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SERVICE INFORMATION

GENERAL INSTRUCTIONS

- Cylinder/piston maintenance and inspection can be performed with the engine installed.
- Camshaft and rocker arm lubricating oil is fed through cylinder oil passages. Be sure the passages are not clogged.

SPECIFICATIONS

ITEM		STANDARD		SERVICE LIMIT	
Cylinder	I.D.	47.005 – 47.015 mm (1.8506 – 1.8510 in)		47.05 mm (1.852 in)	
Piston, piston rings and piston pin	Piston ring-to-ring groove clearance	TOP	0.010 – 0.045 mm (0.0004 – 0.0018 in)	0.12 mm (0.005 in)	
		SECOND	0.010 – 0.045 mm (0.0004 – 0.0018 in)	0.12 mm (0.005 in)	
	Ring end gap	TOP	0.15 – 0.35 mm (0.006 – 0.014 in)	0.5 mm (0.02 in)	
		SECOND	0.15 – 0.35 mm (0.006 – 0.014 in)	0.5 mm (0.02 in)	
		OIL	0.30 – 0.90 mm (0.012 – 0.036 in)	—	
	Piston O.D.		46.98 – 47.00 mm (1.850 – 1.8504 in)		46.90 mm (1.847 in)
Piston pin bore		13.002 – 13.008 mm (0.5119 – 0.5121 in)		13.055 mm (0.5140 in)	
Connecting rod small end I.D.		13.013 – 13.043 mm (0.5123 – 0.5135 in)		13.1 mm (0.52 in)	
Piston pin O.D.		12.994 – 13.000 mm (0.5116 – 0.5118 in)		12.98 mm (0.511 in)	
Piston-to-piston pin clearance		0.002 – 0.014 mm (0.0001 – 0.0006 in)		0.075 mm (0.0030 in)	
Cylinder-to-piston clearance		0.005 – 0.035 mm (0.0002 – 0.0014 in)		0.15 mm (0.006 in)	

TROUBLESHOOTING

Compression low

1. Worn cylinder or piston rings

Excessive smoke

1. Worn cylinder or piston rings
2. Improper installation of piston rings
3. Scored or scratched piston or cylinder wall

Overheating

1. Excessive carbon build-up on the piston or combustion chamber wall

Knocking or abnormal noise

1. Worn piston and cylinder
2. Excessive carbon build-up