



# UTV & ATV Armor Kit Installation Tips

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 x 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](mailto:dh_gibbs@comcast.net) with any questions or concerns.**

# Hardware List for P/N 9191F & 9191F-P

## 919T

- 2) 6x20 hex
- 2) 6mm HD washers
- 2) 1 1/4 clamps
- 3) 8x20 Torx
- 3) 8mm washers
- 1) 1 3/4" "B" clamp
- \* 2) 833 Cupped.Washer
- \* 2) 6x30 hex
- \* 2) 700-101 spacers

\* Denotes that this hardware is a common mount with the two front mounts of the M1

## 919M1

- 1) 833 C.W
- 1) 700-102 spacer
- 1) 6x45 hex
- 2) B clamps
- 2) 8x20 torx
- 2) 8mm washers
- 4) M6 U nut-clip
- 4) 6x20 flat head
- \* 3) 833 C.W.
- \* 3) 700-105 spacers
- \* 3) 6x40 hex

\* Denotes that this hardware is a common mount with the M2

## 919M2

- 1) 833 C.W.
- 1) 700-102 spacer
- 1) 6x45 hex
- 2) 1 3/4" "B" clamp
- 2) 8x25 Torx
- 2) 8mm washers
- \* 2) 833 C.W
- \* 2) 6x55 hex
- \* 2) 700-103 spacers

\* Denotes common mount to the front of 919R

## 919R

- 2) 8x25 torx
- 2) 8mm washers
- 2) 700-37 nut plates
- 2) 6x25 hex
- 2) 6mm HD wshers

## 919 FBR

- 6) 833 C.W.
- 2) 700-104 spacer
- 1) 700-105 spacer
- 1) 700-106 spacer
- 2) 700-107 spacer
- 2) 6x 30 hex
- 2) 6x 40 hex
- 2) 6x 50 hex

## 919 FBL

- 7) 833 C.W.
- 3) 700-104 spacer
- 1) 700-105 spacer
- 1) 700-106 spacer
- 2) 700-107 spacer
- 2) 6x 30 hex
- 3) 6x 40 hex
- 2) 6x50 hex








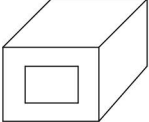
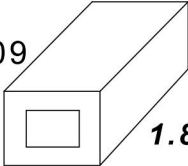

## 919AFA & 919AFB

- 6) 1 1/4 clamps
- 6) 8x20 torx
- 6) 8mm washers

## 919ARA & 919ARB

- 2) 700-108
- 2) 700-109
- 2) 8x60 hex
- 4) 8x70 hex
- 12) 8mm HD washers
- 6) 8mm nylock nut

## Hardware Reference

#700-101		.56" silver
#700-102		1.37" silver
#700-103		1.64" silver
#700-104		.44" silver
#700-105		1" black
#700-106		.92" gold
#700-107		.56" silver
#700-108		1.19" x 1"
#700-109		1.81" x 1"
#700-37		

## Hardware for optional UHMW Layer

### 919P1

- 11) 833 C.W.
  - 11) 6x16 flange bolts
  - \* 2) 833-8 C.W.
- \* common mount to aluminum.  
use the same 8x20 torx as you do for the 1 1/4 clamps

### 919P2

- 18) 833 C.W.
- 14) 6x16 flange bolts
- 3) 6x40
- 3) 700-827 spacers
- 1) 6x5 hex

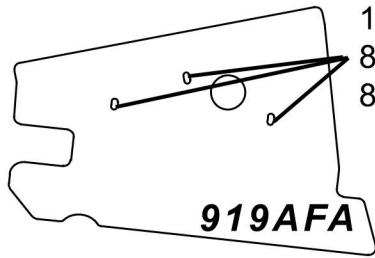
### 919P3

- 18) 833 C.W.
- 14) 6x16 flange bolts
- 3) 6x40 hex
- 3) 700-827 spacers
- 1) 6x5 hex

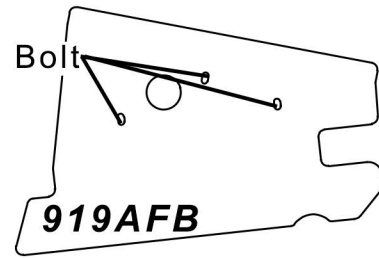
### 919P4

- 18) 833 C.W.
- 18) 6x16 flange bolts

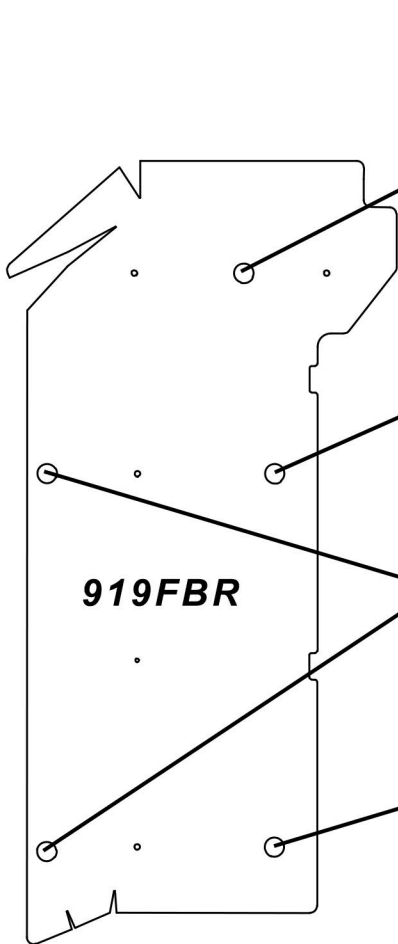
# Clamp & Hardware Placement Guide for P/N 919AF, 919AR, & 919FB



1 1/4" Clamp  
8x20mm Button Head Bolt  
8mm Flat Washer



**919AFB**



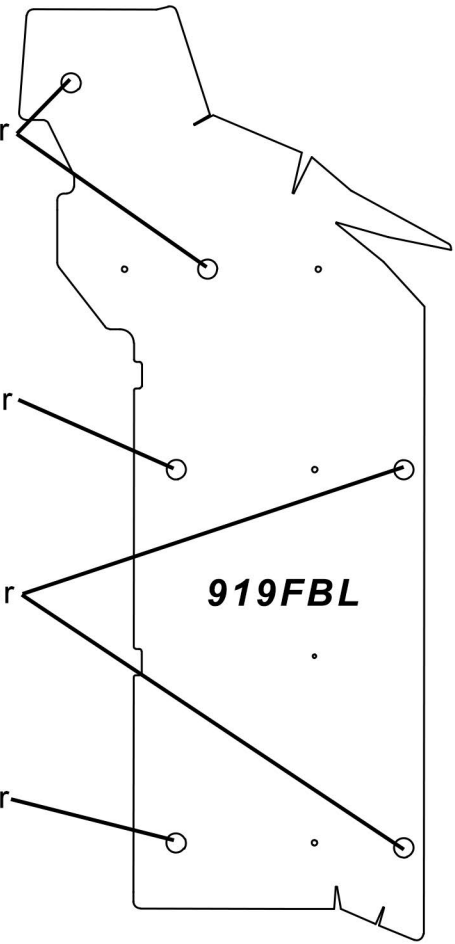
**919FBR**

#833 Cupped Washer  
6x30mm Hex Bolt  
#700-104 Spacer\*  
\*(.44" silver)

#833 Cupped Washer  
6x40 Hex Bolt  
#700-105 Spacer\*  
\*(1" black)

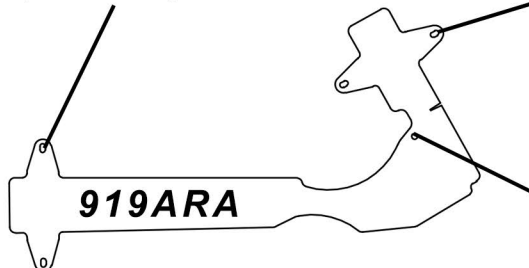
#833 Cupped Washer  
6x50mm Hex Bolt  
#700-107 Spacer\*  
\*(1.15" silver)

#833 Cupped Washer  
6x30mm Hex Bolt  
#700-106 Spacer\*  
\*(.92" gold)



**919FBL**

8x70mm Hex Bolt  
(2x) 8mm HD Flat Washer  
8mm Nylock Nut  
#700-09 Spacer\*  
\*(1.81" x 1")



**919ARA**

8x60mm Hex Bolt  
(2x) 8mm HD Flat Washer  
8mm Nylock Nut  
#700-08 Spacer\*  
\*(1.19" x 1")

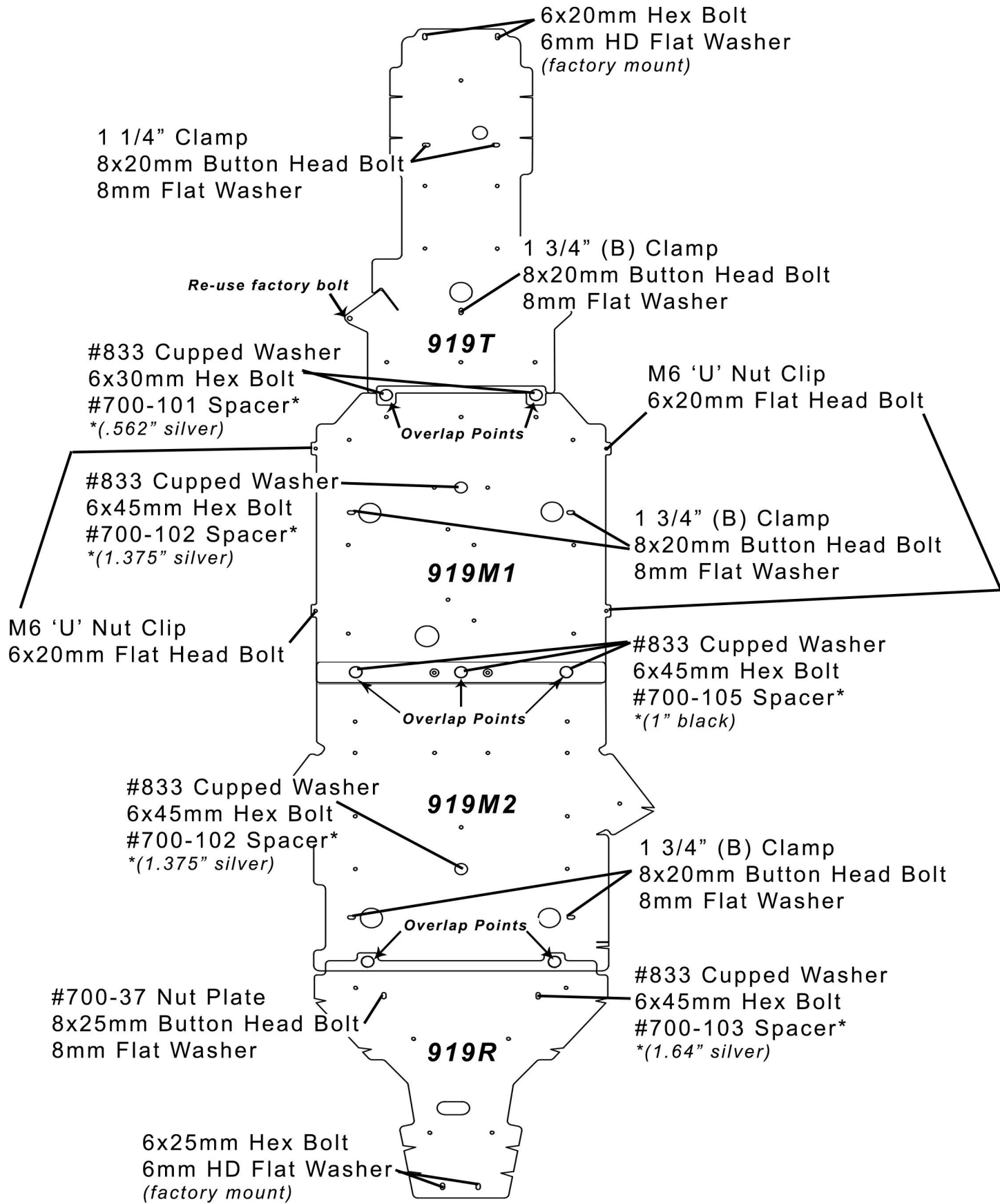
8x70mm Torx  
(2x) 8mm HD Flat Washer  
8mm Nylock Nut

8x70mm Hex Bolt  
(2x) 8mm HD Flat Washer  
8mm Nylock Nut  
#700-09 Spacer\*  
\*(1.81" x 1")



**919ARB**

# Clamp & Hardware Placement Guide for P/N 919



# Mounting Instructions for P/N 9191F

***If Possible it is highly recommended to view our installation video on our YouTube channel. Link to our channel through our website [www.ricochetoffroad.com](http://www.ricochetoffroad.com)***

- 1. Get your machine up off the ground as much as possible, a couple of service ramps will work just fine.**
- 2. Begin by Removing the center frame factory plastic skid plates. The outer floor board plastic skids will need to remain on the machine although you will need to remove the inside mounting bolts on these plastic skids that attach to the center plastic skids.**
- 3. Take a moment to review the hardware placement guide, organize all the hardware according to the hardware guide so that everything will be easy to find when you need it. There are several different lengths of spacers that are used to fill the gap between the skid plates and the frame. Make sure you correctly identify all the spacers so that you are using them in correct positions.**
- 4. Each clamp or bracket that has a nut welded onto it is a pinch style locking nut, it is highly recommended that you apply a small amount of anti-seize or other lubricant to the threads of these nuts.**
- 5. The full frame skid plates will need to be installed before the rock sliders, and the full frame skids should be installed front to rear. As you begin the install keep in mind that for each plate you will be installing all the non-overlapping hardware only finger tight, then securing the next plate by sliding it under the previously installed plate by lining up the overlap points and threading the bolt through both layers. You will want the plates to overlap so that the hard edge always face the rear creating a smooth sliding surface from front to back. You will want to keep all of the installed hardware only finger tight until the entire interlocking assembly has been installed.**
- 6. Most of the hardware is fairly self explanatory as to how it attaches to your machine, nut plates are slid behind welded on steel plates, the round clamps wrap around the frame tubes and the cupped washers are used in existing threaded mounting points that the plastic skid plate attached to.**

***Mounting Tips to keep in mind during the install.***

- Utilize access holes next to clamp locations to position clamp around frame tube and hold in place while you feed in a bolt.**
  - When threading bolts into clamps and nut plates make sure they are going straight in and not cross-threading. You should be able to easily get several turns with your fingers until the bolt hits the locking feature on the nuts.**
  - Do not over-torque the bolts going into factory mounting points, they will strip fairly easily. Just get them nice and snug and they will hold up fine.**
  - Having an extra set of hands to hold the plates in place while you install hardware will make the install quite a bit easier.**
- 7. Once all the hardware is installed you may begin tightening everything down while making sure each plate is positioned correctly.**
  - 8. Once the center skids are properly installed you may install the floorboard skids. The aluminum floorboard skids will overlay the factory plastic floorboard skids and utilize the same mounting points. Refer to your hardware placement guide when installing each bolt to make sure you are using the correct spacer to fill the gap between the skid plate and the mounting point. In order to keep the factory plastic floorboard guard in place as you install the aluminum one remove just one of factory bolts mounting the plastic and hang your aluminum skid to this point using the correct hardware. Then one by one work your way around removing factory bolts and replacing the provided hardware and spacer in its place.**
  - 9. Now install the front a-arm guards with the 1 1/4" clamps wrapped around the a-arm tube. After these are fully installed turn the tire to full lock in both directions to make sure there are no interferences with the CV boot. If there is, loosen the clamps and adjust the guards position accordingly.**
  - 10. Finally, install the rear linkage guards. Position the guard firmly in place on the rear linkage and refer to the hardware placement guide to secure the guard. This will be fairly self explanatory once you hold the guard in place.**