AIM Infotech

Suzuki GSX-R 1000 L7 (2017)

Release 1.00

ECU

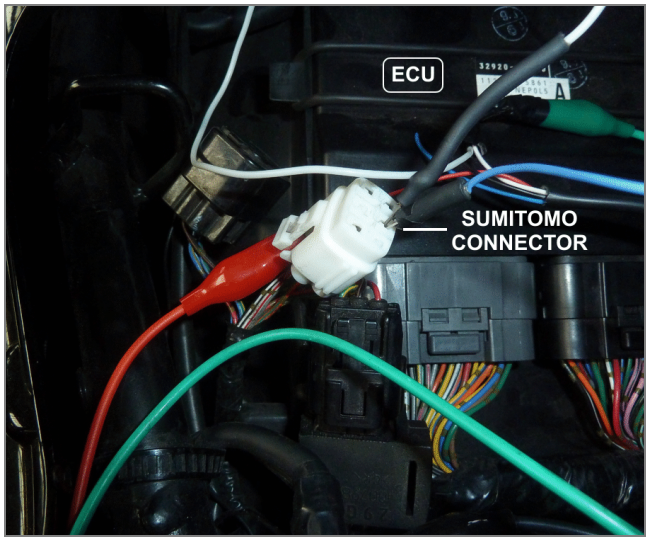
1 Supported models and years

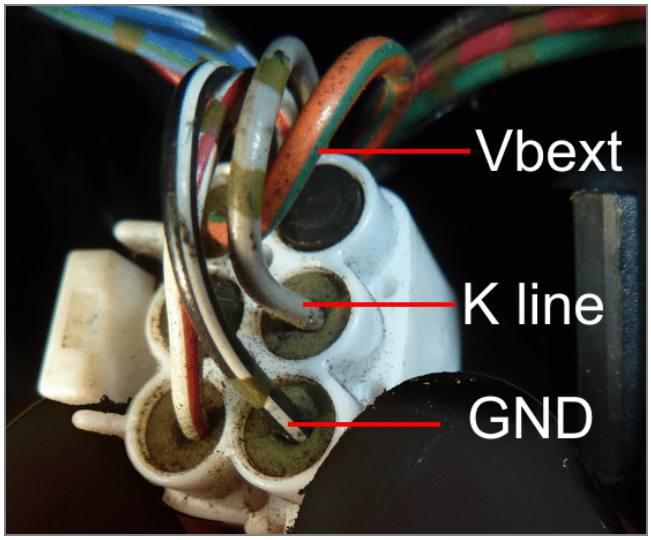
This tutorial describes how to connect AiM devices (MXL excluded) to Suzuki bikes using the diagnosis connector. Supported bike models and years are:

GSX-R1000	2017 onwards

2 Wiring connection

Suzuki GSX-R 1000 L7 features a bus communication based on K-line, that can be reached through the diagnostic connector (Sumitomo) placed near the bike ECU under the seat. Dedicated connection kits are available for EVO4S, Solo 2 DL, EVO4 and SoloDL.
Here below are Sumitomo connector position on the left and its cables functions on the right.





3 AIM device configuration

Before connecting the ECU to the logger set this up using AiM Race Studio software. The parameters to select in the device configuration are:

ECU manufacturer “Suzuki”
ECU Model “SDS 2 Protocol”;

4 Available channels

Channels received by AiM devices connected to "Suzuki" "SDS 2 Protocol" are:

ID	CHANNEL NAME	FUNCTION
ECU_1	SDS RPM	RPM
ECU_2	SDS SPEED R	Rear wheel speed
ECU_3	SDS SPEED F	Front wheel speed
ECU_4	SDS GEAR	Engaged gear
ECU_5	SDS BATT VOLT	Battery Voltage
ECU_6	SDS CLT	Coolant Temperature
ECU_7	SDS IAT	Intake Air Temperature
ECU_8	SDS MAP	Manifold Air Pressure
ECU_9	SDS BAROM	Barometric pressure
ECU_10	SDS FUEL1 msx10	Fuel injector 1
ECU_11	SDS FUEL2 msx10	Fuel injector 2
ECU_12	SDS FUEL3 msx10	Fuel injector 3
ECU_13	SDS FUEL4 msx10	Fuel injector 4
ECU_14	SDS IGN AN 1	Ignition angle 1
ECU_15	SDS IGN AN 2	Ignition angle 2

ECU_16	SDS IGN AN 3	Ignition angle 3
ECU_17	SDS IGN AN 4	Ignition angle 4
ECU_18	SDS TPS1 V	TPS1 voltage
ECU_19	SDS TPS2 V	TPS2 voltage
ECU_20	SDS GRIP1 V	GRIP1 voltage
ECU_21	SDS GRIP2 V	GRIP2 voltage
ECU_22	SDS SHIFT SENS	Gear shift sensor
ECU_23	SDS TPS1	Throttle 1 position
ECU_24	SDS TPS2	Throttle 2 position
ECU_25	SDS GRIP1	Grip1 position
ECU_26	SDS GRIP2	Grip2 position
ECU_27	SDS SPIN RATE	Wheel spin rate (TC: OFF)
ECU_28	SDS SPIN RT TC	Wheel spin rate (TC: ON)
ECU_29	SDS DH COR AN	Dashpot correction angle

Technical notes:

- not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable;
- the following channels work only if the AiM system is connected to a Yoshimura ECU:
  - **SDS SPEED F;**
  - **SDS SPIN RATE;**
  - **SDS SPIN RT TC;**
  - **SDS DH COR AN.**