

Tow Pac Trike Kit Installation

Tow Pac Trike Kit Installation: A Comprehensive Guide for a Smooth Conversion

For many motorcycle enthusiasts, the thrill of the open road is unmatched. However, as we age or if we have specific physical limitations, the balance and stability required to ride a two-wheeled motorcycle can become a challenge. This is where the Tow Pac trike kit comes into play. This ingenious conversion kit transforms your standard two-wheeled motorcycle into a stable, three-wheeled trike without the need for a permanent, welded modification. If you have been searching for information on **Tow Pac Trike Kit Installation**, you have come to the right place. This guide will walk you through everything you need to know, from understanding the components to the step-by-step process of getting your trike on the road.

Tow Pac is a leading manufacturer in the motorcycle trike conversion industry, known for its bolt-on design that allows riders to switch between two-wheel and three-wheel configurations. Unlike full trike conversions that require cutting your frame or extensive welding, a Tow Pac kit attaches directly to the swingarm of your motorcycle. This makes the installation process significantly simpler, though it still requires mechanical aptitude and careful attention to detail. Whether you are a seasoned DIY mechanic or you are planning to have a professional handle the work, understanding the installation process will help you make informed decisions and ensure the job is done correctly.

Understanding the Tow Pac Trike Kit System

Before diving into the installation process, it is essential to understand exactly what a Tow Pac kit includes and how it functions. The system is designed to replace your motorcycle's rear wheel with a solid axle assembly that supports two wheels. The primary components are:

- **The Main Frame Assembly:** This is the core structural component that connects to your motorcycle's swingarm. It typically includes a heavy-duty bracket that bolts into place.
- **Axle and Hub Assembly:** This replaces the single rear wheel with a solid axle that holds two wheels. The hubs are fitted with bearings to ensure smooth rotation.
- **Suspension System:** Tow Pac kits come with independent suspension for each rear wheel, which is crucial for maintaining traction and comfort, especially when cornering or riding over uneven surfaces.
- **Brake System:** The kit includes a hydraulic brake system that integrates with your motorcycle's existing front brake master cylinder. This ensures you have stopping power for all three wheels.
- **Fenders and Bodywork:** To finish the look, the kit includes fiberglass or ABS plastic fenders that match the style of your motorcycle.
- **Hardware and Wiring Harness:** All necessary bolts, washers, spacers, and electrical connectors are included, along with a wiring harness for the brake lights and turn signals.

It is important to note that Tow Pac kits are model-specific. They are designed for various makes and models, including Harley-Davidson, Honda, Yamaha, Suzuki, and others. Before purchasing a kit, you must verify compatibility with your specific motorcycle year and model.

Pre-Installation Preparation: Tools and Workspace

A successful **Tow Pac Trike Kit Installation** begins long before you start wrenching. Proper preparation is key to avoiding frustration and ensuring safety. Here is what you need to have ready:

Essential Tools for the Job

Installing a Tow Pac kit requires a standard set of motorcycle mechanic tools, as well as some specialized items. Here is a checklist:

- Full socket set (metric and standard, depending on your bike)
- Torque wrench (inch-pounds and foot-pounds)
- Allen wrenches (hex keys)
- Screwdrivers (flathead and Phillips)
- Pliers and wire cutters
- Jack and sturdy jack stands (capable of lifting the motorcycle securely)
- Brake bleeder kit (or a helper for the brake bleeding process)
- Pry bars and rubber mallet
- Safety glasses and work gloves

Workspace Requirements

You will need a clean, well-lit, and level workspace. A garage floor is ideal. Make sure you have enough room to walk around the motorcycle on all sides. You will also need a means of lifting the motorcycle safely. A motorcycle lift or a heavy-duty scissor jack placed under the frame is suitable. Never rely solely on a single jack or stand; always use secondary supports for safety.

Read the Manual

This cannot be overstated. Every Tow Pac kit comes with a comprehensive installation manual specific to your motorcycle model. Read the entire manual from start to finish before you begin. This will give you a clear overview of the process and help you identify any potential challenges specific to your bike.

Step-by-Step Tow Pac Trike Kit Installation Process

Now, let's walk through the general steps involved in installing a Tow Pac trike kit. Keep in mind that the exact steps may vary slightly depending on your motorcycle model and the specific kit version. Always defer to the manufacturer's instructions.

Step 1: Prepare the Motorcycle

Begin by parking your motorcycle on a level surface and securely lifting it so the rear wheel is off the ground. Remove the rear wheel, the rear fender, the rear brake caliper, and any associated hardware. You will also need to disconnect the rear brake line and the wiring for the tail light and turn signals. Take your time here and label all wires and hoses with tape and a marker for reassembly. This will save you countless hours of confusion later.

Step 2: Install the Main Frame Bracket

The main frame bracket is the heart of the Tow Pac system. It is designed to bolt directly to your motorcycle's swingarm. Clean the swingarm area thoroughly to ensure a good fit. Slide the bracket into place and hand-tighten all bolts. Do not fully torque them yet, as you may need to make small adjustments. The manual will specify the exact torque values for each bolt. Use a torque wrench to achieve the correct specifications, as under or over-tightening can compromise safety.

Step 3: Attach the Axle Assembly

With the main bracket securely in place, you can now attach the axle assembly. This is a heavy component, so you may need an assistant. Slide the axle into the bracket and secure it with the provided hardware. The axle should be level and aligned with the motorcycle's centerline. Some kits include adjustable alignment spacers. Use a measuring tape to ensure the distance from the axle to the swingarm pivot is equal on both sides.

Step 4: Install the Wheels and Tires

Now it is time to install the two rear wheels. Typically, Tow Pac kits use car tires mounted on steel or alloy rims. Slide each wheel onto the axle, ensuring the wheel bearings are properly seated. Install the hub spacers and tighten the axle nuts to the specified torque. Spin the wheels by hand to check for any binding or wobbles. The wheels should rotate freely and smoothly.

Step 5: Mount the Fenders

The fenders not only provide a finished look but also serve a functional purpose by preventing road debris from being thrown up. Install the fender brackets to the main frame or axle assembly, then attach the fender shells. Most Tow Pac fenders are designed to be easily removable for tire changes or maintenance. Make sure the fenders are centered over the wheels and do not rub against the tires.

Step 6: Brake System Integration

This is arguably the most critical safety step. The Tow Pac kit includes a hydraulic brake system that must be integrated with your motorcycle's front brake system. The kit typically provides a new brake line that runs from the front master cylinder to a junction block. From the junction block, lines run to each rear wheel's brake caliper. To install:

- Route the new brake line from the front master cylinder to the junction block. Ensure the line is not kinked or pinched.
- Attach the brake lines to the rear calipers.
- Bleed the entire brake system thoroughly to remove all air bubbles. This is a two-person job or requires a vacuum bleeder kit.
- Check for leaks at all connections and ensure firm brake pressure at the lever.

Remember, the rear brakes will now be activated by the front brake lever. Your original rear brake pedal may be disconnected or may still operate the original rear brake, depending on the kit design. Some kits allow for integrated braking where the pedal operates both brakes.

Step 7: Wiring and Electrical Connections

You will need to connect the wiring for the tail light, brake light, and turn signals that are mounted on the new fenders. Tow Pac provides a plug-and-play wiring harness that is model-specific. Connect the harness to your motorcycle's existing wiring using the connectors provided. If you are not comfortable with electrical work, consult a professional. Bad wiring can lead to lights not functioning, which is a safety hazard and may be illegal.

Step 8: Final Checks and Adjustments

Before taking your trike for a test ride, perform a thorough inspection:

- Torque all bolts to the manufacturer's specifications.
- Check tire pressure.
- Test all lights: headlight, tail light, brake light, and turn signals.
- Pump the brakes to ensure firm pressure.
- Check for any fluid leaks.
- Jounce the rear suspension to ensure proper function.
- Check the alignment of the rear wheels. They should be parallel to the centerline of the motorcycle.

Test Ride and Break-In Period

Once the **Tow Pac Trike Kit Installation** is complete, it is crucial to take a cautious test ride. Find an empty parking lot or quiet street. Start slowly and get a feel for the handling. A trike handles differently from a two-wheeled motorcycle. You will notice that it is more stable at low speeds but requires more effort to steer. Take gentle turns and gradually increase your speed. Listen for any unusual noises from the driveline or suspension.

After the first 50 to 100 miles, retorque all bolts. The initial heat cycles and vibration can cause hardware to loosen. Check the brake fluid level and inspect the tires for any uneven wear. The break-in period is also when you will become familiar with the unique handling characteristics of your converted trike.

Common Installation Challenges and Tips

While Tow Pac kits are designed for straightforward installation, there are a few common challenges that installers face. Being aware of these will help you avoid pitfalls:

- **Alignment Issues:** Getting the rear axle perfectly aligned can be tricky. Use a string or laser alignment tool to ensure the wheels are tracking straight. Misalignment will cause uneven tire wear and poor handling.
- **Brake Bleeding:** Bleeding a trike brake system can be more complex than a standard motorcycle because of the additional calipers and lines. Take your time and use a quality bleeder kit. If the brake lever feels spongy, there is still air in the system.
- **Wiring Confusion:** Motorcycle wiring can vary by model and year. The Tow Pac harness is designed to be model-specific, but if your motorcycle has aftermarket lighting or accessories, you may need to do some custom wiring.
- **Weight Distribution:** Adding a trike kit adds significant weight to the rear of the motorcycle. Be prepared for changes in acceleration and braking distances. Your front suspension may also need adjustment.

If you encounter any issues during installation, do not hesitate to contact Tow Pac's technical support. They have experienced technicians who can guide you through troubleshooting.

Professional Installation vs. DIY

The decision to install a Tow Pac kit yourself or hire a professional depends on your mechanical skill level and available time. For experienced motorcycle mechanics, the DIY route can be rewarding and cost-saving. However, for those who are less experienced, professional installation is highly recommended. A certified motorcycle shop will have the tools, experience, and knowledge to perform the installation safely and correctly. The cost of professional installation varies, but it is a worthwhile investment for peace of mind and safety.

If you choose the DIY route, connect with online forums and communities dedicated to Tow Pac owners. These groups are invaluable resources where you can ask questions, share tips, and learn from others who have completed the same project.

Maintenance After Installation

Once your trike is on the road, ongoing maintenance is essential. The good news is that maintenance is straightforward. Regularly inspect the bolts for tightness, especially during the first few rides. Check the wheel bearings for play and repack them annually. The brake system should