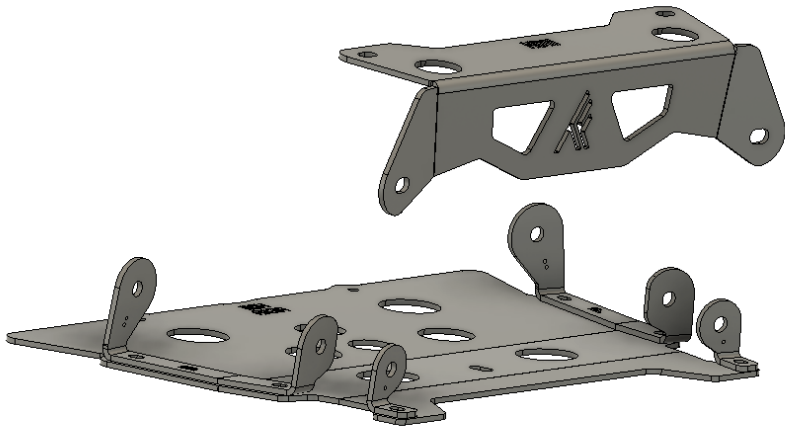


**Can Am Defender HD11**  
**Rear Frame Stiffener**

SKU: TF290907



**Thumper Fab**  
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Customer Service: 903-472-0928

# Can Am Defender HD11

## Rear Frame Stiffener

SKU: TF290907



### PARTS

| REF          | QTY | DESCRIPTION                        |
|--------------|-----|------------------------------------|
| 1            | 1   | Base Plate                         |
| 2            | 1   | Rear Support Bracket - Driver      |
| 3            | 1   | Rear Support Bracket - Passenger   |
| 4            | 1   | Rear Upper Stiffener               |
| 5            | 1   | Middle Support Bracket - Driver    |
| 6            | 1   | Middle Support Bracket - Passenger |
| HARDWARE KIT |     |                                    |
| A            | 11  | M8 Flange Nylon Lock Nut           |
| B            | 2   | M8 Flat Washers                    |
| C            | 1   | M8 Fender Washer                   |
| D            | 11  | M8x30mm Button Flange Screw        |
| E            | 6   | M12 Flange Nylon Lock Nut          |
| F            | 2   | M12 Flat Washer                    |
| G            | 4   | M12x90mm Flange Head Bolt          |
| H            | 2   | M12x95mm Hex Head Bolt             |

### TOOLS

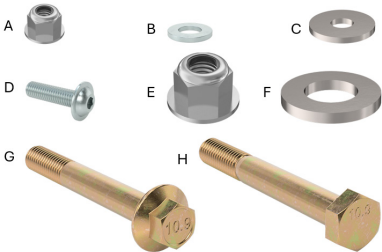
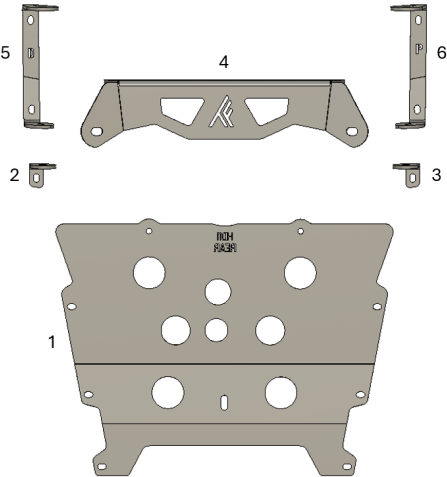
- 13mm Socket and Wrench
- 16mm Socket and Wrench
- 18mm Socket and Wrench
- 19mm Socket and Wrench
- 5mm Allen Wrench
- Drill
- 5/16" Drill Bit
- 3/8" Drill Bit
- Hammer
- Chisel

Torque Specs:

| SIZE<br>(STANDARD) | GRADE 5    | GRADE 8    | SIZE<br>(METRIC) | CLASS 8.8  | CLASS 10.9 |
|--------------------|------------|------------|------------------|------------|------------|
| 5/16"              | 15 ft/lbs  | 20 ft/lbs  | 6MM              | 5 ft/lbs   | 9 ft/lbs   |
| 3/8"               | 30 ft/lbs  | 35 ft/lbs  | 8MM              | 10 ft/lbs  | 23 ft/lbs  |
| 7/16"              | 45 ft/lbs  | 60 ft/lbs  | 10MM             | 32 ft/lbs  | 45 ft/lbs  |
| 1/2"               | 65 ft/lbs  | 90 ft/lbs  | 12MM             | 55 ft/lbs  | 75 ft/lbs  |
| 9/16"              | 95 ft/lbs  | 130 ft/lbs | 14MM             | 85 ft/lbs  | 120 ft/lbs |
| 5/8"               | 135 ft/lbs | 175 ft/lbs | 16MM             | 130 ft/lbs | 165 ft/lbs |
| 3/4"               | 185 ft/lbs | 260 ft/lbs | 18MM             | 170 ft/lbs | 240 ft/lbs |

### BEFORE YOU BEGIN

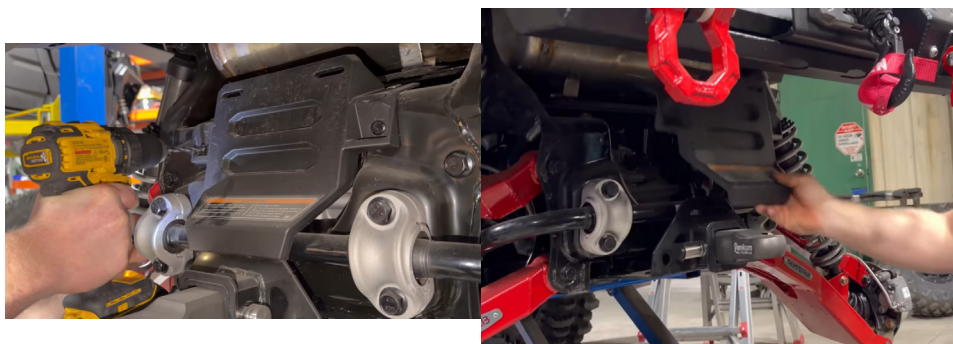
If you do not feel comfortable installing your **Thumper Fab** Rear Frame Stiffener, please see your nearest **Thumper Fab® Dealer** for installation.



# INSTALLATION INSTRUCTIONS

## Installation Preparation

Begin by lifting the rear of the vehicle in the air and remove the wheels. Use the drill and the 5/16" drill bit to drill the OEM rivets holding the rear plastic to the frame of the vehicle. A hammer and chisel may be helpful in the removal process of the top 2 rivets. Once all rivets have been drilled, remove the plastic cover from the vehicle (**FIG 1 & FIG 2**).



**FIG 1 & FIG 2 - Remove plastic cover from the rear of the vehicle**

Remove the lower control arm frame mounting bolts using an 18mm socket and wrench (**FIG 3**).

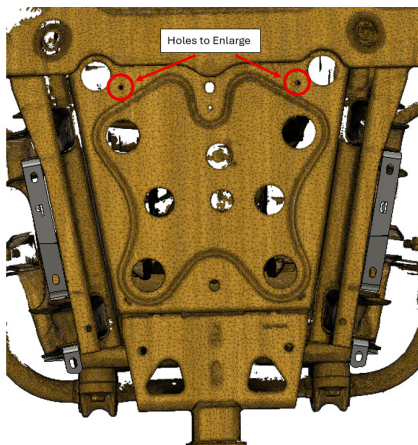


**FIG 3 - Remove lower control arm frame mounting bolts**

# INSTALLATION INSTRUCTIONS

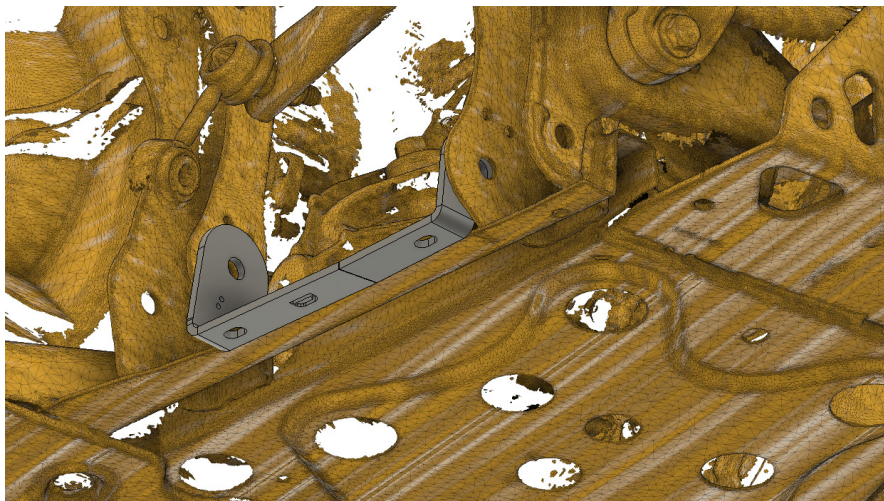
## Installation Preparation

Locate the 2 OEM holes on the underside of the vehicle to be enlarged. Use a drill with a 3/8" drill bit to step the holes up from the underside of the vehicle (**FIG 4 & FIG 5**).



**FIG 4 & FIG 5 - Enlarge holes in bottom of frame**

Insert the middle support brackets in between the frame on the driver and passenger side (**FIG 6**).



**FIG 6 - Slide the Middle Support Brackets in between the frame**

# INSTALLATION INSTRUCTIONS

## Installation

Loosley fasten the rear support brackets to the frame using 2 x M12x95mm hex bolts, 2 x M12 flat washers, and 2 x M12 flange nylon lock nuts (**FIG 7 & FIG 8**).



**FIG 7 & FIG 8 - Mount Rear Support Brackets to vehicle**

Fasten the front of the middle support bracket to the frame using 2 x M12x90mm flange head bolts and 2 x M12 flange nylon lock nuts. Do not tighten at this time (**FIG 9**).



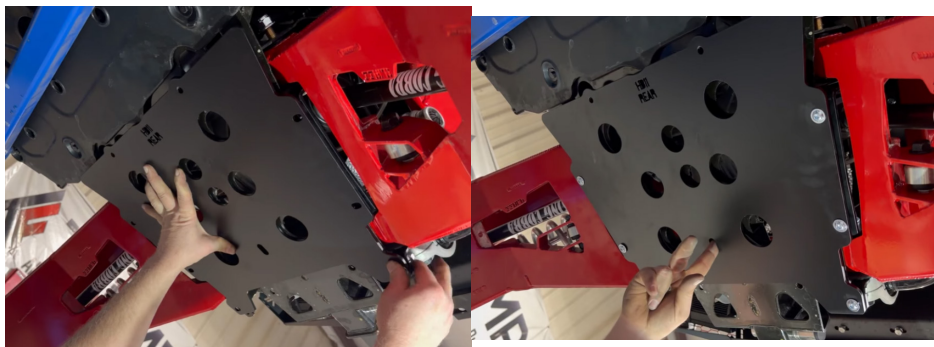
**FIG 9 - Fasten Middle Support Bracket to front bushing collar frame tabs for lower control arm**



# INSTALLATION INSTRUCTIONS

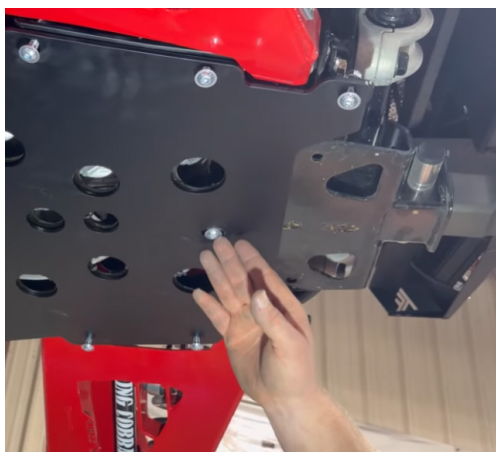
## Installation

Loosley fasten the base plate to the support brackets using the perimeter holes on the base plate. Make sure the large holes in the base plate line up with the large holes in the frame as the base plate is not symmetrical. Use the M8x30mm button flange screws and M8 flange nylon lock nuts to loosley hang the base plate from the support brackets (**FIG 10 & FIG 11**).



**FIG 10 & FIG 11 - Loosley mount the Base Plate to the vehicle**

Fasten the center of the base plate to the frame using an M8x30mm button flange screw, M8 fender washer, and M8 flange nylon lock nut. The fender washer and flange nylon lock nut will go on the top side of the frame (**FIG 12**).

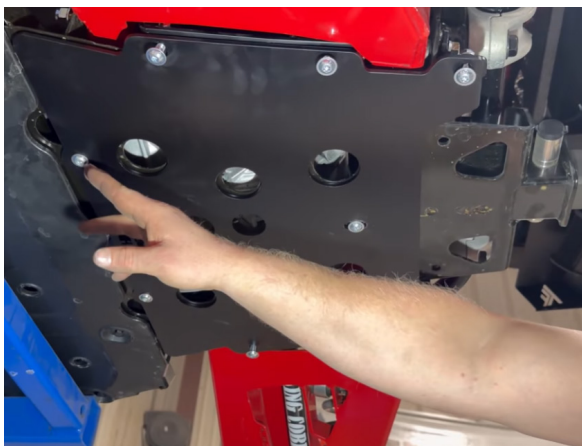


**FIG 12 - Fasten the middle of the Base Plate to the frame**

# INSTALLATION INSTRUCTIONS

## Installation

Slide the M8 flat washers in between the frame and the front of the base plate (lined up with the 2 front most mounting holes). Use 2 x M8x30mm button flange screws and 2 x M8 flange nylon lock nuts to loosely fasten the front of the base plate to the frame (**FIG 13**).



**FIG 13 - Loosley mount the front of the Base Plate to the vehicle**

Tighten all M8 mounting hardware that fastens the base plate to the support brackets and the frame of the vehicle (**FIG 14**).

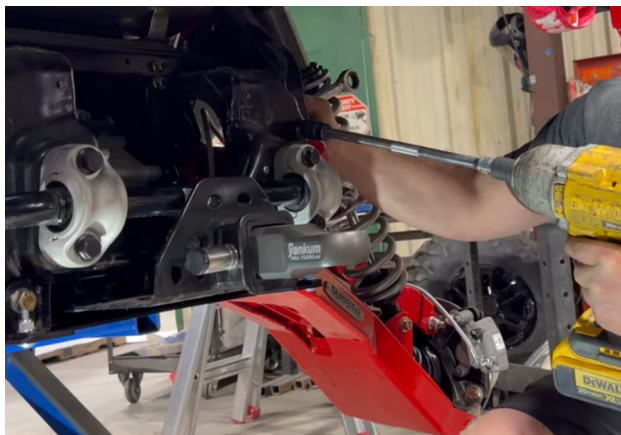


**FIG 14 - Tighten lower M8 hardware**

# INSTALLATION INSTRUCTIONS

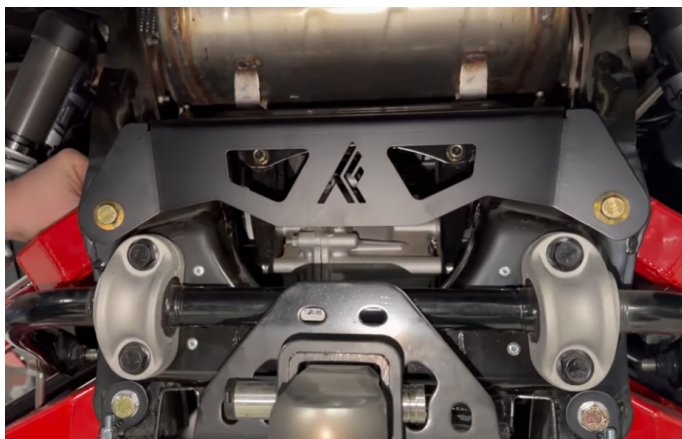
## Installation

Remove the rear most upper control arm mounting bolts that fasten the arm to the frame using an 18mm socket and an 18mm wrench. It may make the bolt removal process easier to unbolt the shock from the lower control arm which will allow the upper control arm to move more freely (**FIG 15**).



**FIG 15 - Remove rear most upper control arm mounting hardware**

Make sure the rivets drilled in step one are fully removed from the frame. Loosley mount the rear upper stiffener to the frame using 2 x M12x90mm flange head bolts and 2 x M12 flange nylon lock nuts bolting through the upper control arm rear bushing and frame tab (**FIG 16**).



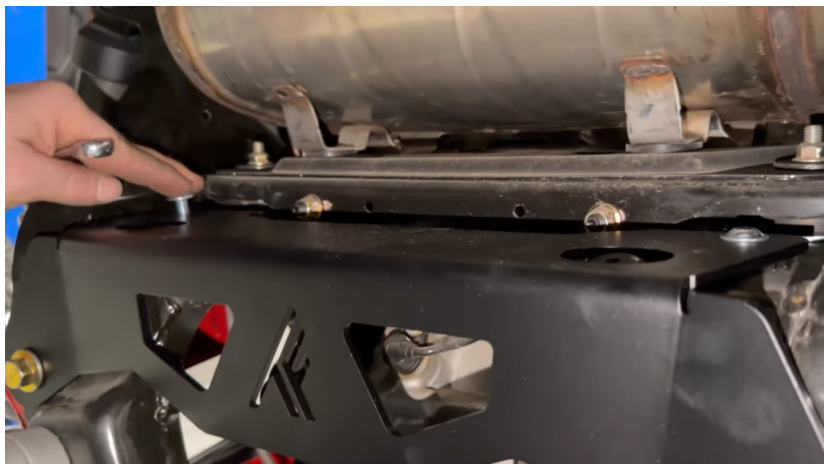
**FIG 16 - Loosley fasten the Rear Upper Stiffener to the vehicle**



# INSTALLATION INSTRUCTIONS

## Installation

Fasten the upper portion of the rear upper stiffener to the frame using the 2 remaining M8x30mm button flange screws and M8 flange nylon lock nuts. Tighten the M8 hardware using a 5mm allen wrench and a 13mm socket (**FIG 17**).



**FIG 17 - Fasten the upper portion of the Rear Upper Stiffener to the vehicle**

Fasten the shock to the lower control arms (if disconnected) and remount the wheels. Lower the vehicle to the ground and tighten all M12 control arm mounting hardware once the suspension is fully settled (**FIG 18**).



**FIG 18 - Tighten all remaining hardware**

# INSTALLATION INSTRUCTIONS

## PRODUCT DISCLAIMER

The installation of products sold or manufactured by Thumper Fabrication, LLC (Thumper Fab) including, but not limited to suspension components such as lift kits, audio roofs, roll cages, frame stiffener kits, and tires that exceed the original specifications for the vehicle, may change the vehicle's center of gravity and handling characteristics both on- and off-road. You are aware that the installation of tires that are larger than original vehicle specifications may reduce the effectiveness of the braking system. Use of these products may place added stress to the original factory vehicle components which could cause them to weaken or possibly fail.

Products sold or manufactured by Thumper Fab are intended for off-road use only. Operation of a vehicle modified with these products on a road could result in serious bodily injury or death, and such operation may violate the laws of your state or municipality. You agree to operate your vehicle exclusively in the manner intended by the vehicle manufacturer. You agree that failure to safely and reasonably operate your vehicle could result in serious bodily injury or death, and that, as a result of installation of this product(s) to your vehicle, extreme care must be taken to prevent vehicle rollover or loss of control, which may be more likely to occur as a result of said modifications. You will avoid unsafe maneuvers, including sudden sharp turns or other abrupt maneuvers, which could make a vehicular accident more likely. You understand that Thumper Fab is not responsible or liable for any damages or any injuries to yourself or your passengers that could occur upon possible accidents due to driver error, incorrect installations, bad judgment, incompatibility with other aftermarket accessories or natural disasters to the fullest extent allowable by law. You will have all vehicle occupants fasten seatbelts, if equipped, and wear proper safety equipment, such as DOT approved helmet and eye protection prior to operating the vehicle. You understand and acknowledge that failure to wear proper safety equipment may increase the risk of serious bodily injury or death to yourself and any passengers.

Proper installation of products sold or manufactured by Thumper Fab requires knowledge of the factory recommended procedures for removal and installation of original equipment components. Installation of these products without proper knowledge and experience may affect the performance of these components and the safety of the vehicle and cause serious bodily injury or death. It is strongly recommended that a certified mechanic familiar with the installation of similar components perform the product(s) installation.

Prior to installing any products sold or manufactured by Thumper Fab, you will perform or cause to be performed an inspection of their vehicle to confirm its condition is suitable for the installation of these products. A proper inspection of the vehicle includes confirmation that the vehicle has not been in a collision and is free of corrosion. If the vehicle is suspected to have been in a collision or misused, or is otherwise unsuitable for modification, you will not install the product(s). You will continue to inspect the vehicle prior to each use to confirm its condition is suitable for its intended use, and you acknowledge that the failure to do so may result in serious bodily injury or death, as well as damage to the vehicle itself.

You will install any warning labels provided with the product so it may be prominently seen by yourself and all passengers. You will notify all passengers of the modifications performed to your vehicle prior to operation.

Insurance companies may handle coverage of a modified vehicle differently. Please check with your insurance carrier prior to modifying the vehicle to ensure your coverage remains sufficient. Installation of this product(s) may void your vehicle warranty. If this is a concern, please check with the manufacturer or dealer before purchase or installation of this product(s).



**Thumper Fab**

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