

REBUILD OF AUSTIN EIGHT ENGINE :- 1A 98256 Started to rebuild on Tuesday 14th July 2020

Block was rebored in 2008 Block surfaced machined new valve guides machined and fitted by Howards Engineering in Glasnevin Dublin also Crankshaft machined Main Bearings to .020thou and Big End Bearings to .040 thou undersize 2 Cylinder Heads were machined at the same time also New Valve guides fitted by Howards

Stared to rebuild Engine on Tuesday 14th July 2020 after sorting out all the parts of engine which were stored from 2008 New Inlet and Exhaust Valves were ground in after receiving block back from Howards in on 24th April 2009

Spent a few days in 14th July 2020 searching for Engine Parts in Sheds and getting all the stuff together for rebuilding

Cleaning Parts and started to rebuild fitted new Valve springs Put reground crankshaft back in engine block with undersize Main Bearing .020thou and new Thrust Washers (4) .093 washers and torqued to 60psi Oversize Pistons (.040thou) assembled (2 oil rings) piston installed from crankcase without rings and rings replaced and 4 pistons put in with new big end shells (.040thou)

New Camshaft Gear and new timing chain with new Rubber tensioner old Crankshaft Gear refitted as I couldn't get a new one timing set up at No.1 Cylinder New Felt seal fitted to Timing Chain case cover

New Brass Filter Mesh fitted to Oil Pump Strainer Bowl Soldered on While Cleaning Sump discovered 2 pin holes near Drain Plug and also under Oil Pump strainer Repaired by Paul Gallagher by Brazing Gaskets made for Engine Mounting Plate and same refitted to Engine block and new joint made for Timing case Cover same refitted and Crankshaft Pulley fitted onto Crankshaft with the new felt seal in timing case cover New Gasket made for Engine to Gearbox Plate and same fitted also new sump Gasket made

Refitted Oil Pump to engine block without gasket as I didn't think there was one there Sump fitted to Engine and Thomas gave me a hand to lift engine onto Front mountings

Fitted Distributor with New Points fitted and set to .012 thou Water Outlet refitted with new Gasket Hole Cut in Test Bench to allow oil to be Changed after using Flushing agent with engine Oil after running engine for First time.

Cylinder Head fitted to Engine block with new Copper Gasket using Grease and same torqued to 40 psi and new Frost plug fitted to head after one was removed for cleaning water spaces in Cylinder Head Exhaust and inlet Manifold fitted with New gasket and Oil Filling Pipe Refitted with new Joint

Fitted Flywheel with new Ring Gear which was fitted on flywheel sometime earlier by Gerry Saurin and Fitted new Clutch plate and Pressure Plate to flywheel Gearbox fitted to engine and all electrical wiring and Voltage Regulator Box wired up also Carburettor Clean and Jets removed and blown through also Petrol lift Pump cleaned and refitted and connected to carburettor by pipe

Spare Radiator flushed with caustic Soda and fitted to engine with New Radiator hoses Filled with water and Gearbox oil topped up along with engine filled with Millar Oil and Flushing agent Distributor Cap fitted with clean spark plugs fitted and Reconditioned starter by Joe Clark's Electrical repairer Fitted to Engine also fitted exhaust to Manifold and fitted temporary Exhaust Box which Paul had welded a patch on and tail pipe fitted to box to engine

Tried to Start engine but of no avail discovered Starter pinion was lacking on starter Ring Gear but after failing to start removed gearbox to check Ring gear to discover rust on Teeth wired brushed and lightly filed each tooth and applied Copper Slip to Starter Pinion and connected Gearbox back on again and refitted starter but Engine still hadn't enough speed to start Having collected another overhauled from Joe Clark and fitting same not enough speed to start so I rang Noel Clinton on the 20th August for help and as usual Noel and Peggy arrived up ay 8 pm that night and after going through timing wit Noel and spart Noel gave it a boost with 12volt booster as I was turning engine on 6 Volts it fired up and Noel altered Distributor to retard timing a bit and we fine turned and got it running a big relief to hear it running

After running it for 15 mins for 2 days I drained the oil from engine by way of drain hole I had cut in test bench and using a funnel wasn't a great success as oils flow to quickly and had a bit of spillage After refilling Sump with new Millers Oil Engine run on test Air flow Screw removed cleaned replaced and engine tuned as best I could.

Rubbed down Spare Radiator to get loose paint off and resprayed Radiator complete Removed Pressure Plate and Clutch to gain access to Crankshaft Toe Bearing removed same by packing behind it with grease and using alignment tool to force old bearing bush out Gave Eric Montgomery old bearing so he could make new one as Austin Club had none in Stock when I got Spares order from them

Friday September 4th Eric arrived with 3 new toe Bearing Bushes he made and he fitted one in Crankshaft with Loctite Bearing Fit Also included in spares was joints for Oil Pump to Crankcase so I decided to take sump off and fit the new oil pump joint Replaced Sump with New joint and grease Replaced engine on Mountings and fill sump with Strained Oil from Sump Ran Engine for 15mins everything ok also Checked Pressure in Engine Cylinders

No. 1 :- (8 Bar 115psi) No. 2 :- (7.5 Bar 110psi) No. 3 :- (8.8 Bar 125psi) No.4 :- (7.5 Bar 115psi)

10th Sept.2020 :- finished off Minor details on Engine filled with water and got it started with help of 12 Volt Booster pack Running well with Good Oil pressure 22psi at idle speed

Paul put 2 Patches on Exhaust Box and engine run nearly every 2nd Day

24th September Started stripping out Engine 1A68640 but not before checking compression on each cylinder

No 1 :- (4.2 Bar 62psi) No 2 :- (nil) No 3:- (7.6 Bar 110 psi) No 4 :- (8.0 Bar 115b psi)

Engine removed from car and over the next few days Engine Bay was cleaned and Painted ready for fitting

10th October 2020 Overhauled Engine 1A 98256 after fitting new Clutch Release Bearing New Clutch and Pressure Plate and over next couple of days all mounting bolts bell housing bolts tightened up as well as fitting Reconditioned

Dynamo and Starter fitted

15th October :- Spare flushed out Radiator fitted and all new hoses fitted to same and filled with water and checked for leaks and after playing around with Carb finally got her to run fairly good spent next couple of days checking engine running and fine tuning and on Sunday 25th October 2020 took car out and took her for a run around the town and she went very well except slight oil leak from Tappet side cover ,replaced side cover with new rubber "O" ring started engine and let her run to warm up happy no oil leaks and also fixed a slight water leak at core plug in Cylinder Head above exhaust Manifold but on starting engine again

3rd Nov Still found to be a small water leak this turned out to be a loose exhaust stud wasn't tightened hence the water leak replaced stud

And no more leaks and the last job was to drain water from engine and refill system with Coolant

Job Complete Mileage Reading 15760

P.S. :- We are all not prefect and sometimes you can get stuck when you are doing a job but help, advice and if necessary assistance is always out there in our Club so don't be afraid to ask for help form any members you know they will put you in touch with the right person to help you