

Installation Instructions & Use Recommendations

FMS Accessories – AR Rifle Mount

These instructions must be read carefully and thoroughly **before** beginning work. FMS Solutions, LLC accepts no liability for damage caused by failure to observe the installation instructions or use recommendations.

Installation of this accessory does not change the factory specified load limits for the motorcycle. Always follow the motorcycle manufacturer's recommendations regarding load limits.



Caution: FMS Solutions, LLC (FMS) weapon mounts and Santa Cruz Gunlocks, LLC (SCG) are intended for temporary, secure storage of firearms. They are not substitutes for a permanent storage enclosure and only act as limited theft deterrents. And they will not prevent accidental discharge/firing of a chambered round. To properly and safely use the FMS weapon mounts with Santa Cruz gunlock:

- **Your weapon mount must be fitted / adjusted to match the weapon being mounted.** It is possible that some weapons will not fit the mount correctly, based on variable components / accessories fitted to the weapon.
- Read and follow all installation instructions!
- Do not use if your firearm does not fit the weapon mount or gunlock properly
- Never leave your firearm unsupervised while using an FMS weapon mount and/or SCG gunlock
- Never place a loaded firearm in an FMS weapon mount and/or SCG gunlock
- Never chamber a round while using a FMS weapon mount and/or SCG gunlock
- It is the responsibility of the user to operate the FMS weapon mount and/or SCG gunlock properly and safely

RH Long Rifle Mount

FMS Accessories has developed a mounting bracket to enable agencies to mount the FMS Rifle Mount to the RH side of the motorcycle and accommodate long barrel lengths as well as suppressors. Rifles with large optics fair better with this mount – less likely to have the optic damaged. This mount stands taller than the standard RH rifle mounting bracket shown in the photo above and is angled toward the rear wheel to aid in cornering clearance.

Five lower leg variants are available. All five mount the same way as noted further in the instruction.



Note that multiple options are available for the lower support arm to fit the needs of your agency:

1. CHP Version for SBR
2. Heat Shield / Std. Muzzle Cup
3. Sight Shield w/Std. Muzzle Cup
4. W/o Sight Shield w/Std. Muzzle Cup
5. W/o Sight Shield w/Suppressor Muzzle Cup

Lower Support Choices



CHP Version for SBR



Heat Shield / Std. Muzzle Cup



Sight Shield / Std. Muzzle Cup



No Sight Shield / Std. Muzzle Cup



No Sight Shield / Suppressor Muzzle Cup

The FMS long rifle mounting bracket comes with the nut clips and M6 bolts. **Please use red Loctite on the mounting bolts** to ensure they cannot be removed easily.

Additional hardware is provided to secure the rifle mount to the bracket which is different than the standard rifle mount instructions.

The upper two mounting holes utilize M6 x 20 Torx bolts from the saddlebag side, through the bracket, into the mount, secured with M6 nylock nuts.

The middle two mounting points secure with the normal clip nuts and M6 x 20 Torx bolts.

An additional security point is on the bottom which secures with M6 x 16 Torx bolt and clip nut.



Secure the upper rifle mount to the upper two holes in the bracket using the M6 x 16 Torx bolts, securing with M6 nylock nuts. Snug but don't tighten fully yet.

The lower leg of the rifle mount will attach to the lower pair of bolt holes under the rifle mount (sandwiched between) with a final securing bolt at the bottom to stabilize the lower leg.

The top of the lower leg likely will need to be trimmed to the proper length as it nears the spacer for the upper two mounting bolts.

You will need to know the dimensions of the rifle from the charging handle to the muzzle tip. Measuring suggestions are farther down in the instructions.



LASO Mounting Bracket:

The LASO Mounting Bracket mounts in a similar way to the RH Long Mounting Bracket. The key difference is that this was designed only for short barrel rifles (12" barrel length or less). There is no additional support for longer barrels and should be used with the Heat Shield / Std. Muzzle Cup lower support arm.

We suggest using the same cable management for this as the RH Long Rifle Mounting Bracket.



Cable Management: Note that on Long Rifle Mounts, we have developed a new routing for the cable from the Santa Cruz lock to the motorcycle (you will see this later in the instruction). For Long Rifle Only, we developed a protective cover that allows you to route the cable along the outside of the mount, down past the mounting bolts, and exit out the side into the RH turn signal housing as noted below. This means far less cable exposed. The Long Rifle Cable Cover Kit is available under PN FMSA-GL-CCK.

<https://fmsaccessories.com/long-rifle-mount-cable-cover-kit>

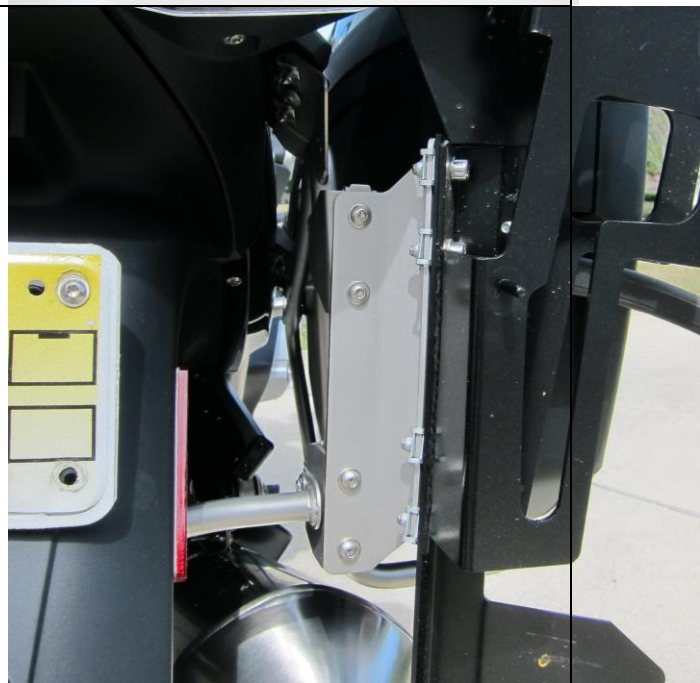


RH Standard Bracket

Install the M6 nut clips on the saddlebag mount and the adaptor bracket as shown with **RH Standard Mount**.

Note: M6 hex key bolts are used to secure the adaptor bracket to the saddlebag mount since they are exposed. **Important! Use red Loctite on these bolts so that they can never be removed!** The heads will strip when someone tries to remove them without first heating the nut clip to break the Loctite bond.

Utilizing the M6 Torx bolts (apply a thin coating of anti-seize to the bolts), sandwich the lower barrel support between the weapon mount and the mounting bracket. Install bolts loosely at first. Note that the Torx bolt heads securing the assault rifle mount to the adapter bracket are blocked once the rifle is installed.



Gun Lock Mounting:

The gun lock and cable are provided in a separate box. Open the lock hasp and bolt the gun lock to the mount using the bolts provided in the lower support packet.

Note: Be careful not to pinch the cable under the gun lock ribs. FMS has hot-glued the cable splices in place to reduce the likelihood of this happening, but you must still use caution when bolting down the lock.

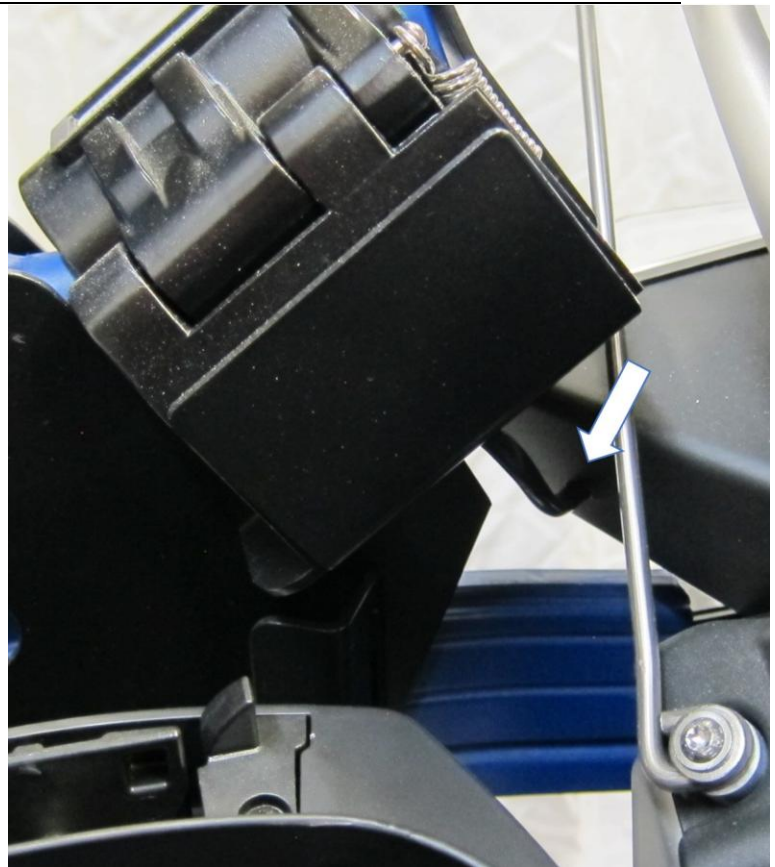
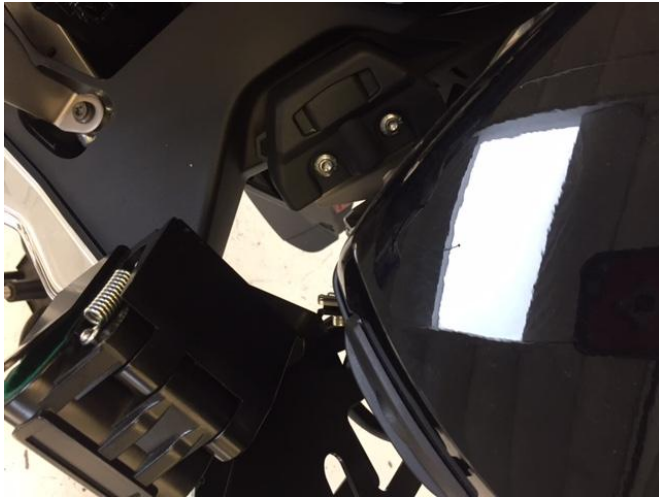
Note: Each lock already has internal shielding from Santa Cruz Gun Locks. Additional electromagnetic protection is incorporated on later rifle mounts from FMS.



Drill a hole in turn signal housing and route wire directly inside to leave no exposed wire.

Note: Place a cable tie around the wire cable just inside the entry hole to prevent the cable from being pulled-out.

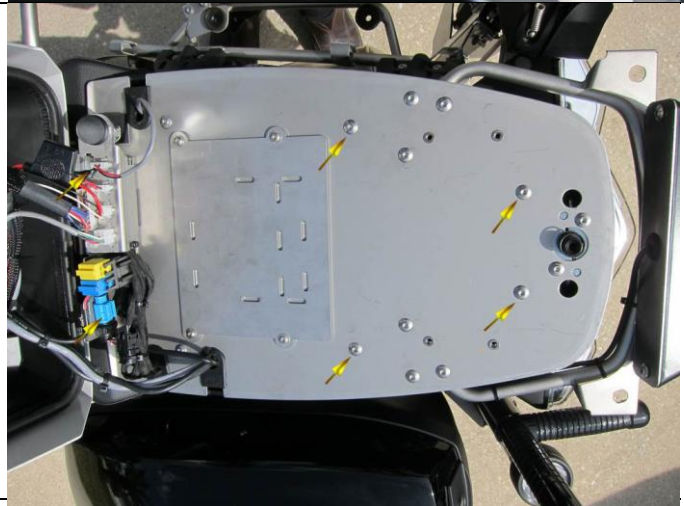
Note: Place a second cable tie on the cable as it surrounds the support post as an added security measure to prevent the cable from being pulled-out.



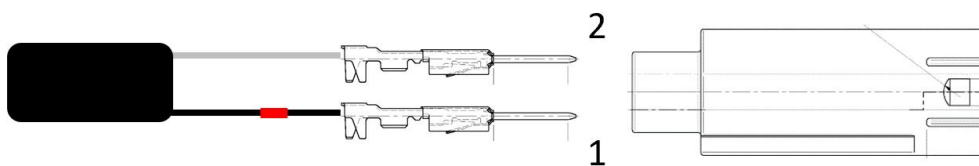
Remove the six bolts securing the radio box plate to the motorcycle frame. You do not need to remove the screws securing the lower trim panel to the radio box plate. **Note:** To remove forward screws, release the 8-pin helmet headset interface plug from the bracket to reach that screw.

Raise the rear of the plate up to gain access to the gun lock plug, placing a piece of wood between the trim and the tail light to hold the radio box plate up.

Note: The rear latch actuating cable may catch on the RH support when raising the assembly.

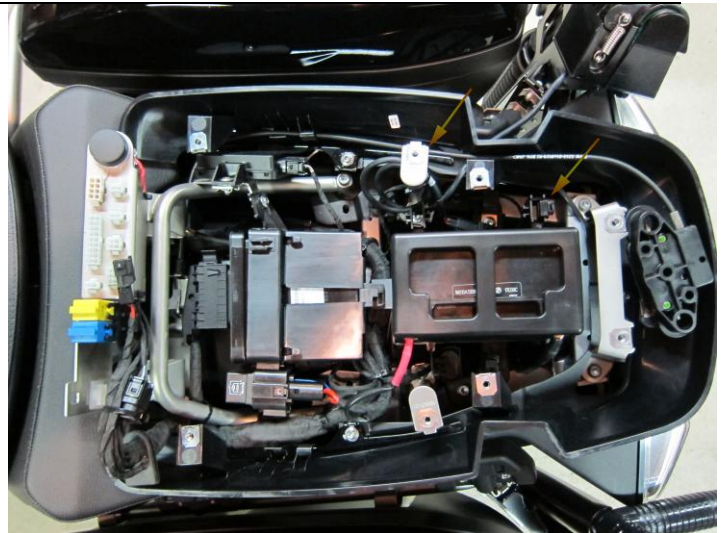


Install MQS housing on gun lock cable – the ground side goes into position 2 marked on the housing. The power side is position 1.



For clarity, the photo at right shows what is under the radio box lid. The right arrow shows the location of the gun lock plug prior to removal from the cable tie. Connect the gun lock cable to the plug and wrap the gun lock cable around the middle support.

Note: Cable tie the gun lock cable to the radio box floor plate support for added security to prevent the cable from being pulled-out at the gun lock.



For most builds, the rifle is not available at the time of installation. Request the measurement below from the agency. You need to know the distance from the muzzle tip to the center of the charging handle to be able to adjust the lower support leg correctly. If possible, have the agency stop by with a rifle to test that it is adjust properly prior to delivery.



Note: Several brands of rifles now offer grips with angles different than the standard for many decades which has been 60 degrees.

If you have one of these specialty rifles such as the Springfield Saint or Daniel Defense, you will need to purchase 60 degree grips for these rifles for them to fit properly in the FMS mount.

Rifles with grips other than 60 degree angle will not fit the FMS Accessories rifle mount properly and will negate the safety / security features of the rifle mount. The grip can be changed to a 60 degree grip for minimal cost.



Insert the muzzle of the weapon in the muzzle cup and slide the barrel support up or down until the magazine just clears the upper side of the magazine opening.

With the weapon in the mount, move the barrel support up or down until the grip is resting firmly into the well of the lock chamber and that the charging handle is sitting within the opening / guard area. Tighten four M6 hex bolts securely.



Note: The charging handle guard area is extra long and may need to be trimmed-back based on the size of the charging handle – otherwise the weapon may be scratched when installing or removing from mount. Trim with a cordless hacksaw, sand and then touch-up with black paint.

Note: Later model FMS rifle mounts have a larger charging handle opening without guard to better accommodate ambidextrous charging handles and side-folding stocks.



Fitting the Grip to the Lock:

Grips on rifles have evolved and range from the basic A2 style to every imaginable variant to best fit the user. However, the free play or movement of the grip within the confines of the lock chamber is critical to keeping the rifle in the designed position. If needed, as in the case at right, add one or two Velcro pads to take-up the extra space if your grip has movement within the lock. Special Velcro is provided on later kits. Press the Velcro fully into the hasp to ensure it bonds with the green material.



However, the lock hasp must close freely!

Ensure that the gun lock hasp closes completely with zero upward pressure from the rifle pistol grip!

The electro-magnetic lock retracts a plunger inside the hinge of the lock hasp. If the rifle is causing upward pressure that loads the hasp, the electro magnet cannot exert enough force to retract the plunger and the lock will not reliably open!

Lock Failure Will Occur if the gun lock hasp is "loaded" by pressure from the rifle pistol grip.

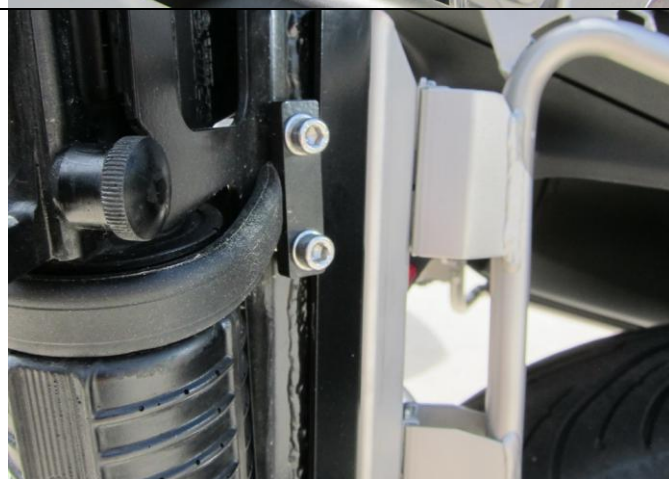
Don't pass a carry strap through the lock hasp!



A rubber strap is provided to keep the weapon from vibrating in the mount as well as provide an added level of security.

Note: It is easier to make this adjustment with the saddlebag removed when using the RH mount.

Adjust the rubber strap to the desired tension based on the forearm design of the weapon, tighten the two M6 bolts securing the strap and cut off the excess with a razor knife.



AR-15 Rifle Cover: FMS has created a rifle cover that is easily removed for fast access to your rifle. Agencies have requested a cover designed to make exterior mounted rifles look less threatening to the general public and provides some dust and water protection at the same time. The cover, made of rugged 1,000 denier ballistic nylon, is attached with two Velcro straps. The handy loop at the top makes removal quick by detaching the two Velcro straps and lifting the cover off the rifle. The cover was designed to fit rifles with carry handles / smaller optics. Another version will be available later for rifles with larger optic sights. Note that the cover only extends down to cover the forearm to avoid issues related to exhaust heat.



Rifle Heat Shield: FMS has created a rifle heat shield to deflect the exhaust heat when your rifle mount is adjusted so that the muzzle cup is directly in line with the exhaust from the muffler. Examples have been reported where the plastic dip coating on the muzzle cup melts-off. This new heat shield should prevent that.

Most typically needed for RH long rifle mounts where the muzzle tip is directly in-line with the exhaust outlet.

Shown at right fitted to standard RH mount. Works with all five optional lower support arms.



Security Pins: Additional security can be achieved by using a security pin to replace the push-pin used ahead of the magazine port. These security pins use T15 Security Torx screws to retain the pin. When in position, added security is provided.

Security Pins are available under part number:
FMSA-GL-SPAR



Helmet Lock:

All later rifle mount uppers have been pre-drilled and counter-sunk for mounting the helmet lock on the outside of the rifle mount. This is often a very convenient location to lock your helmet. The helmet lock is available under PN FMSA-GL-HL.

<https://fmsaccessories.com/helmet-lock-for-ar-mount>



Spare Parts:

The Santa Cruz SC-1 gun lock is included with the assault rifle mount or shotgun mount system. The only part that can fail on the lock is the electromagnetic locking plunger assembly. That part is available through spare parts under FMSA-GL-SCRS.

Replacement rubber straps for the vibration support can be ordered under FMSA-GL-RRS



Feedback: Thank you for your purchase and we welcome your feedback as we too want to make every accessory exceed your expectations. Report any comments, suggestions, problems or concerns to FMS Solutions, LLC at info@fmsaccessories.com.

FMS Solutions, LLC Limited Warranty

FMS Solutions, LLC warrants to the first retail purchaser of new FMS Accessory products, to be free from defects in materials or workmanship, for a period of three (3) years from the original date of purchase as noted on the FMS Solutions, LLC invoice or original dealer invoice, except for paint and powder-coated finishes, which are warranted for the first 12 months only. LED lights from Fenix, Inc., Code 3, Inc. and Littlite are covered for 5 years by their manufacturer's respective warranties – processed through FMS Solutions, LLC.

This warranty extends only to the FMS accessory and does not include: damage caused by accidents or abuse; incorrect installation; labor to diagnose, remove, repair or replace; any consequential damage or loss of use. Any FMS Accessory suspected of being defective should be returned to FMS Solutions, LLC along with a copy of proof of purchase and warranty request form available on the FMS website. FMS Solutions, LLC will determine if the FMS accessory has a warrantable defect, and if so, will repair or replace the item and return it to the sender without charge. The decision to repair or replace said item is solely the prerogative of FMS Solutions, LLC.

Note: Police motors can operate in a very rough environment since police motors are a "tool". They can be dropped, knocked-over, etc. without concern as the officer has a job to do and determines what is necessary at any given moment. Warranty is for defects in materials or workmanship. Therefore, the ability of an item to become broken or damaged does not mean it is warranty ... it just means it is broken or damaged and in need of repair or replacement. No manufacturer warrants their products to be indestructible. Any questions should be directed to info@fmsaccessories.com.