



BMW Drivers Club NSW

Introduction to Motorsport

Course Notes



BMW Drivers Club
New South Wales



Getting Started

- Seating position
 - Low as possible, keeping forward vision clear
 - Legs slightly bent when clutch/brake fully depressed
 - Wrists on top of wheel with arms extended
 - Head restraint, not headrest
 - RELAX
- Seat belts, lap belt low and tight
- Steering wheel grip, 9 <-> 3 and light grip in fingers
- Mirrors correctly adjusted
- Controls familiarisation
- Turn off non-essential functions like air conditioning

Basic Car Control Techniques

- Track vs Road
 - One way
 - Use all the road width
- Braking
 - Brake in a straight line
 - Brake hard, feel ABS working
- Changing gears
 - Brake before changing down, gearboxes are more expensive
 - Don't change gear during cornering
 - Smooth, don't rush it
 - Careful not to over rev the engine on downshifts
 - Learn heel and toe technique

Cornering

- Keep hands at 9 <-> 3 on the steering wheel
- Don't shuffle, cross arms over instead if required
- Light grip in fingers, no white knuckles
- Keep eyes up, looking through the corner to the next corner
- Find the straightest line, using the full width of the circuit
- Front wheels steer the car, so you need to keep weight to the front
- Slow in, Fast out vs Fast in, Not out
- Understeer / oversteer

And lastly, Accelerating

- Smooth, the accelerator is not a digital device
- Build up speed gradually during the day
- Weight moves to the back wheels when accelerating
- Front & Four wheel drive vs Rear wheel drive
- Use more RPM than on the road, listen and recognise the difference in engine noise
- Jackie Stewart – “Never push the gas unless you know you don’t have to take it off”

Learn the Track

- Learn the layout before any speed
- Where is the next corner?
- Keep eyes up, looking forward
- Where do I want my car to be for the next corner?
 - Where is the Turn-in Point?
 - Where is the Apex of the corner?
 - Where is the exit?
 - Link corners together
- Where are areas of extra caution?
- Where are safe runoff areas?
- Where is the track exit?



Track Driving

- One-way road
- Use eyes, forward and mirrors
- Be aware of other cars around you, especially faster cars coming up behind
- Let faster cars pass. If you have been caught, then you are slower. Don't power away on the straights.
- Slower cars hold your line, don't move over, just slow down a little if required
- Faster cars pass on the non "racing" line
- No passing in corners, only on straights
- If you go off the circuit, calm down and re-enter when safe

Preparation

- Empty car of all loose items, including boot
- Check tyre pressures. Generally, lower than for the road – depends on tyre
- Helmet on and adjusted – seat belt on and adjusted
- Get calm and relaxed before entering circuit
- Visualise the track layout each time
- Build up speed over the session as engine, tyre and brake temps come up

Safety

- No timing, no racing, give everyone space
- Use instructors
- Follow instructions from course officials
- Be cautious when driving and walking around in the pits and car park area
- Be aware of which groups are on track and when your group is next out
- Note sound restrictions.

What causes Crashes in Supersprints

- Driving too fast for
 - a. your knowledge level of the track
 - b. your skill base and attitude
 - c. the capability of the vehicle – know your car!
- Turning off the traction control system
- Not being smooth in your actions – steering, braking and acceleration
- Using kerbs/ripple strips - that can unbalance the vehicle
- Braking too hard in mid corner
- 'Panic' – lift-off oversteer
- Accelerating too early as you exit a corner
- Racing other drivers or cars
- Not actioning what the instructor advises in a timely manner

