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Huffaker Engineering

Porsche 911 RSR/IROC

1.31.20

Sonoma Raceway (Standard Configuration)

Power down:

The car takes power very well. The age of the tires doesn't make the car undriveable but you can definitely feel them skipping and sliding around. This is not related to a suspension setting or geometry, its just old tires.

Turn in:

Car likes to be turned while still on the brakes. Coasting or being on throttle early will result in understeer. After finishing your braking, bringing your left foot over to give a slight touch on the brake pedal really helps get the nose to the apex.

Braking:

Braking performance is good. Car tracks straight with no hint of tram-line or wandering. Bias is fine to start, season to taste depending on driving style. Again, trail braking is where it's at with this car. Simply put, if you have understeer BEFORE the apex, then you could've braked later and carried the brakes down in to the apex. Brake pedal height could be a tickle higher for heel/toe, but I didn't feel like I was carrying the throttle when braking so it really would be dealers choice to raise the pedal or not.

Shifting/Clutch:

Upshifts are standard for a Porsche, downshifts are easy with a nice little blip. Linkage feels good for a car of this vintage; a little sluggish but you know right what gear you are in at all times and finding them is very easy. Clutch pedal effort is nice. Clutch disengagement is simple and direct; find the bite point and let the torque pull you off. Stop can probably be raised as it feels like it's over traveling a bit.

Crests:

Car really charges over the crests with confidence. You can easily be flat over the hill in 3A. I tried a small lift at the top of 3A to see if it would bring the rear end around but as long as the lift is of a maintenance nature (not a complete throttle chop), the car stays calm and settled.

Throttle response:

Excellent. Engine pulls cleanly from 4000 RPM without hesitation. Blips on downshifts are accomplished with ease.

Gearing:

A shorter final drive could definitely be used for Sonoma. I never got out of 4th gear and I don't think I even got to max revs in 4th. There is probably another 3-400RPM to be had by hustling through the esses as the car sits now, but this isn't enough to really need to upshift before T10.

Driving Notes:

Entering turn 1, on the throttle, the car is comfortable. I rolled back to ¾ throttle at the kink and would feed on a little LFB to help it tuck the nose up the hill. It gets to the bridge before you need to shut down completely which it does calmly. Committing hard on the left gives you a nice wide angle into T2, and I was down to 3rd gear. It's able to get to the kerbing and put power down nicely but right away you get a sense of what feels like fairly typical Porsche manners. It feels like the car has soft springs and stiff bars. So it soaks up bumps and road irregularities well, but (especially with hard tires like these) when you start to ask it to transfer weight L or R it really twists up and feels like it is picking up the inside front wheel. New tires might lessen this feeling. It's not bad, it is typical of most of the Porsche's of this vintage that I've driven. Leaving it in 3rd gear, as 2nd feels too short and exiting in 3rd the engine is at 4200 RPM anyway so its well in it's powerband.

You can be hard on the gas on the run from T2 all the way to the compression at the apex of T3, the engine really likes to run! I'd leave it in 3rd thru T3 and T3A, and the car really likes using the kerb at the top of 3A to keep the angle of attack correct for the exit. Braking as late as possible for T4 to carry that weight on the nose, and down to 2nd gear. If you are going to trail brake anywhere with this car, T4 is it. As the road falls away the car wants to be pointed down track, not still carrying wheel so you really need to rotate early and a lot. Upshift to 3rd after the exit kerbing, then flat on the gas thru T5 and up to max revs in 3rd before the crest of the carousel. The OP was nice and solid as I went over the crest and into the bowl of the Carousel. I think this car will always be a little tough to handle in corners like the Carousel as air cooled Porsche's seem to like to be "actively" cornered. They respond to trail braking, big inputs on the throttle and wheel, but steady state cornering they always seem to be a little out of their elements. That being said, for the Carousel: carry speed in, slow in the middle, then back on the gas hard to get out of there as best as you can.

Heading into T7 the car handles the bumps in the braking zone well and I would change down to 2nd. Skip shifting or rowing, either way the car is happy. Again a small trail brake really helps with entry understeer. I would throw away the first apex for a "soft" apex and focus on the second apex. Power down later than you'd think to allow the car to finish it's rotation, then up to 4th gear before the access road on the RH side at the start of the Esses. It likes to hustle into T8 but then you need to give it a second to pause before bringing it back to the right or you will beat the weight transfer and the car will push wide at the second apex and you'll have to wait for the throttle.

Squaring the car up for the entry of T10, you want to decelerate the car early, make a decided input on the wheel to send it towards the apex, then commit back to power. Don't be wishy washy with your inputs in 10 and the car will be planted. Finally, heading into T11, I would change back down to 2nd, hold the brakes on until right at the apex, then bring the throttle in smoothly but swiftly. It takes the power nicely and will give you a nice calm exit this way.

Other Notes:

1. Smooth hands make the world go around with this car.
2. Steering wheel is pointing at 11 o'clock when going straight down the road
3. Tach doesn't function beyond 6400-6500. The engine keeps pulling but the tach just stops.
4. Oil pressure was solid at just under 60 PSI at all times.
5. Oil temp was holding steadily around 200F
6. Right bank lambda wasn't reading in the pits, and both AFR gauges did different things when the throttle was closed, but when on the gas, in the powerband, they were both reading yellow bars at 12 o'clock. Some bezels to point these gauges towards the driver would be helpful as well.
7. Passenger mirror is useless in its current position. It needs to be shimmed at the front to allow the ability to see closer to the car
8. The clutch pedal really flexes a lot, and it feels like maybe the stop bolt should be adjusted for a little less pedal travel. The brake and throttle pedals feel fine, but the clutch pedal feels like it might break off if you push too hard!