## **Troubleshooting Checklist**

The chart below shows the most common questions asked by owners of Detroit Diesel engines 3–53 natural when trying to troubleshoot why their engines underperform. It categorizes areas of possible malfunction, likely cause and recommended action to bring your new, rebuilt or used Detroit Diesel engine back to proper operation.

The chart will give you confidence when speaking with your Detroit Diesel engine mechanic or ordering parts. As a quick reference guide only, the chart must not be thought of as a substitute for the use of your Detroit Diesel engine 3–53 natural Owner's operating or service manual.

For your convinience in looking up parts and pricing, please click on the following link www.dieselpro.com/detroit-diesel-engine-part-3-53-natural. You can also call us at 1-888-433-4735 or 305-545-5588.

We also encourage you to do a Google search for Detroit Diesel forum or Detroit Diesel forum 3–53 where you may find information from other people that have had the same question you have about your diesel engine.

PROBLEM	POSSIBLE REASON	CHECK
Engine will not start	Lack of air intake or restricted air intake.  Broken blower shaft  Worn out blower shaft  Defective fuel pump  Defective starter  Discharged battery  High exhaust back pressure	
Black smoke coming out of engine	Defective injector Contaminated fuel Broken or worn cylinder parts Engine overloaded Faulty intercooler or aftercooler (for turbo engines only)	
White smoke coming out of engine	Aro del piston roto Incorrectly installed ring set Defective injector Fuel quality or grade Long idle periods Broken or bent push rod Injector or governor improperly adjusted	
Low engine oil pressure	Water in engine oil pan Fuel in engine oil pan Defective oil cooler Engine overloaded Crankcase overfilled	
Low engine RPM	Improperly working injector Governor calibration	
Hi engine RPM	Governor calibration	
Engine overheating	Defective fresh water pump Defective raw water pump (marine engines only) Defective thermostat or thermostat seal Clogged radiator or heat exchanger (marine engine only)	
Grey smoke coming out of engine	Long idle periods Defective intercooler or aftercooler (for turbo engine only) Restricted air intake Defective injector Contaminated fuel Blower or turbocharger seals leaking	
Geartrain makes noises	Low oil level Engine driven accesories Damage main or rod bearing	
Excessive smoke on acceleration	Long idle periods Contaminated fuel External oil leaks	