

## TACHOMETER (95mm/125mm) Installation Instructions

### Important notes before installing:

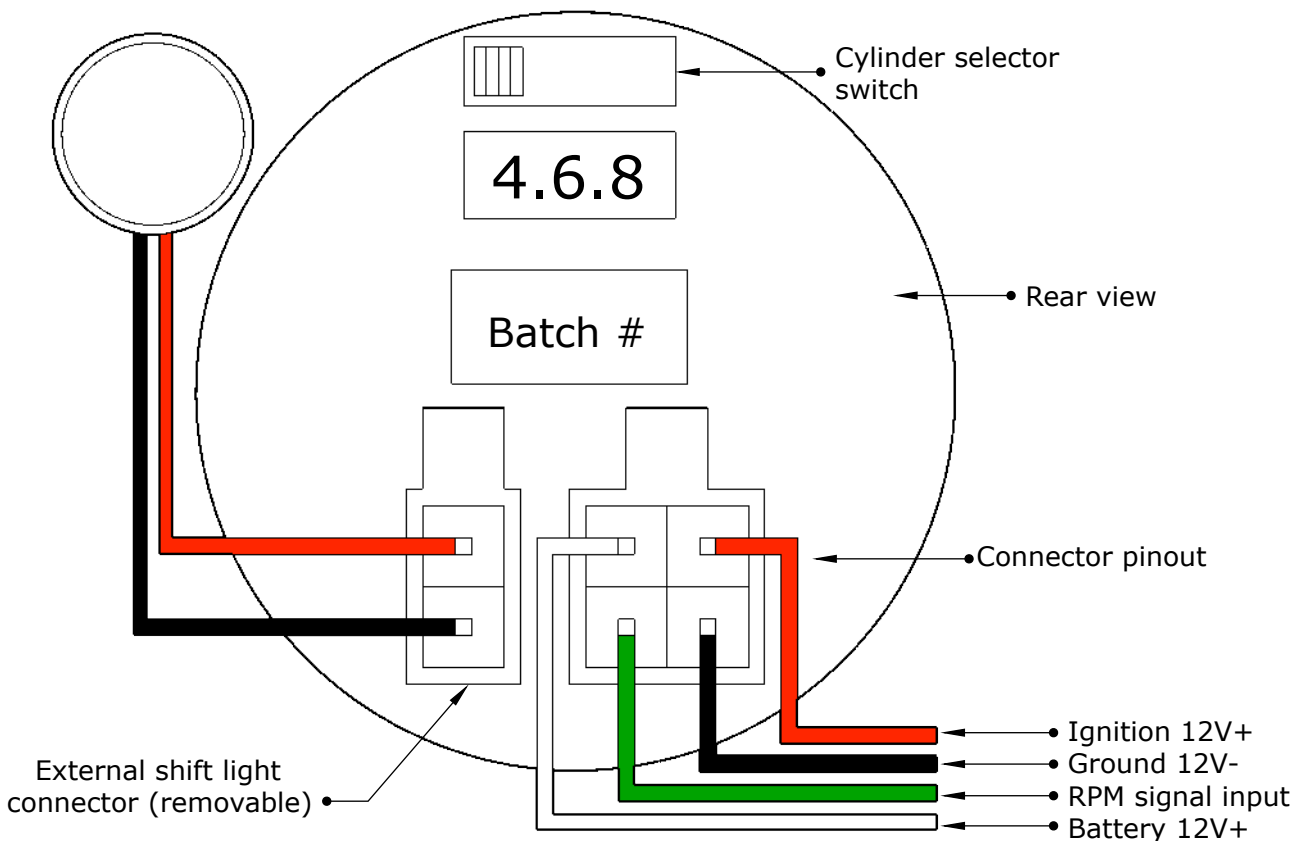
**- WARNING:** SAAS tachometers are designed to work with **factory** ignition systems **ONLY!** Warranty will be void if connected to aftermarket ignition systems such as, MSD, Mallory, Accel, Etc.. Aftermarket ignition systems will require additional parts to operate so please check with your ignition manufacturer for available parts/adaptors and recommended wiring locations.

- SAAS Muscle series tachometers are designed for **12volt PETROL** 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                     |
| Green       | RPM signal input | Negative side of ignition coil or ECU tach wire |
| Black       | Ground 12V-      | Vehicle body                                    |

### Wiring Diagram Typical Layout



## Tachometer Functions:

• **UP/RECALL:** This button is used to increase the RPM shift point and to recall the highest RPM reading.

**Recalling and clearing highest RPM:** Turn ignition on > press (RECALL) button > needle will move to highest RPM > to clear highest RPM press (CLEAR) button while highest RPM is being shown > highest RPM is now cleared.

• **MODE/CLEAR:** This button is used to set the RPM shift point and to clear the highest RPM reading.

**Setting the shift light RPM:** Turn ignition on > press (M) button > needle will move to current shift point > press up/down to move needle to desired RPM > press (M) button to lock in shift point.

• **DOWN/LIGHT:** This button is used to decrease the RPM shift point and to change the back lighting colour. (green>red>blue>white)

## 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<br>-needle jumps around | -bad connection on gauge           | -test for power at the back of the gauge                       |
|  | -bad signal from coil/ECU          | -a resistor may be needed to clean up signal (see notes below) |
|  | -diesel engine                     | -not compatible with diesel engines                            |
| -gauge reading is out                      | -ECU tach output is only 5volts    | -see notes below   |
|  | -cylinder selector switch position | -check cylinder switch for correct setting                     |
|  | -not compatible with ignition      | -aftermarket ignitions will require an adaptor                 |
| -no back lighting                          | -bad wiring or old components      | -fix wiring or replace worn components                         |
|  | -incorrect wiring                  | -refer to fitting instructions                                 |

### - Additional troubleshooting notes:

**Problem:** "Gauge reads but needle bounces around"

- If the tachometer reads but the needle bounces around, a 10K 1/4 watt resistor fitted to the green signal wire may fix this issue.

Installing a resistor: Cut the green signal wire and connect one end of the resistor to the coil side and the other end of the resistor to the tacho side.

**Problem:** "ECU tach output is only 5volts"

- If the tach output from your vehicles ECU is only 5volts, a 10K 1/4 watt resistor is needed to increase the signal voltage to 12volts. (Nissan, Subaru, Etc..)

Installing a resistor: Connect one side of the resistor to the **green** signal wire of the tacho and connect the other side of the resistor to the **red** 12volt ignition wire of the tacho. Do not cut any wires, just splice into.

**WARNING:** Do not connect the resistor to any other wire or you **WILL** damage the tacho and your ECU!

# **GAUGE INFORMATION**

## *Specifications*

|                                   |  |
|-----------------------------------|--|
| Gauge operating range             | 0 > 8,000 RPM / 0 > 10,000 (depending on model)            |
| Gauge operating voltage           | 8v > 18v   |
| Cylinder selector switch          | 4 > 6 > 8 cylinder petrol engines ONLY!                    |
| Recommended signal locations      | Negative (-) side of coil, ECU tach output or tach adaptor |
| Gauge dimensions                  | 95mm x 55mm / 125mm x 60mm (depending on model)            |
| Shift light dimensions            | 15mm x 53mm / 30mm x 55mm (depending on model)             |
| Mounting depth required for gauge | 55mm (all models)  |
| Mounting hole size for gauge      | For 95mm tach: 87mm / For 125mm tach: 117mm                |
| Gauge lighting type               | 4 colour LED (NON DIMMABLE)                                |
| Gauge lighting colours            | green > red > blue > white                                 |

## ***Contents:***

| <b>In The Box</b>    | <b>Qty</b> | <b>Notes</b> | <b>Part No.</b>                           |
|----------------------|------------|--------------|---|
| Tachometer gauge     | 1          |              |   |
| Wiring connector     | 1          |              | SG3161 (95mm tach)<br>SG3162 (125mm tach) |
| Shift light          | 1          |              | Call for spare parts                      |
| Mounting bracket     | 1          |              | Call for spare parts                      |
| 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](mailto:tech@saasautomotive.com.au)***