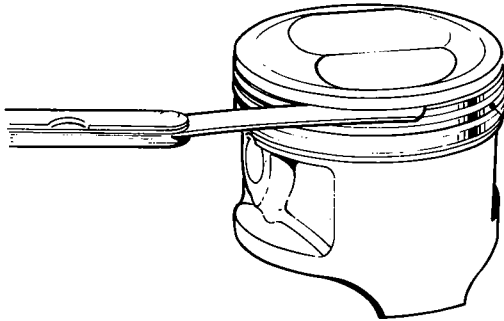


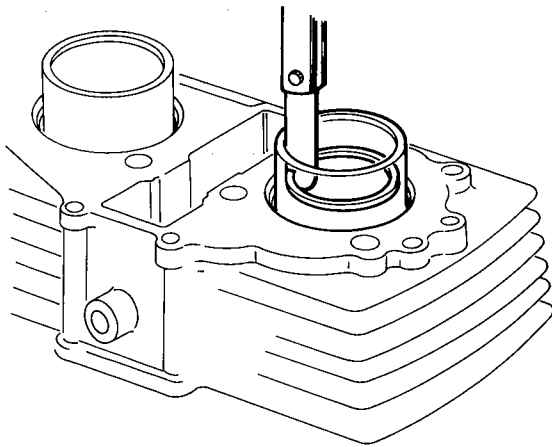
## ● PISTON-TO-RING CLEARANCE



**1**  
PISTON RING

	Standard	Service Limit
Top/Second	0.015–0.045 mm (0.00059–0.00177 in.)	0.12 mm (Replace) (0.0047 in.)
Oil	0–0.15 mm (0–0.0059 in.)	0.17 mm (Replace) (0.0067 in.)

## ● PISTON RING END GAP

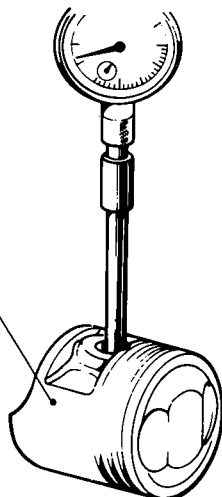


- 2**
- To test the ring end gap, use a piston and push the ring down into the cylinder. Make sure the ring is square in the cylinder.
  - The ring end gap measurement should be taken at the lower limit of the ring travel (10 mm from the lower end of the cylinder).

	Standard	Service Limit
Top/Second	0.15–0.35 mm (0.0059–0.0138 in.)	0.5 mm (Replace) (0.0197 in.)
Oil	0.2–0.5 mm (0.0079–0.0197 in.)	0.7 mm (Replace) (0.0276 in.)

## ● PISTON PIN BORE I.D.

**3**  
DISTORTION OR  
CRACKING



Standard	Service Limit
13.002 – 13.008 mm (0.51189 – 0.51193 in.)	13.055 mm (Replace) (0.5134 in.)