# Pulleyrotor<sub>tm</sub> Assembly Sheet

### **Pulley Rotor Assembly contains:**

- 1 Pulleyrotor<sub>tm</sub>
- 1 wide caliper (assembled)
- 1 caliper mounting bracket with 5H Bolt
- 2 axle spacers
- 2 heim joints, male and female (assembled but may need adjustment)
- 1 weld on brake stay bracket
- 1 5/16 x 18 x 1.0 chrome allen bolt
- 1 5/16 x 18 x 1 1/4 zinc allen bolt
- 3 5/16 washers
- 1 plated lock nut

## Pre Assembly for Fitment purposes - do not use loctite until Final Assembly

- 1. Bolt Pulleyrotor<sub>tm</sub> to wheel using 5 x 7/16 x 14 x 1.5 allen bolts.
- 2. Install left and right spacers into wheel and then install wheel assembly into frame/swing arm.
  - (left spacer measures 2.192" and right spacer measures 1.750"; 240-250 tire fitment left spacer 1.778 and right spacer 1.750)

#### Note.

- -If spacer is to **long** measure the additional amount and trim the drive side spacer *only* by that amount.
- -If spacer is to **short** and able to move from side to side measure the gap and make 1 or 2 spacers depending on measurements or if the wheel is not centered properly.
- 3. Once the wheel is centered remove wheel from frame/swing arm and install caliper bracket onto drive side spacer. Reinstall into frame/swing arm with drive belt on Pulleyrotor<sub>tm</sub>.
- 4. Align wheel in frame/swing arm with axle adjusters and tighten axle.
- 5. Install brake caliper onto brake bracket using the two (2) 3/8 x 16 x 3/4 chrome allen bolts.
- 6. Mount heim joint to brake bracket (use the mounting hole closest to the front of the bike) using the 5/16 x 18 x 1.25 zinc allen bolt.
- 7. Mount the brake stay weld tab using to other end of heim joint using the 5/16 x 18 x 1.00 allen bolt and nut.
- 8. Position brake stay weld tab to the bottom tube of frame/swing arm. At this point it is necessary for you to look at the clearance between the belt and brake caliper. Caliper needs to be moved far enough back that the belt will not rub caliper during operation.
- 9. Mark where brake stay weld tab will need to be welded to frame. (It should roughly be 3 to 3.5 inches from center of axle to center of hole on brake stay bracket.)
- 10. Remove wheel and Pulleyrotor<sub>tm</sub> from frame/swing arm.
- 11. Weld bracket to frame/swing arm at previously marked position. (we strongly recommend welding both sides of the bracket)
- 12. At this point it will be necessary to fabricate the rear brake line for your particular application. Use caution when routing new brake line to ensure that it does not get caught in any moving parts when in operation (i.e.. swing arm movement or rear wheel rotation)

#### - continuation

13. Bleeding the brake. Since the caliper is on the bottom it will be necessary to bleed the caliper with the wheel off the bike. Put complete wheel or just the Pulleyrotor<sub>tm</sub> next to frame/swing arm. Slide caliper on top of Pulleyrotor<sub>tm</sub> so that bleed screw is at the highest point. Now you can bleed brake caliper just like a regular caliper (refer to brake caliper install and bleeding procedures). Always make sure master cylinder is full of fluid at all times. Once caliper is properly and fully bled check for leaks at all connections on brake line and ensure brake light operates properly.

## Final Assembly:

- 14. Install Pulleyrotor<sub>tm</sub> with the 5-7/16 allen bolts (not included), apply red loctite to bolts and torque to 45 lb. Install brake bracket onto drive side spacer. Now install spacers into wheel and install wheel assembly into frame/swing arm.
- 15. Install brake caliper onto brake bracket using the 3/8 x 16 x 3/4 allen bolts. Apply red loctite to bolts and torque to 18 to 20 lb. Attach one end of heim joint to brake stay bracket using the 5/16 x 18 x 1.25 allen bolt and Nylon Nut. Attach other end of heim joint to brake caliper bracket using the 5/16 x 18 x 1.0 allen bolt. Apply red loctite and torque to 15 to 18 lb..
- 16. Adjust belt tension and torque axle to manufacturer specifications.
- 17. Double check distances between belt and brake caliper for proper clearance. If needed adjust heim joint and then tighten lock nut.
- 18. Now spin wheel and depress the brake pedal do this several times. The last time you do this hold pressure on brake pedal and lock down the set screw on caliper mounting bracket. Torque set screw to 4 6 lb. This step ensures good brake and brake pad life.

### --- Installation is now complete.

\*\*\* It is recommended to check all bolts at 100 miles, 500 miles and again at every 1000 miles.





