



# PRODUCT

## INSTALLATION GUIDE

Benelli M4 Raven with Scorpion Recoil System

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### Contents Included

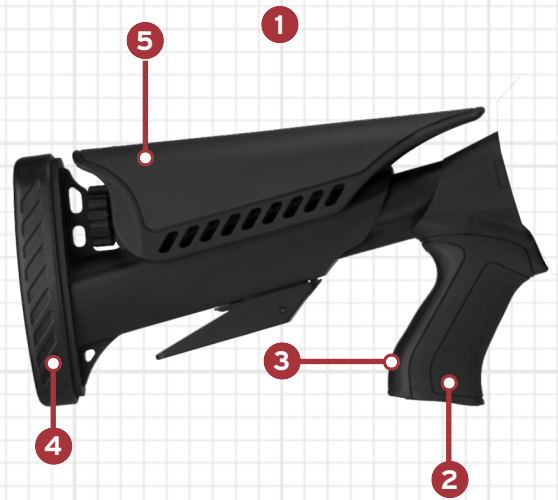
Stock

Pistol Grip

Scorpion Recoil Grip

Scorpion Razorback Recoil Pad

New Infinitely Adjustable Soft Touch Polymer  
Cheekrest





### Installed on Firearm










# Benelli M4 Raven Stock with Scorpion Recoil System

## Hardware Included

-  [2] 8-32 x 1/4" Button Cap Screw
-  [1] Benelli Lock Nut
- [1] M8 x 1.0 x 25mm Flat Head Socket Cap Screw


## Tools Needed

-  Allen Set
-  Torx Set
-  Punch Set
-  Benelli 1" Open Face Wrench  
Raven Lock Nut Tool



**Warning:** When handling a firearm, always follow the proper handling procedures at all times. Failure to follow these procedures could result in serious damage, injury, or death. ATI is not responsible for damage to property, injury, or death resulting from improper installation, misuse or modification of products. If you are not comfortable completing any of the following steps, or do not have the proper tools enlist the help of your local gunsmith. ATI is not responsible for components that are damaged due to improper installation.

## A Stock Installation

 Point the shotgun in a safe direction and place the safety in the "on" position. Next pull back the slide, and carefully inspect the chamber to be sure the shotgun is unloaded.

**1** Begin by pushing the trigger guard take down pin as seen in Figure 1A, (which will come out almost all of the way as seen in Figure 1A) using a small punch.

**2** Next, remove the trigger guard assembly by pulling down on the trigger guard as seen in Figure 2.

**3** Next, unscrew the stock by turning it counterclockwise and remove from the receiver as seen in Figure 3.

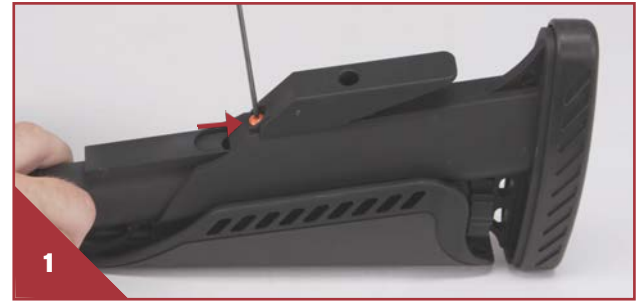




## Benelli M4 Raven Stock with Scorpion Recoil System

### B Raven Stock Installation

1 Before installing the ATI Raven Stock to your M4 you will have to remove the buffer tube and the LOP lever from the buttstock. To do this you will unscrew the orange 8/32 x 1/4" button cap screw using a 3/32" allen wrench as seen in Figure 1. Once you have unscrewed the LOP lever you may discard the orange screw.



2 After unscrewing the LOP lever, pull down and remove the latch from the buttstock as seen in Figure 2 .



3 Next, remove the buffer tube from the buttstock by sliding it out of the stock body as seen in Figure 3.



4 Take the pistol grip and place the single point sling adapter as seen in Figure 4A into the front of the pistol grip as seen in Figure 4B. You may place the single point sling adapter into the grip with the sling loop facing out to the right or left side of the pistol grip.





## Benelli M4 Raven Stock with Scorpion Recoil System

### B Raven Stock Installation -Continued

5 Slide the ATI pistol grip over the bolt spring housing until it is flush with the receiver as seen in Figure 5.



6 Next, take the provided castle nut and slide it over the bolt spring housing (with the teeth out) all the way into the rear of the pistol grip as seen in Figure 6.



7 Take the provided castle nut spanner wrench and slide it onto the castle nut as seen in Figure 7A. Engage the teeth with the slots in the castle nut. Next, take the 1" open face wrench provided and tighten the castle nut by turning the castle nut spanner wrench clockwise until tight as seen in Figure 7B.



8 Next, slide the buffer tube onto the bolt spring housing as seen in Figure 8A and into the rear of the pistol grip as seen in Figure 8B





## Benelli M4 Raven Stock with Scorpion Recoil System

### B Raven Stock Installation -Continued

- 9 Take the buffer tube end cap and slide it into the end of the buffer tube as seen in Figure 9A. Make sure that the cap lines up with the grooves of the buffer tube and fits snug into the end of the buffer tube as seen in Figure 9B.



- 10 Using a 5mm allen wrench, tighten the supplied M8-1.0 x 25mm Flat Head Socket Cap Screw into the end of the buffer tube as seen in Figure 10.



**NOTE:** Before tightening the M8-1 x 25mm flat head socket cap screw to the buffer tube, apply the provided locktite to the bolt threads and then tighten.

- 11 Slide the stockbody onto the buffer tube as seen in Figure 11 .



- 12 Next, you will reinstall the buttstock LOP lever by snapping it into the bottom of the stock body as seen in Figure 12. The locking pin will need to be aligned with one of the six position adjustment holes when snapping into place.



- 13 Using (2) 8/32 x 1/4" button cap screws and a 3/32" allen wrench tighten the buttstock LOP lever to the bottom of the stock body.

**NOTE:** One screw will be placed in the front of the LOP lever as seen in Figure 13A and one will be placed in the middle of the LOP lever as seen in Figure 13B.





## Benelli M4 Raven Stock with Scorpion Recoil System

### B Raven Stock Installation -Continued

**14** Next, flip your M4 upside down and with the trigger guard pin still out, take the trigger assembly and reinstall it into the firearm as seen in Figure 14. To reinstall you will have to hold in the bolt release button and then seat the assembly.



**15** To adjust the height of the cheekrest, turn the adjustment dial clockwise to raise and counter clockwise to lower until the cheekrest is at the desired height as seen in Figure 15.



**16** To adjust the tension of the slide adjustment of the stock body on the buffer tube, begin by using a T20 torx driver and unscrew the screw under the front of the cheekrest as seen in Figure 16A. Make sure that the stock is extended and the cheekrest is raised fully before unscrewing as seen in Figure 16B.



**17** Next, slide the cheekrest forward and remove it from the stockbody as seen in Figure 17.





## Benelli M4 Raven Stock with Scorpion Recoil System

### B Raven Stock Installation -Continued

18 Using a 3/8" open face wrench, loosen the two nuts on each side of the stockbody as seen in Figure 18.



19 Next, use a 3/32" allen wrench to loosen or tighten the (2) set screws on each side of the stockbody as seen in Figure 19. By loosening or tightening these set screws you will be able to set the tension of the stock on the buffer tube. Adjust all (4) set screws in small increments, testing the tension in between each adjustment of the (4) set screws until the desired tension is achieved to insure that the stock slides uniformly on the buffer tube.



20 After you have the tension of the slide adjustment of the stock set, tighten the 2 nuts on each side of the stockbody using a 3/8" open face wrench, to insure the tension is locked in place as seen in Figure 20. Apply 10 ft/lbs. of torque to the nuts to ensure they do not come loose.





B

Raven Stock Installation -Continued

21

Next, slide the cheekrest back onto the stockbody as seen in Figure 21.



22

Use a T20 torx driver and tighten the screw in the front of the cheekrest to secure the cheekrest to the stockbody as seen in Figure 22.

