#### INSTALLATION PROCESS: A Basic Installation of FK003D163-5 Complete 1992-2001 BMW R1100 RS ABS

Torque specifications Stainless steel 15-17 ft. lbs Aluminum 12-15 ft. lbs



## Step 1:

Identify the key components that complete our brake line kit:

You should have five (5) brake lines, eight (8) single banjo bolts and one (1) olive inversor. We have also included a total of twenty (21) washers; seventeen (17) will be used, and three (3) will be spares. We strongly suggest having a professional mechanic install your brake lines, all other installs may void your warranty.

## Step 2:

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

# Step 3:

After bleeding and drying out the OEM brake system, uninstall your front stock hoses. Take note of how the stock system was routed in case you need to re-install the hoses.

### Step 4:

Familiarize yourself with the new Galfer brake lines; notice there is a right (**C**) and left (**D**) line, this is as if you are sitting on the bike, a top (**B**) line, a master cylinder (**A**) line and a rear (**E**) line. Install the master cylinder line to the front master cylinder using a single banjo bolt and two (2) washers, the sequence will be as follows; master cylinder, washer, banjo fitting, washer, single banjo bolt. Route the master cylinder line down towards the lower triple tree and install it to the top mounting point of the distribution piece using one (1) washer, the sequence will be as follows; distribution piece, washer, line fitting (**see line A.**)

### Step 5:

Install the top line (**B**) to the bottom mounting point of the distribution piece using a single banjo bolt and two (2) washers. Continue down through the stock line holder and to the top of the 3-way distribution piece; install the line using a single banjo bolt and two (2) washers. Install the right (**C**) line to the bottom right mounting point on the 3-way distribution piece using a single banjo bolt and two (2) washers, the sequence will be as follows; 3-way distribution piece, washer, banjo fitting, washer, single banjo bolt. Continue to route the line down to the right caliper; install the line using a single banjo bolt. Install the left (**D**) line to the bottom left mounting point on the 3-way distribution piece using a single banjo bolt. Install the left (**D**) line to the bottom left mounting point on the 3-way distribution piece using a single banjo bolt and two (2) washers, the sequence will be as follows; caliper, washer, banjo fitting, washer, single banjo bolt. Install the left (**D**) line to the bottom left mounting point on the 3-way distribution piece using a single banjo bolt and two (2) washers, the sequence will be the same as before. Continue to route the line down to the left caliper and install the line using the same hardware and sequence as before (**see lines B, C & D.**)

# Step 6:

Install the rear (E) line to the OEM hard tubing using the provided olive inversor, the sequence will be as follows; OEM tubing, olive inversor, 10x1.0 female line fitting. Route the line down the swing arm, through the stock guide bracket and to the rear caliper. Install this line using a single banjo bolt and two (2) washers, the sequence will be as follows; caliper, washer, banjo fitting, washer, banjo bolt (see line E.)

### Step 7:

Before you begin the next step, please check the clearance of your new lines. When the front end is 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.

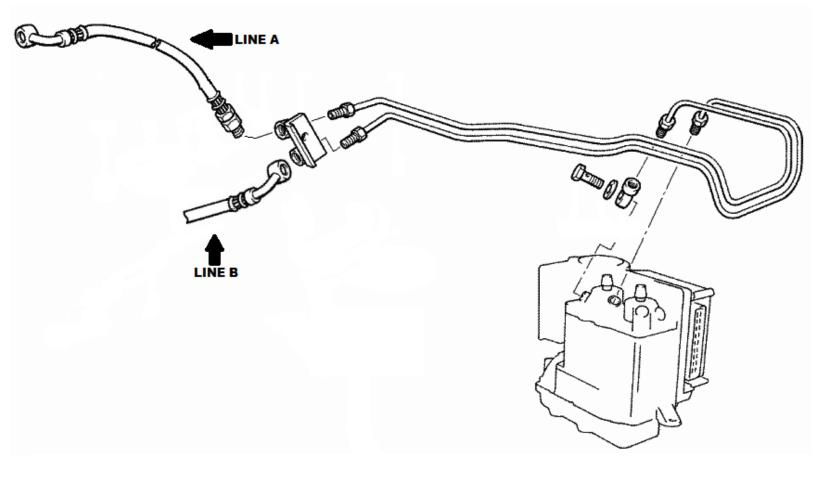
### Step 8:

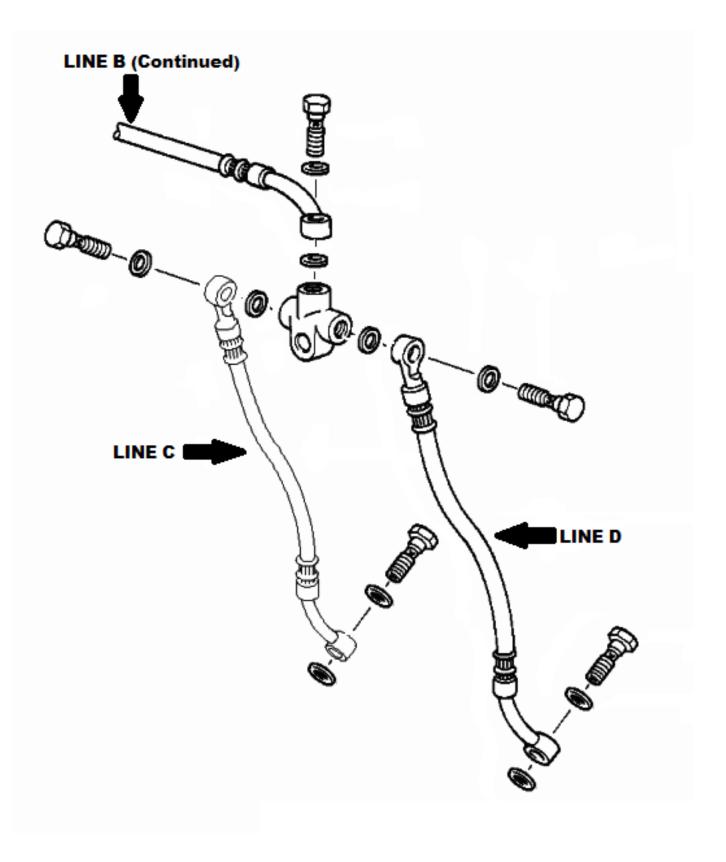
Bleed your brake system according to the owner's manual. Add Galfer DOT-4 brake fluid to the system and build appropriate pressure.

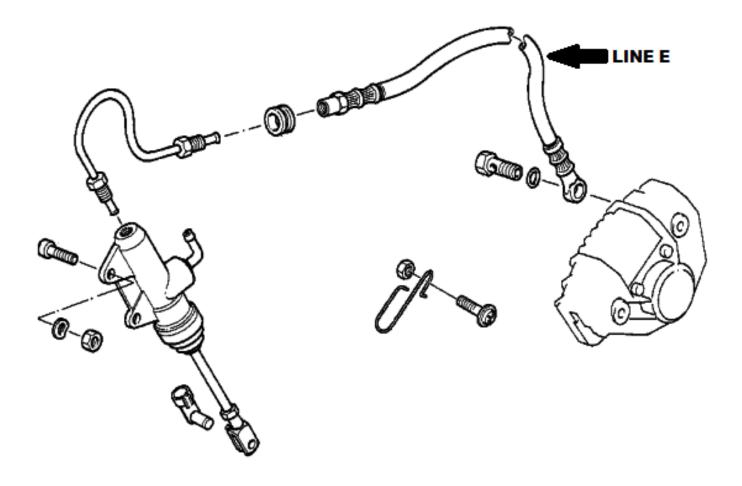
#### Step 9:

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. If the line(s) 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**.









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