INSTALLATION

Thanks for purchasing our ***Koso TNT-01S meter for Harley-Davidson.***
Before operating this unit, please read carefully the instruction sheet and retain it for future reference.

⚠ Notice

1.This meter work on DC 12 volts applications only.
2.For proper installation, please follow the steps described in the instruction sheets. Any damages caused by wrong installation shall be imputed to the users.
3.Don't break or modity the wire terminals. To avoid any short circuit, do not pull the wires out of the terminal when installing.
4.Do not disassemble or change any parts.
5.Opening the instrument will void any warranty. Maintenance or repair should be executed by our professionals only.

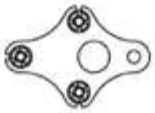
MARK MEANING:

⚠	Some procedures must be followed to avoid damages to the instrument.
⚠WARNING!	Some procedures must be followed to avoid injuries to the user or others.
⚠ CAUTION!	Some procedures must be followed to avoid damages to the vehicle.

1-1 Accessories

1 Meter X 1

2 Meter bracket X 1



3 Handle bar clamp X 1

4 Rubber X 1

5 M6 X 18L Allen screw X 1

6 M5 X P0.8 nut X 3

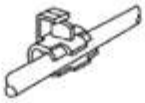
7 M6 X P1.0 nut X 1

8 M5 washer X 3

9 M6 washer X 1

10 M6 Aluminum bushing X 1

11 Mid-way connector X 8

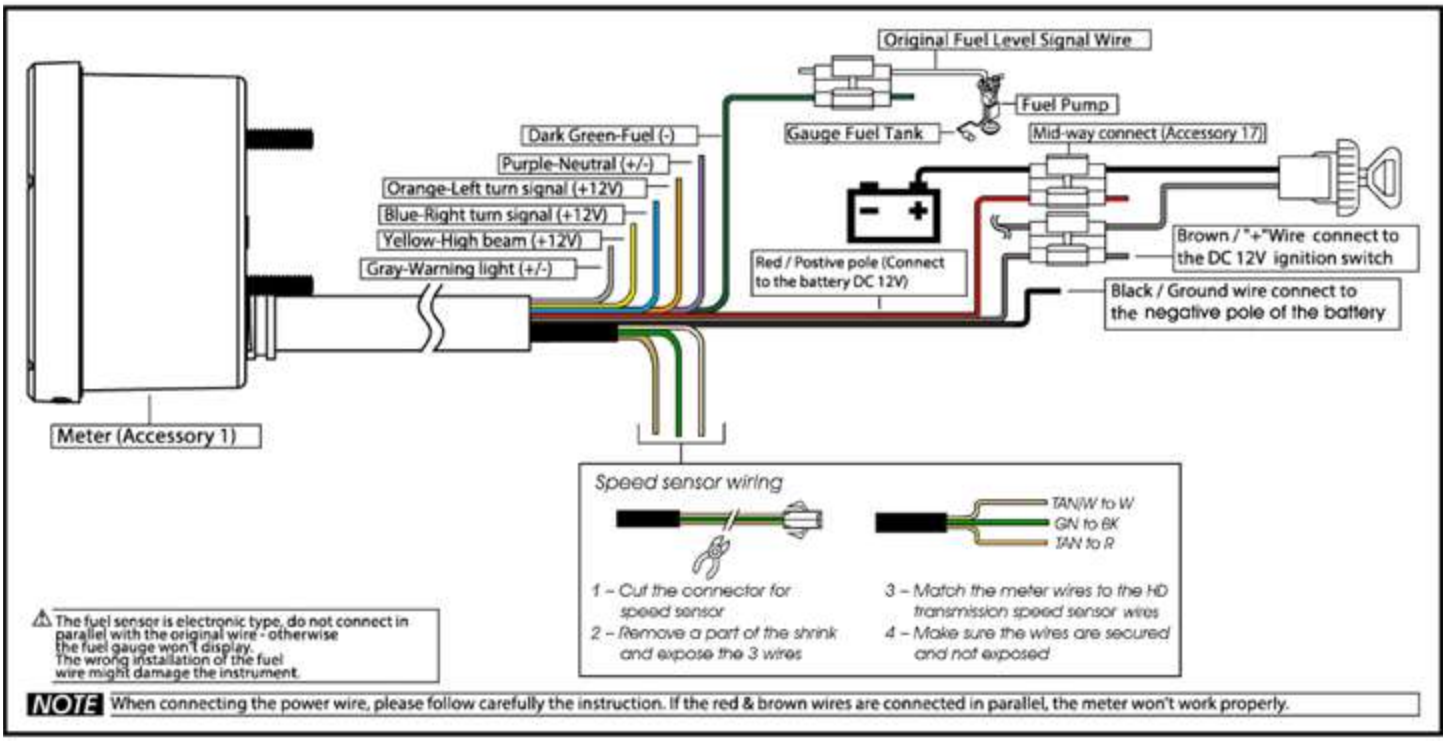


1-2 Optional accessories

GPS Speed signal converter

Transmission speed sensor

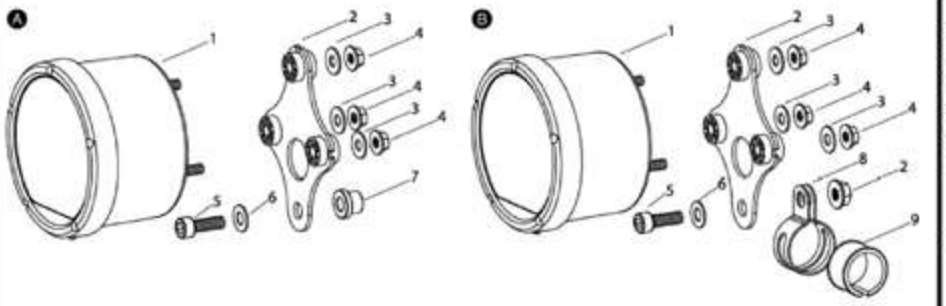
2-1 Wiring installation instruction



⚠ The fuel sensor is electronic type, do not connect in parallel with the original wire - otherwise the fuel gauge won't display. The wrong installation of the fuel wire might damage the instrument.

NOTE When connecting the power wire, please follow carefully the instruction. If the red & brown wires are connected in parallel, the meter won't work properly.

2-2 Installation instructions



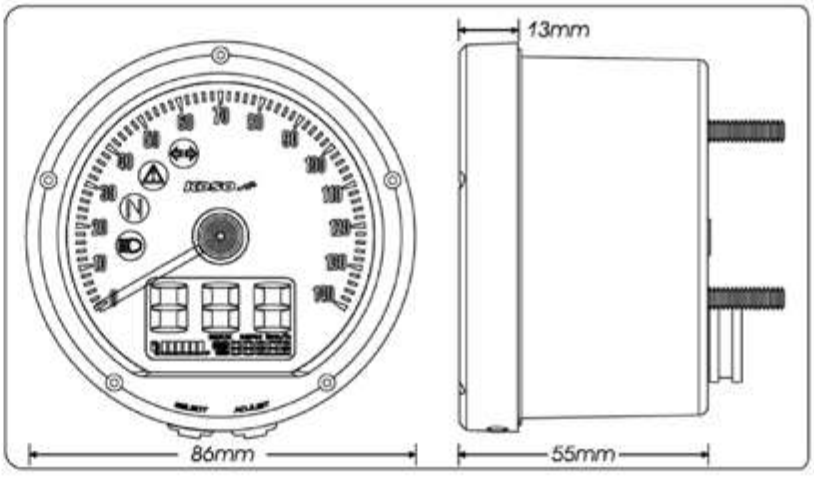
When installing, please follow the process.

1. Meter (Accessory 1)
2. Meter bracket (Accessory 2)
3. M5 washer X 3 (Accessory 8)
4. M5XP0.8 nut X 3 (Accessory 6)
5. M6XP1.0 Screw (Accessory 5)
6. M6 washer (Accessory 9)

Ⓐ Use the meter bracket (Accessory 2),aluminum bush(Accessory 10) to install the speedometer on the handle bar stem.

Ⓑ Use the meter bracket (Accessory 2), handle bar clamp (Accessory 3), rubber (Accessory 4) and the M6XP1.0 nut (Accessory 7) to install the meter on the handle bar.

3-1 Dimensional drawing



3-2 Basic function instruction

Needle Speedometer
●Display range:0 ~ 140 km/h(mph)

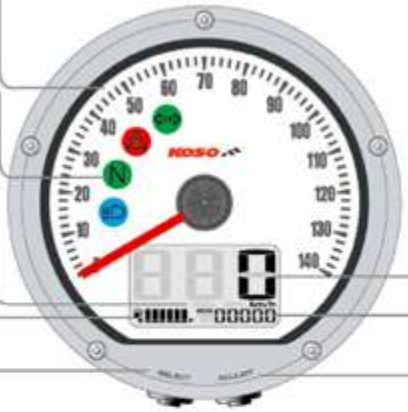
Telltales
●Turn signal (Green)
●Warning (Red)
●Neutral (Green)
●High beam (Blue)

MAX RECORD
●Digital speed:0~360 km/h (0~225 mph)
●Needle Display:0 ~ 140 km/h(mph)

Fuel Level
●Display range:6 levels.
●The fuel level begins to flash when only 1 level is left.

Select button
●Press the Select button in the main screen to switch between MAX record.

Digital Speedometer
●Display range:0 ~ 360 km/h (0~225 mph)
●Display unit:1 km/h (mph)



Odometer
●Display range:0 ~ 99999 km (mile), reset automatically after 99999 km (mile).
●Display unit:1 km (mile)

Trip meter A/B
●Display range:0 ~ 999.9 km (mile), reset automatically after 999.9 km (mile).
●Display unit:0.1 km (mile)

Colck
●24 H

Volt meter
●Display range:DC 8~ DC 18V
●Flashing warning when voltage is lower than 11.5V or higher than 15.5 V.

Adjust Button
●Press the Adjust button in the main screen to switch between ODO, TripA/B, Clock, Volt meter.

3-3 Functions

●Speedomete	Display range:0 ~ 360 km/h (0 ~ 225 mph) Display unit:1 km/h (mph)
○Display internal	<0.5 second
○Oodmeter	Display range:0 ~ 99999 km (mile),reset automatically after 99999 km (mile) Display unit:1 km (mile)
○Trip meter A/B	Display range:0 ~ 999.9 km (mile),reset automatically after 999.9 km (mile) Display unit:0.1 km (mile)
○Tire circumference	Setting range:300~2,500 mm Setting unit:1mm Sensitive point:1~20
●Fuel meter	Display range:6 levels Display unit:Each level represent 16.6% Setting range:100Ω,250Ω,510Ω,1200Ω,SW
●Clock	24 H
●Volt meter	Display range:DC 8~18V Flashing warning when voltage is lower than 11.5 V or higher than 15.5 V

●Maintenance Mileage	Display range:0~99999 km(mile) Display range:1 km (mile)
●ODO setting	Display range:0~99999 km(mile) Display range:1 km (mile)
●Backlight brightness Right	Setting range:1-5 (Darkest)~5-5 (Brightest) Setting unit:Each level represents 20%
●Effective voltage	DC 12 V
●Effective temperature range	-10~+60℃
●Meter standard	JIS D 0203 S2
●Meter size	85.5 X 54.5 mm
●Meter weight	Around 330 g
●Indicator light color	Turn signal (Green) Warning (Red) Neutral (Green) High beam (Blue)

NOTE Design and specifications are subject to change without notice!

3-4 Button function instruction

Press the Select button

1.In main screen, press the Select button to enter the MAX record display.
2.In setting screen, press the Select button to choose the function you want to set.

Hold the Select button for 3 seconds

1.In setting screen, hole pressing the Select button for 3 seconds to go back to the main screen

Press the Adjust button

1.In main screen, press the Adjust button to choose the odometer, trip A, trip B, clock, volt.
2.In the setting screen, press the Adjust button to change the setting numbers. If you keep pressing down the Adjust button the number will increase quikly.

Hold the Adjust button for 3 seconds

1.In the main screen, hole the Adjust button for 3 seconds to reset the trip A, trip B and the MAX record.
2.In the ODO screen, hole the Adjust button for 3 seconds to switch between the km/h and mile/h.

Hold the Adjust button

1.In the setting screen, hold the Adjust button to add quikly the set value.

Hold the Select + Adjust buttons for 3 seconds

1.In the main screen, hold the Select+Adjust buttons at the same time for 3 seconds to enter the setting screen.

3-5 Main function instruction (Select button)

●In the main screen. Press the Select button one time to Max. record.

●In Max. record screen. Press the Select button one time to go back to the main screen (ODO).

●Hold the Select button for 3 seconds to reset Max. record.

●Main screen.

3-6 Main function switch instruction (Adjust button)

●In main screen (ODO). Press the Adjust button one time to enter the trip A screen.

●Hold the Adjust button for 3 seconds to set the meter in metric unit or imperial unit.

●In the trip A screen. Press the Adjust button one time to enter the trip B screen.

●Hold the Adjust button for 3 seconds to reset Trip A.

●In the trip B screen. Press the Adjust button one time to enter the clock screen.

●Hold the Adjust button for 3 seconds to reset Trip B.

●In the clock screen.. Press the Adjust button one time to enter the volt screen.

●In the volt screen. Press the Adjust button one time to go back to the main screen (ODO)

●Main screen.

3-7 Setting screen instruction

●In the main screen

●In the main screen, hold for 3 seconds the Select & Adjust button to enter the setting screen.
●In setting screen, press the Select button to choose the function you want to set. The function in setting screen is in order as circumference→sensor point→fuel gauge resistance→clock→ backinght brightness→Internal ODO display→Extenal ODO setting

Note In any screen, you could press down the Select buttons for 3 seconds to back to the main screen.

●Extenal ODO setting

●Internal ODO display

●Circumference

●Sensor point

●Fuel gauge resistance

●Clock

●Backinght brightness

4 Entering setting screen

●In the main screen, hold for 3 seconds the Select & Adjust button to enter the setting screen.

4-1 Tire circumference setting

●EX. If the tire circumference is 1,300 mm.
●Press the Select button to move to the digit you want to set.

●Press the Adjust button to change the value.

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

The circumference must be set to 1000

●Press the Select button one time to enter the sensor point setting screen.

4-2 Sensor point setting

●EX. If the sensor point is set at 06P.
●Press the Select button to move to the digit you want to set.

●Press the Adjust button to change the value.

Note Setting range: 01P~20P.
Setting unit: 01P.

The sensor point must be set to 20

●Press the Select button once to enter the piston numbers setting screen.
●EX. The sensor point is now set from 01P to 06P.

4-3 Fuel gauge resistance setting

●EX. The fuel gauge need to be set to 510Ω.
●Press the Adjust button to change the setting.

Note The fuel gauge resistance setting range:100Ω, 250Ω, 510Ω, 1200Ω, SW (turn off).

Note When Fuel Setting is set to "SW", the fuel level symbol will light up when fuel level signal wire connected to the negative (-) wire

●Press the Select button once to enter the clock setting screen.
●EX. The setting has been changed from 100Ω to 510Ω.

4-4 Clock setting

●EX. Set the clock at 0:05.
●Press the Select button to move to the digit you want to set.

●Press the Adjust button to change the value.

Note This is a 24 H clock.

●Press the Select button once to enter the backlight brightness setting screen.
●EX. The clock has been set from 0:00 to 0:05.

4-5 Backlight brightness setting

●EX. Change the brightness to 3-5 (60% brightness.)
●Press the Adjust button to change the value.

Note Setting range: 1-5 (Darkest) ~ 5-5 (Brightest), 5 different levels available.
Setting unit: 20% per level.
The backlight brightness will change immediately after you set the value.

●Press the Select button once to enter the odometer display screen.
●EX. The backlight brightness has been set from 5-5 to 3-5

4-6 Odometer display

●Press the Select button one time to enter the external odometer setting screen.
●EX. The internal odometer display is 12500 km.

4-7 Odometer display

●EX. Set the odometer to 5000 km (mile).
●Press the Select button to move to the digit you want to set.

●Press the Adjust button to change the value.

●Press the Select button once to go back to the main screen.
●EX. The odometer setting has been changed from 0 to 5,000 km (mile).

●Back to main screen

5 Trouble shooting

The following situation do not necessary indicate malfunction of the meter. Please check the folloeing before taking it in for repair.

Trouble	Check item	Trouble	Check item
The meter doesn't work when the power is on.	●The power is not supplied properly to the meter. →Make sure the wiring harness is connected correctly. The wires and fuse might be broken. →The battery is too old to supply enough DC 12V power to make the meter work.	Fuel gauge does not appear or appear incorrectly.	●Check your fuel tank. →Is there any fuel inside the tank? ●Check the wiring harness. →Is the wire connected properly? ●Check the setting. →Refer to the manual 4-3.
The meter shows wrong information. Speed does not appear or appear incorrectly.	●Check the voltage of your battery and make sure the voltage is over DC 12V. ●Make sure the speed sensor is connected properly. ●Check the tire-size setting. →Refer to the manual 4-1 & 4-2	The clock is incorrect.	●Did you connect the wires correctly. →Check the positive wire (Red) connectsed to the battery, and the main positive wire (Brown) connected to the main switch.

※If still the problem still can't be solve, Please contacy your local distributor to get assistance.