Thank for your purchase of this Ricochet Off-Road Armor Kit. All of our kits are custom designed to fit each model and should install hassle free with no additional modifications required. Please carefully read through all included instruction sheets before beginning your install.

The tips described on this sheet are general mounting tips that may or may not apply to your particular model, refer to the attached model specific instructions for a step by step mounting procedure.

If you do encounter a problem during installation please check the FAQ on our website or feel free to contact us by phone or email using the contact info at the bottom of this page.

# **Required Tools:**

(refer to your hardware placement guide for bolt sizes)

**Button Head TORX Bolts:** (socket bit is highly recommended) 8mm bolts use a T-40 TORX bit 6mm bolts use a T-30 Torx bit

#### **Hex Bolts & Nuts:**

10mm bolts uses 17mm 8mm bolts uses 13mm 6mm bolts uses 10mm 1/4"-20 bolts uses 7/16"

#### **Drill Bits:**

While we try to avoid drilling whenever possible some models require one or two mounting points to be match drilled. When instructions call for a drilled mounting point use an **11/32**" bit to match drill through the mounting point on the skid plate only after the plate has been fully secured to your machine using the other hardware listed on your hardware guide.

# **Locking Nuts:**

Most sets will include two types of locking nuts. Loose nuts are Nylock, and any nuts welded onto other hardware are pinch-style Stover lock nuts. It is highly recommended that you use a bit of Anti-seize or a drop of oil on the threads of the welded-on pinch style nuts, this will make the bolts go on and come off much easier.

### Other helpful tips:

- -Before you begin the installation organize all the included hardware according to the hardware placement sheet so you can quickly find the correct bolts and brackets when you need them.
- -Install all bolts finger-tight at first until all hardware has been installed, this will give you maximum adjustability.
- -When using the cupped washers to secure the plates to factory mounting points do not over torque the bolts because the threads can strip easily. If you do strip one out the simplest way to repair the thread is to use a  $1/4''-20 \times 5/8''$  self tapping bolt.
- -You may find it easier to remove the rear tires when installing the rear a-arm guards, it's typically very tight and hard to see when the tires are left on.

Contact us at 1-866-273-1197 or dh\_gibbs@comcast.net with any questions or concerns.

#### Frame Skid Plates:

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	#833 Cupped Washers Qty: 26	0	5/16" SAE Flat Washers Qty: 18		
	#833-8 Cupped Washers (Larger Hole) Qty: 6	0	8mm Nylock Nuts Qty: 6		
	6 x 25mm Hex Bolts Qty: 26	1	8 x 20mm Hex Bolts Qty: 4		
0	1/4" Lock Washers Qty: 26	8 x 90mm Hex Bolts Qty: 2			
0	#700-41 Aluminum Spacer Qty: 24	UHMW Layer (optional)  #833 Cupped Washers Qty: 36 6mm Flange Bolts Qty: 33 6 x 35mm Hex Bolts Qty: 3			
A-Arm Gua	rds:		6mm HD Flat Washers Qty: 3		
	1" Clamps 8 x 20m	m Button	5/16" SAF Flat Washers		

Lateral Skids:										
	#833 Cupped Washer Qty: 4	0	1/4" Lock Washer Qty: 2				6 x 30mm Buttonhead Bolts Qty: 2			
4	1/4" x 3/4" Self- Tapping Hex Bolt Qty: 2	1	8 x 25mm Buttonhead Bolt Qty: 2	0	5/16" Flat Washer Qty: 4	0	8mm Nylock Nut Qty: 2			

Head Bolts

Qty: 6

1. Begin by removing all of the stock plastic skid plates.

1" Clamps

Qty: 6

- 2.Before installing your front bash plate you will need to drill one hole in the position shown in fig. 1.Using an 11/32" (or 3/8") bit match drill through the outermost existing hole opening up a hole on the top side of the frame so that the 8 x 90mm hex bolt can pass completely through and an 8mm nylock nut can be fastened. The center mounting point should already have an access hole on the top side. Now install your front bash plate (p/n 741t) using the hardware shown on the hardware placement guide.
- 3. The four other frame plates can now be installed in any order using the hardware shown on your hardware placement guide. To fill the gap between the mounting point and the skid plate you will need to use the #700-41 aluminum spacers on each point which uses a 6 x 25mm bolt as shown in fig 2. The four outermost mounting points which use the 8 x 20mm bolts will not require a spacer. These points will fasten using an 8mm nylock nut and washer on the top side. It is best to leave all of these bolts loose until you have installed all four of these plates as to allow for some adjustibility in their positions. Once every bolt has been started you may begin tightening each bolt while making sure each plates position is properly aligned as to interlock with each adjacent plate. It is important not to over torque the bolts because they will strip fairly easily
- 4. Because of the variation in weld heights which the skid plates lay across, you may notice that some of the mounting points either suck the plate too low with respect to its adjacent plate leaving an exposed hard edge or in other cases the cupped washer may not seed down firmly against the plate. In the former case you may use some of the extra 5/16" flat washers to increase the height of the spacer which will help create smoother transistions between the plates. In the latter case the spacer may need to be ground or filed down as to allow the cupped washer to set firmly against the plate.
- 5. If you have purchased the lateral skids you may install them now to protect the plastic beneath the floor boards. First hold the skid into place to identify the three mounting points. Remove the button head bolt and the rivet where the two outermost mounting points are located. This rivet will need to be drilled out using an 1/8" bit. Now you may mount your lateral skid using the hardware shown on your hardware placement guide. The self tapping bolts can be a little tricky to get started, use a little lubricant on the bolt and with a ratchet apply a decent amount of pressure while slowly threading the bolt into place, make sure you keep the bolt going as stright in as possible and don't over torque it because it can strip quite easily.

#### **UHMW Layer Mounting Instructions**

Refer to your hardware placement guide to locate the 3 spots where the UHMW and aluminum use common monunting points.

You have been provided with a longer 6 x 35mm Hex Bolt to be used at these points threaded through both the UHMW and aluminum as well as the required spacer.

Install UHMW using the 6mm flange bolts and cupped washers to attach UHMW layer directly to aluminum skid plate, except in the three places mentioned above

Fig.



5/16" SAE Flat Washers

Qty: 6



# Hardware Placement Guide for Can-Am Commander (P/N 7410)

