

## 2004.5-2005 Dmax LLY Running Hot

November 2005

What have we learned to date? Based on my reading and limited first hand experience (my truck has hit 220-230° f max. on limited occasions) with running hot, not all trucks overheat or run hot. Statistically, I'd say that the hot runners are actually a very small percentage of vehicles. Some differences can be attributed to the individualistic tendencies among trucks, and some can be attributed to climatic/geographic and work load differences be it weight or frontal (wind) load.

For all intents and purposes, the LLY cooling system is the same as the LB7. The minor differences are that the LLY has a smaller fan drive pulley for slightly higher fan speed, and the fan clutch engagement calibration has been tweaked SLIGHTLY higher to address concerns of overly active cooling fan operation. While 2004.5 sales literature claims higher flow water pump, it appears as though it is identical to the LB7.

Here is a list of numerous things that have been tried:

- 1) Improving and concentrating air flow through the coolers and out of the engine bay (stack seal/shrouds/hood louvers/splash shield modifications/air dams) can help, but not a sure fire cures.
- 2) Cold Air Intakes can help, but not a sure fire cure
- 3) Replacing coolant caps/flushing/thermostat changes can help, but not a sure fire cure.
- 4) Larger radiators/intercoolers/trans coolers can help but not a sure fire cure.
- 5) EGR-Cat defeat/ free flow exhaust for reduced EGT's can help but not a sure fire cure.
- 6) Boost increase for reduced EGT's be it Programming or Boost Stick installation can help but not a sure fire cure.
- 7) Power increase through tuning of fueling, timing etc can help but not a sure fire cure.

Some have found that one, two, a combination, OR all of the above has worked for their situation, or at least minimizes the frequency of "episodes" yet others have found that even with all of the above they still have problems.

The difference in operating characteristics is likely a combination of things. It could be increased heat load generated by the turbocharger. It could be a difference in the cylinder head redesign for the external injectors. Only time

will tell, but I am beginning to wonder if there will ever be a sure fire cure. It should prove interesting to see how the 2006 models (be it LLY or LBZ) perform with a minor turbocharger change and the revised cooling fan/shroud arrangement...

It also should be noted that GM has issued PIP# 3574 (Sep 30, 2005) Document ID #1708799. This document is copyrighted information so I will not post it here, but it basically says to check that the latest operating software is installed, verify that the cooling system is free of debris and no aftermarket grille is in place. In other words check for the obvious. Then obtain a scale ticket to verify weight and if all looks good yet it still overheats to file a Field Product Report.