

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

Remove existing OEM engine guard if installed. There are two bolts on each side and two at the front of the engine

Note these two right side and two left side mounting locations will be used for the HT Nerf bars.

Note none of the removed hardware will be reused. Set these spacers and bolts aside so they are not confused with the HT bolt kit.

#### Step 2

Starting with the left side of the motorcycle, locate the two mounting holes from the previous removal step shown in Fig 2.

Fig 1



Fig 2

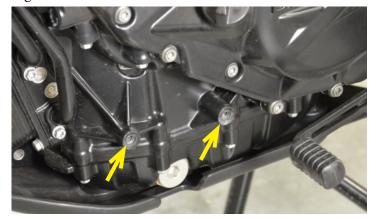
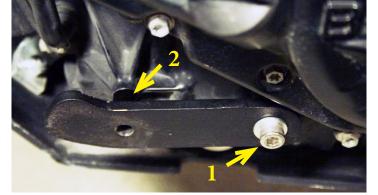


Fig 3



# Step 3

Place the steel bracket (MT2) onto the mounting holes as shown. A 1/2"OD x 5/8"Long aluminum spacer fits between the plate and front mounting point, shown by arrow 2 in Fig 3.

Place an M830S bolt with a M8 flat washer in the rear mounting point as shown on Fig 2, arrow 1. Tighten the bolt just enough to hold the spacer in place, but still slightly loose.

### Step 4

Using a T50 Torx wrench, remove the motor mount bolt behind the plastic plug at the location shown in Fig 4. Insert the 3/4OD x 2 1/8"L black metal spacer in the hole. Place the Left side Nerf bar on the motorcycle and secure at this engine mount location using a M10110C bolt and M10 flat washer.

Secure the bottom mount point to the tab from Step 3 using a M850S bolt and M8 flat washer. Refer to arrow 2 in Fig 3 if needed. Leave bolts slightly loose.

### Step 5

Moving to the right side of the bike, install the MT1 bracket at the lower mount point as shown in Fig 5 placing a 1 1/4" long aluminum spacer behind the bracket at arrow 1 location. Secure using M860S bolt and M8 flat washer.

Set another 1 1/4" aluminum spacer, M860S bolt and M8 flat washer within easy reach for nerf installation at arrow 2 location in Step 7.

# Step 6

Remove the plastic plug (arrow 1) and motor mount bolt similar to Step 4. See Fig 6 for location.

CAUTION: Be sure to catch the thin aluminum spacer (arrow 2) between the frame and engine as you remove this bolt. This spacer will be placed back in this same location in the next step.

# Step 7

Place the 1.4" long black metal spacer in the hole, fit the Right side Nerf bar on the bike, and secure at this motor mount location using a M10110C bolt and M10 flat washer. **Leave slightly loose.** 

#### CAUTION: Be sure to replace spacer from Step 6

Secure the lower mount point placing the 1 1/4" aluminum spacer behind the bracket and securing with an M860S bolt and M8 flat washer. Refer to arrow 2 in Fig 5 for reference. **Leave slightly loose.** 

Fig 4



Fig 5

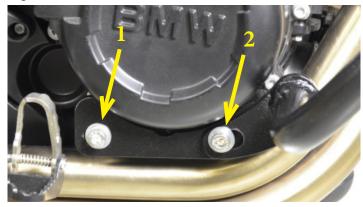


Fig 6

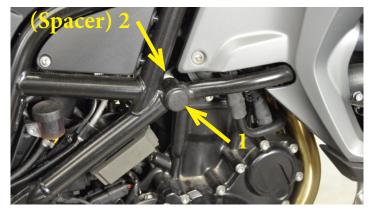


Fig 7



### Step 8

Move to the front of the engine to secure the Nerf cross over supports shown in Fig 8.

Secure using (2) M825S bolts, (2) M8 Nuts, and (4) M8 flat washers.

Note the Right side Nerf cross tab goes IN FRONT of the Left side tab. (The bars should line up.)

# Step 9

Tighten all bolts to the following specifications:

M10 bolts should be tightened to 27 ft/lbs M8 bolts should be tightened to 18 ft/lbs M6 bolts should be tightened to 9 ft/lbs

We recommend tightening engine mount bolts first, lower mount points next, and finally the front crossover tabs last.

### Fig 8

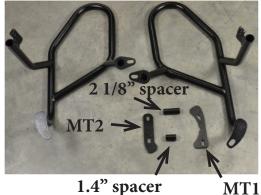


Fig 9



#### **Recommended Tools:**

T50 and T45 Torx Wrench 6mm Allen (hex) Wrench 17mm box end wrench 13mm box end wrench



1.4" spacer

# **Hardware List:**

- (1) Left Nerf Bar
- (1) Right Nerf Bar
- (1) MT1 Bracket
- (1) MT2 Bracket
- (1) 3/4"OD x 2 1/8"L x 1/2"ID Steel Spacer
- (1) 3/4"OD x 1.4"L x 1/2"ID Steel Spacer



11/11/13 Rev. 1 ΙE

