INSTALLATION PROCESS: **FK003D663-9 Complete Brake Line Kit** 1992-93 Yamaha FJ 1200 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 nine (9) lines, one (1) double banjo bolt, twelve (12) single banjo bolts and four (4) "olive" conic inversors. We have also included a total of twenty-nine (29) washers; twenty-seven (27) will be used, and two (2) will be spares. We strongly suggest having a professional mechanic install your brake lines, all other installs may void your warranty.

Step 2:

Familiarize yourself with the new Galfer brake lines. You will notice each line is labeled with a number; these numbers will correspond with the OEM drawings (**refer to the end of these instructions for drawings.**) The lines labeled 10, 12, 13, 15, 21 and 22 will be for the front set up, line 16 will replace the clutch and lines 25 and 26 will be for the rear. *Please be sure to read through the instructions before attempting this install.*

Step 3:

Before moving forward, it is recommended to identify and label the OEM piping used on the front set up of your bike (these are labeled 11 and 14 on the OEM drawings.) These will be reused with the new Galfer set up and should be kept close by.

Step 4:

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

Step 5:

After bleeding and drying out the OEM brake system, uninstall your front, clutch and rear stock hoses. Please take note of how the stock system was routed in case you need to re-install the hoses, *you may also want to take pictures to use as reference*.

Step 6:

Locate Lines 10 and 12, and the OEM piping labeled "11." Install the Galfer lines to the OEM piping using one (1) olive inversor at each female end and torque down to 5 ft pounds (refer to drawing for details.) Install Line 10 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 (refer to picture A.) Install Line 12 to the ABS unit using a single banjo bolt and two (2) washers, be sure to use the same sequence as the master cylinder (refer to picture B.)

Step 7:

Locate Lines <u>15 and 13</u>, and the OEM piping labeled "<u>14.</u>" Install the Galfer lines to the OEM piping using one (1) olive inversor at each female end and torque down to 5 ft pounds (**refer to drawings for details.**) Identify the OEM elbow joint; used with the OEM front lines and located at the lower triple tree. Install <u>Line 15</u> to the OEM joint using a single banjo bolt and two (2) washers, and using the same sequence as before (**refer to picture C.**) Install <u>Line 13</u> to the ABS unit (**refer to picture B.**)

Step 8:

Locate Lines 21 and 22. Line 21 is to be installed at the left caliper; "left" as if you are sitting on the bike, Line 22 is for the right caliper. Install the appropriate ends to the OEM joint at the lower triple tree, using a double banjo bolt and three (3) washers, the sequence will be as follows; OEM elbow joint, washer, Line 21 fitting, washer, Line 22 fitting, washer, double banjo bolt (refer to picture C.) Route these lines behind the forks and to their appropriate calipers. Install each line to the caliper using a single banjo bolt and two (2) washers (refer to picture D.) You may re-use the OEM line holders at your own discretion.

Step 9:

Locate <u>Line 16</u> and identify which end to install at the clutch master cylinder. Install this end using a single banjo bolt and two (2) washers (**refer to picture E.**) Route the line down to the slave cylinder, similarly to the OEM routing. Install the line to the slave cylinder using a single banjo bolt and two (2) washers.

Step 10:

Locate <u>Line 25</u>, identify which end to install at the rear master cylinder. Install this end using a single banjo bolt and two (2) washers. Route the line to the ABS unit. Install the line to the ABS unit using a single banjo bolt and two (2) washers (**refer to picture F.**) Locate <u>Line 26</u> and identify which end to install at the rear caliper. Install this end using a single banjo bolt and two (2) washers (**refer to picture G.**) Route the line to the ABS unit using the OEM routing and install the line using a single banjo bolt and two (2) washers (**refer to picture F.**)

Step 11:

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 12:

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

Step 13:

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 for at least 2 hours. 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**.



a. Line 10 – Front master cylinder



b. Lines 12 & 13 – ABS Unit

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c. Lines 15, 21 & 22 – OEM elbow joint at lower triple tree



d. Lines 21 & 22 - Front calipers



e. Line 15 – Clutch master cylinder



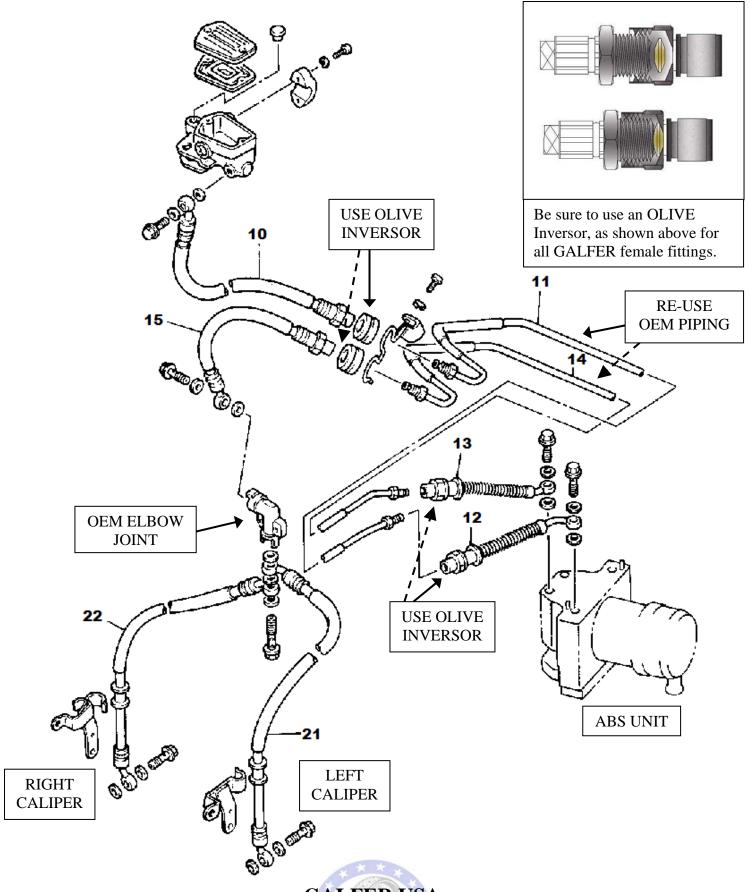
f. Lines 12, 13, 25 & 26 – ABS Unit



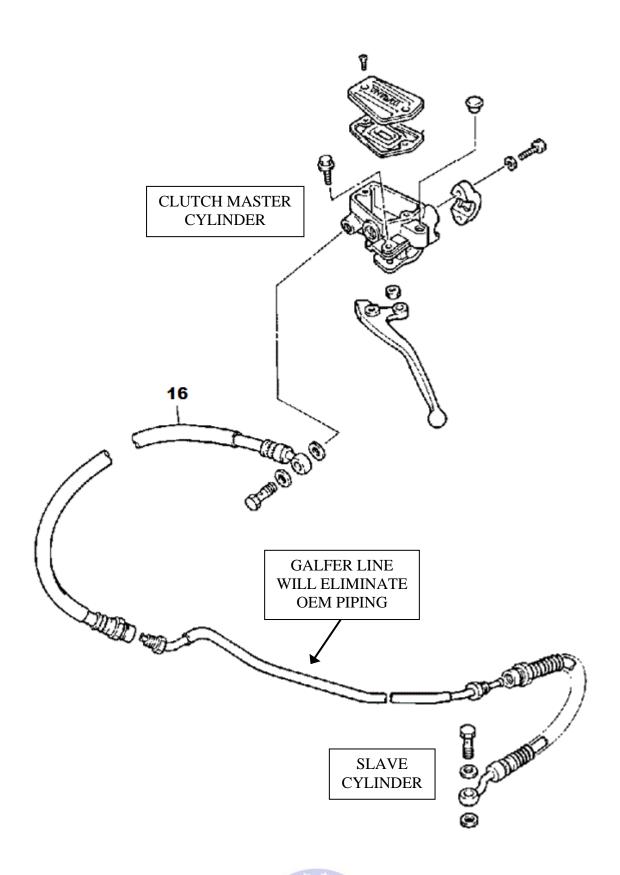
g. Line 26 – Rear caliper

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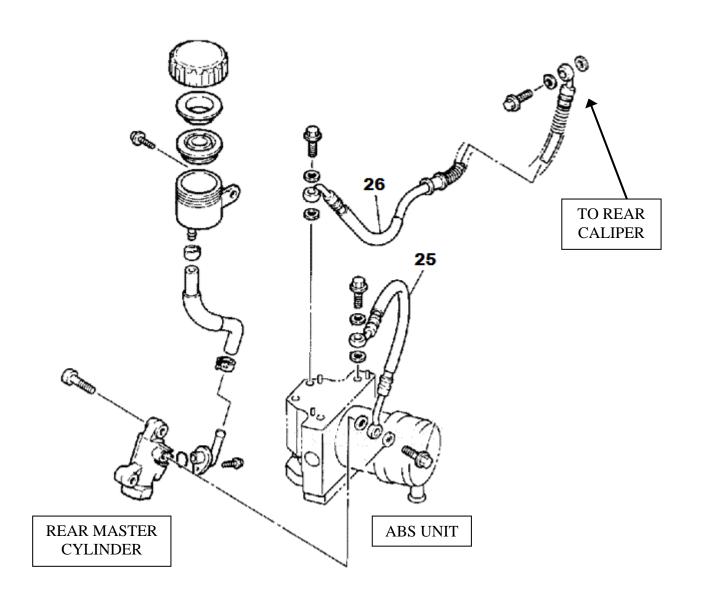
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