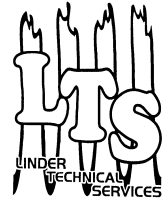


Networking

Newsletter



Jim Linder
The Injector "Guru"

Have you been a little slow?

Are you having trouble getting good qualified technicians?

These are the words I have been hearing for some time now, especially as the summer season starts. Many of you know that I collect old automotive books, manuals, tools and other old automotive related material. It is amazing to me that the above issues were the same in 1932 as they are today. Not much has changed over the years .

This month's newsletter is intended as a **"help" tool**, not a slam of any kind. It's like the ole saying **"if the shoe fits wear it"** . So read on, examine your present condition and work on the problem areas.

Example #1:

Garage "A" just can't keep good service technicians. **NO WONDER!** The shop is a junkyard! They take anything in for service and don't pay their technicians any benefits at all! A good kid at McDonald's has more going for him than you offer. Step up, offer a good pay package and clean up your act.

Remember a quote from Mitch Schneider: **"If you are too busy , then you are too cheap!"** Many disagree with this statement, BUT they are usually the ones complaining.

Example #2:

Garage "B" can't find good qualified technicians? Look around..... would you really wish to come to work in your shop? Dirty floors, old drab uniforms, dingy walls, dimly-lit work areas and the front counter has stuff laying on it (an old brown counter at that) from three years ago. Visit your competition. What makes them special? Why are you different? Get with the times. Clean up, remodel and be "today".

I do some training for parts organizations from time to time and had noticed that they were very concerned in regards to a large chain of discount parts stores. (You all know the one) In one of my presentations to a group of these store owners, I used the word **"traditional"**. A lady in the crowd asked me, "Mr. Linder, what does *traditional* mean in your own words?" ***A traditional parts store is one that has the same of stuff in the front as they did 10 - 12 years ago (including the dirt, grease and dust).*** Her reply was, "Mr. Linder, you have just described all 3 of my stores!"

After hearing their concern over this chain of discount parts stores, I felt that I should visit this place and check it out. What I found was a very well-stocked, well-lit store room with service (counter) help wearing clean uniforms and having a very large concern for customer service. I actually found myself enjoying going to this store and just looking around! I never seem to leave without a purchase of some kind. At the same time, the store where I spent many years as a customer had become very "traditional" with poor (untrained, un-experienced) counter help, dirty floors and counters, dimly-lit showroom and poor stock etc. I no longer shop there!

I really think this applies to each and every one of us in the automotive service business! Someone said once, **"if you always do what you always did, you will always get what you always got!"** I believe that is a very realistic statement.

Wish to know what your shop looks like from a customer's standpoint? Give us a call and we will come out, take photos and show you our view from the outside looking in. Our fee? Nothing! I'm always glad to help this industry any way that I can.

Analysis from the “Sleuth”, Michele Winn



Last month we started plumbing the fuel system and installed the new intake.

- We then installed the upper radiator hose
- Install both heater hoses.

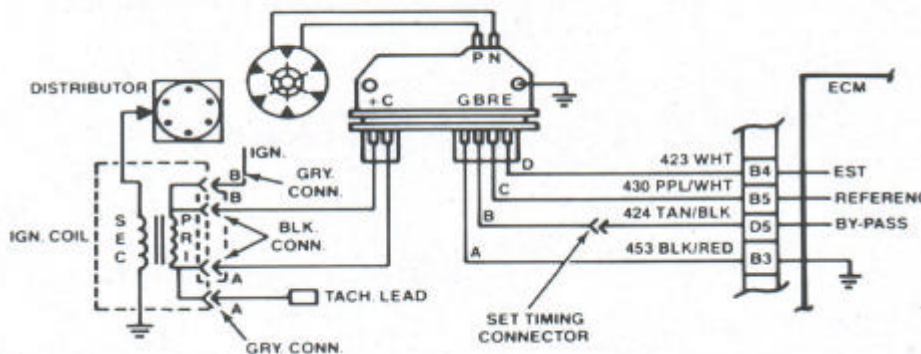
We used shrink fit clamps on all. Boy, they look great! Now it's time to install the new distributor.

- Bring #1 cylinder to top-dead center & align timing marks.
- I noted the position of the rotor so I knew where to put the #1 plug wire.
- Consulted the 2000 Car Care Guide for firing order and distributor rotation for a 1990 Chevy Truck with a 5.7L engine.
- Install the new distributor cap and spark plug wires.

The spark plug wires that were already on the truck were fairly new, but since we changed distributors, the ends that fit onto the cap were wrong. So, in typical “Bubba” fashion, we removed the old ends and replaced them with new 90degree ends. Bubba, has all of the necessary tools to do a job like this and make it relatively easy!

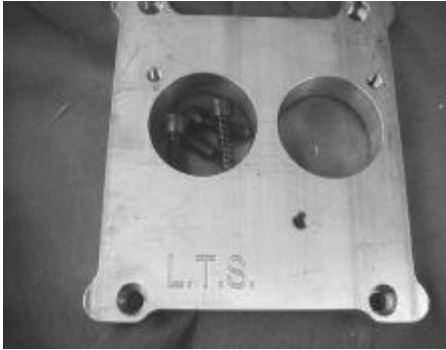
Now I'm left with the wiring issues we talked about earlier. There are four separate wires coming off the ignition coil. Two of them (one pink and one white) are located on the smaller, black connector. The other two wires are located on the larger black connector. One is gray and one is purple. Let's get a closer look at the wiring diagram.

The gray wire is ground. Lucky for me, I marked the + and - wires as I removed them from the old coil. I soldered the gray wire to the black coil - wire. Next is the purple wire. It needs to go to ignition feed. I could connect the purple wire to the + wire I took off the old coil, but Jim informed me that there was probably a resistor in that wire that would not function properly with this new-style system. So, I needed to run the purple wire into the cab of the truck to the ignition switch. Directly above where the coil was located, there was already a small hole in the firewall. I yelled in to Jim and handed the purple wire thru to him. Now it's his problem to deal with ☺ Ok, now I'm left with one pink and one white wire (located on the black connector).



They both go to the ignition module, but which way??? Back to the books. I went to the GM Throttle Body Injection Manual (SD-214-A) and easily found the wiring diagram for the EST system. The ignition module itself is marked + and C on the two particular terminals I'm worried about. The + obviously goes to battery power, so it is connected and soldered to the pink wire. The C terminal is then connected and soldered to the remaining white wire.

Analysis from the “Sleuth”, Michele Winn (cont.)



- Install the special LTS adapter plate so the new 4-barrell intake would accommodate the throttle body unit.
- Install the throttle body unit on the intake.
- Connect vacuum hose for PCV valve and install PCV in the driver’s side valve cover.
- Connect the vacuum hose for the MAP sensor to the throttle body unit and then to the MAP sensor itself. At this point, the MAP sensor has not been permanently mounted. It is just laying on the intake right now.

- Install the electrical connectors for the MAP, ECT, IAC and TPS sensors.

We still have an electrical connector that is not plugged in. It goes to the KS, but we have not installed the sensor yet.

Now it’s time to finish plumbing the fuel system. When we left off, Jim had handed the red pressure and black return lines up to me on the passenger side of the truck. Now we need to decide how to run them over to the throttle body unit. The fuel lines come out of the back side of the throttle body unit, pointing toward the firewall. The pressure line is on the driver’s side and the return line is on the passenger side. The only problem we have is the distributor is also located on the passenger side of the engine compartment.

For obvious safety reasons, we decided to run the red pressure line around the front of the throttle body unit and around to the driver’s side. We used a 90-degree fuel line fitting to point the line out toward the side of the truck.



We cut a small section out of the red pressure line and installed a liquid-filled fuel pressure gauge. It can easily be mounted to the valve cover on the driver’s side of the engine compartment.

Once again, in an effort to keep the fuel lines away from the distributor, we connected a 90-degree fuel line fitting to the return port. We ran the black return line up the side of the valve cover and then made a right turn to connect to the fuel line fitting. In every place where possible, we used the new shrink-fit hose clamps. It really makes things look clean!

Things under the hood are really taking shape! I’m starting to snicker under my breath now, because Jim is still inside the truck working hard.

The last thing for me to do was install new throttle linkage. Sure, there was nothing wrong with the old linkage, but Jim had a shiny chrome ball-end new linkage kit that he was dying to use.

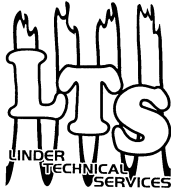
Ok....I’ve got the ignition wired, fuel system plumbed, throttle linkage connected.....I’m ready to go. I’d better check on Jim’s progress inside the truck.

Watch for the final chapter in the TBI Conversion project next month.....

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ject next month!**

What's coming up at LTS?

June 18-22: Guru School

July 13, 14 & 15: Guru II School. For all past Guru's who haven't already signed up for this great weekend of training, there is still time. Call Peggy today!

July 23-27: Guru School exclusively for the IAIBMWSP group (International Association of Independent BMW Service Professionals)

August 20-24: Guru School

September 14, 15 & 16: Annual LTS Conference. This year's theme: "Your key to OBDII"

October 5, 6 & 7: Bubba's Garage in Newport, Indiana

October 15-19: Week-long Guru School

October 29-November 2: Industry Week in Las Vegas. LTS will be closed