Oxygen Sensor Installation Instructions by - PerformanceChipTuning.com

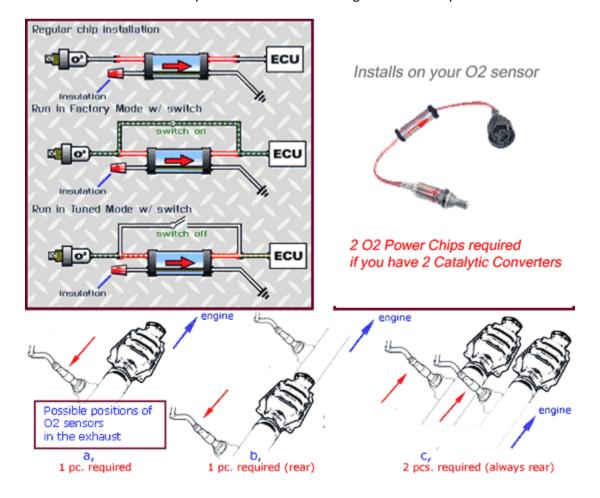
Before installation please confirm that stock O2 sensor is working correctly because result might be diminished if stock oxygen sensor does not work with proper signals: if your sensor is old or worn.

FACTORY RECOMMENDATION FOR MAINTENANCE OF O2 SENSOR(S)

- 1. SHOULD BE CHECKED BY EACH 20.000 MILES (32.000 km).
- 2. MUST BE REPLACED BY EACH 50.000 MILES (80.000 Km).

Please follow these steps below for installation:

- 1. Cut the original harness between the factory plug and the oxygen sensor.
- 2. See colors & operations of each wire in car wiring diagram or search for your combination in table below.
- 3. Connect the suitable wires with terminals or solder them in place.
- 4. Seal the contacts with the provided heat shrink tubing or electrical tape.



Please make sure the red arrow on the oxygen chip points toward the engine.

COLOR MATCHING for 1,2,3,4 wire O2 sensors:

WIRES of O2 SENSOR	STOCK	CHIP WIRE	STOCK	CHIP WIRE	STOCK	CHIP WIRE	STOCK	CHIP WIRE
signal	blue	red	white	red	green	red	black	red
ground	white	black	green	black	yellow	black	gray	black
heater	black		black		black		white	
heater	black		black		black		white	

COLOR MATCHING for rare 5 wire sensors

WIRES of O2 SENSOR	STOCK	CHIP WIRE	STOCK	CHIP
signal in1	red		blue	
signal out	black	red	black	red
sign in2	yellow		white	
heater-	white	black	grey	black
heater+	grey		yellow	

Please watch out the sign on the chip, arrow must face the ECU.

Incidental mismatching of wires by installation does not result any damage.

1 wire version

- 1. Cut the one wire of O2 sensor.
- 2. Contact here in series the red of performance chip.
- 3. Ground one side of performance chip's black wire to the chassis or the exhaust pipe.
- 4. Seal the other end of chip's black wire.

2 wire version

- 1. Cut the signal wire of O2 sensor (see table below).
- 2. Contact here in series the red of performance chip.
- 3. Ground the black of performance chip to the ground wire of the sensor.
- 4. Seal the other end of chip's black wire.

3 wire version

- 1. Cut the signal wire of O2 sensor (see table below).
- 2. Contact here in series the red of performance chip.
- 3. Ground the black of performance chip to the ground wire of the sensor.
- 4. Seal the other end of chip's black wire.

4-5 wires version

- 1. Cut the signal wire of O2 sensor (see table below).
- 2. Contact here in series the red of performance chip.
- 3. Ground the black of performance chip to the ground wire of the sensor.
- 4. Do not cut oxygen sensor's heater wires.

YOU CAN ALSO USE THE BELOW CHART TO HELP FIND THE SIGNAL WIRE OF YOUR SENSOR.

Oxygen sensor wire colors to find the Signal wire MANUFACTURER SENSOR MFG 1 WIRE 1 WIRE 2 WIRE 2 WIRE 3 WIRE 3 WIRE 4 WIRE 4 WIRE FUNCTION General Motors DELPHI VIOLET VIOLET VIOLET VIOLET SIGNAL + PINK PINK SIGNAL -BROWN BROWN HEATER BROWN BROWN HEATER BLACK **BLUE** BLUE DENSO **BLUE** SIGNAL + WHITE WHITE SIGNAL BLACK BLACK **HEATER BLACK BLACK HEATER** BOSCH **BLACK** BLACK BLACK SIGNAL + GRAY SIGNAL -WHITE HEATER **HEATER** WHITE AUTOLITE BLACK SIGNAL + FORD BOSCH **BLACK** BLACK BLACK SIGNAL + **GRAY** SIGNAL -WHITE WHITE **HEATER** WHITE WHITE **HEATER** BLACK **BLUE** SIGNAL + **SIGNAL BLACK HEATER BLACK HEATER** NGK **BLACK** BLUE **SIGNAL** CHRYSLER **BLACK BLUE BLUE** SIGNAL + WHITE WHITE **SIGNAL BLACK HEATER BLACK HEATER** DELPHI VIOLET SIGNAL + SIGNAL -BOSCH BLACK

TOYOTA	DENSO	BLACK		BLACK	BLUE		BLUE		SIGNAL +
			WHITE	WHITE			WHITE		SIGNAL -
					BLACK		BLACK		HEATER
					BLACK		BLACK		HEATER
HONDA	DENSO	BLACK					BLUE	WHITE	SIGNAL +
								GREEN	SIGNAL -
								BLACK	HEATER
							BLACK	BLACK	
	NGK	BLACK						WHITE	SIGNAL +
								GREEN	SIGNAL -
								BLACK	HEATER
	DEL DIII	MOLET						BLACK	HEATER
	DELPHI	VIOLET							SIGNAL +
					D1 1 014	D1 5016			
NISSAN	U-JECS	GREEN			BLACK	BLACK			SIGNAL +
									SIGNAL -
					WHITE	RED			HEATER
		DI BOW			WHITE	WHITE			HEATER
	BOSCH	BLACK			BLACK				SIGNAL +
									SIGNAL -
					WHITE				HEATER
					WHITE				HEATER
*********	DENCO				DLUE		DLUE		CICNAL
MAZDA	DENSO				BLUE		BLUE		SIGNAL +
					DI ACK		WHITE		SIGNAL -
					BLACK		BLACK		HEATER
	DOCCII				BLACK		BLACK	DI ACK	HEATER
	BOSCH							BLACK	SIGNAL + SIGNAL -
								WHITE	HEATER
								WHITE	HEATER
								AALIIIE	HEATER
MITSUBISHI	DENSO				BLUE		BLUE		SIGNAL +
MILISODISHI	DENSO				DLUE				SIGNAL +
					BLACK		WHITE BLACK		HEATER
					BLACK		BLACK		HEATER
	BOSCH				DEACH		BLACK		SIGNAL +
	DOSCII						GRAY		SIGNAL -
							WHITE		HEATER
							WHITE		HEATER
							2011112		· · · · · · · · · · · · · · · · · · ·
SUZUKI	DENSO	BLACK					BLUE		SIGNAL +
302011	DLNSO	DENOIT					WHITE		SIGNAL -
							BLACK		HEATER
							BLACK		HEATER
	DELPHI	VIOLET			VIOLET		DEMON		SIGNAL +
	DEEFTII	T.OLL!			FIOLE				SIGNAL -
					BROWN				HEATER
					BROWN				HEATER

CUDADU	II IECC	CDEEN	DED	ODANCE	DI A	CIZ	DL ACK			CICNAL .
SUBARU	U-JECS	GREEN	RED	ORANGE	BLA	CK	BLACK			SIGNAL +
							DED			SIGNAL -
					WH		RED			HEATER
	Boooti				WH		WHITE			HEATER
	BOSCH				BLA	CK				SIGNAL +
										SIGNAL -
					WH					HEATER
					WH	ITE				HEATER
	DENSO	BLACK								SIGNAL +
		DI 1 01/			-	-				
ISUZU	DENSO	BLACK			BL	UE		WHITE	WHITE	SIGNAL +
								BLUE	GREEN	SIGNAL -
					BL#				BLACK	HEATER
					BL#			BLACK	BLACK	HEATER
	DELPHI	VIOLET			VIO	LET				SIGNAL +
										SIGNAL -
					BRO					HEATER
					BRO	WN				HEATER
	BOSCH				BLA	CK				SIGNAL +
										SIGNAL -
					WH	ITE				HEATER
					WH	ITE				HEATER
VW AUDI	BOSCH	BLACK			BLA	CK		BLACK		SIGNAL +
								GRAY		SIGNAL -
					WH	ITE		WHITE		HEATER
					WH	ITE		WHITE		HEATER
BENZ	BOSCH	BLACK			BLA	CK		BLACK		SIGNAL +
								GRAY		SIGNAL -
					WH	ITE		WHITE		HEATER
					WH	ITE		WHITE		HEATER
BMW	BOSCH	BLACK			BL#	CK		BLACK		SIGNAL +
					DE.			GRAY		SIGNAL -
					WH	ITE		WHITE		HEATER
					WH			WHITE		HEATER
PORSCHE	BOSCH	BLACK			BLA	CK		BLACK		SIGNAL +
					DEF			GRAY		SIGNAL -
					WH	ITE		WHITE		HEATER
					WH			WHITE		HEATER
ALFA-ROMEO	BOSCH	BLACK			BL#	CK		BLACK		SIGNAL +
	230011				DEF			GRAY		SIGNAL -
					WH	ITE		WHITE		HEATER
					WH			WHITE		HEATER
								20.012		, LETTER
										:

VOLVO	BOSCH	BLACK		BLACK	BLACK	SIGNAL +
					GRAY	SIGNAL -
					WHITE	HEATER
					WHITE	HEATER
SAAB	BOSCH			BLACK	BLACK	SIGNAL +
					GRAY	SIGNAL -
				WHITE	WHITE	HEATER
				WHITE	WHITE	HEATER
DEMAIN T	DOCCII	DI & CIV		DI ACI/	DI ACI/	CICNAL
RENAULT	BOSCH	BLACK		BLACK	BLACK	SIGNAL +
					GRAY	SIGNAL -
				WHITE	WHITE	HEATER
	AUTOUTE	DI AOIG		WHITE	WHITE	HEATER
	AUTOLITE	BLACK				SIGNAL +
JAGUAR	BOSCH			BLACK		SIGNAL +
ondonit	Booon			BEHOIT		SIGNAL -
				WHITE		HEATER
				WHITE		HEATER
	DENSO		BLUE	***************************************	BLUE	SIGNAL +
			WHITE		WHITE	SIGNAL -
					BLACK	HEATER
					BLACK	HEATER
HYUNDAI	KEFICO		BLACK	BLACK	BLACK	SIGNAL 4
			GRAY		GRAY	SIGNAL -
				WHITE	WHITE	HEATER
				WHITE	WHITE	HEATER
	DENSO	BLACK				SIGNAL +
	NGK					SIGNAL 4
						HEATER
KIA	DENSO	BLACK			BLUE	SIGNAL 4
inn	DENISO	JENO!			WHITE	SIGNAL -
					BLACK	HEATER
					BLACK	HEATER
	BOSCH			BLACK	BLACK	SIGNAL +
	230011				GRAY	SIGNAL -
					0.011	C.O.T.L
				WHITE	WHITE	HEATER

IF GENERIC SEE BELOW:

STANDARD	BLACK	BLACK	SIGNAL +
			SIGNAL -
		WHITE	HEATER
		WHITE	HEATER
ECHLIN		BLACK	SIGNAL +
			SIGNAL -
		WHITE	HEATER
		WHITE	HEATER
I		•••••	: