



SERVICE INFORMATION	11-1
TROUBLESHOOTING	11-1
FRONT BALANCER REMOVAL	11-2
REAR BALANCER REMOVAL	11-3
CRANKSHAFT REMOVAL	11-3
CAMSHAFT TIMING SPROCKET REPLACEMENT	11-5
BALANCER TIMING SPROCKET REPLACEMENT	11-6
CRANKSHAFT INSTALLATION	11-6
REAR BALANCER INSTALLATION	11-6
FRONT BALANCER INSTALLATION	11-7
BALANCER TIMING	11-8
BALANCER TIMING INSPECTION	11-10

SERVICE INFORMATION

GENERAL INSTRUCTIONS

- To service the crankshaft and rear balancer, it is necessary to separate the crankcase. The front balancer can be serviced without crankcase separation.
- After installing the balancer, check balancer timing and adjust chain tension.

SPECIFICATIONS

ITEM		STANDARD	SERVICE LIMIT
Crankshaft	Connecting rod big end side clearance	0.050–0.650 mm (0.0020–0.0256 in)	0.80 mm (0.031 in)
	Connecting rod big end radial clearance	0.006–0.018 mm (0.0002–0.0007 in)	0.05 mm (0.002 in)
	Connecting rod small end I.D.	21.020–21.041 mm (0.8276–0.8284 in)	21.07 mm (0.830 in)
	Crankshaft runout	—————	0.1 mm (0.004 in)
Balancer	Shaft holder O.D.	39.964–39.980 mm (1.5734–1.5740 in)	39.91 mm (1.571 in)
	Shaft holder I.D.	26.007–26.020 mm (1.0239–1.0244 in)	26.05 mm (1.026 in)
	Rear balancer I.D.	26.007–26.020 mm (1.0239–1.0244 in)	26.05 mm (1.026 in)
Crankshaft bearing play	Radial	—————	0.10 mm (0.004 in)
	Axial	—————	0.05 mm (0.002 in)

TROUBLESHOOTING

Excessive Noise

- | | |
|--|--|
| <p>1. Crankshaft</p> <ul style="list-style-type: none"> – Worn connecting rod small and big end bearings. – Bent connecting rod. – Worn crankshaft bearing. | <p>2. Balancer</p> <ul style="list-style-type: none"> – Improper timing adjustment. – Improper chain adjustment. – Damaged chain. |
|--|--|