



# MOOSE RACING

## EXPEDITION LUGGAGE ADVENTURE PANNIER MOUNT SET



INCLUDES EVERYTHING YOU NEED TO ADD MOUNTS TO YOUR MOTORCYCLE

3501-0916 [Kawasaki KLR650 2008-2014]

### FEATURES OF THE EXPEDITION LUGGAGE - ADVENTURE PANNIER MOUNT SET:

- Rugged 18mm steel tube mounting hoops and arms rigidity secure the luggage to your motorcycle
- Precision machined brackets ensure proper fit and durability
- Deep, complete welds make sure the mounts can handle the rigors of Adventure Touring
- Thick, black-matte powder-coating looks as good as it is tough
- Includes high-quality, cad-plated hardware with flange-style bolt heads and flange-style locking nuts
- Turn signal relocation brackets place the signals out of harm's way, but they remain highly visible
- Designed to work perfectly with MOOSE Expedition Aluminum Panniers and mounting kits
- No motorcycle modification required, simple installation - Designed and built in the U.S.A.

### ⚠ WARNING

#### READ THESE INSTRUCTIONS THOROUGHLY BEFORE INSTALLATION!

Because of the variety of motorcycle configurations, other accessories, and the features and intended use of this MOOSE accessory, there are many different mounting options. You are responsible for the proper installation of this accessory on your motorcycle. Download the required instructions for your accessory mount set and motorcycle from [www.MOOSERACING.com](http://www.MOOSERACING.com). Your attention to the installation instructions and recommendations will permit safe and proper use of this accessory. You must mount this accessory properly and securely before riding your motorcycle. If you lack the ability to safely and properly install this accessory, seek out a qualified motorcycle technician for assistance. During installation, support the motorcycle with a suitable stand or lift so it will not tip over and injure you, or damage the vehicle. Using or mounting this accessory improperly could result in a loss of control of the motorcycle which could result in damage to your motorcycle or other personal property, the property of third parties, and/or personal injury to yourself or others, up to and including death.

#### BE SURE TO THOROUGHLY READ AND CLOSELY FOLLOW THE MOUNTING INSTRUCTIONS THAT ARE INCLUDED WITH THIS ACCESSORY:

- The pannier mounts must be installed and securely fastened to the motorcycle's frame.
- Install the mounts securely so they will not shift or move while riding. Make sure the mounts and all related brackets and hardware will not contact the wheels, suspension or any other moving parts of the motorcycle.
- If you do not understand these instructions DO NOT install the mounts. Remove any components you may have already installed on your motorcycle.
- Thoroughly inspect your motorcycle's luggage mounts and panniers before every ride.
- Do not use the panniers if the mounts have been modified, or if they have deteriorated, loosened, cracked, or are beginning to fail in any way. Do not use the panniers or mounts if your motorcycle's frame is damaged, or if the sub-frame is damaged or is loose on the main chassis.
- Check the security of the mounts at each stop as you ride. Mounting hardware can loosen during operation, so be sure to check it frequently.
- Do not use this accessory mount set if you have any doubts as to whether it is properly mounted to your motorcycle.
- Do not exceed 25 pounds (11.3 kg) of cargo in each pannier bag you attach to your mounts - 50 pounds total (22.6 kg total).
- When using this accessory, do not exceed your vehicle's Maximum Gross Vehicle Weight as listed on your motorcycle or in its Owner's Manual.
- Be aware the panniers and cargo will affect your vehicle's performance and handling characteristics. Use caution when riding your motorcycle.
- Balance your cargo evenly between each pannier and arrange its placement so it does not shift during riding.
- When riding with panniers mounted to your motorcycle, be aware the width of your luggage may exceed the width of your handlebars. Use extra care when maneuvering in traffic or around other obstacles so you do not impact other objects with your luggage.
- If you strike another object, or tip over your motorcycle, immediately inspect the panniers, their mounts and your vehicle for damage.
- If your panniers or mounts are ever damaged, do not use them until they have been inspected by your local professional motorcycle dealer. Replace these parts immediately if they have damage that will prevent them from being properly secured to your motorcycle or able to securely hold cargo.

#### DO NOT ATTEMPT TO USE THIS ACCESSORY IF:

- You do not understand these installation and use instructions,
- You do not understand any part of the accessory mounting system,
- You have any doubts as to the security of the mounting system.

If you have any concerns or questions, contact your authorized MOOSE retailer.

Remember: Motorcycling can be a dangerous activity. Installation of any accessory can increase your risk if it is not installed properly. You are responsible to install this accessory so it will not contact any portion of the drive train, suspension or steering, and so that it will in no way interfere with the operation of your motorcycle.

### RECOMMENDED TOOLS & MATERIALS:

5mm & 6mm Allen wrenches or sockets	12mm wrench or socket (may need two)	13mm wrench or socket (may need two)
10mm wrench or socket (may need two)	#2 and #3 Phillips screwdrivers	8mm socket
Electrical connector tool (cut, strip & crimp)	Power drill (up to 1/2" chuck)	5/16" & 1/4" drill bits
Center punch	Deburring tool (or 1/2" drill bit)	Masking tape & pen
Shop vacuum	Required: Thread Locking Agent	Suggested: Double-sided adhesive tape

NOTE: Other tools may be required, depending upon your vehicle, previously installed accessories, and how you will mount this accessory.

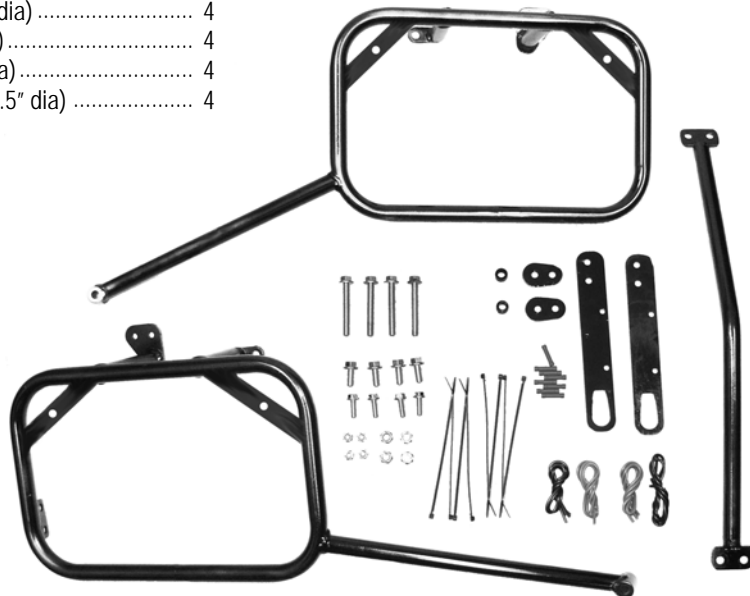
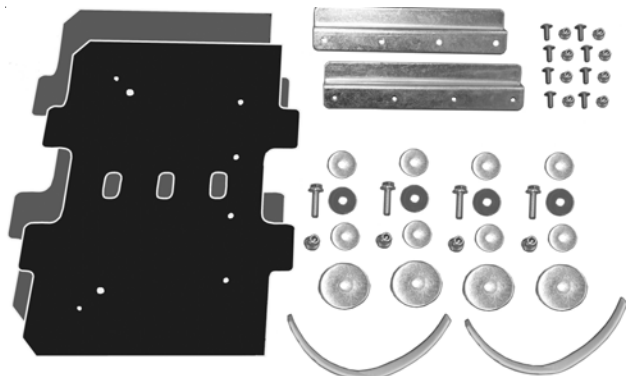
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WWW. MOOSERACING.COM 1 / 11

## ITEMS INCLUDED WITH YOUR EXPEDITION PANNIER MOUNTS:

Mount parts	Qty.	Pannier attachment hardware	Qty.	Turn signal-related & other items	Qty.
Left-hand pannier mount .....	1	Buffer/drill templates .....	2	Turn signal mount extenders .....	2
Right-hand pannier mount .....	1	Mounting lip .....	2	Extension wires (11g x 1') .....	4
Back bar .....	1	Mounting lip buffer strips .....	2	Butt-connectors .....	8
Retention plate .....	2	Button-head bolt (6 x 16mm) .....	8	Cable ties .....	8
Spacers (3/8" L) .....	2	Nylock flange nut (6mm) .....	8	Instruction sheet (not shown) .....	1
Flange bolt (6 x 20mm) .....	4	Flange bolt (8 x 30mm) .....	4		
Nylock flange nut (6mm) .....	4	Nylock flange nut (8mm) .....	4		
Flange bolt (8 x 20mm) .....	4	Support discs (3" dia) .....	4		
Nylock flange nut (8mm) .....	4	Washers (1.5" dia) .....	4		
Flange bolt (8 x 60mm) .....	2	Washers (1.25" dia) .....	4		
Flange bolt (8 x 70mm) .....	2	Rubber washer (1.5" dia) .....	4		



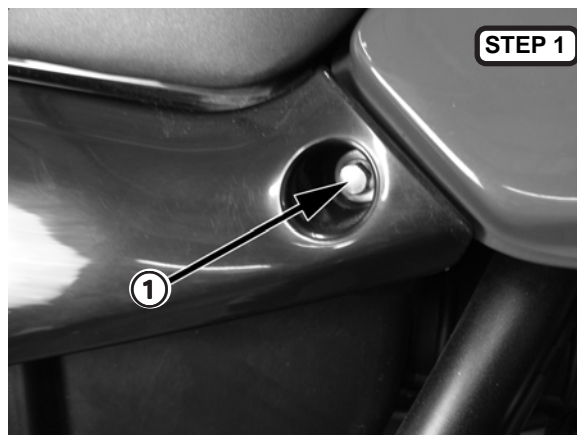
Appearance and scale of sample image may differ from actual supplied parts

### INSTALLATION INSTRUCTIONS:

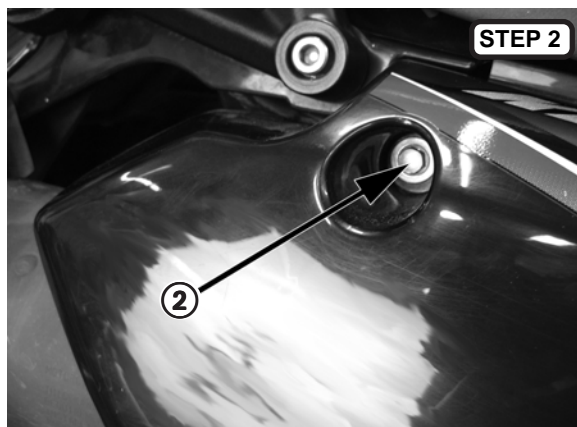
Your MOOSE pannier mounts were developed to mount easily to KLR650 motorcycles in stock trim. Before beginning, have your motorcycle's Owner's Manual and Service Manual handy in case you to reference a procedure.

**WARNING:** Place the motorcycle on a secure stand or lift so it will not tip over and injure you, or cause damage to the vehicle itself. If you lack the technical understanding or ability to install the pannier mounts, seek out the assistance of a qualified motorcycle technician.

**STEP 1:** Use a 8mm socket tool to remove the front, right frame-cover retention bolt ①. Remove the same bolt from the left side frame-cover. Take care to not lose the stepped washers located under the bolts. Move to STEP 2.



**STEP 2:** Use a 8mm socket tool to remove the upper-rear, right frame-cover retention bolt ②. Remove the same bolt from the left side frame-cover. Take care to not lose the stepped washers located under the bolts. Carefully pull the frame covers outward from the motorcycle to disconnect them from the rubber grommets on the sub-frame. Place them in a safe location while you work on the rest of the installation. Move to STEP 3.

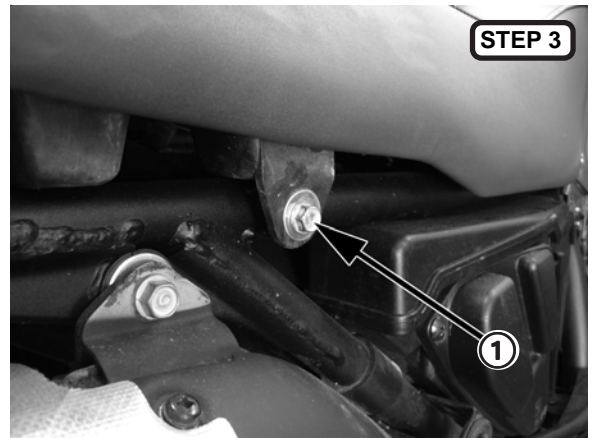


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## INSTALLATION INSTRUCTIONS *(continued)*:

**STEP 3:** Use a 10mm socket tool and remove the right ① and left side 6mm bolts that hold the seat to the motorcycle. Once the bolts are removed, lift up on the back of the seat and slide it rearward so its front tab pulls out of the mount at the back of the gas tank (see the Owner's Manual if you require further information). Place the seat in a safe location as you perform the rest of the mount installation.

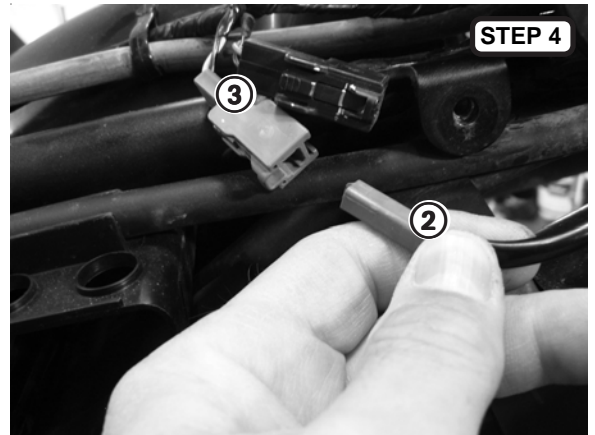
Move to STEP 4.



**STEP 4:** To provide a good chassis foundation plus better positioning of the turn signals once panniers are mounted, your mount set includes turn signal relocation plates and hardware. To install the mounts and the relocation parts, you must first disconnect the turn signals' black and gray terminal connectors located at the left, upper edge of the sub-frame. Squeeze the tabs on the top of each connector to release the male portion 2 from the female portion 3 of the connector.

Move to STEP 5.

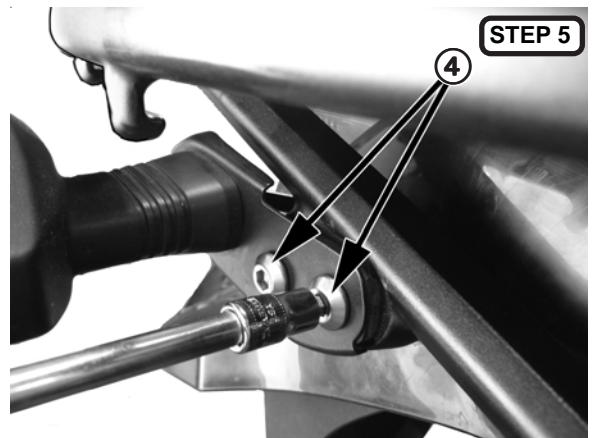
**CAUTION:** Disconnect the negative battery terminal wire before doing any service work on the turn signals or any other electrical component. Refer to the service manual and its wiring diagram and illustrations when relocating the turn signals.



**STEP 5:** Use a 5mm Allen tool to loosen and remove the two bolts ④ that thread through the turn signal mount. This mount holds the turn signal to the mounting boss on the rear rack. Take care to permit the turn signal to hang by their wires for a moment as you prepare to loosen other hardware so they can be completely removed. Repeat the step on the other side of the motorcycle.

Move to STEP 5.

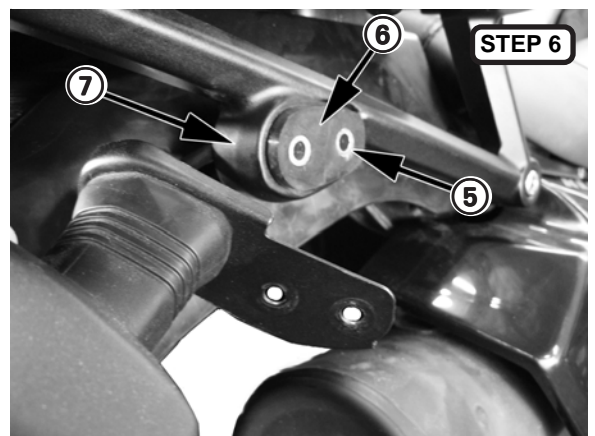
**CAUTION:** Consider wrapping the turn signals with a clean rag and tape to protect them from damage during relocation.



**STEP 6:** With the turn signal removed from the rear rack, push out the spacers ⑤ in the rubber grommet ⑥. Once the spacers are removed, you can twist and remove the grommet from the mounting boss ⑦ on the rear rack. Repeat the step on the other side of the motorcycle.

Move to STEP 7.

**NOTE:** Cup your hand under the mounting boss on the rack to catch the spacers as you press them inward through the grommet. Save all of the removed hardware so you can return the motorcycle to its original configuration if you decide to remove the pannier mounts and turn signal extension hardware.

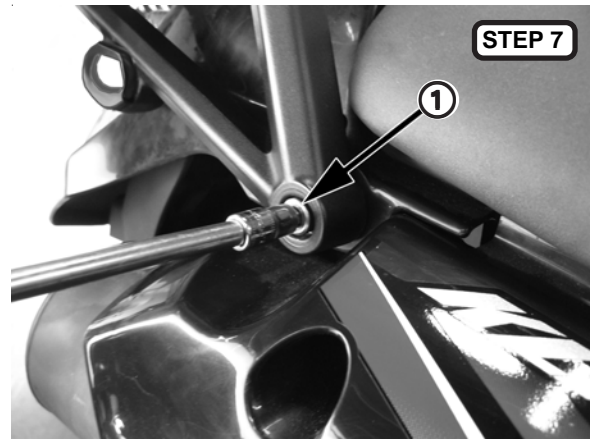


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## INSTALLATION INSTRUCTIONS *(continued)*:

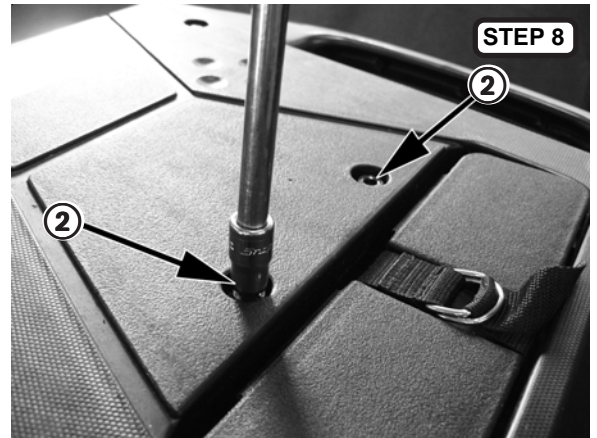
**STEP 7:** To access the turn signal wires (which may require the wire length increased) you will need to disconnect the rack from the motorcycle's sub-frame. Some of these fasteners must also be removed to install the pannier mounts and related hardware. Use a 6mm Allen socket to remove the 8mm bolt ① from the front of the rack. Repeat the step on the other side of the motorcycle.

Move to STEP 8.



**STEP 8:** Use a 5mm Allen socket to remove the two 6mm bolts ② from the top of the rack.

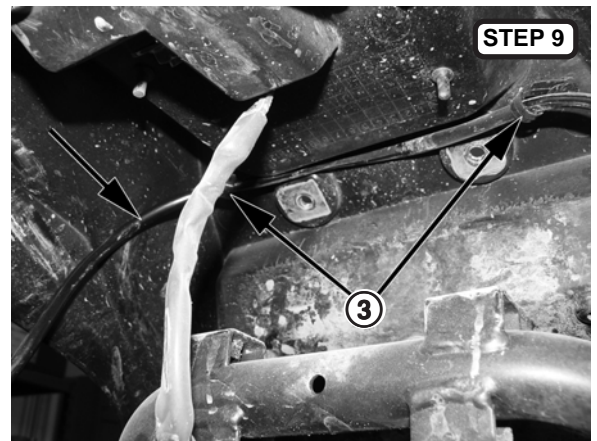
Move to STEP 9.



**STEP 9:** When you remove the rack fasteners you will be able to lift the rack and the rear fender off of the sub-frame. This will provide you access to the retention loops ③ that secure the turn signal wires to the chassis. Carefully pull the signal wires out of the retention loops.

Move to STEP 10.

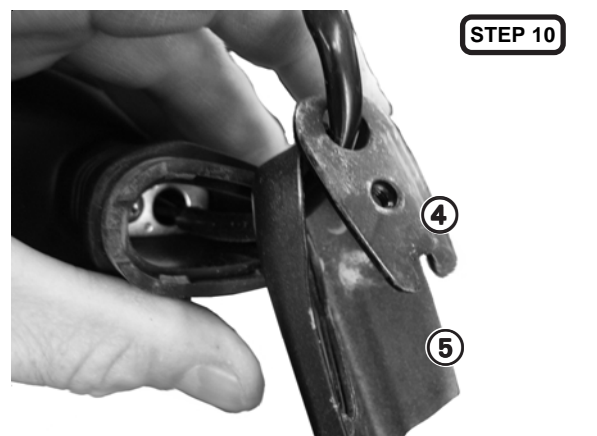
**NOTE:** Place a clean towel or similar cloth between the rack and the fender to prevent damaging either component's finish as you lift them up from the motorcycle. Having another person aid you during portions of this procedure is convenient and will help you avoid damaging your vehicle.



**STEP 10:** With the both turn signal wires pulled out of their retention loops, you can remove the signals completely from the motorcycle. Use a #2 Phillips screwdriver to remove the retention plate ④ and securing each turn signal to its original mount ⑤. Remove the mount and retention plate from the rubber turn signal boss on both signals. Set aside the mount, but you will reuse the retention plate and its mounting screw to secure the signal to the new, extended length mount.

Move to STEP 11.

**NOTE:** Pay close attention to how the turn signal's rubber stalk is inserted and captured in the original mount. The supplied extension mount is the same shape and captures the turn signal in the same fashion.



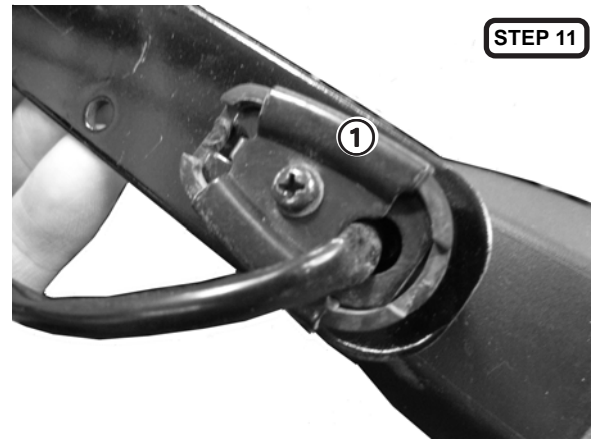
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INSTALLATION INSTRUCTIONS (continued):

**STEP 11:** Press the flexible base of each turn signal into the extension plates. The signal will nest into the plate like it did on the original mounts you removed in STEP 10. Once the signals are in place on the extension plates, place the retainer plate ① in place and secure it with the Phillips screw. Tighten each screw securely. Set the turn signals aside, you will mount them after the mounts are loosely attached to the motorcycle.

Move to STEP 12.

**NOTE:** Orient the turn signals when mounting them into the extension plates so the two holes are on the bottom edge of the plate when they are mounted to the rack.

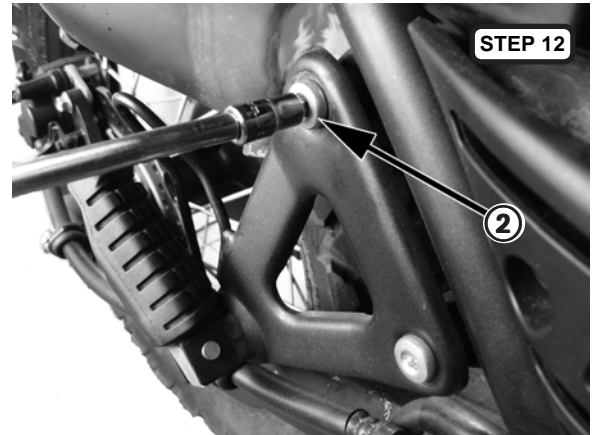


STEP 11

**STEP 12:** Use a 6mm Allen socket to remove the upper 8mm bolts ② that secure the passenger foot rest bracket to the frame.

Move to STEP 13.

**NOTE:** As notes early, it is helpful to have a second person assisting you with the installation of the mounts.



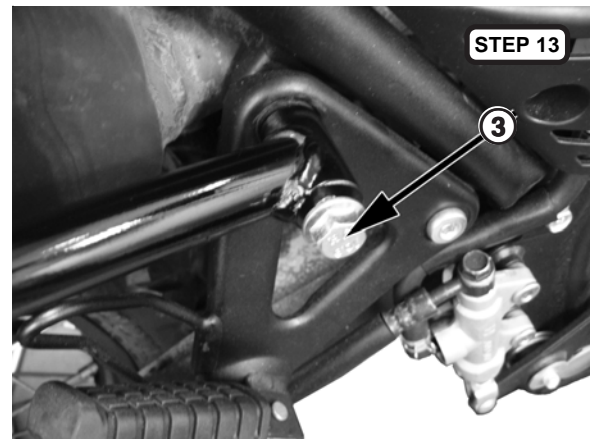
STEP 12

**STEP 13:** Hold the right pannier mount to the motorcycle and insert one of the 8 x 70mm flange-head bolts ③ through the front arm of the mount into the bolt hole vacated in STEP 12. Hand thread the bolt in several turns so it will stay in place. Do not tighten the bolt fully yet.

Move to STEP 14.

**CAUTION:** Do not tighten any mounting hardware fully until all of the mount set components are loosely assembled together on the motorcycle. This will ensure all of the components mesh together and further permits you to make aesthetic adjustments.

**WARNING:** Always apply a thread-locking agent to threads of the bolts and nuts as you install the hardware. Do this to the new hardware and the fasteners you removed and reinstalled as part of the mount installation procedure. See page 11 of this instruction set for the type of recommended thread locking agent.



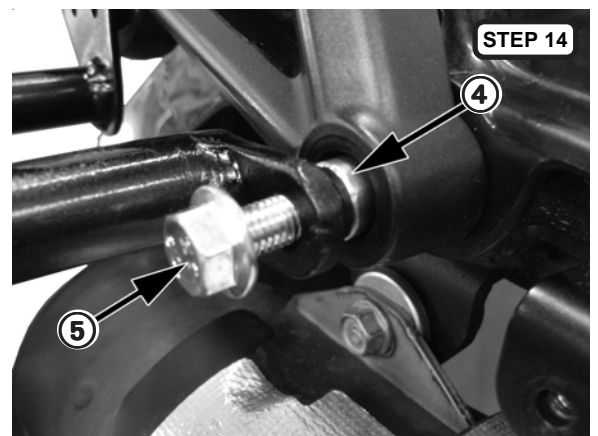
STEP 13

**STEP 14:** Locate and place 3/8" long spacer ④ into the stepped hole on the right, front arm of the rack. Place a 8 x 60mm flange head bolt ⑤ through the tab on the mount, through the spacer and into the sub-frame. Hand thread the bolt in several turns so it will stay in place. Do not tighten the bolt fully yet.

Use the left pannier mount and repeat STEPS 13 and 14 on the left side of the motorcycle.

Move to STEP 15.

**CAUTION:** As noted earlier, do not tighten any mounting hardware fully until all of the mount set components are on the motorcycle.



STEP 14

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**STEP 15:** The turn signal extension plate ① hardware will route through rear, upper pannier mounting tab ② and the turn signal mounting boss ③ on the luggage rack.

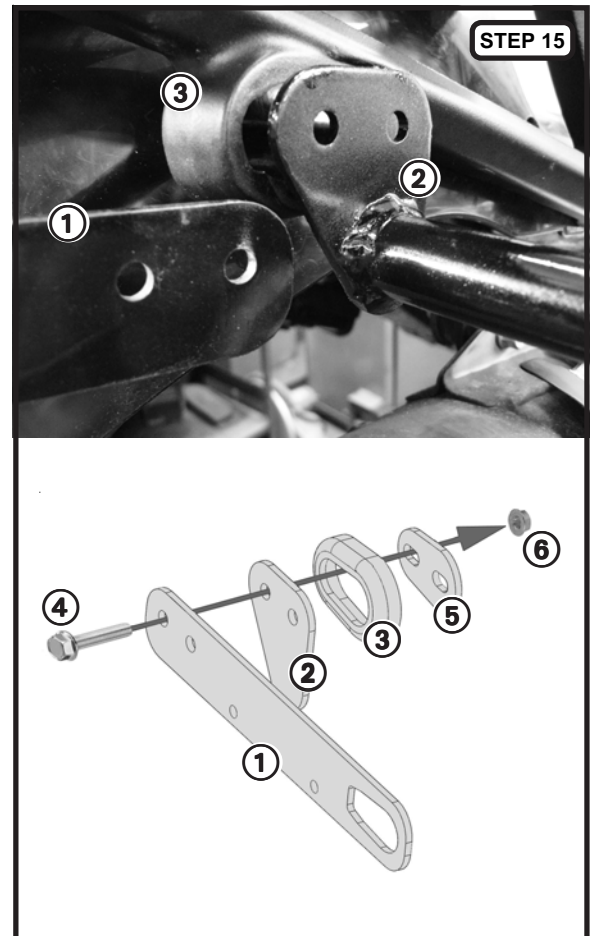
The plate and the pannier mount tab are held to the rack's turn signal mounting boss on each side via two 6 x 20mm bolts ④ that are secured via a retention plate ⑤ and a pair of 6mm flange-style locking nuts ⑥.

**NOTE:** Once installed, the retention plate ⑤ and the nuts ⑥ are not visible on the back side of the mounting boss ③.

Install the plate and the hardware on both sides of the motorcycle as illustrated at right. Use a 10mm socket and wrench to tighten the 6mm bolts and nuts just enough so they will stay in place. This will permit you to set the pitch of the turn signal's extension plates so they are level and even on both sides. Do not tighten the hardware fully yet.

Move to STEP 16.

**CAUTION:** As noted earlier, do not tighten any mounting hardware fully until all of the mount set components are on the motorcycle.



**STEP 16:** Select an appropriate route to feed the turn signal wires back in place so they can be reconnected to the motorcycle's main wiring harness. In most cases, because the wires have been freed from the retention loops under the rear fender (see STEP 9) there is adequate wire length for simple reconnecting of the signals to the main wire harness. In case there is not enough wire length, extension wire and bullet connections have been provided with your mount set.

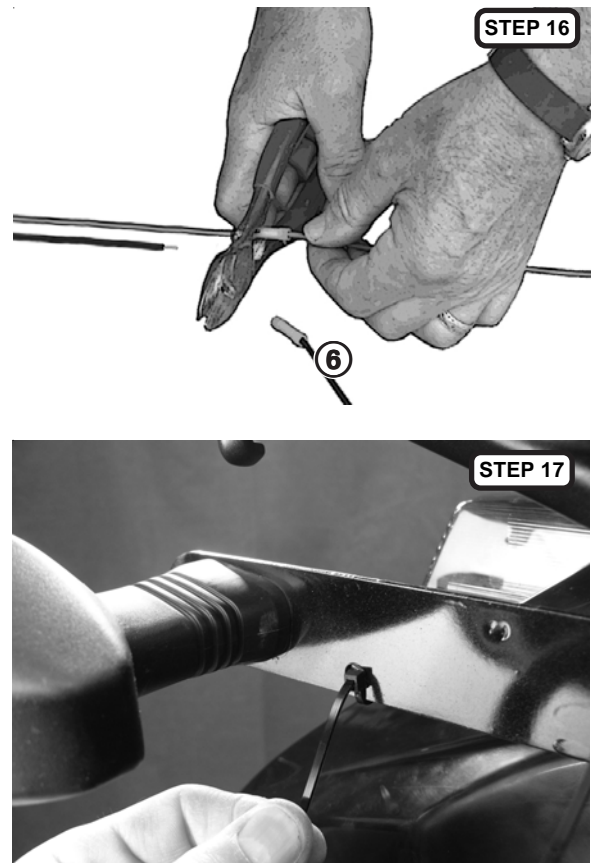
**CAUTION:** When routing the turn signal leads, use care so the wires will not be pinched or damaged by remounting the seat or any body panels. Use four of the supplied cable ties to secure the wires in place. Do not attempt to extend the turn signal wires unless you have the technical ability to do so. Consult your local, professional motorcycle dealer for assistance if required. While the supplied butt connectors ⑥ and wires can provide a good electrical connection, MOOSE recommends using solder and shrink tube to insert any wire extensions into your turn signal leads. These items are readily available through a auto parts or electronics store. You should also consult your dealer as other solutions may be available, such as pre-made extension wires that may simply plug into your existing leads without wire modification.

Move to STEP 17.

**STEP 17:** Once the turn signal wires are routed properly and connected, use the remaining supplied cable ties to secure the loose wires to the bottom edge of the extension plate.

**CAUTION:** Use care snipping off the excess cable tie length so you do not damage the turn signal wires.

Move to STEP 18.

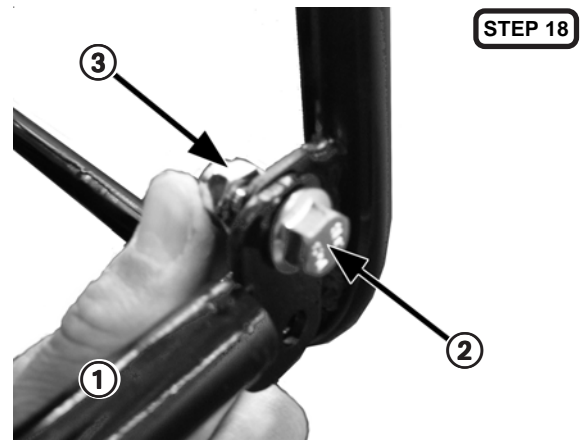


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**STEP 18:** Install the back support bar ① between the left and right pannier mounts. Loosely install four 8 x 20mm flange-head bolts ② and four 8mm flange-style locknuts ③ through the mounting tabs on the back bar and the pannier mounts. The back bar's mounting tabs are designed to be outside of the tabs on the pannier mounts. The nuts should be placed on the pannier mount-side of the joint.

**SPECIAL ASSEMBLY NOTE:** Verify that all of the mounting hardware is installed on the mounts and the motorcycle's chassis. Make sure all of the fasteners are threaded properly into their respective nuts or mounting points. Check to make sure the mounts are aligned properly on the motorcycle and then begin to tighten all of the hardware to the torque specifications listed in the *Hardware Torque Value* table listed on page 11 of this instruction set.

With the mounts securely installed on the motorcycle, you will now need to prepare your panniers for attachment to the mounts. Move to STEP 19.



**STEP 19:** Supplied with your pannier mounts are a pair of plastic buffer/drill template sheets ④. These sheets have been engineered to mate perfectly with the outer wall contours of the MOOSE Expedition Panniers. You will use the sheets to mark the location of the holes you will need to drill in the panniers to install the mounting hardware supplied in this kit. After the holes are drilled and cleaned, the plastic sheets are then attached to the panniers to help protect the luggage and the mounts from abrasive wear.

**DRILL BIT SIZES REQUIRED:** Refer to the template illustration at right and sizes listed below to select the proper size drill bits required to place holes in your panniers for the mounting kit hardware.

- ⑤ This hole is not used for these mounts **DO NOT DRILL**
  - ⑥ Use a 5/16" drill bit for the upper 8mm mounting hardware
  - ⑦ Use a 1/4" drill bit for the 6mm hardware that retains the lower mounting lip
- NOTE: Use a 1/2" drill bit or a formal tool to deburr holes after they have been drilled

Move to STEP 20.

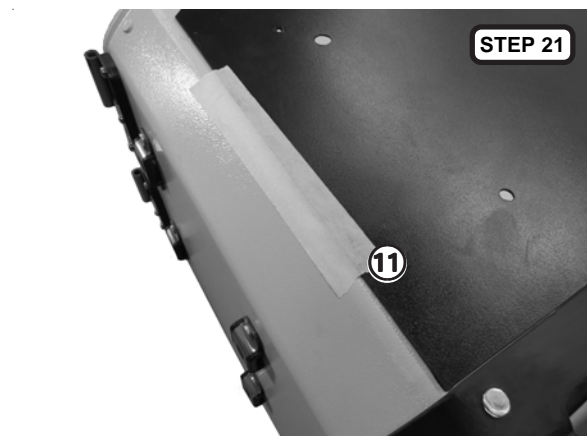
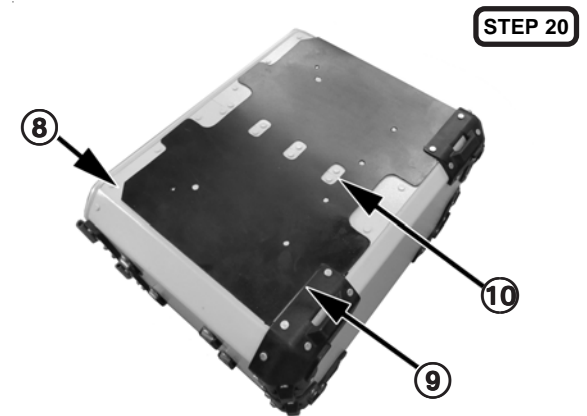
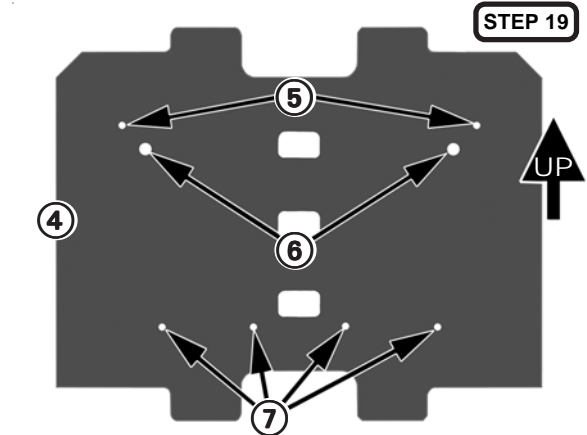
**STEP 20:** Set your pannier box down on a protected surface (with the lid removed) and place the buffer/drill template on the side that will face the motorcycle's chassis. This is the side of the pannier that has the riveted joint. The buffer/drill template's shape determines its placement on the pannier. The angular edges ⑧ indicates the top of the buffer/template. The buffer/template's other shapes fit with the pannier's bumpers ⑨ and there is clearance for the protruding rivet heads ⑩.

**NOTE:** You can use other band panniers with your MOOSE pannier mounts. While the buffer/drill template shapes will not exactly match another brand pannier, the hole relationships will allow you to attach the mounting hardware so the luggage can attach to the pannier mounts. Use care when selecting the mounting methods for non-MOOSE panniers on the mounts.

Move to STEP 21.

**STEP 21:** Position the buffer/template so it aligns with the contours and edges of the pannier. Use some masking tape ⑪ to temporarily hold the buffer/template in place for marking the drill hole locations.

Move to STEP 22.

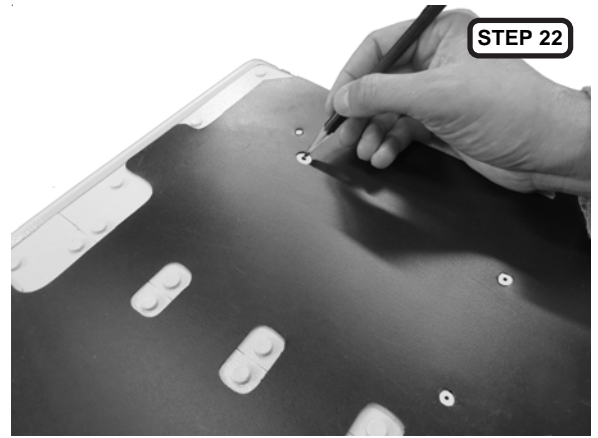


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**STEP 22:** Use a pencil to mark the center of the mounting holes in the pannier.

**TIP:** Avoid using a permanent marker or paint pen to mark the drill locations. This is so you can clean off a mark if needed. For dark color panniers, you can use a white grease pencil.

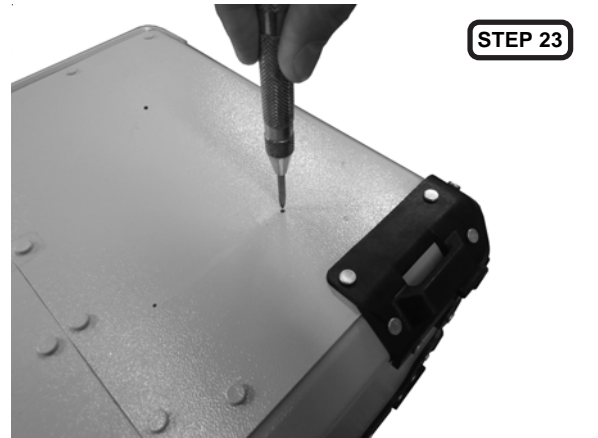
Move to STEP 23.



**STEP 23:** Remove the buffer/template from the pannier and use a center punch tool to create a pilot dent in the surface of the aluminum.

**CAUTION:** Use a spring-loaded center punch tool to create the indentation. Avoid using a solid punch with a hammer or another method which could cause you to dent or scratch the surface of the pannier.

Move to STEP 24.



**STEP 24:** Using the proper size drill bit, carefully drill each of the required holes.

**REMINDER:** Refer to the drill bit/hole size list on page 11 (STEP 19) of this instruction set.

Move to STEP 25.

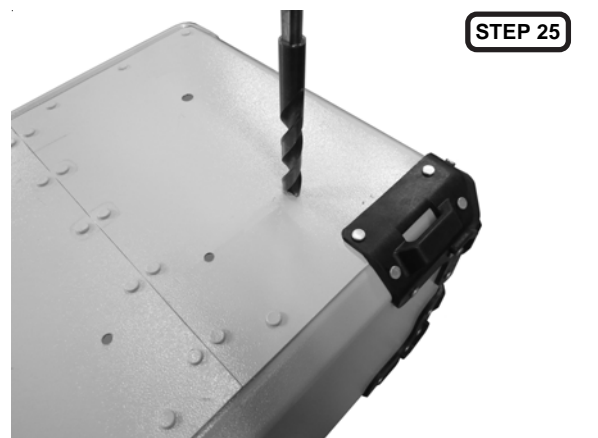


**STEP 25:** Hand-turn a large drill bit (1/2") or use a formal deburring tool and remove any burrs or loose material from the drilled holes.

**CAUTION:** Deburr the exterior of the holes and the inside of the holes. Use a shop vacuum to clean up the drilling debris from the inside of the pannier. Take care to keep your work area clean of aluminum chips or other debris that could damage the pannier's finish.

After the holes are deburred, and the debris cleaned off the pannier, re-tape the buffer/template back into place.

Move to STEP 26.



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**STEP 26:** Prep the two mounting lips included with your pannier mounts by installing the 1/8" thick buffer strips on each lip as show ①. Once you peel the protective backing off, carefully place the strips on each lip and press firmly so they will stick in place.

**TIP:** You may need to trim the supplied buffer strips, so verify the length before removing the protective backing from the strip.

The majority of the water resistance designed into your pannier mounting components is from the plastic buffer/drill template and the nylock-style nuts that hold the mounting lip in place on each pannier. For additional sealing apply some silicone sealant to the threads ② and underside of the head ③ of the eight 6mm button-head screws supplied with your mounts.

**NOTE:** The sealant will not compromise the fastening capability of your hardware.

Move to STEP 27.

**STEP 27:** Place the mounting lip on the bottom of the pannier so it's four mounting holes align with the line of four holes you drilled into the pannier. Make sure the lip is oriented so its opening is facing down ④.

Insert the 6mm button head screw through the holes inside the pannier. Use a 10mm wrench ⑤ or socket to tighten the nuts ⑥ as you hold the screws ⑦ with a #3 phillips screwdriver ⑧. Repeat on the other pannier.

**CAUTION:** Tighten all of the hardware evenly. After the initial tightening of the hardware, refer to the table on page 11 for final torque specification.

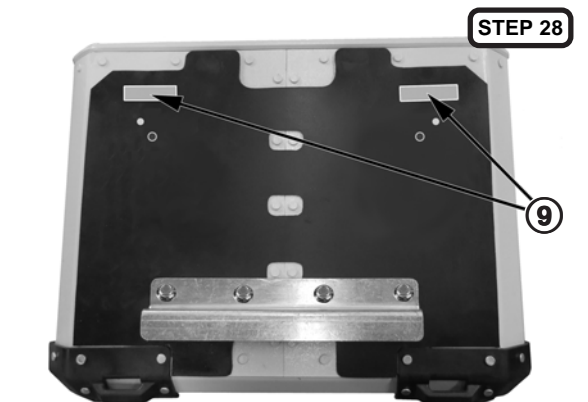
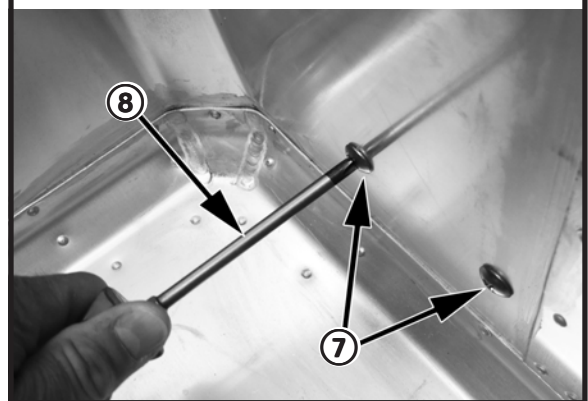
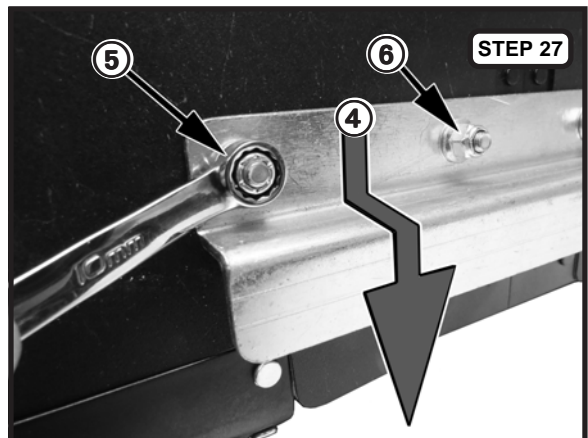
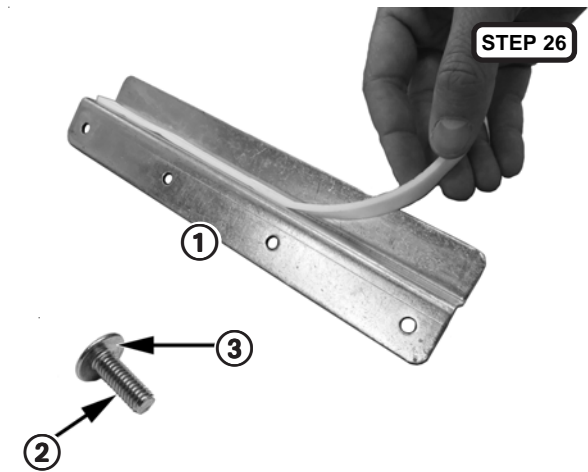
Move to STEP 28.

**STEP 28:**

**TIP:** If you will be removing and reinstalling your panniers frequently, install some double sided tape at the indicated location ⑨ between the outer wall of the bag and the plastic protector. This will ease mounting as it will prevent the protector from flaring away from the pannier.

**NOTE:** Obtain the double-sided adhesive tape from your local hardware store.

Move to STEP 29.



Continued on next page...

**STEP 29:** Each pannier is secured to the mount assembly via the bottom mounting lip and the hardware that connects it to the brackets in the top corners of the mount's rectangular hoop. Familiarize yourself with the hardware and lay it out in the order that is used to attach the pannier to the mount:

<i>Item</i>	<i>Description</i>	<i>Qty. (per pannier)</i>
①	Flange bolt (8 x 30mm)	2
②	Washer (1.5" dia)	2
③	Rubber washer (1.5" dia)	2
④	Support disc (3" dia)	2
⑤	Pannier/protector	-
⑥	Mount bracket	-
⑦	Washer (1.25" dia)	2
⑧	Nylock flange nut (8mm)	2

**TIPS:** Enlist the aid of another person when mounting the panniers. Once you are familiar with the mounting process you can easily do it by yourself. Pre-install the washers (in the proper order) that go on the flange bolts before attempting to mount the pannier.

With the lid off of the pannier, carefully lift it up and position it so the mounting lip slips over the bottom porting of the mount's rectangular hoop. Adjust the pannier's position so you can insert the bolt through the washers, then through the hole in the pannier's wall and the mount bracket. Slip the washer onto the protruding end of the bolt and hand thread the nylock onto the bolt. Hand install the hardware in the other corner of the pannier/mount. Using the proper wrench and/or socket, tighten both bolts ① and nuts ⑧ in each pannier. Repeat for the other pannier.

**NOTE:** For additional element protection apply some silicone sealant to the back side of the support discs ③ and the treads of the mounting bolts ①. The sealant will not compromise the fastening capability of your hardware.

**CAUTION:** Tighten all of the hardware evenly. After the initial tightening of the hardware, refer to the table on page 11 for final torque specification.

Move to STEP 30.

**STEP 30:**

**OPTIONAL ITEMS AVAILABLE:** You can obtain a pannier attachment kit which includes hardware that permits pannier removal and installation without tools. See your MOOSE dealer to order part number 3501-0995.

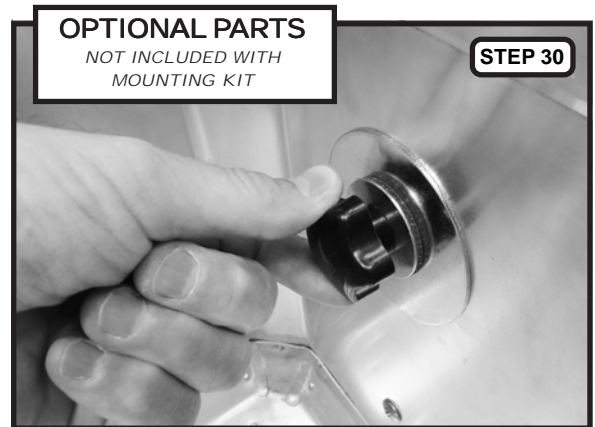
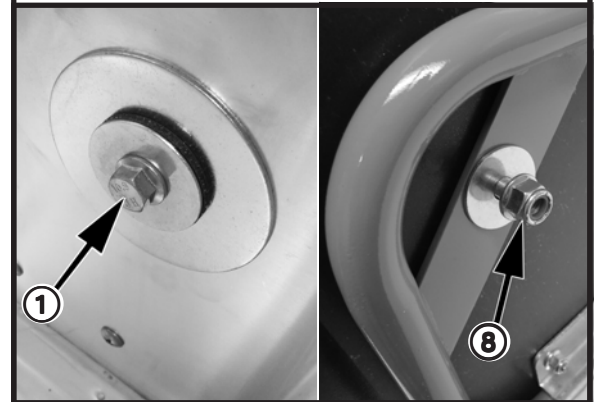
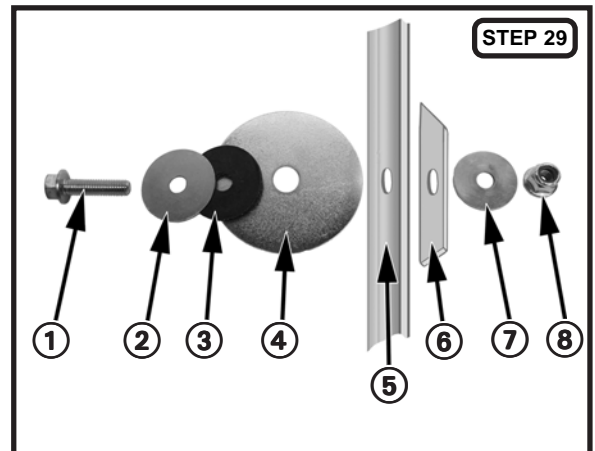
**CAUTION:** Be sure to follow the instructions included with the optional quick-release kit. You must use hardware from your main mounting kit in addition with the threaded knob and clips supplied in the kit. When riding over rough paved roads, or unimproved terrain, or with a heavy cargo load you should always use the supplied, standard mounting bolts and locking nuts. This hardware will properly secure your panniers to the mounts during this type of use.

Move to STEP 31.

**STEP 31:**

Visually inspect the panniers to verify they are mounted evenly and away from any other components on the motorcycle. Before riding do a complete review of the installation. Do not load the panniers with cargo during an initial test ride. Install the pannier lids and latch them securely. After your test ride, double check the installation.

**WARNING:** Review all of the information on page 11 of the instruction set. It is imperative that you continually verify the security and integrity of your accessory/ and its mounting on your motorcycle. Adventure and Dual Sport motorcycles are very capable vehicles and they can operate in environments that will tax all mechanical devices. Your safety and that of others is dependent on your attention to this continual inspection of your vehicle and it's accessories.



Continued on next page...

## HARDWARE TORQUE VALUES:

As the final step of the pannier mount installation process, you must tighten all of the new hardware and any other related hardware on your motorcycle.

These fasteners should be tightened to the torque values specified in your vehicle's Owner's Manual and Service Manual. For fasteners not listed in those manuals, refer to the torque table below. Threads should be treated with a thread locking agent before installation.

5mm screw .....	3 - 4 ft-lb	(0.35 - 0.5 kg-m)
5mm bolt & nut .....	3 - 4 ft-lb	(0.35 - 0.5 kg-m)
6mm screw .....	5 - 8 ft-lb	(0.7 - 1.1 kg-m)
6mm bolt & nut .....	6 - 9 ft-lb	(0.8 - 1.2 kg-m)
6mm flange bolt & nut .....	7 - 10 ft-lb	(1.0 - 1.4 kg-m)
8mm bolt & nut .....	13 - 18 ft-lb	(1.8 - 2.5 kg-m)
8mm flange bolt & nut .....	14 - 21 ft-lb	(2.0 - 3.0 kg-m)
10mm bolt & nut .....	22 - 29 ft-lb	(3.0 - 4.0 kg-m)
10mm flange bolt & nut .....	22 - 29 ft-lb	(3.0 - 4.0 kg-m)
12mm bolt & nut .....	36 - 43 ft-lb	(5.0 - 6.0 kg-m)

Most of the supplied fasteners are flange-type; please pay attention to the different torque specifications this hardware. The majority of the nuts supplied with your mount set are self-locking type. However it is still recommend to use a locking agent on all bolt and nut threads. **Suggest the use of Three Bond Hi-Strength Thread Lock (obtain #TB-1303 or an equivalent from your MOOSE dealer).**

## LOAD CAPACITY:

While your pannier mount set has been designed to tolerate the rigors of touring use, care must be taken to not overload your luggage system and your vehicle.

## MAXIMUM LOAD CAPACITY: 25 lbs (11.3 kg) per mount side/pannier

Include the weight of the mounts and panniers when calculating the amount of cargo you will be carrying on your motorcycle. Do not exceed your vehicle's Maximum Gross Vehicle Weight as listed on your motorcycle or in the manufacturer's Owner's Manual.

## IMPORTANT:

Failure to install this accessory properly may allow portions of the mounts, mounting hardware or panniers to come into contact with the motorcycles's moving parts or controls. It is vital that you verify that neither the accessory, nor any of its parts can touch, or interfere with, other motorcycle components while the steering or suspension moves through its entire range of motion. Make sure that neither your panniers, their mounts or any related hardware can come into contact with the exhaust or any other component of the motorcycle, as other vehicle components may be damaged by contact with this accessory.

It is your responsibility to make sure the installation of this accessory does not create an unsafe or illegal condition.

Check to be sure that all lights and safety reflectors are visible once the mounts and panniers are in place. If the panniers of the mounts block any side reflectors, place reflectors on the exterior sides of the panniers (reflectors with self-adhesive backing are available from motorcycle or automobile supply stores).

After 50 miles (80 kilometers) of riding, recheck the panniers and mounts to make sure that they are still tight and secure. Inspect the accessories more often if you are riding your motorcycle in wet or rough conditions (such as a dirt road). Inspect the accessory and related hardware before and during each ride. Loose accessory and/or mounting hardware can interfere with the vehicle's operation and cause an unsafe riding condition.

## CARE OF YOUR MOOSE EXPEDITION PANNIER MOUNTS:

Check the attachment and assembly hardware often; tighten these fasteners as recommended in this instruction set and as listed in your vehicle's owner's manual. Your MOOSE mounts require almost no cosmetic maintenance, other than periodic cleaning with mild soap and water. It is normal for some scuffing of the mounts finish to occur, especially if you operate your motorcycle in dusty, wet or dirty conditions. This type of wear is normal and is not considered a defect, so repair or replacement of parts due to this type of surface wear is not covered under the product's limited warranty. You can use paint to cover such wear so the metal does not rust or corrode.

## MOOSE LIMITED ONE-YEAR WARRANTY

*Moose warrants this product for defects in materials, design or workmanship for a period of one year after retail purchase. Items that are defective will be repaired or replaced by MOOSE at its sole discretion. Damage caused by improper use or improper installation is not a defect; therefore repair or replacement of a damaged accessory will not be covered under this warranty. This warranty contains other provisions and conditions, so please visit [www.mooseracing.com](http://www.mooseracing.com) for additional information. Thank you for purchasing your MOOSE Expedition Pannier Mounts. You can count on MOOSE's quality, innovation, service and style. We want you to be completely satisfied. If you have any comments, or are not satisfied with the performance of your accessory, please contact your MOOSE retailer directly.*



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