

# ASSEMBLY AND OPERATION GUIDE



# MESA TACTICAL®

**MAXIMUM SECURITY  
FOR AN INSECURE WORLD**

**SURESHELL® SHOTSHELL CARRIERS  
INCLUDING SADDLE MOUNT AND  
OTHER FULL LENGTH RAILS**

#47374 Rev I

# SURESHELL SHOTSHELL CARRIERS INCLUDING SADDLE MOUNT AND OTHER FULL LENGTH RAILS

Thank you for your purchase of the Mesa Tactical SureShell® on-gun shotgun shell carrier. Our products are manufactured using the highest quality processes and materials, and should provide many years of reliable service.

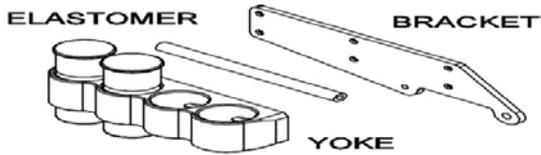
For best results, please read this entire manual before installing and using your SureShell shotgun carrier. If you have any questions, please call 714-545-3332 or e-mail [support@mesatactical.com](mailto:support@mesatactical.com).

## CONTENTS

System Concept .....	3
Santoprene® Elastomer .....	3
Operation .....	5
Forend Compatibility.....	5
Adapter Mount SureShell Shotshell Carriers.....	6
Chicago Screws.....	7
Remington 870 and Remington 1100/11-87 .....	8
Mossberg 500/590 .....	11
Mossberg 930 .....	13
Benelli M1 .....	14
FN SLP .....	14
Integrated Rail Carriers: Benelli M2 Tactical, Benelli M4/M1014, Benelli SuperNova and Mossberg 500/590 .....	14
Benelli Rail Hole Pattern .....	16
Stock Mount Four-Shell SureShell Carrier for Benelli .....	17
SureShell Carrier for M4 SOPMOD Stock .....	17
SureShell Carrier for Urbino Tactical Stock.....	18
Front Support for Saddle Mount SureShell Carrier, Integrated Rail Carrier and Saddle Rails .....	18
Support .....	19
Warranty .....	19

## SYSTEM CONCEPT

SureShell shotshell carriers are assemblies comprising an aluminum yoke and backing plate and a Santoprene® elastomer tube. The yoke features four to eight vertical bores .700" or .810" in diameter to accept 20-gauge or 12-gauge shotgun shells. The shells are securely retained by the elastomer tube interfering with the bores. In many cases, shells can be confidently retained in a brass down as well as a brass up configuration, though brass up is most secure.



The principle difference between one model of SureShell and another, aside from capacity, is the backing plate, which is designed to mount the carrier assembly on a particular model of shotgun. Side-mount SureShell shotshell carriers for Mossberg, Remington and Benelli M1 shotguns use the trigger group pin holes to secure the assemblies to the weapon; the Benelli M2 Tactical, Benelli M4/M1014, Benelli SuperNova Tactical and some Mossberg 500/590 versions take advantage of the factory-tapped rail mounting holes in the tops of these shotguns and include integrated Pic-tanny optics mounting rails; another version with an integrated rail is the saddle-mount design for Remington; SureShell Carriers for M4 SOPMOD stocks feature special hardware for attachment to these buttstocks; Adapter Mount SureShell shotshell carriers are designed to be attached to Mesa Tactical Telescoping Stock Adapter accessory mount points.

## SANTOPRENE® ELASTOMER

The elastomer used to interfere with the shell bores and thus retain the shells in the SureShell shotshell carrier is made of tough Santoprene thermoplastic. We are required to publish the following message to comply with California's Proposition 65:

**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

## **ELASTOMER STIFFNESS**

SureShell carriers are assembled at the factory with a black Santoprene elastomer tube with a shore value, or stiffness, of A64. This has proven to be optimal for most customers and in most situations. However, some customers require a stiffer elastomer and for those operators we have included an alternative white elastomer tube with a shore value of A73. The black elastomer tube can be swapped for the white one if tighter shell retention is required.

## **CHANGING THE ELASTOMER**

The SureShell carrier's elastomer can be changed at any time. This may be necessary due to excessive wear of the original, or perhaps to replace the elastomer with the white tubing mentioned above, or an alternative material that offers more or less interference (and thus secures the shotshell in the shell carrier more or less tightly). Replacement elastomers are available free of charge from Mesa Tactical, if needed.



Another form of maintenance that can be performed on the elastomer is to clean it periodically of grease or oil that may reduce its ability to securely retain shotshells.

The elastomer is accessed by removing the shell carrier from the shotgun, then unscrewing the yoke from the backplate (there are six or ten screws, depending on the capacity of the shell carrier). The elastomer can then be removed from the channel machined into the yoke, which can be clearly seen in the photo above.

## OPERATION

The Mesa Tactical SureShell shotshell carrier is dramatically different from other shell carrier solutions, principally in the shell retention method. This might require a revision in training methods.

**Any operator adopting the SureShell shotshell carrier *must* train with the new system before ever using the weapon in a duty situation.**

The shells in the SureShell shotshell carrier are very close together. Shells can often be more quickly and reliably removed from the SureShell shotshell carrier if they are twisted out. With practice, this can be accomplished quickly is a single fluid movement.

**Note that the SureShell shotshell carrier is not designed for long-term storage of shells on the weapon. It is instead designed for professional use in which the shells are replaced in the carrier during armory checkout. Storing shells in the carrier over long periods can deform the elastomer, resulting in a degradation of the shell retention efficacy.** However, if the shells are removed from the carrier for a few hours the elastomer will reform to its original shape.

## FOREND COMPATIBILITY

Factory shotgun forends, except “tactical” forends, often feature significant receiver overlap when the bolt is pulled back. These forends will need to be cut down or replaced with aftermarket “tactical” forends to be used with some SureShell shotshell carriers.

Before you install a SureShell shotshell carrier, measure your forend’s receiver overlap and compare it to the furthest forward point of the shotshell carrier. Then cut any potential overlap or interference off the end of the forend with a miter saw or a rotary arm saw for a perfect fit.

## **ADAPTER MOUNT SURESHELL SHOTSHELL CARRIERS**

The Adapter Mount SureShell shotgun carrier is designed to be used with shotguns already equipped with the Mesa Tactical High-tube or Low-tube Telescoping Stock Adapter. If you do not already have a Mesa Tactical Telescoping Stock Adapter system installed on your shotgun, this carrier cannot be used. The other Mesa Tactical SureShell carriers described in this guide can be fitted to shotgun receivers without the stock adapter installed.

Adapter Mount SureShell shotgun carriers are available in three configurations: four-shell, six-shell and eight-shell. The six-shell and eight-shell configurations can be installed on the left side of the receiver, while the four-shell carriers can be installed on either side of the receiver. Carriers can also be installed pointed back toward the stock.

The steel push-button sling swivel cup will need to be removed from the adapter prior to Adapter Mount SureShell shotgun carrier installation. Remove it by unscrewing it with a flat bladed screwdriver.

The large hole between the two adapter mounting holes on the bracket is machined to accept a push-button sling swivel.

The eight-shell carrier will interfere with factory forends which overlap the receiver. Either replace the factory forend with a shorter tactical forend, or trim material from the factory forend until it no longer overlaps the shotgun receiver. The four- and six-shell SureShell carriers should work with most forends without modification.

## CHICAGO SCREWS

Several platforms use custom fasteners called Chicago screws. These are paired male and female fasteners that, when screwed together, meet at their respective shoulders for a precise fit on whatever platform they are made for (each shotgun platform will use different length Chicago screws). Ideally, when they are tightened against each other, they also secure the shell carrier without pinching the receiver.



It is important to realize that once the Chicago screws are tightened against each other, they aren't going to get any tighter, and applying too much torque will snap them at the center. It is useful to practice tightening them outside the shotgun before installation, to get a hang for how tight they can get, and also to clean the threads of any dirt or debris.

Because manufacturing them to a perfect size is impossible, your Chicago screws may sometimes be slightly oversized. When this occurs, your shell carrier will remain only loosely attached even when the Chicago screws are fully tightened, and some minor fitting is required. To remedy this, remove the female Chicago screw and rub the end on a file a few times, then re-install. Repeat this until the shell carrier is tightly secured when the Chicago screws have been screwed together tightly.



Chicago screws can benefit from a drop of blue Loctite® on the threads.

## REMINGTON 870 AND REMINGTON 1100/11-87

The following instructions can also be used to install the Saddle Rail for Remington 870/1100/11-87, as well as receiver length Saddle Mount SureShell assemblies.

This package includes a hardware kit. The standoffs are the stainless steel pins that are threaded on the inside (there are two for the 20 gauge shell carrier and only one for the 12 gauge shell carrier). These will replace the trigger group pins in your Remington 870 (both for the 20 gauge; only the rear trigger pin for the 12 gauge). There are two screws for each standoff. The flat head screw is used to secure the SureShell shotgun carrier bracket to the weapon, while the button head screw will fit into the opposite side of the standoff to keep it in the weapon. The Saddle Rails and Saddle Mount SureShell carriers employ flat head screws only. The Saddle Rails and Saddle Mount SureShell carriers do not include the adhesive-backed rubber gasket.

The front trigger pin is replaced by custom Chicago screws instead of a standoff with 12 gauge Remington shotguns. These are described in more detail above.



These SureShell shotgun carriers can be used alone or in conjunction with other SureShell shotgun carriers mounted on the opposite side. The necessary Chicago screws for this application are supplied with right-hand mount SureShell carriers.

Two hex keys are provided for each screw size. Sometimes it is necessary to screw the fasteners in from both sides simultaneously.

The adhesive-backed rubber gasket material (not included with Saddle Rails or Saddle Mount SureShell assemblies) can optionally be used to keep the backplate screw heads away from the surface finish of your weapon.

This SureShell shotgun carrier can be attached to Remington 870, Remington 1100 or Remington 11-87 shotguns. The semi-automatic Remingtons can only support SureShell shotgun carriers mounted on the left side of the receiver.

## INSTALLATION

1. Ensure the weapon is unloaded and pointed in a safe direction.
2. Optional: The adhesive-backed rubber gasket material can be applied to the back of the SureShell shotshell carrier bracket to protect the weapon's finish from the screw heads.
3. Before you begin the installation, carefully thread all the screws together, to ensure they work smoothly. Then remove them.
4. Use the standoffs or Chicago screws to drift out the trigger group pins from the side of the weapon opposite where you want the SureShell shotshell carrier. The pins should come out easily. Some standoffs have machined rings or cannellures at one end. Ignore these, they are not functional in any way. Both ends of the standoff are chamfered to allow it to move through the receiver easily.



5. The front clip on the 870 trigger assembly is designed to hold the factory trigger pin in place. Our Chicago screw DOES NOT require a clip. To install the front Chicago screw on the Remington 870 you will need to remove this clip and keep it with your factory trigger pins.
6. Slip a washer over the button-head end of the Chicago screw and install it on the side opposite of where you want the shell carrier. Do the same with the button head screw for the rear standoff.
7. When standoffs and Chicago screws are installed, put the factory pins in a safe place.
8. Place the SureShell shotshell carrier assembly over the trigger pin holes and use the flat head screws to secure the bracket to the weapon. As you tighten the screws on the one side, make sure the screws are tight on the other side as well. Generally, you can make the screw finger tight with the long arm of the hex key. A drop of blue Loctite on each screw will keep it in place.

If the Chicago screws are tight, but the shell carrier isn't, consult the section on Chicago screws at the front of this manual.

Installation of Saddle Rails and Saddle Mount SureShell carriers is similar to the above, except the bracket is secured from both sides of the shotgun receiver.



Saddle Rails that extend the length of the shotgun are supported at the front by a barrel or magazine clamp. More details about this mount point are provided below, on page 18.

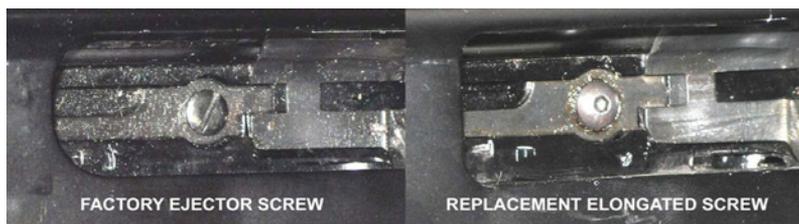
## MOSSBERG 500/590

The following instructions cover the installation of side-mount shell carrier for the Mossbger 500 and 590 shotguns. For shell carriers with integrated optics rail for the Mossberg platforms, please see page 13.

For the Mossberg 500 and 590 platforms, the front of the SureShell carrier is in the same location for all sizes. Factory field forends will have to be modified, but the SureShell carrier can be used with any tactical style forend, including Mossberg 590 tactical and SureFire forends, without modification.

### INSTALLATION

1. **Ensure the weapon is unloaded and pointed in a safe direction.**
2. The adhesive-backed rubber gasket material should be applied to the back of the shell carrier bracket. The gasket included with four- and six-shot SureShell carriers is  $3\frac{3}{4}$ " (for the four-shell) and  $5\frac{1}{2}$ " (for the six-shell) long, and should be cut down to about  $2\frac{1}{2}$ " and  $3\frac{3}{4}$ ", respectively, with scissors before being applied to the bracket. Do not cover the keyhole with the gasket material.
3. Test the fit of the Chicago screws in the rear hole of the carrier assembly bracket. It may be tight. If you have difficulty fitting the screw through the hole, widen the hole slightly with a rolled-up emery cloth or a rattail file.
4. Find the ejector screw inside the receiver of the weapon and replace it with the included button head cap screw. If the screw head interferes with the weapon's action, it has not been screwed far enough into the receiver. It is best to use a drop of blue Loctite on this screw to ensure it remains in place.



5. Place the hex head tee nut over the exposed end of the new ejector screw, flat side facing out, and finger tighten. Make sure the top and bottom flats of the hex head are parallel with the top of the receiver. Back off the nut if necessary (it needn't be tight).

6. Place the shell carrier assembly over the hex head tee nut so that the nut fits inside the keyhole in the backing plate; then slide the assembly forward until the hole in the rear of the backing plate is aligned with the trigger group pin.



7. Prepare the male Chicago screw by slipping the flat washer onto it.
8. While holding the trigger assembly in place, use the female Chicago nut to drift the trigger pin out of the shotgun; then remove the female Chicago nut and insert the male Chicago screw into the hole from the ejector side.
9. After you have removed the trigger group pin, put it and the original ejector screw in a safe place.
10. While holding the shotgun so the shell carrier assembly is facing up, slip the female Chicago nut through the Sureshell bracket and into the trigger pin hole. The screws have been sized so that they can be firmly tightened with the hex keys without fear of squeezing the action. Generally, you can make the screw finger tight with the long arm of the hex key. A drop of blue Loctite on each screw will keep it in place. Be sure to check for loose screws every time you use your shotgun.

If the Chicago screws are tight, but the shell carrier isn't, consult the section on Chicago screws at the front of this manual.

## **MOSSBERG 930**

The SureShell shotshell carriers for the Mossberg 930 have been designed so that no alterations to the forend are required for installation.

### ***INSTALLATION***

1. **Ensure the weapon is unloaded and pointed in a safe direction.**
2. The adhesive-backed rubber gasket material should be applied to the back of the SureShell shotshell carrier bracket to protect the weapon's finish from the screw heads and to secure a tight fit for the entire assembly.
3. Test the fit of the Chicago screws in the holes of the carrier assembly bracket. It may be tight. If you have difficulty fitting the screw through the hole, widen the hole slightly with a rolled-up emery cloth or a rat-tail file.
4. Prepare the male (button head) Chicago screws by slipping the washers onto them.
5. While holding the trigger assembly in place, use a female (flat head) Chicago nut to drift the two trigger pins out of the shotgun; then remove the female Chicago nuts and insert the male Chicago screws into the holes from the ejector side.
6. After you have removed the trigger group pins, put them in a safe place.
7. While holding the shotgun so the shell carrier assembly is facing up, slip the female Chicago screws through the SureShell bracket and into the trigger pin hole. The Chicago screws have been sized so that they can be firmly tightened with the hex keys without fear of squeezing the action. Generally, you can make the screw finger tight with the long arm of the hex key. A drop of blue Loctite on each screw will keep it in place. Be sure to check for loose screws every time you use your shotgun.

If the Chicago screws are tight, but the shell carrier isn't, consult the section on Chicago screws on page 7.

## **BENELLI M1**

The SureShell shotgun carrier design for the Benelli M1 is similar to that of the Mossberg 930 design in that the trigger group pin is replaced with custom Chicago screws. The main difference is that as there is only one set of screws, the bracket has been contoured to hug the shotgun receiver to prevent it from pivoting.

Note that the bracket has been designed to be installed with the included rubber adhesive gasket. The SureShell carriers for the Benelli M1 can also be installed on Benelli M2 Tactical and Benelli M3 shotguns.

## **FN SLP**

The SureShell shotgun carrier design for the FN SLP is similar to that of the Mossberg 930 design, and installation is exactly the same.

## **INTEGRATED RAIL CARRIERS: BENELLI M2 TACTICAL, BENELLI M4/M1014, BENELLI SUPERNOVA AND MOSSBERG 500/590**

The Integrated Rail SureShell shotgun carrier design for the Benelli M2 Tactical, Benelli M4/M1014, Benelli SuperNova and Mossberg 500/590 platforms is radically different from the side mount designs. Instead of a stamped backing plate, the shell carrier yoke is attached to a machined bracket with an integral Picatinny (MIL-STD 1913 or NATO STANAG 2324) sight rail.



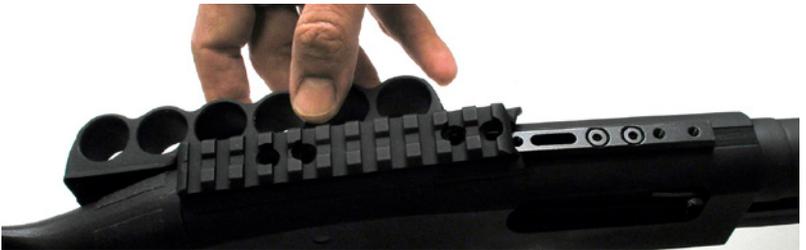
The design allows the ShotShell assembly to be installed on the top of the shotgun by taking advantage of the factory tapped Picatinny (MIL-STD 1913 or NATO STANAG 2324) rail holes.

With the Benelli shotguns, the shell carrier assembly is mounted directly onto the shotgun receiver. With the Mossberg platforms, a steel mount-

ing cleat is first installed and the shell carrier is fastened to the cleat.

## **INSTALLATION**

1. **Ensure the weapon is unloaded and pointed in a safe direction.**
2. Optional: The adhesive-backed rubber gasket material can be applied to the back of the SureShell shotshell carrier bracket to protect the weapon's finish from the screw heads (SuperNova models do not include the gasket material).
3. Prepare the shotgun to accept the shell carrier assembly in one of the following ways:
  - a. If you are installing the shell carrier on a Benelli M2 Tactical, Benelli SuperNova Tactical or Mossberg 500/590, remove the four plastic hole plugs from the tapped rail mounting holes in the top of the receiver. The easiest way to do this is to first remove the barrel and the bolt, then push the plugs out from below using a long, thin rod such as a small screwdriver.
  - b. If you are installing the shell carrier on a Benelli M4/M1014, use a flathead screwdriver to remove the five screws securing the optics rail to the top of the receiver. Detach the rail and store it in a safe place. You can re-use the factory screws with your SureShell carrier.
4. On the Mossberg platforms, place the steel rail cleat onto the receiver, with two threaded holes in front and the countersunk holes lined up with the factory tapped holes on the shotgun. Fasten the cleat to the shotgun using the longer four of the eight small screws that came with the kit.



Mount the shell carrier and rail assembly to the cleat using the four shorter screws. Tighten all eight screws to about 15 inch-lbs and use a drop of blue Loctite® on each screw.

5. With Benellis, secure the shell carrier assembly to the receiver us-

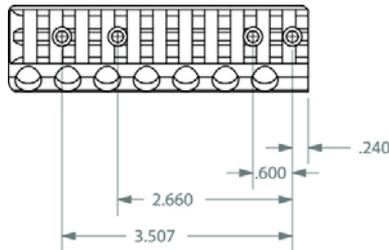
ing the four or five screws and washers (the SureShell carriers for the Benelli SuperNova Tactical do not include washers). Tighten to about 15 inch-lbs and use a drop of blue Loctite® on each screw.

6. When the assembly is secured to the receiver, ensure the barrel can be easily removed and replaced. If the barrel hangs on one or more screws, remove them and shorten them slightly by rubbing them on some emery cloth or a file. Re-fit until the barrel does not contact the screws. Be sure to check for loose screws every time you use your shotgun.

## BENELLI RAIL HOLE PATTERN

Many customers will purchase SureShell carriers with rails for Benelli M1 shotguns that have not been drilled and tapped at the factory for an optics rail, but which will be drilled and tapped at home or by a gunsmith.

We recommend this work be performed only on those shotguns that are fully radiused at the top of the receivers (ie, they do not have a flat running down the top of the receiver). This is because the flat reduces number of threads that the mounting screws will be able to engage, and thus could reduce the reliability of the mount. It is also best that the work be performed by an experienced gunsmith who has the necessary tools and skills to do a proper job.



The mounting screws for the Benelli M1, Benelli M2 Tactical and Benelli M4 SureShell carriers with rails are patterned on the factory screws for the Benelli M4's optics rail. These use an unusual #8-40 thread. The above diagram illustrates the hole pattern for the SureShell carrier and rail for the Benelli M2 Tactical (dimensions in inches):

The Benelli M4 and Benelli SuperNova have different hole patterns; the Benelli SuperNova uses a different fastener.

## **STOCK MOUNT FOUR-SHELL SURESHELL CARRIER FOR BENELLI**

The Stock Mount four-shell SureShell Carrier for Benelli is designed to replace the rear sling loop in Benelli fixed pistol grip stocks used on most models (except the Benelli M4; the sling loop on the Benelli M4 is glued into place and cannot be easily removed. The Stock Mount four-shell SureShell Carrier for Benelli cannot be installed on the Urbino Tactical stock either).

To install the shell carrier, first remove the stock's buttpad to gain access to the stock mounting bolt. Remove the mounting bolt to allow the sling loop plate to slide free of the stock. Insert the SureShell assembly where the sling loop plate used to be, with the carrier pointing forward. Re-install the stock bolt and tighten to secure the stock and the SureShell carrier.

For easiest access with your support arm, the shells should be inserted in the carrier brass down.

## **SURESHELL CARRIER FOR M4 SOPMOD STOCK**

The SureShell carrier for the M4 SOPMOD stock is secured through the horizontal sling loop in the web of most M4 SOPMOD buttstock designs. Note that as these buttstocks are supplied by a variety of manufactures, compatibility with all available buttstocks cannot be assured.

### ***INSTALLATION***

1. Remove the buttsock from the receiver extension (buffer) tube.
2. With the SureShell carrier assembly held so that the holes are to the bottom, use the short flat head screw to attach the threaded hex standoff to the rear of the bracket.



3. Put the longer screws through the rear mounting holes, the unthreaded hex standoffs and the buttstock's sling slot to screw them into the steel mounting cleat. Push the assembly as far forward as possible be-

fore tightening the screws to ensure compatibility with slip-on rubber butt pads.

The SureShell carrier for the M4 SOPMOD stock was designed to fit onto the right side of the buttstock only, but it can also be installed on the left side for left-handed shooters, by inverting the assembly so the mounting holes face up.

For easiest access with your support arm, the shells should be inserted in the carrier brass down.

## **SURESHELL CARRIER FOR URBINO TACTICAL STOCK**

Mesa Tactical Urbino Tactical stocks fitted with a cheek riser can accept specialized four-shot or six-shot SureShell shotgun carriers. The two holes on each side of the cheek riser correspond with the holes in the mounting brackets of the SureShell carriers. Simply screw the flathead cap screws into the hex nuts retained in the inside pockets. Test the fit of the cheek riser to ensure the mounting screws do not interfere with the stock. If they do, remove them and grind them down a little until there is no interference.

For easiest access with your support arm, the shells should be inserted in the carrier brass down.

## **FRONT SUPPORT FOR SADDLE MOUNT SURESHELL CARRIER, INTEGRATED RAIL CARRIER AND SADDLE RAILS**

Certain full length rail systems available from Mesa Tactical, with and without integrated SureShell shotgun carriers, require a mounting point near the muzzle of the shotgun. On the Remington platforms, these mounting points take the form of a magazine clamp or barrel clamp. Mossberg rails are secured with a Magon™ clamp attached to the magazine tube.



The fit between the rail and the clamp is very tight. The best installation procedure is to *loosely* install the clamp in its approximate location before attaching the rail at the receiver. Once the rail is firmly mounted on the receiver (or on the stock adapter for High-tube full length rails), move the clamp until the rail mounting holes are lined up and the mounting screws are started before finally tightening it into place. Use blue Loctite on all fasteners.

## **SUPPORT**

If you have any problems or questions, please feel free to contact Mesa Tactical for assistance at 714-545-3332 or [support@mesatactical.com](mailto:support@mesatactical.com).

## **WARRANTY**

Mesa Tactical warrants that all products are free from defective material and workmanship and, subject to the conditions set forth below, agrees to repair or replace any part of a product that proves defective by reason of improper workmanship or materials without charge for parts and labor.

In no event will Mesa Tactical be liable for damages, lost revenue, lost wages, lost savings or any other incidental or consequential damages arising from purchase, use or inability to use this product.

No express or implied warranty is made for Mesa Tactical product damaged by accidents, misuse, natural or personal disaster, or any unauthorized disassembly, repair or modification. Mesa Tactical's warranty covers only repair or replacement of defective Mesa Tactical products.

# MESA TACTICAL



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