STAY COOL

By Roy Braatz

You have or know someone that has his or her '56-'62 Corvette temperature gauge reading around 210-220, but never really boils over or seems to get hot.

Most owners will blame the gauge, radiator or water pump. Most owners I meet that have this problem have all made the same mistake. They replaced the original sender with a new, shiny brass sender that is said to be a replacement for '56 and up because the original one was ugly and dull. Let's discuss one simple fact: '53-'54 used a 4 pound pressure cap because it had, in fact, an overflow or reserve tank to keep the water at a temperature calibrated by "design," and aided by the thermostat. '56-'62 used a 7 pound pressure cap for copper radiators. '60-'62 used a 13 pound pressure cap on aluminum radiators only.

Each rise in cap pressure raises the boiling point of water which, in turn, has a temperature (calibrated sender) to match the boiling point of water which is matched to pounds of the pressure cap that is used. If a 7 pound pressure cap determines 180° is normal, the sender reads the 180° water temperature and sends a resistance reading back to the gauge which will relay a 180° reading. Today's Corvettes use a 14

pound pressure cap which raised the "water boiling point" so that 210 is normal. If you have that sender installed, your gauge will read 210 all the time but your engine is not hot. Remember, each year sender is matched to a particular pound pressure cap or system.

If you had each year sender and placed them in a 180° boiling pan of water, the resistance reading would be different for each sender. Now you'll know why some Corvette owners that know this sell used senders at Vette swaps. It would seem reasonable that cars in the '50's using 7 pound pressure systems would have the sender you need. I used '56-'57 Chevy car senders. Also, the radiator caps are correct. Hope I cooled off someone's problem.





