

## Connecting the GROM ( EBJ-JC61) ECU to the ENIGMA SemiFull (FPV-330) Bluetooth version

Supported models of this manual

**ENIGMA type** ENIGMA SemiFull (SF2330 / SF2330RTFW)

**Vehicle type** HONDA GROM (EBJ-JC61)

This ENIGMA SemiFull can not connect the GROM(EBJ-JC75) .

### Caution

The wiring of the FI lamp is different between before 2015 projector headlight model(EBJ-JC 611000001~1299999) and after 2016 LED headlight model(EBJ-JC61 1300001~).

Installation should be done in a safe place. A basic knowledge of GROM(JC61) maintenance is necessary.

There is an ECU under the seat and remove gas tank side cover and rubber mount.

Make an **interrupt connection** from the ENIGMA SemiFull wiring to the wiring on the coupler side.

(AN interrupt connection can made without cutting but by making a branch in the normal connection)

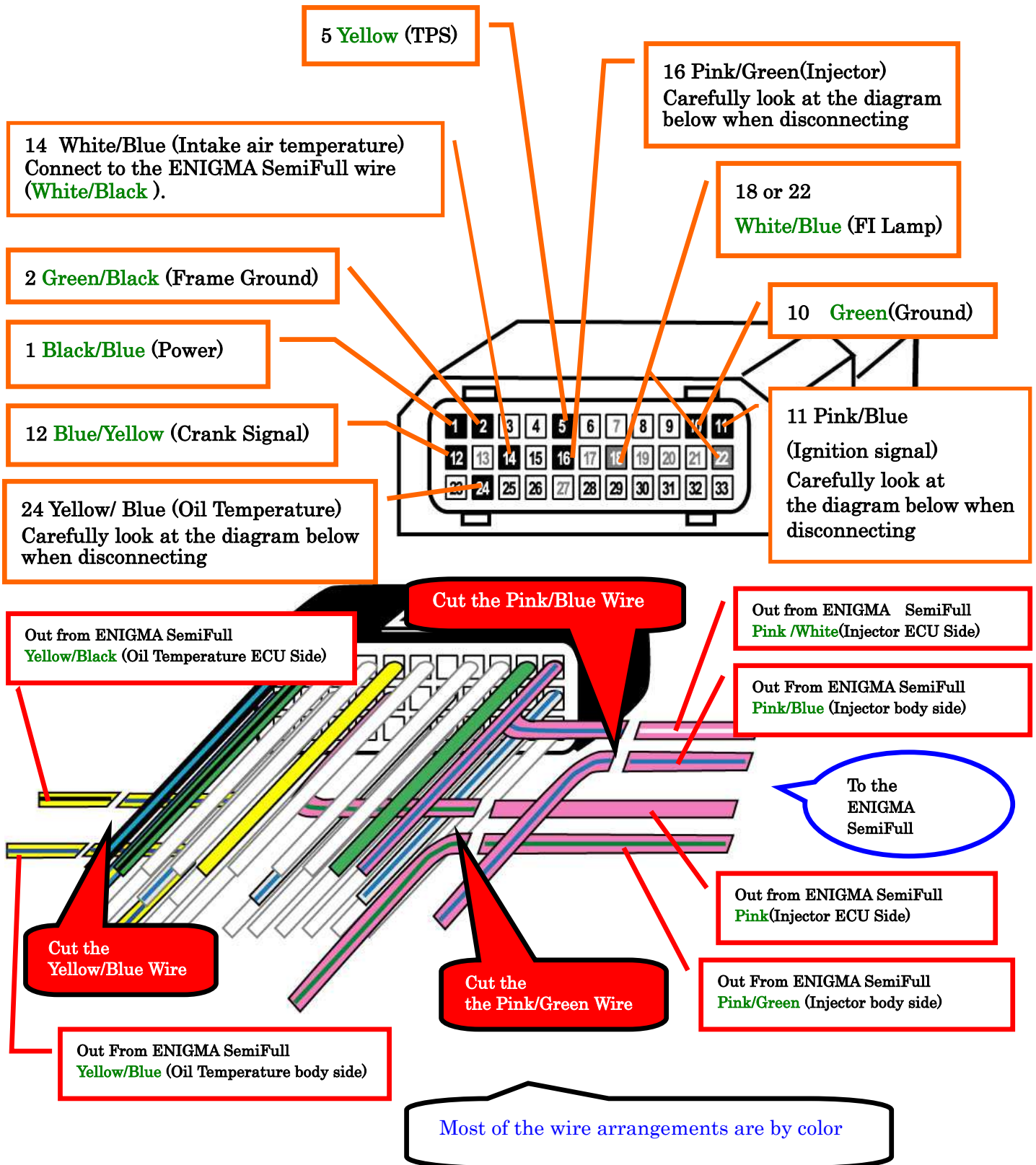
Do not use an electro tap on the interrupt wiring connection. It causes many connection issues that are problematic to the operation of the ENIGMA SemiFull. (Use solder or the like for improved reliability.)

If you use the RTF type, remove the coupler which is connected to the ECU, please connect the coupler that has come out from ENIGMA SemiFull RTF to the ECU and the vehicle body side. Please make sure that the lock sound is a "click".

The wires from the ENIGMA SemiFull will be the fundamentally the same, or similar to that of the wires it will connect to from the bike. Please carefully follow the diagram below when making the connection. There are a total of 13 wires.

- The purple wire is a engine revolution output service cable and is not to be connected to the ECU.
- The White wire is a pit lane switch service and is not to be connected to the ECU.  
When you do not want to use this function, please tip of the wire is insulated with tape so as not to short against the metal part.
- The Gray/Red wire is a wire for the MAP changeover switch and is not to be connected to the ECU.  
When you do not want to use the wiring for the MAP changeover function, please tip of the wire is insulated with tape so as not to short against the metal part.
- By cutting the No.11 Pin (Pink / Blue) wire of ECU (Ignition signal), the bike vehicle body side wiring from the ENIGMA SemiFull connect the Pink / Blue wire. Connect the Pink / White wire the ECU side.

- By cutting the No.16 Pin (Pink / Green) wire of ECU (Injecttor), the bike vehicle body side wiring from the ENIGMA SemiFull connect the Pink / Green wire. Connect the Pink wire the ECU side.
- **Both the No.9 Pin and the No.10 Pin are Green wire.Be careful.**
- The No.14 Pin (White / Blue) wire is the Intake air temperature sensor, Connect to the ENIGMA SemiFull wire(White / Black ).
- By cutting the No.24 Pin (Yellow/ Blue) wire of ECU (Oil Temperature), the bike vehicle body side wiring from the ENIGMA SemiFull connect the Yellow/ Blue wire. Connect the Yellow/Black wire the ECU side.
- **For the EBJ-JC61(1000001~1299999) model , connect the White / Blue wire (FI Lump) to the No.22 pin of ECU. The EBJ-JC61 (1300001~)model connect the No.18 pin of ECU.  
The RTFW type is connected to both to support both.**
- **In order to prevent the reporting water from entering into the ENIGMA SemiFull inside from the base of the wiring from the ENIGMA SemiFull, it is recommended that you install in the lower wiring side in the vertical the ENIGMA SemiFull.**



ECU terminal connected 10wires 1, 2, 5, 10, 11, 12, 14, 16, 18 or 22, 24. Please confirm the picture.

The purple line is the service output line. The ENIGMA SemiFull will output 5V each crank rotation (or Once every two crank revolutions ). Most commercially available digital tachometers are supported. Exact values will be displayed if these cables are connected. They are useful to various applications. Do not short-circuit by taping when there is no need.

Please use the ENIGMA Semifull dedicated app for the iOS/Android version of the app. Download the **GROM (EBJ-JC61)** dedicated ENIGMA Semifull app from the model selection screen in the app. Other Vehicle dedicated apps cannot be used.

Please use the **GROM (EBJ-JC61)** dedicated ENIGMA Semifull PCsoftware.  
Other Vehicle, Other ENIGMA dedicated PCsoftwares,cannot be used.

The Enigma operating software can be downloaded free from our website.  
The ENIGMA SemiFull operating software can be downloaded free from our website.  
<http://www.dilts-japan.com>

## Installation of the pit lane limiter switch

"White wire" that has come out from ENIGMA SemiFull is the wiring for the pit lane limiter switch installation.

Pit lane limiter to the rotation of the constant engine speed to control the speed only when the external switch ON

You control. Do those who want to use this feature by performing the following tasks.

In general, to buy a handle mounting switch, which is commercially available, it should be placed in easy-to-use position.

(If you are installing to handle and place easy to operate location does not interfere with operation)

Switch is common thing that cuts in the "OFF" position to connect with the "ON" position.

Switch is not suitable to be connected only when you press. be careful.

Connect the White line the installation of the switch is out of the ENIGMA SemiFull when finished.

Connect the White line to one of the terminals of the switch. The other is connected to ensure that "body earth".

**The most reliable of is to connect to the negative battery. Circuit will be burned down and unavailable when connecting to the positive wrong. Never done.**

This completes the installation of pit lane limiter switch with more work

**When you do not want to use the pit lane limiter function, please tip of the wire is insulated with tape so as not to short against the metal part.**

## Installation of the MAP changeover switch

"Gray/Red wire" that has come out from ENIGMA Semifull is the wiring for the MAP changeover switch installation. You can instantly switch between a two maps with the MAP changeover switch.

Do those who want to use this feature by performing the following tasks.

In general, to buy a handle mounting switch, which is commercially available, it should be placed in easy-to-use position. (If you are installing to handle and place easy to operate location does not interfere with operation.)

Switch is common thing that cuts in the "OFF" position to connect with the "ON" position.

Switch is not suitable to be connected only when you press. be careful.

Connect the Gray/Red line from the ENIGMA Semifull when finished the installation of the switch.

Connect the Gray/Red line to one of the terminals of the switch. The other is connected to ensure that "body earth". **The most reliable of is to connect to the negative battery. Circuit will be burned down and unavailable when connecting to the positive wrong. Never done.**

This completes the wiring for the MAP changeover switch with more work.

**When you do not want to use the wiring for the MAP changeover function, please tip of the wire is insulated with tape so as not to short against the metal part.**

**When switching maps, Be sure to transfer the data to both maps before starting to avoid engine trouble.**