

## BackRest Installation R11xxGS "Classic" Model – Stainless Steel Frame

Thank you for purchasing a BestRest BackRest! We're confident it'll improve your riding comfort and expand your riding adventures.

If you have problems with installation or operation of the BackRest please call us at the number on the letterhead.

Ride safe and God Bless!  
David & Judy Petersen

### FOR PROPER INSTALLATION & SAFE OPERATION, PLEASE READ ALL INSTRUCTIONS BEFORE STARTING

Unpack the BackRest Assembly and parts bag from the shipping container. For the R1100/R1150GS you should have the following items:

- 2 - M5 x 12 button head cap screws
- 2 - M6 x 40 socket head cap screws
- 2 - M6 x 25 socket head cap screws
- 2 - M6 nylon locknuts
- 2 - #10 flat washers (small)
- 4 - #12 flat washers (large)
- 2 - 6mm split ring lock washers
- 1 - Front (long) subframe bar
- 4 - Rubber grommets
- 1 - 5 mm hex wrench

Remove the two large ring-pins holding the BackRest in the folded position by gently pulling on the rings. These ring-pins have a detent ball and will "click" as they clear each hole.

Unfold the BestRest. As you do this the Slide Assemblies in the middle of the BackPlate will drop down. Align the 5/16" holes at the ends of the Lower Slide with the holes in the two upright Rear Posts. Reinsert one of the 5/16" ring-pins thru these four holes to secure the BackPlate the upright position. Store the remaining ring-pin in one of the two remaining storage holes. As you move the BackPlate thru its full range of motion you may need to remove the second ring-pin and relocate it to another storage hole.

See page 3 for information on how to configure, adjust, and secure your BackRest.

### BackRest In Rider's Position (Only for R11xxGS)

1. Remove passenger seat and toolkit lid. Remove the 6mm screw holding the rear of the toolbox. (Fig. 1)



Fig. 1

2. Rotate rear of toolbox upward, then pull gently rearward (Fig. 2). The front of the toolbox is held in place by two plastic tabs that fit into the forward cross frame member.



Fig.2

3. Installation of the Subframe Bar. To hold the BackRest Assembly onto the motorcycle, you must install a Subframe Bar (Fig. 3). It will fasten beneath the cross frame rail, which is located just in front of recess for the toolbox. (Fig. 3 shows Subframe Bar next to the cross frame rail.) Two M5x12 pan head screws hold this Bar tightly against the underside of the rail, preventing the Bar from shifting. The larger 6mm holes are for the screws that hold the BackRest in place. All four screws will pass thru the two small slots in the frame as shown in Fig. 3.

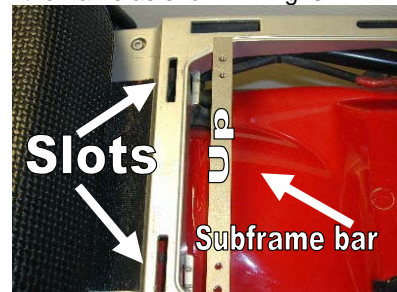


Fig. 3

Special note: The Subframe Bars shown in these photos are prototypes without the pressed screw fittings.

Special note: The Subframe Bar is marked "UP" on one side. Make sure that the Bar is mounted properly or the pressed screw

fittings may come loose. **The fittings should be on the bottom of the bar.**

4. To assist placing the Subframe Bar under the cross rail, we suggest using a small nylon ziptie or piece of string. Insert the tie thru the hole in the Bar and thread the end of the tie up thru the small slot in the frame (Fig. 4a). Pull the Subframe bar into place (Fig. 4b). It's much easier this way!

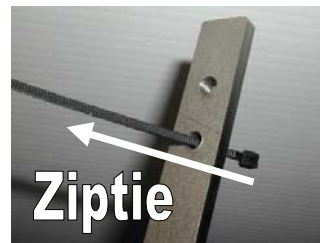


Fig. 4a

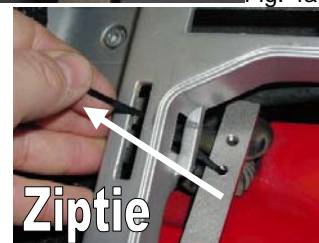


Fig.4b

5. Once the Subframe Bar is in place beneath the frame, LOOSELY thread the two M5x12 flat head screws (with flat washers) into the Bar (Fig. 5a).

We recommend use of a semi-permanent thread-locking compound to hold these 5mm screws. "Blue Thread Lock" will prevent the screws from coming loose, which would cause the Subframe Bar to drop or otherwise move out of alignment. Do NOT use a permanent (red) thread compound.



Fig. 5a

The two (empty) M6 screw holes must be equidistant left and right. They must also be centered fore and aft in the slots (Figs. 5b – 5c). If they're offset in any axis, adjust the Subframe Bar as needed. It's important to align the bar properly or you'll have difficulty inserting and threading the BackRest hold down screws.



Fig. 5b

Fig. 5c

Finished installation of the Subframe Bar should look like Fig. 5d:

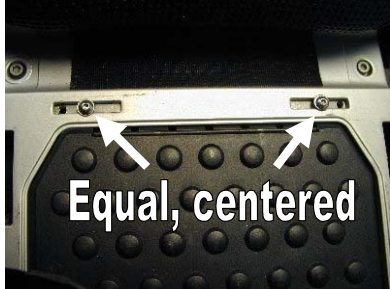


Fig. 5d

6. Now that you've temporarily fitted the Subframe Bar, it's time to mount the BackRest assembly onto the frame. The BackRest has "hooks" on the underside, beneath the black plastic spacer. The hooks fit into the two large slots shown in Fig. 6a.



Fig. 6a

Fit the hooks into the frame slots, lowering the BackRest so it's sitting on the frame, then slide rearward 3/8" to engage the hooks as shown in Fig 6b.

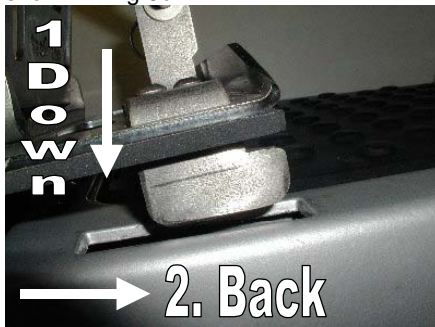


Fig. 6b

Once the hooks have been inserted into their slots and the assembly is moved rearward 3/8", the M6 holes in the BackRest Carrier Plate should align with the 6mm holes in the Subframe Bar you've just installed. First time fitting may be snug; if this occurs, gently tap the BackRest rearward with a rubber mallet if necessary. Do not use a steel hammer or other hard instrument! If you encounter problems also check to ensure the Subframe Bar has not shifted out of alignment.

7. If the holes are aligned, insert the M6 x 20mm screws (with lock and flat washers) into the holes shown in Fig. 7. The screws should thread easily into the Subframe Bar. If necessary remove the BackRest and adjust the Subframe Bar for the best fit, then tighten the M5 screws holding the Subframe Bar in place. Replace BackRest and check again for alignment - this may take a couple tries. Once you're satisfied everything is correct, snugly tighten the small M5 screws, locking the Subframe Bar in place. Use common sense and do not over-tighten the screws or you'll damage the threaded fittings. The purpose of these M5 screws is to keep the Subframe Bar from shifting - there are no structural requirements involved.



Fig. 7

Note: The Subframe Bar may be left in place indefinitely; it will not interfere with placement of the Rider or Passenger seats, or the toolkit.

8. After you've confirmed proper location of the Subframe Bar, replace the toolkit (Fig. 2, reverse process). Slide the two front plastic tabs of the toolkit into their slots in the frame and tighten the screw at the rear of the toolbox (Fig. 1). Replace the toolkit lid.

9. Reinstall the BackRest in the Rider's Position (Fig 9).



Fig. 9

Remember to fully tighten both two M6x25 screws. Use common sense and do not over-tighten. **These M6 screws should be checked on a frequent basis to confirm they're secure, since they hold the BackRest in place on the motorcycle.**

Removal of the BackRest is easily accomplished by removing the two M6x20

screws. Slide the BackRest slightly forward and lift up. You may then place the Passenger seat back in place if desired.

Note: You can store the M6x25 screws in their respective holes but you cannot fit the passenger seat if these screws are in place.

## **BackRest In Passenger Position**

1. Read the above instructions to familiarize yourself with BackRest installation in the Rider Position.

2. Install the BestRest CargoRest according to instructions, per your specific model.

3. The hooks on the underside of the BackRest (Fig. 6b) fit into the two square slots machined in the CargoRest (Fig. 10).

Model C is shown below; Models J and T have similar hole and slot patterns.



Fig. 10

4. Lower the BackRest onto the CargoRest and slide the BackRest assembly slightly rearward so the M6 holes align with the holes in the CargoRest (Fig. 10). These holes will also line up with the threads in the Subframe Bar, beneath the CargoRest. Insert the M6x40 screws (with lock and flat washers) and tighten. Use common sense and do not over-tighten. **To provide added strength and security we've included two extra M6 nylon locknuts. While not required, we recommend attaching them to the bottom ends of these M6 x 40 screws.**

Note: If the stock grab rail prevents the BackRest from fitting down onto the CargoRest, change the angle of the BackPlate. Once in place, readjust to the desired angle and tighten the screws.

Removal of the BackRest is easily accomplished by removing the two M6x40 screws. Slide the BackRest slightly forward and lift up. When the BackRest is not in place on the CargoRest store the M6x40 screws by threading them down thru the



CargoRest and into the Subframe Bar. This way you'll never misplace them.

When installed in the passenger position, the BackRest should look like Fig. 11.



Fig.11

## Adjusting The BackRest

The patented BestRest Products BackRest is infinitely adjustable. As you examine the various assemblies, you'll see how easy it is to adjust the height, angle and pitch for your comfort and riding style.

Take note of the nylon locknuts fitted to the ends of the M6 screws that adjust the swing arms and back pad. The nuts are there to prevent the screws from vibrating loose and falling out along the road. The nuts don't need to be tightened, and should be left as they come from the factory.

Adjustments to the BackRest should never be attempted when operating the motorcycle. If adjustments are needed, come to a complete stop, turn off the ignition and secure the motorcycle against tipping or falling. Make any required adjustments, then tighten all screws, fittings and fasteners. Quick release ring-pins must be fully inserted and locked in place. Before resuming travel, inspect carefully to ensure all parts are in place and properly secured.

To change the angle of BackRest:

1. Loosen the two M6 screws located on the Upper Slide, allowing it to move over the top of the Lower Slide. This sliding movement results in a change of the BackPlate angle.
2. Adjust the angle as needed and re-tighten all screws.

The Upper and Lower Slides are screwed together in the most common setting. If you require more range of movement, remove the nylon locknuts and M6 screws and replace them in two of the five holes found on the Lower Slide. Note – Always install BOTH M6 screws and tighten securely! Do NOT rely on one screw to hold the Upper and Lower Slide in place. Failure to use both screws may result in unexpected movement of the BackRest!

To change the angle or height of the BackPad:

1. Loosen the eight M6 screws holding the four SwingArms, adjust as needed, and tighten.
2. Note that as the BackPad is moved thru its arc of rotation the pad moves up/down as well as forward/back, always staying parallel to the BackPlate.

To change the elevation of the BackPad:

1. Remove the eight M6 screws, locknuts, and four SwingArms.
2. Move the BackPad up/down along the BackPlate to the required height. Replace the M6 screws and locknuts and tighten securely.

Changing the four SwingArms from their factory setting (parallelogram) to a trapezoid allows the BackPad to change pitch as it rotates in its arc of motion. You can experiment with these settings to get exactly the configuration you require.

To store your BackRest horizontally:

1. To lower the Backrest, pull both ring-pins and allow the BackPlate to fold rearward.
2. As you do so, lift the Slide Assemblies until they're parallel with the BackPlate. The 5/16" holes in the BackPlate Angle will align with holes in the two Rear Posts.
3. Insert a ring-pin thru all four holes, locking the BackPlate in a horizontal position.
4. Insert the other ring-pin into the holes in the Upper Slide and the BackPlate Angle. This will lock the Slides in a horizontal position and keeps them from damaging the top of your toolkit.
5. If the top of the BackPad hits the BMW grab rail when the BackRest is folded, loosen the SwingArms and move the BackPad slightly forward.

You can strap duffels and other gear over a folded BackRest, however it is NOT designed to handle the weight of a Passenger. Excessive loading will void any warranties.

Do not remove or adjust the spring circlip or clevis pin holding the Upper and Lower Slide Assemblies to the BackPlate Angles.

## Helpful Hints:

Lanyard – Later production models come with a stainless steel lanyard connecting the two ring-pins. If yours does not have a lanyard, make one from nylon cord or other line to prevent loss of the ring-pins. Tie one end thru a hole in the BackRest, pass the cord thru one ring-pin and tie the cord to the second ring-pin. Adjust the length of the

lanyard as needed – we've found a 12" cord is the best size.

Hex wrench storage - We've provided a set of storage holes for your hex wrench, so it's always available to adjust or remove the BackRest. Look for two small holes drilled near the bottom of the Rear Posts. Pass your hex wrench thru these holes and slide the rubber grommets onto the wrench, two on each end. This effectively locks the wrench in place until needed. The grommets are NOT meant to fit into the holes of the posts.

## Caring For Your BackRest:

The BackRest assembly and the mounting hardware are made from high quality stainless steel. While not completely 'rust-proof', they exhibit excellent corrosion resistant qualities. To further protect the finish we recommend a light coating of paste wax or silicone protectant.

Wash the BackRest with a solution of mild detergent and water. Use common sense, so water does not penetrate the seams and saturate the padding of the BackPad. A plastic bag over the BackPad helps prevent this.

While it's OK to leave the BackRest exposed to the elements for short periods, we strongly suggest protecting your investment with a tarpaulin or other covering, or park your bike inside, away from acid rain and UV rays.

Occasionally lubricate the main hinge point of the BackRest, using a lightweight, non-penetrating oil. Do not lubricate other contact points since they rely on friction to hold the angle you've set.

Do not use penetrating agents or solvents since they may attack the thread locking compounds used in assembly. Solvents may also affect the nylon inserts on the locknuts and the nylon spacer on the bottom of the BackRest.

Do not attempt to loosen the small M4 screws that connect the BackRest subassemblies. These are secured at the factory with a permanent thread-locking compound. In the unlikely event they come loose, retighten them, using a permanent thread compound.

The finish on the BestRest is obtained with a random orbit sander and 150 grit aluminum oxide abrasives. You can touchup your BackRest with fine sandpaper or ScotchBrite pads. **DO NOT USE STEEL WOOL**, since it will 'infect' the stainless steel surfaces with iron oxides, causing rust to form. If rusting does occur, sand the affected areas gently to remove any rust spots, then apply a coat of wax, silicone, or other quality protectant.

## **Safety Inspections and Consumer Warnings**

Do not proceed with 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 of the instructions and understand how these products work and what limitations, if any, they may have. **Failure to read and follow these instructions could result in serious bodily injury or death!**

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 System for signs of missing parts, excessive wear, metal fatigue, or imminent failure. Should any of these be observed the BestRest System should be removed from the motorcycle and not used until inspected and repaired by BestRest Products.

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. The Consumer agrees to follow and abide by any and all instructions, recommendations, warnings, or other information supplied or published by BestRest Products, LLC.

BestRest Products, LLC, its employees, agents, and owners assume no liability of any kind whatsoever for property damage, personal injury or other losses resulting from the Consumer's failure to properly install or maintain these products, for unauthorized modifications of any kind, for use of unauthorized parts (including bushings, screws, pins, or other fasteners), or for misuse 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 items installed contrary to the latest published instructions, that are improperly secured or maintained, that are improperly tightened or otherwise secured, or which are otherwise improperly fitted to the motorcycle.

Only authorized BestRest replacement parts (assemblies, screws, fasteners or fittings) shall be used when mounting or installing any BestRest products. Authorized replacement parts may be purchased only from BestRest Products. Parts from other sources or vendors are not covered under warranty

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