

Transaxle Cooling

Posted by AgRacer - 20 Feb 2014 17:43

Has anyone taken advantage of the new rule allowing transaxle cooling?

Ive started to develop a setup and got a quote from one source that included pump, filter, and cooler with fan that scavenges off the drain plug and returns through the fill plug.

The source seemed to agree that its not a lubrication issue for us but rather a heat issue that kills the bearings holding the ring and pinion. He seemed knowledgeable on our transaxles and also made a good point that particles off the LSD clutches can add to wear, which is why he recommended a filter. Any temps over 220-230 were said to be too high, and that's under what some reports on here were saying they were seeing.

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Re: Transaxle Cooling

Posted by AgRacer - 03 Mar 2014 16:30

After doing some more shopping and asking around, Ive come up with a kit that prices in the \$680 range shipped and includes everything needed except the mounting solution.

After talking to some Corvette shops (same drive train config) as well as P car shops, I think that just getting the fluid circulating and out of the box will be enough. This is why I ditched the Fan mounted cooler in the above quoted setup in favor of a 25 row that may or may not have air ducted to it depending on where its mounted.

Ive thought about using a naca duct in the passenger side quarter window and then routing a duct to the spare tire wheel well which is where the cooler will be mounted.

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Re: Transaxle Cooling

Posted by Big Dog - 03 Mar 2014 20:19

Having hot oil in the spare tire area exposes it to damage in a rear ender and hot oil can burn if there is an ignition source. As I recall, NASCAR brings air in through NACA ducts in the quarter windows with an oil cooler on the floor of the car inside a sealed box. I never saw where the air exits but assumed it exited through the bottom of the car.

I don't know if that is a great idea either but they seem to use it. I would personally look for a spot that is not as easy to damage.

Big Dog

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Re: Transaxle Cooling

Posted by AgRacer - 04 Mar 2014 06:35

Not sure if the danger there is any different then oil coolers mounted right up on the front bumper but I saw your point after I did some cardboard mock ups last night trying to figure out a better solution.

I have the late plastic fuel tank so I can remove the spare tire well which would make a perfect place to hang a cooler into that void and in some air flow. There aren't really many other alternatives if you leave the well in place besides what I found pictured below. What I don't like about that setup is that it places the cooler right next to the hot muffler (which I have a larger muffler then most).