



OIL PRESS/WATER TEMP Installation Instructions

Part No: SG613020
2 inch-52mm

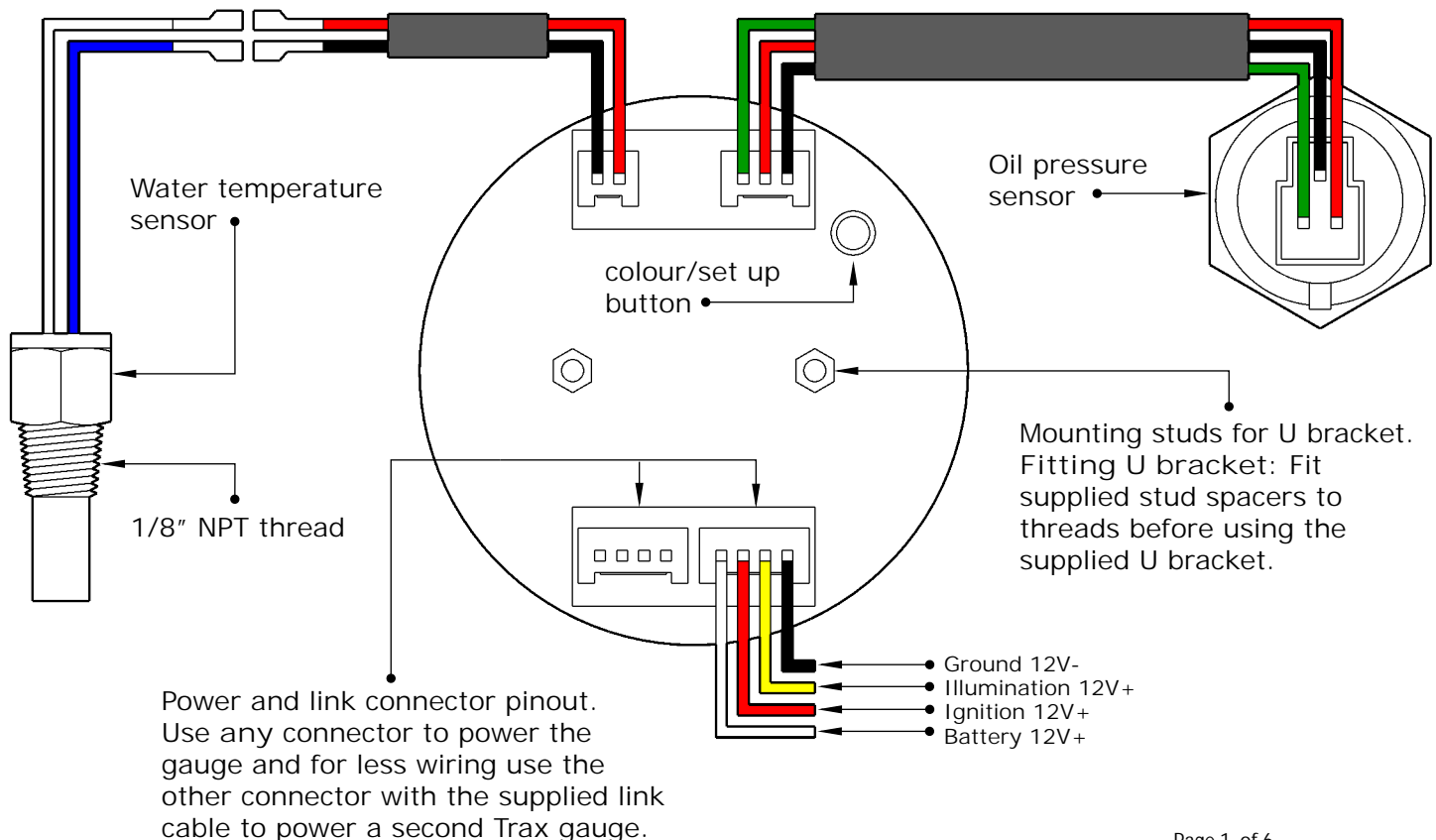
Important notes before installing:

- 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 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.

Wiring Guide:

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

Wiring Diagram Typical Layout



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.

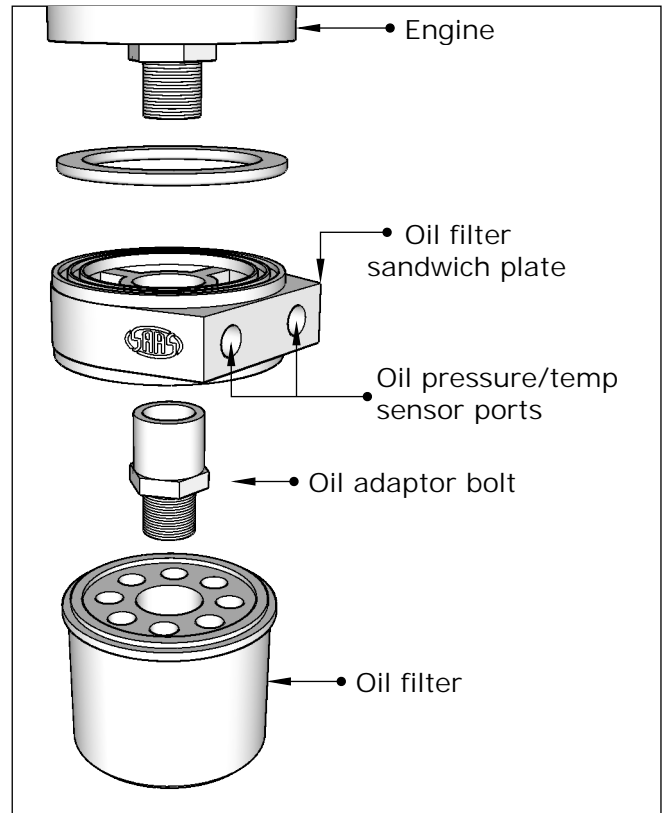
- Tee Adaptor:

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:

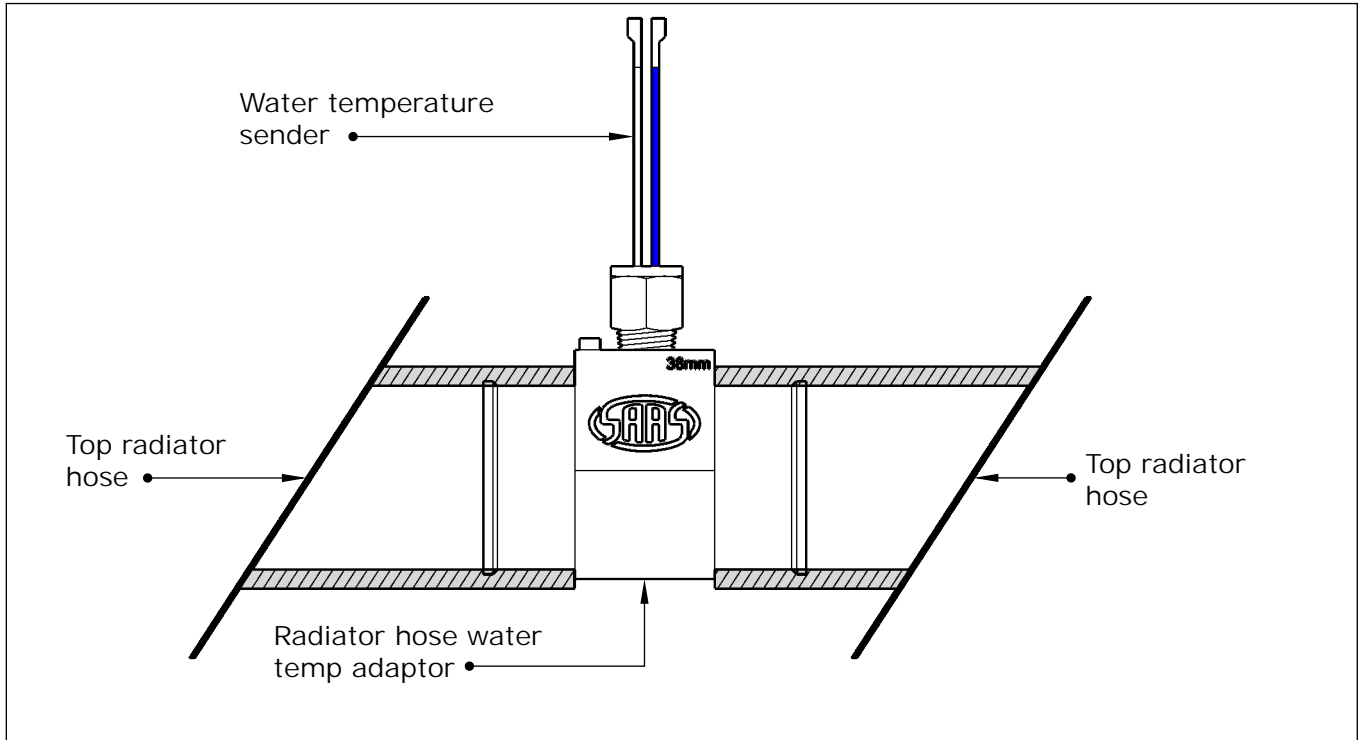
Option (A): Drill or cut a hole into a rubber grommet making sure there is enough room behind not to damage any factory cables and enough space to pass your cables and sensors through without any force. DO NOT pull on connectors when feeding through firewalls or grommets!

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.



Setting Gauge Functions:

Note: Use the button at the back of the gauge to set all gauge functions before fitting gauges to gauge pods and holders.

Gauge Warning Functions

- Analogue read out: Turn ignition on > press and hold button for 5 seconds until needle flashes > release button > press and hold button again to move the needle to your desired setting > release button > gauge will exit setup after 5 seconds.

- Example: Boost warning is set to 17 PSI; when boost reading exceeds 17 PSI the analogue gauge (needle and backlight) will flash and beep.

- Digital read out: Turn ignition on > press and hold button for 10 seconds until digital display flashes > release button > press and hold button again to adjust your desired setting > release button > gauge will exit setup after 5 seconds.

- Example: Exhaust warning is set to 650°C; when exhaust reading exceeds 650°C the digital gauge (LED section) will flash and beep.

Backlight Colour

- Turn ignition on > press button once to change colour.

Beep Disable

- Turn ignition on > press and hold button for 15 seconds > release button > press button again to turn beeps on or off > gauge will exit setup after 5 seconds.

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
-not reading oil pressure	-sensor not plugged in correctly -damaged sensor	-check connector on gauge and sensor -test sensor using a multimeter, a good sensor should read: 0.5v @ 0 PSI or 0.9v @ 15 PSI
- no oil pressure when engine heats up	-damaged sensor	-replace oil sensor
-needle gets stuck	-over tightened metal gauge cup	-loosen band on gauge cup to free needle -see note below
-needle sitting below starting point	-gauge has been dropped or suffered a mechanical shock	-replace gauge
-no water readings	-sender cables reversed	-refer to fitting instructions
-readings jump around	-water temp cable is too long or too thick -damaged sender	-use the supplied cable and only extend with the same thickness cable if needed -test sender using a multimeter, a good sender should read: 50K Ω @room temp 21 $^{\circ}$ C -see note below
-gauge beeps and flashes randomly	-warning function activated	-adjust warning settings accordingly
-no backlight	-incorrect wiring -connected to a dimmer	-refer to fitting instructions -refer to fitting instructions
-gauge gets hot	-incorrect wiring -damaged oil sensor	-refer to fitting instructions -replace oil sensor

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 $^{\circ}$ C).

A good water temp sender should read around 50K Ω @ room temp and will decrease when heat is applied. (See page 5 for scale)

- Oil needle won't read or is stuck:

If your gauge is mounted in a metal gauge cup, please loosen the band as this may be the cause. Over tightening the gauge cup band puts a lot of pressure on the gauge body and will make the needle stick at some point.

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 meter power cable
Water temp sender ohms range	60KΩ > 0.9KΩ, scale: 50KΩ @ 21°C or 6.14KΩ @ 80°C
Water temp sender thread size	1/8" NPT
Water temp sender dimensions	total length 35mm
Water temp sender wire length	2 meters wiring harness / 100mm on sender
Gauge lighting type	7 colour LED (with a non adjustable dimmer)
Gauge lighting colours	blue/red/green/purple/ice blue/amber/white/needle only/scan
Gauge power harness length	1 meter
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

Contents:

In The Box	Qty	Notes	Part No.
Oil/water gauge	1		
Water temperature sender and 2 pin gauge harness	1		SG61001
Oil sensor and 3 pin power harness	1		SG61002
Gauge power connector	1		SG6100
Gauge link connector	1		SG6101
Mounting U bracket	1		SG61005
Mounting U bracket studs (M4x0.7 thread)	2		
Mounting U bracket nuts	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

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



SAAS Automotive PTY LTD
25 Metrolink Circuit West, Campbellfield,
Victoria 3061 Australia

ABN: 48166279670
ACN: 166279670

Phone: +61 3 9930 0100
Fax: +61 3 8339 2270
Email: tech@saasautomotive.com.au
Web: www.shopsaas.com