

Back to school with CTS Motorsport

Many of us find it more and more frustrating driving on the roads these days. However for those wanting test their car and driving ability to the limit without breaking laws, together with freedom from congestion, lorries, caravanners and motorhomes (I must hold my hands up to being one of those), track days are becoming a more popular option. I have often wondered why I joined this 'party' later in life, I am certainly not the fastest or most skilled driver on circuit, but the fun and comradery of this non-competitive pastime is second to none.

Taking your precious car on track can be daunting but being prepared is key to having an enjoyable and trouble free day. Until now preparing our car for track days was husband Roger's job, so feeling as though I should be able to share the load I turned to Jon Curry, one of the Directors for CTS Motorsport (and occasional mathematics teacher) to take me through the straight forward checks, which as a novice I could master . Jon let me loose on one of their cars, a Caterham with a Sigma 150 engine that was racing the following weekend.

Everything listed (below) when preparing your car for track would apply to a general spanner check you might do regularly or before a longer trip. However, on track, as Jon pointed out, you are putting your car through as much pressure in 20 minutes as half a day of intense road driving. In addition, when you participate in any track day event you sign an indemnity form, declaring that your car is in a safe condition for such a high speed activity, so it's well worth spending a couple of hours before the day to ensure everything is in order.

Pre - track day car check

Interior

1. Check the seat belt mounts first and the seat belt condition.
2. Check seats are secure
3. If you carry a fire extinguisher (highly recommended – fully charged AFFF type with a minimum 1.5 litre capacity) check it is mounted securely.

Engine

The first job is to jack the car up and put it on axle stands, allowing you to conduct your check. There is much debate about jacking points on a 7 so Jon starts there.

1. The rear of the car is first with the jacking point on the A frame (see photo). Placing the axle under either end of the rear side rails
2. On the front of the car use the tow eye point (see photo). Placing the axle stand under the main chassis cross member

Now remove the bonnet and nose cone and start at the front of the car checking;

3. Radiator/coolant levels (don't over fill) and check all hoses and joints
4. Oil levels (don't overfill) - **hint** use a cable tie on the dip stick to secure it (see photo)

5. Alternator belt for condition - **hint** if you land in the gravel, when you come off circuit check to ensure stones haven't got caught in the belt.
6. Brake fluid levels
7. Clutch fluid levels
8. Throttle cable condition – **hint** it's worth carrying a spare
9. Pedal Box – check for leaks in the master cylinder
10. Check the oil filler cap and the condition - **hint** if there is a mayonnaise looking substance this could indict a head gasket problem
11. Battery – make sure it is securely mounted and terminals are covered by an insulating material
12. Wiring for condition, look for potential chafing points and short circuits
13. Take top cover off to check ignition wiring to the coil packs
14. General check of all hoses and pipes for condition and connections
15. Nuts and bolts starting at the front work backwards checking all the nuts and bolts are tightened pay attention to the top and bottom wishbones. Include roll over bar/cage fixings. **Hint** when tight, mark the nuts and bolts with paint for a quick visual check for any loosening.

Remove wheels and check;

16. Tyres for wear – removing the wheels allows you to inspect the inside wall
17. Check suspension for condition and operation – look for play in joints, linkages and bushes (especially live axle cars)
18. De dion tube welds for condition (see photo)
19. Radial arms
20. Brakes – brake pad material should have at least a third of its original thickness remaining (see photo). If you do replace the brake pads, then make sure they are bedded in **before** the track day.
21. Check brake discs for wear.

External check

22. Windscreen wipers (unless you drive with an aero screen)
23. Lights – indicators and brake lights
24. Towing eye – you can also indicate this with an arrow to help the marshals
25. Body work - generally ensuring there are no loose bits that might fall off
26. Check that when you sit in the car with a helmet on your head is below the roll bar

Before the day

1. Driving Licence. Remember your driving licence and check it's valid!
2. Clothing. You will need appropriate clothing that covers up your arms and legs preferably natural fibres as you will: A) get hot and B) in the rare case of a fire will not melt onto your skin. Also ensure you have sensible footwear, thinsoled, flat shoes/trainers tend to work best for maximum pedal control. This also helps as the pedals can be quite close together.
3. Fuel. Ensure you arrive at the circuit with at least $\frac{1}{4}$ tank but less than $\frac{3}{4}$. You might also want to bring fuel with you in a suitable container (most track day venues will

have fuel for sale, which can be rather pricey, whereas others don't have it available, so it's worth checking)

4. Helmet. You will need to wear a full face helmet in an open top car. Some track day providers will hire these. You might want to invest in a balaclava as it can get quite hot and sweaty (say no more)
5. Gloves. A good pair of driving gloves will not just protect your hands but give you a better grip of the wheel
6. If you have two drivers then you may want to consider using a seat insert to save adjusting the seat for each driver.
7. If you are driving to the circuit rather than towing your car you might pack a camping chair and tarpaulin/bag to store your possessions in while you are on circuit
8. Tool kit – a basic tool kit with basic spares is useful. There is no requirement and you will find other track day users really helpful if you have a problem. For a basic tool kit – a set of spanners, socket set, torque wrench, tyre gauge, compressor/tyre gauge, tank tape (gaffer tape), tie wraps, jubilee clips, brake fluid, oil and water. Carrying an assortment of nuts and bolts will bring you new friends in the paddock.

On the day

When you get to the circuit

1. Remove all loose items from the cockpit and boot – having that pack of polo mints rolling around your feet is not a good idea!
2. If you are on circuit without a passenger, then buckle up the passenger seat belts to stop them flying around.
3. Check the wheel nut torque
4. Check tyre pressures (remember these will change as they get hot, so will need adjusting throughout the day)
5. Remove any wheel trims/centre caps
6. Check the fuel filler cap is secure
7. Check the bonnet is clipped down correctly
8. If you use side screens then make sure these are secure.

Fastening your seat belt

1. Make sure you and your passenger are strapped in securely with a fixed harness belt. Tighten the waist/hip belt first and then the shoulder straps as tight as you can. The centre of the harness should sit just below your stomach when completely tightened, NOT on your rib cage. **Hint** don't tighten the shoulder straps before your switch on the engine – you will not reach!!

During the day

When you return to the paddock after a session

1. Leave the car in gear DO NOT put the handbrake on
2. Do a quick visual check
3. Let the car cool down
4. Check tyre pressures and wheel nut torque regularly

Your maintenance

The car is now ready to go, what about you?

1. Listen carefully to the safety briefing by the track day organisers, they know the circuit. If there is anything you are unsure about – ask. They want you to have an enjoyable and safe time.
2. Remember to refuel yourself - drink water, even if it isn't a hot day– you will get dehydrated and your concentration then wavers
3. Circuits often provide great food but eating little and often is better than that steak and ale pie, with treacle pudding and custard, however tempting it might be!
4. Stop when you are tired. Don't be tempted to do that last run.

Track Day Organisers

LOTUS AND SEVEN SPECIALISTS

CTS Motorsport

www.ctsmotorsport.com

Hire 7's for track days and race meetings. Based in Lincolnshire UK.

Lotus on track

This is a track day club run by Lotus enthusiasts for lotus enthusiasts with events all over Europe

www.lotus-on-track.com.

Sevens only track Club UK

A face book group of track day enthusiasts who run track days in association with other organisations

<https://www.facebook.com/groups/sevensonlytrackclubuk>

OTHERS

Circuit days

Track days in UK and mainland Europe and some imaginative road tours.

www.circuit-days.co.uk.

EasyTrack

UK track days across the year

www.easytrack.co.uk

Gold Track

Track days in UK and Europe at major circuits

www.goldtrack.co.uk

Javelin Track days

A popular track day provider who run days on circuits and ex airfields in UK and Europe.

Group discounts available

www.javelintrackdays.co.uk

MSVT

Not only the owners of Brands Hatch, Oulton Park, Donington Park, Snetterton, Cadwell Park and Bedford Autodrome, MSV is also a track day operator at these circuits. They also run novice days.

www.motorsportvision.co.uk

Want2race

Formerly BookaTrack. Tracks include those in mainland Europe and UK. Hire both Ginettas and Caterhams

www.want2race.co.uk

Trackdays

A one-stop shop of track day listings and driving experiences. Most track day companies utilise Track Days to promote their calendar, however, just be aware not all use this service.

www.trackdays.co.uk