



MUSCLE SERIES



AIR/FUEL (Narrow Band) Installation Instructions

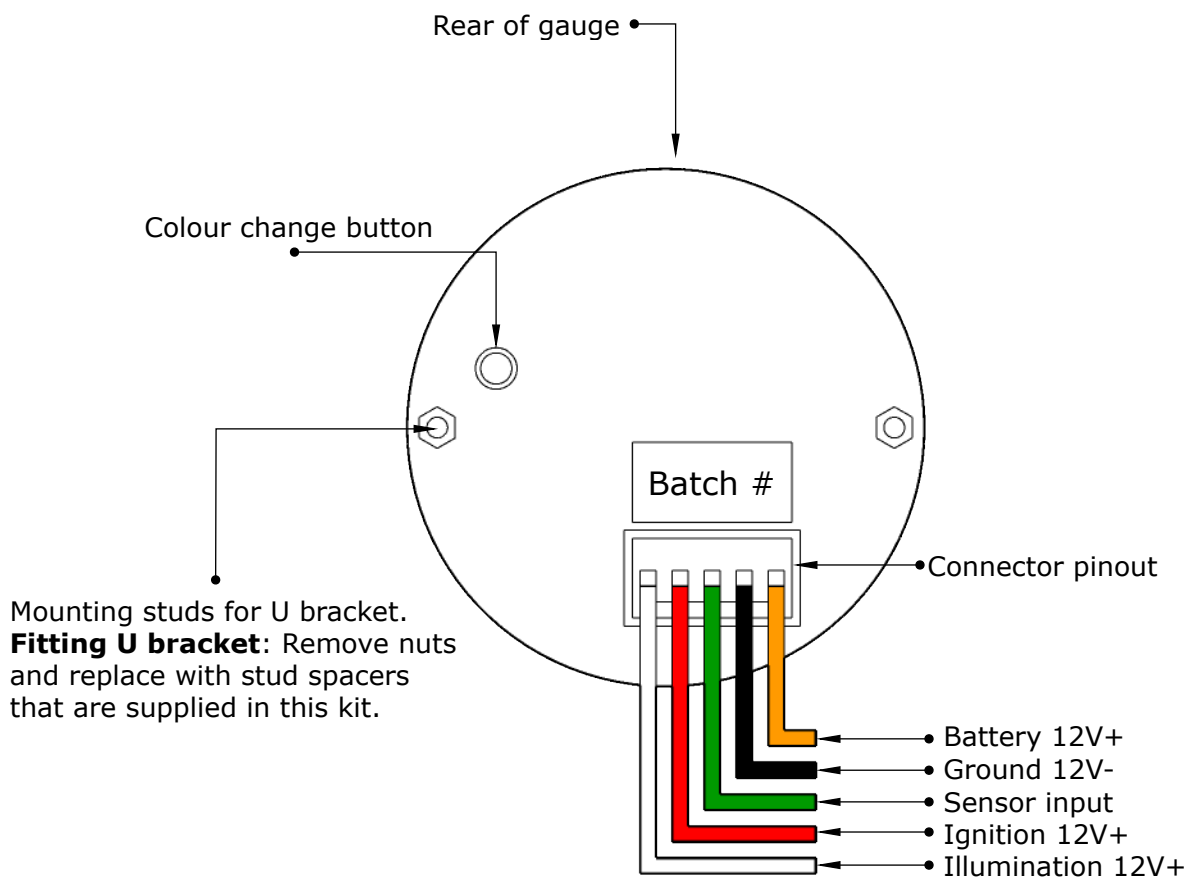
Important notes before installing:

- Installing this product to your vehicle may require an adaptor. SAAS make a large range of adaptors and installation parts, please check with your SAAS dealer for available adaptors.
- SAAS Muscle series gauges are designed for **12volt** systems **ONLY!**
- All installation work should be done by a qualified professional to avoid damage to this product.
- SAAS **RECOMMENDS** all products be tested prior to installation. This will save time and speed up the troubleshooting process if you encounter any issues.

Wiring Guide:

Wire colour	Wire Function	Wire Connection Location
White	Illumination 12V+ (NOT adjustable)	Park light circuit (do NOT connect to a dimmer)
Red	Ignition 12V+	Ignition harness / Fuse box
Green	Sensor input	Oxygen sensor / PCM Module
Black	Ground 12V-	Vehicle body
Orange	Battery 12V+	Ignition harness / Fuse box

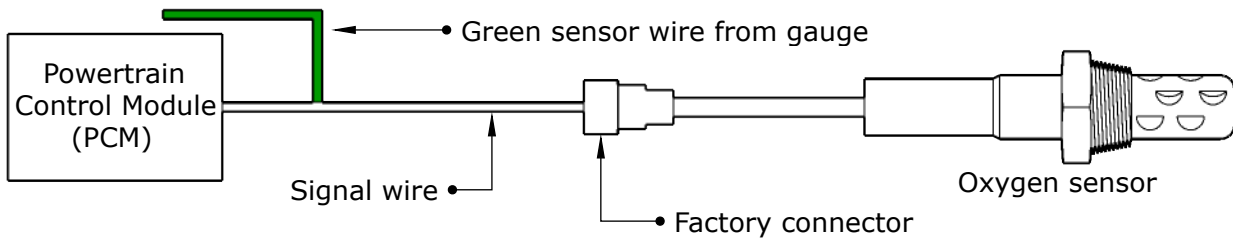
Wiring Diagram Typical Layout



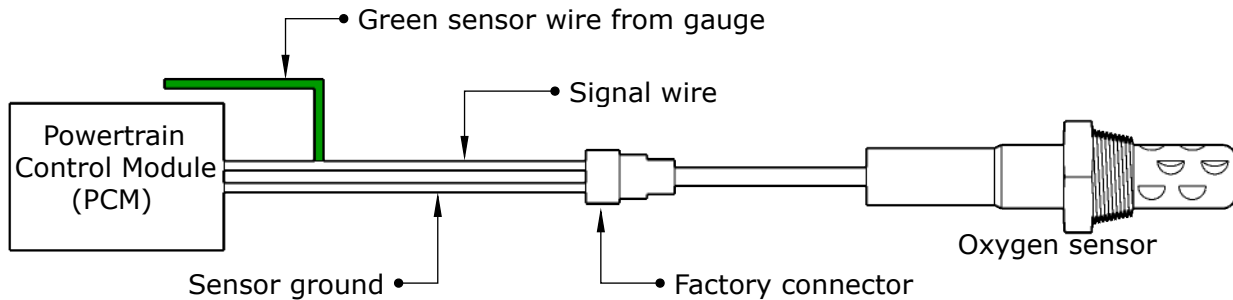
Oxygen Sensor Types:

- Choose from one of the diagrams below that best suits your application.
- Always check the vehicles wiring diagrams for the correct signal wire colour.
- For vehicles with multiple sensors, always connect the gauge sensor wire to the oxygen sensor in the exhaust manifold also known as the **upstream** sensor. For engines that have a left bank and a right bank sensor (e.g GM LS series V8), connect to one sensor only not both!

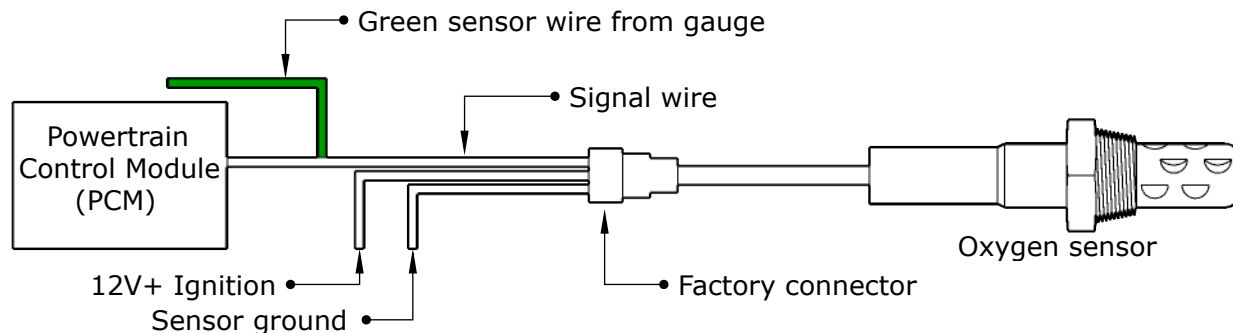
1 Wire Sensor



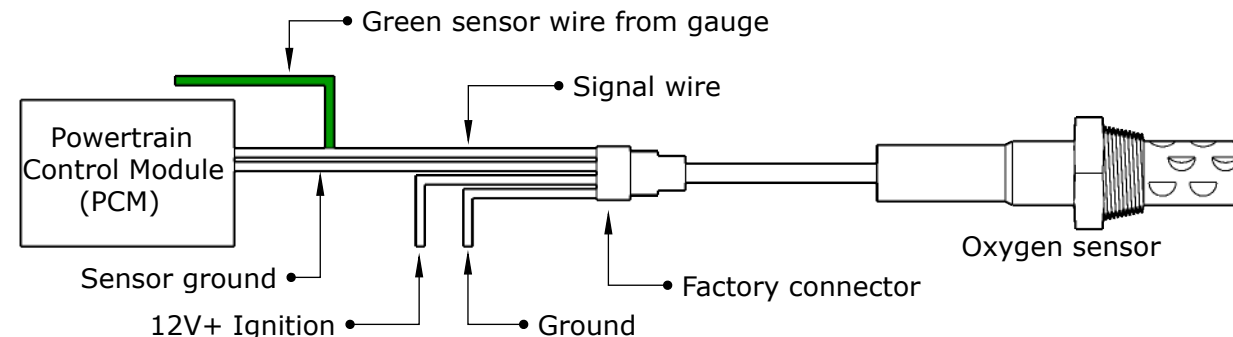
2 Wire Sensor



3 Wire Heated Sensor



4 Wire Heated Sensor



Installation Tips:

- **All** oxygen sensors need to be heated to 315°C + before they start to read accurately.
- 1 and 2 wire oxygen sensors use exhaust gases to get them up to operating temperature. You may need to drive the vehicle for a few minutes before the gauge starts to read.
- 3 and 4 wire oxygen sensors have built in heaters and will get up to operating temperature within 1 or 2 minutes.

GAUGE INFORMATION

Specifications

Gauge operating range	0.00mV > 1.0V
Gauge operating voltage	8v > 18v
Gauge sensor input type	narrow band only!
Gauge lighting type	4 colour LED (NON DIMMABLE)
Gauge lighting colours	green > red > blue > white (default colour green)
Mounting depth required for gauge	50mm (minimum)
Total depth of gauge	55mm (including bezel)
Mounting hole size for gauge	52mm

Troubleshooting:

Please note: If you are having problems with the installation of this product, please do not contact your retailer or SAAS until you have read **ALL** the troubleshooting notes below.

Problem	Possible Cause	Solution
-gauge not reading	-bad connection on gauge	-test for power at the back of the gauge
	-wrong signal wire	-check oxygen sensor diagrams for correct application
	-cold oxygen sensor	-wait for sensor to get up to temperature
-reading is constantly bouncing around	-the vehicles computer is adjusting the air/fuel mixtures	-no fault, this is normal operation
-no back lighting	-incorrect wiring	-refer to fitting instructions
	-connected to a dimmer	-refer to fitting instructions
-back lighting stuck on white	-incorrect wiring	-connect or check orange wire for 12V+
-back lighting defaults back to green	-incorrect wiring	-check orange wire for 12V+
	-battery was disconnected	-press button to set desired colour

Contents:

In The Box	Qty	Notes	Part No.
Air/Fuel gauge	1		
Wiring connector	1		SG3130
Mounting U bracket	1		SG31005
Mounting U bracket studs (M4x0.7 thread)	2		
Mounting U bracket nuts	2		
Mounting U bracket spring washers	2		
Fitting instructions	1		

Warranty Terms & Conditions:

SAAS Automotive Pty Ltd warrants this product against defects in factory workmanship and materials for a period of twelve (**12**) months from the date of original purchase. This warranty applies to the first retail purchaser, is non-transferable and covers only where the product has been subjected to normal use or service. Provision of this warranty shall not apply to any SAAS Automotive product that has been used for a purpose for which it is not designed, or which has been altered in any way that would be detrimental to the performance or life of the product, or misapplication, misuse, negligence or accident. Warranty claims to the manufacturer must be transportation prepaid and accompanied with dated proof of purchase. On any part or product found to be defective after examination by SAAS Automotive Pty Ltd, SAAS Automotive Pty Ltd will only repair or replace the merchandise through the original selling dealer or on a direct basis. SAAS Automotive Pty Ltd assumes no responsibility for diagnosis, removal and/or installation labour, loss of vehicle use, loss of time, inconvenience or any other consequential expenses. The warranties herein are in lieu of any other expressed or implied warranties, including any implied warranty of suitability, and any other obligation on the part of SAAS Automotive Pty Ltd, or the selling dealer.

For further assistance email: tech@saasautomotive.com.au



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