

# TerraCycle™ ICE Trike Idler Kit

## Power Side and Return Side Idlers

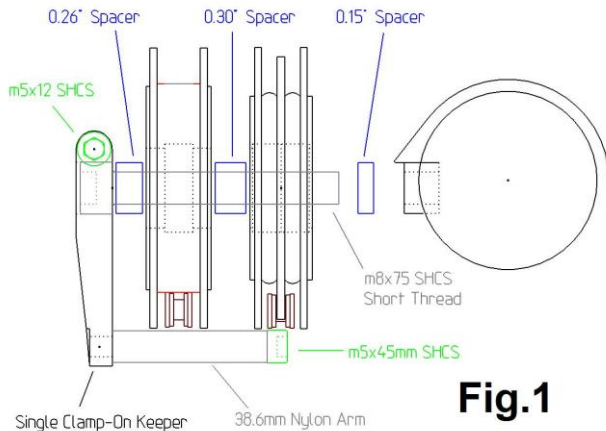
### Installation and Adjustment Instructions

#### Introduction

This kit consists of Power Side Idler, a Return Side Idler, a clamp-on chain keeper, spacers, and a new idler bolt for ICE trikes. This kit is designed to completely replace the existing Power Side idler setup on an ICE trike. We make a different kit that includes a return tube clamp for the return side of the chain for those trikes where a Return Idler isn't feasible (those where the return chainline is very low, and basically straight from the bottom of the chainring to the rear derailleur). We also make additional clamp-on idler kits for controlling the chain further back.

#### Tools Required

You will need 4mm and 6mm Allen wrenches. A short piece of wire, like a long twist tie, is handy also.



**Fig. 1**

#### Installation

Installation involves removing the existing idler and chain tube mount, installing the new idlers, and adjusting the new chainkeeper.

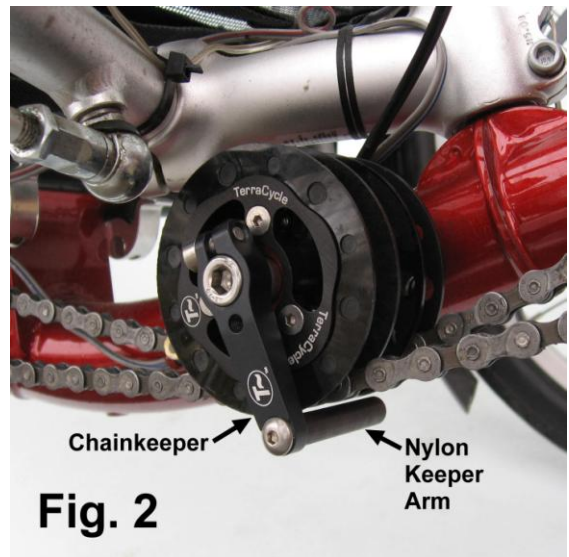
1. **Remove the existing Idler and chaintube/mount under the seat.** Break the chain at the Quick Link if it has one, or use a chain tool to separate the chain and slide it out of the chaintubes.

You will need to allow the chain to slide out of the front derailleur in order to remove it from the power side tubes. We suggest you not allow the chain to slide out of the rear derailleur. To preserve your sanity, we suggest using a short piece of wire to hold the ends of the chain while you work to keep the chain from slithering out of the derailleurs while you're not watching.

Finally, remove the 8mm bolt that the existing idler rides on, and remove the idler and the chain tube mount. Set the old parts aside; none of them will be used in the new setup.

2. **Temporarily remove the chainkeeper from the new idler bolt.** Loosen the 5mm pinch bolt that holds the keeper to the head of the 8mm stainless bolt and slip the keeper off. You will reinstall the keeper after the idler is in place.

3. **Install the new idler** as shown in Fig. 1. The only difference between model years pre 2008 and 2008 onward is whether the 0.15in/4mm spacer is used next to the frame. Note the relative positions of the idlers and spacers on the main idler bolt. With the spacers and the idler on the bolt, insert the bolt into the frame boss and tighten the bolt with the 6mm Allen wrench. **Tighten securely**, to about 60in-lb (6.5N-m).
4. **Reinstall and align the chain keeper.** Set the power and return chains of the chain into their idlers, then slip the chain keeper back onto the head of the idler bolt. Tighten the 5mm pinch bolt slightly, and then rotate the keeper until it is at the apex of the chain. Double check the inside edge alignment, then tighten the pinch bolt until the chainkeeper is secure, about 25in-lbs (2.8N-m).
5. **Reassemble the chain.** Make sure that the chain isn't twisted, and then attach the chain back together.
6. **Check that nothing is rubbing and that the idlers float side to side.** Gently rotate the cranks backwards to make sure the idlers turn smoothly and nothing is rubbing. If the trike is on a stand, turn the cranks forward and check to see that the idler floats side to side as you change gears. If everything looks good, take it for a test ride.



**Fig. 2**

**Notes:** There will be a short break-in time for both the Power Side cog and the Return Idler during which things will quiet down even more as the chain and the idlers get to know each other. Depending on how they are set up, some trikes, like the Q and the Explorer that have fairly low and straight return chains, may need some chain tube or an additional idler between the front idler and the rear derailleur. We make various kits for this also; contact us if you need more information.

That's it! May you ride in peace and quiet for years and years!

