



## HARLEY TRI-GLIDE TRAILER HITCH INSTALLATION INSTRUCTIONS

LAST UPDATED 11/5/2011

Thank you for choosing the Motor Trike trailer hitch for your trike. We ask that you read the directions before you start, and follow them very closely. Doing so will save you time and ensure that you and/or your customer's experience with the trailer hitch is a positive one.

**We strongly suggest that you read the complete instructions before beginning the installation process to eliminate the possibility of performing unnecessary work.**

**If you do not have the proper tools to do this installation, DO NOT ATTEMPT TO PERFORM THE INSTALLATION.**

Having a safe and clean environment and using the proper tools is essential for a successful installation. You must have the ability to secure the motorcycle to prevent the bike from moving or falling during the installation. We strongly recommend the use of a motorcycle lift manufactured by Handy Industries. It allows you to lift the bike to a comfortable work level while maintaining a safe and stable environment. In addition to a lift, we recommend having a front tire clamp and center stand to support the bike under the center section of the frame.

**Failure to secure the vehicle during installation could result in injury up to and including death.**

**It is critical that proper eye wear, ear protection, and protective clothing is worn throughout the installation.**

When you receive your kit, please check to ensure that all parts and hardware are included. If there are any parts missing or if you have any questions concerning the kit, call Motor Trike at 1-800-90TRIKE (800-908-7453) Mon-Fri 8am-5pm CST. Or you can email us at [INFO@MOTORTRIKE.COM](mailto:INFO@MOTORTRIKE.COM)

Motor Trike Inc. reserves the right to change specifications, equipment, or designs at any time without notice and without incurring obligation.

## About the Trailer Hitch Kit:

### Identification:

There are two different trailer hitch kits for the Tri-Glide. Please be sure to order the correct kit based on the year model of the motorcycle receiving the trailer hitch. Use Figure 1 below to identify which kit belongs to which year models.

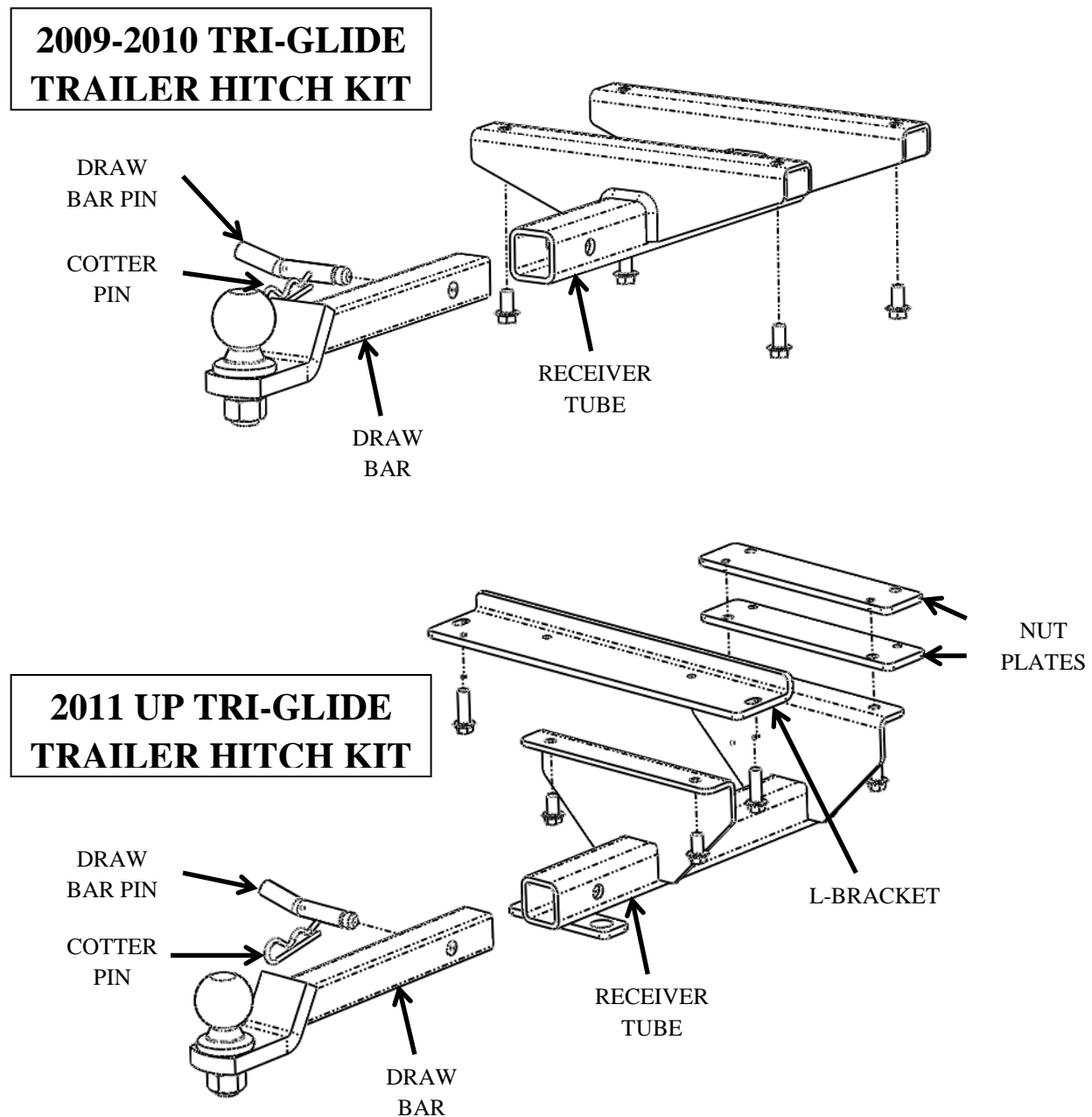


Figure 1: Trailer hitch year models and components.

## **Wiring Trailer Lights:**

Please see our separate installation instructions titled *GLADIATOR, HD FLH, & TRI-GLIDE TRAILER WIRE HARNESS INSTALLATION INSTRUCTIONS*. They can be found on our dealer website located under the "Trailer" section or on our regular retail website under the "Owner's Corner" link. If you have any trouble locating these instructions, please contact Motor Trike customer service for assistance at 1-800-90TRIKE (800-908-7453).

## **Compatibility with Light Bar & Bumper Accessories:**

The Tri-Glide trailer hitch is designed to be compatible with the Motor Trike Tri-Glide light bar as well as the HD Tri-Glide chrome bumper. The trailer hitch may or may not fit with other manufacturers accessories.

## **Installation Procedure 2009 -2010:** See Figure 1.

1. Place the trailer hitch under the trunk in-between the mufflers. Line up the holes in the trailer hitch brackets with the threaded holes in the trike frame. If your Tri-Glide is equipped with a light bar, the light bar shares the same bolt holes. The light bar must be installed in between the trailer hitch and the trike frame. Otherwise, the trailer hitch bolts directly to the trike frame as described above.
2. Apply blue Loctite 242 to the supplied 5/16"-18 coarse thread bolts. Screw the bolts into the trike frame and torque them to 18-20 ft\*lbs.
3. Insert the draw bar into the receiver section of the hitch. Line up the hole in the receiver with the hole in the draw bar. Slide the draw bar pin through the hole and install the cotter pin on the draw bar pin.
4. Install the 3/8"-16 bolt into the threaded hole in the bottom of the receiver tube. Tighten the bolt against the draw bar to prevent the hitch from rattling. **NOTE: THE BOLT UNDER THE RECEIVER IS ONLY INTENDED TO PREVENT THE DRAW BAR FROM RATTLING AND CREATING NOISE. IT IS NOT INTENDED TO SECURE THE DRAW BAR IN THE RECEIVER.**

## **Installation Procedure 2011 Up:**

NOTE: Some 2011 Tri-Glides came equipped with threaded holes in the bottom of the trunk floor frame. Please identify the holes in the frame and determine if they are threaded on your particular installation. Follow the appropriate procedure below based on what you find.

**Frames WITH Threaded Holes:** This installation does NOT require the L-Bracket or nut plates. See Figure 1 above.

1. Place the trailer hitch under the trunk in-between the mufflers. Line up the holes in the trailer hitch brackets with the threaded holes in the trike frame. If your Tri-Glide is equipped with a light bar, the light bar shares the same bolt holes. The light bar must be installed in between the trailer hitch and the trike frame. Otherwise, the trailer hitch bolts directly to the trike frame as described above.
2. Apply blue Loctite 242 to the supplied 5/16"-18 coarse thread bolts. Screw the bolts into the trike frame and torque them to 18-20 ft\*lbs.
3. Insert the draw bar into the receiver section of the hitch. Line up the hole in the receiver with the hole in the draw bar. Slide the draw bar pin through the hole and install the cotter pin on the draw bar pin.
4. Install the 3/8"-16 bolt into the threaded hole in the bottom of the receiver tube. Tighten the bolt against the draw bar to prevent the hitch from rattling. **NOTE: THE BOLT UNDER THE RECEIVER IS ONLY INTENDED TO PREVENT THE DRAW BAR FROM RATTLING AND CREATING NOISE. IT IS NOT INTENDED TO SECURE THE DRAW BAR IN THE RECEIVER.**

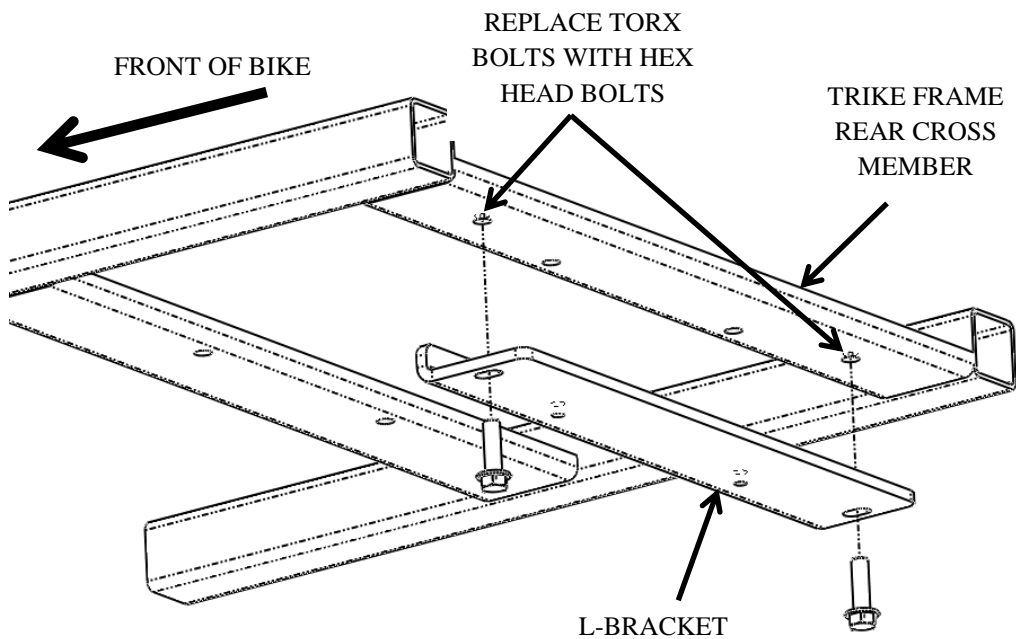
**Frames WITH OUT Threaded Holes:** This installation **does** require the L-bracket and nut plates. See Figure 1 above.

1. Remove the muffler mounting bolts from the back of each muffler. This will loosen the exhaust and allow access to the tamper resistant T-40 Torx bolts located under the trike frame. Remove the two tamper resistant bolts with the appropriate Torx socket. The tamper resistant torx socket can be found at [www.mcmaster.com](http://www.mcmaster.com) 54055A51 if you do not own one or cannot find one locally. See Figure 2 below.



**Figure 2: T-40 tamper resistant torx socket.**

2. Install the L-bracket in the rear cross member of the trike frame. Use the 5/16"-18 coarse thread hex head bolts. Apply blue Loctite 242 to the bolts and torque them to 18-20 ft\*lbs. See Figure 3.



**Figure 3: Installing the L-bracket to the trike frame.**

3. Install one of the two nut plates inside the U-shaped front cross member of the trike frame. The nut plate will slip between the cross member and the trunk floor. Be sure to line up the threaded holes in the nut plate with the through holes in the cross member. This requires you to check the orientation of the nut plate before sliding it into the cross member. See Figure 4 below.

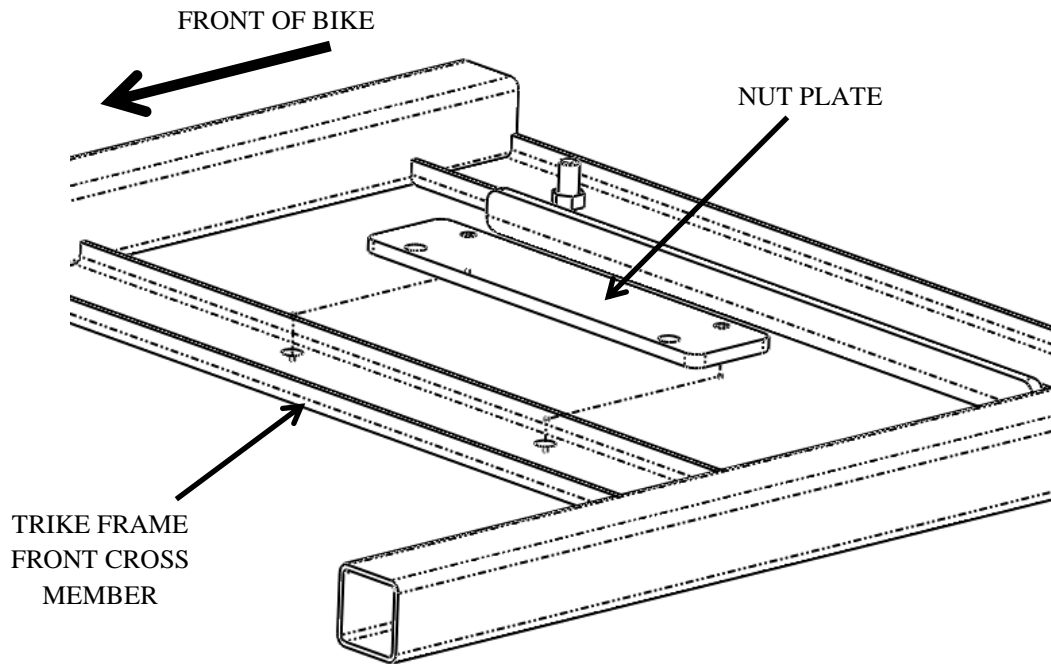


Figure 4: Slip one of the nut plates in the position described

4. Place the trailer hitch under the trunk and in-between the mufflers. Line up the holes in the trailer hitch brackets with the threaded holes in the L-Bracket and nut plate.

Use the second nut plate as a spacer between the trike frame and the front bracket of the trailer hitch. The through holes in the bottom nut plate should line up with the threaded holes in the top nut plate.

If your Tri-Glide is equipped with a light bar, the light bar shares the same bolt holes. The light bar must be installed in between the trailer hitch and bottom nut plate / L-bracket. Otherwise, trailer hitch attaches directly to the L-bracket and nut plates as described above.

Apply blue Loctite 242 to the supplied 5/16"-24 fine thread bolts (see note and table below regarding bolt lengths). Screw the bolts into the L-bracket and nut plate and torque them to 18-20 ft\*lbs. See Figure 5 below.

**Note:** The bolts that screw into the nut plate (5/16-24 x 1 1/4) are the same regardless of installation. The bolts that screw into the L-bracket are specific to the configuration being installed. **Be sure to use the correct bolt length in order to ensure full thread**



engagement. The bolts must fully engage the L-bracket in order to safely attach a light bar or trailer hitch. There must be a 1/4" of thread showing when the bolts are first started in the L-bracket. Failure to follow these instructions may result in damage to the trike, trailer, or injury to the rider(s).

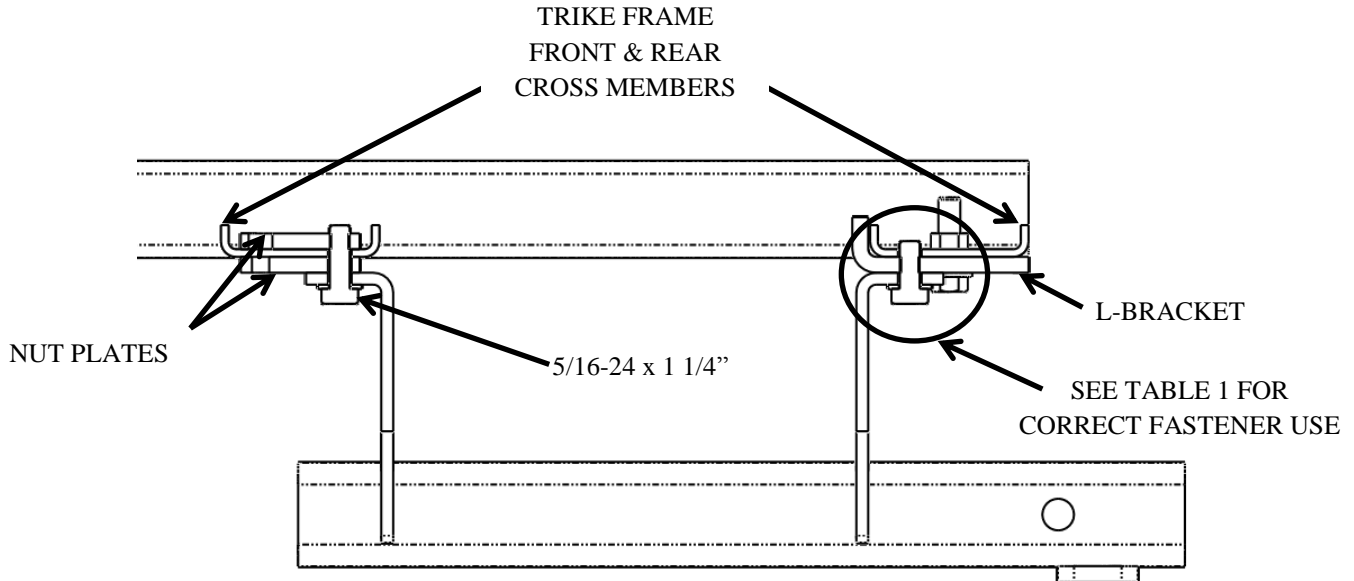


Figure 5: Section view showing nut plate and L-bracket locations.

TRAILER HITCH / LIGHT BAR L-BRACKET FASTENER AND WASHER USE		
CONFIGURATION	BOLT LENGTH	NUMBER OF WASHERS UNDER BOLT HEAD
TRAILER HITCH ONLY	5/16-24 X 5/8	2
LIGHT BAR ONLY	5/16-24 X 1/2"	1
TRAILER HITCH + LIGHT BAR	5/16-24 x 3/4"	2

Table 1: Use the correct fastener for the L bracket.

5. Insert the draw bar into the receiver section of the hitch. Line up the hole in the receiver with the hole in the draw bar. Slide the draw bar pin through the hole and install the cotter pin on the draw bar pin.
6. Install the 3/8"-16 bolt into the threaded hole in the bottom of the receiver tube. Tighten the bolt against the draw bar to prevent the hitch from rattling. **NOTE: THE BOLT UNDER THE RECEIVER IS ONLY INTENDED TO PREVENT THE DRAW BAR FROM RATTLING AND CREATING NOISE. IT IS NOT INTENDED TO SECURE THE DRAW BAR IN THE RECEIVER.**



