The OBD II Home Page
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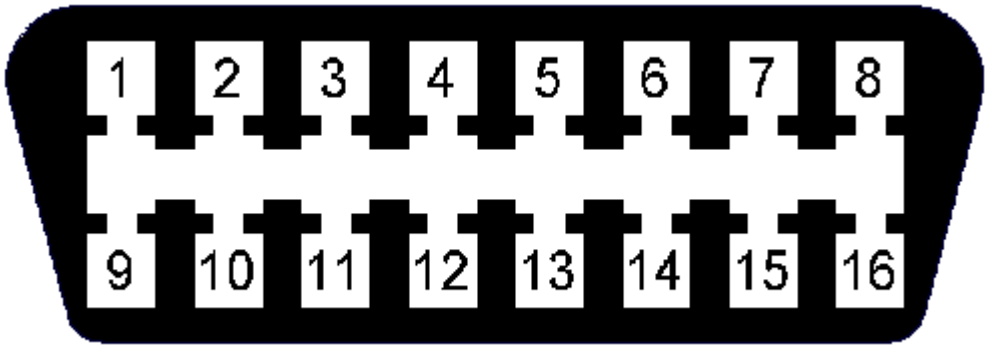
OBD II Diagnostic Scanner

Does My Car Have OBD-II?

All cars and light trucks built and sold in the United States after January 1, 1996 were required to be OBD II equipped. In general, this means all 1996 model year cars and light trucks are compliant, even if built in late 1995.

Two factors will show if your vehicle is definitely OBD II equipped:
1) There will be an OBD II connector as shown below, and
2) There will be a note on a sticker or nameplate under the hood: "OBD II compliant".

The Connector



Pin 2 - J1850 Bus+
Pin 4 - Chassis Ground
Pin 5 - Signal Ground
Pin 6 - CAN High (J-2284)
Pin 7 - ISO 9141-2 K Line
Pin 10 - J1850 Bus
Pin 14 - CAN Low (J-2284)
Pin 15 - ISO 9141-2 L Line
Pin 16 - Battery Power

Where is the connector located?

The connector must be located within three feet of the driver and must not require any tools to be revealed. Look under the dash and behind ashtrays.

The Three Flavors of OBD II

While the parameters, or readings, required by OBD II regulations are uniform, the auto manufacturers had some latitude in the communications protocol they used to transmit those readings to scanners. Naturally, each felt they had the one true way, so we have three different OBD II communications protocols in use.

The big scanner consoles costing thousands of dollars include the decoding software and firmware for all three protocols in their units, making them universal. Less expensive units, for home or small shop use, are usually customized for a specific communications protocol. Be sure the scanner you are using suits the protocol of your car.

What Communications Protocol does my vehicle use?

As a rule of thumb, GM cars and light trucks use SAE J1850 VPW (Variable Pulse Width Modulation). Chrysler products and all European and most Asian imports use ISO 9141 circuitry. Fords use SAE J1850 PWM (Pulse Width Modulation) communication patterns.

There are some variations among captive imports such as the Cadillac Catera, a German Opel derivative, which uses the European ISO 9141 protocol. If you have first hand knowledge of other such variations, please send them in and, together, we can build a more complete listing.

On 1996 and later vehicles, you can tell which protocol is used by examining the OBD II connector:

J1850 VPW--The connector should have metallic contacts in pins **2, 4, 5,** and **16,** but **not 10.**
ISO 9141-2--The connector should have metallic contacts in pins **4, 5, 7, 15,** and **16.**
J1850 PWM--The connector should have metallic contacts in pins **2, 4, 5, 10,** and **16.**

If your vehicle has this style connector, but doesn't have these pins populated, you probably have a pre-OBDII vehicle. To add some confusion, even having the connector with the contacts shown above is not a guarantee of OBD II compliance. This style connector has been seen on some pre-1996 vehicles which were not OBD II compliant.

Information on Pre-96 Cars

A reader with the California Air Resouces Board provided this list of pre-96 OBD II engine designations. Note that CARB recognizes engine series, rather than vehicle models, so the engine designations are the true key, with the vehicle models provided as a courtesy.

California Air Resources Board List of Certified OBD II Complying Engine Families and Models

Engine Family	Manufacturer	Model(s)	Fully Compliant?
1994 Model Year Certifications			
RAD2.8V8GFEM	Audi	100	No
RFM3.8V8G1EK	Ford	Mustang	No
RFM4.6V8G1EK	Ford	T-Bird, Cougar	No
RMB2.2VJGCEK	Mercedes-Benz	C220	No
RMB3.2VJGCEK	Mercedes-Benz	C 280, S 320, SL 320	No
RNS2.0VJGDEK	Nissan	G20	Yes
RTY3.0VJGFEK	Toyota	Camry, ES300	No
RTY2.7HGEEK	Toyota	T100	No
RTY2.42HGEEK	Toyota	Previa, Previa All-Trac	No
RVW2.8V8GFHM	Volkswagen	Corrado	No
RVV2.3VHGFEK	Volvo	850 Turbo	No
1995 Model Year Certifications			
SBM5.4V8GAEK	BMW	750cl(V12), 850ci(V12)	No
SCR2.0VJGFEK	Chrysler	Dodge Neon, Plymouth Neon	No
SCR122VJG2EK	Chrysler	Dodge Neon, Plymouth Neon	No
SCR2.0VJG2GK	Chrysler	Dodge Neon, Plymouth Neon	
SCR2.0VJGFEL	Chrysler	Dodge Neon, Plymouth Neon	No
SDS2.0VJGFEK	Diamond Star	Eagle Talon, Mitsubishi Eclipse, Chrysler Sebring, Dodge Avenger	No
SFM3.828G1EK	Ford	Windstar	No
SFM3.8V8G1EK	Ford	Mustang	No
SFM4.6V8G1EK	Ford	T-Bird, Cougar	No
SFM4.6V8G1GK	Ford	Grand Marquis, Town Car, Crown Victoria	No
SFM2.318G1EK	Ford	Ranger	No
SFM3.028G1EK	Ford	Windstar	No

SFM3.018G1EK	Ford	Ranger	No
SFM3.028G1FK	Ford	Ranger	No
SFM4.018G1EK	Ford	Ranger	No
SFM4.6VJG1EK	Ford	Continental	No
SFM4.028G1EK	Ford	Ranger	No
S1G3.8V8G1EK	GM	Camaro, Firebird	Yes
S3G4.319GFEJ	GM	S10 Pick-Up, Jimmy, Blazer	No
S3G4.329GFGJ	GM	S10 Pick-Up	No
SIG2.3VJG2GK	GMC	Cavalier, Sunfire	
SHN2.7VJG1EK	Honda	Accord LX, EX (V6)	Yes
SHN2.7VJGFEK	Honda	Accord LX, EX (V6)	Yes
SHN2.5VJGKEK	Honda	TL	Yes
SHN3.0VJGKEK	Honda	NSX	Yes
SJC4.0VJGAEK	Jaguar	AJ16 (SC)	Yes
SJC6.0V8GFFK	Jaguar	V12	No
SJC4.0VJGFEK	Jaguar	XJS	No
SKM1.8VJG1EK	KIA	Sephia	No
STK2.3VJGFEK	Mazda	Millenia	No
STK2.5VJGFEK	Mazda	Millenia	No
STK1.5VJG2EK	Mazda	Protege	No
STK1.8VJG1EK	Mazda	Protege	No
SFM2.318G1EK	Mazda*	B2300	No
SFM3.018G1EK	Mazda*	B3000	No
SFM3.028G1FK	Mazda*	B3000	No
SFM4.018G1EK	Mazda*	B4000	No
SFM4.028G1EK	Mazda*	B4000	No
SMB3.6VJGFEK	Mercedes Benz	S 320, C 280, SL 320	Yes
SMT1.5VJG2EK	Mitsubishi	Summit, Mirage	No
SMT1.8VJG2EK	Mitsubishi	Summit, & Summit Wagon, Mirage, Expo, LRV	No
SMT2.4VJG2EK	Mitsubishi	Summit Wagon, Expo, LRV	No
SNS2.4VJGFFK	Nissan	240 SX	Yes
SNS2.0VJGFFK	Nissan	G20	Yes
SNS3.0VJG1EK	Nissan	Maxima	No
SNS3.0VJG1FK	Nissan	Maxima	No
SNS2.4VJG2EK	Nissan	Altima	Yes
SNS1.6VJG2EK	Nissan	Sentra/200 SX	Yes
SNS2.0VJGFEK	Nissan	200SX SE-R	Yes
SNS3.0VJG1EK	Nissan	Maxima	No
SLR4.0H8GOEK	Rover	Range Rover New Model	No
SFJ2.2VJGFEK	Subaru	Legacy	Yes (A/T models only)
STY3.41JG1GK	Toyota	T100 2WD	Yes
STY3.42JG1GK	Toyota	T100 2WD & 4WD	Yes
STY3.0VJGFEK	Toyota	Camry, Camry Wagon, ES300, Avalon	Yes
STY2.42HGJEK	Toyota	Previa, Previa All-trac	No
STY2.71HGEEK	Toyota	T100 2WD	Yes
STY1.5VHGFEK	Toyota	Tercel	No
STY4.0VJG1GK	Toyota	LS 400	No
STY2.41HG1GK	Toyota	Tacoma 2WD	No
STY2.71HG1GK	Toyota	Tacoma 4WD	No
STY3.41JGFEK	Toyota	Tacoma 2WD/4WD	No
STY3.42JGFEK	Toyota	Tacoma 4WD	No
STY4.55JGFEK	Toyota	Land Cruiser	No
SVV2.3VJGFEK	Volvo (TC)	850 Turbo Sedan/Wagon	No
SVV2.4VJGFEK	Volvo	850 Sedan/Wagon	Yes

A note accompanying this list indicated that certification is for the engine group only. The models listed are believed correct, but the engine is the deciding factor.

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[OBD-II Home]

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