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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 these instructions. If any parts or hardware are missing, contact us immediately at the number or email listed above.

Step 1

PLEASE NOTE: This skid plate installation requires that you already have either Happy Trails Nerf bars (HTP7-14-5) or the similar OEM crash bars already installed and the Happy Trails V-Strom Aluminum Skid plate (HTP7-5-88) on hand.

The front of the skid plate mounts to the crossover bar or those Nerf bars as shown in Fig 6 and the circle in Fig 1.

Fig 1



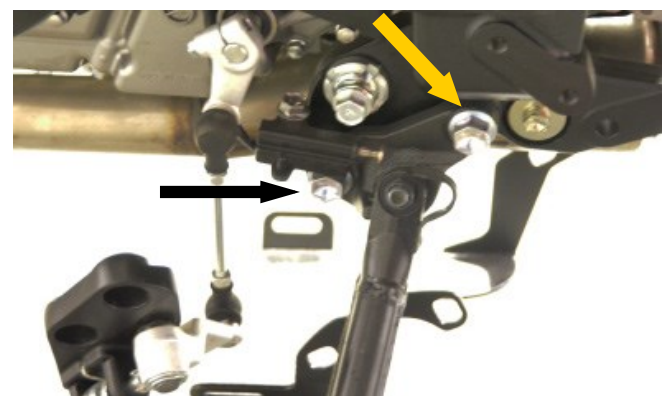
Step 2

Secure the bike using tie downs at the handlebars or some other means so you will be able to remove the side kick stand during skid plate installation.

Remove the right side foot peg assembly to access the side stand bolts. Remove the side stand bolts shown by the Fig 2 arrows. Again, make sure the bike is securely supported by other means before side stand removal.

Note all these bolts will be reused for assembly.

Fig 2



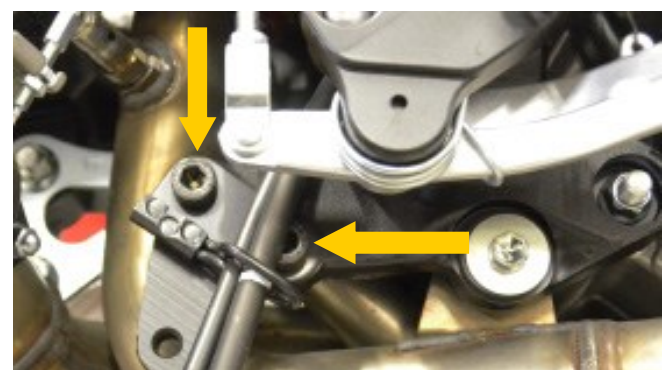
Step 3

On the right side of the bike, remove the hose bracket and two bolts indicated by the arrows in Fig 3.

These two bolt locations will be the mount point for the rear skid plate bracket. Note the skid bracket will go BEHIND the hose bracket during re-installation.

Note these two bolts will be reused. (They still meet the required thread engagement after skid plate bracket installation.)

Fig 3



Step 4

Install the rear skid plate bracket by lining up the holes of the bracket with the 4 holes shown by the arrows in Fig 2 and Fig 3.

Note on the side stand side, the skid bracket goes BETWEEN the frame and side stand assembly removed in Step 1. See arrow in Fig 4.

NOTE: If a center stand is installed on the bike, there may be a gap left between the skid plate bracket and the side stand. If this is the case, use the 10mm flat washers provided in the kit to shim up the gap.

Install the left side using the original side stand bolts. Leave slightly loose until all bolts are installed.

Step 5

Install the right side rear bracket using the same OEM bolts removed in Step 3.

Note we recommend the use of thread locking compound such as Loctite at these bolt locations.

Also note the hose holder bracket goes on the outside of the rear skid plate bracket.

Step 6

Install the front bracket as shown in Fig 6 using the flat plate, plastic bushings, and “U” shaped clamps. Secure using the M116S lock washer, and M6 flat washer at each of the four locations shown in the circle in Fig 6.

Also note that the skid plate attaches to the bottom holes as shown and can be installed either in front of the bracket as shown, or behind depending on best fit and preference.

Step 7

Install the skid plate to the brackets at the two front locations shown in bottom of Fig 6 and the two back locations. See arrow in Fig 7 for right side rear location.

All four locations use the M820B bolt, an M8 flat washer on both inside and outside, and are secured with an M8 nut. Follow this sequence: bolt, washer, skid plate, bracket, washer, nut.

Fig 4

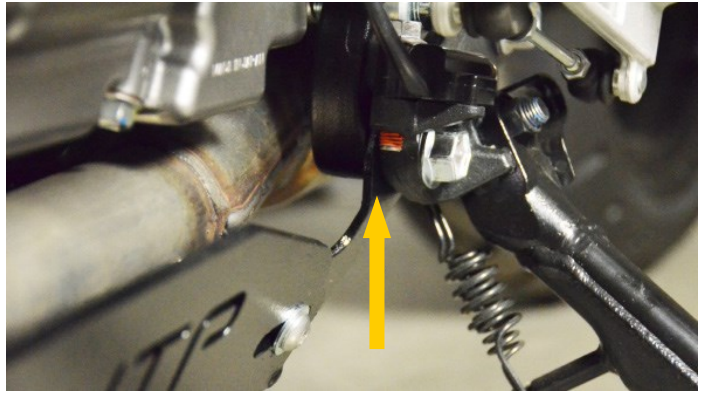


Fig 5

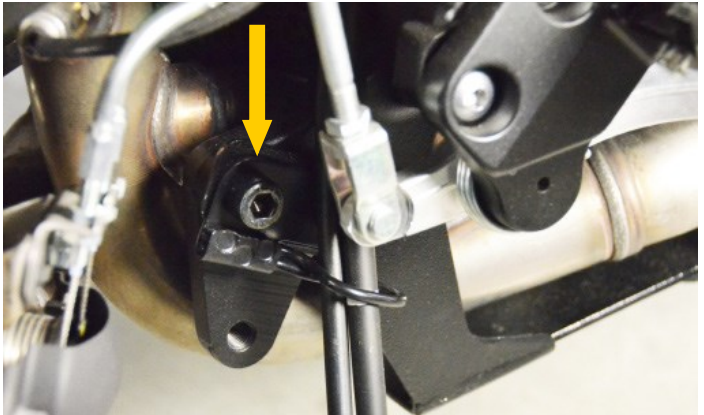


Fig 6

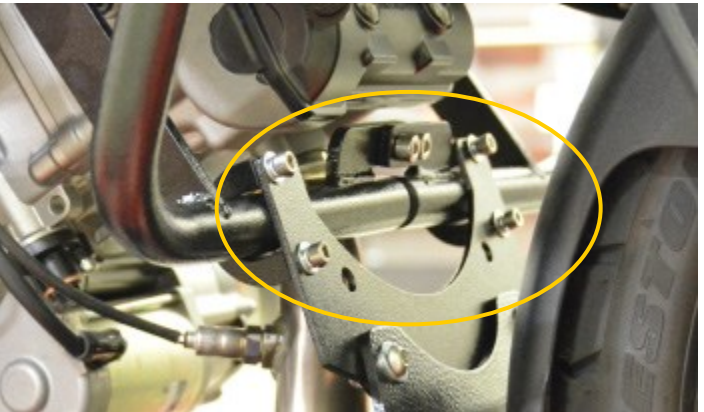
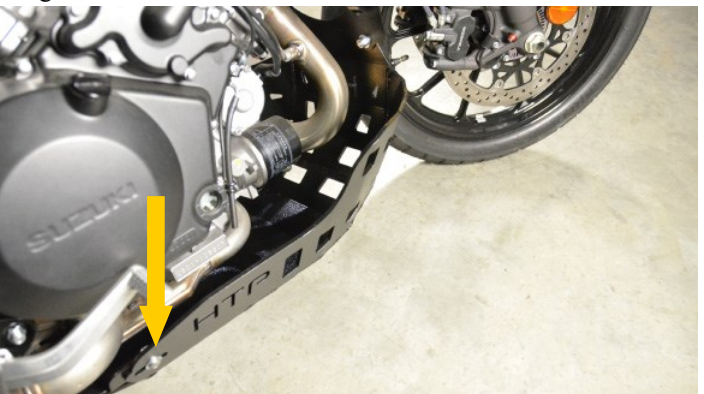


Fig 7



Step 8

Verify there is clearance between exhaust exit and front area of skid plate. There should be about 3/8" at closest point. If not, push the skid plate forward before tightening bolts in step 6 & 7 and/or loosen the Nerf bars and reposition as needed to gain clearance.

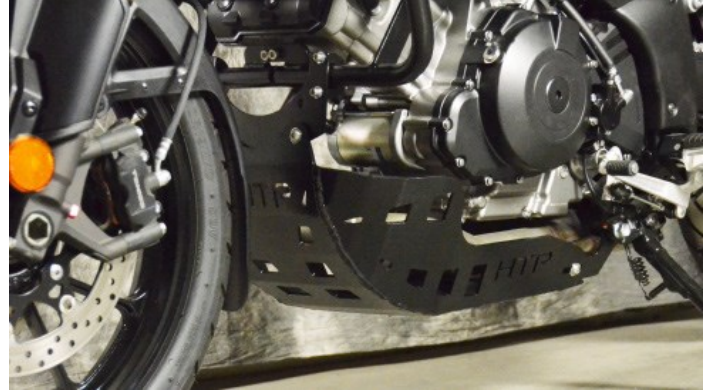
Tighten all the bolts to the following specifications:

M12 bolts: 62 ft/lbs

M10 bolts: 27ft/lbs

M8 bolts: 16ft/lbs

M6 bolts: 6 ft/lbs



You're done! Time to ride!

Note: Skid plate sold separately



Bolt Kit:

- 4 M616S bolts
- 4 M6 Flat washers
- 4 M6 lock washers
- 4 M820B bolts
- 8 M8 Flat washers
- 4 M8 Nylock nuts
- 2 M10 Flat washers

Recommended Tools:

- 8mm Allen (hex) wrench
- 6mm Allen (hex) wrench
- 5mm Allen (hex) wrench
- 17mm socket and ratchet
- 13mm box end wrench
- Torque wrench

Hardware List:

- (1) Rear Bracket
- (1) Front Bracket
- (1) Bolt Kit
- (1) Instructions
- (2) U-clamps
- (2) 1" bushings
- (2) 7/8" bushings

Bushings

