

## 138 MAINTENANCE

2. Damaged sprocket teeth.
3. Too much clearance between the friction plate tangs and the clutch housing.
4. Weak or damaged damper spring(s).

**NOTE:** When replacing the clutch housing, check the alignment of the primary sprocket (on the crankshaft) as described in Pg. 139.

### Spring Tension

Remove the springs, and set them, one at a time, on a spring tension testing device. Compress the spring, and read the tension at the test length. If the spring tension at the specified length is weaker than the service limit, replace the spring.

**Table 58 Clutch Spring Tension**

Length	Standard	Service Limit
23.5 mm	23.5-26.5 kg	21.5 kg

### Friction plate wear, damage

Visually inspect the friction plates. If any plates show signs of wear, measure them with vernier calipers. If any plates show signs of wear past the service limit, replace them with new ones.

### Friction Plate Measurement

Standard	Service Limit
0.1 ~0.3 mm	0.5 mm

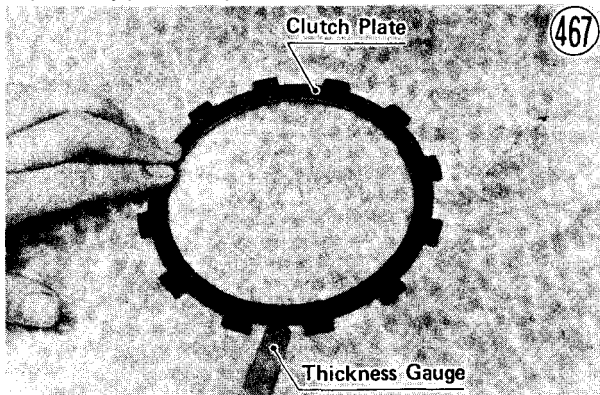
**Table 59 Friction Plate Thickness**

Standard	Service Limit
2.9~3.1 mm	2.5 mm

### Clutch plate warp

Place each clutch plate on a surface plate, and measure the gap between each clutch plate and the surface plate. This gap is the amount of clutch plate warp.

Replace any plates warped over the service limit.



**Table 60 Clutch Plate Warp**

Standard	Service Limit
under 0.2 mm	0.4 mm

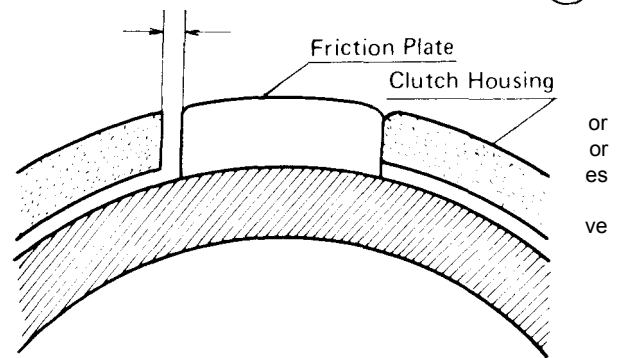
### Friction plate/clutch housing clearance

Measure the clearance between the tangs on the friction plates and the fingers of the clutch housing. If this clearance is excessive, the clutch will be noisy.

If the clearance exceeds the service limit, replace the friction plates. Also, replace the clutch housing if it is unevenly or badly worn where the friction plates wear against it.

### Friction Plate/Clutch Housing Clearance

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**Table 61 Friction Plate/Clutch Housing Clearance**

### Clutch housing sprocket damage

Inspect the teeth on the clutch sprocket. Any light damage can be corrected with an oilstone, but the clutch housing must be replaced if the teeth are badly damaged. Damaged teeth on the clutch housing sprocket indicate that the primary chain, by which it is driven, may also be damaged. At the same time that the clutch housing sprocket is repaired or replaced, the primary chain should be inspected, and then replaced if necessary.

