





Thank you for purchasing KOSO mini LCD Air/ fuel ratio meter, please read the instruction throughly befor installing.

Notice

- 1. The LCD meter is apply for **CR 2032 (LCD display), DC 12V (Back light)**. **P.S.** The oxygen sensor will start to detect the signal after starting the engine over one minute.
- 2. The meter is designed for 4-stroke fuel engine, and doesn't work with other type engine (Such as the 2-stroke engine or the diesel engine)
- 3. When installing the meter, please use the attached signal wire to avoid the electromagnetic wave interference caused by the wire.
- 4. For installation, please follow the steps described in manual. Any damage caused by wrong installation shall be imputed to the users.
- 5. To avoid the short circuit, please don't pull the wire when installing, don't break or modify the wire terminal.
- 6.Do not disassemble or change any parts excluding the manual description.
- 7. The interior examination or maintenance should be executed by our professionals.

MARK MEANING:

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

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

A MARNING! Some processes must be followed to avoid damages to yourself or the public.

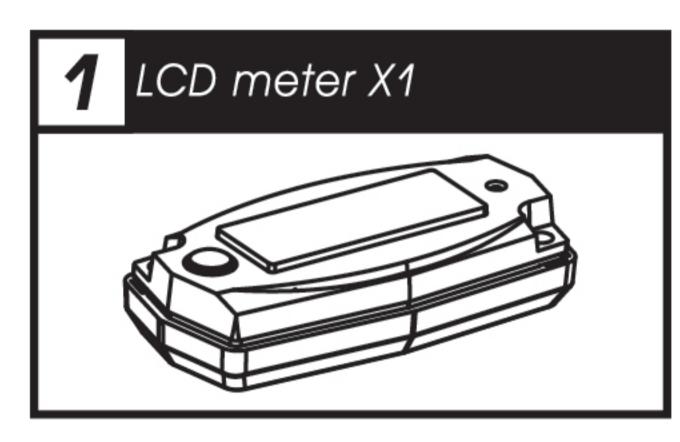
A CAUTION! Some processes must be followed to avoid the damage to the vehicle.



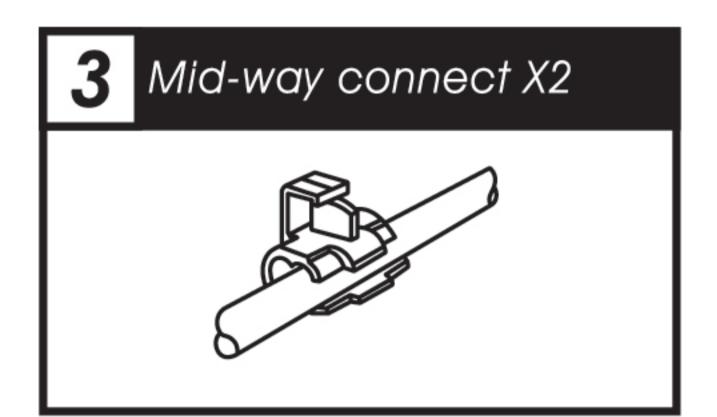


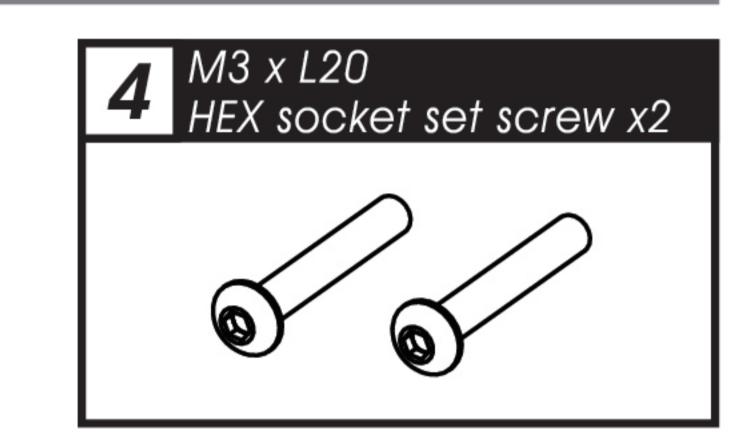


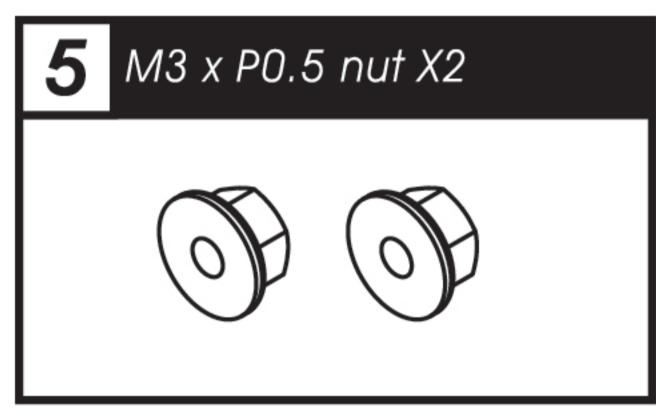
1 Accessory

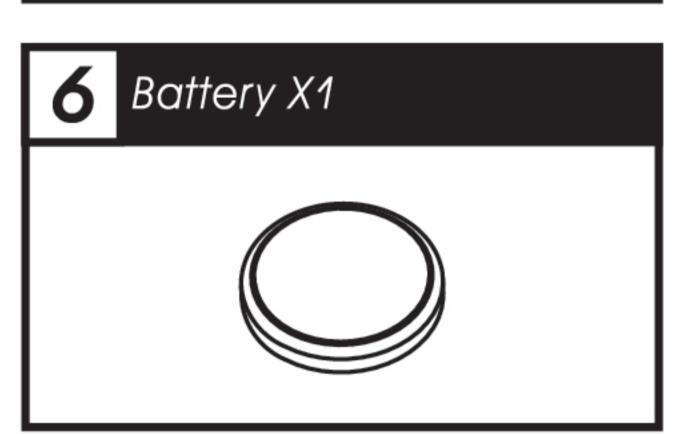


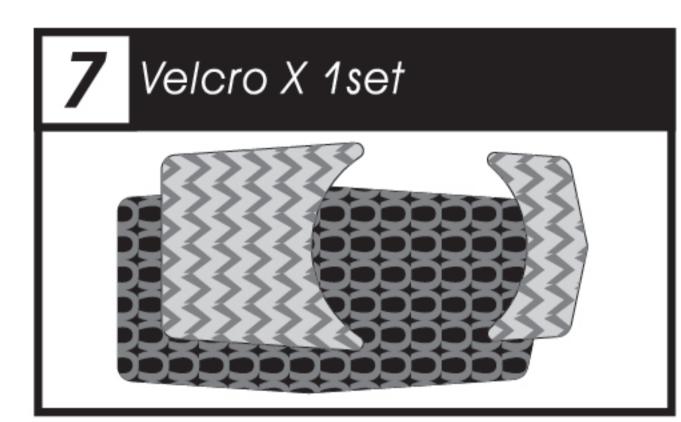


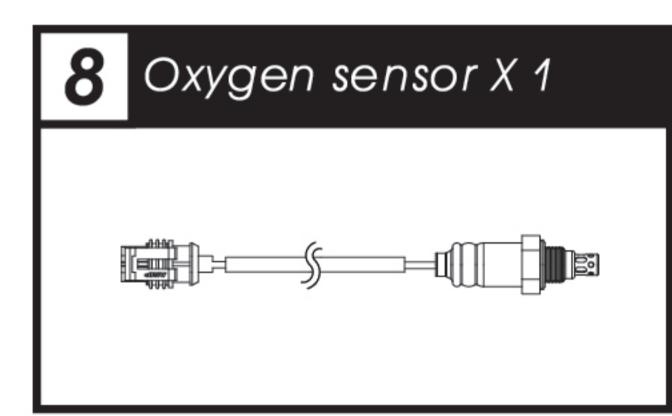




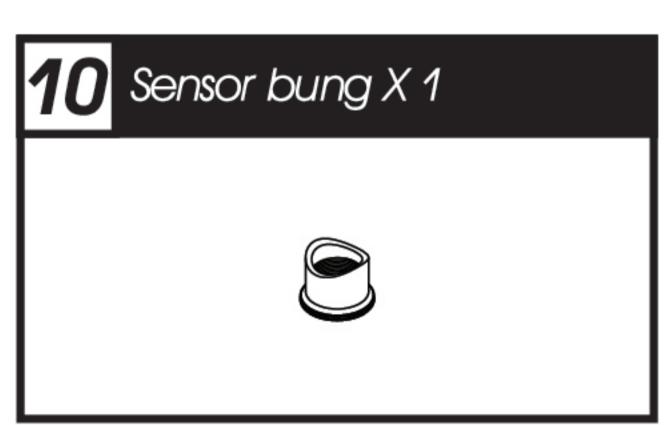


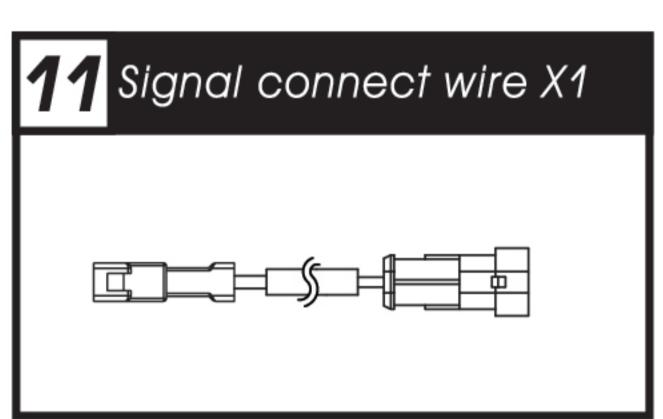






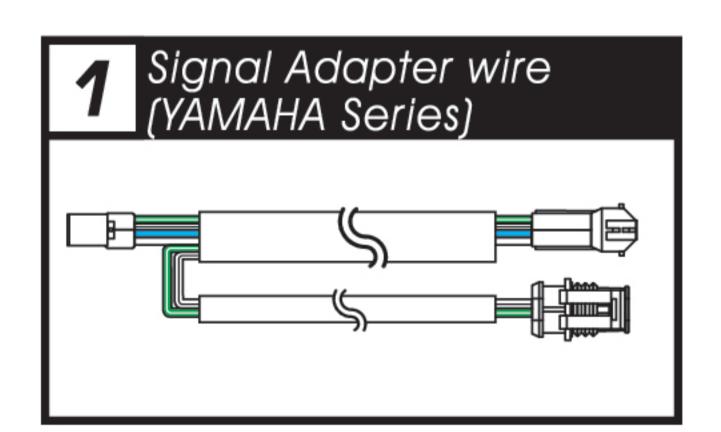


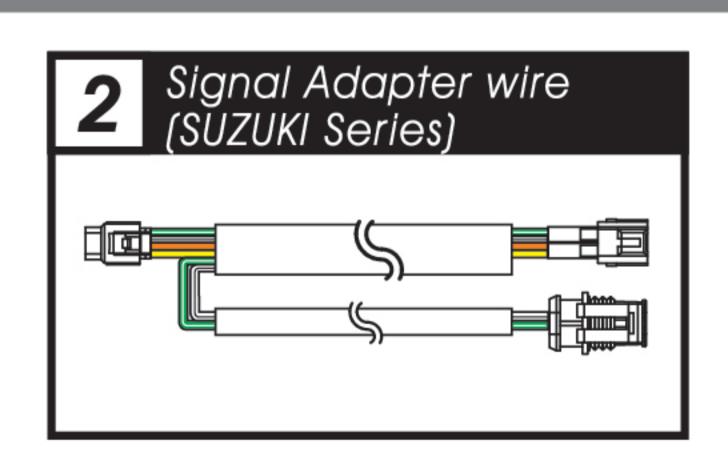


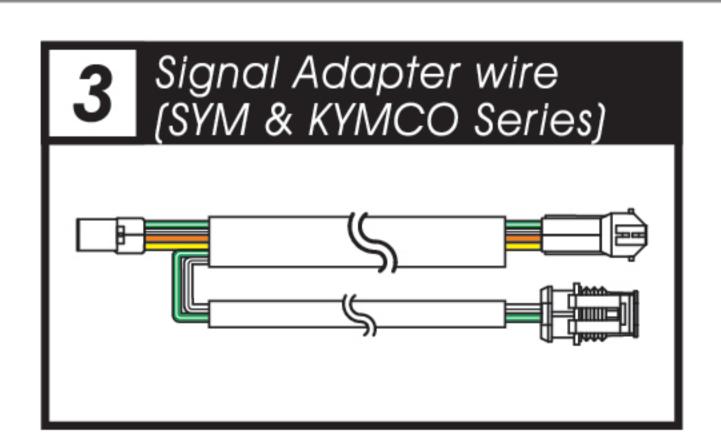


NOTE Please contact the local distributor if the items you open are not the same, with the above-listed one.

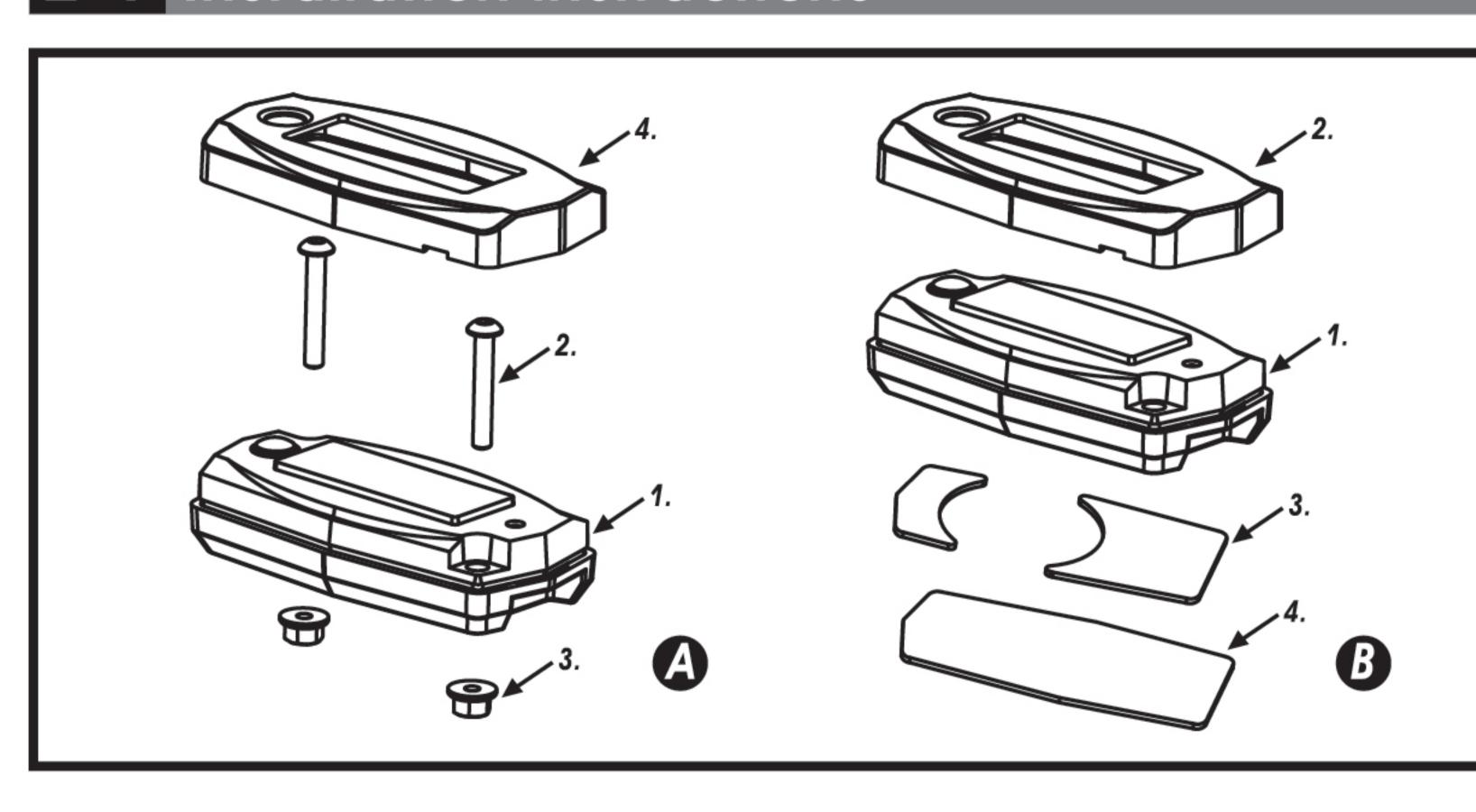
1-2 Option accessory







2-1 Installation instructions

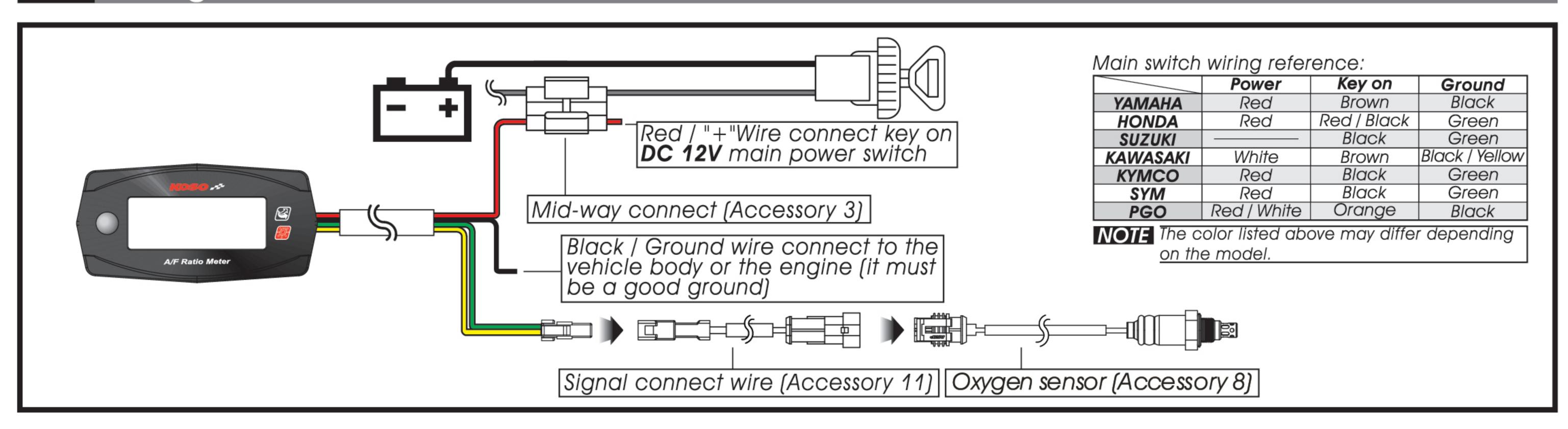


Follow those steps when installing.

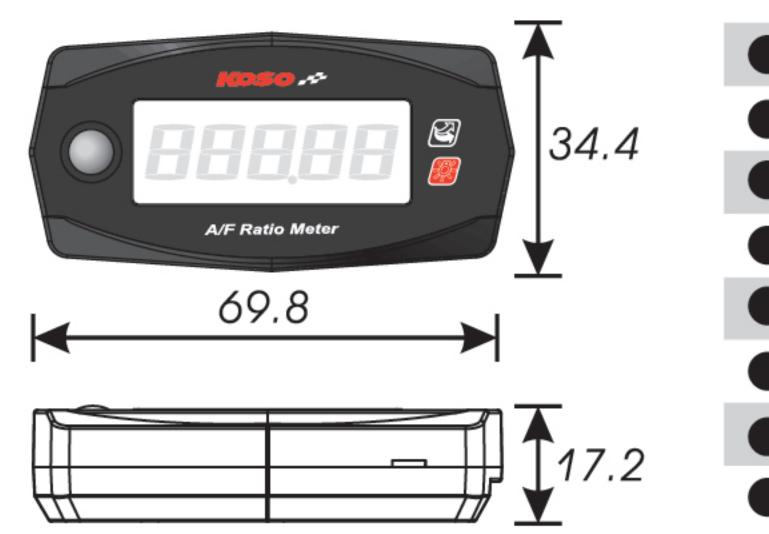
- **A 1.**LCD meter(Accessory 1)
 - 2.HEX socket set screw(Accessory 4)
 - 3.Nut(Accessory 5)
 - **4.** Meter Cover (Accessory 2)
- **B** 1.LCD meter(Accessory 1)
- 2.Meter Cover(Accessory 2)
- 3.Velcro-Male(Accessory 7)
- **4.**Velcro-Female(Accessory 7)

NOTE Please choose either Method A or B according to your need to install

2-2 Wiring installation instructions



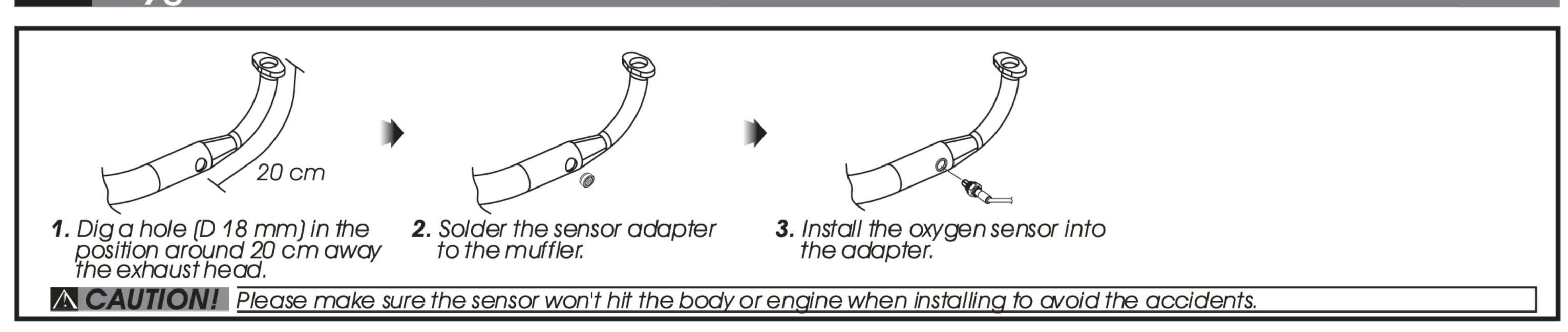
2-3 Basic function instruction



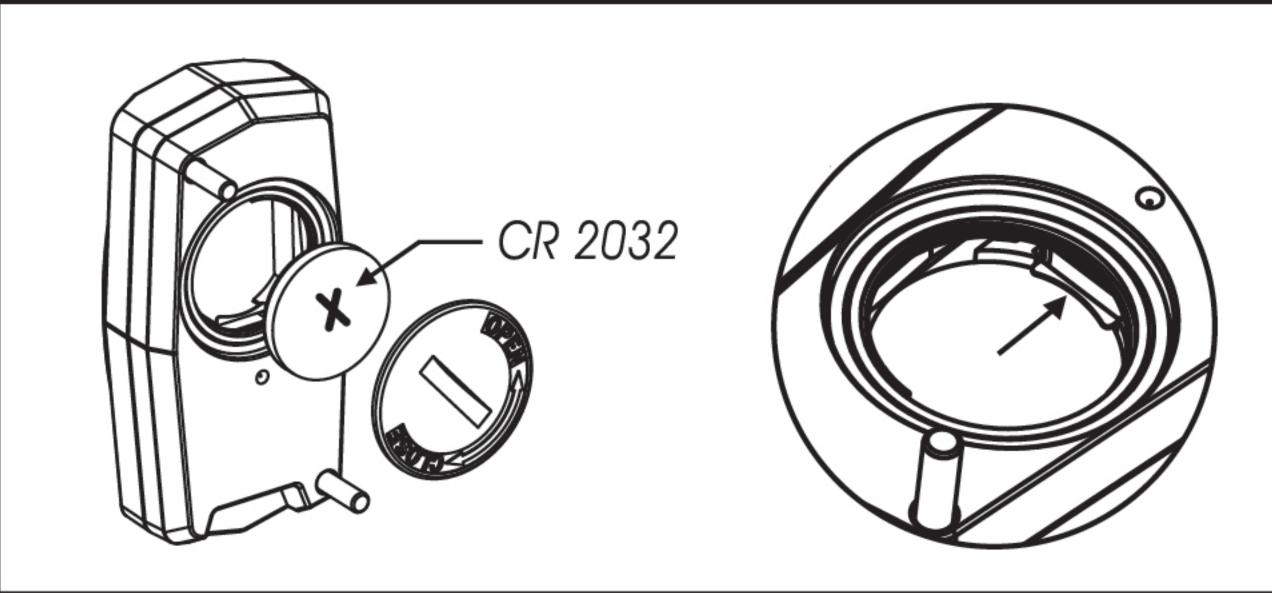
●A/F ratio	Displayed range: 12.2~17.2 \ Displayed unit: 0.1
Effective voltage	DC 12V
Battery type	CR 2032
●Battery life time	About 450 H (when battery volume below 250 mAh)
Effective temperature range	-10~60°C
Meter standard	JIS D 0203
●Meter size (W X L X H)	W69.8 X L34.4 X H17.2 mm
■Meter weight	Around 47.6g

NOTE Design and specifications are subject to change without notice!

2-4 Oxygen sensor installation



2-5 Battery installation instructions



Please change the battery when the meter is off!

NOTE Please follow the arrow direction to press before remove the battery.

NOTE If directly connect to the DC 12V power supply, please remove the CR 2032 battery inside the meter.

3 Basic function instruction



- Turn On: Press and hold the button for 3 seconds.
- In main screen, shows current Air/Fuel Ratio value.
- ●EX. Now the A/F ratio is display 14.7.



- ●Turn Off:
- 1. When using CR 2032 battery, press and hold the button for 3 seconds to turn the meter off.
 2. When using DC 12V power supply from the bike, the meter will automatically turn off while user turn the key off.



The A/F ratio is too lean

The display will show -Lif the A/F ratio is higher than 17.2, it means that the A/F ratio is too lean.



The A/F ratio is too rich

The display will show -Rif the A/F ratio is lower than 12.2, it means that the A/F ratio is too rich.



If O2 Sensor is not connected, then the screen will display "---".

MARNING! When remove the Air/Fuel Ratio meter, please remove the signal adapter wire as well to avoid the water get into the tube to hurt the user, others or the bike.

4 Trouble shooting

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

Trouble-1	Check item	Trouble-2	Check item
information.		Under the Key Off status, the meter screen doesn't go off.	■It's highli possible that the CR 2032 battery hasn't been removed. →Please press and hold the button for 3 seconds, and confirm whether the meter is turned off or not.