

'Quad Cruise' Electronic Cruise & Spray Control for Polaris Ranger XP 1000 from 2017



NOTE: - When ordering your cruise control you need to specify which type of connection your vehicle has on the accessory power bus. Check the end of this document for details.

Quad Cruise is a new version of the MotorCycle Setup cruise control for vehicles with Throttle-By-Wire (TBW) electronic throttle systems.

It is designed to operate at speeds as low as 4 km/h (3mph) and up to 25 km/h (15 mph). The "Quad Cruise" has been designed to provide power to any crop spray or other accessory fitted to the ATV (Quad) via an optional switched 10 amp fused outlet built into the cruise control wiring harness - either manually, or automatically when the cruise control is engaged.

The cruise control can be set to a specific speed to spray a row by pressing the SET button, and turned off at the end of the row with the brake lever. The RES button can be used to set the vehicles' speed back to the previous speed. The spray system will turn on and off with the cruise control, when the spray switch is in the AUTO position. Manual operation of the spray is possible when the spray switch is in the MANUAL position.

You can accelerate the vehicle further, if desired, by using the throttle pedal. When the throttle is released the cruise control will take over again at the previous set speed.

If the cruise control is disengaged, for example by applying the brake, it may be resumed by pressing the RES button. The vehicle will accelerate or decelerate to the previous set speed provided the vehicle is still travelling between about 3 kph (2mph) and about 25 kph (15mph). The cruise control will not engage outside these speed limits so it is not possible to accidentally engage the cruise control when the vehicle is stationary.

To increase the set speed while the cruise control is engaged, the SET button may be pressed and held. The speed will gradually increase until the button is released. The speed control will then maintain the new speed. Alternatively the 'Tap up' feature allows the speed to be increased each time the SET button is momentarily pressed.

To decrease the set speed the RES button may be used in the same way as the SET button, but this will reduce the speed instead of increasing it.

The amount the speed changes with the 'Tap Up' and 'Tap Down' function is selectable. The standard setting is 0.5 kph per press, but this can be changed from 0.5 mph per press down to 0.01kph in several steps in both kph and mph increments.

Once the desired speed is SET for a particular application, this speed can also be 'locked' if desired so the operator cannot accidentally change the SET speed. The operation to 'lock' and 'unlock' the SET speed takes 5 seconds and is done using the cruise control switch. When the speed is 'locked' it is retained in memory permanently even if the vehicle is turned off. This function is useful when a precise and repeatable speed is required for spraying for example, and once SET you do not want it to be changed accidentally.

Every effort has been made to make the cruise control waterproof. The new computer is fully sealed. Wherever possible sealed connectors have been used on the wiring harness.

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

The cruise control draws minimal current from the vehicle, typically less than 0.3 Amp. 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).

Installed weight of the cruise control is approximately 1kg.



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

The **Computer (1)** is mounted in the front compartment.



The **Control Switch (2)** can be mounted on top of the dashboard on the left side of the steering wheel. The photo below left shows the control switch without the optional spray power control switch. The photo below right shows the control switch fitted to another Polaris model WITH the optional spray power control switch (2A on the parts drawing below). If the cruise is ordered without the optional spray power control, this switch is not included (2B on the drawing).



The **Control Switch (2)** can also be mounted on top of the dashboard on the right of the steering wheel. The photo below left shows the control switch on the Ranger XP without the optional spray power control switch. The photo below right shows the control switch fitted to another Polaris model WITH the optional spray power control switch.

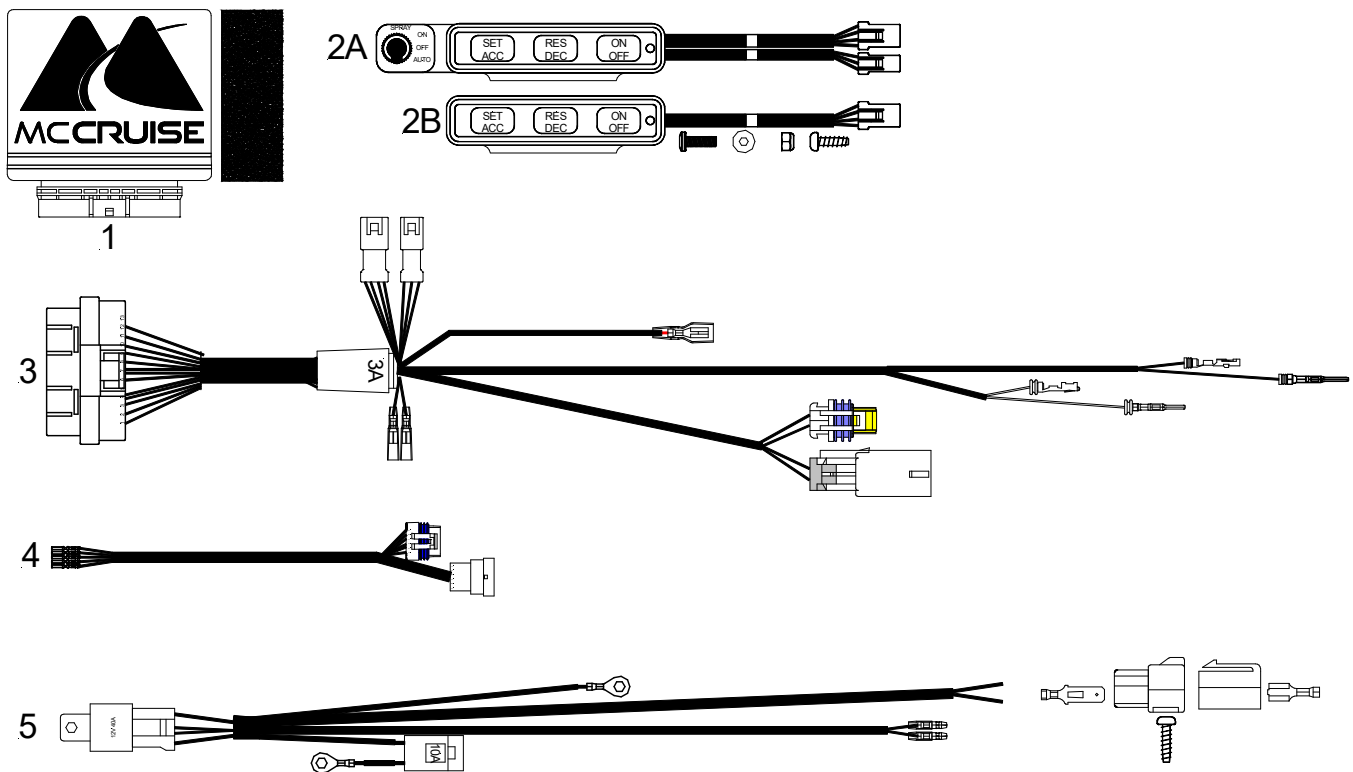


The **Main Wiring Harness (3)** is dedicated to the vehicle. The connectors on the harness match the vehicle's connectors, so it is not necessary to cut or strip any wires during the installation.

The **Throttle Pedal Harness (4)** is connected at the vehicle throttle pedal. The vehicle's connector on the pedal is disconnected, and matching connectors on the cruise control Throttle Pedal Harness connect to the throttle pedal and the vehicle's wiring harness. This bridges the connection and allows the cruise control to control the throttle.

Power for the cruise control is sourced from the vehicle's accessory power bus. Brake sensing is sourced from the brake light switch connection. Park and Neutral gear position sensing is sourced from the vehicle's gear position switch. Speed signal is sourced from the vehicle's speedometer sender. Earth (ground) is sourced through the Throttle Pedal Harness.

Power for the **OPTIONAL Spray Power Harness (5)** is sourced from the battery positive terminal and a two pin plug is provided that can be mounted anywhere on the vehicle for connection to the spray system or other powered accessory. Matching plug and terminals are provided in the kit for connection to the spray unit. Any accessory drawing less than 10 amps may be connected to this outlet.



See over the page for details of the accessory power bus.

Accessory power bus connection type.

Your vehicle may have either the earlier type power bus with three 'posts' for connecting accessories to the vehicle. This is located inside the front compartment, on the firewall between the cabin and front compartment.



OR

It may have the later type with a series of plugs on the firewall.

You must specify which connection type your vehicle has when ordering the cruise control.

