

3. With the air dam out of the way, locate and unplug the main harness plug on the top of the passenger/right frame rail behind the bumper bracket, **(Figure 3)**. Unplug any remaining harnesses leading to the bumper. On hybrid models, temporarily unplug and remove the speaker assembly for the pedestrian audible alert system from the driver/left frame channel, **(Figure 4)**. Note speaker is located on the inner side of the frame, behind the driver/left bumper bracket. From below, remove the hex bolt and drop the speaker down, unplug and remove, **(Figure 5)**.
4. Place blocks or jack stands under the front bumper to support it during mounting hardware removal. Once the bumper has been safely supported, remove the large hex nuts from the back of each bumper bracket attaching the bumper to the bumper brackets, **(Figure 6)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling. Carefully slide the bumper off over the tow hooks if equipped.
5. Remove both tow hooks if equipped, **(Figure 6)**. Tow hooks cannot be reinstalled.
6. On models with bolt-on frame extensions, remove the extensions from outside of frame, **(Figure 6)**. **NOTE:** It may be necessary to cut the bolts to remove frame extensions, (removal is optional).
7. Models without tow hooks, insert (1) 12mm Double Nut Plate into the end of the driver/left side of the frame and over the two holes in the bottom of the frame, **(Figures 6 & 7)**.
8. Select the driver/left Frame Mounting Bracket, **(Figure 7)**. Attach the Bracket to the bottom of the frame and inner Double Nut Plate with the included (2) 12mm x 45mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, **(Figures 7 & 8)**. Do not fully tighten hardware at this time.
9. Next, insert (1) 12mm x 170mm Long Hex Bolt with (1) 12mm Flat Washer the Frame Bracket and frame, **(Figures 7 & 9)**. Secure the Bracket to the frame with (1) 12mm Flat Washer, (1) 12mm Lock Washer and (1) 12mm Hex Nut. **NOTE:** On models with ecoboost, it may be necessary to temporarily remove the hardware attaching the intercooler shutter assembly to insert the long Hex Bolt.
10. Slide (2) "U" Bracket Spacers, (1 on inner, 1 on outer side of frame), down between the side of the frame and the inside of the Frame Bracket, **(Figure 7)**. **NOTE:** On models with ecoboost, reattach assembly once Hex Bolt has been installed. Do not fully tighten hardware.
11. Repeat **Steps 7—10** to install the passenger/right Frame Bracket.
12. Disassemble front bumper to unplug and remove sensors and wiring harness from bumper. Pay attention to mounting location of all sensors for proper reinstallation.
13. Determine if the vehicle is equipped front sensors:

Models without bumper sensors:

- a. Select the included (6) Plastic Plugs.
- b. From the front, push the plugs into the sensor mounting holes, **(Figure 10)**.

Models with bumper mounted parking sensors:

- a. Select the driver/left outer sensor. Remove the silicone seal from the end of the sensor. Slide the included larger Foam Sensor Seal over front of sensor, **(Figure 11)**.
- b. Insert sensor with Seal into driver/left outer sensor mount, **(Figure 12)**.
- c. Place Foam Spacer over end of sensor. Push Sensor Retaining Cap onto sensor mount and lock into mounting holes, **(Figure 12)**.
- d. Repeat previous Steps to install remaining sensors.
- e. Install wiring harness for parking sensors, **(Figure 17)**. **NOTE:** Use the included (2) Wire Harness Extensions to extend the length of the factory harness to reach all sensors.

Models with Adaptive Cruise Control (ACC).

- a. Remove the Rubber Plugs from the holes in the top of the Bumper, **(Figure 13)**.
- b. Select the Relocation Bracket. Attach the Bracket to the front of the Bumper with (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 13)**.
- c. Remove the ACC assembly from the vehicle. Remove the sensor from the bracket, **(Figure 14)**.
- d. Attach the sensor to the back of the Relocation Bracket with (2) 6mm x 25mm Button Head Bolts, (2) 6mm Lock Washers, (2) 6mm Flat Washers and (2) 6mm Flange Nuts, **(Figure 15)**.
- e. Attach the Plastic Sensor Cover to the front of the Bracket with the included (4) 5mm x 16mm Button Head Bolts, (4) 5mm Flat Washers, (4) 5mm Lock Washers and (4) 5mm Hex Nuts, **(Figure 16)**.
- f. Fully tighten sensor mounting hardware.

