

INSTRUCTION



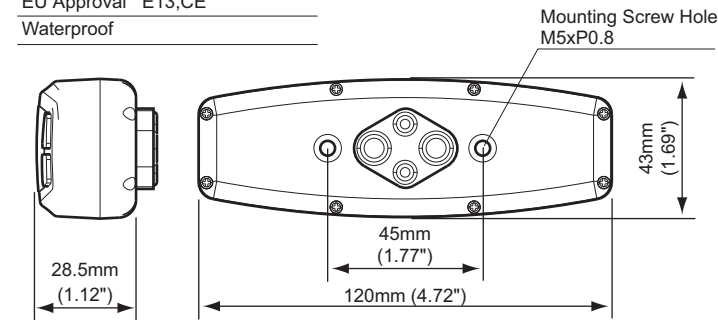
ASURA MULTI FUNCTION COMPUTER

"ASURA" Multi Function Computer offers you "ALL IN ONE". All the necessary functions are included in a compact housing (120Lx40Wx28.5H mm / 4.7Lx1.7Wx1.14H inch). Designed to be used on motorcycles and ATV's regardless of whether or not the vehicle generates electrical speed signal, since a reed sensor is included in the kit. Two screw holes(M5) on the back of the housing offers many mounting options. The supplied handlebar bracket enables to mount on any type of stock and custom handlebar with 7/8" through 1-1/4" diameter. Any type of aftermarket bracket with 45mm(1.77") mount-pitch can also be used for a custom mount. Hidden Wiring solution can be made if you make a hole on handlebar.

SPECIFICATIONS

FUNCTIONS	SPECIFICATIONS
Housing Size	120mmx43mmx28.5mm (4.72"x1.69"x1.12")
LCD	Blue LCD with LED backlight
Power	DC10V - 16V
Operating Temperature	-20°C - +70°C (-4°F - +158°F)
Accuracy of Clock	+/- 70sec/month
Accuracy of Volt Meter	+/- 1.0%
Speedometer	0 - 399 km/h or 0 - 299MPH
Odometer	0 - 99,999.9km (mile)
Trip Odometer 1/2	0 - 999.9km (mile)
Engine Speed Display	0 - 20,000rpm
Clock	12h / 24h
Air Temperature Gauge	-10°C - +60°C (+14°F - +140°F)
Oil Temperature Gauge	+40°C - +200°C (+104°F - +392°F)

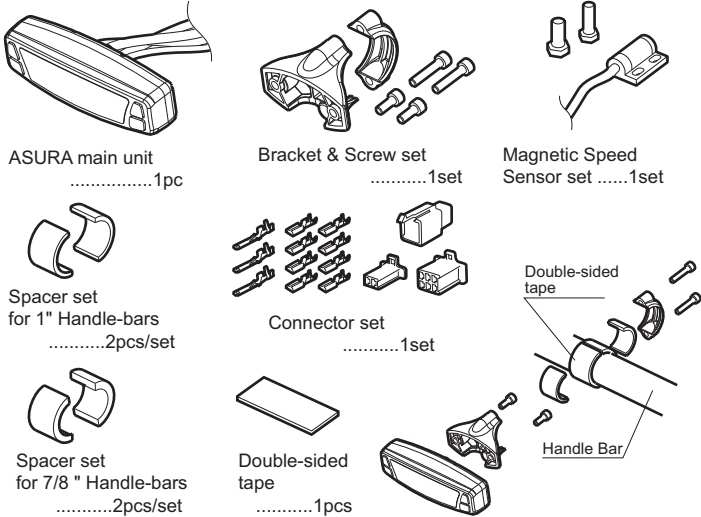
EU Approval	E13,CE
Waterproof	



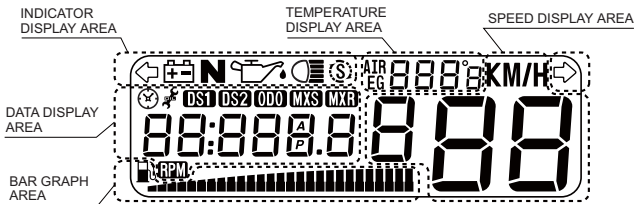
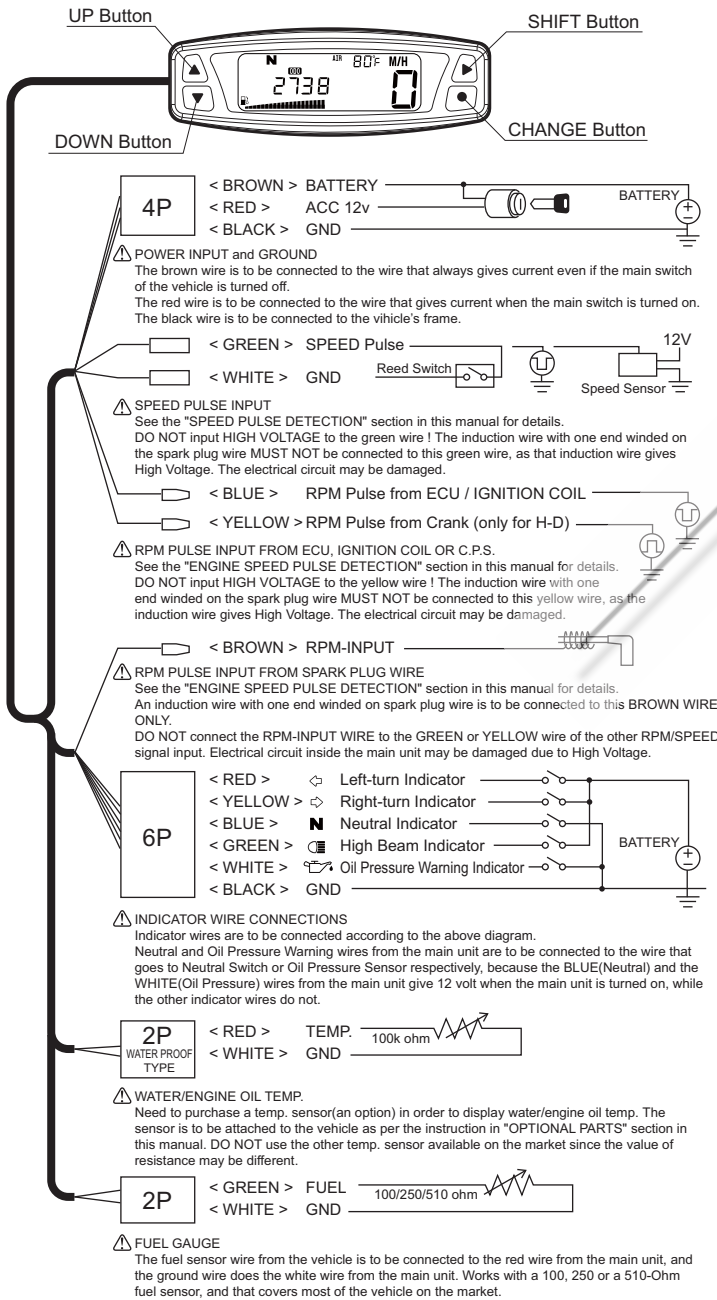
CAUTION

- Read all instructions before use.
- Disconnect the ground wire from the negative post of vehicle's battery before installation.
- Use ASURA computer for the intended purpose of use
- DO NOT disassemble ASURA computer. It may be damaged and water may come in.
- DO NOT leave ASURA computer under the sunlight when not used
- Avoid contact with gasoline, brake fluid or other chemicals. It may be damaged
- For motorcycles that do not generate electrical speed pulse, use the supplied Magnetic Speed Sensor Set or a device(separately sold) that turns mechanical speedometer cable movement into electrical pulse.
- Removing the original speedometer may impair some original functions such as turn signal auto canceller, igniter and/or immobilizer.
- Designed for a 12 volt system. ASURA does NOT work with a 6 volt system or a battery-less system.
- Be sure that ASURA displays the right speed before used on street.
- DO NOT hit, drop or give a shock on ASURA main unit. It may be damaged due to a precision part.
- Rubber mounting is recommended for vehicles with much vibration
- After installation, check to see if all the parts are correctly installed, and see if all the screws are torqued properly.
- Periodical inspection of the installed parts is required every 500km(300mile). If anything unusual may be found while driving, stop at a safe place to check.

COMPONENTS & INSTALLATION



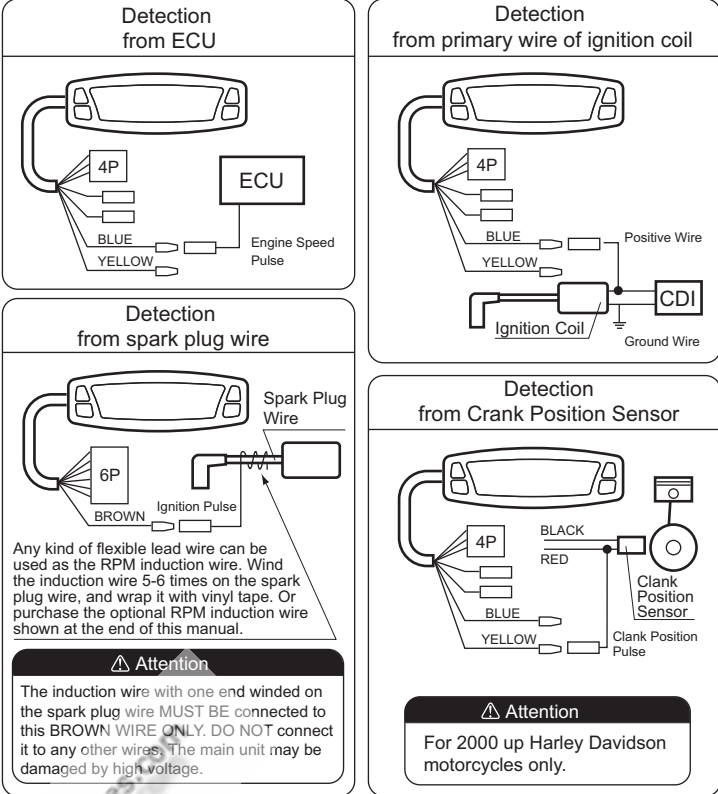
WIRING DIAGRAM & OVERVIEW



ENGINE SPEED PULSE DETECTION

You have four choices to detect the pulse, and choose one from the following.

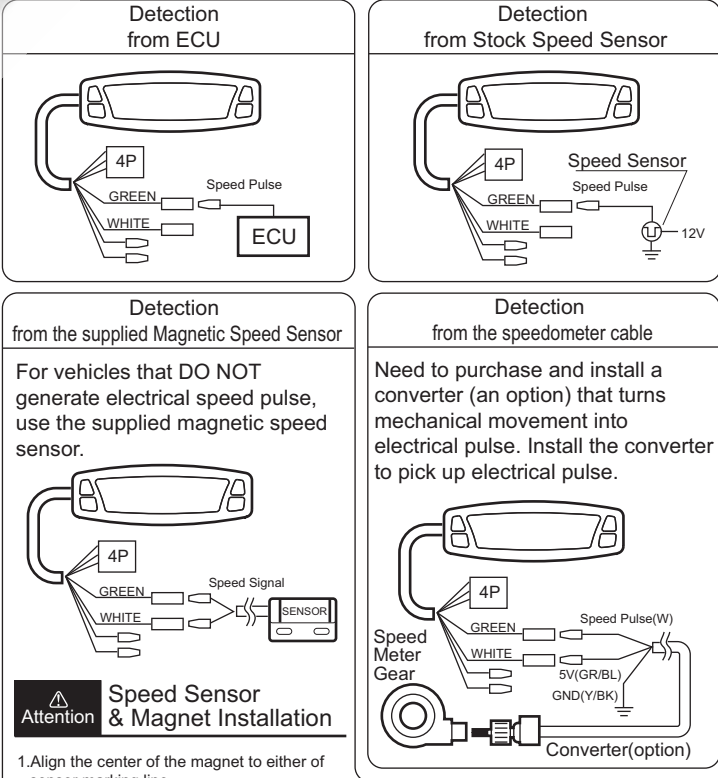
Attention
DO NOT detect two or more different pulses. ASURA DOES NOT display the right engine speed.



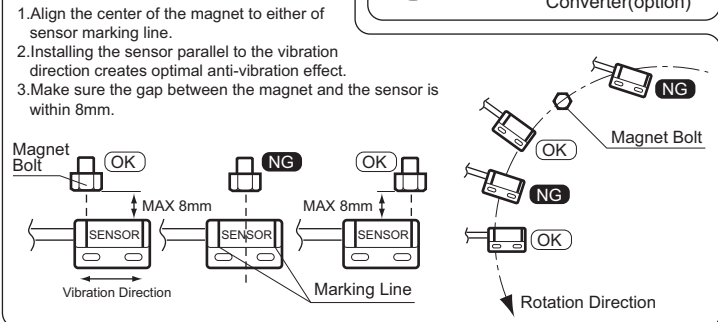
SPEED PULSE DETECTION

You have four choices to detect the pulse, and choose one from the following.

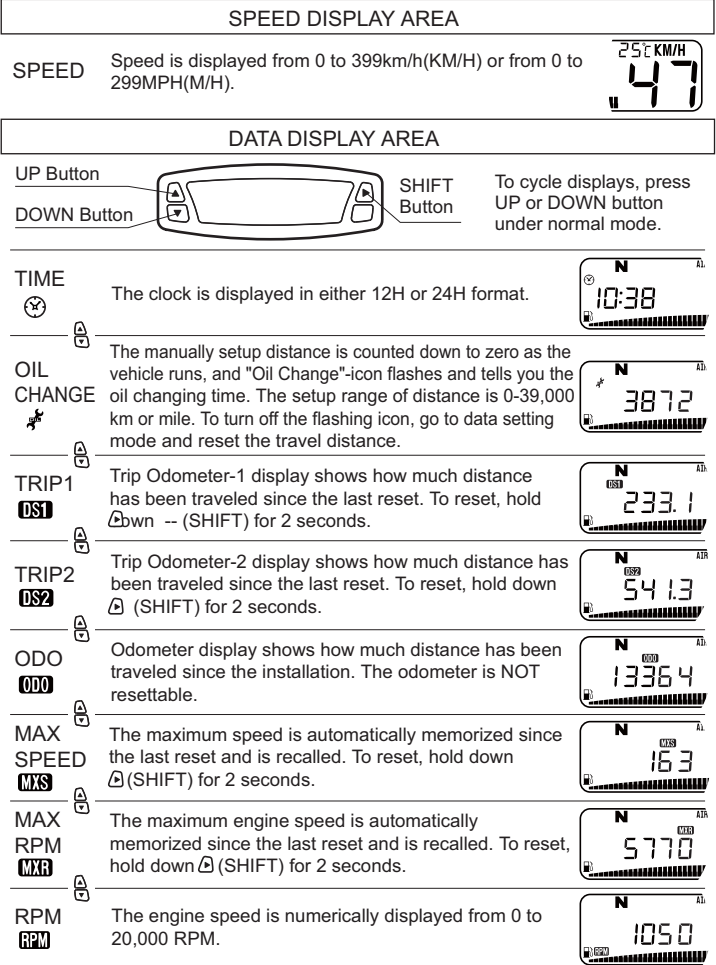
Attention
DO NOT detect two or more different pulses. ASURA DOES NOT display the right engine speed.



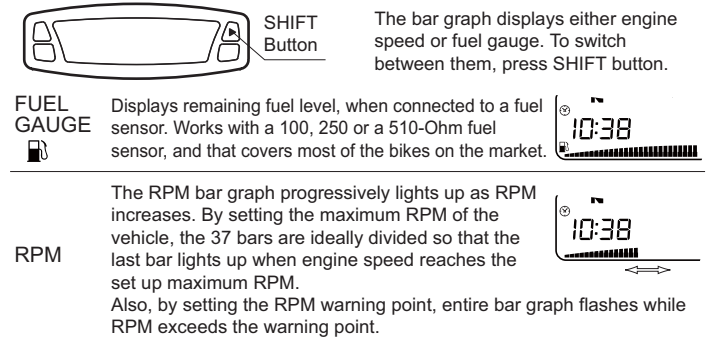
Speed Sensor & Magnet Installation



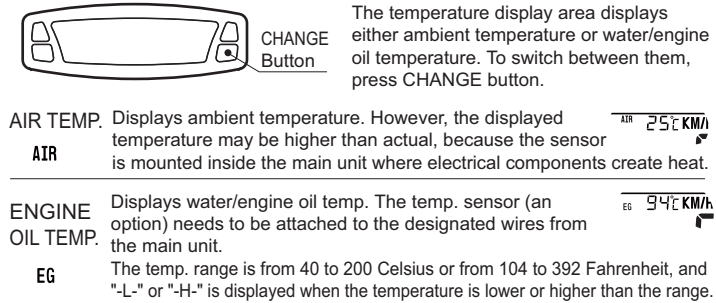
NORMAL MODE DISPLAYS



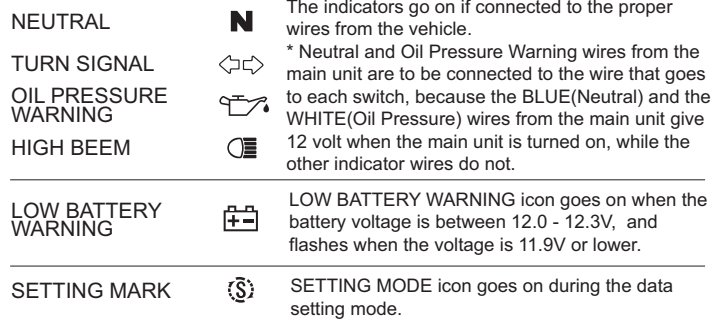
BAR GRAPH AREA



TEMPERATURE DISPLAY AREA



INDICATOR DISPLAY AREA



DATA SETTING MODE

NORMAL MODE

UP Button SHIFT Button

DOWN Button CHANGE Button

To enter data setting mode, hold down ▲ (UP) + ▼ (DOWN) for two seconds.

To go back to Normal Mode, hold down ▼ (DOWN) for two seconds. (This button operation finalizes the data setting IN ANY SETTING MODE, and returns to Normal Mode.)

Input km/h or MPH

U n i t

To cycle between M/H and KM/H, press (CHANGE).

To confirm and to go to the next setting, press ▼ (DOWN)

Input Number of Pulses per Revolution

E - t y p e P 30

To cycle between engine types, press (CHANGE).

The engine sends ignition pulse every revolution, and the number of pulses per revolution varies by engine type.

Select from the following four ;

- "1P/2r" - 1 pulse per 2 revolutions
- "1P/1r" - 1 pulse per revolution
- "2P/1r" - 2 pulses per revolution
- "P30" - ① For 2000up Harley Davidson motorcycles ONLY.

2000up Harley Davidson motorcycles have a crank position sensor (CPR). It is highly recommended to detect pulse from CPR for 2000up Harley Davidson motorcycles.

To confirm and to go to the next setting, press ▼ (DOWN)

Input Maximum RPM of The Vehicle

06000

When entered in this setting mode, both ten-thousand's and thousand's digits flash at the same time.

To display RPM bar graph ideally, it needs to input the Maximum RPM of the vehicle. The 37 bars are ideally divided so that the last bar lights up when engine speed reaches the setup maximum RPM.

To modify the flashing number, press (CHANGE).

To go to the next digit setting, press ▲ (SHIFT).

To modify the flashing number, press (CHANGE).

(The ten's or unit digit cannot be entered.)

To confirm and to go to the next setting, press ▼ (DOWN)

Input Over Revolution Warning Point

02500

When entered in this setting mode, both ten-thousand's and thousand's digits flash at the same time.

To modify the flashing number, press (CHANGE).

To go to the next digit setting, press ▲ (SHIFT).

To modify the flashing number, press (CHANGE).

(The ten's or unit digit cannot be entered.)

To confirm and to go to the next setting, press ▼ (DOWN)

SPEED CALIBRATION

You have three choices to calibrate the speed, and choose one out of the following three.

Speed Calibration "Wheel Circumference Input"

043 M/H

To skip this setting and to go to the next setting, press ▼ (DOWN).

Find the circumference by either measuring the wheel diameter or by rotate the wheel and measuring it.

The circumference is obtained from the wheel diameter by the following formula.

Wheel Diameter(in millimeter) x 3.14 = Circumference (in millimeter)

Wheel Diameter(in inch) x 3.14 x 25.4 = Circumference (in millimeter)

Check to see where the speed sensor is installed on the vehicle. If the sensor is installed on the front wheel, measure the circumference of the front wheel. And if the sensor is installed either on the rear wheel, transmission or on the drive sprocket, measure the circumference of the rear wheel.

When entered in this setting mode, thousand's digit flashes. To modify the flashing number, press (CHANGE).

To go to the next digit setting, press ▲ (SHIFT). To modify the flashing number, press (CHANGE). Continue this operation until the last digit is input.

To confirm and to go to the next step, hold down ▲ (SHIFT) for two seconds.

Now, you are entered in the "Automatic Pulse Counting Mode".

To count the pulse automatically, slowly rotate the wheel exactly once. The display increases as the wheel is rotate and reads number of pulse obtained.

To finalize the setting, press ▲ (SHIFT). The number of pulse obtained is displayed on the temp. display area.

To confirm and to go to the next setting, press ▼ (DOWN)

Speed Calibration "Auto Calibration"

Auto

To skip this setting and to go to the next setting, press ▼ (DOWN).

You are now entered in "Auto Calibration" mode. By driving exactly one kilometer/mile, the speed is automatically calibrated.

When ready to go, press ▲ (SHIFT), and drive exactly one kilometer/mile.

Stop the vehicle and press (CHANGE) to finalize the setting.

To confirm and to go to the next setting, press ▼ (DOWN)

Speed Calibration "Manual Pulse Input"

PULSE

To skip this setting and to go to the next setting, press ▼ (DOWN).

You are entered in "Manual Pulse Input" mode. By manually inputting the number of pulse obtained by exact one-kilometer / mile drive, the speed is calibrated.

To enter the number of pulse, press ▲ (SHIFT).

The hundred-thousand's digit flashes. To modify the flashing digit, press ▲ (SHIFT).

To go to the next digit, press (CHANGE). To modify the flashing digit, press ▲ (SHIFT). Continue this operation until the last digit is input.

To confirm and to go to the next setting, press ▼ (DOWN)

Input Celsius or Fahrenheit (°C or °F)

U n i t

To cycle between °C and °F, press (CHANGE).

To confirm and to go to the next setting, press ▼ (DOWN)

Input Over Heat Warning Point

U n i t

The warning point is adjustable between 40°C(104°F) and 180°C(356°F).

To modify the flashing number, press (CHANGE).

To go to the next digit, press ▲ (SHIFT).

To modify the flashing number, press (CHANGE).

To confirm and to go to the next setting, press ▼ (DOWN)

Input Travel Distance for oil change

02000

The travel distance is adjustable between 1,000 km/Mile and 39,000 km/Mile in thousands.

To modify the flashing number, press (CHANGE).

To go to the next digit, press ▲ (SHIFT). To modify the flashing number, press (CHANGE).

To confirm and to go to the next setting, press ▼ (DOWN)

Input Fuel Sensor Type

FUEL - 1

Select one out of the following three to display fuel level correctly.

- FUEL-1 : 100 ohm
- FUEL-2 : 250 ohm
- FUEL-3 : 510 ohm

* Most of the vehicles are covered by these three.

To cycle between these types, press (CHANGE).

To confirm and to go to the next setting (Input km/h or MPH), press ▼ (DOWN).

NORMAL MODE

12:07

To go back to Normal Mode, hold down ▼ (DOWN) for two seconds. (This button operation finalizes the data setting IN ANY SETTING MODE, and returns to Normal Mode.)

ADJUST CLOCK

To adjust the clock, go to CLOCK mode by pressing either ▲ (UP) or ▼ (DOWN) button while you are in the NORMAL mode.

To enter in the adjusting mode, hold down ▲ (SHIFT) for two seconds.

To cycle between 12H and 24H, press (CHANGE).

To confirm and to go to the hour setting, press ▲ (SHIFT).

To modify the flashing digit, press (CHANGE). If 12H format is selected, "A" (means AM) or "P" (means PM) is displayed as the number is modified.

To confirm and to go to the minute setting, press ▲ (SHIFT).

To modify the flashing digit, press (CHANGE).

To go back to Normal Mode, hold down ▲ (UP) for two seconds.

TROUBLE SHOOTING

Speed is displayed when the vehicle is standing. Calibrate the speed again. Number of speed pulse input may extremely be low.

Speed is NOT displayed

Wire connection of the speed sensor may be incorrect. Check service manual of the vehicle to see if the wires are connected correctly. By detaching the vehicle's original equipment speedometer, the power-supply to the speed sensor may be cut-off on some vehicles. In that case, the BLUE wire(5V Output) from the main unit is to be connected with the positive(+) wire of the speed sensor in order to activate it. Be sure the speed calibration is correctly done before use.

Unstable SPEED/RPM display

Be sure the black wire is firmly connected to the vehicle's frame. Painting is to be removed from the area where the ground terminal is attached.

RPM is NOT displayed

Try the other detection methods. If the pulse needs to be detected from primary wire of ignition coil, try to connect the BROWN wire to the primary wire, even though the wiring diagram instructs to use the GREEN wire.

LCD Display is Slow

The LCD display becomes slow as the ambient temperature goes close to zero 0 Celsius or 32 Fahrenheit due to the nature of LCD. This is NOT a defect of LCD, and LCD display becomes normal as the ambient temperature goes up.

LCD Display is Black

The LCD display becomes black when exposed to direct sunlight while not riding. This is because of the nature of LCD, and is NOT a defect. Avoid the exposure of the main unit to direct sunlight when not riding.

Frozen Display

In case the display is frozen, disconnect the 4-P connector of the main unit for a few seconds and connect it again to restart. Or disconnect the negative wire of the battery to cut the power supply for a seconds, and the connect it again to restart.

LOW BATTERY WARNING

Before the engine start, LOW BATTERY WARNING icon goes on when the main switch is turned on. This is NOT a defect of the warning function, as long as the warning icon goes off a few seconds after the engine start.

The Others

For further help, go to the local dealer where you purchased ASURA from.

OPTIONAL PARTS

Water/Oil Temp. Sensor (R1/8) & Extension Wire #84851	M12xP1.5 #85018
	M14xP1.25 #85019
	M14xP1.5 #85020
	M16xP1.5 #85021
	M18xP1.5 #85022
	M20xP1.0 #85023
	M20xP1.5 #85024

Speed Pulse Converter	A1 type #61118
	M11 Female Thread
	B1 type #61120
	M12 Female Thread
	G2 type #61122
	Φ 15 Insert
	A2 type #61124
	M12 Female Thread
	J1 type #61126
	Φ 18 Insert
	H type #61130
	Φ 10 Insert
	X1 type #61128
	Speedometer cable mount

Water/Oil Temp. Sensor (R1/8) (Option #84851)	Temp. Sensor Adaptor(R1/8), radiator hose 8mm #43350
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RPM Induction Wire Set, spark plug wire & IG coil #40841
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