

### **Installation Instructions**

### **Premium Front Sensor Bumper**

Product Number: C3050, C3051, C3052 Application: 2015+ CHEVY HD

### **SAFETY**

### Your safety and the safety of others is very important.

- In order to help you make informed decisions about safety, we have provided installation instructions and other information.
- These instructions alert you to potential injury hazards.
- Please do a job safety analysis before each task to identify potential hazards for your situation and remove/protect against them.
- You must use your own good judgment.
- Read and understand all safety precautions and instructions before installing this product.

THIS PRODUCT IS FOR OFFROAD USE ONLY. ALL LIABILITY FOR INSTALLATION AND USE RESTS WITH THE OWNER. CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS

INJURY OR EQUIPMENT DAMAGE.

SENSORS FIELD OF VIEW WILL BE ALTERED WITH USE OF THE REPLACEMENT BUMPER.

### Injury hazard

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	randre to observe these instructions could lead to severe injury of death.
	Always remove jewelry and wear eye protection. Always use extreme caution when jacking up a vehicle for work. Set emergency
	brake and use tire blocks. Locate and use the vehicle manufacturers designated
	lifting points. Use jack stands.
	Always use appropriate and adequate care in lifting components into place.
	Always insure components will remain secure during installation and operation
	Always wear safety glasses when installing this kit. A drilling operation will
	cause flying metal chips. Flying chips can cause serious eye injury.
	Always use extreme caution when drilling on a vehicle. Thoroughly inspect the
	area to be drilled (on both sides of material) prior to drilling, and relocate any
	objects that may be damaged.
	Always use extreme caution when cutting and trimming during fitting.
	Always tighten all nuts and bolts securely per installation instructions.
	Always route electrical cables carefully. Avoid moving parts, components that
	become hot and rough or sharp edges.
	Always insulate and protect all exposed wiring and electrical terminals.
	Always perform regular inspections and maintenance on mounts and related
_	hardware.





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### I. Overview

Congratulations on your new purchase of the industries' best and most stylish Front Bumper available for the 2015 Chevy Heavy Duty! This Bumper has been engineered for strength while keeping the weight down.

Your Front Bumper designed in 3-D from digitized data, CNC laser cut, fabricated, and powder coated... all in the U.S.A.

Enjoy the fit and finish of a quality Chevy HD Front Bumper from Fab Fours Inc.





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### **Parts List**

- Replacement Bumper
- Brackets
- A305X-HW fastener kit
- Fog lights and turn signals
- Welded bolt strips
- Epoxy
- Instruction Manual

### **Tools Required**

- Socket Wrench with Extension (Ratcheting wrenches may also be convenient)
- 7mm, 10mm, 15mm, 18mm, 19mm, 3/4 Sockets and Box End Wrenches
- Flat head screw drivers
- Floor jack, jack stands, and/or a wood block.
- 9/16 drill bit w/ drill

### II. Removal of OEM Bumper

Note: Save all OEM parts until installation is complete!

A. Open hood and locate push pins on radiator cover. Using a flat head screw driver, pull the head of the push pins up, remove push pin and lift radiator cover off. This will allow access to top grill bolts (Ref. Figure 1).



Figure 1





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B. Remove the fasteners connecting the grill to the frame. Four bolts, are located at the top of the grill, two on each side (Ref. Figure 2a-b). Two bolts and two clips are located behind the grill and are indicated by the ovals and triangles respectively (Ref. Figure 2c).

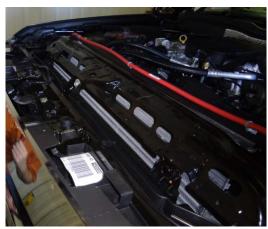




Figure 2a Figure 2b

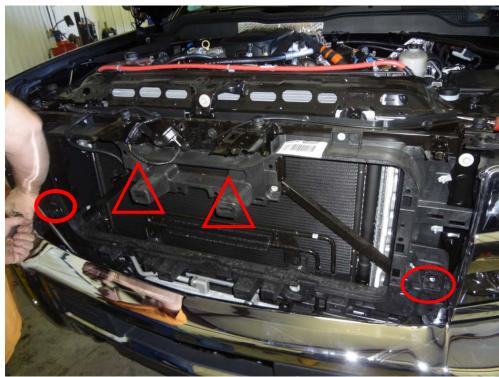




Figure 2c



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C. Disconnect electrical harness (Ref. Figure 3a) from vehicle and remove tow hooks. Tow hooks are mounted with one cross bolt through the side and a bolt through the bottom of the frame (Ref. Figure 3b).



Figure 3a (ELECTRICAL HARNESS DISCONNECTED)



Figure 3b (TOW HOOK & OEM MOUNTING BRACKET)





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D. Remove bolts connecting bumper to mounting bracket. There is one bolt on each side which requires a socket wrench with an extension to easily reach (Ref. Figure 4). Carefully pull bumper away from vehicle.



Figure 4

E. Remove the fasteners connecting the OEM mounting bracket to the frame. Using a socket/wrench remove bolts from front of bracket connected to the bumper. Repeat process on each side of vehicle.



Figure 5



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F. Remove OEM electrical harness from bumper. Disconnect harness from fog lights and sensors. Pop out the three plastic clips holding fog lights to fog light housing and carefully pull away, the plastic clips are indicated by a circle. Unbolt bumper support frames as necessary to more easily access sensors, start with the bottom bolts indicated by squares (Ref. Figure 6).

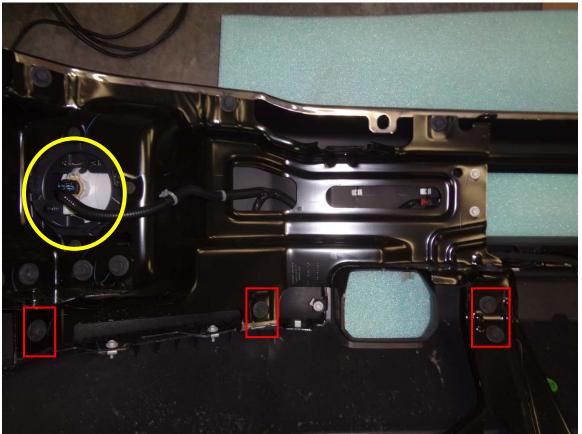


Figure 6





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### PLEASE NOTE PARKING SENSORS ARE EXTREMELY DELICATE AND MUST BE HANDLED WITH CARE!

Do <u>NOT</u> touch or shift the clear rubber grommet that surrounds the sensor face. DO <u>NOT</u> glue housing into place until orientation and functionality is determined.

G. Remove OEM electrical harness from bumper. Disconnect harnesses from fog lights and sensors. Sensors can be disconnected from housing by depressing the plastic clip indicated by the red square (ref. Figure 8a).

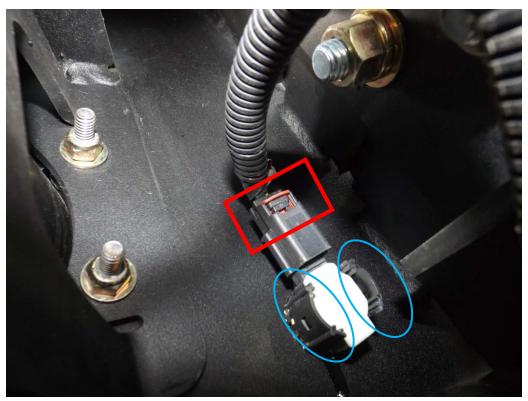


Figure 8a

- H. Pop out plastic clips holding harnesses to bumper on both sides and carefully pull away.
- J. CAREFULLY remove sensors from plastic housing by gently pulling the





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top and bottom tabs, indicated by blue circles (Ref. Figure 8a), away as sensor is pulled out. Do not push on front of sensor as this will damage the membrane. Place sensors face up in a safe location.

K. Remove plastic housing from OEM bumper. Outer sensors are removed by depressing the four plastic tabs around the inside and pushing housing out. Inner sensors are removed by tearing off plastic tabs at the top and bottom of the sensor housing (ref. figure 8a-b). Do not worry about damaging plastic tabs at top and bottom of housing, as the plastic lip on the sides are used to mount housing to Fab Fours bumper. All sensor housings will have to be placed into the Fab Fours bumper in the same location as they were removed from OE bumper, although orientation of sensors may change depending on hole profile. (E.G. Outer right sensor clip must go into the outer right sensor hole in the Fab Fours bumper.)

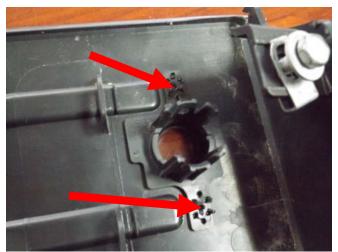


Figure 8b



Figure 8c





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#### III. Pre-Installation

NOTE: PLEASE READ THE ENTIRE MANUAL BEFORE ATEMPTING INSTALLATION!

Ignoring these steps will increase your probability of scratching the vehicle during product installation.

- A. Remove the Bumper from the shipping carton. Lay all items out on a blanket to prevent damage to the powder coating.
- B. For sensor installation run sensor harness under winch tray. Sensors housings should be installed in Fab Fours bumper in the same locations they were removed from in the OEM bumper. For the outer sensors simply insert housings through bumper matching sensor profile to the sensor holes and orientation in images below (ref figure 9a-d).



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Figure 9a (DRIVER SIDE OUTER)



Figure 9b (DRIVER SIDE INNER)





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Figure 9b (PASSENGER SIDE INNER)



Figure 9C (PASSENGER SIDE OUTER)

C. For inner sensor housings slide the plastic tabs, indicated by the black arrows (ref. figure 9b), between sensor mounting clips, indicated by red arrows (ref figure 9c), and inside bumper face. A flathead screw driver may be required to bend sensor mounting clips slightly away



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from bumper for ease of installation and to slightly angle housing up if necessary for functionality.

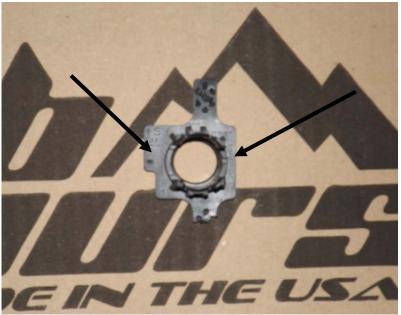


Figure 9b



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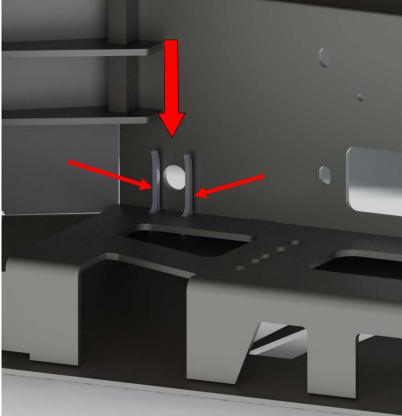


Figure 9c

- D. After assuring sensors work in current orientation, epoxy should be applied to the housing on inside of bumper and allowed to dry. Epoxy may not need to be applied to inner sensors if clip is holding firmly, though it is recommended. At this time reconnect sensor harness to sensors and insert sensors into sensor housings making sure that the clear plastic grommet is on properly and sensors appear centered. Final installation of sensors on driver side should appear as shown above. (Ref. Figures 9a-f)
- E. Install the provided Fab Fours fog lights using the provided hardware kit. The wiring diagram for the fog lights can be found in section VI.





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Figure 10a



Figure 10a

Optional: If installing winch and roller fairlead into bumper, do it at this time. Follow the winch manufacturer's instructions for installation.

### IV. Front Bumper Installation



A. Mount bracket to truck frame. Two bolts pass through



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the side of the frame. One bolt passes through the bottom of the frame (Ref. 8a-b). Mount on both sides. If holes on the side of frame are out of tolerance then enlarge hole with 9/16 drill as needed on side of frame.





Figure 8a

Figure 8b

- B. Mount bracket to bumper. With the help of at least two others, and possibly a floor jack, to support the center of the bumper, lift the Fab Fours bumper into place.
- C. Insert the bolt strips from the inside facing out and tighten. <u>Do</u> Not Fully Tighten, Hand Tighten Only!
- D. Align the bumper side to side and top to bottom to ensure a perfect fit to the truck. Allow clearance to all painted surfaces, this is to allow for frame flex.
- E. Fully tighten all fasteners between bumper and bracket
- F. Refer to Appendix A if a sensor warning or fault appears when starting the vehicle.
- G. Enjoy your New Front Replacement Bumper from Fab Fours!





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### V. Fog Light and Turn Signal Wiring

- 1. Disconnect the battery of your truck.
- 2. Using a 10mm wrench, remove the bolts attaching the headlight pods to the truck.
- 3. Remove plastic push pin attaching headlight pods and gently pull headlights away from the truck.
- 4. To completely remove, disconnect the headlight wiring harness.
- 5. Using the provided hardware, splice the wires using the wiring guide below.
- 6. Connect headlight and wires and fog light/turn signal wires.
- 7. Reattach headlight pods to truck. Connect headlight and wires and fog light/turn signal wires.

### Wire Colors

Component	Fab Fours Color	OEM Corresponding Color				
Turn Signals	Green	Blue W/ Stripe (LH)				
		Green W/ Stripe (RH)				
	White	Purple W/ Stripe (LH)				
		Grey W/ Stripe				
	Red	Black (ground)				
Fog Lights	Green	Brown W/ Stripe				
	Red	Black (ground)				





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- 8. Reattach headlight pods to truck
- 9. Install turn indicators into the plastic light insert using three self-tapping screws as shown below.



10. Install the light inserts with turn indicators into the cutout in the bumper. Use the ¾" length ¼" stainless steel button head, ¼" washers and hex nuts to fasten the insert through the holes shown below.

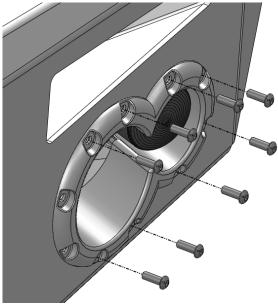


Figure 13a





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11. Install the Fab Fours fog lights into the mounting brackets as shown below using the #8 button head screws, washers, and hex nuts.

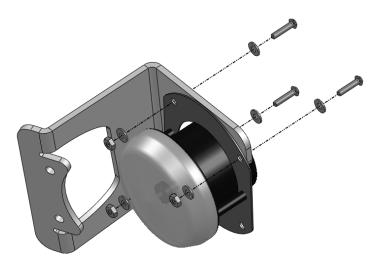


Figure 14a

- 12. 13. Install the fog light and bracket into the bumper using the remaining two holes.
- 13. 14. Install turn indicators into the plastic light insert using three self-tapping screws as shown below.



Figure 12a

14. Install the light inserts with turn indicators into the cutout in the bumper. Use the ¾" length ¼" stainless steel button head, ¼" washers and hex nuts to fasten the insert through the holes shown below.





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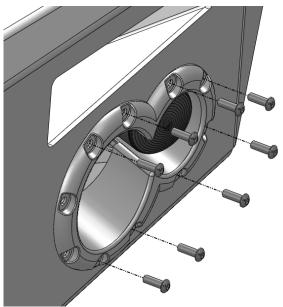


Figure 13a

15. Install the Fab Fours fog lights into the mounting brackets as shown below using the #8 button head screws, washers, and hex nuts.

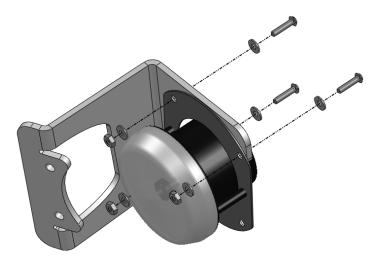


Figure 14a

16. Install the fog light and bracket into the bumper using the remaining two holes





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### VI. Maintenance/Care

- ☐ Periodically check and tighten all fasteners.
- ☐ Stripped, fractured, or bent bolts or nuts need to be replaced.
- ☐ After washing of the vehicle make sure to fully dry all surfaces



More than expected... Better than expected.





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### **APPENDIX A. Troubleshooting Vehicle Sensors**

- Start with a general inspection of the sensor fitment. Check that both
  the sensors and the sensor clips are fully secure and the sensors are
  properly centered in the housing.
- Confirm plastic housing is in the correct mounting holes. Misplaced sensor housings could compress sensor and give false readings or faults.
- Use a clean microfiber to wipe the front face of the sensor.
- Inspect connection. Be sure that the sensor is firmly seated into the harness.
- Run through several start cycles (i.e. fully turn the vehicle on and off).
- Finally, disconnect the battery to reset the sensors.

