

Product Number: C4050, C4051, C4052 Application: 2016-2018 Dodge 2500+

# 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 hazards that could hurt you or others.
- Please do a job safety analysis (JSA) before each task to identify potential hazards for your situation and remove/protect against them.
- You must use your own good judgment, and take your time.

#### 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** 

#### Failure to observe these instructions could lead to severe injury or 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 ensure 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. <u>Overview</u>

Congratulations on your purchase of the industries' best and most stylish Premium Sensor Bumper!

This product has also been **engineered** to allow alignment in three directions so you will end up with a very professional fit.

Your bumper was designed, cut, fabricated, and powder coated... all in the U.S.A. Enjoy the fit and finish of a quality Dodge Winch Bumper from Fab Fours Inc!





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### II. <u>Tools Required</u>

- Electric Drill
- □ 5/8" Drill bit
- □ Electric Hand Grinder
- D Pry Bar
- □ Socket Wrench With Extension
- □ 10mm or 13mm Socket (year dependent)
- □ 18mm Socket
- $\Box$  3/4" Socket
- $\Box$  3/4" Open End Wrench
- □ 7/16" Open End Wrench
- □ 3/8" Open End Wrench
- □ 1/8" Allen Wrench
- □ 5/32" Allen Wrench
- Center punch
- Hammer
- Tin Snips



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### III. Vehicle Preparation

- **1.** (DIESEL ONLY) Open the hood and remove the dust shield covering the radiator and intercooler assembly.
- **2.** (DIESEL ONLY) Remove the two screws attaching the intercooler to the top of the core support.
- **3.** (2013+ DIESEL ONLY) Unbolt intercooler mount brackets from frame rails and disconnect intercooler hoses to move intercooler out of the way to access the bolt strips.



**Figure 1 – Intercooler Fasteners** 



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- **4.** If equipped, unplug the OEM fog light harness front under the driver's side headlamp.
- 5. Remove the lower air dam by popping out the plastic push clips.
- 6. With the bumper supported, remove the nuts and stud plates attaching the OEM bumper to the frame rail. On diesel equipped trucks, the cooling package must be lifted upward and forward to allow the stud plate to be pulled out of the frame in the gap between the radiator and intercooler.(2013+ must remove intercooler to gain access to bolt strips) Use caution not to damage the intercooler or radiator fins while lifting the assembly.
- 7. Pull forward to remove the OEM bumper assembly and set aside.
- **8.** If equipped, unbolt the under-run guards from the frame rails with a 24mm Socket.
- **9.** If equipped, remove sensors and sensor housing from the bumper along with the sensor and fog light harness. All sensor housing will have to be placed into the Fab Fours bumper in the same location as they were removed from the OEM bumper. (e.g. outer right sensor clip must go into the outer right sensor hole in the Fab Fours bumper)



**10.** If the vehicle was not equipped with under run guards, two mounting holes need to be drilled in their place. (See Figure 4)



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**11.** Use the frame bracket or L-shaped template provided to drill two 5/8" holes through both sides of the frame rail. Be sure to inspect both sides of the frame for items that may be damaged by the drilling operation.



Figure 5-Removal of OEM Anti-Crush Can

- 11. Anti-crush spacers need to be installed inside the frame rail after the drilling operation. To get them into place, the OEM anti-crush spacers need to be removed. Use a large screwdriver to pry the anti-crush spacer out of the front of the frame rail; it is not necessary to completely remove it from frame. (see image above)
- 12. Pry the lower tab of the OEM anti crush spacer upward with a large flathead screwdriver to allow it to rotate forward out of the frame rail. It is not necessary to completely remove the spacer.



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- 13. With the OEM spacer pulled up, insert the provided anti crush spacer into the frame rail and align it with the holes previously drilled. The spacer should form a box around the two-hole pattern.
- 14. Push the OEM anti-crush spacer back into the frame rail so it lines back up with the OEM bumper mounting holes
- 15. Repeat steps 10-14 for the opposite frame rail.
- 16. (2013+ DIESEL ONLY) Before re-installing intercooler follow Bumper Installation Step 1 below.
- 17. Your Truck is now ready for the installation of your New FAB FOURS BUMPER!



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### IV. Lights and Wiring Installation

- 1. Remove headlights following procedure in owner's manual. On each side, tap into the three turn indicator wires using supplied tap connectors (reference the wiring diagram).
- 2. Connect supplied turn indicator wiring harnesses to factory wires using supplied tap connectors; See below for wire color guide.
- 3. Replace headlights in reverse order of removal.
- 4. Tap into OEM fog light harness using two supplied tap connectors.
- **5.** Connect supplied fog lamp wiring harness to tap connectors following wire color guide below.
- 6. Run passenger side fog lamp supply wires across bottom of bumper and tap into Fab Fours driver side fog lamp wires.
- **7.** Install turn indicators into the plastic light insert using three self- tapping screws as shown below:



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Figure 6 – Turn Signal Installation

8. Install the light inserts with turn indicators into the cutout in the bumper. Use the  $\frac{3}{4}$ " length  $\frac{1}{4}$ " stainless steel button head,  $\frac{1}{4}$ " washers and hex nuts to fasten the insert through the holes shown below:



**Figure 7 – Light Insert Installation** 



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



Figure 8 - Fog Light to Bracket Installation

10. Install the fog light and bracket into the bumper using the remaining two holes available in the light insert. Use the 1-1/2" length  $\frac{1}{4}$ " stainless steel button heads with  $\frac{1}{4}$ " washers and nylock nuts:



**Figure 9 - Fog Light Installation** 

- **11.** Repeat steps 8-10 for other side.
- Do not connect wiring harnesses to lights until bumper is installed.



Installation Instructions Premium Front Bumper w/ Sensors Product Number: C4050, C4051, C4052 Application: 2016-2018 Dodge 2500+

## FAB FOURS TURN INDICATOR WIRING

WHITE WIRE = GROUND BROWN WIRE = RUNNING RED WIRE = TURN

FAB FOURS FOG LIGHT WIRING

WHITE WIRE = GROUND BLACK WIRE = POWER

\*Note: For customers that are going from LED to our LED lights you should not need to use the provided resistors\*

\*For customers that are going from Halogen to our LED lights then you may need to use the provided resistors on our turn indicators; please wire the resistors between your power and ground wire\*

\*Use a multi-meter or test light to determine the correct location for each wire



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### V. <u>Bumper Installation</u>

• **Optional:** If installing winch and roller fairlead into bumper, do it at this time. Follow the winch manufacturer's instructions for installation. If you are installing a winch with a pulling capacity of 12,000 lbs. or greater, the front face mounting holes must be used.

If not installing a winch, a license plate may be installed onto the front face of the bumper using the provided  $\frac{1}{4}$ " hardware.

1. Install intermediate mount onto the frame rail using the 9/16" x 4" bolts and nuts through the FRAME UNDER RUN GUARD holes, and then replace the bolt strip in the original orientation. Insert all hardware from the inside out, with the nuts accessible from the outside of the frame rail. DO NOT FULLY TIGHTEN, repeat for other side.



Figure 9 - Intermediate Bracket Installation



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# Installation Instructions Dodge Winch Bumper

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2. For sensor installation run sensor harness under winch tray. Re install sensor housing and sensors making sure that the clear plastic grommet is on properly and sensors appear centered in their housings. DO NOT EPOXY AT THIS TIME.





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- **3.** After assuring sensors work in current orientation epoxy should be applied to the housing on the inside of bumper and allowed to dry
- **4.** Insert the provided stud plate assemblies through the back of the bumper mount face as shown below.



Figure 10 – Stud Plate Orientation

- 3. Lift the bumper and carefully inert the studs into the slots on the mounting brackets. With the bumper supported, install four nuts, washers, and lock washers per side onto the studs. **DO NOT FULLY TIGHTEN**
- 4. Adjust the bumper to achieve good visual alignment as follows:
  - 1. Adjust in/out bumper alignment with mounting bracket to frame hardware.
  - 2. Adjust up/down and left/right alignment with bumper to mounting bracket hardware
- 5. Tighten all fasteners fully; beginning with frame mounts. Then tighten all mount-to-bumper fasteners.
- 6. Connect wiring harnesses to lights as shown in wiring diagram.
- 7. Verify proper operation of lights. Note: Turn indicators should be dim during



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"running" condition and flash bright for turn.