

Troubleshooting

Engine lacks power	Black exhaust smoke	Excessive engine oil usage	Blue exhaust smoke	Turbocharger noisy	Cyclic sound from turbo	Oil leak from compressor seal	Oil leak from turbine seal		
•	•	•	•			•		Clogged air filter element	Replace element according to engine manufacturers recommendations
	•	•	•	•	•	•		Obstructed intake manifold	Remove obstruction or replace damaged parts as required
•	•			•				Obstructed air outlet duct from compressor to intake manifold	Remove obstruction or replace damaged parts as required
•	•			•				Obstructed intake manifold	Refer to engine manufacturers manual and remove obstruction
				•				Air leak in duct from air cleaner to compressor	Correct leak by replacing seals or tightening fasteners as required
•	•	•	•	•				Air leak in duct from compressor to intake manifold	Correct leak by replacing seals or tightening fasteners as required
•	•	•	•	•				Air leak at intake manifold to engine joint	Refer to engine manufacturers manual and replace gaskets or tighten fasteners as required
•	•	•	•	•		•		Obstruction in exhaust manifold	Refer to engine manufacturers manual and remove obstruction
•	•					•		Obstruction in muffler or exhaust or exhaust stack	Remove obstruction or replace faulty components as required
•	•			•		•		Gas leak in exhaust manifold to engine joint	Refer to engine manufacturers manual and replace gaskets or tighten fasteners as required
•	•			•		•		Gas leak in turbine inlet to exhaust manifold joint	Replace gasket or tighten fastener as required
				•				Gas leak in ducting after the turbine outlet	Refer to engine manufacturers manual and repair leak
		•	•			•	•	Obstructed turbocharger oil drain line	Remove obstruction or replace lines as required
		•	•			•	•	Obstructed engine crankcase vent	Refer to engine manufacturers manual, clear obstruction
		•	•			•	•	Turbocharger center housing sludged or coked	Change engine oil and oil filter, overhaul or replace turbo as required
•	•							Fuel injection pump or fuel injectors incorrectly adjusted	Refer to engine manufacturers manual-replace or adjust faulty component[s] as required
•	•							Engine camshaft timing incorrect	Refer to engine manufacturers manual and replace worn parts
•	•	•	•			•	•	Worn engine piston rings or liners [blowby]	Refer to engine manufacturers manual and repair engines as required
•	•	•	•			•	•	Internal engine problem [valves,pistons]	Refer to engine manufacturers manual and repair engines as required
•	•	•	•	•	•	•	•	Dirt caked on compressor wheel and/or diffuser vanes	Clean using a Non-Caustic cleaner and soft brush. Find and correct of unfiltered air and change engine oil filter
•	•	•	•	•	•	•	•	Damaged turbocharger	Analyze failed turbocharger, find and correct cause of failure, overhaul or replace turbocharger as required