



## Piston Clearance Inspection

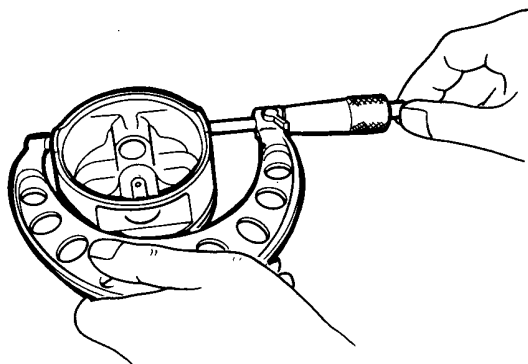
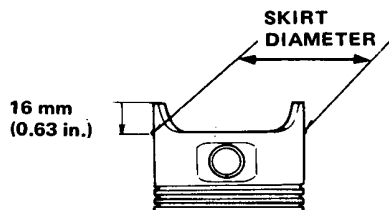
**NOTE:** If cylinder is bored, an oversized piston must be used.

1. Measure piston diameter at a point 16 mm (0.63 in.) from bottom of skirt.

### Piston Diameter

**Standard (New):** 73.97–73.99 mm  
(2.9122–2.9133 in.)

**Service Limit:** 73.96 mm (2.9118 in.)



### Oversize Piston Diameter

**Standard 0.25:** 74.215–74.248 mm  
(2.9218–2.9231 in.)

**Standard 0.5:** 74.465–74.498 mm  
(2.9317–2.9330 in.)

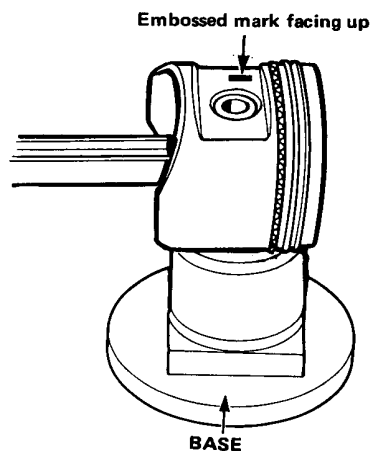
2. Calculate difference between cylinder bore diameter on page 7-9 and piston diameter.

### Piston-to-Cylinder Clearance:

**Standard (New):** 0.01–0.05 mm  
(0.0004–0.0020 in.)

**Service Limit:** 0.07 mm (0.003 in.)

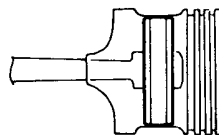
## Piston Pin Removal



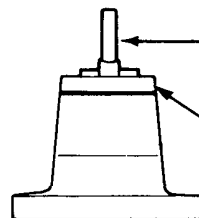
**PISTON PIN DRIVER**  
07973-PE00301



**PILOT COLLAR**  
07973-PE00200



**PISTON PIN BASE INSERT**  
07973-PE00400



**PISTON BASE HEAD**  
07973-PE00100

**BASE IS PART OF**  
**TOOL SET 07973-6570002**  
or  
**07973-6570001**

Use hydraulic press. When pressing pin in or out, make sure that the recessed portion of the piston aligns with the lips on the collar.

# Engine Block

## Piston Pin Inspection

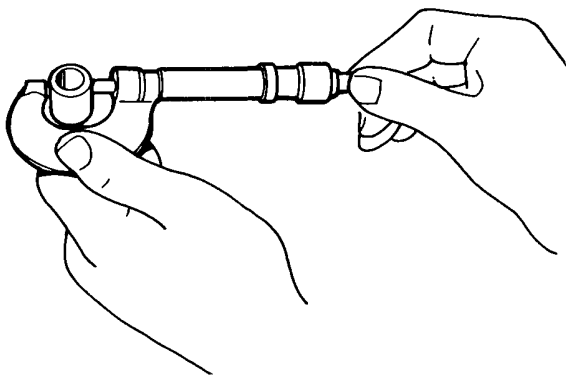
1. Measure the diameter of the piston pin.

### Piston Pin Diameter:

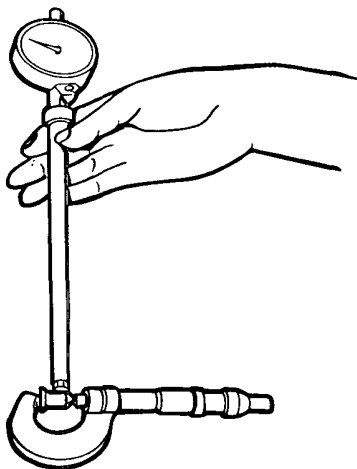
**Standard (New):** 18.994–19.0 mm  
(0.7478–0.7480 in.)

**Oversize:** 18.997–19.003 mm  
(0.7479–0.7481 in.)

NOTE: All replacement piston pins are oversize.



2. Zero the dial indicator to the piston pin diameter.



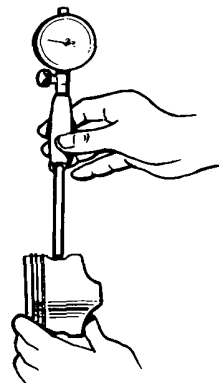
3. Measure the piston pin-to-piston clearance.

NOTE: Check the piston for distortion or cracks.

If the piston pin clearance is greater than 0.022 mm (0.0009 in.) re-measure using an oversize piston pin.

### Piston Pin-to-Piston Clearance:

**Service Limit:** 0.010–0.022 mm  
(0.0004–0.0009 in.)



4. Check the difference between piston pin diameter and connecting rod small end diameter.

### Piston Pin-to-Connecting Rod Interference:

**Standard (New):** 0.02–0.04 mm  
(0.0008–0.0016 in.)

