

ø 48 Small DN Tachometer kit 12500RPM Instruction manual

Product no. 05-05-0085.

Applicable car model	Monkey 125 (JB02-1000001 -)
	(JB03-1000001 -)
	Monkey 125 Thai model (MLHJB02) (MLHJB03)

preface

Thank you for purchasing our product.

Please ensure that you understand the following information before using the product. Always check the contents of the kit before installation. If you have any questions, please contact the dealer where you purchased the product.

© Illustrations, photographs and other descriptions may differ from this part. Please be aware of this beforehand.

★Please read this before use★

■ When installing, prepare tools and other equipment and follow the installation instructions carefully. This manual is intended for persons with basic skills and knowledge. If you have no experience in installation or if you do not have sufficient tools and other equipment, we recommend that you contact a specialist shop with technical expertise.

We are not liable for any accidents, injuries or damage to property that may occur during use of this product.

The warranty does not cover any parts other than the product, even if the product is installed and used and defects occur in other parts of the product.

■ Please refrain from combining with products from other companies, as this is not covered by the warranty.
 ■ The warranty does not cover the product if it has been processed or otherwise altered.
 ■ Performance, design and prices are subject to change without notice. Please note that performance, design and prices are subject to change without notice.

■ Claims will only be repaired or replaced within one month of purchase if the product is found to be defective in materials or workmanship, but not for labour charges or other costs.

Please keep this instruction manual until you dispose of the product.

■ Charge the battery frequently if the vehicle's battery is not fully charged, e.g. when driving short distances at a time.

If the vehicle has been stored for a period of time, remove the negative battery terminal and charge the battery frequently or use our battery charger to charge the battery. (The standby current can cause the battery to run down.)

Features



The meter body is a "ø 48 small DN tachometer 12500RPM".

Digital signal & small motor fully control the pointer angle. Highly reliable construction with high pointer holding power.

- Always carry out work when the engine and muffler are cold (engine and muffler are cold). (This may cause burns.)
- When carrying out work, prepare the appropriate tools for the task. (This may cause damage to parts or injury.)
- The product and frame may have edges and protrusions. Protect your hands when working on the product. (This may cause injury.)

Warning Indicates a potentially hazardous situation which, if ignored, could result in death or serious injury.

- Do not carry out the work if you do not have the skills and knowledge. (Work errors due to lack of skill, knowledge, etc., may lead to accidents due to damage to components).
- When working on the vehicle, stabilise the vehicle on a level surface and work safely. (The vehicle may fall over during operation, resulting in injury.)
- If damaged parts are found during inspection and maintenance, do not reuse the parts and replace the damaged parts. (If used as is, parts may break, resulting in an accident.)
- Always run the engine in a well ventilated area. Do not start the engine in such an enclosed area. (This may result in carbon monoxide poisoning.)

株式会社 スペシャルパーツ 武川

■ If an abnormality occurs while driving, immediately stop the vehicle in a safe place and stop driving. (This may lead to accidents.)

■ When carrying out inspections and servicing, follow the procedures and procedures described in this manual, the service manual, etc.

(Improper inspection and maintenance can lead to accidents.)

Precautions for use

[Racing vehicles with headlights off / safety parts removed].

If a vehicle with permanently illuminated headlights is driven with the lights off due to easy modification (just disconnecting the wires), the unconsumed power will increase the overall voltage of the vehicle. If the vehicle continues to run, the battery may deteriorate due to overcharging and the factory regulator may fail due to excessive load. The negative effects are even stronger in vehicles with engine modifications that run at higher engine speeds than normal.

If the headlight has burnt out, stop driving immediately or, if it is absolutely necessary to drive, switch to high beam (and adjust the optical axis). At this time, run at as low a speed as possible.

Removing all security parts on a racing vehicle requires specialist knowledge and alternative or additional parts.

■ Some H.I.D. kits and LED headlight kits from other manufacturers may produce high voltage noise from the ballast/inverter (voltage converter) which may adversely affect the digital circuitry, and depending on the quality, may cause meter failure.

Do not.

LED headlight kits can be fitted at the same time.

Do not install external ignition systems, ignition coils, plug cords or racing plugs (non-resistive type) as they may cause a malfunction due to increased adverse noise.

Deterioration of ignition system components is also related to increased ignition noise.

■ Do not install external power generators as they may cause a drop in battery voltage due to insufficient charging power or malfunction of the control voltage, which may result in a malfunction.

■ Please take care not to leave the product in hot weather.

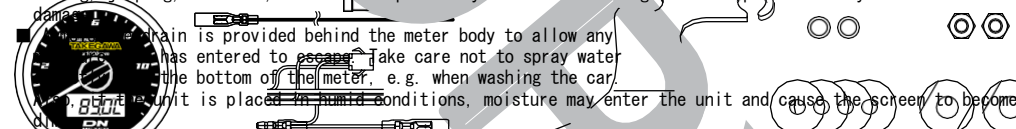
If the motorbike is to be left outdoors for a long period of time, cover it with a cover or similar. If the bike is left for a long period of time under severe conditions, such as in the hot sun, there is a risk of deterioration and deformation of the resin and rubber parts.

■ The product is not fully waterproof.

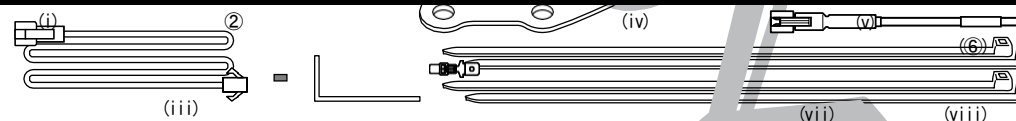
The unit has a drip-proof construction, so water will not get inside if it is exposed to rain or other normal wetness, but it is not completely waterproof, so water will get in if it is immersed in water. If water should enter the unit, stop using it immediately. Also, if the humidity is high or there is a sudden change in temperature, the unit may absorb moisture and fogging may occur on the inner surface of the panel.

■ Do not subject to violent shocks.

Do not perform any actions that may cause a strong impact on the meter, such as off-road riding, jumping, wheelies, etc. Some impacts may result in missing internal parts or body damage.



Product details



number	Part name	quantity	Repair part number
1	Main body of meter	1	
(x) 2	IG Coil cord (1500 mm)	1	09-05-0142
3	Tachometer subcode COMP(11)	(12) 1	00-00-1993
4	meter stay	1	00-00-2385
5	cushion collar	2	
6	Hexagon nut 4 mm	2	00-00-0398 (Pack of 10)
7	Plain washer 4 mm	4	
8	cushion rubber	2	
9	Stick temperature sensor	1	07-04-0553
10	Temperature sensor connecting cord 900 mm	1	07-04-0554
11	Hexagon socket set screw (potato screw) M3x5	1	00-00-0480 (Pack of 6)
12	L Wrench 1.5 mm	1	00-00-0902
13	Binding bands 200 mm	4	00-00-0269 (Pack of 10)

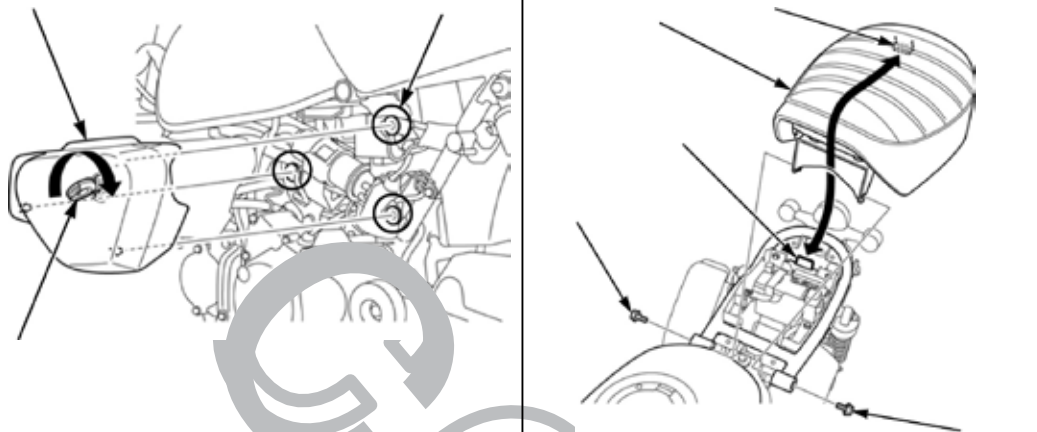
Repair parts must be ordered by number. If you do not order by part number, we may not be able to accept your order. Please understand this in advance.

SPECIAL PARTS TAKEGAWA

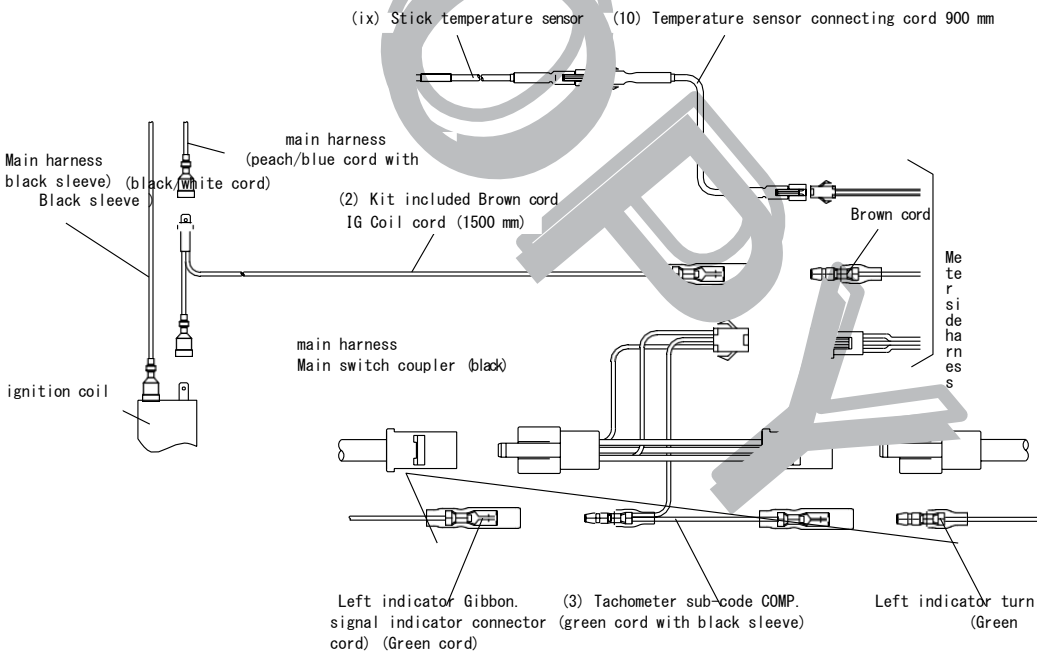
▲ attention (heed)

The contents of the work to remove external parts in this instruction manual are only an outline with details omitted. If you are not familiar with exterior removal work, ask your dealer to carry out the work or always follow the instructions for the work procedure and tightening torque in the genuine service manual of the manufacturer. When removing and installing the exterior parts, work carefully to avoid damaging the claw and groove parts.

Remove the side cover. Remove the seat and remove the negative terminal of the battery.



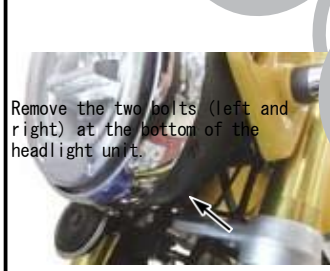
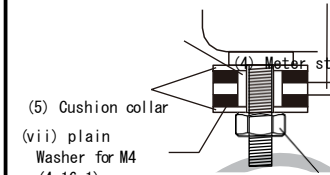
wiring diagram



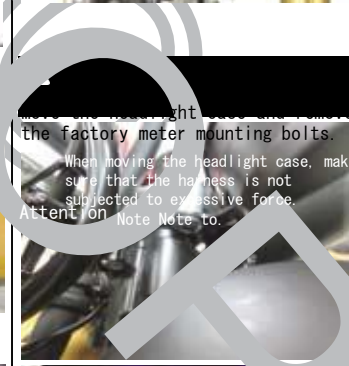
*Stick temperature sensors can be positioned out of the running wind to measure the outside temperature. Temperature measurement at the drain bolt is also possible by purchasing our drain bolts with magnets separately.

(1) Meter body and (4) meter stay.

Installation.



Use the batteries to connect the stock meter to

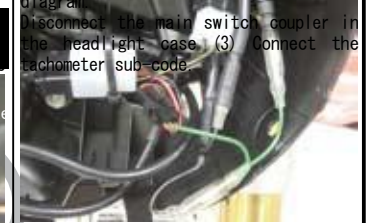


Take the headlight case in the reverse order. Attach. *The headlight units are not yet assembled. Referring to the wiring connection diagram, connect the IG coil cord to the ignition coil peach/blue cord around the right side of the vehicle under the tank. Be sure to pass the cord so that it does not touch the IG coil body.



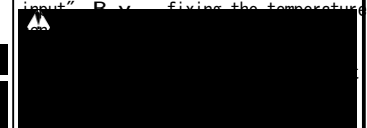
If the cord and the IG coil body do not touch, it is OK.

Pass the (2) IG coil cord through the headlight and connect the meter side harness to the (2) IG coil cord, referring to the wiring connection diagram.



Disconnect the green cord connection of the L indicator cord in the headlight case. (3) Connect the tachometer sub-code COMP. If you purchase our drain bolts separately, you can measure the temperature at the drain bolt. (Measuring range 0 - 150°)

For instructions on how to fit the sensor to the drain bolt, see page 4 of this paper, heading no. See section 1) "Temperature sensor input" by fixing the temperature



The display is [] C.

he DN

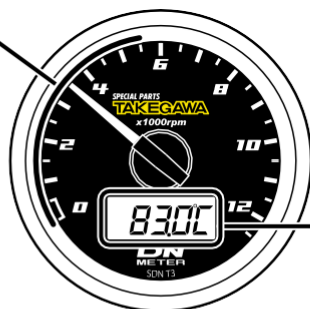
Secure the stay using the factory bolts, leaving a gap at the meter. Route the harness on the meter side into the headlight case.

Check each connection and install the headlight unit in the reverse order.

Attach the negative terminal.

Functions at a

- Tachometer with pointer type
- Highest record (automatic measurement) Highest RPM record



- Thermometer.
- Highest record (automatic measurement) Highest temperature record
- Clock
- Engine work timer

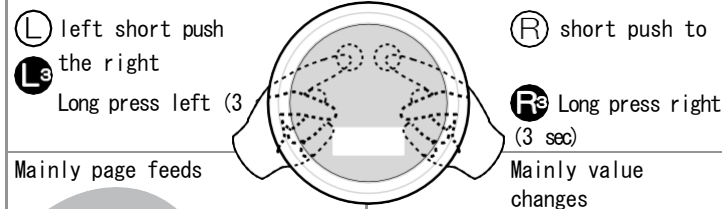
Pointer-type tachometer with D... for excellent seismic resistance and accuracy, plus thermometer, clock and maximum record (automatic measurement). (Multifunction tachometer with digital display (maximum temperature record / maximum RPM record) and engine work timer function). The meter has a clock panel with orange illumination for excellent day and night visibility.

	Functions	Display range: 12500 rpm	
	guiding principle tachometer	Firing frequency setting crankshaft revolution	Firing frequency setting per 1/2 ignition, 1-6 ignition
	thermometer	Electronic circuit	8 to 17 V AC / 10 to 18 V DC, with power circuits that are highly durable against voltage fluctuations and overvoltages.
		Measurement range (with sensor) Highest RPM record (record stored until reset)	Configuration → Heading number (ii).
	Work Timeline (operating hour meter)	Measurement range (with sensor) Highest temperature record (record stored until reset)	Configuration → Heading number (i).
	Clock	Up to 100 hours in minutes	Configuration → Heading number (5).
	Menu OFF Setting	Up to 100 hours are recorded in minutes and 100 hours in hourly increments. If exceeded, the data is recorded in hourly increments.	Configuration → Heading number (iv).
		Resettable. Menu OFF support (with hidden settings).	Configuration → Heading number (iv).
<p>You can hide functions that cannot be used depending on the type of vehicle in which they are installed, or functions that some customers find unnecessary. Two functions are supported: clock and work timer. The menu OFF setting is made in ADJ mode.</p> <p>Example 1) Battery-less vehicles cannot use the clock function, so set the clock to Menu OFF. Example 2) Set the tachometer clock to Menu OFF as there is a clock on the speedometer strip.</p>			



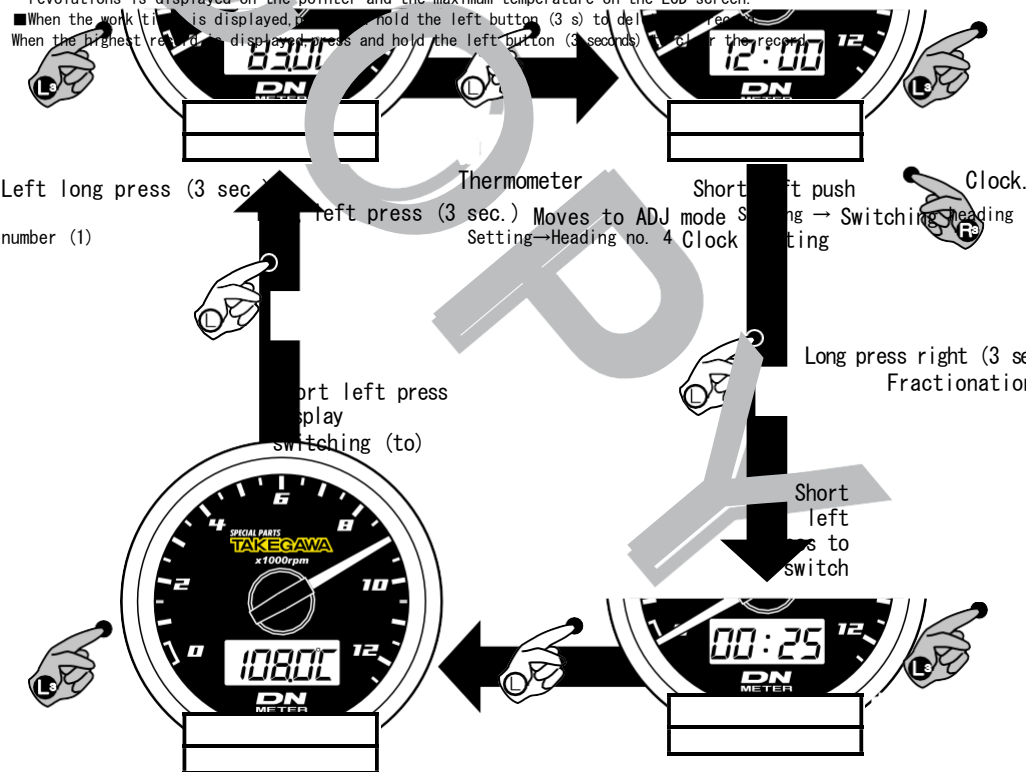
How to operate the buttons

The two buttons on the back of the meter body are used for basic meter settings and display switching. The left and right buttons are shown in the illustration below as "looking at the dial from the front". There are two ways to press the buttons: "short press" and "long press" (3 seconds). Please check the display icons and the indications on how to press the button before operating the unit.



Meter activation

- Battery-powered vehicles are switched on with the key ON, while battery-less powered vehicles are switched on when the engine is started.
- Starts up in the mode in which it was turned off last time.
- When the "left short press" is performed, the display on the LCD screen in the lower centre switches between thermometer, clock, work timer, maximum record and thermometer. For the maximum record, the maximum number of revolutions is displayed on the pointer and the maximum temperature on the LCD screen.
- When the work timer is displayed, hold the left button (3 s) to delete the record. When the highest record is displayed, press and hold the left button (3 seconds) to delete the record.



- Long left press (3 s) Timer Left long press (3 sec.) Delete record no. 5 (5) Time erasure
- Short left press (3 sec.) Highest record
- Short left press (3 sec.) Switch to.
- Work



L button (left button)	Short press: go to next setting item / Long press: exit ADJ mode
R button (right button)	Short press: advances the set value / long press: resets the set value.

Work timer menu OFF setting	Settings → Heading number (5) -2
OFF if the clock function is not used Range: on, off	

RPM signal connection settings	Settings → Heading number (2) -1
RPM Code type of connection point	
IG mode [A connection] [B connection] Ignition coil connection PC mode [C connection] Pulse generator connection	

Clock menu OFF Setting	Settings → Heading number (4) -2
OFF if the clock function is not used Range: on, off	

RPM Signal frequency setting	Settings → Heading number (2) -2
Number of signals per crankshaft revolution	
Range in IG mode: 0.5, 1 - 6 times Range in PC mode: 1 - 24 times	

1

Temperature sensor connection cord, temperature sensor connection

- The measuring range of the thermometer is 0-120 ° C.
- Optional adapters are required to measure oil temperature and water temperature.
- Depending on the vehicle model, engine components are also available for temperature sensor installation.
- See optional parts in our catalogue.
- The temperature sensor can be fixed in a suitable position and used as an outside temperature gauge.

Ma
in
it
co
de

'5 Ash
'6 Yellow

Φ 3

Temperature sensor connecting cord 900 mm stick temperature sensor

Use wiring tape or tie wrap to fix the wiring to the frame or vehicle harness to prevent damage or disconnection due to interference caused by steering operation, friction caused by driving vibrations or contact with hot engine parts.

When the sensor is not connected (wiring disconnected), the value is [- - -, -C].

■ The set screws supplied are used for attaching the stick temperature sensor to compatible parts manufactured by us. To prevent the sensor from falling off, apply a small amount of threadlocker to the set screw and stop

tightening to the extent that the sensor is lightly scratched. Hexagon socket
1.5 mm

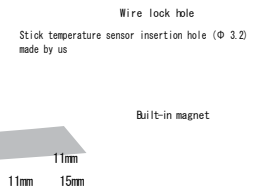
Over-tightening of the set screw causes the sensor part to become large. Deformation can damage the internal

If damaged, it is the same as a broken or short-circuited cord.
Indication at disconnection: [- - -, -C]
indication at short circuit: [120.0C].

Tighten down to the extent that light linear scratches in the shape of () are made.

Temperature optional parts

Drain bolt with magnet (M12xP1.5) Fits Monkey 125.



The magnets on the drain bolts absorb the iron powder mixed in the engine oil with strong magnetic force. This reduces the amount of iron powder in the oil and enables the original stable lubrication performance of the engine oil to be demonstrated. Furthermore, our aluminium drain bolts are equipped with a wire lock hole for wire locking and a hole for inserting our stick temperature sensor to prevent it from falling off. By attaching the stick temperature sensor to the drain bolt and connecting it to our Φ 48 small DN tachometer 12500 RPM, the temperature at the drain bolt can be measured. The drain bolt itself is elaborately machined from aluminium and has a Colour anodised. Available in silver, black, blue and red. With laser marking of our logo. Magnets are "caulked" for secure fixing ■ Can be used in place of various genuine drain bolts.

Adaptor for oil temperature gauge Monkey 125 Suitable for vehicles fitted with our oil cooler kit (rubber hose).

Attached to the meter.

This applies to vehicles fitted with an oil cooler kit that uses rubber hoses (inner diameter ø 8 mm).

スティック温度センサー スティック温度センサー差込穴付きアダプターです。

Inner diameter Φ 8 mm Rubber hose

adapter

How to operate the buttons

ADJ Mode.

■ This mode is used to change or adjust various setting values.

Press and hold left (2 sec.) while "Thermometer" is displayed to enter ADJ mode.

Settings → Heading number (2) -4

Minimum engine speed at which the pointer is moved

Range: 500 rpm - 4000 rpm

Front view of the dial.

Left button right

RPM Signal type setting

Settings → Heading number (2) -3

Type of loading programme

Range: Hi mode Lo mode

Press and hold left (3 sec.) Go to ADJ mode.

left slotting

thermometer

left slotting

left slotting

left slotting

Short left press to switch

so the temperature screen inside the meter.

Product name	item's stock 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 3 mm Oil cooler hose adaptor	02-04-0521

LOCK

ネジロック剤

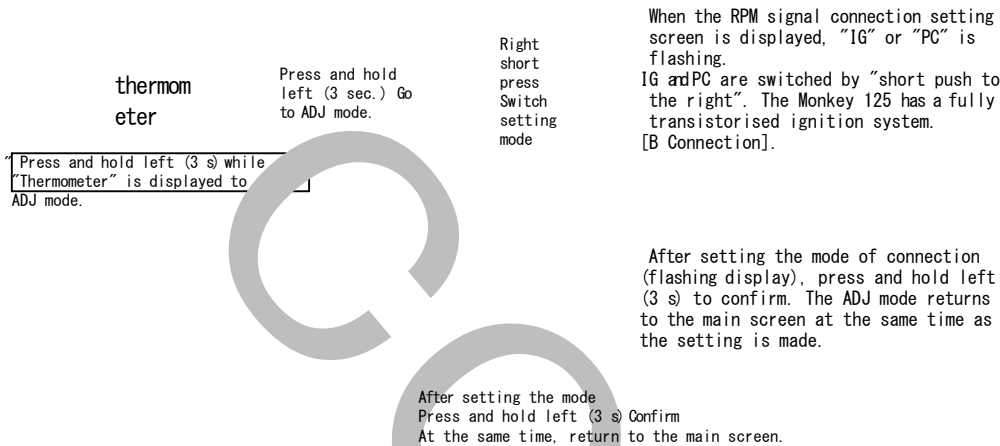
2

RPM signal connection setting:

- sets the RPM code connection.
- 1 The Monkey 125 uses the full transistor ignition system [B connection]. For [B connection], the setting mode corresponds to IG (ignition coil connection).

Press and hold left (3 sec.) while "Thermometer" is displayed to enter ADJ mode.

- When the ADJ mode is entered, "rP-IG" is displayed. In this state, "short press right" is performed to set the RPM signal connection.

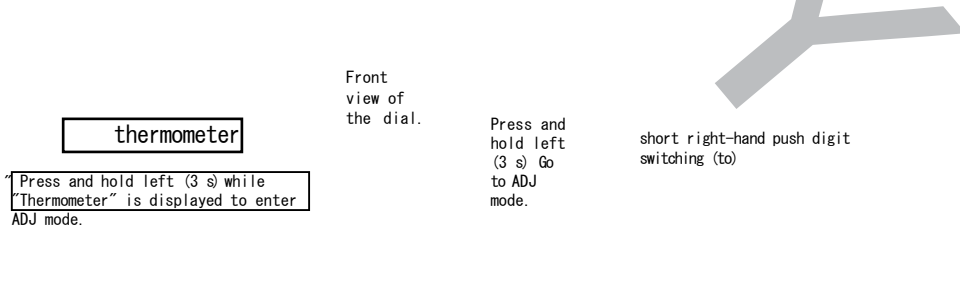


2

RPM signal frequency setting: set the signal frequency per crankshaft revolution. For the Monkey 125, "0.5" is relevant.

2

- Press and hold left (3 sec.) while "Thermometer" is displayed to enter ADJ mode.
- When the ADJ mode is "rP-IG" is displayed. Switch the display by pressing the left button briefly to set the display to "rP-1". Display order "rP-IG" → "rP-1" → "rP-HI" → "500r". ... With "rP-1" displayed, press "short right" to set the RPM signal frequency.



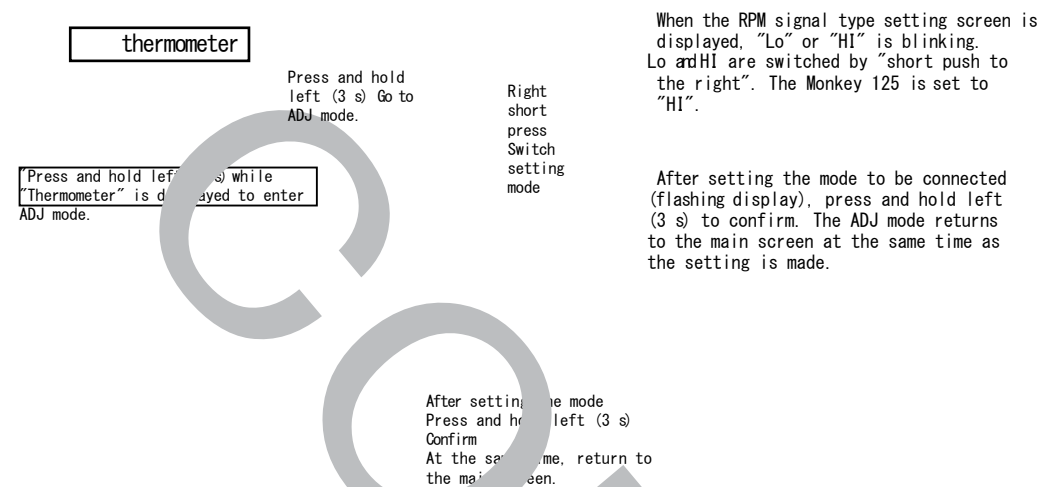
2

RPM signal type setting: set the type of reading programme. For the Monkey 125, "HI" is relevant.

3

Press and hold left (3 sec.) while "Thermometer" is displayed to enter ADJ mode.

- When the ADJ mode is "rP-IG" is displayed. Switch the display to "rP-HI" by pressing the left button briefly. Display order "rP-IG" → "rP-1" → "rP-HI" → "500r". ... In the "rP-HI" display, press the "short right" button to set the RPM signal type.

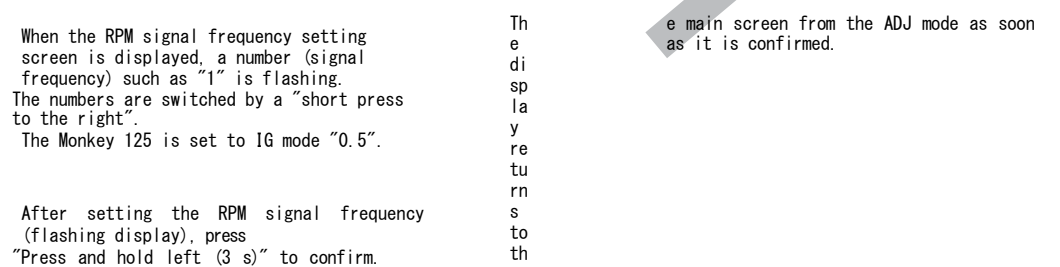


2

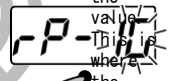
Minimum speed setting: sets the minimum engine speed at which the indicators are to be moved.

4

- Use as a function for battery-less vehicles. In battery-less vehicles, when the engine is stopped, the drive power supply is cut off and the pointer remains at that angle. By specifying a slightly higher rpm than the idling rpm (+500 rpm or so), it is possible to keep the pointer at zero when the engine is stopped. If the angle of the pointer deviates, it will be automatically corrected when the engine is restarted.
- For vehicles with battery, set to "500 rpm".
- Press and hold left (3 sec.) while "Thermometer" is displayed to enter ADJ mode.
- When the ADJ mode is "rP-IG" is displayed. Switch the display by pressing left button to set the display to "500r".
- The number 500 in "500r" may differ. Display order "rP-IG" → "rP-1" → "rP-HI" → "500r". With "500r" displayed, press "short right" to change the value.



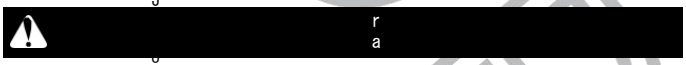
P
r
and
d
l
e
f
t
(
3
s
e
c
)
G
o
t



With the display shown in 500r, press "short right" to change the value. This is where the minimum RPM setting is made.

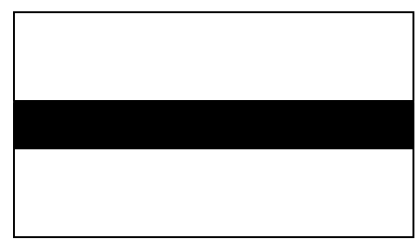
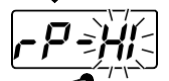
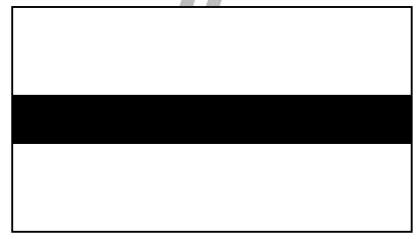


A
D
J
r
a
d
e



Press and hold left (3 s) while the display enters Adj mode.

Front view of the dial.



thermometer



Left button
button

right

After setting the
RPM signal
frequency, press
and hold left (3 s)
to confirm.
At the same time, return to
the main screen.

Left button
button

right

After setting the
RPM signal frequency,
press and hold left
(3 s) to confirm and
return to the main
screen at the same
time.

After setting the minimum rpm (flashing
display), press and hold "left".
(3 sec)" to confirm.
Upon confirmation, the ADJ mode
returns to the main screen.

4

clock: sets the time in 24-hour display.

When the "Thermometer" is displayed on the main screen, press and hold the left button (for 3 seconds) to set the clock display.

clock display

thermometer
left short pushdown display switching
In the "Thermometer" display, press 'short left' to move to clock display and press and hold left (3 sec.) to enter the clock setting screen.

Front view of the dial.

Left button button

right

Right short press Hour/minute switching

left short pushdown Definitive / Next item.

After minute setting, short left push confirmed. At the same time, return to the main screen.

In the clock setting screen, the hour (e.g. 12) digits flash. "Short press right" switches the time (24 hours). After setting the time, a "short left press" will change the time to the minute. It switches to the setting and the number flashes.

"Short press right" switches the minutes. After setting the minutes, the clock setting is confirmed by pressing the "short left" button.

4 - 1

Clock fractionalisation function: fractions of a minute to the nearest five minutes.

When the "Thermometer" is displayed on the main screen, a short left press and hold (3 seconds) on the right side of the screen will display the time with the fractional time displayed.

When the "Thermometer" is displayed, press "short right" to move the display to the clock display.

thermometer

left short pushdown display switching

Long press right (3 sec) Change to Fractional display

The display switches to the fractional display by pressing and holding right (3 s) on the clock screen.

Fractional time processing (e.g. 1) 13:12 → 13:10 (e.g. 2) 13:18 → 13:20

4 - 2

Clock menu OFF setting: set to OFF to hide the function when it is not used.

Press and hold left (3 sec.) while "Thermometer" is displayed to enter ADJ mode. When the ADJ mode is "rP-IG" is displayed. Switch the display by pressing left button briefly to set the display to "C-on". Display order "rP-IG" → "rP-l" → "rP-HI" → "500r" → "C-on". "C-on"... In the "C-on" display, press "short right" to set ON or OFF.

Short left press (several times)

Press and hold left (3 s) Go to ADJ mode.

thermometer
Press and hold left (3 s) while "Thermometer" is displayed to enter ADJ mode.

5

Work timer: Timer that automatically adds up the engine operating time above 500 rpm. Stops when the engine runs below 500 rpm. The measured time can be deleted.

During the "Thermometer" display on the main screen, a "short left press" (several times) can be used to switch to the work timer time display and check the engine running time. In the time display, a "long left press" (3 s) will delete the record.

Up to 100 hours are recorded in minutes and 100 hours in If exceeded, the data is recorded in hourly increments. *The ":" flashes when the timer is running.

Example: 99 hours 59 minutes

Example: 100 hours 0 - 59 minutes

thermometer

Short left press (several times) Switch display

During the "Thermometer" display, the work timer time display can be checked by pressing the "short left" button.

On the display screen. Long press left (3 sec) Erase record

5 - 2

Work timer menu OFF setting: set to OFF to hide the function when it is not used.

Press and hold left (3 sec.) while "Thermometer" is displayed to enter ADJ mode.

When the ADJ mode is "rP-IG" is displayed. Switch the display by pressing left button briefly to set the display to "E-on". Display order "rP-IG" → "rP-l" → "rP-HI" → "500r" → "C-on" → "E-on". "C-on" → "E-on".

In the "E-on" display, press "short right" to set ON or OFF.

Short left press (several times) Work timer menu OFF To setting screen

Switching "E-on" When switched on, "ON" is flashing. ON/OFF is toggled by "short press to the right".

After setting OFF (flashing display), press and hold left (3 s) to confirm. Upon confirmation, the ADJ mode returns to the main screen.

thermometer

Press and hold left (3 sec.) Go to ADJ mode.

"Press and hold left (3 s) while "Thermometer" is displayed to enter ADJ mode.

Right short press Switch setting mode

After setting menu OFF, press and hold left (3 s) to confirm. At the same time, return to the main screen.

6

Maximum record: maximum RPM and maximum temperature are measured automatically. Measuring times can be erased.

Switching "C-on" Clock menu OFF When the setting screen is entered, "ON" is flashing. ON/OFF is toggled by "short press to the right".
Settings: on off
After setting OFF (flashing display), press and hold left (3 s) to confirm.

■ During the "Thermometer" display on the main screen, a "short left press" (several times) allows the highest record to be displayed and each record to be checked. Press and hold the left button (3 seconds) displayed to delete the record.

isplay on LCD screen.

thermometer

■ M
a
x
i
m
u
m

R
P
M

i
s

i
n
d
i
c
a
t
e
d

b
y

a

p
o
i
n
t
e
r
.
■ M
a
x
i
m
u
m

t
e
m
p
e
r
a
t
u
r
e

d

short press
Switch setting mode

Menu OFF Press and hold left (3 s) after setting Confirm At the same time, return to the main screen.

Max. speed: up to 12500 rpm Max.

(Several times) Switch display

The maximum record (RPM/temperature) can be checked by pressing the "left short press" (several times) while the "thermometer" is displayed.

On the display screen. Long press left (3 sec) Erase record