

Inspection Report of
Waukesha Gas gen-set Model L36 GLD 12 Cylinder

Manufacturing date: 1998
Operating hours: N/A
Control System: N/A

Inspection includes cylinder heads and Chambers, Turbo chargers, Crankcase and Conrods.

Cylinder heads:

In total 9 Cylinders were removed, 6 Cylinders in Left Bank and 3 from Right Bank. All Cylinders heads need to be refurbished to operate the engine.

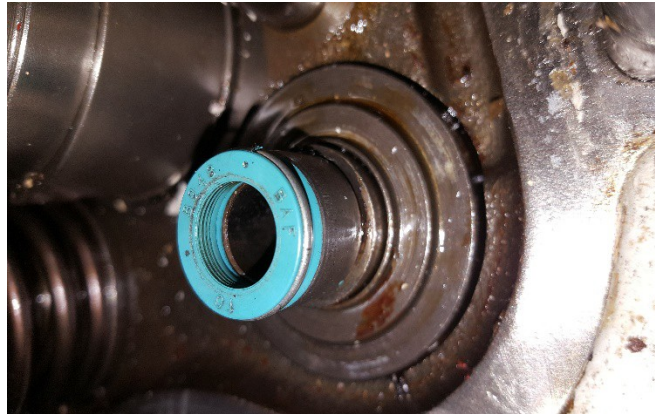
Exhaust Valves

are looking good and show no crack and burning signs. Intake Valves have too much soot and combustion deposit between Guide and Seat which must be fully polished.





Valve seal oils on both exhaust valves are looking visually good and there is no trace of leakage on Valve stem but on Intake valves, that would be a potential for such deposit.



Sealing Test of Valves by diesel, shows leaking mostly by Intake valves. There is no sign of wearing or crack on valves and seats which seems a good sign to making valve sealing possible after refurbishing.



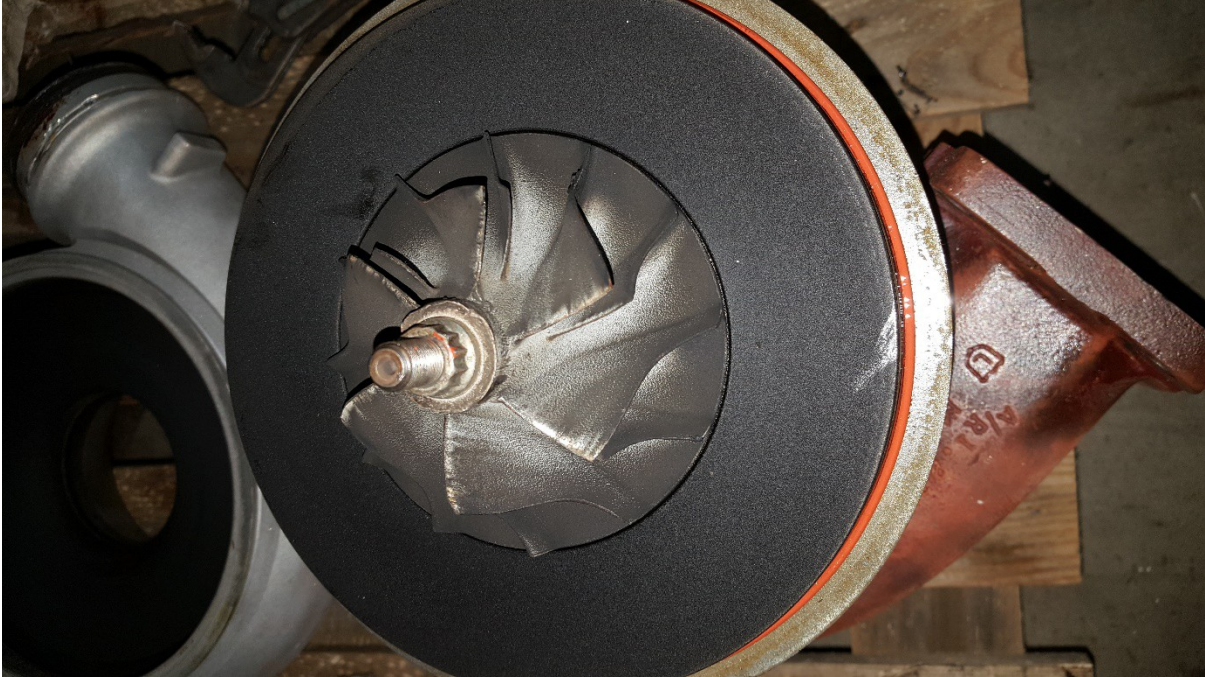
Test leakage on body of the Cylinder heads shows no defect on them and no trace of micro cracking also. Rocker arms and Rocker Rods, in all Cylinders are looking without problem.

Camshaft: Camshafts in both Banks of the engine are turning with out problem and the surface of the cup followers are looking normal as well.

Rotor caps and valve springs facing acceptable and functioning normal. Main Gears and drive gears are all healthy on tooth and wearing.

Turbochargers: Jastram TG 06 W7879

The Turbochargers have been inspected and checked. Oil cartridge on both of Turbochargers has over radial clearance and too much tilting which probably has caused oil leakage inside of after-cooler. Inside of the after-cooler and Air intake manifold are oily and that likely approves such defect on Turbo's Oil cartridge. Black soot on compressor side of the Turbochargers have been probably created by same defect.



Cylinder Liners:

The Liners on some cylinders have Significant scratches which has probably caused by Piston rings friction. Generally, that could not affect engines operation seriously since we have not only found any trace of oil burning on surface of the cylinder heads but also exhaust valves. They have good condition of honing in most of the parts but that would be recommended to be observed for right time elimination.



Scraper rings around top of the Liners are complete burned and exhausted and it is strongly recommended to replace them.

