

Motorcycle Electronic Cruise Control

Using Utilux roll crimpers

MotorCycle Cruise Controls

MotorCycle Setup Pty. Ltd. A.B.N. 94 798 167 654 6 Kingston Street Mount Waverley, Victoria, 3149 AUSTRALIA If you purchased your cruise control with the 'Universal' wiring loom and the optional Utilux terminal crimpers, the following instructions will help you get the best results from using the crimpers.

We supply two different crimpers to help you install the cruise control wiring loom in the safest and most professional way possible.

The Utilux No.147A crimpers are used for the cruise control computer plug terminals and do the best crimp on these terminals. Workshops doing multiple cruise control installations would be advised to use this crimper.

The Utilux No. 61 crimpers can be used to crimp all the terminals used in the cruise control installation on motorcycles and ATV's including the computer plug terminals. It does NOT produce as professional a result when used on the computer plug terminals and it can be a little awkward to use, but the crimp is good and is perfectly serviceable. If you are doing a one-off installation, we would not recommend purchasing the No. 147A as well as the No. 61. The result does not justify the extra expense.

Utilux uninsulated terminal crimping tool No. 147A.

The No. 147A crimpers are for use on small terminals. They are provided in this case for use on the terminals used in the cruise control computer plug.

These crimpers will also crimp many other terminal types, including flag terminals (terminals that have the wire entering from the side of the terminal instead of the back)

Using the No. 147A crimpers (computer plug terminals).

• Use the smallest jaw with the roll crimp to crimp the wire bucket on the terminal and the middle jaw with the round crimp to crimp the insulation bucket.



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- Strip $4\sim 5$ mm (3/16") of insulation from the end of the wire.
- Place the computer plug terminal on the wire so the stripped wire is in the small terminal bucket and the insulation is in the large terminal bucket.



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• Place the terminal wire bucket in the smallest jaw of the crimper and crimp the terminal to the wire.





• Place the terminal insulation bucket in the middle jaw of the crimper and crimp the insulation bucket.





• Check the terminal for straightness. If necessary, gently bend the terminal up at the end to straighten it out.



• The terminals should look like this after crimping.



Utilux uninsulated terminal crimping tool No. 61.

The No. 61 crimpers are for use on small and medium size terminals. They are provided in this case for use on the terminals used in the cruise control computer plug, and most of the other terminals used on motorcycle cruise control installations.



Using the No. 61 crimpers on computer plug terminals.

• Use the smallest jaw with the roll crimp (red dot) to crimp the wire bucket on the terminal, and the middle jaw with the roll crimp (blue dot) to crimp the insulation bucket.



• Place the computer plug terminal on the wire so the stripped wire is in the small terminal bucket and the insulation is in the large terminal bucket.



• Place the terminal wire bucket in the smallest jaw of the crimper and crimp the terminal to the wire.





• Place the terminal insulation bucket in the **middle** jaw of the crimper and crimp the insulation bucket **VERY GENTLY AND CAREFULLY. You will have to align the crimper carefully to achieve a good crimp on the insulation bucket. It is very easy to bend the tabs out of shape.**







• Now place the terminal insulation bucket in the **small** jaw of the crimper and crimp the insulation bucket **VERY GENTLY AND CAREFULLY to close it down properly.**



• If the terminal is bent like this (it most probably will be)...

...hold the terminal in the crimper and gently push the terminal up to straighten it.



• The terminal should look like this after crimping.



Using the No. 61 crimpers on most other terminals.

The most common terminals used for connection to the motorcycles electrical system are shown below.

Some common spade and ring terminals.



Butt and single splice terminals.





2.8mm Quick Connect terminals and housings. The photo shows 2-way housings (commonly used on brake light switch connections), but they also are commonly used in 3-way form on speed sensor, brake light switch and clutch switch connections.



090 series sealed connectors. 1-way and 2-way housings are shown here, but these are also commonly used in 3 and 4-way variants.

- In most cases use the middle jaw with the roll crimp (blue dot) to crimp the wire bucket on the terminal, and the end largest jaw with the roll crimp (yellow dot) to crimp the insulation bucket (circled in the photo).
- Some smaller terminals will require the smallest jaw (red dot) for the wire bucket and either the middle or largest for the insulation bucket.



• In most cases, strip about 6mm (1/4") of insulation from the end of the wire and then fold the wire over. The wire buckets on most of these terminals are quite large, and folding the wire to fill the bucket results in a better quality crimp.



• Place the terminal wire bucket in the middle jaw of the crimper and crimp the terminal to the wire.





• Place the terminal insulation bucket in the end jaw of the crimper and **GENTLY** crimp the insulation bucket. It is preferable to **NOT** penetrate the insulation with the tabs. Be careful when crimping. Some terminals require some care to prevent the insulator tabs being bent or broken during crimping.

• The terminal should look like this after crimping



- Be careful with the 2.8mm QC tab terminal. If the wire protrudes from the end of the wire bucket at all, you will not be able to insert the terminal all the way into the housing.
- The sealed terminals require the same procedure, just don't forget to fit the seal first and DON'T crimp the insulation bucket too hard and destroy the seal.
- The 6mm (1/4") ring terminal is made of VERY heavy gauge material and requires a LOT of force (two hands) to crimp satisfactorily.
- Use the middle jaw (blue dot) on the crimper to crimp the single splice terminal <u>OR</u> close the terminal up a little by hand first (squeeze it in your fingers) then use the small jaw (red dot).

