

TROUBLESHOOTING

If a problem occurs, stop the engine immediately. Refer to the SYMPTOM column in the Troubleshooting Chart to identify the problem.

CAUTION
<p>If any indicator fails to illuminate when the key switch is in the ON position, see your authorized Yanmar industrial engine dealer or distributor for service before operating the engine.</p>
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CAUTION
<p>If any indicator illuminates during engine operation stop the engine immediately. Determine the cause and repair the problem before you continue to operate the engine.</p>
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TROUBLESHOOTING CHART

SYMPTOM	PROBABLE CAUSE	ACTION	REFER TO
Indicator Turns On - Engine Running			
Engine oil pressure indicator (If equipped)	<ul style="list-style-type: none"> • Low level of engine oil • Too high an oil level 	<ul style="list-style-type: none"> • Check and adjust oil level as necessary 	<i>Checking Engine Oil on page 33</i>
	<ul style="list-style-type: none"> • Clogged engine oil filter 	<ul style="list-style-type: none"> • Replace engine oil filter element 	<i>Replace Engine Oil on page 77</i>
Battery Indicator	<ul style="list-style-type: none"> • Battery failure 	<ul style="list-style-type: none"> • Check battery condition 	<i>Check Indicators on page 35</i>
	<ul style="list-style-type: none"> • Faulty dynamo 	<ul style="list-style-type: none"> • See authorized Yanmar industrial engine dealer or distributor 	—
Indicator Does Not Turn On - Key Switch is Turned to ON (OFF → ON)			
	<ul style="list-style-type: none"> • Faulty electrical wiring or faulty indicator 	<ul style="list-style-type: none"> • See authorized Yanmar industrial engine dealer or distributor 	—

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	ACTION	REFER TO
Indicator Stays On - Key Switch is Turned from Start to ON (START → ON)			
• Battery indicator stays On	• Faulty alternator	• See authorized Yanmar industrial engine dealer or distributor	—
• Engine oil pressure indicator stays On	• Faulty engine oil pressure switch		—
Engine Does Not Start			
• Starter motor operates but engine does not start	• No diesel fuel	• Refuel fuel system	<i>Filling the Fuel Tank on page 30</i>
	• Improper diesel fuel	• Replace with recommended diesel fuel	<i>Diesel Fuel Specifications on page 29</i>
	• Clogged fuel filter	• Replace fuel filter	<i>Drain the Fuel Tank and Replace Outlet Fuel Filter on page 82</i>
	• Poor fuel injection	• See authorized Yanmar industrial engine dealer or distributor	—
	• Compressed air leakage from intake / exhaust valves		—
	• Faulty engine stop solenoid (if equipped)		—
• Starter motor does not operate or rotates too slowly (engine can be turned manually)	• Battery needs charging	• Check electrolyte, recharge	<i>Check Battery (If Equipped) on page 70</i>
	• Faulty cable connection at battery terminals	• Clean terminals, retighten	—
	• Faulty starter switch	• See authorized Yanmar industrial engine dealer or distributor	—
	• Faulty starter motor		—
• Engine cannot be manually turned	• Inner parts seized or damaged		—
White or Black Exhaust Smoke			
• Black exhaust smoke	• Engine overloaded	• Reduce load	—
	• Clogged air cleaner element	• Clean element or replace	<i>Clean Air Cleaner Element on page 80</i>
	• Improper diesel fuel	• Replace with recommended diesel fuel	<i>Diesel Fuel Specifications on page 29</i>
	• Faulty spraying of fuel injection	• See authorized Yanmar industrial engine dealer or distributor	—
	• Excessive intake / exhaust valve clearance		—

SYMPTOM	PROBABLE CAUSE	ACTION	REFER TO
<ul style="list-style-type: none"> • White exhaust smoke 	<ul style="list-style-type: none"> • Improper diesel fuel 	<ul style="list-style-type: none"> • Replace with recommended diesel fuel 	<i>Diesel Fuel Specifications on page 29</i>
	<ul style="list-style-type: none"> • Faulty spray pattern of fuel injection 	<ul style="list-style-type: none"> • See authorized Yanmar industrial engine dealer or distributor 	—
	<ul style="list-style-type: none"> • Fuel injection timing delay 		—
	<ul style="list-style-type: none"> • Engine burning oil 		—

TROUBLESHOOTING INFORMATION

If your engine does not operate properly, refer to the troubleshooting chart or consult your authorized Yanmar industrial engine dealer or distributor.

Supply the authorized Yanmar industrial engine dealer or distributor with the following information:

- Model name and serial number of your engine
- The driven machine type (tractor, generator, skid steer loader), manufacturers name, model and serial number
- How long the engine has been in service (the number of engine hours or the number of calendar months)
- Operating conditions when problem occurs:
 - ◆ Engine rpm
 - ◆ Color of exhaust smoke
 - ◆ Type of diesel fuel
 - ◆ Type of engine oil
 - ◆ Any abnormal noises or vibration
 - ◆ Operating environment such as high altitude or extreme ambient temperatures, etc.
- Engine maintenance history and previous problems
- Other factors that contribute to the problem