



HAPPY-TRAIL.COM

Dual Sport & Adventure Touring Specialists

Thank you for purchasing Happy Trails products. Our products are proudly hand made in Boise Idaho, USA. If you have any questions or concerns about the installation of this product, please contact us directly at 1-800-444-8770 or e-mail installation@happy-trail.com.

Before you begin, place the bike on a hard level surface where you have room to work. Lay out the parts included in this kit and compare to the parts list on the final pages of these instructions. If any parts or hardware are missing, contact us immediately at the number or email listed above.

Step 1

Place the large rubber mat on the inside of the skid plate as shown in Fig 1. Align the holes in the rubber mat with the front holes in the skid plate.

The skid plate is shown fully assembled to aid in installation.

Set the skid plate aside while the brackets are installed on the motorcycle.

Note it was discovered that the top rear brackets in Fig 1 photo are reversed. See text in Step 5 for accurate placement of small vs large brackets.

Step 2

Remove the stock skid plate if one is currently installed. If it has been installed, removed the bracket shown in Fig 2. Set the bracket aside. Keep the bolt and nut for step 3.

If the bolt is not included, use the M1090C bolt included with the Happy Trails bolt kit, including the M10N nut and the two 10MM flat washers.

Step 3

Install the front skid plate bracket re-using the bolt from Step 2 and tighten to 33 ft/lbs. Slide two threaded "speed clips" over the edge of the clamp and into the holes as shown in Fig 3.

Fig1



Fig 2



Fig 3



Step 4

Clip the small nylon bushing on the frame tube behind each cylinder head as shown in Step 4. Slide the U clamp on over the back side of the nylon bushing on each side of the motorcycle. See Fig 4.

Fig4



Step 5

Rotate the U clamp from Fig 4 downward. Attach one of the L brackets as shown. Please note there are left and right brackets included with the kit. **The larger bracket is the left side, and the smaller bracket is the right side.** The bracket should be aligned with two slotted holes at the top facing forward, and one long slot facing downward as shown in Fig 5.

Fig 5



Place an M6 Lock Washer onto the M616C bolts, place an M6 flat washer on the bolts, then slide the bolts through the slot in the L bracket and thread into the U clamp installed in Step 4. Do not tighten yet.

Step 6

Loosely bolt the mounting tab to the long slotted hole on the L bracket in Fig 5. Bolt it in place using two M616S bolts, 4 M6 flat washers and two M6N nuts. Do not tighten this bracket completely.

Fig 6

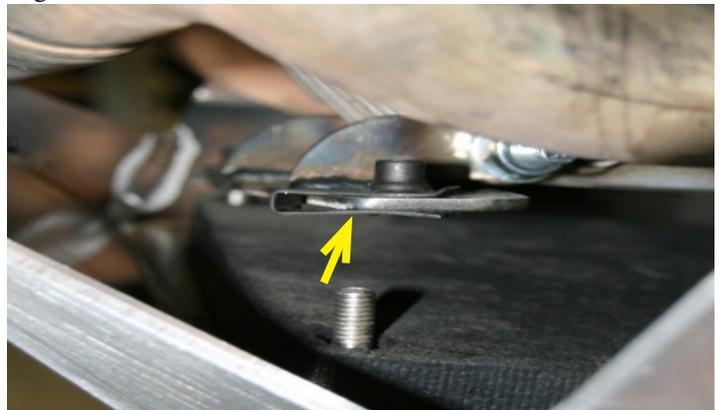


Repeat steps 4-6 on both sides of the bike.

Step 7

Slide the M840T bolts up through the bottom of the skid plate and rubber mat and into the speed clips on the bracket installed in Step 3. Do not tighten these bolts completely.

Fig 7



Step 7

Bolt the rear of the skid plate on either side in place using an M620S bolt, an M6N nut and two M6 Flatwashers. Align the bottom of the bracket to sit flush with the skid plate as shown in Figure 7. Tighten this bolt, designated by the arrow labeled #1 in Fig 7, to 9 ft/lbs. Repeat this on both sides of the motorcycle.

Next, tighten the upper bolts on the back bracket, designated by the arrows labeled #2 in Fig 7. The bolts should be tightened to 9 ft/lbs.

Step 8

Finally, tighten the remaining bolts. The M840T bolts on the bottom of the skid plate should be tightened enough to allow the M8 Unitorque nuts to be installed on the bolt above the speed clip as shown in Fig 8. Tighten the Unitorque nut until at least one thread of the bolt is visible above the nut. The remaining M6 bolts under the frame mounted L bracket installed in Step 5 should be tightened to 7 ft/lbs.

Congratulations! You've successfully installed your Happy Trails skid plate.

Fig 7

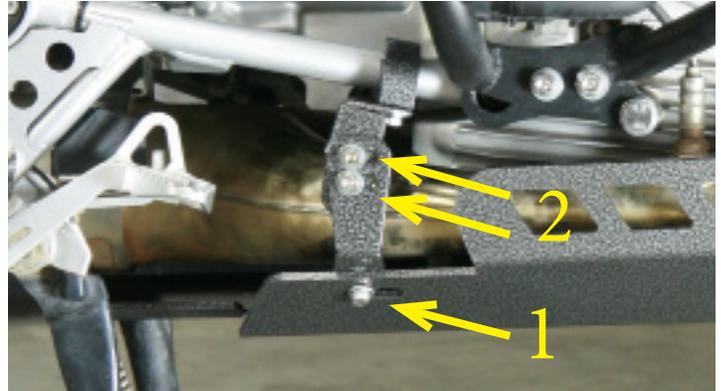
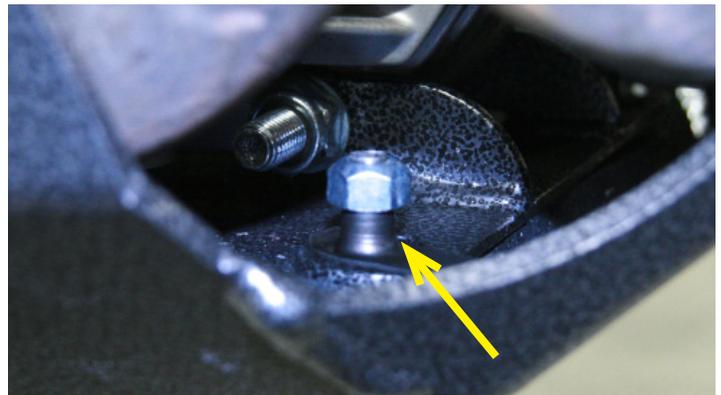
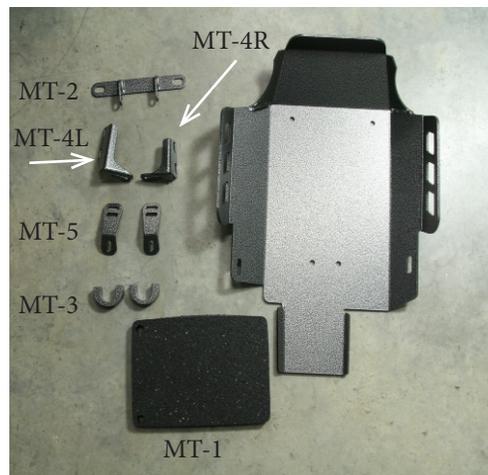


Fig 8



Recommended Tools:

- 5mm Allen (hex) Wrench
- 8mm Allen (hex) Wrench
- 10mm Box End Wrench
- 13mm Box End Wrench
- 17mm Box End Wrench



Hardware List:

- Skid Plate
- Front Mounting Plate (MT-2)
- Left & Right side L brackets (MT-4)
- 2 Mounting tabs (MT-5)
- 2 U clamps (MT-3, 1" inside height)
- 1 Rubber Isolation Pad (MT-1)
- Bolt Kit
- Instructions



BMW R1200GS/GSA Skid Plate

