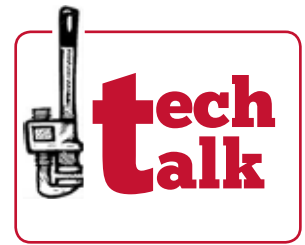


The truth about cruise control and aquaplaning ...



■ Words: The NRMA blog - posted on 26/8/2014 (reproduced with permission)

In a recent NRMA blog, the issue of using cruise control whilst driving in wet weather was canvassed. In the article, the author (Daniel@NRMA) reproduced a chain email that has been appearing on-and-off for a number of years.

"A 36-year-old female was travelling between Wollongong and Sydney. It was raining, though not excessively, when her car suddenly began to hydroplane and literally flew through the air. When she explained to the policeman what had happened, he told her something that every driver should know – NEVER DRIVE IN THE RAIN WITH YOUR CRUISE CONTROL ON. The policeman told her that if the cruise control is on and your car begins to hydroplane – when your tyres lose contact with the pavement, your car will accelerate to a higher rate of speed and you take off like an airplane. She told the policeman that was exactly what had occurred. The policeman estimated her car was actually travelling through the air at 10 to 15km/h faster than the speed set on the cruise control. The policeman said this warning should be listed, on the driver's seat sun-visor – NEVER USE THE CRUISE CONTROL WHEN THE PAVEMENT IS WET OR ICY."



image: www.pistonheads.com

How does cruise control operate?

Cruise control is a device used to keep the speed of the vehicle constant.

The speed of the wheels is constantly being measured and fed into a cruise control system that regulates the engine's output. Under a condition where the driving wheels have broken traction, such as an aquaplane situation, the sensor would measure an increase in wheel speed. The cruise control system would then reduce the amount of throttle and maintain the set speed. (This is the complete opposite to what is claimed in the e-mail to have occurred and causing the accident.)

In addition, cruise control systems are deactivated upon application of the brake pedal, which is usually deployed in emergency situations. Hence cruise control causing a 15 km/h increase in vehicle speed, under these conditions, is not possible.

Safe use of a cruise control

The safest way to operate a vehicle is to ensure that under all driving conditions you can control the vehicle (brake, corner and accelerate) in a safe manner. As the "cruise" control title infers, it is a device that should be used under steady driving situations.

Cruise control when deployed will attempt to keep the car at a constant speed set by the driver. Hence, if it has been set to 100 km/h speed, the car will enter a corner at 100 km/h. If this is an inappropriate speed for the corner, the subsequent braking to reduce speed will affect the balance of the vehicle which may in turn induce instability in the vehicle. This will affect the vehicle's handling and if not correctly compensated for by the driver, can in a worst case, result in a loss of control of the vehicle.

Wet roads significantly affect the grip of the tyres and this in turn can make corrective actions by the driver much more difficult to judge. Accordingly, the driver should assess the conditions of the road and adjust vehicle speed so it is suitable for the road.

To better understand safe operation of its cruise control, you should refer to your vehicle manual. Many owner manuals suggest cruise control should not be used in heavy traffic driving, city driving, and winding, undulating, slippery or unsealed roads.

It would be interesting to hear from any members who have aquaplaned or have had issues using cruise control under wet conditions. ■



image: SuperBlah, Louisiana < <http://forum.miata.net/vb/showthread.php?t=551502> >

Daniel penned the following response: While the final phrase in capital letters is good advice, the reasons given for arriving at this conclusion are misleading. Cruise control should not be used in wet conditions but there is no reasonable explanation why it would cause aquaplaning.

What is aquaplaning or hydroplaning?

Driving in wet conditions can be more hazardous than normal dry conditions as the wet conditions affect the tyre's ability to grip the road surface. In order to maximise the grip available to the tyres, water is dispersed via the tyre's grooves. At higher speed, the tyre (particularly if worn) may fail to disperse the water, allowing the tyre to ride on a plane of water and lose contact with the road surface. This is commonly referred to as aquaplaning or hydroplaning.

Worn tyres will aquaplane more easily due to lack of tread depth. Tyres worn below their tread depth indicators are no longer capable of clearing the road of water. If you want to get your Tyres checked, book in to one of our friendly MotorServes or one of our More4Members partners, Beurepairs or Tyreright.

This article was originally posted by "Daniel@NRMA" (<http://www.mynrma.com.au/blog/2014/08/26/the-truth-about-cruise-control-and-aquaplaning/>).

■ Please note: All "Tech Talk" information is provided as a guide only. All work is carried out at the owner's risk.