

Meter Bracket & Harness Kit(For Super Multi TFT Meter) Instruction manual

Product number 05-06-0029

Adaptation For motorcycle with DC12V battery.

Thank you very much for purchasing our products.

Thank you so you will comply with the following matters at the time of use. Before installation, please check your always kit contents. If there is a point of notice event, Please contact us the dealer of purchase.

◎ If the description, such as photos or illustration different with this part.

☆ Please read carefully before use ☆

◎ The use ignoring the instructions that are written in the manual, if the accident or damage has occurred, we can not assume any responsibility for compensation.

◎ This product installation and use, when a problem occurs to after market goods, guarantee other than this product, also can not assume any in any such matters.

◎ If it was the case or mounting that has been processed like a product, it will not be covered under warranty.

◎ It is not possible to inquire of the combination of other manufacturers.

◎ This product is the above-mentioned vehicle exclusive goods. Is not possible attached to the other vehicle. Please note.

◎ Do not use gasoline or thinner (or any solvent) cleaning this product. There is a risk of deterioration of rubber and plastic parts.

◎ If you have any questions, please contact your local Takegawa dealer.

◎ Product may have edges or protrusions. Be sure to wear working gloves.

(Please wear work gloves when working, even if a photo in this article show without work gloves.)

◎ This product is a standard bracket kit for installing the Super Multi TFT meter on applicable models. The sub-harness and small parts come with this kit are general purpose parts for DC12V models. (Caution: SP Takegawa mini regulator can not be used with this products)

◎ This product cannot be used to meters other than Super Multi TFT Meters.

◎ Product and programs are subject to change and improvement without notice.

Even with the same product number, the operation and screen may slightly differ depending on the production time.

◎ Caution: Some vehicles, when replacing the sprocket, the error code such as "ABS" may come on but it cannot be erased. (even speed display setting is changed)

~ feature ~

The Super Multi TFT meter can be attached to the DC12V models with a custom bracket and sub-wire included in the kit.

Using a rubber mount prevents vibration to the meter body.


This custom meter can be equipped a great many functions such as rotation speed, gear position, thermometer, battery voltage display, tire outer diameter correction, power test function, etc. (in addition to speed, odd / trip meter)

You can change the display and set the function with an external switch.

Since the meter comes with a stick temperature sensor, you can detect oil temperature with the adding SP Takegawa magnet drain bolt.

 Note: Super Multi TFT Meter

Do not use LED, H.I.D. headlights or fog lamps kit made by other than our companies at the same time. Some ballast / inverter (voltage converter) generates high-voltage noise that adversely affects the digital circuit, resulting in product failure or malfunction.

 Note: setting the gear position

To set the gear position, both the speed signal and the engine speed signal must be input to the Super Multi DN meter.

Therefore, it is require to learn gear display by chassis dynamo, free roller or actual driving.

We recommend learning gear display by chassis dynamo or free rollers for safety reasons.

Do not learn gear display on driving in the city because there are many traffic lights and traffic in the city.

When performing in actual driving, select a safe place with good visibility and check the surroundings.

 Caution When the handling of ignoring this display, property damage and human shows the assumption of what injury.


■ When performing the work, etc., be sure during the cold (when the engine and the muffler is cold). (It may cause burns.)

■ When performing the work, it should be made to prepare the tools for the job. (Breakage of parts, it may cause injury.)

■ Do the work must always specified torque using a torque wrench. (Damage of bolts and nuts, and cause of dropout.)

■ The product and the frame, might have edges or protrusions. When working, please wear work gloves to protect your hands. (It may cause injury.)

■ Be sure to each part inspection before operation, check the loosening of the threaded portion, be sure to securely tighten the specified torque if there is loose. (It may cause detachment of the parts.)

 Warning When the handling of ignoring this display people died, shows the contents of the serious injury possibility is assumed.

■ During operation, when an abnormality occurs, immediately stop the vehicle in a safe place, please stop running. (It may lead to an accident.)

■ When performing the work, do the work safely stabilize the vehicle in a horizontal location.

(There is a risk of injury vehicle collapsed while working.)

■ Inspection, maintenance, the instruction manual or, inspection methods such as service manuals, to protect the way, should be done correctly. (unsuitable inspection and maintenance, there is a risk that result to an accident.)

■ When carrying out the inspection and maintenance, etc., if found damaged parts, replace the damaged parts to avoid possible to reuse the parts. (There is a risk that lead to accidents Continued use.)

■ Plastic bags of product packaging, you can either be stored in a place that is out of reach of children, it should be discarded. (When the children or wearing, there is a risk of suffocation.)

■ Do not operate the switch while driving. (It may lead to an accident.)

■ On Monkey 125, changed from stock sprocket teeth, an error will occur in the display of the genuine speedometer. (Will show error code.)

Also, the ABS warning light will light up and ABS will not work. To fix these problems, a vehicle speed signal correction unit is required. We do not sell vehicle speed signal correction units.

◎ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.

◎ Please be informed that we shall be held harmless against any claim against us whatsoever arising out of use of the products in racing and the like.

◎ Keep this manual stored until this product is discarded.

SPECIAL PARTS
TAKEGAWA

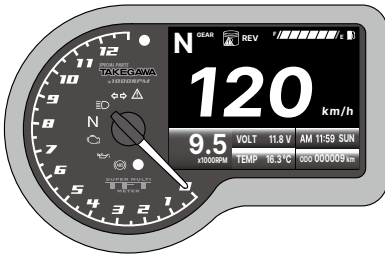
CONTACT Address : 3-5-16 Nishikiorihigashi Tondabayashi Osaka JAPAN

TEL: +81-721-25-1357 FAX: +81-721-24-5059 e-mail: english@takegawa.co.jp URL: http://www.takegawa.co.jp

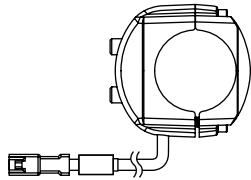
Please contact with your name and country name provided. (Only English please)

Product content

① Meter body



② External switch

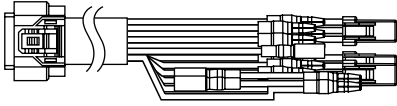


③ Rubber strip

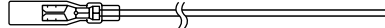


■ Super Multi TFT Meter			
Number	Product content	Quantity	Item Number
1	Meter body	1	—
2	External switch	1	00-05-0380
3	Rubber strip	1	

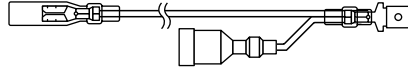
④ SUB harness



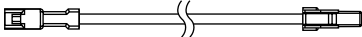
⑤ RPM code A (2000mm)



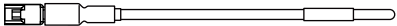
⑥ RPM code B (550mm)



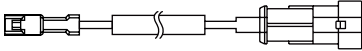
⑦ Temperature sensor connection cord (900mm)



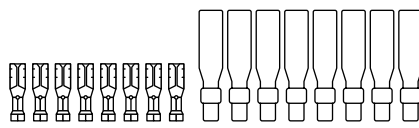
⑧ Stick temperature sensor (~ 250°C)



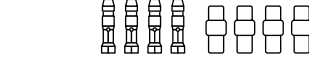
⑨ O₂ Sensor Connection cord (1200mm)



⑩ Female connector set (φ 3.5)



⑪ Male connector set (φ 3.5)



⑫ Heat shrink tube (φ 12x50)

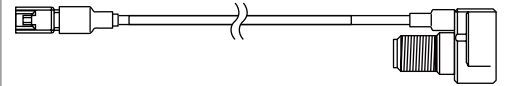


⑬ Cable tie 300mm



JIS cable type speed sensor set (05-06-0036)

⑭ JIS cable type speed sensor



⑮ Socket cap screw (M4x16)



⑰ Nut M4



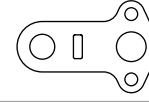
⑯ Spring washer for M4



⑱ washer for M6 (6x16x1.0)



⑲ Speed sensor bracket, Flat type



⑳ Speed sensor bracket, 90 degree bend type



㉑ Cable tie 200mm

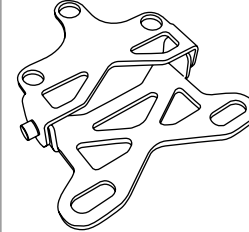


■ Bracket Kit (05-06-0029)

Number	Product content	Quantity	Item Number	in packs of
4	Sub harness	1	—	—
5	RPM code A (2000mm)	1	00-05-0350 (1.4m)	1
6	RPM code B (550mm) for IG connection	1	090-00-0063	1
7	Temperature sensor connection cord (900mm)	1	07-04-0556	1
8	Stick temperature sensor (~ 250°C)	1	07-04-0555	1
9	O ₂ sensor connection cord (1200mm)	1	00-05-0201 (non-waterproof/2.0m)	1
10	Female connector set (φ 3.5)	8	—	—
11	Male connector set (φ 3.5)	4	—	—
12	Heat shrink tube (φ 12x50)	1	—	—
13	Cable tie 300mm	2	—	—
14	JIS cable type speed sensor	1	05-06-0036	1
15	Socket cap screw (M4x16)	2		2
16	Spring washer for M4	2		2
17	Nut M4	2		2
18	Washer for M6 (6x16x1.0)	1		1
19	Speed sensor bracket, Flat type	1		1
20	Speed sensor bracket, 90 degree bend type	1		1
21	Cable tie 200mm	2		2
22	H1 bracket	1		1
23	Cushion rubber	3		3
24	Tapping screw (M4x12)	3		3
25	Washer for M4 (5.3x13x1)	3		3
26	Custom washer for M8	2		2
27	Aluminum (stepped) spacer for M8 (8.5x12x12.5)	2		2
28	Socket cap screw (M8x45)	2		2
29	Custom washer for M6	2		2
30	Aluminum (stepped) spacer for M6 (6.5x10x10)	2		2
31	Socket cap screw (M6x40)	2		2
32	L wrench (3mm)	1		1

H1 bracket set

㉒ H1 bracket



㉓ Cushion rubber (Assembled to H1 bracket)



㉔ Tapping screw (M4x12)



㉕ Washer for M4 (5.3x13x1)



㉖ Custom washer for M8



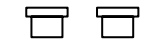
㉗ Custom washer for M6



㉘ Aluminum (stepped) spacer for M8 (8.5x12x12.5)



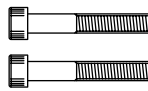
㉙ Aluminum (stepped) spacer for M6 (6.5x10x10)



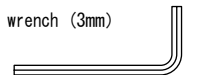
㉚ Socket cap screw (M8x45)



㉛ Socket cap screw (M6x40)



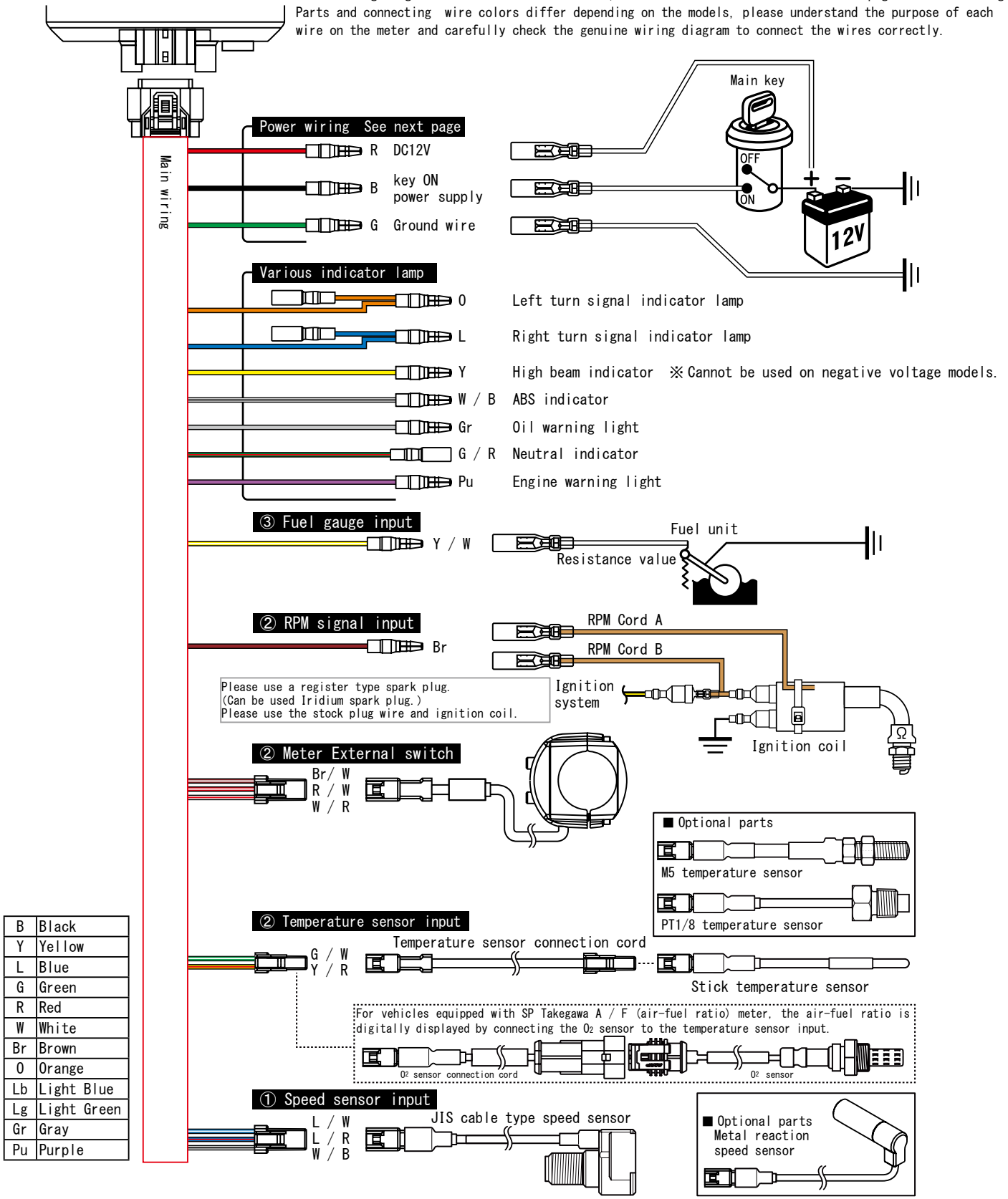
㉜ L wrench (3mm)



※ Please order in the repair parts are always repair part number.
 If it is not the part number order, you may not be able to order. Please be forewarned.
 It should be noted, In the case of parts that can not be separately shipment, please order a set part number.
 ※ Repair parts may differ slightly from the kit contents in terms of shape, etc.
 There is no problem to use it. Please be forewarned.
 ※ The repair parts for the ⑨ O₂ sensor connection cord are different from the kit accessories and are non-waterproof.

Main harness diagrams

Basic wiring diagram often found on mini bikes, etc. Please check more on the details page for each wiring. Parts and connecting wire colors differ depending on the models, please understand the purpose of each wire on the meter and carefully check the genuine wiring diagram to connect the wires correctly.



[Meter body]

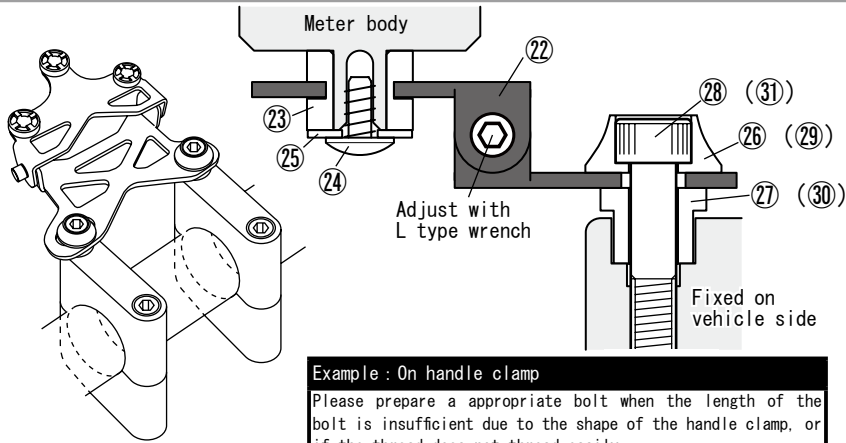
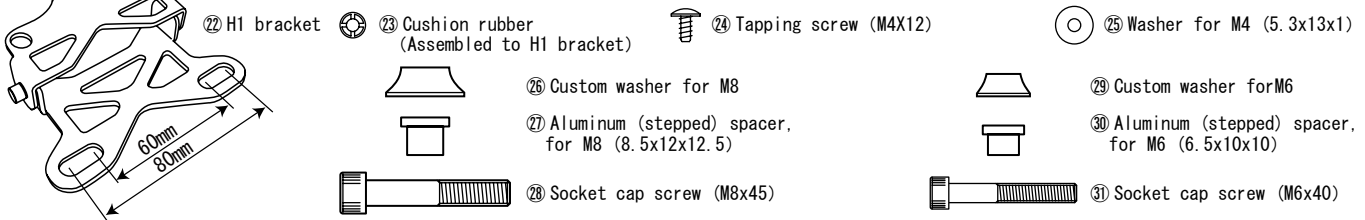
The basic power source for this product is DC12V from battery, therefore in order to support the power supply of mini bikes, which tend to be unstable, the circuit design has high durability against overvoltage. In addition, the minimum operating voltage is set low to improve operating stability during idling. The main voltage range of the meter is DC8V ~ 24V, but the LCD character density and backlight will become dim near the lowest operating voltage. Used a flash memory type that does not require a built-in battery, various records are maintained for a long time even when the power is turned off. The wiring color and connector are small size (φ 3.5) as Honda models. Wiring may be modified by the models.

[Prohibition of driving on public road with headlights off / Racing or safety parts removed]

Riding with the lights off by simply modifying by cutting wire of "always-on" headlights models, the unused power will increase the voltage of the entire car body. Continue to ride in this conditions, the battery may deteriorate due to overcharging or regulator may malfunction due to excessive strain. Run at higher engine speeds than normal, negative effects will be stronger especially modified engines. If your headlight burns out, stop driving immediately, if you absolutely have to continue running, use high beam (and adjust the optical axis). At this situation, please drive at a low rpm as much as possible. Removing all safety parts on a racing vehicle requires specialized knowledge and replacement or additional parts.

How to install the meter bracket (H1 type) and precautions

The included H1 bracket SET is general purpose parts used by your own custom way. Please use as your needs.



Caution

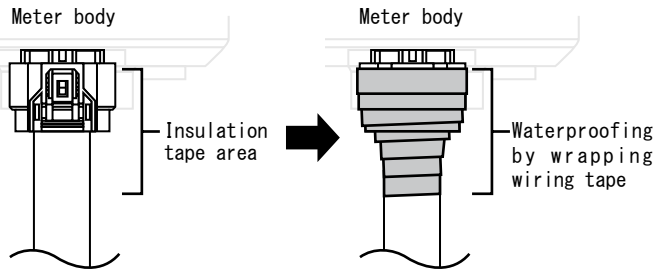
Gap

Check that there is no gap at the bottom of the collar as shown in the picture. Caution: Any gaps may cause bolts to come loose.

Caution: Installing a handle pipe clamp, etc., is very dangerous to drive with the wrong fixation.
 Caution: We will not be responsible for any compensation in the event of product failure, damage, accidents, or damage caused by improper installation by the customer.

Connection to the meter body

Refer to the photos and illustrations below, connect the ① meter body and the ④ sub harness, and covered by insulating.



Caution
 If not covered by tape, water may get inside the wire and may cause the meter to malfunction.

Attach the headlight case, headlight unit, and exterior in reverse order.

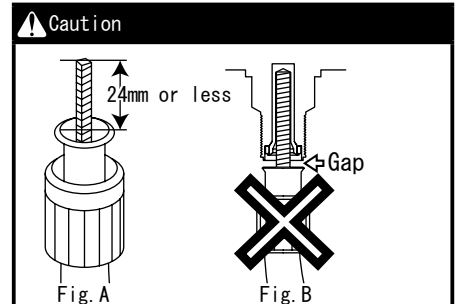
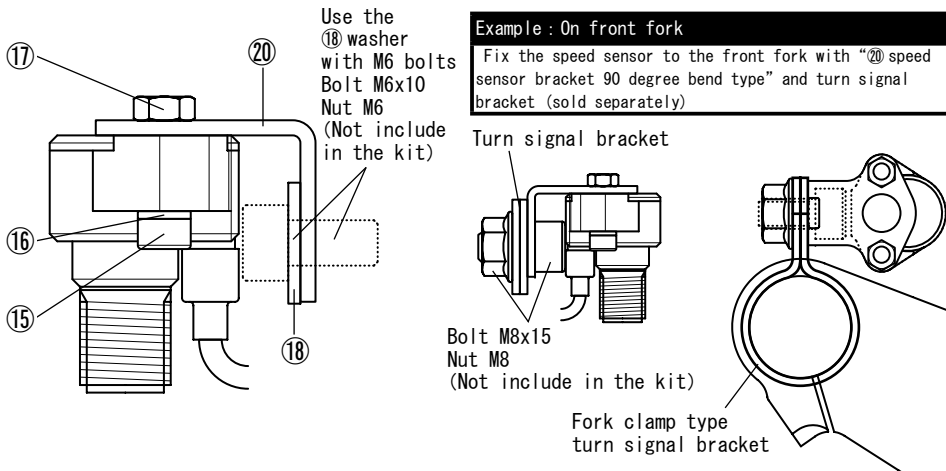
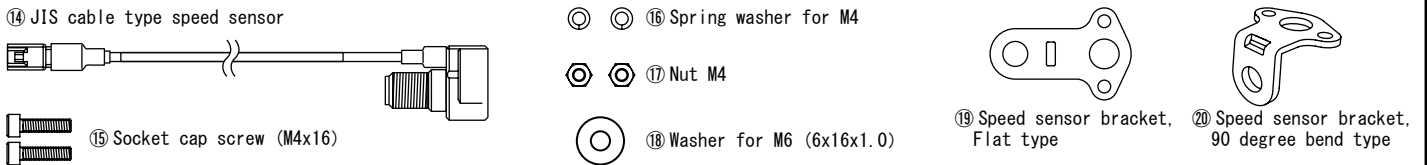
Caution
 Be careful not to pinch the meter harness in the headlight case. It may cause disconnection or poor contact.

Place external switch

Attach the external switch and rubber strip connected to the meter harness to the handle pipe.
 ※ The external switch is waterproof, but do not expose it to water directly with a high pressure washer, etc.

How to install the JIS cable type speed sensor and precautions

The meter unit and speed sensor are separate pieces. Comes with two types of speed sensor bracket that can be used for general purposes.



This product uses a JIS standard cable insertion, but modification of the cable may be required on some models. Measure the amount of cable protruding from the outer cable (Fig. A). Exceeds more than 24mm, please cut that part.

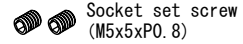
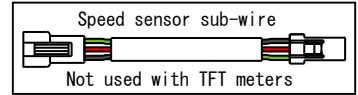
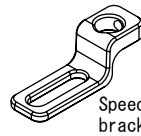
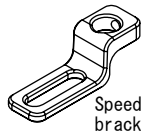
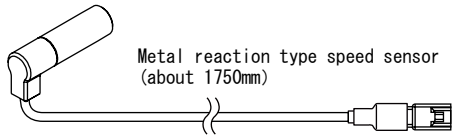
Caution: Figure B (Pushed upwards), the rotating parts will wear out severely and it will NOT be possible to accurately recognize the speed.

Optional parts How to install the metal reaction type speed sensor and precautions

■ Metal reaction type speed sensor set (about 1750mm) Item Number:05-06-0035

Please modify the bracket or make your own and set the metal reaction type temperature sensor.

Metal reaction type speed sensor set contents



The hexagon socket (included) screw is inserted into the speed sensor bracket and used to secure the metal-reactive temperature sensor. Please use the set screw within the metal part of the sensor. The sensor can be installed on either front or rear wheel. Please make your own way.
 Note: Prepare a bolt 5mm longer than the thickness of the bracket when fix by the M8 or M10 speed sensor bracket and other bracket together. Leave enough free play in the cord at the moving part and securely secure both sides with zip-tie etc., so that the movement of the moving part does not put strain on the base of the cord (sensor side, connector side).

Warning Not recommend tightening with the axle shaft as the bracket (may not be strong enough to handle the tightening torque).

■ Sensor installation example (Detailed diagram)

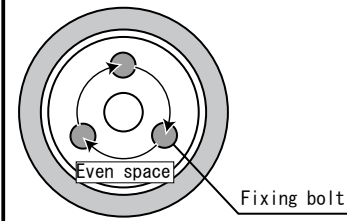
① Make sure that the signal intervals are evenly spaced. Accurate speed cannot be displayed with irregular space intervals.

② When picking up a signal with a hex socket bolt, please set it at the center of the bolt.

■ Note

If the sensor reaction part is not in the right place, create a reaction part by put a small piece of steel (washer etc) with epoxy bond.

Please check the metal reaction by checking by LED lamp on the metal reaction speed sensor is lit or not, and make fine adjustments to the set position. ※The number of lights lit on and off is not the number of signals. Please enter the number of bolts as the number of signals.



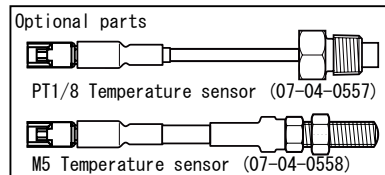
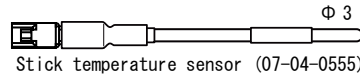
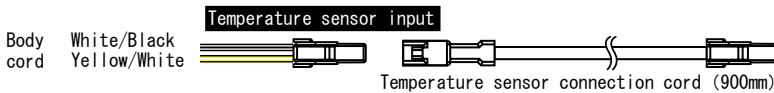
About temperature sensor input

Connect Temperature sensor cord and extension

- Thermometer measuring range: 0 ~ 250°C
- To measure oil temperature, sensor adapter (optional) are required.
- Please see optional parts in our catalog.
- The temperature sensor can be used as an outer air temperature meter by fixing the sensor to an appropriate position.

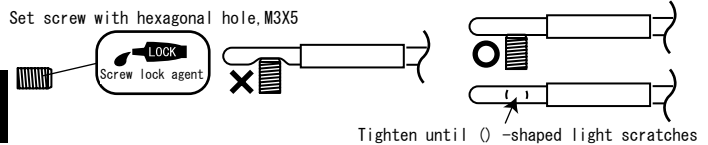
Please fix the wiring to the frame and body harness using wiring tape and zip-tie so that it will not break due to interference caused by steering operation or rubbing due to running vibration and contact with hot engine parts.

When the sensor is not connected (disconnected), the value will show as[- - -, -°C]



The optional drain bolt and set screw included with the adapter are used to secure the stick temperature sensor. Apply a small amount of screw locking agent to the set screw to prevent it from falling off.

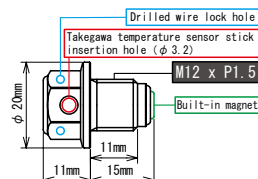
If it breaks, it will be act same as a broken or shorted cord.
 Display at disconnection: [- - -, -°C]
 Display at short circuit: [250.0°C]



Note If the sensor part is deformed greatly by tightening the set screw too much, the internal electronic components may be damaged.

Thermometer optional parts

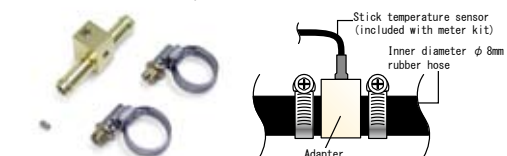
- Drain bolt with magnet (M12xP1.5)



A strong magnetic drain bolt will picks iron powder in the engine oil. As a result, iron powder in the oil is reduced and the engine oil's inherent stable lubrication performance can be demonstrated. In addition, Takegawa aluminum drain bolts have a safety wire lock hole and a stick temperature sensor insertion hole. The temperature at the drain bolt can be measured by attaching the stick temperature sensor to the drain bolt and connecting it to our Super Multi DN meter. The drain bolt body is made from billet aluminum and colored anodized. Color: Silver, Black, Blue, Red.

- The magnet is firmly fixed with "swage"
- Can be interchangeable with various genuine drain bolts.

- Oil thermometer adapter



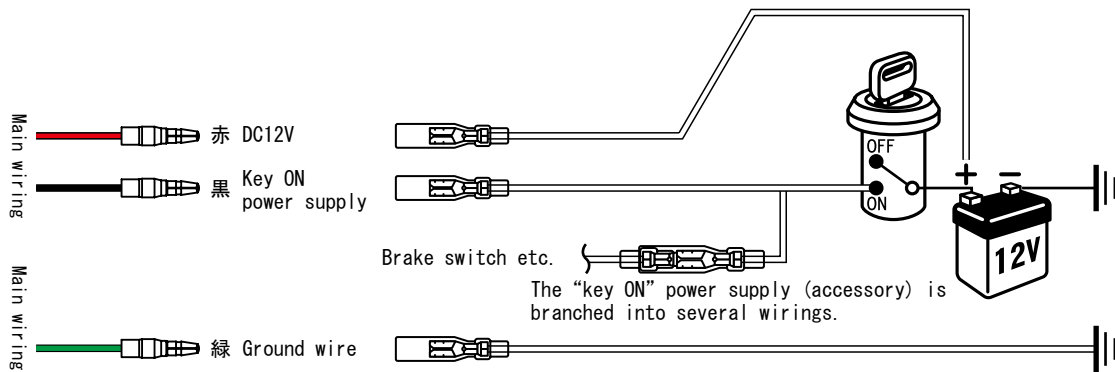
Adapter with stick temperature sensor insertion hole for rubber hose (inner diameter 8mm) oil cooler kit. Place this adapter between the rubber hose connecting the oil outlet and the oil cooler, the temperature at the oil line (adapter part) can be measured. Since the temperature sensor is not in contact with oil directly, its temperature at the adapter part, but you can see it as a reference of oil temperature. By connecting the stick temperature sensor attached to this product, you can check the temperature on the LCD screen in the meter.

Product content	Product number
Drain bolt with magnet : M12 P1.5	Silver 02-09-0022 Blue 02-09-0024 Black 02-09-0023 Red 02-09-0025
M12 Sealing washer	00-00-0140
Inner diameter 8mm Oil cooler hose adapter	07-04-0521

Power wiring

Basic wiring diagram often found on mini bikes, etc. Parts and connecting wire colors differ depending on the models. please understand the purpose of each wire on the meter and carefully check the genuine wiring diagram to connect the wires correctly.

DC12V Connect to power supply Connect the black wire of the main wiring to the "key ON" (DC 12V) wiring.



The meter turns on when the key is turned on (engine stopped).

Standard wiring color

※Wiring color may vary depending on model.

Manufacturer	Key ON power color	Ground wire color
HONDA	Black Red / Black	Green
YAMAHA	Brown	Black
SUZUKI	Orange	Black / White
KAWASAKI	Brown	Black / Yellow

※ The mini-regulator cannot be installed with this meter.

[What is DC power supply?]

= DC power supply. Battery power source, voltage is relatively stable from the key is turned on (engine stopped) to the engine is running. Voltage is around 12.5~13V when the key is on, and around 12.5 ~ 14.5V while running (general usage)

※ AC power, type of vehicles uses more power/voltage when the engine starts (mostly in headlights and taillights).

[Connection precautions]

If the power does not turn (with the key ON), is battery deterioration or incorrect wiring. Use a completely deteriorated battery, it will not only cause overvoltage at high speeds, but also cause the genuine regulator to malfunction due to excessive load.

[Note]

With the engine off, turn on the brake lights and turn signals. If the blinking speed is abnormal, the battery is weak.

Indicator lamp wiring

Parts and connecting wire colors differ depending on the models.

please understand the purpose of each wire on the meter and carefully check the genuine wiring diagram to connect the wires correctly.

■ The wiring method (may be different depending on the model).



■ Warning light Red LED (lights up with negative connection) use as water temperature warning light, etc.



■ Engine warning light Yellow LED (lights up with negative connection) use it for engine check light, FI warning light, etc.



■ ABS lamp Yellow LED (lights up with negative connection) Use for ABS models.



■ Warning light Red LED (lights up with negative connection) You can use it by specifying the warning function.

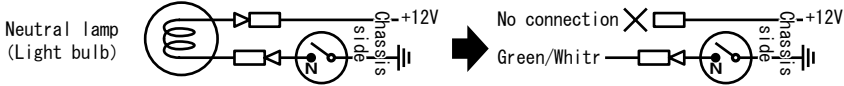
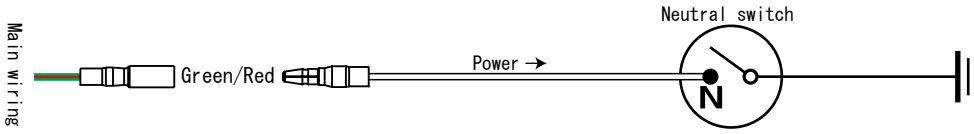
Indicator lamp wiring

Basic wiring diagram often found on mini bikes, etc. Parts and connecting wire colors differ depending on the models. please understand the purpose of each wire on the meter and carefully check the genuine wiring diagram to connect the wires correctly.

■ Reference example for lighting an LED. the wiring method (may be different depending on the model).

N

■ Neutral lamp Green LED (lights up with negative connection)
Connect the green/red wire to the conductive to ground when gear in neutral.

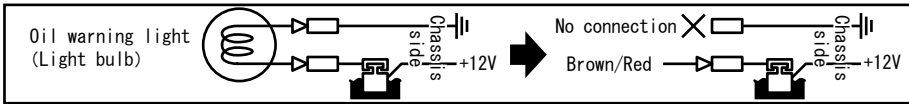
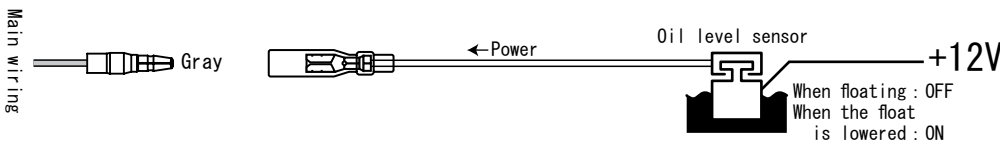


■ Standard wiring color	
※Wiring color may vary depending on model.	
Manufacturer	wiring color
HONDA	Light Green / Red
YAMAHA	Light Blue
SUZUKI	Blue / Black
KAWASAKI	Light Green

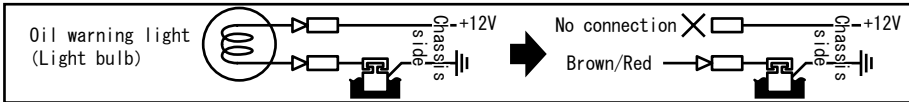
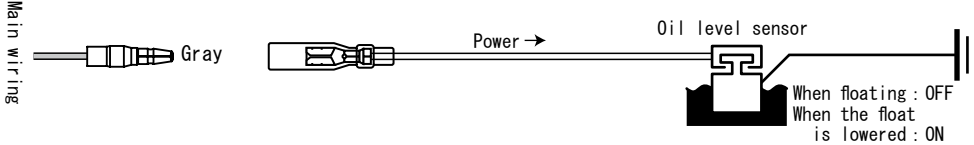
S

■ Oil warning light Red LED (Lights up with either positive or negative connection)
There is a slight time lag between sensing the signal from the sensor and the indicator turning on and off.

■ Example of use as an oil warning light (positive connection) YAMAHA 2-stroke scooters, etc. (wiring color: gray)
Connect the gray wire to the warning wire +12V(when conductive).



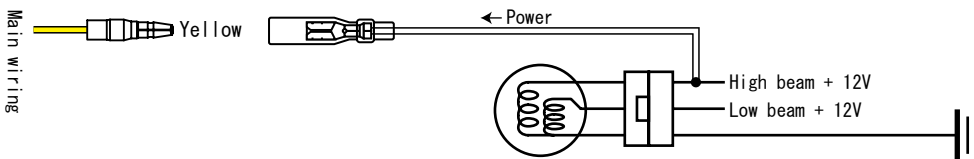
■ Example of use as an oil warning light (negative connection) Most common
Connect the gray wire to ground wire warning(when conductive).



■ Standard wiring color	
※Wiring color may vary depending on model.	
Manufacturer	wiring color
HONDA	Green / Red
YAMAHA	Black / Red
SUZUKI	Blue / White
KAWASAKI	Black / Red

D

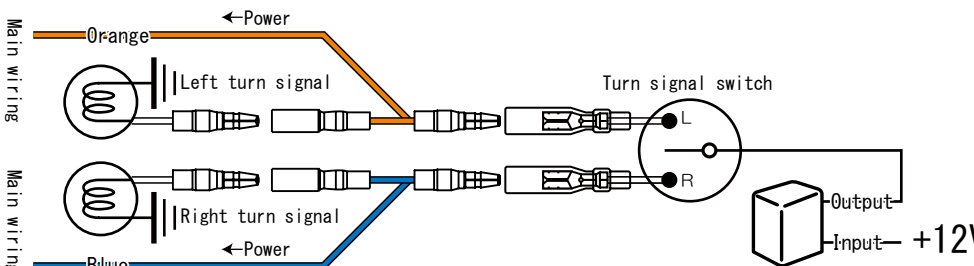
■ High beam indicator Blue LED (lights up with positive connection)
Please also connect the yellow wire to the high beam wiring.



※ Negative voltage(only) headlights model can NOT be used high beam indicator.
Unusable also Honda injection models such as Monkey (FI) and Ape (FI) .
These models use the generated AC positive for charge the battery, and the negative AC the headlights and taillights.
(The headlights will turn on when the engine starts.)

T

■ Turn signal indicator Green LED(lights up with positive connection)
Please insert each wire into the turn signal(positive). Orange: Left turn signal Blue: Right turn signal



■ Turn signal relay		
Standard wiring color		
※Wiring color may vary depending on model.		
Manufacturer	Wiring color reference	
HONDA	Orange	Light Blue
YAMAHA	Dark Brown	Dark Green
SUZUKI	Black	Light Green
KAWASAKI	Green	Gray

(Example: Ape(battery-less), XR100M etc.)
※ The indicators may not work properly on AC models.

Please refer to the meter instruction manual.

RPM signal input

1. Do not use the aftermarket parts that may have a negative effect.

- Increasing the spark also ignition noise accordingly.
 Modifications to ignition coils, plug cords, plug caps, racing plugs (non-resistance type), aftermarket CDIs, etc. may have a major negative effects.
- Deterioration of ignition system parts also contributes to increased ignition noise.
 Be careful about deterioration and wetting on the surface of the plug cord.

2. Please perform wiring work with care about these condition.

There are many ways to pick up the signal. Try the recommended methods in this order. Find the lowest negative effects as possible (low signal voltage, low noise) within the range where the tachometer operates normally.

Please set the connection, RPM signal frequency, and type by the models.

RPM signal Setting of the number of signals per crankshaft rotation.
 number setting: When the settings not match, the display shows exactly half, double, triple, etc.

RPM signal Chose the type of loading program that matches your connection method.
 type setting: By switching, the same connection method may work properly.

[A connection] [B connection] [C connection] RPM 信号入力 (3 types)
 ※ For details of connection method, please see the following pages.

- [A connection]** Plug cord surface (See P24)
- [B connection]** Ignition coil primary side (See P24)
- [C connection]** Loading the pickup pulse (See P25)

The connection method may varies depending on the ignition type of the motorcycle.

How to find ignition types

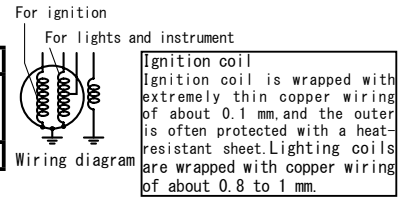
Know type of ignition system, will help you find the right connection method. There are 3 type of Ignition system. Note: Point type ignition system are not compatible with this product.

- ★ : certain conditions
- △ : May be different

C. D. I. ignition Common in non-battery model and small size carburetor model.

Basic system	There is an ignition coil in the stator, and the power is stored in the CDI and ignited.
How to find	★ DC12V power supply (key ON) is not connected to CDI ★ There is an ignition coil in the stator (right wiring diagram) △ Most flywheels have only one protrusion.
Connection method	[A connection] [B connection] [C connection]

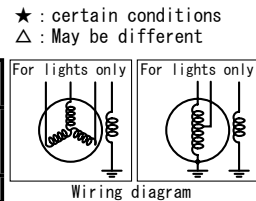
12V Monkey/Ape, both carburetor type.



DC-C. D. I. ignition method Common in older carburetor models.

Basic system	The raised battery power to a high voltage using a boost circuit and ignited. Commonly known as "battery ignition"
How to find	★ DC12V power is connected to CDI ★ There is no ignition coil in the stator (right wiring diagram) △ Most flywheels have only one protrusion.
Connection method	[A connection] [B connection] [C connection]

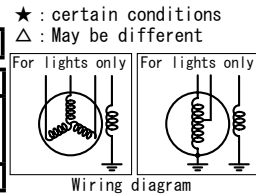
KSR110 · CYGNUS-X (carburetor type) · AddressV125 (GK7). etc



Transistor ignition system Common in injection models and mid to big carburetor models.

Basic system	Transistor controls the supply of battery power to the ignition coil and ignites it.
How to find	★ DC12V power supply is connected to the ignition coil. ★ There is no ignition coil in the stator (right wiring diagram) △ There are often multiple flywheels protrusions.
Connection method	[B connection] [C connection]

GROM · Monkey125 · CT125 · Monkey (F1) · Ape (F1) · CYGNUS-X (F1) · AddressV125 (GK9). etc



RPM signal input

RPM signal input [A connection] Wiring method

C. D. I. ignition

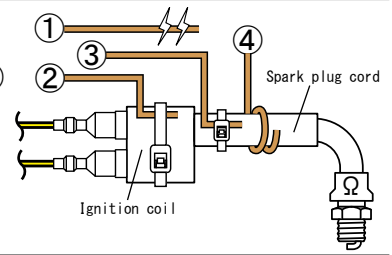
DC-C. D. I. ignition method

Please see the previous page for how to find type of ignition systems.

[A connection]

Vehicle side cord
=[4] Brown

RPM wiring A
① ~ ④



Switch the RPM signal setting of the meter unit.

RPM signal number setting : Basically 1 or 2

RPM signal type setting : Basically Hi, if unstable, try Lo

Small	↑
Signal strength	
Large	↓

① Attach the wiring on the near frame or body panel, it will be read by the antenna.

② Attach the wiring about 20mm along the surface of the ignition coil and secure it with a tie wrap, etc.

③ Align about 20mm to 30mm along the plug cord and secure with a tie wrap, etc.

Note: longer the length, the stronger the signal.

④ Wrap it around the plug cord and pick up the signal with the electricity generated.

Note: more you wrap stronger the signal.

In most cases, wrap it around 3 times by method ④ can be read correctly.

Troubleshooting

■ The needle moves stable, but it indicates lower or higher than the actual value.

→ The "RPM signal count setting" may not be correct. Note: If it doesn't match, it will indicate exactly double or half the value.

■ The needle does not go up at all, or the goes down at high speeds. → Try ways to make the signal stronger.

■ The needle value that is higher than the actual value. The needle swings away. → Try to weaken the signal (signals too strong)

※ Note: Adjustments are unlikely to introduce subtle numerical errors. It is clear whether values can be displayed or not.

Temporarily secure RPM wiring A with insulating tape, etc., and check operation by rev the engine lightly.

⚠ Warning Do not test ride with attached the RPM wiring temporarily.

■ RPM signal input by [A connection] ③ or ④, please wrap heat shrink tube (sold separately) to complete the process.

• Remove the plug cap from the plug cord.

• Wrap heat shrink tube over RPM wiring A and shrink by hair dryer etc.

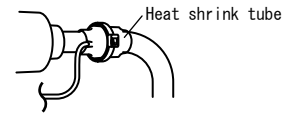
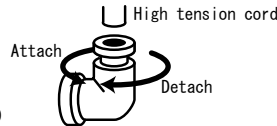
(Shrinkage temperature: 90°C or higher, shrinks to approximately 50% of the inner diameter)

• Please securely secure the RPM wiring with a zip-tie not to fall. • Finally, firmly attach the plug cap.



Heat shrink tube φ 12X50

(Sold separately) 3pcs. Item number:00-00-2809



RPM signal input [B connection] Wiring method

C. D. I. ignition

DC-C. D. I. ignition method

Transistor ignition system

Please see the previous page for how to find type of ignition systems.

C. D. I. ignition [B connection]

Vehicle side cord
=[4] Brown

RPM wiring B

CDI

Plus voltage ignition

Ground

Ignition coil

Ground

Ignition coil

Please switch the RPM signal setting of the main unit before checking the operation.

RPM signal number setting : Basically 1 or 2

RPM signal type setting : Set Hi, (try Lo if unstable)

※ Note: May not have ground wiring (The bolt of the coil also works as body ground.)

DC-C. D. I. ignition method [B connection]

Some models cannot be used.

Vehicle side cord
=[4] Brown

RPM wiring B

CDI

Plus voltage ignition

Ground

Ignition coil

Ground

Ignition coil

Please switch the RPM signal setting of the main unit before checking the operation.

RPM signal number setting : Basically 0.5 or 1 or 2

RPM signal type setting : Set Lo, (try Hi if unstable)

※ Note: May not have ground wiring (The bolt of the coil also works as body ground.)

Transistor ignition system [B connection]

Some models cannot be used.

Vehicle side cord
=[4] Brown

RPM wiring B

ECU

Minus voltage ignition

Ground

Ignition coil

Ground

Ignition coil

Please switch the RPM signal setting of the main unit before checking the operation.

RPM signal number setting : Basically 0.5 or 1

RPM signal type setting : Hi

Some models cannot be used.

Troubleshooting

■ The needle moves stable, but it indicates lower or higher than the actual value.

→ The "RPM signal count setting" may not be correct. Note: If it doesn't match, it will indicate exactly double or half the value.

■ The needles doesn't go up at all. → Please check whether the "RPM signal type setting" is correct.

■ The needle points higher than the actual value. The needle swings away. → Please check whether the "RPM signal type setting" is correct.

※ Note: Adjustments are unlikely to introduce subtle numerical errors. It is clear whether normal values can be displayed or not.

■ Tachometer needle jumps. → RPM wiring B is touching the ignition coil.

RPM signal input

RPM signal input [C connection] Wiring method

C. D. I. ignition

DC-C. D. I. ignition method

Transistor ignition system

Please see the previous page for how to find type of ignition systems.

Prior to connect, please check whether the number of protrusions on the outer the flywheel is within the setting range of the meter. Setting range : 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6, 9, 10, 11, 12, 17, 18, 23, 24

[C connection]

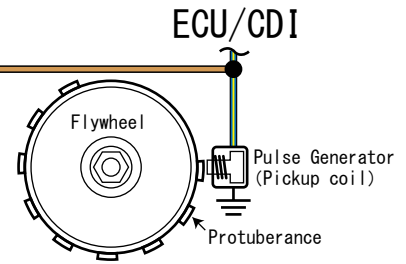
Vehicle side cord — [4] Brown

Modifying RPM wiring A code

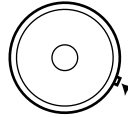
Number of protrusions on the outer flywheel is within the set range. (compatible with uneven spacing)

Please switch the RPM signal setting of the main unit before checking the operation.

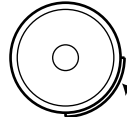
RPM signal number setting : Set the number of protrusions.
RPM signal type setting : Set Lo, (try Hi if unstable)



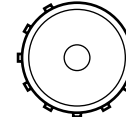
Example: RPM signal frequency setting



RPM signal number setting : 1



RPM signal number setting : 1



RPM signal number setting : 9

Count the number of pieces

Troubleshooting

- The needle is stable, but it indicates a value that is lower or higher than the actual value. → "RPM signal setting" may not be correct. Note: If doesn't match, it will indicate exactly double or half the value.
- The needle doesn't go up at all. → Please check the "RPM signal type setting" is correct.
- The needle indicates higher than the actual value. Or needle swings away. → Please check the "RPM signal type setting" is correct.

Reference information Common questions. ※ This information is advice and does not dictate how you connect.

Vehicle name	Engine specs	Ignition	Connection	Meter setting	
12V Monkey	Carburetor	C. D. I.	Common for all	A connection (A-④ 3 Roll)	1 - Hi
12V Gorilla	Carburetor	C. D. I.		B connection (Black/Yellow code)	1 - Hi
Ape50/100	Carburetor	C. D. I.		C connection (Blue/Yellow code)	1 - Hi
XR50/100 Motard	Carburetor	C. D. I.			

Vehicle name	Engine specs	Ignition	Connection	Meter setting	
Monkey (F1)	Injection	Full transistor	Common for all	Not available for A connection	
Ape50 (F1)	Injection	Full transistor		B connection (Pink/Blue code)	0.5 - Hi
GROM ※1	Injection	Full transistor		C connection (Blue/Yellow code)	9 - Lo
Monkey125	Injection	Full transistor			
CT125	Injection	Full transistor			
Ape50 TYPE D	Injection	Full transistor			

※1 When using a sub-wiring for GROM, the pulse line inside and the setting is "2 - Hi"
"B connections" specified in the table are only available when using the general-purpose sub wiring.

Vehicle name	Engine specs	Ignition	Connection	Meter setting
KSR110	Carburetor	DC-CDI	C connection (Blue/Yellow code)	1 - Hi
CYGNUS-X (F1)	Injection	Full transistor	B connection (Red code)	0.5 - Hi
Address V125 GK7	Injection	DC-CDI	A connection (A-④ 3 Roll)	0.5 - Hi
			B connection (Black/Blue code)	0.5 - Lo
Address V125 GK9	Injection	Full transistor	B connection (Blue code)	0.5 - Hi

If the meter is malfunctioning, please refer to the troubleshooting section in the meter's manual.

