4a. DISC BRAKE

This section is laid out as follows:

Construction and Operation

Disassembly – Assembly

Master Cylinder

- 1. Disassembly
- 2. Assembly

Brake Pads

- 1. Disassembly
- 2. Assembly

Caliper

- 1. Disassembly
- 2. Assembly

Brake Line

Maintenance

Adjustment

Bleeding the Brake

Brake Fluid

- 1. Specifications
- 2. Changing the Brake Fluid

Master Cylinder

Caliper

Brake Line

Construction and Operation

Hydraulic disc brakes are used for their superior braking performance and high reliability. The major components of the disc brake are the brake lever, master cylinder, brake fluid pressure switch, brake line, caliper assembly and disc. The brake lever is pulled to move a piston in the master cylinder and pressurize the brake fluid. Fluid pressure operates the brake lamp pressure switch and is transmitted by the brake line to operate the calipers. The switch turns on the brake lamp, and the calipers grip the disc attached to the front wheel, thereby stopping wheel rotation.

The brake fluid is an extra heavy duty type with a high boiling point, to withstand the heat produced from friction of the caliper pads on the disc. Since the fluid's performance and boiling point could be reduced by contamination with water vapor or dirt from the air, the reservoir is sealed with a rubber diaphragm under the cap. This cap seal also prevents fluid evaporation, and spillage should the motorcycle fall over. The fluid is further protected by dust covers in the caliper assembly and at the master cylinder brake line fitting.





