INSTALLATION PROCESS:

FK003D901-2 Front 2-Line Kit

2001-2004 BMW R1100S non-ABS with BMW Calipers



Parts List:

2 lines 2 single banjo bolts

1 double banjo bolt 9 washers (7 will be used, 2 will be spares)

1 clip

We strongly suggest having a professional mechanic install your brake lines, all other installs may void your warranty. *Be sure to read through the instructions first before installing the Galfer lines*.

Step 1:

To ensure there is no paint damage from the brake fluid, completely cover the front and rear end of the bike. Installing brake lines can be a messy process, and brake fluid *WILL* spill!

Step 2:

Bleed and dry out the OEM brake system. Take note of how the stock system was routed in case you need to reinstall the hoses, you may want to take pictures to use for reference. Uninstall the front OEM hoses.

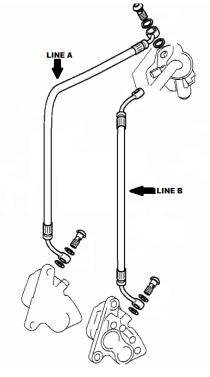
NOTE:

Galfer stainless steel banjos and bolts are to be torqued between 15 – 17 ft pounds.

Galfer aluminum alloy banjos and bolts are to be torqued between 12-15 ft pounds.

Step 3:

Familiarize yourself with the new Galfer brake lines. The left line will be about 1" longer than the right. Identify which ends of the <u>Left & Right Lines</u> to install to the front master cylinder. Install them using a double banjo bolt and three (3) washers, the sequence will be as follows; master cylinder, washer, left banjo fitting, washer, right banjo fitting, washer, double banjo bolt. Route both lines down in front of the lower triple clamp and install using the provided clip.



Step 4:

Route the lines behind the fork legs and attach the banjos to the calipers using 2 crush washers and a single bolt on each side.

Step 5:

Before you begin the next step, please check the clearance of your new lines. When the front and rear ends are fully extended or compressed, make sure the lines do not bind with anything. Be sure to triple check that the lines

are traveling correctly and are clear from any obstructions.

Step 6:

Bleed your brake system according to the owner's manual. Add Galfer DOT-4 brake fluid to the system and build appropriate pressure.

Step 7:

Once you have bled the system, please check the brake fluid level in your master cylinder. Top off your brake fluid according to your manual and close the brake fluid reservoir. To ensure there are no leaks or other issues, zip-tie the brake lever to the throttle for at least 2 hours, for the rear; use a jug or something similar to apply pressure to your brake pedal. If the lines are not leaking and all else looks good, (bolts are tight and torqued down to specification, washers are in place, and lines are clear from obstruction) you are now ready to ride with the new brake system.

Please be aware that the overall braking feel has been changed dramatically. We suggest taking it easy while you get used to the new brake lever pressure and feel. We recommend checking your brake system periodically; be sure to check that your bolts are tight and *VERY* carefully check your lines for any leaks or damage. If there are any signs of damage or stress to the lines, the complete brake line kit will need to be replaced. Remember, our brake lines have a LIFETIME WARRANTY! If you have any problems or questions, do not hesitate to call our tech department - **(800) 685-6633**.

*Please note that although Galfer fittings come pre-positioned from the factory for easy installation, differences in bike setup, bar position, control angle, etc. may require the banjos to be rotated slightly. All Galfer fittings are what we refer to as turn-to-fit and can be rotated to alleviate twist or tension in the lines. To do so, firmly hold the crimped portion of the line; insert a wood dowel, brass punch, or pen into the banjo, and rotate as shown in the diagram below. Just be sure to only apply rotational force and NEVER pry on the connection. If you have any questions, please contact our tech department before attempting this procedure.

