

SpeedSafe Electronic Speed Limiter Product Brochure



The SpeedSafe speed limiter is an electronic speed limiter which is custom configured to suit your ATV, UTV or Side by Side vehicle. It is a 'stand-alone' device or may be added to an existing 'QuadCruise' cruise control installation.

Note - A cruise control cannot be added to an existing speed limiter installation without replacing most of the parts.

The SpeedSafe speed limiter can be set to any speed desired. This product allows full use of the available power on the vehicle up to the 'limiting' speed. The unit can be supplied pre-programmed with a default limiting speed up to 55kph (35mph). If a speed is not specified when ordered, the default limiting speed is normally set to 25kph (15mph) to satisfy Occupational Health and Safety regulations. The 'default' speed is the speed the limiter will be set to any time the limiter is turned off and back on using the Setup switch or if the unit has a 'reset' for any reason. If that is not the speed desired, the owner/manager can set the speed limit to any speed.

CONFIGURATIONS: 'Tamper Resistant' and 'Standard' configurations are available on most models. Some models, particularly those with Diesel engines may not have this option.

When **'Tamper Resistant'** is selected, in most cases any interference with the speed limiter (disconnecting electrical plugs, removing a fuse or other 'tampering' and most failure modes) will result in the vehicle's engine stopping.

When **'Standard'** is selected, in most cases disconnecting wires or removing the fuse will disable the speed limiter but will allow the vehicle to operate normally. The hardware for both versions is the same, with a minor change to one wiring connection and the computer program. You **MUST** specify if you want 'tamper proof' or 'standard' configuration when the unit is ordered to get the correct default setting.

In remote operations, where if the vehicle became inoperable the operators could be exposed to risk, standard configuration is recommended. Tamper Resistant configuration is recommended in local areas where an inoperable vehicle is inconvenient, but not potentially life threatening.

When the vehicle reaches the limiting speed, the speed limiter causes the engine to misfire, progressively cutting engine power by controlling the operation of the fuel injector on vehicles with electronic fuel injection or by cutting ignition on vehicles with carburetor/s.

OPERATING MODES:

There are several different operating modes available.

Soft Cut Mode

When 'Soft Cut Mode' is selected, at the limiting speed the engine develops a slight, but rapid misfire. If the operator tries to go faster by applying more throttle, the speed limiter makes the misfire worse as speed increases. The 'range' of the speed variation from slight misfire to severe misfire is selectable (0.5kph to 8kph in several steps) as well as the 'rate' of the misfire (2, 4 or 6 'misfires' per second). If the speed for maximum misfire is exceeded, the engine is turned off until the speed drops back to the maximum misfire. If a very 'firm' limit is desired, a low range (0.5kph) would be selected, if a 'soft' limit is desired a high range (8kph) would be selected. The 'rate' of the misfire also affects the 'feel' of the limiter, but not the operation. Two misfires per second is very rough, six is smoother.

Hard Cut Mode

When 'Hard Cut Mode' is selected, at the limiting speed the engine is cut completely until the vehicle drops below the limiting speed. There is also a delay before the engine is turned back on. This delay can be varied in several steps from 0.1 to 4 seconds. The shortest delay setting is less 'severe', if the delay is extended, the 'feel' is much rougher.

Penalty Mode

'Penalty Mode' can also be selected when using either soft or hard cut modes. If the operator persists in running on the limit (causing misfire) for more than a few seconds, or if the operator 'bumps' into the limit twice in a few seconds, the limiting speed is reduced progressively and is held for several seconds. The amount the speed is reduced can be varied from 10% to 100% (vehicle stopped) in several steps. The time the reduced speed is held can be varied from 5 to 30 seconds in several steps. If the operator keeps the speed below the limiting speed, after the time has elapsed, the original limiting speed is restored. If the operator exceeds the lower penalty speed limit, the timer stops until the speed is reduced.

UTV SpeedSafe is Manufactured by MCCruise, global leaders in precision speed control
www.mccruise.com

Unit 13, 137-145 Rooks Road, Nunawading, VIC, 3131 AUSTRALIA
e: sales@mccruise.com p: +61 3 9808 2804



The following provides a brief description of the component locations of the UTV SpeedSafe speed limiter. Refer to the line drawing below to identify the component numbers in the text.

Current draw is minimal, typically less than a small light globe at approximately 0.20 amp (2.8 watts).

Installed weight of the speed limiter by itself (not including cruise control parts) is approximately 0.5kg (depending on model).

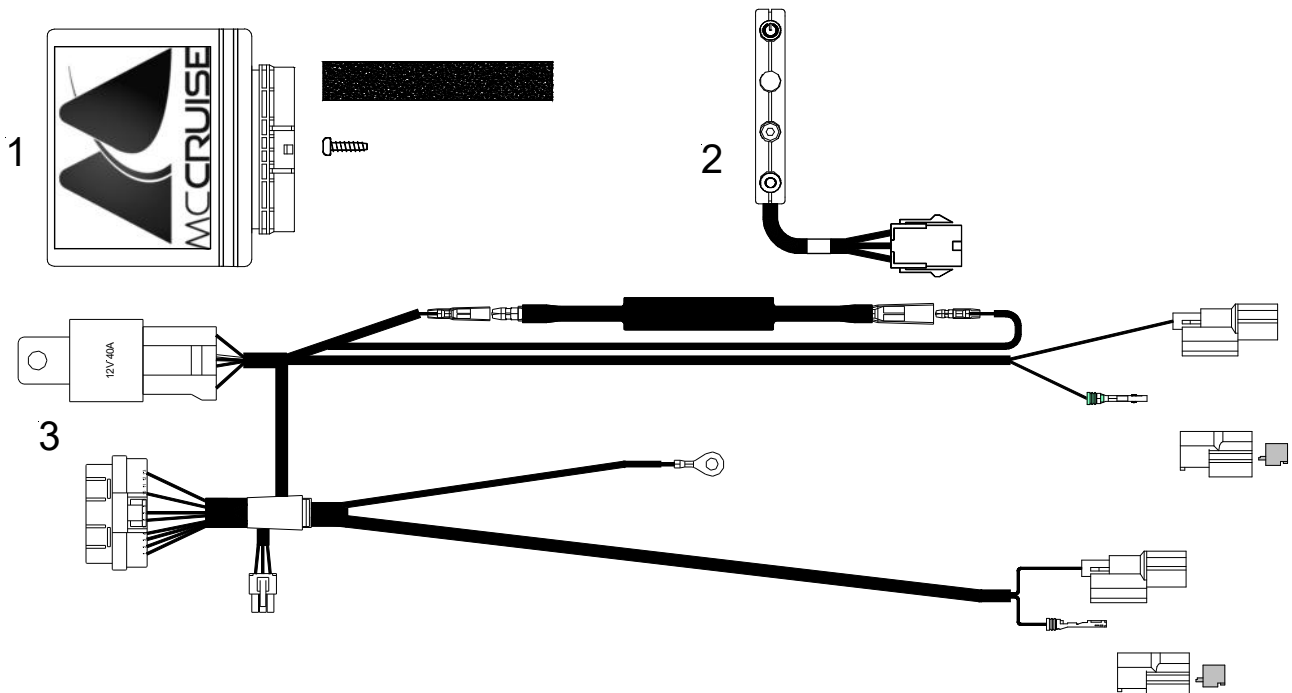
The Computer (1) is typically installed under the seats or in the front storage compartment. In the example shown it is installed under the seat on top of the vehicle's engine ECU, but this will vary depending on the vehicle.

The Setup Control Switch (2) is handheld for setup of the speed limiter and is then removed from the vehicle.

N.B. For use with QuadCruise the Set-Up Control Switch remains fitted to the vehicle. A specific set of instructions is provided to ensure that the speed limiter setup cannot be altered by the operator accidentally or intentionally.



The Wiring Harness (3) is dedicated to the vehicle. Power for the speed limiter is sourced from a suitable power source on the vehicle such as the vehicle's accessory circuit, engine management system or brake circuit. Speed signal is normally sourced from the vehicle's speedometer sender or other source of speed signal in the vehicle electrical system. The speed limiter is connected to the engine fuel injector or kill switch circuit to cut the engine. Ground is normally sourced from the negative terminal of the battery or the vehicle's engine ground connection. In most installations the connections are 'plug & play', the connectors on the speed limiter harness match the connectors used on the vehicle. No cutting or stripping of wires is necessary. Some installations do require some modification to the vehicle's wires, but most do not.



UTV SpeedSafe is Manufactured by MCCruise, global leaders in precision speed control
www.mccruise.com

Unit 13, 137-145 Rooks Road, Nunawading, VIC, 3131 AUSTRALIA
e: sales@mccruise.com p: +61 3 9808 2804