

2015-Current F-150 Radar Blindspot System

(Part # RDBS-1520)

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Items Included in the Kit:

(2) Radar Housings

(2) Radars

Chassis Harness

Radar Harness

OBDII Connector

RDBS ECU

HMI Display Set and Buzzer

Heat Shrink (for interior wire connections)

(2) Radar Harness Connectors

22 ga. White, Brown and Yellow Wire (4ft)

22 ga. Light Green and Red Wire (10ft)

(12) zip ties with 1 Ztech rust inhibitor

(2) 1/4" plastic screws (for Radar mounting)

(4) 3/8" screws (for Radar mounting)

(6) 11/2" screws (for Base mounting)

Tools & Supplies Needed:

Electrical Tape

Zip ties

1/8" Drill Bit

Digital Volt Meter / BCM Safe Test Light

Screwdriver

Panel Popping Tool

Rotary Cutting Tool

Masking Tape





Safety Precautions:

- Work in well ventilated area that is clear of obstructions.
- Secure vehicle with tire chucks in both front and rear of tires.
- Turn vehicle accessories OFF and ensure ignition key is in OFF position.
- Wear safety goggles and snug fitting clothes.
- Use tools only for their intended purpose and which are in good repair.
- Only perform this task if confidence, skill, and physical ability permit.

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

Installing ECU Into Vehicle:

- 1. For the interior harness installation (Interior is taped up) run wires to passenger kick panel and make following connections. Keep the connector end under the drivers side dash.
 - a. GREEN wire connects to the vehicle's RIGHT TURN SIGNAL positive wire.
 - b. YELLOW wire connects to the vehicle's LEFT TURN SIGNAL positive wire.
 - c. WHITE wire connects to the vehicle's REVERSE lights.
 - d. BROWN wire connects to the vehicle's PARKING LIGHTS positive wire.
 - e. RED wire connects to vehicle IGNITION.
 - f. BLACK plastic-coated wire connects to a good, clean GROUND in the vehicle.

| Turn Signal (Left) | blue/green (F); gray/orange (R) | + | BCM in passenger kick, 40 pin plug (F), pin 39; 52 pin plug (E), pin 26 | | |
|---|---|---|--|--|--|
| Turn Signal (Right) | yellow/violet (F); green/orange (R) | + | BCM in passenger kick, 40 pin plug (F), pin 38; 52 pin plug (E), pin 52 | | |
| Reverse Light | green/brown | + | driver kick or BCM in passenger kick, 36 pin plug (C), pin 11 | | |
| Ignition | n white/orange + ignition switch, black 7 pin plu | | ignition switch, black 7 pin plug, pin 1 | | |
| Parking Lights blue/gray (F); blue/gray (R) | | + | BCM in passenger kick, 22 pin plug (G), pin 3; 36 pin plu (C), pin 12 | | |

- 2. Plug the interior harness into the ECU
- 3. Determine best mounting location for ECU under the drivers side dash.
- 4. Mount ECU
- 5. Connect the Blue and Brown CAN wires to the supplied OBDII connector.
- 6. Plug OBDII connector into OBDII under the dash.



INSTALL HMI (warning lights) and BUZZER:

- 1. Run HMI (human-machine interface) harness to interior harness. The short wire with connector goes to the driver's side and the longer wire goes to the passenger side.
- 2. Remove both driver and passenger A-pillar covers from vehicle.







- 3. Find a visible location low on the A-pillars covers to mount HMI.
- 4. Mark the location on both A-pillar covers and, using a 9/16-inch drill bit, carefully drill through each A-pillar.
- 5. Insert HMI into drilled hole and secure from the back side of A-pillar cover using retaining washer.
- 6. Plug in HMI to HMI harness and reattach A-pillar covers to appropriate sides, taking care not to pinch HMI harness wires.
- 7. Plug the buzzer into the interior harness. Find a flat surface to mount the buzzer to and remove backing of double-sided tape to attach to preferred location. (The more hidden the location is, the lower the buzzer volume will be.)

Install Chassis Harness:

- 1. Plug supplied chassis harness into ECU.
- 2. Run harness down drivers side of vehicle. Zip Tie harness along factory harnesses running to the rear bumper. *Be sure to avoid* things like exhaust pipes, brake lines, fuel lines, suspension components, and anything else that could damage the harness.
- 3. Run chassis harness to a location under the rear bumper on the drivers side. Leave connector in an accessible location to be used in final step.

INSTALLING RADARS AND HOUSINGS

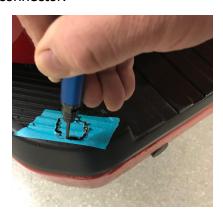
- 1. Cover both corners of the bumper with painters tape. This will help with making hole marks and a cutout template for the connector hole.
- 2. Place the housing base on the bumper. The base should fit snug within the grooves on the bumper. Mark the three screw holes and trace connector hole.







3. Remove housing base and drill three screw holes with 1/8th inch drill bit. Be sure to drill through the layer of metal beneath the plastic bumper. Using the template that was traced on the tape, cut out the hole for the connector.





- 4. Route the radar harness through each side of the bumper. The short side of the radar harness goes to the drivers side and the long side will go to the passenger side of the vehicle.
- 5. Insert the pins into the connector as shown below. Once inserted, push the white locking clip shown in photo below into place to secure pins in connector.

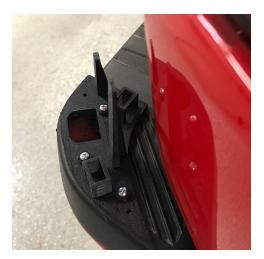




| Pin # | 1 | 2 | 3 | 4 | 5 | 6 |
|-------|-----|-----|--------------------------|-------------------------|-------|-----|
| Color | N/A | N/A | Brown w/ Black Stripe | Blue w/ Black Stripe | Black | Red |



6. Using the provided screws, attach the housing base to the bumper. Be careful not to damage the harness when installing screws.



DO NOT OVER TIGHTEN!

Doing so may cause the base to bow and prevent radar installation

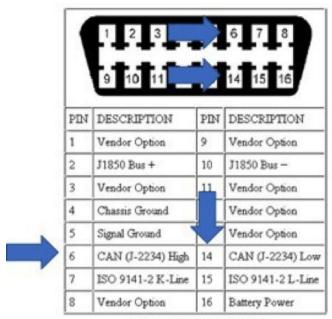


- 7. Connect the radar marked with an "L" on the back to the drivers side radar connector. Use provided screws to attach radar to posts on housing base
- 8. Connect the radar marked with an "R" on the back to the passenger side radar connector. Use provided screws to attach radar to posts on housing base.

3/8" screws are for the lower mounting holes, 1/4" for the single top mounting hole.

- 9. Install housing cover. Make sure the clips on the cover are lined up with the receivers on the base before applying pressure.
- 10. Connect the chassis harness to the radar harness.

Once install is complete, enter diagnostic mode for component testing. See last page for diagnostic mode instructions.



OBD-II Connector and Pinout



