



Replacing Morgan Plus 8 Cylinder Head Gasket

By Dave B

Hello again, after the semi rebuild of my plus 8 and a few run outs in it I found I was losing coolant not a great amount about a pint after 10 miles or so. I looked for leaks on hoses and gaskets and found no evidence of leakage then noticed a small weep from the cylinder head gasket which I didn't expect to find as there was no coolant in the oil which is the norm so must just have the water gallery on the cylinder head. Well it was no good leaving it, it was not going to go away so off with her heads (thought I was Henry the 8th then) as it was no good just doing the one head. There is not much room to work in the engine compartment on a plus 8 so there were some choice words and a lot of spanner rash in the process as well as copious amounts of tea supplied by Pauline to keep me sane.

The first thing was to drain the coolant and remove any hoses connected to the heads remove plug leads vacuum pipes and alternator. Exhaust manifold air and inlet manifold were next to be removed after removal of fuel and water pipe the unit comes out very easy.

Next it was the rocker covers which are secured by 4 cap head screws and remove rocker gasket, the rocker shaft with rockers was removed next then onto the heads themselves there are 14 bolts on each head to be removed.



in the same order.

This depends on the age of the engine as the older engine had 8 bolts and used different head and manifold gaskets, the later type which mine is use thin steel head and inlet manifold gaskets as opposed to the composite gaskets used on the older type. The inlet manifold gasket fits in a valley between the two heads and the push rods are under the valley. The push rods were removed and put in a cardboard sheet in the order they came out to make sure they went back

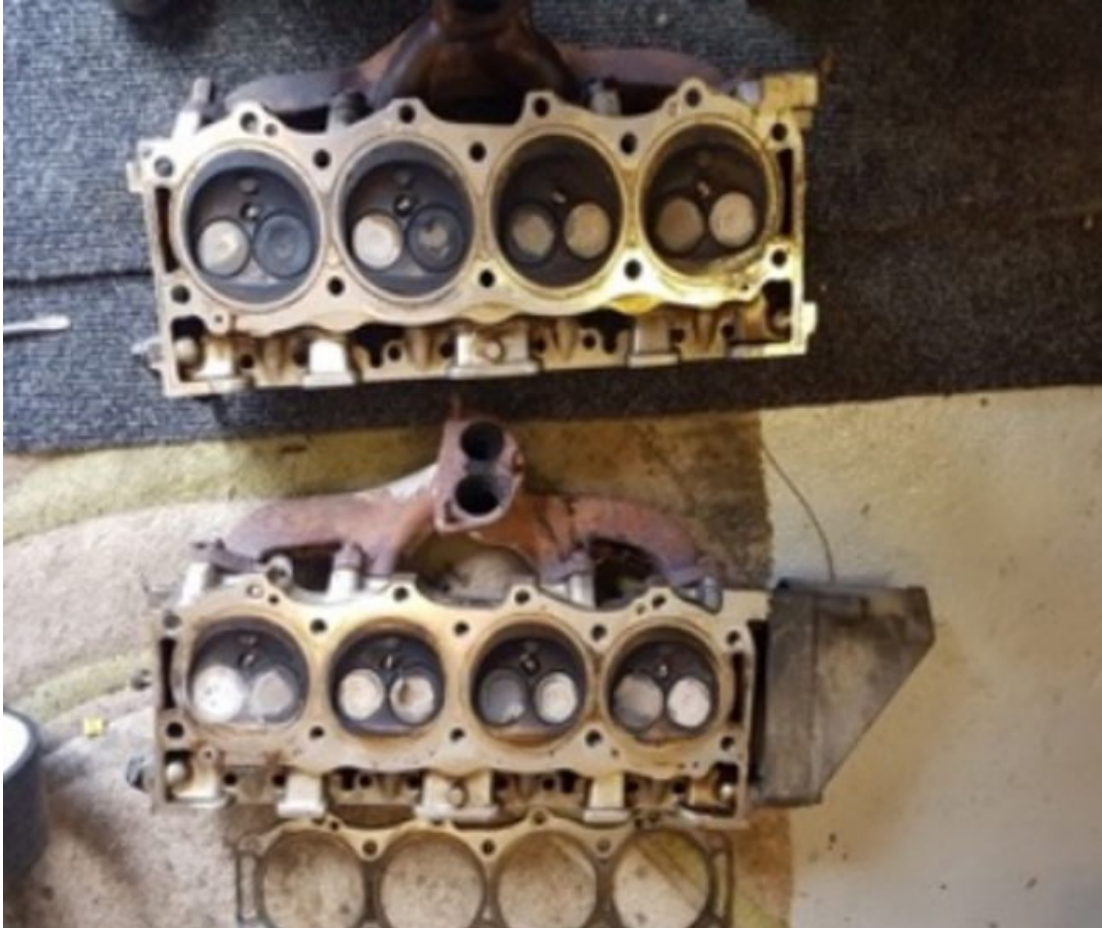
Some say you don't need to do this but it was the way I was taught and I will keep doing it that way. Great care should be taken removing the heads as they are aluminium





and the faces are polished and must not be damaged.

As you can see from the photo there are some deposits on the face of the head this can easily be removed with a cloth and WD40. With the heads removed the cylinder bores could be inspected and to my delight they were in perfect condition no lip at the top of cylinder no scores and the original honing marks were still visible.



The heads were cleaned and all found to be in very good condition with very little carbon deposits on the valves no oil burns or marks on the valve stems so I decided not to decoke the valves as they were clean and the seats in good condition and I thought why fix what ain't broken.





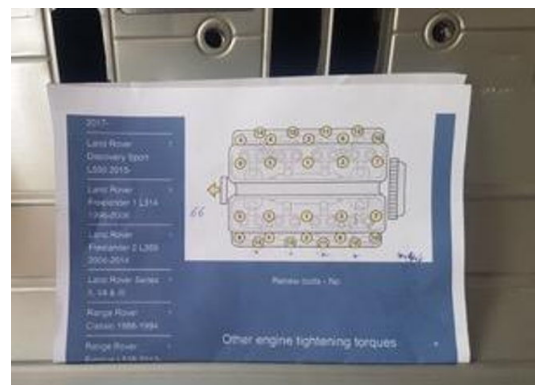
With all components cleaned and polished and a good engine clean it was time to reassemble which is mainly a reverse of the above in theory but it never is. New gaskets were purchased.

Now as I have said to many people over the years, buying parts for Morgans is a minefield and the price can be ridiculous i.e. Morgan dealer cylinder head gasket £22 each inlet manifold gasket £18 plus vat and post. I purchased my replacement gaskets from Richards of Hinstock. Genuine Rover head gasket £2 each, inlet gasket £3.50.

Richards of Hinstock 119 2TH	
Land Rover, Discovery & Range Rover Spares, Tyres, Batteries, Tools General Supplies & Supplies	
Tel & Fax: 01952 550391 Email: disco444@tiscali.co.uk Website: www.johnrichardsurplus.co.uk	
M	MR [REDACTED]
Date	6.6.20
2 HEAD GASKETS	4.00
1 VALVEY GASKET	3.50
8 EXHAUST GASKETS	2.00
	9.50
VAT	1.90
TOTAL	11.40

So, the moral of the story is shop around. Anyway, to get back on track. While the heads were off it was easy to change the thermostat as it is a pig in situ so a new one was fitted after I tested it in boiling water to make sure it was working. The new head gaskets were located on the dowels (note do not use any gasket seal compounds) and the head lowered into place head bolts screwed in hand tight. The next thing is to torque the head down in the correct sequence start the sequence to 10 lbs ft for all bolts. Then to 30 lbs ft bolts 11-14 are torqued to 44lbs ft the rest are to 66 lbs ft. Push rods re fitted in order and the rocker shaft and rockers fitted and torqued to 28lbs ft valley inlet manifold this has two rubber seals each end it is recommended a small amount of gasket seal on the end of each rubber to make seal the gasket is secured by a steel formed plate with one bolt each end.

The inlet manifold is the next to fit and this is torqued to 10 lbs ft from centre out and then to 32 lbs ft. The air inlet fitted fuel and coolant pipes refitted rocker covers with new rubber gaskets and new screws fitted.





All hoses refitted alternator and belt, plug leads vacuum pipe exhaust manifold and various wires replaced and everything checked. Oil changed and filter coolant in I use 60/40 mix anti-freeze as the car only gets used in good weather.



Ready to go turned the key a few turns to get fuel in and away she went, that lovely V8 burble. A test run to see if all was well and I was one happy chap ready to do some Morgan driving again. I would like to thank my good friend and fellow member of the Staffordshire Centre Kevin B. for his assistance in doing this job

Thanks to Dave for this article, originally published in Burble and Blatt.