Electronic Cruise Control for

BMW F650/700/800GS

D2D ACCESSORIES
ELECTRONIC CRUISE CONTROLS

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 2.5kg.

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.

NOTE: - The photos here are of a F700GS. See the end of the document for photos of all three models.

The **Computer (1)** mounts on the left side of the steering head, inside the fairing (black arrow).

The **Electric Throttle Servo (2)** is mounted in front of the engine on the left side (lower white arrow).

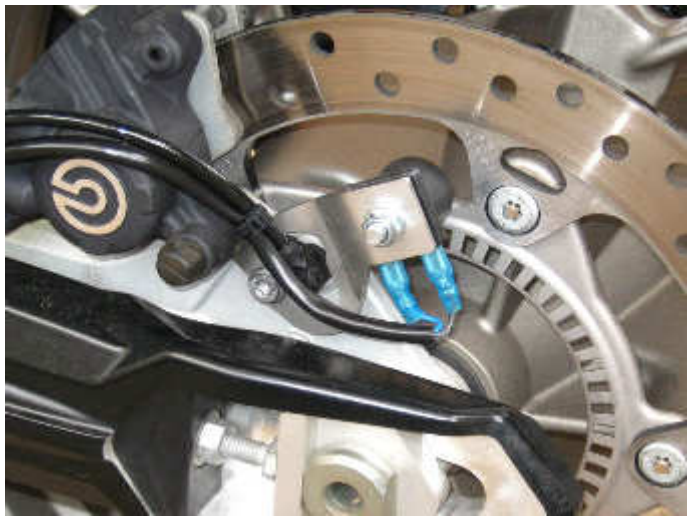
The **CIU (3)** is mounted on the left side of the bike beside the cylinder head (upper white arrow). A new **cable (4)** connects it to the throttle bodies.

A closer view of the cruise control **Computer (1)** inside the fairing.

A closer view of the **Electric Throttle Servo (2)**.

A closer view of the **CIU (3)**.

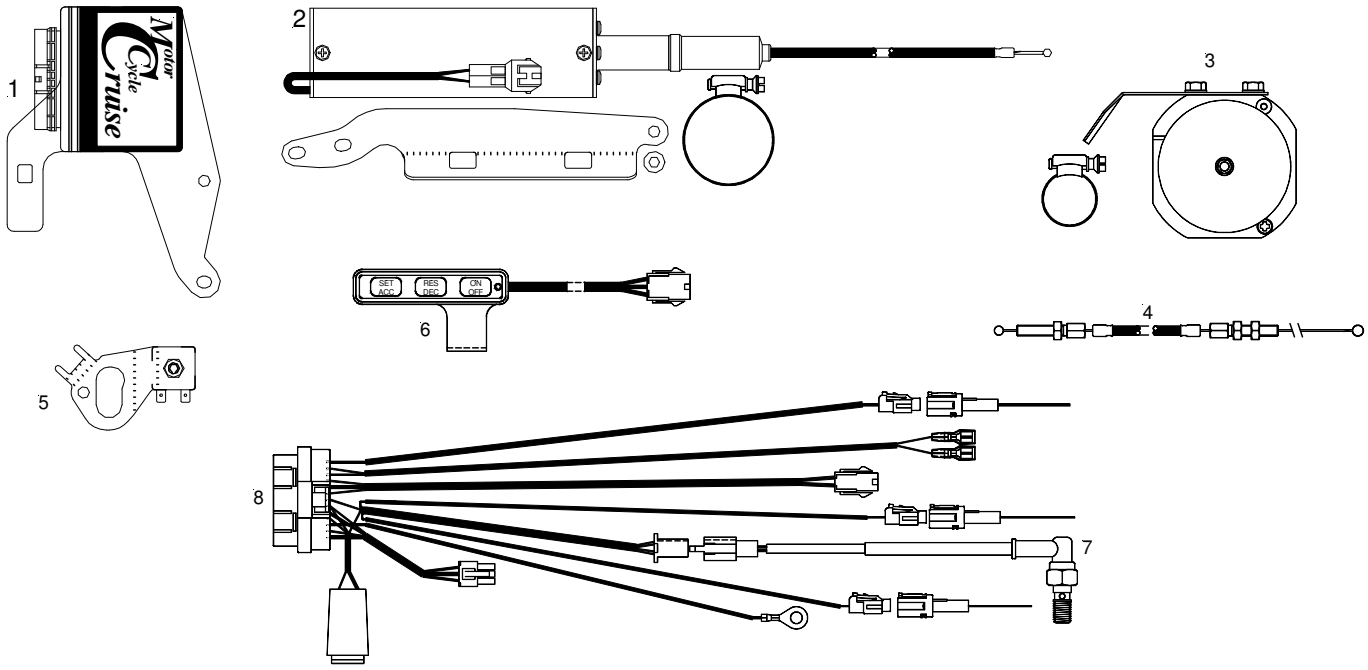
The **Speed sensor (5)** is mounted on left side of the rear wheel, on the ABS wheel speed sensor. Nickel-plated magnets are placed in the heads of the bolts that mount the brake disc.



The **Control Switch (6)** is mounted on the left side mirror stalk. The switch is located just above the left switch block. There is still good access to the 'INFO' and Hazard buttons immediately behind the cruise control switch. If desired a taller control switch bracket is available as a no cost option. The higher bracket is part number MCS830U. This places the control switch approx 10mm (3/8") higher to allow easier access to the 'INFO' button.

To ensure that the cruise control installation is as safe as possible, an additional **hydraulic pressure switch (7)** is fitted to the bikes front brake circuit. This is to provide a back up method of disengaging the cruise control in the event of failure of the bikes brake light circuit. Fitment of this switch involves replacing one of the brake line 'banjo' bolts with a new bolt that has a pressure switch built in to it. This switch is fitted to the front brake master cylinder (front brake lever assembly).

The **Wiring Harness (8)** has the same type of plugs or terminals that are already used on the motorcycle, with three exceptions. Power for the cruise control is taken from the positive wire to the bike's accessory power plug. Tach (engine speed) sensing is detected from the bike's ignition primary circuit. Brake sensing if from the bikes brake light circuit. These connections must be spliced. Splice terminals and heat shrink tube are supplied in the kit to make these connections. The cruise control is grounded on the negative battery terminal. The wiring loom is a 'custom' finished item, with all parts of the loom cut length and terminated appropriately.



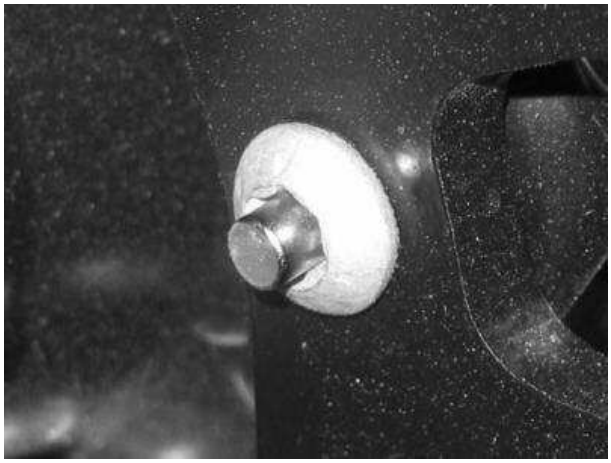
These photos show the left side of the F650GS (above left), F700GS (above right) and F800GS (right). The cruise control kit is the same for all three models, but there are slight differences in the calibration of the cruise control computer.

Disc brake mounting bolts on current BMW motorcycles.

We are aware of four different type heads in disc brake mounting bolts on current model BMW motorcycles.

The F650GS and current F700GS and F800GS has this new bolt, a flat head T-40 ‘Torx’ fitting and the magnets we use to fit this are 4.75mm diameter x 4.75mm long.

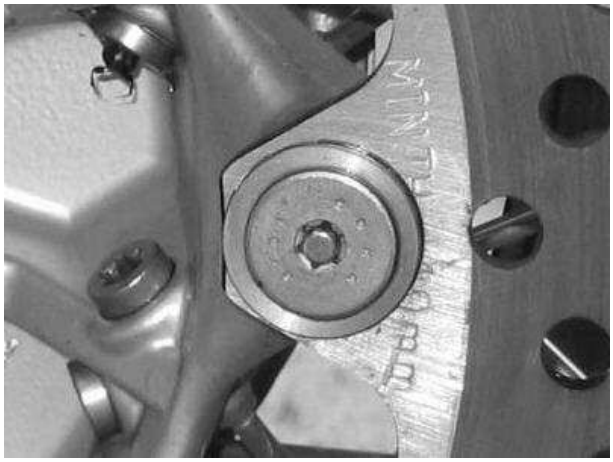
The current F800GS has this new bolt on the front wheel, a T-30 'Torx' fitting and the magnets we use to fit this are 4mm diameter x 5mm long. This design has gone back to the BMW's earlier practice of having a disc carrier bolted to the wheel and then the disc 'floats' on the carrier. We don't know if earlier F800GS models use this bolt on the rear disc as well or use the same bolt used on the current model bikes.



All models that we are aware of from mid '90's to 2007 use this 'button' (rounded) head bolt. The recess in the head of this bolt is a T-40 'Torx' fitting and the magnets we have to fit this are 4.75mm diameter x 4.75mm long. We have seen this bolt in various models, R1100RT, R1150RT, R1150GS, R1100S, K1100RS, K1100LT, R1200GS, R1200S, K1200S, F800ST.

Note that this type of bolt is used in earlier designs that bolt a disc carrier to the wheel and the discs then are allowed to 'float' on the carrier and also later models as shown here with the disc bolted to the wheel without a carrier, but there are spring washers on the bolt to allow the disc to 'float'.

Some current (2008) bikes have flat head bolts. The recess in the head of this bolt is a T-30 'Torx' fitting and the magnets we have to fit this are 4mm diameter x 5mm long. We have seen this bolt on the new (late 2008) R1200GS.



This kit for this model F650/700/800GS comes with magnets to fit the first bolts (flat head T-40). If your bike has different size bolts, please let us know so we can supply appropriate magnets.