EM17X–01

INSPECTION

INSPECT PISTON

(a) Inspect the piston oil clearance.

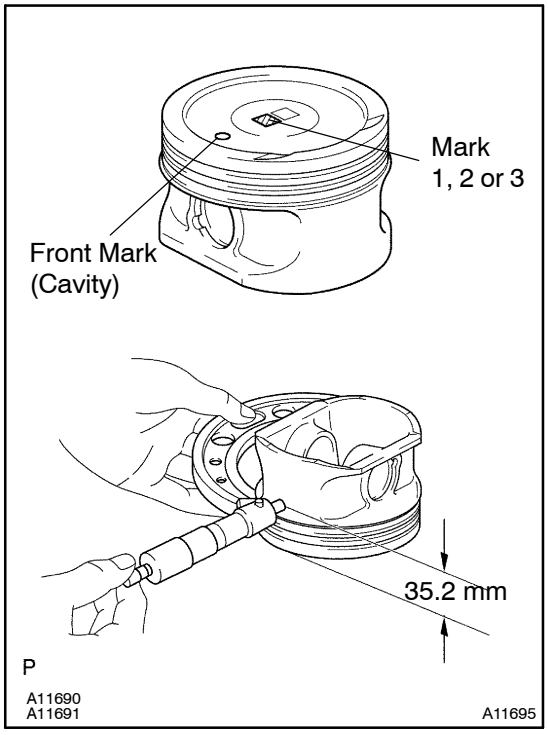
HINT:

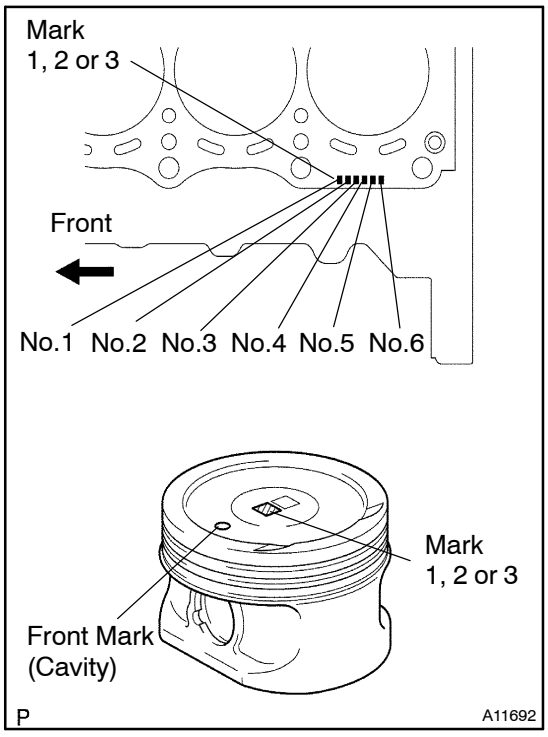
There are 3 sizes of the standard piston diameter, marked "1", "2" and "3" accordingly. The mark is stamped on the piston top.

(1) Using a micrometer, measure the piston diameter at right angles to 35.2 mm (1.386 in.) from the piston head.

Piston diameter

STD	Mark 1	99.935 – 99.945 mm (3.9344 – 3.9348.in.)
	Mark 2	99.945 – 99.955 mm (3.9348 – 3.9352 in.)
	Mark 3	99.955 – 99.965 mm (3.9352 – 3.9356 in.)
O/S 0.50		100.435 – 100.465 mm (3.9541 – 3.9553 in.)
O/S 1.00		100.935 – 100.965 mm (3.9738 – 3.9750 in.)





(2) Measure the cylinder bore diameter in the thrust directions.
(See Pub. No. RM321E on page EG–146E)

(3) Subtract the piston diameter measurement from the cylinder bore diameter measurement.

Standard oil clearance:

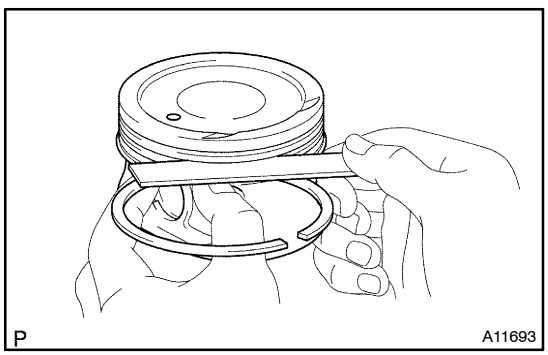
0.055 – 0.075 mm (0.0022 – 0.0030 in.)

If the oil clearance is greater than maximum, replace all the 6 pistons and rebore all the 6 cylinders. If necessary, replace the cylinder block.

HINT:

Use new cylinder block:

Use a piston with the same number mark as the cylinder bore diameter marked on the cylinder block.



(b) Inspect the piston ring groove clearance.

Using a feeler gauge, measure the clearance between new piston ring and the wall of the piston ring groove.

Ring groove clearance:

No.1	0.040 – 0.080 mm (0.0016 – 0.0031 in.)
No.2	0.030 – 0.070 mm (0.0012 – 0.0028 in.)

If the clearance is not as specified, replace the piston.