

Emissions system and ICV Help

Posted by AgRacer - 16 May 2012 17:28

I'm working through a couple of issues that I need help with since I don't know this car that well. I have an 83 chassis with an 88 drive train and 88 DME. At my first race I found out that my car likes to use oil at the rate of about a quart a day. To see how much might be going through the intake, I decided to take it apart.

Upon removing the MAF and J boot, I found that there was quite a bit of oil residue in the J boot and Throttle body. Enough to almost cause pooling. I then started tracing lines back and found the ICV wasn't hooked up. I think this explains why my car doesn't want to idle well when its cold.

After doing some research, I found out that the late ICV is a 3 pin and the early one a 2 pin. I have the 3 pin ICV and a 2 pin harness. I understand the concept of the ICV, but I cant figure out where the hose goes under the intake that supplies air when the valve is open.

I have a line that comes off the the T fitting at the bottom of the J boot that is quite long and just plugged at the end. I also have another T that's plugged in the hose that connects the Venturi to the fitting at the bottom of the J boot.

What is the best way to simplify all this that's still spec legal?

Should I worry about changing the engine harness to an 88 version to match the motor and DME so I can retain the proper use of the ICV?

Is a catch can legal and whats the best way to hook it up?

Ive done my best to try and search for stuff but Ive run out of patience with researching my answer. I can snap a few pictures of what I'm talking about if that helps but I'm sure there are a few of you guys that have all this stuff memorized.

Re: Emissions system and ICV Help

Posted by B1BFlyer - 16 May 2012 22:12

You can run an oil catch can to get rid of the intake buildup. My car smoke bombed bad from the oil vapor return getting into the intake in sweeping left turns until I routed a catch can. They're legal because it's an engine durability upgrade that adds no performance value.

The quart of oil consumption isn't out of the norm either.

I have no ICV on my car, there is no loss of reliability, just a hunting idle that sometimes dies right when I first start it cold.

Talk to BJ about the ICV and catch can setup. He's working my oil catch can because mine is not optimal when it fills up and puts oil in front of the driver side wheel well.

Cheers,

Ryan

Re: Emissions system and ICV Help

Posted by AgRacer - 11 Dec 2012 21:26

So I've finally gotten around to figuring out the vacuum system. I was able to completely remove every bit of hose not connected to the fuel system.

My long and rambled reasoning is below, so if you want the cliff notes, I just want to make sure I can do the following two things and delete/plug everything else in the vacuum system:

- 1) Can I run the hose off the booster directly to the forward facing intake port?
- 2) Can I run the port off the top of the AOS directly to my oil catch tank that's vented to the atmosphere with a breather?
- 3) Is replacing the o rings on the AOS to include a new filler cap worth the effort if only to clean up the oily mess underneath it?

As I understand it, I can connect the line off the brake booster directly to the port on the intake that faces forward and then plug the port on the bottom of the J boot which deletes the venturi tube.

Since my motor is an 88 in an 83 chassis, the ICV electrics don't hook up leading me to remove it completely and plugging the port under the intake that's a pain to get to.

Now for the real reason I want to do this: I have a fair amount of oil residue on the throttle body side of the J-boot, all over the throttle body, and likely inside the intake as well. All indications point to oil from the AOS tube going into the intake. The tube from the AOS is pretty much direct with only a T at the metal fitting that used to go to what I think was a Charcoal canister.

I still have that old catch tank with breather that came with the car. I plan on routing the input for the catch tank directly to the nipple on top of the Air Oil Separator.

I also think I need to replace the o rings on the AOS as the bottom of the motor is all sorts of oily directly underneath it.

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