



SURFACE VEHICLE INFORMATION REPORT	J2809™	OCT2017
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Honda Diagnostic Serial Data Link Protocol - ABS/VSA System		

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

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1. SCOPE

This Technical Information Report defines the proprietary diagnostic communication protocol for ABS or VSA ECU (Electronic Control Unit) implemented on some Honda vehicles. This protocol does not apply to all Honda vehicles.

This document should be used in conjunction with SAE J2534-2 in order to fully implement the communication protocol in an enhanced SAE J2534 interface.

The purpose of this document is to specify the requirements necessary to implement the communication protocol in an enhanced SAE J2534 interface.

2. REFERENCES

2.1 Applicable Publications

The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest version of SAE publications shall apply.

2.1.1 SAE Publications

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), www.sae.org.

SAE J2534-1 Recommended Practice for Pass-Thru Vehicle Programming

SAE J2534-2 Optional Pass-Thru Features

2.1.2 ISO Publications

Available from ANSI, 25 West 43rd Street, New York, NY 10036-8002, Tel: 212-642-4900, www.ansi.org.

ISO 9141:1989 Road vehicles—Diagnostic systems—Requirements for interchange of digital information

ISO 9141-2:1994 Road vehicles—Diagnostic systems—CARB requirements for interchange of digital information

3. DEFINITIONS AND ACRONYMS

3.1 “ABS”

Anti-lock Brake System.

3.2 “VSA”

Vehicle Stability Assist.

3.3 “Serial Diagnosis”

The serial diagnosis offers the possibility of rapid access to control unit information and functions without disconnecting the wire harness. Serial diagnosis allows interrogation of all input signals present at the control unit, external switching of all actuators to which the control unit has access as well as reading the internal unit information such as the fault memory. Serial diagnosis can be used in the end of line inspection or in the service workshops and can contribute towards considerable savings in inspection time.

3.4 “MESSAGE”

The smallest repeatable unit of transmission is a “MESSAGE”.

A message consists of a certain number of bytes and always has the same format.

3.5 “TELEGRAM”

The sum of all messages transmitted during communication with a control unit is a “TELEGRAM”.

3.6 “TRANSMITTER”

The unit (control unit or tester) which is entitled to output a message is called a “TRANSMITTER”.

3.7 “RECEIVER”

The transmitter executes a passive handshake (i.e. it checks the complemented byte with respect to correct transmission). The receiver of a message is called a “RECEIVER”.

The receiver performs an active “handshake” (each received byte (except “ETX”) is complemented and returned to the transmitter).

4. OVERVIEW

4.1 Telegram-Specific Overview

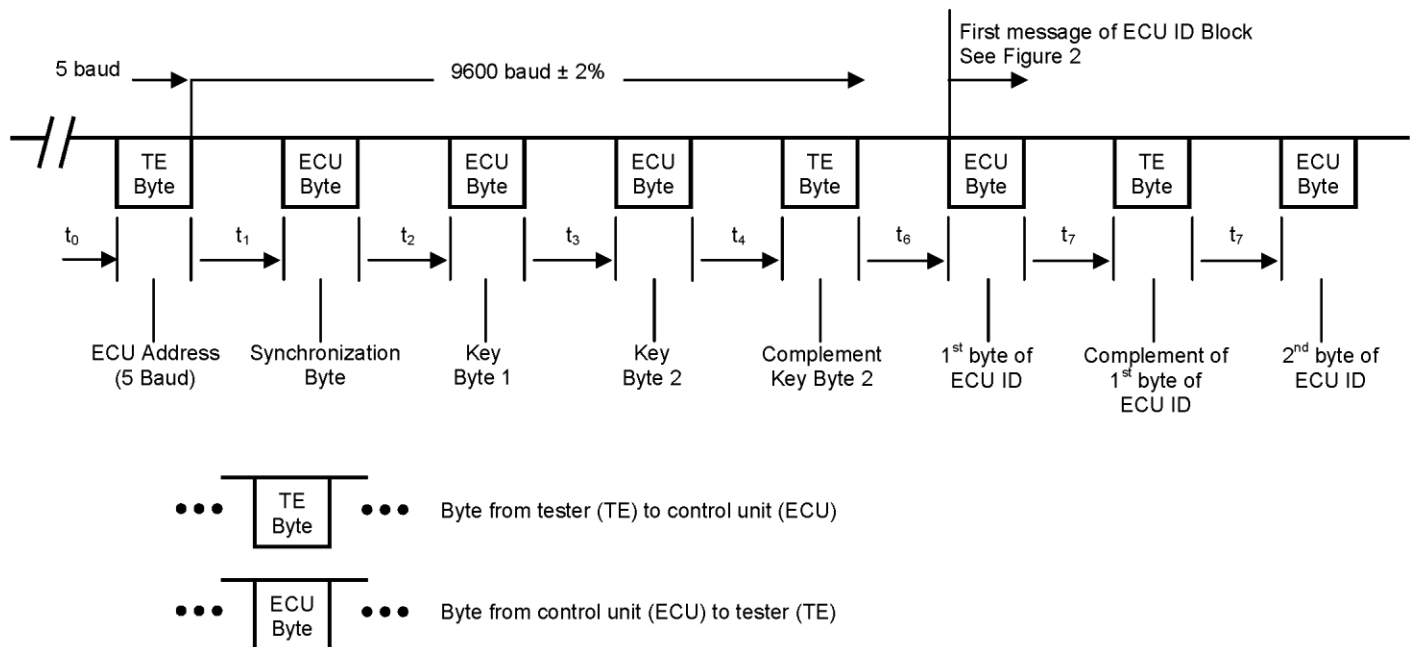


FIGURE 1 - INITIATION OF DIAGNOSIS

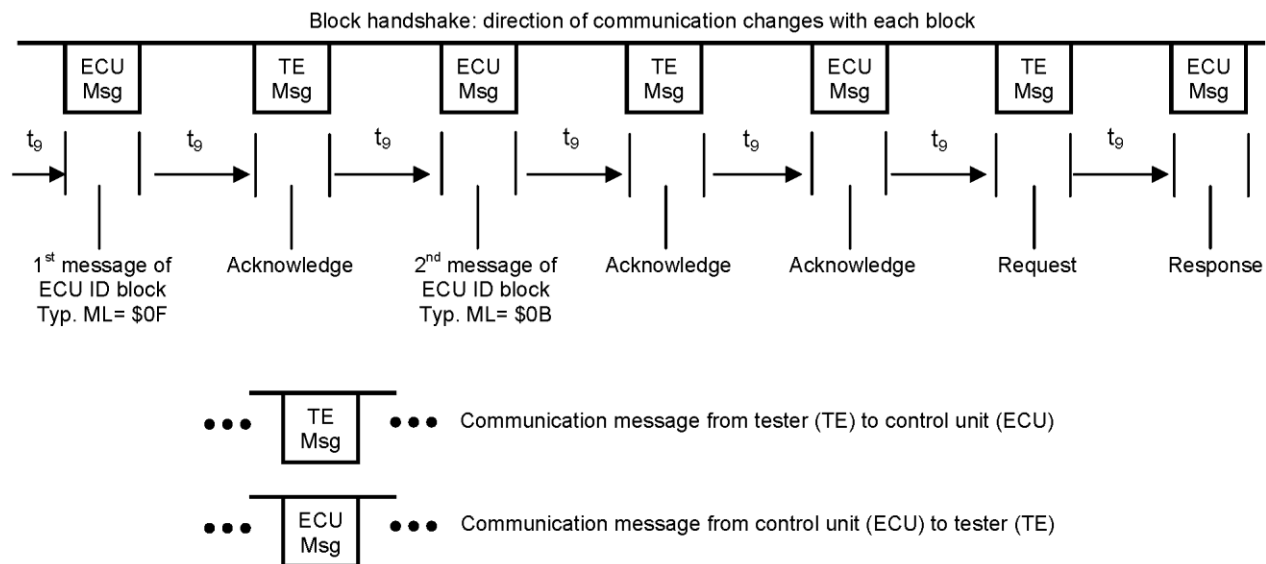


FIGURE 2 - COMMUNICATION TELEGRAM