



**Motorcycle  
Electronic Cruise Control**

**Electrical connector range**

**10 December 2024**

**MOTORCYCLE CRUISE CONTROLS**

**MotorCycle Setup Pty. Ltd.  
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AUSTRALIA**

## **Electrical connectors.**

We have available to us most of the common electrical terminals and housings used for connections on motorcycles.

If you can take digital photos, and e-mail them to us, we can usually identify the type and supply them with the kit. This will enable you to make ALL or most electrical connections on the bike without cutting or soldering any wires on the bike's wiring loom.

The drawings following show the most common connectors found on Japanese bikes and a description of their most common applications. Some European manufacturers use these connectors too.

**NOTE: - The electrical terminal kit is a standard cost and includes a basic set of terminals that every kit uses. These include terminals and blanking plugs for the cruise control computer plug, ring or eye terminals for ground connection.**

**If you take the time to find out what your bike has in most cases we will be able to supply all or most of the terminals and housings needed to professionally finish the installation. There is NO ADDITIONAL COST involved in supplying these parts. You just have to tell us what to supply.**

**We will NOT supply multiple different types of connectors for each position. ie. We will only supply one type of connectors for brake switch connection, one type for clutch switch connection etc.**

### **Brake light switch connection.**

**NOTE: - You will only need to connect the cruise control to either the front OR rear brake light switches. NOT BOTH.**

Most manufactures have brake light switches on the FRONT brake that has two small spade terminals on them. The cruise control can be connected to this switch if desired. Typically, the width of the spade on these switches is 4.8mm, which is a standard size, but is smaller than most 'normal' spade terminals that are common in automotive applications.

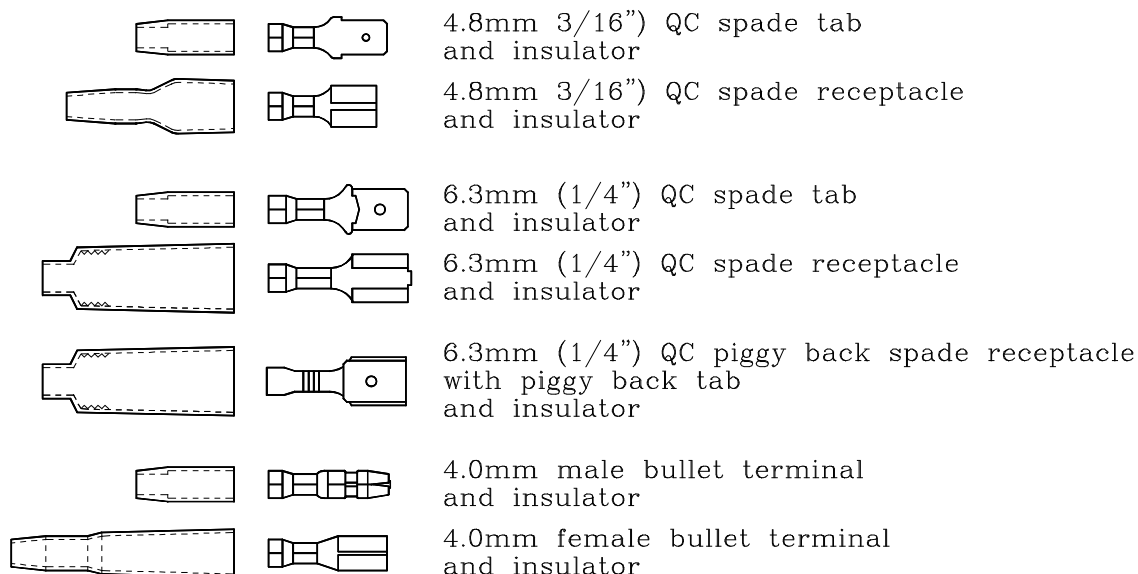
The photo shows a typical Honda front brake light switch with the cruise control brake sensor wires connected to the switch and the bike's original wires connected to a 'patch' connections with spade terminals on them.

**If you want these terminals in your kit your need to order a '4.8mm QC Spade Brake Switch kit'.**



The drawing below shows a selection of regular terminals available.

Any sets of these may be requested for brake light switch connection.

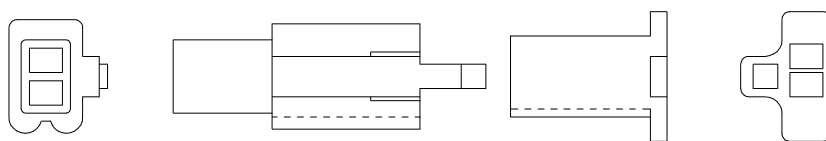


In addition to the above, the following drawings show a variety of brake light switch connectors that are used on REAR brakes.

Rear brake light switch connector (unsealed)  
 Part ID. JD02 2 way  
 Wire colours usually black on switch end  
 Wire colours variable at loom end  
 All makes use this

This is an older design but is still used on some bikes. All manufacturers have used this design at some time.

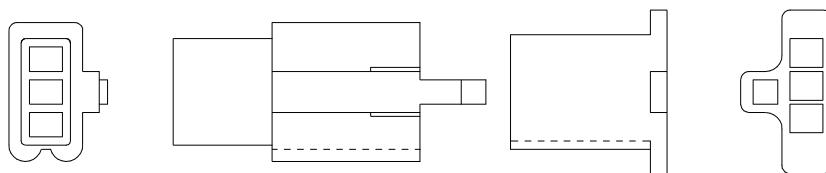
**If you want these plugs in your kit your need to order a 'JD 2 way Brake Switch kit'.**



Rear brake light switch connector (unsealed)  
 Part ID. JD02 3 way  
 Wire colours usually black on switch end  
 Wire colours variable at loom end  
 All makes use this

This is the same design as the above, but using a three-way plug instead of a two-way. Only two of the holes are used for brake light switch connection.

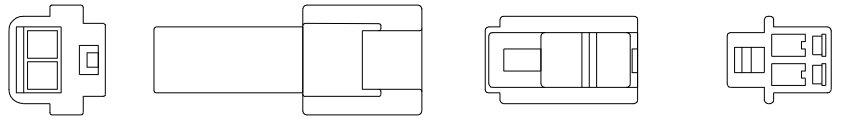
**If you want these plugs in your kit your need to order a 'JD 3 way Brake Switch kit'.**



This design is current on many Yamaha models. We have not seen this type of plug on other makes at this time.

**If you want these plugs in your kit you need to order a 'MT090 Unsealed 2 way Brake Switch kit'.**

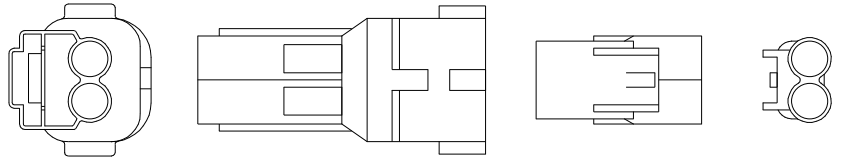
Yamaha rear brake light switch connector  
(unsealed)  
Part ID. MT090 Unsealed 2 way  
Wire colours usually black at switch end  
Brown and yellow at loom end  
Other colours also used



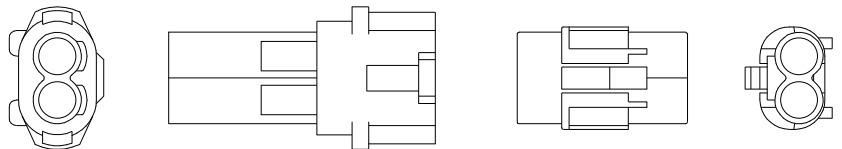
This is a common design seen on some Honda cruisers. We have not seen this on other makes at this time.

**If you want these plugs in your kit you need to order a 'HM090 Sealed 2 way Brake Switch kit'.**

Rear brake light switch connector (sealed)  
Part ID. HM090 Sealed 2 way  
Wire colours usually black on switch end  
Wire colours variable at loom end  
All makes use this



Rear brake light switch connector (sealed)  
Part ID. MT090 IL type Sealed 2 way  
Wire colours usually black on switch end  
Wire colours variable at loom end  
All makes use this



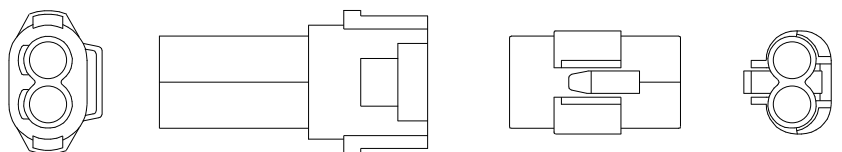
This is a common design on some Yamaha cruisers. We have not seen this on other makes at this time. This is VERY similar to the one below, but they will NOT fit each other. Be careful to select the correct plug type.

**If you want these plugs in your kit you need to order a 'MT090 IL Type Sealed 2 way Brake Switch kit'.**

This is VERY similar to the one above, but they will NOT fit each other. Be careful to select the correct plug type.

**If you want these plugs in your kit you need to order a 'MT090 AL Type Sealed 2 way Brake Switch kit'.**

Rear brake light switch connector (sealed)  
Part ID. MT090 AL type Sealed 2 way  
Wire colours usually black on switch end  
Wire colours variable at loom end  
All makes use this



### Clutch switch connection.

Many manufacturers have a clutch switch on the clutch lever assembly that has two small spade terminals on it. The cruise control can be connected to this switch if desired. Typically, these spades are the same as those used on the brake light switch, 4.8mm.

**If you want these terminals in your kit your need to order a '4.8mm QC Spade Clutch Switch kit'.**

As for the brake light switch connection, the selection of terminals shown in the picture on page 24 are also available for clutch switch connection.

In addition to this, a number of bikes are now coming out with clutch switches that use the JD style brake light switch connector (see page 23). The female housing is moulded into the switch, and the male housing is fitted to the wiring loom. Because we have both male and female housings available, we can supply the parts necessary to make a suitable patch for the clutch switch connection.

**For a 2 way plug, if you want these plugs in your kit your need to order a 'JD 2 way Clutch Switch kit'.**

**For a 3 way plug, if you want these plugs in your kit your need to order a 'JD 3 way Clutch Switch kit'.**

### Tach sensor connection.

On most installations, the tach sensor wire will be connected to the active terminal on one of the bike's ignition coil primary. This connection is usually a 6.3mm QC spade terminal on the coil and a matching receptacle on the wire. The easiest way to make this connection is to use a 'piggy back' terminal on the end of the tach sensor wire. This terminal connects to the spade terminal on the bike's ignition coil, and the bike's wire connects to the piggy back terminal.

**If you want this connection in your kit you need to order a 6.3mm QC Piggy Back Receptacle Tach Sense kit.**



As for the brake light switch connection, the selection of terminals shown in the picture on page 22 are also available for tach sensor connection (the piggy back terminal is shown in this picture).

We have also seen some bikes using the HM and MT090 sealed 2 way connectors that are shown on page 24.

## Speed sensor connection.

If you order a speed sensor assembly with your kit, you will automatically receive suitable terminals to enable you to connect this to the wiring loom.

If you are going to connect the cruise control to your bike's speedometer sender, the following drawings show a variety of common speedometer sender connectors that are in use.

This is an older design but is still used on many bikes. Most manufactures have used this design at some time.

**If you want these plugs in your kit your need to order a 'JD 3 way Speed Sensor kit'.**

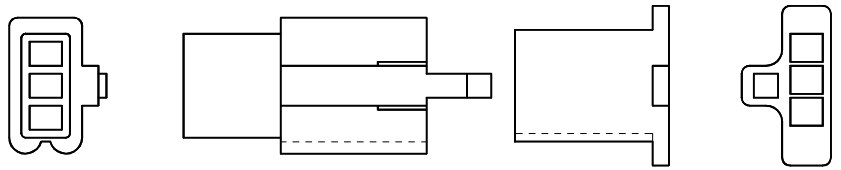
These two designs are in common use at the moment.

Because you only need to connect to ONE of the speed sensor wires, we do not provide these three way housings, but we DO provide suitable terminals, seals and ONE way housings to enable you to assemble a suitable patch.

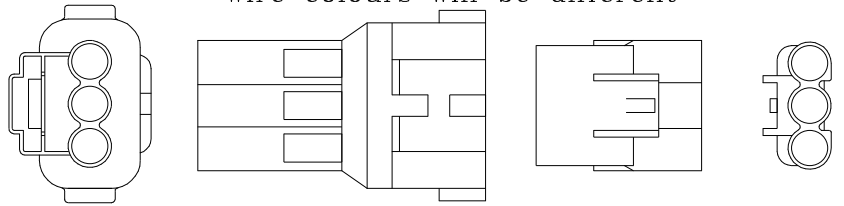
If you have either of these designs of speedometer sender connector on you bike we can supply suitable terminals and housings to make a waterproof patch connection.

**If you want this in your kit your need to order a 'MT090 Sealed 1 way Speed Sensor kit'.**

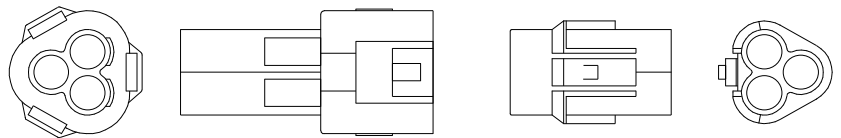
Honda speed sensor connector (unsealed)  
Part ID. JD022 and JD023  
Wire colours usually pink, green and black  
Other makes use this too  
Wire colours may be different



Speed sensor connector (sealed)  
Part ID. HM090 Sealed 3 way  
Honda wire colours usually pink, green and black  
Other makes use this too  
Wire colours will be different



Yamaha speed sensor connector (sealed)  
Part ID. MT090 Sealed 3 way  
Wire colours usually orange, pink and black/white at sensor end  
Blue/yellow, black/white and white at loom end  
Other colours also used



While it is difficult to cover all designs possible on motorcycles, many current Japanese motorcycles use either HM 090 or MT 090 sealed connectors in many different positions on their bikes. These connectors may be anything from the two and three way connectors shown here, up to 20 way or more. They all use the same terminals, and as a result the 1 way patch kit can be used.

The 'MT090 Sealed 1 way Speed Sensor kit' can be used in many different locations to make a safe, waterproof patch connection.

If you wish to make up a patch using all three wires on the above designs, we can supply patch kits using the three way housings instead of one-way. This makes fitting the patch easier, however making the patch is more time consuming.

**If you want either of these in your kit your need to order:**

**'HM090 Sealed 3 way Speed Sensor kit' for the HM 090 plugs shown above.**

**'MT090 Sealed 3 way Speed Sensor kit' for the MT 090 plugs shown above.**

Ground connection.

Suitable 6.3mm (1/4") ring terminals are provided in the kit to allow connection to the battery negative terminal.

NOTE: - We have many other connectors available, the connectors shown here are just the very common ones used on Japanese bikes.

If you can take good clear photos and email them to us, we may be able to supply most or all of your terminal and housing requirements.