



This is the time to remove all loose items from the car. Check your tyre pressures and wheel nuts before heading to the track.

So, who is Neil Furber?

I am a recent addition to the *Retro Japanese* team - a performance car enthusiast with a taste for the Japanese but bringing something a bit different to the magazine. As an Automotive Engineer by background and having played my part in Red Bull Racing's Championship-winning streak I took the decision to turn a performance driving hobby into a new career path. Now working as a driver coach both freelance and for several performance car manufacturers, I'll be covering some of the performance driving aspects in future issues. After owning a string of MX-5s, S2000s and most recently a nice example of an Evo V, I'm fairly used to extracting performance from Japanese sports cars.



BEGINNER'S GUIDE TRACK DAYS

With Japfest Donington on the horizon, we tell you all you need to know about track days. WORDS: NEIL FURBER PICS: DAVID WOODALL

Here at *Retro Japanese*, we cater for a huge variety of cars but the Japanese manufacturers have certainly created some of the best affordable performance cars over the last few decades. The MX-5, Honda's S2000 and the MR-2 line spring to mind but then the Evos, Imprezas, Type Rs and Skylines of this world are not to be forgotten. Most of these cars have performance far in excess of what can be used on the daily commute and even the weekend blat, so getting on track is an obvious step that most enthusiasts are going to want to take at some point.

This article is aimed at the novice track day driver. Whether helping explain what will happen during your first time or giving some useful advice to help you get more from your first few events, there should be something for most readers.

Before the Day

You've made the decision to do that first track day. Now what? Having some time to plan is definitely worthwhile. I often hear of people

spending a fortune and months of their lives building the perfect modified track car before they've even had a go on track. In my opinion, it is better to start by just getting out there and having a go. But before you do, a little research on different venues and track day formats is prudent. It is also worth checking over the car thoroughly. As an example, Opentrack offers days ranging from £109 for an evening at Bedford Autodrome to £275 for a full day on the Silverstone GP circuit. Javelin Trackdays' options range from £69 to £400 depending on the circuit. David Woodall, owner of Opentrack says, 'As for noise, generally the evening events have a quieter limit but most tracks are 105dB which is fine for most cars using standard exhaust systems.' However, 'all track day noise limits are generally displayed on the website so you know the limit before you attend.' Colin Jebson from Javelin advises that the format for their days is usually 'open pit lane 9am to 5pm with a lunch break'.

There is probably no need to go out and buy the most expensive helmet

you can find just because you are going on a track day. However, this is one of the most important items you will need on the day. Most circuits or track day operators will have a limited number of helmets that can be hired at the track but do check in advance. Some people prefer to buy helmets. Others will borrow from a friend and there will be a mix of motorcycle, kart and open-face or full-face car helmets. Personally, I prefer an open-face helmet for cars with a roof since they can't get steamed up and it is easier to talk to other people in the car, but it is a matter of personal preference. The most important thing is to get the best one you can afford and make sure you don't drop it as this could destroy the inner protective layer used to protect your head.

According to Colin, like most track day operators, Javelin don't offer insurance but it is available elsewhere should you feel that it is worthwhile for you. In terms of venues, these range from fairly open airfields to full race circuits. The former usually have more run-off area so can be more forgiving should this be a worry.

The checklist:

- Make sure the car is running reliably and doesn't leak fluids
- Thoroughly inspect tyres and brakes for signs of wear or damage and replace as necessary. A track day seems like a great way to send-off shot tyres and worn-out brakes but it could be a costly decision if they run out part-way through.
- Helmet(s) – see notes
- Remove all that loose junk from the boot and passenger compartment. If it's not nailed down, remove it.
- Foot pump, tyre pressure gauge and torque wrench to check wheel nuts?
- Final planning, directions etc. the night before so it isn't a mad rush in the morning.

Starting the Day

The butterflies have started as you roll in under the 'Welcome' sign and now it's getting both exciting and a little scary. There is some expensive machinery around and quite a few on trailers. You may be thinking, 'Have I done the right thing?'

Upon arrival it is worth getting signed on and finding out about any required noise test before wandering around the eclectic mix of circuit-going toys. Most importantly, be ready for the briefing.

The most valuable advice I can give you is this: Don't try to drive fast, try to drive smoothly with good technique. Then the speed will come naturally.

After the briefing there will usually be mandatory sighting laps. This is a

chance to cover some low speed laps of the circuit in a follow-my-leader format to scope out the track and start to learn where the corners go before things start to speed up. The lead car will usually drive a good 'racing line' so if you can be near the front of the queue, you may learn a thing or two about positioning as you follow them round. During these laps, keep a nice steady flow and avoid the temptation to constantly change speed, weave around heating the tyres etc. This isn't the warmup lap before the Grand Prix!

So now it is time for the first proper session on track. There may be one or two cars flat-out from the off. These are usually either the regular track day warriors or the first one or two



You don't need a fearsomely-powerful car to enjoy some track time. The Toyota MR2 is ideal.



Don't be put off by my wet weather. It's an ideal opportunity to learn about car control!

that will inevitably end up in the gravel and barriers. As a novice, take it easy, build things up gradually, keep an eye on the mirrors and drive within your limits. According to David Woodall, 'In terms of ability, we see anything and everything. We offer free tuition, useful for novices to build confidence, but our days cater for absolute beginners right through to the occasional touring car driver.'

The briefing will have covered overtaking rules and signalling. Do let faster cars through as soon as you reasonably can but don't panic just because there is a car behind. This is not a race and the laps are not timed – usually timing is forbidden. It is worth using the first lap to gradually build up the speed and temperatures in the tyres, brakes and drivetrain (your engine should ideally be warm before joining the track). Follow as much of the 'racing line' as you can remember from the sighting laps but don't worry too much about 'lines' to start with. As you move onto laps two and three your pace will naturally increase through confidence and familiarity with the circuit. This is good, but make sure to stay within your comfort zone and remember the cars behind – the harder people start to push, the less they consider the cars waiting to overtake. Of course, if you are starting to catch



other drivers, be patient and overtake them when they follow the procedure from the briefing.

At times, there can be a tendency for cars to bunch up if a slower driver isn't checking their mirrors. If you can, it is best to avoid putting yourself in this group. Either drop back a bit and maintain a gap to the car in front or drop back and let others past. I've seen many near misses when a group of cars get bunched up and one suddenly has a spin in the track.

It is important to obey the rules and stick to your limits. Both David and Colin have had to send the odd driver home. According to David, 'Most

drivers behave but we [Opentrack] operate a 2 black flags policy regarding driving standards. After the first flag we'd call the driver in to have a word. A second flag and that's the end of their day.' Not obeying yellow flags, driving dangerously or racing other cars are reasons for the black flag to be issued.

With the British weather, a dry day is never guaranteed. In fact, wet tracks may be no bad thing as there is far more to be learned as the result of all driver inputs are amplified. Of course, there will be less grip and more care must be taken, especially if puddles are starting to form or the track is drying but still has damp patches.

Going Faster

You've got a session or two under your belt and you remember most of the corners – time to put your foot down, right? Well, maybe.

Remember what I said about smoothness and good technique over 'driving fast'? This is where it really counts. For drivers with more powerful cars it is easy to accelerate hard, brake hard, turn hard and ultimately burn-up the tyres and brakes. This doesn't mean the laps are quick and probably the technique isn't good. This is the stage where 'lines', the phases of cornering and how you turn the steering wheel really start to count.

During some days, there are instructors available for a small fee or even included in the day for those that book early. If you had the foresight to get your name down when you arrived nice and early you'll now have a chance to get some invaluable tips. I'd recommend having the instruction late in the morning if you can so that you've had time to play a little on your own but will have plenty of time to practice what you learn with the instructor.

There is a temptation to become the 'last of the late brakings', accelerate

to the max. and be on the absolute limit all the way round. This is fine if you wish to do it but may destroy a set of brake pads and discs, ruin the sidewalls of the front tyres etc. For the first or second track day perhaps it is better to develop your technique with good positive acceleration on the straights but leaving a bit of margin in the braking. Learning to corner at high speed on a good 'line' yields the most fun and if done correctly isn't necessarily too harsh on the tyres.

Track day drivers need to learn how to manage brake temperatures. Most road cars will not need a brake warmup phase but during lapping and repeated brake application, huge temperatures can be achieved. Before pulling into the pits at the end of a session, it really is important to spend one or two laps cooling the brakes by minimising braking to prevent the risk of fires, boiled brake fluid etc. It is also worth parking the car in gear instead of using the handbrake after a session where the brakes are still warm.

Some final advice from David Woodall: 'On track, tyre pressures may go up by 4 or 5 PSI so dropping these a bit can help save tyre wear and make less noise.'

Performance Driving Tips – novice to intermediate

- Brake straight before the corner and finish braking before turning the steering wheel.
- As soon as you finish braking, apply a light gas pedal pressure to maintain speed ready to turn-in to the corner. But don't accelerate yet!
- Look where you want to go – usually there is a cone or marker at the apex/clipping point.
- Turn the steering wheel gradually. Turning hard with sudden rotation of the wheel may lead to a spin. A 'quarter to three' grip maintained throughout is generally best.
- As you reach the apex/clipping point, look up the next straight as it is time to exit the corner.
- Smoothly unwind the steering lock and exchange steering for power as you gradually increase pressure on the gas. As the wheels become straight, you can usually arrive at full power.
- Generally use all the width of the track for entry (outside edge), apex/clipping point (inside edge) and exit (outside edge). S-bends, chicanes and multiple bends may need a different approach but simple kinks, 90° and hairpin bends can use the general technique.



Build the speed up gradually through the session and keep your eye on your mirrors.

BEGINNERS GUIDE TRACK DAYS

Don't go mad with upgrades. Try the track first to see what you need.



Do some steady laps to finish, to allow components to cool.



Always end on a high!

It always seems like doing those extra laps right up to the end of the day is good value for money. This bit is up to you, but entry number one in the 'Driver Coach's Book of Things Never to Say' is "This is your last lap!"

I don't know what it is about the last

lap but there is always the temptation to push that little bit harder, go that little bit faster, brake that little bit later. It normally ends up with you that little bit closer to the tyres or gravel. Being that driver at the end of the day is not going to make you popular with the organisers, marshals or circuit staff.

It is generally better to cut things a little short, save the extra wear and tear on the tyres and brakes and end on a high with a real desire to go and have another go on another day. After all, you got up early, it's been a long day and you will be most fatigued at the end. **RJ**



Pre-track briefing will advise how and when to pass slower cars.