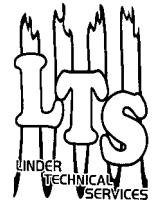


# *Networking*

*Newsletter*



**Jim Linder  
The Injector “Guru”**

## **December.....Already?**

I can hardly believe that another year has come and gone. What a year it's been! As I sit here on the beach in Florida (yes, I do get a vacation each year, rbg), I find that I have a lot to be thankful for.

First and foremost, I am thankful for YOU, our loyal customers, who have had faith in us and supported each and every aspect of Linder Technical Services. It has been eleven years now since I opened LTS here on Gasoline Alley (with 4 tables and 15 borrowed chairs) and we have never looked back. The business has grown each and every year. Even when I try to put the brakes on and slow down, the business just keeps speeding up. Thanks to each and every one of you for your support and your business! We intent to keep it up on our end and make it better every day.

Special thanks must also go to the Linder Technical Services crew. It takes special people to make things happen and our people are very special in the way that they share my vision of helping this industry in any way we can. From our local group of Peggy, Doug, Michele and Hiedi, to our part-time crew of Danny, Gary, Greg, Tim and Terry, to the LTS North crew of Randy and Mike, thanks to each and every one of you for your contributions to the finished LTS products and services!

The future? Being a planner, I am now working on a ten-year plan that will keep us in the marketplace and insure your support from our company. Look for these new products and services in 2002:

- New injector equipment (see page 3)
- New classes and seminars addressing the latest service issues
- New manuals on fuel injection
- “Guru Fuel Injection Service” video from the folks at AVI (Automotive Video, Inc)
- New fuel injection cleaning chemical (on and off-car)
- Local area fuel injector representative (door-to-door)
- Expanding our in-house PCM flash programming services
- Extending the warranty on **ALL** LTS fuel injectors

Let's not forget our annual Technician Conference on September 13, 14 & 15, 2002. With a focus on OBD-II and fuel injection, this promises to be bigger and better than ever before.

Am I thankful? You bet I am! But, I am also very excited about the new year and implementing the plans that we have made for the future.

***Jim Linder The “Injector Guru”***

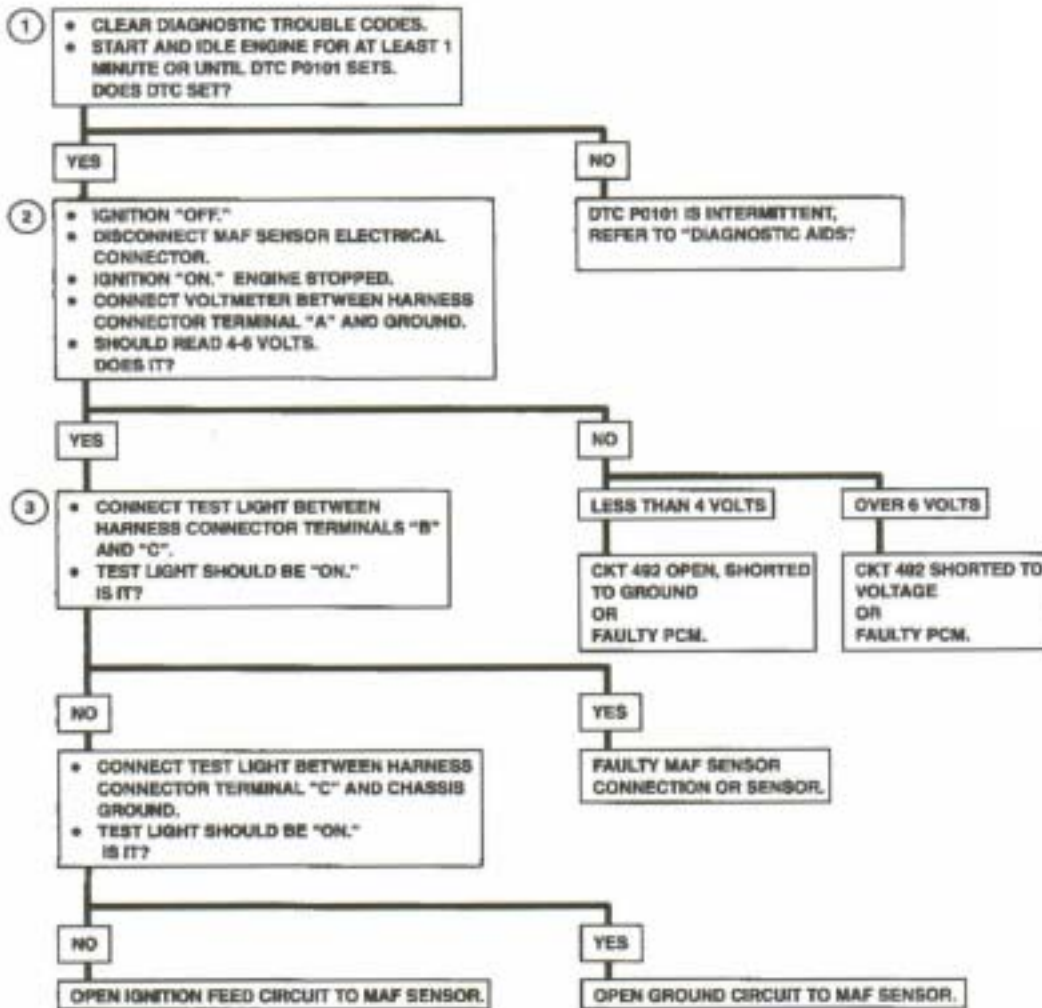
## Analysis from the “Sleuth”, Michele Winn



This month’s case study comes from Ralph Davis. Ralph works at Mosso Automotive in Wellsboro, Pennsylvania and has been thru both our week-long Guru school and the weekend Guru-2 training class. He is an ASE-certified Master technician with LI and undercar specialist designation. Every now and then when he comes across an interesting problem, he will fax me the pertinent information along with waveforms, flow charts, etc. and a brief explanation of the fix. I enjoy hearing about the different problems that face technicians all over the country and how they approach different problems.

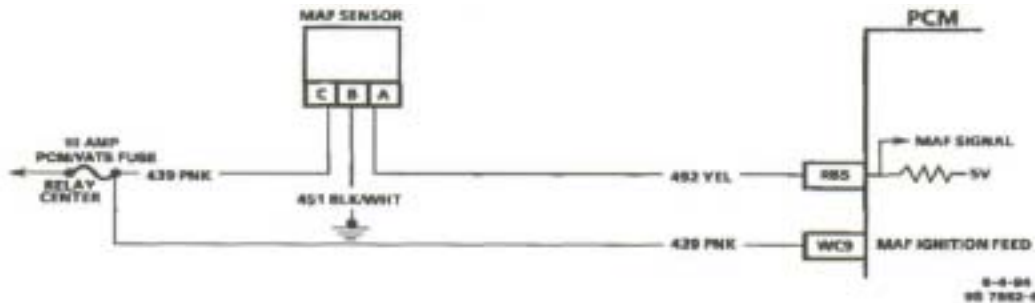
A few times earlier this year I have written newsletter articles warning of the dangers of flow charts. I chose Ralph’s case study to share with you this month because it holds true to the theme.

1995 Pontiac Bonneville with a 3800 engine. Check engine light is on. Scan check revealed code P0101 (Mass Air Flow Sensor circuit) Here is the flow chart:



## Analysis from the “Sleuth”, (Cont.)

Step 2 checks terminal “A” for a 5-Volt reference and it was good. Step 3 checks to see that Terminal “B” is a ground and that Terminal “C” has battery voltage to it. Once again both were good. The flow chart brought him to the conclusion that the MAP sensor was bad, so it was replaced. Unfortunately, this did not cure the problem. The problem turned out to be inside the PCM. For some reason, it was not seeing or acknowledging the MAF signal. It took a new PCM to fix the problem...ouch! Ralph mentioned that he should have scoped the MAF sensor first and it would have saved him a lot of grief. Not the first time someone has looked back and wished they would have done things differently :) Thanks, Ralph, for being willing to share a tough experience with the rest of us!



## Fuel Injection Service Update from the “Wizard”



Our expansion earlier this year allowed for many changes in the fuel injection room. First was the addition of two new ASNU ultrasonic fuel injection machines. Second was a much larger work area that allows several people (sometimes as many as 5) to work in the fuel injection lab at the same time. Third was an entire room (larger than the one I previously did ALL of my work from) devoted entirely to storing, separating and cleaning fuel injector cores. I literally have thousands of cores on the shelf and several thousand more that are still waiting to be sorted through. Here in the core room you will find the latest addition to the fuel injection lab.

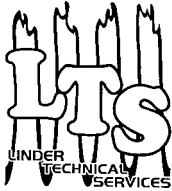


This is our new 30+ gallon heavy-duty ultrasonic cleaning machine. I am happy to announce that I now have the ability to ultrasonically clean fuel rails, and I can tell you that this machine does a great job! This type of service will be ideal for vehicles that have been sitting for long periods of time and may have rust or other build-up in the fuel rail. This will also work well on vehicles whose fuel system may have been contaminated by sugar, water, etc. So, the next time you get one of those problem vehicles in your shop, don't beat yourself up trying to run through several cans of on-car chemical to clean out the fuel rail. Send it to the Wizard!

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## Gasoline Alley

Whew, our expansion that begun last January is getting close to being complete. If you haven't been by the shop lately, you need to come take a look. In January, we expanded and took over the entire building. This gave us many new work areas. Michele, the analysis "Sleuth, took over Peggy's old office and remodeled the entire office into the "NASCAR" look. (She is still looking for a stand-up of Jeff Gordon if anyone has any leads) Doug, the injector "wizard", moved into the middle section of the building that gave him two rooms dedicated to injectors. We now have 4 flow benches and another one on order. Peggy moved into a new, larger office that we affectionately call the "pink room" and we gained another bathroom and complete kitchen area. We turned the far end of the building into a library that doubles as Hiedi's office. (We announced Hiedi's arrival in October's newsletter). What used to be a paint booth has been turned into a replica of the old Gasoline Alley Indy Garage and houses our Teardrop trailer workshop. Our new storage room has been converted into a replica of a 1960's Sinclair gas station. (Got any Sinclair stuff you don't want?) I took over the old injector room and fitted with tune-up equipment and a screen door to complete the "Bubba" look. Have you ever seen a flat screen monitor in a 1944 GM Kent Moore Tool Cabinet? If you're ever in the neighborhood, stop by and we'll be happy to take you for a tour. There wasn't much room in this issue for many pictures, but look for more in future editions.