# V-Twin Mfg. GMA 10" REAR BRAKE CALIPER KIT Fits 1973-1980 FX,FL VT No. 23-4501

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.

## **BRAKE LINE RECOMMENDATIONS**

Always use correct fittings. The caliper inlet is drilled 1/8 NPT thread. DO NOT confuse this with the stock brake line threads. A fitting is provided to use -3 size stainless steel brake line. Adapters are available to convert the master cylinder outlet from 3/8 x 24 inverted flare to JIC female hose ends.

To fit caliper to existing brake line buy a brass adapter. You'll need to buy a 3/16" inverted flare female to 1/8" NPT (1/8" male pipe)

If you purchased one of the following gma calipers (200f, 201st. 202st or 103sa) the fittings will not be included as they are tapped to use the stock HD banjo style inlet fittings.

# **MASTER CYLINDERS AND GMA BRAKE CALIPERS:**

- Do not use the old fluid in your master cylinder. Take a few minutes and install a rebuild kit in your master cylinder.
  The master cylinder brake line fittings and caliper work together as a system to provide you with sufficient force to
  STOP! All components that make up your system need to be in the best of working order to give you the saftey and
  performance you deserve GMA has master cylinders available for the best possible performance with your GMA
  brake caliper.
- Most problems with disc brake systems are:
  - 1. Not all air was bleed from the system
  - 2. Master cylinders are not in good working order.
  - 3. Rotors have been over heated and have excessive run out.
  - 4. Insufficient free play in pedal travel, causing brake pads to drag and overheat.

## **BLEEDING INSTRUCTIONS:**

- 1. Use standard brake bleeding procedure when bleeding the system. We recommend DOT 5 silicone motor vehicle brake fluid. Drain and flush old system before adding DOT 5 fluid.
- 2. A simple procedure is to unbolt caliper from the bracket and bleed the system with the bleeder outlet straight up in the 12 o"clock position. This method allows the air to escape easily. Place a block or a 9/16 open end wrench between the pads to hold the pistons. We also recommend back filling the system.
- 3. Use a clean pump style oil can and a small piece of hose to pump brake fluid through the bleeder into the caliper until fluid begins to fill the master cylinder.
- 4. Finally top off the master cylinder with fluid and begin to bleed all the air out of the system.

**NOTE:** The person pumping the pedal should use slow but firm pedal movements. TAKE YOUR TIME AT THIS POINT and be sure to get ALL the air out of the system. Due to higher leverage, high performance disc brakes have a slightly softer pedal feel.

#### **CALIPER ASSEMBLY AND PISTON POSITION**

- Use an automotive brake assembly fluid anytime you reassemble the pistons and internal o-rings. The assembly
  fluid works well and makes the brake system function properly. The fluid may be purchased at any Auto Parts store
  under a variety of brand names. WAGNER or NAPA carry this also under there own brand names. This fluid
  should also be used when installing master cylinder rebuild kits.
- 2. When installing the caliper on the rotor check the piston on each side of the rotor.

**NOTE:** It is very important that the pistons protrude from the piston bore evenly on both sides.