KOSO Feel The Speed

INSTRUCTIONS

●Thank you for purchasing our product. Before installing/operating the product, read the instructions carefully and retain them for future reference.

⚠ Attention!

- For installation, please follow the steps described. Any damage caused by wrong installation shall be imputed to the users.
- To avoid a short circuit from occuring do not pull or modify the wires during installation.
- Do not disassemble or change any parts. Opening and dissassembling this unit will void any warranty.
- Maintenance and repairs should be executed by our professionals only.

FLASH | LIGHT ON | HOLD THE BUTTON ONE SECONDS | HOLD THE BUTTON 3 SECONDS

◎ Symbol description:

NOTE

⚠ Some procedures must be followed to avoid damages to the instrument.

⚠WARNING! Certain procedures must be followed to avoid damages to yourself, to the vehicle or others.

1 Accessories

1 LCD Meter X1	2 Main wiring harness X1	3 Temp sensor wire X1	4 Meter bracket X1
5 M6 Hex Socket Screws X3	6 M6 nut X3	7 Bushing X3	8 M5 washer X2
9 M5x16mm Screw X2			

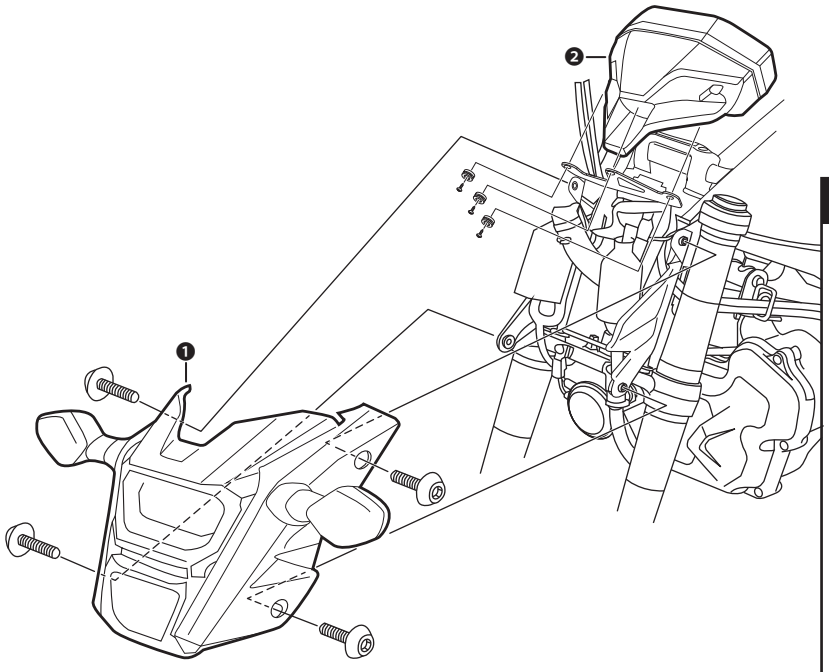
2-1 Vehicle installation instruction(1)

2017~2021

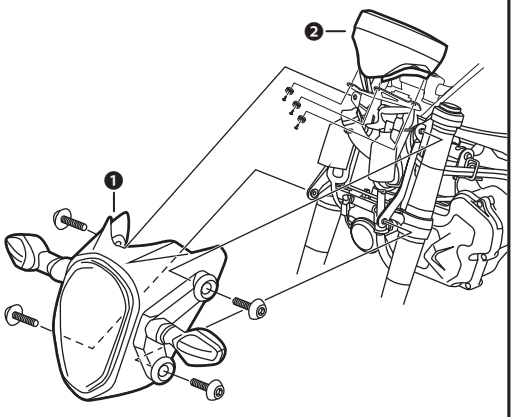
Disassemble in the following order

❶ Headlight
❷ LCD Meter

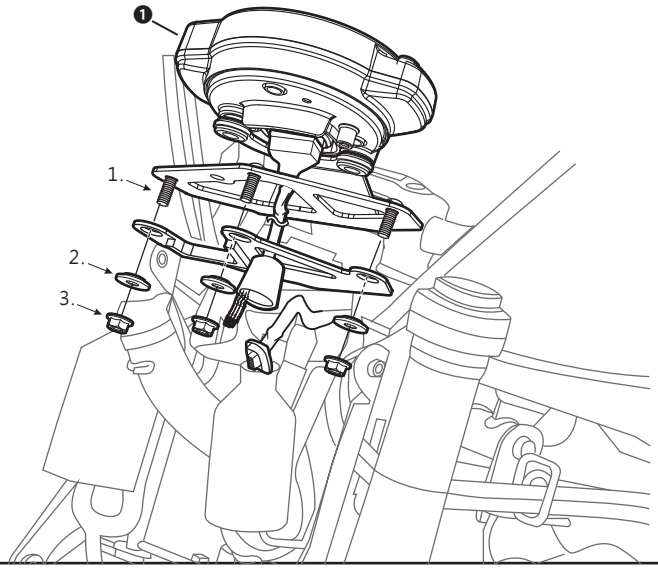
NOTE Refer to the sequence shown in the figure for disassembly



2013~2016



2-2 Vehicle installation instruction(2)



Install in the following order

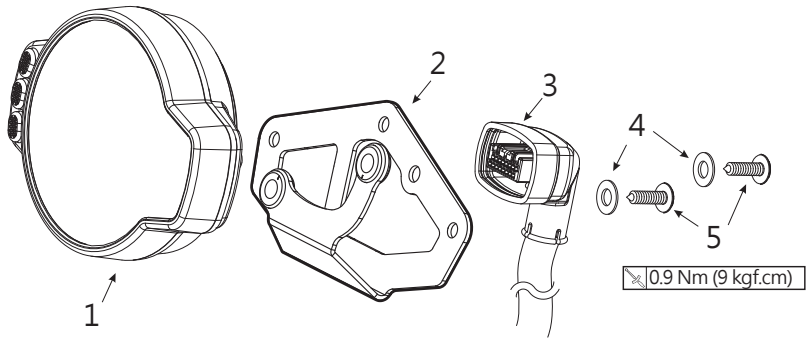
❶ LCD Meter (With Bracket)

1.M6 Hex Socket Screws X3(Accessory 5)
2.Bushing X3(Accessory 7)
3.M6 nut X3(Accessory 6)

⚠ Before installing, assemble according to the diagram and bracket assembly. (Refer to 2-3 installation instructions for bracket assembly).

NOTE Follow the order shown in the figure for installation.

2-3 Bracket Installation instructions

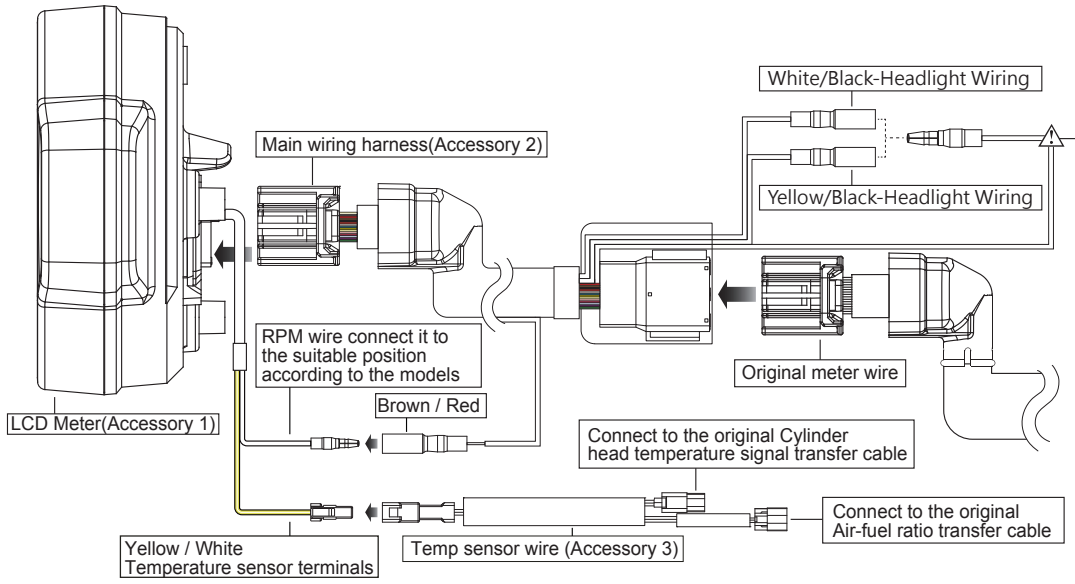


Follow the steps below during installation.

1. LCD Meter (Accessory 1)
2. Meter bracket (Accessory 4)
3. Main wiring harness (Accessory 2)
4. M5 washer X2 (Accessory 8)
5. M5x16mm screw X2 (Accessory 9)

0.9 Nm (9 kgf.cm)

2-4 Wiring Installation Instructions



Yellow/Black-Headlight Wiring

Refer to the information below and according to your manufacturing year to connect the wiring.

Year:2013~2016
Model:GROM
(JC61-1000001~1299999)

Year:2017~2020
Model:GROM
(JC61-1300001~/JC75-1000001~)

3-1 Basic function instruction

Tachometer (LCD Bar)
●Display Range :
0 ~ 10,000 RPM (250 RPM each segment)
0 ~ 13,000 RPM (250 RPM each segment)
Tachometer (Number)
*Displays when the gear function is turned off
●Display Range :
0 ~ 10,000 RPM (100 RPM each segment)
0 ~ 13,000 RPM (100 RPM each segment)

Gear meter
(When the gear function is off, the speed function is displayed.)
●Display range : OFF, highest gear, N and highest gear, show all (N / 1 ~ 6)

Odometer
●Display range : 0 ~ 99,999 mile (km) returns to zero upon exceeding
●Display unit : 1 mile (km)
Distance meter A,B
●Display range : 0 ~ 9,999.9 mile (km) returns to zero upon exceeding
●Display unit : 0.1 mile (km)
Mileage maintenance user settings (closable)
●Display range : user adjustable (300 ~ 10,000 mile / 500 ~ 16,000 km) ~ -999 mile (km), automatically decreases according to the increase of total mileage.
●Display unit : 1 mile (km)

Speedometer
●Display range : 0~124 MPH (0~199 km/h)
●Display unit : 1 MPH (km/h)

Button A (UP)

Button B (ENTER)

Button C (DOWN)

Fuel meter
●Display Range : OFF、6 Levels

●Indication light
●ABS ●Neutral N
●High beam light ●Warning light
●Turn signal ●IMMO
●Engine warning light

Time
●Display range : 12 hour format
Run time
●Display range :
00:00 ~ 99:59 (<100 hour)
100 ~ 9,999H (100 ~ 9,999 hour)
Engine running time
● Display range:
00:00 ~ 99:59 (<100 hours)
100 ~ 9,999H (100 ~ 9,999 hours)

Thermometer
●Display Range : OFF、11 temperature sensor type ranges
※The temperature for the cylinder head will only be displayed when the RPM is above 0.
Air-fuel ratio
●Display Range : 12.1 ~ 17.5
※ This is a selective function, which shall be used in conjunction with the narrowband AFR sensor.
Voltmeter
●Display Range : 8.0 ~ 18.0 V

Max. speed record
●Display range：0 ~ 124 MPH (0 ~ 199 km/h)
Max. RPM
●Display range：0 ~ 10,000 RPM、0 ~ 13,000 RPM
Maximum temperature record
●Display range：11 temperature sensor type ranges
Max gear level record
●Display range : -(No display) ~ 9 gear level

3-2 Features and settings description

●Speedometer	Display range：0 ~ 124 MPH (0 ~ 199 km/h) switchable Display unit：1 MPH (km/h)
○Speedometer unit	Setting range : mile(MPH), km(km/h)
○Internal and external odometer	Display range：0 ~ 99,999 mile (km) returns to zero upon exceeding Display unit：1 mile (km)
○Trip meter A、B	Display range：0 ~ 9,999.9 mile (km) returns to zero upon exceeding. Display unit：0.1 mile (km)
○Over speed warning	Setting range : 19 ~ 124MPH (30 ~ 199 km/h) warning on when higher than set value (including). Setting unit : 1 MPH (km/h)
○Tire circumference	Setting range : 300 ~ 2,500 mm Setting unit : 1 mm
●Sensor points	Display range : 1 ~ 40 points
●Gear indicator	Display range : OFF, highest gear, N and highest gear, show all (N / 1 ~ 6)
●Maintenance mileage	Setting range : 300 ~ 10,000 mile (500 ~ 16,000 km) Setting unit : 100 mile (km)
●Bar segment tachometer	Display range : 0 ~ 10,000 RPM, 0 ~ 13,000 RPM Display unit : 0 ~ 10,000 RPM (250 RPM each segment) 0 ~ 13,000 RPM (250 RPM each segment)
○The RPM input pulse	Setting range : POS(+)、NEG(-)
○RPM signal	Setting range : P-0.5, P-1, P-1.5, P-2, P-2.5, P-3, P-4, P-5, P-6, P-9, P-10, P-11, P-12, P-17, P-18, P-23, P-24, P-34, P-36
○First-stage warning for over-RPM (Illuminated) Display range：0 ~ 10,000 RPM Setting range：3,000 ~ 9,750 RPM Display range：0 ~ 13,000 RPM Setting range：3,000 ~ 12,750 RPM Higher than the setvalue (inclusive), the signaling light for over-RPM will be illuminated (green)	
○Second-stage warning for over-RPM (Illuminated) Display range：0 ~ 10,000 RPM Setting range：3,000 ~ 9,750 RPM Display range：0 ~ 13,000 RPM Setting range：3,000 ~ 12,750 RPM Higher than the set value (inclusive), the signaling light for over-RPM will be illuminated (red)	
○Third-stage warning for over-RPM (Blinking) Display range：0 ~ 10,000 RPM Setting range：3,250 ~ 10,000 RPM Display range：0 ~ 13,000 RPM Setting range：3,250 ~ 13,000 RPM Higher than the set value (inclusive), the signaling light for over-RPM will be flashing (green + red) Setting unit : 100 RPM	

●Temperature & Max. temperature record
Display range：
❶OFF
❷Cylinder head temperature:

P-1	-4.0 ~ 392.0°F (-20.0 ~ 200.0°C)	P-1A	-4 .0~ 392.0°F (-20.0 ~ 200.0°C)
P-2	-40.0 ~ 365.0°F (-40.0 ~ 185.0°C)	P-2A	-40 .0~ 365.0°F (-40 .0~ 185.0°C)
P-3	-4.0 ~ 428.0°F (-20.0 ~ 220.0°C)	P-5A	-4 .0~ 248.0°F (-20.0 ~ 120.0°C)
P-4	-4 .0~ 392.0°F (-20.0 ~ 200.0°C)	P-6A	-22 .0~ 392.0°F (-30.0 ~ 200.0°C)
P-5	-4.0 ~ 248.0°F (-20.0 ~ 120.0°C)		
P-6	-22.0 ~ 392.0°F (-30.0 ~ 200.0°C)		

❸Temperature sensor:

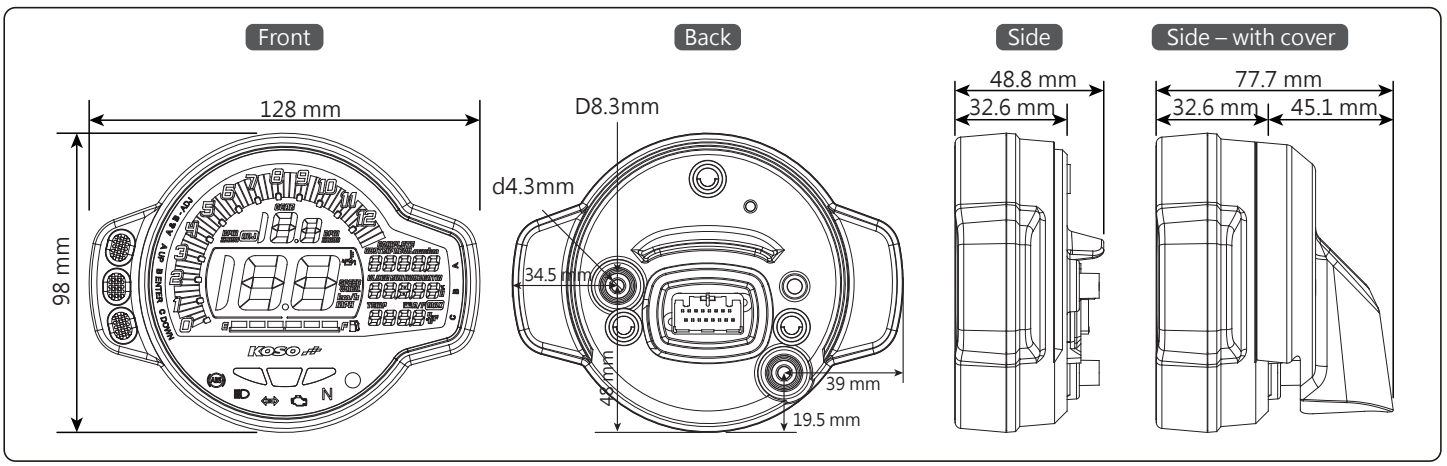
P-250	32.0 ~ 482.0°F (0.0 ~ 250.0°C)

Display unit : 0.1 °F(°C)

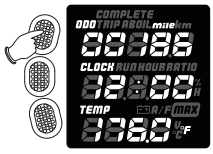
○Thermometer unit	Setting range : °F,°C
○Over temp warning	Setting range : 122 ~ 356°F (50 ~ 180°C), warning sign on when higher than set value. Setting unit : 3°F (5°C)
●Fuel meter	Setting range : OFF, 100Ω, 250Ω, 270Ω, 390Ω, 510Ω, 1200Ω, fuel switch, USER
○Low fuel warning	Setting range : 0 ~ 3 segments, low fuel warning blinking when lower than set value (including). Setting unit : 1 segment
●Clock	Setting range : 1:00 ~ 12:59 (12 H)
●Voltmeter	Display range : 8.0 ~ 18.0 V Display unit : 0.1 V
○Low voltage warning	Setting range : 8.0 ~ 13.0 V，low voltage warning on when lower than set value (including). Setting unit : 0.1 V
●Backlight brightness	Setting range : 1 - 5 (darkest)~ 5 - 5 (brightest)
●ABS	Setting range : ON、OFF
●AFR	Setting range : ON、OFF
●Lean/Rich settings	Display range：12.1 ~ 17.5 Display unit : 0.1
○Operating voltage	DC 12V
●Temperature range	-10 ~ +60°C
○Specifications	JIS D 0203(S2)
●Meter Size	128 X 98 X 48.8 mm
○Meter Weight	± 200 g
●Indication light	●ABS ●High beam light ●Turn signal ●Engine warning light ●Neutral ●Warning light / IMMO

NOTE Design and specification may change without further notice.

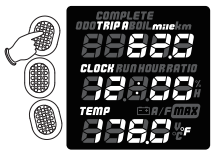
3-3 Meter size



3-4 Button A (UP) function instructions

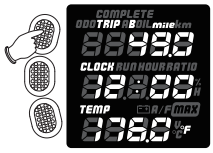


●In the total mileage screen, **press button A once** to switch to Trip A screen.



●Trip A screen, **press button A once** to switch to Trip B screen.

●**Hold button A for 3 seconds** to clear the Trip A recordings.

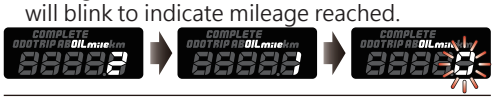


●Trip B screen, **press button A once** to switch to mileage maintenance screen.

●**Hold the button A for 3 seconds** to clear the Trip B recordings.

●In the mileage maintenance screen, **press button A once** to return to total mileage screen.

●Mileage maintenance will count down from setting value, when it reaches 0, the screen will blink to indicate mileage reached.



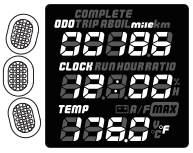
●**Hold button A for 8 seconds** to clear the mileage maintenance recordings.

○At 0 seconds, start holding the button.

○At 3 seconds, mileage display will begin blinking.

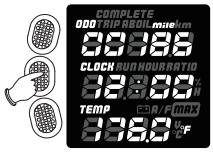
○Between 4-7 seconds, if the button is released, the proccess will end.

○After 8 seconds, the mileage maintenance record is cleared.



●Total mileage screen.

3-5 Button B (ENTER) function instructions



●In the clock screen, **press button B once** to switch to Run time.

●**Hold the button B for 3 seconds** to enter into the setting screen.

3-5-1 Clock settings

●**EX：To set hour to 10.**

●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Cursor moving order is：
Digit in ten minutes > Digit in minutes

NOTE Setting range : 1 ~ 12 (12H).

●Example：Set time settings from 12 to 10.

●**Press button B once** to enter time into the (minutes) settings screen.

●**Example：You want to change the minutes to 30.**

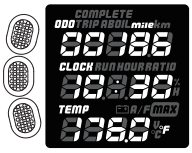
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Setting range： 00 ~ 59 minutes.

●**EX : Set time settings from 0 to 30.**

●**Press button B once** to go back to the clock screen.



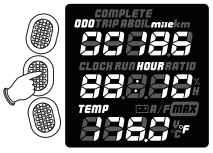
●Clock screen.

●In the Runtime screen, **press button B once** to enter into the hour meter.

NOTE Time would start accumulating when the speed per hour is over 5 km/h.

Runtime	<100 hour	100 ~ 9,999 hour
Display range	00:00 ~ 99:59	100 ~ 9,999 H
Icon example		

●**Hold button A for 3 seconds** to clear the Runtime screen.

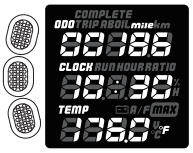


●In the hour meter, **press button B once** to return to time screen.

NOTE Time will start accumulating when the running speed is over 1,000 RPM.

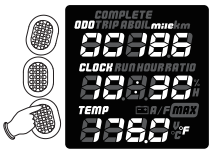
Hour meter	<100 hour	100 ~ 9,999 hour
Display range	00:00 ~ 99:59	100 ~ 9,999 H
Icon example		

●**Hold button A for 3 seconds** to clear the Hour meter screen.



●Clock screen.

3-6 Button C (DOWN) Function instructions



●In the engine temperature screen, **press button C once** to switch to Air-fuel ratio screen.

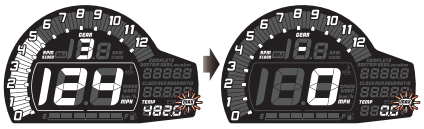
NOTE Enter the voltage screen when the AFR function is set to off.

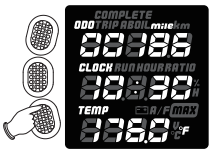
●In the Air-fuel ratio screen, **press button C once** to switch to the Voltage screen.

●In the Voltage screen, **press button C once** to switch to the MAX screen.

●In the MAX screen, **press button C once** to return to the engine temperature screen.

●**Hold button C for 3 seconds** to clear the MAX screen.

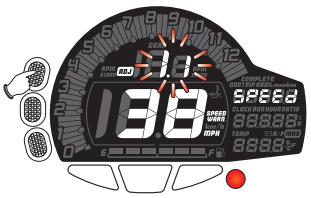




●Engine temperature screen.

4 The settings screen description

●Setting the main screen



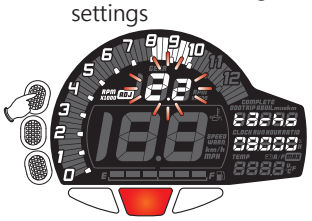
●1.1 _Overspeed warning

●1.2 _Maintenance mileage settings

●1.3 _Sensor point setting

●1.4 _Wheel circumference

●2.1 _First-stage RPM warning value



●2.2 _Second-stage warning for RPM

●2.3 _Third-stage warning for RPM

●2.4 _RPM

●2.5 _Type of RPM signals

●2.6 _RPM stroke piston

●3.1 _Type of thermal sensor

●3.2 _Over temperature warning

●3.3 _Temperature unit

●4.1 _Backlight brightness

●4.2 _ABS

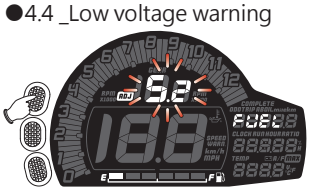
●4.3 _Air-fuel ratio

●4.4 _Low voltage warning

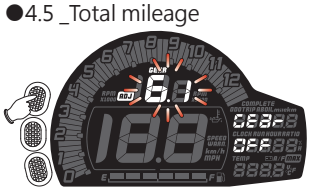
●4.5 _Total mileage

●4.6 _Mileage unit

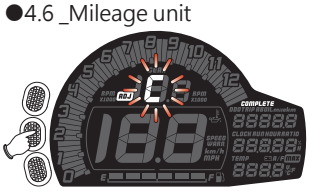
●5.1 _Fuel resistance setting



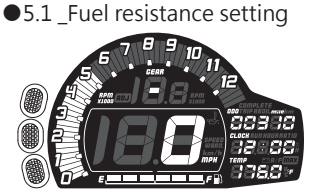
●5.2 _Low fuel warning



●6.1 _Gear



●Exit settings



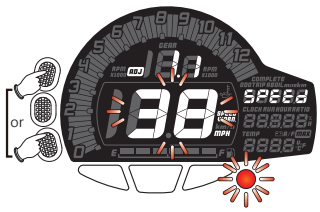
●Main screen

NOTE Press button A (to add) or press button C (to deduct) to set the item.

NOTE The diagrams are examples of button A.

4-1 Overspeed warning

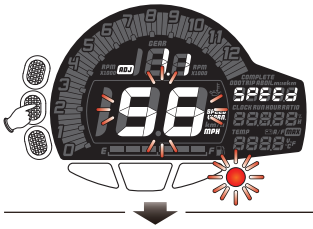
●**Press button B** to enter overspeed warning setting screen.



●**EX：To set overspeed warning value to 56 MPH.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Setting range :
19 ~ 124 MPH (30 ~ 199 km/h).
Setting unit : 1 MPH (km/h).
Default value : 38 MPH (60 km/h).



●Example：Set the overspeed warning value from 38 MPH to 56 MPH.
●**Press button B once** to return to overspeed warning screen.

●Overspeed warning setting screen.
●**Press button A once** to enter next setting.

4-2 Maintenance mileage settings

●**Press button B** to enter Maintenance mileage settings screen.

●**EX：To set Maintenance mileage settings value to 900 mile.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Setting range : 300 ~ 10,000 mile (500 ~ 16,000 km).
Setting unit : 100 mile (km).
Default value : 300 mile.

●Example：Set the Maintenance mileage value from 300 mile to 900 mile.
●**Press button B once** to return to Maintenance mileage screen.

●Maintenance mileage setting screen.
●**Press button A once** to enter next setting.

4-3 Sensor point settings

●**Press button B** to enter the Sensor point settings screen.

●**EX：To set the Sensor point value to 6.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Setting range : 1 ~ 40.
Setting unit : 1.
Default value : 1.

●Example：Set the Sensor point settings value from 1 to 6.
●**Press button B once** to return to the sensor point settings screen.

●Sensor point setting screen.
●**Press button A once** to enter next setting.

4-4 Tire diameter settings

●**Press button B** to enter Tire circumference settings screen.

⚠ CAUTION!

●Measure the tire circumference (the tire you will install the sensor on) and confirm the number of magnet sensor points (You can install the magnet into the disc screw or the sprocket screw.)

●The speed displayed on the meter will be affected by the setting, make sure the setting number is correct before entering the setting.

⚠ Reset this function upon changing the tire size.

●**EX：To set Tire circumference setting value to 1,300 mm.**

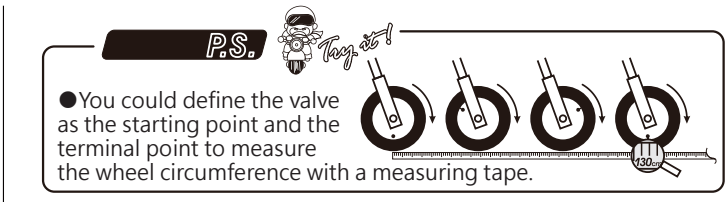
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Setting range : 300 ~ 2,500 mm.
Setting unit : 1 mm.
Default value : 1,535 mm.

P.S. Try it!

●You could define the valve as the starting point and the terminal point to measure the wheel circumference with a measuring tape.



●**Press button A (to add) or button C (to deduct) to choose the setting number.**

●Example：Set the tire circumference value from 1,535 to 1,300.

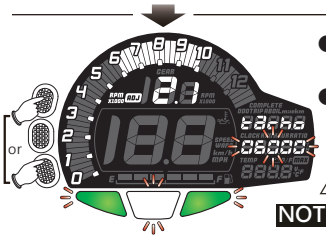
●**Press button B once** to return to Maintenance mileage screen.

●Tire circumference setting screen.

●**Press button A once** to enter next setting.

4-5 First-stage RPM warning value

●**Press button B** to enter First-stage RPM warning value screen.

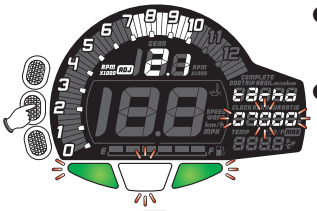


●**EX：To set First-stage RPM warning value to 7,000 RPM.**

●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE When the scope of RPM is 0 ~ 10,000 RPM.
Setting range：3,000 ~ 9,750 RPM
When the scope of RPM is 0 ~ 13,000 RPM.
Setting range：3,000 ~ 12,750 RPM
Default value : 6,000 RPM.



●Example：Set the First-stage RPM warning value from 6,000 RPM to 7,000 RPM.

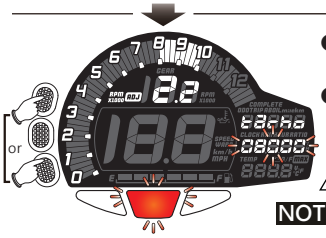
●**Press button B once** to return to First-stage RPM warning screen screen.

●First-stage RPM warning value setting screen.

●**Press button A once** to enter next setting.

4-6 Second-stage warning for RPM

●**Press button B** to enter Second-stage warning for RPM value screen.

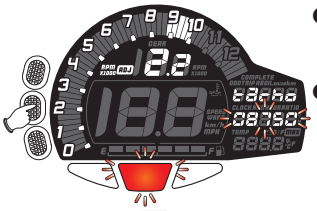


●**EX：To set Second-stage warning for RPM to 8,700 RPM.**

●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE When the scope of RPM is 0 ~ 10,000 RPM.
Setting range：3,250 ~ 10,000 RPM
When the scope of RPM is 0 ~ 13,000 RPM.
Setting range：3,250 ~ 13,000 RPM
Setting unit : 250 RPM.
Default value : 8,000 RPM.



●Example：Set the Second-stage warning for RPM value from 8,000 RPM to 8,750 RPM.

●**Press button B once** to return to Second-stage warning for RPM screen.

●Second-stage warning for RPM value setting screen.

●**Press button A once** to enter next setting.

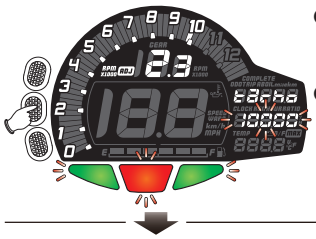
4-7 Third-stage warning for RPM

●**Press button B** to enter Third-stage warning for RPM value screen.

●**EX：To set Third-stage warning for RPM to 10,000 RPM.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE When the scope of RPM is 0 ~ 10,000 RPM.
Setting range：3,250 ~ 10,000 RPM
When the scope of RPM is 0 ~ 13,000 RPM.
Setting range：3,250 ~ 13,000 RPM
Setting unit：250 RPM.
Default value：9,000 RPM.



●Example：Set the Third-stage warning for RPM value from 9,000 RPM to 10,000 RPM.
●**Press button B once** to return to Third-stage warning for RPM screen.

●Third-stage warning for RPM value setting screen.
●**Press button A once** to enter next setting.

4-8 RPM

●**Press button B** to enter RPM settings screen.

●**To set the RPM range to 0 ~ 13,000 RPM.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Setting range：0 ~ 10,000 RPM、0 ~ 13,000 RPM。
Default value：0 ~ 10,000 RPM。

●Example：Set the RPM value from 0 ~ 10,000 RPM to 0 ~ 13,000 RPM.
●**Press button B once** to return to RPM screen.

●RPM setting screen.
●**Press button A once** to enter next setting.

4-9 Type of RPM signals

●**Press button B** to enter Type of RPM signals screen.

●**EX：To set Type of RPM signal to negative(-).**
●**Press button A (to add) or button C (to deduct) to choose the setting.**

⚠ Now the setting value will blink.

NOTE Settings range：POS(+)、NEG(-).
Default value：POS(+).

●Example：Set the Type of RPM signals value from POS(+) to NEGA(-).
●**Press button B once** to return to RPM screen.

●Type of RPM signals value setting screen.
●**Press button A once** to enter next setting.

4-10 RPM pulse

●**Press button B** to enter RPM stroke piston value screen.

●**EX. You want to connect the RPM signal wire to the pick up signal and there are 12 flywheel signals per turn.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : P-0.5, P-1, P-1.5, P-2, P-2.5, P-3, P-4, P-5, P-6, P-9, P-10, P-11, P-12, P-17, P-18, P-23, P-24, P-34, P-36.
Default value : P-2.

●Example : Set the RPM pulse value from 2 to 12.
●**Press button B once** to return to Running speed stroke piston screen.

●RPM pulse setting screen.
●**Press button A once** to enter next setting.

4-11 Type of thermal sensor

●**Press button B** to enter Type of thermal sensor value screen.

⚠ CAUTION!
●Methods for temperature detection are divided into OFF, cylinder head temperature, and temperature sensor.
●For the temperature sensor function, select P-25 regarding the setting value.

●**EX : For HONDA MSX, the setting value as per the reference is P-6.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.
⚠ If the setting is OFF, enter the 4-14 backlight brightness directly.

NOTE Settings range : OFF, P-1, P-2, P-3, P-4, P-5, P-6, P-1A, P-2A, P-5A, P-6A, P-250.
Default value : P-6.

NOTE The temperature for the cylinder head would only be displayed when the RPM is > 0RPM.

Model category reference

Vehicle brand	Vehicle type	Default value
HONDA	MSX	P-6

Model category reference - FOR aRacer ECU

Vehicle brand	Vehicle type	Default value
HONDA	MSX	P-6A

●Example : Set the Type of thermal sensor value from P-6 to P-5.
●**Press button B once** to return to Type of thermal sensor screen.

●Type of thermal sensor setting screen.
●**Press button A once** to enter next setting.

4-12 Warning indicator operation settings - overheat

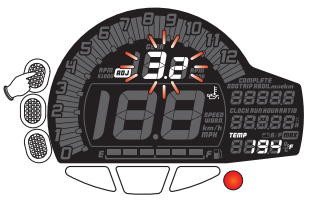
●**Press button B** to enter overheat warning setting value screen.

●**EX : To set overheat warning value to 194 °F.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : 122 ~ 356 °F (50 °C ~ 180 °C).
Setting unit : 3 °F(5 °C).
Default value : 212 °F (100 °C).

●Example : Set the Warning indicator operation settings - overheat from 212 °F to 194 °F.
●**Press button B once** to return to Warning indicator operation settings - overheat screen.



●Warning indicator operation settings - overheat setting screen.
●**Press button A once** to enter next setting.

4-13 Speed, temperature unit settings

●**Press button B** to enter Speed, temperature unit settings screen.

●**EX：To set temperature unit settings value to °C.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : °F ,°C.
Default value : °F.

●Example：Set the temperature unit settings from °F to °C.
●**Press button B once** to return to Warning indicator operation settings - overheat screen.

●Speed, temperature unit settings screen.
●**Press button A once** to enter next setting.

4-14 Backlight brightness settings

●**Press button B** to enter Backlight brightness settings value screen.

●**EX：To set Backlight brightness settings value to 3-5.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : 1-5 ~ 5-5.
Default value : 5-5.

●Example：Set the Backlight brightness settings from 5-5 to 3-5.
●**Press button B once** to return to Backlight brightness settings screen.

●Backlight brightness settings screen.
●**Press button A once** to enter next setting.

4-15 ABS settings

●**Press button B** to enter ABS settings screen.

●**EX：To set ABS to ON.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : ON、OFF.
Default value : ON.

●Example：Set the ABS settings from OFF to ON.
●**Press button B once** to return to ABS settings screen.

●ABS settings screen.
●**Press button A once** to enter next setting.

4-16 AFR settings

●**Press button B** to enter air-fuel ratio settings screen.

●**EX：To set air-fuel ratio to ON.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : ON、OFF.
Default value : OFF.

NOTE This selected function, will only work with the air-fuel ratio sensor.

●Example：Set the air-fuel ratio settings from OFF to ON.
●**Press button B once** to return to AFR settings screen.

●Air-fuel ratio settings screen.
●**Press button A once** to enter next setting.

4-17 Warning indicator operation settings - Low Voltage

●**Press button B** to enter the low voltage warning setting screen.

●**EX：To set low voltage warning to 10.5 V.**
●**Press button B** to choose the setting number.

⚠ Now the setting value will blink.

NOTE Settings range : 8.0 ~ 13.0 V.
Setting unit : 0.1 V.
Default value : 11.5 V.

●**Press button A (to add) or button C (to deduct) to choose the setting number.**

●Example：Set the low voltage warning value from 11.5 V to 10.0 V.
●**Press button B once** to return to warning indicator settings screen.

●Warning indicator resistance settings screen.
●**Press button A once** to enter next setting.

4-18 Total mileage settings

●**Press button B** to enter Total mileage settings screen.

●**EX : To set external total mileage value to 31,000 mile.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ User unable to adjust and clear internal ODO.

⚠ Now the setting value will blink.

NOTE Settings range : 0 ~ 99,999 mile (km)

●**Press button B** to choose the setting number.

●Example：Set the external ODO from 0 to 31,000 mile.
●**Press button B once** to return to Total mileage settings screen.

●Total mileage settings screen.
●**Press button A once** to enter next setting.

4-19 Mileage unit settings

●**Press button B** to enter Mileage unit settings screen.

●**EX：To set Mileage unit to km/h.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE Settings range : mile(MPH), km(km/h).
Default value : mile(MPH).

●Example：Set the Mileage unit settings from mile to km/h.
●**Press button B once** to return to Mileage unit settings screen.

●Mileage unit settings screen.
●**Press button A once** to enter next setting.

4-20 Fuel gauge resistance settings

●**Press button B** to enter Fuel gauge resistance settings screen.

●**EX：For HONDA MSX 125, the setting value as per the reference is 270 Ω.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**
⚠ Now the setting value will blink.

NOTE The fuel gauge resistance setting range：OFF, 100Ω, 250Ω, 270Ω, 390Ω, 510Ω, 1200Ω, fuel switch, CUSt.
Default value : 270 Ω.

NOTE In the absence of the fuel meter wirings, the fuel meter will not be displayed.

NOTE Custome fuel level resistance:
1)Manual - Check 4-20-1 Fuel Level Resistance Manual Setting Instructions.
2)Auto - Check 4-20-2 Fuel Level Resistance Auto Setting Instructions.
3)Where the setting is OFF, directly enter into the 4-22 gear setting.

Vehicle brand	Type	Default value
HONDA	MSX 125	270 Ω

●Example：Set the Fuel gauge resistance settings to 270 Ω.
●**Press button B once** to return to Fuel gauge resistance settings screen.

●Fuel gauge resistance settings screen.
●**Press button A once** to enter next setting.

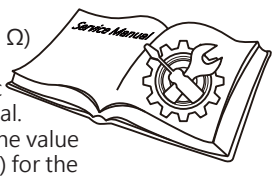
4-20-1 Manual operating settings

●**EX：To set the resistance of the fuel meter (Ω) to CUSt.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**
⚠ Now the setting value will blink.
NOTE Default value : 100 Ω

●Example：Set the resistance of the fuel meter (Ω) on the main screen from 100 to CUSt.
●Press button B two times to enter the manual operating setting screen.
●**Example：For YAMAHA FORCE 155, according to the service manual, the fuel tank resistance from low to high is 267 - 273 Ω (the lowest) and 10 - 14 Ω (the highest).So enter the setting value as 14 Ω .**

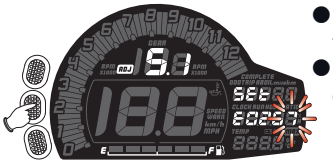
P.S. Try it!

●You may refer to the lowest (267 ~ 273 Ω) and the highest (10 ~ 14 Ω) resistance of fuel for the fuel sensor in the Electric Component section in the repair manual.
●Generally, the setting value would be the value closest to the lowest value (267 ~ 14 Ω) for the lowest and highest fuel resistance.



●**EX：To set the lowest fuel resistance to 267 Ω.**
●**Press button B** to move the cursor to the setting range.
⚠ Now the setting value will blink.

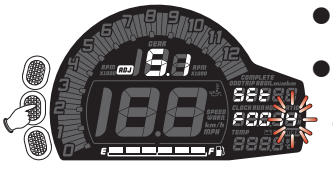
●**Press button A (to add) or button C (to deduct) to choose the setting number.**



●Example：Set the lowest fuel resistance from 0 to 267 Ω.
●**Press button B for three times** to enter the setting screen for the highest fuel resistance.

●**EX：To set the highest fuel resistance to 14 Ω.**
●**Press button B** to choose the setting number.
⚠ Now the setting value will blink.

●**Press button A (to add) or button C (to deduct) to choose the setting number.**



●Example：Set the highest fuel resistance from 0 to 14 Ω.
●**Press button B for two times** to return to the screen for the resistance of the fuel meter (Ω).

●Fuel gauge resistance settings screen.
●**Press button A once** to enter next setting.

4-20-2 Automatic detection operating settings

●**EX：To set the resistance of the fuel meter (Ω) to CUSt.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**
⚠ Now the setting value will blink.

NOTE Default value : 100 Ω

●Example：Set the resistance of the fuel meter (Ω) on the main screen from 100 to CUSt.
●**Press button B** to enter the automatic detection screen.

P.S.

●The fuel float sensor in the lowest position.

The lowest position

●**Press button A or button C to detect the lowest fuel resistance.**

●Example：The automatic detected minimum fuel level is 267 Ω.
●**Press button B for five times** to enter the detection screen for the highest fuel resistance.

⚠ CAUTION!

●Before detection, ensure your current fuel level is in the highest position that you would like to have.
●Stop the vehicle for a few seconds to allow the fuel surface to become steady, then start the detection of the resistance.

P.S.

The highest position

●The fuel float sensor is in the highest position.

●**Press button A or button C to detect the highest fuel resistance.**

●Example：The highest oil revel automatically detected was 14 Ω.
●**Press button B for five times** to return to the screen for the resistance of the fuel meter (Ω).

●Fuel gauge resistance settings screen.
●**Press button A once** to enter next setting.

4-21 Low fuel warning settings

●**Press button B** to enter Low fuel warning settings screen.

●**EX：To set the low fuel level to 2 bars.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**
⚠ Now the setting value will blink.

NOTE Settings range : 0~3 bars, the fuel level symbol will blink as a warning when the fuel level is at the setting value or below.
Default value : 1 bars

●Example：Set the low fuel level from 1 to 2 bars.
●**Press button B once** to return to Low fuel warning settings screen.

●Low fuel warning settings screen.
●**Press button A once** to enter next setting.

4-22 Gear learning settings

●**Press button B** to enter gear learning settings screen.

●**EX：To set the gear to gear-learning.**
●**Press button A (to add) or button C (to deduct) to choose the setting number.**

⚠ Now the setting value will blink.

NOTE If any changes happen to the tires circumference then the gear indicator will need to re-learn the gear positioning.

NOTE Settings range :
OFF、Gear-learning
Default value : Gear-learning

●Example：Set the Gear learning from off to Gear-learning.
●**Press button B** to enter the Gear-learning screen.

●Example：When the gauge displays LEArN, it will blink.
●**Press button A or button C** to start the gear learning.

NOTE Where gear-learning is not required, press button B to return to the main screen for gear-learning setting.

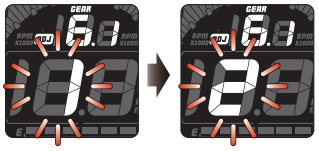
●Start riding when "GO" is flashing.

NOTE To abandon the gear-learning, short-press any button to return to the main screen for gear-learning setting.

P.S. Try it!

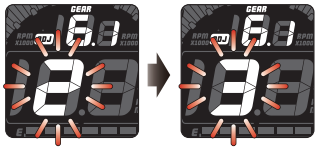
●During the gear learning, select a road that is wide and and relatively straight with little to no traffic lights for more accurate settings and traffic safety.

Step one



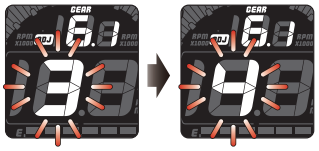
●When the 1st Gear is blinking, change the gear of the bike to 1st gear and keep riding the bike for few seconds. The setting is completed when the signal has detected the accurate 1st gear value, and the process will move on to the 2nd gear.

Step two



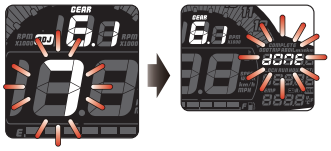
●When the 2nd Gear is blinking, change the gear of the bike to 2nd gear and keep riding the bike for few seconds. The setting is completed when the signal has detected the accurate 2nd gear value, and the process will move on to the 3rd gear.

Step three



●When the 3rd Gear is blinking, change the gear of the bike to 3rd gear and keep riding the bike for few seconds. The setting is completed when the signal has detected the accurate 3rd gear value, and the process will move on to the 4th gear.

Step four

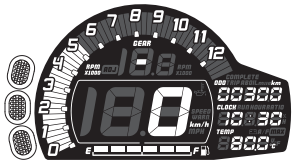


●If the highest gear for the bike is the 6th gear, when the gear learning model has reached the 7th gear and it is unable to detect the accurate gear after pending for few seconds, it will end the learning process and return to the setting screen.

●Gear learning settings screen.
●**Press button A once** to enter next setting.

4-23 Exit settings

●Once confirmed, to leave the screen, **press button B** to return to the main screen.



●Main screen.

5 Trouble shooting

The following situations do not indicate malfunction of the meter. Check the following points before contacting us.

Trouble	Check item	Trouble	Check item
The meter doesn't work when power is on.	**●The power isn't supplied to the meter. →Make sure the wiring is connected. The wiring and fuse are not broken. →The battery is too old to supply needed power (DC 12 V).**	**Fuel meter doesn't display or displays error.**	**●May be due to poor connection of wiring. →Check whether the wires are disconnected or have fallen off. ●May be wrong setting. →Check the settings menu to confirm whether the setting for fuel level is correct.**
The meter shows wrong information.	●Check the voltage of your battery, and make sure the voltage is over DC 12 V.		
Speed doesn't appear or appears incorrectly.	**●May be due to poor connection of wiring. →Check whether the wires are disconnected or have fallen off. ●May be wrong settings. →Check the settings menu to confirm whether the setting for speed per hour is correct.**	The clock is incorrect.	**●May be wrong setting. →Check the setting list to see whether the setting for clock is correct. ●Wirings for the connector may be poorly installed. →Confirm whether the wires in the connector is properly installed and whether the wires are connected.**
Tachometer doesn't appear or appears incorrectly.	●May be due to poor connection of wiring. →Check whether the wires are disconnected or have fallen off. ●May be due to failure to change to R type spark plug. ●May be wrong setting. →Check the settings menu to confirm whether the setting for RPM is correct.	**Voltage doesn't appear or appears incorrectly.**	**●Wires in the connector may be poorly installed. →Confirm whether the wires in the connector is properly installed and whether the wires are connected.**
Thermometer doesn't appear or appears incorrectly.	**●May be due to poor connection of wiring. →Check whether the wires are disconnected or have fallen off. ●May be wrong setting. →Check the settings menu to confirm whether the setting for temperature is correct.**	A / F does not display or displays error.	●May be due to poor connection of wiring. →Check whether the wires are disconnected or have fallen off. ●May be due to the wrong settings of AFR. →Check the settings menu to confirm whether the setting is correct.

※If you can't resolve the problems according to the steps above, contact our technical department.