplied interior harness.

INSTALLATION INSTRUCTIONS

Section 6B: Wiring vehicles with 7-pin mirror connector

26. On the supplied interior harness, locate the seven loose wires near the black 16-pin connector (Figure 24)

Figure 24



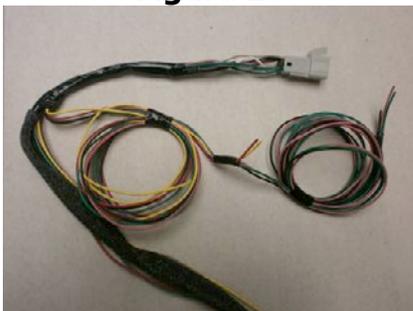
27. Consulting the Connector C911 pinout diagram opposite, splice the seven wires to the vehicle mirror harness wires according to Diagram A1.

Diagram A1

Supplied Interior Harness Wire Color	Polarity	Function	Splice to Wire at C911 Location
Red	+	Ignition	pin 1
Green	+	Reverse	pin 2
Black	-	Ground	pin 3
Yellow	-	Compass	pin 7
Pink	+	Compass	pin 6
Orange	+	Auto Dimming Mirror	pin 4
White	-	Auto Dimming Mirror	pin 5

28. If you removed the compass circuit board, per section 6A: On the supplied interior harness, locate the five loose wires near the white 6-pin connector. (Figure 25)

Figure 25

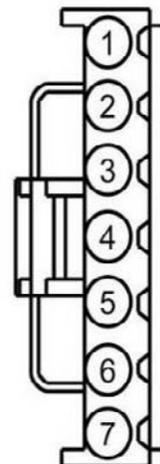


29. Consulting the Connector C911 pinout diagram below, splice the five pink, green, black, red, and yellow wires to the vehicle mirror harness connector according to Diagram A1.
30. If you did not remove the compass circuit board, isolate the five unused loose wires with electrical tape.

IMPORTANT: If reverse signal does not exist in pin 2 of 7-pin mirror C911 connector (see diagram below), then follow directions in Section 7 to connect reverse.

Connector:	Description	Color
C911	AUTO-DIMMING INTERIOR MIRROR UNIT	BK
Harness	Base Part #	Service Pigtail
14358	17700	

Pin	Circuit	Gauge	Circuit Function	Supplied Interior Harness Wire Color
1	CBP41 (BU-RD)	18	FUSE - 41 OR CIRCUIT BREAKER	Pink
2	CET47 (BU)	22	REVERSE LAMP RELAY COIL +	Green
3	GD147 (BK-VT)	22	GROUND - PILLAR C LEFT	Black
4	LRD12 (BU-OG)	22	CTRL MOD. - ELECTROCHROMIC MIRROR	Orange +
5	RRD12 (BN-WH)	22	CTRL MOD. - ELECTROCHROMIC MIRROR	White -
6	VMC31 (GY-BU)	22	COMPASS MOD. #+	Red
7	VMC30 (BU-GY)	22	COMPASS MOD. #-	Yellow



NOTE: Circuit colors shown may vary depending on model and year. Verify pin locations and check circuit for proper function using a digital volt-ohm meter.

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Section 6C: Wiring for vehicles with 16-pin mirror connector

31. On the supplied interior harness, near the black 16 pin connector, locate the seven loose wires. (Figure 24)
32. Isolate the pink wire with electrical tape as it will not be used.
33. Using the Connector C9039 pinout diagram opposite, splice the remaining six wires to the vehicle mirror harness wires according to Diagram A2.

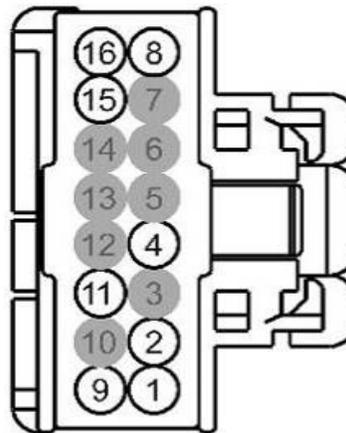
Diagram A2

Supplied Interior Harness Wire Color	Polarity	Function	Splice to Wire at C9039 Location
Red	+	Ignition	pin 1
Green	+	Reverse	pin 9
Black	-	Ground	pin 4
Yellow			pin 2 (if present)
Pink			Not used – Isolate with electrical tape
Orange	+	Auto Dimming Mirror	pin 11
White	-	Auto Dimming Mirror	pin 15

34. **If you removed the compass circuit board, per section 6A:** On the supplied interior harness, locate the five loose wires near the white 6-pin connector. (Figure 25)
35. **IMPORTANT:** Isolate the red wire with electrical tape as it will not be used.
36. Using the Connector C9039 pinout diagram opposite, splice the remaining four red, green, black, and yellow wires to the vehicle mirror harness connector removed in Step 24 according to Diagram A2.
37. If you did not remove the compass circuit board, isolate the five loose wires with electrical tape, as they will not be used.

IMPORTANT: If reverse signal does not exist in pin 9 of 16-pin mirror C9039 connector (see diagram below), then follow directions in Section 7 to connect reverse.

Connector: C9039	Description	Color	Supplied Interior Harness Wire Color	
	AUTO-DIMMING INTERIOR MIRROR	BK		
Pin	Circuit	Gauge	Circuit Function	Supplied Interior Harness Wire Color
1	CBP32 (GN-VT)	18	FUSE - 32 OR CIRCUIT BREAKER	Pink
2	VDND1 (BU-WH)	20	CTRL. MOD. - LIN BUS # SPOUB 1	Yellow (if present)
3	*	*	Not Used	
4	GD133 (BK)	20	GROUND - COWL SIDE/PILLAR A LEFT (BLT)	Black
5	*	*	Not Used	
6	*	*	Not Used	
7	*	*	Not Used	
8	VMP19 (WH-GN)	20	CAMERA - PARKING AID REAR VIDEO	
9	CLS28 (BU-WH)	20	CTRL. MOD. - RELAY REVERSE LAMP CONTROL (RLC)	Green
10	*	*	Not Used	
11	LRD12 (BU-GY)	22	CTRL. MOD. - ELECTROCHROMIC MIRROR	Orange *
12	*	*	Not Used	
13	*	*	Not Used	
14	*	*	Not Used	
15	RPD12 (BN)	22	CTRL. MOD. - ELECTROCHROMIC MIRROR	White *
16	RMP19 (BN-VT)	20	CAMERA - PARKING AID REAR VIDEO	



NOTE: Circuit colors shown may vary depending on model and year. Verify pin locations and check circuit for proper function using a digital volt-ohm meter.

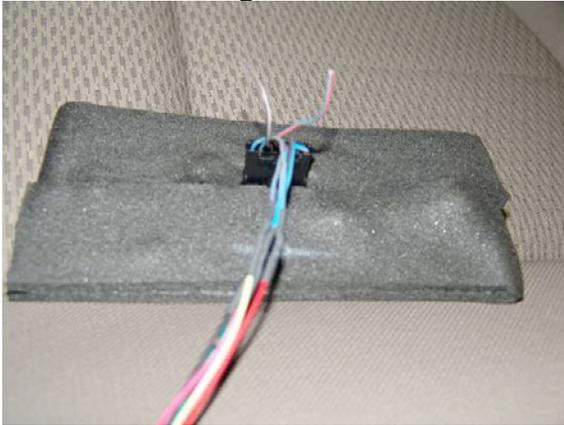
INSTALLATION INSTRUCTIONS

Section 6D: Relocate the Compass Circuit Board (if required)

Follow the steps in Section 6D only if your compass displayed (- -) when the mirror connector was unplugged in Section 4.

38. Solder all connections and cover with heat shrink tubing or electrical tape.
39. Plug vehicle mirror connector into mirror circuit board. Maintain the original connector orientation: retaining tab to top side of board (Figure 26).

Figure 26



40. Remove driver's side knee bolster trim by removing three screws with a M7 socket. Pull panel by hand to release mounting clips (Figure 27).

Figure 27



41. Remove the driver's side knee bolster reinforcement by removing the four M8 screws (Figure 28)

Figure 28



42. Route the mirror circuit board connector as shown (Figure 29).

Figure 29



43. Place the mirror circuit board as shown (connector facing forward and towards the bottom). Secure the circuit board to the existing cross dash harness with the two supplied long wire ties (Figure 30)

Figure 30



INSTALLATION INSTRUCTIONS

Section 7: Inside Rear View Mirrors without Auto Dimming (if required)

Follow the steps in Section 7 only if the vehicle does not have an auto dimming inside rear view mirror.

44. Remove the passenger side door sill plate with a trim tool and remove passenger side kick panel with hands, just disengaging the two clips from the sheet metal (Figure 31).

Figure 31



45. Isolate the seven wires near the black 16-pin mirror connector on the supplied interior harness (Figure 32) with electrical tape along with the pink and yellow wires near the white 6-pin connector (Figure 33).

Figure 32

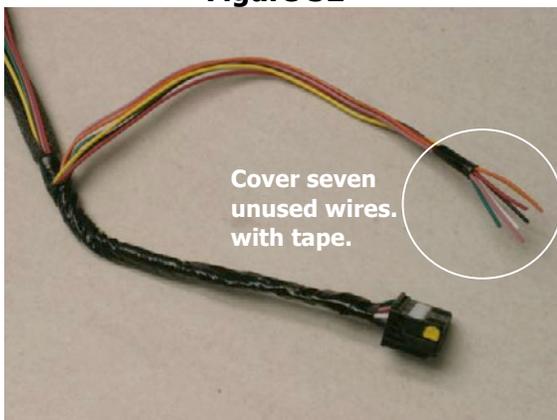
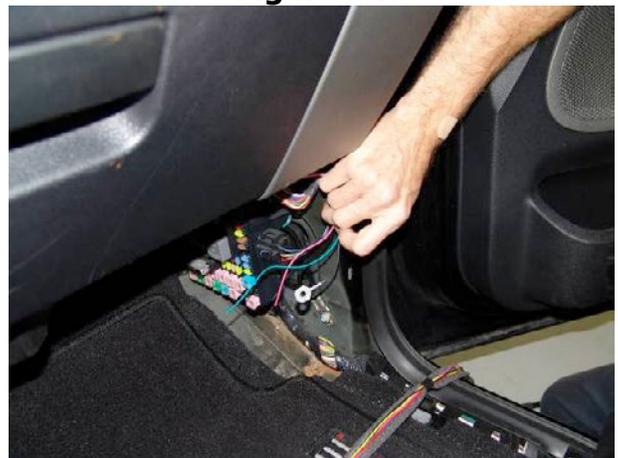


Figure 33



46. Route the supplied interior harness green, red, and black wires along the vehicle cross dash harness. Secure using wire ties wherever possible at 2 inch intervals.
47. Splice the green reverse wire from the supplied interior harness white 6-pin connector end to the wire listed in Diagram A3, on the next page, depending on the vehicle model. Solder and cover the connection with tape or heat shrink tubing.
48. Splice the red ignition wire from the supplied interior harness white 6-pin connector end to the wire listed in Diagram A3, on the next page, depending on the vehicle model. Solder and cover the connection with tape or heat shrink tubing.
49. Attach the black ground wire eyelet from the supplied interior harness white 6-pin connector end to sheet metal in the passenger side kick panel with a screw using an 8mm socket (Figure 34).

Figure 34



INSTALLATION INSTRUCTIONS

Section 7: Inside Rear View Mirrors without Auto Dimming continued (if required)

Non Auto Dimming Pinouts Diagram A3

Chassis Harness Ignition & Reverse Locations								Supplied Interior Harness
Model	Year(s)	Function	Connector	Dia. Page	Location	Pin	Color	Color
F150	2012 (late production)	Ignition	C2280B	16	Right Kick (BCM)	35	Violet/Green	Red
		Reverse	C2280D	17	Right Kick (BCM)	13	Blue/White	Green
Super Duty	2012 (late production)	Ignition	C2280B	18	Right Kick (BCM)	35	Violet/Green(Gas) Yellow/Orange (Diesel)	Red
		Reverse	C2280D	17	Right Kick (BCM)	13	Blue/White	Green

NOTE: For previous years pinouts, please refer to Section 10C.

INSTALLATION INSTRUCTIONS

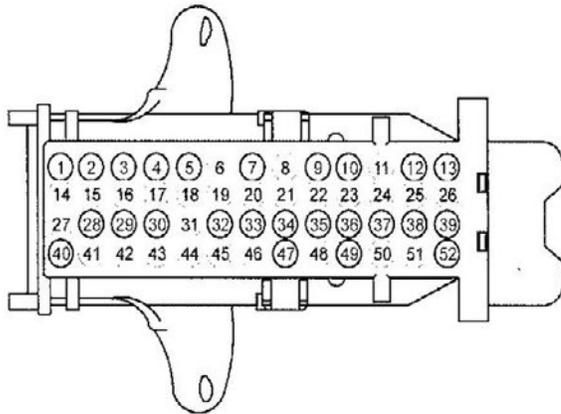
Section 7: Inside Rear View Mirrors without Auto Dimming continued

(if required)

INSIDE REAR VIEW MIRROR WITHOUT AUTO DIMMING DIAGRAM A4

Ignition Connector C2280B – 2012 late production F150

Connector:	Description	Color	Harness	Base Part #	Service Pigtail
C2280B	BODY CONTROL MODULE (BCM)	BK	14401	14B207	Not Available



	Pin	Circuit	Gauge	Circuit Function	Qualifier
	1	SBP09 (RD)	22	FUSE - 9 OR CIRCUIT BREAKER	
	2	CBP34 (VT-BN)	22	FUSE - 34 OR CIRCUIT BREAKER	
	3	CBP41 (BU)	22	FUSE - 41 OR CIRCUIT BREAKER	SVT Raptor
	3	CBP41 (BU)	22	FUSE - 41 OR CIRCUIT BREAKER	
	4	CBP31 (BU-OG)	20	FUSE - 31 OR CIRCUIT BREAKER	
	5	CBP42 (GN)	26	FUSE - 42 OR CIRCUIT BREAKER	
	6	*	*	Not Used	
	7	CBP35 (YE-GY)	22	FUSE - 35 OR CIRCUIT BREAKER	
	8	*	*	Not Used	
	9	CBP36 (BU-BN)	20	FUSE - 36 OR CIRCUIT BREAKER	
	10	CBP37 (WH)	22	FUSE - 37 OR CIRCUIT BREAKER	
	11	*	*	Not Used	
	12	SBP26 (YE-RD)	22	FUSE - 26 OR CIRCUIT BREAKER	
	13	CBP38 (GY-BU)	22	FUSE - 38 OR CIRCUIT BREAKER	
	14	*	*	Not Used	
	15	*	*	Not Used	
	16	*	*	Not Used	
	17	*	*	Not Used	
	18	*	*	Not Used	
	19	*	*	Not Used	
	20	*	*	Not Used	
	21	*	*	Not Used	
	22	*	*	Not Used	
	23	*	*	Not Used	
	24	*	*	Not Used	
	25	*	*	Not Used	
	26	*	*	Not Used	
	27	*	*	Not Used	
	28	CCB08 (VT-WH)	22	SWITCH - BRAKE PEDAL POSITION (BPP) NORMAL OPEN	
	29	CDC34 (WH-OG)	20	SWITCH - IGNITION # RUN; START	
	30	VLF14 (BU-BN)	22	SENSOR - AUTOLAMP DAY/NIGHT	
	30	VLF14 (BU)	26	SENSOR - AUTOLAMP DAY/NIGHT	with automatic A/C
	31	*	*	Not Used	
	32	CLS32 (BN)	26	SWITCH - HAZARD	
	33	CRH04 (VT)	26	CTRL MOD. - RELAY HORN	
	34	CDC30 (BU-GY)	22	SWITCH - IGNITION # KEY IN	
	35	CDC33 (VT-GN)	22	SWITCH - IGNITION # RUN; ACCESSORY	
36	VRT23 (VT-GY)	22		TRANSCEIVER - PASSIVE ANTI THEFT (IMMOBILIZER) # RX DATA (RX_IN)	
37	VRT24 (YE-OG)	22		TRANSCEIVER - PASSIVE ANTI THEFT (IMMOBILIZER) # TX CNTRL	
38	VDB06 (GY-OG)	22		CONNECTOR - DIAGNOSTIC # CAN BUS MEDIUM SPEED HIGH	
39	VDB07 (VT-OG)	22		CONNECTOR - DIAGNOSTIC # CAN BUS MEDIUM SPEED LOW	
40	VLN04 (VT-GY)	22		CTRL MOD. - IP/SWITCH ILLUMINATION	
41	*	*		Not Used	
42	*	*		Not Used	
43	*	*		Not Used	
44	*	*		Not Used	
45	*	*		Not Used	
46	*	*		Not Used	
47	CDC35 (BU-WH)	22		SWITCH - IGNITION # START	
48	*	*		Not Used	
49	CET53 (BU-OG)	20		CTRL MOD. - POWERTRAIN # BRAKE SHIFT INTERLOCK	
50	*	*		Not Used	
51	*	*		Not Used	
52	VDN01 (BU-WH)	20		CTRL MOD. - LIN BUS # SPDJB 1	
52	VDN01 (BU-WH)	22		CTRL MOD. - LIN BUS # SPDJB 1	with inverter module

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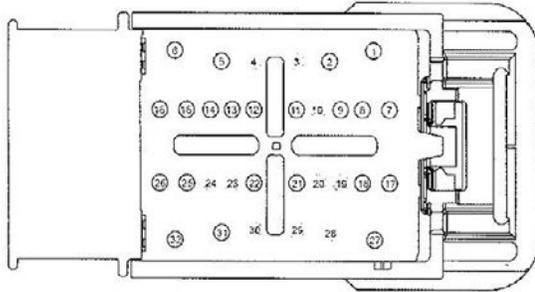
Section 7: Inside Rear View Mirrors without Auto Dimming continued

(if required)

INSIDE REAR VIEW MIRROR WITHOUT AUTO DIMMING DIAGRAM A5

Reverse Connector C2280D – 2012 late production F150 and Super Duty

Connector:	Description	Color	Harness	Base Part #	Service Pigtail
C2280D	BODY CONTROL MODULE (BCM)	BK	14A005	14B207	Not Available



Pin	Circuit	Gauge	Circuit Function	Qualifier
1	SBP03 (BU-RD)	14	FUSE - 3 OR CIRCUIT BREAKER	
2	SBP05 (GY-RD)	16	FUSE - 5 OR CIRCUIT BREAKER	w/memory
3	*	*	Not Used	
4	*	*	Not Used	
5	SBP02 (YE RD)	18	FUSE - 2 OR CIRCUIT BREAKER	
6	SBP01 (RD)	14	FUSE - 1 OR CIRCUIT BREAKER	
7	CBP33 (WH-BN)	20	FUSE - 33 OR CIRCUIT BREAKER	heated seats
7	CBP33 (WH-BN)	22	FUSE - 33 OR CIRCUIT BREAKER	rear heated seats
8	CBP34 (VT-BN)	22	FUSE - 34 OR CIRCUIT BREAKER	
9	SBP21 (GY-RD)	18	FUSE - 21 OR CIRCUIT BREAKER	ambient lighting
10	*	*	Not Used	
11	SBP07 (WH-RD)	22	FUSE - 7 OR CIRCUIT BREAKER	offline
11	SBP07 (WH-RD)	20	FUSE - 7 OR CIRCUIT BREAKER	online
12	CLS18 (GY-BN)	20	CTRL MOD. - STOP/TURN LEFT (INBOARD)	
13	CLS28 (BU-WH)	18	CTRL MOD. - RELAY REVERSE LAMP CONTROL (RLC)	
14	CLS52 (BN)	20	CTRL MOD. - STOP/TURN RIGHT MIDDLE	
15	CLS19 (VT-OG)	18	CTRL MOD. - STOP/TURN RIGHT (INBOARD)	
16	GD139 (BK-YE)	16	GROUND - COWL SIDE/PILLAR A RIGHT # 2ND POINT (8L2T)	
17	CBP32 (GN-VT)	18	FUSE - 32 OR CIRCUIT BREAKER	
18	CBP40 (YE-GN)	18	FUSE - 40 OR CIRCUIT BREAKER	
19	*	*	Not Used	
20	*	*	Not Used	
21	CPL51 (BU-GN)	18	CTRL MOD. - DOOR LOCK # DRIVER UNLOCK	
22	CLN09 (YE-GN)	22	RELAY - BATTERY SAVER (E.G. SWITCH OFF INTERIOR LIGHTING)	
23	*	*	Not Used	
24	*	*	Not Used	
25	GD139 (BK-YE)	20	GROUND - COWL SIDE/PILLAR A RIGHT # 2ND POINT (8L2T)	
26	CPL11 (GY-BN)	16	CTRL MOD. - DOOR LOCK # ALL LOCK	
27	CBP01 (BU)	12	FUSE - 48 OR CIRCUIT BREAKER	
28	*	*	Not Used	
29	*	*	Not Used	
30	*	*	Not Used	
31	CPL52 (VT-GY)	18	CTRL MOD. - DOOR LOCK # PASSENGER DOORS UNLOCK (ALL EXCLUDING DRIVER)	
31	CPL52 (VT-GY)	16	CTRL MOD. - DOOR LOCK # PASSENGER DOORS UNLOCK (ALL EXCLUDING DRIVER)	Super Crew
32	SBP19 (BU-RD)	14	FUSE - 19 OR CIRCUIT BREAKER	SONY sound

INSTALLATION INSTRUCTIONS

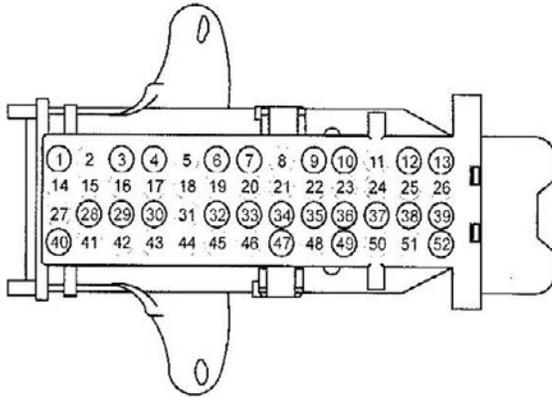
Section 7: Inside Rear View Mirrors without Auto Dimming continued

(if required)

INSIDE REAR VIEW MIRROR WITHOUT AUTO DIMMING DIAGRAM A6

Ignition Connector C2280B – 2012 late production Super Duty

Connector:	Description	Color	Harness	Base Part #	Service Pigtail
C2280B	BODY CONTROL MODULE (BCM)	BK	14401	15604	Not Available



Pin	Circuit	Gauge	Circuit Function	Qualifier
1	SBP09 (RD)	20	FUSE - 9 OR CIRCUIT BREAKER	
2	*	*	Not Used	
3	CBP41 (BU)	22	FUSE - 41 OR CIRCUIT BREAKER	
4	CBP31 (BU-OG)	22	FUSE - 31 OR CIRCUIT BREAKER	
5	*	*	Not Used	
6	CBP44 (VT)	22	FUSE - 44 OR CIRCUIT BREAKER	
7	CBP35 (YE-GY)	22	FUSE - 35 OR CIRCUIT BREAKER	
8	*	*	Not Used	
9	CBP36 (BU-BN)	20	FUSE - 36 OR CIRCUIT BREAKER	
10	CBP37 (WH)	22	FUSE - 37 OR CIRCUIT BREAKER	
11	*	*	Not Used	
12	SBP26 (YE-RD)	22	FUSE - 26 OR CIRCUIT BREAKER	
13	CBP38 (GY-BU)	22	FUSE - 38 OR CIRCUIT BREAKER	with single CD / base audio
14	*	*	Not Used	
15	*	*	Not Used	
16	*	*	Not Used	
17	*	*	Not Used	
18	*	*	Not Used	
19	*	*	Not Used	
20	*	*	Not Used	
21	*	*	Not Used	
22	*	*	Not Used	
23	*	*	Not Used	
24	*	*	Not Used	
25	*	*	Not Used	
26	*	*	Not Used	
27	*	*	Not Used	
28	CCB08 (VT-WH)	22	SWITCH - BRAKE PEDAL POSITION (BPP) NORMAL OPEN	
29	CDC62 (WH-VT)	22	CTRL MOD. - IGNITION ACCESSORY SHUTDOWN # B+	diesel
29	CDC34 (WH-OG)	18	SWITCH - IGNITION # RUN; START	gasoline
30	VLF14 (BU-BN)	22	SENSOR - AUTOLAMP DAY/NIGHT	manual a/c
30	VLF14 (BU-BN)	20	SENSOR - AUTOLAMP DAY/NIGHT	automatic a/c
31	*	*	Not Used	
32	CLS32 (BN-YE)	22	SWITCH - HAZARD	
33	CRH04 (VT-GN)	22	CTRL MOD. - RELAY HORN	
34	CDC30 (BU-GY)	22	SWITCH - IGNITION # KEY IN	
35	CDC63 (YE-OG)	22	CTRL MOD. - IGNITION ACCESSORY SHUTDOWN # RUN	diesel
35	CDC33 (VT-GN)	22	SWITCH - IGNITION # RUN; ACCESSORY	gasoline
36	VRT24 (YE-OG)	22	TRANSCEIVER - PASSIVE ANTI THEFT (IMMOBILIZER) # TX CNTRL	
37	VRT23 (VT-GY)	22	TRANSCEIVER - PASSIVE ANTI THEFT (IMMOBILIZER) # RX DATA (RX_IN)	
38	VDB06 (GY-OG)	22	CONNECTOR - DIAGNOSTIC # CAN BUS MEDIUM SPEED HIGH	
39	VDB07 (VT-OG)	22	CONNECTOR - DIAGNOSTIC # CAN BUS MEDIUM SPEED LOW	
40	VLN04 (VT-GY)	22	CTRL MOD. - IP/SWITCH ILLUMINATION	
41	*	*	Not Used	
42	*	*	Not Used	
43	*	*	Not Used	
44	*	*	Not Used	
44	*	*	Not Used	
45	*	*	Not Used	
46	*	*	Not Used	
47	CDC35 (BU-WH)	22	SWITCH - IGNITION # START	
48	*	*	Not Used	
49	CET53 (BU-OG)	22	CTRL MOD. - POWERTRAIN # BRAKE SHIFT INTERLOCK	
50	*	*	Not Used	
51	*	*	Not Used	
52	VDN01 (BU-WH)	22	CTRL MOD. - LIN BUS # SPDJB 1	

INSTALLATION INSTRUCTIONS

Section 8: Supplied Mirror Installation

50. Plug the 16-pin connector from the supplied interior harness into the supplied mirror (Figure 35).

Figure 35



51. Install the supplied mirror on the mounting button and slide it downwards. Secure by tightening the T20 Torx screw to 1.8 Nm (16 lb-in.), while not exceeding 2.2 Nm (19.5 lb-in.).
52. If equipped, reinstall modified Rain Sensor from Section 3.

INSTALLATION INSTRUCTIONS

Section 9: Chassis Harness Installation

53. Remove the driver side sill plate with a trim tool (Figure 36).

Figure 36



54. Loosen driver side A-pillar molding with hands and then remove the driver side lower kick panel (Figure 37).

Figure 37



55. Pull back carpet in front of driver's seat (Figure 38). If existing hole

Figure 38



56. Secure Super Duty template number 1008-9100-03 (Figure 39) or secure F150 template number 1008-9100-04 over opening in front of driver's seat (Figure 40).

Figure 39



Figure 40



INSTALLATION INSTRUCTIONS

Section 9: Chassis Harness Installation continued

- 57. Center punch and drill a pilot hole.
- 58. Drill a 1/2 inch hole, clean the hole with a deburring tool (Figure 41).

Figure 41



- 59. Apply supplied Z-tech with a small brush (Figure 42).

Figure 42



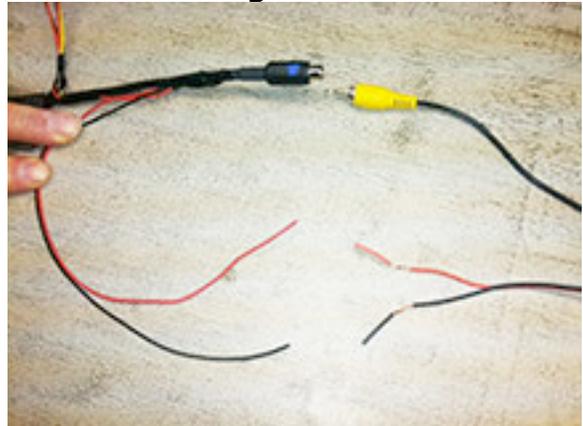
- 60. Route the supplied chassis harness through the drilled opening and seat the grommet from the inside of vehicle (Figure 43).

Figure 43



- 61. Route the supplied chassis harness toward the supplied interior harness and connect the RCA connectors together. Then connect the red and black camera chassis harness wire to the red and black wires from the RCA of the interior harness (Figure 44).

Figure 44



INSTALLATION INSTRUCTIONS

Section 9: Chassis Harness Installation continued

- 62.** Route the exterior portion of the supplied chassis harness along existing vehicle chassis harness and over fuel tank. Using supplied tie wraps, secure the harness to existing wiring at 2 inch intervals (Figures 45 and 46).

Figure 45



Figure 46



- 63.** Loop any excess from the harness as shown and secure with tie wraps (Figure 47).

Figure 47



- 64.** Plug the chassis harness into the camera harness installed earlier under the pickup bed. Make sure provided heat shrink is slid on first (Figure 48).

Figure 48



INSTALLATION INSTRUCTIONS

65. Move heat shrink over the connection between the chassis harness and camera (Figure 49).

Figure 49



66. Heat and seal the connection between the chassis harness and camera (Figure 50).

Figure 50



67. Start vehicle with foot on brake and shift into reverse to check camera operation. If all of the connections are correct, you will see an image displayed on the left side of the supplied mirror.
68. Reinstall all previously removed interior and exterior parts.

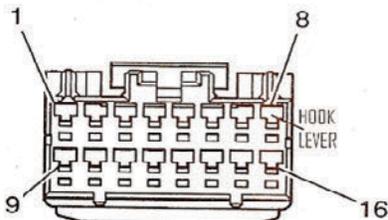
INSTALLATION INSTRUCTIONS

Section 10A: Reference – Supplied Harness Pinouts

Loose wires provided in the Supplied Interior Harness

Function	Wire color
Ground (-)	Black
Reverse signal 12V	Green
Ignition 12V	Red
Compass (+)	Pink
Compass (-)	Yellow
Auto dimming (+)	Orange
Auto dimming (-)	White

16-pin mirror connector pinout



NOTE:

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

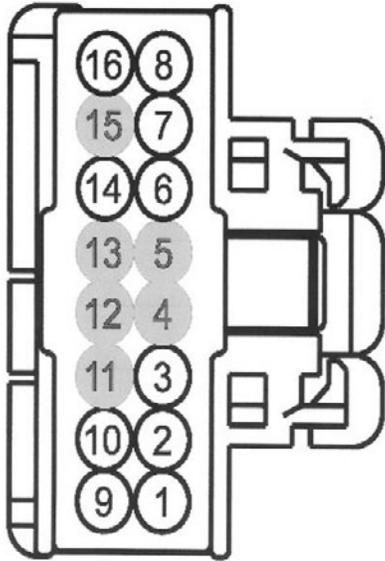
PIN	Circuit Description
1	Not Used
2	Not Used
3	Camera Video Shield
4	Camera Power (+)
5	Dual Outside Drive EC (+)
6	Camera NTSC Video (+)
7	Camera NTSC Video (-)
8	Vehicle Ground (-)
9	Reverse Input (Active High)
10	Camera Power (-)
11	Not Used
12	Not Used
13	Ignition (Run Only Line)
14	Not Used
15	Not Used
16	Dual Outside Drive EC (-)

INSTALLATION INSTRUCTIONS

Section 10B: Reference – Previous Model Year Mirror Connector Pinouts

Connector: C9112
Description: AUTO-DIMMING INTERIOR MIRROR
Color: BK

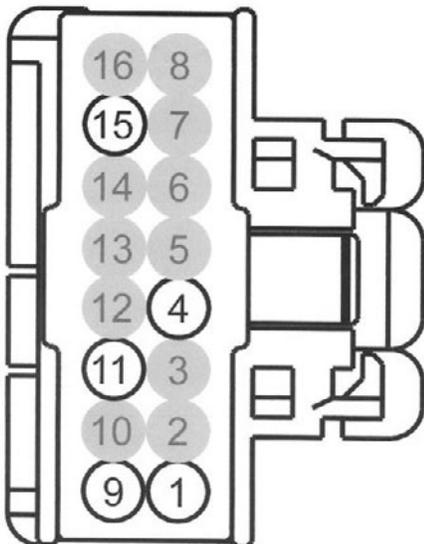
Harness: 14334
Base Part #: 17700
Service Pigtail: Not Available



Pin	Circuit	Gauge	Circuit Function	Supplied Interior Harness Color	Microphone Supplied Harness Color
1	CBP41 (BU)	20	FUSE - 41 OR CIRCUIT BREAKER	1 Red	1 Blue (+)
2	CLS10 (BK-VT)	20	RELAY - REVERSE LAMPS	2 Green	2
3	GD133 (BK)	18	GROUND - PILLAR A LEFT	3 Black	3 Black
4	*	*	Not Used	4	4
5	*	*	Not Used	5	5
6	VMM13 (YE-GN)	20	MICROPHONE - PHONE/VOICE CONTROL	6	6 Yellow
7	DMM13 (BK)	20	MICROPHONE - PHONE/VOICE CONTROL	7	7
8	VMP19 (WH-GN)	20	CAMERA - PARKING AID REAR VIDEO	8	8
9	VMC31 (YE-GN)	20	COMPASS MOD. # +	9 Pink	9
10	VMC30 (BU-GY)	20	COMPASS MOD. # -	10 Yellow	10
11	*	*	Not Used	11	11
12	*	*	Not Used	12	12
13	*	*	Not Used	13	13
14	RMM13 (BU)	20	MICROPHONE - PHONE/VOICE CONTROL	14	14 Black
15	*	*	Not Used	15	15
16	RMP19 (BN-VT)	20	CAMERA - PARKING AID REAR VIDEO	16	16

Connector: C9044
Description: AUTO-DIMMING INTERIOR MIRROR UNIT
Color: BK

Harness: 14358
Base Part #: 17700
Service Pigtail: Not Available



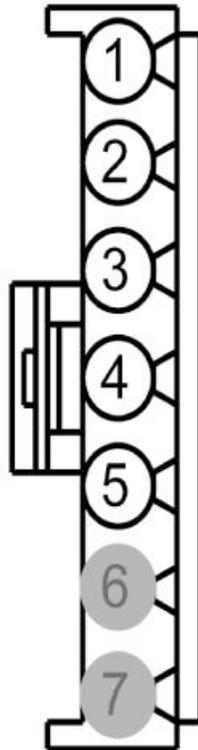
Pin	Circuit	Gauge	Circuit Function	Supplied Interior Harness Color
1	CBP41 (BU-RD)	18	FUSE - 41 OR CIRCUIT BREAKER	1 Red
2	*	*	Not Used	2
3	*	*	Not Used	3
4	GD147 (BK-VT)	22	GROUND - PILLAR C LEFT	4 Black
5	*	*	Not Used	5
6	*	*	Not Used	6
7	*	*	Not Used	7
8	*	*	Not Used	8
9	CET47 (BU)	22	REVERSE LAMP RELAY COIL +	9 Green
10	*	*	Not Used	10
11	LRD12 (BU-OG)	22	CTRL MOD. - ELECTROCHROMIC MIRROR	11 Orange (+)
12	*	*	Not Used	12
13	*	*	Not Used	13
14	*	*	Not Used	14
15	RRD12 (BN-WH)	22	CTRL MOD. - ELECTROCHROMIC MIRROR	15 White (-)
16	*	*	Not Used	16

INSTALLATION INSTRUCTIONS

Section 10B: Reference – Previous Model Year Mirror Connector Pinouts continued

2004-2007 F150 Pinout

Connector: C911	Description AUTO-DIMMING INTERIOR MIRROR UNIT	Color BK	Harness 14334	Base Part # 17A674	RVS Supplied Interior Harness Wire Color
----------------------------------	---	--------------------	-------------------------	------------------------------	---



Pin	Circuit	Gauge	Circuit Function	RVS Supplied Interior Harness Wire Color
1	294 (WH-LB)	20	Voltage supplied in Start and Run (overload protected)	Pink
2	57 (BK)	20	Ground	Black
3	1043 (DG-YE)	18	Trailer tow relay, reversing lamp switched power	Green
4	46 (VT)	20	Exterior rear view mirror, signal	Orange +
5	47 (LB-WH)	20	Exterior rear view mirror, signal return	White -
6	*	*	Not Used	
7	*	*	Not Used	

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations

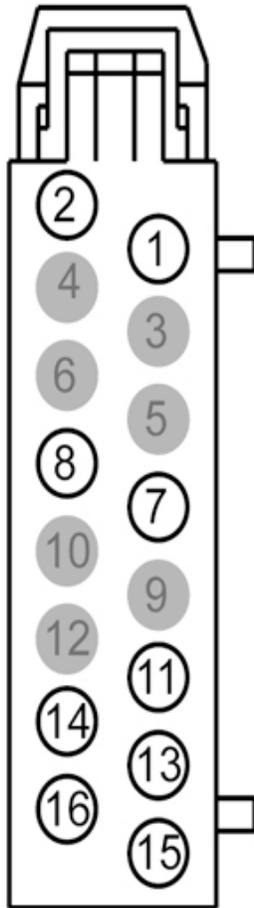
								Supplied Interior Harness
Model	Year	Function	Connector	Dia. Page	Location	Pin	Color	Color
F150	2004	Ignition	C270J	27	Right Kick	2	White / L. Blue	Red
		Reverse	C270E	28	Right Kick	20	Black / Pink	Green
F150	2005-2008	Ignition	C270J	27	Right Kick	2	White / L. Blue	Red
		Reverse	C270B	29	Right Kick	12	Green/ Yellow	Green
F150	2009-2012 (early production)	Ignition	C2280D	30	Right Kick	16	Blue or Blue/ Red	Red
		Reverse	C215	31	Right Kick	6	Blue	Green
Super Duty	2008	Ignition	C264	32	Right Kick SJB	10	Red / Yellow	Red
		Reverse	C264	32	Right Kick SJB	12	Black / Pink	Green
Super Duty	2009-2012 (early production)	Ignition	C264	33	Right Kick	2	Blue	Red
		Reverse	C264	33	Right Kick	10	Green/ Blue	Green

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Ignition Connector C270J – 2004 – 2008 F150

Connector:	Description	Color	Harness	Base Part #	Service Pigtail
C270J	CENTRAL JUNCTION BOX (CJB)	BK	14A005	14A067	

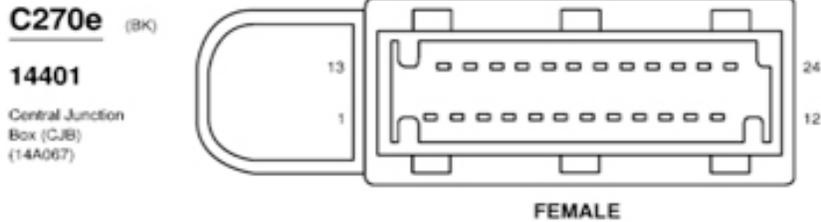


Pin	Circuit	Gauge	Circuit Function	Qualifier
1	59 (DG-VT)	20	Rear window defrost relay output	
2	294 (WH-LB)	20	Voltage supplied in Start and Run (overload protected)	
3	*	*	Not Used	
4	*	*	Not Used	
5	*	*	Not Used	
6	*	*	Not Used	
7	956 (OG-LG)	20	Voltage supplied at all times overload protected	
8	9 (LG-OG)	16	Left rear stop-turn lamps signal feed	
9	*	*	Not Used	
10	*	*	Not Used	
11	720 (RD-YE)	20	Voltage supplied at all times overload protected	
12	*	*	Not Used	
13	937 (RD-WH)	20	Voltage supplied in Start and Run (overload protected)	
14	5 (OG-LB)	16	Right rear stop-turn lamps signal feed	
15	705 (LG-OG)	18	Battery saver relay output	
16	64 (DG)	16	Right rear stop-turn lamps signal feed	

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Reverse Connector C270E – 2004 F150



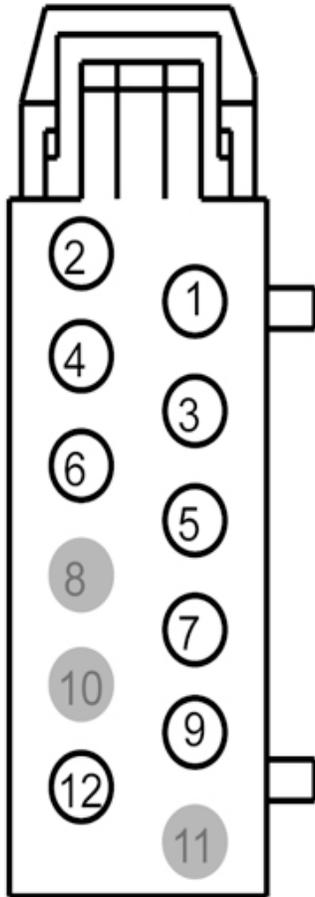
Pin	Circuit	Circuit function
1	1039 (BK/YE)	Voltage supplied in Start and Run (overload protected)
2	14 (BN)	Hot in Park or Head
3	. . .	not used
4	. . .	not used
5	. . .	not used
6	. . .	not used
7	. . .	not used
8	. . .	not used
9	461 (OG)	Front blower motor relay control
10	1005 (VT/OG)	Battery saver relay control
11	. . .	not used
12	1 (DB)	Horn relay control
13	54 (LG/YE)	Accessory delay relay switched power
14	1003 (GY/YE)	Voltage supplied in Start and Run (overload protected)
15	9 (LG/OG)	Left rear stop/turn lamps signal feed
16	729 (RD/WH)	Voltage supplied at all times (overload protected)
17	1266 (RD/YE)	Voltage supplied in Start and Run (overload protected)
18	5 (OG/LB)	Right rear stop/turn lamps signal feed
19	. . .	not used
20	140 (BK/PK)	Trailer tow relay, reversing lamp switched power
21	1332 (LB)	Accessory delay relay control
22	1009 (OG/YE)	Rear window defrost relay control
23	296 (WH/VT)	Voltage supplied in Start and Run (overload protected)
24	1000 (RD/BK)	Voltage supplied in Start (overload protected)

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Reverse Connector C270B – 2005-2008 F150

Connector:	Description	Color	Harness	Base Part #	Service Pigtail
C270B	CENTRAL JUNCTION BOX (CJB)	BK	12A581	14A067	XF2T-14A464-KA



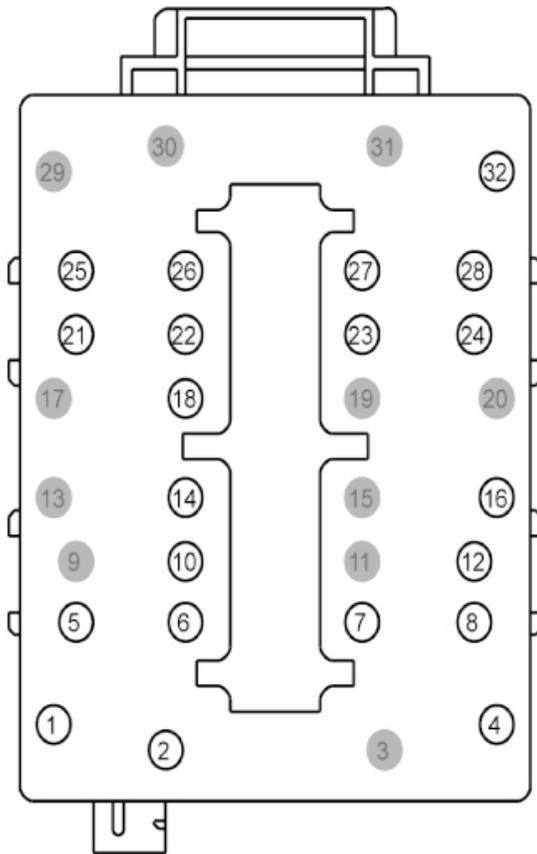
Pin	Circuit	Gauge	Circuit Function	Qualifier
1	295 (LB-PK)	18	Voltage supplied in Start and Run (overload protected)	
2	1856 (GY-DG)	20	Voltage supplied in Start and Run (overload protected)	Late production
3	533 (TN-RD)	18	Voltage supplied in Start and Run (overload protected)	
4	1683 (DG)	20	Voltage supplied at all times (overload protected)	
5	160 (DB-WH)	18	Headlamps low beam switched power	
6	65 (DG)	20	Voltage in Run or Accessory (overload protected)	
7	883 (PK-LB)	16	Voltage supplied at all times (overload protected)	
8	*	*	Not Used	
9	161 (DG-OG)	18	Headlamps low beam switched power	
10	*	*	Not Used	
11	*	*	Not Used	
12	1043 (DG-YE)	20	Trailer tow relay, reversing lamp control	

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Ignition Connector C2280D – 2009-2012 (early production) F150

Connector:	Description	Color	Harness	Base Part #	Service Pigtail
C2280D	SMART JUNCTION BOX (SJB)	BK	14A005	14B207	



Pin	Circuit	Gauge	Circuit Function	Qualifier
1	SBP01 (RD)	16	FUSE - 1 OR CIRCUIT BREAKER	
2	SBP18 (YE-RD)	16	FUSE - 18 OR CIRCUIT BREAKER	
3	*	*	Not Used	
4	SBP38 (BN-RD)	16	FUSE - 38 OR CIRCUIT BREAKER	
5	CBP32 (GN-VT)	20	FUSE - 32 OR CIRCUIT BREAKER	
6	CPL11 (GY-BN)	16	CTRL MOD. - DOOR LOCK # ALL LOCK	
7	GD139 (BK-YE)	16	GROUND - PILLAR A RIGHT # 2ND STUD	
8	GD139 (BK-YE)	20	GROUND - PILLAR A RIGHT # 2ND STUD	
9	*	*	Not Used	
10	SBP13 (GY-RD)	20	FUSE - 13 OR CIRCUIT BREAKER	
11	*	*	Not Used	
12	GD139 (BK-YE)	20	GROUND - PILLAR A RIGHT # 2ND STUD	
13	*	*	Not Used	
14	CBP46 (WH-BU)	20	FUSE - 46 OR CIRCUIT BREAKER	
15	*	*	Not Used	
16	CBP41 (BU)	18	FUSE - 41 OR CIRCUIT BREAKER	
17	*	*	Not Used	
18	SBP12 (GN-RD)	18	FUSE - 12 OR CIRCUIT BREAKER	All others
18	SBP12 (GN-RD)	20	FUSE - 12 OR CIRCUIT BREAKER	If equipped
19	*	*	Not Used	
20	*	*	Not Used	
21	CLN09 (YE-GN)	18	RELAY - BATTERY SAVER (E.G. SWITCH OFF INTERIOR LIGHTING)	
22	CBP43 (GY)	20	FUSE - 43 OR CIRCUIT BREAKER	
23	CBP35 (YE-BU)	20	FUSE - 35 OR CIRCUIT BREAKER	
24	GD139 (BK-YE)	20	GROUND - PILLAR A RIGHT # 2ND STUD	
25	CLS18 (GY-BN)	16	CTRL MOD. - STOP/TURN LEFT	
26	CLS19 (VT-OG)	16	CTRL MOD. - STOP/TURN RIGHT	
27	CPL52 (VT-GY)	16	CTRL MOD. - DOOR LOCK # PASSENGER DOORS UNLOCK (ALL EXCLUDING DRIVER)	
28	CPL51 (BU-GN)	18	CTRL MOD. - DOOR LOCK # DRIVER UNLOCK	
29	*	*	Not Used	
30	*	*	Not Used	
31	*	*	Not Used	
32	CBP47 (GN-BU)	12	FUSE - 47 OR CIRCUIT BREAKER	

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Reverse Connector C215 – 2009-2012 (early production) F150

**Inline
C215**

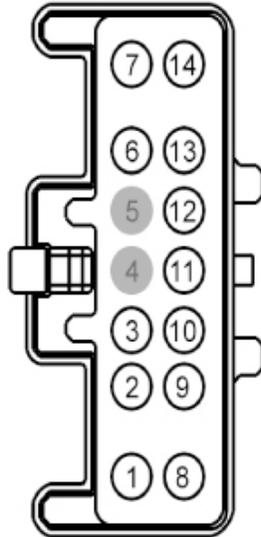
Description
Inline

Color
GY

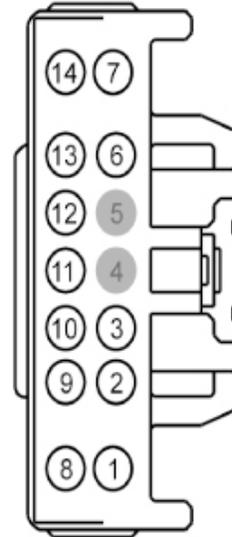
Base Part #

Service Pigtail

MALE
Harness 14A005



FEMALE
Harness 12A581



Pin	Circuit	Gauge	Qualifier
1	SBB11 (BU-RD)	12	
2	CLS19 (VT-OG)	16	
3	SBB72 (VT-RD)	16	
4	*	*	
5	*	*	
6	CET47 (BU)	20	
7	SBB14 (BN-RD)	14	
8	SBB69 (GY-RD)	12	14A005
8	SBB69 (GY-RD)	14	12A581
9	CMC25 (WH-VT)	20	12A581
9	CMC25 (WH-VT)	22	14A005
10	VCA23 (BU-WH)	20	
11	VCA24 (GN-OG)	20	
12	CLS25 (YE-VT)	18	14A005
12	CLS25 (YE-VT)	18	12A581 - Early production
12	CLS25 (YE-VT)	20	12A581 - Late production
13	CLS18 (GY-BN)	16	
14	CRD06 (BN-YE)	12	

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Ignition and Reverse Connector C264 – 2008 Super Duty

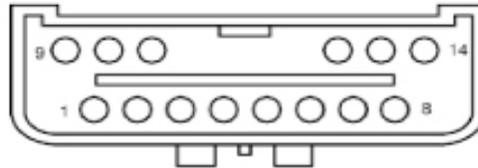
C264 (BK)

*with Marker lamps

**with Roof opening panel

***with Electrochromatic mirror

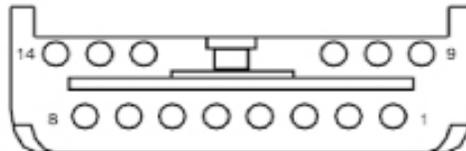
14401



MALE

(1)	–	(8)	**53 (BK/LB)
(2)	***676 (PK/OG)	(9)	**19 (LB/RD)
(3)	–	(10)	***640 (RD/YE)
(4)	*14 (BN)	(11)	54 (LG/YE)
(5)	57 (BK)	(12)	***140 (BK/PK)
(6)	–	(13)	***703 (WH/OG)
(7)	**400 (LB/BK)	(14)	***702 (WH/BK)

17C712/15A404



FEMALE

(1)	–	(8)	**53 (BK/LB)
(2)	***676 (PK/OG)	(9)	**19 (LB/RD)
(3)	–	(10)	***640 (RD/YE)
(4)	*14 (BN)	(11)	54 (LG/YE)
(5)	57 (BK)	(12)	***140 (BK/PK)
(6)	–	(13)	***703 (WH/OG)
(7)	**400 (LB/BK)	(14)	***702 (WH/BK)

INSTALLATION INSTRUCTIONS

Section 10C: Reference – Previous Model Year Ignition & Reverse Locations continued

Ignition and Reverse Connector C264 – 2009-2012 (early production) Super Duty

**Inline
C264**

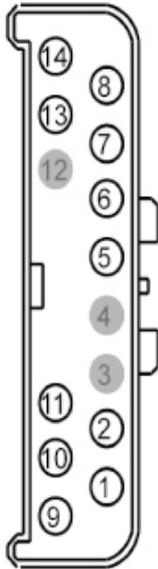
Description
Inline

Color
BK

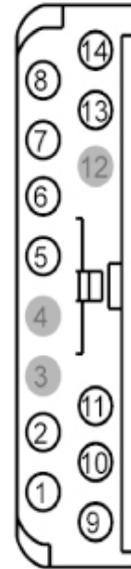
Base Part #

Service Pigtail

MALE
Harness 14A005



FEMALE
Harness 17K745



Pin	Circuit	Gauge	Qualifier
1	DMP19 (BK)	20	With Video Camera
2	CBP41 (BU)	20	
3	*	*	
4	*	*	
5	VMC30 (BU-GY)	20	
6	VMC31 (GY-BU)	20	
7	VMP19 (WH-GN)	20	With Video Camera
8	RMP19 (BN-VT)	20	With Video Camera
9	RMM13 (BU)	20	MIC
10	CLS10 (GN-BN)	18	MIC
11	VMM13 (YE-GN)	20	
12	*	*	
13	DMM13 (BK)	18	
14	GD133 (BK)	20	

INSTALLATION INSTRUCTIONS

Section 10D: Reference – Relocating the Compass Circuit Board for vehicles with External Compass Module (if required)

- 69.** Remove the separate compass module from the existing interior mirror by sliding it downwards (Figure 49).

Figure 49



- 70.** Unplug connector from the compass module (Figure 50).

Figure 50



- 71.** Pry the compass module apart with a screwdriver (Figure 51).

Figure 51



- 72.** Remove the circuit board from the compass module (Figure 52).

Figure 52



INSTALLATION INSTRUCTIONS

Section 10D: Reference – Relocating the Compass Circuit Board for vehicles with External Compass Module continued (if required)

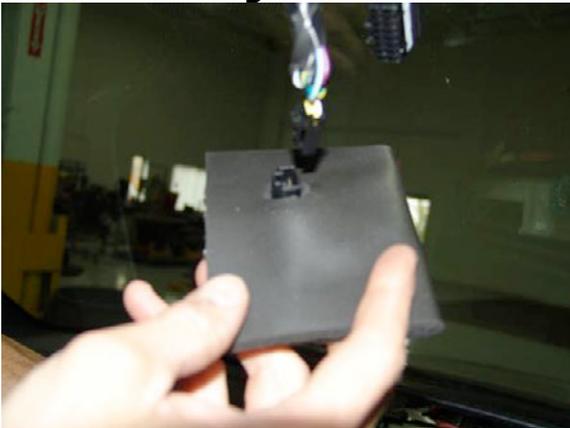
73. Wrap the circuit board in the supplied foam and cut an opening for connector terminal (Figure 53).

Figure 53



74. Plug the compass module connector into the circuit board (Figure 54).

Figure 54



75. Install the compass module circuit board between underneath the headliner as shown. The connector should face up, to the rear, and to the right (Figure 55).

Figure 55



INSTALLATION INSTRUCTIONS

Section 10E: Reference – Vehicles with Sync Microphone in Mirror

Follow the steps on this page only for auto dimming inside rear view mirror with built in Sync microphone.

- 76.** Splice the supplied interior harness to the vehicle mirror harness by following the next ten steps and Diagram A7.
 NOTE: Isolate the black, green and pink wires at the white 6 pin connector end of the supplied interior harness with electrical tape as they will not be used.
- Splice the black ground wire from the supplied interior harness black 16 pin connector end to the wire in pin 10 of the vehicle mirror harness connector.
 - Splice the green reverse wire from the supplied interior harness black 16 pin connector end to the wire in pin 3 of the vehicle mirror harness connector.
 - Splice the red ignition wire from the supplied interior harness black 16 pin connector end to the wire in pin 1 of the vehicle mirror harness connector.
 - Splice the orange positive (+) auto dimming wire from the supplied interior harness black 16 pin connector end to the wire in pin 8 of the vehicle mirror harness connector.
 - Splice the white negative (-) auto dimming wire from the supplied interior harness black 16 pin connector end to the wire in pin 7 of the vehicle mirror harness connector.
 - Splice the pink positive (+) compass wire from the supplied interior harness black 16 pin connector end to the wire in pin 6 of the vehicle mirror harness connector.
 - Splice the yellow negative (-) compass wire from the supplied interior harness black 16 pin connector end to the wire in pin 2 of the vehicle mirror harness connector.
 - Splice the yellow open wire from the microphone harness (supplied separately) to the wire in pin 4 of the vehicle mirror harness connector.
 - Splice the black ground wire from the microphone harness (supplied separately) to the wires in pins 5 and 10 of the vehicle mirror harness connector.
 - Splice the blue 12V positive (+) wire from the microphone harness (supplied separately) to the wire in pin 1 of the vehicle mirror harness.
 - Cover all connections with electrical tape or heat shrink.
- 77.** Place the microphone in a convenient place on A-pillar or in headliner.

Auto Dimming Mirror With Built-In Sync Microphone Mirror Pinout DIAGRAM A7

