YANMAR

SERVICE MANUAL

L48N
L70N
L100N

MidWestTech | JCB Yanmar L48N, L70N, L100N Engine Service Manual | Publication 0BU...

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TROUBLESHOOTING CHARTS

	Trouble Symptom / Cause	Starting Problem: Engine Does Not Start.	Starting Problem: Engine Starts But Stops Soon. Exhaust Smoke: None	Starting Problem: Engine Starts But Stops Soon. Exhaust Smoke: Little	Starting Problem: Engine Starts But Stops Soon. Exhaust Smoke: Much	Insufficient Engine Output: Exhaust Color: Ordinary	Insufficient Engine Output: Exhaust Color: White	Insufficient Engine Output: Exhaust Color: Black	Poor Exhaust Color: During Work: White	Poor Exhaust Color: During Work: Black	High Knocking Sound During Combustion	Abnormal Engine Sound	Uneven Combustion Sound	Engine Surging: During Idling	Engine Surging: During Work Operation	Excessive Engine Vibration	Difficulty in Returning to Low Speed	Excessive Fuel Consumption	Engine Oil: Excessive Oil Consumption	Engine Oil: Dilution by Diesel Fuel	Engine Oil: Oil with Water	Engine Oil: Low Oil Pressure	Excessive Blow-by Gas	Air Intake: Pressure Drop	Air Intake: Pressure Rise	Exhaust Temperature Rise	Corrective Action	Reference Page
Engine System	Improper Intake/Exhaust Valve Clearance	O	O			O						O											O		O	Adjust the Valve Clearance.	*See Checking Actual Piston TDC (Top Dead Center) on page 6-36.*
	Compression Leakage from Valve Seat					O		O		O		O					O					O	O		O	Lap the Valve Seat.	*See Valve Face and Valve Seat on page 6-26.*
	Intake/Exhaust Valve Seizure	O			O	O		O		O		O			O	O			O			O	O			Correct or Replace Intake/Exhaust Valve.	*See Valves and Valve Guides on page 6-27.*
	Cylinder Head Gasket Blowout					O														O						Replace the Gasket.	*See Inspection of Engine Components on page 6-45.*
	Seized or Broken Piston Ring	O			O		O		O			O		O		O		O	O			O			O	Replace the Piston Ring.	*See Reassembly of Piston, Piston Rings and Connection Rod on page 6-60.*
	Worn Piston Ring, Piston or Cylinder	O			O		O		O									O	O			O				Perform Honing and Use Oversize Parts.	*See Honing and Boring on page 6-52.*
	Seized Crankpin Metal or Bearing	O	O									O		O	O	O						O				Repair or Replace.	*See Crankshaft on page 6-48.*
	Improper Arrangement of Piston Ring Gaps		O				O											O				O				Correct the Ring Joint Positions.	*See Reassembly of Piston, Piston Rings and Connection Rod on page 6-60.*
	Reverse Assembly of Piston Rings						O		O									O				O				Reassemble Correctly.	*See Reassembly of Piston, Piston Rings and Connection Rod on page 6-60.*
	Worn Crankpin and Journal Bearing					O						O		O	O	O					O					Measure and Replace.	*See Crankshaft on page 6-48.*
	Loose Connecting Rod Bolt											O				O					O					Tighten to the Specified Torque.	*See Special Torque Specifications on page 6-18.*
	Foreign Matter Trapped in Combustion Chamber	O										O						O				O				Disassemble and Repair.	*See Inspection of Engine Components on page 6-45.*
	Worn Intake/Exhaust Valve Guide						O											O				O				Measure and Replace.	*See Intake / Exhaust Valves, Guides and Seals on page 6-6.*
	Governor Adjusted Incorrectly		O											O	O	O	O									Make Adjustment.	*See Check Engine Speed Control on page 5-20.*
	Improper Open/Close Timing of Intake/ Exhaust Valves	O					O	O	O	O		O														Adjust the Valve Clearance.	*See Checking Actual Piston TDC (Top Dead Center) on page 6-36.*
	Bent Connecting Rod	O		O			O																			Replace Connecting Rod.	*See Removal of Engine on page 6-40.*

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