

Electronic Cruise Control for **Suzuki DR650SE from 1996 to 2021**



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

The installation was checked on a bike with the original fuel tank fitted, and with Acerbis and Safari long range fuel tanks.

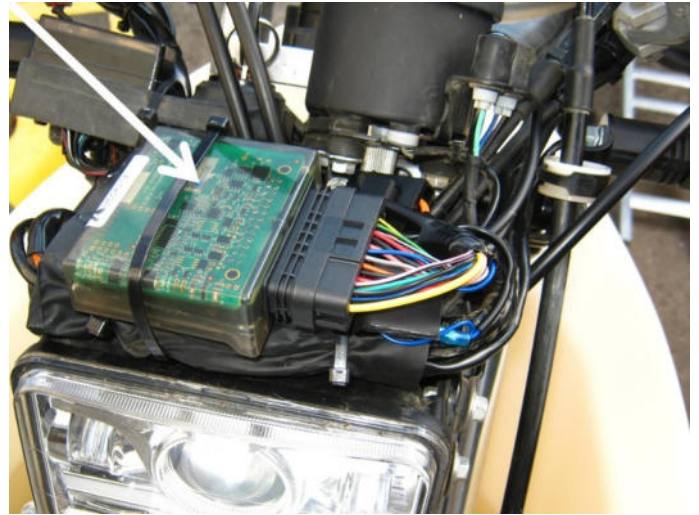
Installed weight of the cruise control is approximately 2.5kg.

Current draw while the cruise is switched on, but not engaged, is approximately 0.2 amp (2.5 watts). Current draw while the cruise is engaged is nominally 0.50~1 amp (6~12 Watts).

By comparison, a head light bulb typically draws about 4 amps (55 Watts), and a taillight bulb (running light) draws about 0.4 amp (5 Watts).

Refer to the line drawing at the end of this document to identify the components from the numbers in the text.

The **Computer (1)** mounts above the headlight, inside the headlight fairing.



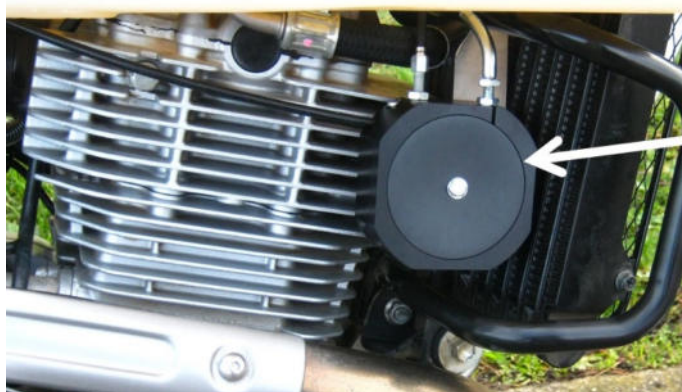
The edge of the computer enclosure is visible in this photo (arrowed), below the 'ledge' in the headlight fairing. If there is not enough space above the headlight for the computer, it may be mounted above the 'ledge' and attached with suitable mounting tape.



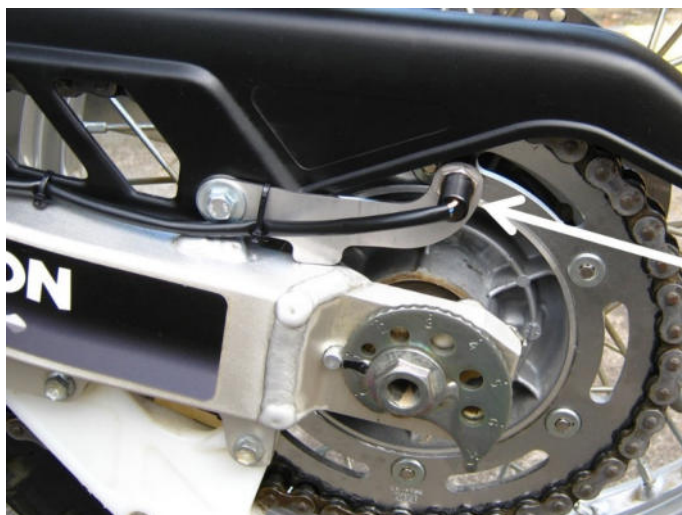
The **Electric Throttle Servo (2)** is mounted on the left side of the motor, it is attached using brackets attached to two of the crankcase side cover bolts. New longer high tensile bolts are provided in the kit to replace the original bolts.



The **CIU or Cable Interface Unit (3)** is mounted on the right side of the motor, behind the oil cooler. It has a new **cable (4)** running from it to the carburetor. The mounting bracket for the CIU has three different mounting holes for the CIU so it can be adjusted up or down to allow for different fuel tank designs. A new longer high tensile bolt is provided in the kit to replace the original bolt.



The **Speed Sensor (5)** is mounted on the left side of the rear wheel and picks up on magnets inserted into the socket heads of the rear sprocket mounting bolts. A new longer high tensile bolt is provided in the kit to replace the original chain guard mounting bolt.



MotorCycle Cruise Controls

Unit 13, 137~145 Rooks Road

Nunawading VIC 3131

AUSTRALIA

Web Site:

<http://www.mccruise.com>

International:

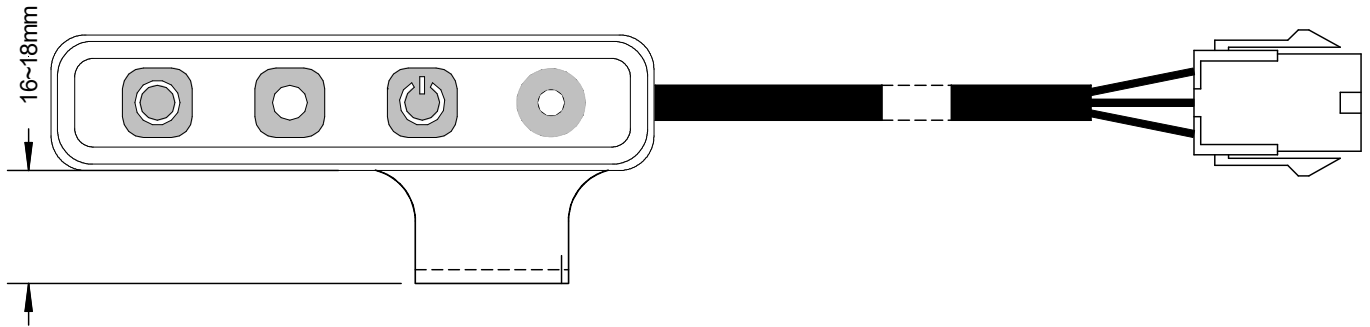
Phone (International Access Code) 61 3 9808 2804

Australia:

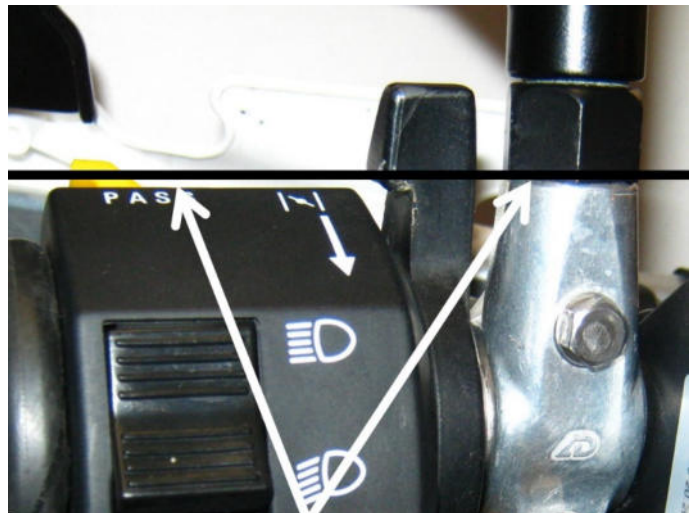
Phone (03) 9808 2804

E-mail: sales@mccruise.com

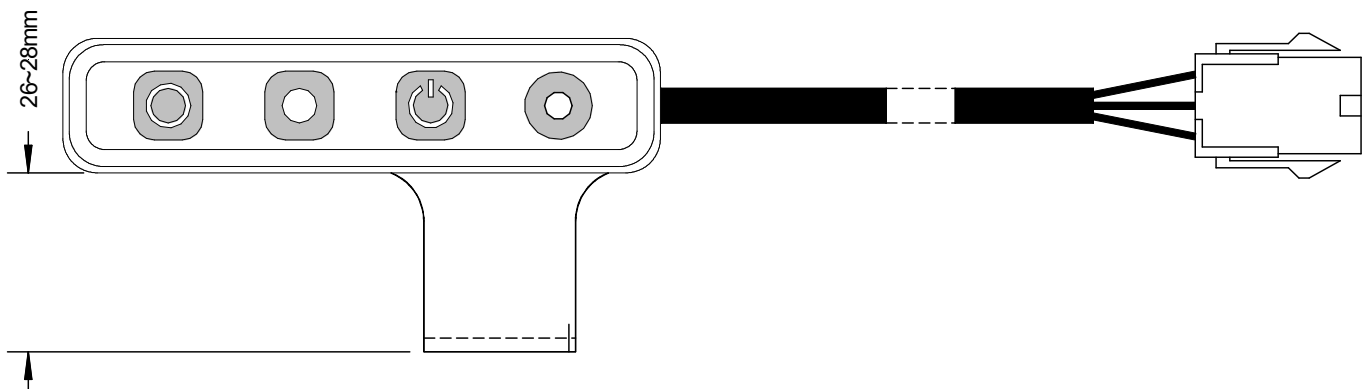
The standard **Control Switch (6a)** is our original style switch mounted on the left hand (clutch) lever mirror mount. The switch is located above the left switch block.



The bike we prototyped the cruise on had aftermarket clutch and brake lever assemblies. The mirror mount on this bike is almost the same height as the top of the bike's switch block. The 'standard' switch bracket we supply is suited to this height of mirror mount, so the switch clears the choke lever satisfactorily. This switch bracket places the bottom of the switch approximately 16 to 18mm above the mirror mount on the clutch lever assembly.



If your bike has a shorter mirror mount, or you would like more clearance between the bottom of the switch and the choke lever we also have a taller **Control Switch (6b)** available which is roughly 10mm (3/8") taller.



MotorCycle Cruise Controls

Unit 13, 137~145 Rooks Road

Nunawading VIC 3131

AUSTRALIA

Web Site:

<http://www.mccruise.com>

International:

Phone (International Access Code) 61 3 9808 2804

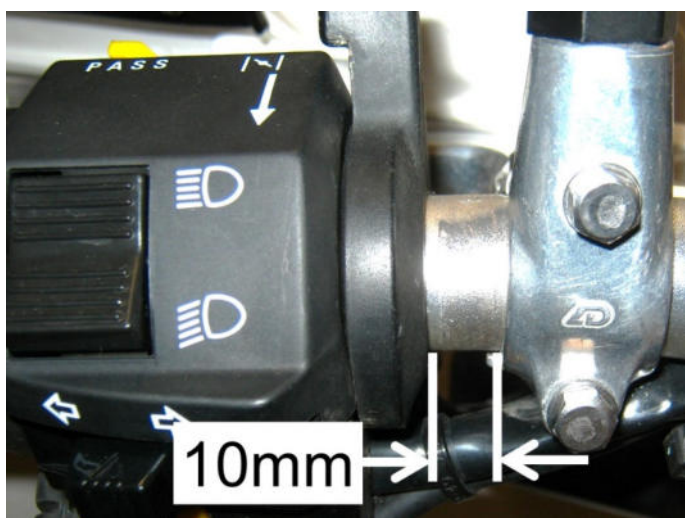
Australia:

Phone (03) 9808 2804

E-mail: sales@mccruise.com

The is also the option of our new **Slim Control Switch (6c)** which may be mounted directly to the handlebar. The usual position for this switch is between the bike's switch block and the clutch lever mount as shown here. On the bike we had, if the clutch lever mount is moved across to make space for the switch (10mm gap required – see photo below left), when the clutch lever is pulled in, the clutch lever contacted the bike's switch block before contacting the grip (photo below right). Different clutch levers may alleviate this issue.

It may also be mounted between the grip and the bike's switch block to move is close to the rider's hand or the other side of the clutch lever mount, but the reach to the switch is then very long.



The **Wiring Harness (7)** has the same type of plugs or terminals 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 harness are plugged in to the switch and the bike's harness. Tach (engine speed) sensing is detected from the bike's ignition coil. This is used to disengage the cruise if the clutch is operated, and the engine rpm change up or down. The bike's clutch switch is also connected to the cruise control to disengage the cruise control. The cruise control is grounded on the negative terminal of the battery. All these connections are "Plug & Play", no cutting of wires or splicing is required.

MotorCycle Cruise Controls

Unit 13, 137~145 Rooks Road

Nunawading VIC 3131

AUSTRALIA

Web Site:

<http://www.mccruise.com>

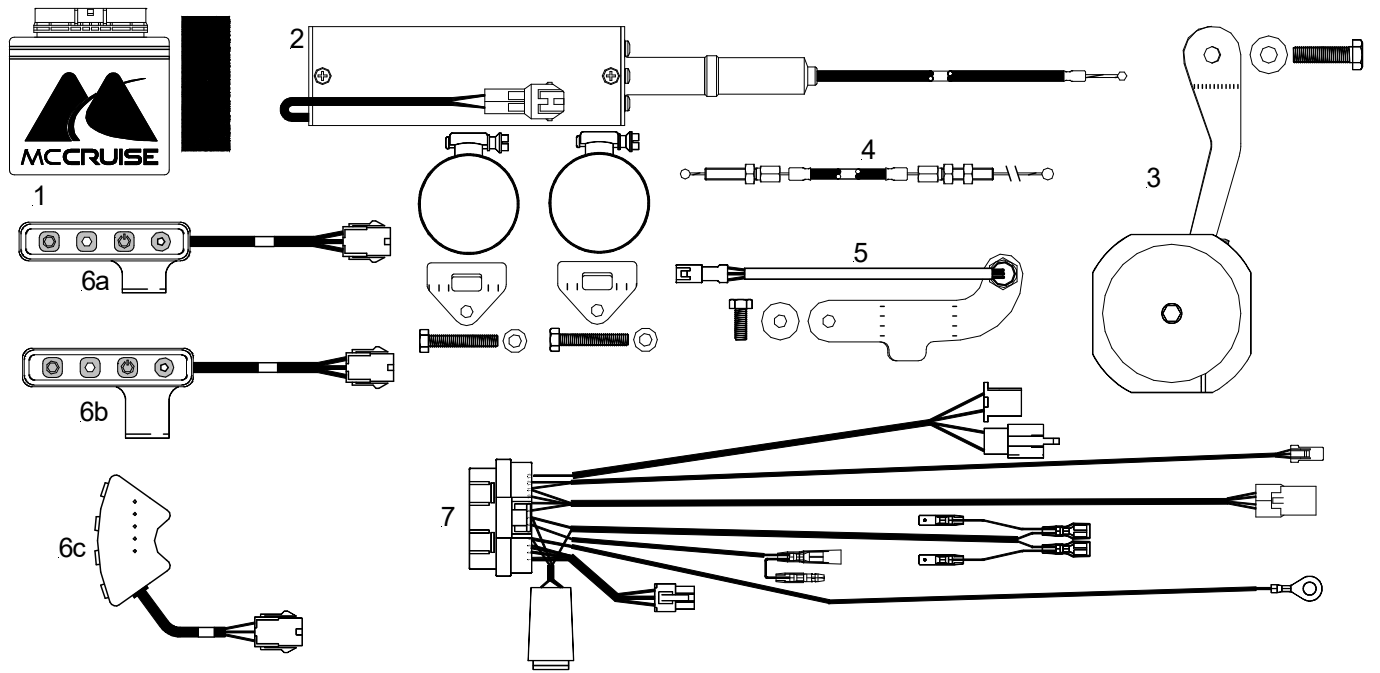
International:

Phone (International Access Code) 61 3 9808 2804

Australia:

Phone (03) 9808 2804

E-mail: sales@mccruise.com



MotorCycle Cruise Controls

Unit 13, 137~145 Rooks Road

Nunawading VIC 3131

AUSTRALIA

Web Site:

<http://www.mccruise.com>

International:

Phone (International Access Code) 61 3 9808 2804

Australia:

Phone (03) 9808 2804

E-mail: sales@mccruise.com