



THUMPER FAB

Aluminum Audio Roofs • Roll Cages • UTV Accessories

Can-Am/Defender 62" and 64" Models Forward Control Arms

SKU: TF041202 & TF041203



Thumper Fab

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Ver. 0323

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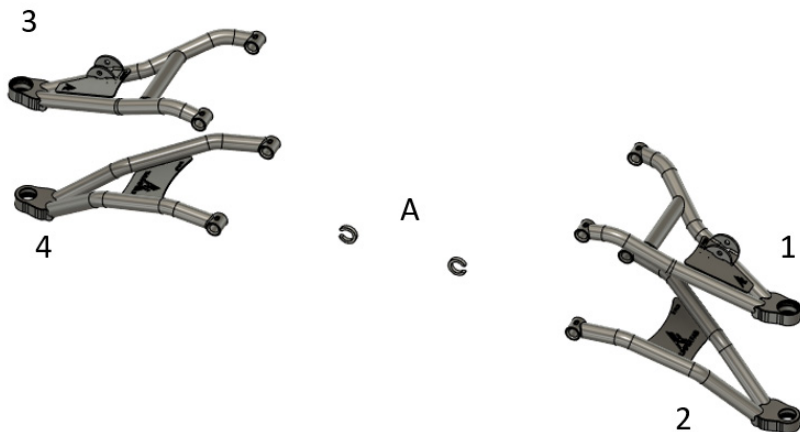


PARTS

QTY		DESCRIPTION
1	1	Driver Upper Forward Control Arm
2	1	Driver Lower Forward Control Arm
3	1	Passenger Upper Forward Control Arm
4	1	Passenger Lower Forward Control Arm
HARDWARE KIT		
A	4	Steering Stops
B	4	Zip Ties
C	2	Ball Joint Install Tool

TOOLS

- 7mm Socket
- 10mm Socket
- 13mm Socket
- 15mm Socket
- 18mm Socket
- 15mm Wrench
- 18mm Wrench
- Flat Head Screwdriver
- Pliers
- Dikes
- Dead Blow

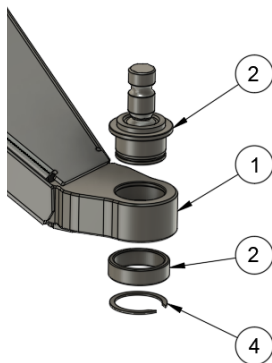


BEFORE YOU BEGIN

If you do not feel comfortable installing your **Thumper Fab** Forward Control Arms, please see your nearest Can-Am® Dealer for

BALL JOINT INSTALLATION INSTRUCTIONS

OEM

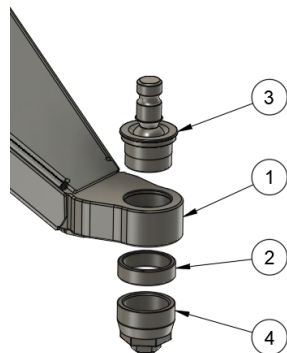


PARTS LIST	
ITEM	PART NUMBER
1	CONTROL ARM / BALL JOINT HOUSING
2	CAN-AM OEM BALL JOINT
2	RING INSERT
4	EXTERNAL RETAINING RING

STEPS:

1. Press ring insert into housing.
2. Press ball joint into ring insert & housing.
3. Install external retaining ring.

Thumper Fab Elite



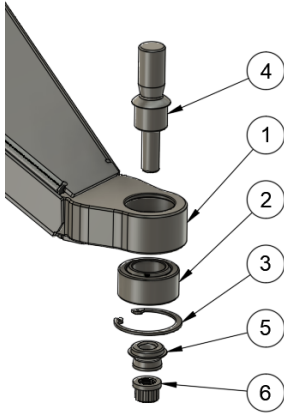
PARTS LIST	
ITEM	PART NUMBER
1	CONTROL ARM / BALL JOINT HOUSING
2	RING INSERT
3	BALL JOINT BODY/PIN
4	BALL JOINT CAP

STEPS:

1. Press ring insert into housing.
2. Press ball joint body into ring insert & housing.
3. Install ball joint internals and cap.

BALL JOINT INSTALLATION INSTRUCTIONS

UNIBALL

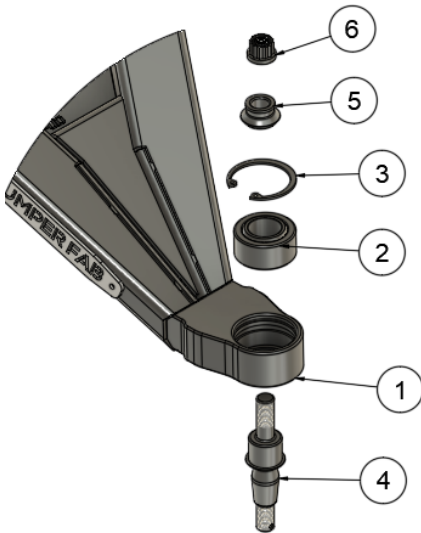


PARTS LIST	
ITEM	PART NUMBER
1	CONTROL ARM / BALL JOINT HOUSING
2	UNIBALL
3	INTERNAL RETAINING RING
4	UNIBALL PIN
5	MISALIGNMENT
6	NUT

STEPS:

1. Press uniball into housing.
2. Install internal retaining ring.
3. Insert uniball pin into uniball.
4. Install misalignment onto threaded end of uniball pin.
5. Install nut onto uniball pin.

UNIBALL - TAPERED



PARTS LIST	
ITEM	DESCRIPTION
1	CONTROL ARM / BALL JOINT HOUSING
2	UNIBALL
3	RETAINING RING
4	UNIBALL PIN - TAPERED
5	UNIBALL CAP
6	RETAINING NUT

STEPS:

1. Press UNIBALL into BALL JOINT HOUSING
2. Install RETAINING RING
3. Insert UNIBALL PIN into UNIBALL
4. Slide UNIBALL CAP over UNIBALL PIN
5. Install RETAINING NUT onto UNIBALL PIN

INSTALLATION INSTRUCTIONS

Place Front of Defender on Jacks

To prepare for install, use a jack and jackstands to lift the front of your Defender to remove the wheels. Remove the shock from the upper control arm using 15mm socket and 15mm wrench (**FIG 1**).



FIG 1 - Remove Wheels, Axle Nuts, and Shock lower mounting bolt

Remove Brake Caliper

Remove the 2 factory bolts fastening the brake caliper to the back of the hub assembly using a 15mm socket (**FIG 2**).



FIG 2 - Remove the Brake Caliper

INSTALLATION INSTRUCTIONS

Unfasten the Tie rod from Hub Assembly

Remove the cotter pin from the outer tie rod end mounting bolt using dikes, then use a 15mm socket and 15mm wrench to remove the tie rod end from the hub assembly (**FIG 3**).



FIG 3 - Remove cotter pin and disconnect tie rod end from hub assembly using 15mm Socket and 15mm Wrench

Disconnect brake line from upper control arm

Use a 10mm socket to remove the factory M6x1.0 flange bolt fastening the brake line to the underside of the upper control arm (**FIG 4**).



FIG 4 - Disconnect the brake line from the underside of upper control arm using 10mm socket

INSTALLATION INSTRUCTIONS

Disconnect Upper Ball Joint

Use the dikes to remove the cotter pin that goes through the upper ball joint shank, then use a 18mm wrench to remove the upper ball joint retaining nut. A dead blow may be needed to separate upper ball joint from the knuckle (**FIG 5**).



FIG 5 - Disconnect upper ball joint using 18mm Wrench

Disconnect Lower Ball Joint

Use a 15mm socket and 15mm wrench to remove the factory cross bolt that fastens the lower ball joint to the knuckle. A dead blow may be needed to separate the knuckle from the lower ball joint (**FIG 6**).



FIG 6 - Disconnect lower ball joint from knuckle using 15mm Wrench and 15mm Socket

INSTALLATION INSTRUCTIONS

Remove Upper Control Arm

Once knuckle is free from the upper and lower ball joints, remove the upper control arm using 15mm socket and 15mm wrench (**FIG 7**).



FIG 7 - Remove Upper Control Arm using 15mm Socket and 15mm Wrench

Remove Lower Control Arm

Use 15mm socket and 15mm wrench to remove the lower control arm mounting bolts and remove the lower control arm from the unit (**FIG 8**).



FIG 8 - Remove Lower Control Arm using 15mm Socket and 15mm Wrench

INSTALLATION INSTRUCTIONS

Install Thumper Fab Forward Control Arms

Remove the grease fittings from your factory control arms and install them in the threaded busing collars in the Thumper Fab forward arms using 7mm socket (**FIG 9**). Using the factory hardware and a 15mm socket and 15mm wrench, install the lower forward arm (**FIG 10**).

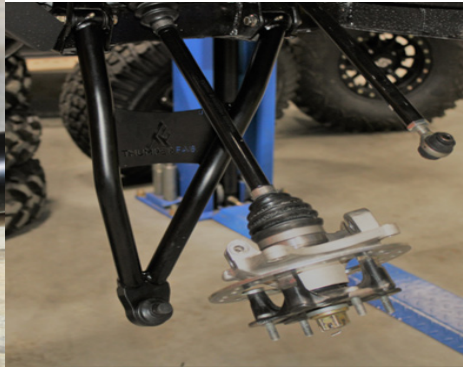


FIG 9 - Install OEM grease fittings into Thumper Fab arms using 7mm Socket

FIG 10 - Install lower forward arm using 15mm Socket and 15mm

Secure the knuckle to the lower ball joint using the factory cross bolt. Tighten using 15mm socket and 15mm wrench (**FIG 11**).



FIG 11 - Fasten knuckle to lower ball joint using 15mm Socket and 15mm Wrench

INSTALLATION INSTRUCTIONS

Install upper arm using factory hardware and 15mm socket and 15mm wrench. Attach upper ball joint to knuckle using 18mm wrench. Install cotter pin to ensure nut can not back off ball joint pin (**FIG 12**).

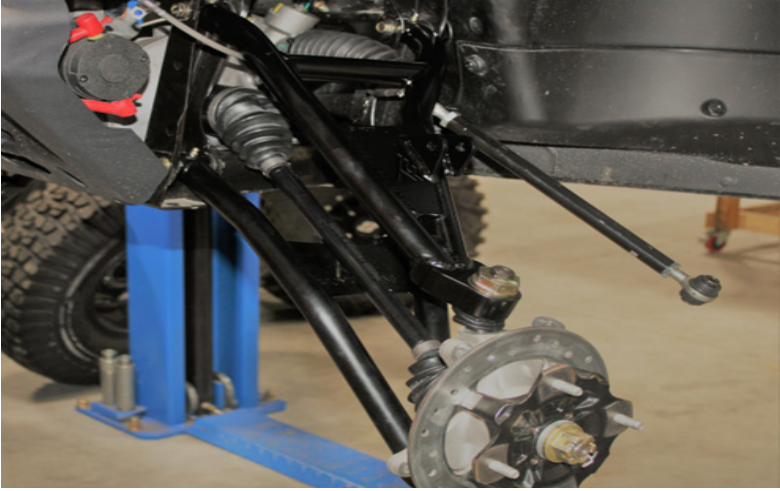


FIG 12 - Mount upper control arm using 15mm Socket and 15mm Wrench

Mount the shock to the upper control arm using the factory bolt and tighten using a 15mm socket and a 15mm wrench. (**FIG 13**).



FIG 13 - Fasten shock to upper control arm using 15mm Wrench and 15mm Socket

INSTALLATION INSTRUCTIONS

Install Brake Calipers

Install brake caliper using factory hardware with blue loctite applied to threads of OEM mounting hardware and a 15mm socket (**FIG 14**). Use a zip tie to fasten brake line to underside of upper control arm (**FIG 15**).



FIG 14 - Mount brake calipers using 15mm Socket

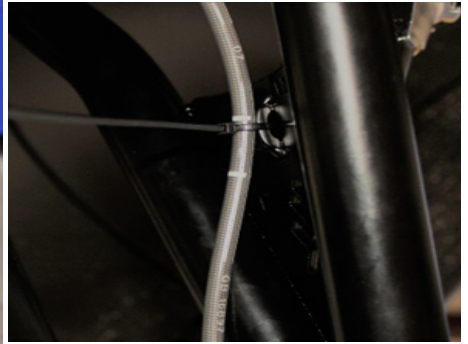


FIG 15 - Mount brake line to upper arm using zip tie

Install Steering Stops

Break the factory clamp with the dikes that fastens the steering boot to the steering rack to be able to slide the boot back to access the worm gear (**FIG 16**).



FIG 16 - Slide steering boot back to gain access to worm gear

INSTALLATION INSTRUCTIONS

Slide 1 steering stop onto worm gear on each side, if needed double stack an additional steering stop on each side. Reattach steering boots with provided zip ties. Remount tires and lower unit to the ground, adjust toe as needed (**FIG 17**). Fasten tie rod to knuckle using OEM hardware, including a new cotter pin through hole in OEM bolt. Lower the unit to the ground and adjust toe as needed (**FIG 18**).

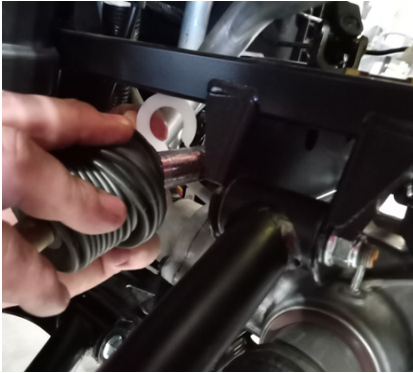


FIG 17 - Install steering stops, and reattach boots using provided zip ties



FIG 18 - Fasten tie rod to knuckle using OEM bolt and nut including new cotter pin. Adjust toe as needed

Tighten all hardware to factory specifications.

ENJOY YOUR NEW THUMPER FAB FORWARD A-ARMS!!

The installation of products sold or manufactured by Thumper Fab including, but not limited to suspension components such as lift kits, control arms, frame stiffener kits, roofs, roll cages, 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).



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