# BestRest Products, LLC

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# **R1200GS FitKit** (CargoRests Sold Separately)

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The FitKit allows you to carry large bulky loads weighing up to 30 lbs. Use care not to overload the CargoRest or you may experience handling problems and place extra stress on the motorcycle frame. FitKit mounting instructions are the same for every CargoRest.

Thank you for purchasing a BestRest FitKit. We appreciate every order. If you have problems with installation please call us at the number above or send us an email.

May the Lord God bless you, watch over you, and keep you safe as you travel the world on your motorcycling adventures.

David & Judy Petersen

# Requirements for installation:

The stock BMW luggage rack must be in place on the motorcycle.

# Tools needed for installation:

Torx hex wrench (from your bike's toolkit) 8 mm box wrench (from your own toolkit) 5 mm hex wrench (in the parts package) 3mm hex wrench (in the parts package) Electric or cordless drill Loctite Blue (semi-permanent thread compound)

# Your parts package should contain:

- 2 FitKit Struts (they look like a hockey stick)
- 2 FitKit Yokes (flat bars with bend ends)
- 2 FitKit Hooks (left and right hook brackets)
- 4 6x20 mm socket head cap screws\*\*
- 4 5x40 mm button head cap screws
- 15 5x16 mm button head cap screws\*\*
- 15 5mm nylon locknuts\*\*
- 30 #10 flat washers (small)\*\*
- 2 #12 flat washers (medium)
- 4 9/16" flat washers (large)
- 4 5/16" x 1/2" nylon spacer
- 4 3/8" shoulder barrel LONG UPPER collar
- 4 1/4" shoulder barrel SHORT LOWER collar
- 1 3 mm hex wrench
- 1 5mm hex wrench
- 1 7/32" drill bit

\*\*Some of these parts will be leftover unless a BackRest is installed.

Take a few minutes and separate each item into a separate pile. This will save time later.

# Installation

Read and follow these instructions carefully. Improper installation may result in damage to your motorcycle, or personal injury. Do not attempt installation unless you can perform it in a safe and professional fashion.

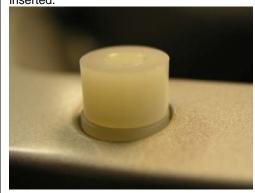
Check to determine that the BMW luggage rack has been properly installed and that all fasteners and fittings are properly tightened. Inspect for signs of stress, fracture, bending, or other failure. If any of these are found, return the motorcycle to your dealer for repair or replacement. Do not attempt to mount the BestRest FitKit if the BMW luggage rack is damaged, defective, or improperly installed.



Place a 3/8" shoulder barrel LONG UPPER collar in the 4 holes of the luggage rack as shown:



Place a 5/16" thick x 1/2" diameter nylon spacer on top of each collar. It may be helpful to use a piece of cellophane tape to hold the spacer in place when the screws are inserted.



Inspect your CargoRest. It may already have 4 holes drilled to match the hole pattern found on the stock luggage rack. doesn't, follow the instructions on the drilling enclosed template, using the drill bit supplied. Do not drill the holes while the CargoRest is on the motorcycle.



Once this drilling process is complete clean the CargoRest free of any metal shavings.

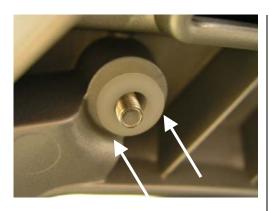
Place a 5x40 mm screw (with small washer) into each of these holes. Lower the CargoRest carefully so that the screws pass through the spacers and collars, and project down thru the holes in the BMW luggage rack. The photo shows a screw projecting from the bottom of the rack.



Place a toolbox or other heavy object on the front of the CargoRest to hold it in place while vou attach the collars and nuts on the ends of the screws.



From the underside, place a 1/4" shoulder barrel SHORT LOWER collar upward onto the ends of the screws. You may need to wiggle the screws to make the collars fit. Push them upwards all the way so that the shoulder contacts the rack.



Place a <u>LARGE</u> 9/16" washer on the screw, followed by a locknut. The photo below shows a small washer, but you'll want to use the LARGEST washer that came in your parts package. Do not tighten the nut all the way.



Repeat this process until a spacer, washer and locknut are on the ends of all 4 screws.

Wiggle the CargoRest gently until you feel the "natural" resting point of CargoRest on the luggage rack. Using a cross-hatch pattern, tighten the screws equally.

We don't provide specific torque value for these screws. Start tightening by spinning the hex wrench while holding the locknut. When you start to feel resistance, stop turning the hex wrench and start turning the locknut. If you turn the hex wrench during final tightening you'll strip the hex head. Instead, turn the nuts using a wrench. Use common sense – too much torque will squish and damage the collars and spacers – too loose and the CargoRest will rattle.

From your parts package take one of the Yokes, along with 3 small screws, 6 washers, and 3 locknuts. Attach the Yoke to the underside of the CargoRest. Note: If mounting Jesse saddlebags, insert a 1/8" nylon spacer

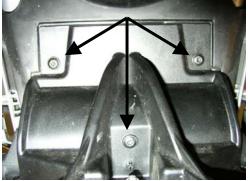


Don't use the hex wrench for final tightening or you'll strip the hex, instead do your final tightening by turning the nuts with a wrench.

Remove the taillight assembly.



Look on the underside of the wheel well, just in front of the taillight. Using a Torx wrench from your motorcycle tool kit, remove the 3 screws holding the assembly in place. The front of the motorcycle is at the top in this photo, the rear is at the bottom.



When you've removed the last screw, the taillight assembly will drop down. Let it hang by the wiring harness as you complete the rest of the installation.



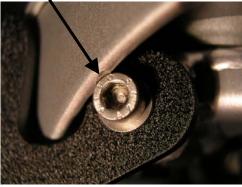
Using a Torx wrench, remove the two screws shown above, in the ends of the frame.

From your parts package obtain the Left and Right Hook, two M6x20 screws, and two medium washers. <u>Use Loctite Blue semi-permanent compound on these screws.</u>



Tighten both screws <u>loosely</u> so the Hooks don't swing down. The bent angles should be pointing vertically.

Note: Depending on your motorcycle, you may find that the head of the screws are a tight fit against the plastic shroud of the tail assembly. One of the screws on our prototype fit easily but the other screw was in contact with the shroud. This is considered normal and is a function of BMW's manufacturing tolerances. Just make sure you don't cross-thread the screw as you tighten it. If you can't get the screw in the hole because it's hitting the shroud you may need to cut away a small portion of the shroud.



Take the two Struts from your parts package, along with screws, washers, and locknuts. Attach the Struts to the angles of <u>OUTSIDE</u> of the hooks and tighten loosely.



Repeat the process on the other side of the motorcycle, making sure the Strut is on the OUTSIDE of the Hook.

The top of the Struts should be on the OUTSIDE of the Yoke, on the underside of the CargoRest. Insert a screw with washers and locknut and tighten the nuts loosely.



From your parts package take the remaining Yoke and attach it between the Struts. There are 3 holes cut in each Strut. The Yoke can be attached in any set of the 3 holes, but for maximum strength use the center holes. The other holes are there so you can move the Yoke to accommodate additional accessories at a later time. The Yoke can be configured so the cross bar is flat or vertical, depending on your preference.

When all the parts are in place they should look like this:





Until now all your screws and nuts were loose. Wiggle the CargoRest and FitKit to relieve any stress points, and so the parts find their natural resting position. Adjust the Hooks as necessary to clear the rear shroud. Begin tightening all the parts.

The two M6 screws holding the Hooks must be tightened securely so they don't rotate downward under heavy loads. Use common sense and don't over-torque. When the hex wrench begins to bend you should stop tightening. The Loctite you've previously applied will prevent the screws from working loose.

The other screws and nuts must also be tightened. Remember to do the final tightening by turning the nut, not the screw head.

Check your work again and make sure all screws and nuts are tight.

Replace the taillight assembly. Some contact between the black plastic housing at the top of the taillight assembly and the lower edge of the Hooks is normal and will not affect performance.



Installation is complete!

After riding approximately 200 miles, check all the nuts and screws for proper tightness. Re-tighten all parts if necessary.

As part of your daily pre-ride check, always inspect the CargoRest and FitKit mounting system. Remove the CargoRest from service if you observe any stress points, fractures, missing or loose screws, nuts, or other indications of fatigue or failure.



Your CargoRest is designed to handle large, bulky loads. We've successfully tested the CargoRest under the most extreme conditions with VERY heavy loads. However, because the CargoRest sits on the stock rack and frame, we must honor BMW's maximum rear cargo rack load capacity. Refer to your Owner's Manual for official loading limits.

# Refer to your BMW owner's manual for luggage loading recommendations.

Loading the CargoRest beyond manufacturer's recommendations may void the manufacturer's warrantee, may result in handling problems, may cause handling problems, and can raise other safety issues.

### Mounting a BackRest

Note: Before mounting any BackRest, check the length of each mounting screw. You may find that the screws included in the BackRest parts package are too long and would hit the stock BMW luggage rack below. Cut the screws to length or obtain replacement screws at a hardware store or from BestRest.

# **Classic and Sprint BackRests**

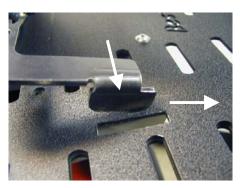


Classic BackRest



Sprint BackRest

From your BackRest parts package, obtain the stainless subframe bar. Slide the bar in from the side, under the CargoRest and above the stock BMW luggage rack. Align the holes of the bar with the 4 mounting holes of the CargoRest. Use two M5x12 mm (short) screws and flat washers to hold the subframe bar up against the underside of the CargoRest. Use blue Loctite on these small screws. When the bar is properly installed, it should be resting flat against the underside of The pressed Pem nuts the CargoRest. should be on the underside of the bar, facing down.



Place the Sprint or Classic onto the CargoRest. The hooks on the lower frame of will fit into the rectangular cutouts on the CargoRest. Move the hooks rearward and rotate the BackRest forward and downward so that the plate of the BackRest is flat against the CargoRest.

Use the two M6x20mm screws from the CargoRest FitKit, along with washers from your BackRest parts package to mount the BackRest on the CargoRest. Place a small amount of anti-seize or thread lubricant on these two screws to prevent galling and

binding of the screws, should you want to remove them at a later time.

Screws longer than 20mm will damage the

BMW luggage rack below.



The Sprint BackRest is shown in the above photos, but the techniques used and the maximum screw length is the same for the Classic BackRest.

### **EZRest BackRest**

Because of limited clearances below the CargoRest, you must remove the CargoRest from the motorcycle in order to mount (or demount) the EZRest.

First, place the EZRest on the top surface of the CargoRest. Check to determine if all 4 mounting holes are present on the CargoRest.

If not, use the drilling template provided with the EZRest. Use an awl or punch to mark the holes, then use the 7/32" bit to drill the holes. Always remove the CargoRest from the motorcycle before drilling any holes!



Insert a 5mm screw (with washer) into each of the four holes. From the underside, attach a flat washer and a 5mm nylon locknut to the ends of these screws. Tighten securely.

Remount the CargoRest onto the motorcycle. Follow all the above directions for mounting the CargoRest to the stock luggage rack and to the Struts.

Follow the instructions that came with the EZRest for details on adjusting the BackPad.

# Caring for your FitKit and CargoRest

The finish on the FitKit and CargoRest is a UV resistant powder coat polyester paint.

Wash with a mild auto detergent and water. Touchup of minor blemishes may be done with black marker pen or black high quality automotive enamel. Do not use abrasives, solvents, or harsh chemicals when washing or cleaning. Do not use paste wax or other coatings that leave a whitish residue when they dry. We recommend 'Mother's Back-To-Black' or 'Protect-All' brand products to keep your CargoRest looking new.

# **Structural Rails (Angles)**

Models J & T CargoRests have aluminum structural rails (angles) mounted on the underside of the CargoRest deck. Do not remove these rails or the load carrying capacity will be adversely affected.

# Safety & Legal Notices

Do not proceed with product installation unless you are qualified to complete the installation in a safe fashion and as described herein. Do not use these products unless you have read all instructions and understand how these products work and what limitations, if any, they may have.

It is the responsibility of the Consumer to evaluate the suitability of these products for personal use. Consumers must evaluate whether these products meet their needs and whether these products can be mounted and used in a safe fashion. The Consumer accepts full and complete responsibility for selection of products and for mounting and maintenance of these products. Consumer agrees to follow and abide by any instructions, warnings, and all recommendations, or other information supplied or published by **BestRest** Products.

It is the Consumer's responsibility to inspect all screws, fasteners and fittings on a daily basis, tighten or replace them as necessary, and to regularly inspect the entire BestRest CargoRest and mounting hardware for signs of missing parts, excessive wear, metal fatigue, or imminent failure. Should any of these be observed the assembly should be removed from the motorcycle and not used until inspected and repaired by BestRest.

BestRest Products, it's employees, agents, and owners assume no liability whatsoever for property damage, personal injury or other losses resulting from the Purchaser's failure to properly maintain the products, for unauthorized modifications of any kind, for use of unauthorized parts (including bushings, screws, pins, or other fasteners), or for use of any BestRest Product in a fashion not intended by BestRest or described as a suggested application in BestRest literature.

Because installation of these products is done by others outside our control, we cannot assume any liability or responsibility whatsoever for improper or unsafe installation, or installation which is contrary to published instructions, for products that are improperly secured or maintained, or that are improperly tightened or otherwise secured, or which are otherwise improper fitted to the motorcycle.

#### **Authorized Repairs and Parts**

Only authorized, and approved replacement parts, assemblies, nuts, washers, screws, fasteners or fittings may be used when mounting, installing, or repairing any BestRest Product. Authorized replacement parts may be purchased only from BestRest Products. Parts from other sources or vendors are not covered under warrantee and will void any Consumer claims against BestRest or others. Any use, modifications, or applications of any BestRest Product, other than those authorized by us in writing, are specifically prohibited.

For full legal disclosures and a description of our warrantee, please refer to our website:

#### www.bestrestproducts.com

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