

Sprocket Teeth

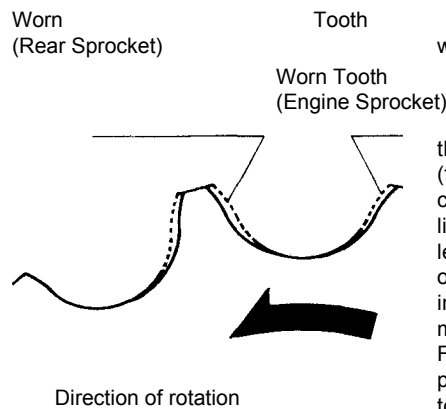


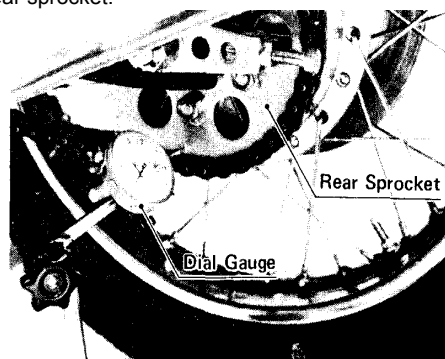
Table 92 Sprocket Diameter

	Standard	Service Limit
Engine	71.01-71.21 mm	70.2mm
Rear	182.08mm	180.0 mm

Rear sprocket warp

Elevate the rear wheel so that it will turn freely, and set a dial gauge against the rear sprocket near the teeth as shown in Fig. 516. Rotate the rear wheel. The difference between the highest and lowest dial gauge readings is the amount of runout (warp).

If the runout exceeds the service limit, replace the rear sprocket.



DISC BRAKES

A hydraulic disc brake is used on each wheel for superior braking performance and high reliability. The major components of each disc brake are the brake lever (front) or the brake pedal (rear), master cylinder, brake line, caliper assembly, and disc. The brake lever is pulled or the brake pedal is pushed to move a piston in the master cylinder and pressurize the brake fluid. Fluid pressure is transmitted through the brake line to operate the caliper. The caliper grips the disc attached to the wheel, slowing wheel rotation. Front fluid pressure operates the front brake light switch, and the rear brake pedal pulls the rear brake light switch. Each switch turns on the brake light.

The brake fluid is an extra heavy duty type with a high boiling point to withstand the heat produced by friction of the caliper pads on the disc. Since the boiling point and thus the performance of the fluid would 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 rubber seals in the caliper assembly and at the master cylinder brake line fitting.

Each master cylinder assembly includes the reservoir, piston, primary and secondary cups, non-return valve, check valve (only on front), and spring. The reservoir has two holes at the bottom: a relatively large supply port to supply fluid to the lines and a small relief port to admit excess fluid from the line. The primary and secondary cups stop the fluid from leaking back around the piston while the piston is moving forward to pressurize the line. The check valve stops fluid from suddenly returning from the brake line when the lever is released, and thereby smooths brake operation. The non-return valve is in the head of the piston; it stops backward fluid flow when the brake is applied. When the brake lever or pedal is released, the valve allows flow around the cup to fill the vacuum in front of the piston

so that the piston can return easily.

Each caliper assembly includes pad A, pad B, and the piston, which is inside the caliper cylinder. Through each caliper run two shafts, which also pass through the caliper holder to mount the assembly to the left front fork or the rear axle. When the piston forces pad A against the disc, the shaft portion of the caliper assembly slides through the holder such that pad B is

also forced against the disc, both brake pads being kept parallel to the disc.

Unlike a drum-type brake, the components of the disc brake which perform the actual braking action, i.e., the disc and pads, are open to direct contact with the air flow past the motorcycle. This provides for excellent dissipation of the heat from brake friction, and minimizes the possibility of brake fade common to drum brakes.

Table 93 Rear Sprocket Warp

Standard	Service Limit
under 0.3 mm	0.5 mm

Automatic Wear Adjustment

When fluid pressure develops in the cylinder, the piston is pushed exerting pressure against the brake pad, which in turn presses against the brake disc. The