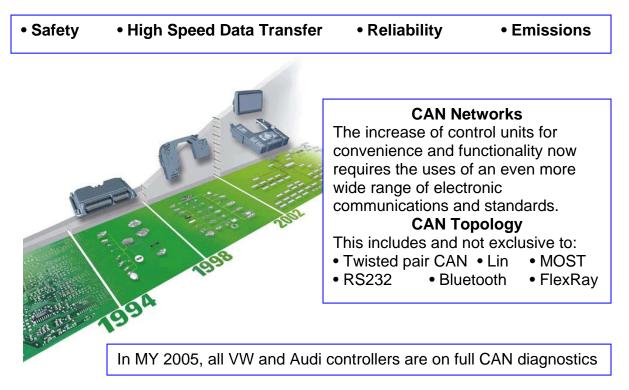


Modern Volkswagen & Audi automobiles utilize different CAN systems to interconnect and communicate within the network structure. There are four main reasons why most manufacturers needed to establish the CAN system.



This seminar and workshop is a must for the repair facilities and technicians to get a grasp on the latest technology. This includes a detailed manual, resource CD with graphics on the entire CAN system.

NOTE: There is a prerequisite to this seminar. All attending technicians or shop owners should have completed the VW and Audi Data Blocks seminar. It will be difficult but not impossible to comprehend this seminar.

VW and Audi training with technical support Call 1-866-245-7602 Email: <u>esatinc@esatinc.ca</u>

Topology and what you should know



The twisted pair CAN with the images on the left, will become standard equipment in these models.

Volkswagen

Passat, Jetta/City, Golf, Beetle R32, Touareg, Tiguan, Eos, Rabbit

Audi A3, A5, A4, A6, A8L, TT, TTR, R8, Q7, S/RS

Can you: Distinguish singe/dual channel mode in CAN. Diagnose a fiber optic system. Understand the LIN commands. See and comprehend CAN on the scan tool. Test CAN signals and message headers. Isolate CAN sub systems. Diagnose/Repair any of these systems

There are more than 80 known control addresses built into the VW and Audi model line up, including the Cayenne and Bentley. Some, but not all controllers are installed.

In this seminar, you will know its structure, connection, behavior and communication status via scan tool and oscilloscope patterns.

This seminar includes live data within the power point presentation. Technicians will follow the included CAN Resource manual, CD, live data with the presentation. Bring your Data Blocks manual and resources from that CD, on your laptop.

Time	=	Money	This
Training	=	Efficiency	This
Efficiency	=	Money	This
Knowledge	=	Power	The
Power	=	Money	choi

This is the way of the future. This is how I teach. This is what you need to learn. There are no answers, it's the choices that are made. (AF)

The VW and Audi Immobilizer with Generations

In addition to this CAN seminar, we're going to introduce the VW and Audi Immobilizer. The seminar and workshop is a must for the repair facilities and technicians to get a grasp on the latest technology.

Adding or replacing any keys in a VW or Audi will require the 5 digit PIN. That same PIN is required to replace an ECM or Instrument Cluster. If the repair facility is not able to get the PIN, expect the customer to return to the dealer.

With the correct hardware and software combination, a generated PIN is possible in most cases. We have various remote methods that include a data link to the DLC via ECM or Instrument Cluster to acquire the PIN codes.

Not only is the Immobilizer of importance to the vehicle owner, it's as important to the shop owner. There are many choices and various systems to acquire PIN codes, it's a question of Time, Money and Security.

You'll need to ask yourself if "buying" into the system is worth the \$7000.00 plus monthly fees are acceptable when working on few systems per year.

Depending on year make or model, the immobilizer will reside within different systems. As an example:

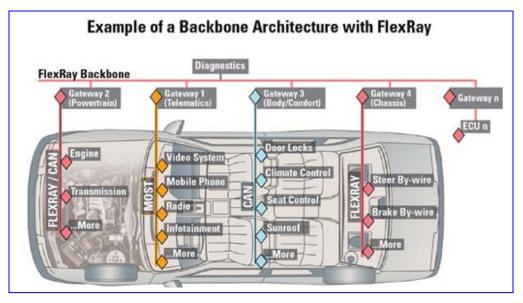
Model	Туре	Location
2001 Golf 2.8L Manual	Immobilizer II	Cluster and ECM
2002 Jetta 2.0L Automatic	Immobilizer III	Cluster and ECM
2003 A4 1.8L Automatic	Immobilizer III	Cluster and ECM
2004 A8 4.2L Automatic	Immobilizer III	Kessy and ECM
2005 Touareg 3.2L Auto	Immobilizer III	Kessy and ECM
2005 Mk5 Golf/Jetta	Immobilizer IV	Cluster and ECM
2007 A6 3.2L Automatic	Immobilizer V	Steering Lock and ECM

Some systems can be accessed within the Instrument Cluster and others within the ECM. The A8, Phaeton, Touareg and the Porsche Cayenne are accessed within the Kessy Unit. Those units require removal and read with a programmer. Today, the difficulties are the new generation IV and V. Those systems produce a "challenge code" at every key cycle. Even if a code is known, the issues are within the system called "component protection".

Some of this work can be done remotely, that will be shown in the class, some will require specialized programmers.

Bring your VW or Audi, even a Cayenne or Bentley, let's see what we can do.

This is the future!



Conventional mechanical and hydraulic systems can only go so far. Likewise, the in-vehicle serial data buses that pass electronic signals between a vehicle's electronic control units (ECU) and associated electronic devices can no longer cut it. The future is FlexRay—a new communications protocol designed for the high data transmission rates required by advanced automotive control systems. These are the same control systems that, in the next few years, are expected to replace nearly every hydraulic line and mechanical cable in today's automobiles with wire-based networks, sensors, and actuators.

Schedule your reservation for this class by contacting: Euro Systems Automotive Training Inc. at 1-866-245-7602 Reservations and seating is limited. Secure Payment options. VIERICAN VISA MasterCar EXPRES Seminar Date: October 14th and October 15th, 2011 **Host Facility:** Avers Automotive 220 Anacapa Street Santa Barbara, CA 93101 805-845-4242 http://www.ayersrepairs.com/

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