

DIGITAL WIDEBAND AIR/FUEL RATIO GAUGE

A. RESISTANCE: 0 ~ 5V

B. UNITS TYPE: AFR

C. AIR/FUEL RATIO GAUGE DISPLAY: DIGITAL TYPE → 20.00-10.00 AFR : ANALOG LED → 20-10 AFR .

D. IF EXCEED THE DISPLAY RANGE DIGITAL DISPLAY WILL SHOW THE MAXIMUM OR MINIMUM DUTY.

E. DPI OF DIGITAL DISPLAY=0.01 AFR

F. DPI OF LED ANALOG DISPLAY= 0.33 AFR.

G. IF AIR/FUEL RATIO IS LOWER 10 AFR OR EXCEED 20 AFR FOR 3 SEC OR MORE, THE DIGITAL NUMBER WILL FLASHING FOR WARNING.

H. LED ANALOG INDICATOR (THERE ARE 20 PCS OF LED LIGHT IN SIDE)

20.00~17.93 AFR RED LED X 6 PCS	17.92~ 12.98 AFR YELLOW LED X 15 PCS	12.97~10.00 AFR GREEN LED X 9 PCS
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FUNCTION:

1. OPENING CEREMONY:

TURN ON AND TURN OFF THE ENGINE : GREEN → YELLOW → RED LED WILL SCAN ONCE..

2. DISPLAY FUNCTION:

DISPLAY AIR/FUEL RATIO , NUMBER AND LED WILL CORRESPONDING RECIPROCALLY.

3. SENSOR WARMING UP:

UEGO SENSOR NEEDS TO WARM UP FOR 30 SECOND EVERY TIME WHEN USING THE GAUGE. WHEN UEGO SENSOR IS WARMING UP, THE LED SCREEN WILL DISPLAY A SCROLLING OBLONG.

UEGO CONTROLLER INSTALLATION INSTRUCTIONS:

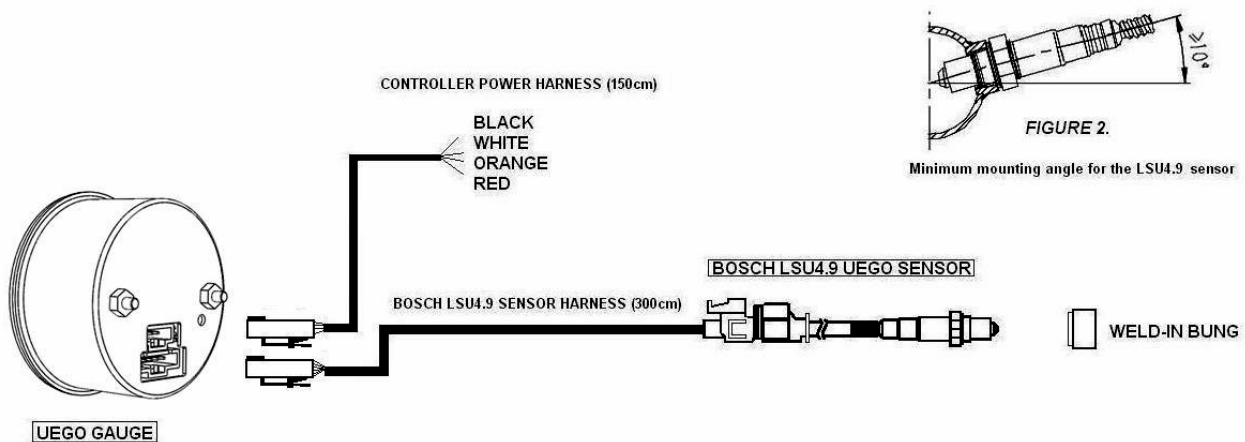
RED - 12V+ IGNITION SWITCH

WHITE - WIDE BAND ANALOG OUTPUT 0-5V (0V → 10AFR, 5V → 20AFR)

BLACK - ENGINE GROUND(-)

ORANGE - DIMMER / +12V TO DIM

CONNECT TO HEADLIGHT TO ACTIVATE.



A WELD-IN M18 X 1.5 BOSS IS SUPPLIED FOR SENSOR INSTALLATION. MOUNT THE O2 SENSOR IN THE EXHAUST SYSTEM AT LEAST 18 INCHES DOWNSTREAM FROM THE EXHAUST PORT. IF YOU ANTICIPATE HIGH EGT'S (OVER 800C), RUN A TURBOCHARGER, RUN AT HIGH RPM FOR EXTENDED PERIODS OF TIME OR PLAN ON RUNNING LEADED RACE FUEL THEN YOU MUST MOUNT THE SENSOR AT LEAST 36 INCHES OR MORE DOWNSTREAM OF THE EXHAUST PORT AS ALL OF THESE CAN CAUSE THE SENSOR TO OVERHEAT. ON TURBOCHARGED ENGINES THE UGEO SENSOR MUST BE INSTALLED AFTER THE TURBO CHARGER, IF NOT, THE PRESSURE DIFFERENTIAL WILL GREATLY AFFECT THE ACCURACY OF THE UNIT. FOR ACCURATE READINGS, THE SENSOR MUST BE MOUNTED BEFORE CATALYTIC CONVERTERS AND/OR AUXILIARY AIR PUMPS. TO PREVENT COLLECTION OF LIQUIDS BETWEEN THE SENSOR HOUSING AND SENSOR ELEMENT DURNING THE COLD START PHASE, THE INSTALLATION ANGLE SHOULD BE INCLINED AT LEAST 10° FROM HORIZONTAL WITH THE ELECTRICAL CONNECTION UPWARDS, SEE BELOW (FIGURE 2)

VOLT	LAMBDA	GASOLINE AFR
0.00	0.683	10.00
0.16	0.705	10.32
0.31	0.725	10.62
0.47	0.747	10.94
0.62	0.768	11.24
0.78	0.790	11.56
0.94	0.811	11.8
1.09	0.832	12.18
1.25	0.854	12.50
1.40	0.874	12.80
1.56	0.896	13.12
1.72	0.918	13.44
1.87	0.939	13.74
2.03	0.960	14.06
2.18	0.981	14.36
2.34	1.003	14.68
2.50	1.025	15.00
2.65	1.045	15.30
2.81	1.067	15.62
2.96	1.087	15.92
3.12	1.109	16.24
3.28	1.130	16.54
3.43	1.152	16.86
3.59	1.173	17.18

3.74	1.194	17.48
3.90	1.216	17.80
4.06	1.236	18.10
4.21	1.258	18.42
4.37	1.280	18.74
4.52	1.301	19.04
4.68	1.322	19.36
4.84	1.343	19.66
4.99	1.356	19.98

1. CALIBRATION MODE:

PRESS THE BUTTON ON THE BACK OF GAUGE FOR 3 SECONDS TO CALIBRATE THE GAUGE. WHEN THE LED SCREEN DISPLAYS [2], THE GAUGE IS CALIBRATING.

2. SENSOR ERROR DIAGNOSIS:

WHEN THE LED SCREEN DISPLAYS [3], IT IS A SENSOR ERROR CODE. PLEASE CHECK IF THE SENSOR IS DISCONNECTED OR DEFECTIVE.

3. ORIGINAL MANUFACTURE SETTING MODE:

PRESS THE BUTTON THE BACK OF GAUGE FOR 8 SECONDS TO OPERATE THE ORIGINAL MANUFACTURE SETTING OF THE GAUGE. THE LED SCREEN WILL DISPLAY [2] FIRST. AFTER THE LED SCREEN DISPLAYS [4], THE ORIGINAL MANUFACTURE SETTING IS PROGRAMMED.