

# **InstaTrike**

**By**

Installation Manual

1500cc Honda Goldwing

Limited Warranty

TOW-PAC, INC. warrants to the first end user purchaser that this product "InstaTrike" when purchased will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product for the period of one year from date of original purchase.

This warranty does not apply to tires or to the appearance of any item which has been damaged, defaced, been subjected to misuse, or which has been altered or modified in design or construction.

Neither the sales personnel of the seller nor any other person is authorized to make any warranties other than those described above or to extend the duration of any warranties beyond the time period described above on behalf of TOW-PAC, INC.

## **NOTICE OF LIMITED LIABILITY**

Tow-Pac, Inc. warrants *only* components supplied by Tow-Pac, Inc. Tow-Pac, Inc. cannot be responsible for any components on owners motorcycle including frames, hardware, aftermarket accessories, etc. Owner is solely responsible for ensuring motorcycle is in sound mechanical order. Tow-Pac, Inc cannot be responsible for any damage due to improper installation of Tow-Pac components or use of any hardware (bolts, nuts, etc) on Tow-Pac components not supplied directly by Tow-Pac, Inc. Owner is solely responsible for installation of Tow-Pac components. Please refer to limited warranty for warranty details.

# **Notice**

***After your InstaTrike is installed, take some time to get used to “Trike” handling characteristics.***

- On a Trike you will ***steer*** rather than ***lean*** as you would on a conventional two wheel motorcycle.
- Take corners ***very slowly*** until you get used to the feel of cornering on a Trike.
- Remember to use your front brake in tandem with your rear brake. This will greatly increase your stopping power when in Trike configuration.
- With InstaTrike installed remember the outrigger wheels. Use caution not to run them into objects.
- Keep your feet up at all times.

## **Important Notices**

- Remove all preload (air) from rear suspension of motorcycle after initial installation of

InstaTrike. Readjust preload as desired.

- InstaTrike is designed for use on paved surfaces *only*. Use of InstaTrike on unpaved terrain may void warranty.
- Installation of InstaTrike requires your motorcycle to be level. Some motorcycles are not level when on the center stand. Level the motorcycle by placing spacers under the center stand as needed
- ***When installing trailer hitch attach all bolts and brackets loosely. After all bolts and brackets are in place tighten all bolts.***
- Using the enclosed wooden risers under each InstaTrike wheel may make installation and removal easier particularly if traction kit is installed.

## Installation Checklist

Review entire installation manual

- Loosen saddle bags and remove rear fender cover**
- Modify rear fender cover**
- Install receiver hitch and double check all bolts**
- Remount rear fender and tighten saddle bags**
- Assemble InstaTrike hitch cart**
- Attach InstaTrike to motorcycle via receiver hitch**
- Attach leanstop brace bolts to receiver hitch**
- Align InstaTrike wheels**
- Double check all bolts for tightness**
- Test ride InstaTrike slowly in an open area to familiarize yourself with handling characteristics**

## **Receiver Hitch Installation**

***NOTICE: Install all bolts and brackets loosely until all bolts and brackets are in place***

- 1) Place motorcycle on center stand.

*NOTE: Some Goldwings are not level when on center stand. Shim underneath center stand to level motorcycle.*

- 2) Remove side covers
- 3) Loosen saddle bags and remove rear fender cover.
- 4) Modify rear fender cover. *See diagram*
- 5) Remove muffler bolts. Replace with enclosed muffler bolts. (hex bolt head toward inside with washers on bolt head side) This allows clearance between the hitch and muffler bolt.
- 6) ***Replace existing motorcycle rear crashbar bolts with those provided (2 each side). Ensure new crashbar bolts are securely tightened before attaching brackets A and B.***
- 7) With brackets **A** (left) and **B** (right) attached to bottom of forward arms of hitch, slide hitch under bike and loosely attach **A** and **B** to bottom of rear crash bar with provided U-bolts.  
***Use caution not to crush crash bar with U-bolt***
- 8) Attach top portion of bracket **C** to crossbar on rear sub frame with saddle U-bolts provided. It may be necessary to pry plastic from inner fender up slightly to allow for U-bolt installation.

*NOTE: Bar on top of bracket C must be in direct contact with rear sub frame crossbar. It may be necessary to push a plastic tab from the inner fender in so as to allow direct contact.*

- 9) Attach bottom of bracket **C** to rear of receiver hitch.
- 10) Attach hitch tabs D and E to rear sub frame with U-bolts.  
***Use caution not to crush sub frame with U-bolts.***

- 11) Tighten all bolts

*NOTE: Be certain hitch is centered and square with motorcycle when tightening bolts.*

- 12) Replace rear fender cover and retighten saddle bags.

## **Hitch Diagram**

# Saddle Bag Removal

## INSTALLATION OF THE TOW-PAC HITCH CART.

1. Place your motorcycle on a smooth flat surface, like a garage floor, and rest it on its center stand.
2. Assemble the axles, tires and wheels, and fenders onto the tow-pac hitch cart.
3. Carefully align the tow-pac hitch cart's hitch mount with the receiver hitch on the motorcycle. Now push the hitch mount into the receiver hitch. (this might be a little difficult until you get use to doing it. Removing the paint from the hitch mount and applying a little grease will help.)
4. Place the hitch pin through the receiver hitch and hitch mount (*alignment plate*). Install and tighten the tension bolt.

5. Bolt leanstop braces to hitch. (Bolt inserts from the bottom) Be certain to replace washers/spacers in the same configuration as when you removed them. *see diagram next page*
6. Push the motorcycle off of the center stand and risers if used.
7. Check all bolts for tightness.
8. You are now ready for the test ride.
  - A. Keep your feet up!
  - B. Ride slowly in first gear until you are comfortable with the Tow-Pac system.

## **Wheel Height / Traction Adjuster**

The wheel height/traction adjuster (right and left side) allows you to selectively adjust the position of your trike wheels in order to customize ride, handling, level, and traction characteristics. Your trike is shipped with the adjuster preset to an optimum position for your model of motorcycle however you can make whatever adjustments necessary to customize to your bike and personal preference.

**Shortening** the adjuster arm **raises** the trike wheels and places more of the weight of your motorcycle on the motorcycle wheel. This increases motorcycle traction and gives a generally softer ride.

- 1) Loosen jam nuts
- 2) Shorten adjuster arm by turning adjuster nut **A** toward bolt **C** desired amount.
- 3) Turn adjuster nut **B** until it tightens against adjuster bracket and adjuster nut **A**
- 4) Tighten nuts **A** and **B** and jam nuts

**Lengthening** the adjuster arm **lowers** the trike wheels and places more of the weight of your motorcycle on the trike wheels. This gives a firmer ride and increases handling/cornering.

- 1) Loosen jam nuts
- 2) Lengthen adjuster arm by turning adjuster nut **B** toward bolt **D** desired amount.
- 3) Turn adjuster nut **A** until it tightens against adjuster bracket and adjuster nut **B**
- 4) Tighten nuts **A** and **B** and jam nuts

If necessary the pivot bolt and bolts C and D and be loosened for adjustment  
***Be certain to retighten all bolts after adjustment.***

**NOTICE:** Check all bolts and nuts periodically for tightness  
**NOTICE:** Be sure motorcycle is level after adjustment.

## Leanstop Braces

- When installing InstaTrike, bolt leanstop brace to receiver hitch by inserting bolt from *bottom* through the leanstop brace and washers/spacers. Thread bolt into bracket on hitch and tighten.
- When removing InstaTrike reverse the above procedure.
- Adding or removing washers/spacers between receiver hitch and leanstop brace will allow you to level your motorcycle if necessary and adjust traction/handling.

*Leanstop brace is slotted to allow for proper alignment with bolt holes*

### **NOTICE:**

Be certain that hitch bolts are inserted from the **BOTTOM**

## InstaTrike Assembly Diagram

# Wheel Alignment

*Wheel alignment is critical for proper tire wear and handling.*

With InstaTrike installed and motorcycle on center stand, measure **A** and **B**. Loosen axle plates and align wheel so **A** and **B** are equal to within 1/16<sup>th</sup> of an inch. Tighten axle bolts and torque to 45 pounds. Repeat for **C** and **D**. It may be necessary to shim axle plates for proper alignment.

***NOTE:*** *The measurement of A and B may not be the same as C and D. This is normal and presents no difficulty.*

## Frequently Asked Questions

**Does InstaTrike require any permanent alterations to my motorcycle?**

InstaTrike requires only the one time installation of its heavy duty receiver hitch. This alone does not alter the function or appearance of you motorcycle.

**Can I remove InstaTrike from my motorcycle?**

After the initial one time installation of the heavy duty receiver hitch, InstaTrike can be attached and/or removed in only a few minutes.

**What are the specifications of InstaTrike?**

InstaTrike is 63 inches wide and weighs merely 155 pounds. Its wheels are 8 inches with high speed tires and high speed tapered wheel bearings.

**Does InstaTrike have suspension?**

Yes. InstaTrike has independent torsion axels.

**What is the proper air pressure for my InstaTrike tires?**

45 to 60 pounds.

**Will my saddle bags open with InstaTrike installed?**

Yes. Stock saddle bags will open 100%.

**Can I pull a trailer or camper with InstaTrike?**

InstaTrike comes with a trailer ball and ball mount that can be used with just the motorcycle and receiver hitch or with InstaTrike attached.

**Will InstaTrike affect my gas mileage?**

At merely 155 pounds, InstaTrike will reduce your gas mileage by only 2 to 3 mpg.

**Can I drive my InstaTrike at posted highway speeds?**

Yes.

**Does Tow-Pac, Inc perform InstaTrike installations?**

Tow-Pac, Inc. performs installations at its Aroma Park, IL facility for a fee of \$150. This fee may vary depending upon the number of aftermarket add-ons on the motorcycle.

**Can I install InstaTrike on my motorcycle myself?**

Yes. The only permanent equipment installation on the motorcycle is the heavy duty receiver hitch. InstaTrike comes with a complete installation manual. For questions regarding installation, call 815-936-0923. Installation time varies based upon mechanical ability and aftermarket accessories on motorcycle.

**Can I use any aftermarket receiver hitch for InstaTrike?**

Tow-Pac, Inc. recommends only the use of the provided heavy duty receiver hitch since it is specifically designed to handle both pull and torque. We can make no guarantees as to the safety or stability of InstaTrike if used with any hitch other than the one provided.

**With InstaTrike installed, will my motorcycle lean back and forth?**

InstaTrike will hold your motorcycle in an upright position when installed. Your motorcycle will handle like a three-wheeler.

**Will my motorcycle become stiffer with InstaTrike?**

You can expect the ride of your motorcycle to be about 20% stiffer with InstaTrike. This allows for proper handling in turns and is necessary with any three-wheel kit although InstaTrike is not as stiff as most three-wheelers.

**How long will it take to receive my InstaTrike?**

You should receive your InstaTrike between 5 and 10 working days after order.

**What colors are InstaTrike available in?**

InstaTrike is shipped in standard black only.

**Can I buy options for my InstaTrike?**

Optional wheels, lights, fenders, etc. are usually available at most retailers that sell trailers.



**Periodically check leanstop bolts for tightness. Use enclosed jam nuts on top of bolt to further secure leanstop bolt.**

**Periodically check alignment plate bolt (behind receiver) for tightness as well.**

