

Identifying 1968 and 1969 Cougar and Mustang Radiators

I had a chance today to compare some radiators and would like to share my conclusions with you. I am using two radiators for the picture but have compared many examples to verify that these are typical and not freaks or something that happened at a radiator shop. These two examples appear to have never been disassembled for recoring or cleaning since new. I am only comparing the 24 " wide by 16 " tall clamp in radiators, the bolt in style are another topic. 1967 clamp in radiators are also a breed unto themselves deserving of a separate article.

Let's start the pictures:



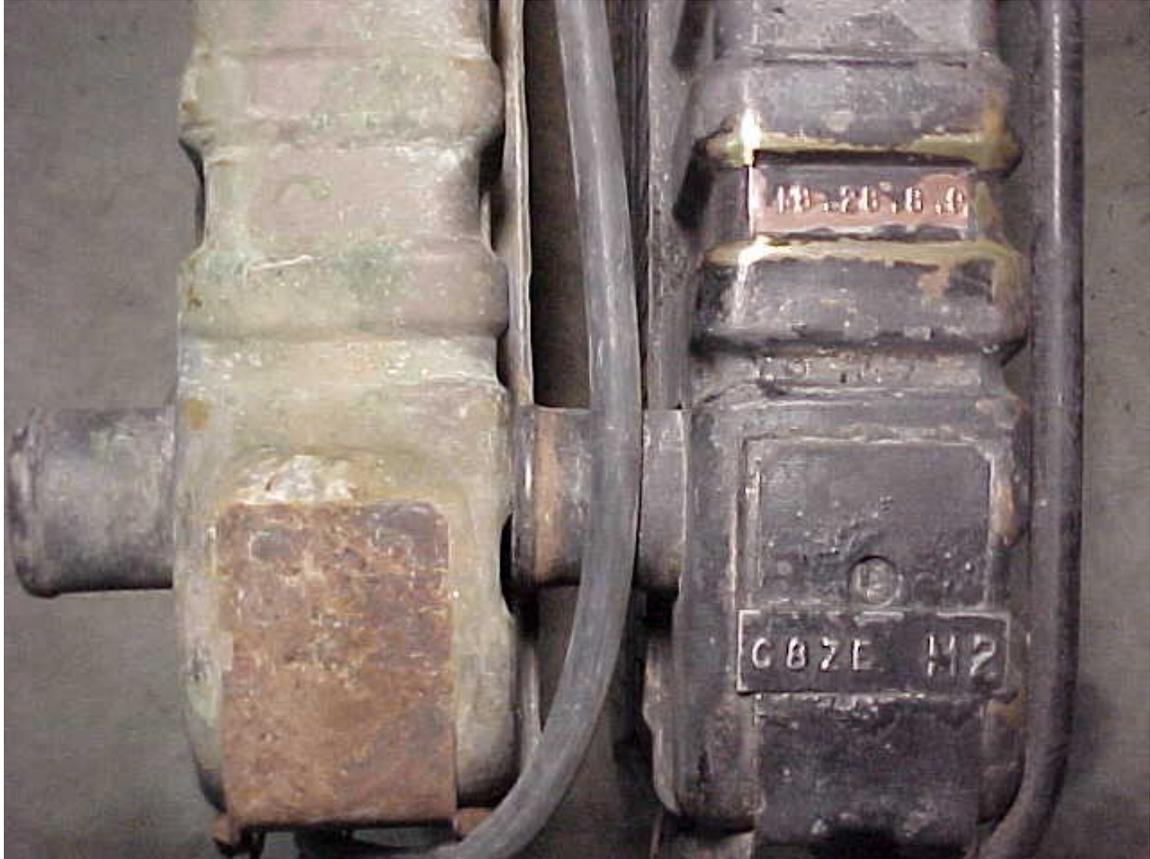
This picture (above) shows a date code on a 1968 Cougar radiator made in December 1967. The top radiator clamp hides this area when the unit is installed in the car.



Here (above) is the same area on the 1969 Radiator with no date code imprint.



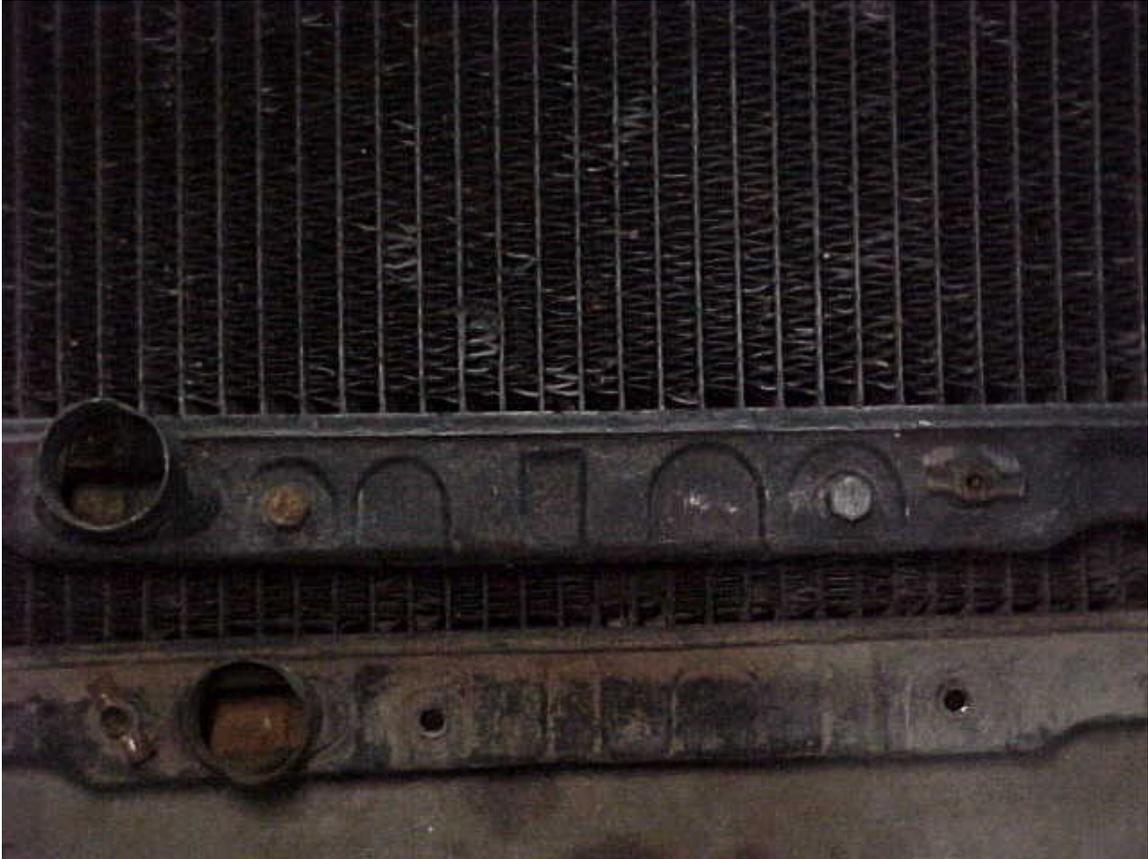
Here (above) is a comparison view of the 1969 (left) and 1968 (right) FoMoCo imprint. Notice the 1968 stamping is much larger. These marks are on the driver side of the radiator, forward would be to the right in this view.



This view shows the difference in the strap on the top tank, the 1969 strap (left) is shorter. The 1968 strap has a hole drilled in it. Also notice the part ID tag on the 1968 unit (right). I do not know the purpose of the copper tag on the 1968 radiator. Notice the radiator inlets are in the same place on both radiators, either would work fine for each model year from 1968 – 70. The tag on the 1968 radiator C8ZE M2 cross references to part number C8ZZ 8005-C which is the correct radiator for a 390 – 427 – 428 Cougar in 1968. What is interesting to note is that the C8ZE M radiator was manufactured through the 1970 model year but after model year 1968 the tag was not present on the top tank and the date code was not used on later radiators either.



More differences occur on the side. The 1969 radiator (left) has C9ZE- E1 and a relocated overflow tube clamp. The 1968 unit has other subtle differences in the side straps, little indentations on the front and rear stiffening flange not seen in the 1969 units. If this were a C8ZE-M radiator for 1969 or 1970 the C8ZE-M designation would be seen.



I should have lined up the lower outlets and transmission cooling line connections because they are actually in the identical location. What is different is the drain petcock. On the 1968 radiator (bottom) the petcock is on the driver's side. The 1969 unit has the petcock on the passenger side.



A major difference between 1968 radiators and 1969 – 70 radiators is the fin design. Ford engineers evidently found gains from increasing airflow by using fewer fins with the same tube size and spacing in the 1969 – 70 units. The 1968 unit on the right has a much denser fin spacing arrangement which would give greater surface area but hurt airflow especially as the fins became clogged with corrosion or debris over the years.



This shot is of a radiator installed in a '68 Cougar with 302 engine. Notice the clamps holding the radiator in place on either side of the cap, this is actually one piece that bolts to the radiator core support near the hood latch assembly.