

Classic Chrome Ltd.,  
12, Sheen Lane  
Mortlake, London  
SW14 8LN

12<sup>th</sup> August 2022

**Invoice no. mmmmm Job no. J2094**

**To the following work on Lancia Fulvia 1.3 Sport Zagato, registration no. KRX 463L, chassis no. 818.651\*003066\*, engine no. 818.303\*80453\*, with recorded mileage 39947 miles, for work between 5<sup>th</sup> July and 11<sup>th</sup> August 2022.**

Remove parts from inside car and clean prior to Classic Chrome's customer viewing at Omicron. Talk to potential buyer on behalf of Classic Chrome. Put car on ramp for them to see underneath.

Clean block face from old head gasket and check where possible with straight edge. Check head face with straight edge. Check inlet manifold and head mounting face.

Decide to get cylinder head, which looks fine, and the inlet manifold, which also looks okay, pressure tested as an assembly. Take to company that does this for us, and await them to get round to it and report back. Head was fine. Manifold was fine. But together there was a leak between the gasket faces. They machined the manifold flange flat and re-tested. Okay now.

Head rebuild.

Replace upper engine- gearbox mount bolts. Replace heater hose between inlet manifold and heater valve inside car. Confirm there are 2 dowel bolts for cylinder head and lift head back on. In a moment of doubt remove head and recheck timing marks – best to be sure!

Refit head and fit camshaft sprockets. Turn engine to confirm valves do not touch. Set No.1 valves to 2.2mm clearance and check valve timing. Correct valve timing on vernier sprocket pins. Re-check engine turns with no contact.

Refit exhaust manifold with a new gasket.

Refit carburettors and connect fuel pipes (note - mechanical fuel pump is not connected).

Connect all coolant pipes and fill with water only (for testing).

Refit spark plugs after gapping them.

Unable to find throttle link rod. Get second-hand rod and fit new ball sockets to its ends. Adjust to length.

Run engine to warm - cooling fan does not cut in. No fuse fitted to inline fuse holder. Clean fuse holder and fit new 8 Amp fuse. Cooling fan now works if fan switch is bridged.

Start engine, misfires. Isolate misfire to cylinder 4. Check for spark at plug, swap no.1 and no.4 plugs. Misfire transfers. Replace spark plugs which are incorrect heat range, and too cold (they were NGK BPR 8ES).

Set points gap and strobe check/set ignition timing.

Road test car which breaks down on test. Limp car home. Diagnose car cutting out - does not feel electrical and spark present when car falters. Fuel present in pre-pump filter but not much after.

Add 10 litres of fuel in case it's not picking up in the tank, no improvement.

Connect master pressure gauge in line from pump to carburettors. 1.5psi dropping to 0.

/continuation...

Connect mechanical fuel pump inline and disconnect electric fuel pump and remove fuse from inline holder. 3.5psi remaining constant with just the mechanical pump connected. Road test car and on return change engine oil and filter. Also drop coolant and add antifreeze.

Start car. Okay in workshop, but then starts to splutter. Low fuel? Removed fuel sender to inspect - tank is clean and fairly new. Fuel pressure 4.5psi today!

Remove old electric fuel pump. Drill new holes for new pump and fit pump and regulator. Plumb in hoses (tank - in-line filter - electric pump - mechanical pump - regulator - carburetors). Run engine and set idle fuel pressure to 3.5psi.

Short road test around common - engine runs fine and idles fine. Car repeatedly fine on subsequent starts.

**PARTS/SUBCONTRACT (CONTINUED ON SUBSEQUENT PAGES) £**

Pressure test cylinder head and inlet manifold, and machine manifold face, subcontract	234.00
2191840 - Oil filler base gasket	1.44
2214710 - Water rail to inlet manifold gasket, 2 off	2.60
4411010 - Heater hose, 1.5 metres	10.13
2283388 - Rocker cover gasket, inner, 2 off	5.28
2283387 - Rocker cover gasket, outer	5.16
2247473 - Exhaust manifold gasket	7.08
2214805 - Throttle linkage rod, second-hand	8.00
2129695 - Carb linkage ball joints, 2 off	11.64
Fuse, ceramic, 8 Amp	0.33
Shell V-Power, 10 litres	17.30
Parafly antifreeze, 2 litres	15.84
Engine oil, 15w-40, 5 litres	27.80
Spark plugs, 4 off	26.36
2300672U - Oil filter	11.36
Cavis Benz fuel hose, 2 metres	9.36
Fuel pressure regulator/filter	61.44
Electric Fuel Pump, Facet type	90.78
Cavis Benz fuel hose, thin type, 0.5 metres	1.18

**TOTAL PARTS 547.08**

<b>LABOUR</b>	<b>hours</b>
BUYER VISIT	4.50
ENGINE (REBUILD)	17.00
MISFIRE	4.00
ROADTESTS	2.25
ELECTRIC FUEL PUMP	3.25

**TOTAL LABOUR 31.00 hours @ £60 per hour 1860.00**

**TOTAL PARTS AND LABOUR 2407.08**

**VAT @ 20% 481.42**

**GRAND TOTAL £ 2888.50**