

TWIN CITIES MODEL A FORD CLUB - SEPTEMBER 2023

Which way to go? *by Mark Leder*

Recently circumstances came about that it was time to consider replacing the head gasket. It was not blown but it was weeping on its edge like many engines I have seen. Knowing that the engine was rebuilt 53 years ago and that the head had a casting date that was 73 years ago. It was time to evaluate my options.

Pulling the head can be troublesome and I did prepare for that with the right preparation, remove hood, drain down coolant, remove hoses etc. and using a good puller and some tricks it did come off, although there is always a fight put up, I won mine, but I've seen some nasty stuck ones as well. So, now you do an inspection of the existing gasket and clean the combustion area deck of the engine as close to surgical clean as can be. Look for cracks, roughness, or any burnt valves or any thing out of the ordinary. Clean the head up and now think about what you should do. Get the head surfaced, and before you spend the money on that get it magnafluxed for crack detection.

Here is where and when you may question costs, your labor and should you even do that with a 73 year old head with standard compression? You could spend \$150.00 to \$200.00 for these services providing the head first checks out without cracks and you then surface it. The next question bothering you, is there stresses built up in that head that may someday soon surface and cause a failure? Now you could be back to the process of pulling it off again.

Quick check of the parts supplier and you see a higher compression head similar to the police head offered during the Model A days now called a 5.5:1 head. It is somewhere around \$400.00. You should also replace the existing head studs with a higher strength stud kit about \$55.00. This can turn into a big headache should you snap one or more. Again, there is a process to follow for higher success rates but no guarantee. Your head gasket cost will be the same whichever head you use.

Benefits? known flatness of new head, already surfaced, quality casting, no possible age stresses, some better performance.

You may be inclined to not change the head studs, but it is not recommended to leave them in with the higher compression head. If you know nothing about your engine and it is a babbitt engine with wear in the bearings, you may prematurely knock the babbitt out of the bearings with the higher compression head. The 5.5:1 head is not that much of a problem if you have a good bearings.

There is a lot of work in the change out of the head gasket and you won't want to do it often.

So, the next consideration is driving your car and using the spark advance in the correct manner. With a step up to this higher compression head in this discussion you should be more careful with the advance setting you run with, the forgiveness compared to a standard head is less and should you run too much or too little advance at times you run the risk of premature head gasket failure and increased bearing wear.

There is a tradeoff here being that of the increased performance for today's traffic. Next choice, do you really want to spend time running to a machine shop and spend money on an old part that could be questionable? Life is full of choices, take your time to ask others about their experiences and also for some help if you have never been down that road before.

What did I do? 5.5:1 head, new studs, had experience of having my other A with the same head and liked the performance. Did I think it was a lot of work? Yes, but I knew my engines wear was minimal and I wanted the extra performance and the comfort of using a new casting, correctly installing the head studs using permatex and anti-seize where needed and up grading my water neck to accept a temperature gauge probe for an in cabin temperature gauge.

Please approach me at a clinic and tell me what choices you would consider if this was your car, there is no right answer.

