

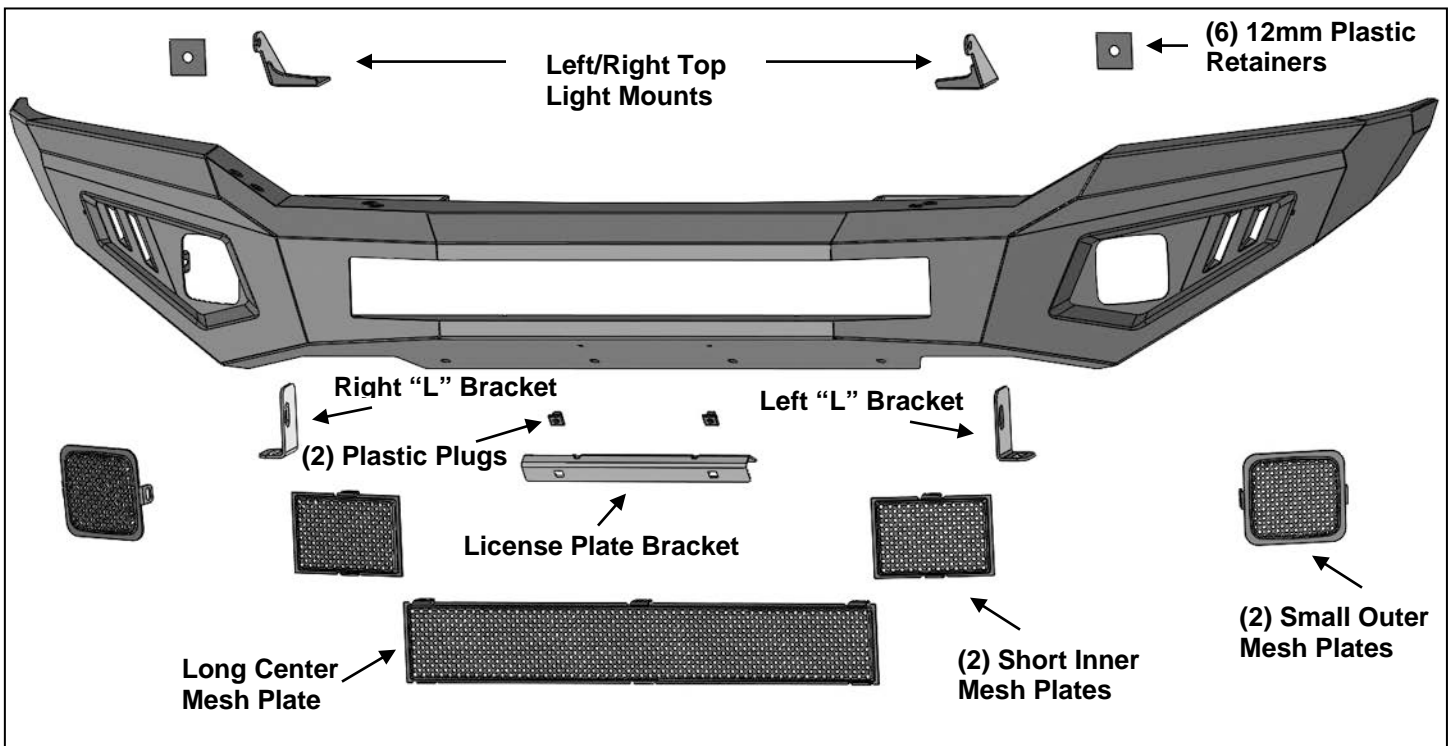


AB2217

Endurance Truck Front Bumper for 18-20 FORD F150
(Excl. 2020 Diesel Models and ACC bracket kit is sold separately)

PARTS LIST:

1	LD2 Front Bumper	2	8-1.25mm x 16mm Hex Bolts
1	Long Center Mesh Plate	14	8mm x 24mm x 2mm Flat Washers
2	Short Inner Mesh Plates	8	8mm Lock Washers
2	Small Outer Mesh Plates	6	8mm Hex Nuts
1	Driver/Left Bumper Top Light Mount	2	6-1.0mm x 20mm Button Head Bolts
1	Passenger/Right Bumper Top Light Mount	14	6-1.0mm x 20mm Combo Bolts
1	Driver/left "L" Bracket (center LED light)	2	6-1.0mm x 16mm Hex Bolts
1	Passenger/right "L" Bracket (center LED light)	6	6mm x 18mm x 1.6mm Flat Washers
1	License Plate Bracket	2	6mm Lock Washers
2	Plastic Plugs for license plate mount	14	6mm Flange Nuts
6	12mm Plastic Retainers	2	6mm Nylon Lock Nuts
4	8-1.25mm x 25mm Button Head Bolts	1	5mm Allen Wrench (for 8mm Button Bolts)
2	8-1.25mm x 25mm Hex Bolts	1	4mm Allen Wrench (for 6mm Button Bolts)



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, **(Figure 1)**. Remove the plastic bumper pad assembly, **(Figure 2)**. **NOTE:** Carefully pull bumper pad straight out away from bumper. Unplug and remove the adaptive cruise control, if equipped, **(Figure 3)**.



2. Unplug the fog lights, if equipped, **(Figure 4)**. Release the wiring harness from the clips attached to the back of the bumper. Move all wiring harnesses away from 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 the bumper bracket attaching the lower bumper to the bumper bracket, **(Figure 5)**. Next, from the front of the bumper, remove the (2) factory hex nuts attaching the bumper to the bumper brackets, **(Figure 6)**. **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 bolt on frame extensions, remove the extensions from outside of frame, **(Figure 7)**. **NOTE:** On some models the factory bolts may need to be cut to remove frame extensions.
5. **Models equipped with adaptive cruise control** must purchase a separate ACC Relocation Kit to install the ACC to the Front Bumper. Please follow the instructions provided in the Kit to install the ACC.
6. Carefully unwrap the Bumper assembly. Determine if accessory lights, (not included), or Screen Fill Panels will be installed at this time. **IMPORTANT:** It may be easier to install Center Fill Panels and/or lights before installing Bumper. **IMPORTANT:** On Ecoboost models, it is highly recommended not to install a center LED Light on the Bumper. Blocking the Ecoboost engine may cause overheating.

Screen Fill Panel Installation (do not install fill panels if installing lights).

- a. Select desired Screen Fill Panels. **NOTE:** Outer Panels are square with rounded corners, Inner panels are rectangular with sharp corners, **(Figure 8)**.
- b. Attach Screen Fill Panels as needed with the included 6mm Button Head Combo Bolts and 6mm Flange Nuts, **(Figures 8 & 9)**. Fully tighten Fill Panel hardware at this time. Repeat to install all Panels as desired.

Inner center LED bar style light installation (light not included).

- a. Select the driver/left "L" Light Bar Bracket. **NOTE:** "L" Brackets are offset to adjust for different widths of LED Bar Lights and can be installed on either side as needed.
- b. Attach the L Bracket to the slot on the back of the Bumper with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 10)**. Repeat this Step to install the remaining "L" Bracket on the other side of the Bumper. **IMPORTANT:** The Bumper features slots designed for 20" and 30" bar style lights. Attach the Brackets to the correct slots in the Bumper. If necessary, hold the light up to the slots to help determine correct slots to use.
- c. Attach the light to the "L" Brackets with the hardware included with the light or the supplied (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers or (2) 6mm x 16mm Hex Bolts, (2) 6mm Lock Washers and (2) 6mm Flat Washers, **(Figure 10)**. Do not fully tighten hardware at this time.

Outer LED cube style light installation (light not included).

- a. Attach lights to the mounting tabs at the outer-ends of the Bumper, **(Figure 8)**.
- b. Follow the light manufacturer's instruction to properly wire lights once Bumper is installed.

Top mounted 30" bar style LED light (not included). **IMPORTANT:** If installing the ACC Relocation Kit, (sold separately), then the top 30" Light, (sold separately), cannot be installed.

- a. Remove the (2) rubber plugs from the driver/left side mounting holes.
- b. Select the driver/left Light Bracket. Attach the Bracket to the top of the Bumper with (2) 8mm x 25mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 11)**. Do not tighten hardware at this time.
- c. Repeat previous Steps to attach the passenger/right Bracket.
- d. Select the 30" light, (not included). Attach light to Top Brackets with the hardware included with the light. Adjust the width of the Brackets to the light and fully tighten bracket hardware.
IMPORTANT: Top Light Brackets are designed to install 30" bar style LED lights with outside length dimensions of 31.653" (804mm) to 32.44" (824mm) only. Fully tighten top light hardware.

7. Select (1) factory double bolt plate, **(Figure 12)**. Insert the bolt plate through the back of the driver side mounting plate on the back of the bumper and out through the top bumper slots, **(Figure 13)**. Thread (2) 12mm Plastic Retainers onto the double bolt plate and up tight against the mounting plate to secure



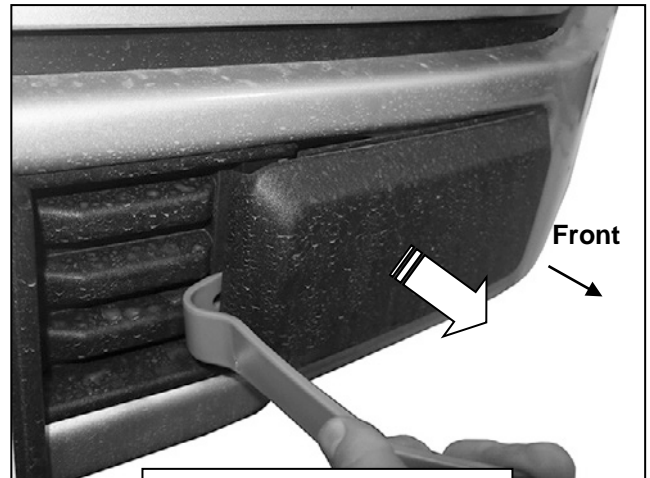
in place. **NOTE:** The Plastic Retainers are used to hold the bolt plates in place and help in Bumper installation. Repeat step to install (1) factory bolt plate with (1) 12mm Plastic Retainer to the bottom slot on the bumper mounting plate, **(Figure 13)**.

8. Repeat previous step to install the factory bolt plates on the passenger side bumper mounting plate.
9. With assistance, position the Bumper Assembly up to the frame, **(Figure 14)**. 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.
10. Reuse the (6) factory hex nuts to secure the Bumper to the bolt plates, **(Figure 15)**. Do not fully tighten.
11. Level and adjust the bumper and fully tighten all hardware.
12. Attach the License Plate Bracket to the holes in the bumper with the included (2) 6mm x 20mm Button Head Screws, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts. Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 16)**.
13. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

To protect your investment, wax this product after installing. Regular waxing is recommended to add a protective layer over the finish. 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 Bumper assembly.



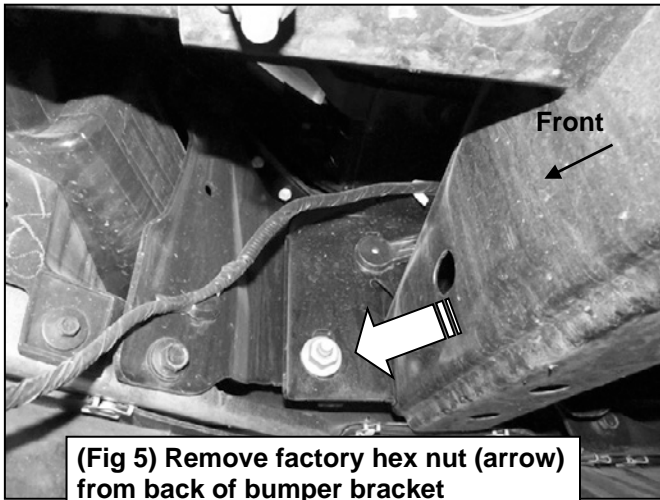
(Fig 1) Remove license plate from Bumper



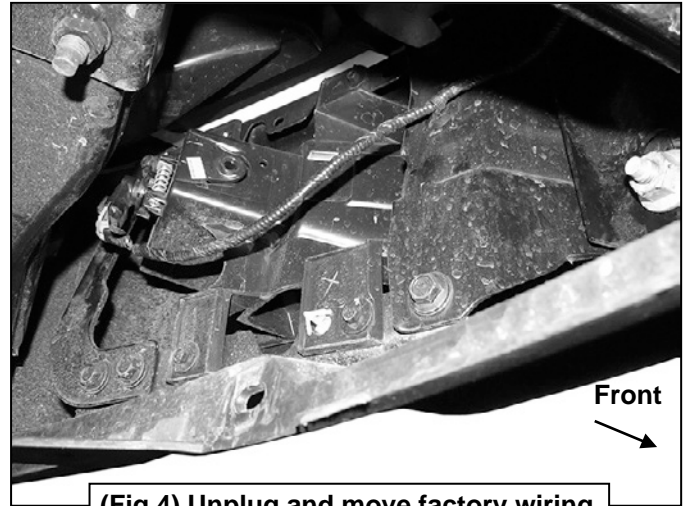
(Fig 2) Carefully pull plastic bumper pad off of bumper



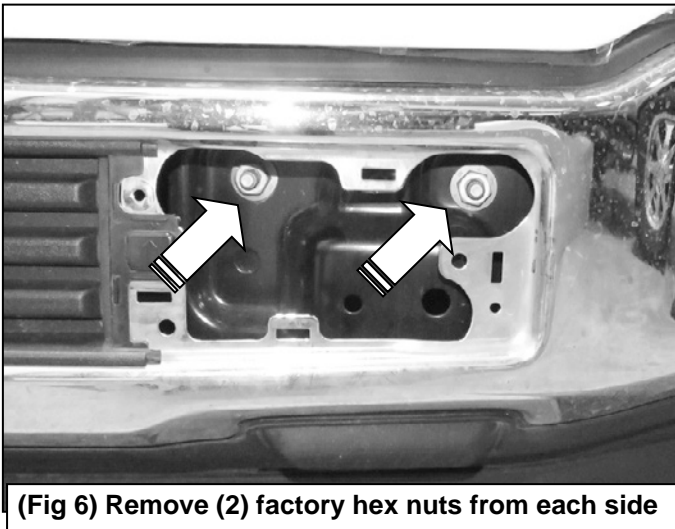
(Fig 3) Remove and unplug adaptive cruise control from driver/left side of frame, if equipped



(Fig 5) Remove factory hex nut (arrow) from back of bumper bracket

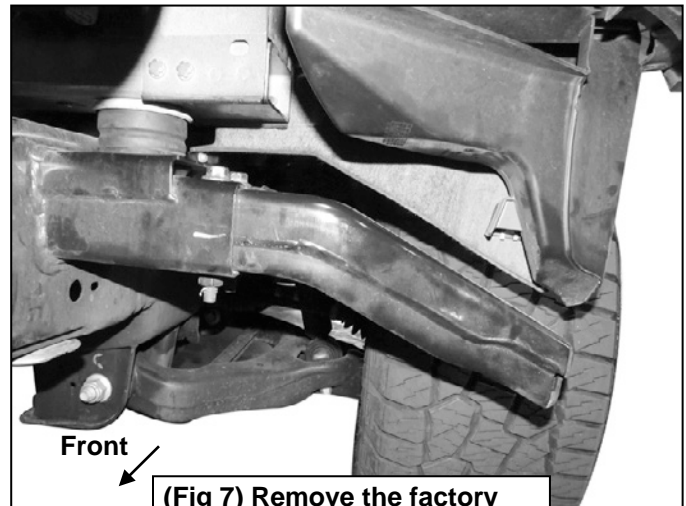


(Fig 4) Unplug and move factory wiring harness for fog lights (if equipped)

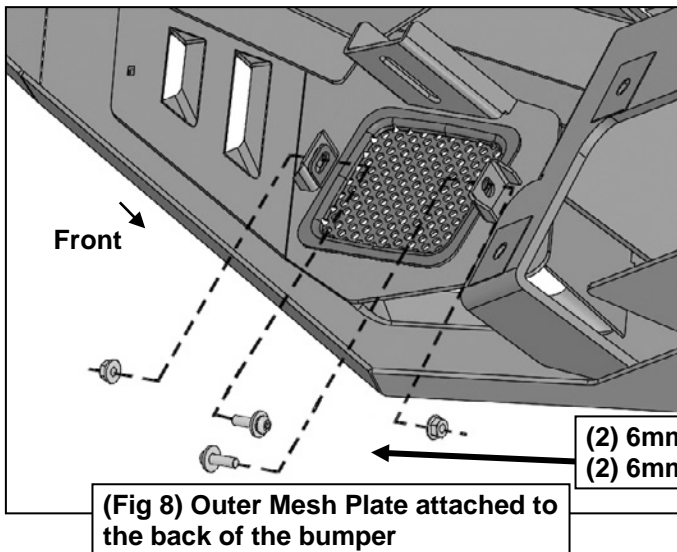


(Fig 6) Remove (2) factory hex nuts from each side

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



(Fig 7) Remove the factory frame extension, if equipped

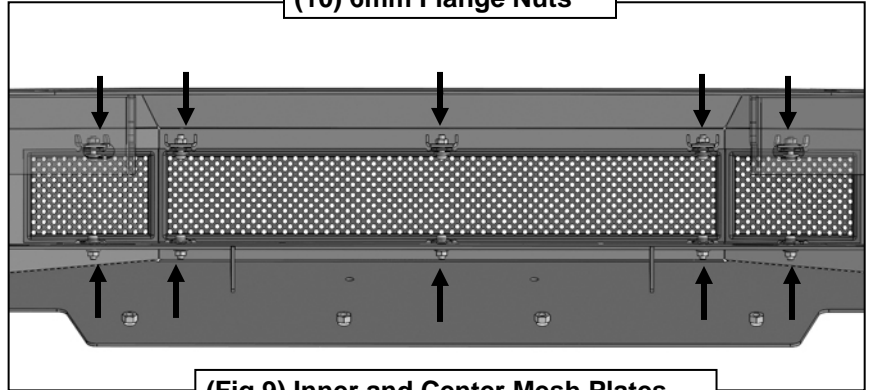


(2) 6mm Combo Bolts
(2) 6mm Flange Nuts

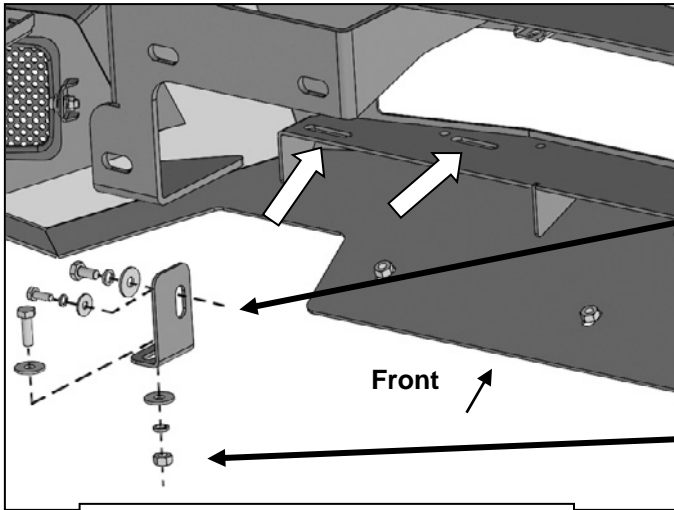
(Fig 8) Outer Mesh Plate attached to the back of the bumper



(10) 6mm Combo Bolts
(10) 6mm Flange Nuts



(Fig 9) Inner and Center Mesh Plates attached to the back of the bumper



NOTE: Mount the "L" Bracket to the proper slot for the light size

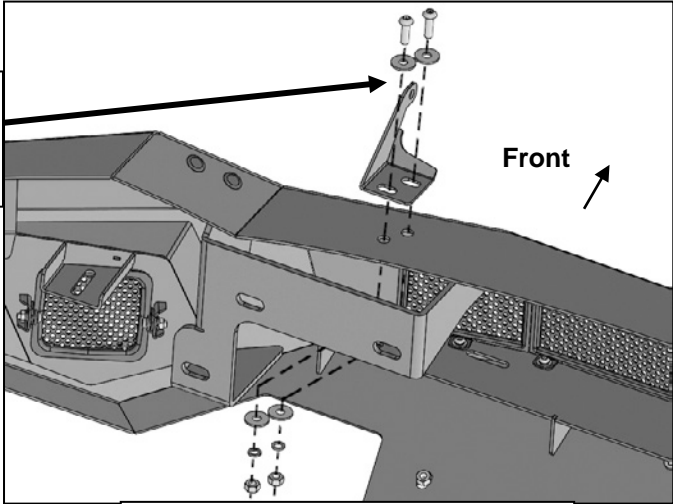
6mm x 16mm Hex Bolt
6mm Lock Washer
6mm Flat Washer
Or
8mm x 16mm Hex Bolt
8mm Lock Washer
8mm Flat Washer

8mm x 25mm Hex Bolt
(2) 8mm Flat Washers
8mm Lock Washer
8mm Hex Nut

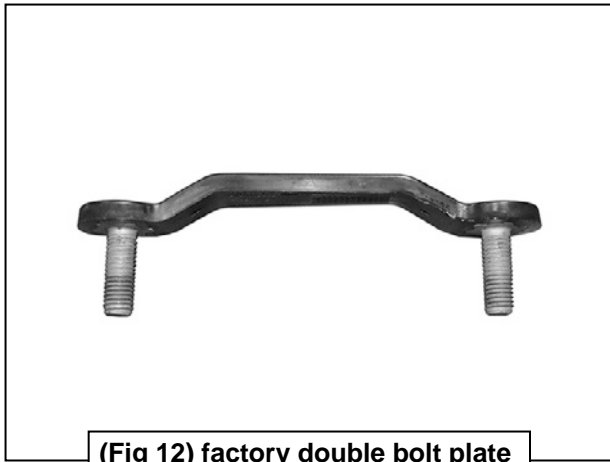
NOTE: Top Light bracket mounting location is designed for light assembly 31.65" (804mm) to 32.44" (824mm)

(Fig 10) Driver/left side "L" Bracket attached to the back of the bumper

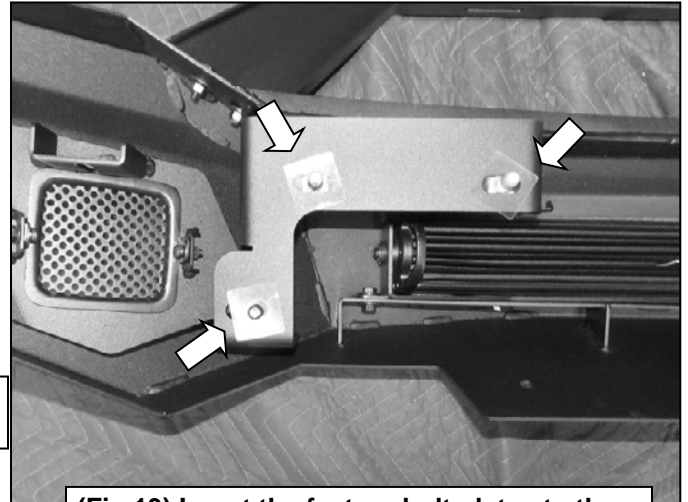
(2) 8mm x 25mm Button Bolts
(4) 8mm Flat Washers
(2) 8mm Lock Washers
(2) 8mm Hex Nuts



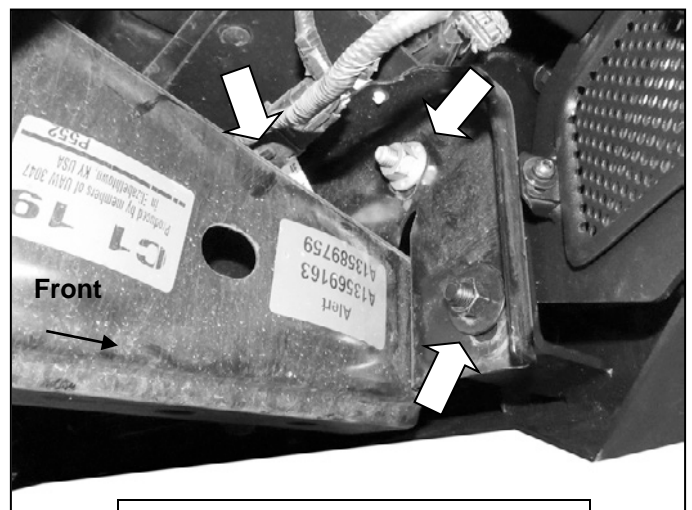
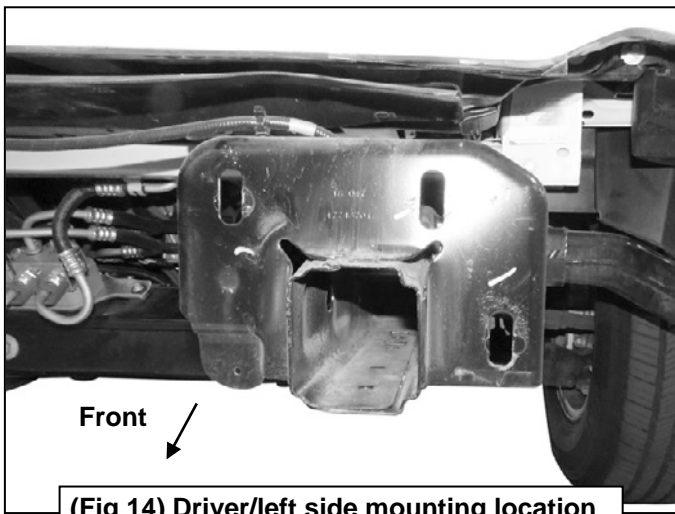
(Fig 11) Driver/left side Top Light Mount attached to top of bumper

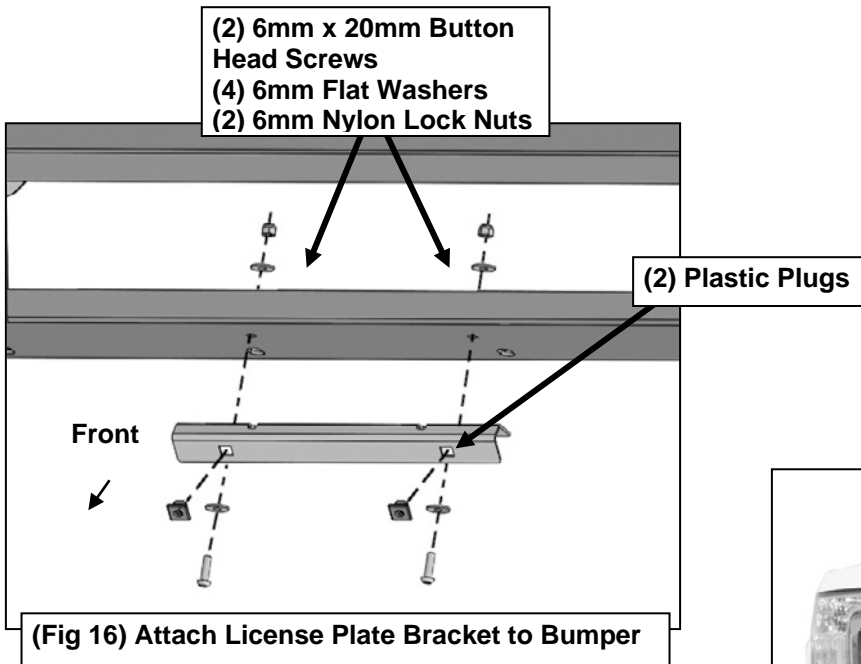


NOTE: Use (3) 12mm Plastic Retainers to hold the factory bolt plates in place



(Fig 13) Insert the factory bolt plates to the bumper brackets on the back of the bumper



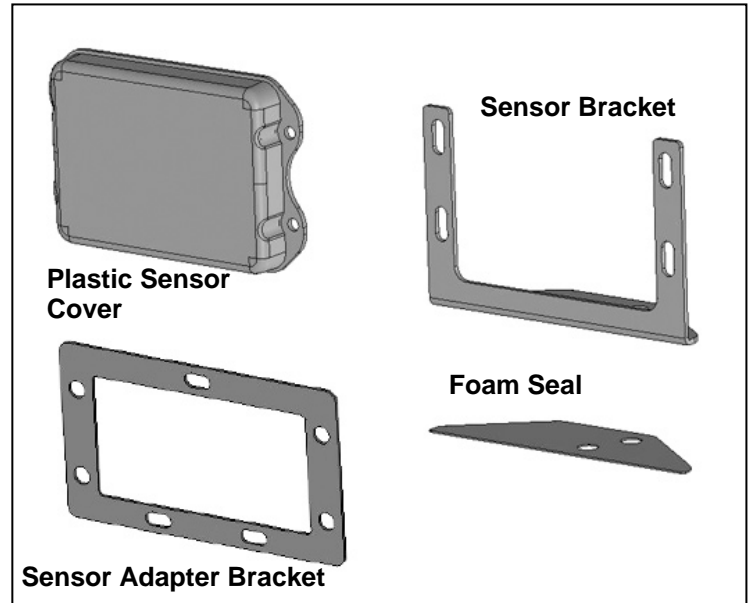


Complete Installation
(Hoop & Light Sold Separately)



PARTS LIST:

1	ACC Sensor Main Bracket
1	ACC Adapter Bracket
1	Foam Gasket
1	Plastic Sensor Cover
2	8-1.25mm x 25mm Button Head Bolts
4	8mm x 24mm x 2mm Flat Washers
2	8mm Lock Washers
2	8mm Hex Nuts
7	6-1.0mm x 25mm Button Head Bolts
10	6mm x 18mm x 2mm Flat Washers
7	6mm Lock Washers
7	6mm Hex Nuts
1	5mm Wrench
1	4mm Wrench



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

- 14. Remove the (2) rubber plugs from the top of the driver/left side of the Bumper, **(Figure 1)**.
- 15. Select the ACC Relocation Bracket and Foam Seal. Attach the Seal to the bottom of the Bracket, **(Figure 1)**.
- 16. Attach the Mounting Bracket to the top of the Bumper with the included (2) 8mm x 25mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 1)**.
- 17. Select the ACC (adaptive cruise control) sensor removed from the factory bumper. Note the design of the sensor.

Vehicles with early style ACC with tabs on ends:

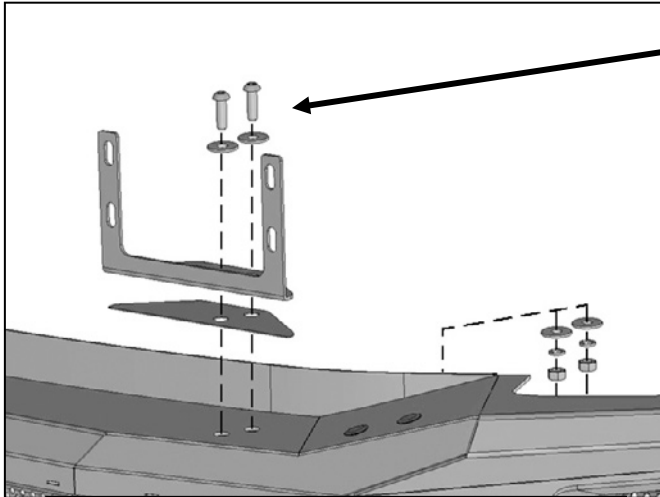
- a. Select the ACC Plastic Cover, **(Figure 2)**. Insert (3) 6mm x 25mm Button Head Bolts through the Plastic Cover, the Bracket and out through the ACC sensor. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts.

Vehicles with late style ACC with tabs on top and bottom:

- a. Select the Mounting Bracket Adapter Plate, **(Figure 3)**.
- b. Attach the ACC sensor to the back of the Adapter with the included (3) 6mm x 25mm Button Head Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 3)**.
- c. Attach the ACC sensor and Adapter Plate to the back of the Bracket. Line up the Plastic Cover with the front of the Bracket. Insert (3) 6mm x 25mm Button Head Bolts through the ACC Plastic Cover, the Bracket, the Adapter Plate, **(Figure 4)**. Secure with (3) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts.

- 18. Plug sensor wiring harness into sensor.
- 19. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

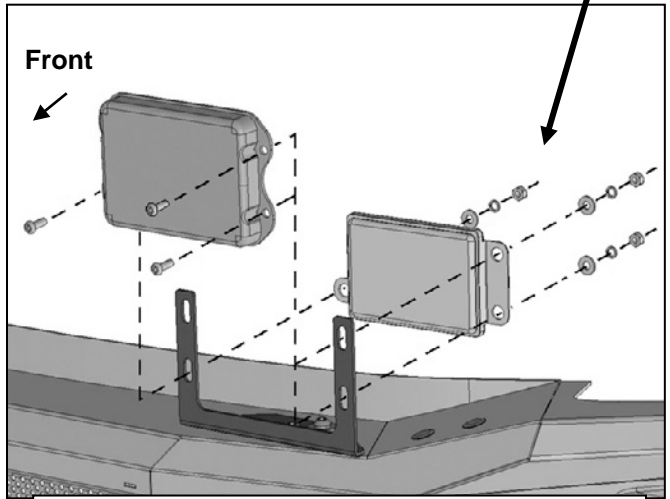
To protect your investment, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Bracket.



(Fig 1) Remove rubber plugs from top of Bumper. Attach Bracket to top of Bumper

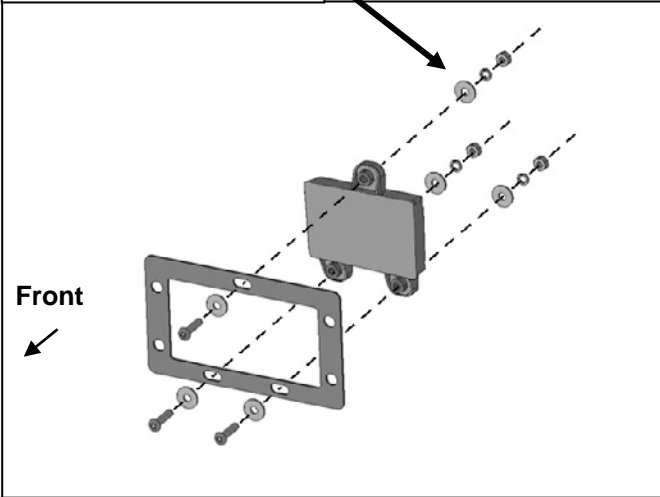
- (2) 8mm x 25mm Button Head Bolts
- (4) 8mm Flat Washers
- (2) 8mm Lock Washers
- (2) 8mm Hex Nuts

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



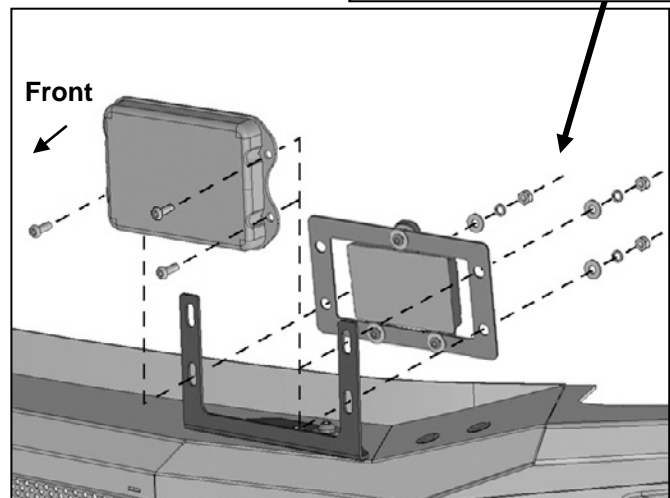
(Fig 2) Attach Plastic Sensor Cover to front of Bracket and early sensor to back of Bracket

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



(Fig 3) Attach late style Sensor to Adapter Bracket

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



(Fig 4) Attach late style Sensor w-Adapter Bracket to back of Mounting Bracket