# TECHNICAL REPORT

ISO/TR 15031-2

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Road vehicles — Communication between vehicle and external equipment for emissions-related diagnostics —

Part 2:

Terms, definitions, abbreviations and acronyms

Véhicules routiers — Communications entre un véhicule et un équipement externe pour le diagnostic relatif aux émissions —

Partie 2: Termes, définitions, abréviations et acronymes



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# **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 15031-2 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

ISO/TR 15031 consists of the following parts, under the general title *Road vehicles* — *Communication between vehicle and external equipment for emissions-related diagnostics*:

- Part 1: General information
- Part 2: Terms, definitions, abbreviations, and acronyms [Technical Report]
- Part 3: Diagnostic connector and related electrical circuits: specification and use
- Part 4: External test equipment
- Part 5: Emissions-related diagnostic services
- Part 6: Diagnostic trouble code definitions
- Part 7: Data link security

# Introduction

The various parts of ISO 15031, when taken together, provide a coherent, consistent set of specifications for facilitating emissions-related diagnostics. ISO 15031-2 to ISO 15031-7 are based on recommended practices of the society of automotive engineers (SAE). This part of ISO 15031 is based on SAE J1930:05/98, *Electrical/Electronic Systems Diagnostic Terms, Definitions, Abbreviations, and Acronyms*.

See ISO 15031-1 for general information and an introduction to ISO 15031.

As the number of sophisticated electrical and electronic systems on motor vehicles has increased, so has substantially the number of terms, abbreviations and acronyms which describe the various components of these systems. This part of ISO 15031 is intended to bring order to the proliferation of such terms, abbreviations and acronyms. It is part of a process by which the nomenclature used to convey automotive service information is being standardized in order to more accurately convey information to technicians faced with the diagnosis and repair of increasingly complex vehicles.

To be properly descriptive, each type of automotive nomenclature requires a consistent procedure. This part of ISO 15031 is concerned with a procedure for naming objects and systems and with the set of words from which names are built. Firstly, the procedure allows the complete description of objects and systems without ambiguity and the generation of names which distinguish among similar objects or systems without confusion but with brevity. Secondly, using terms which are well defined within the context of the automotive service industry, the procedure allows already existing, imprecise, names to be suitably changed and future names to be assigned in a predictable way that will reliably convey meaning to the technician.

# Road vehicles — Communication between vehicle and external equipment for emissions-related diagnostics —

# Part 2:

# Terms, definitions, abbreviations and acronyms

# 1 Scope

This part of ISO 15031 is a guide to terms, definitions, abbreviations and acronyms used in emissions-related diagnostics, with respect to the communication between road vehicles and external equipment used in that field. It also specifies a procedure for constructing new terms. As it gives recommended usage of diagnostic terms applicable to electrical/electronic systems, it also makes reference to related mechanical terms, definitions, abbreviations, and acronyms.

#### 2 Overview

#### 2.1 General

Certain abbreviated terms, although already in common use and readily understood by manufacturers and technicians, do not follow the procedures given in this part of ISO 15031. To preserve this understanding, the terms concerned are identified in Table 2 by Footnote reference "a" as being "Historically accepted common usage", so that they will not erroneously serve as a precedent in the construction of new names. They fall into three categories:

- a) acronyms that do not logically fit the term;
- b) acronyms existing at the component level, i.e. their terms contain the base word or noun that describes the generic item that is being further defined;
- acronyms for terms that appear to contain the base word, but are frequently used as a modifier to another base word (this use could possibly be thought of as following the procedure, since the acronym is normally used as a modifier).

Specific applications include diagnostic service and repair manuals, bulletins and updates, training manuals, repair data bases, engine-bay emission labels, and emission certification applications.

#### 2.2 Layout and explanations

#### 2.2.1 Structure of document

This part of ISO 15031 is presented mainly in tabular format:

- Table 1 is used to find the accepted terms and their acronyms corresponding to existing terms, abbreviations or acronyms;
- Table 2 gives the definitions of the recommended terms;

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- Table 3 presents an example of the usage of modifiers;
- Table 4 is a glossary of terms and their definitions;
- Table 5 gives examples of alphanumeric descriptors;
- Table 6 is a list of alphanumeric descriptors.

In addition, 2.3 to 2.9 specifies a procedure for constructing new names and, using Annex A, for requesting a revision of this part of ISO 15031 so as to add, change or delete a term, definition, abbreviation and/or acronym.

#### 2.2.2 Table 1 — Cross-references and look-up

The left column includes existing terms, acronyms and abbreviations. The centre column provides the corresponding accepted usage constructed of terms combined with other modifiers and/or base words. The accepted acronyms are shown in the right column.

#### 2.2.3 Table 2 — Recommended terms, their acronyms and definitions

Table 2 is an alphabetical listing of recommended terms to be used in combination with base words and their acronyms and abbreviations, together with their definitions.

#### 2.2.4 Table 3 — Modifier usage example

Table 3 gives an example how to use modifiers and base words.

#### 2.2.5 Table 4 — Glossary of terms and their definitions

Table 4 is an alphabetical listing of base words and single word modifiers, together with their definitions.

#### 2.3 Naming procedure

#### 2.3.1 Explanation

This naming procedure for describing objects and systems uses modifiers attached to base words. Appropriate modifiers are added to a base word until an object or system is uniquely specified within its context.

#### 2.3.2 Naming objects

When building names, select the most descriptive base word from the glossary of terms (see Table 4). Add modifiers as necessary or as desirable within the context, in the order of most significance to least significance. The most significant word will be the base word, which denotes the basic function of the object. The most significant modifier will be adjacent to the base word, the second most significant will be next to that modifier, and so on until the least significant modifier is added. For the sake of future clarity, an additional modifier can be added to a name at any time, even if there is no present conflict with another object name.

Table 3 gives an example to illustrate how modifiers can be added to build the name *instrumentation engine* coolant temperature sensor.

When naming an object, it is tempting to choose the first modifiers according to the initial purpose for which the object was designed, but this will not always result in the name which is most helpful in the long run to a service technician. The information a technician needs is most often supplied by a term which describes a functional attribute, not purpose.

To ensure accuracy, always check the glossary definitions of base words and modifiers (see Table 4) before including them in a name. The glossary is intended for diagnostic purposes, but provides only electrical/electronic terms for base words. Base words which describe non-electrical objects (e.g. bolt, screw, bumper) shall be used as in the past. Often, names for these objects are created by attaching the appropriate electrical/electronic object name to the mechanical base word. When using a common multiple word modifier, see Tables 1 and 2 to ensure that the modifier is acceptable; if not, replace it with a more precise term.

# 2.3.3 Base words

The base word is the most generic term in a name. Simply stated, it answers the question, "What is this object?" In answering the question, the base word does not include information about the location or function of an object within a particular system. Specific information like this is provided by modifiers that are added to the base word. The following are examples of base words: diode, engine, module, motor, pump, relay, sensor, solenoid, switch, valve. The base word is always a noun and the last term in a name. However, "device" shall not be used as a base word.

#### 2.3.4 Modifiers

Modifiers provide functional/applicational meaning, system differentiation and location/direction information. Modifiers usually express non-electrical ideas to describe base words which in turn convey electrical/electronic meaning. The range of modifiers is not limited and may be used as necessary to uniquely describe an object in light of present knowledge, past experience and potential future conflicts.

Although modifiers are used as adjectives, they are not necessarily terms which would normally be classified as adjectives. While neither "air" nor "flow" are adjectives, the meaning of "airflow valve" is clear to technicians; it is the name of a valve which regulates the flow of air. Both modifiers are nouns functioning as adjectives because of their position.

System modifiers may be added to object names to describe an object's purpose. When using a system name as a modifier in an object name, the word "system" is not included.

EXAMPLE The device that directs the exhaust gases in the exhaust gas re-circulation (EGR) system is named exhaust gas re-circulation (EGR) valve.

#### 2.3.5 Technological terms

Technologically specific terms tend to lengthen names without adding a corresponding level of useful service information about the function of an object. Add an appropriate technological modifier to a name only when it describes the primary difference between two objects. For example, the "thick film" technology used to construct the internal circuit of an airflow sensor shall not be identical in the object's name. However, if necessary for clarity, it would be appropriate to differentiate the relation to a specific external provision by adding "hot wire" to "airflow sensor".

A technological term shall be the first modifier conversationally (farthest from the base word, the position of least significance), unless a directional modifier is also present.

#### 2.4 Naming systems

When constructing a name for a system, consider it to be a combination of a concept and the word "system". Develop the concept name according to the rules for object naming and add the word "system" Keep in mind that a concept's most basic attribute is its purpose and that this attribute is described by the term closest to the word "system".

EXAMPLE Re-circulation is the basic attribute of the exhaust gas re-circulation (EGR) concept. The group of components that embody the concept are together named the EGR system.

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#### 2.5 Shortened names

#### 2.5.1 Naming rules

Techniques of shortening, including acronyms and abbreviations, are often necessary when space is limited and when names become awkwardly long. It is preferable to create a name first and its shortened form later, rather than the other way around.

Abbreviations and acronyms may be constructed not only of the letters of the alphabet, but of numbers, space characters, punctuation marks (such as "/" and "-"), subscripts, and any other ASCII characters. Treat the individual acronyms, modifier abbreviations and base word abbreviations as words, separating them by space characters.

#### 2.5.2 Acronyms

Specific definitions of acronyms vary, but for the purpose of this document, an acronym is a memorable combination of the first letters of the words of a name. While abbreviations are useful in text where space is limited, acronyms are particularly convenient for shortening verbal communication in addition to written materials. For this reason, acronyms are often pronounceable, which also makes them easy to remember.

They are especially useful if a name is long and bulky both on paper and in conversation.

Use acronyms as modifiers or base words within names, such as "EGR system" and "primary ECM". Do not use them as entire names like "EGRS". Acronyms and other modifiers may be combined in any meaningful order to modify a base word.

EXAMPLE 1 EGR system, EGRT sensor

EXAMPLE 2 Low-speed FC switch

EXAMPLE 3 High-speed FC switch

Because there are a limited number of useful letter combinations for acronyms, new acronyms shall be created for only the most commonly used terms. Also, avoid creating new acronyms by adding letters to those that already exist. For example, when using the acronym "FC" (fan control), do not add "H" or "L" to indicate "high speed" or "low speed". Instead, use additional modifiers.

Usually, the first letters of each word of a name are used to build an acronym, but if a particular word is of little significance, it may be omitted (e.g. "United States of America" becomes "USA"). Also, more than the first letter of each word may be used (e.g. "Radio detecting and ranging" becomes "RADAR"). An acronym like "USA" which contains three letters or fewer will have its letters spoken separately, but a longer acronym such as "RADAR" shall be pronounceable or its purpose will be defeated.

All of the letters of an acronym shall be in upper case. Acronyms shall not contain full stops. Until an acronym is widely well known, it shall be accompanied by the full form when necessary for accurate reader comprehension in any given context.

In the very rare cases of strong historical meaning across all manufacturers, the rules for naming and acronym usage may be broken. For example, "AIR" is the approved acronym for "secondary air injection", instead of "SAI". In fact, because there is no approved name "primary air injection", the term "secondary air injection" would be considered inappropriate. Despite this, historical precedent renders "AIR" and "secondary air injection" the most easily understood terms. "AIR" originally meant, "Air injection reactor". However, vehicles no longer necessarily use a separate air injector reactor, but instead might have additional air injected to the catalytic converter. Because of the similarity to the previous system, technicians have expressed a strong desire to retain "AIR" rather than "SAI".

Before using a new acronym, check Tables 1 and 2 for any conflicts with acronyms already in use.

#### 2.5.3 Abbreviations

Use abbreviations to shorten base words and directional modifiers in written materials. Unlike an acronym, an abbreviation shall have only its first letter in upper case and shall end with a full stop.

Wire colours are an exception to the rules of case and punctuation. As in the past, they shall continue to be completely in upper case in text and shall not be followed by a full stop.

EXAMPLE BLK wire.

For currently identified abbreviations for base words and modifiers, see Table 1.

# 2.6 Indexing of names

Service information index designers consider the importance of each term in a name, and select the most appropriate word(s) to index. They most frequently index base words; following each by its modifier(s) to enhance users' retrieval.

The procedure given in part of ISO 15031 allows the designer flexibility to choose the indexed word(s) while describing, in detail, the procedure for the conversational word order in text and illustrations.

EXAMPLE The designer provides the user with the effective retrieval of the conversational name *left front wheel* speed sensor by indexing it as sensor, *left front wheel* speed.

#### 2.7 Explanation of alphanumeric descriptors

The previous subclauses (2.3 to 2.6) describe how to completely describe object and system without ambiguity, and cover the naming of objects (with base words, modifiers, and technological terms), naming systems and building of shortened names.

An *alphanumeric descriptor* may also be used in information delivered to the end-user of a scan tool having an 8-character display limitation. An alphanumeric descriptor is not recommended for general use, but can be built from a recommended term by replacing position modifier words with numeric digits, and omitting certain self-evident letters.

Alphanumeric position modifiers in an alphanumeric descriptor shall be positioned to follow the base word, rather than the conversational practice of preceding the base word. Table 5 illustrates how several recommended terms and acronyms can be further shortened into alphanumeric descriptors.

The following is a procedure for using or developing alphanumeric descriptors.

- a) First, consult Table 2, recommended terms in the acronyms column.
- b) If the term is not included, build a suitable term using 2.3.2 or 2.4. Then shorten the term using 2.5.
- c) If the resultant term is too long for a scan tool with an 8-character display limitation, build an alphanumeric descriptor for electronic delivery according to the pattern given in Table 5.
- d) Delete or replace characters as required.
- e) Omit spaces depending on the display limitation (e.g. FUEL PRES becomes FUELPRES).
- f) Consult Table 6 for a matching alphanumeric descriptor.
- g) If Table 6 does not contain a matching alphanumeric descriptor, request an addition, using the request for revision form in Annex A.

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# 2.8 Table 6 — Alphanumeric descriptor table

Table 6 is an alphabetical listing of alphanumeric descriptors to be used when required due to limited display sizes.

# 2.9 Revision procedures

It will be appropriate to revise this document on an ongoing basis. Requested revisions and updates will be controlled by SAE/ISO according to the normal revision process. This will ensure proper distribution of the changes.

Use Annex A for submission of new information.

Table 1 — Cross-references and look-up

Existing usage	Accepted usage	Accepted acronym
3-2 Timing Solenoid	3-2 Timing Solenoid	3-2TS
3-2 Timing Solenoid Valve	3-2 Timing Solenoid Valve	3-2TS Valve
3-2TS Valve (3-2 Timing Solenoid) Valve	3-2 Timing Solenoid Valve	3-2TS Valve
3-2TS (3-2 Timing Solenoid)	3-2 Timing Solenoid	3-2TS
3GR (Third Gear)	Third Gear	3GR
4GR (Fourth Gear)	Fourth Gear	4GR
4WD (Four Wheel Drive)	Four Wheel Drive	4WD
4WD (Four Wheel Drive)	Full Time Four Wheel Drive	F4WD
4WD (Four Wheel Drive)	Selectable Four Wheel Drive	S4WD
A4WD (Automatic 4 Wheel Drive)	Automatic 4 Wheel Drive	A4WD
A/C (Air Conditioning)	Air Conditioning	A/C
A/C Cycling Switch	Air Conditioning Cycling Switch	A/C Cycling Switch
AFWD (Automatic Four Wheel Drive)	Automatic 4 Wheel Drive	A4WD
A/F Ratio Sensor	Air Fuel Ratio Sensor	A/F Sensor
A/T (Automatic Transaxle)	Automatic Transaxle	A/T
A/T (Automatic Transmission)	Automatic Transmission	A/T
AAT (Ambient Air Temperature)	Ambient Air Temperature	AAT
AC (Air Conditioning)	Air Conditioning	A/C
ACC (Air Conditioning Clutch)	Air Conditioning Clutch	A/C Clutch
Accelerator	Accelerator Pedal	A/P
Accelerator Pedal Position	Accelerator Pedal Position	APP
ACCS (Air Conditioning Cyclic Switch)	Air Conditioning Cyclic Switch	A/C Cycling Switch
ACH (Air Cleaner Housing)	Air Cleaner Housing	ACL Housing
ACL (Air Cleaner)	Air Cleaner	ACL
ACL (Air Cleaner) Housing	Air Cleaner Housing	ACL Housing
ACL (Air Cleaner) Housing Cover	Air Cleaner Housing Cover	ACL Housing Cover
ACL (Air Cleaner) Element	Air Cleaner Element	ACL Element
ACS (Air Conditioning System)	Air Conditioning System	A/C System

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
ACT (Air Charge Temperature)	Intake Air temperature	IAT
Adaptive Fuel Strategy	Fuel Trim	FT
Adsorber	Adsorber	Adsorber
AFC (Airflow Control)	Mass Airflow	MAE
AFC (Airflow Control)	Volume Airflow	VAE
AFS (Airflow Sensor)	Mass Airflow Sensor	MAF Sensor
AFS (Airflow Sensor)	Volume Airflow Sensor	VAF Sensor
After Cooler	Charge Air Cooler	CAC
Al (Air Injection)	Secondary Air Injection	AIR
AIP (Air Injection Pump)	Secondary Air Injection Pump	AIR Pump
AIR (Air Injection Reactor)	Pulsed Secondary Air Injection	PAIR
AIR (Air Injection Reactor)	Secondary Air Injection	AIR
Air Cleaner	Air Cleaner	ACL
Air Cleaner Element	Air Cleaner Element	ACL Element
Air Cleaner Housing	Air Cleaner Housing	ACL Housing
Air Cleaner Housing Cover	Air Cleaner Housing Cover	ACL Housing Cover
Air Conditioning	Air Conditioning	A/C
Air Conditioning Sensor	Air Conditioning Sensor	A/C Sensor
Air Control Valve	Secondary Air Injection Control Valve	AIR Control Valve
Air Fuel Ratio Sensor	Air Fuel Ratio Sensor	A/F Sensor
Air Intake System	Intake Air System	IA System
Air Management	Secondary Air Injection Bypass	AIR Bypass
Air Management 2	Secondary Air Injection Diverter	AIR Diverter
Air Temperature Sensor	Intake Air Temperature Sensor	IAT Sensor
Air Valve	Idle Air Control Valve	IAC Valve
AIRB (Secondary Air Injection Bypass)	Secondary Air Injection Bypass	AIR Bypass
AIRD (Secondary Air Injection Diverter)	Secondary Air Injection Diverter	AIR Diverter
Airflow Meter	Mass Airflow Sensor	MAE Sensor
Airflow Meter	Volume Airflow Sensor	VAE Sensor
Airflow Sensor	Mass Airflow Sensor	MAE Sensor
AIV (Air Injection Valve)	Pulsed Secondary Air Injection	PAIR
ALCL (Assembly Line Communication Link)	Data Link Connector	DLC
Alcohol Concentration Sensor	Flexible Fuel Sensor	FF Sensor
ALDL (Assembly Line Diagnostic Link)	Data Link Connector	DLC
ALT (Alternator)	Generator	GEN
Alternator	Generator	GEN
AM (Air Management)	Secondary Air Injection Bypass	AIR Bypass
AM2 (Air Management 2)	Secondary Air Injection Diverter	AIR Diverter
Ambient Air Temperature	Ambient Air Temperature	AAT
APP (Accelerator Pedal Position)	Accelerator Pedal Position	APP

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
APS (Absolute Pressure Sensor)	Barometric Pressure Sensor	BARO Sensor
ATS (Air Temperature Sensor)	Intake Air Temperature Sensor	IAT Sensor
Automatic 4 Wheel Drive	Automatic 4 Wheel Drive	A4WD
Automatic Temperature Control	Climate Control	CC
Automatic Transaxle	Automatic Transaxle	A/T
Automatic Transmission	Automatic Transmission	A/T
B+ (Battery Positive Voltage)	Battery Positive Voltage	B+
Backpressure Transducer	Exhaust Gas Re-circulation Backpressure Transducer	EGR Backpressure Transducer
BARO (Barometric Pressure)	Barometric Pressure	BARO
Barometric Pressure Sensor	Barometric Pressure Sensor	BARO Sensor
Battery Positive Voltage	Battery Positive Voltage	B+
BC (Blower Control)	Blower Control	BC
BLM (Block Learn Matrix)	Long Term Fuel Trim	Long Term FT
BLM (Block Learn Memory)	Long Term Fuel Trim	Long Term FT
BLM (Block Learn Multiplier)	Long Term Fuel Trim	Long Term FT
Block Learn Integrator	Long Term Fuel Trim	Long Term FT
Block Learn Matrix	Long Term Fuel Trim	Long Term FT
Block Learn Memory	Long Term Fuel Trim	Long Term FT
Block Learn Multiplier	Long Term Fuel Trim	Long Term FT
Blower Control	Blower Control	BC
Blower Control Module	Blower Control Module	BC Module
Blower Motor Speed Controller	Blower Control Module	BC Module
BP (Barometric Pressure) Sensor	Barometric Pressure Sensor	BARO Sensor
BPP (Brake Pedal Position)	Brake Pedal Position	BPP
Brake Pedal Position	Brake Pedal Position	BPP
Brake Pressure	Brake Pressure	Brake Pressure
BUS N	BUS Negative	BUS N
BUS Negative	BUS Negative	BUS N
BUS P	BUS Positive	BUS P
BUS Positive	BUS Positive	BUS P
C <sup>3</sup> I (Computer Controlled Coil Ignition)	Electronic Ignition	El
CAC (Charge Air Cooler)	Charge Air Cooler	CAC
Calculated Load Value	Calculated Load Value	LOAD
Camshaft Position	Camshaft Position	CMP
Camshaft Position Actuator	Camshaft Position Actuator	CMP Actuator
Camshaft Position Controller	Camshaft Position Actuator	CMP Actuator
Camshaft Position Sensor	Camshaft Position Sensor	CMP Sensor
Camshaft Sensor	Camshaft Position Sensor	CMP Sensor
Camshaft Timing Actuator	Camshaft Position Actuator	CMP Actuator

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Canister	Canister	Canister
Canister	Evaporative Emission Canister	EVAP Canister
Canister Purge	Evaporative Emission Canister Purge	EVAP Canister Purge
Canister Purge Vacuum Switching Valve	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve
Canister Purge Valve	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve
Canister Purge VSV (Vacuum Switching Valve)	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve
CANP (Canister Purge)	Evaporative Emission Canister Purge	EVAP Canister Purge
CARB(Carburettor)	Carburettor	CARB
Carbon Dioxide	Carbon Dioxide	CO2
Carbon Monoxide	Carbon Monoxide	СО
Carburettor	Carburettor	CARB
Catalytic Converter Heater	Catalytic Converter Heater	_
CC (Climate Control)	Climate Control	CC
CCC (Converter Clutch Control)	Torque Converter Clutch	TCC
CCO (Converter Clutch Override)	Torque Converter Clutch	TCC
CCS (Coast Clutch Solenoid)	Coast Clutch Solenoid	ccs
CCS (Coast Clutch Solenoid) Valve	Coast Clutch Solenoid Valve	CCS Valve
CDI (Capacitive Discharge Ignition)	Distributor Ignition	DI
CDROM (Compact Disc Read Only Memory)	Compact Disc Read Only Memory	CDROM
Central Multiport Fuel Injection	Central Multiport Fuel Injection	Central MFI
Central Sequential Multiport Fuel Injection	Central Sequential Multiport Fuel Injection	Central SFI
CES (Clutch Engage Switch)	Clutch Pedal Position Switch	CPP Switch
CFI (Central Fuel Injection)	Throttle Body Fuel Injection	TBI
CFI (Continuous Fuel Injection)	Continuous Fuel Injection	ТВІ
CFV (Critical Flow Venturi)	Critical Flow Venturi	CFV
Charcoal Canister	Evaporative Emission Canister	EVAP Canister
Charge Air Cooler	Charge Air Cooler	CAC
Check Engine	Service Reminder Indicator	SRI
Check Engine	Malfunction Indicator Lamp	MIL
CID (Cylinder identification) Sensor	Camshaft Position Sensor	CMP Sensor
CIS (Continuous Injection System)	Continuous Fuel Injection	CFI
CIS-E (Continuous Injection System-Electronic)	Continuous Fuel Injection	CFI
CKP (Crankshaft Position)	Crankshaft Position	CKP
CKP (Crankshaft Position) Sensor	Crankshaft Position Sensor	CKP Sensor
CL (Closed Loop)	Closed Loop	CL
Climate Control	Climate Control	CC
Closed Bowl Distributor	Distributor Ignition	DI
Closed Throttle Position	Closed Throttle Position	CTP

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Closed Throttle Switch	Closed Throttle Position Switch	CTP Switch
CLS (Closed Loop System)	Closed Loop	CL
Clutch Engage Switch	Clutch Pedal Position Switch	CPP Switch
Clutch Pedal Position Switch	Clutch Pedal Position Switch	CPP Switch
Clutch Start Switch	Clutch Pedal Position Switch	CPP Switch
Clutch Switch	Clutch Pedal Position Switch	CPP Switch
CMFI (Central Multiport Fuel Injection)	Central Multiport Fuel Injection	Central MFI
CMP (Camshaft Position)	Camshaft Position	CMP
CMP (Camshaft Position) Sensor	Camshaft Position Sensor	CMP Sensor
CO (Carbon Monoxide)	Carbon Monoxide	СО
CO (Carbon Monoxide) Potentiometer	Carbon Monoxide Potentiometer	CO Potentiometer
CO2 (Carbon Dioxide)	Carbon Dioxide	CO2
Coast Clutch Solenoid	Coast Clutch Solenoid	ccs
Coast Clutch Solenoid Valve	Coast Clutch Solenoid Valve	CCS Valve
COC (Continuous Oxidation Catalyst)	Oxidation Catalytic Converter	ОС
Condenser	Distributor Ignition Capacitor	DI Capacitor
Constant Control Relay Module	Relay Module	RM
Constant Volume Sampler	Constant Volume Sampler	CVS
Continuous Fuel Injection	Continuous Fuel Injection	CFI
Continuous Injection System	Continuous Fuel Injection System	CFI System
Continuous Injection System-E	Electronic Continuous Fuel Injection System	Electronic CFI System
Continuous Trap Oxidizer	Continuous Trap Oxidizer	СТОХ
Continuously variable transaxle	Continuously variable transaxle	CVT
Continuously variable transmission	Continuously variable transmission	CVT
Coolant Temperature Sensor	Engine Coolant Temperature Sensor	ECT Sensor
CP (Crankshaft Position)	Crankshaft Position	CKP
CPP (Clutch Pedal Position)	Clutch Pedal Position	CPP
CPP (Clutch Pedal Position) Switch	Clutch Pedal Position Switch	CPP Switch
CPS (Camshaft Position Sensor)	Camshaft Position Sensor	CMP Sensor
CPS (Crankshaft Position Sensor)	Crankshaft Position Sensor	CKP Sensor
Crank Angle Sensor	Crankshaft Position Sensor	CKP Sensor
Crankshaft Position	Crankshaft Position	CKP
Crankshaft Position Sensor	Crankshaft Position Sensor	CKP Sensor
Crankshaft Speed	Engine Speed	RPM
Crankshaft Speed Sensor	Engine Speed Sensor	RPM Sensor
Critical Flow Venturi	Critical Flow Venturi	CFV
CTO (Continuous Trap Oxidizer)	Continuous Trap Oxidizer	СТОХ
CTOX (Continuous Trap Oxidizer)	Continuous Trap Oxidizer	СТОХ
CTP (Closed Throttle Position)	Closed Throttle Position	СТР
CTS (Coolant Temperature Sensor)	Engine Coolant Temperature Sensor	ECT Sensor

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
CTS (Coolant Temperature Switch)	Engine Coolant Temperature Switch	ECT Switch
CVS (Constant Volume Sampler)	Constant Volume Sampler	CVS
CVT (Continuously Variable Transmission)	Continuously Variable Transmission	CVT
CVT (Continuously Variable Transaxle)	Continuously Variable Transaxle	CVT
Cylinder ID (Identification) Sensor	Camshaft Position Sensor	CMP Sensor
Data Link Connector	Data Link Connector	DLC
Detonation Sensor	Knock Sensor	KS
DFI (Digital Fuel Injection)	Multiport Fuel Injection	MFI
DFI (Direct Fuel Ignition)	Direct Fuel Injection	DFI
Diagnostic Test Mode	Diagnostic Test Mode	DTM
Diagnostic Trouble Code	Diagnostic Trouble Code	DTC
DID (Direct Injection - Diesel)	Direct Fuel Injection	DFI
Differential Pressure Feedback EGR (Exhaust Gas Re-circulation) System	Differential Pressure Feedback Exhaust Gas Re-circulation System	Differential Pressure Feedback EGR System
Digital EGR (Exhaust Gas Re-circulation)	Exhaust Gas Re-circulation	EGR
Direct Fuel Injection	Direct Fuel Injection	DFI
Direct Ignition System	Electronic Ignition System	El System
DIS (Distributorless Ignition System)	Electronic Ignition System	El System
DIS (Distributorless Ignition System) Module	Ignition Control Module	ICM
Distance Sensor	Vehicle Speed Sensor	VSS
Distributor Ignition	Distributor Ignition	DI
Distributorless Ignition	Electronic Ignition	EI
D-Jetronic	Multiport Fuel Injection	MFI
DI (Direct Injection)	Direct Fuel Injection	DFI
DLC (Data Link Connector)	Data Link Connector	DLC
DLI (Distributorless Ignition)	Electronic Ignition	El
DM (Drive Motor)	Drive Motor	DM
DMCM (Drive Motor Control Module)	Drive Motor Control Module	DMCM
DMCT (Drive Motor Coolant Temperature)	Drive Motor Coolant Temperature	DMCT
DMPI (Drive Motor Power Inverter) Module	Drive Motor Power Inverter Module	DMPI Module
Drive Motor	Drive Motor	DM
Drive Motor Control Module	Drive Motor Control Module	DMCM
Drive Motor Coolant Temperature	Drive Motor Coolant Temperature	DMCT
Drive Motor Power Inverter Module	Drive Motor Power Inverter Module	DMPI Module
Driver	Driver	Driver
DS (Detonation Sensor)	Knock Sensor	KS
DTC (Diagnostic Trouble Code)	Diagnostic Trouble Code	DTC
DTM (Diagnostic Test Mode)	Diagnostic Test Mode	DTM
Dual Bed	Three Way + Oxidation Catalytic Converter	TWC+OC
Duty Solenoid for Purge Valve	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Dynamic Pressure Control	Dynamic Pressure Control	Dynamic PC
Dynamic Pressure Control Solenoid	Dynamic Pressure Control Solenoid	Dynamic PC Solenoid
Dynamic Pressure Control Solenoid Valve	Dynamic Pressure Control Solenoid Valve	Dynamic PC Solenoid Valve
E2PROM (Electrically Erasable Programmable Read Only Memory	Electrically Erasable Programmable Read Only Memory	EEPROM
Early Fuel Evaporation	Early Fuel Evaporation	EFE
EATX (Electronic Automatic Transmission/Transaxle)	Automatic Transmission	A/T
EC (Engine Control)	Engine Control	EC
ECA (Electronic Control Assembly)	Powertrain Control Module	PCM
ECL (Engine Coolant Level)	Engine Coolant Level	ECL
ECM (Engine Control Module)	Engine Control Module	ECM
ECT (Engine Coolant Temperature)	Engine Coolant Temperature	ECT
ECT (Engine Coolant Temperature) Sender	Engine Coolant Temperature Sensor	ECT Sensor
ECT (Engine Coolant Temperature) Sensor	Engine Coolant Temperature Sensor	ECT Sensor
ECT (Engine Coolant Temperature) Switch	Engine Coolant Temperature Switch	ECT Switch
ECU4 (Electronic Control Unit 4)	Powertrain Control Module	PCM
EDF (Electro-Drive Fan) Control	Fan Control	FC
EDIS (Electronic Distributor Ignition System)	Distributor Ignition System	DI System
EDIS (Electronic Distributor Ignition System) Module	Distributor Ignition Control Module	Distributor ICM
EDIS (Electronic Distributorless Ignition System)	Electronic Ignition System	El System
EEC (Electric Engine Control)	Engine Control	EC
EEC (Electronic Engine Control) Processor	Powertrain Control Module	PCM
EECS (Evaporative Emission Control System)	Evaporative Emission System	EVAP System
EEPROM (Electrically Erasable Programmable Read Only Memory)	Electrically Erasable Programmable Read Only Memory	EEPROM
EFE (Early Fuel Evaporation)	Early Fuel Evaporation	EFE
EFI (Electronic Fuel Injection)	Multiport Fuel Injection	MFI
EFI (Electronic Fuel Injection)	Throttle Body Fuel Injection	ТВІ
EFT (Engine Fuel Temperature)	Engine Fuel Temperature	EFT
EFT (Engine Fuel Temperature) Sensor	Engine Fuel Temperature Sensor	EFT Sensor
EGO (Exhaust Gas Oxygen) Sensor	Oxygen Sensor	O2S
EGOS (Exhaust Gas Oxygen Sensor)	Oxygen Sensor	O2S
EGR (Exhaust Gas Re-circulation)	Exhaust Gas Re-circulation	EGR
EGR (Exhaust Gas Re-circulation) Diagnostic Valve	Exhaust Gas Re-circulation Diagnostic Valve	EGR Diagnostic Valve
EGR (Exhaust Gas Re-circulation) System	Exhaust Gas Re-circulation System	EGR System
EGR (Exhaust Gas Re-circulation) Thermal Vacuum Valve	Exhaust Gas Re-circulation Thermal Vacuum Valve	EGR T V V
EGR (Exhaust Gas Re-circulation) Valve	Exhaust Gas Re-circulation Valve	EGR Valve

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
EGR T V V (Exhaust Gas Re-circulation Thermal Vacuum Valve)	Exhaust Gas Re-circulation Thermal Vacuum Valve	EGR T V V
EGRT (Exhaust Gas Re-circulation Temperature)	Exhaust Gas Re-circulation Temperature	EGRT
EGRT (Exhaust Gas Re-circulation Temperature) Sensor	Exhaust Gas Re-circulation Temperature Sensor	EGRT Sensor
EGRV (Exhaust Gas Re-circulation Valve)	Exhaust Gas Re-circulation Valve	EGR Valve
EGRVC (Exhaust Gas Re-circulation Valve Control)	Exhaust Gas Re-circulation Valve Control	EGR Valve Control
EGS (Exhaust Gas Sensor)	Oxygen Sensor	O2S
EGT (Exhaust Gas Temperature)	Exhaust Gas Temperature	EGT
EHOC (Electrical Heated Oxidation Catalyst)	Heated Oxidation Catalyst	HOC
EHT WC (Electrical Heated 3-way Catalyst)	Heated 3-way Catalyst	HTWC
El (Electronic Ignition) (with Distributor)	Distributor Ignition	DI
El (Electronic Ignition) (without Distributor)	Electronic Ignition	EI
Electrically Erasable Programmable Read Only Memory	Electrically Erasable Programmable Read Only Memory	EEPROM
Electrically Heated 3-way Catalyst	Heated 3-way Catalyst	HTWC
Electrically Heated Oxidation Catalyst	Heated Oxidation Catalyst	HOC
Electronic Automatic Temperature Control	Climate Control	CC
Electronic Engine Control	Electronic Engine Control	Electronic EC
Electronic Ignition	Electronic Ignition	El
Electronic Spark Advance	Ignition Control	IC
Electronic Spark Timing	Ignition Control	IC
EM (Engine Modification)	Engine Modification	EM
EMR (Engine Maintenance Reminder)	Service Reminder Indicator	SRI
Engine Control	Engine Control	EC
Engine Control Module	Engine Control Module	ECM
Engine Coolant Fan Control	Fan Control	FC
Engine Coolant Level	Engine Coolant Level	ECL
Engine Coolant Level Indicator	Engine Coolant Level Indicator	ECL Indicator
Engine Coolant Temperature	Engine Coolant Temperature	ECT
Engine Coolant Temperature Sender	Engine Coolant Temperature Sensor	ECT Sensor
Engine Coolant Temperature Sensor	Engine Coolant Temperature Sensor	ECT Sensor
Engine Coolant Temperature Switch	Engine Coolant Temperature Switch	ECT Switch
Engine Fuel Temperature	Engine Fuel Temperature	EFT
Engine Fuel Temperature Sensor	Engine Fuel Temperature Sensor	EFT Sensor
EPR (Exhaust Pressure Regulator)	Exhaust Pressure Regulator	EPR
EVAP (Evaporative Emission)	Evaporative Emission	EVAP
EVAP (Evaporative Emission) Canister	Evaporative Emission Canister	EVAP Canister
EVAP (Evaporative Emission) CANP (Canister Purge)	Evaporative Emission Canister Purge	EVAP Canister Purge

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
EVAP (Evaporative Emission) Purge Valve	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve
Evaporative Emission	Evaporative Emission	EVAP
Evaporative Emission Canister	Evaporative Emission Canister	EVAP Canister
EVP (Exhaust Gas Re-circulation Valve Position) Sensor	Exhaust Gas Re-circulation Valve Position Sensor	EGR Valve Position Sensor
EVR (Exhaust Gas Re-circulation Vacuum Regulator) Solenoid	Exhaust Gas Re-circulation Vacuum Regulator Solenoid	EGR Vacuum Regulator Solenoid
EVRV (Exhaust Gas Re-circulation Vacuum Regulator Valve)	Exhaust Gas Re-circulation Vacuum Regulator Valve	EGR Vacuum Regulator Valve
EXC (Exhaust Control)	Exhaust Control	EXC
EXC (Exhaust Control) Valve	Exhaust Control Valve	EXC Valve
EXC (Exhaust Control) Valve Actuator	Exhaust Control Valve Actuator	EXC Valve Actuator
Exhaust Control	Exhaust Control	EXC
Exhaust Control Valve	Exhaust Control Valve	EXC Valve
Exhaust Control Valve Actuator	Exhaust Control Valve Actuator	EXC Valve Actuator
EXC (Exhaust Control) Valve Cable	Exhaust Control Valve Cable	EXC Valve Cable
Exhaust Control Valve Cable	Exhaust Control Valve Cable	EXC Valve Cable
Exhaust Gas Re-circulation	Exhaust Gas Re-circulation	EGR
Exhaust Gas Re-circulation Temperature	Exhaust Gas Re-circulation Temperature	EGRT
Exhaust Gas Re-circulation Temperature Sensor	Exhaust Gas Re-circulation Temperature Sensor	EGRT Sensor
Exhaust Gas Re-circulation Vacuum Regulator Valve	Exhaust Gas Re-circulation Vacuum Regulator Valve	EGR Vacuum Regulator Valve
Exhaust Gas Re-circulation Vacuum Solenoid Valve Regulator	Exhaust Gas Re-circulation Vacuum Regulator Solenoid Valve	EGR Vacuum Regulator Solenoid Valve
Exhaust Gas Re-circulation Valve	Exhaust Gas Re-circulation Valve	EGR Valve
Exhaust Gas Temperature	Exhaust Gas Temperature	EGT
Exhaust Gas Temperature	Exhaust Temperature	E/T
Exhaust Gas Temperature Sensor	Exhaust Gas Temperature Sensor	EGT Sensor
Exhaust Pressure	Exhaust Pressure	EP
Exhaust Pressure Regulator	Exhaust Pressure Regulator	EPR
Exhaust Pressure Regulator Valve	Exhaust Pressure Regulator Valve	EPR Valve
F4WD (Full Time Four Wheel Drive)	Full Time Four Wheel Drive	F4WD
Fan Control	Fan Control	FC
Fan Control Module	Fan Control Module	FC Module
Fan Control Relay	Fan Control Relay	FC Relay
Fan Motor Control Relay	Fan Control Relay	FC Relay
Fast Idle Thermal Valve	Idle Air Control Thermal Valve	IAC Thermal Valve
FBC (Feed Back Carburettor)	Carburettor	CARB
FBC (Feed Back Control)	Mixture Control	MC
FC (Fan Control)	Fan Control	FC

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
FC (Fan Control) Relay	Fan Control Relay	FC Relay
FEEPROM (Flash Electrically Erasable Programmable Read Only Memory)	Flash Electrically Erasable Programmable Read Only Memory	FEEPROM
FEPROM (Flash Erasable Programmable Read Only Memory)	Flash Erasable Programmable Read Only Memory	FEPROM
FF (Flexible Fuel)	Flexible Fuel	FF
FI (Fuel Injection)	Central Multiport Fuel Injection	Central MFI
FI (Fuel Injection)	Continuous Fuel Injection	CFI
FI (Fuel Injection)	Direct Fuel Injection	DFI
FI (Fuel Injection)	Indirect Fuel Injection	IFI
FI (Fuel Injection)	Multiport Fuel Injection	MFI
FI (Fuel Injection)	Sequential Multiport Fuel Injection	SFI
FI (Fuel Injection)	Throttle Body Fuel Injection	TBI
FIC (Fuel Injection Control)	Fuel Injector Control	FIC
Flame Ionization Detector	Flame Ionization Detector	FID
Flash EEPROM (Electrically Erasable Programmable Read Only Memory)	Flash Electrically Erasable Programmable Read Only Memory	FEEPROM
Flash EPROM (Erasable Programmable Read Only Memory)	Flash Erasable Programmable Read Only Memory	FEPROM
Flexible Fuel	Flexible Fuel	FF
Flexible Fuel Sensor	Flexible Fuel Sensor	FF Sensor
Four Wheel Drive	Automatic 4 Wheel Drive	A4WD
Four Wheel Drive	Four Wheel Drive	4WD
Four Wheel Drive	Full Time Four Wheel Drive	F4WD
Four Wheel Drive	Selectable Four Wheel Drive	S4WD
Fourth Gear	Fourth Gear	4GR
FP (Fuel Pump)	Fuel Pump	FP
FP (Fuel Pump) Module	Fuel Pump Module	FP Module
Freeze Frame	Freeze Frame	See Table 6
Front Wheel Drive	Front Wheel Drive	FWD
FRP (Fuel Rail Pressure)	Fuel Rail Pressure	FRP
FRP (Fuel Rail Pressure) Sensor	Fuel Rail Pressure Sensor	FRP Sensor
FRT (Fuel Rail Temperature)	Fuel Rail Temperature	FRT
FRT (Fuel Rail Temperature) Sensor	Fuel Rail Temperature Sensor	FRT Sensor
FRZF (Freeze Frame)	Freeze Frame	See Table 6
FT (Fuel Trim)	Fuel Trim	FT
FTP (Fuel Tank Pressure)	Fuel Tank Pressure	FTP
FTP (Fuel Tank Pressure) Sensor	Fuel Tank Pressure Sensor	FTP Sensor
FTT (Fuel Tank Temperature)	Fuel Tank Temperature	FTT
FTT (Fuel Tank Temperature) Sensor	Fuel Tank Temperature Sensor	FTT Sensor
Fuel Charging Station	Throttle Body	ТВ

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Fuel Concentration Sensor	Flexible Fuel Sensor	FF Sensor
Fuel Injection	Central Multiport Fuel Injection	Central MFI
Fuel Injection	Continuous Fuel Injection	CFI
Fuel Injection	Direct Fuel Injection	DFI
Fuel Injection	Indirect Fuel Injection	IFI
Fuel Injection	Multiport Fuel Injection	MFI
Fuel Injection	Sequential Multiport Fuel Injection	SFI
Fuel Injection	Throttle Body Fuel Injection	TBI
Fuel Injector Control	Fuel Injector Control	FIC
Fuel Level Sensor	Fuel Level Sensor	_
Fuel Module	Fuel Pump Module	FP Module
Fuel Pressure	Fuel Pressure	_
Fuel Pressure	Fuel Pressure	See Table 6
Fuel Pressure Regulator	Fuel Pressure Regulator	Fuel Pressure Regulator
Fuel Pump	Fuel Pump	FP
Fuel Pump Relay	Fuel Pump Relay	FP Relay
Fuel Quality Sensor	Flexible Fuel Sensor	FE Sensor
Fuel Rail Pressure	Fuel Rail Pressure	FRP
Fuel Rail Pressure Sensor	Fuel Rail Pressure Sensor	FRP Sensor
Fuel Rail Temperature	Fuel Rail Temperature	FRT
Fuel Rail Temperature Sensor	Fuel Rail Temperature Sensor	FRT Sensor
Fuel Regulator	Fuel Pressure Regulator	_
Fuel Sender	Fuel Pump Module	FP Module
Fuel Sensor	Fuel Level Sensor	Fuel Level Sensor
FUEL SYS (Fuel System Status)	Fuel System Status	See Table 6
Fuel System Status	Fuel System Status	See Table 6
Fuel Tank Pressure	Fuel Tank Pressure	FTP
Fuel Tank Pressure Sensor	Fuel Tank Pressure Sensor	FTP Sensor
Fuel Tank Temperature	Fuel Tank Temperature	FTT
Fuel Tank Temperature Sensor	Fuel Tank Temperature Sensor	FTT Sensor
Fuel Tank Unit	Fuel Pump Module	FP Module
Fuel Trim	Fuel Trim	FT
Full Throttle	Wide Open Throttle	WOT
Full Time Four Wheel Drive	Automatic 4 Wheel Drive	A4WD
Full Time Four Wheel Drive	Full Time Four Wheel Drive	F4WD
FWD (Front Wheel Drive)	Front Wheel Drive	FWD
GCM (Governor Control Module)	Governor Control Module	GCM
GEM (Governor Electronic Module)	Governor Control Module	GCM
GEN (Generator)	Generator	GEN

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Generator	Generator	GEN
Glow Plug	Glow Plug	Glow Plug
GND (Ground)	Ground	GND
Governor	Governor	_
Governor Control Module	Governor Control Module	GCM
Governor Electronic Module	Governor Control Module	GCM
GPM (Gram Per Mile)	Gram Per Mile	GPM
Gram Per Mile	Gram Per Mile	GPM
GRD (Ground)	Ground	GND
Ground	Ground	GND
HC (Hydrocarbon)	Hydrocarbon	HC
HCDS (High Clutch Drum Speed)	High Clutch Drum Speed	HCDS
HCDS (High Clutch Drum Speed) Sensor	High Clutch Drum Speed Sensor	HCDS Sensor
Heated Oxygen Sensor	Heated Oxygen Sensor	HO2S
HEDF (High Electro-Drive Fan) Control	Fan Control	FC
HEGO (Heated Exhaust Gas Oxygen) Sensor	Heated Oxygen Sensor	HO2S
HEI (High Energy Ignition)	Distributor Ignition	DI
High Clutch Drum Speed	High Clutch Drum Speed	HCDS
High Clutch Drum Speed Sensor	High Clutch Drum Speed Sensor	HCDS Sensor
High Pressure Cut-off Switch	High Pressure Cut-off Switch	HPC Switch
High Speed FC (Fan Control) Switch	High Speed Fan Control Switch	High Speed FC Switch
HO2S (Heated Oxygen Sensor)	Heated Oxygen Sensor	HO2S
HOC (Heated Oxidation Catalyst)	Heated Oxidation Catalyst	HOC
HOS (Heated Oxygen Sensor)	Heated Oxygen Sensor	HO2S
Hot Wire Anemometer	Mass Airflow Sensor	MAF Sensor
HPC (High Pressure Cut-off) Switch	High Pressure Cut-off Switch	HPC Switch
HT WC (Heated Three Way Catalyst)	Heated 3-Way Catalyst	HT WC
Hydrocarbon	Hydrocarbon	HC
I/M (Inspection and Maintenance)	Inspection and Maintenance	I/M
IA (Intake Air)	Intake Air	IA
IA (Intake Air) Duct	Intake Air Duct	IA Duct
IAC (Idle Air Control)	Idle Air Control	IAC
IAC (Idle Air Control) Thermal Valve	Idle Air Control Thermal Valve	IAC Thermal Valve
IAC (Idle Air Control) Valve	Idle Air Control Valve	IAC Valve
IACV (Idle Air Control Valve)	Idle Air Control Valve	IAC Valve
IAT (Intake Air Temperature)	Intake Air Temperature	IAT
IAT (Intake Air Temperature) Sensor	Intake Air Temperature Sensor	IAT Sensor
IATS (Intake Air Temperature Sensor)	Intake Air Temperature Sensor	IAT Sensor
IC (Ignition Control)	Ignition Control	IC
ICM (Ignition Control Module)	Ignition Control Module	ICM

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
ICP (Injection Control Pressure)	Injection Control Pressure	ICP
IDFI (Indirect Fuel Injection)	Indirect Fuel Injection	IFI
IDI (Indirect Diesel Injection)	Indirect Fuel Injection	IFI
IDI (Integrated Direct Ignition)	Electronic Ignition	EI
Idle Air Bypass Control	Idle Air Control	IAC
Idle Air Control	Idle Air Control	IAC
Idle Air Control Valve	Idle Air Control Valve	IAC Valve
Idle Speed Control	Idle Air Control	IAC
Idle Speed Control	Idle Speed Control	ISC
Idle Speed Control Actuator	Idle Speed Control Actuator	ISC Actuator
IFI (Indirect Fuel Injection)	Indirect Fuel Injection	IFI
IFS (Inertia Fuel Shutoff)	Inertia Fuel Shutoff	IFS
Ignition Coil	Ignition Coil	_
Ignition Control	Ignition Control	IC
Ignition Control Module	Ignition Control Module	ICM
IMRC (Intake Manifold Runner Control)	Intake Manifold Runner Control	IMRC
IMT (Intake Manifold Tuning) Valve	Intake Manifold Tuning Valve	IMT Valve
Indirect Fuel Injection	Indirect Fuel Injection	IFI
Inertia Fuel - Shutoff Switch	Inertia Fuel Shutoff Switch	IFS Switch
Inertia Fuel Shutoff	Inertia Fuel Shutoff	IFS
Inertia Switch	Inertia Fuel Shutoff Switch	IFS Switch
Injection Control Pressure	Injection Control Pressure	ICP
Injector Pressure Sensor	Fuel Rail Pressure Sensor	FRP Sensor
Input Shaft Speed	Input Shaft Speed	ISS
Inspection and Maintenance	Inspection and Maintenance	I/M
INT (Integrator)	Short Term Fuel Trim	Short Term FT
Intake Air	Intake Air	IA
Intake Air Duct	Intake Air Duct	IA Duct
Intake Air Temperature	Intake Air Temperature	IAT
Intake Air Temperature Sensor	Intake Air Temperature Sensor	IAT Sensor
Intake Manifold Absolute Pressure Sensor	Manifold Absolute Pressure Sensor	MAP Sensor
Intake Manifold Runner Control	Intake Manifold Runner Control	IMRC
Intake Manifold Tuning Valve	Intake Manifold Tuning Valve	IMT Valve
In-Tank Module	Fuel Pump Module	FP Module
Integrated Relay Module	Relay Module	RM
Integrator	Short Term Fuel Trim	Short Term FT
Inter Cooler	Charge Air Cooler	CAC
ISC (Idle Speed Control)	Idle Air Control	IAC
ISC (Idle Speed Control)	Idle Speed Control	ISC
ISC (Idle Speed Control) Actuator	Idle Speed Control Actuator	ISC Actuator

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
ISC (Idle Speed Control) Solenoid Vacuum Valve	Idle Speed Control Solenoid Vacuum Valve	ISC Solenoid Vacuum Valve
ISC BPA (Idle Speed Control Bypass Air)	Idle Air Control	IAC
ISS (Input Shaft Speed)	Input Shaft Speed	ISS
KAM (Keep Alive Memory)	Non-Volatile Random Access Memory	NVRAM
KAM (Keep Alive Memory)	Keep Alive Random Access Memory	Keep Alive RAM
KE-Jetronic	Continuous Fuel Injection	CFI
KE-Motronic	Continuous Fuel Injection	CFI
K-Jetronic	Continuous Fuel Injection	CFI
Knock Sensor	Knock Sensor	KS
KS (Knock Sensor)	Knock Sensor	KS
Lambda	Oxygen Sensor	O2S
LH-Jetronic	Multiport Fuel Injection	MFI
Light Off Catalyst	Warm Up Three Way Catalytic Converter	WU-TWC
Light Off Catalyst	Warm Up Oxidation Catalytic Converter	WU-OC
Line Pressure Control Solenoid Valve	Line Pressure Control Solenoid Valve	Line PC Solenoid Valve
L-Jetronic	Multiport Fuel Injection	MFI
LOAD (Calculated Load Value)	Calculated Load Value	LOAD
Lock Up Relay	Torque Converter Clutch Relay	TCC Relay
LONG FT (Long Term Fuel Trim)	Long Term Fuel Trim	See Table 6
Long Term FT (Fuel Trim)	Long Term Fuel Trim	Long Term FT
Long Term Fuel Trim	Long Term Fuel Trim	Long Term FT
Low Speed FC (Fan Control) Switch	Low Speed Fan Control Switch	Low Speed FC Switch
LUS (Lock Up Solenoid) Valve	Torque Converter Clutch Solenoid Valve	TCC Solenoid Valve
M/C (Mixture Control)	Mixture Control	MC
MAF (Mass Airflow)	Mass Airflow	MAF
MAF (Mass Airflow) Sensor	Mass Airflow Sensor	MAF Sensor
Malfunction Indicator Lamp	Malfunction Indicator Lamp	MIL
Manifold Absolute Pressure	Manifold Absolute Pressure	MAP
Manifold Absolute Pressure Sensor	Manifold Absolute Pressure Sensor	MAP Sensor
Manifold Absolute Pressure and Temperature	Manifold Absolute Pressure and Temperature	MAPT
Manifold Differential Pressure	Manifold Differential Pressure	MDP
Manifold Surface Temperature	Manifold Surface Temperature	MST
Manifold Vacuum Zone	Manifold Vacuum Zone	MVZ
Manual Lever Position Sensor	Transmission Range Sensor	TR Sensor
Manual/Transaxle	Manual/Transaxle	M/T
Manual Transaxle	Manual/Transaxle	M/T
Manual/Transmission	Manual/Transmission	M/T
Manual Transmission	Manual/Transmission	M/T
MAP (Manifold Absolute Pressure)	Manifold Absolute Pressure	MAP

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
MAP (Manifold Absolute Pressure) Sensor	Manifold Absolute Pressure Sensor	MAP Sensor
MAPS (Manifold Absolute Pressure Sensor)	Manifold Absolute Pressure Sensor	MAP Sensor
MAPT (Manifold Absolute Pressure and Temperature)	Manifold Absolute Pressure and Temperature	MAPT
Mass Airflow	Mass Airflow	MAF
Mass Airflow Sensor	Mass Airflow Sensor	MAF Sensor
MAT (Manifold Air Temperature)	Intake Air Temperature	IAT
MATS (Manifold Air Temperature Sensor)	Intake Air Temperature Sensor	IAT Sensor
MC (Mixture Control)	Mixture Control	MC
MCS (Mixture Control Solenoid)	Mixture Control Solenoid	MC Solenoid
MCU (Microprocessor Control Unit)	Powertrain Control Module	PCM
MDP (Manifold Differential Pressure)	Manifold Differential Pressure	MDP
MFI (Multiport Fuel Injection)	Multiport Fuel Injection	MFI
MIL (Malfunction Indicator Lamp)	Malfunction Indicator Lamp	MIL
Mixture Control	Mixture Control	MC
MLPS (Manual Lever Position Sensor)	Transmission Range Sensor	TR Sensor
Modes	Diagnostic Test Mode	DTM
Mono-Jetronic	Throttle Body Fuel Injection	TBI
Mono-Motronic	Throttle Body Fuel Injection	TBI
Monotronic	Throttle Body Fuel Injection	TBI
Motronic	Multiport Fuel Injection	MFI
Motronic-Pressure	Multiport Fuel Injection	MFI
MPI (Multipoint Injection)	Multiport Fuel Injection	MFI
MPI (Multiport Injection)	Multiport Fuel Injection	MFI
MRPS (Manual Range Position Switch)	Transmission Range Switch	TR Switch
MST (Manifold Surface Temperature)	Manifold Surface Temperature	MST
Multiport Fuel Injection	Multiport Fuel Injection	MFI
MVZ (Manifold Vacuum Zone)	Manifold Vacuum Zone	MVZ
NDS (Neutral Drive Switch)	Park/Neutral Position Switch	PNP Switch
Neutral Safety Switch	Park/Neutral Position Switch	PNP Switch
NGS (Neutral Gear Switch)	Park/Neutral Position Switch	PNP Switch
Nitrogen Oxides	Nitrogen Oxides	NOX
Non-Dispersive Infrared	Non-Dispersive Infrared	NDIR
Non-Volatile Random Access Memory	Non-Volatile Random Access Memory	NVRAM
NOX (Nitrogen Oxides)	Nitrogen Oxides	NOX
NPS (Neutral Position Switch)	Park/Neutral Position Switch	PNP Switch
NVM (Non-Volatile Memory)	Non-Volatile Random Access Memory	NVRAM
NVRAM (Non-Volatile Random Access Memory)	Non-Volatile Random Access Memory	NVRAM
O2 (Oxygen)	Oxygen	O2
O2 (Oxygen) Sensor	Oxygen Sensor	O2S

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
O2S (Oxygen Sensor)	Oxygen Sensor	O2S
OBD (On-Board Diagnostic)	On-Board Diagnostic	OBD
OBD (On-Board Diagnostic) STAT	OBD Status	See Table 6
OBD (On-Board Diagnostic) Status	OBD Status	See Table 6
OC (Oxidation Catalyst)	Oxidation Catalytic Converter	OC
ODS (Overdrive Drum Speed)	Overdrive Drum Speed	ODS
ODS (Overdrive Drum Speed) Sensor	Overdrive Drum Speed Sensor	ODS Sensor
Oil Pressure Sender	Engine Oil Pressure Sensor	EOP Sensor
Oil Pressure Sensor	Engine Oil Pressure Sensor	EOP Sensor
Oil Pressure Switch	Engine Oil Pressure Switch	EOP Switch
OL (Open Loop)	Open Loop	OL
On-Board Diagnostic	On-Board Diagnostic	OBD
On-Board Refuelling Vapour Recovery	On-Board Refuelling Vapour Recovery	ORVR
Open Loop	Open Loop	OL
ORVR (On-Board Refuelling Vapour Recovery)	On-Board Refuelling Vapour Recovery	ORVR
OS (Oxygen Sensor)	Oxygen Sensor	O2S
OSS (Output Shaft Speed) Sensor	Output Shaft Speed Sensor	OSS Sensor
Output Driver	Driver	Driver
Output Shaft Speed	Output Shaft Speed	OSS
Output Shaft Speed Sensor	Output Shaft Speed Sensor	OSS Sensor
Overdrive Drum Speed	Overdrive Drum Speed	ODS
Overdrive Drum Speed Sensor	Overdrive Drum Speed Sensor	ODS Sensor
Oxidation Catalytic Converter	Oxidation Catalytic Converter	OC
OXS (Oxygen Sensor) Indicator	Service Reminder Indicator	SRI
Oxygen	Oxygen	O2
Oxygen Sensor	Oxygen Sensor	O2S
Oxygen Sensor Location	Oxygen Sensor Location	see Table 6
P-(Pressure) Sensor	Manifold Absolute Pressure Sensor	MAP Sensor
P/N (Park/Neutral)	Park/Neutral Position	PNP
P/S (Power Steering) Pressure Switch	Power Steering Pressure Switch	PSP Switch
PAIR (Pulsed Secondary Air Injection)	Pulsed Secondary Air Injection	PAIR
Parameter Identification	Parameter Identification	PID
Parameter Identification Supported	Parameter Identification Supported	See Table 6
Park/Neutral Position	Park/Neutral Position	PNP
PC (Pressure Control) Solenoid Valve	Pressure Control Solenoid Valve	PC Solenoid Valve
PCM (Powertrain Control Module)	Powertrain Control Module	PCM
PCV (Positive Crankcase Ventilation)	Positive Crankcase Ventilation	PCV
PCV (Positive Crankcase Ventilation) Valve	Positive Crankcase Ventilation Valve	PCV Valve
Percent Alcohol Sensor	Flexible Fuel Sensor	FF Sensor
Periodic Trap Oxidiser	Periodic Trap Oxidiser	PTOX

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
PFE (Pressure Feedback Exhaust) Gas Recirculation Sensor	Feedback Pressure Exhaust Gas Recirculation Sensor	Feedback Pressure EGR Sensor
PFI (Port Fuel Injection)	Multiport Fuel Injection	MFI
PG (Pulse Generator)	Vehicle Speed Sensor	VSS
PGM-FI (Programmed Fuel Injection)	Multiport Fuel Injection	MFI
PID (Parameter Identification)	Parameter Identification	PID
PID SUP (Parameter Identification Supported)	Parameter Identification Supported	see Table 6
PIP (Position Indicator Pulse)	Crankshaft Position	CKP
PNP (Park/Neutral Position)	Park/Neutral Position	PNP
Positive Crankcase Ventilation	Positive Crankcase Ventilation	PCV
Positive Crankcase Ventilation Valve	Positive Crankcase Ventilation Valve	PCV Valve
Power Steering Control	Power Steering Control	PSC
Power Steering Control Module	Power Steering Control Module	PSC Module
Power Steering Pressure	Power Steering Pressure	PSP
Power Steering Pressure Switch	Power Steering Pressure Switch	PSP Switch
Power Takeoff	Power Takeoff	PTO
Powertrain Control Module	Powertrain Control Module	PCM
PR (Pressure Relief)	Pressure Relief	PR
PR (Pressure Relief) Valve	Pressure Relief Valve	PR Valve
Pressure Control Solenoid Valve	Pressure Control Solenoid Valve	PC Solenoid Valve
Pressure Feedback EGR (Exhaust Gas Recirculation)	Feedback Pressure Exhaust Gas Recirculation	Feedback Pressure EGR
Pressure Feedback EGR (Exhaust Gas Recirculation) System	Feedback Pressure Exhaust Gas Recirculation System	Feedback Pressure EGR System
Pressure Relief	Pressure Relief	PR
Pressure Relief Valve	Pressure Relief Valve	PR Valve
Pressure Sensor	Manifold Absolute Pressure Sensor	MAP Sensor
Pressure Transducer EGR (Exhaust Gas Recirculation) System	Pressure Transducer Exhaust Gas Recirculation System	Pressure Transducer EGR Sensor
PRNDL (Park, Reverse, Neutral, Drive, Low)	Transmission Range	TR
Programmable Read Only Memory	Programmable Read Only Memory	PROM
PROM (Programmable Read Only Memory)	Programmable Read Only Memory	PROM
PSC (Power Steering Control)	Power Steering Control	PSC
PSC (Power Steering Control) Module	Power Steering Control Module	PSC Module
PSP (Power Steering Pressure)	Power Steering Pressure	PSP
PSP (Power Steering Pressure) Switch	Power Steering Pressure Switch	PSP Switch
PSPS (Power Steering Pressure Switch)	Power Steering Pressure Switch	PSP Switch
PTO (Power Takeoff)	Power Takeoff	РТО
PTOX (Periodic Trap Oxidizer)	Periodic Trap Oxidizer	PTOX
Pulsair	Pulsed Secondary Air Injection	PAIR
Pulse Width Modulation	Pulse Width Modulation	PWM

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Pulsed Secondary Air Injection	Pulsed Secondary Air Injection	PAIR
PWM (Pulse Width Modulation)	Pulse Width Modulation	PWM
QDM (Quad Driver Module)	Driver	_
Quad Driver Module	Driver	_
Radiator Fan Control	Fan Control	FC
Radiator Fan Relay	Fan Control Relay	FC Relay
RAM (Random Access Memory)	Random Access Memory	RAM
Random Access Memory	Random Access Memory	RAM
Read Only Memory	Read Only Memory	ROM
Rear Wheel Drive	Rear Wheel Drive	RWD
Recirculated Exhaust Gas Temperature Sensor	Exhaust Gas Re-circulation Temperature Sensor	EGRT Sensor
Reed Valve	Pulsed Secondary Air Injection Valve	PAIR Valve
REGTS (Recirculated Exhaust Gas Temperature Sensor)	Exhaust Gas Re-circulation Temperature Sensor	EGRT Sensor
Relay Module	Relay Module	RM
Remote Mount TFI (Thick Film Ignition)	Distributor Ignition	DI
Revolutions per Minute	Engine Speed	RPM
RM (Relay Module)	Relay Module	RM
ROM (Read Only Memory)	Read Only Memory	ROM
RPM (Revolutions per Minute)	Engine Speed	RPM
RWD (Rear Wheel Drive)	Rear Wheel Drive	RWD
S4WD (Selectable Four Wheel Drive)	Selectable Four Wheel Drive	S4WD
SABV (Secondary Air Bypass Valve)	Secondary Air Injection Bypass Valve	AIR Bypass Valve
SACV (Secondary Air Check Valve)	Secondary Air Injection Check Valve	AIR Check Valve
SASV (Secondary Air Switching Valve)	Secondary Air Injection Switching Valve	AIR Switching Valve
SBEC (Single Board Engine Control)	Powertrain Control Module	PCM
SBS (Supercharger Bypass Solenoid)	Supercharger Bypass Solenoid	SCB Solenoid
SC (Supercharger)	Supercharger	SC
Scan Tool	Scan Tool	ST
SCB (Supercharger Bypass)	Supercharger Bypass	SCB
Secondary Air Bypass Valve	Secondary Air Injection Bypass Valve	AIR Bypass Valve
Secondary Air Check Valve	Secondary Air Injection Check Valve	AIR Check Valve
Secondary Air Injection	Secondary Air Injection	AIR
Secondary Air Injection Bypass	Secondary Air Injection Bypass	AIR Bypass
Secondary Air Injection Bypass Valve	Secondary Air Injection Bypass Valve	AIR Bypass Valve
Secondary Air Injection Diverter	Secondary Air Injection Diverter	AIR Diverter
Secondary Air Injection Shutoff Valve	Secondary Air Injection Shutoff Valve	AIR Shutoff Valve
Secondary Air Injection Switching Valve	Sequential Air Injection Switching Valve	AIR Switching Valve
Secondary Air Switching Valve	Sequential Air Injection Switching Valve	AIR Switching Valve
SEFI (Sequential Electronic Fuel Injection)	Sequential Multiport Fuel Injection	SFI

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Selectable Four Wheel Drive	Automatic 4 Wheel Drive	A4WD
Selectable Four Wheel Drive	Selectable Four Wheel Drive	S4WD
Self Test	On-Board Diagnostic	OBD
Self Test Codes	Diagnostic Trouble Code	DTC
Self Test Connector	Data Link Connector	DLC
Semi-Automatic Temperature Control	Climate Control	CC
Sequential Multiport Fuel Injection	Sequential Multiport Fuel Injection	SFI
Service Engine Soon	Service Reminder Indicator	SRI
Service Engine Soon	Malfunction Indicator	MI
Service Reminder Indicator	Service Reminder Indicator	SRI
SFI (Sequential Fuel Injection)	Sequential Multiport Fuel Injection	SFI
Shift Solenoid	Shift Solenoid	SS
Shift Solenoid Valve	Shift Solenoid Valve	SS Valve
Short Term FT (Fuel Trim)	Short Term Fuel Trim	Short Term FT
Short Term Fuel Trim	Short Term Fuel Trim	Short Term FT
SHRT FT (Short Term Fuel Trim)	Short Term Fuel Trim	See Table 6
SLP (Selection Lever Position)	Transmission Range	TR
SMEC (Single Module Engine Control)	Powertrain Control Module	PCM
Smoke Puff Limiter	Smoke Puff Limiter	SPL
SPARK ADV (Spark Advance)	Spark Advance	See Table 6
Spark Advance	Spark Advance	See Table 6
Spark Plug	Spark Plug	Spark Plug
SPI (Single Point Injection)	Throttle Body Fuel Injection	TBI
SPL (Smoke Puff Limiter)	Smoke Puff Limiter	SPL
SRI (Service Reminder Indicator)	Service Reminder Indicator	SRI
SRT (System Readiness Test)	System Readiness Test	SRT
SS (Shift Solenoid)	Shift Solenoid	SS
ST (Scan Tool)	Scan Tool	ST
Supercharger	Supercharger	SC
Supercharger Bypass	Supercharger Bypass	SCB
Sync Pickup	Camshaft Position	CMP
System Readiness Test	System Readiness Test	SRT
TAB (Thermactor Air Bypass)	Secondary Air Injection Bypass	AIR Bypass
TAC (Throttle Actuator Control)	Throttle Actuator Control	TAC
TAC (Throttle Actuator Control) Module	Throttle Actuator Control Module	TAC Module
TAD (Thermactor Air Diverter)	Secondary Air Injection Diverter	AIR Diverter
TB (Throttle Body)	Throttle Body	ТВ
TBI (Throttle Body Fuel Injection)	Throttle Body Fuel Injection	TBI
TBT (Throttle Body Temperature)	Intake Air Temperature	IAT
TC (Turbocharger)	Turbocharger	TC

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
TC (Turbocharger) Wastegate	Turbocharger Wastegate	TC Wastegate
TC (Turbocharger) Wastegate Regulating Valve	Turbocharger Wastegate Regulating Valve	TC Wastegate Regulating Valve
TCC (Torque Converter Clutch)	Torque Converter Clutch	TCC
TCC (Torque Converter Clutch) Relay	Torque Converter Clutch Relay	TCC Relay
TCC (Torque Converter Clutch) Solenoid	Torque Converter Clutch Solenoid	TCC Solenoid
TCC (Torque Converter Clutch) Solenoid Valve	Torque Converter Clutch Solenoid Valve	TCC Solenoid Valve
TCCP (Torque Converter Clutch Pressure)	Torque Converter Clutch Pressure	TCCP
TCM (Transmission Control Module)	Transmission Control Module	TCM
TE (Thermal Expansion)	Thermal Expansion	TE
TE (Thermal Expansion) Valve	Thermal Expansion Valve	TE Valve
Temperature and Manifold Absolute Pressure	Manifold Absolute Pressure and Temperature	MAPT
TFI (Thick Film Ignition)	Distributor Ignition	DI
TFI (Thick Film Ignition) Module	Ignition Control Module	ICM
TFP (Transmission Fluid Pressure)	Transmission Fluid Pressure	TFP
TFT (Transmission Fluid Temperature) Sensor	Transmission Fluid Temperature Sensor	TFT Sensor
Thermac	Secondary Air Injection	AIR
Thermac Air Cleaner	Air Cleaner	ACL
Thermactor	Secondary Air Injection	AIR
Thermactor Air Bypass	Secondary Air Injection Bypass	AIR Bypass
Thermactor Air Diverter	Secondary Air Injection Diverter	AIR Diverter
Thermactor II	Pulsed Secondary Air Injection	PAIR
Thermal Expansion	Thermal Expansion	TE
Thermal Expansion Valve	Thermal Expansion Valve	TE Valve
Thermal Vacuum Switch	Thermal Vacuum Valve	TVV
Thermal Vacuum Valve	Thermal Vacuum Valve	TVV
Third Gear	Third Gear	3GR
Three Way + Oxidation Catalytic Converter	Three Way + Oxidation Catalytic Converter	TWC+OC
Three Way Catalytic Converter	Three Way Catalytic Converter	TWC
Throttle Actuator	Throttle Actuator	Throttle Actuator
Throttle Actuator Control	Throttle Actuator Control	TAC
Throttle Actuator Control Module	Throttle Actuator Control Module	TAC Module
Throttle Body	Throttle Body	ТВ
Throttle Body Fuel Injection	Throttle Body Fuel Injection	TBI
Throttle Opener	Idle Speed Control	ISC
Throttle Opener Vacuum Switching Valve	Idle Speed Control Solenoid Vacuum Valve	ISC Solenoid Vacuum Valve
Throttle Opener VSV (Vacuum Switching Valve)	Idle Speed Control Solenoid Vacuum Valve	ISC
Throttle Position	Throttle Position	TP

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
Throttle Position Switch	Throttle Position Switch	TP Switch
Throttle Potentiometer	Throttle Position Sensor	TP Sensor
TMAP (Temperature and Manifold Absolute Pressure)	Manifold Absolute Pressure and Temperature	MAPT
TOC (Trap Oxidizer - Continuous)	Continuous Trap Oxidizer	СТОХ
TOP (Trap Oxidizer - Periodic)	Periodic Trap Oxidizer	PTOX
Torque Converter Clutch	Torque Converter Clutch	TCC
Torque Converter Clutch Pressure	Torque Converter Clutch Pressure	TCCP
Torque Converter Clutch Relay	Torque Converter Clutch Relay	TCC Relay
Torque Converter Clutch Solenoid	Torque Converter Clutch Solenoid	TCC Solenoid
Torque Converter Clutch Solenoid Valve	Torque Converter Clutch Solenoid Valve	TCC Solenoid Valve
TP (Throttle Position)	Throttle Position	TP
TP (Throttle Position) Sensor	Throttle Position Sensor	TP Sensor
TP (Throttle Position) Switch	Throttle Position Switch	TP Switch
TPI (Tuned Port Infection)	Multiport Fuel Injection	MFI
TPNP (Transmission Park Neutral Position)	Park/Neutral Position	PNP
TPS (Throttle Position Sensor)	Throttle Position Sensor	TP Sensor
TPS (Throttle Position Switch)	Throttle Position Switch	TP Switch
TR (Transmission Range)	Transmission Range	TR
Track Road Load Horsepower	Track Road Load Horsepower	TRLHP
Transmission Control Module	Transmission Control Module	TCM
Transmission Fluid Pressure	Transmission Fluid Pressure	TFP
Transmission Fluid Temperature Sensor	Transmission Fluid Temperature Sensor	TFT Sensor
Transmission Park Neutral Position	Park/Neutral Position	PNP
Transmission Position Switch	Transmission Range Switch	TR Switch
Transmission Range Selection	Transmission Range	TR
Transmission Range Sensor	Transmission Range Sensor	TR Sensor
TRLHP (Track Road Load Horsepower)	Track Road Load Horsepower	TRLHP
TRS (Transmission Range Selection)	Transmission Range	TR
TRSS (Transmission Range Selection Switch)	Transmission Range Switch	TR Switch
TSS (Turbine Shaft Speed) Sensor	Turbine Shaft Speed Sensor	TSS Sensor
Tuned Port Injection	Multiport Fuel Injection	MFI
Turbine Shaft Speed Sensor	Turbine Shaft Speed Sensor	TSS Sensor
Turbo (Turbocharger)	Turbocharger	TC
Turbocharger	Turbocharger	TC
Turbocharger Wastegate	Turbocharger Wastegate	TC Wastegate
Turbocharger Wastegate Regulating Valve	Turbocharger Wastegate Regulating Valve	TC Wastegate Regulating Valve
TVS (Thermal Vacuum Switch)	Thermal Vacuum Valve	TVV
T V V (Thermal Vacuum Valve)	Thermal Vacuum Valve	TVV
T WC (Three-Way Catalytic Converter)	Three-Way Catalytic Converter	TWC

Table 1 (continued)

Existing usage	Accepted usage	Accepted acronym
T WC + OC (Three-Way + Oxidation Catalytic Converter)	Three-Way + Oxidation Catalytic Converter	TWC+OC
VAC (Vacuum) Sensor	Manifold Differential Pressure Sensor	MDP Sensor
Vacuum Switches	Manifold Vacuum Zone Switch	MVZ Switch
VAF (Volume Airflow)	Volume Airflow	VAF
Valve Position EGR (Exhaust Gas Recirculation) System	Valve Position Exhaust Gas Re-circulation System	Valve Position EGR System
Vane Airflow	Volume Airflow	VAF
Variable Control Relay Module	Variable Control Relay Module	VCRM
Variable Fuel Sensor	Flexible Fuel Sensor	FF Sensor
VAT (Vane Air Temperature)	Intake Air Temperature	IAT
VCC (Viscous Converter Clutch)	Torque Converter Clutch	TCC
VCM (Vehicle Control Module)	Vehicle Control Module	VCM
VCRM (Vehicle Control Relay Module)	Vehicle Control Relay Module	VCRM
Vehicle Control Module	Vehicle Control Module	VCM
Vehicle Identification Number	Vehicle Identification Number	VIN
Vehicle Speed Sensor	Vehicle Speed Sensor	VSS
VIN (Vehicle Identification Number)	Vehicle Identification Number	VIN
VIP (Vehicle In Process) Connector	Data Link Connector	DLC
Viscous Converter Clutch	Torque Converter Clutch	TCC
Voltage Regulator	Voltage Regulator	VR
Volume Airflow	Volume Airflow	VAF
VR (Voltage Regulator)	Voltage Regulator	VR
VSS (Vehicle Speed Sensor)	Vehicle Speed Sensor	VSS
VSV (Vacuum Solenoid Valve) (Canister)	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve
VSV (Vacuum Solenoid Valve) (EVAP)	Evaporative Emission Canister Purge Valve	EVAP Canister Purge Valve
VSV (Vacuum Solenoid Valve) (Throttle)	Idle Speed Control Solenoid Vacuum Valve	ISC Solenoid Vacuum Valve
Warm Up Oxidation Catalytic Converter	Warm Up Oxidation Catalytic Converter	WU-OC
Warm Up Three-Way Catalytic Converter	Warm UP Three-Way Catalytic Converter	WU-OC
Wide Open Throttle	Wide Open Throttle	WOT
WOT (Wide Open Throttle)	Wide Open Throttle	WOT
WOTS (Wide Open Throttle Switch)	Wide Open Throttle Switch	WOT Switch
WU-OC (Warm Up Oxidation Catalytic Converter)	Warm Up Oxidation Catalytic Converter	WU-OC
WU-TWC (Warm Up Three-Way Catalytic Converter)	Warm Up Three-Way Catalytic Converter	WU-TWC

Table 2 — Recommended terms, their acronyms and definitions

Recommended term	Acronym	Definition
3-2 timing solenoid	3-2TS	device that controls the "third to second" timing valve
accelerator pedal	APa	See Table 4, glossary entry "accelerator pedal".
accelerator pedal position	APP	See Table 4, glossary entry "accelerator pedal".
adsorber	b	system device which stores hydrocarbons upon engine start-up then later releases them to be burned by the TWC down the line. Use only in conjunction with a standard TWC.
air cleaner	ACL	See Table 4, glossary entry "cleaner".
air conditioning	A/C	See Table 4, glossary entry "air conditioning".
air fuel ratio	A/F	proportion of air to fuel
ambient air temperature	AAT	air temperature surrounding the vehicle
automatic 4 wheel drive	A4WD	automatic engagement or disengagement of wheel drive based on need
automatic transaxle	A/T	See Table 4, glossary entry "transaxle".
automatic transmission	A/T	See Table 4, glossary entry "transmission".
barometric pressure	BARO <sup>a</sup>	See Table 4, glossary entry "pressure".
battery positive voltage	B+ a	See Table 4, glossary entry "battery".
blower control	ВС	See Table 4, glossary entries "blower" and "control".
brake pedal position	BPP	See Table 4, glossary entry "brake".
brake pressure	b	positive pressure in the brake system.
bus negative	BUS N	neutral side of a high current conductor
bus positive	BUS P	positive side of a high current conductor
calculated load value	LOAD	percentage of engine capacity being used
camshaft position	CMP	See Table 4, glossary entry "camshaft".
canister	b	See Table 4, glossary entry "canister".
carbon dioxide	CO2	See Table 4, glossary entry "carbon dioxide".
carbon monoxide	СО	See Table 4, glossary entry "carbon monoxide".
carburettor	CARB <sup>a</sup>	See Table 4, glossary entry "carburetor".
catalytic converter heater	b	device to quickly heat a catalytic converter
charge air cooler	CAC <sup>a</sup>	device which lowers the temperature of the pressurised intake air
climate control	CC	See Table 4, glossary entries "climate" and "control".
closed loop	CL	See Table 4, glossary entry "closed loop".
closed throttle position	CTP	See Table 4, glossary entry "throttle".
clutch pedal position	CPP	See Table 4, glossary entry "clutch".
coast clutch solenoid	ccs	device that controls the coast clutch valve
constant volume sampler	CVS	exhaust sampling system that provides a flow of a constant amount of ambient air diluted exhaust
continuous fuel injection	CFI	fuel injection system with the injector flow controlled by fuel pressure
continuous trap oxidizer	CTOX	system for lowering diesel engine particulate emissions by collecting exhaust particulates and continuously burning them through oxidation
continuously variable transmission	CVT	automatic transmission that operates at an infinite number of gear ratios
continuously variable transaxle	CVT	automatic transaxle that operates at an infinite number of gear ratios

Table 2 (continued)

Recommended term	Acronym	Definition
crankshaft position	CKP	See Table 4, glossary entry "crankshaft".
critical flow Venturi	CFV	airflow regulating device which uses a sonic wave to limit airflow
data link connector	DLC <sup>a</sup>	connector providing access and/or control of the vehicle information, operating conditions, and diagnostic information
diagnostic test mode	DTM	level of diagnostic capability in an on-board diagnostic (OBD) system
		NOTE This can include different functional states for observing signals, a base level for reading diagnostic trouble codes, a monitor level which includes information on signal levels, bi-directional control with on/off board aids, and the ability to interface with remote diagnosis.
diagnostic trouble code	DTC	alphanumeric identifier for a fault condition identified by the on-board diagnostic system
direct fuel injection	DFI	fuel injection system that supplies fuel directly into the combustion chamber
distributor ignition	DI	system in which the ignition coil secondary circuit is switched by a distributor in proper sequence to various spark plugs
drive motor	DM	See Table 4, glossary entries "drive" and "motor".
drive motor control module	DMCM	See Table 4, glossary entries "drive", "motor" and "module".
drive motor coolant temperature	DMCT	See Table 4, glossary entries "drive", "motor" and "coolant".
drive motor power inverter	DMPI	See Table 4, glossary entries "drive", "motor" and "inverter".
driver	b	See Table 4, glossary entry "driver".
early fuel evaporation	EFE	enhancement of air/fuel vaporisation during engine warm up
electrically erasable programmable read only memory	EEPROM	electronic device
electrically heated oxidation catalyst	HOC	oxidation catalyst which is designed to be quickly heated in order to reduce cold start emissions
electronic ignition	EI	system in which the ignition coil's secondary circuit is dedicated to specific spark plugs without the use of a distributor
engine control	EC	See Table 4, glossary entries "engine" and "control".
engine control module	ECM <sup>a</sup>	See Table 4, glossary entries "engine", "control" and "module".
engine coolant level	ECL	See Table 4, glossary entries "engine," "coolant" and "level".
engine coolant temperature	ECT	See Table 4, glossary entries "engine" and "coolant".
engine fuel temperature	EFT	See Table 4, glossary entries "engine" and "fuel".
engine modification	EM	method of lowering engine emissions through changes in basic engine construction or in fuel and spark calibration
engine oil pressure	EOP	positive pressure in the engine's lubrication system
engine oil temperature	EOT	temperature of engine lubricant oil
engine speed	RPM <sup>a</sup>	See Table 4, glossary entries "engine" and "speed".
erasable programmable read only memory	EPROM	electronic device
evaporative emission	EVAP <sup>a</sup>	system used to prevent fuel vapour from escaping into the atmosphere
		NOTE It typically includes a charcoal canister to store fuel vapours.

Table 2 (continued)

Recommended term	Acronym	Definition
exhaust control	EXC	technology for maximizing engine torque at low engine speed and for reducing engine exhaust noise
exhaust gas temperature	EGT	monitoring/measurement of the high temperature of the exhaust gas/catalyst system
exhaust gas re-circulation	EGR	reduction of $\mathrm{NO}_{\scriptscriptstyle \chi}$ emissions by adding exhaust gas to the incoming $$ fuel/air mixture
exhaust gas re-circulation temperature	EGRT	sensing of exhaust gas re-circulation function based on temperature change. Primarily used in systems with mechanical flow control devices
exhaust pressure	EP	See Table 4, glossary entries "exhaust" and "pressure".
exhaust pressure regulator	EPR	See Table 4, glossary entry "regulator".
exhaust temperature	E/T	See Table 4, glossary entries "exhaust" and "temperature".
four wheel drive	4WD	It may or may not be driver-selectable.
fan control	FC	See Table 4, glossary entries "fan" and "control".
flame ionization detector	FID	device used to measure hydrocarbon concentrations
flash electrically erasable programmable read only memory	FEEPROM	electronic device
flash erasable programmable read only memory	FEPROM	electronic device
flexible fuel	FF	system capable of using a variety of fuels for vehicle operation
fourth gear	4GR <sup>a</sup>	gear in which the transmission is operating at a particular moment
		EXAMPLE The transmission range (TR) switch may indicate that "drive" was selected, but the transmission is operating in 4th gear as indicated by 4GR switch.
freeze frame	bс	block of memory containing the vehicle operating conditions for a specific time
front wheel drive	FWD	driveline configuration that transmits motive power only through the front axle
fuel injector control	FIC	See Table 4, glossary entries "fuel", "injector" and "control".
fuel level sensor	b	See Table 4, glossary entries "fuel" and "sensor".
fuel pressure	b	See Table 4, glossary entries "fuel" and "pressure".
fuel pump	FP a	See Table 4, glossary entries "fuel" and "pump".
fuel rail pressure	FRP	See Table 4, glossary entries "fuel", "rail" and "pressure".
fuel rail temperature	FRT	temperature of fuel in the fuel rail
fuel system status	С	information describing operation of the fuel control
fuel tank pressure	FTP	See Table 4, glossary entries "fuel", "tank", and "pressure".
fuel tank temperature	FTT	temperature of fuel in the fuel tank
fuel trim	FT	This is a fuel correction term.
full time four wheel drive	F4WD	driveline configuration that transmits motive power to both axles
		NOTE The system does not allow the driver to select between one-axle and two-axle operation.
generator	GEN <sup>a</sup>	See Table 4, glossary entry "generator".
glow plug	b	See Table 4, glossary entry "glow plug".

Table 2 (continued)

Recommended term	Acronym	Definition	
governor control module	GCM <sup>a</sup>	See Table 4, glossary entries "governor", "control" and "module".	
grams per mile	GPM	grams of pollutant emitted per kilometre/mile	
ground	GND	See Table 4, glossary entry "ground".	
heated 3-way catalyst	HTWC	3-way catalyst which is designed to be quickly heated in order to reduce cold start emissions	
heated oxygen sensor	HO2S <sup>a</sup>	oxygen sensor (O2S) that is electrically heated	
high clutch drum speed	HCDS	rotational speed of the high clutch drum	
high pressure cutoff	HPC	method or device for limiting high pressure to a specified value	
hydrocarbon	HC	See Table 4, glossary entry "hydrocarbon".	
idle air control	IAC	electrical or mechanical control of throttle bypass air	
idle speed control	ISC	electronic control of minimum throttle position	
ignition coil	b	device which increases the voltage in an ignition circuit, providing a spark to ignite a fuel/air mixture in an engine	
ignition control	IC	See Table 4, glossary entries "ignition" and "control".	
ignition control module	ICM <sup>a</sup>	See Table 4, glossary entries "ignition", "control" and "module".	
indirect fuel injection	IFI	injection system that supplies fuel into a combustion pre-chamber (diesel)	
inertia fuel shutoff	IFS	inertia system that shuts off the fuel delivery system when activated predetermined force limits	
injection control pressure	ICP	injection control pressure for hydraulic actuated injectors	
input shaft speed	ISS	See Table 4, glossary entries "input shaft" and "speed".	
intake manifold tuning	IMT	control of airflow by changing of the resonant frequency in the intake manifold	
inspection and maintenance	I/M <sup>a</sup>	emission control program	
intake air	IA	See Table 4, glossary entry "intake air".	
intake air temperature	IAT	See Table 4, glossary entry "intake air".	
intake manifold runner control	IMRC	control of airflow by changing of the resonant frequency in the intake manifold	
knock sensor	KS <sup>a</sup>	See Table 4, glossary entries "knock" and "sensor".	
malfunction indicator lamp	MIL a	required on-board indicator designed to alert the driver of an emissions-related malfunction	
manifold absolute pressure	MAP	See Table 4, glossary entries "manifold" and "pressure".	
manifold absolute pressure and temperature	MAPT	See Table 4, glossary entries "manifold", "pressure" and "temperature".	
manifold differential pressure	MDP	See Table 4, glossary entries "manifold" and "pressure".	
manifold surface temperature	MST	See Table 4, glossary entry "manifold".	
manifold vacuum zone	MVZ	See Table 4, glossary entries "manifold" and "vacuum".	
manual transaxle	M/T	See Table 4, glossary entry "transaxle".	
manual transmission	M/T	See Table 4, glossary entry "transmission".	
mass airflow	MAF	system which provides information on the mass flow rate of the intake air to the engine	
mixture control	MC	device which regulates bleed air, fuel, or both, on carburetted vehicles	

Table 2 (continued)

Recommended term	Acronym	Definition	
multiport fuel injection	MFI	fuel delivery system in which each cylinder is individually fuelled	
non dispersive infra red	NDIR	emission-measuring technique typically used for measuring carbon monoxide and carbon dioxide concentrations	
non-volatile random access memory	NVRAM	electronic device	
nitrogen oxides	NOX	See Table 4, glossary entry "nitrogen oxides".	
on board diagnostic	OBD	system that monitors some or all computer input and control signals.  NOTE Signal(s) outside of the predetermined limits imply a fault in the system or in a related system.	
on-board refueling vapor recovery	ORVR	system incorporated into a vehicle fuel system designed to collect fuel vapours during refuelling	
open loop	OL	See Table 4, glossary entry "open loop".	
overdrive drum speed	ODS	This describes the overdrive drum rotational speed.	
output shaft speed	OSS	See Table 4, glossary entries "output shaft" and "speed".	
oxidation catalytic converter	OC	catalytic converter system that reduces levels of HC and CO	
oxygen	O2	See Table 4, glossary entry "oxygen".	
oxygen sensor	O2S <sup>a</sup>	sensor that detects oxygen (O <sub>2</sub> ) content in the exhaust gases	
park/neutral position	PNP	See Table 4, glossary entry "park/neutral".	
parameter identification	PID	identification of an address in memory, which contains vehicle operatin information	
periodic trap oxidizer	PTOX	system for lowering diesel engine particulate emissions by collecting exhaus particulates and periodically burning them through oxidation	
positive crankcase ventilation	PCV	positive ventilation of crankcase emissions	
power steering pressure	PSP	See Table 4, glossary entry "power steering".	
power steering control	PSC	See Table 4, glossary entries "power steering" and "control".	
power takeoff	PTO	supplementary mechanism (as on a truck) enabling the engine power to be used to operate non-automotive apparatus (such as a pump)	
powertrain control module	PCM <sup>a</sup>	See Table 4, glossary entries "powertrain", "control" and "module".	
pressure control	PC	See Table 4, glossary entries "pressure" and "control".	
pressure relief	PR	limit on excess pressure in a controlled system	
programmable read only memory	PROM	electronic device named as programmable by the manufacturer	
pulsed secondary air injection	PAIR <sup>a</sup>	pulse-driven system for providing secondary air without an air pump by using the engine exhaust system pressure fluctuations or pulses	
pulse width modulation	PWM	rectangular wave with a variable on-off time	
random access memory	RAM	electronic device	
read only memory	ROM	electronic device	
rear wheel drive	RWD	driveline configuration that transmits motive power only through the rear axle	
relay module	RM <sup>a</sup>	See Table 4, glossary entries "relay" and "module".	
scan tool	ST <sup>a</sup>	See Table 4, glossary entry "scan tool".	

Table 2 (continued)

Recommended term	Acronym	Definition	
secondary air injection	AIR <sup>a</sup>	pump-driven system for providing secondary air	
selectable four wheel drive	S4WD	driveline configuration that allows the driver to select the option to transmi motive power either to both axles or to only one axle (front or rear)	
sequential multiport fuel injection	SFI	multiport fuel delivery system in which each injector is individually energised and timed relative to its cylinder intake event.  NOTE Normally, fuel is delivered to each cylinder once per two crankshaf revolutions in four-cycle engines and once per crankshaft revolution in two-cycle engines	
service reminder indicator	SRI <sup>a</sup>	indicator used to identify a service requirement	
shift solenoid	SS	See Table 4, glossary entry "shift solenoid".	
smoke puff limiter	SPL	system for reducing diesel exhaust smoke during vehicle acceleration or gear changes	
spark advance	bс	relationship between the ignition timing and top dead centre	
spark plug	b	device for producing an electrical spark inside the cylinder of an internal combustion engine to ignite the fuel mixture	
supercharger	SC <sup>c</sup>	See Table 4, glossary entry "supercharger".	
supercharger bypass	SCB	See Table 4, glossary entry "supercharger".	
system readiness test	SRT	system readiness test as applicable to OBD scan tool communications.	
thermal expansion	TE	See Table 4, glossary entry "thermal expansion".	
thermal vacuum valve	TVV <sup>a</sup>	valve that controls vacuum levels or routing based on temperature	
third gear	3GR <sup>a</sup>	gear in which the transmission is operating at a particular moment	
		EXAMPLE The Transmission Range TR switch may indicate that "drive" was selected, but the transmission is operating in 3rd gear as indicated by 3GR switch.	
three-way + oxidation catalytic converter	TWC+OC	catalytic converter system that has both three-way catalyst (TWC) and oxidation catalyst (OC).  NOTE Usually, secondary air is introduced between the two catalysts.	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
three-way catalytic converter	TWC	catalytic converter system that reduces levels of HC, CO, and $\mathrm{NO}_{x}$	
throttle actuator	b	See Table 4, glossary entries "throttle" and "actuator".	
throttle actuator control	TAC	See Table 4, glossary entries "throttle", "actuator" and "control".	
throttle body	TB <sup>a</sup>	See Table 4, glossary entries "throttle" and "body".	
throttle body fuel injection	TBI	electronically controlled fuel injection system in which one or more fuel injectors are located in a throttle body	
throttle position	TP	See Table 4, glossary entry "throttle".	
torque converter clutch	TCC <sup>a</sup>	See Table 4, glossary entries "converter" and "clutch".	
torque converter clutch pressure	TCCP	positive pressure in a torque converter clutch hydraulic circuit	
track road load horsepower	TRLHP	power required for a vehicle to maintain a constant speed, taking into account power losses due to wind resistance, tyre losses, bearing friction, etc.	
transmission control module	TCM <sup>a</sup>	See Table 4, glossary entries "transmission", "control" and "module".	
transmission fluid pressure	TFP	positive pressure in a transmission hydraulic system	

Table 2 (continued)

Recommended term	Acronym	Definition	
transmission fluid temperature	TFT	temperature of transmission fluid	
transmission range	TR	See Table 4, glossary entries "transmission", "range".	
turbine shaft speed	TSS	See Table 4, glossary entries "turbine shaft" and "speed".	
turbocharger	TC <sup>a</sup>	See Table 4, glossary entry "turbocharger".	
variable control relay module	VCRM	module that variably controls engine cooling fan speed, operates the A/C compressor clutch, and controls some of the non A/C functions	
vehicle control module	VCM <sup>a</sup>	electronic module that controls the powertrain plus chassis and/or body related functions	
vehicle identification number	VIN	unique number on the vehicle, used for identification	
vehicle speed sensor	VSS <sup>a</sup>	sensor which provides vehicle speed information	
voltage regulator	VR <sup>a</sup>	See Table 4, glossary entry "regulator".	
volume airflow	VAF	system which provides information on the volume flow rate of the intake air to the engine	
warm up oxidation catalytic converter	WU-OC	catalytic converter system designed to lower HC and CO emissions during engine warm up  NOTE It is usually located in or near the exhaust manifold.	
warm up three-way catalytic converter	WU-TWC	catalytic converter system designed to lower HC, CO, and $NO_x$ emissions during engine warm up NOTE It is usually located in or near the exhaust manifold.	
wide open throttle	WOT	See Table 4, glossary entry "throttle".	

a Historically accepted common usage.

Table 3 — Modifier usage example

Modifier			Base word	Precision of term	
What is the purpose?	Where is it?	Which temperature?	What does it sense?	What is it?	Precision of term
				Sensor	Most generic
			Temperature	Sensor	]
		Coolant	Temperature	Sensor	]
	Engine	Coolant	Temperature	Sensor	]
Instrumentation	Engine	Coolant	Temperature	Sensor	Most specific
Least significant ——				· Most significant	Significance of term

b Only the recommended term is used.

<sup>&</sup>lt;sup>c</sup> For alphanumeric descriptor, See Table 6.

Table 4 — Glossary of terms and their definitions

Base word/single word modifier	Definition	
accelerator pedal	foot-operated device which, directly or indirectly, controls the flow of fuel and/or air to the engine, controlling engine speed	
accumulator	vessel in which liquid or gas is stored, usually at greater than atmospheric pressure	
actuator	mechanism for moving or controlling something indirectly instead of by hand	
	cf. solenoid, relay, valve	
air conditioning	vehicular accessory system that modifies the passenger compartment air by cooling and drying the air	
alternator	See generator.	
battery	electrical storage device designed to produce a d.c. voltage by means of an electrochemical reaction	
blower	device designed to supply a current of air at a moderate pressure	
	cf. fan	
	NOTE A blower usually consists of an impeller assembly, a motor and a suitable case. The blower case is usually designed as part of a ventilation system.	
brake	device for retarding motion, usually by means of friction	
body	(1) assembly of components, windows, doors, seats, etc., that provide enclosures for passengers and/or cargo in a motor vehicle. It may or may not include the bonnet and bumpers	
	(2) primary, central or key part of a feature	
bypass	secondary path provided to relieve pressure in the primary passage	
camshaft	shaft on which phased cams are mounted	
	NOTE The camshaft is used to regulate the opening and closing of the intake and exhaust valves.	
camshaft position sensor <sup>a</sup>	sensor producing defined electrical signal representing camshaft position	
canister	evaporative emission canister containing activated charcoal, which absorbs fuel vapours and holds them until the vapours can be purged at an appropriate time	
capacitor	electrical device for accumulating and holding a charge of electricity	
carbon dioxide	heavy colourless gas that can be found as a product of complete combustion	
carbon monoxide	colourless odourless gas that can be found as a product of incomplete combustion	
carburettor	mechanism which automatically mixes fuel with air in the proper proportions to provide a desired power output from a spark ignition internal combustion engine	
catalyst	substance that can increase or decrease the rate of a chemical reaction between substances without being consumed in the process	
chassis	suspension, steering, and braking elements of a vehicle	
circuit	(1) complete electrical path or channel, usually including the source of electric energy	
	(2) electrical path between two or more components	
	NOTE It can apply to gaseous or liquid fluids.	
cleaner	device used in the intake system of parts that require clean air	
	NOTE An air cleaner usually has a filter in it to trap particulates and only pass clean air through.	
climate	temperature/ventilation in the passenger compartment	
closed loop	⟨engine⟩ operating condition or mode, which enables modification of programmed instructions based on a feedback system	
clutch	mechanical device which uses mechanical, magnetic, or friction type connections to facilitate engaging or disengaging of two shafts or rotating members	

Table 4 (continued)

Base word/single word modifier	Definition	
code	system of symbols (such as letters, numbers, or words) used to represent meaning of information	
coil (ignition)	(ignition) device consisting of windings of conductors around an iron core, designed to increase the voltage and for use in a spark ignition system	
control	means or device for directing and regulating a process or guide the operation of a machine, apparatus or system	
converter	⟨catalytic⟩ in-line exhaust system device used to reduce the level of engine exhaust emissions	
converter	$\langle torque \rangle$ device which, by its design, multiplies the torque in a fluid coupling between an engine and transmission/transaxle	
coolant	fluid used for heat transfer	
	NOTE Coolants usually contain additives such as rust inhibitors and antifreeze.	
cooler	heat exchanger that reduces the temperature of the named medium	
crankshaft	part of an engine which converts the reciprocating motion of the pistons to rotary motion	
crankshaft position sensor <sup>a</sup>	sensor producing defined electrical signal representing crankshaft position	
cylinder #1	cylinder most remote from the fly wheel	
	NOTE Consequently, cylinder #2 is the next most remote and so on.	
data	general term for information, usually represented by numbers, letters, symbols	
device <sup>b</sup>	piece of equipment or mechanism designed for a specific purpose or function	
diagnostics, pl	process of identifying the cause or nature of a condition, situation or problem, in order to determine corrective action in the repair of automotive systems	
diagnostic sensor <sup>a</sup>	sensing device used partly or exclusively for diagnostic purposes	
built-in diagnostic sensor	diagnostic sensor which is part of the permanent equipment of a motor vehicle	
plug-in diagnostic sensor	diagnostic sensor which is part of the off-vehicle diagnostic equipment, to be fitted — prior to diagnosis — to a receiving device already provided on the motor vehicle for this purpose	
clip-on diagnostic sensor	diagnostic sensor which is part of the off-vehicle diagnostic equipment, to be attached to the motor vehicle prior to diagnosis, and for which no special on-vehicle equipment is necessary	
distributor	mechanical device designed to switch a high voltage secondary circuit from an ignition coil to spark plugs in the proper firing sequence	
drive	device which provides a fixed increase or decrease ratio of relative rotation between its input and output shafts	
driver	switched electronic device that controls output state	
electrical, adj.	type of device or system using resistors, motors, generators, incandescent lamps, switches, capacitors, batteries, inductors or wires	
	cf. electronic	
electronic, adj.	(1) type of device or system using state devices or thermionic elements such as diodes, transistors, integrated circuits, vacuum fluorescent displays and liquid crystal displays	
	cf. electrical	
	(2) type of device or system for the storage, retrieval and display of information through media such as magnetic tape, laser disc, electronic read only memory (ROM) and random access memory (RAM)	
engine	machine designed to convert thermal energy into mechanical energy to produce force or motion	
exhaust	gaseous by-products of combustion emitted from an engine	

## Table 4 (continued)

Base word/single word modifier	Definition		
fan	device designed to supply a current of air		
	cf. blower		
	NOTE A fan can also have a frame, motor, wiring harness, and the like.		
fuel	combustible substance burned to provide heat or power		
	NOTE Typical fuels include gasoline and diesel fuel. Other types of fuel include ethanol, methanol, natural gas, propane, or in combination.		
generator	rotating machine designed to convert mechanical energy into electrical energy		
glow plug	combustion chamber heat generating device to aid starting diesel engines		
governor	device designed to automatically limit engine speed		
ground	electrical conductor used as a common return for an electric circuit(s) and with a relative zero potential		
hydrocarbon	organic compound containing various carbon and hydrogen molecules which occur in fuel		
idle	rotational speed of an engine with vehicle at rest and accelerator pedal not depressed		
ignition	system used to provide high voltage spark for internal combustion engines		
indicator	device which visually presents vehicle condition information transmitted or relayed from some other source		
injector	device for delivering metered pressurized fuel to the intake system or the cylinders		
input shaft	shaft in a device, that is "driven" by the previous element in the powertrain		
intake air	air drawn through a cleaner and distributed to each cylinder for use in combustion		
inverter	device which converts direct current to alternating current		
knock engine knock	sharp, metallic sound produced when two pressure fronts collide in the combustion chamber of an engine		
level	magnitude of a quantity considered in relation to an arbitrary reference value		
limits <sup>a</sup>	set of values that describe the established boundaries of acceptance		
	NOTE The same characteristics may have several sets of limits depending upon the time or basis of establishing acceptance (for example new parts limits, overhaul limits and safety limits)		
line	⟨generic term⟩ system of pipes, tubes and hoses		
link, electrical [electronic]	⟨generic term⟩ existence of communication facilities between two points		
manifold	device designed to collect or distribute fluid, air or the like cf. rail		
memory	device in which data can be stored and used when needed		
mode	alternative condition or method of operating a device or control module		
module, electrical [electronic]	self-contained group of electrical [electronic] components, designed as a single replaceable unit		
motor	machine that converts kinetic energy, such as electricity, into mechanical energy		
	cf. actuator		
nitrogen oxides	combinations of nitrogen and oxygen atoms which can be a product of incomplete combustion		
open loop	operating condition or mode based on programmed instructions and not modified by a feedback system		
output shaft	shaft in a device that drives the next element in the powertrain		
oxygen	colourless, tasteless, odourless gas that supports combustion		

Table 4 (continued)

Base word/single word modifier	Definition		
park [neutral]	non-drive mode of the transmission		
power steering	system which provides additional force to the steering mechanism, reducing the driver's steering effort		
powertrain	elements of a vehicle by which motive power is generated and transmitted to the driven axles		
pressure, gauge	amount by which the total absolute pressure exceeds the ambient atmospheric pressure		
	NOTE 1 Unless otherwise noted (see following), "pressure" signifes gauge pressure.		
pressure, absolute	pressure referenced to a perfect vacuum		
pressure, atmospheric	pressure of the surrounding air at any given temperature and altitude		
	NOTE 2 Sometimes called barometric pressure.		
pressure, barometric	pressure results obtained using a barometer		
	NOTE 3 Sometimes called atmospheric pressure.		
pressure, differential	pressure difference between two regions		
	EXAMPLE Difference between intake manifold pressure and atmospheric pressure.		
pump	device used to raise, transfer, or compress fluids by suction, pressure, or both		
radiator	liquid-to-air heat transfer device having a tank(s) and core(s) specifically designed to reduce the temperature of the coolant in an internal combustion engine cooling system		
rail	manifold for fuel injection		
	cf. manifold		
range	detent position of the transmission manual valve		
refrigerant	substance used as a heat transfer agent in an air-conditioning system		
relay	generally electromechanical device in which connections in one circuit are opened or closed by changes in another circuit		
	cf. actuator, solenoid, switch		
regulator	(mechanical) mechanism for controlling the flow or pressure of liquid, gases, steam, etc.		
regulator	$\langle voltage \rangle$ device that automatically controls the functional output of another device by adjusting the voltage to meet a specified value		
scan tool	device that interfaces with, and communicates information on, a data link		
secondary air	air provided to the exhaust system		
sensor	(generic name) device that senses either the absolute value or a change in a physical quantity such as temperature, pressure, rotation, or flow rate, and converts that change into an electrical quantity signal		
	cf. transducer		
shift solenoid	device that controls shifting in an automatic transmission		
signal, electrical [electronic]	fluctuating electric quantity, such as voltage or current, whose variations represent information		
solenoid	device consisting of an electrical coil which, when energized, produces a magnetic field in a plunger, which is pulled to a central position		
	cf. actuator, relay, switch		
	NOTE A solenoid can be used as an actuator in a valve or switch.		
solid state	crystalline circuit structure used to perform electronic functions		
	EXAMPLE Transistor, diode, integrated circuit, other semiconductor.		
speed	magnitude of velocity (regardless of direction)		

## Table 4 (continued)

Base word/single word modifier	Definition
supercharger	mechanically-driven device that pressurizes the intake air, thereby increasing the density of charge air and the consequent power output from a given engine displacement
switch	device for making, breaking, or changing the connections in an electrical circuit
	cf. relay, solenoid, valve
system	group of interacting mechanical or electrical components serving a common purpose
tank	storage device for liquid or gas
test <sup>a</sup>	procedure or action taken to compare, under real or simulated conditions, parameters of a system or a component against specified performance and/or values
thermal expansion	expansion of a solid, liquid, or gas due to a change in temperature
throttle	valve for regulating the supply of a fluid, usually air or a fuel/air mix to an engine
transaxle	device consisting of a transmission and axle drive gears assembled in the same case cf. <b>transmission</b>
transducer	device that receives energy from one system and retransmits (transfers) it, often in a different form, to another system
	cf. sensor
	EXAMPLE The cruise control transducer converts a vehicle speed signal to a modulated vacuum output to control a servo.
transmission	device which selectively increases or decreases the ratio of relative rotation between its inpurand output shafts
	cf. transaxle
troubleshooting	See diagnostics.
turbine shaft	shaft in a device that is driven by a turbine
turbocharger	centrifugal device driven by exhaust gases that pressurize the intake air, thereby increasing the density of charge air and the consequent power output from a given engine displacement
ultraviolet	portion of the electromagnetic spectrum between violet visible light and x-rays
vacuum	circuit in which pressure has been reduced below the ambient atmospheric pressure
valve	device by which the flow of liquid, gas, vacuum, or loose material in bulk may be started stopped or regulated by a movable part that opens, shuts or partially obstructs one of more ports or passageways
	cf. actuator, switch
	NOTE A <i>valve</i> is also the movable part of such a device.
vapour	substance in its gaseous state as distinguished from the liquid or solid state
volatile	(1) vaporized at normal temperatures
	(2) not permanent
wastegate	valve used to limit charge air pressure by allowing exhaust gases to bypass the turbocharger
wheel	circular frame of hard material that may be solid, partially solid or spoked and that is capable of rotating on an axle
a According to ISO 4092	2:1988.
b "Device" shall not be u	sed as a base word.

Table 5 — Alphanumeric descriptor examples

Recommended term	Accepted usage	Alphanumeric descriptor
diagnostic trouble code freeze frame	DTC freeze frame	DTC FRZF
engine coolant temperature	ECT	None required.
flexible fuel	FF	None required.
freeze frame	freeze frame	FRZF
fuel pressure	fuel pressure	FUEL PRES
fuel system 1 status	fuel system 1 status	FUEL SYS 1
long-term fuel trim bank 2	long-term FT bank 2	LONG FT2
oxygen sensor location bank 1 position 1	O2S bank 1 position 1	O2SLOC11

Table 6 — Alphanumeric descriptor table

Recommended term	Accepted usage	Alphanumeric descriptor	
central multiport fuel injection	central multiport fuel injection	CMFI	
diagnostic trouble code freeze frame	DTC freeze frame	DTC FRZF	
freeze frame	freeze frame	FRZF	
fuel pressure	fuel pressure	FUEL PRES	
fuel system status	fuel system status	FUEL SYS	
long-term fuel trim	long-term fuel trim	LONG FT	
OBD status	OBD status	OBD STAT	
oxygen sensor location	O2S location	O2S LOC	
parameter identification supported	PID supported	PID SUP	
short-term fuel trim bp	short-term fuel trim <sup>a</sup>	SHRT FT bp	
spark advance	spark advance	SPARK ADV	
Numeric indication of bank and position.			

# Annex A (informative)

## Request form for revision of ISO/TR 15031-2

To ensure that a request is accepted for voting and incorporation into SAE J1930/ISO 15031-2, supply the following information in accordance with the naming procedure given in 2.3 to both of the following:

FAKRA	SAE Headquarters
Normenausschuß Kraftfahrzeuge	755 West Big Beaver Road
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ATTN: JSO/TC22/SC3/WG1 ATTN: J2012 Powertrain Committee Chairman

Purpose or reason for request				

Table 1 — Cross-reference and search					
Existing usage	Recommended terms				

Table 2 — Recommended terms and their acronyms							
Recommended term		Circle one					
Existing		Add	Delete	Change			
Suggested		Add	Delete	Change			
Acronym/abbreviation		Circle one					
Existing		Add	Delete	Change			
Suggested		Add	Delete	Change			
Definition		Circle one					
Existing		Add	Delete	Change			
Suggested		Add	Delete	Change			

## ISO/TR 15031-2:2004(E)

Table 4 — Glossary of terms and their definitions								
Base word/single word modifier	er Definition							
	Table 6		Alabanum			1		
	l able o		Alphanum	neric descriptors				
Current alphanume	ric descripto	r		Desired	alpha	numeric descriptor		
Originator			Phone: Fax:			Fax:		
Signature			Address:					
Date								
Committee use only								
Recommended for voting Y	⁄es	No	T	oting target date				
Comments								
SAE/ISO Project leader			Г	Date				

## **Bibliography**

- [1] ISO 9141-2:1994, Road vehicles Diagnostic systems Part 2: CARB requirements for interchange of digital information
- [2] ISO 9141-2:1994/Amd 1:1996, Road vehicles Diagnostic systems Part 2: CARB requirements for interchange of digital information Amendment 1
- [3] ISO 14230-4, Road vehicles Diagnostic systems Keyword protocol 2000 Part 4: Requirements for emission-related systems
- [4] ISO 15765-4, Road vehicles Diagnostics on controller area network CAN Part 4: Requirements for emissions-related systems
- [5] ISO 4092:1988, Road vehicles Diagnostic systems for motor vehicles Vocabulary
- [6] SAE J1850:05/2001, Class B Data Communications Network Interface

