

AIR COMPRESSOR TROUBLESHOOTING GUIDE

SYMPTOMS	CODES							
Passing Excessive Oil	1	2	3	4	5	6	7	8
Knock or Rattle	9	10	11	12	13			
Slow Air Buildup	1	6	8	9	10	14	15	16
Will Not Unload	15	17	18					
Excessive Load/Unload Cycling	15	17	19	20				
Runs Hot	9	16	20	21	22	23	24	
Premature Carbon Buildup	6	17	21	23	24	25		

PROBABLE CAUSES

1	Restricted air intake. Change air filter element, local or engine. Kinked air hose. Vacuum from engine turbocharger when the compressor air intake is hooked to the engine air intake. Use inlet check valve assembly.
2	Restricted or kinked oil return line. Return line size must be a minimum of 5/8" O.D. Check for silicone buildup in the drain hole. Excessive engine rotation may require a bottom drain on the compressor.
3	Poorly filtered air. Check for defective intake components.
4	Improper cooling. Restricted water flow, maximum coolant flow plumbed into the block and out the head. (Opposite sides)
5	No air dryer in the system. Drain reservoir tanks daily.
6	Excessive duty cycle. Check for system leakage, inadequate compressor size for vehicle application.
7	Excessive engine oil pressure and/or crankcase pressure.
8	Compressor worn out or defective
9	Restricted air discharge line - build up of oil heating to a hard carbon fibre.
10	Loose pulley or worn drive gear components.
11	Lack of lubrication has created excessive bearing clearances.
12	Mounting bracket vibration
13	Carbon formation on the top of piston/bottom of cylinder head.
14	Air dryer purge valve stuck open
15	Defective unloader mechanism and/or governor
16	Braided discharge line heat fatigued. Check with a soapy solution.
17	Discharge valve leakage. Excessive system leakage.
18	Governor reservoir or unloader line restricted.
19	Reservoir volume reduced. Drain water from system.
20	Brakes out of adjustment. Increased volume usage.
21	Improper cooling. Restricted water flow, maximum coolant flow plumbed into block and out the head (Opposite sides)
22	Insufficient air blast cooling. Clean cooling fans.
23	Carbon comes from heat. Look for restrictions. Early engines did not utilize inner coolers. Compressor inlet turbocharged to elevate temperatures.
24	Compressor is turbocharged at temperatures/pressures and RPM above acceptable limitations. Consult manufacturer for parameters
25	Brand of multi-grade motor oil. Some oil brands allow carbon and varnish formation at lower temperatures.