

# Electronic Cruise Control for Honda ST1300



The following provides a brief description of the power consumption and component locations of the MotorCycle Setup 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 0.50-0.80 amp (6-10 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).

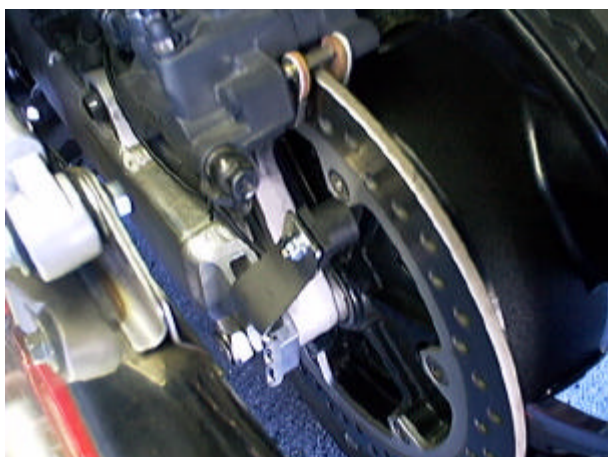
Refer to the line drawing on the back of this sheet to identify the components from the numbers in the text.

The **Computer (1)** mounts in the rear storage compartment under the seat. It is positioned in the top of the compartment in a **foam block (2)**. Alternatively, the computer may be mounted under the rider's seat, on top of the under-seat fuel tank, but the wiring loom is NOT designed for this location and the installer will have to accommodate this during installation. It is also NOT possible to set the riders seat at the lowest height setting when the computer is installed under the rider's seat.



The **Vacuum Actuator (3)** (throttle servo) is mounted on the left side of the bike next to the bike's rear suspension preload adjuster. Aluminium covers finished in satin black powder coat are provided to protect the actuator and enhance its appearance. The actuator mounting bracket incorporates a new mount for the preload adjuster. A **vacuum hose assembly (4)** is provided to connect the actuator to the engine.

The **Cable Interface Unit (5)** is located under the air filter housing, in front of the fuel injection throttle bodies and has a new **cable (6)** running from it to the throttles.



The **Speed Sensor (7)** is mounted on the left hand side of the swing arm on the rear axle. Nickel plated magnets are placed in the heads of the bolts that mount the brake disc.

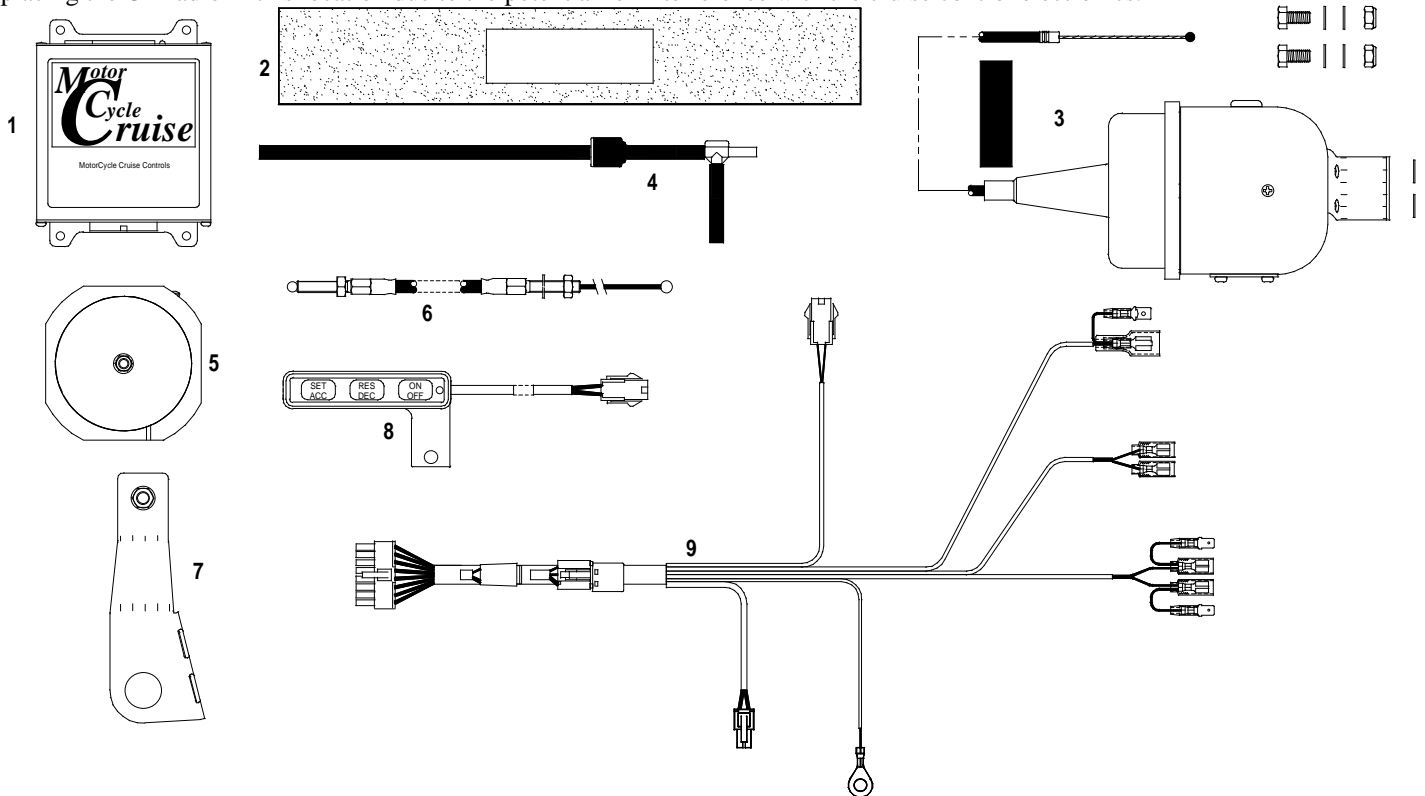
The **Control Switch (8)** is mounted to the left hand (clutch) master cylinder handlebar clamp. The bracket mounts between the top faces of the clamp and the master cylinder. The clamp must have about 1~1.5mm (0.040"~0.060") filed from the top face to allow for the thickness of the switch bracket.



The **Wiring Loom (9)** uses the same type of plugs that are already used on the motorcycle. Power for the cruise control and brake sensing is taken off the brake light switches by unplugging the front brake light switch. Matching connectors on the cruise control loom are plugged in to the switch and the bike's electrical loom. Tach (engine speed) sensing is detected from the bike's ignition coils. This is used to disengage the cruise if the clutch is operated. The cruise control is grounded on the bike's battery negative terminal.

The wiring loom incorporates a new safety device, the 'CruiseSafe' actuator power relay. This device is a simple relay that is operated by the brake light switches. If the cruise control should malfunction, either due to electrical interference or component failure, applying the brakes enough to turn the brake light on will instantly cut power to the cruise control actuator (servo). Releasing the brakes will restore power to the actuator. This device is fail-safe in all respects except one. The brake light switches must be operative for this device to work.

We have seen several bikes with accessories such as a CB radio fitted in the rear luggage compartment. We do NOT recommend placing the CB radio in this location due to the potential for interference with the cruise control electronics.



## MotorCycle Setup P/L

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