

Script.CAN.J1939.WABCO_EBS.500KBPS.ACK_ENBL.v1.0.0.0_MG

500 KBPS WABCO EBS CAN Script

The compatibility if this script can only be guaranteed for:

1. The script supports SAE J1939 Protocol
2. Vehicle Dynamic Stability data availability is dependent on the vehicle's EBS system

This script can be used with the following devices:

1. MiX 4000
2. MiX 6000
3. FM3316 and FM3306 Communicators
4. FM3517i and FM3507i Communicators
5. FM3617i and FM3607i Communicators
6. FM3717i and FM3707i Communicators
7. FM3817i and FM3807i Communicators

Version History

| Reference | Version | Changes |
|--------------------------|----------|---|
| SCR-2575 | v1.0.0.0 | First version of Wabco EBS script. Based on: Script.CAN.J1939.500KBPS.ACK_ENBL.v1.28.0.6_MG The script supports all standard J1939 signals and Vehicle Dynamic Stability Control 1 signals. |
| SCR-2575 | v1.0.0.0 | Converted to Production version |

Supported Parameters

Currently there is no configuration group to automatically configure the new events in this script.

The following system generated parameters are supported by the script:

- Road Speed (FEF1 or FE6C or FE6E)
- Engine Speed (Revs).
- High-Res ODO Sync. (With 20 km Threshold)
- Fuel Consumption (FEF2 or FEE9 or FD09 or FEAF or Torque fuel)
- ECMST (ELD detection)

Refer to the following link for instructions on how to set up events for the new parameters:

- [Events and Parameter Names - J1939](#)
- [FMS Telltale Events and Parameter Names - J1939](#)

| ACRONYM | PARAMETER NAME | PARAMETER DESCRIPTION | Return values/states (if applicable) |
|---------|----------------|--|---|
| FMSTQ | FMS.FMSTQ | FMS Engine Torque | |
| DM1DA | FMS.DM1DA | FMS Active Diagnostic Trouble Codes | |
| DM2PA | FMS.DM2PA | FMS Previously Active Trouble Codes | |
| FMSRT | FMS.FMSRT | FMS Retarder Torque | |
| FMSPP | FMS.FMSPP | FMS Brake Pedal Position | |
| FMSA1 | FMS.FMSA1 | FMS Aftertreatment 1 SCR Catalyst Tank Level | |
| SBAP1 | FMS.SBAP1 | FMS Service Brake Air Pressure Circuit 1 | |
| SBAP2 | FMS.SBAP2 | FMS Service Brake Air Pressure Circuit 2 | |
| FMSFD | FMS.FMSFD | FMS Fan Drive State | |
| FMTEH | FMS.FMTEH | FMS DM Total Engine Hours | |
| AXLW0 | FMS.AXLW0 | FMS Vehicle Weight Axle 0 | |
| AXLW1 | FMS.AXLW1 | FMS Vehicle Weight Axle 1 | |
| AXLW2 | FMS.AXLW2 | FMS Vehicle Weight Axle 2 | |
| AXLW3 | FMS.AXLW3 | FMS Vehicle Weight Axle 3 | |
| AXLW4 | FMS.AXLW4 | FMS Vehicle Weight Axle 4 | |
| FMSCT | FMS.FMSCT | FMS Engine Coolant Temperature | |
| FMSET | FMS.FMSET | FMS DM Engine Oil Temperature | |

| | | | |
|-------|--------------------|--|--|
| FMSCL | FMS.FMSCL | FMS Coolant Level | |
| FMSEO | FMS.FMSEO | FMS Engine Oil Level | |
| FMSOP | FMS.FMSOP | FMS DM Engine Oil Pressure | |
| FMSBA | FMS.FMSBA | FMS Battery Current | |
| FMSBV | FMS.FMSBV | FMS Battery Voltage | |
| FMBPS | FMS.FMBPS | FMS Brake Pedal Switch | 0 = Brake released 1 = Brake depressed 2 = Error 3 = Not Available |
| FMSPT | FMS.FMSPT | FMS PTO State | 0 = Off/Disabled 1 = Hold 2 = Remote Hold 3 = Standby 4 = Remote Standby 5 = Set 6 = Decelerate/Coast 7 = Resume 8 = Accelerate 9 = Accelerator Override 10 = Preprogrammed set speed 1 11 = Preprogrammed set speed 2 12 = Preprogrammed set speed 3 13 = Preprogrammed set speed 4 14 = Preprogrammed set speed 5 15 = Preprogrammed set speed 6 16 = Preprogrammed set speed 7 17 = Preprogrammed set speed 8 18 = PTO set speed memory 1 19 = PTO set speed memory 2 20 = PTO set speed memory 3 21-30 = Reserved 31 = Not available |
| FMSCC | FMS.FMSCC | FMS Cruise Control Active | 0 - Off/Disabled 1 - Active |
| FMSCS | FMS.FMSCS | FMS Clutch Switch | 0 = Clutch released 1 = Clutch depressed 2 = Error 3 = Not available |
| DRTNS | FMS.DRTNS | FMS Distance remaining to next service | |
| TTDW1 | CAN.TELLTALE.TTDW1 | TT: DWORD 1 | |
| TTDW2 | CAN.TELLTALE.TTDW2 | TT: DWORD 2 | |

| B#S## | CAN.TELLTALE.B#S## | TT: Block # Status ## (Block 0-4, Status 1-15) | |
|-------|---------------------|--|--|
| SBLTS | System.FM.CAN.SBLTS | FM CAN: Seat Belt State | 0 = Not present 1 = Engaged 2 = Disengaged 3 = Reserved |
| FMMIL | FMS.FMMIL | FMS Engine fault | |
| FMAPP | FMS.FMAPP | FMS AcceleratorPedalPosition | |
| HRES | FMS.HRES | FMS High resolution odometer | |
| FMSFL | FMS.FMSFL | FMS Fuel level | |
| CANTF | System.CAN.CANTF | Total fuel pulses for trip | |
| FMSPB | FMS.FMSPB | FMS Parking brake switch | 0 = Parking brake not set 1 = Parking brake set |
| RAWFL | System.CAN.RAWFL | Raw FEE9 Life Fuel | |
| PTOEN | FMS.PTOEN | FMS At Least One PTO Engaged | |
| GRSVW | System.CAN.GRSVW | Gross Vehicle Weight | |
| FMSTT | FMS.FMSTT | FMS Transmission Oil Temperature | |
| BRKPP | FMS.BRKPP | FMS Brake Primary Pressure | |
| BRKSP | FMS.BRKSP | FMS Brake Secondary Pressure | |
| VDC11 | CAN.VDC1.VDC11 | VDC Information Signal | 0 = Off 1 = On 2 = Reserved 3 = Don't care/Take no action |
| VDC12 | CAN.VDC1.VDC12 | VDC Fully Operational | 0 = Not fully operational 1 = Fully operational 2 = Reserved 3 = Don't care/Take no action |
| VDC13 | CAN.VDC1.VDC13 | VDC Brake Light Request | 0 = Turn brake light not on 1 = Turn brake light on 2 = Reserved 3 = Don't care/Take no action |
| VDC14 | CAN.VDC1.VDC14 | ROP Engine Control Active | 0 = ROP engine control passive but installed 1 = ROP engine control active 2 = Reserved 3 = Don't care/Take no action |

| | | | |
|-------|----------------|--------------------------|--|
| VDC15 | CAN.VDC1.VDC15 | ROP Brake Control Active | 0 = ROP brake control passive but installed 1 = ROP brake control active 2 = Reserved 3 = Don't care/Take no action |
| VDC16 | CAN.VDC1.VDC16 | YC Engine Control Active | 0 = YC engine control passive but installed 1 = YC engine control active 2 = Reserved 3 = Don't care/Take no action |
| VDC17 | CAN.VDC1.VDC17 | YC Brake Control Active | 0 = YC brake control passive but installed 1 = YC brake control active 2 = Reserved 3 = Don't care/Take no action |
| VDC18 | CAN.VDC1.VDC18 | Trailer VDC Active | 0 = VDC passive, but installed 1 = VDC active 2 = Reserved 3 = Not available or not installed |

Installation Notes

1. Industry standard for heavy vehicles with a physical layer running - CAN 250kb/s, 29bit IDs
2. This script supports SAE J1939 via a FMS gateway or contactless CAN sensor and should not be directly connected to the hot-bus of a vehicle
3. The CAN jumpers must be in a position to allow ONLY allow Read actions on the CAN bus (Passive Mode). The only exception is when the FMS gateway requires ACK messages to broadcast the data.
4. ODO Synchronization will only take place if the MIX OBC ODO setting and the value read from the CAN bus is within 20 km distance from each other or when the MiX OBC ODO is set to zero.
5. Torque fuel is dependent on Engine type - Therefore manual calibration of Fuel must be done if scripts selects Torque Fuel.