154 MAINTENANCE

Table 86 Rim, Spokes Size

			Rim		
	Inner		Outer		
	Left	Right	Left	Right	
Front	#8x #9x184.5x97°		#8 x #9x184.0x83.5°		1.85x19
Rear	#8 x #9x144.0x100.5°	#8x#9x 167.5x83°	#8 x #9x143.5x80°	#8 x #9x167.5x91°	2.15Bx18

Spoke breakage

If any spoke breaks, it should be replaced immediately. A missing spoke places an additional load on the other spokes, which will eventually cause other spokes to break.

Periodically check that all the spokes are tightened evenly since they stretch a certain amount during use. Standard spoke tightening torque is $0.20 \sim 0.40$ kg-m (17 \sim 35 in-lbs). Over-or under-tightening may cause breakage.

Rim runout

Set a dial gauge against the side of the rim, and rotate the wheel to measure axial runout. The difference between the highest and lowest dial readings is the amount of runout.

Set the dial gauge to the inner circumference of the rim, and rotate the wheel to measure radial runout. The difference .between the highest and lowest dial readings is the amount of runout.



Axial mullout

Table 87 Rim Runout

	Standard	Service Limit
Axial	under 0.8 mm	3 mm
Radial	under 1 mm	2 mm

A certain amount of rim warp (runout) can be corrected by recentering the rim. Loosen some spokes and tighten others to change the position of different parts of the rim. If the rim is badly bent, however, it should be replaced.

AXLE

A bent axle causes vibration, poor handling, and instability.

To measure axle runout, remove the axle, place it in V blocks that are 100 mm apart, and set a dial gauge to the axle at a point halfway between the blocks. Turn the axle to measure the runout. The amount of runout is the amount of dial variation.

If runout exceeds the service limit, straighten the axle or replace it. If the axle cannot be straightened to within tolerance, or if runout exceeds 0.7 mm, replace the axle.



100 mm



	Standard	Service Limit
Front	0.1 mm	0.2 mm
Rear	0.05 mm	0.2 mm

GREASE SEALS AND WHEEL BEARINGS

A grease seal is fitted in the speedometer gear housing, in the right sides of the front and rear hubs, and in the rear wheel coupling. Each grease seal is a rubber ring equipped with a steel band on its outer circumference. The grease seal inner lip is held against the axle collar by a wire spring band. Since the grease seal not only seals in the wheel bearing grease but also keeps dirt and moisture from entering the hub, the use of a damaged grease seal will cause the wheel bearing to wear quickly.

Grease Seal



