

Super Multi TFT Meter Instruction manual

Adaptation model 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.
- ◎ 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 general-purpose product for motorcycles with DC12V batteries
(But not compatible with all DC12V batteries sold (may have some exceptions).
Depending on the model, you may not be able to use the all or any meter functions.
- ◎ 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.
- ◎ Place the separate unit in a position where the speedometer cable will work properly.
- ◎ Please use stock spark plug caps, cable, and ignition coils, or SP Takegawa products.
- ◎ Please use a register type spark plug.
- ◎ External battery-less kits cannot be used.
- ◎ Do not combine to use any ignition, electric related products other than SP Takegawa made products.
- ◎ 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.
- ◎ 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.
- ◎ When using this fuel gauge, please make sure that the fuel tank is empty (and as the meter shows empty).
Caution: If the meter shows remaining but actually out of gas, there is a risk that the vehicle will stop due to out of gas.
- ◎ Please do not use a strong impact to the meter, such as off-road driving, jumping, wheelies, etc.
Strong impact, may be damaged internal parts or body.
- ◎ This product is not a full waterproof.
Caution: It has a rain-proof, can be used in the normal rain condition, but it is not fully waterproof (Do not get it in the water).
If water gets into the unit, please stop using it immediately.
Also, when the humidity is high or outside temperature changed, the main unit may absorb moisture and cause fogging on the inside of the panel.
- ◎ Please be careful not to leave it in the hot sun. Please cover it if you leave your bike outdoors for a long time.
If left for a long time under harsh conditions such as in the hot sun, there is a risk of deterioration or deformation of body and rubber parts.
[Prohibition of riding with headlights off. / Converted street to Racing motorcycle with safety light parts removed.]
Running without headlights, the unused power will increase the voltage. When you continue to run in this condition, the battery may deteriorate due to overcharging or the genuine regulator may malfunction due to excessive strain.
In motorcycle with modified engines that run at higher engine speeds than stock, the negative effects will be stronger.
If your headlights burn out, stop riding immediately, *if you need to continue riding, switch headlight to high beam
(adjust the optical axis) and run at as low a speed as possible.
Removing all safety equipment to be as a racing motorcycle (from street motorcycle) requires specialized knowledge and replacement or additional parts.
- ◎ This product is for DC12V. Do not use it with AC12V power supply.
(Caution: SP Takegawa mini regulator can NOT be used with this products.)
- ◎ When replacing the gear sprocket or changing the speed display setting on the meter, error codes such as ABS may not be erased.
- ◎ The high beam indicator cannot be used on motorcycles that headlights are used with negative voltage.
- ◎ Modern models may detect an ABS error code if the speed is displayed directly from the metal speed sensor.

~ feature ~

- This multimeter is equipped with many functions such as speed, engine speed, gear position, oil/water temperature gauge, fuel gauge, time, voltage, tire outer diameter correction, power test function, etc.
Highly visible pointer-type tachometer and digital display with TFT LCD.
The meter unit comes with a small JIS cable type speed sensor and H1 bracket set.
- The H1 bracket set for the general-purpose.
- All meter operations and function can be done with the included external switch.



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.)

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)

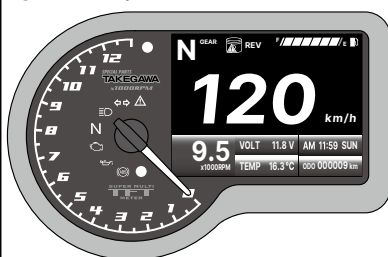
Warning When the handling of ignoring this display people died, shows the contents of the serious injury possibility is assumed.

- 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.)
- When replacing the gear sprocket or changing the speed display setting on the meter, error codes such as ABS may not be erased.
(in some models)

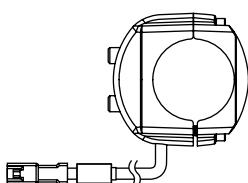
◎ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.
◎ Please be informed that we shall be held harmless against any claim against us whatsoever arising out of use of the products in racing and the like. ◎ Keep this manual stored until this product is discarded.

Product content

① Meter body



② External switch



③ Rubber strip

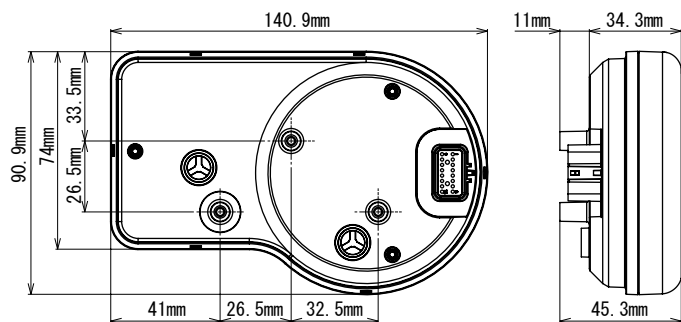


Super Multi TFT meter			
Number	Product content	Quantity	Item Number
1	Meter body	1	00-05-0380
2	External switch	1	
3	Rubber strip	1	

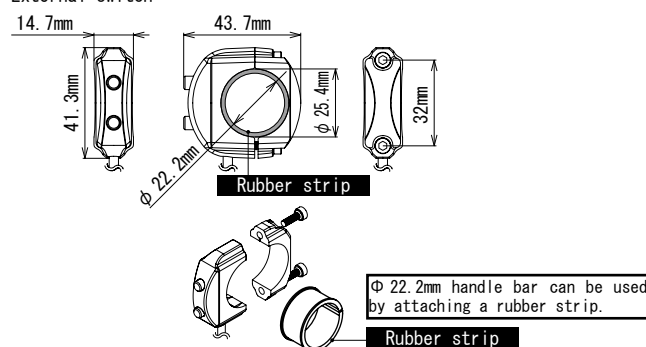
※ Please order in the repair parts are always repair part number.
If it is not the part number order, you may not be able to order. Please be forewarned.
It should be noted. In the case of parts that can not be separately shipment, please order a set part number.
※ Repair parts may differ slightly from the kit contents in terms of shape, etc.
There is no problem to use it. Please be forewarned.

Unit size drawing of the meter unit and meter external switch.

Meter body

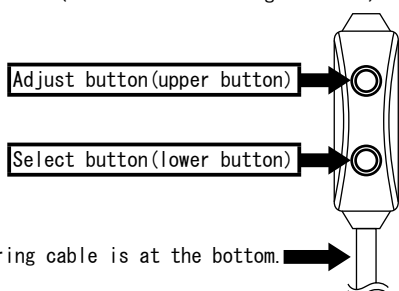


External switch

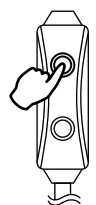


External switch Operation

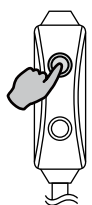
Install the meter external switch with the wiring cable underneath as shown in the illustration below. The upper button is the "adjust button" and the lower button is the "select button". (attached as shown figure below)



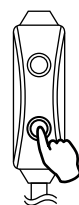
To operate the meter external switch.
To display the manual, please check how to press the button below.



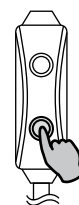
Adjust button
"Press
(short press once)"



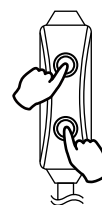
Adjust button
"Press 3 seconds
(hold long press)"



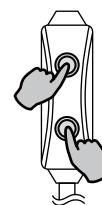
Select button
"Press
(short press once)"



Select button
"Press 3 seconds
(hold long press)"

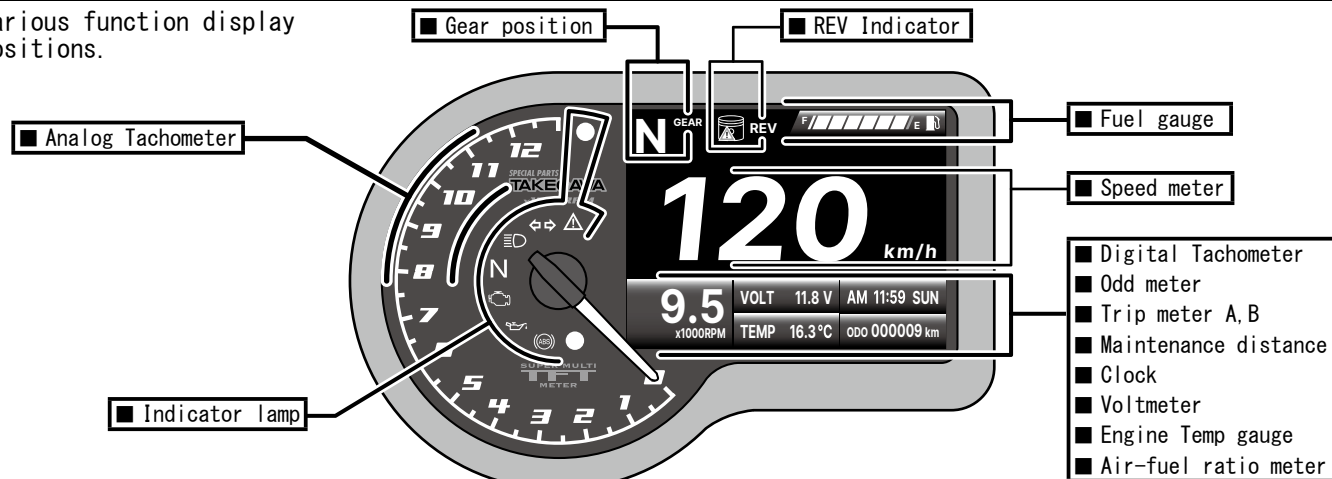


Press "Adjust button"
and "Select button"
at the same time
"Press
(short press once)"



Press "Adjust button"
and "Select button"
at the same time
"Press 3 seconds
(hold long press)"

Various function display positions.



■ List of various functions Setting method heading number

Speed meter	Display range:0 ~ 360km/h	
120 km/h	Tire circumference setting Setting unit:1mm Setting range:300 ~ 2500mm	Headline number ⑫
	Maximum speed limit Setting range:30 ~ 360km/h	Headline number ④
	warning light Setting unit:1km/h	
	Top speed record Display range:0 ~ 360km/h Display unit:1km/h	

	Tachometer	Needle type display:0 ~ 13000rpm Digital display:0 ~ 20000rpm	
		RPM warning light 指針 setting range:1000 ~ 13000rpm	Headline number ⑤
		Digital setting range:1000 ~ 20000rpm	
		Setting unit:100rpm	
		Highest RPM record Display range:0 ~ 20000rpm	
		Ignition settings Setting range:0.5・1 ~ 24	Headline number ⑭
		: Hi Act・Lo Act	

ODO 000009 km	Odd meter	Display range:0 ~ 999999km Display unit:1km (Returns to 0 when the range is exceeded)	Headline number ⑮
TRIP A 9999.9 km	Trip meter A,B	Total distance・Trip meter setting (user)	
TRIP B 9999.9 km		Display range:0 ~ 9999.9km Display unit:0.1km (Returns to 0 when the range is exceeded)	Setting page → P6

TRIP 9999.9 km	Oil change warning	Setting range:500 ~ 16000km Setting unit:100km	Headline number ⑨
		Maintenance distance (notification mode)	

N GEAR	Gear position	All gear indicator, OFF	Headline number ⑬
		Gear transmission registration function using automatic learning mode	

F FUEL GAUGE	Fuel gauge	Display unit:6 steps	
		Fuel sensor resistance value preset	Headline number ⑮
		:100 Ω・250 Ω・270 Ω・390 Ω・510 Ω・1200 Ω	
		User resistance value setting Resistance value range:0 ~ 1500 Ω	
		Low fuel level warning light	Headline number ⑧

Backlight	Brightness	Day mode Setting range:1/5 (Dark) ~ 5/5 (Bright)	Headline number ③
Day/Night		Night mode Setting range:1/5 (Dark) ~ 5/5 (Bright)	
AUTO function	Color	Setting range:White, Red, Orange, Green, Blue, Yellow	

VOLT 11.8 V	Voltmeter	Display range:8 ~ 18V	
		Voltage warning light Setting range:8 ~ 18V Setting unit:0.1V	Headline number ⑦

TEMP 16.3°C	Temp gauge	Display range:0 ~ 250°C Can be measured with the temperature at the drain bolt. (* sensor drain bolt/ sold separately)	
		Temperature warning light Setting range:60 ~ 250°C	Headline number ⑥
		Highest temperature record Display range:0 ~ 250°C	

AM 11:59 SUN	Clock	Display	Headline number ①
	Day of the week	:12/24 hours	

A/F 12.1	Air-fuel ratio meter	Display range	Headline number ①
		:12.1 ~ 17.5	

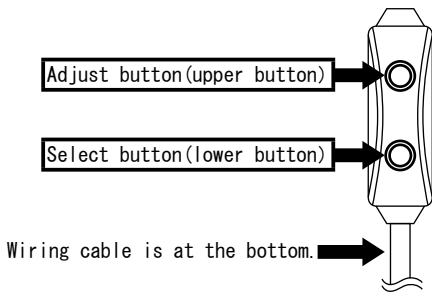
Target Speed	Target speed record (Record display)
Target Distance	Target distance record (Record display)
Top Speed	Top speed record (Record display)

Meter unit size	140.9mm X 90.9mm X 45.3mm
Meter unit weight	188g
Operating voltage	DC12V
Operating temperature range	-10 ~ +60°C

Indicator lamp	Icon
RPM warning light (Red light)	●
Warning light (Red light)	▲
Turn lamp (Green light)	↔
High beam lamp (Blue light)	≡
Neutral lamp (Green light)	N
Engine warning light (Yellow light)	⚙
Oil check lamp (Red light)	⚙
ABS lamp (Yellow light)	(ABS)

External switch Operation

Install the meter external switch with the wiring cable underneath as shown in the illustration below. The upper button is the "adjust button" and the lower button is the "select button". (attached as shown figure below)



To operate the meter external switch.

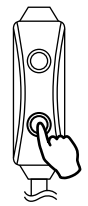
To display the manual, please check how to press the button below.



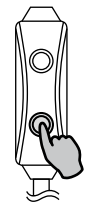
Adjust button
"Press
(short press once)"



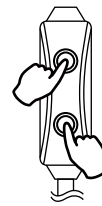
Adjust button
"Press 3 seconds
(hold long press)"



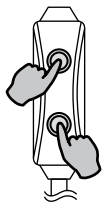
Select button
"Press
(short press once)"



Select button
"Press 3 seconds
(hold long press)"



Press "Adjust button"
and "Select button"
at the same time
"Press
(short press once)"

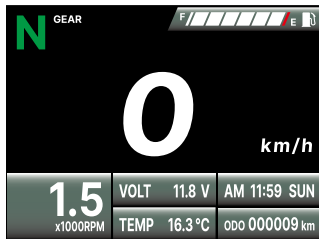


Press "Adjust button"
and "Select button"
at the same time
"Press 3 seconds
(hold long press)"

■ Main screen Switch operation

Pressed briefly or held for 3 seconds from the main screen.

Main screen



Adjust button
"Press 3 seconds
(hold long press)"



Switch to date/time and backlight setting function.
(Press and hold the adjust button for 3 seconds to return to the main screen)



Press "Adjust button"
and "Select button"
at the same time
"Press
(short press once)"



Switch to recording function



Return to the main screen by brief pressing the adjust button and select button twice (at the same time).



Press "Adjust button"
and "Select button"
at the same time
"Press 3 seconds
(hold long press)"



Setting screen



Press and hold the adjust button for 3 seconds to return to the main screen.



Select button
"Press
(short press once)"



Change the display in the following order: odometer, trip meter A/B, oil change warning (distance), and highest record displayed on the main screen.



Select button
"Press 3 seconds
(hold long press)"

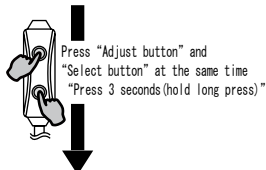


Trip meter A/B, oil change warning (distance), and maximum record. (can be reset individually).

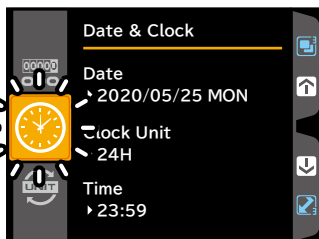
■ Setting screen Switch operation

From the main screen, where you press and hold the adjust button and select button (at the same time) for 3 seconds to switch to the settings screen.
Each button will function as a brief press or a long press for 3 seconds.

Main screen



Setting screen



Adjust button
"Press 3 seconds
(hold long press)"



Main screen



Adjust button
"Press
(short press once)"



Move upward



Select button
"Press
(short press once)"



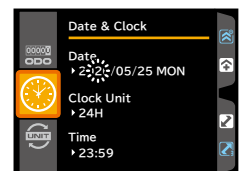
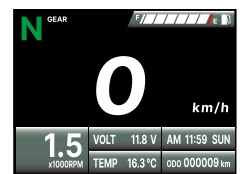
Move downward



Select button
"Press 3 seconds
(hold long press)"



Setting screen



External switch Operation

Check screen

Switch operation

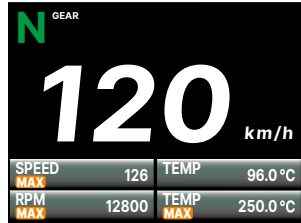
Main screen

Press "Adjust button" and "Select button" at the same time "Press(short press once)"

Record display screen

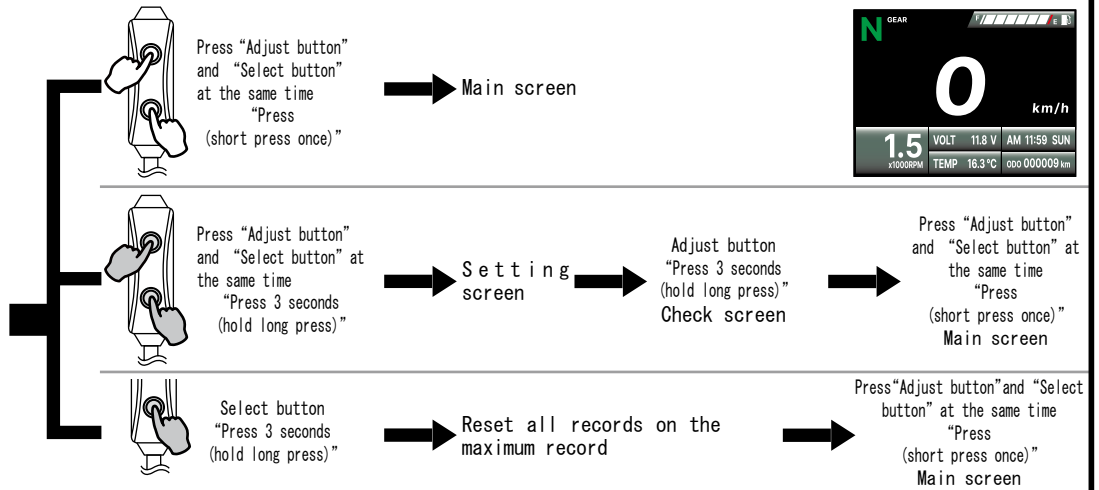
Press "Adjust button" and "Select button" at the same time "Press(short press once)"

Check screen



Press "Adjust button" and "Select button" at the same time "Press(short press once)"
Main screen

Adjust button and select button are pressed briefly (from main menu) to switch to the recording, and then the adjust button and select button are pressed briefly (at the same time) to switch to the check screen. Each button will function as a brief press or a long press for 3 seconds.



Record display screen

Switch operation

Main screen

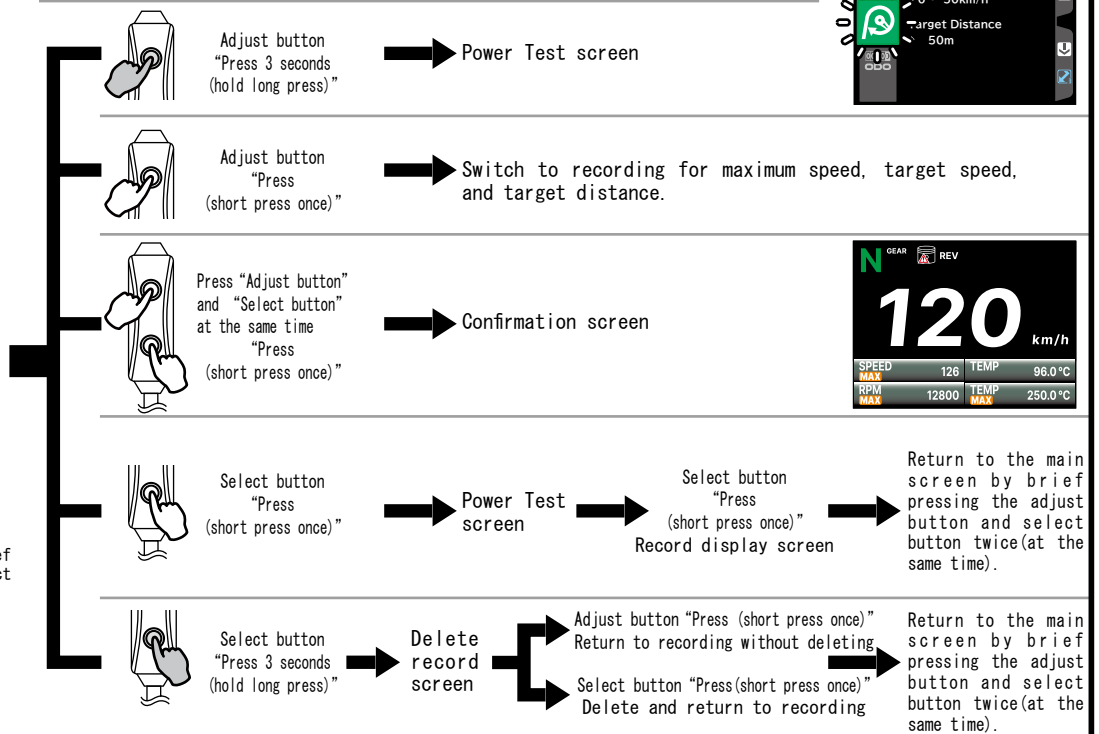
Press "Adjust button" and "Select button" at the same time "Press(short press once)"

Record display screen

No.	Time	Speed	RPM	DST
1	0:20.07	120	12610	279
2	0:21.28	120	12610	282
3	0:23.28	120	11530	283
4	0:25.03	120	10840	285
5	0:26.09	120	10290	286
6	0:26.22	120	10280	290
7	0:29.02	120	9430	325
8	0:29.05	120	9250	350

Return to the main screen by brief pressing the adjust button and select button twice (at the same time).

Main screen is switched to the recording page by briefly pressing the adjust button and select button (at the same time). Each button will function as a short press or a long press for 3 seconds.



Setting screen

Switch operation

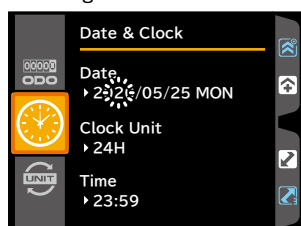
Main screen

Press "Adjust button" and "Select button" at the same time "Press 3 seconds (hold long press)"

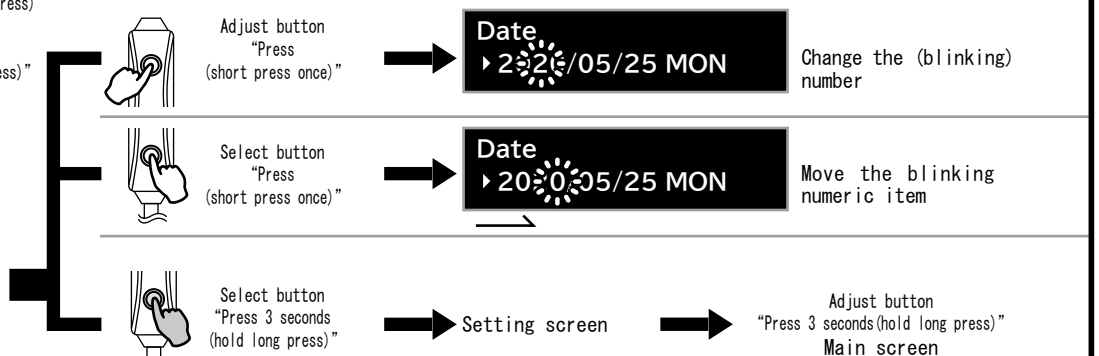
Setting screen

Select button "Press 3 seconds (hold long press)"

Setting screen



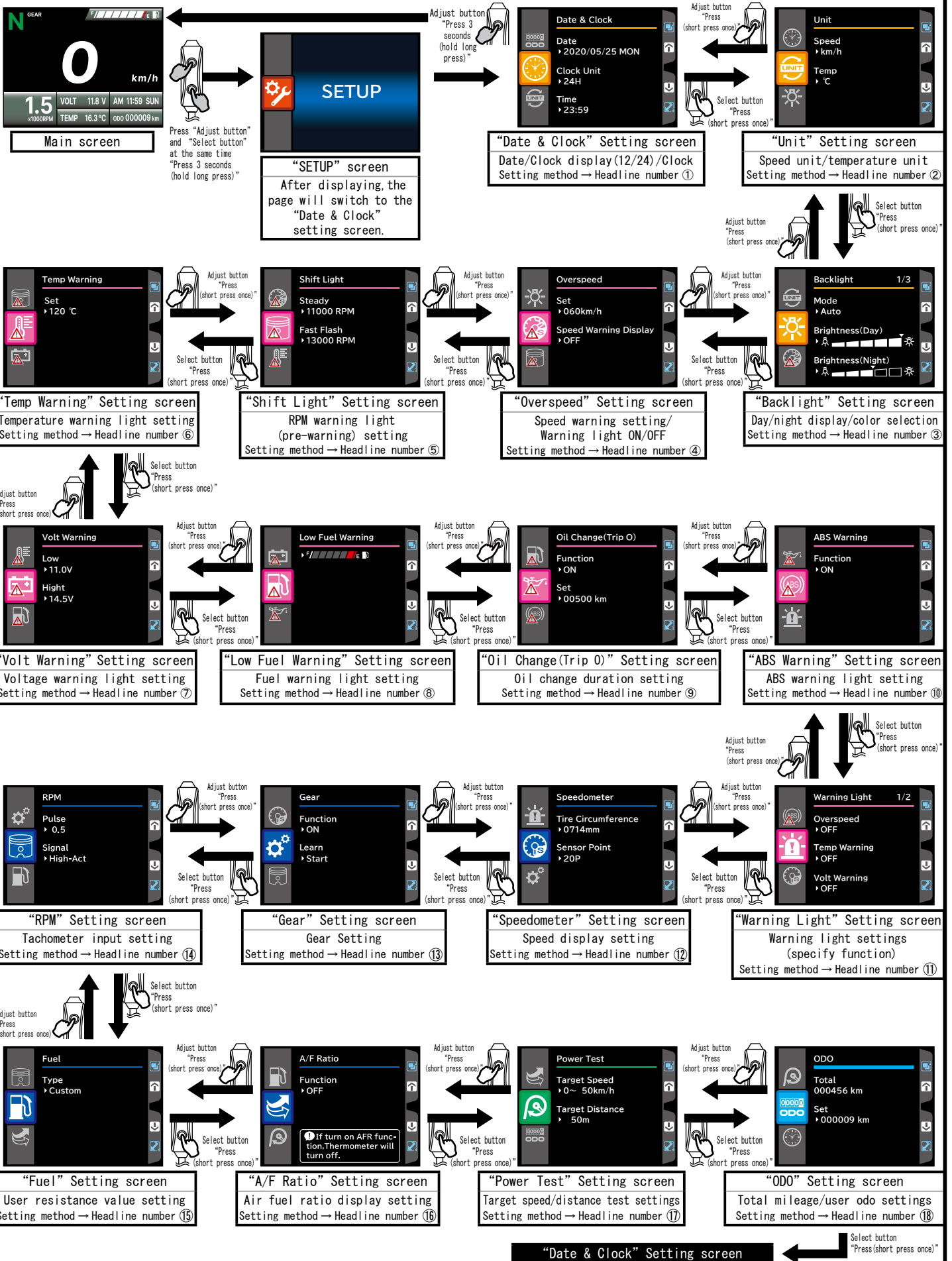
From the main screen, press and hold the adjust button and select button (at the same time) for 3 seconds, switch to , and then press and hold the select button for another 3 seconds to switch to the Setting screen. Each button will function as a "short press" or "long press for 3 seconds".



SPECIAL PARTS
TAKEGAWA

How to enter the SET UP menu and switch between various setting screen.

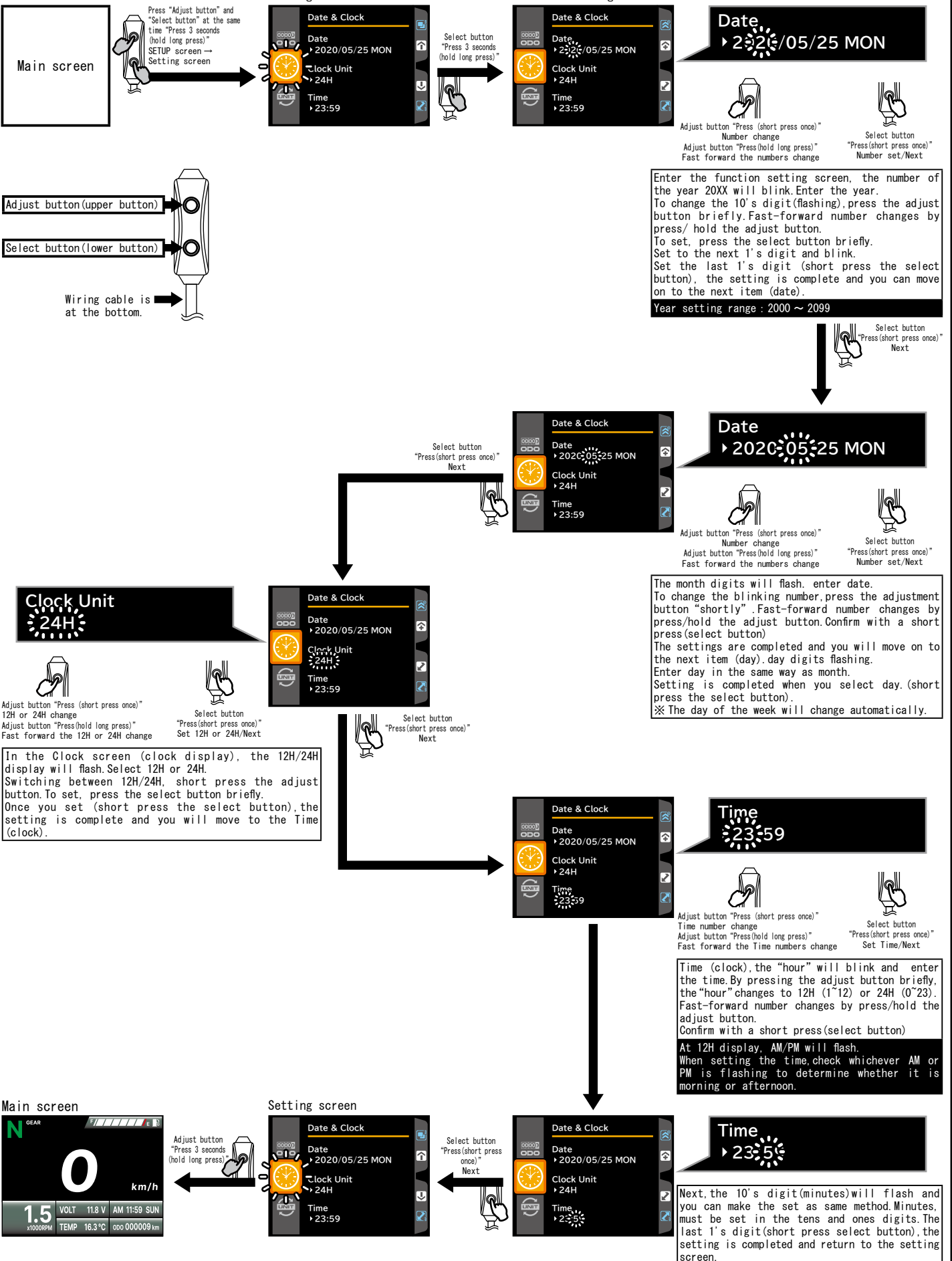
- Various settings can be changed on the SET UP screen. To go SET UP screen, press and hold the adjust button and select button (at the same time) for 3 seconds on the main screen.
- You can switch to each function by brief pressing the adjust button (scroll up) or the select button (scroll down). To enter the function screen for further selection, press and hold the select button for 3 seconds. To switch items or change values within the selected function, press the adjust button, and to move to the next item or determine the value, brief press the select button.



① Date & Clock

1

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
 Note: The "SETUP" will be displayed before the settings screen.
 To enter the Date/Clock settings screen, press/hold (3 seconds) the select button while Date & Clock is displayed.



② Unit (Speed/Temperature settings)

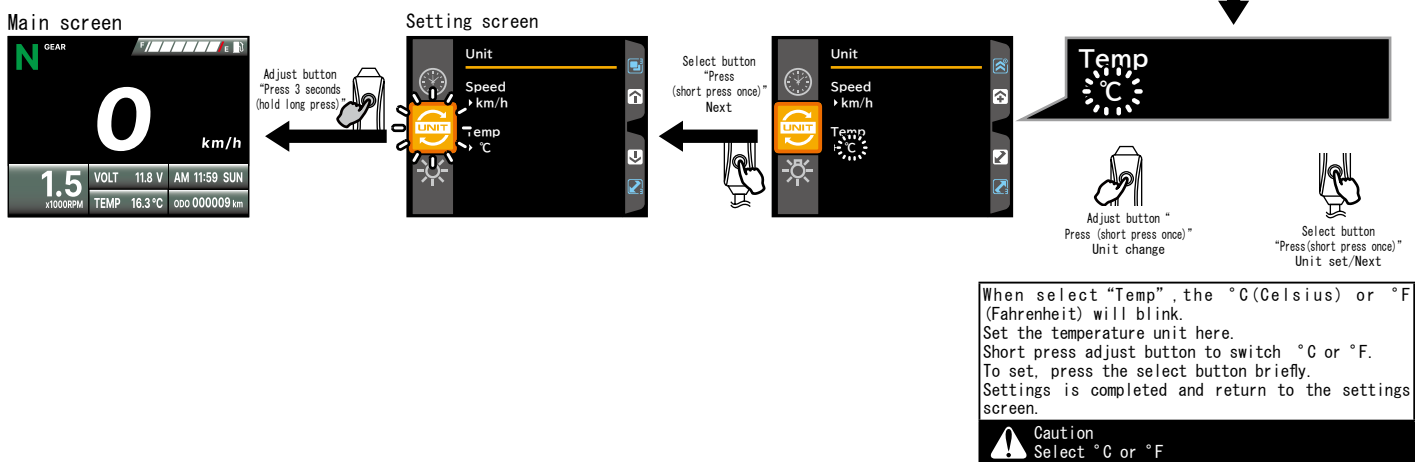
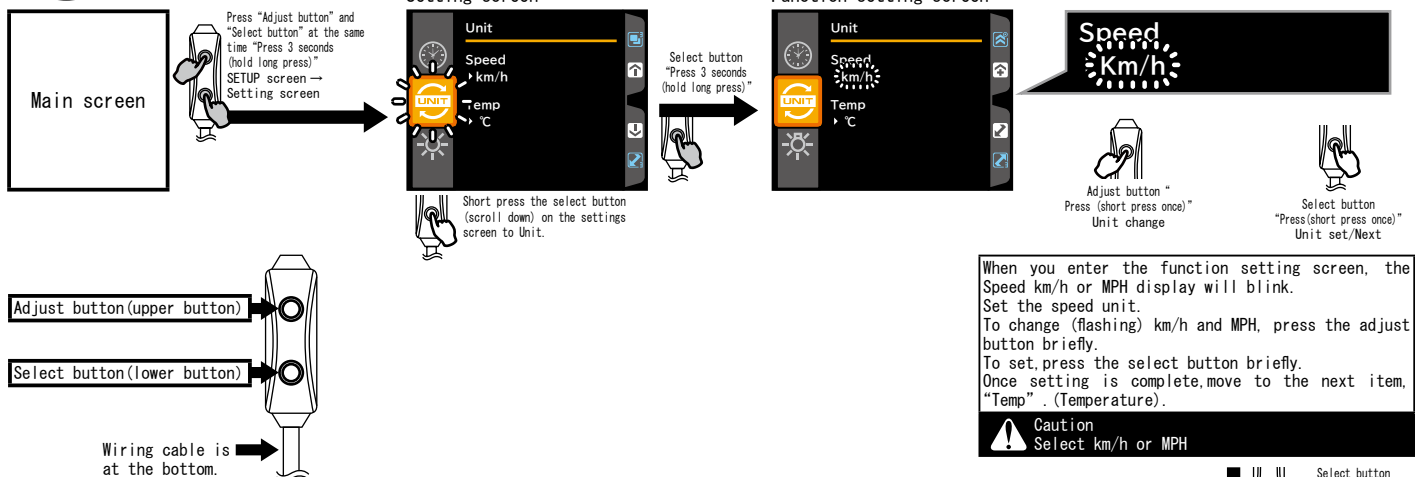
2

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.

Note: The "SETUP" will be displayed before the settings screen.

On the setting screen, short press the select button (scroll down) place to "Unit".

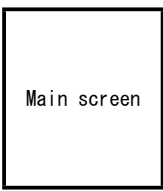
"Unit" is displayed, press/hold (3 seconds) the select button to enter the function setting screen "Unit" (speed/temperature settings).



③ Backlight

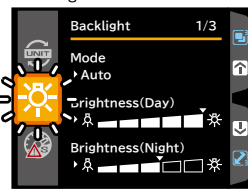
3

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Backlight. Backlight is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



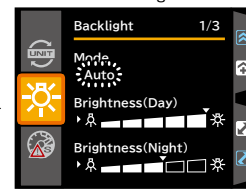
Press "Adjust button" and "Select button" at the same time "Press 3 seconds (hold long press)"
SETUP screen → Setting screen

Setting screen



Short press the select button (scroll down) on the settings screen to Backlight.

Function setting screen



Select button "Press 3 seconds (hold long press)"

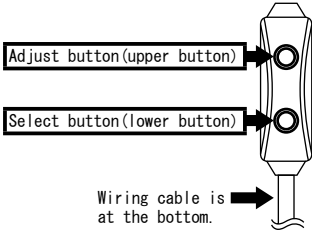


Adjust button "Press (short press once)"
Mode change

Select button "Press (short press once)"
Mode set/Next

At the function setting screen, enter the item Mode, "Auto", "Day", or "Night" will flash. Set the display mode of the LCD backlight. To change each flashing mode, press the adjust button briefly. The settings are complete and move to next item, Brightness (Day).

Backlight display
Auto: Switches automatically adjusting the brightness (by environment)
Day mode in bright environments.
Night mode in dark environments.



Wiring cable is at the bottom.

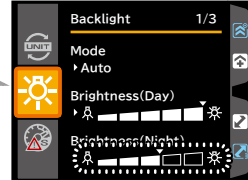


Adjust button "Press (short press once)"
Dimmer adjust

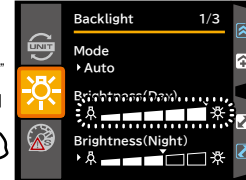
Select button "Press (short press once)"
Dimmer set/Next

When entering Brightness (Night), dimmer adjust will blink. Set the dimmer adjust in Day mode. Day mode can be adjusted in a range of 1 to 5 steps. Adjust the dimmer by short press the adjust button. Setting is complete and move to the next item, RPM Color.

Night mode dimmer adjust range
: 1 to 5 steps. 1 steps: 20%



Select button "Press (short press once)"
Next



Select button "Press (short press once)"
Next



Adjust button "Press (short press once)"
Dimmer adjust

Select button "Press (short press once)"
Dimmer set/Next

When entering Brightness (Day), dimmer adjust will blink. Set the dimmer adjust in Day mode. Day mode can be adjusted in a range of 1 to 5 steps. Adjust the dimmer by short press the adjust button. Setting is complete and move to the next item, Brightness (Night).

Day mode dimmer adjust range
: 1 to 5 steps. 1 steps: 20%



Adjust button "Press (short press once)"
Color adjust

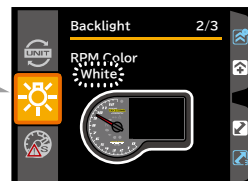
Select button "Press (short press once)"
Color set/Next

RRPM Color (change illumination color of tachometer needle), the color display (White) will flash. Select the color. To change the color, short press the adjust button. To confirm, short press the select button. Setting is complete and move to the Display Color (for Night).

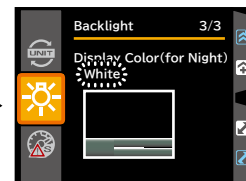
Color lineup

: White, Red, Orange, Green, Blue, Yellow

Note: color of the illustration LCD will also changes.



Select button "Press (short press once)"
Next



Select button "Press (short press once)"
Next



Adjust button "Press (short press once)"
Color adjust

Select button "Press (short press once)"
Color set/Next

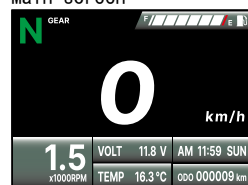
Display Color (for Night) (LCD screen color change)
The color display (White) will blink. Select the color of the LCD screen here (White: no color)
To switch colors, short press the adjust button. Setting is completed and return to the setting screen.

Color lineup

: White, Red, Orange, Green, Blue, Yellow

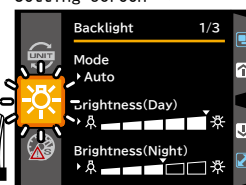
Note
Color of the illustration LCD will also changes. ※ White: no color

Main screen



Adjust button "Press 3 seconds (hold long press)"

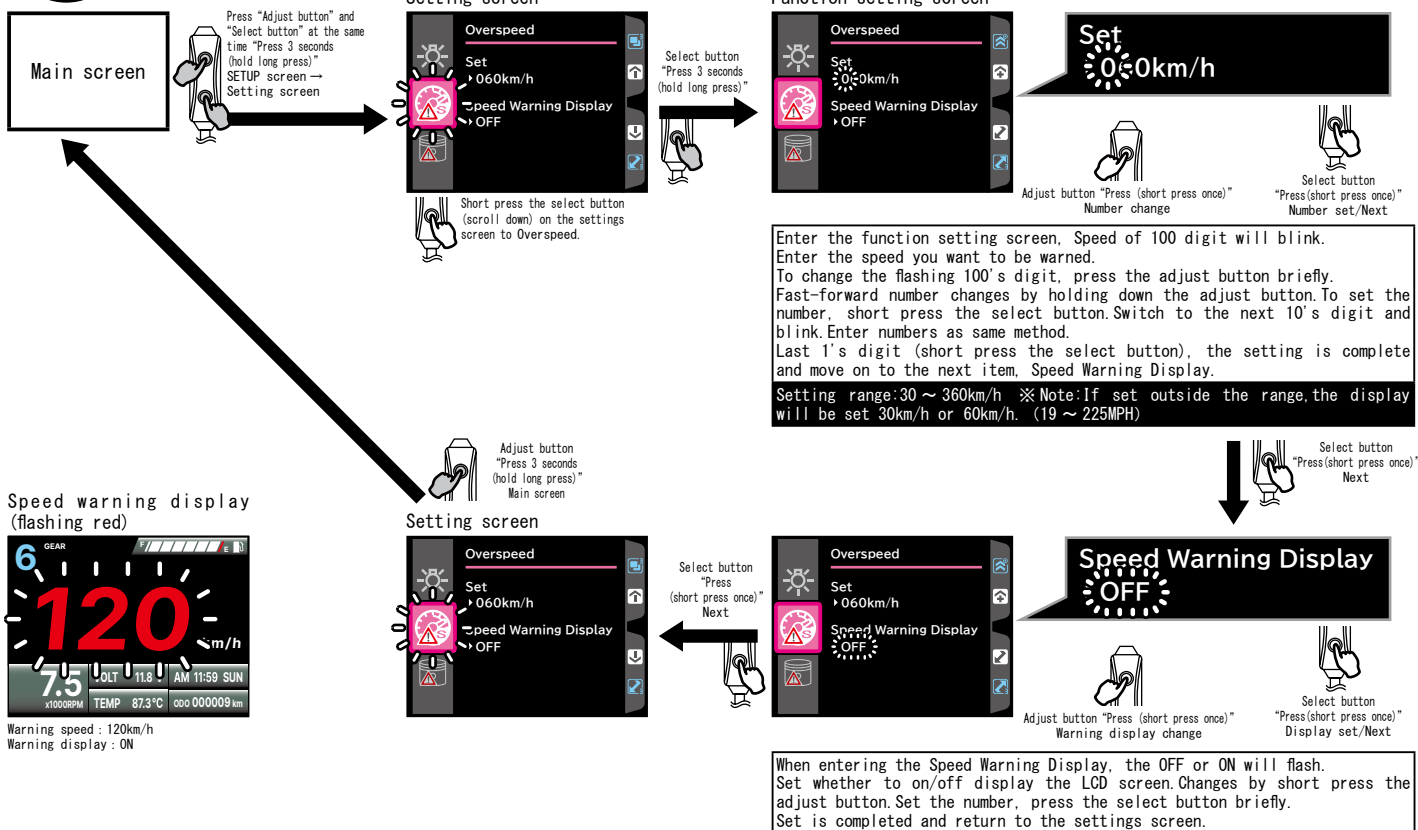
Setting screen



④ Overspeed (Speed warning settings)

4

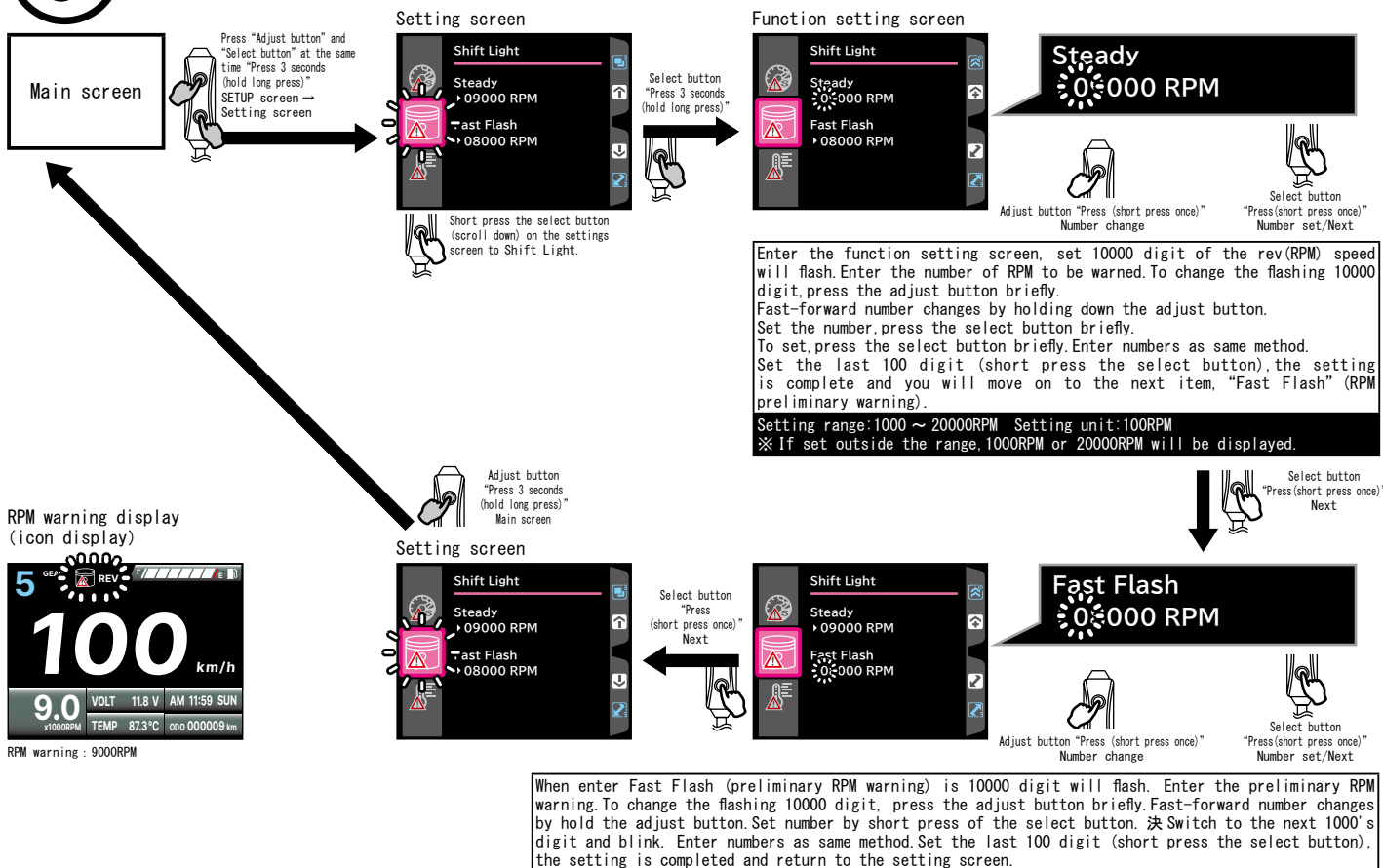
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Overspeed. Overspeed is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



⑤ Shift Light (Rev(RPM) warning setting)

5

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Shift Light. Shift Light is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



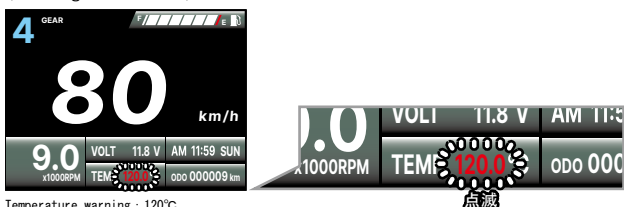
⑥ Temp Warning (Temperature warning settings)

6

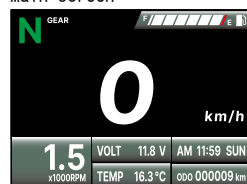
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Temp Warning. Temp Warning is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



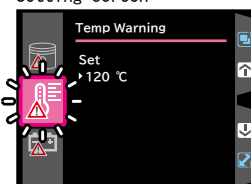
Temperature warning display (flashing red number)



Main screen



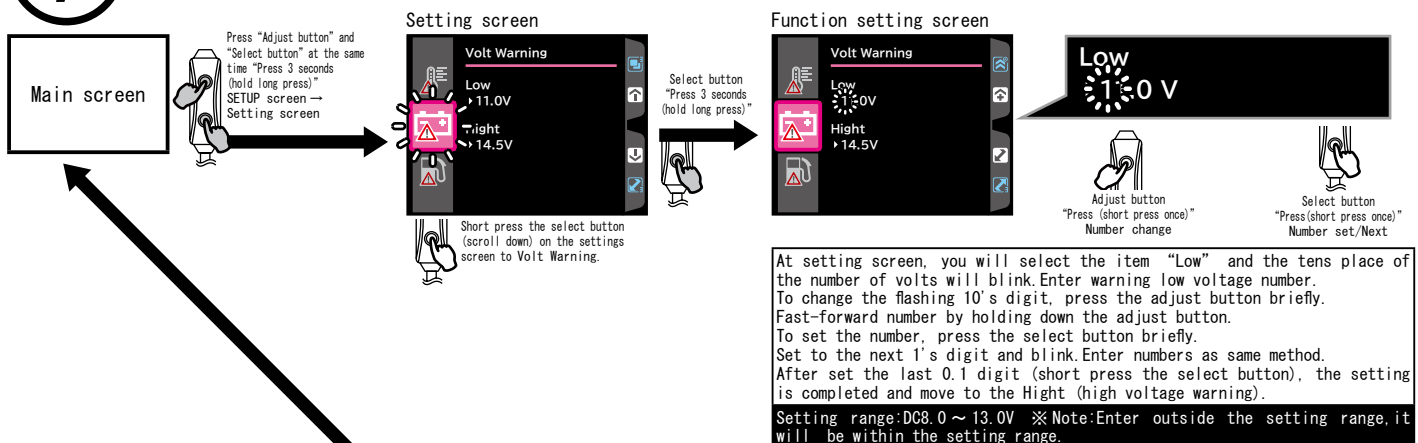
Setting screen



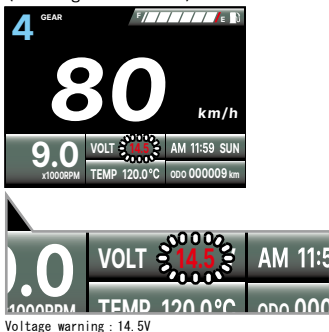
⑦ Volt Warning (Voltage warning setting)

7

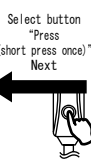
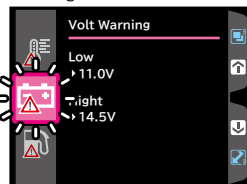
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Volt Warning. Volt Warning is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



Voltage warning display (flashing red number)



Setting screen



High 14.5 V

Adjust button "Press (short press once)" Number change

Select button "Press (short press once)" Number set/Next

When select High (high voltage warning), the tens digit of the volt number will flash. Enter warning high voltage. To change the flashing 10's digit, press the adjust button briefly. Fast-forward number changes by holding down the adjust button. Set the select button briefly.
Once set, it will switch to the next 1's digit and blink. Enter numbers as same method.
Set the last 0.1 digit (short press the select button), and return to the setting screen.

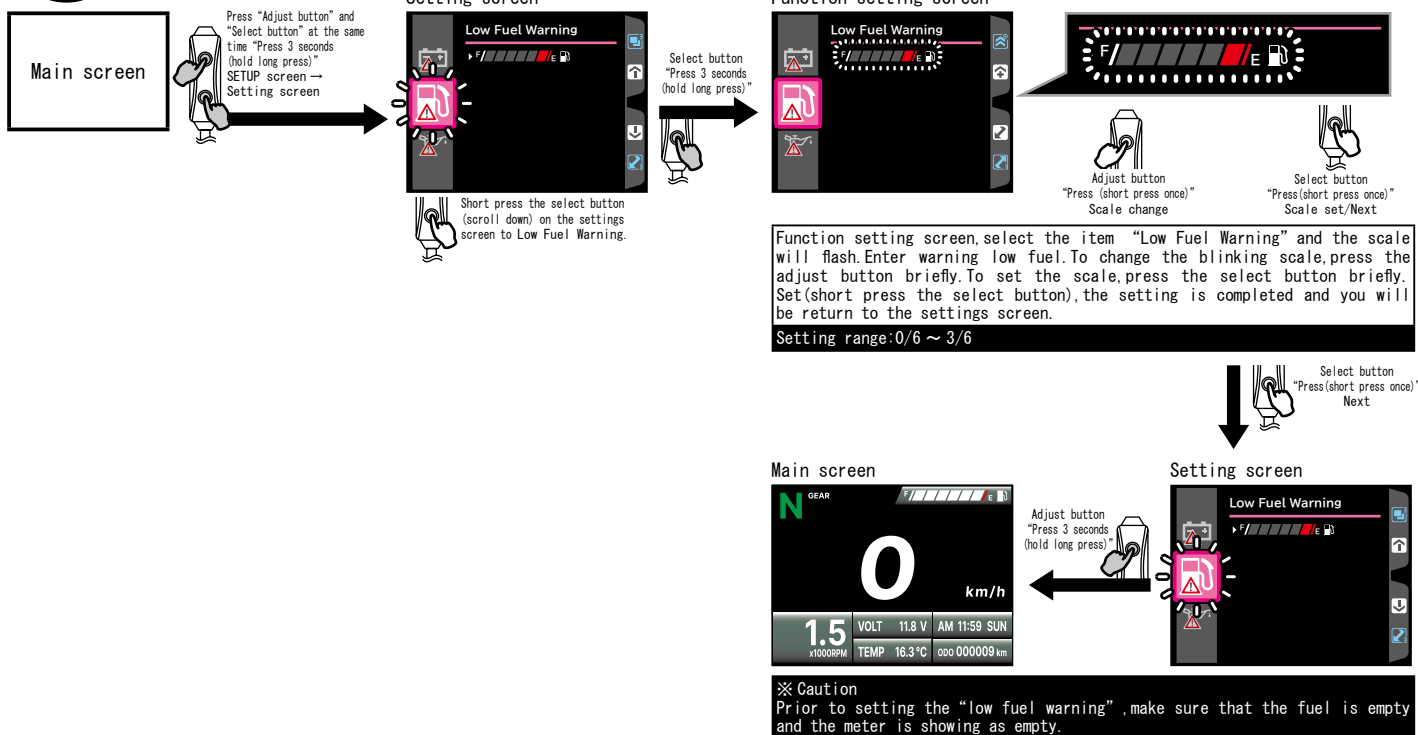
Setting range: DC13.1 ~ 18.0V

※ Note: Enter outside the setting range, it will be within the setting range.

⑧ Low Fuel Warning (Low Fuel Warning setting)

8

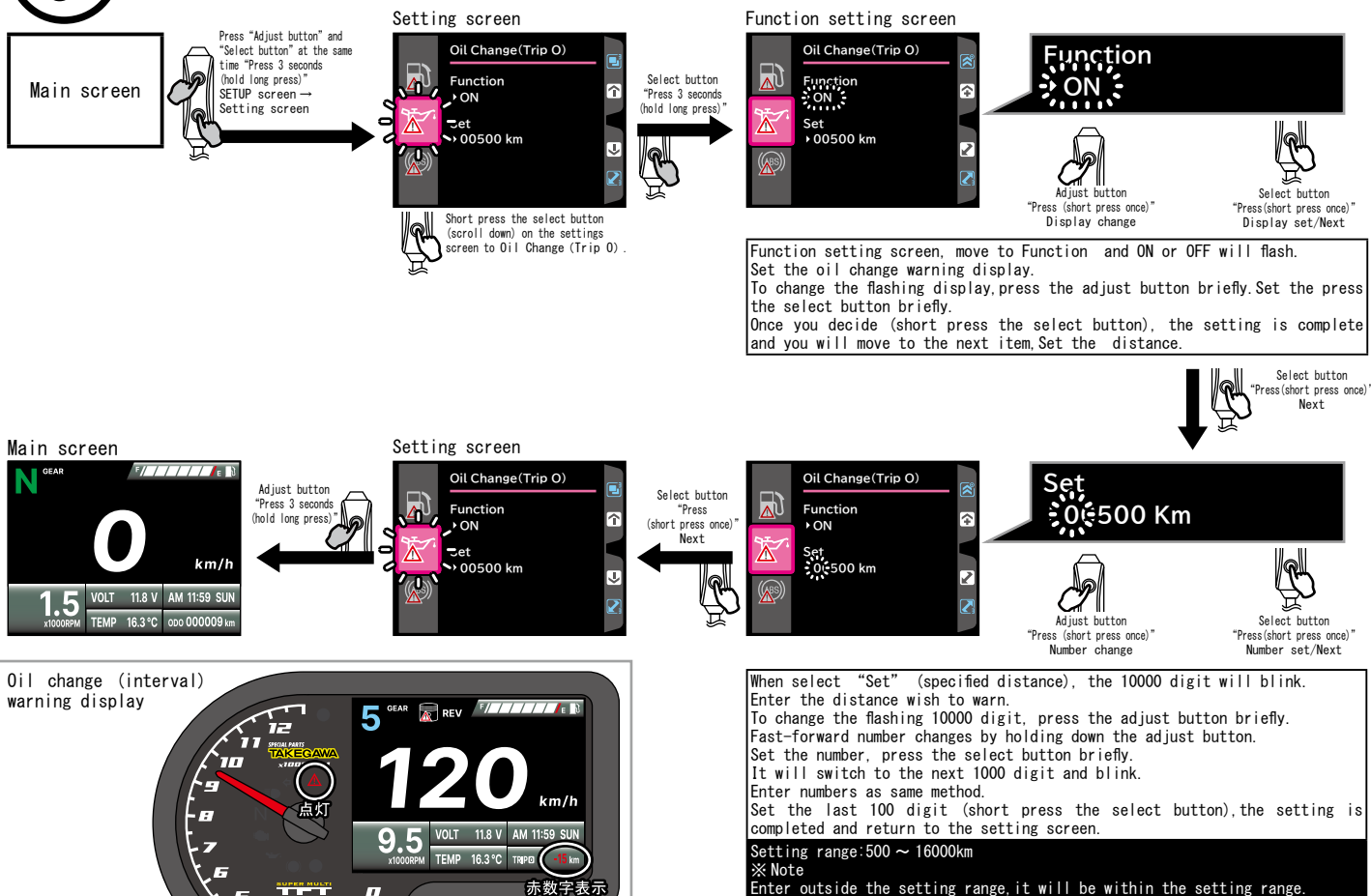
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note:The "SETUP" will be displayed before the settings screen.Short press the select button (scroll down) on the settings screen to Low Fuel Warning.Low Fuel Warning is displayed in the title, press/hold(3 seconds) the select button to move function setting screen.



⑨ Oil Change (Trip 0) (Oil change warning setting)

9

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note:The "SETUP" will be displayed before the settings screen.Short press the select button (scroll down) on the settings screen to Oil Change (Trip 0). Oil Change (Trip 0) is displayed in the title, press/hold(3 seconds) the select button to move function setting screen.



⑩ ABS Warning (ABS warning settings)

10

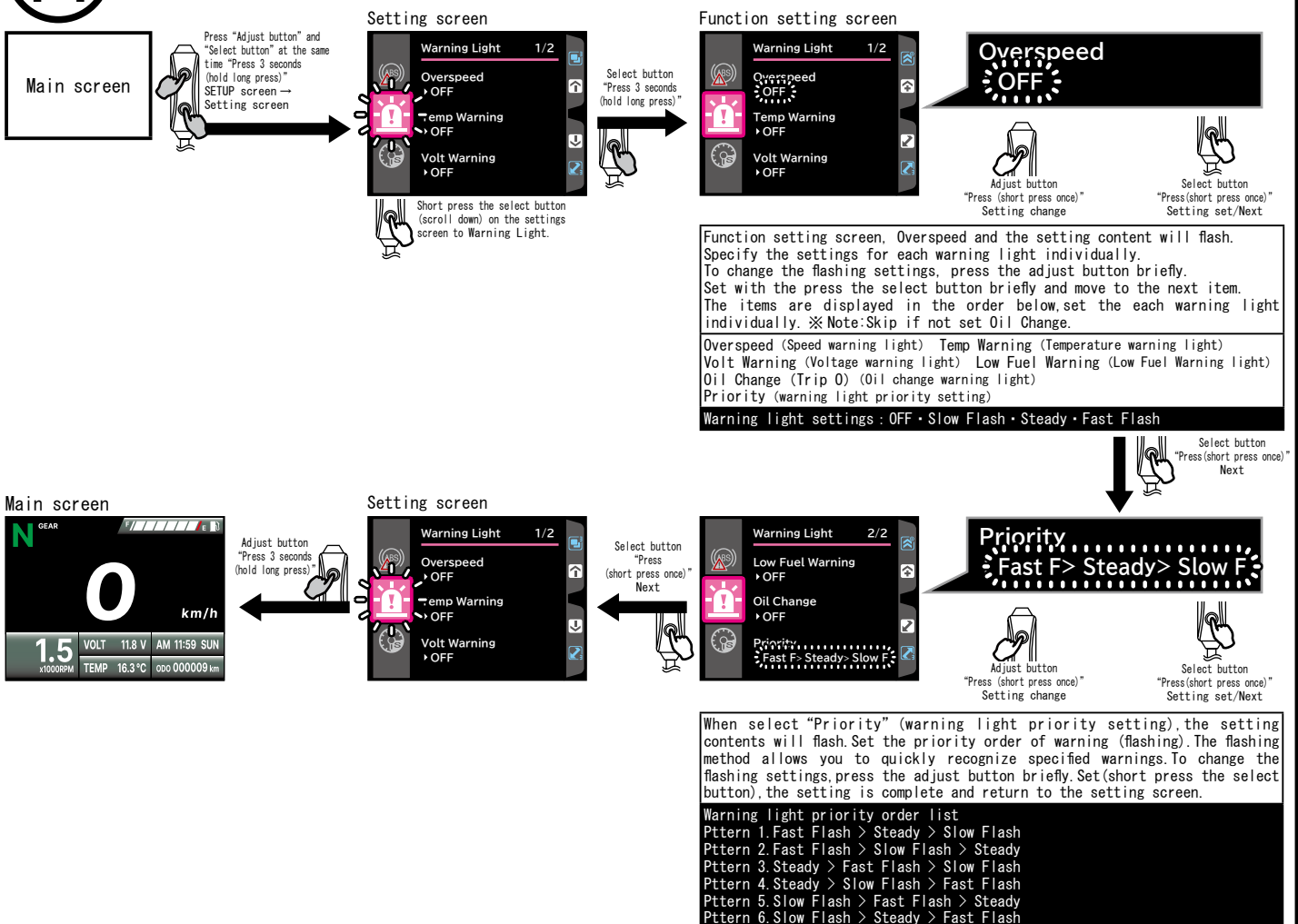
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to ABS Warning. ABS Warning is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



⑪ Warning Light (Warning light settings)

11

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Warning Light. Warning Light is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



12 Speedometer (Speed display settings)

12

■ Tire Circumference and Sensor Point settings. (Please follow the installation manual for the bracket/harness kit. (specified model)) Measure the outer tire dimension (circumference). Measure with reference "How to measure tire outer circumference" in the illustration below. After the measurement, apply the number to the following formula to calculate. This gives the value of the Tire Circumference. Then, enter the various sensor points and complete the settings.

■ How to set the stock (genuine) speed sensor.

For a vehicle that reads the number of teeth of the drive gear of the transmission to display the speed.

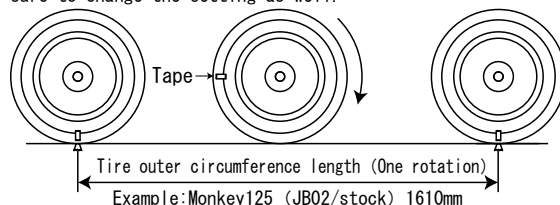
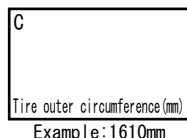
Calculate by applying the number to the following formula, and obtain the number for input to the meter. The required number are tooth of drive and driven sprocket gear and "tire circumference".

■ Let the drive sprocket (tooth) as "A" and the driven sprocket (tooth) as "B".

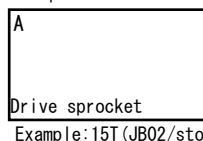
Example: Monkey125 (JB02 stock) Drive sprocket (A): 15T, Driven sprocket (B): 34T

How to measure the tire outer circumference: Set the mark at the near air valve, and measure the distance that the tire has rotated once, using that as the starting point. ※ When you change the tire size, be sure to change the setting as well.

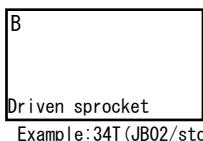
■ Let the tire circumference as "C"



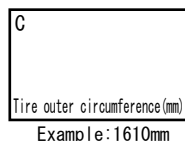
The value can be calculated from the following formula. The number (bold) "Speed signal length (Tire Circumference)", which is the number to be input to the meter.



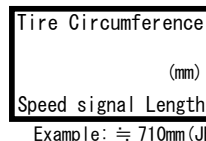
÷



×



=



■ Number of signals of stock speed sensor. (Sensor Point)

(Example) Vehicles that use the C2 gear (2nd gear on counter shaft) of the CT125 transmission to display the speed. In this case, enter the number of teeth on the C2 gear (2nd gear on counter shaft) of stock transmission (read by the genuine speed sensor.) The number in the bold frame is the value of "number of signals" and is the value to be input to the meter.

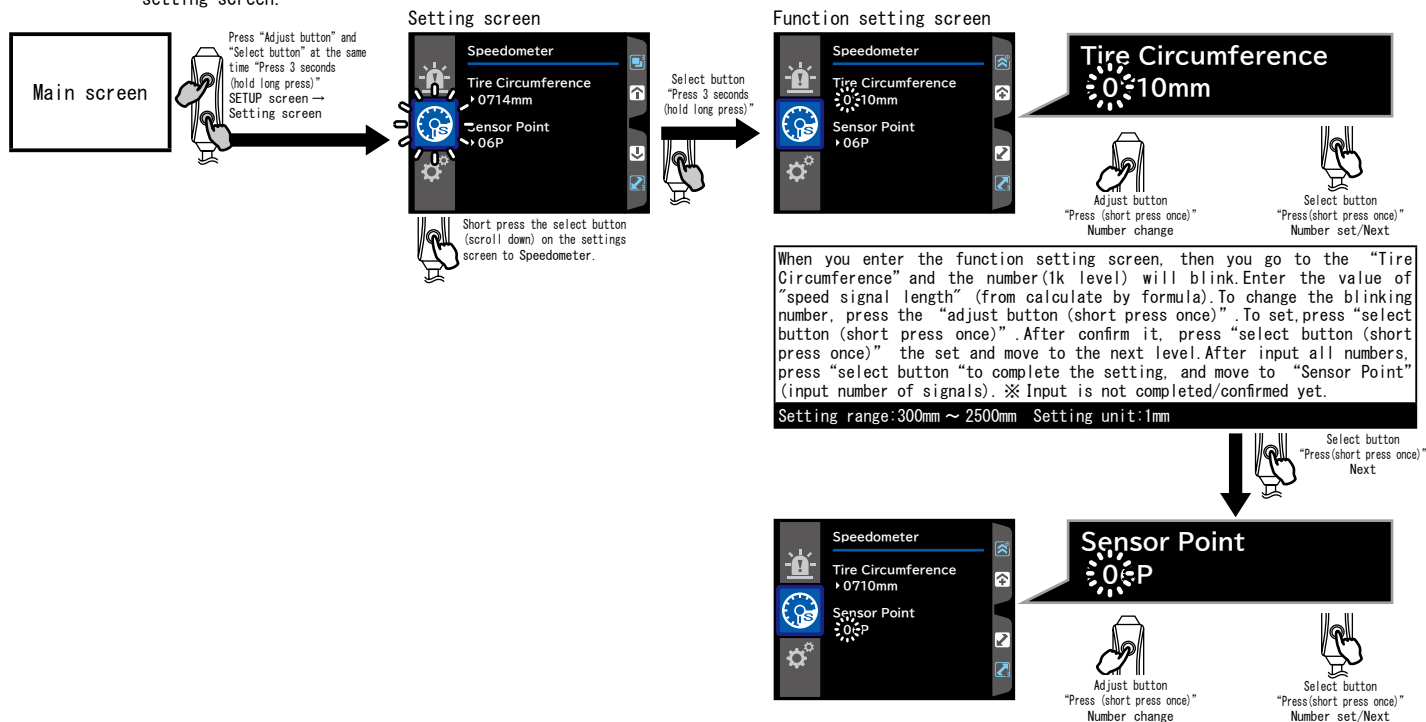
Sensor Point

P

Number of points to pick up the signal

Example: 31P (JB02)

At the main screen, press and hold the "adjust button" and "select button" at the same time for 3 seconds (to go to the setting screen). The SETUP screen is displayed (before the setting screen). On the setting screen, press the "select button (short press once)" to scroll down and set it to "Speedometer". While "Speedometer" is displayed and press the "select button" for 3 seconds to enter the function setting screen.



When you enter the function setting screen, then you go to the "Tire Circumference" and the number (1k level) will blink. Enter the value of "speed signal length" (from calculate by formula). To change the blinking number, press the "adjust button (short press once)". To set, press "select button (short press once)". After confirm it, press "select button (short press once)" the set and move to the next level. After input all numbers, press "select button" to complete the setting, and move to "Sensor Point" (input number of signals). ※ Input is not completed/confirmed yet.

Setting range: 300mm ~ 2500mm Setting unit: 1mm

When you enter the "Sensor Point" (signal count input screen), the tens digit blinks. Enter the number of "drive gear teeth" here, the "Sensor Point" (read by the stock speed sensor). To change the blinking tens digit, press the "adjust button (short press once)". To set the number, press the "select button (short press once)". Once set, the next digit will switch and blink. After the 1st level is set, Press "select button (short press once)", then setting is completed and back to the setting screen.

※ Input is not complete/confirmed yet.

Press the "adjust button" for 3 seconds" on the setting screen to return to the main screen. This complete/confirm the settings.

Setting range: 01P ~ 40P

※ Precautions regarding setting confirmation

After entering the number and selecting the function, be sure to press and hold the "adjust button" for 3 seconds on the setting screen to return to the main screen. This is "complete/setting confirmation" and the setting is stored in the meter.

Caution: If you do not perform this operation and turn off the key, the new settings will not be stored and will be back to previous settings.

Monkey125 (JB02) / GROM (JC61/JC75)

Note: For SP Takegawa speed sensor kit and 5-speed cross mission kit

Calculate method by "stock" drive/driven sprockets, circumference of the "stock" tire, enter to the meter.

Note: even if the sprocket has been changed.

SP Takegawa speed sensor will be setting by display unit when sprocket or cross(close) mission is installed.

12 Speedometer (Speed display settings)

12

■ Tire Circumference and Sensor Point settings.

Measure the outer tire dimension (circumference). Measure with reference "How to measure tire outer circumference" in the illustration below. After the measurement, apply the number to the following formula to calculate. This gives the value of the Tire Circumference. Then, enter the various sensor points and complete the settings.

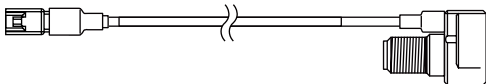
■ JIS cable speed sensor

The maximum engine speed of JIS cable speed sensor is 4200rpm $\approx$ 180km/h equivalent.

Note: More than 180km/h, use a metal reaction speed sensor. Maximum meter display 360km/h.

Insert all the way into the meter cable connection, then tighten the cable lock nut. Please use pliers to securely tight lock nut. Please check periodically to make sure there is no looseness after installation.

JIS cable speed sensor (Cord length: 300mm)

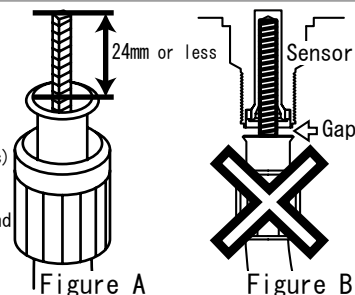


■ Note: Cable modification may be required for import and some domestic models. (if not JIS spec)

※ Measure the amount of cable protruding from the cable outer (Figure A).

If it exceeds more than 24mm, please cut that part.

Caution: If it is bottomed out as shown (Figure B), the rotating parts will be severely worn and the accurate speed will NOT be recognized.



■ JIS cable type speed sensor, speed signal length setting and speed signal number setting.

■ For all model using stock tires and meter gear, the meter setting is 714 mm and 6 signals.

Note: JIS standard specified that the meter cable rotation speed is 60 km/h at 1400 rpm (converted 714 mm, 6 signals).

Note: Using a wheel and meter gear as a set from other model, standard correction value is 714mm and 6 signals.

■ Caution: speed correction is required if the tire circumference changes (with stock meter gear).

When wheel size up. When changing tire size.

■ How to set JIS cable speed sensor

■ How to find speed correction value 1

■ Calculate from the meter gear and the circumference of the modified tire.

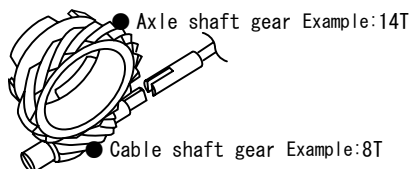
※ Caution: Care of damage during disassembly. Please be very careful when working. Enter the values to the formula below to calculate (to be input the meter).

■ Cable shaft side in the meter gear box is "Number A", and the gear on the accelerator shaft side is "Number B".

Example: Monkey (Stock)

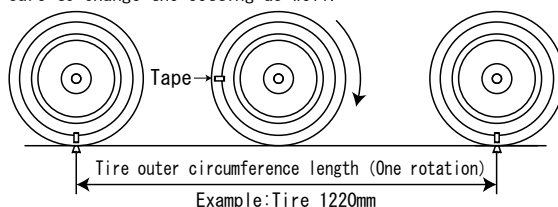
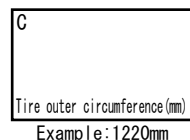
Cable shaft gear (Number A): 8T Axle shaft gear (Number B): 14T

■ Inside the meter gear box



How to measure the tire outer circumference: Set the mark at the near air valve, and measure the distance that the tire has rotated once, using that as the starting point. ※ When you change the tire size, be sure to change the setting as well.

■ Let the tire circumference as "C"



The value can be calculated from the following formula. The number (bold) "Speed signal length (Tire Circumference)", which is the number to be input to the meter.

$$\begin{array}{|c|} \hline \text{A} \\ \hline \text{Cable shaft gear} \\ \hline \text{Example: 8T} \\ \hline \end{array} \div \begin{array}{|c|} \hline \text{B} \\ \hline \text{Axle shaft gear} \\ \hline \text{Example: 14T} \\ \hline \end{array} \times \begin{array}{|c|} \hline \text{C} \\ \hline \text{Tire outer circumference (mm)} \\ \hline \text{Example: 1220mm} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Tire Circumference} \\ \hline \text{Speed signal Length} \\ \hline \text{Example: } \approx 697\text{mm} \\ \hline \end{array}$$

■ The speed signal setting (number of signals) will be 6.

■ How to find speed correction value 2

■ Method to stock tires and modified tires. Measure the circumference of each tire.

Enter the values to the formula below to calculate the value (to input the meter).

■ The changed tire circumference is "Number A" and the stock tire circumference is "Number B".

Example: The changed tire circumference (Number A): 1220mm The stock tire circumference (Number B): 1250mm

The value can be calculated from the following formula. The number (bold) "Speed signal length (Tire Circumference)", which is the number to be input to the meter.

$$\begin{array}{|c|} \hline \text{A} \\ \hline \text{The changed tire circumference} \\ \hline \text{Example: 1220mm} \\ \hline \end{array} \div \begin{array}{|c|} \hline \text{B} \\ \hline \text{The stock tire circumference} \\ \hline \text{Example: 1250mm} \\ \hline \end{array} \times 714 = \begin{array}{|c|} \hline \\ \hline \text{Example: } \approx 697\text{mm} \\ \hline \end{array}$$

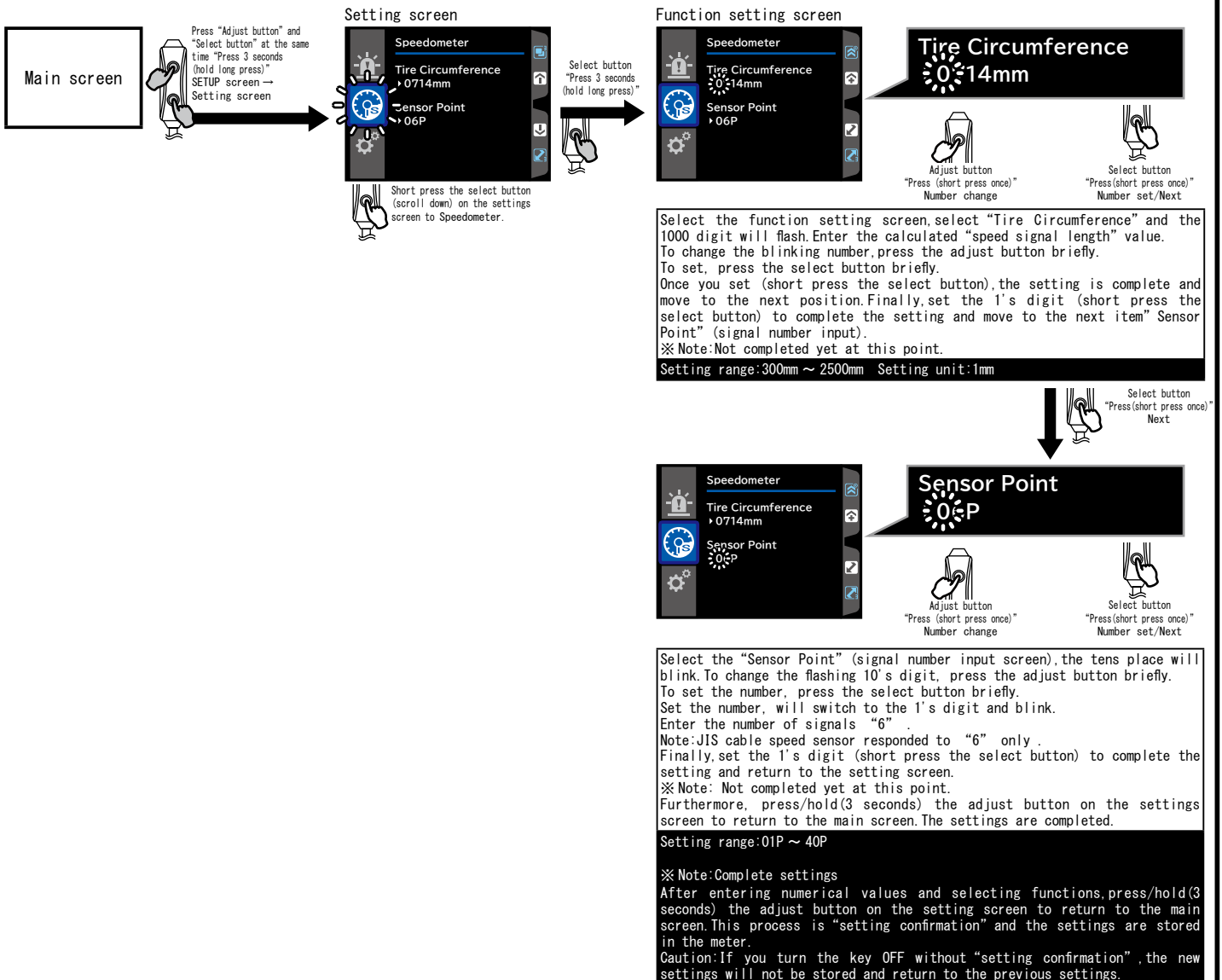
■ The speed signal setting (number of signals) will be 6.

12 Speedometer (Speed display settings)

12

■ How to set the JIS cable speed sensor(cont.) Meter input method.

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
 Note:The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Speedometer. Speedometer is displayed in the title, press/hold(3 seconds) the select button to move function setting screen.



12

- Speed signal length and sensor point settings.

How to set the metal reaction speed sensor(Optional parts).

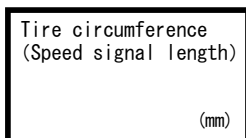
- Metal reaction type speed sensor, measure the required value and enter it into the meter.

Setting values required to input to the meter.

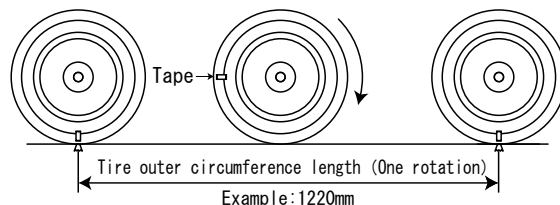
Tire circumference (number of speed signal length)

Number of signals (Bolts that pick up the signal of the metal-reactive speed sensor)

- Refer to the figure(right) for how to measure the tire circumference.



Example:1610mm



- Signal of metal reaction type speed sensor.

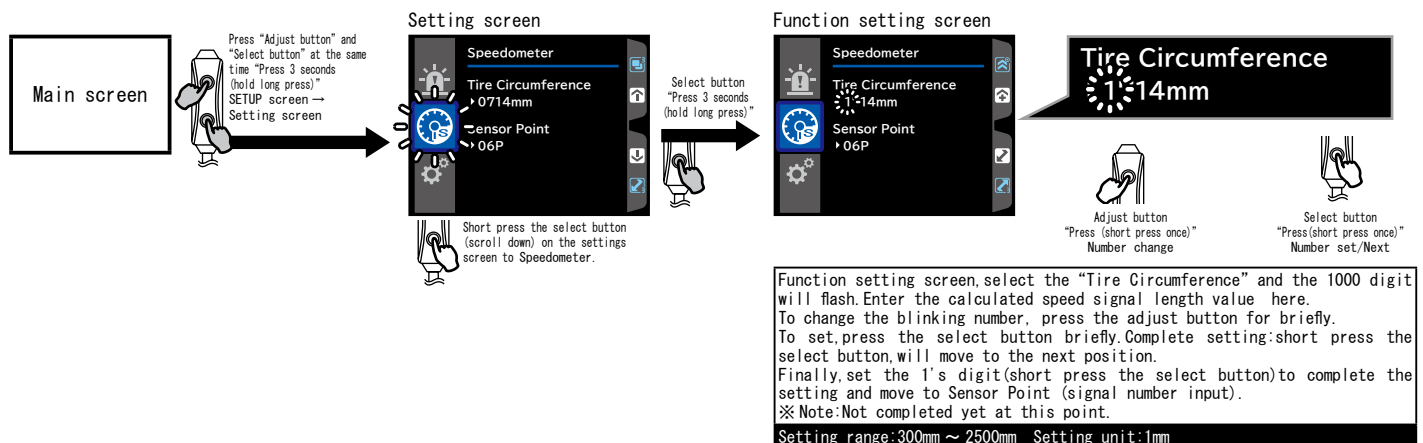
SP Takegawa "Metal reaction speed sensor" (optional)picks up the signal with a disc bolt or sprocket bolt.Enter the number of bolts to pick up the signal.
The numbers(bold frame) signals" and input into the meter.

Sensor Point

P

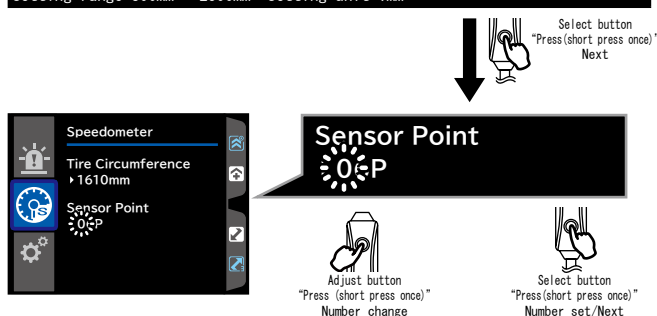
Number of bolt to pick up the signal.

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note:The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Speedometer.Speedometer is displayed in the title, press/hold(3 seconds) the select button to move function setting screen.



Function setting screen,select the "Tire Circumference" and the 1000 digit will flash.Enter the calculated speed signal length value here.
To change the blinking number, press the adjust button for briefly.
To set,press the select button briefly.Complete setting:short press the select button,will move to the next position.
Finally,set the 1's digit(short press the select button)to complete the setting and move to Sensor Point (signal number input).
※ Note:Not completed yet at this point.

Setting range:300mm ~ 2500mm Setting unit:1mm



Enter the Sensor Point(signal number input screen),the tens place will blink.Enter the number of signals to be reacted to metal-reactive speed sensor(bolts to pick up the signal).
To change the flashing 10's digit,press the adjust button briefly.
To set,press the select button briefly.
Set the number then move to the 1's digit and blink.
Finally, set the 1's digit (short press the select button) to complete the setting and return to the setting screen.
※ Note:Not completed yet at this point.
Furthermore,press/hold(3 seconds) the adjust button on the settings screen to return to the main screen.The settings are completed.

Setting range:01P ~ 40P

※ Notes on confirm settings

After entering numerical values and selecting functions, be sure to press/hold(3 seconds)the adjust button for on the setting screen to return to the main screen.This process will confirm the settings and the settings will be stored in the meter.Caution: If you turn the key OFF without performing this step, the new settings will not be stored and will return to the previous setting.

About the number of signals

For front:number of brake disc bolts,For rear:number of sprocket bolts.Need to securely fix the metal reaction speed sensor in the appropriate position (each bolt).Please refer the installation method of the metal reaction type speed sensor below.

- Example of sensor installation (detailed figure below)

① Make sure that the signal space are even.

Accurate speed cannot be displayed with irregular space.

② Note:

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

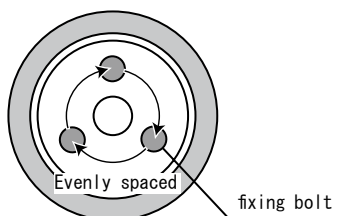
■ Note

If the sensor reaction part can not placed in the right place,create a reaction part by a small piece of iron such as washer with epoxy bond etc.

Check the metal reaction by checking LED lamp on the metal reaction speed sensor is lit or not, and then adjust the set position.

※ Note:The number of lights on/off is not the number of signals.

Number of signals:please enter the number of bolts(or the number of reaction parts created).



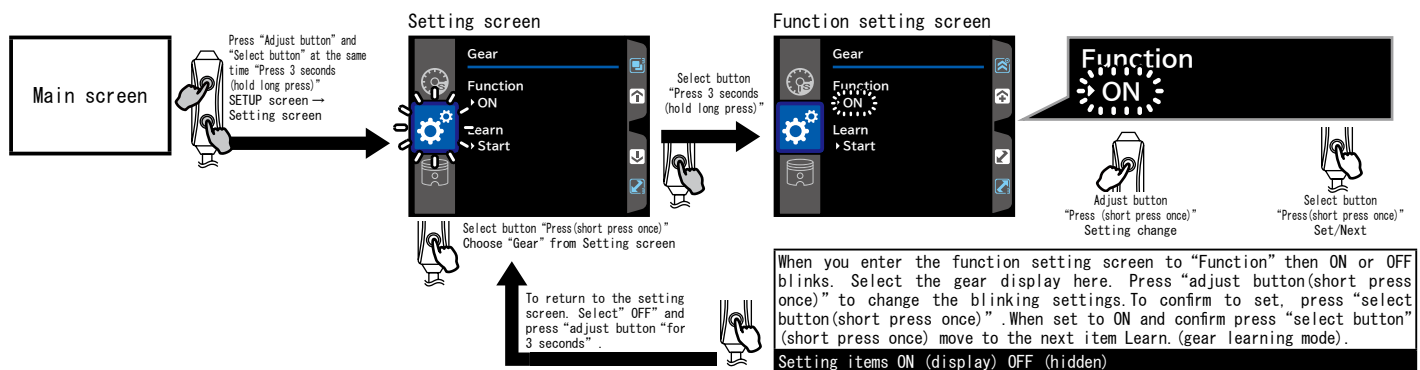
13 Gear (Gear Setting)

13

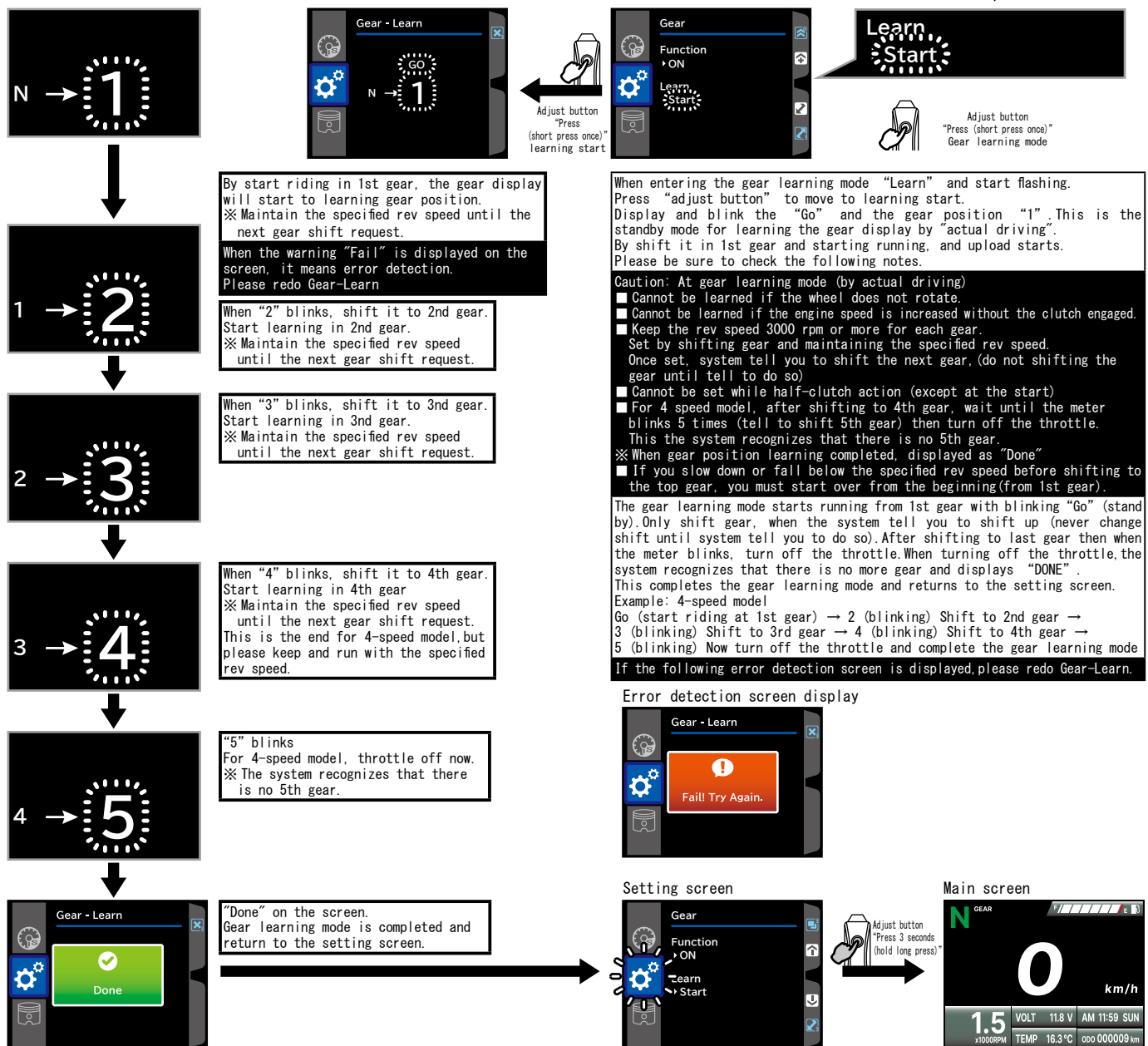
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
 Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Gear. Gear is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.

※ 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 TFT meter. Therefore, it is required 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: Set the gear to neutral before gear learning mode.
 ※ The meter will tell you when you need to shift in the gear.
 Maintain the rev at specified speed until the system tells you to shift the gear. (while system learning).

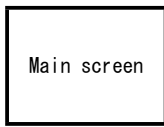


14 RPM (Tachometer input setting)

14

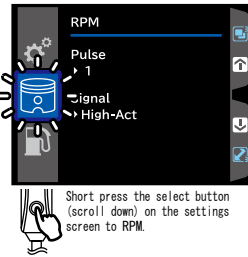
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to RPM. RPM is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.

Tachometer signal input. Set the connection method, RPM signal frequency by the models. Please refer to the various settings in "RPM signal input" below and connect the RPM code and input the number of signals.



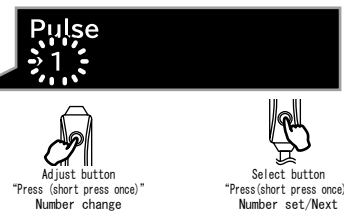
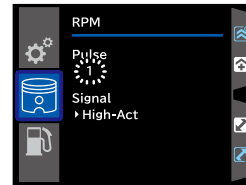
Press "Adjust button" and "Select button" at the same time "Press 3 seconds (hold long press)" SETUP screen → Setting screen

Setting screen



Select button "Press 3 seconds (hold long press)"

Function setting screen



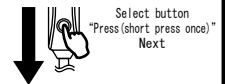
Adjust button "Press (short press once)" Number change

Select button "Press (short press once)" Number set/Next

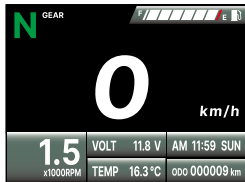
RPM signal number setting	Number of firings
P0.5	2-rotation 1-ignition
P1	1-rotation 1-ignition
P2	1-rotation 2-ignition
P3	1-rotation 3-ignition
P4	1-rotation 4-ignition
P5	1-rotation 5-ignition
P24	1-rotation 25-ignition

After connecting the RPM cord and confirming the signal number by referring to "RPM signal input" below, enter the signal number in the tachometer input setting. When you enter the function setting screen, enter the item Pulse and the number will flash. Enter the RPM signal number. To change the blinking number, press the adjust button briefly. Set the press the select button briefly. The settings are complete and move to next item, Signal.

RPM signal number setting range: P0.5 P1 ~ P24

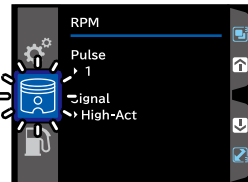


Main screen



Adjust button "Press 3 seconds (hold long press)"

Setting screen



Select button "Press (short press once)" Next

At the function setting screen, enter the Signal and "Hi-Act" or "Lo-Act" will flash. Choose the RPM signal type. To change the flashing settings, press the adjust button briefly. To set, press the select button briefly. Short press the chose button, return to the setting screen.
※ Note: Not completed yet at this point.

RPM signal type setting: Hi-Act Lo-Act

※ Note: Complete settings

After entering numerical values and selecting functions, press/hold (3 seconds) the adjust button on the setting screen to return to the main screen. This process is "setting confirmation" and the settings are stored in the meter.

※ Caution: Turn the key OFF without performing the above steps, the new settings will not be recoded and return to previous the settings.

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.

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.

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.

[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.

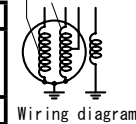
C.D.I. ignition Common in non-battery model and small size carburetor model.

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.

For ignition

For lights and instrument



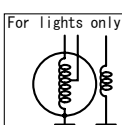
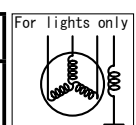
Ignition coil
Ignition coil is wrapped with extremely thin copper wiring of about 0.1 mm, and the outer is often protected with a heat-resistant sheet. Lighting coils are wrapped with copper wiring of about 0.8 to 1 mm.

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]

KS110 • CYGNUS-X (carburetor type) • AddressV125 (GK7). etc

★ : certain conditions
△ : May be different



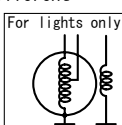
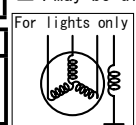
Wiring diagram

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 (JB02) • Super Cub • CT125 • Monkey (F1) • Ape50 (F1) • CYGNUS-X (F1) • AddressV125 (GK9). etc

★ : certain conditions
△ : May be different



Wiring diagram

⑭ RPM signal input

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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.

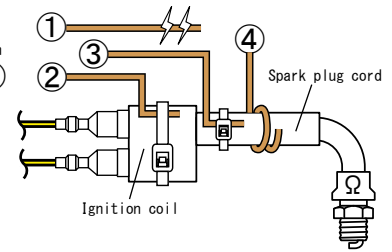
[A connection]

Vehicle side
cord

[4] Brown

RPM wiring A

A connection



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.

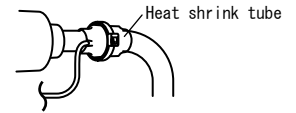
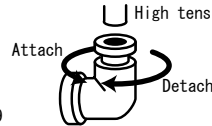
• Wrap heat shrink tube over RPM wiring A and shrink by hair dryer etc.

(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.

[B connection]

Vehicle side
cord

[4] Brown

RPM wiring B

CDI

Plus voltage ignition

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

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

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

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.

⑭ RPM signal input

14

RPM signal input [C connection] Wiring method

C. D. I. ignition

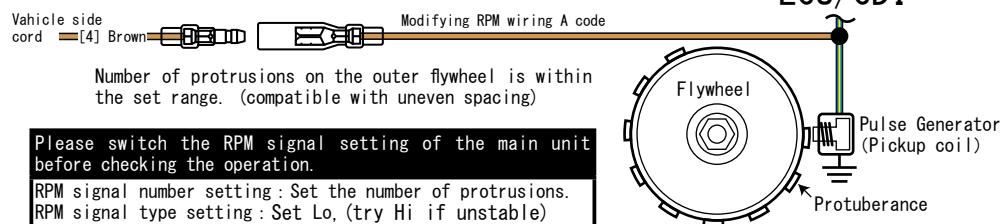
DC-C. D. I. ignition method

Transistor ignition system

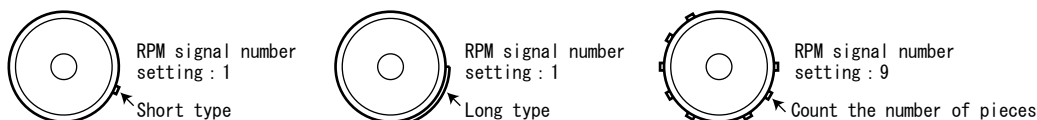
Please see the previous page for how to find type of ignition systems.

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]



Example: RPM signal frequency setting



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.	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	Not available for A connection	
Ape50 (F1)	Injection	Full transistor		
GROM ※1	Injection	Full transistor	B connection (Pink/Blue code)	0.5 - Hi
Monkey125 (JB02)	Injection	Full transistor		
CT125 (JA45)	Injection	Full transistor		
Ape50 TYPE D	Injection	Full transistor	C connection (Blue/Yellow code)	9 - Lo

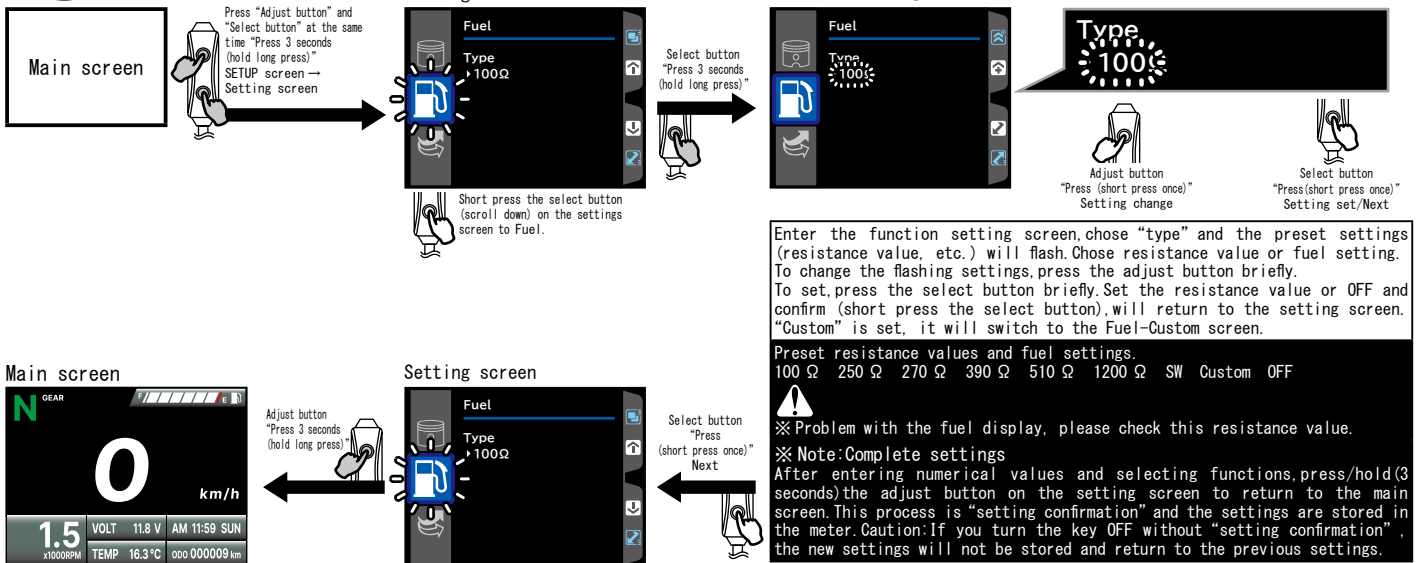
※1 When using a sub-wiring for GROM, the pulse line inside and the setting is "2 - Hi"
"B connections" specified in the table are only available when using the general-purpose sub wiring.

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

15 Fuel (Fuel settings) Know the resistance value of the stock fuel tank, etc.

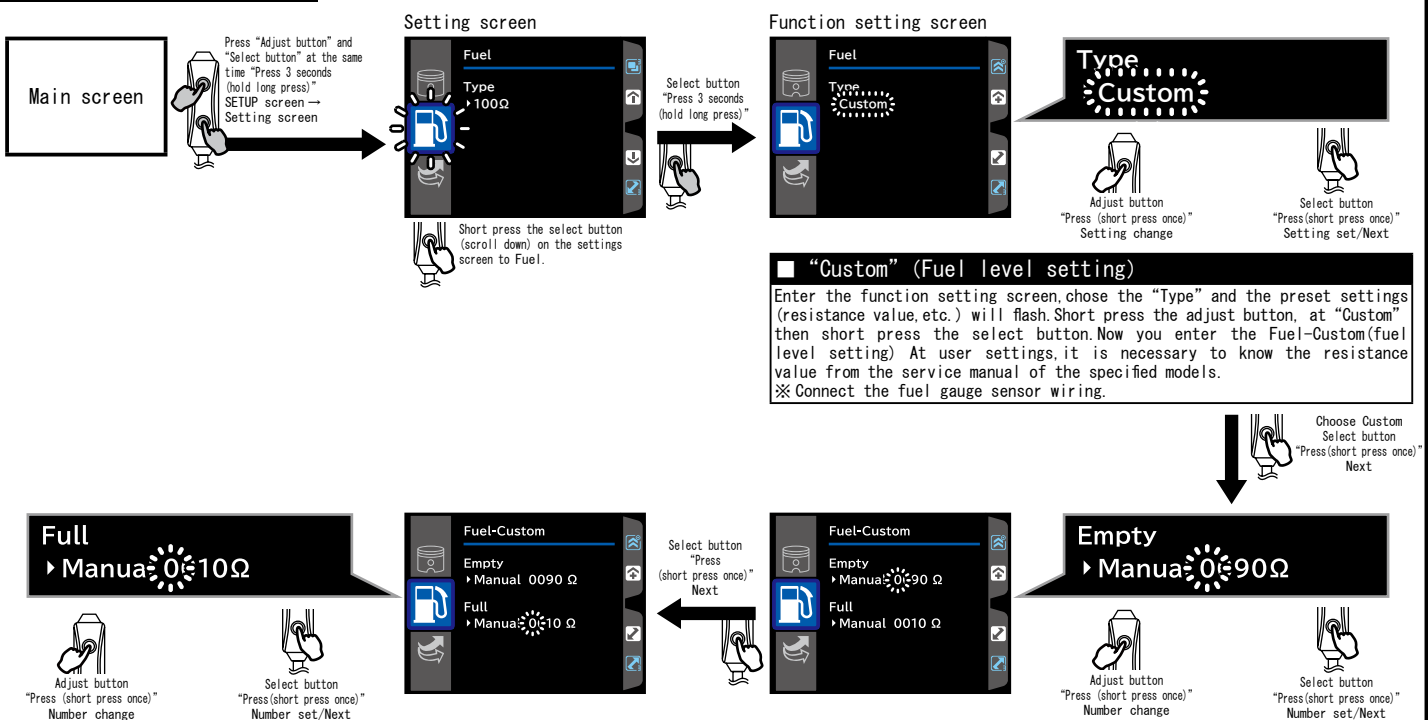
15

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time. Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Fuel. Fuel is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



Custom Manual Setting

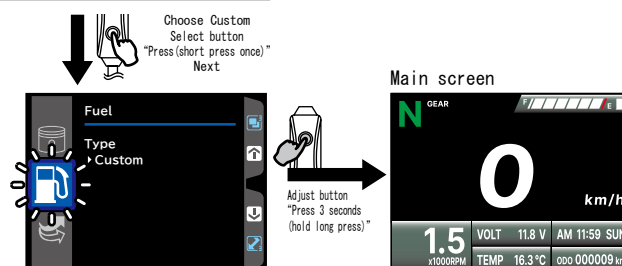
From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time. Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Fuel. Fuel is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



At "Full" (full tank), short press the select button "Auto" change to "Manual" and the 1000 digit will blink. Enter the resistance value when the fuel is full. Change the numbers by short press the adjustment button. When you finish entering the last 1's digit and confirm it (short press the select button), will return to the setting screen.

⚠️ Note: Complete settings
 After entering numerical values and selecting functions, press/hold (3 seconds) the adjust button on the setting screen to return to the main screen. This process is "setting confirmation" and the settings are stored in the meter. Caution: If you turn the key OFF without "setting confirmation", the new settings will not be stored and return to the previous settings.

Switch to the "Fuel-Custom" (fuel level settings) screen, the "Empty" will appear and "Auto" will flash. User settings, by short pressing the select button, "Auto" will change to "Manual" and the 1000's digit will blink. Enter the resistance value when the fuel is empty. Change the numbers by short press the adjust button. To set, short press the select button. After enter the last 1's digit and confirm your set (short press the select button), will move to the "Full".



15 Fuel (Fuel settings) Setting in Custom Auto

15

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Fuel. Fuel is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.

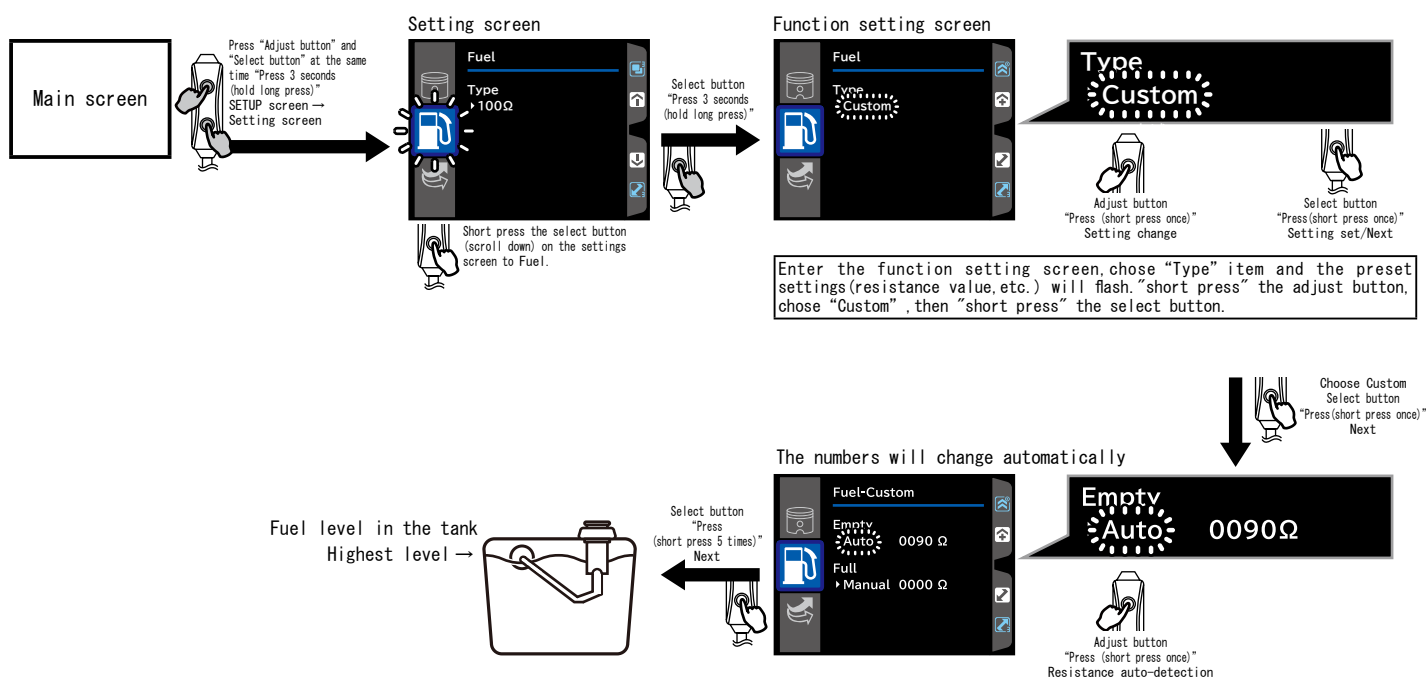
■ "Fuel level resistance auto-detection setting"



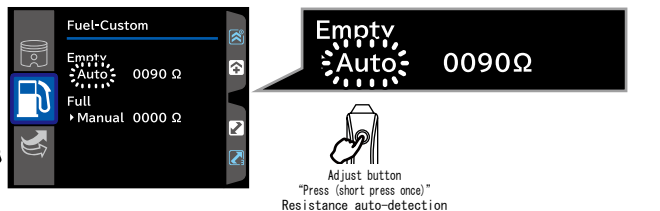
Note
Fuel level resistance auto-detection setting need to know the capacity of the fuel tank and the total fuel distribution (%) for setting.
Must have fuel sensor (genuine) that is compatible with our meter in the fuel tank.
※ May not be compatible with custom fuel tanks.



■ Make to a lowest level of fuel.
※ Keep the vehicle stationary and not to move the fuel level.



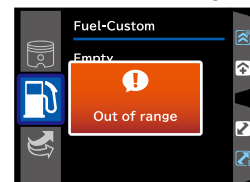
The numbers will change automatically



Fuel-Custom (fuel level user settings) screen, the "Empty" item will appear and "Auto" will flash.
Now configure the fuel level resistance auto-detection.

Conditions at this point.
※ Fuel must be lowest.
If the fuel level is not low, "Full" will not be detected automatically and "Out of range" will be displayed. Please check actual fuel level of the tank.
※ Fuel gauge sensor wiring is connected.
Note: Wiring is not connected, resistance auto-detection will not work.
Press the adjust button "shortly" while "Auto" is flashing, and the resistance value will be automatically displayed on the right side.
Short press the select button 5 times to move to "Full".

Automatic detection is not working. ↓

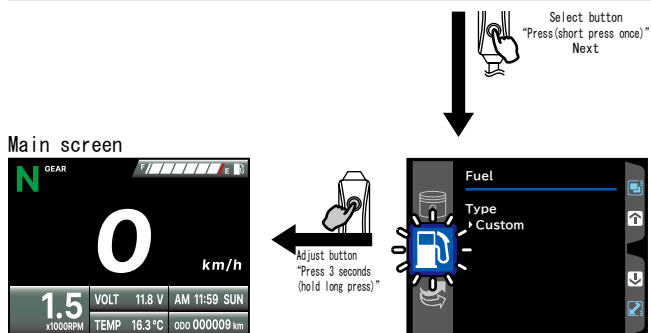


■ Fill the fuel (to the highest level)
※ Keep the vehicle stationary and not to move the fuel level.



"Auto" will flash when you move to "Full". "short press" the adjust button, the resistance value will be automatically displayed on the right side. Confirm (short press the select button), return to the setting screen.

※ Note: Complete settings
After entering numerical values and selecting functions, press/hold (3 seconds) the adjust button on the setting screen to return to the main screen. This process is "setting confirmation" and the settings are stored in the meter. Caution: If you turn the key OFF without "setting confirmation", the new settings will not be stored and return to the previous settings.



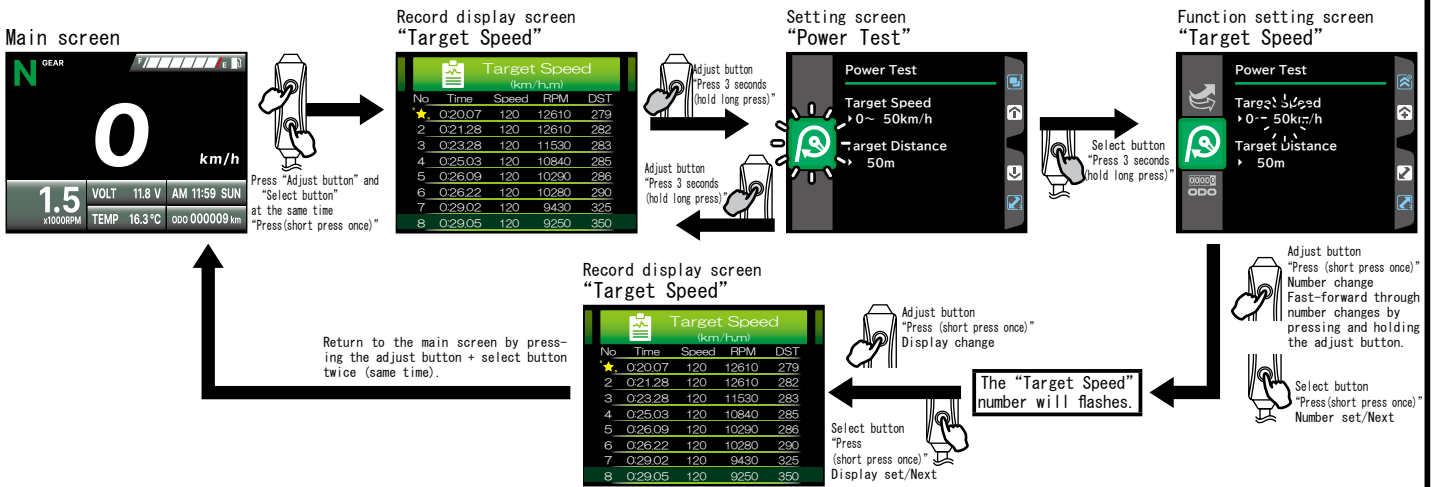
Target speed test (measuring time and distance to specified speed).

Caution: Do not perform the target speed test on public roads.

■ Set the target speed before performing the target speed test. Please see ⑪ for details.

■ How to set target speed Setting range: 30 ~ 360 km/h

On the main screen, "short press" the adjust button + select button (same time), "Target Speed", hold pressing the adjust button for 3 seconds to go to the SET UP/Power test. Hold pressing the select button for 3 seconds to enter the function setting screen, and set the specified speed for "Target Speed" using the short press of the adjust button. Fast-forward through number changes by pressing and holding the adjust button. To confirm, press the select button "shortly" and move to the next item. After determining the display method (short press the select button), press/hold the adjust button for 3 seconds to return to "Target Speed". From "Target Speed", press the adjust button + select button (at same time) twice to return the main screen.



How to start/end target speed test measurement.

■ To perform a target speed test, press the adjust button + select button short press (same time) from the main screen to switch to "Target Speed".

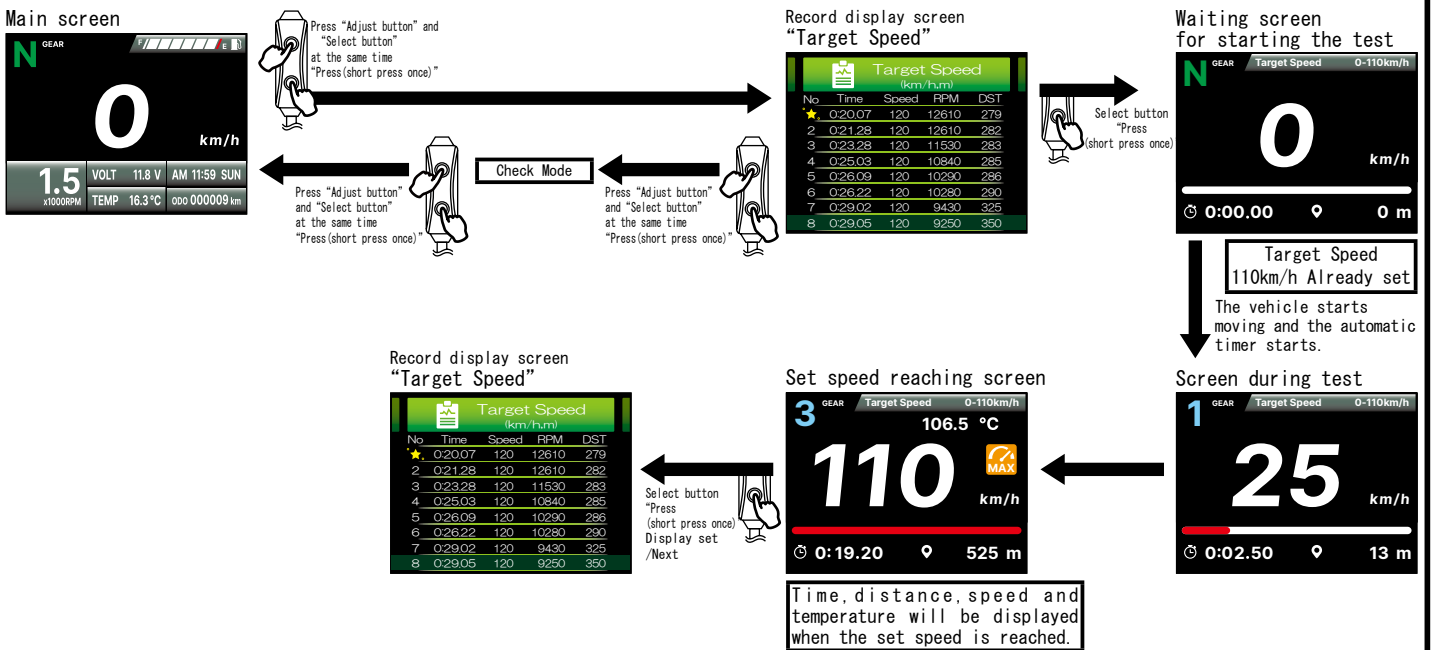
By "short press" the select button on the "Target Speed" screen, switch to the test screen.

The test screen will be ready to start the test, and the timer will automatically start when the vehicle moves.

Start the vehicle and once the set speed is reached the time, distance, speed and temperature will be displayed.

From the recording screen "Target Speed", press the adjust button + select button twice (same time) to return the main screen.

■ Automatic timer: Measurement starts automatically when the vehicle starts moving (tires moves), and ends automatically when the vehicle stops.



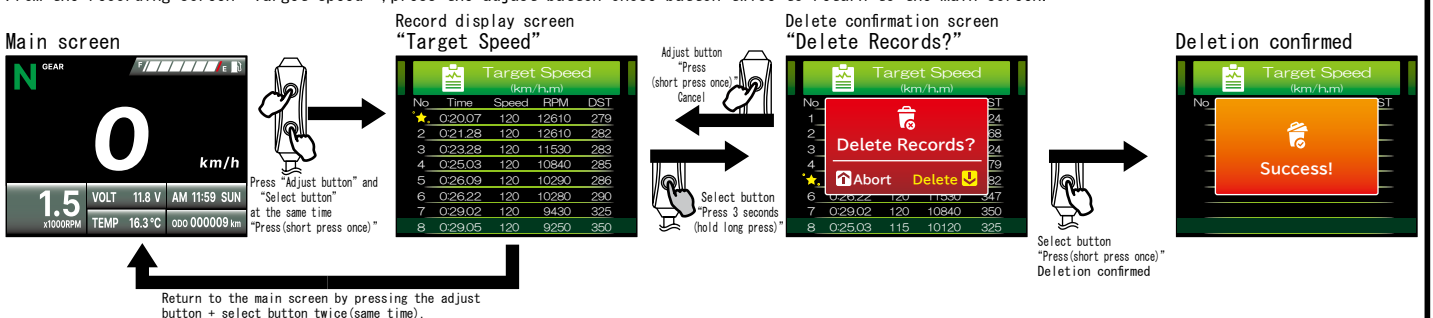
Record management of target speed test measurements.

■ The target speed test record will be displayed in the "Best" on the function setting screen. For the best record, a ★ (star mark) is displayed in the No.

■ Delete target speed test records ※ All target speed test record data will be deleted.

To delete test records, from the main screen short press the adjust button + select button (at same time) to the recording screen "Target Speed". Hold pressing the select button for 3 seconds at "Target Speed", "Delete Records" (do you want to delete the records?) will be displayed, hold pressing the select button for 3 seconds, all Target Speed recorded data will be deleted. Not to delete, short press the adjust button, chose Abort (cancel), and return to the recording screen "Target Speed".

From the recording screen "Target Speed", press the adjust button + chose button twice to return to the main screen.



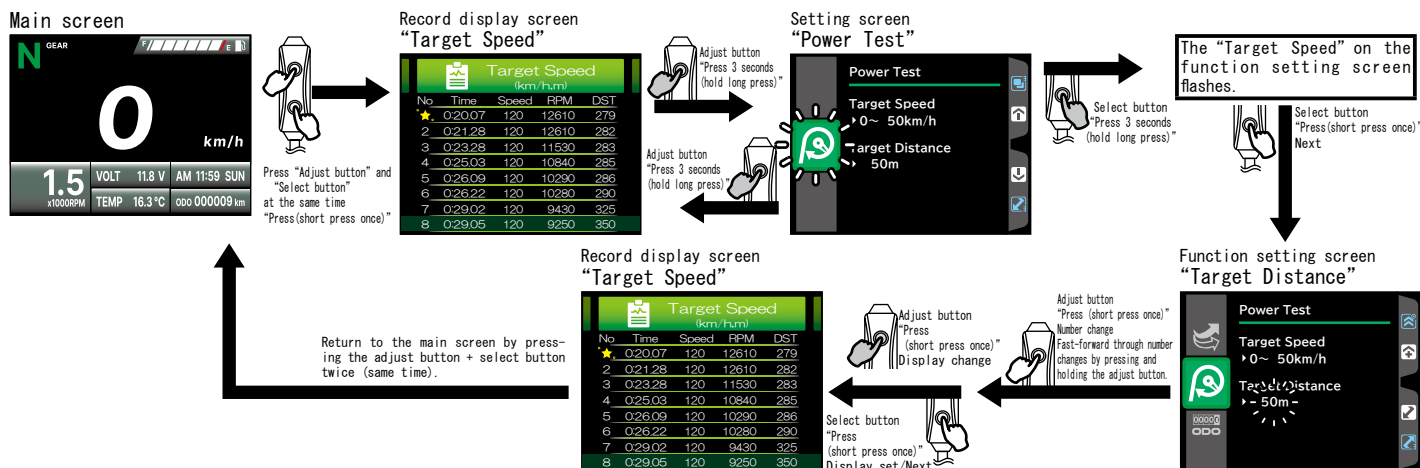
Target distance test (measuring time and speed to specified distance) method.

Caution: Do not perform the target distance test on public roads.

■ Set the target distance before performing the target distance test. See ⑰ for details.

■ How to set target distance 50 ~ 1500m Minimum Unit: 50m

On the main screen, "short press" the adjust button + select button, and on the displayed recording screen "Target Speed", hold pressing the adjust button for 3 seconds to go to the SET UP screen (setting screen) "Power test". Hold pressing the select button for 3 seconds to enter the function setting screen. The "Target Speed" will blink, short press the select button to move "Target Distance". Set the specified distance for "Target Distance" with a "short press" of the adjustment button. Fast-forward through number changes by hold pressing the adjustment button. To set, short press the select button. To confirm, short press the select button then hold pressing the adjust button for 3 seconds to return to the "Target Speed". From "Target Speed", press the adjust button + select button twice (same time) to return to the main screen.



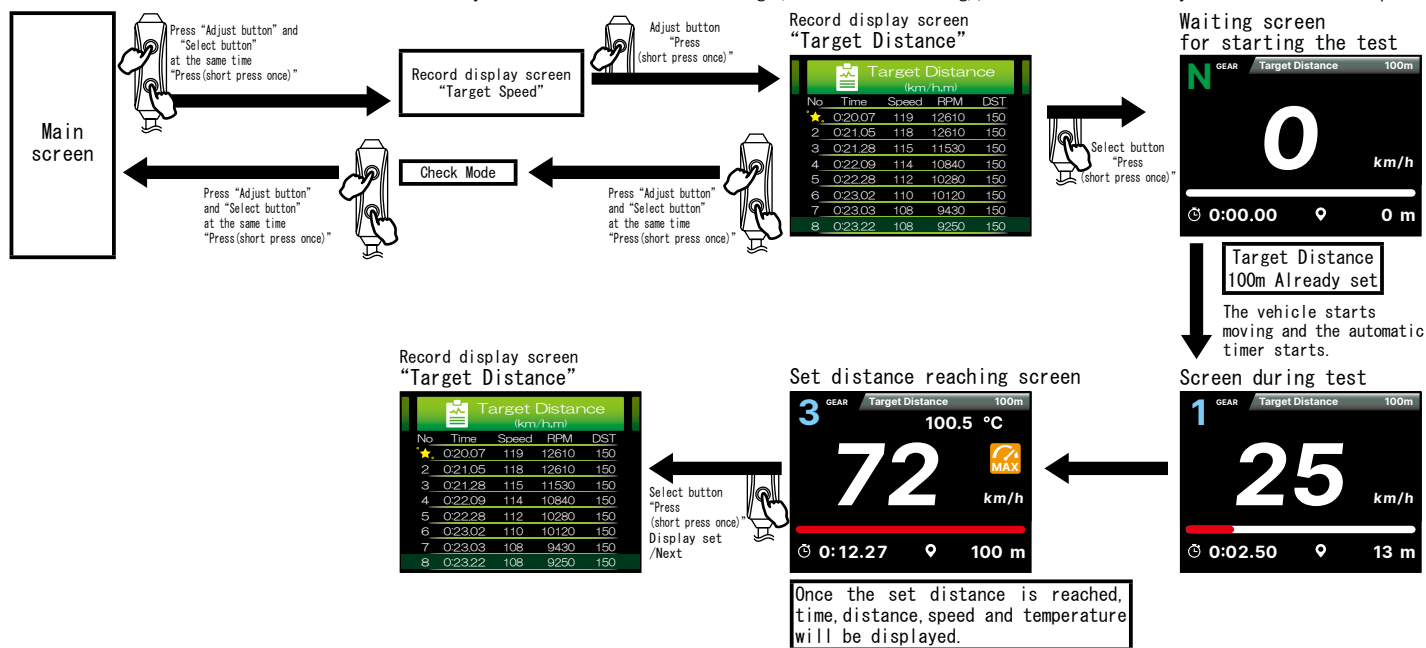
How to start/end target distance test measurement.

■ To perform a target speed test, short press the adjust button + select button (same time), from the main screen to "Target Speed" on the recording screen. To move "Target distance", short press the adjustment button on the "Target Speed" screen. By "short press" the select button, will switch to the test screen. The test screen will be ready to start the test, and the timer will automatically start when tire moves.

Start the vehicle and once the set distance is reached, time, distance, speed and temperature will be displayed.

From "Target Distance", press the adjust button + select button twice (same time) to return to the main screen.

■ Automatic timer: Measurement starts automatically when the vehicle starts moving (tires start rotating), and ends automatically when the vehicle stops.



Record management of target distance test measurements.

■ The target speed test record will be displayed in the "Best" setting on the function setting screen.

For the best record, a ★ (star mark) is displayed in the No.

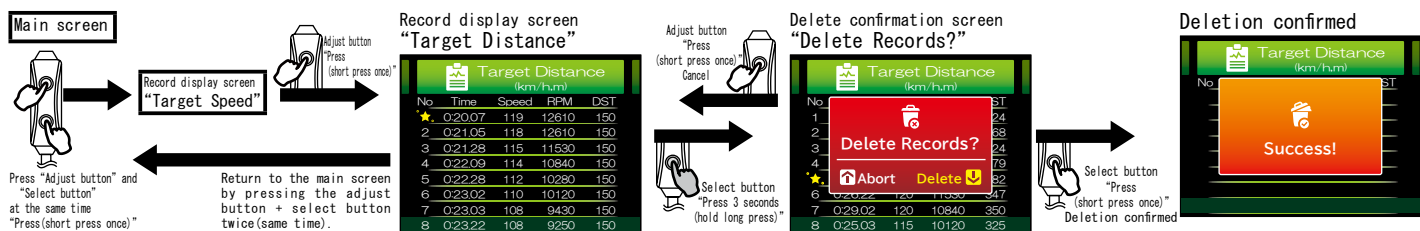
■ Delete target distance test records ※ All target distance test record data will be deleted.

To delete test records, short press the adjust button + select button from the main screen to switch to the recording screen "Target Speed". Move to "Target Distance" by short press the adjustment button on the "Target Speed" screen.

"Target Distance" is displayed, press/hold the select button for 3 seconds, "Delete Records" (do you want to delete the records?), press the select button briefly By chose Delete, all Target Speed recorded data will be deleted.

Not to delete, short press the adjustment button and select Abort (cancel) to return to the recording screen "Target Distance".

From the recording screen "Target Distance", press the adjust button + chose button twice (same time) to return to the main screen.

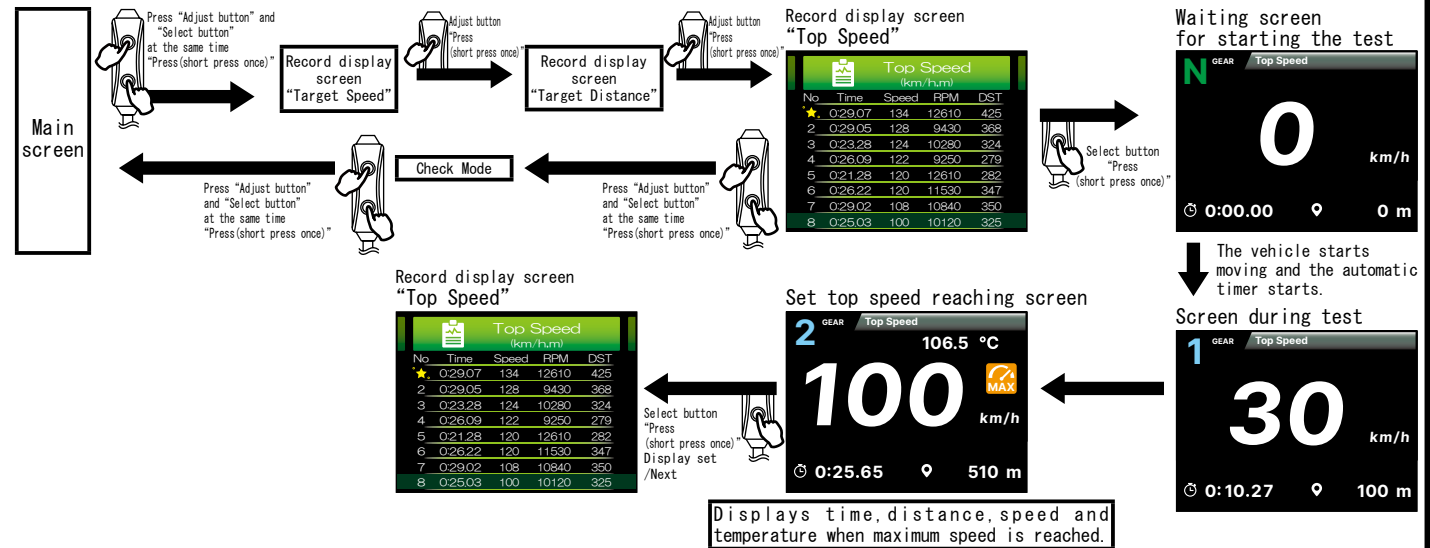


TOP speed test (measuring maximum speed) method.

Caution: Do not perform the top speed test on public roads.

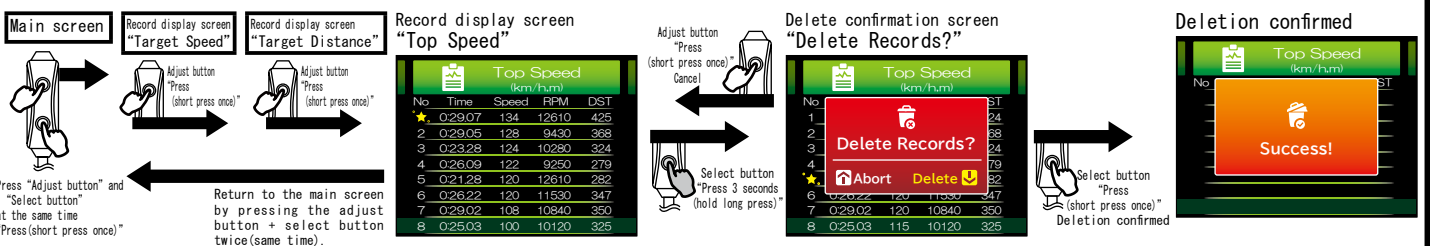
How to start/end top speed test measurement

- To perform the top speed test, press the adjust button + select button (same time) from the main screen to switch to "Target Speed" on the recording screen. Move to "Top Speed" by short press the adjustment button twice on the "Target Speed" screen. Short press the select button, will switch to the test screen. The test screen will be ready to start the test, and the timer will automatically start when the vehicle moves. When the vehicle starts running and reaches maximum speed (accelerator OFF), time, distance, speed, and temperature are displayed. From the recording screen "Target Speed", press the adjust button + select button twice (same time) to return to the main screen.
- Automatic timer: Measurement starts automatically when the vehicle starts moving (tires start rotating), and ends automatically when the vehicle stops.



Management of fastest test measurements.

- The highest speed test record will be displayed in the "Best" setting on the function setting screen. For the best record, a ★ (star mark) is displayed in the No.
- Delete top speed records: All top speed record data will be deleted. To delete the maximum speed test, press the adjust button + select button (same time) from the main screen to switch to the recording screen "Target Speed". Move to "Top Speed", short press the adjustment button twice on the "Target Speed" screen. At "Top Speed", hold pressing the select button for 3 seconds. "Delete Records" (Do you want to delete the records?) will be displayed. Press the select button briefly. By chose Delete, all Target Speed recorded data will be deleted. Not to delete it, short press the adjust button, chose Abort (cancel), and return to the recording screen "Target Speed". From the recording screen "Target Speed", press the adjust button + select button twice same time to return to the main screen.

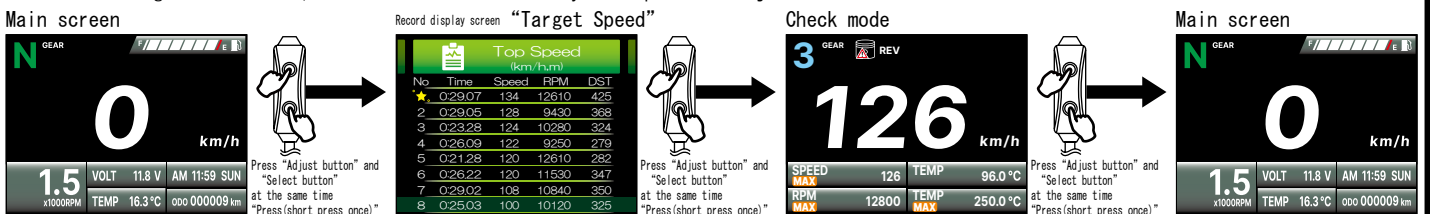


Check mode (check maximum speed, maximum rotation speed, maximum temperature)

Caution: Do not perform the Check mode on public roads.

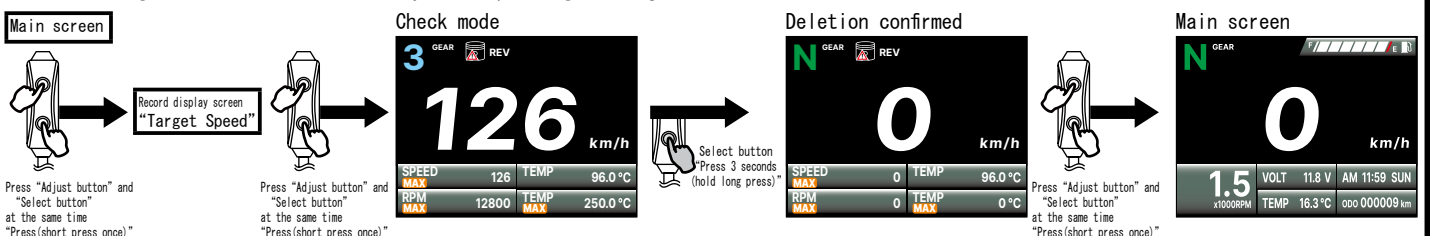
How to check "check mode"

- To check the "check mode", press the adjust button + select button same time from the main screen to switch to "Target Speed" on the recording screen. On the "Target Speed" screen, short press the adjust button + select button same time to switch to "check mode". In check mode, maximum speed, maximum rotation speed, and maximum temperature are displayed. After confirming the check mode, return to the main screen by short press the adjust button + select button same time.



How to reset "check mode"

- Reset will delete all check mode data. To reset the check mode, press the adjust button + select button (same time) from the main screen to switch to the "Target Speed". On the "Target Speed", short press the adjust button + select button same time again to switch to "check mode". At "check mode", hold pressing the select button for 3 seconds to reset the check mode data. After resetting, return to the main screen by "short pressing" the adjust button + select button (same time).



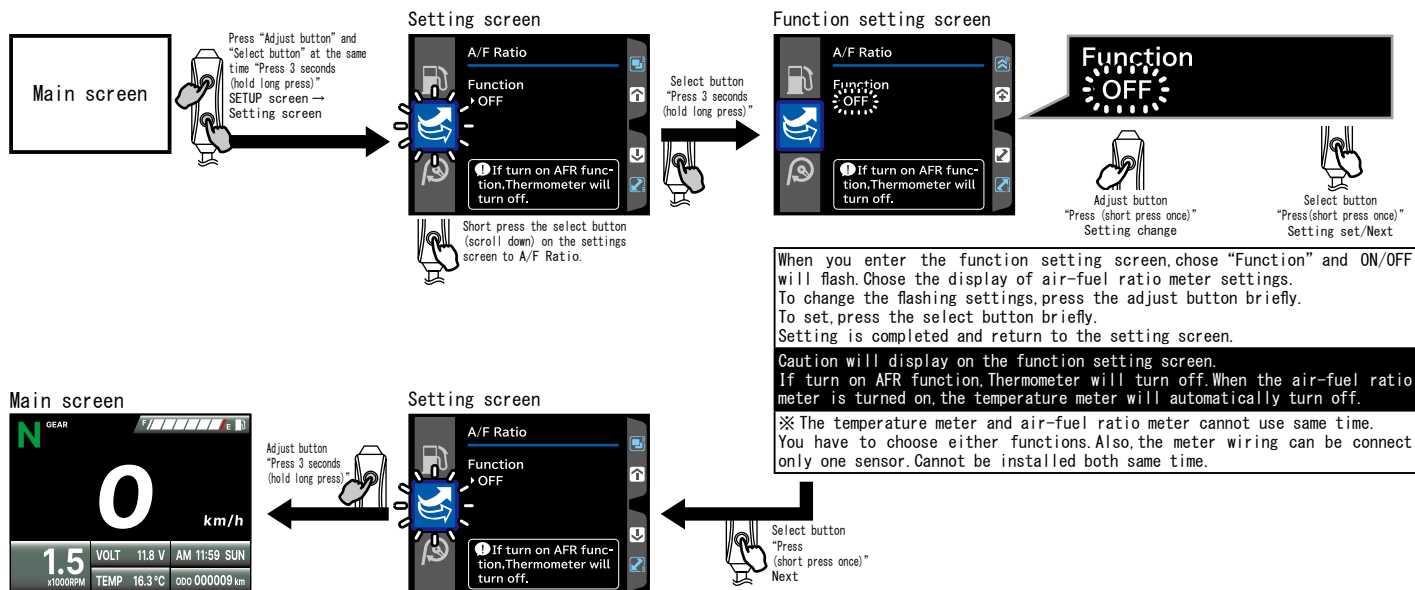
⑪ A/F Ratio(Air fuel ratio meter)

16

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note:The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to A/F Ratio. A/F Ratio is displayed in the title, press/hold(3 seconds) the select button to move function setting screen.

※ SP Takekawa A/F sensor and O₂, need a sensor boss (sold separately).

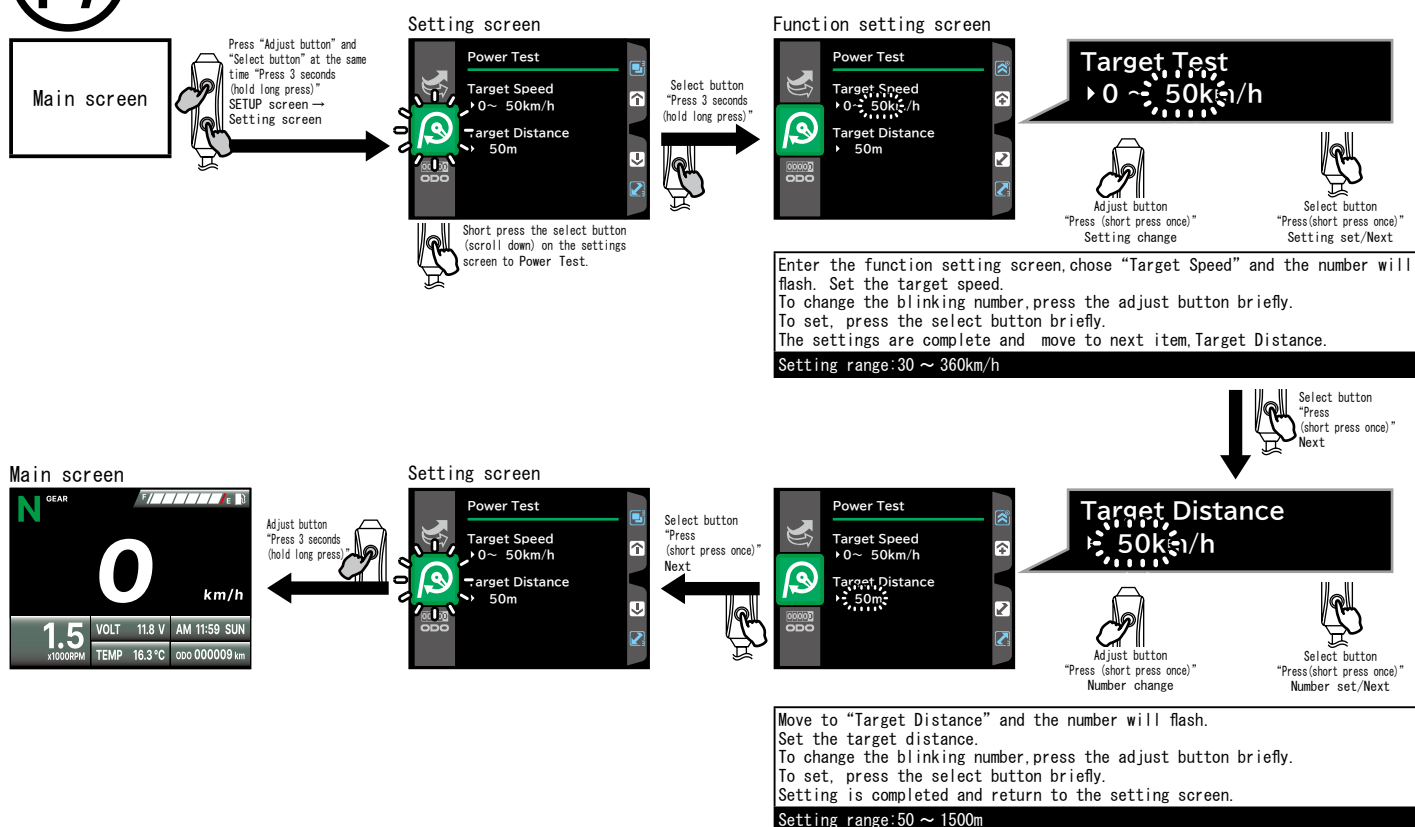
※ Installation of O₂ sensor boss, drill a hole in the exhaust pipe and welding O₂ sensor boss.



⑪ Power Test(Power Test setting)

17

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note:The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to Power Test. Power Test is displayed in the title, press/hold(3 seconds) the select button to move function setting screen.

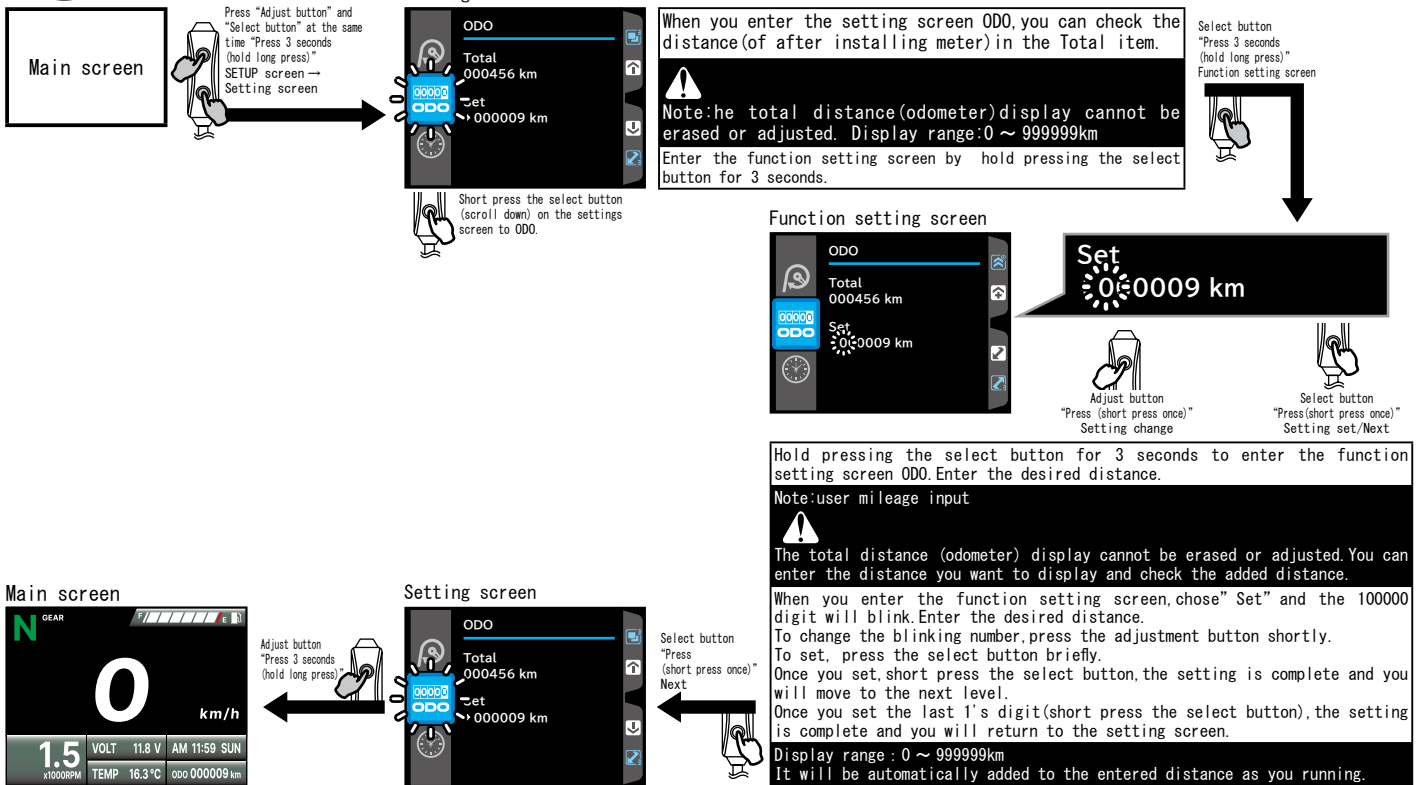


The recording screen is displayed by "short press" the adjust button + select button (same time) on the main screen. "Target Speed", "Target Distance" and "Top Speed" can be switch by "short press" of the adjustment button.

18 ODO (Running distance (odometer))

18

From the main screen to switch to the settings screen press/hold (3 seconds) the adjust button and select button at the same time.
Note: The "SETUP" will be displayed before the settings screen. Short press the select button (scroll down) on the settings screen to ODO. ODO is displayed in the title, press/hold (3 seconds) the select button to move function setting screen.



Troubleshooting

■ These symptoms is not a malfunction of the meter. Please check before repair it.

The power is on but the meter does not work.	- There is no electricity at the meter. → Please check the wiring is securely connected. Check the poor wiring and fuses are not blown. - DC12V is required for meter power supply. It will not work if the battery is weak, old or damaged. - TFT meter does not turn on but stock meter turns on. → The backup fuse may be blown.
Incorrect information on the Meter display.	Check the battery voltage (must have DC12V).
Speedometer does not display or does not display correctly.	- Possibility a problem the speed sensor connection. → Check the speed sensor is connected correctly. - Check the speedometer settings.
Tachometer does not display or does not display correctly.	- Check the RPM wiring is connected correctly. - Please check the spark plug is "Register" type. - Check the RPM settings.
Temp meter does not display or does not display correctly.	- Check the temp sensor is connected correctly. - Check the temp meter setting. - Check the O2 sensor/wiring is connected to the meter harness. - Check the air-fuel ratio meter setting is turned ON (displayed). When turned ON, the temp meter will automatically turn OFF (not showing).
Air-fuel ratio meter does not display or does not display correctly.	- Check the O2 sensor and wiring is connected correctly. - Check the air-fuel ratio meter settings. - When temp sensor is connected, the display will remain at 17.5. Reconnect the O2 sensor and check again. - If the wiring is disconnected (inside of wiring) or the O2 sensor is malfunctioning, check the meter display briefly with the key turned on. Wait few minutes, then the display shows "A/F-- --", this phenomenon indicates wiring may be disconnected (or not connected correctly), or the O2 sensor may be malfunctioning.
Fuel gauge does not display or displays an "error".	- Check the fuel tank. - Connection problem in the harness. → Check the wiring is connected correctly. - Check the fuel gauge settings.
The clock is not functioning properly.	- Check the meter settings. - Check the wiring is not reversed. → Check positive wiring (red) is connected to the battery (DC12V) and the positive wiring (black/key ON power supply) is connected to the main switch (DC12V).
Meter indicator is not displayed.	Connection problem in the harness. → Check the wiring is connected correctly.
Shift indicator is respond slow.	- Check the speed setting and the gear position setting is correct. - The teeth of the front sprocket or rear sprocket was changed after setting the gear position. → Please set again.
Meter indicator lights up when key is OFF.	When the key is turned off each indicator lamp on the meter may light up momentarily. (this is not a malfunction).
When the backlight setting is set to AUTO, the lighting changes frequently.	"Auto" stteted, the display will switch from Day to Night if there is a shadow (roadside trees, under elevated tracks) even during bright morning and afternoon hours. It doesn't malfunctioning.

※ If these symptoms occurs (after checking), please contact your retailer.

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If this document hard to read, please download it from our website.



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

Product number 05-06-0034

Adaptation model CT125 (JA55-1000001 ~)
(JA65-1000001 ~)

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 is a custom bracket kit for mounting the Super Multi TFT meter on the specified vehicle.
All sub wiring and including parts are custom made exclusively for specified vehicle.
- ◎ 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.
- ◎ There may be a slight speed difference with the GPS of the application etc.
- ◎ 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)
- ◎ For using this product on JA65, Honda genuine accessory socket: 08U70-K2E-J00 cannot be used it self.
SP TAKEGAWA cigar socket bracket: 09-01-0001. make possible to use together.

~ feature ~

The Super Multi TFT meter can be attached to the CT125 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.

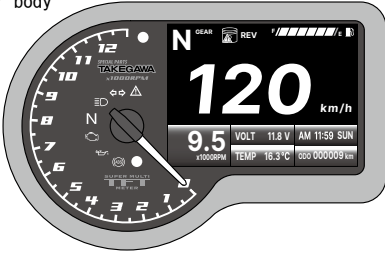
◎ Keep this manual stored until this product is discarded.

SPECIAL PARTS
TAKEGAWA

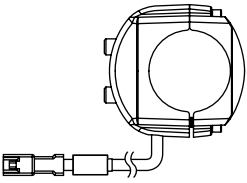
CONTACT Address : 3-5-16 Nishikiorihigashi Tondabayashi Osaka JAPAN
TEL: +81-721-25-1357 FAX: +81-721-24-5059 e-mail: english@takegawa.co.jp URL: http://www.takegawa.co.jp
Please contact with your name and country name provided. (Only English please)

Product content

① Meter body



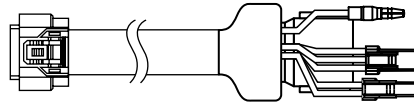
② External switch



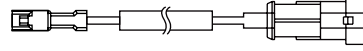
③ Rubber strip



④ SUB harness



⑧ O₂ Sensor Connection cord (1200mm)



⑩ Collar



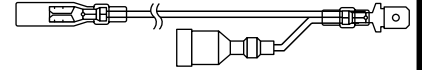
⑪ Nut M6 (Black)



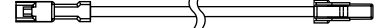
⑫ Button head screw M6x15 (Black)



⑤ RPM code B (550mm)



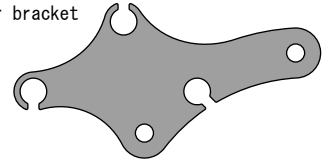
⑥ Temperature sensor connection cord (900mm)



⑦ Stick temperature sensor (~ 250°C)



⑨ Meter bracket



⑬ Cushion rubber



⑭ Tapping screw (M4x12)



⑮ washer for M4 (4x14x1)



⑯ Cable tie 300mm



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	—

Bracket Kit (05-06-0034)			
Number	Product content	Quantity	Item Number
4	Sub harness	1	00-05-0216
5	RPM code B (550mm) for IG connection	1	090-00-0063
6	Temperature sensor connection cord (900mm)	1	07-04-0556
7	Stick temperature sensor (~ 250°C)	1	07-04-0555
8	O ₂ sensor connection cord (1200mm)	1	00-05-0201 (non-waterproof/2.0m)
9	Meter bracket	1	—
10	Collar	2	—
11	Nut M6 (Black)	2	—
12	Button head screw M6x15 (Black)	2	—
13	Cushion rubber	3	—
14	Tapping screw (M4x12)	3	—
15	Washer for M4 (4x14x1)	3	—
16	Cable tie 300mm	2	—

※ 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.

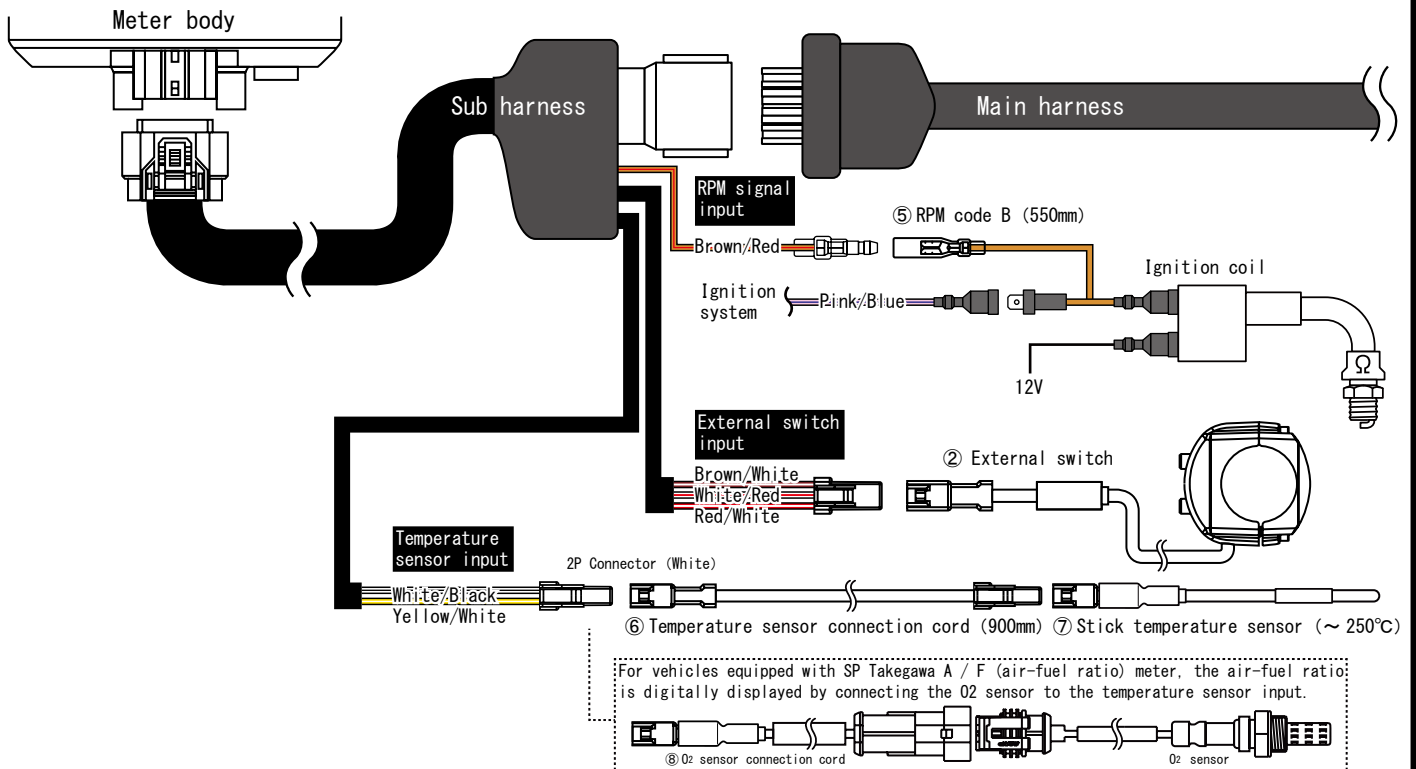
※ Repair parts may differ slightly from the kit contents in terms of shape, etc.

There is no problem to use it. Please be forewarned.

※ ⑬ Cushion rubber is already assembled on the ⑨ meter bracket.

※ The repair parts for the ⑧ O₂ sensor connection cord are different from the kit accessories and are non-waterproof.

Wiring diagrams

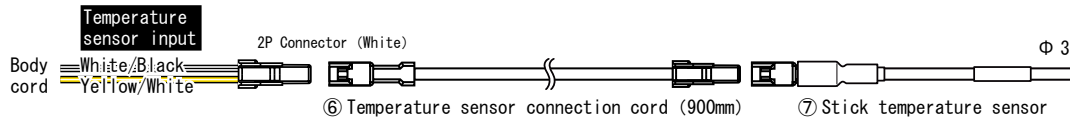


Connect Temperature sensor cord and extension

- 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.

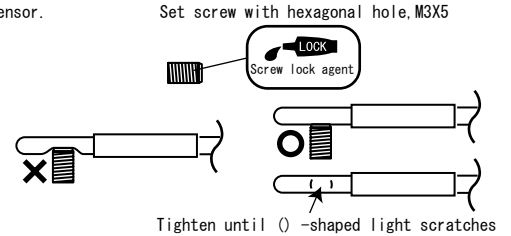
When the sensor is not connected (disconnected), the value will show as [- - - °C]



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.

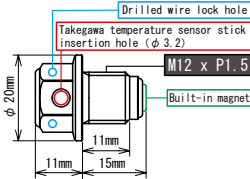
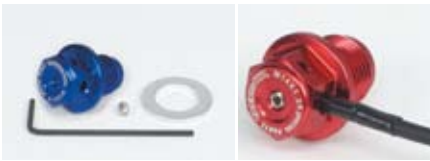
If it breaks, it will be act same as a broken or shorted cord.
Display at disconnection: [- - - °C]
Display at short circuit: [250.0°C]

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) for CT125

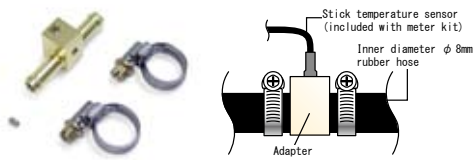


A strong magnetic drain bolt will picks iron powder in the engine oil. As a result, iron powder in the oil is reduced and the engine oil's inherent stable lubrication performance can be demonstrated. In addition, Takegawa aluminum drain bolts have a safety wire lock hole and a stick temperature sensor 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

CT125 fitted with Takegawa oil cooler kit (rubber hose)



Adapter with stick temperature sensor insertion hole for rubber hose (inner diameter φ 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.

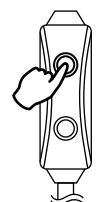
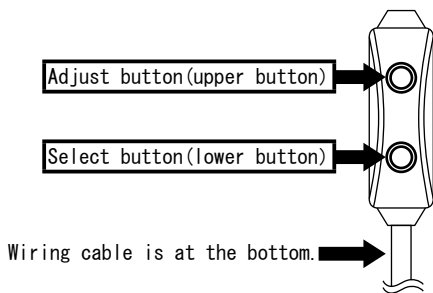
Product content	Product number
Drain bolt with magnet: M12 P1.5	Silver 02-09-0022 Blue 02-09-0024
	Black 02-09-0023 Red 02-09-0025
M12 Sealing washer	00-00-0140
Inner diameter φ 8mm Oil cooler hose adapter	07-04-0521

External switch Operation

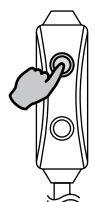
Install the meter external switch with the wiring cable underneath as shown in the illustration below. The upper button is the "adjust button" and the lower button is the "select button". (attached as shown figure below)

To operate the meter external switch.

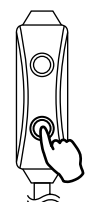
To display the manual, please check how to press the button below.



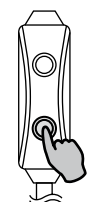
Adjust button
"Press
(short press once)"



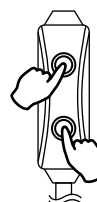
Adjust button
"Press 3 seconds
(hold long press)"



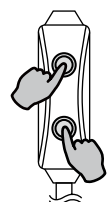
Select button
"Press
(short press once)"



Select button
"Press 3 seconds
(hold long press)"



Press "Adjust button"
and "Select button"
at the same time
"Press
(short press once)"

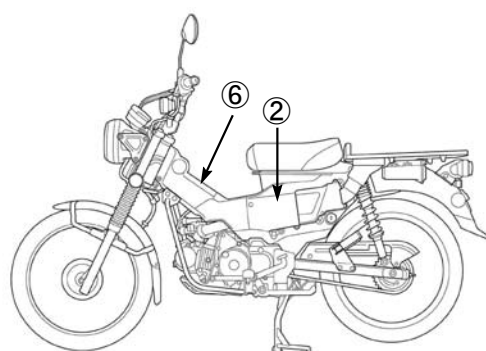
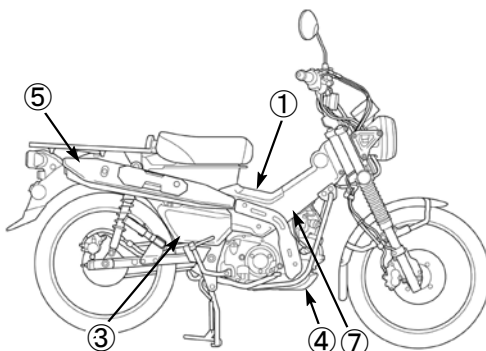


Press "Adjust button"
and "Select button"
at the same time
"Press 3 seconds
(hold long press)"

- Mounting procedure ※ Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

- Remove the exterior parts in the order of the numbers.

The following exteriors must be removed to access the pulse line of the ignition coil.



- ① Center cover
- ② Air cleaner garnish
- ③ R. Body cover
- ④ Under guard
- ⑤ Exhaust system
- ⑥ L. Main pipe cover
- ⑦ R. Main pipe cover

▲ Note

To record the mileage, make a note of the mileage before replace the genuine meter.

For JA55

■ Remove genuine speedometer

Remove the left and right bolts at the bottom of the headlight unit.



Remove the headlight unit from the bottom and remove the top nail. Disconnect the coupler of the headlight unit.



Remove the two bolts from the headlight bracket that hold the headlight case in place.



Move the headlight case and remove the stock meter cover mounting bolts, cover and coupler.

▲ Note When moving the headlight case, be careful not to apply excessive force to the harness.



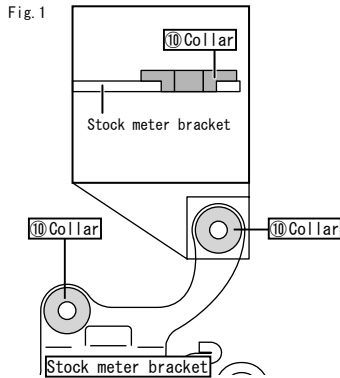
Remove the two stock meter mounting bolts and remove the stock meter.



■ Fixing the meter body and meter bracket.

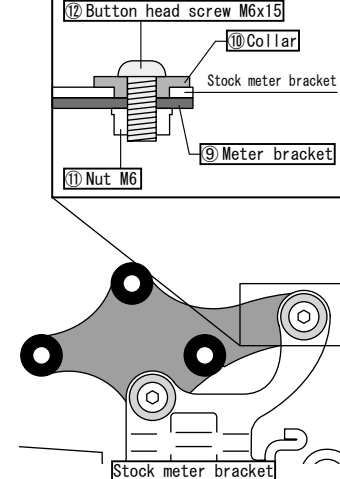
Remove the stock cushion rubber, place the ⑩ collar downward (convex side down), and fit it into the hole of the stock meter bracket from above.

Fig. 1



Place the ⑨ meter bracket under the stock meter bracket and fix it with M6 (⑪ button head screw and ⑫ nut). Please see (Fig. 2)

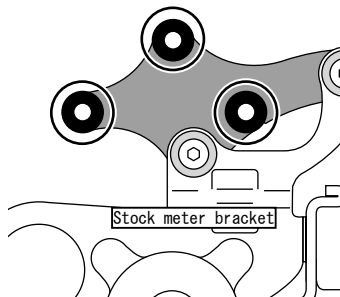
Fig. 2



▲ Note : Be sure that you protect specified torque.
⑫ Button head screw M6x15
Torque : 8N · m (0.8kgf · m)

Make sure that the groove in the center of the ⑬ cushion rubber is securely attached to the ⑨ meter bracket.

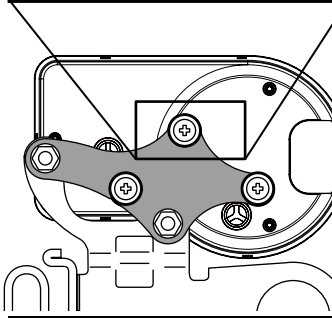
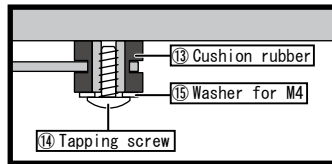
Fig. 3



■ Fixing the meter body

After attaching the cushion rubber to the bracket, insert the boss of the ① meter body into each ⑬ cushion rubber from above. Attach the ⑮ M4 (large diameter washer) to the boss of the meter body and fix it with the ⑭ tapping screw. Please see (Fig. 4)

Fig. 4

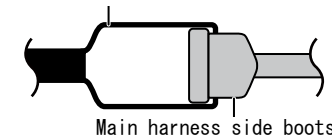


▲ Caution Do not over-tighten the tapping screw.

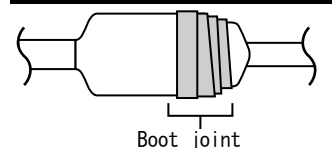
■ Connect to the subcode.
Connect the ⑤ RPM code B, ② meter external switch, ⑦ stick temperature sensor or O2 sensor (optional) by referring to page 2 of the instruction manual. At last, insert the connector of the ④ sub harness into the main harness.



Meter side boots



▲ Note Wrap the wiring tape so as to cover the joint of the boots to protect from water.



Waterproofing by wrapping wiring tape

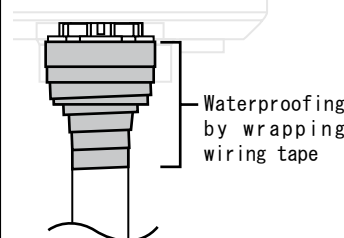
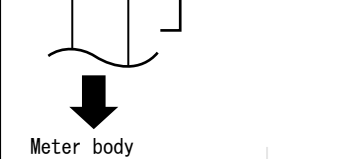
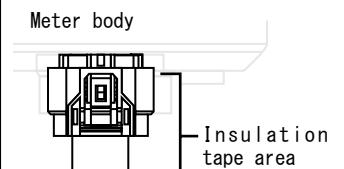
▲ Caution: wrong direction of the taping and the boot cover, water may enter the boot cover and damage the meter.

Refer to the wiring diagram and connect the ⑤ RPM code into the IG coil wire (pink / blue).



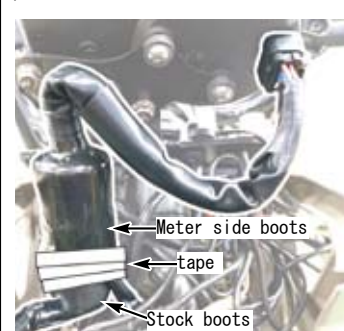
■ Connection to the meter body

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.

Arrange the main harness and meter harness so that the boots on the meter side are on top, see the image below. Be sure to route the wiring of the temperature sensor, switch, and pulse wire downward.



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

▲ Note 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.

▲ Note The external switch is waterproof, but do not expose it to water directly with a high pressure washer, etc.

▲ Note

To record the mileage, make a note of the mileage before replace the genuine meter.

For JA65

■ Remove genuine speedometer

Remove the left and right bolts at the bottom of the headlight unit.



Remove the headlight unit from the bottom and remove the top nail. Disconnect the coupler of the headlight unit.



Remove the two bolts from the headlight bracket that hold the headlight case in place.



Move the headlight case and remove the stock meter cover mounting bolts, cover and coupler.

▲ Note When moving the headlight case, be careful not to apply excessive force to the harness.



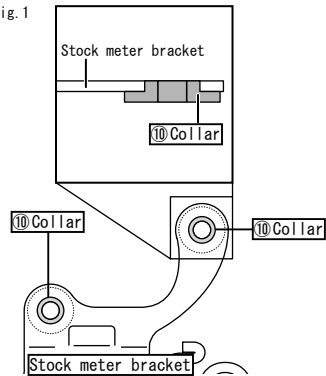
Remove the two stock meter mounting bolts and remove the stock meter.



■ Fixing the meter body and meter bracket.

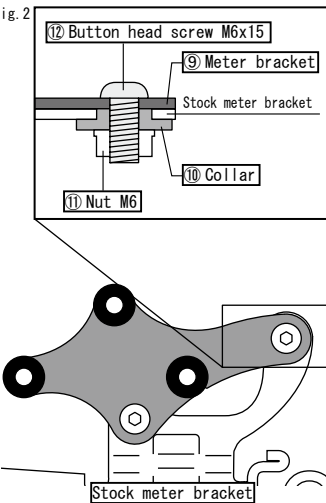
Remove the stock cushion rubber, turn the convex side upward, and insert it into the hole of the stock meter bracket from below. 2 locations (Fig. 1).

Fig. 1



Stack the ⑨ meter bracket on top of the stock meter bracket and fix it by ⑫ button head screw and ⑪ nut (M6x15). Please see (Fig. 2) and check the mounting installation. 2 locations.

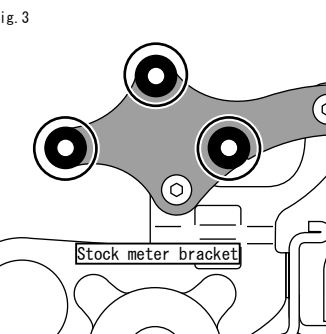
Fig. 2



▲ Note : Be sure that you protect specified torque.
⑫ Button head screw M6x15
Torque : 8N · m (0.8kgf · m)

Make sure that the groove in the center of the ⑬ cushion rubber is securely attached to the ⑨ meter bracket.

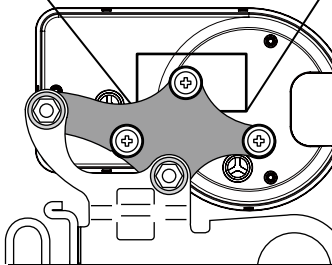
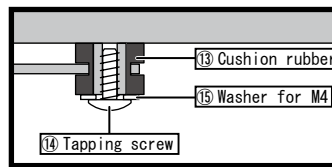
Fig. 3



■ Fixing the meter body

After attaching the cushion rubber to the bracket, insert the boss of the ① meter body into each ⑬ cushion rubber from above. Attach the ⑮ M4 (large diameter washer) to the boss of the meter body and fix it with the ⑭ tapping screw. Please see (Fig. 4)

Fig. 4



▲ Caution

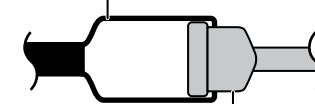
Do not over-tighten the tapping screw.

■ Connect to the subcode.

Connect the ⑤ RPM code B, ② meter external switch, ⑦ stick temperature sensor or O2 sensor (optional) by referring to page 2 of the instruction manual. At last, insert the connector of the ④ sub harness into the main harness.



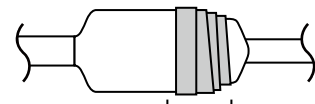
Meter side boots



Main harness side boots

▲ Note

Wrap the wiring tape so as to cover the joint of the boots to protect from water.



Boot joint

Waterproofing by wrapping wiring tape

※ Caution: wrong direction of the taping and the boot cover, water may enter the boot cover and damage the meter.

Refer to the wiring diagram and connect the ⑤ RPM code into the IG coil wire (pink / blue).

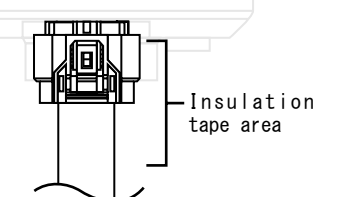


■ Connection to the meter body

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

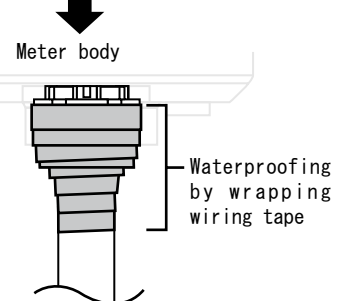


Meter body



Insulation tape area

Meter body

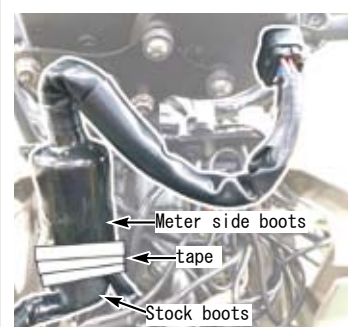


Waterproofing by wrapping wiring tape

▲ Caution

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

Arrange the main harness and meter harness so that the boots on the meter side are on top, see the image below. Be sure to route the wiring of the temperature sensor, switch, and pulse wire downward.



Meter side boots

tape

Stock boots

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

▲ Note

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 connected to the meter harness to the handle pipe.

※ Note

The external switch is waterproof, but do not expose it to water directly with a high pressure washer, etc.

Function for CT125 only (The setting value varies depending on the model.)

When setting the specific vehicle function, please refer to the "Super Multi TFT meter main manual".

"Super Multi TFT meter main manual" includes all switching functions, setting screen basic operations (such as how to change and input numerical values).

The following vehicle-specific function settings, only describe the numerical values and settings to be entered.

The following numbers are the function setting item numbers in the meter body.

■ Please refer to the "Super Multi TFT meter main manual" for function setting number ① ~ ⑪ ⑬ ~ ⑮.
(Description of function setting method)

- ① "Date & Clock" (Date/clock setting) ② "Unit" (Speed and temperature setting) ③ "Backlight" (Backlight setting)
④ "Overspeed" (Speed warning setting) ⑤ "Shift Light" (RPM warning setting) ⑥ "Temp Warning" (Temperature warning setting)
⑦ "Volt Warning" (Voltage warning setting) ⑧ "Low Fuel Warning" (Fuel warning setting) ⑨ "Oil Change(Trip 0)" (Set oil change timing warning.)
⑩ "ABS Warning" (ABS warning setting) ⑪ "Warning Light" (Warning light setting)
⑬ "A/F Ratio" (A/F meter setting) ⑭ "Power Test" (Power test setting) ⑮ "ODO" (Distance setting)

12

For CT125 ⑫ Speedometer (Speed display setting)

■ Tire Circumference and Sensor Point settings

Measure the outer tire dimension (circumference). Measure with reference "How to measure tire outer circumference" in the illustration below. After the measurement, apply the number to the following formula to calculate.

This gives the value of the Tire Circumference. Then, enter the Sensor Point of the genuine speed sensor and complete the setting.

■ How to set the stock(genuine) speed sensor.

For a vehicle that reads the number of teeth of the drive gear of the CT125 transmission to display the speed.

Calculate by applying the number to the following formula, and obtain the number for input to the meter.

The required number are tooth of drive and driven sprocket gear and "tire circumference".

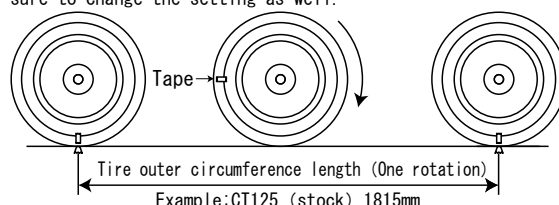
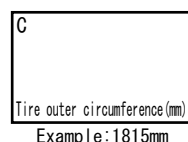
■ Let the drive sprocket (tooth) as "A" and the driven sprocket(tooth) as "B".

Example: CT125 (JA55 stock) Drive sprocket (A): 14T, Driven sprocket (B): 39T

Example: CT125 (JA65 stock) Drive sprocket (A): 14T, Driven sprocket (B): 38T

How to measure the tire outer circumference: Set the mark at the near air valve, and measure the distance that the tire has rotated once, using that as the starting point. ※ When you change the tire size, be sure to change the setting as well.

■ Let the tire circumference as "C"



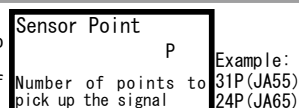
The value can be calculated from the following formula. The number (bold) "Speed signal length(Tire Circumference)", which is the number to be input to the meter.

$$\frac{\text{A (Drive sprocket)}}{\text{B (Driven sprocket)}} \times \text{C (Tire outer circumference(mm))} = \text{Speed signal Length (Tire Circumference (mm))}$$

Example: 14T (JA55 stock) / 39T (JA55 stock) × 1815mm = 652mm (JA55 stock)
Example: 14T (JA65 stock) / 38T (JA65 stock) × 1815mm = 669mm (JA65 stock)

■ Number of signals of stock speed sensor. (Sensor Point)

(Example) Vehicles that use the C2 gear (2nd gear on counter shaft) of the CT125 transmission to display the speed. In this case, enter the number of teeth on the C2 gear (2nd gear on counter shaft) of stock transmission (read by the genuine speed sensor.) The number in the bold frame is the value of "number of signals" and is the value to be input to the meter.

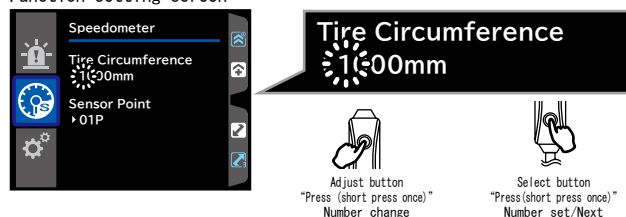


At the main screen, press and hold the "adjust button" and "select button" at the same time for 3 seconds (to go to the setting screen). The SETUP screen is displayed (before the setting screen).

On the setting screen, press the "select button (short press once)" to scroll down and set it to "Speedometer".

While "Speedometer" is displayed and press the "select button" for 3 seconds to enter the function setting screen.

Function setting screen

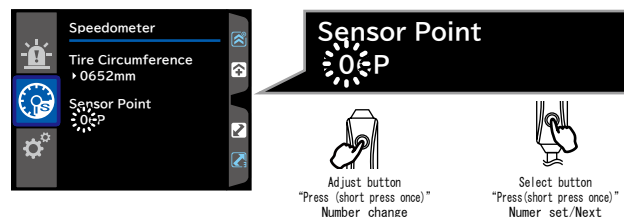
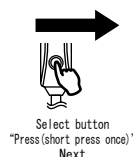


When you enter the function setting screen, then you go to the "Tire Circumference" and the number (1k level) will blink.
Enter the value of "speed signal length" (from calculate by formula).
To change the blinking number, press the "adjust button (short press once)". To set, press "select button (short press once)".
After confirm it, press "select button (short press once)" the set and move to the next level.

After input all numbers, press "select button" to complete the setting, and move to "Sensor Point" (input number of signals).

※ Input is not completed/confirmed yet.
Stock CT125 (stock tire size) Speed signal length : 652mm (JA55)
: 669mm (JA65)

If your tire is not stock size, measure the "outer circumference" and calculate from the formula and enter the number.



When you enter the "Sensor Point" (signal count input screen), the tens digit blinks. Enter the number of "drive gear teeth" here, the "Sensor Point" (read by the stock speed sensor) To change the blinking tens digit, press the "adjust button (short press once)".
To set the number, press the "select button (short press once)". Once set, the next digit will switch and blink.

After the 1st level is set, Press "select button (short press once)", then setting is completed and back to the setting screen.

※ Input is not complete/confirmed yet.

Press the "adjust button" for 3 seconds on the setting screen to return to the main screen. This complete/confirm the settings.

If the vehicle is a stock transmission, enter the number of "teeth of the stock drive gear" read by the stock speed sensor.

CT125 Stock Transmission (4 speed) Input number : 31P (JA55)
: 24P (JA65)

※ Precautions regarding setting confirmation

After entering the number and selecting the function, be sure to press and hold the "adjust button" for 3 seconds on the setting screen to return to the main screen. This is "complete/setting confirmation" and the setting is stored in the meter.

Caution: If you do not perform this operation and turn off the key, the new settings will not be stored and will be back to previous settings.

13 Gear (Gear Setting)

13

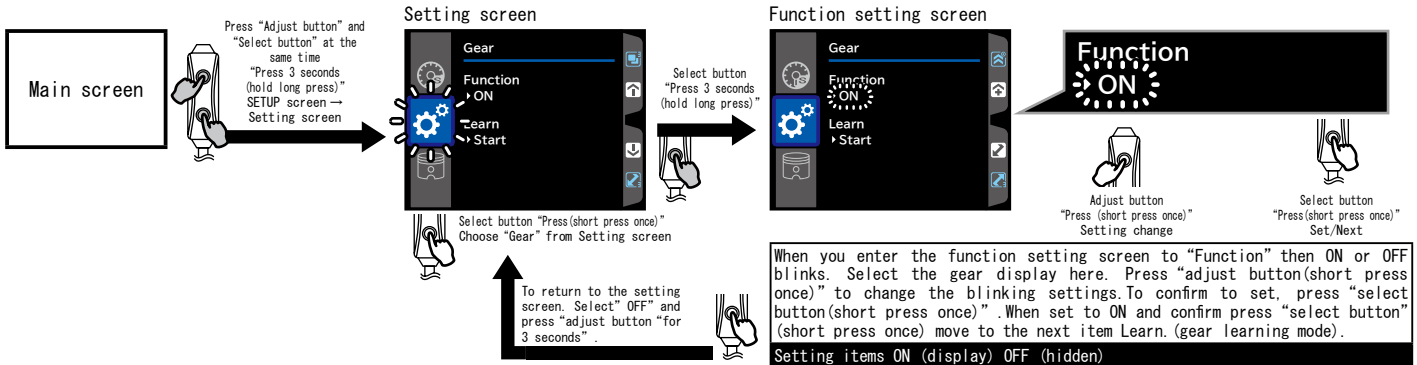
From the main screen, press and hold the "adjust button" and "select button" at the same time for 3 seconds to switch to the setting screen. The SETUP screen is displayed before the setting screen. Press the "select button(short press once)" to scroll down on the setting screen to choose "Gear". While "Gear" is displayed, and press the "select button" for 3 seconds to enter the function setting screen "Gear" (gear setting).

※ 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.

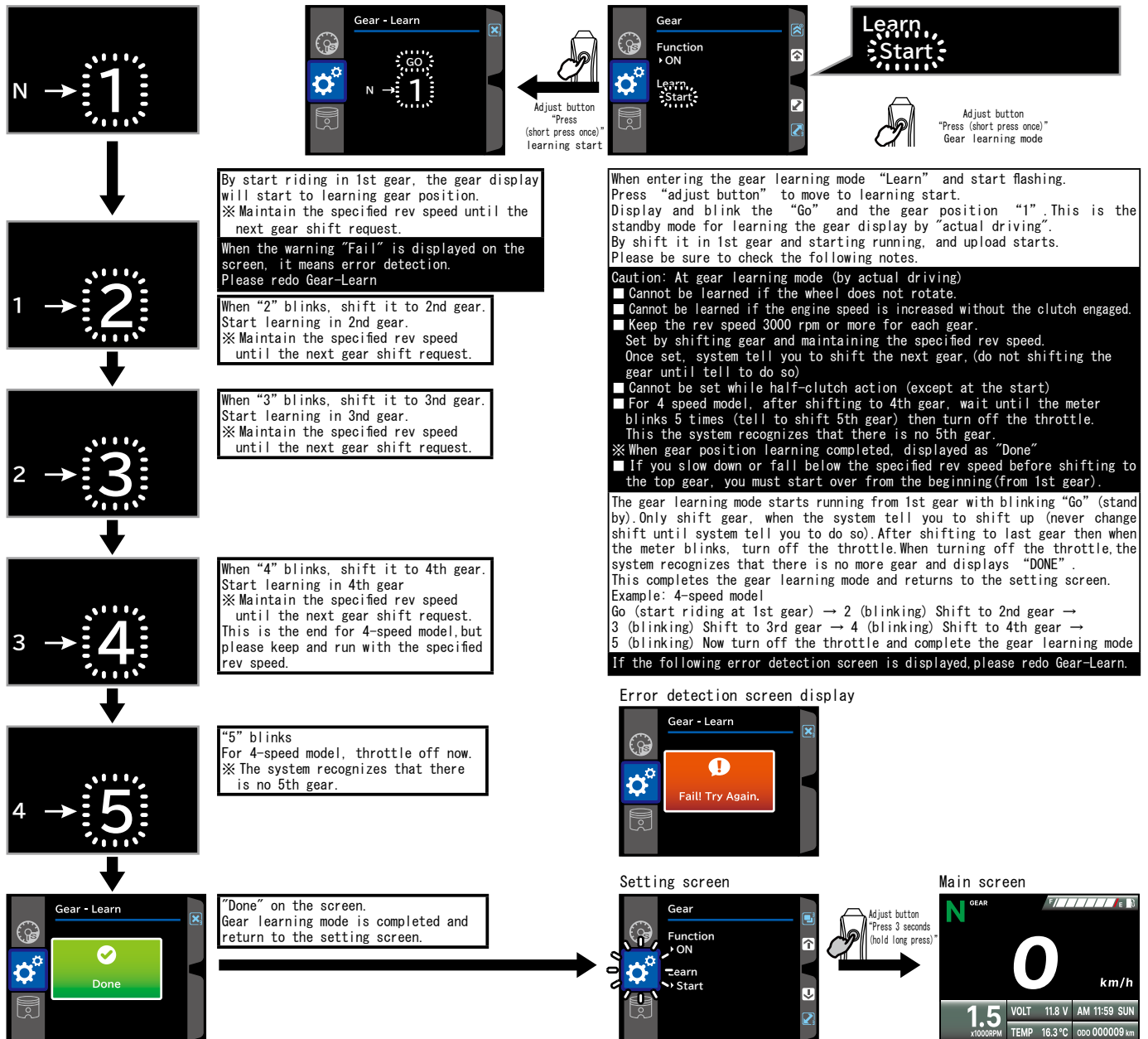
Do not learn gear display on driving in the city because there are many traffic lights and traffic in the city. When performing in actual driving, select a safe place with good visibility and check the surroundings.



※ Caution: Set the gear to neutral before gear learning mode.

※ The meter will tell you when you need to shift in the gear.

Maintain the rev at specified speed until the system tells you to shift the gear. (while system learning).

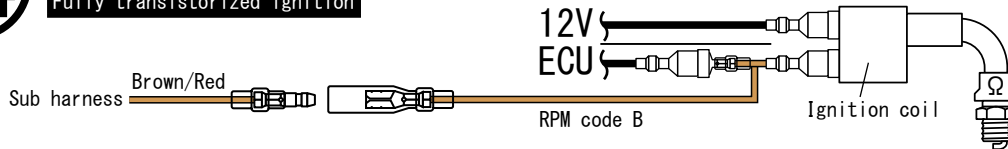


For CT125 ⑭ RPM (tachometer input setting)

14

For CT125, [B connection] become "Fully transistorized ignition". Connect the RPM code B(included) as the connection method below.

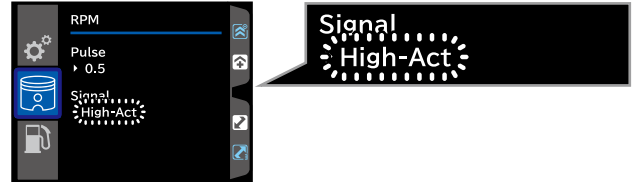
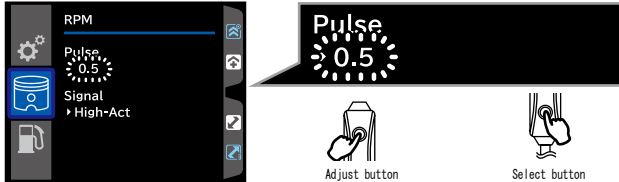
Fully transistorized ignition



After connecting the RPM code B, set the RPM signal count and RPM signal type in the "RPM (tachometer input setting)" below.

At the main screen, press and hold the "adjust button" and "select button" at the same time for 3 seconds to switch to the setting screen. The "SETUP" is displayed before the setting screen. Press "select button(short press once)" to scroll down on the setting screen to set it to "RPM". When "RPM" is displayed in the title, press "select button" for 3 seconds to enter the function setting screen "RPM" (tachometer input setting).

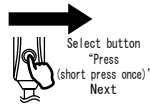
Function setting screen



After connecting the RPM wire and check the number of signals, and then enter that number to the tachometer input setting. (refer to the "RPM signal input") Chose "Pulse" at the function setting screen, then the number will blink. Now enter the number of RPM signals.

To change the blinking number, press "adjust button(short press once)". The set will be made by pressing "select button" (short press once). Enter "select button" (short press once) to move to the next item "Signal".

RPM signals for CT125: P0.5



When you enter the "function setting" screen, then chose "Signal" and "Hi-Act" or "Lo-Act" will blink. Now select the RPM signal type. To change the blinking settings, press "adjust button(short press once)". The set will be made by the press "select button(short press once)". Press "select button(short press once)" to return to the setting screen. ※ Input is not complete/confirmed at this point.

CT125 RPM signal type: Hi-Act

※ Precautions regarding setting confirmation

After input the number or selecting a function, be sure to press and hold the "adjust button" for 3 seconds to return to the main screen. This action makes "setting complete/confirmation" and the setting is stored in the system.

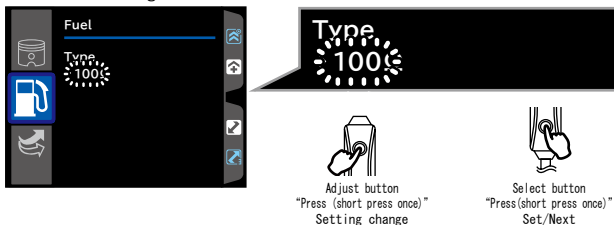
※ If you do not perform this action and turn off the key, the new settings will not be stored and will be back to previous settings.

For CT125 ⑮ Fuel (Fuel setting)

15

At the main screen, press and hold the "adjust button" and "select button" at the same time for 3 seconds to move to the setting screen. The "SETUP" shows before the setting screen. On the setting screen, use the "select button(short press once)" to scroll down and set it to "Fuel". When "Fuel" is shown in the title, press "select button" for 3 seconds to enter the "Fuel" (fuel setting) function setting screen.

Function setting screen



When you enter the function setting screen, you will move the "Type" and the preset settings (resistance value, etc.) will blink. Select the resistance value or fuel setting here. Press the "adjust button(short press once)" to change the blinking settings.

The set will be made by pressing the "select button(short press once)". After setting the resistance value or "OFF" and confirming. Press "select button(short press once)" to return to the setting screen. ※ Input is not complete/confirmed at this point.

For CT125, select "390 Ω" in the preset resistance value.

⚠ Please check

※ If there is a problem with the fuel display, please check this resistance value again.

※ Precautions regarding setting confirmation

After selecting the resistance value or fuel setting, be sure to press for 3 seconds "adjust button" to return to the main screen. This is "setting confirmation" and the stored to the system.

※ If you do not perform this action and turn off the key, the new settings will not be stored and will be back to previous settings.

