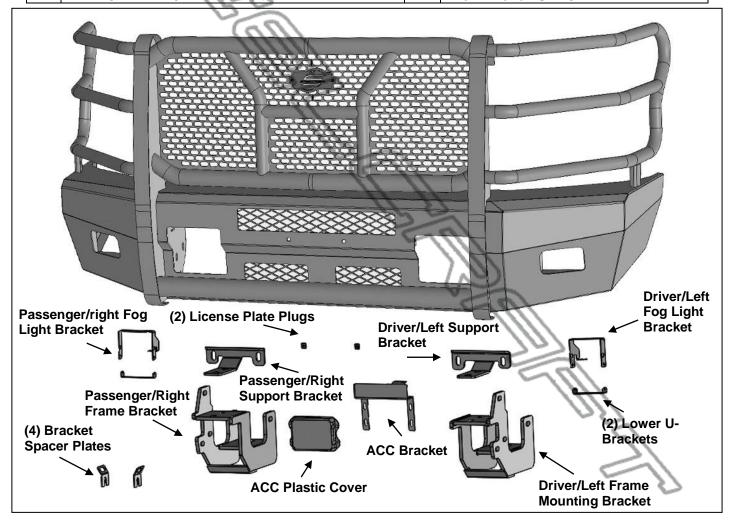
PARTS LIST:

1	Front Bumper Assembly	14	12-1.75mm x 45mm Hex Bolts
1	Driver/Left Frame Mounting Bracket	28	12mm x 37mm x 3mm Flat Washers
1	Passenger/Right Frame Mounting Bracket	12	12-1.75mm Nylon Lock Nuts
1	Driver/Left Frame Support Bracket	4	12mm Lock Washers
1	Passenger/Right Frame Support Bracket	4	8-1.25mm x 20mm Hex Bolts
4 \	Bracket Spacer Plates	4	8mm x 24mm x 2mm Flat Washers
1	Driver/Left Fog Light Upper U-Bracket	4	8mm x 16mm x 1.6mm Flat Washers
1	Passenger/Right Fog Light Upper U-Bracket	4	8mm Nylon Lock Nuts
2	Lower U-Brackets (Fog Lights)	3	6mm x 25mm Button Head Bolts
1	Adaptive Cruise Control, (ACC) Bracket	4	6mm x 16mm Hex Bolts
1	ACC Plastic Cover	7	6mm x 18mm x 1.6 Flat Washers
2	Plastic Plugs for license plate mount	7	6mm Lock Washers
6	12mm Plastic Washers	3	6mm Hex Nuts
2	12mm Double Nut Plates	1	Allen Wrench S=4
2	12-1.75mm x 170mm Hex Bolts	1	Allen Wrench S=2.5



RECOMMENDED TO REPLACE THE 12MM HEX BOLTS ON AN ANNUAL BASIS

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PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS HIGHLY RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.

- 1. Remove the license plate and bracket. On models with factory fog lights, unplug both lights and remove the complete light assemblies from back of bumper, (Figure 1). Unplug and remove the adaptive cruise control, if equipped. Release the wiring harness from the clips attached to the back of the bumper. Move harness away from bumper.
- 2. Next, remove the plastic bumper pad assembly, **(Figure 2)**. **NOTE**: Release metal clips from back of bumper to remove bumper pad assembly. It may be easier to access bumper hardware, (from back of bumper), with plastic air dam removed from bottom of bumper.
- 3. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the large hex nut from the back of each bumper bracket, (Figure 3). Next, from the front of the bumper, remove the (2) factory hex nuts attaching the bumper to each bumper bracket, (Figure 4). WARNING! Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper off over the tow hooks.
- **4.** On models with tow hooks, remove the tow hook from the bottom of the frame, **(Figure 5)**. Repeat to remove the passenger side tow hook.
- 5. Select the driver/left side Frame Mounting Bracket. Insert the included (1) 12mm Double Nut Plate into the open end of the frame, (Figures 5 & 6). NOTE: On models with tow hooks, use the factory double nut plate. Attach the Frame Bracket to the bottom of the frame and Double Nut Plate with (2) 12mm x 45mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, (Figure 6). Do not tighten.
- 6. Select the driver/left side Frame Support Bracket, (Figure 7). Place the Support Bracket on top of the Frame Bracket. Insert the factory double bolt plate through the Support Bracket and bumper flange, (Figure 7). Reuse the factory hex nuts to attach the Support Bracket to the factory double bolt plate. Do not fully tighten at this time.
- 7. Attach the Support Bracket directly to the top of the Frame Bracket with (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figure 8). Do not tighten. NOTE: On models with tow hooks, attach the tow hook to the inside of the Frame Bracket and Support Bracket with the included (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, (Figures 8 & 9). IMPORTANT: On models with tow hooks and an adaptive cruise control, ONLY the passenger/right side tow hook may be reinstalled. Refer to Step 10.
- 8. Insert (1) 12mm x 170mm Long Hex Bolt with (1) 12mm Flat Washer through the outside of the mounting tab on the Frame Bracket, through the frame and inside tab. Secure with (1) 12mm Flat Washer and (1) 12mm Nylon Lock Nut. Insert (1) Spacer Plate down between each mounting tab and the side of the frame, (Figures 9 & 10). Do not fully tighten hardware.
- 9. Repeat Steps 5—8 to install the passenger/right side Frame Bracket assembly.
- **10.** Determine if the vehicle is equipped with an adaptive cruise control, (ACC). **Vehicles without ACC**, continue to **Step 11**.

Vehicles with ACC:

- **a.** Insert (3) 6mm x 25mm Button Head Bolts through the (3) holes on the ACC Plastic Cover, the ACC Bracket and out through the adaptive cruise control. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 11)**.
- **b.** Attach the ACC Bracket assembly to the mounting tabs on the back of the bumper with (2) 8mm x 20mm Hex Bolts, (4) 8mm x 16mm Flat Washers and (2) 8mm Nylon Lock Nuts, **(Figure 12)**.

11. Models with factory fog lights:

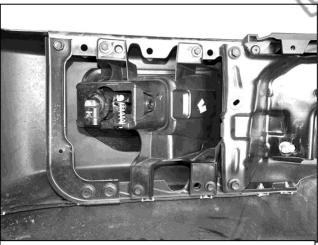
- **a.** Use a flat blade screwdriver to carefully pop out the tabs on the side of the fog light bracket attaching the light to the bracket, **(Figure 1)**. Pop the light out of the plastic bracket housing.
- **b.** Remove the adjustment screw and spring from the light assembly.
- c. Select the driver/left top U Bracket, (Figure 13). Attach the Bracket to the slot in the light opening with the included (1) 8mm x 20mm Hex Bolt, (2) 8mm Flat Washers and (1) 8mm Nylon Lock Nut, (Figure 13).
- **d.** Carefully spread the sides of the Bracket enough to slide the OE plastic fog light between and into the Bracket, **(Figure 14)**. Select (1) Lower U-Bracket. Attach the Lower Bracket to the

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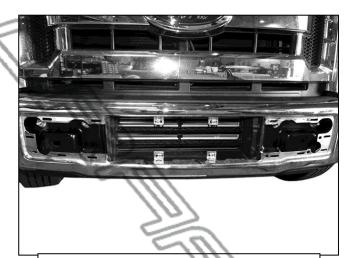
- Upper Bracket with (2) 6mm x 16mm Hex Bolts, (2) 6mm Lock Washers and (2) 6mm x 12mm Small Flat Washers, (Figure 15).
- **e.** Insert the factory spring between the tab on the Bracket and the light. Insert the screw through the tab, spring and into the fog light, **(Figure 15)**.
- **f.** Repeat to install the passenger/right fog light.
- **g.** Reattach the wiring harness. Adjust lights and tighten all fog light bracket hardware.
- **12.** With assistance, position the Bumper Assembly to the outsides of the Frame Brackets. Temporarily support the weight of the Bumper. **WARNING**: To avoid possible injury or damage to the vehicle, do not proceed until the bumper is fully and safely supported.
- 13. Attach the Bumper to the driver/left Bracket with the included (3) 12mm x 45mm Hex Bolts, (6) 12mm Flat Washers, (3) 12mm Plastic Washers and (3) 12mm Nylon Lock Nuts, (Figures 16 & 17). IMPORTANT: Place the Plastic Washers between the outer 12mm Flat Washers and the mounting plate on the Bumper to minimize corrosion. Repeat this **Step** to attach the passenger/right side of the Bumper. Snug but do not tighten hardware.
- **14.** Level and adjust the bumper and fully tighten all 12mm hardware to 65-70ft-lbs. **NOTE**: If additional inout adjustment is required, loosen Frame Bracket hardware and slide the Bracket in or out as necessary and fully tighten.
- **15.** Use the included (2) push-in Plastic Plugs to attach the front license plate, (if required), to the (2) holes in the front bumper, **(Figure 18)**.
- **16.** Do periodic inspections to the installation to make sure that all hardware is secure and tight.

To protect your investment, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Front Bumper assembly.

Driver Side Installation Pictured



(Fig 1) Remove fog light assembly from bumper



(Fig 2) Remove license plate. From behind bumper, release metal clips attaching plastic bumper pad to the bumper

WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or the bumper may fall.

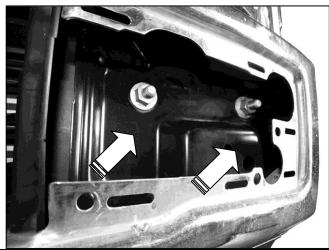
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Driver Side Installation Pictured



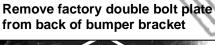
(Fig 3) Remove factory hex nut (arrow) from back of bumper bracket

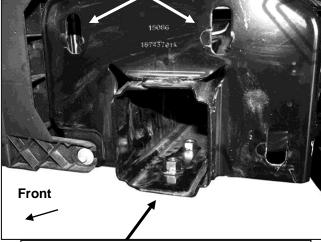
WARNING! Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or the bumper may fall.



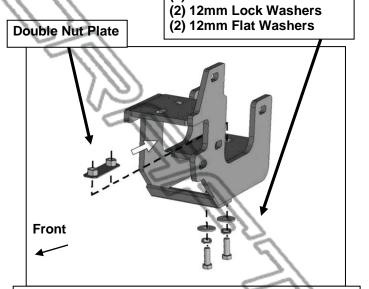
(Fig 4) Remove (2) factory hex nuts from each side

(2) 12mm x 45mm Hex Bolts





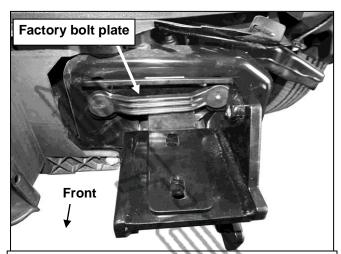
(Fig 5) Reuse factory double nut plate (models with tow hooks) or insert included Double Nut Plate into end of frame



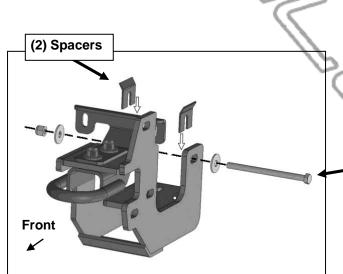
(Fig 6) Slide Bracket assembly over end of frame. Attach assembly to Double Nut Plate in frame (Fig 5)

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Driver Side Installation Pictured



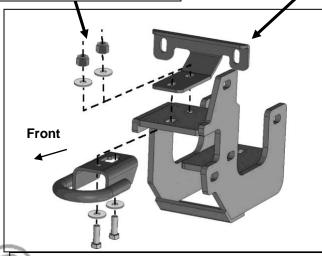
(Fig 7) Reuse factory double bolt plate and hex nuts to attach Support Bracket to bumper bracket



(Fig 9) Insert Spacers between tabs on Bracket assembly and sides of frame

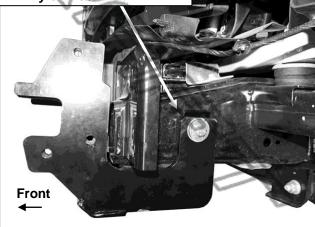
Tow Hook (if equipped)
(2) 12mm x 45mm Hex Bolts
(4) 12mm Flat Washers
(2) 12mm Nylon Lock Nuts

Driver/left Frame Support Bracket



(Fig 8) Attach Support Bracket to top of Bracket Assembly and factory tow hook (if equipped)

(2) Frame Spacers 12mm x 170mm Long Hex Bolt (2) 12mm Flat Washers 12mm Nylon Lock Nut



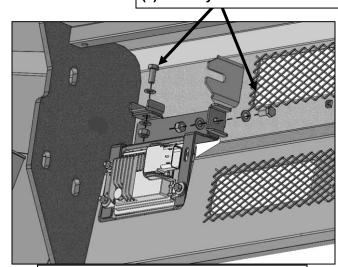
(Fig 10) Driver side Bracket Assembly pictured

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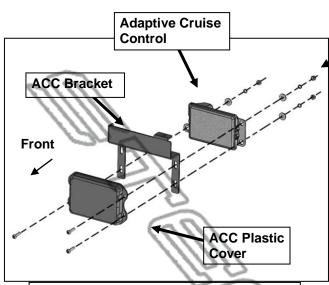
- (3) 6mm x 25mm Button Head Bolts
- (3) 6mm x 18mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts



- (4) 8mm x 16mm Flat Washers
- (2) 8mm Nylon Lock Nuts

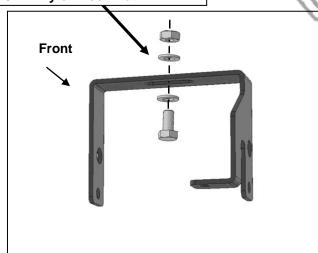


(Fig 12) Attach ACC assembly, Bracket and Cover to tabs on back of Bumper

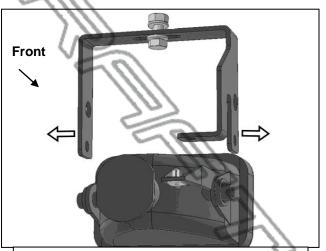


(Fig 11) Attach Adaptive Cruise Control, (ACC) to back of ACC Bracket

8mm x 20mm Hex Bolt (2) 8mm x 24mm Flat Washers 8mm Nylon Lock Nut



(Fig 13) Optional OEM fog light installation (light not included). Attach driver/left Upper Bracket to the slot in top of the opening



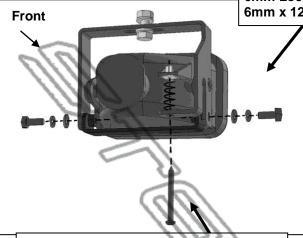
(Fig 14) Carefully spread sides to slide OEM fog light into position in pivot holes

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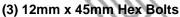
7/20/20 (DP)

Driver Side Installation Pictured

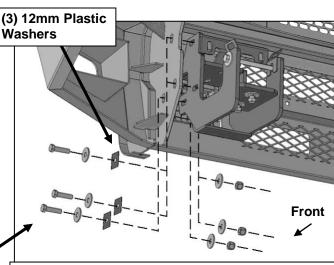
6mm x 16mm Hex Bolt 6mm Lock Washer 6mm x 12mm Flat Washer **WARNING!** Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.



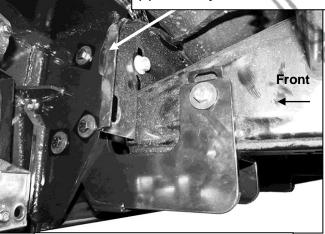
(Fig 15) Attach lower U Bracket to Upper Bracket. Reuse factory adjustment hardware (screw, spring and plastic nut)



- (6) 12mm Flat Washers
- (3) 12mm Plastic Washers
- (3) 12mm Nylon Lock Nuts

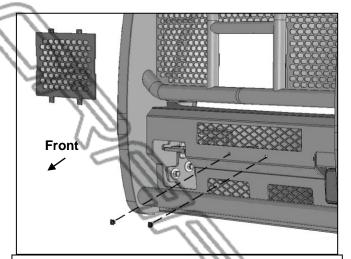


(Fig 16) Attach Bumper to side of Bracket. NOTE: Insert Plastic Washers between Flat Washer and mounting plate on Bumper to minimize corrosion



(Fig 17) Driver side Bracket to Bumper

Special Note: While Aluminum does not rust, there is potential for galvanic corrosion if the coating is scratched between your bumper and the steel frame brackets + hardware (especially in extreme environments such as the coastlines or where road salt is used during winter). A visual inspection should be performed by the user at least on an annual basis to determine if excessive corrosion is present on or surrounding the hardware.



(Fig 18) Push plastic plugs into holes in Bumper for license plate if required. Models with grille mounted camera, remove center screen. NOTE: Due to partially obstructed airflow, center LED light installation not recommended on ecoboost models used under extreme conditions. (light not included. Installation optional)

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