





# OIL PRESS/WATER TEMP DIGITAL

Part No: SG913020 2 inch-52mm

#### v20200814

# Installation Instructions

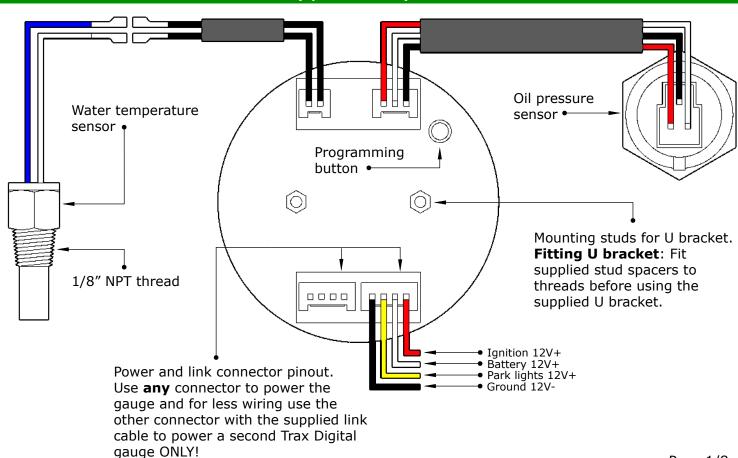
#### Important notes before installing:

- Installing this product to your vehicle may require an adaptor. SAAS offer a large range of adaptors and installation parts; please check with your SAAS dealer for available adaptors.
- SAAS Trax 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.
- **BEFORE** installing, please check our website (**shopsaas.com**) for the latest fitting instructions. If the top left corner (**v**) number is different to website, please use instructions from website.

## Wiring Guide:

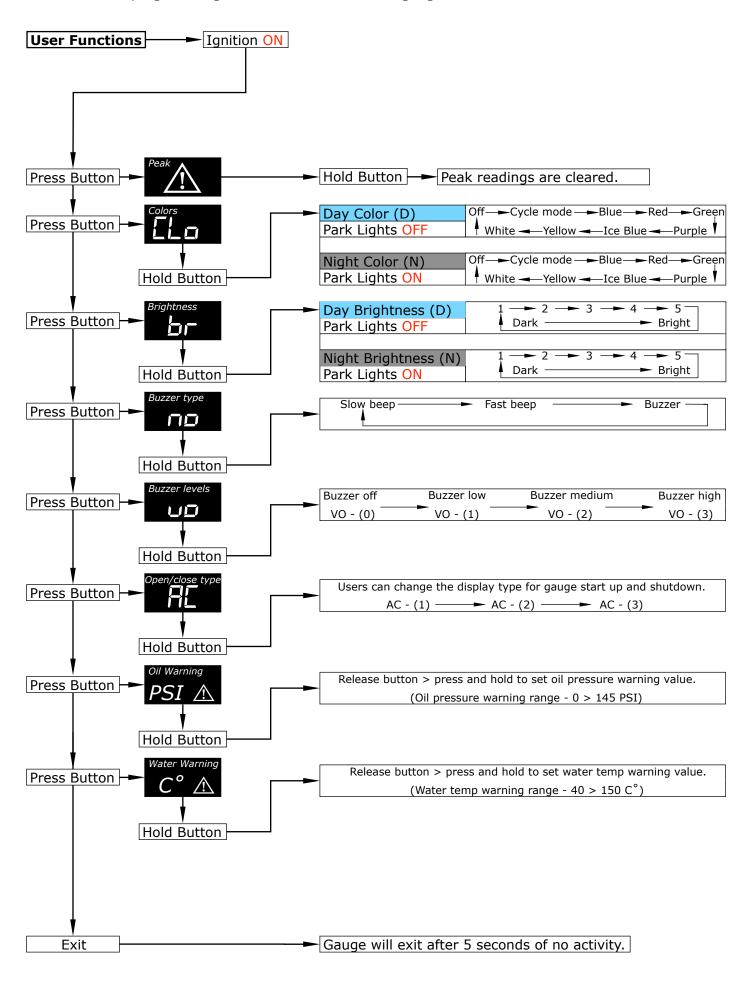
Wire colour	Wire Function	Wire Connection Location	
Black	Ground 12V-	Vehicle body	
Yellow	Park lights 12V+	Park light circuit (do <b>NOT</b> connect to a dimmer)	
White	Battery 12V+	Ignition harness / Fuse box	
Red	Ignition 12V+	Ignition harness / Fuse box	

# Wiring Diagram Typical Layout



#### **User Functions:**

Note: Use the programming button on the back of the gauge to set the below functions.



#### Oil Pressure Sensor Installation:

- Recommended sensor locations: Engine block, oil pump/filter housing, factory oil switch location.
- Fitting the oil pressure sensor:

There are a two ways to fit an oil pressure sensor to your engine. One way is to use a oil filter sandwich plate and the other is to use a tee adaptor.

- Oil Filter Sandwich Plate (Recommended):

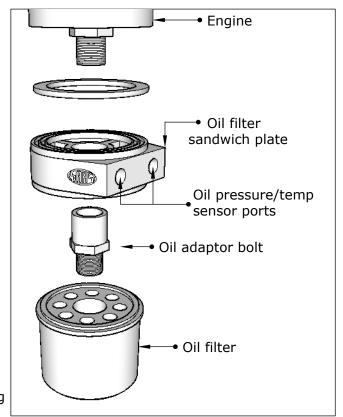
The diagram to the right shows how a sandwich plate is fitted and in most cases is the quickest.

#### - Tee Adaptor:

A tee adaptor allows the factory oil switch and a second oil pressure sensor to be fitted in the same location.

Tee adaptors can be harder to fit due to the lack of space on some engines. If the factory oil switch is in a hard to reach position, then it is recommended that you fit the SAAS oil pressure sender in a remote location so it will be much easier to get to for servicing and testing.

- **Tip:** Braided turbo feed line works great as an extension and can also be used on oil filter sandwich plates for vehicles with compact engine bays.
- **Caution:** Removal of the factory oil switch is not recommended! Modern vehicles need the factory oil switch to operate correctly and will set of dash warning lights if they are removed.



## Important Fitting Notes For Installers:

- How to pass cables and sensors through firewalls correctly:

**Option (A):** Drill or cut a hole into a rubber grommet making sure there is enough room behind not to damage any factory cables and enough space to pass your cables and sensors through **without** any force. **DO NOT** pull on connectors when feeding through firewalls or grommets!

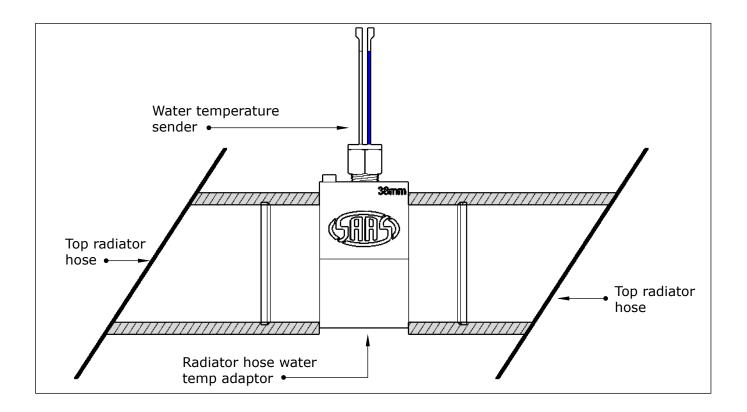
**Option (B):** Wrap some electrical tape around a wire coat hanger and around the connectors/ cables that you want to pass through the firewall, use some WD40 to lubricate the coat hanger so the connectors pass through the firewall grommet gently. **DO NOT** pull on connectors when feeding through firewalls or grommets!

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

# 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.



# GAUGE INFORMATION Specifications

Gauge operating range	(oil) 0 > 140 PSI (water) 0°C > 120°C		
Gauge operating voltage	8v > 18v		
Oil sensor operating range	0.5v > 4.5v, scale: 0.5v > 0 PSI , 0.9v > 15 PSI		
Oil sensor cable length	2 metre power cable		
Water temp sender ohms range	$60$ K $\Omega$ > 0.9K $\Omega$ , scale: 50K $\Omega$ @ 21°C or 6.14K $\Omega$ @ 80°C		
Water temp sender thread size	1/8" NPT		
Water temp sender dimensions	total length 35mm		
Water temp sender wire length	2 metre wiring harness / 100mm on sender		
Gauge lighting type	7 colour LED with 5 levels of brightness		
Gauge lighting colours	blue/red/green/purple/ice blue/yellow/white/OFF/cycle mode		
Gauge power harness length	1 metre		
Gauge link harness length	300mm		
Mounting depth required for gauge	55mm (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 beeps but no	-incorrect wiring	-refer to fitting instructions
display	-display is set to (OFF)	-press button to change backlight colour
-not reading oil	-sensor not plugged in correctly	-check connector on gauge and sensor
pressure	-damaged sensor	-test sensor using a multimeter, a good
-oil reads ()		sensor should read: 0.5v @ 0 PSI or
		0.9v @ 15 PSI
- no oil pressure when	-damaged sensor	-replace oil sensor
engine heats up		
-water reads ()	-sensor not plugged in	-check connector on gauge and sensor
-readings jump around	-water temp cable is too long or	-use the supplied cable and only extend
	too thick	with the same thickness cable if needed
	-sensor or cable damaged	-test sender using a multimeter, a good
		sender should read:50KΩ@room temp 21°C
		-see note below
-gauge beeps and	-warning function activated	-adjust warning settings accordingly
flashes randomly		

## Additional Troubleshooting Notes/Tips:

#### - How to test a Trax water temperature sender:

Disconnect the wiring from the water temp sender and connect the white and blue sender wires to a multimeter, this test must be performed at room temp (21°C).

A good water temp sender should read around 50K  $\Omega$  @ room temp and will decrease when heat is applied. (See page 4 for scale)

#### Contents:

In The Box		Notes	Part No.
Oil/water gauge	1		
Water temperature sender and 2 pin gauge harness	1		SG91001
Oil sensor and 3 pin power harness	1		SG91002
Gauge power connector			SG9100
Gauge link connector	1		SG9101
Mounting U bracket			SG61005
Mounting U bracket studs (M4x0.7 thread)	2		
Mounting U bracket nuts	2		
Fitting instructions			

# ACCESSORIES & Installation Solutions

Item	Part No.
Oil filter sandwich plate billet black (oil filter adaptor bolt sold separately)	SGAP1
Oil filter sandwich plate billet polished (oil filter adaptor bolt sold separately)	SGAP2
Oil filter sandwich plate billet black 4X4 (oil filter adaptor bolt sold separately)	SGAP3
Water temp adaptor radiator hose 28mm black	SWTA28B
Water temp adaptor radiator hose 32mm black (also available in polished)	SWTA32B
Water temp adaptor radiator hose 34mm black (also available in polished)	SWTA34B
Water temp adaptor radiator hose 36mm black (also available in polished)	SWTA36B
Water temp adaptor radiator hose 38mm black (also available in polished)	SWTA38B
Water temp adaptor radiator hose 40mm black	SWTA40B
Metal gauge cup 52mm black	SGC52BH
Metal gauge cup 52mm chrome	SGC52CH
Plastic gauge cup 52mm black	SGC52P

# See our full range of installation components @ www.shopsaas.com





# www.shopsaas.com

### 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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