

The following Information was supplied by Vetronix.

Since Vetronix manufactures and sells tools to download EDR data from many vehicles, their data is being provided on the EDR Web site.

Contact Details

Phone/Fax

Toll-free: 1-800-321-4889

International: +1 805-966-2000

Fax: +1 805-965-3497

Email

Customer Service: customerservice@vetronix.com

Technical Support: technicalsupport@vetronix.com

Product Information and Sales: salesleads@vetronix.com

Post

Vetronix Corporation, 2030 Alameda Padre Serra, Santa Barbara, CA
93103-1716, USA

FAQs

Crash Data Retrieval (CDR) system

Q: What is the Vetronix CDR system?

A: The Vetronix Crash Data Retrieval (CDR) system consists of hardware and software that downloads Pre-Crash and Crash data from the vehicle's air bag module to a laptop computer. The Windows® based CDR software presents this data in easy-to-read graphs and tables.

Q: What is an air bag module?

A: The air bag module is the vehicle's "computer" that controls air bag deployment. Since 1990, recordable air bag modules have been installed in select GM vehicles. SDM, Sensing and Diagnostic Module, is the name given to air bag modules used in General Motors vehicles from 1994 to present.

Since 1998, recordable air bag modules have been installed in select Ford vehicles. RCM, Restraint Control Module, is the name given to air bag modules used in Ford vehicles from 1998 to present.

Q: What data can be downloaded from the vehicle's air bag module?

A*: Recorded data depends on vehicle make, model and year. The following data is typical of what is found on a newer GM vehicle.

- ? **Vehicle speed (5 seconds before impact)**
- ? **Engine speed (5 seconds before impact)**
- ? **Brake status (5 seconds before impact)**
- ? **Throttle position (5 seconds before impact)**
- ? State of driver's seat belt switch (On/Off)
- ? Passenger's air bag enabled or disabled state (On/Off)
- ? SIR Warning Lamp status (On/Off)
- ? Time from vehicle impact to air bag deployment
- ? Ignition cycle count at event time
- ? Ignition cycle count at investigation
- ? Maximum ? V for near-deployment event
- ? ? V vs. time for frontal air bag deployment event
- ? Time from vehicle impact to time of maximum ? V
- ? Time between near-deploy and deploy event (if within 5 seconds)

**Depending on the particular vehicle, all or a subset of this data may be available.*

Q: Will data only be recorded if the air bags deploy?

A: No, data is recorded in both Deployment and Near Deployment Events.

Q: What is a Near Deployment Event?

A: There are two types of air bag module (SDM) recorded crash events. The first is the near deployment event. A Near Deployment Event is an event severe enough to "wake up" the sensing algorithm but not severe enough to deploy the air bag(s). It contains Pre-Crash and Crash data. The SDM can store up to one Near Deployment Event. This event can be overwritten by an event that has a greater SDM recorded velocity change. This event will be cleared by the SDM after the ignition has been cycled 250 times (about 60 days of normal driving).

Q: What is a Deployment Event?

A: The second type of SDM recorded crash event is the deployment event. It also contains Pre-Crash and Crash data. The SDM can store up to two different Deployment Events, if they occur within five seconds of one another. The first deployment event will be stored in the Deployment file (this would have been the event that deployed the air bag) and the second Deployment Event will be stored in the Near Deployment file. Deployment events cannot be overwritten or cleared from the SDM. Once the SDM has deployed the air bag, the SDM must be replaced.

Q: Did GM or Ford add any cost to the consumer by installing recordable air bag modules?

A: No, GM and Ford used existing memory space in their air bag modules to record data.

Q: What is included in the CDR kit?

A:

- **Crash Data Retrieval Module**
- **Windows® 95/98/ME/NT/2000/XP based Software (CD)
(includes Help Files/Manual)**
- **PC Interface Cable**
- **Vehicle Interface Cable**
- **Air bag Module Interface Cables (3)**
- **6' Extension Cable**
- **Cigarette Lighter Power Cable**
- **AC/DC 12V Power Supply**
- **Storage Case**

Q: How much does the CDR system (kit) cost?

A: \$2,495 (US)

Q: What vehicles can the CDR system interface with?

A: The CDR system interfaces with select GM and Ford vehicles. For a complete list, please see the latest *Vetronix CDR Vehicle Coverage* sheet.

Also included in our CDR module is the hardware capability to download data from vehicles other than GM and Ford. Only an agreement with the vehicle manufacturer and a software and cable update is required, eliminating the need to buy new hardware. This allows other car manufacturers to partner with Vetronix at a later date.

Q: Why is GM and Ford making this data available?

A: GM and Ford wish to collect air bag deployment and crash data in order to improve vehicle design safety features. They also wish to support recommendations set forth by the NTSB and NHTSA.

Q: Do other vehicle manufacturers have recordable air bag modules, and if so, why aren't they releasing this data?

A: Yes, some other vehicle manufacturers have recordable air bag modules. The amount of information recorded and the Model Year that they began installing these recordable air bag modules differs for each manufacturer. The NTSB (National Transportation Safety Board) and the NHTSA (National Highway Traffic Safety

Administration) have recommended that all vehicle manufacturers equip their vehicles with recorders capable of storing crash data.

Currently, the CDR system can only interface with select GM and Ford vehicles. An agreement with a new vehicle manufacturer is needed to enable Vetronix to write software and build cable for air bag module systems other than those equipped in GM and Ford vehicles.

Q: When do you expect the other vehicle manufacturers to partner with Vetronix?

A: Vetronix signed an agreement with Ford Motor Company, allowing Vetronix to write software and build cables to interface with select 1998 and newer Ford vehicles. We expect the initial Ford upgrade to be available in early 2002. We anticipate that other vehicle manufacturers will release this type of information in the coming years with recommendations and pressure from the NTSB and NHTSA.

Q: Has the CDR system been validated?

A: Yes, GM, Ford and Vetronix have worked together to ensure the accurate retrieval and presentation of the recorded data. In addition, independent validation tests have been performed by NHTSA, Michigan State Police, Ontario Provincial Police Department, and others.

Q: Are there validation studies and reports available?

A: Yes, several papers and studies have been published concerning CDR data validation. Please contact Vetronix for more information.

Q: Is there an on-line user's group that I can join to ask questions and learn more about the CDR System?

A: Yes, to join the on-line CDR user's group, simply send an e-mail to CDRtool-subscribe@yahoogroups.com. This group is not operated by Vetronix Corporation, but by a group of individuals dedicated to the exchange of information related to Event Data Recorders in Collision Reconstruction, especially, but not limited to, those using the Vetronix Crash Data Retrieval tool.

Q: Who will be using the Vetronix CDR system?

A:

- Accident Reconstructionists
- Law Enforcement
- Insurance Adjusters
- NHTSA / NTSB
- Automobile Manufacturers
- Vehicle Fleet Managers
- Car Rental Agencies
- Others

Q: How does the CDR system download data?

A: Data can be collected from the air bag module in two ways.

- If the vehicle's electrical system is operational, then data can be read by connecting to the vehicle's Data Link Connector (DLC). The DLC is located underneath the dash by the steering column, and is used by technicians to communicate with the vehicle's on-board computer.
- If the vehicle's electrical system is not operational, then data can be read by connecting directly to the air bag module using one of the interface cables provided in the CDR Kit.

Q: Where does the air bag module (SDM) collect its data?

A: All SDM recorded data is measured, calculated, and stored internally, except for the following: Vehicle Speed, Engine Speed, and Percent Throttle data is transmitted, once a second by the Powertrain Control Module (PCM) via the Class 2 data link, to the SDM.

- Brake Switch Circuit Status data is transmitted, once a second by either the ABS module or the PCM via the Class 2 data link, to the SDM. Depending on vehicle option content, the Brake Switch Circuit Status data may not be available.
- In most vehicles, the Driver's Belt Switch Circuit is wired directly to the SDM. In some vehicles, the Driver's Belt Switch Circuit Status data is transmitted from the Body Control Module (BCM), via the Class 2 data link, to the SDM.
- The Passenger Front Air Bag Suppression Switch Circuit is wired directly to the SDM.

Q: Is all the recorded data from the air bag module downloaded by the CDR system?

A: Yes, all the data retrieved from the air bag module is downloaded and displayed on the PC.

Q: Is the Vetronix CDR system the only tool that can download this type of crash data?

A: Vetronix has agreements with both GM and Ford to download and convert the recorded air bag module data into a readable format. No one else has licensed access to this information.

Q: Is the data permanently stored in the vehicle's air bag module?

A: Yes, the data is permanently written in the EEPROM.

Q: How do I power up the CDR interface module?

A: There are three ways to power up the CDR interface module. First, you must determine if the crashed vehicle has its electrical system operational or not. If it is, then you can simply access the air bag module data by plugging into the DLC, which will power up the CDR module. No external power supply is needed.

If the vehicle's electrical system is not operational, then you must first locate the air bag module (SDM) using the chart found in the help files. Once the SDM has been found, then you have to determine if you can access it at the crash scene, or if you need to unbolt it and take it back to the office. If you decide to access it on-site, then you can plug the DC power cable into your car's cigarette lighter and power up the CDR interface module, which then powers up the SDM.

If you unbolt the SDM and take it back to the office, then you can use the 12V AC/DC power supply, which powers both the CDR interface module and the SDM.

Q: How do I order the Vetronix CDR System?

A: To place an order, please call Vetronix Customer Service at 800-321-4889.

Supported GM Vehicles

(January, 2002 – CDR v1.2 Software)

1996

| Make | Model | Cable | Module Location |
|-----------|---------|----------|-----------------|
| Buick | Riviera | 02002888 | Under RF seat |
| Buick | Skylark | 02002888 | Under RF seat |
| | | | |
| Chevrolet | Astro | 02002888 | Under LF seat |

| | | | |
|------------|------------|-----------------|----------------------|
| Chevrolet | Camaro | 02002888 | Under center console |
| Chevrolet | Cavalier | 02002888 | Under RF seat |
| Chevrolet | Express | 02002888 | Under LF seat |
| | | | |
| GMC | Safari | 02002888 | Under LF seat |
| GMC | Savana | 02002888 | Under LF seat |
| | | | |
| Oldsmobile | Achieva | 02002888 | Under RF seat |
| Oldsmobile | Aurora | 02002888 | Under RF seat |
| | | | |
| Pontiac | Firebird | 02002888 | Under center console |
| Pontiac | Grand AM | 02002888 | Under RF seat |
| Pontiac | Sunfire | 02002888 | Under RF seat |
| | | | |
| Saturn | All models | 02002888 | Under center console |

1997

| Make | Model | Cable | Module Location |
|-------------|--------------------|-----------------|---|
| Buick | Century | 02002888 | Under RF seat |
| Buick | LeSabre | 02002888 | Under RF seat |
| Buick | Park Avenue | 02002888 | Under RF seat |
| Buick | Regal | 02002888 | Under RF seat |
| Buick | Riviera | 02002888 | Under RF seat |
| Buick | Skylark | 02002888 | Under RF seat |
| | | | |
| Cadillac | Commercial Special | 02002828 | Under LF seat |
| Cadillac | Deville | 02002828 | Under LF seat |
| Cadillac | Eldorado | 02002828 | Under LF seat |
| Cadillac | Seville | 02002828 | Under LF seat |
| | | | |
| Chevrolet | Astro | 02002888 | Under LF seat |
| Chevrolet | Camaro | 02002888 | Under center console |
| Chevrolet | Cavalier | 02002888 | Under RF seat |
| Chevrolet | Corvette | 02002888 | Behind accessory trim plate, under heater and AC control head |
| Chevrolet | Express | 02002888 | Under LF seat |
| Chevrolet | Lumina | 02002888 | Under RF seat |
| Chevrolet | Malibu | 02002888 | Under RF seat |
| Chevrolet | Monte Carlo | 02002888 | Under RF seat |
| Chevrolet | Silverado | 02002888 | Under LF seat |
| Chevrolet | Suburban | 02002888 | Under LF seat |
| Chevrolet | Tahoe | 02002888 | Under LF seat |
| Chevrolet | Venture | 02002888 | Under RF seat |
| | | | |

| | | | |
|------------|--------------|-----------------|--|
| GMI | EV1 | 02002888 | RF side of battery pack tunnel near IP |
| | | | |
| GMC | Safari | 02002888 | Under LF seat |
| GMC | Savana | 02002888 | Under LF seat |
| GMC | Sierra | 02002888 | Under LF seat |
| GMC | Yukon | 02002888 | Under LF seat |
| | | | |
| Oldsmobile | Achieva | 02002888 | Under RF seat |
| Oldsmobile | Aurora | 02002888 | Under RF seat |
| Oldsmobile | Cutlass | 02002888 | Under RF seat |
| Oldsmobile | Eighty Eight | 02002888 | Under RF seat |
| Oldsmobile | Regency | 02002888 | Under RF seat |
| Oldsmobile | Silhouette | 02002888 | Under RF seat |
| | | | |
| Pontiac | Bonneville | 02002888 | Under RF seat |
| Pontiac | Firebird | 02002888 | Under center console |
| Pontiac | Grand AM | 02002888 | Under RF seat |
| Pontiac | Grand Prix | 02002888 | Under RF seat |
| Pontiac | Sunfire | 02002888 | Under RF seat |
| Pontiac | Trans Sport | 02002888 | Under RF seat |
| | | | |
| Saturn | All models | 02002888 | Under center console |

1998

| Make | Model | Cable | Module Location |
|-----------|--------------------|-----------------|---|
| Buick | Century | 02002888 | Under RF seat |
| Buick | LeSabre | 02002888 | Under RF seat |
| Buick | Park Avenue | 02002828 | Under RF seat |
| Buick | Regal | 02002888 | Under RF seat |
| Buick | Riviera | 02002888 | Under RF seat |
| Buick | Skylark | 02002888 | Under RF seat |
| | | | |
| Cadillac | Commercial Special | 02002828 | Under LF seat |
| Cadillac | Deville | 02002828 | Under LF seat |
| Cadillac | Eldorado | 02002828 | Under RF seat |
| Cadillac | Seville | 02002828 | Under RF seat |
| | | | |
| Chevrolet | Astro | 02002888 | Under LF seat |
| Chevrolet | Blazer | 02002888 | Under center console |
| Chevrolet | Camaro | 02002888 | Under center console |
| Chevrolet | Cavalier | 02002888 | Under RF seat |
| Chevrolet | Corvette | 02002888 | Behind accessory trim plate, under heater and AC control head |
| Chevrolet | Express | 02002888 | Under LF seat |

| | | | |
|------------|--------------|----------|----------------------|
| Chevrolet | Malibu | 02002888 | Under RF seat |
| Chevrolet | Monte Carlo | 02002888 | Under RF seat |
| Chevrolet | Lumina | 02002888 | Under RF seat |
| Chevrolet | S10 | 02002888 | Under center console |
| Chevrolet | S10 electric | 02002888 | Under center console |
| Chevrolet | Silverado | 02002888 | Under LF seat |
| Chevrolet | Suburban | 02002888 | Under LF seat |
| Chevrolet | Tahoe | 02002888 | Under LF seat |
| | | | |
| GMC | Jimmy | 02002888 | Under center console |
| GMC | Safari | 02002888 | Under LF seat |
| GMC | Savana | 02002888 | Under LF seat |
| GMC | Sierra | 02002888 | Under LF seat |
| GMC | Sonoma | 02002888 | Under center console |
| GMC | Yukon | 02002888 | Under LF seat |
| | | | |
| Oldsmobile | Achieva | 02002888 | Under RF seat |
| Oldsmobile | Aurora | 02002888 | Under RF seat |
| Oldsmobile | Bravada | 02002888 | Under center console |
| Oldsmobile | Cutlass | 02002888 | Under RF seat |
| Oldsmobile | Eighty Eight | 02002888 | Under RF seat |
| Oldsmobile | Intrigue | 02002888 | Under RF seat |
| | | | |
| Pontiac | Bonneville | 02002888 | Under RF seat |
| Pontiac | Firebird | 02002888 | Under center console |
| Pontiac | Grand AM | 02002888 | Under RF seat |
| Pontiac | Grand Prix | 02002888 | Under RF seat |
| Pontiac | Sunfire | 02002888 | Under RF seat |
| | | | |
| Saturn | All models | 02002888 | Under center console |

1999

| Make | Model | Cable | Module Location |
|-----------|--------------------|----------|-----------------|
| Buick | Century | 02002829 | Under RF seat |
| Buick | Le Sabre | 02002888 | Under RF seat |
| Buick | Park Avenue | 02002828 | Under RF seat |
| Buick | Regal | 02002829 | Under RF seat |
| Buick | Riveria | 02002888 | Under RF seat |
| | | | |
| Cadillac | Commercial Special | 02002828 | Under LF seat |
| Cadillac | Deville | 02002828 | Under LF seat |
| Cadillac | Eldorado | 02002828 | Under LF seat |
| Cadillac | Escalade | 02002888 | Under LF seat |
| Cadillac | Seville | 02002828 | Under RF seat |
| | | | |
| Chevrolet | Astro | 02002888 | Under LF seat |

| | | | |
|------------|--------------|----------|---|
| Chevrolet | Blazer | 02002888 | Under center console |
| Chevrolet | Camaro | 02002829 | Under center console |
| Chevrolet | Cavalier | 02002888 | Under RF seat |
| Chevrolet | Corvette | 02002888 | Behind accessory trim plate, under heater and AC control head |
| Chevrolet | Express | 02002888 | Under LF seat |
| Chevrolet | Lumina | 02002888 | Under RF seat |
| Chevrolet | Malibu | 02002888 | Under RF seat |
| Chevrolet | Monte Carlo | 02002888 | Under RF seat |
| Chevrolet | S10 | 02002888 | Under center console |
| Chevrolet | S10 Electric | 02002888 | Under center console |
| Chevrolet | Silverado | 02002888 | Under LF seat |
| Chevrolet | Suburban | 02002888 | Under LF seat |
| Chevrolet | Tahoe | 02002888 | Under LF seat |
| | | | |
| GMI | EV1 | 02002888 | RF side of battery pack tunnel, near IP |
| | | | |
| GMC | Jimmy | 02002888 | Under center console |
| GMC | Safari | 02002888 | Under LF seat |
| GMC | Savana | 02002888 | Under LF seat |
| GMC | Sierra | 02002888 | Under LF seat |
| GMC | Sonoma | 02002888 | Under center console |
| GMC | Yukon | 02002888 | Under LF seat |
| | | | |
| Oldsmobile | Alero | 02002888 | Under RF seat |
| Oldsmobile | Aurora | 02002888 | Under RF seat |
| Oldsmobile | Bravada | 02002888 | Under center console |
| Oldsmobile | Cutlass | 02002888 | Under RF seat |
| Oldsmobile | Eighty Eight | 02002888 | Under RF seat |
| Oldsmobile | Intrigue | 02002888 | Under RF seat |
| | | | |
| Pontiac | Bonneville | 02002888 | Under RF seat |
| Pontiac | Firebird | 02002829 | Under center console |
| Pontiac | Grand AM | 02002888 | Under RF seat |
| Pontiac | Grand Prix2 | 02002829 | Under RF seat |
| Pontiac | Sunfire | 02002888 | Under RF seat |
| | | | |
| Saturn3 | All Models2 | 02002829 | Under center console |

2000

| Make | Model | Cable | Module Location |
|-------|-------------|----------|----------------------|
| Buick | Century | 02002829 | Under RF seat |
| Buick | LeSabre | 02002829 | Under center console |
| Buick | Park Avenue | 02002829 | Under center console |
| Buick | Regal | 02002829 | Under RF seat |
| | | | |

| | | | |
|------------------------|-------------------------|----------|---|
| Cadillac | Commercial Special | 02002829 | Under center console |
| Cadillac | Deville | 02002829 | Under center console |
| Cadillac | Eldorado | 02002828 | Under LF seat |
| Cadillac | Escalade | 02002888 | Under LF seat |
| Cadillac | Seville | 02002829 | Under RF seat |
| | | | |
| Chevrolet | Astro | 02002829 | Under LF seat |
| Chevrolet | Blazer | 02002829 | Under center console |
| Chevrolet | Camaro | 02002829 | Under center console |
| Chevrolet | Cavalier | 02002829 | Under RF seat |
| Chevrolet | Corvette | 02002829 | Behind accessory trim plate, under heater and AC control head |
| Chevrolet | Express | 02002888 | Under LF seat |
| Chevrolet | Impala | 02002829 | Under RF seat |
| Chevrolet | Lumina | 02002888 | Under RF seat |
| Chevrolet | Malibu | 02002829 | Under RF seat |
| Chevrolet | Monte Carlo | 02002829 | Under RF seat |
| Chevrolet | S10 | 02002829 | Under center console |
| Chevrolet | Silverado | 02002829 | Under LF seat |
| Chevrolet ⁴ | Silverado | 02002888 | Under LF seat |
| Chevrolet | Suburban | 02002829 | Under LF seat |
| Chevrolet ⁴ | Suburban | 02002888 | Under LF seat |
| Chevrolet | Tahoe | 02002829 | Under LF seat |
| Chevrolet ⁴ | Tahoe | 02002888 | Under LF seat |
| Chevrolet | Venture | 02002829 | Under RF seat |
| | | | |
| GMC | Jimmy | 02002829 | Under center console |
| GMC | Safari | 02002829 | Under LF seat |
| GMC | Savana | 02002888 | Under LF seat |
| GMC | Sierra | 02002829 | Under LF seat |
| GMC ⁴ | Sierra | 02002888 | Under LF seat |
| GMC | Sonoma | 02002829 | Under center console |
| GMC | Yukon | 02002829 | Under LF seat |
| GMC ⁴ | Yukon | 02002888 | Under LF seat |
| | | | |
| Isuzu | Hombre | 02002829 | Under center console |
| | | | |
| Oldsmobile | Alero | 02002829 | Under RF seat |
| Oldsmobile | Bravada | 02002829 | Under center console |
| Oldsmobile | Intrigue | 02002829 | Under RF seat |
| Oldsmobile | Silhouette | 02002829 | Under RF seat |
| | | | |
| Pontiac | Firebird | 02002829 | Under center console |
| Pontiac | Grand Am | 02002829 | Under RF seat |
| Pontiac | Grand Prix ² | 02002829 | Under RF seat |

| | | | |
|---------|------------|-----------------|----------------------|
| Pontiac | Montana | 02002829 | Under RF seat |
| Pontiac | Sunfire | 02002829 | Under RF seat |
| | | | |
| Saturn | All but LS | 02002829 | Under center console |

2001

| Make | Model | Cable | Module Location |
|-------------|--------------------|-----------------|---|
| Buick | Century | 02002829 | Under RF seat |
| Buick | LeSabre | 02002829 | Under center console |
| Buick | Park Avenue | 02002829 | Under center console |
| Buick | Regal | 02002829 | Under RF seat |
| Buick | Rendezvous | 02002829 | Under RF seat |
| | | | |
| Cadillac | Commercial Special | 02002829 | Under center console |
| Cadillac | Deville | 02002829 | Under center console |
| Cadillac | Eldorado | 02002828 | Under LF seat |
| Cadillac | Escalade | 02002829 | Under LF seat |
| Cadillac | Seville | 02002829 | Under RF seat |
| | | | |
| Chevrolet | Astro | 02002829 | Under LF seat |
| Chevrolet | Blazer | 02002829 | Under center console |
| Chevrolet | Camaro | 02002829 | Under center console |
| Chevrolet | Cavalier | 02002829 | Under RF seat |
| Chevrolet | Corvette | 02002829 | Behind accessory trim plate, under heater and AC control head |
| Chevrolet | Express2 | 02002829 | Under LF seat |
| Chevrolet | Impala | 02002829 | Under RF seat |
| Chevrolet | Lumina | 02002888 | Under RF seat |
| Chevrolet | Malibu | 02002829 | Under RF seat |
| Chevrolet | Monte Carlo | 02002829 | Under RF seat |
| Chevrolet | S10 | 02002829 | Under center console |
| Chevrolet | Silverado | 02002829 | Under LF seat |
| Chevrolet | Suburban | 02002829 | Under LF seat |
| Chevrolet | Tahoe | 02002829 | Under LF seat |
| Chevrolet | Venture | 02002829 | Under RF seat |
| | | | |
| GMC | Jimmy | 02002829 | Under center console |
| GMC | Safari | 02002829 | Under LF seat |
| GMC | Savana2 | 02002829 | Under LF seat |
| GMC | Sierra | 02002829 | Under LF seat |
| GMC | Sonoma | 02002829 | Under center console |
| GMC | Yukon | 02002829 | Under LF seat |
| | | | |
| Isuzu | Hombre | 02002829 | Under center console |
| | | | |

| | | | |
|------------|-------------|----------|----------------------|
| Oldsmobile | Alero | 02002829 | Under RF seat |
| Oldsmobile | Aurora | 02002829 | Under center console |
| Oldsmobile | Bravada | 02002829 | Under center console |
| Oldsmobile | Intrigue | 02002829 | Under RF seat |
| Oldsmobile | Silhouette | 02002829 | Under RF seat |
| | | | |
| Pontiac | Aztek | 02002829 | Under RF seat |
| Pontiac | Bonneville | 02002829 | Under center console |
| Pontiac | Firebird | 02002829 | Under center console |
| Pontiac | Grand Am | 02002829 | Under RF seat |
| Pontiac | Grand Prix2 | 02002829 | Under RF seat |
| Pontiac | Montana | 02002829 | Under RF seat |
| Pontiac | Sunfire | 02002829 | Under RF seat |
| | | | |
| Saturn | All but LS | 02002829 | Under center console |

2002

| Make | Model | Cable | Module Location |
|-----------|-------------|----------|---|
| Buick | Century | 02002829 | Under RF seat |
| Buick | LeSabre | 02002829 | Under center console |
| Buick | Park Avenue | 02002829 | Under center console |
| Buick | Regal | 02002829 | Under RF seat |
| Buick | Rendezvous | 02002829 | Under RF seat |
| | | | |
| Cadillac | Eldorado | 02002828 | Under LF seat |
| Cadillac | Escalade | 02002829 | Under LF seat |
| Cadillac | Seville | 02002829 | Under RF seat |
| | | | |
| Chevrolet | Avalanche | 02002829 | Under center console |
| Chevrolet | Astro | 02002829 | Under LF seat |
| Chevrolet | Blazer | 02002829 | Under center console |
| Chevrolet | Camaro | 02002829 | Under center console |
| Chevrolet | Cavalier | 02002829 | Under RF seat |
| Chevrolet | Corvette | 02002829 | Behind accessory trim plate, under heater and AC control head |
| Chevrolet | Express2 | 02002829 | Under LF seat |
| Chevrolet | Impala | 02002829 | Under RF seat |
| Chevrolet | Malibu | 02002829 | Under RF seat |
| Chevrolet | S10 | 02002829 | Under center console |
| Chevrolet | Silverado | 02002829 | Under LF seat |

| | | | |
|------------|-------------------------|-----------------|----------------------|
| Chevrolet | Suburban | 02002829 | Under LF seat |
| Chevrolet | Tahoe | 02002829 | Under LF seat |
| Chevrolet | TrailBlazer | 02002829 | Under center console |
| | | | |
| GMC | Envoy | 02002829 | Under center console |
| GMC | Safari | 02002829 | Under LF seat |
| GMC | Savana ² | 02002829 | Under LF seat |
| GMC | Sierra | 02002829 | Under LF seat |
| GMC | Sonoma | 02002829 | Under center console |
| GMC | Yukon | 02002829 | Under LF seat |
| | | | |
| Isuzu | Hombre | 02002829 | Under center console |
| | | | |
| Oldsmobile | Alero | 02002829 | Under RF seat |
| Oldsmobile | Aurora | 02002829 | Under center console |
| Oldsmobile | Bravada | 02002829 | Under center console |
| Oldsmobile | Intrigue | 02002829 | Under RF seat |
| | | | |
| Pontiac | Aztek | 02002829 | Under RF seat |
| Pontiac | Bonneville | 02002829 | Under center console |
| Pontiac | Firebird | 02002829 | Under center console |
| Pontiac | Grand Am | 02002829 | Under RF seat |
| Pontiac | Grand Prix ² | 02002829 | Under RF seat |
| Pontiac | Sunfire | 02002829 | Under RF seat |
| | | | |
| Saturn | All but LS & Vue | 02002829 | Under center console |

1. Please connect directly to the SDM for EV1 electric cars.
2. Does not record pre-crash data.
3. 1999 Saturn vehicle's DLC port has a non-standard wiring configuration and does not interface with the Vetronix OBD II interface cable (02002837). Please connect directly to the SDM, or contact Vetronix for more information.
4. These trucks have different SDMs depending upon body style. If the eighth digit of the VIN is either F, J, or R, please use the **02002888** cable.

Airbag Module Data

For Vehicles that correspond with the **02002888** cable, the following data is available from the airbag module for recorded Deployment and Near-Deployment files:

Data Summary Table

- SIR Warning Lamp Status (ON/OFF).
- Driver's Belt Switch Circuit Status (Buckled/Unbuckled).
- Passenger Front Airbag Suppression Switch Circuit Status (ON/OFF).
- Ignition Cycles at Deployment/Near-Deployment.
- Ignition Cycles at Investigation.
- Time from Algorithm Enable to Deployment Command (msec).
- Time From Near-Deployment to Deployment Command (sec) (If within 5 seconds).

Post-Crash Graph: SDM Recorded Velocity Change

- Plots Change in Forward Velocity (MPH) Versus Time for 300 msec After Algorithm Enable.

For Vehicles that correspond with the **02002828** cable, the following data is available from the airbag module for recorded Deployment and Near-Deployment files*:

Data Summary Table

- SIR Warning Lamp Status (ON/OFF).
- Driver's Belt Switch Circuit Status (Buckled/Unbuckled).
- Passenger Front Airbag Suppression Switch Circuit Status (ON/OFF).
- Ignition Cycles at Deployment/Near-Deployment.
- Ignition Cycles at Investigation.
- Time from Algorithm Enable to Deployment Command (msec).
- Time From Near-Deployment to Deployment Command (sec) (If within 5 seconds).
- Time From Algorithm Enable to Pretensioner Deployment Command Criteria Met (msec).

Post-Crash Graph: SDM Recorded Velocity Change

- Plots Change in Forward Velocity (MPH) Versus Time for 300 msec After Algorithm Enable.

*Note: 1999 vehicles that correspond with the **02002828** cable will have Pre-Crash Data in addition to Data Summary Table and Post-Crash Data.

For Vehicles that correspond with the **02002829** cable, the following data is available from the airbag module for recorded Deployment and Near-Deployment files:

Pre-Crash Graph

- Vehicle Speed 5 Seconds Before Algorithm Enable (MPH).
- Engine Speed 5 Seconds Before Algorithm Enable (RPM).
- Percent Throttle 5 Seconds Before Algorithm Enable.

- Brake Switch Circuit Status 5 Seconds Before Algorithm Enable (ON/OFF).

Data Summary Table

- SIR Warning Lamp Status (ON/OFF).
- Driver's Belt Switch Circuit Status (Buckled/Unbuckled).
- Passenger Front Airbag Suppression Switch Circuit Status (ON/OFF).
- Ignition Cycles at Deployment/Near-Deployment.
- Time Between Deployment and Near-Deployment Events (msec) (If within 5 seconds).

Post-Crash Graph: SDM Adjusted Algorithm Velocity Change*

- Plots Change in Forward Velocity (MPH) Versus Time for 150 msec After Algorithm Enable.

*Deployment Files Only.