INSTALLATION

- Thank you for purchasing the **HD-03** series kit. Before installing, or operating this unit, please read the instructions thoroughly and retain them for future reference.

⚠ Attention!

1. This meter only functions with DC 12V.
2. Any damages caused by faulty installation shall be imputed to the users.
3. To avoid a short circuit from occuring, do not pull or modify the wires during installation.
4. Dissasembling this unit will void your warranty. Maintenance should be executed by our professionals.

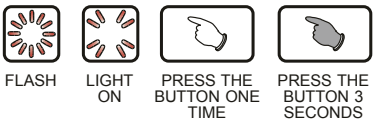
◎MARK MEANING:

NOTE You could get the installation details from the information behind the mark.

⚠ Some processes must be followed to avoid the affection caused by wrong installation.

⚠ **WARNING!** Some processes must be followed to avoid damages to yourself or the public.

⚠ **CAUTION!** Some processes must be followed to avoid the damage to the vehicle.



1 Accessories

1 Speedo & Tacho Meter X1



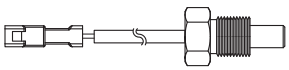
2 Fuel Level Meter X1



3 Oil Temp. Meter X1



4 PT1/2-20UFN sensor X1



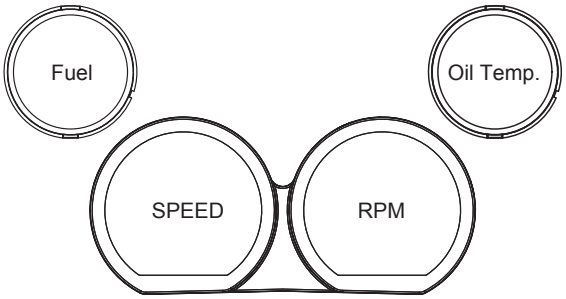
5 Sensor wire set X1



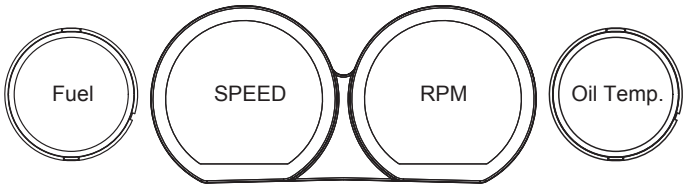
NOTE Contact your local distributor, if the items received in the box are not the same as the items listed above.

2-1 Gauge location

Road Glide | Harley-Davidson

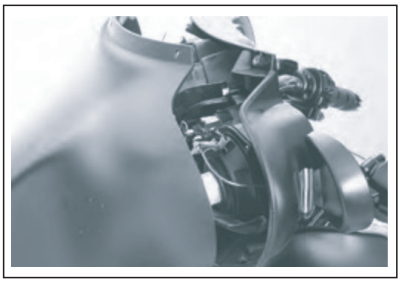


Street Glide | Harley-Davidson

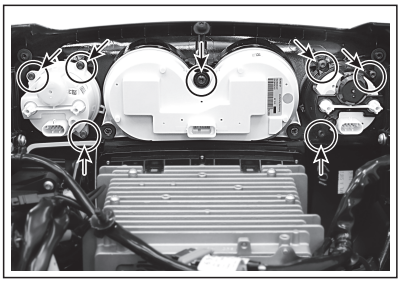


NOTE Fit Harley-Davidson ® FLHX, FLTC and FLTR from 2014 to 2017.

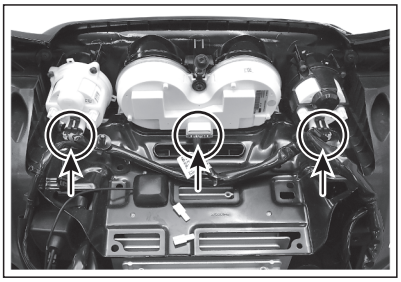
2-2 Disassembling Instructions



1.Disconnect the ground (-) (negative pole of the battery) from the vehicle's battery.
2.Remove the mounting screw and remove the fairing.



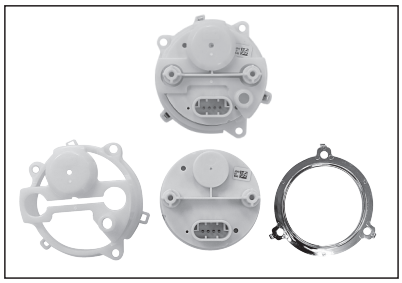
4.Remove the remaining 7 screws.



3.Disconnect the 3 gauges.



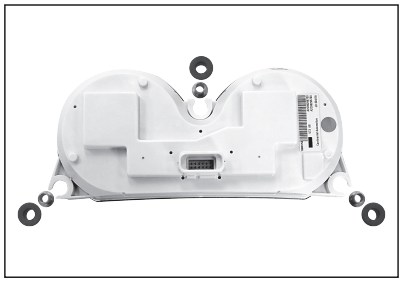
5.Ensure the Speed and Tach bezels remain in the fairing.



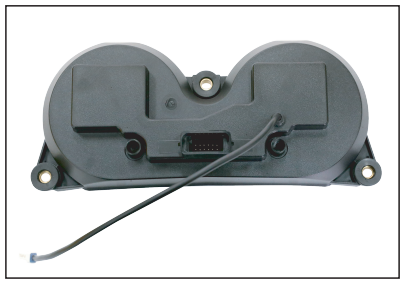
6.The Fuel and Volts bezels and mounting cups will be reused. There are 3 tabs on the bezels that need to be carefully pushed back through the mounting cup to separate the bezel from the mounting cup and to release the factory gauge.



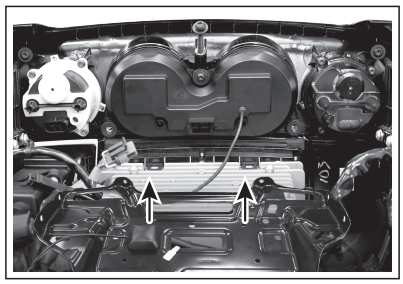
7.The new OIL TEMP gauge will use the existing white Volts mounting cup and the new Fuel Level gauge will use the existing black Fuel mounting cup. Place the new VOLTS and OIL TEMP gauge in the appropriate housings and secure the bezel in place by lining up the tabs.



8.Remove the bushings and nuts for original Speed / Tachometer.

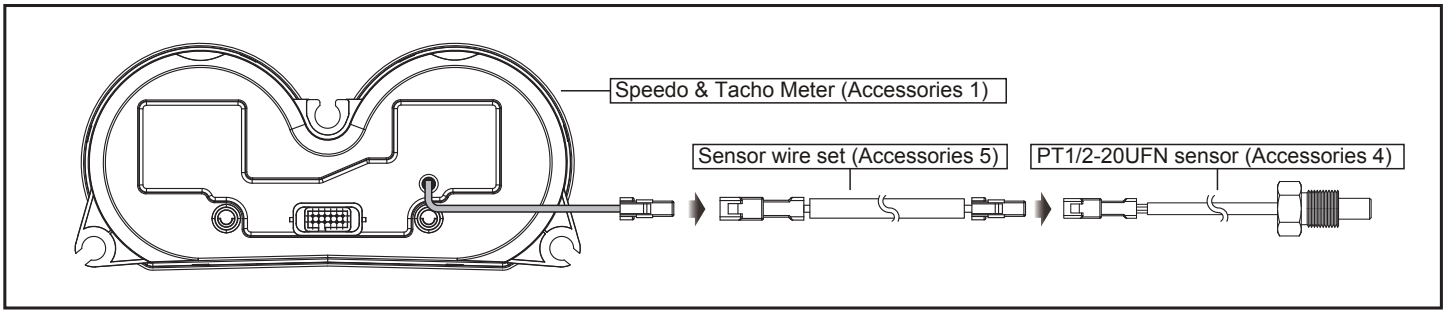


9.Put the bushings and nuts to KOSO Speed / Tachometer.



10.Reassemble the amplifier tray to the radio and sperker enclosures using the factory hardware; also give the top center Speed / Tach screw a final torqueing with the gauge aligned to the fairing and amplifier tray.

2-3 Wiring Installation Instructions



3-1 Overview

Speedometer
●Display range : 0 ~ 299 km/h (0 ~ 199 MPH) ●Display unit : 1 km/h (MPH)

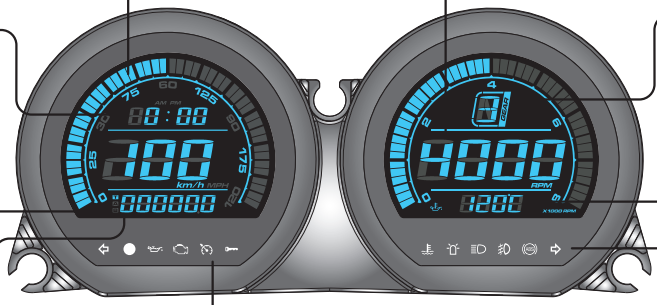
Tachometer
●Display range : 0 ~ 9,990 RPM ●Display unit : 10 RPM

Time
●Display range : 12 / 24 hour format
Time is not displayed when using radio.

Gear meter
●Display range : N, R, P, 1 ~ 6

Engine temperature
●Display range : -40 ~ 300 °C (-40 ~ 572 °F)
Voltmeter
●Display range : 8 ~ 18 V

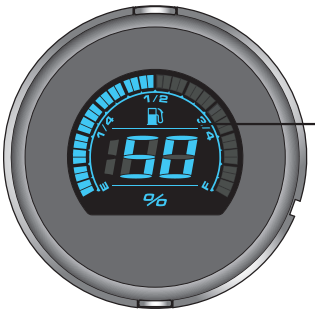
Odometer
●Display range : 0 ~ 999,999 km (mile) return to zero upon exceed.
●Display unit : 1 km (mile)
Distance meter A,B
●Display range : 0 ~ 9,999.9 km (mile) return to zero upon exceed.
●Display unit : 0.1 km (mile)



Mileage maintenance user settings (closable)
●Display range : user adjustable (500 ~ 16,000km / 300 ~ 10,000 mile) ~ -999 mile, automatically decreases according to the increase of total mileage.
●Display unit : 1 km (mile)
RANGE / Remaining Mileage Warning
●Display range : LCD shows "LO RNG" and flashing as warning when RNAGE / Remaining Mileage lower than 16 km (10 miles).
Average fuel consumption
●Setting range :
OFF / L/100km / km/L / MPG (US spec.) / MPG(UK spec.)

Indicators
●Turn signal (Green)
●Photometric Sensing
●Oil (Red)
●Engine warning (Yellow)
●Constant speed (Orange / Green)
●Security (Red)

Indicators
●Water temperature (Blue)
●Warning Light (Orange/Green)
●High beam (Blue)
●Fog Light (Green)
●ABS (Yellow)
●Turn signal (Green)



Fuel Meter
●Display range : 0 ~ 100 %
●Display unit : 1 %



Oil Temp. Meter
●Display range :
0 ~ 400 °F (32 ~ 248 °C)
●Display range : 1 °F (1 °C)
Oil Temp. Warning
●Setting range :
140 ~ 400 °F (60 ~ 250 °C)
●Setting unit : 1 °F (1 °C)

3-2 Settings Instructions

●Speedometer	Display range : 0 ~ 299 km/h (0 ~ 199 MPH) switchable Display unit : 1 km/h (MPH)
○Display interval	<0.5 second
○Overspeed warning setting	Setting range : 30 ~ 299 km/h (19 ~ 199 MPH) when above(including) setting value, warning light will lit. Setting unit : 1 km/h (MPH)
○Max. speed record	Display range : 0 ~ 299 km (mile)
○Internal and external odometer	Display range : 0 ~ 999,999 C Display unit : 1 km (mile)
○Tire circumference	Setting range : 50 ~ 210% Setting unit : 1%
○Trip meter A、B	Display range : 0 ~ 9,999.9 km (mile) Display unit : 0.1 km (mile)
○Mileage maintenance	Setting range : off / 500 ~ 16,000 km (300 ~ 10,000 mile) ~ -999 km (mile), decrease according to the increase in total mileage. Setting unit : 1 km (mile)
●Gear meter	Display range : off / N / P / R / 1~6
●Tachometer	Display range : 0 ~ 9,990 RPM Display unit : 10 RPM
○RPM shift light	Display range : 2,000 ~ 8,000 RPM Warning lights on when exceed setting value (including). Setting unit : 100 RPM
○Max. rotating speed	Display range: 0 ~ 8,000 RPM Display unit : 100 RPM
●Engine temperature	Setting range : -40 ~ 300 °C (-40 ~ 572 °F)
●Fuel meter	Setting range : HD Std / Cust
○Fuel warning setting	Setting range : 1. HD Standard - LCD flashing as warning when Fuel level resistance greater than 211Ω, and will turn off when resistance smaller than 187Ω. 2. Customize - LCD flashing as warning when Fuel level lower than 20%, and will turn off when fuel level higher than 30%.

○Fuel tank volume	Setting range : OFF / 1.0 ~ 9.9 US gallons
○Average fuel consumption	Setting range : OFF / L/100km / km/L / MPG (US spec.) / MPG (UK spec.)
●RANGE / Remaining Mileage	Display range : 0 ~ 9,999 km (6,249 miles) Display unit : 1 km (mile)
●RANGE / Remaining Mileage Warning	Display range : LCD shows "LO RNG" and flashing as warning when RANGE / Remaining Mileage lower than 16 km (10 miles).
●Clock	Setting range : 12 / 24 hour format
●Oil Temp.	Display range : 0 ~ 400 °F (32 ~ 248 °C) Display unit : 1 °F (°C)
○Max. Oil Temp. record	Display range : 0 ~ 400 °F (32 ~ 248 °C)
●Voltmeter	Display range : 8 ~ 18 V
●Backlight brigntness	Setting range : 1 / 5 (darkest) ~ 5 / 5 (brightest)
○Backlight color	Setting range : red / blue
●Operating voltage	DC 12 V
●Temperature range	-10 ~ 60 °C
●Specifications	JIS D 0203 (S2)
●Meter Weight - Speedo & Tacho	286 grams
●Meter Weight - Oil Temp.	81 grams
●Meter Weight -Fuel Level	81 grams
●Indicators	Turn signal (Green) Photometric Sensing Oil (Red) Engine warning (Yellow) Constant speed (Orange / Green) Security (Red) Water temperature (Blue) Warning Light (Orange/Green) High beam (Blue) Fog Light (Green) ABS (Yellow) Turn signal (Green)

NOTE Design and specification may change without further notice.

3-3 Entering the settings

* To enter the gauge settings mode, you must follow the steps below:

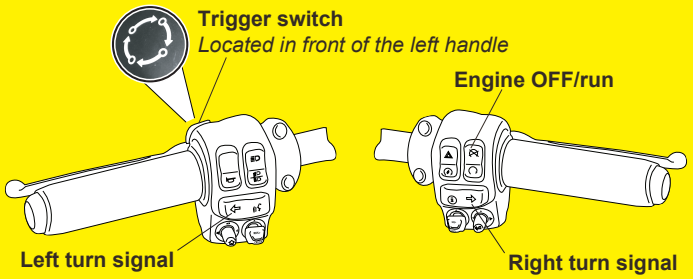
1 : The key must be switched to **ON/Accessories**

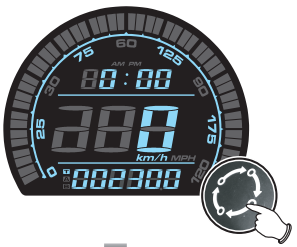
2 : **Engine OFF/run** switch must be **OFF**.

3 : Meter must be displaying **ODOMETER**.

4 : Hold both **turn signal** switches for 3 seconds.

5 : Use **trigger** switch to navigate through settings.

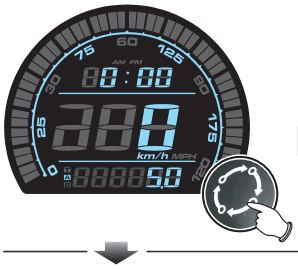




- In the total mileage screen, press the **button once** to switch to Trip A screen.
- Hold the **button for 3 seconds**, to switch engine temp. or voltage.

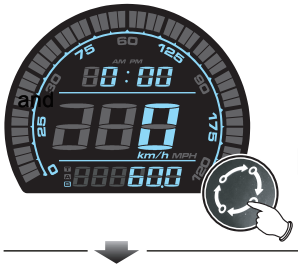


NOTE Engine temp. and voltage will display on tachometer.



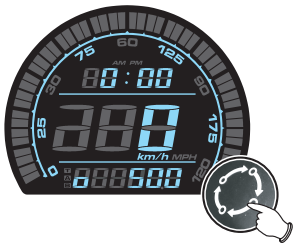
- Trip A screen, press the **button once** to switch to Trip B screen.
- Hold the **button for 3 seconds** to clear the Trip A recordings.





- Trip B screen, press the **button once** to switch to the mileage maintenance screen.
- Hold the **button for 3 seconds** to clear the Trip B recordings.





- In the mileage maintenance screen, press the **button once** to switch to the remaining mileage screen.
- Mileage maintenance will count down from setting value, when it reaches 0, the screen will blink to indicate millage reached.



- When reminding feature is activated, it will automatic return to mileage maintenance screen if the mileage maintenance value is reached.
- When reminding feature is activated, it will automatically switch to mileage maintenance screen during startup if remaining mileage value is reached.



- Hold the **button for 3 seconds** to switch to inform function switch.



NOTE It will not display if it's not supported in engine computer.

- Hold the **button for 10 seconds** to clear the mileage maintenance recordings.



○In the 0 second, start holding the button.



○In the 3rd second, the inform feature will blink once.



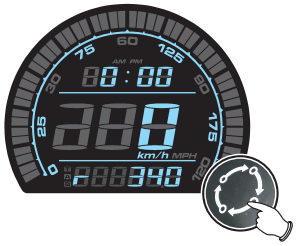
○In the 5th second, inform feature will switch back, mileage display will begin blinking.

○During the 6~9th seconds, if the button is released, it will cancel the process.



○On the 10th second, the mileage maintenance record is cleared.

NOTE Display can be switch off. Please reference video setting.



- In the remaining mileage screen, press the **button once** to switch to the average fuel consumption screen.
- Remaining mileage is lower than 16 km (10mile), will display " LO RNG " to inform users.



- When reminding feature is activated, it will automatic return to the remaining mileage screen, if remaining mileage is too low.
- When reminding feature is activated, it will automatic switch to the remaining mileage screen during startup, if remaining mileage is too low.



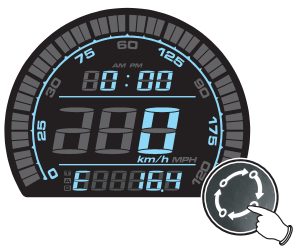
- Hold the **button for 3 seconds** to switch to inform feature switch



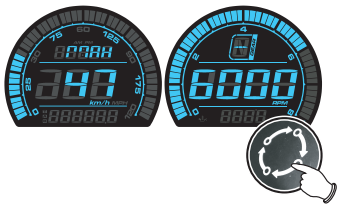
NOTE It will not display if it's not supported in engine computer.

- The following situation will result displaying "r----" or no display at all.
  - ○Abnormal fuel sensor (short / open circuit)

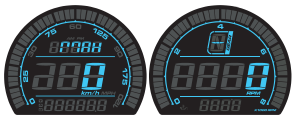
NOTE Display can be switch off. Please reference video setting.



- In the average fuel consumption screen, press the **button once** to switch to the MAX. record screen.



- In the MAX. record screen, press the **button once once** to switch to the total mileage screen.
- Hold the **button for 3 seconds** to clear the MAX. record.





- Total mileage screen.

4 Information for setting screen and how to do setting

KOSO Harley Touring 4pcs Kit (Speedo&Tacho / Oil Temp. / Fuel Level)
Information for setting screen and how to do setting -

Please scan QR code for information.

If any further assistance is required please contact us :

Phone : 450 359-0604
Toll free : 1 877 777-0604
Email : tech@koso-na.com