Radar Blind Spot Brackets for 2013-Current Ford Escape (Part # RDBS-1420)

*****REQUIRES RDBS-1400 UNIVERSAL RADAR BLIND SPOT SYSTEM*****

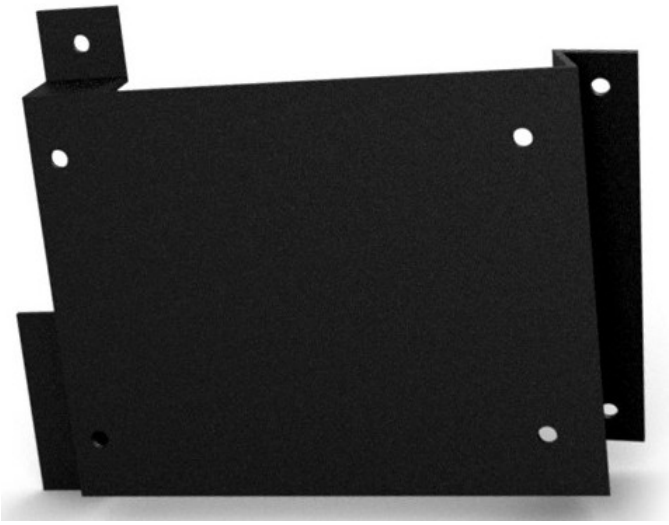
Please read thoroughly before starting installation and check that kit contents are complete.

Items Included in the Kit:

Driver side radar mounting bracket
Passenger side radar mounting bracket
8 ¾-inch stainless steel Phillips screws
4 1-inch stainless steel Phillips screws
16 Nyloc stainless steel nuts
16 5mm stainless steel washers
4 10mm nuts
8 self-tapping ¼-inch drive screws

Tools & Supplies Required:

Torx T30 Bit
¼-inch and ½-inch drill bit
¾-inch bi-metal hole saw
¼ inch,7mm, 8mm and 10mm sockets
Power drill
Deburring tool or round file
Multi-meter or computer safe test light
Zip ties and electrical tape
Plastic trim removal tool
Smart phone app: iHandy Level or Bubble level



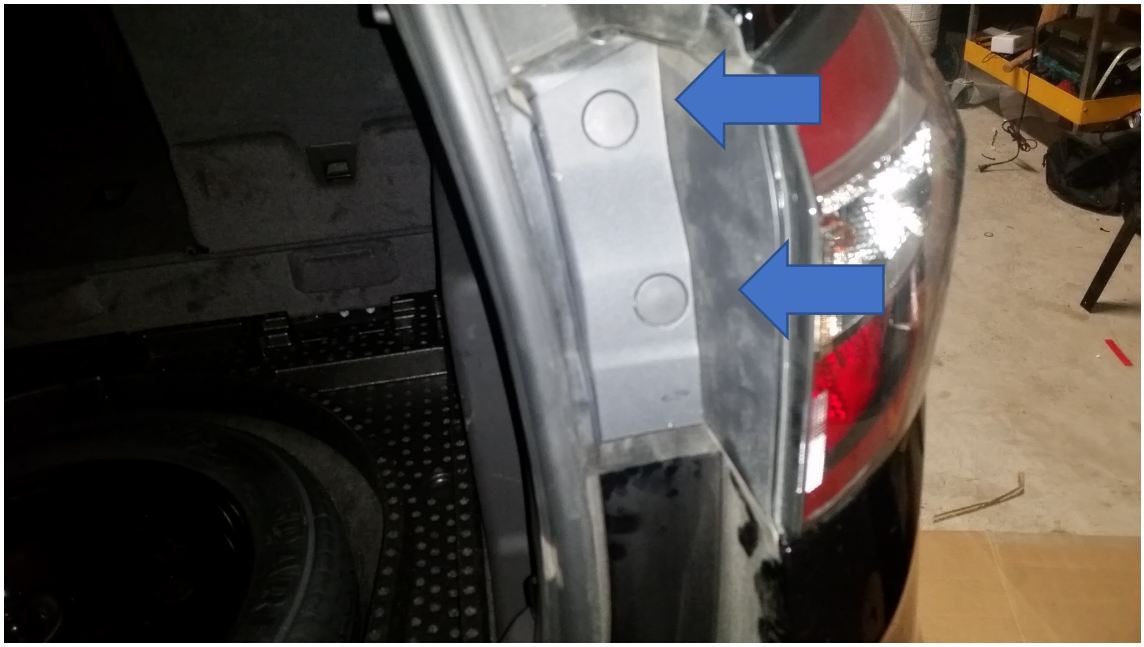
Safety Precautions:

- Work in a 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 please visit www.brandmotion.com

SECTION 1: REMOVE REAR BUMPER FASCIA

1. Starting at the rear wheel wells and moving forward, remove the black plastic trim from around the wheel well opening. When unclipping from rear bumper facia, use a plastic trim removal tool.
2. In the rear driver's side wheel well, remove (5) 7mm bolts. Repeat on passenger's side wheel well.
3. From underneath the vehicle bumper, remove 4 push-type fasteners that attach fascia to body of vehicle.
4. Open the rear hatch. Remove 2 plastic round trim covers on both taillight assemblies and remove the 8mm bolts behind the covers.



5. Pull back towards you to remove the tail light assembly and unplug from vehicle.
6. Remove the 8mm bolt below both tail light assemblies as pictured below.

7. This step will require assistance. One person should hold the bumper fascia, while the other removes the fascia from the vehicle body. On the driver's side of the upper bumper fascia, use a plastic pry tool and begin to unsnap the fascia from the body working from the wheel well toward the rear of the vehicle. Repeat removing bumper fascia from passenger side.

8. Lift the bumper fascia off the bumper (checking for any wiring or harnesses that may need to be disconnected) and set aside in a safe place.

SECTION 2: ATTACH BRACKETS and SENSORS

1. Working on the passenger's side, locate the vent on the passenger side lower rear. The bracket will be positioned against the edge of the vent and the top of the bracket against the body line.
2. After bracket is test-fitted, insert the 4 Phillips screws from the back side and attaching them with the 10mm Nylok nuts from the front. Screw threads will extend past the nuts.
3. Attach assembled bracket to vehicle using supplied self-tapping screws.
4. Mount radar sensor on the four studs with the connector pointing down (MASTER radar sensor mounts to driver's side, SLAVE mounts to passenger side). Secure sensor to studs with 4 additional Nylok nuts.
5. Repeat steps 1-4 on driver's side of vehicle.
6. Inside rear compartment, remove storage bin on driver's side.
7. Mark bottom of storage bin to drill ¾-inch hole. Drill hole using ¾-inch bi-metal hole saw (not supplied). Smooth edges of hole using deburring tool or round file. (We also recommend using rust inhibitor or paint on the hole.)
8. Drop the connector and blunt-cut wires from interior harness through the ¾-inch hole from the inside of the vehicle to the outside. Attach the blunt-cut wires to the loose wires by soldering and covering with supplied heat shrink. Plug the rear bumper harness to the interior harness by connecting the white plugs together.

9. Untape grommet from supplied bumper harness to gain access and run four loose wires through the grommet.
10. Pull interior harness back up through the hole to reseat grommet. (We also advise using a rust inhibitor or paint on the hole that was cut.)
11. Connect shortest length wired connector to MASTER radar module. Route the GREEN wire and the longer wired connector over to the passenger side.
12. Secure the wire running across the back of the vehicle with zip ties.

SECTION 3: INTERIOR WIRING HARNESS

1. On passenger side behind rear panel in taped-up harness, cut the tape to expose wires.

2. Splice the GREEN loose wire to the GREEN/ORANGE wire in wiring loom. This should be the RIGHT turn signal. Test the wire with a multimeter to confirm it is the RIGHT turn signal positive wire.
3. Splice the BROWN loose wire to the PURPLE/GREEN wire in the wiring loom. This should be the PARKING LIGHTS. Test the wire with a multimeter to confirm it is the PARKING LIGHTS positive wire.
4. Splice the WHITE loose wire to the GREEN/BROWN wire in the wiring loom. This should be the REVERSE lights. Test the wire with a multimeter to confirm it is the REVERSE lights positive wire.
5. Splice the RED wire from the interior harness to the WHITE/RED 18-gauge wire behind the fuse box mounted to the rear passenger wall. Use the supplied fuse holder and 3A fuse, and splice into the RED

wire approximately 3 inches from the previous spliced connection.

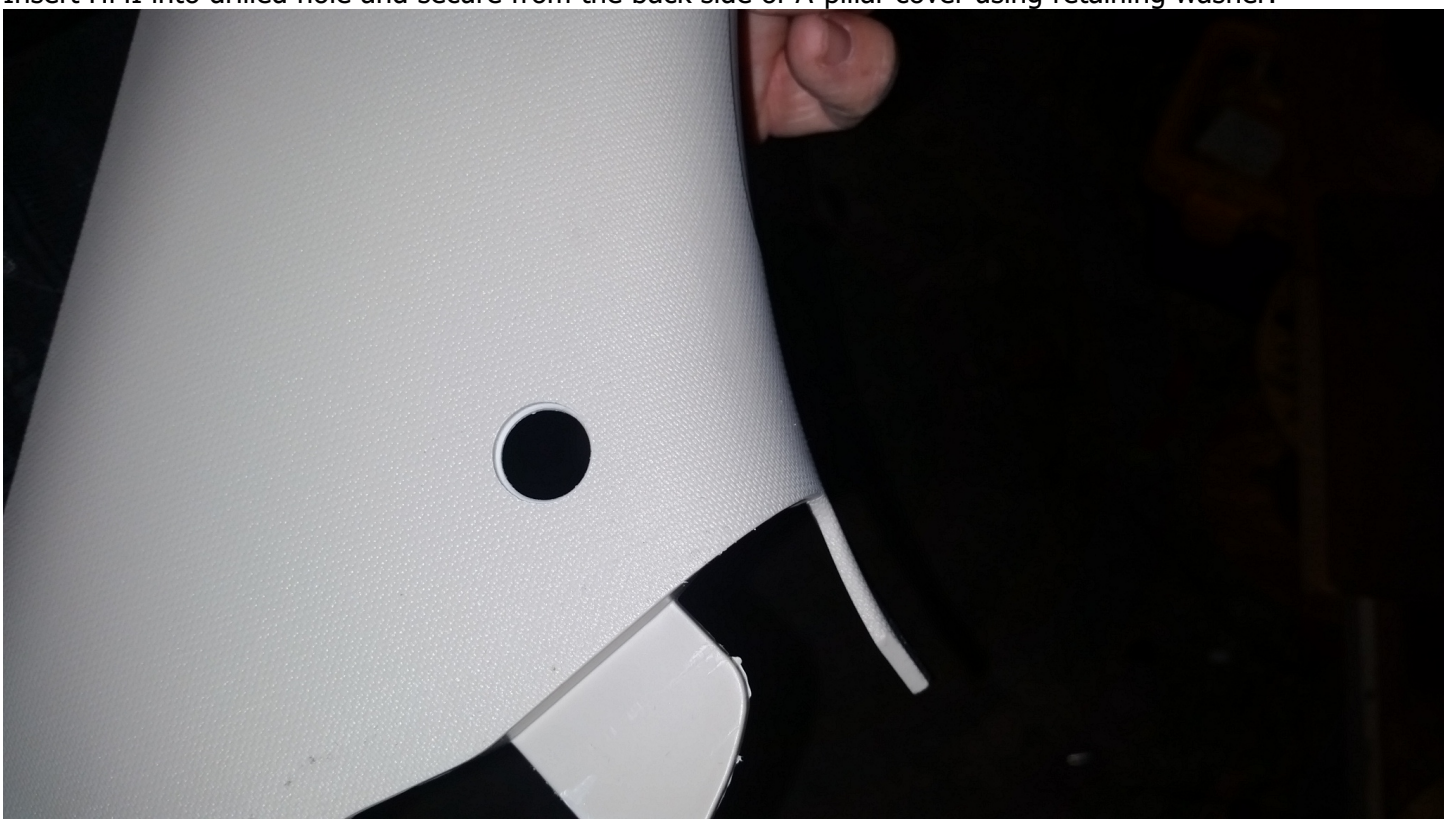
6. Use electrical tape to secure connection and return wires to original location.
7. On driver's side behind rear panel in taped-up harness, cut the tape to expose the wires.

8. Splice the YELLOW loose wire to the GRAY/ORANGE wire in the wiring loom. This should be the LEFT turn signal. Test the wire with a multimeter to confirm it is the LEFT turn signal positive wire.
9. Use electrical tape to secure connection and return wires to original location.
10. Inside the vehicle, remove the sill panels from the front and rear driver's side doors.
11. Remove driver side kick panel and under dash cover.
12. Route the interior harness from the rear storage bin to the front driver-side kick panel.
13. Attach the black plastic-coated wire with the ringlet from the interior harness to a good, clean ground in the vehicle.

SECTION 4: INSTALL HMI (warning lights) and BUZZER

1. Plug in 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 ½-inch drill bit, carefully drill through each A-pillar.

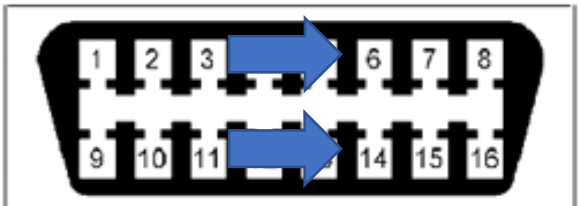
5. Insert HMI into drilled hole and secure from the back side of A-pillar cover using retaining washer.



6. Plug in HMI to HMI harness and re-attach 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 with be.)

SECTION 5: INSTALL ECU INTO VEHICLE

1. Plug the interior harness into the ECU.
2. Determine best mounting position for ECU.
3. Mount the ECU.
4. Attach BLUE CAN HI wire from the ECU to pin location 6 on the vehicle's OBDII connector and attach the BROWN CAN LO wire from the ECU to pin location 14 on the vehicle's OBDII connector.



PIN	DESCRIPTION	PIN	DESCRIPTION
1	Vendor Option	9	Vendor Option
2	J1850 Bus +	10	J1850 Bus –
3	Vendor Option	11	Vendor Option
4	Chassis Ground	12	Vendor Option
5	Signal Ground	13	Vendor Option
6	CAN (J-2234) High	14	CAN (J-2234) Low
7	ISO 9141-2 K-Line	15	ISO 9141-2 L-Line
8	Vendor Option	16	Battery Power

OBD-II Connector and Pinout

SECTION 6: REASSEMBLE VEHICLE

1. Before reassembling vehicle and reattaching bumper fascia, it is highly recommended to test the blind spot system to make sure it is functioning properly (detecting objects behind or approaching from the sides while the vehicle is in reverse and at speeds above 20 MPH). If detection falses, it may be necessary to shim radar modules 1 degree up or down using included washer shims or longer 1-inch screw studs.
2. Use ***Smart phone app: iHandy Level or Bubble level*** to test angles.
3. Reassemble vehicle, following steps in reverse order. Test the blind spot system again to ensure proper functioning of the radar units under the rear bumper fascia.