

INSTALLATION GUIDE



SAFETY

THE SAFETY OF YOU AND OTHERS IS VERY IMPORTANT TO US!

In order to minimize this risk and make an informed decision about safety, it is important that you carefully read and follow the installation instructions we have provided.

We urge you to use your own good judgment and allow plenty of time for install.

HAZARD CHECKLIST

1. Always wear personal protective equipment (PPE) such as: protective eye wear, gloves, close toed shoes, etc.
2. We recommend that you use a certified mechanic or shop for professional installation.
3. Always set emergency brakes on vehicle and use tire blocks to ensure vehicle stabilization.
4. Use caution when lifting, we recommend the use of equipment to help lift bumpers into place.
5. Use caution when using power tools such as air ratchet, etc.
6. Take caution when installing wiring.
7. Perform regular inspections of hardware, bolts, brackets, etc.
8. Rigid light brackets are specifically designed to fit Rigid lights, we do not guarantee off brand fitment.
9. Our winch mount is designed for Warn and Superwinch products. We do not guarantee off brand fitment.

USE & RISK

Bodyguard Products LLC is not responsible for damage to our products, or other subsequent damage that might occur, as a result of misuse or improper installation. While we do manufacture products that appear stronger than factory parts, our products should not be viewed or relied upon as life-saving devices in the event of a collision or rollover. We make no claims relating to airbag compatibility, crashworthiness, or sturdiness. It is the customer's responsibility to check with the vehicle manufacturer or auto dealer regarding airbag compatibility and automobile manufacturer's warranty before installing our products.

PREPARATION

- Ensure personal safety by checking for hazards and identifying risks.
- Check for correct hardware.
- Check for tools needed.
- Use either foam or tape on fenders to prevent scratches to the truck when installing your bumper.
- Please allow approximately 3-4 hours for installation.
- Disconnect battery.

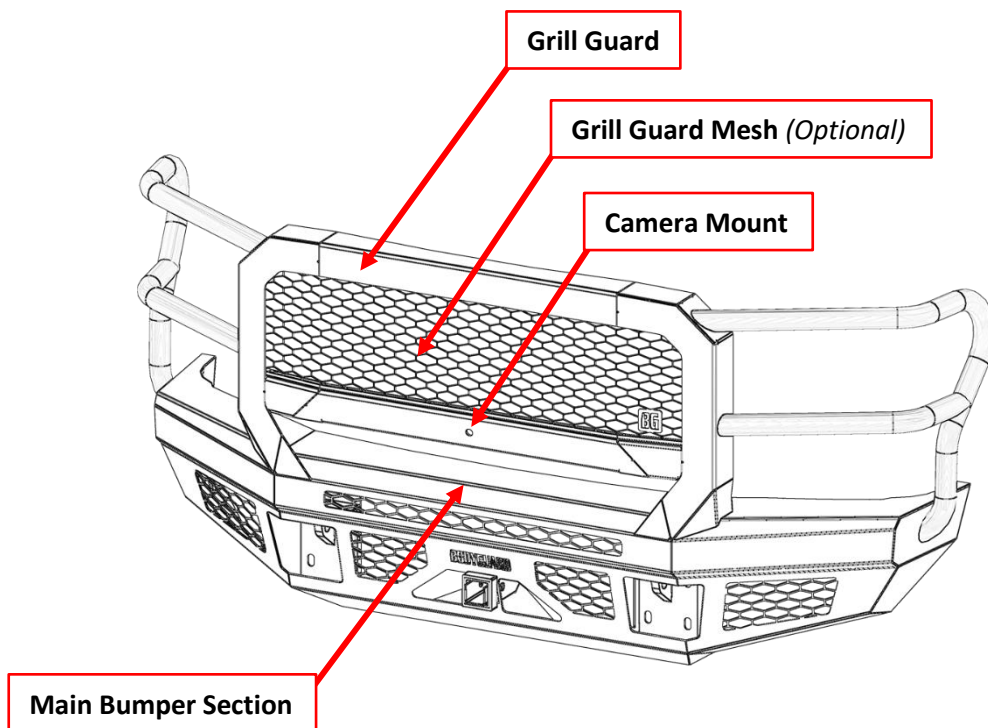
TOOLS

- 1** - Jack
- 2** - Safety Stands
- 2** - Wheel Chocks
- 1** - Wire Cutters & Wire Crimpers
- 1** - Small Pry Tool
- 1** - Tape measure

- 1** - Pliers
- 1** - Metric Wrench/Sockets – 10mm, 11mm, 13mm, 15mm, and 18mm
- 1** - Level

BUMPER COMPONENTS

- 1** - Main Bumper Section
- 1** - Grill Guard
- 2** - Fog Light Mounts
- 2** - Bumper Frame Mounts
- 2** - Light Bar Mounts
- 1** - Adaptive Cruise Control Relocation Bracket (ACC)
- 1** - Camera Relocation Mount



HARDWARE

FT-HK-FFH17	FT Front Mount Kit 2017+ Ford SD	Qty
	1/2-13 x 1-1/4" Long, Grade 8 HB Zinc-Yellow	8
	1/2" Washer, Grade 8 Zinc-Yellow	12
	1/2"-13 x 1-1/4" Stainless Steel Hex Bolt	8
	1/2" Stainless Steel Flat Washer	16
	1/2"-13 Grade 8 Steel Serrated Flange Nut Zinc	16
	3/8"-16 x 1-1/4" Long, Grade 8 HB	2
	3/8" Yellow Zinc Grade 8 Flat Washer	2
	3/8"-16 Zinc Grade 8 Serrated Hex Flange Nut	2
	5/16"-18 x 1" Zinc Grade 5 Hex Bolt	4
	5/16" Zinc Grade 5 Flat Washer	8
	5/16"-18 Zinc Grade 8 Serrated Hex Flange Nut	4
	1/4-20 x 5/8 Long, Stainless Steel SBHCS	8
	1/4-20 Hex Grade 5 Serrated Flange Nut, Stainless Steel	4
	1/4-20 (.093-.126: Panel Range) Zinc Electroplate Spring Steel Cage Nut	4
W/ Adaptive Cruise Control	5/16"-18 x 1" Zinc Grade 5 Hex Bolt	3
	5/16" Zinc Grade 5 Flat Washer	3
	5/16"-18 Zinc Grade 8 Serrated Hex Flange Nut	3
	1/4-20 x 3/4 Long, Stainless Steel SBHCS	2
	1/4-20 Hex Grade 5 Serrated Flange Nut, Stainless Steel	2

FT-HK-GGC	Grill Guard Camera	Qty
	1/4-20 x 5/8 Long, Stainless Steel SBHCS	2
	1/4-20 Hex Grade 5 Serrated Flange Nut, Stainless Steel	2
	Sensor Plug	1
FT-HK-GGM	Grill Guard Mesh	Qty
	1/4-20 x 5/8 Long, Stainless Steel SBHCS	4
	1/4-20 Hex Grade 5 Serrated Flange Nut, Stainless Steel	4
FT-HK-FLP	FT Front License Plate	Qty
	Plastic License Plate Nuts	4
	#14 x 5/8" Zinc License Plate Screw	4
FT-HK-LBM	FT Front Light Bar Mount	Qty
	5/16"-18 x 1" Zinc Grade 5 Hex Bolt	2
	5/16" Zinc Grade 5 Flat Washer	2
	5/16"-18 Zinc Grade 8 Serrated Hex Flange Nut	2

BUMPER REMOVAL

1. If equipped; disconnect the fog light wiring harness from behind the front bumper on the driver side.
2. If equipped; Remove the block heater plug from the bumper clip on the passenger side.



3. Remove the (2) bumper brace bolts from the driver and passenger side using the 15mm socket or wrench.
4. Locate the (2) tabs on the front bumper plastic bolt cover on the driver and passenger side, and press the tabs on the top to remove.



5. Support the front bumper before removing the bolts, and using an 18mm socket remove the (4) bolts in the front of the bumper on the driver and passenger side of the vehicle.
6. Remove the nut plate on the back side of the bumper mount when removing the front bolts.



7. Remove the front bumper from the vehicle.
8. Remove the (2) front frame brackets from the driver and passenger side using an 18mm wrench or socket.



CAMERA REMOVAL AND INSTALL

1. Using a pry tool, remove the (14) plastic clips and the plastic shroud will come off.



2. Remove the (8) 10mm bolts and remove the grill by pulling outward on it.



3. Remove the (2) E6 torx bolts and the retaining fixture, unplug and remove the camera.

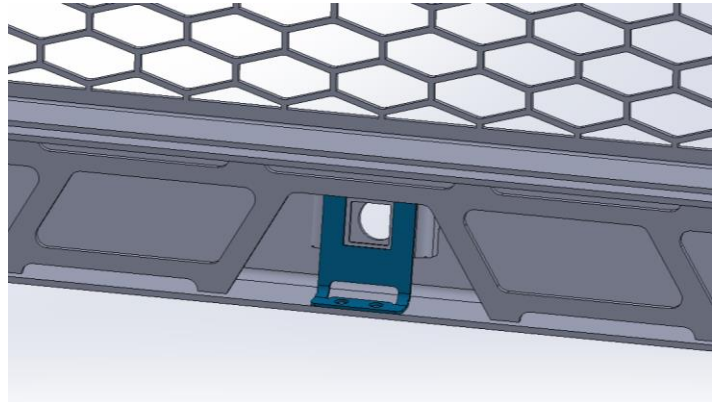
4. Run the supplied harness down and toward the passenger side. Where it will go under the bumper top plate up through a cut hole in the uprights to the camera mount in the grill.

5. Install the camera into the new bumper and wait to plug in until the bumper installation is completed.

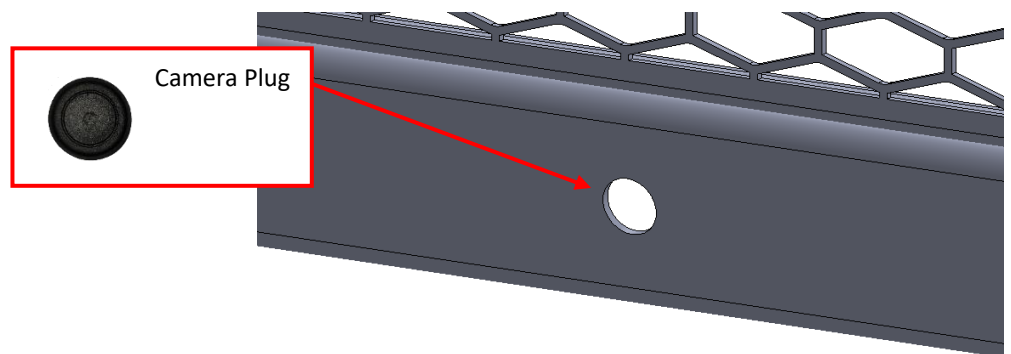


CAMERA BRACKET INSTALL

1. Place Camera into square spacer that is welded to the bumper. Then install the blue bracket with **2x (1/4-20 x 5/8 Long, Stainless Steel SBHCS)** behind the camera. This bracket will press the camera against the spacer securing the camera to the grille guard.



2. If you do not have a camera, we provided a camera hole plug that can be installed in place of camera.

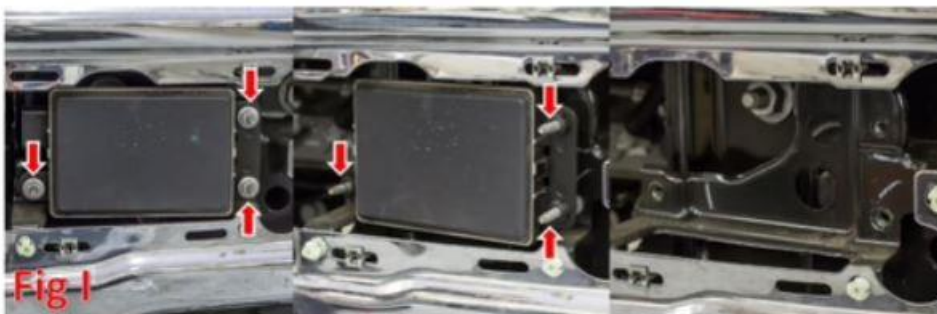


ADAPTIVE CRUISE CONTROL INSTALL

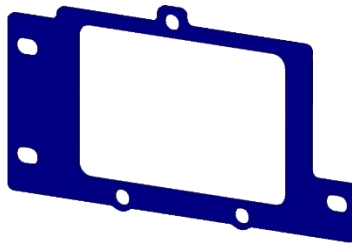
Some vehicles are equipped with an Adaptive Cruise Control unit (ACC). The following steps will show you how to install the unit into your bumper.

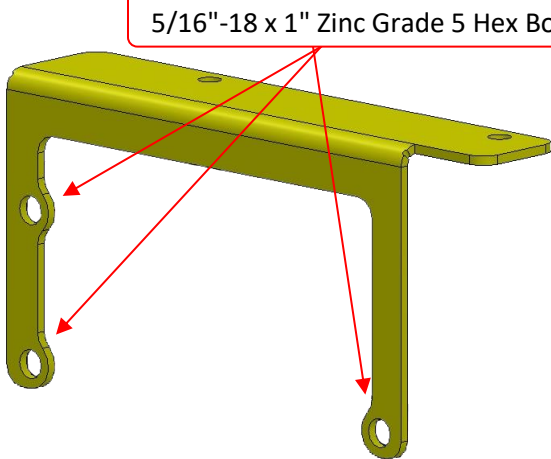
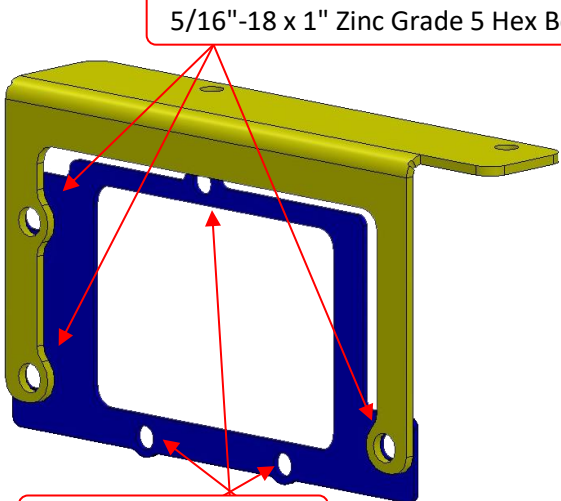
NOTE: If the battery is not disconnected prior to removal and installation, it is possible that after installation, the ACC module will have to be recalibrated.

1. Remove the ACC factory module mounting nuts (3) with an 11mm socket, unplug the module connector, remove the module mounting studs with an E6 External Torx socket (3), then remove the module from the vehicle. (Fig. 1)



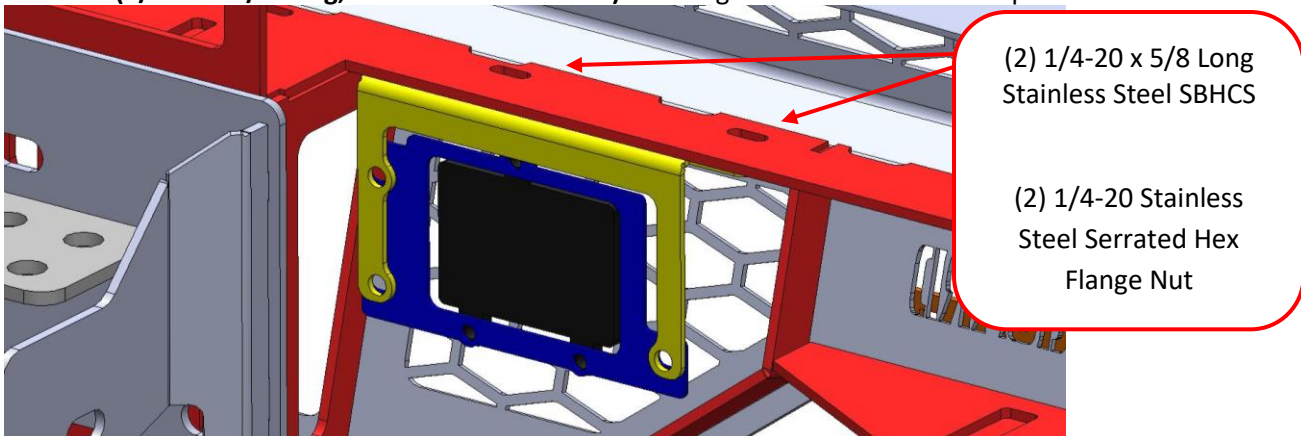
We send an additional bracket shown in blue. This will be used as an adapter bracket for the smaller version of the ACC module.



Large ACC Module Install	Small ACC Module Install
 <p data-bbox="326 422 776 464">5/16"-18 x 1" Zinc Grade 5 Hex Bolt</p>	 <p data-bbox="1057 380 1507 422">5/16"-18 x 1" Zinc Grade 5 Hex Bolt</p> <p data-bbox="922 877 1230 919">1/4"-20 x 5/8", SBHCS</p>
<p>1. Install 3x (5/16"-18 x 1" Zinc Grade 5 Hex Bolt) Securing the Large ACC unit to the bracket.</p>	<p>1. Install 3x (5/16"-18 x 1" Zinc Grade 5 Hex Bolt) Securing the adapter bracket to the large ACC unit bracket.</p> <p>2. Install 3x (1/4"-20 x 5/8 Long, Stainless Steel SBHCS) Securing the Small ACC unit to the adapter bracket.</p>

Note: Some slots on this bracket will not be used for this install. This is a universal ACC bracket used on several different models.

2. Install 2x (1/4-20 x 5/8 Long, Stainless Steel SBHCS) Securing the bracket to the bumper.



3. Next Connect the ACC unit back to the factory wiring harness.

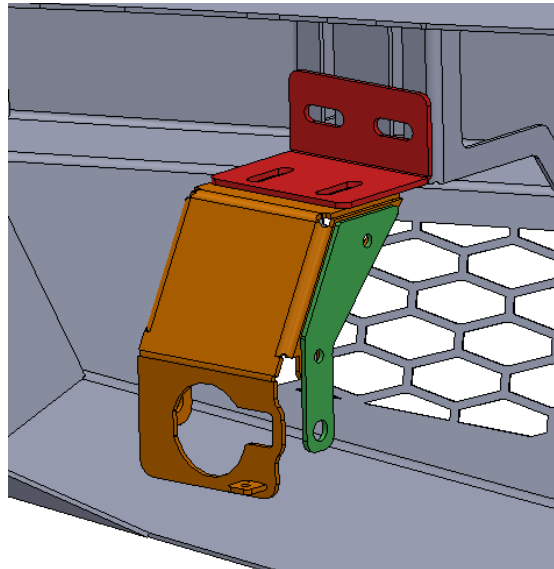
Note: It may take up to 50 miles for the ACC unit to calibrate itself.

BUMPER INSTALLATION

1. Start by installing the OEM fog lights and light bar option.
2. Determine which fog light you have, the factory halogen(a) or LED(b), on your vehicle from the images below. Remove the fog light from the factory bumper and bracket and install on its respective provided bracket shown in orange below.

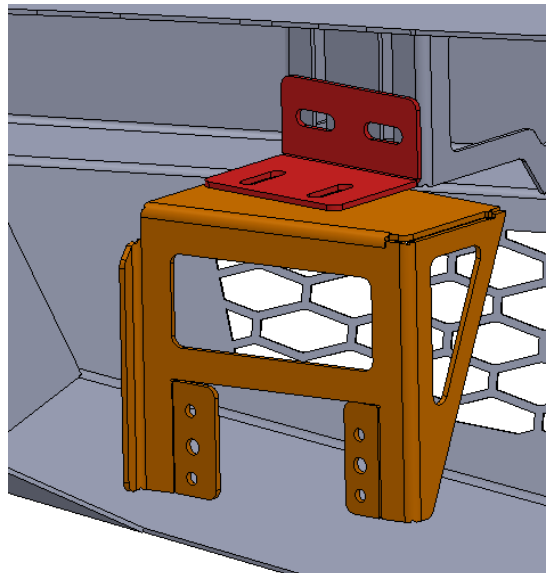
Fog Light Type A - Halogen

Factory Halogen Fog Light



Fog Light Type B - LED

Factory LED Fog Light



LIGHT BAR INSTALL

1. Install the light bar using the pictured bracket and 1/4" hardware.



2x - 1/4-20 x 5/8 Long, Stainless Steel SBHCS

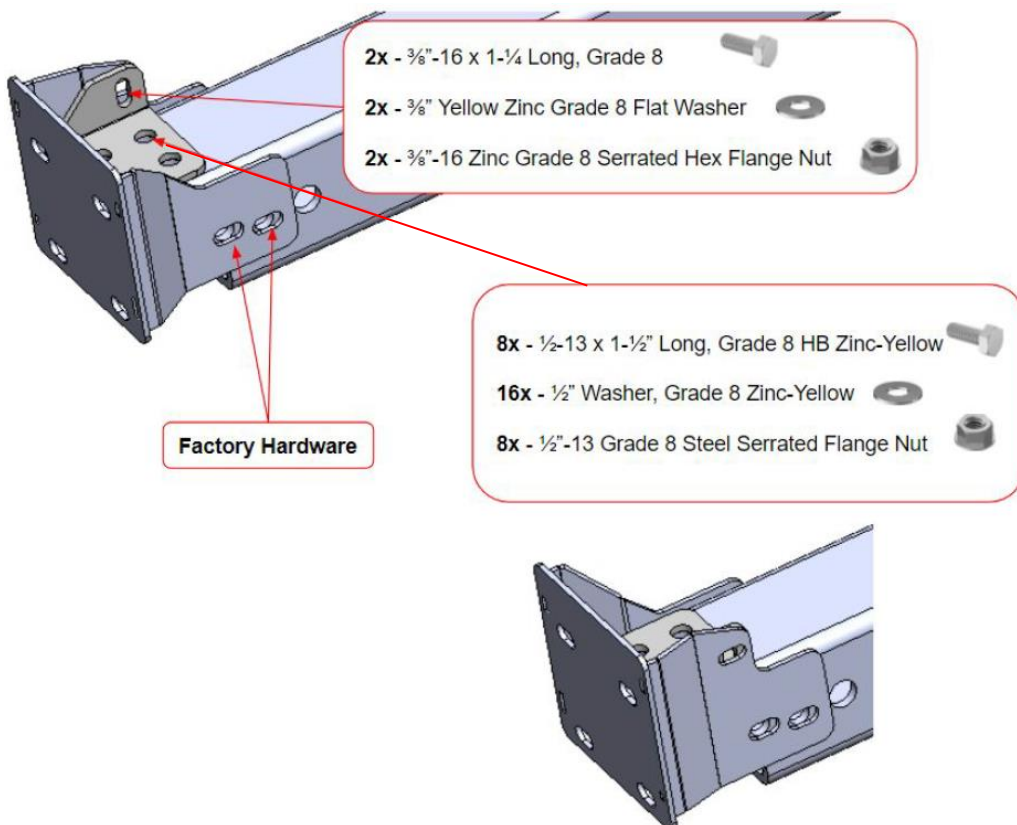


2x - 1/4-20 Hex Grade 5 Serrated Flange Nut, Stainless Steel

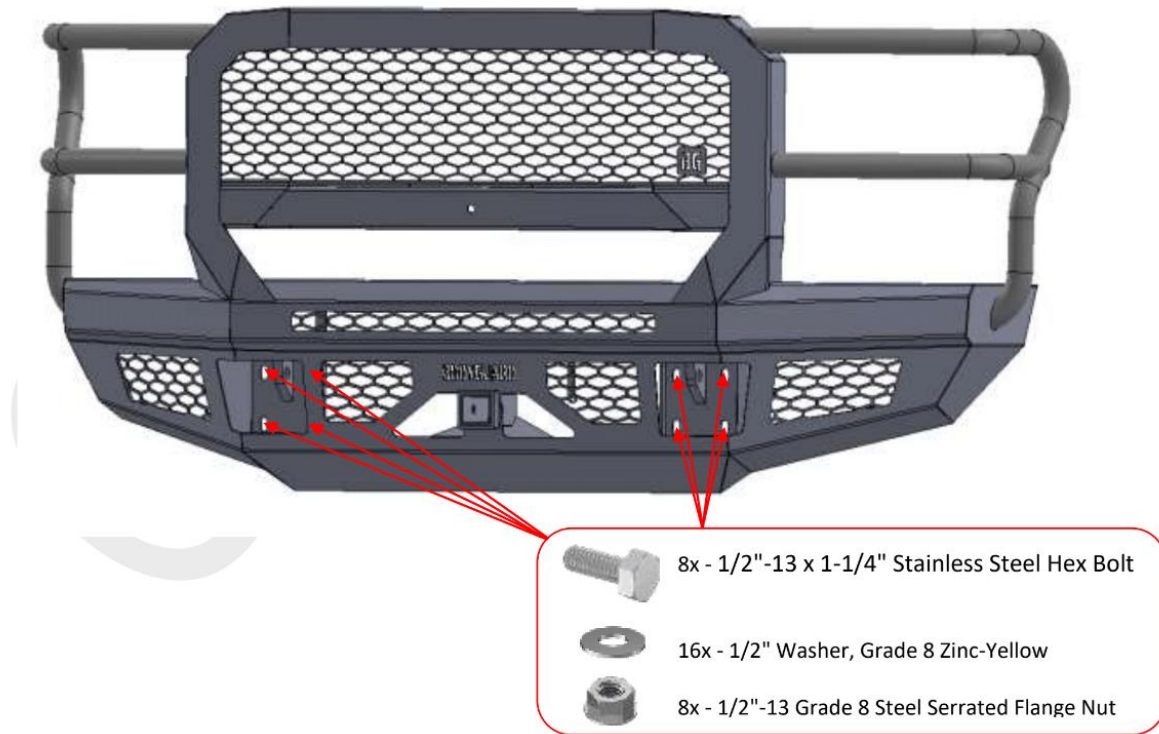
BUMPER INSTALLATION CONTINUED

MOUNT INSTALL

1. Attach the supplied truck mounts loosely with the hardware listed below.



1. Attach the bumper with the 1/2" stainless hardware, leaving enough space to adjust the bumper as needed into position. Using a tape measure, adjust the bumper vertically and horizontally to the desired body gaps. Once the bumper is lined up, tighten all hardware for the bumper and the mounts. Using jack stands or an additional person to help support the bumper is recommended.



2. Now that the bumper is mounted and installed, plug in the factory fog lights, front camera, ACC module, and wire in the light bar. Route and secure wiring as desired.

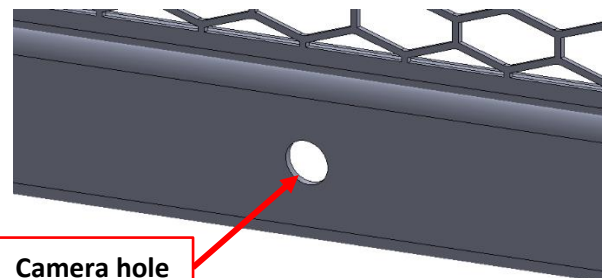
NOTE: The camera harness will go under the bumper top plate up through a cut hole in the uprights to the camera mount in the grill.

CAMERA PLUG INSTALL

1. If your vehicle does not come equipped with a front camera, install the provided plug into the camera hole.



Camera plug



Camera hole

FINISHING UP

- Install shackles.
- Confirm that all hardware is tightened and everything is secure.
- Secure wiring harnesses for lights and sensors.
- Test all lighting and wiring before using vehicle (fog lights, sensors, etc.).
- Reconnect the battery.

MAINTENANCE

- Periodically check that all hardware is tightened and that all wiring and connections are secure.
- Periodically check that all sensor plugs are secure.
- Routinely wash bumper to maintain the powder coat finish.

FEEDBACK

We'd love to hear from you!

Please send your pictures, testimonials, comments, or suggestions to us by email at info@bodyguardbumpers.com. We frequently use customer pictures for brochures and marketing materials, and we always welcome customer feedback to ensure quality improvements within our company. Thanks for your purchase; we appreciate your business very much!

Where **STRENGTH** Meets *Style!*™



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