



WATER TEMPERATURE

Installation Instructions

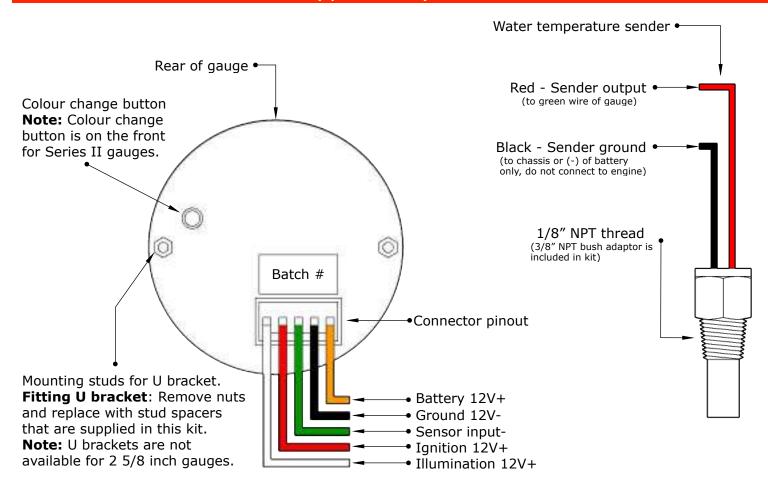
Important notes before installing:

- 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-	Water temp sender output (red wire of sender)
Black	Ground 12V-	Vehicle body
Orange	Battery 12V+	Ignition harness / Fuse box

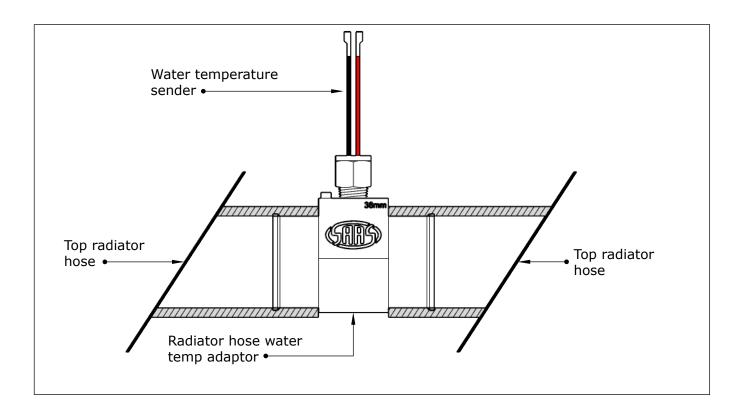
Wiring Diagram Typical Layout



Water Temp Sender Installation:

- Recommended sender locations:

- Water temp senders should be installed in a radiator, water temp adaptor or cylinder head.
- The most common way of fitting a water temp sender is by using a radiator hose adaptor, the adaptor is fitted to the vehicles **TOP** radiator hose. The diagram below shows how a water temp sender and radiator hose adaptor is fitted.



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	-test for power at the back of the gauge	
-needle jumps around		-test for ground at the sender	
	-sender signal wire is too long or	-wire thickness must not exceed 20AWG	
	too thick		
	-damaged sender	-check if sender is in spec with a	
		multimeter (see page 3 for scale)	
-no back lighting	-incorrect wiring	-refer to fitting instructions	
	-connected to a dimmer	-refer to fitting instructions	
-back lighting stuck	-incorrect wiring	-connect or check orange wire for 12V+	
on white			
-back lighting defaults	-incorrect wiring	-check orange wire for 12V+	
back to green	-battery was disconnected	-press button to set desired colour	

GAUGE INFORMATION

Specifications

Gauge and sender operating range	40°C > 120°C	
Gauge operating voltage	8v > 18v	
Water sender ohms range	$2000\Omega > 74\Omega$, scale: $1040\Omega > 40$ °C or $215\Omega > 80$ °C	
Water sender thread size	1/8" NPT	
Water sender dimensions	Total length 35mm, wire length 100mm	
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 (52mm gauges)	52mm	
Mounting hole size (2 5/8 inch gauges)	65mm	

Contents:

In The Box		Notes	Part No.
Water temperature gauge			
Water temperature sender			SG31001
Brass bush adaptor (3/8" NPT to 1/8" NPT)	1		SGA-320051
Wiring connector	1		SG3120
Mounting U bracket	1	Not available for 2 5/8 inch gauges	SG31005
Mounting U bracket studs (M4x0.7 thread)	2	Not available for 2 5/8 inch gauges	
Mounting U bracket nuts	2	Not available for 2 5/8 inch gauges	
Mounting U bracket spring washers	2	Not available for 2 5/8 inch gauges	
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.



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