

# Electronic Cruise Control for Boom Trike Mustang ST1

Ford 1.6l engine and manual transmission



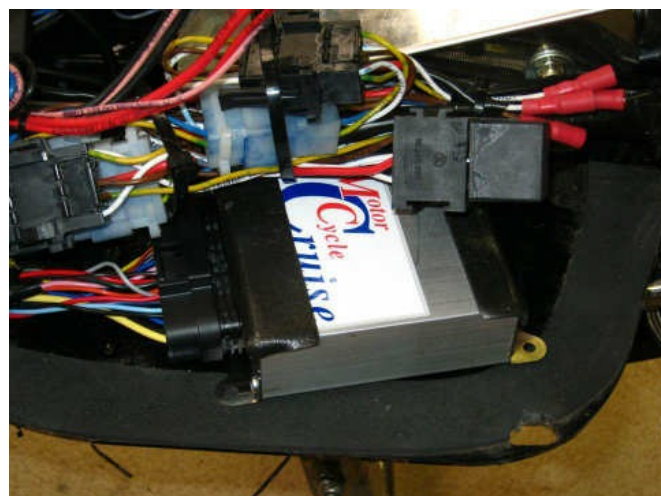
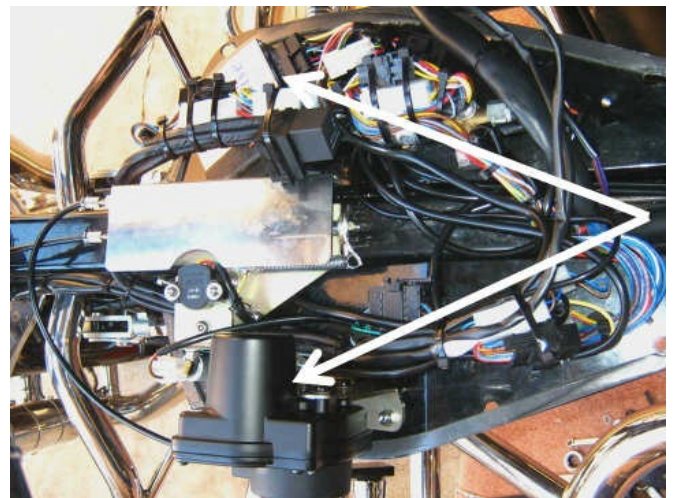
The following provides a brief description of the power consumption and component locations of the MotorCycle electronic cruise control.

Installed weight of the cruise control is approximately 2.0kg.

Current draw while the cruise is switched on, but not engaged, is approximately 0.250 amp (3 watts). Current draw while the cruise is engaged is nominally 0.5~1.50 amp (6~18 Watts). By comparison, a head light bulb typically draws about 4 amps (55 Watts), and a tail light bulb (running light) draws about 0.4 amp (5 Watts).

Refer to the line drawing on the back of this sheet to identify the component numbers in the text.

The **Computer (1)** and **Electric Throttle Servo (2)** are mounted inside the 'dummy' fuel tank/console. The upper arrow shows the computer, the lower arrow the throttle servo.



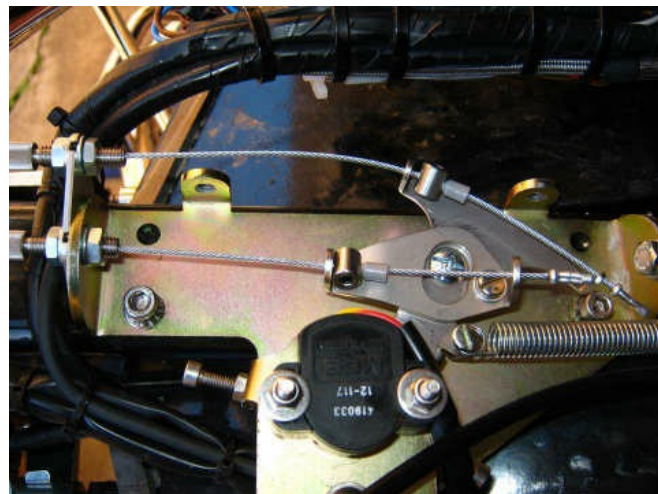
Self-adhesive 'hook & loop' (Velcro) fastener is provided in the cruise control kit as well as screws, washers and Nyloc nuts to mount the computer. Either may be used to mount the computer.

The throttle servo is bolted to the frame on the left side. A **servo cable (3)** connects the servo the vehicle's throttle grip position sensor.



A **lost motion device (4)** is fitted to the arm of the throttle grip position sensor. This device is fitted to allow safe operation of the cruise control and twist grip without risk of the throttle cable or servo cable twisting or jamming.

A **new throttle cable (5)** is also supplied in the kit. This cable incorporates suitable mounting hardware to prevent throttle jams during cruise control operation. The original throttle cable is not used.



A **pressure switch (6)** is fitted to the hydraulic clutch master cylinder. This instantly disengages the cruise control in the event of clutch operation.

The **Control Switch (7)** is mounted to the left hand mirror handlebar clamp. This mounting arrangement uses the 'Hi' bracket.



Alternatively, the **Control Switch (7a)** may be mounted below the handlebar. This mounting arrangement uses the 'Lo' bracket.

Either mounting may be selected when the cruise control is ordered.

If you have fitted different mirrors to your Boom and these mounting brackets will not work, we have large range of switch mounting brackets. Contact us for more information.

The **Wiring Harness (8)** has the same type of plugs or terminals that are already used on the vehicle, with one exception. Power for the cruise control and brake control sensing is taken off the brake light switch by disconnecting the wires to the brake light switch. Matching connectors on the cruise control harness are plugged in to the switch and the vehicle's harness. Road speed (speed sensing) is detected from the vehicle's speedometer signal. Tach (engine speed) sensing is detected from the vehicle's signal to the tachometer. This is used to disengage the cruise if the clutch is operated. This connection (tach) must be spliced to the vehicle's wiring harness. Splice terminals and heat shrink tube are supplied in the kit to make this connection. The clutch pressure switch supplied with the cruise control is connected to disengage the cruise control. The cruise control is grounded on the negative battery terminal. The wiring harness is a 'custom' finished item, with all parts of the harness cut length and terminated appropriately.

All connections except for the clutch pressure switch and the ground connection to the battery are made inside the 'dummy' fuel tank/console.

