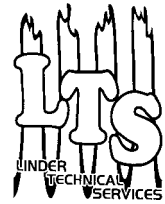


# Networking

Newsletter



## TECH TRAINING

# GURU-2



This year we completed our second group of “Guru-2” classes. Just like last year, only past Guru’s were invited to attend. We stayed with the three day format, and started early on Friday morning. New this year was

a special EVAP class which was taught by Randy Dillman. This year since we had recently expanded our facility, all classes were held here at our facility on Gasoline Alley.

**Friday** morning started with a light breakfast followed by Jim’s presentation on inductors and also his current ramping “standard”. After lunch, Mac Vandenbrink (the ignition guru) took over for an ignition update and some coil-on-plug training. Later that afternoon, John Thornton took over with a great presentation on primary current analysis.

Jim opened up on **Saturday** morning with his “Scan Tool Graphical Interface” class (now available on video). After lunch, we had on-car demonstrations with six different scan tools showing the computer interface capabilities of each. We owe a huge THANK YOU to all of the guys who did scan tool presentations. Many of them drove or flew in for the weekend just to do a 45 minute presentation for our class. Thanks again to:

Jeff Masterman, Standard BDM  
Scott Hessler, OTC Genysis  
Jim Graham, Snap-On MT2500  
Chuck Mehozonek, Ford NGS  
Mike Sauer, Vetronix Mastertech  
Randy Dillman, GM Tech-2

**Saturday evening** ended with the ever popular LTS cookout which included Bubba’s shrimp boil. All-you-could-eat shrimp, potatoes, corn, smoked sausage, brats and steak was on the menu. By the end of the evening, Bubba fed about 45 people.

**Sunday** morning began with a brief intro to OBD-II by Jim. Next Randy took over for a jam-packed class on EVAP. Classes wrapped up around 12:30, just in time for many to start the drive home or make the trip back to the airport.

## Analysis from the “Sleuth”, Michele Winn



Most of you that receive this newsletter understand the importance of regular training to keep up with the ever-changing technology in this industry. And, most of you also realize that having the proper tools and equipment (scopes, scanners, etc.) is essential in proper diagnosis. However, sometimes we get caught up in the world of new technology and forget the basics.

Here are the case studies:

1991 Chevy Corsica with a 3.1L engine. The car had been sitting for almost two years. The customer complained that it just didn't run right. With keys in hand, I strutted out to the parking lot to pull in what I assumed was an injector job. Tell the truth, all you needed to know was the description of the vehicle and the complaint and most of you were right there with me. The first thing that *should have* clued me in was the car was VERY hard to start and there was an almost empty can of starting fluid laying on the passenger's side floorboard. However, I could make sense of that since the car had been sitting for so long. You know, those darned multec injectors just cause all sorts of trouble :) Once inside the shop, I grabbed my trusty current probe just to confirm what I already knew.....or what I thought I knew. Ok, the initial current ramps look good, but I'm sure if I let the car get hot, I'll see the problem. Ok, the car is hot and I still don't see a problem, but I bet if I get my DVOM and check resistance on each bank I'll find it. Sure, resistance checks good too, but I can have that plenum off in no time and throw a new set of Doug's reconditioned injectors in the car and have the problem fixed. BUT, before I do, maybe I should check the fuel pressure??? KOEO pressure was 11 and running it got up to almost 18psi. I hate when that happens!

1989 Buick LeSabre with a 3800 engine. The customer complained that the car was hard to start at times and had a slight misfire. You have to admit that when you pop the hood on a familiar car, it's hard not to diagnose by pattern failure. Right away, the MAF was staring me in the face along with that awful “U”-shaped fuel rail with the EGR stuck right between two of the back injectors. It just so happens that the MAF called my name first, so I quickly removed it and checked under the magnifying lens. Sure enough, it had several hairs attached to it and after looking closely at the air filter, someone had put in a “lifetime” filter that was purchased at the local State Fair (no joke)! You know that screamed quality! After cleaning the MAF and replacing the air filter, I still had a problem at times. Sometimes it would start right away and sometimes it would crank indefinitely. I resisted the urge to look at the injectors (although they were quietly calling me) and grabbed the fuel pressure gage that was conveniently laying on the cart next to the car. What could it hurt? After several key cycles, KOEO pressure rose to around 18psi and running pressure jumped up to a whopping 24psi.

Sure, neither of these vehicles were extraordinary “super fixes” that make me look like a genius. They are just two examples of real-world vehicles with real problems. Not every driveability problem requires a high-dollar tool for diagnosis and not every driveability problem is a one-in-a-million fix. Many of them are simple problems with simple fixes that WE turn into complicated problems. Don't be your own worst driveability problem. Keep it simple!

## Fuel Injection Service Update from the “Wizard”



In 1993 General Motors introduced a new version of the Multec injector. It utilizes a stamped spray– tip with a larger discharge bore. This was done to prevent fuel dripping from the discharge area and improve air/fuel mixing. These injectors, when compared to the original Multec, not only have a larger discharge bore but are slightly shorter (2.65mm) and use a plastic collar (O-ring backup) behind the lower O-ring.

We are finding that a lot of these injectors have a tendency to carbon up at the discharge end and reduce the amount of fuel flow. This could be related to the use of fuels that do not contain certain detergents or fuel additives and the use of fuel with an improper octane rating. Driving patterns such as short trips with long cool down periods can also accelerate this condition.

It is our recommendation that after installing an LTS cleaned and flow matched set of injectors that you discuss with your customer the importance of routine maintenance service. This includes regular oil changes, PCV valve replacement, fuel system service and intake cleaning to remove carbon build-up.



## What’s happening at LTS?

Wow! The first three quarters of the year are gone but there is still a lot going on before the end of the year. Here’s a quick look at our schedule thru the end of 2001:

September 5 & 6:	Fuel injection seminar in Cary, N.C.
September 14, 15 & 16:	The 6th annual LTS Conference, “Your Key to OBDII Service Today”
September 28-30:	Trade show and training seminars in Houston, TX for AASP
September 29:	Training class for ASA Ohio (Randy Dillman of LTS North)
October 5-7:	Bubba’s Garage in Newport, Indiana
October 6:	PMTA Car Care Clinic
October 12-14:	Trade show and training seminars in Worcester, Mass for ACDC
October 15-19:	Guru School
October 29-November 2:	Industry week in Las Vegas.....LTS is closed for the week
November 17:	PMTA training class
November 19-???????????	Bubba is on vacation!!!!!!!

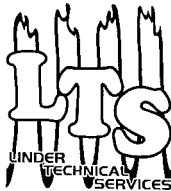
Much of next year’s calendar is already booked with Guru Schools, remote training seminars and trade shows and local training, so it doesn’t look like things will slow down much in the near future.

**Without your support, none of this would be possible. Thanks!**

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## LTS Newsletters available via e-mail!

Linder Technical Services has recently made our monthly newsletter, "Networking" available via e-mail. This has greatly helped reduce printing and mailing costs and saves valuable time that is spent folding, taping and stamping several hundred copies each month.

The new system of sending newsletters via e-mail began with this month's issue. As of right now, we have 26 shops and technicians participating and hope to see that number grow in the up-coming months. If you would like to start receiving the newsletter via e-mail, please send an e-mail to Michele at [michele347@juno.com](mailto:michele347@juno.com). Be sure to include your name, your company name and the mailing address where you are currently receiving the newsletter.

\* If you do NOT want to receive the newsletters by e-mail and wish to continue receiving them in the mail, simply do nothing. We will continue to mail newsletters to you unless you contact us to do otherwise.

*We hope that this new system will be more convenient for everyone!  
Thanks for your continued support of Linder Technical Services!*