

# CRASH BAR ERASE & BRACE KIT

DOCUMENT: F6-17-451B\_INST.PDF • LAST UPDATED: JUNE 2023

Thank you for purchasing this item from **LOBO Off-Road!** Please read through this entire document before proceeding with installation. If you are not confident in your mechanical skills, please seek the help of a professional to perform the installation. Check your packages immediately upon arrival to ensure that everything listed is included, and to check for damage during shipping.



## **APPLICATIONS**

These installation instructions apply to the following LOBO Off-Road Products:

F6-17-451B CRASH BAR ERASE & BRACE KIT | BRONCO

## **INCLUDED COMPONENTS**

Please check your packages immediately upon arrival to ensure that everything listed is included, and to check for damage during shipping. If anything is missing or damaged, contact LOBO Off-Road.

- 1 OUTSIDE FRAME BRACE LEFT
- 1 OUTSIDE FRAME BRACE RIGHT
- 1 INSIDE FRAME BRACE LEFT
- I INSIDE FRAME BRACE -RIGHT
- 1 OUTBOARD DRIVER SIDE NUT PLATE
- 1 OUTBOARD PASSENGER SIDE NUT PLATE
- 2 INBOARD NUT PLATE

# **HARDWARE KIT**

- 4 M6-1.0 GR10.9 NYLON INSERT LOCK NUT
- 6 M10-1.5 X 90MM GR10.9 HEX HEAD FLANGE BOLT
- 6 M10-1.5 GR10.9 NYLON INSERT LOCK NUT
- 6 M12-1.75 GR10.9 NYLON INSERT FLANGE LOCK NUT

### **TOOLS NEEDED**

- MECHANICS TOOL SET WITH ASSORTED METRIC WRENCHES
- RECIPROCATING SAW WITH LONG BI-METAL BLADE
- 4-INCH ANGLE GRINDER WITH GRIDING DISC AND/OR FLAP WHEEL
- BLACK TOUCH-UP PAINT
- BLUE THREAD LOCKING COMPOUND (LOCTITE© 242 OR EQUIVALENT)

#### INSTALLATION PROCEDURE

NOTE: These instructions assume that the front bumper has already been removed from the vehicle. If needed, look up the procedure of removing your bumper and do so prior to beginning this installation.

- 1. Park the vehicle on a flat, level surface and set the parking brake. It may be helpful to lift the rear of the vehicle and place it on jack stands for stability while working. Wear safety glasses from this point forward.
- 2. Remove the front bumper and front skid plate from the Bronco, if present. Remove the factory bumper nut plates from behind the bumper mounting flanges. They will not be re-used.
- 3. OPTIONAL: Remove intercooler mounts and intercooler. While it is possible to install the Erase & Brace Kit without removing the intercooler, it is much easier of you do. Begin by un-bolting the intercooler/skid mounts (or recovery loop mounts on Broncos with plastic front bumper) and prying them loose from the rubber intercooler bushings. Then release the air hose spring clips from the inlet and outlet, and carefully remove the intercooler.
- 4. Use a floor jack or screw jack to support the corner of the body tub near the body mount (if intercooler in place) or the center of the body tub crossmember (if intercooler removed). Pre-load the support with light pressure against the bottom of the body.
- 5. Loosen and remove the front corner body mount bolt. It may be accessed through a hole in the bottom of the body mount perch. Set the body mount bolt and washer aside.
- 6. Use a reciprocating saw with a long bi-metal blade to cut the body mount pedestal/crash bar mount from the side of the Bronco's frame rail. Note that the pedestal is connected to the frame only by an approximately 2" X 2" heavy wall rectangular tube protruding crossways through the frame rail. The blade of the reciprocating saw may be slipped in between the bulky



portion of the pedestal and the frame rail to cut through this connection.



Photo 02

The following image shows the body mount pedestal after it has been cut from the frame, showing the section of rectangular tubing that was cut through. The rest of the pedestal is not actually attached to the frame rail.



Photo 02

- 7. Use a flap-wheel, grinder or file to de-burr the cut edges of the nub of the rectangular tubing in the side of the frame rail. Paint or coat the bare metal with rust inhibitor to prevent rust.
- 8. Remove both halves of the removed body mount from the removed body mount pedestal and install them into the Outside Frame Brace for the side you are working on. It will be easier to pre-install the lower half

of the body mount inside the Brace before installing the Brace on to the vehicle.



Photo 02

Place the upper half of the body mount on top of the Brace. The metal sleeve that runs through both halves should be enough to hold them together during installation.



Photo 02

**9. Observe the back-side of** the factory bumper mount, along the outboard side of the frame rail. Note the stud protruding rearward from the mount:



Photo 02



Place the Outside Frame Brace (with the body mount bushing pre-installed) along the side of the frame rail. There is a hole in the forward end of the Outside Brace that corresponds with the aforementioned stud. Slide the Brace onto the stud while working the body mount into position, aligned with the threaded hole for the body bolt.



Photo 02

side of the frame rail. There is a similar locating stud on the inner/rearward side of the bumper mounting flange that is used to locate the position of the Inside Frame Brace. Note that the rear-most bolt holes in both the Outside and Inside Frame Braces correspond to existing holes in the Bronco's frame rail. Insert a supplied M10-1.5 X 90mm Gr10.9 Hex Head Flange Bolt through the Outer Brace, the Frame Rail, and the Inner Brace. Insert a second M10-1.5 X 90mm Gr10.9 Hex Head Flange Bolt through the forward set of throughholes as shown. Loosely install a supplied M10-1.5 Gr10.9 Nylon Insert Lock Nut on to each of the M10 bolts.



Photo 02

11. Locate the supplied (2) Inboard and (2) Outboard Nut Plates. If they have not been pre-assembled, press the supplied M12-1.75 GR10.9 Flange Lock Nuts into the hex-shaped holes with the nut flanges on the same side of the plate as the small oval spacers (shown below, un-powdercoated for clarity).



Photo 02

12. Install each of the Nut Plates so that they sandwich the front end of each Frame Brace between the Nut Plate and the back (rearward) side of the Bronco's bumper mount flanges (AKA frame horns). Consult the diagram below to identify the correct location for each Nut Plate. The slotted hole in each Nut Plate goes over the threaded stud on the back of the Bronco's bumper mount flange. Thread a supplied M6-1.0 Gr 10.9 Nylon Insert Lock Nut on to the threaded stud to hold the Nut Plate in place. Tighten the nut enough that it barely holds the Nut Plate in position but loose enough to still allow for adjustment.



Photo 0

Note that the indexing slot allows for some adjustment of the Nut Plate. Pre-position each Nut Plate so that



each nut is aligned with the bumper bolt slots in the Bronco's bumper mount flange, as shown.



Photo O'

- 13. With the help of a friend, install the bumper onto the Bronco. Re-use the (6) factory bumper bolts, threading them through the bumper, bumper mount flange, and into the captured nuts in the Nut Plates. Take care to ensure that the bumper is level and properly adjusted for height and horizontal position, then tighten the (6) bumper bolts.
- **14. Tighten the M10 Flange** Bolts and Flange Nuts that hold the Inner and Outer Frame Braces to the frame rails.
- 15. OPTIONAL: A third set (per side) of M10-1.5 X 90mm Gr10.9 Hex Head Flange Bolt and M10-1.5 Gr10.9 Nylon Insert Lock Nut may be installed through the Braces and the frame rail, if desired. A middle set of bolt holes have been provided in both the Outer and Inner Frame Braces. But a corresponding hole in the frame rail will have to be marked and drilled before installing the third bolt. Be sure to de-burr and coat the bare metal edge of the drilled hole if it is decided to add the third bolt.

**16. Install the factory body** mount bolt and washer through the body mount into the body. Snug the bolt but do not tighten it at this time.



Photo 02

17. Re-check that that the bumper is still positioned and levelled correctly, then tighten all bumper bolts, body mount bolts Frame Brace bolts and Nut Plate retaining nuts. Torque the factory bumper bolts to 59 ft.-lbs. Torque the supplied M10 Flange Bolts & Nuts to 40 ft.-lbs. Tighten the body mount bolts to factory specification.

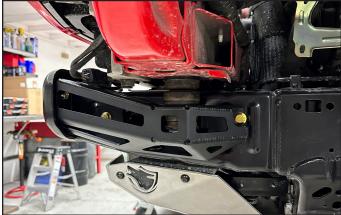


Photo 02

**18. If the intercooler was** removed to facilitate the installation, re-install it including the intercooler/skid plate mounts. re-install the front skid, bash plate or plastic valance.

Congratulations! You have completed the installation! Keep reading for important information from LOBO Off-Road, and keep these instructions for future reference.



#### **LOBO OFF-ROAD** - 5-YEAR LIMITED WARRANTY

Items manufactured and sold by LOBO Off-Road (here-inafter "LOBO") are covered under a 5-year warranty against manufacturing defects and workmanship. This Warranty applies to the LOBO-manufactured structural components ONLY.

For a period of 5 years from the retail purchase date, LOBO warrants to the original retail purchaser that its products are free from defects in material and workmanship. All other warranties and representations, expressed or implied, are hereby disclaimed, including fitness for merchantability and buyer's intended use or purpose. Buyer assumes all risks as to the selection, suitability and performance of all LOBO products purchased. This limited warranty does not cover damage or impairment in any part due to misuse or use in racing or other forms of competition, improper installation, accident or contact with onroad or off-road hazards, product modification, improper or inadequate cleaning and/or maintenance. Product purchased "used" or "open box" are not covered under warranty. LOBO is not responsible for items damaged during shipping. This warranty is not transferable from the original buyer.

LOBO's 5-Year Limited Warranty covers LOBO-manufactured structural components only. It does not cover paint or powder coat finish, electrical and wiring products, or any other components or processes performed by secondary vendors.

For the original Buyer to be eligible for the limited warranty coverage, the Buyer must provide proof of purchase. Customer's remedy hereunder shall be limited only to repair or replacement (at LOBO's option) of any defective part(s) returned to LOBO at customer's expense. The determination of whether or not a returned part is defective or subject to coverage under the limited warranties stated herein shall be made at LOBO's sole discretion.

This Warranty does not apply to items manufactured by other companies and sold by LOBO, individually or as part of a kit or assembly. Such items are covered only under their respective manufacturer's Warranty. Remedies under other manufacturers' warranties should be pursued directly with the manufacturer.

To file a Warranty Claim, please contact LOBO via email at pitcrew@lobooffroad.com to request a warranty claim form.