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eRam Wing Actuation Kits*

PSM Disconnect Instructions

*Patent Pending

Leaving PSM on at the track could affect high speed handling, lead to engine cut out after long sweeping high speed turns, and might cook the back brakes. However, this procedure is only recommended for experienced track drivers. As someone else put it on one of the forums:

This is not something a new owner or first time Porsche owner should attempt. This is not something that should be disabled for street use. This should only be done for track events and for drivers with many years of track driving experience. NOT FOR A NOVICE. Porsche put these abilities into the car for safety and protection of the driver. They should not be changed or tampered with for any car used on the street or any inexperienced driver.

Cooked rear brake rotor – 996 Turbo

Disconnect instructions (for high speed track driving only):

1. Remove the plastic cover in the trunk, look for the PSM pump under the brake master cylinder.
2. The PSM pump has a wiring harness, about 10 inches long which exits the back of the pump leading to a connector.
3. Disconnect the plug. (When you plug it back in everything goes back to normal).

Pictures courtesy of Speedfreak

4. PSM will be totally out of the loop and ABS will remain intact.
5. Optionally, install a simple ON/OFF switch in the trunk wired inline with the PSM harness.

The PSM warning light and a PSM failure in the central dash display will be lit. They can be cleared with the stalk. It will ding and reappear every 30 minutes, requiring a re-clear. Unfortunately, the only way to get rid of it is to install a GT2 instrument cluster which does not have the PSM logic in the cluster ECU.

Addendum

Pulled from the internet forums.

This thread lays out the various methods of dealing with PSM:

1. "Disconnect the yaw sensor on the tunnel in front of the shifter." Downside: "ABS performance can be degraded (though still fully functional - depends on the system)". (If I understand correctly, this is an unconfirmed hypothesis. But the later 996 ABS systems (version 3.5.7 I think) are more sophisticated, they brake the four wheels independently, and I can imagine they use the yaw sensor.) (There can be other dowsides on PASM, Sport Chrono, or PDK equiped cars, not relevant for 996s obviously.) This seems quite popular with 2nd gen Caymans and Boxsters, often done by putting a rocker swich on the ground wire. I haven't found any instructions how to do this on a 996, and no terribly clear instructions re. 987s, etc.

   2. Unplug "the clip going to the yellow sensor on the side of the brake fluid reservoir. … Disconnecting the sensor … did disable PSM and ABS still worked. I was able to back the car into corners at will and engage ABS. You do get 2 warning lights at start up and every ~15min for PSM failure and brake fluid sensor. It's annoying but not that bad." Downside: No warning if you lose too much brake fluid. But assuming this can be connected to a rocker switch and one only uses it for track or drifting sessions, then one can check the fluid again at regular intervals.

   3. "Interrupting power to the actual PSM computer by putting a switch on the ground wire for the module." I found this mentioned just once, no further details. The poster said he had seen reference to this working. Downside? I seem to recall reading elsewhere that the PSM controller also controls ABS, but I could be wrong.

   4. "The Durametric tool will do it or find an indie mechanic with the PIWIS tool to do it." This is the only mention I saw of this, and it was not clear the poster had actually done it or knew someone who had. A software fix could potentially mean PSM is turned off with zero effect on anything else … .

   5. Same as 4?? Napleton Motorsports disables PSM on the Interseries race Caymans by a software and/or ECU solution. Those who mentioned this suspect/hope that this desables nothing else.

   6. "On a 987.1 find pin #6 on the 6-pin connector of the accelerometer. Install a rocker switch on the #6 wire between the connector and the accelerometer. Turn the rocket switch OFF before starting the engine and PSM is disabled. ABS remains functional." I don't think I saw this mentioned anywhere else. No clue if it's applicable to a 996. And I'm wondering if this is similar to number 1. (Is the accelerometer the same as a yaw sensor?)

   7. Disconnecting a switch under the brake pedal [another one found only in 987 forums]: "There are two switched on the brake pedal, one for the lights and one for PSM, disconnect the PSM switch and you should be in trail braking heaven." Also "disengage the PSM brake override by disconnecting the two wires at the brake pedal". Disadvantage: Another poster said this also disables ABS. And on some cars – probably earlier ones – there is just one switch, so you loose the brake lights.

   8. Pulling a fuse? This was suggested, but not confirmed in a 987 forum: "pull the 25A fuse for the "Control Unit, PSM" located in Column C, Row 8 in, I believe, the front left cabin fuse box." Disadvantages: Loss of brake bias control. And there was a question whether this is the same fuse as for ABS which probably wan't answered.

   9. "A less complete alternative is to have someone with PIWIS code your Cayman to believe that it has composite brakes. This will reduce even more the amount of intervention when the nominal "PSM Off" button is pushed." Again, 987 forums only – and only one mention. Disadvantage: Might it affect ABS performance? Or PSM when on?

Another perspective:

If you require more fun, you can turn the PSM off. When you "turn it off," you are taking only the outputs offline. The PSM system is still collecting data from the ABS system, the yaw sensor, the lateral acceleration sensors and the steering wheel position sensor. If you have PSM off, and the levels of slip are exceeded, and you do not touch the brakes, the car will continue to slide. If you have not exceeded the levels of slip allowed, and apply the brakes (no matter how hard), PSM will not activate its outputs. However, if you have exceeded the levels, AND apply the brakes (no matter how hard), PSM will activate until the car has regained control or you get off the brakes, at which point PSM stops outputting. PSM assumes that since you hit the brakes that you are not comfortable with the level of sliding and that you want it to help. This answers the question, posed by Mike Furnish on the PCASD forum, that inspired this article, "what happens in a spin when you put both feet in?" Presuming that you put in the correct two pedals, PSM will activate.

So what about PSM and racing? At this point in my career, PSM is an asset to my racing. It has allowed me to more confidently explore the limits of traction on the first few laps at a new track, particularly in scarier corners, e.g., Turn 8 at Willow Springs. I was very happy to have it at Phoenix International Raceway, a track with concrete barriers everywhere. When PSM activates you can feel it, much like you can feel ABS. It will show you where you are losing traction while keeping you on the track if the loss was unintentional. When it engages, it may slow you down where you might not want it to later, i.e., where you really do want more oversteer, but on those first few practice laps, who cares? You can actually throttle steer the car quite well with PSM on as long as you are smooth, the yaw is not excessive, and the corner is fast enough to allow smooth inputs. This in itself is a good training tool. So PSM is good for practice, but what about when it matters, during timed laps?

In a time trial situation, it would depend on the course whether it would matter if PSM were on or off. On a tight road course, you would most likely want it off. On an autocross track, you want it off for sure. If you had sufficient presence of mind on a road course you could turn it on and off depending on the corner. You could make sure it's off for Turn 2 and 4 at Willow Springs, turns where throttle steering comes into play. You could turn it on for Turn 8, the last place on earth you want to see your tail catching up with you. I've never done this, but it illustrates the point.