

OPMID OPM SPEEDOMETER

ITEM M1201/M1202/M1203

- # M1201 JIS STD cable type speed sensor set
- # M1202 Genuine speed sensor usable type set
- # M1203 Magnetic proximity sensor set



- If you do not have basic skills and knowledge of motorcycle maintenance, please do not install.
- When installing, please proceed with manufacturer service manual for each model.
- Do not improperly install, modify, or change specifications.
- If any abnormality is found, stop traveling immediately and check.
- Specifications are subject to change without notice.

The warranty period for this product is 6 months. Please keep the receipt or invoice with the date of purchase together with this book. If there is a quality defect due to manufacturing reasons within the warranty period, please contact your dealer. We will repair or replace the product after confirming the defect. However, we will not be liable for any damage (physical damage, personal damage) other than repair or replacement of this product. Please note.

NOTE

Release screen lock



Hold for 3 sec

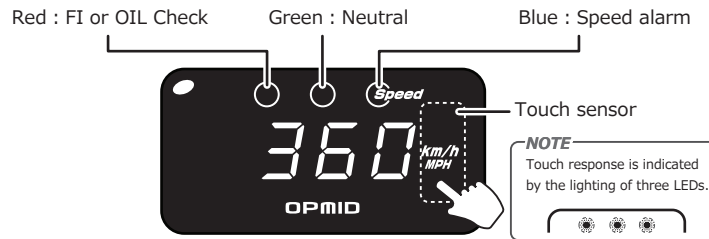
To prevent malfunction caused by heavy rain, this product always keeps screen lock. Touch for 3 seconds to release the lock. It will be locked again after 5 minutes of no operation.

Features

A compact speedometer equipped with basic functions of speed, odo, trip, voltmeter, maximum speed record, and 3 LED indicators (speed warning light, neutral lamp, FI or 2-cycle oil warning).

- Speed : ~ 360km/h (~200MPH)
- Odo : ~9999km (~9999mile)
- Trip : ~999.9km (~999.9mile)
- Volt meter : 8V ~ 18V
- Display : 7 Seg x 4 Green LED
- With Touch sensor (Right front)
- Size : W57mm x H29mm x D10mm
- Waterproof cord : IP66
- Operating voltage : DC10~16V

* Even if it is connected to AC12V, it will not break, but it will not operate properly when the frequency is low (low RPM)



NOTE
Touch response is indicated by the lighting of three LEDs.

Operating procedure

Key switch ON

Startup screen OPOP scrolls
after 4 sec

Enter Initial setting to next page

Startup voltmeter
after 10 sec
Necessary to release screen lock.

Speed ~ 360km/h (~200MPH)
Short

Setting of speed alarm

After 10 seconds have elapsed (or touched), it switches to speedometer mode.

Save when No operation for 10 sec

Increase +5 Short

Reduce -5 Short

Changing value

Switching of Increase or Decrease

Odo ~ 9999km (~9999MPH)
Short

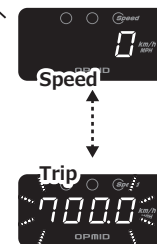
Trip ~ 999.9km (~999.9MPH)
Short

Erase the record

Voltmeter 8.0V ~ 18.0V
Short

Max. speed
Short

Erase the record

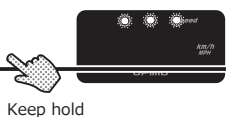


When stopping for 5 seconds, it automatically switches to trip (blinking display) When restart running (or touched), return to speedometer.

Startup screen

Touch the startup screen (OPOP scrolls). Release the finger when ADJ display appears.

Key switch ON



Enter Initial setting mode

Initial setting

Adjusting Speedometer



300~2500mm
▷Tire circumference length



1~99
▷Signal points



Changing value

To next

Short

M1201

NOTE

M1201 JIS STD cable type speed sensor set Standard setting value Tire circumference length: **714 mm** signal points: **6**

● Japan's motorcycle meter is adjusted according to the gear ratio of the meter gear so that the meter cable becomes 1400 rpm when it is 60 km / h under the JIS standard. Converting this to the distance traveled per meter cable 1 rotation is 714 mm.

● If the circumferential length of the normal tire is 1300 mm and this diameter is increased to 1500 mm, the calculation formula is $[1500 \div 1300 \times 714 = 824]$ and the correction value is 824 mm.

M1202

NOTE

M1202 Genuine speed sensor usable type set There is no standard setting value. It is necessary to examine the tire circumference length and the number of signal points.

M1203

M1203 Magnetic proximity sensor set There is no standard setting value. It is necessary to examine the tire circumference length and the number of signal points.

● You can calculate the perimeter length by multiplying the diameter of the tire by the circumference ratio (3.1416).

● When the correct tire circumference length is 1000 mm, if you accidentally enter 1100 mm, the display speed will be 10% more.

● If the correct number of signals is 8 and you accidentally enter 4, the display speed will be doubled.

● Compared with GPS speed meters such as smartphones, OPM mete also has a function that allows fine adjustment quickly. Next page →

Adjusting Odometer



Short



0000~9999km(mile)
▷Mileage



Changing value

To next

NOTE

Odometer can be changed any number of times.
Please be careful not to change it by mistake.

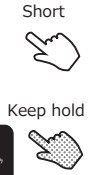
Adjusting unit



Short



km/h or MPH
▷Unit of speed



Changing value

To next

NOTE

If the unit is wrong, a large error occurs in the display speed.
EX. 60km=37MPH

Complete adjustment



Short



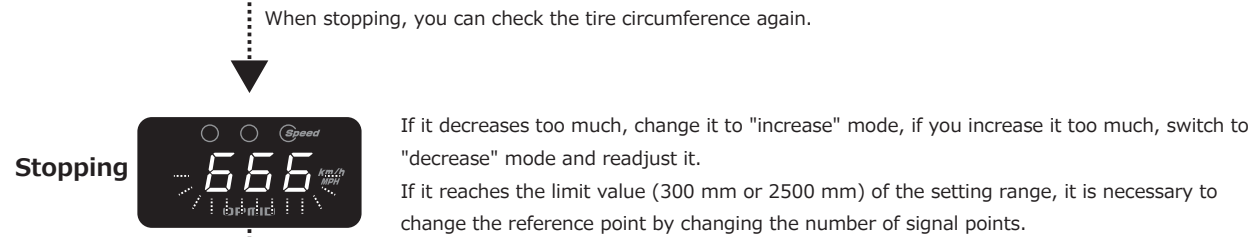
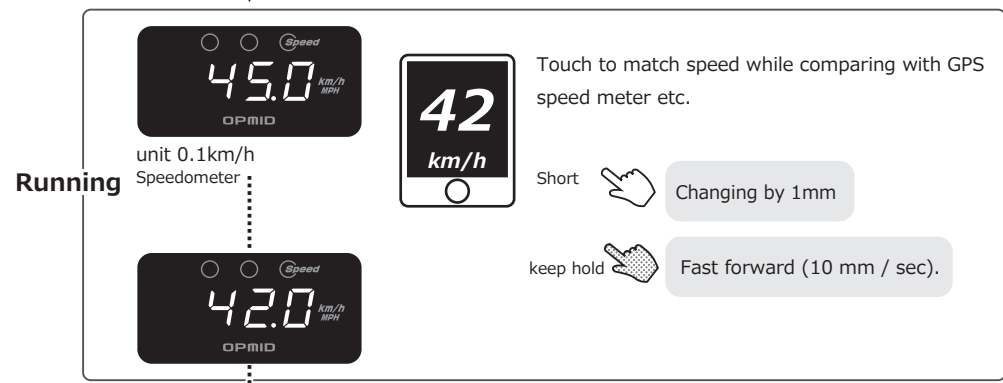
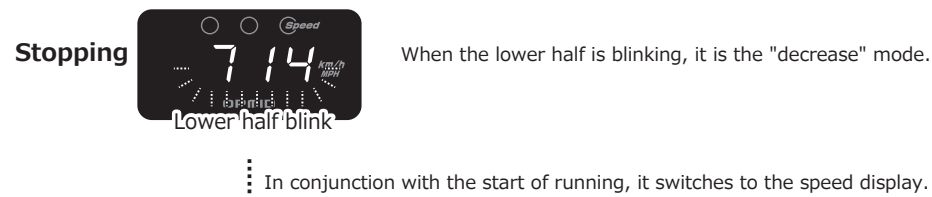
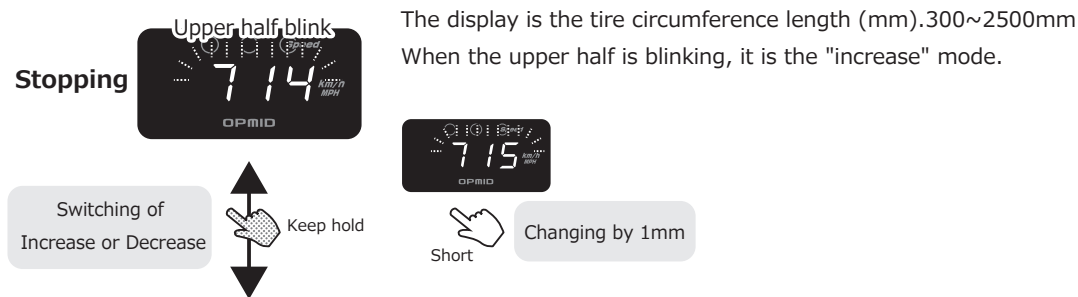
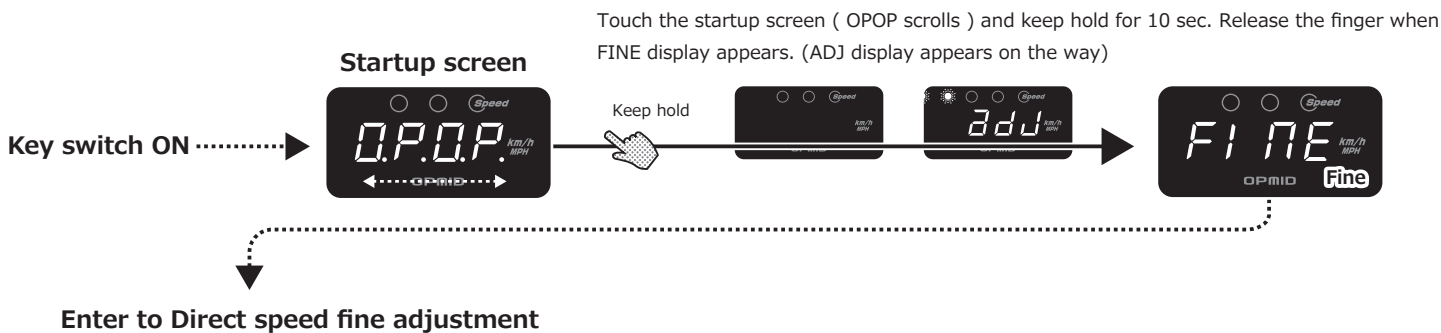
Complete

Return to "Adjusting Speedometer"

Direct speed fine adjustment

It is a function to adjust the speed while checking the speed difference with the GPS speed meter (Smartphone app etc.).

※Because it is very dangerous, please do not make adjustments while driving on public roads.

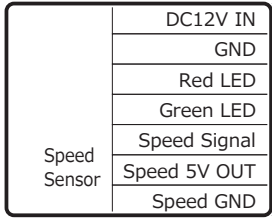


No operation for 3 min or Key switch OFF

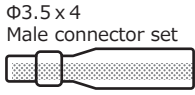
No operation for 3 minutes to finish the direct speed fine adjustment mode, or turn the key OFF / ON. (The setting value is saved even if it is turned off)

Complete

● OPM メーター OPM Meter



● Connector set



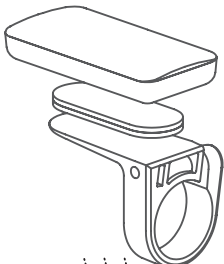
Φ3.5 x 4 Female connector set



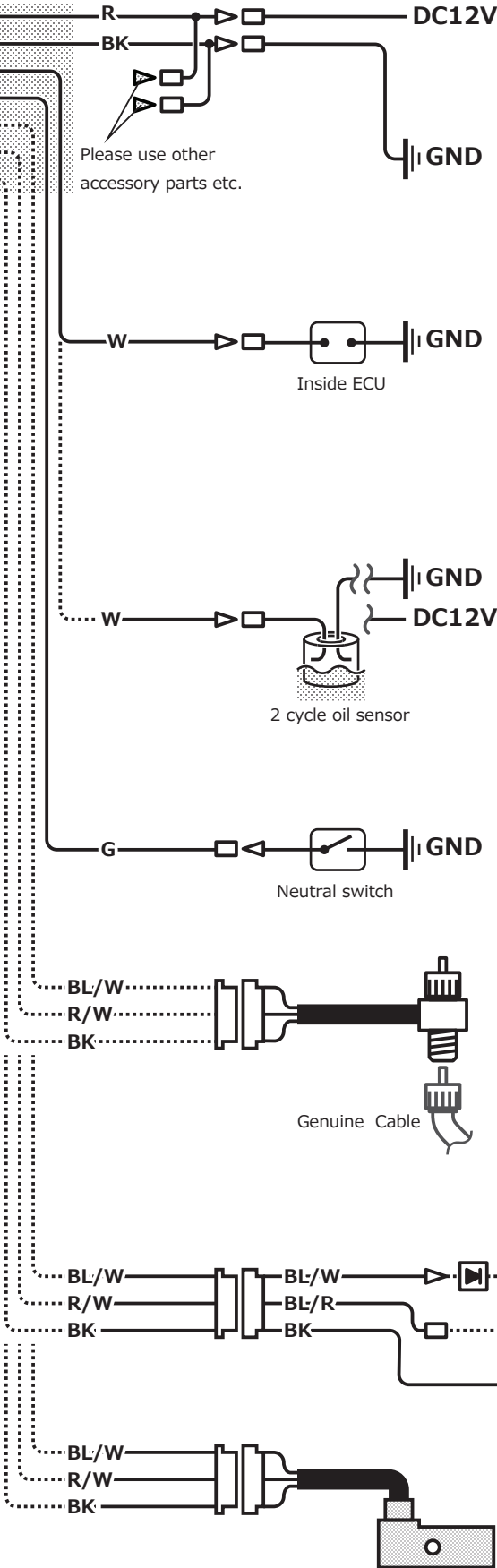
Connect using the supplied connector.

● Velcro

● 22mm 7/8" Handlebar Bracket



Please tilt more than 10 degrees to prevent water accumulation on the panel.



Key-ON power DC12V

● Connect to the cord to which DC12V is applied when main switch is turned on (engine not operating).

● Insert GND cord or connect directly to body ground.

Red Indicator

Can be used with FI check lamp or 2 cycle oil warning indicator.

● Connect to the cord which becomes GND connection at FI check.

If FI check lamp is not GND connection type, OPM meter indicator can not be used.

For example, a genuine meter that receives an information signal from an ECU controls a number of times of lighting.

● Connect to the cord which becomes GND or DC12V connection at the oil sensor of 2 cycle oil warns ON.

Oil sensors of many 2 cycle motorcycle are ground connection type when warning.

Becomes 12V connection is only a part (old Yamaha car etc.). OPM meter supports either positive connection or ground connection.

Green Indicator

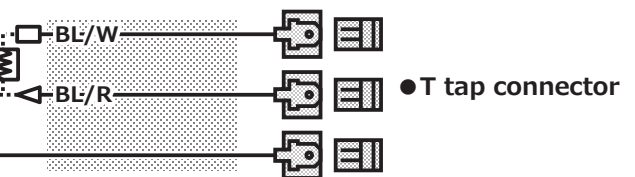
● Connect to the cord which becomes GND connection at neutral.

JIS STD cable type speed sensor set

M1201 Details are described on page 5.

Genuine speed sensor usable type set

M1202 Details are described on page 5 & 6.



Magnetic proximity sensor set

M1203 Details are described on page 6.

Reference of color

OPM METER	Red	Black	White	Green
	Key-ON power DC12V	GND	2st-Oil warning	Neutral
YAMAHA	R/ W · BR	BK · BK/ W	BK/ R · GY	LB
HONDA	BK · BK/ BR · P/ BL	G	G/R	LG/R
SUZUKI	O/ G	BK/ W	BL/W	BL/ BK
KAWASAKI	BR/ W	BK/ Y	BK/R	LG

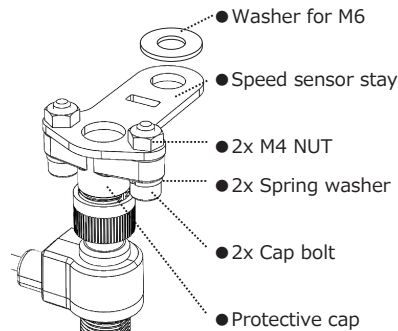
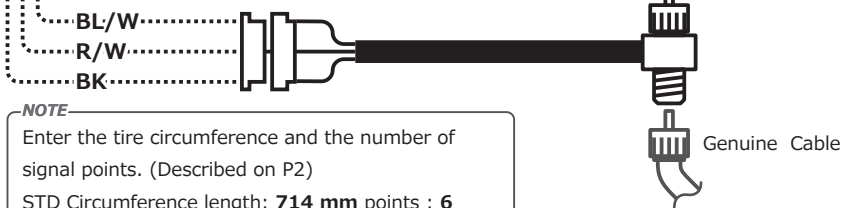
- BK :Black
- BR :Brown
- BL :Blue
- LB :Light Blue
- G :Green
- GY :Gray
- LG :Light Green
- O :Orange
- R :Red
- W :White
- Y :Yellow

※Reference wiring colors are not necessarily compatible with all motorcycles.

Since the color of the code may differ depending on the model and year, please check with the service manual issued by the manufacturer.

M1201 This description is for #M1201.

- Insert included speed sensor between genuine meter and cable.
- When not using genuine meter, fix it using protective cap.

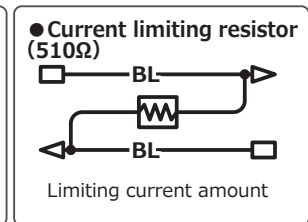
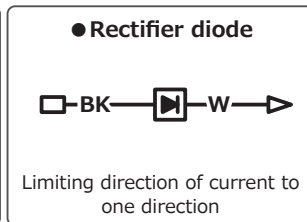
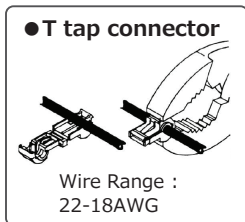


Genuine sensor usable type set

M1202 This description is for #M1202.

It is a method of using electric type genuine speedometer.
If OPM meter can not read the signal from genuine speedometer, Please use a commercially available proximity sensor.

- OMRON proximity sensor (NPN)
- # E2S - W23 (Upper detection) # E2S - Q23 (Side detection)
- DATONA speed sensor # 90666 (top detection)



Reference of color () is the code color of sensor body or around connecting coupler of sensor.

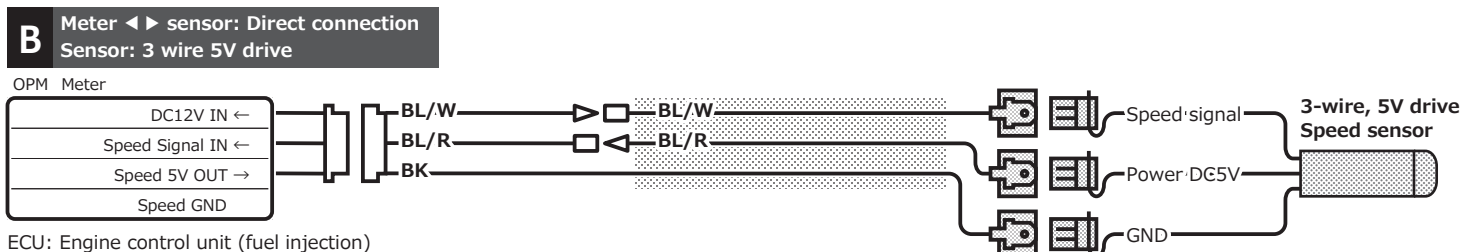
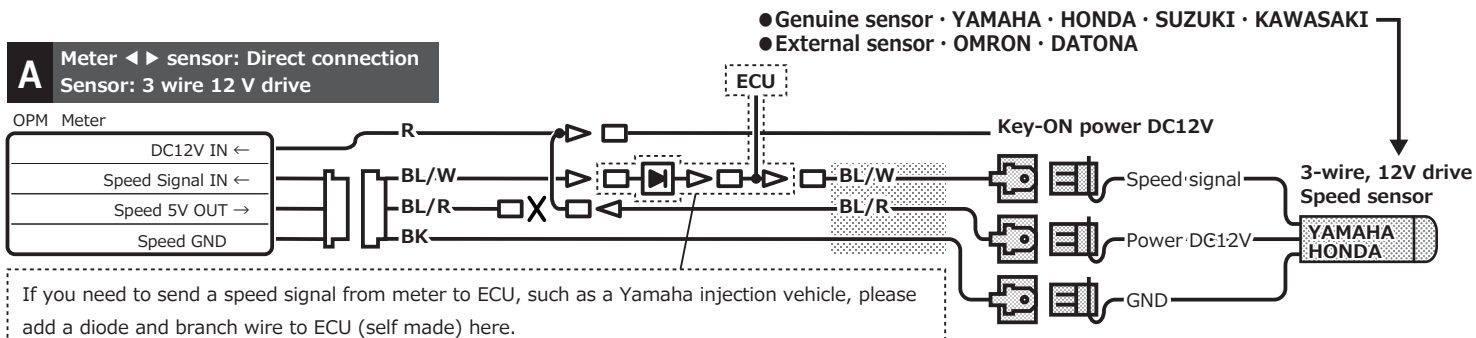
OPM METER	Blue/ White	Red	Black
	Speed signal	Key-ON power DC12V	GND
YAMAHA	P · W / Y (W)	R / W · BR (O / R · R)	BK · BK / W
HONDA	P / G (W / R)	BK · BK / BR · P / BL (P · R / BK)	G
SUZUKI	P	O / G	BK / W
KAWASAKI	P · P / BL · G / R (W)	BR / W (R)	BK / Y (BK)
OMRON / DATONA	BK	BR	BL

- BK :Black
- BL :Blue
- BR :Brown
- G :Green
- O :Orange
- P :Pink
- R :Red
- W :White
- Y :Yellow

※Reference wiring colors are not necessarily compatible with all motorcycles. Since the color of the code may differ depending on the model and year, please check with the service manual issued by the manufacturer.

Using 3-wire type speed sensor (Genuine) directly connected

- It is a method to connect directly to speedometer and 3 wire type speed sensor. (Motorcycle whose speed sensor does not operate when genuine meter is removed)
- The speed sensor generally has 12V drive, 5V drive, the connection method is different depending on this voltage. Figure A is 12 V and Figure B is 5 V.
- Because most motorcycle makers' original speed sensors are driven by 12V, connect them referring to figure A (also made by DATONA made by OMRON).



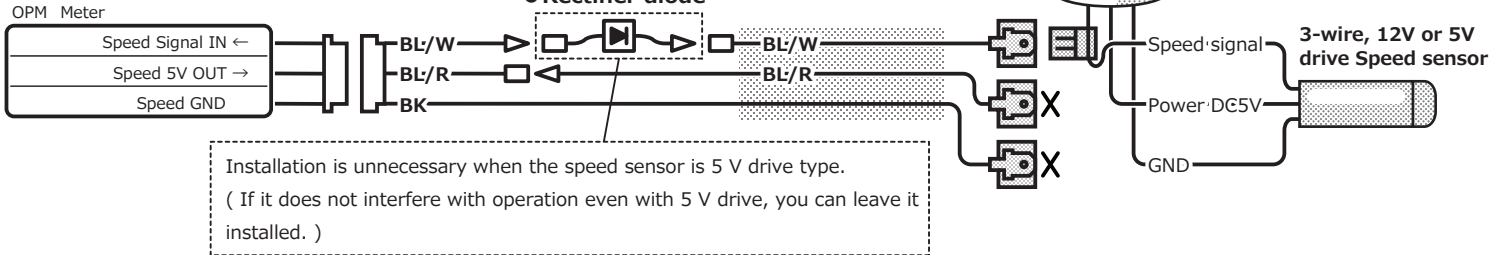
Continue to the next page

M1202 Continuation of previous page

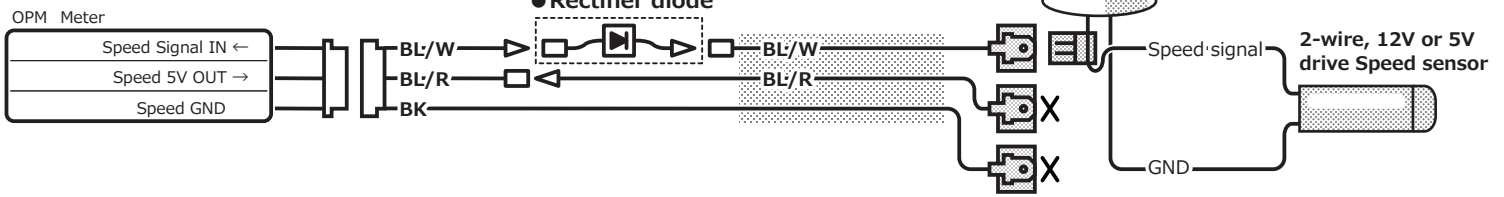
Case where ECU is driving speed sensor, or Genuine speedometer is left

- This is a method to acquire the speed signal from the body harness with a motorcycle that the ECU controls the speed sensor. (Motorcycle in which the speed sensor operates even if the genuine meter is removed)
- Also, if you want to leave a genuine speedometer even in a motorcycle whose meter is controlling the speed sensor, please connect by this method.

C Meter ◀ ▶ sensor: Branch connection Sensor: 3 wire 12 V or 5 V drive



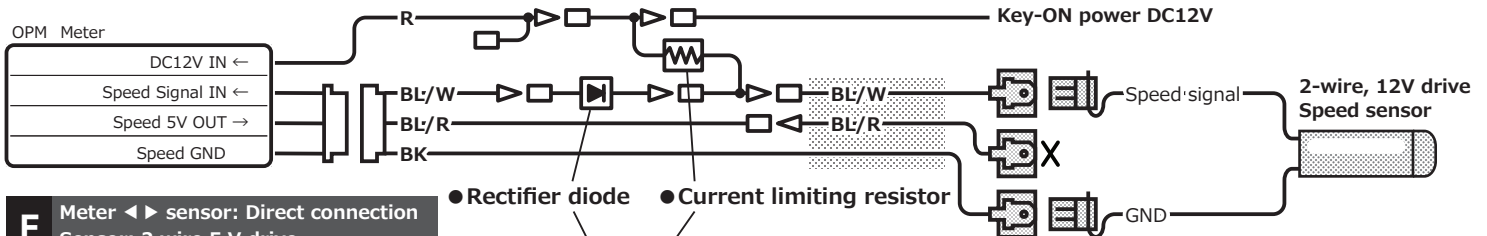
D Meter ◀ ▶ sensor: Branch connection Sensor: 2 wire 12 V or 5 V drive



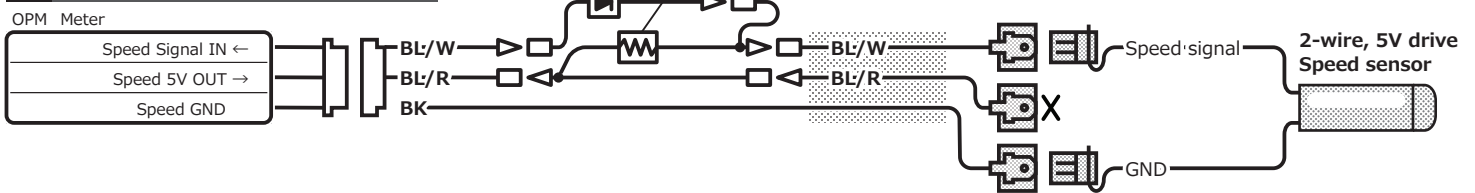
Using 2-wire type speed sensor directly connected

- It is a method to connect the meter and the 2-wire type speed sensor directly.
- The speed sensor generally has 12V drive, 5V drive, the connection method is different depending on this voltage. E diagram is 12 V, F diagram is 5 V.

E Meter ◀ ▶ sensor: Direct connection Sensor: 2 wire 12 V drive



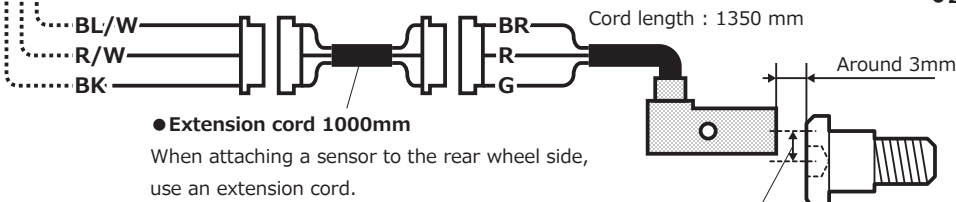
F Meter ◀ ▶ sensor: Direct connection Sensor: 2 wire 5 V drive



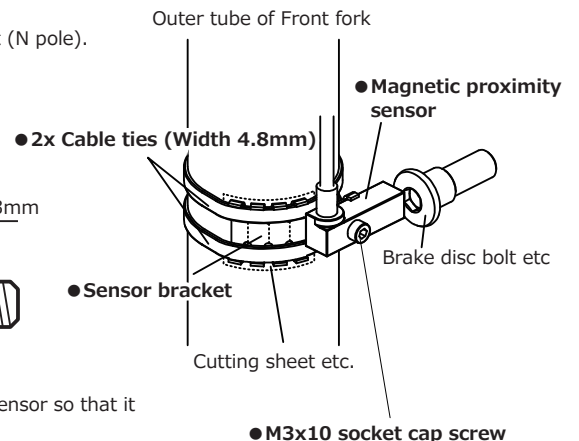
Magnetic proximity sensor set

M1203 This description is for #M1203.

- It is a sensor that reacts when the magnetic metal approaches. It also reacts to the magnet (N pole).
- Bend Sensor stay slightly according to outer tube, And secure it with Cable ties.



● **Extension cord 1000mm**
When attaching a sensor to the rear wheel side, use an extension cord.



NOTE
Enter the tire circumference and the number of signal points. (Described on P2)

Because it may react to the hole, Install the sensor so that it does not pass through the center of Bolt.