SAAS
SINCE 1954

MUSCLE SERIES 3

IN-DASH TACHOMETER (90mm)

Installation Instructions

v20230328

Part No: SG32642

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 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.
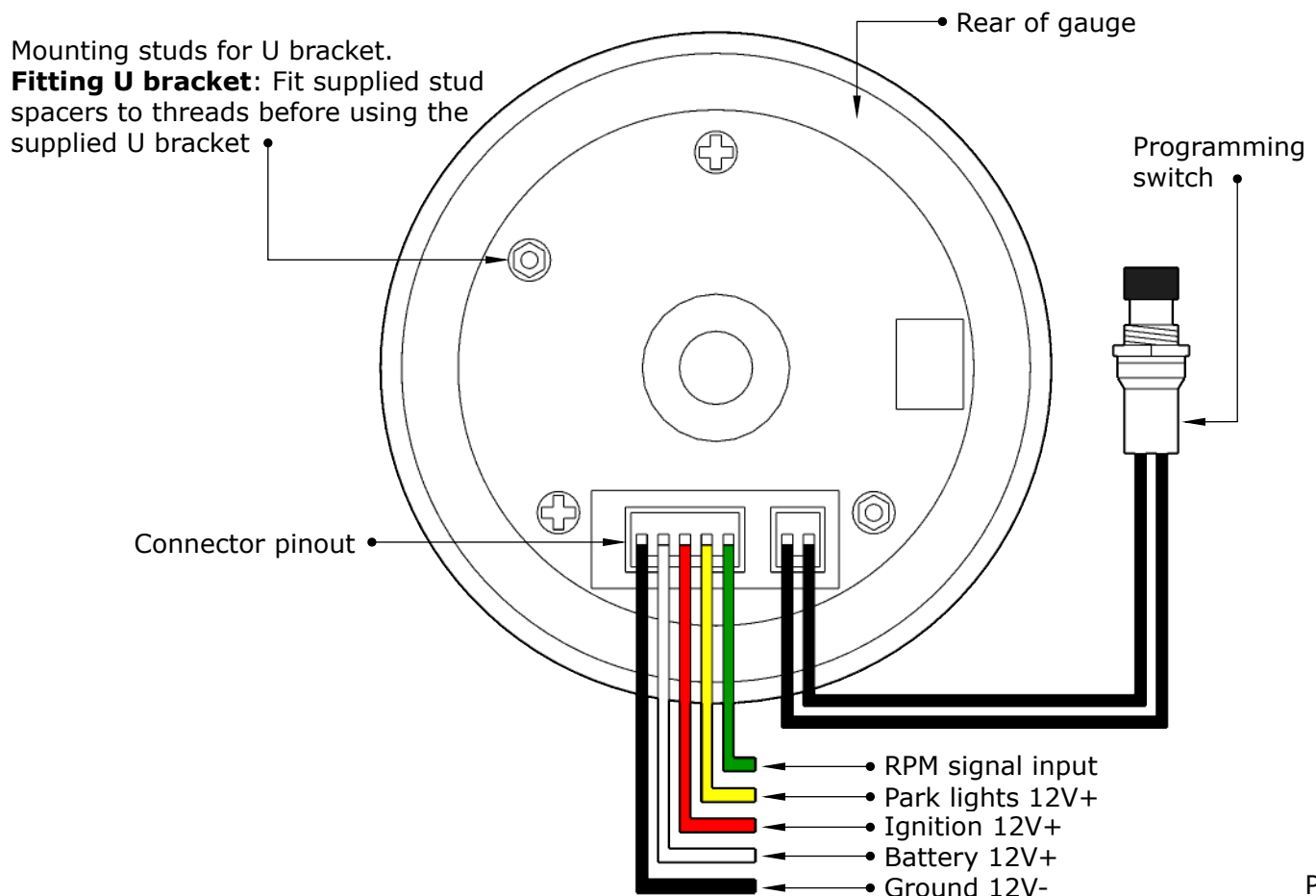
- **BEFORE** installing, please check our website (**shopsaas.com**) for the latest fitting instructions. If the top left corner (**v**) number is different to website, please use instructions from website.

Wiring Guide:

Wire colour	Wire Function	Wire Connection Location
Black	Ground 12V-	Vehicle body
White	Battery 12V+	Ignition harness / Fuse box
Red	Ignition 12V+	Ignition harness / Fuse box
Yellow	Park lights 12V+	Park light circuit (do **NOT** connect to a dimmer)
Green	RPM signal input	Negative side of ignition coil or ECU tach wire

Wiring Diagram
Typical Layout

Mounting studs for U bracket.
Fitting U bracket: Fit supplied stud spacers to threads before using the supplied U bracket

Rear of gauge

Programming switch

Connector pinout

RPM signal input
Park lights 12V+
Ignition 12V+
Battery 12V+
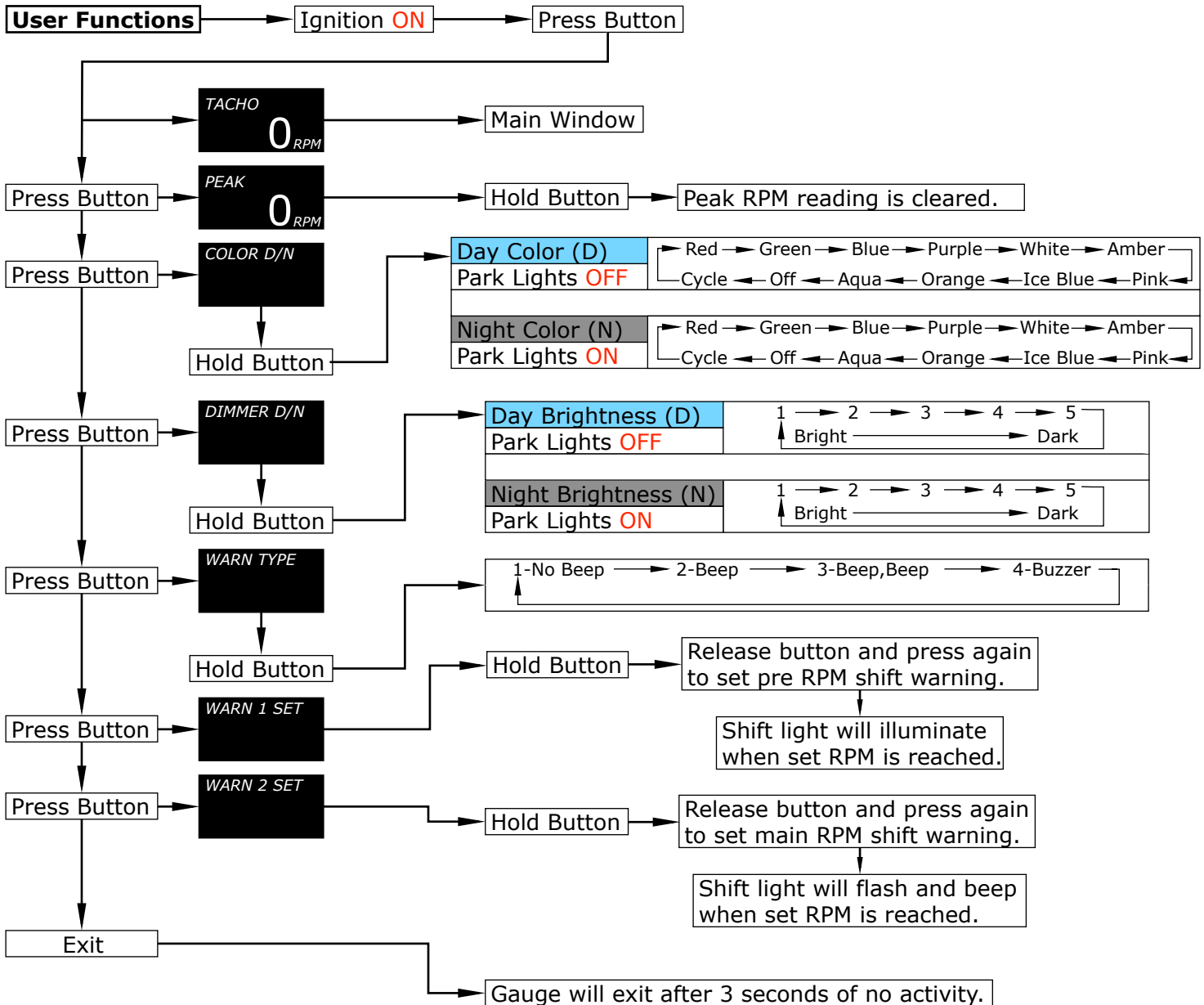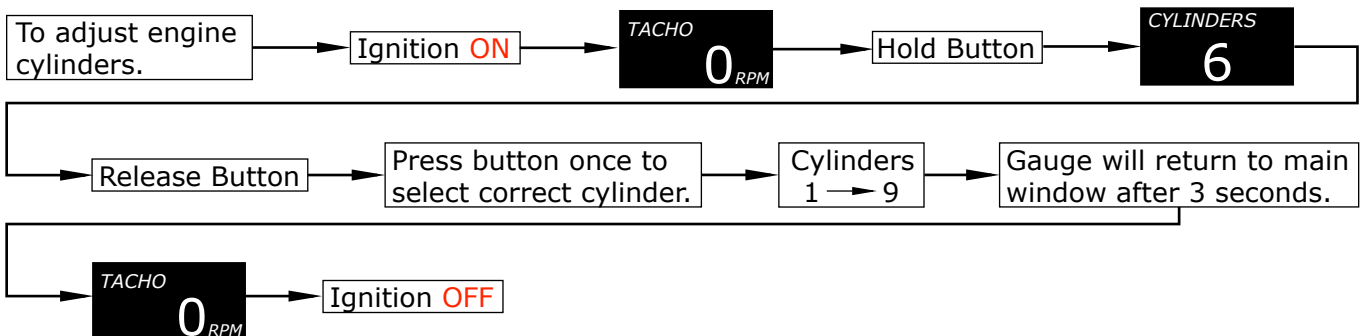Ground 12V-

User Functions:

Note: The programming switch must be connected to the back of the gauge and mounted in a location that is easy to reach to access all functions.
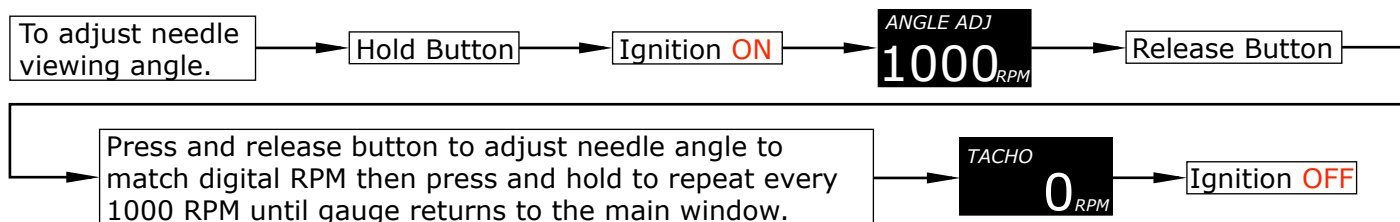
User Functions → Ignition ON → Press Button

TACHO 0 RPM → Main Window

Press Button → PEAK 0 RPM → Hold Button → Peak RPM reading is cleared.

Press Button → COLOR D/N →

Day Color (D) / Park Lights OFF → Red → Green → Blue → Purple → White → Amber → Cycle ← Off ← Aqua ← Orange ← Ice Blue ← Pink

Hold Button → Night Color (N) / Park Lights ON → Red → Green → Blue → Purple → White → Amber → Cycle ← Off ← Aqua ← Orange ← Ice Blue ← Pink

Press Button → DIMMER D/N →

Day Brightness (D) / Park Lights OFF → 1 → 2 → 3 → 4 → 5 / Bright → Dark

Hold Button → Night Brightness (N) / Park Lights ON → 1 → 2 → 3 → 4 → 5 / Bright → Dark

Press Button → WARN TYPE →

1-No Beep → 2-Beep → 3-Beep,Beep → 4-Buzzer

Hold Button → Hold Button → Release button and press again to set pre RPM shift warning. → Shift light will illuminate when set RPM is reached.

Press Button → WARN 1 SET

Press Button → WARN 2 SET → Hold Button → Release button and press again to set main RPM shift warning. → Shift light will flash and beep when set RPM is reached.

Exit → Gauge will exit after 3 seconds of no activity.

Engine Cylinder Set Up:

To adjust engine cylinders. → Ignition ON → TACHO 0 RPM → Hold Button → CYLINDERS 6

Release Button → Press button once to select correct cylinder. → Cylinders 1 → 9 → Gauge will return to main window after 3 seconds.

TACHO 0 RPM → Ignition OFF

Installation Tip: For with vehicles with no tach wire or tach wire location is not know, set cylinder to (**1**) and connect signal wire (green) to **ONE** cylinder coil only! **(e.g. VE Commodore / FG Falcon)**

Needle Viewing Angle Function:

| To adjust needle viewing angle. | → | Hold Button | → | Ignition ON | → | *ANGLE ADJ* **1000**RPM | → | Release Button |

| → | Press and release button to adjust needle angle to match digital RPM then press and hold to repeat every 1000 RPM until gauge returns to the main window. | → | *TACHO* **0**RPM | → | Ignition OFF |

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 -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
	-ECU tach output is only 5volts	-see notes below
-gauge reading is out	-cylinder selector switch position	-check cylinder switch for correct setting
	-not compatible with ignition	-aftermarket ignitions will require an adaptor
	-bad wiring or old components	-fix wiring or replace worn components
-no back lighting	-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 > 9,000 RPM
Gauge operating voltage	8v > 18v
Compatable engines	1>2>3>4>5>6>7>8>9 cylinder petrol engines ONLY!
Recommended signal locations	Negative (-) side of coil, ECU tach output or tach adaptor
Programming switch cable length	1.1mt
Wiring harness length	2mt
Gauge lighting type	white OLED window with 10 colour LED backlight
Gauge lighting colours	red - green - blue - purple - white - amber - pink - ice blue - orange - aqua - OFF - cycle mode
Gauge dimensions	88mm x 70mm
Mounting depth required for gauge	55mm (minimum)
Mounting hole size for gauge	80mm / 3 1/4"

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

Contents:

In The Box	Qty	Notes	Part No.
Tachometer gauge	1		
Wiring connector	1		SG3165
Programming switch	1		SG4106
Mounting U bracket	1		SG31015
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.

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