



CHANGE TO PCA DRIVER EDUCATION RULES

Late last year PCA invoked a new restriction for all Driver Education events operated by PCA or its Zones and Regions with regard to vehicles fitted with so called 'Automatic Braking Systems'.

The operation of these systems varies from manufacturer to manufacturer, but in essence they use a distance monitoring device (e.g. Radar and/or cameras) to measure the distance between itself and a vehicle ahead. The monitor also measures the rate of closure between the two vehicles. Its primary use is in conjunction with Adaptive Cruise Control (ACC) systems so that the driver can preset a distance to follow a vehicle and the ACC will maintain that distance, increasing or decreasing speed accordingly. It takes over throttle and brake control from the driver, although the driver can still override both functions if required.

In some vehicles, this technology is also used as a Collision Avoidance System, where even when ACC is not switched on, the system will still monitor the rate of closure to a vehicle or object ahead and if the distance closes rapidly with no intervention by the driver, it will apply the brakes in order to avoid a collision. Many of you may have seen this demonstrated in Volvo TV ads where a SUV driven by a distracted driver screeches to a halt to avoid a child crossing the road ahead.

No question these systems have their place, although many including me will despair of the reasons for their becoming necessary, i.e. inattentive drivers. The concern with regard to our Driver Education events is that the performance of these systems in a track environment cannot at this time be predicted. For example with vehicles running in close proximity and at elevated speeds, will a car rapidly closing on another prior to taking a pass be interpreted by the Collision Avoidance System as an impending impact and slam the brakes on? Not only will this action be unwanted, but it could also be very dangerous for vehicles following. Another scenario is a car passing another and then pulling back in front could invoke a similar system reaction in the passed car.

Because of these concerns, PCA has mandated that any vehicles fitted with such a Collision Avoidance System, must have a means of 100% defeating the system in order to be allowed to participate in any PCA Region organized Driver Education event. Upon request, this defeat function must be demonstrated to Tech Line personnel. It is the responsibility of non-Porsche drivers to ensure their vehicle complies with this requirement.

Not all manufacturers do have a means of switching off these Collision Avoidance systems entirely and those that do may need driver intervention every time the engine is started. With regard to Porsche vehicles there is no known problem.

Porsche Adaptive Cruise Control (ACC) with Porsche Active Safe (PAS) is optional equipment on several new Porsche vehicles. It has been available for a number of years; the exact offer is dependent upon vehicle model, derivative and model year (MY).

Vehicle Overview:

MY2010 **Panamera** (G1) 4S / Turbo: first Porsche offer of Adaptive Cruise Control (ACC). Porsche Active Safe (PAS) was not an expressed component of this system.
MY2011 **Cayenne** (E2) S / Turbo: first Cayenne offer of Adaptive Cruise Control (ACC) enhanced with Porsche Active Safe (PAS)
MY2012 **911 Carrera** (991-II): first 2-door offer of Adaptive Cruise Control (ACC) with Porsche Active Safe (PAS)
MY2013 **Boxster** (981): first mid-engine offer of Adaptive Cruise Control (ACC) with Porsche Active Safe (PAS).
MY2014 **Cayman** (981) first available and provided the same offer structure as MY13 Boxster.

The option "Adaptive Cruise Control (ACC) incl. Porsche Active Safe (PAS)" remains available on current model year vehicles, with enhanced system functionality in the interest of performance, comfort, and efficiency.

There is/was no offer of ACC w/PAS for 911 GT3 (neither 991-I nor 991-II), Cayman GT4 (981), and Boxster Spyder (981). The situation with the **Macan** is yet to be determined.

Basic System Description

Adaptive Cruise Control (ACC) is optionally available on the vehicles listed above. With the help of a radar sensor in the front fascia it monitors the distance to the preceding car, controls the speed in order to adhere to the distance preset by the driver (if necessary), and decelerates the vehicle down to standstill. The ACC system must be switched on and active with no exceptions (i.e. no brake pedal input, driver's door remains closed, radar sensor is not excessively dirty, etc.) in order for ACC to operate.

Porsche Active Safe (PAS) is a sub-component of the optionally available ACC system. The adaptive cruise control radar sensor is used for PAS functions. PAS functions, warning stages, and driver controls are listed in the below excerpt from the MY2017 911 Carrera (991-II) Owner's Manual for reference. Exact menu structure may differ by the model/derivative/year, but this excerpt is representative of the current offer across all model lines.

PAS functions include:

- Prefilling the brake system
- Brake Assist
- Target braking

The PAS system can notify the driver via three separate warning stages:

- 1) Latent warning (visual)
- 2) Prewarning (visual & acoustic)
- 3) Acute warning (visual, acoustic and tactile)

There are two (2) switch-off functions in the instrument cluster under Vehicle -> Settings -> Assistance Systems -> Active Safe (PAS): 1) System on, and 2) Prewarning on. These do need to be set each time the vehicle is started.

In short: PAS does not provide auto-braking. Rather, PAS supplements the driver's input to improve brake responsiveness and assist brake pressure force. It can also be switched off completely as described above.