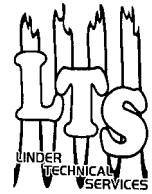


Networking

Newsletter



Jim Linder
The Injector "Guru"



E.S.I.

E.S.I. (Electronic Service Information) may very well become one of the most important words in an automotive service technician's vocabulary very soon.

It certainly has become a very often-discussed issue when technicians and service shop owners get together. Many remember the first attempts by our friends at GM with the multiple disc packs offered thru S.T.S. , (SAE's Service Technician Society) and other technician support groups across the country a few years back. It was the first time I remember the word ESI being used and the writing was on the wall that someday this method might very well be the only method of receiving very much needed automotive service information.

Think about it??

####Wouldn't it be a wonderful day in the service shop when the technician could walk over to their toolbox, hit a single button on a mouse and pull up a complete library of technician service information?

####Wouldn't it be nice to have a wiring diagram delivered to the service bay right away with super transmission speed to be viewed, zoomed and printed at the techs will. (A speed faster than most CD players and computers in use today).

####It would be even nicer if the tech could send out a cry for help to the information supplier if they did not find exactly what was needed for that particular job. (again at a very rapid speed). *This is called "monkey management" where the correct fix is to pass the "monkey" to someone else. This takes the problem off the tech's back so they can continue on with other service work.*

It appears two things have finally made this a real work experience that could be put together in your service bay right away:

1. DSL Direct Service Link dial up service (very high speed internet)
2. Motor All Data Internet Service Shop Hookup

Call us for more information on both products.

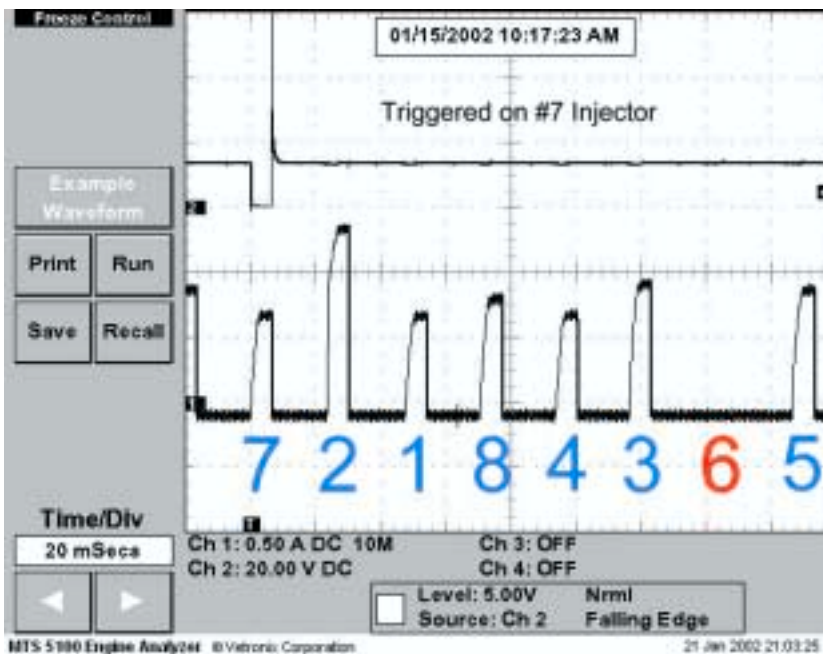
Jim Linder

Analysis from the “Sleuth”, Michele Winn



The victim this month is a 1990 Cadillac with a 4.9L engine. As usual, this vehicle has been to several other places but still has the same problem. I read over the “laundry list” of parts that have already been replaced and things that had already been checked. My first thought was, “what’s left?” The customer’s complaint was a very rough idle and misfire while driving. The previous shop had diagnosed a bad ECM and replaced it with a **used** one, but when that didn’t fix the problem, they put the original ECM back in. The customer was told that it would need to have the plugs, wires, dist. cap & rotor replaced. At this point the customer took the vehicle home and did the repairs himself. The vehicle still wasn’t fixed, so they gave us a call.

I was happy to see the usual pattern failure gray multec injectors under the hood and I couldn’t resist the urge to current ramp the fuel injectors. The picture below was taken with the Vetronix MTS5100 scope with current probe on the injector fuse. You should notice right away that there is



an injector pattern missing. This tells me that the ECM is not triggering that injector. However, this picture also gives us one more bit of much-needed information.

Normally when look at an injector pattern to see if it is shorted, we zoom in on each individual injector and pay close attention to the on-ramp. In cases where the injector is shorted, the on-ramp will be a straight up and down line, not a slope. Since the picture to the right shows all 8 cylinders, the time setting is not correct to judge the condition of the on-ramps. But, we can tell by looking at the peak current on each one that there are extreme variations between all of

them. From this we can conclude that not only is the ECM bad, but we have at least 3 or 4 bad injectors also. Of course, the correct fix for this vehicle is to buy a new computer and get a complete set of Bosch DRI replacement injectors from Doug, the Injector “Wizard”. Now let’s go back to the beginning. Why didn’t the used computer fix the vehicle? It may have fixed the problem of injector #6 not firing. However, since there are at least 3 or 4 bad injectors, the vehicle still had a misfire and the technician assumed that the ECM wasn’t the problem. We know the ECM was a problem, but not the **entire** problem.

Like what you see in the picture above? The Vetronix MTS5100 is not only a 4-channel lab scope, but an ignition scope that is portable and easily hooks to DIS systems! Contact your area Vetronix rep for more information!

Fuel Injection Service Update from the “Wizard”



NEW FROM LTS: The Injector “Wizard” Announces Fuel Injector Service Kits

These kits contain o-rings, pintle caps, grommets, spacers and all of those other “hard-to-find” injector parts. These kits are a must for shops specializing in engine rebuilding and cylinder head work. They are also nice to have around at 4:30 on a Friday afternoon! Don’t waste your time running to the local parts store that can’t help you. Save time and money and keep these valuable parts in stock. Additional parts are available that may not be shown in the kits. The Injector “Wizard” will customize injector service kits to meet your needs. Call Doug for more details!

Here’s an example of what’s available:

BASIC DOMESTIC PORT KIT (others available, call Doug!)

Qty.	Part #	Description	Retail	Total Retail
16	2-100	BLUE PINTLE CAP	\$ 0.78	\$ 12.48
6	2-117	GRAY CHIMNEY CAP	\$ 0.83	\$ 4.98
6	2-114	BOSCH YELLOW CAP	\$ 0.78	\$ 4.68
6	2-104	FORD DRI LARGE WHITE CAP	\$ 3.25	\$ 19.50
8	2-101	SPACERS	\$ 0.46	\$ 3.68
2	5-122	HARNESS / LEAD	\$ 3.70	\$ 7.40
16	3-105	FORD GREEN O-RING	\$ 0.90	\$ 14.40
16	3-108	BOSCH BLACK O-RING	\$ 0.90	\$ 14.40
PARTS KIT VALUE			\$ 81.52	

Mention the newsletter and receive special pricing on these kits:

Enhanced: \$99.95

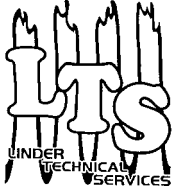
Basic: \$49.95



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Guru Thoughts



Henry Said :

You know I really never enjoyed history back in my school days, but now (yes , I am getting older :>) I think I am beginning to see what all the excitement was about. Collecting old automotive stuff has given me a set of Ford Factory Service bullitens from the 30's. From time to time I find one or two I wish to share with all service technicians. Here are a couple of those thoughts from Henry Ford in 1938.

“Good intensions alone, while admirable, can not take the place of precision equipment and a planned procedure”

“There is no reason to guess about what’s wrong when it is so easy to know“