Script.CAN.GM.GLOBAL-B-POWERTRAIN.v1.19.7.3_MG

GM GLOBAL-B-POWERTRAIN CAN Script

The compatibility if this script can only be guaranteed for:

1. Chevrolet Silverado 1500 2019+ models.
2. Vehicles with a VIN Number that starts with: **3GCUDDED_RG, 1GC1YNE7_RF**

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-2619	v1.19.1.0	This script supports the standard system Parameters: Engine Speed, Vehicle Speed, Odometer, Vehicle Range, Fuel, Fuel Level, Total Engine Hours, Accelerator Pedal Position, Brake Pedal Switch, Driver Seat Belt, Gearbox Drive, Gearbox Reverse, Gearbox Neutral, Gearbox Park, Park Brake, Gearbox Mode, Driver Door 1, Driver Door 2, Side Lamp, Indicator Left, Indicator Right. **The script should be compatible with vehicles with a VIN starting with: 3GCUDDED_RG & 1GC1YNE7_RF**
SR-17707	v1.19.2.1	Updated speed and RPM sync logic to minimize occurrence of speed spikes. Enabled Odo sync
SCR-2619	v1.19.3.2	Added indicated speed as priority speed over axles speeds.
SCR-2685	v1.19.4.3	Integrated speed signals.
SCR-2685	V1.19.4.3	Converted to Production version.
SR-21055	V1.19.5.3	Added debug for monitoring speed spike/drop occurrences and raw CAN data for all speed sources.
SR-21055	V1.19.7.3	Revert to Axle Speed as main speed source. Apply adjustment to Axle Speed by sampling offset to Indicated Speed.
SR-21055	V1.19.7.3	Converted to Production version.

Supported Parameters

ACRONYM	PARAMETER NAME	PARAMETER DESCRIPTION	Return values/states (if applicable)
CAN_V	System.Scratch40D	Road speed	
CAN_N	System.Scratch40C	Engine RPM	
CANFE	System.CAN.FuelRate	Fuel Rate	
FMODO	System.FM.CAN.FMODO	FM CAN: Odometer (introduced 27/11/2019)	
FMSFL	FMS.FMSFL	FMS Fuel level	
FMRNG	System.FM.CAN.FMRNG	FM CAN: Vehicle range remaining	
FMTEH	FMS.FMTEH	FMS DM Total engine hours	
FMAPP	FMS.FMAPP	FMS AcceleratorPedalPosition	
FMBPS	FMS.FMBPS	FMS Brake Pedal Switch	0 = NOT PRESENT 1 = ENGAGED 2 = DISENGAGED
GBDRM	System.FM.CAN.GBDRM	FM CAN: Gear Box Drive Mode	0 = NOT PRESENT 1 = PARK 2 = REVERSE 3 = NEUTRAL 4 = DRIVE 5 = LOW GEAR
GBDM1	System.FM.CAN.GBDM1	FM CAN: Gear Box Mode Park	0 = DISENGAGED / NOT PRESENT 1 = ENGAGED
GBDM2	System.FM.CAN.GBDM2	FM CAN: Gear Box Mode Reverse	0 = DISENGAGED / NOT PRESENT 2 = ENGAGED
GBDM3	System.FM.CAN.GBDM3	FM CAN: Gear Box Mode Neutral	0 = DISENGAGED / NOT PRESENT 3 = ENGAGED
GBDM4	System.FM.CAN.GBDM4	FM CAN: Gear Box Mode Drive	0 = DISENGAGED / NOT PRESENT 4 = ENGAGED
GBDM5	System.FM.CAN.GBDM5	FM CAN: Gear Box Mode Low Gear	0 = DISENGAGED / NOT PRESENT 5 = ENGAGED

DD01S	System.FM.CAN.DD01S	FM CAN: Driver Door 1	0 = NOT PRESENT 1 = OPEN 2 = CLOSED
DD02S	System.FM.CAN.DD02S	FM CAN: Driver Door 2	0 = NOT PRESENT 1 = OPEN 2 = CLOSED
LTSSI	System.FM.CAN.LTSSI	FM CAN: Left Turn Indicator	0 = NOT PRESENT 1 = ON 2 = OFF
RTSSI	System.FM.CAN.RTSSI	FM CAN: Right Turn Indicator	0 = NOT PRESENT 1 = ON 2 = OFF
PBRKS	System.FM.CAN.PBRKS	FM CAN: Park Brake State	0 = NOT PRESENT 1 = DISENGAGED 2 = ENGAGED
PDOS1	System.FM.CAN.PDOS1	FM CAN: Passenger Door 1	0 = NOT PRESENT 1 = OPEN 2 = CLOSED
PDOS2	System.FM.CAN.PDOS2	FM CAN: Passenger Door 2	0 = NOT PRESENT 1 = OPEN 2 = CLOSED
SBLTS	System.FM.CAN.SBLTS	FM CAN: Seat Belt State	0 = NOT PRESENT 1 = PLUGGED IN 2 = UNPLUGGED
PSBLT	System.FM.CAN.PBELT	FM CAN: Passenger Seat Belt Status	0 = NOT PRESENT 1 = PLUGGED IN 2 = UNPLUGGED
SDLMP	System.FM.CAN.SDLMP	FM CAN: Side lamp status	0 = NOT PRESENT 1 = ON 2 = OFF

Installation Notes

1. **The script is NOT compatible with TRACERS**
2. The CAN jumpers must be in a position to ONLY allow **read** actions on the CAN bus (Passive Mode)
3. The script supports 11 bit CAN message identifier CAN headers.
4. The script only supports a CAN bus with a speed of 500 kbit/s CAN bus speed
5. Device Drivers: BAS 1.70k - E15.08.27.xx or later sets are supported

Wiring and Installation Instructions

Chevrolet Silverado 1500	
CAN bus location	Position 5) Other
Wire colours & details	APTIV ECU Connector. CANH = Blue & White, CANL = Blue & Yellow
Can bus speed	CAN_500_kbps