## Installation Instructions for the Hawg Halters 4 & 6 Piston Calipers 2000-up H-D models only

## WARNING – BRAKE PERFORMANCE IS A CRITICAL SAFETY ITEM. BRAKE SYSTEMS SHOULD BE INSTALLED BY A QUALIFIED SERVICE TECHNICIAN ONLY!!!!

The master cylinder needs to be the correct size bore diameter for 100% braking efficiency.

ALL HAWG HALTERS CALIPER FRONT SINGLE DISC APPLICATIONS REQUIRE A 9/16" or 5/8" BORE MASTER CYLINDER.

ALL HAWG HALTERS CALIPER FRONT DUAL DISC APPLICATIONS REQUIRE THE FACTORY 11/16" BORE (1984 & LATER) OR 3/4" BORE HANDLEBAR MASTER CYLINDER.

- Make sure bike is secure and will not fall over.
- 2. Break loose the banjo bolt on caliper but leave attached so fluid won't leak out.
- Loosen and remove the two allen head bolts that attach the o.e.m. caliper to the mounting bracket.
- 4. Now carefully remove the caliper from the disc and let hang out of the way.
- 5. Take your HAWG HALTERS caliper out of the box along with the hardware package. This package should contain two copper crush washers, banjo bolt, stainless steel shims, two chrome plated aluminum spacers and two 10 mm chrome socket head cap screws with washers.
- 6. Using the two 10 mm chrome socket head cap screws with flat washers, attach the caliper to the fork leg. Place the aluminum spacers between the fork leg and caliper. Snug the two screws so the caliper is firmly mounted. Now check alignment of the centerline of the caliper to the centerline of the rotor. This can best be achieved by sighting down the caliper where the two halves are joined together relative to the rotor.
- 7. The caliper kit includes two each stainless steel shims in the following thickness-.010, .016, .032 & .060. These shims go on the mounting bolts between the fork leg and the mounting ears on the caliper. You are to use whatever amount of shims needed to center the caliper on the rotor. This step is very important!!!! Be sure to check for adequate clearance between the rotor and lower caliper mounting screw. If the screw contacts the rotor, remove it and use the shims supplied as washers underneath the screw head. The wheel should turn freely at this point. Once proper alignment is accomplished, snug one screw and remove the other so you can apply blue Loctite to the threads. Repeat this procedure for the other screw. At this point it is recommended the caliper be positioned to allow for maximum clearance between rotor and pad retaining bolt by pulling the caliper in a rotational motion away from the rotor. This also takes up any bolt hole clearance that may exist in the direction of braking force. Once completed, tighten the screws to 25 ft-lbs of torque.

- 8. Remove the brake line from the o.e.m. caliper. It is recommended you fill the caliper completely with DOT 5 brake fluid at this point to aid in bleeding the brakes. The EZ bleeder works well to inject fluid into the caliper thru the banjo bolt hole. Make sure the bleeder screws are loose. Once the caliper is full, tighten the bleeder screws. With the new banjo bolt and two new copper crush washers supplied with your caliper, slide one of the crush washers onto the banjo bolt and then slide the bolt through the banjo fitting and slide the other crush washer onto the bolt. Screw the bolt into the caliper housing but do not tighten until after you have bled the air from this point. Torque the banjo bolt to 20ft/lbs. Check for leaks at this location once the system is fully bled.
- 9. If the brake pads were removed prior to caliper installation, reinstall them now making sure the friction material is against the disc rotor and the metal backing plate is towards the pistons. Reinstall the pad retaining bolt & stainless steel e-clip on shaft to hold the shaft in place. (NOTE: MAKE SURE E-CLIP IS REINSTALLED PROPERLY) When fitting pads, do not contaminate friction surfaces with fluids, oils or grease.
- 10. Now, bleed all the air out of your brake system. Start with the lower bleeder screw and finish with the upper. If there is any air left in the system you will not have 100% braking efficiency. Helpful Hint: When bleeding the front caliper, make sure the handlebar master cylinder is level and a minimum of 3/4 full.
- 11. Check your lines and fittings for leaks and correct if necessary.

## **Additional Information-**

Observe manufacturers specifications for minimum rotor thickness. BRAKE PERFORMANCE will be SEVERELY REDUCED by using new pads on scored or distorted rotors. Test ride bike carefully after fitting new calipers and pads to acquaint yourself with brake performance. Friction levels (stopping power) will be more aggressive as compared to the o.e.m. calipers & pads, and the rider needs to familiarize him or herself with stopping distances & brake lever pressures needed to stop safely in both dry & wet conditions after fitting new calipers & pads.

## **BREAK IN / BED IN TIMES-**

Pads need up to 250 miles of regular urban use where the brakes are used frequently (not highway cruising) to allow pads to mate with worn (or new) rotors. During this time brake performance WILL BE LESS EFFECTIVE especially if rotors are scored or distorted. Ride motorcycle carefully in low traffic areas at lower speeds during bed in period until 90% contact area is achieved between pads and rotors. If you are replacing calipers and/or pads for another person be sure to warn the rider of this potential hazard. A quick and effective way to bed in the pads is to make several acceleration/deceleration passes and then allow them to cool.

All HAWG HALTERS calipers are guaranteed to be free from defects in material and workmanship for a period of one year from the date of purchase.

If you have any questions call:

**TOLL FREE 1-877-HHALTER (442-5837)** 

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