

Getting Started

There are numerous Race Series competing in New Zealand – from Classic Trial right up to V8 Supercars. For those new to Motorsport, we would recommend one of the starter classes – 2K Cup, SuperLaps or Classic Trial. These all provide friendly, competitive car racing while keeping costs to a realistic level.

Once you have entered a series, advice and assistance from fellow competitors is never far away, and the social events are legendary.

This information has been written to help prospective new competitors to Motorsport. We hope that it will help clarify the rules and regulations governing racing, and perhaps answer a few of the questions that any new competitor will naturally need answering. If you do have any further questions, please ask one of the HRC staff, we will be happy to help, or if we can't, we'll direct you to someone who can.

Driver training opportunities

Information on some opportunities provided by HRC to get you onto the track.

Since 2014, HRC have hosted track days and Twilight Sessions at Hampton Downs, Pukekohe and Taupo with an accent on driver training and track driving. These have been great events for first time drivers, even those just wanting to run a road car on track to “see what it’s like.”

The driver training allows you to take your car around the track, with an experienced race driver alongside you. Sprint events give you an opportunity to extend your driving experience in a low risk, but still competitive situation.

Both of these events are highly recommended to beginner drivers.

Dates for these and other HRC Events are available online at www.hrcevents.co.nz

Driver training sessions at these meetings are suitable for either someone who wants to sample the excitement of the track in a controlled environment, or to the prospective racer who wants an introduction into the sport, without having to over-commit him or herself.

Single and dual car sprints may be held during the day, offering a true sample of on-track competition. A sprint is typically a 3 lap run, at full speed, on the track either on your own or starting alongside one other car.

Races may be held at these events, which may either be either a grid start where the cars are arranged on the grid, fastest to the front, and all start together. Or a handicap start where the slowest car starts first and the following cars are given delayed starts to give equal opportunity to all drivers to win.

Social events are held in the evening after the racing, and are not to be missed!! Good food, great company and an opportunity to re-live the experiences of the day, make these events an integral part of the racing experience.

Safety Gear

As a minimum, for driver training and sprint events, you will need;

- **Safety Helmet** (must be of an approved standard)
- **Cotton overalls** (100% cotton overalls for training/sprints, but a minimum of 2 layer race suit needed for races)
- **Fire extinguisher** fitted to the car. (Secured by 2 metal straps, in a metal bracket, held by two 6mm bolts with large washers fitted)

Your car must be in good mechanical order, particularly with respect to the brakes, tyres and suspension. Ensure oil, brake fluid and coolant are all topped up before you start!

Club membership and Competition Licence

Membership of a Motorsport NZ Affiliated Club is required for all MSNZ events. This is readily arranged.

Competition licence is not needed for driver training and non-competitive track day, events.

A competition licence is needed to enter dual sprints, multi car sprints or race events.

Apply for your competition licence through the Motorsport NZ on-line system,
<http://online.motorsport.org.nz/>

The dual and multi car sprints require an “M” grade formerly known as a clubsport licence, which also entitles you to compete in a wide variety of motorsport events, from autocross and hillclimbs, right through to ralliesprints.

The races require a “C” grade formerly known as a National Race competition licence, which requires that a short written and oral examination, mainly on safety matters, must be passed first.

Worried about the exam? Well don't be. Most of the test is open book, and the written questions are available on the Motorsport NZ website.

If you want to give the track a try, ask HRC. We will be happy to help, or if we can't, we'll direct you to someone who can.

Entering a Race Series

Licences, memberships, forms and approvals. Dealing with the paperwork!

Starting in Motorsport can be a confusing experience. Lots of forms and a whole new set of rules and regulations to deal with. It is actually easier than it looks. The main forms and approvals you will need are set out below:

Series Entry Form.

You will need to enter the Series to compete in any series races.

Talk to HRC about which series would be best for you to enter and we will put you in touch with the relevant Series Co-ordinator.

Racing Number

When you register in a Series, you will be asked to nominate your preferred race number. If a number is in use by another competitor in either the current or the previous year, you will be asked to select another number. Numbers must be three or fewer digits, and be the correct size, colour and background. **Depending on entries in other classes, meeting organisers may need to allocate variations of your preferred number, or even an entirely different number. That is the organiser's prerogative. Series cannot guarantee that your preferred number will always be available.**

n.b. Some organisers do have self adhesive numbers available for sale at documentation.

Competition Licence

Motorsport New Zealand issues different grades of competition licence for different events. The basic grade, known as the Clubsport licence allows you to compete in sprint events, autocross, hillclimbs etc, but not in full grid racing events.

To compete in the Series race events, you need to obtain a Grade "C" formerly known as a "National Race" grade competition licence.

A short examination needs to be passed, and you will need to study the Motorsport Manual, which is the Motorsport New Zealand rulebook. You will be sent a copy of the rulebook when you get your licence, but it is available on the MSNZ website to study. Sample exam papers are on the MSNZ website, as are names of approved licence examiners.]

You will also need to fill out a medical aptitude declaration on line, to confirm that you are medically OK to compete. If you are on medication or have a condition that may affect your driving, it must be declared on the form. It's all about safety. When you are on the grid, you really do need to know that the drivers around you all know what they are supposed to do, and are up to the job !

The MSNZ website has all the information you need to gain your competition licence

<http://www.motorsport.org.nz>

Club membership

To obtain a competition licence, you must first be a member of a MSNZ affiliated club.

Membership application information for the Historic Racing Club (HRC) website at:

<http://www.hrcevents.co.nz/shop>

Logbook

Cars regularly used in competition and those fitted with roll protection, are required to have a log book issued by Motorsport New Zealand.

The application form for a log book is available from the motorsport NZ website:

<http://www.motorsport.org.nz>

This allows the competition history of the car to be tracked, and more particularly for the scrutineers at a race meeting to see what has happened to the car in the past, and what issues of concern may be with the car. The logbook also carries a copy of the roll protection homologation documents.

Motorsport Authority Card

Some competitors, may wish to drive their vehicles on the public road from time to time. A number of our competitors do drive their cars to the track, and need to have them up to warrant of fitness standard.

To drive a vehicle modified for competition on the public road, you will need to obtain a "Motorsport Authority Card"

The application form for an authority card is also available at:

<http://www.motorsport.org.nz>

Roll protection structures, racing harnesses, stainless steel brake lines hydraulic handbrakes and competition seats are modifications that could prevent a vehicle from obtaining a warrant of fitness. Motorsport New Zealand has entered into an arrangement where a "Motorsport Authority Card" can be issued to a competition licence holder who is regularly competing in motorsport events.

The authority card shows the WOF testing station that the changes have been checked and approved under MSNZ rules and that the car can be issued with a warrant of fitness, without having to go through a low volume vehicle certification process.

The card must be renewed yearly, with your competition licence and must be produced when requested by a police officer or WOF inspector.

Competition Calendar and Entry forms

How do I know when the races are on and where do I get entry forms from ?

The HRC Website has the schedule of events posted on the "Upcoming Events" page.

Entry forms are posted on the website. Registered competitors are also contacted, usually by e-mail with advice of upcoming events or essential information.

Fitting roll protection to your car ?

Although the rules do allow a minimal roll protection structure to be fitted, (i.e. a roll hoop) it is well worth considering a full roll cage.

If you are intending fitting a roll cage or a roll bar to your car for competition use, it needs to be done right and documented properly before you can use it on the track.

Unless you have considerable experience, it is best to use a recognized constructor. The requirements for materials design and construction are set out in the MSNZ Motorsport Manual, as are a number of approved basic designs. While you may need or want to add additional bracing or side intrusion bars, do ensure that your design incorporates one of the approved designs as a basis, before anything else is added.

The roll protection guidelines and approval forms are on the MSNZ website under the menu headings Technical / Safety Structures:

The constructor will need to put his details and details of the construction of the roll cage on the approval form before it is sent to MSNZ for homologation. (i.e. approval) You will need to fill out the rest of the form and also put in some photographs of certain parts of the cage so that MSNZ have a record of its construction. (Photos need to be good quality, clear and of the cage before it is painted)

Once the homologation papers have been received back from MSNZ, you need to place the identification number label provided by MSNZ on the roll cage. Once the cage is fitted in your car, approved padding material needs to be fitted in areas where you may hit the cage in an accident. Approved full harness seatbelts will also need to be fitted.

Make sure you read the Motorsport Manual's "Schedule A" and do the do the job right. If in any doubt, ask one of the licensed scrutineers in the club, or the series Eligibility Officer. This is one part of your future race car that really has to be done well !

Before you go racing

Safety and technical tips for the new competitor

They say that experience is what you get, right after you needed it!

This might just help.....

Here are a few preparation tips and observations from competitors that might just save you time and money, or keep you a bit safer on the track.

Much of this section is safety related. While injuries are rare in motorsport these days, we want to keep it that way, and encourage all competitors to do everything they can, to enjoy their motorsport as safely as is possible.

Brakes

Make sure the brakes have been recently bled, using good quality, high boiling point brake fluid, straight from a new container. Brake fluid absorbs water from the air. The fluid can then boil under race conditions and cause sudden brake failure.

Use good competition grade brake pads. Brake pads made for road use (yes, even most of the "performance" pads) will be badly affected by heat and can degrade and cause brake fade, even after only three or four laps. Good quality race pads will give more consistent braking throughout the race, and are a necessity, both for safety, and to be competitive.

Do be aware that racing pads may need to be "warmed up" for maximum effect and may not be ideal for use on the road.

Hint ! Some brands of racing pads seem have around 2-3mm of heat shielding material between the friction material and the backing plate. This does not last long under race conditions. Changing the pads while there is still a reasonable covering of friction material left on the pad is good practice, and may avoid unpleasant surprises during a race !

Ignition Circuit Breaker / Isolation switch

If your car is a warranted, registered, road legal vehicle, and the standard ignition switch is in reach of the driver when seated, and with safety harness secured, then a separate circuit breaker is not needed.

If the car is a dedicated racing vehicle, an outside means of triggering the isolation switch must be located near the lower windscreen mounting area, and marked with the appropriate symbol.

Check Schedule A in your current Motorsport Manual for details of requirements.

Seat Belts

The four point or five point safety harnesses used in racing provide a high level of safety but need to be worn properly for your protection.

IMPORTANT - Make sure that the lap belt is securely fastened low down, across the bony parts of your hips rather than over the soft stomach cavity.

In a high speed collision, there is a possibility for a belt pressing hard into the stomach area to cause severe internal injuries.

Using a 5 point harness with the crotch strap fitted can help stop you sliding under the belt (known as "submarining") in a crash, and may reduce injury should the worst happen..

Seat belts stretch considerably in an accident. Keep the length of the belts to a minimum. Mounting the belts in an approved manner, on the roll cage behind the driver, rather than just using the old rear seat belt anchorages, can help reduce the length of the belt. The roll cage is also less likely to deform than the body shell, and the scope for injury can be lessened. Seat belt expiry dates. Check the expiry dates and specs before you buy. The two most common specifications for racing seat belts are the American SFI specification and the European FIA specification. These belts have expiry dates after which they cannot be used in competition. SFI belts have a date of manufacture on them, and are valid for 2 years from that date. FIA belts have a five year period of validity on them but can be used for a further 5 years, after which they cannot be used again for racing. Check Schedule A in the Motorsport Manual for the list of approved harness specifications for the events you are competing in.

Roll cages

With well built roll protection, the car will be more rigid, handle better, and you will be much safer if it all goes "pear-shaped" out on the track. **Extra time and money spent on the roll protection is a wise investment.**

Side intrusion bars are optional in some classes, but are highly recommended.

Roll protection must be built to the specifications in the Motorsport Manual and individually inspected and approved by MSNZ. If you are thinking of having a roll cage built, get competent advice first! A committee member or one of our competitors will be able to help you with information or with finding a licensed scrutineer to help.

Roll hoop only required – that sounds like a real cost saver ! Well the rules do say that you can race with just the rear roll bar, so you can if you really want to. **It is most strongly recommended that a full roll-cage be fitted to all cars. The car will be more rigid, handle better, and you will be much safer.**

Suspension

Polyurethane (Nolathane) suspension bushes. Can be fitted and can be beneficial in making your car's handling more responsive.

Engine Bay

Cam belts, tensioner pulleys and fan belts – These components are relatively inexpensive to replace but the consequences of failure can be expensive indeed. Check that they are in good condition before competing. If in doubt, replace!

Engine oil – Modern engines, are generally very reliable but can suffer from oil surge and loss of oil pressure under race conditions. Running an additional 1cm of engine oil over the full mark on the dipstick will minimise oil surge and help preserve engine life.

Clean, good quality oil along with a clean, **quality oil filter** is a must for engine longevity.

Fuel lines – Deterioration can be an issue in some older vehicles. Check that the fuel lines are in good condition, and have not become hardened, cracked or weakened. Replace only with quality approved fuel hose.

Free extra horsepower ? – Check that your accelerator cable is properly adjusted and that your throttle is actually opening up 100% !

Throttle return springs - Check that there are at least two springs to close the throttles when the accelerator is released, and that there are no obstructions near to the throttle linkages that might jam the throttle open.

A clean air filter is a necessity for the engine to breath properly. While you could run without an air filter, this is not advised as inhaled dust and grit can cause premature wear on your engine.

Keep it cool, racing can put more heat into the engine than it is used to. Make sure that the radiator is clean, and in good condition and the cooling system filled with clean coolant.

Fire Extinguisher

Must be a minimum of 0.9kg dry powder, securely fitted to the car. Make sure it is properly bolted in, using a minimum of two, six mm bolts, and large washers under bolt heads. The mounting bracket must be of metal, capable of holding the extinguisher in a collision. Two metal straps are required to secure the extinguisher.

Plastic mounts are not permitted as they will fail in a collision and allow the extinguisher to bounce around the car. This can cause serious injury!

Crash Helmet

Your helmet must carry one of the approval types in the current Motorsport manual.

Check the approvals in Schedule A in the Motorsport Manual before you buy !!!

The helmet is not an item to save money on

Got a \$10 head - get a \$10 helmet says the old slogan !

Buy the best you can afford and look after it well, protect it from bumps & scratches and it will protect you. Consider replacement after 5 to 7 years, and periodically check that there is no corrosion building up inside the buckles, which can wear through the webbing.

Driving gloves ?

Highly recommended ! Good driving gloves of leather and fire resistant nomex will help your grip on the steering wheel, and give you protection in case of a fire.

Need convincing ? Just think of all the things you couldn't do for yourself with two burned hands. From eating your dinner to far more humble activities. Think about it !

Racing boots?

No they aren't just made like that to look "cool". Good quality racing boots incorporate fire resisting nomex and leather construction to minimize injury in case of fire, and are built to help you control your car better.

The light sole will allow good feel on the pedals and the sole will not have a ridge protruding out, to get stuck under pedals when racing.

GETTING STARTED 12 Also, for those endowed with large feet and minimal room between the pedals, racing boots are significantly less bulky than normal shoes or sneakers The economical spacing of some pedals is much less of an issue in good racing boots !

What not to wear when racing !

Avoid wearing clothing, socks or even underclothing made of nylon, or other synthetics that might melt in a fire situation.

Even if it is a terribly wet meeting, avoid the temptation to keep your wet weather gear on, while in the car !

Synthetics will melt in a fire and cause terrible burns. Wool and cotton don't melt, have fire retardant properties, and are very much safer.

Also take care if you wear any jewellery, that it isn't likely to cause injury in an accident or emergency. Even a simple gold chain, pulled hard against the skin, under a seatbelt in an accident, can leave some very uncomfortable lacerations.

Your first race day

A competitor's eye view of what happens on race day.

Worried about your first race meeting ?

You are not alone in that !

To help guide you along the way, we have outlined the steps working up to a "typical" race day, including documentation and scrutineering.

Variations will occur between different clubs, circuits and organisers, so be sure to read the information sent by the organisers and if in doubt, ask!

Rules – Motorsport has its dangers, and a need to ensure fair competition. The rules are there to keep it safe, fair and enjoyable.

Understanding of class, or series rules is vital for fair competition and for you to be competitive. Make sure that you know what you can and cannot do with your car, and if in doubt, ask the Series Eligibility Officer.

Three weeks before race day

You should have completed your entry for the meeting, either on line or in hard copy and posted them off to the organizers. Remember - late entries may not necessarily be accepted !!! (Most entries are now done on the www.motorsportentry.com website)

You should have your competition licence, MSNZ logbook and club membership all up to date. If not – get it sorted urgently. You are not likely to be allowed to compete if the paperwork isn't right.

Your car should be well on the way to race readiness....

One week before race day

Your potentially class-winning car should now be looking tidy and presentable, and be set up in accordance with the rules for your class. You will have gone over the car, and confirmed that all the safety check items have been checked, and done a "spanner check" on critical items or known weak points.

You should know the competition number allocated to you and have it ready, on the car.

You should also have carefully read through the Supplementary Regulations that came with the entry form. These can contain important information on the way the meeting will be run, how starts will be made and other important facts. A good read of this information now can save a lot of confusion later !

The day before

Make sure that everything is packed, prepared and ready to go.

Preparation doesn't just mean working on the car, but also having your licence and documentation ready, tools and spares packed and the trailer well maintained.

You would be amazed how many race weekends have been ruined by a trailer wheel bearing failure or a lost licence.

If you use race-gas, do you have enough on hand, or can you get it on race day? It pays to check!

Race day - Arriving at the meeting

The information sent to you by the organizer or available on line (i.e. Supplementary regulations) will tell you when documentation and scrutineering start. Make sure you arrive on time.

There will often be directions as to where to park your car, what to do with the trailer, and which section of the pits each class is to use. Arriving early can allow you to get a good spot in the pits.

Do be aware that pit bays and garages at some circuits may be reserved or leased out to others. It pays to check first.

Trailer parking.

Trailers can take up a huge amount of space and are often discouraged in pit areas. If the organizer indicates a trailer parking area, it is best to use it.

Fuel storage and refueling

There will be limitations as to the amount of fuel you may hold in your pit area generally no more than 2 x 20l containers. Check the supplementary regulations for the event to ensure that you stay within the limits. A big meeting with many competitors means many fuel containers and a significant fire risk.

When refueling at a meeting, remember that you are also required to have another person, in overalls, with an extinguisher on hand in case of incident. (Refuelling in endurance events has additional requirements). Check the motorsport NZ website for the approved code of practice.

<http://motorsport.org.nz/sites/default/files/motorsport/documents/fuel/Code-of-Practice-Fuel.pdf>

Officials of the meeting

The exact roles and responsibilities of the various officials are set out in the Motorsport Manual, and the following is a brief outline for guidance only.

Clerk of the course – Runs the meeting, makes the operational and disciplinary decisions – i.e. GOD

Stewards – Appointed by Motorsport NZ to ensure that the meeting runs according to MSNZ rules – i.e. GOD's supervisors

Competitor Relations Officer – The official to see if you have any problems or concerns with regard to the meeting – i.e. GOD's representative in the pits.

Scrutineers – Carry out technical inspection of your car, and will advise the Clerk of the Course if your car is/is not acceptable to race.

Judges of fact – Officials delegated to make decisions as to breaches of specific rules, e.g. noise, start line infringements etc.

All the officials are dedicated car club people, who have volunteered, unpaid, to put on a race meeting for your enjoyment. They are trained and experienced and are there to make the meeting run safely, within the rules. Politeness, respect, good humour and doing things right make for a pleasant relationship with the officials, and a successful race day

Documentation

Once you have arrived, unloaded your car and parked your, trailer, your first port of call is to documentation. This is where you “check in” with the organizers;

You will need to;

- Confirm details of, and correctness of your entry
- Produce your competition licence and club membership card
- Produce your car’s logbook

The organizers will check off details on your entry form, look at licence & membership card, and check the logbook to see if the car is to be scrutineered. Cars are generally scrutineered every third meeting, or if the car has not been scrutineered in the last 6 months. It may also be scrutineered if it had a problem noted at the last entry, if there has been a change to the roll protection, or at the organisers’ discretion.

If your car is not required to be scrutineered, your logbook will be marked “not audited” and generally a sticker will be given to you to place on the car to show that it has been accepted at the meeting.

If required to be scrutineered, you will be asked to present your car at the scrutineering bay. Your logbook may be retained by the organizer and given back to you at scrutineering.

Novice “stripes”

Competitors who haven’t previously competed in four series meetings may be required under Series Rules, to have three stripes 300mm x 25mm on the rear windscreen of their car. These should be fitted before scrutineering.

This is for safety reasons, so that other drivers can recognize and allow for a less experienced competitor.

Scrutineering

Your car must be presented at scrutineering as it will be raced, along with your helmet and overalls. i.e. no fuel containers, spare tyres or lunch boxes on board. (If you intend running an in-car video camera, this should be securely mounted for scrutineering too.)

Scrutineering is all about safety, your safety as well as that of the other competitors and officials. The scrutineer will look at selected safety items on the car, so be ready to assist with opening bonnet or boot, and showing him your safety equipment when requested.

If you pass scrutineering, you will be given a sticker to place on or near the right hand side of the rollover bar to show that your car is OK to race.

We all feel a bit nervous when someone is looking at our car and possibly criticizing our mechanical handiwork. If the scrutineers do ask you to change or repair something on the car, it will be for good reason and for your safety.

Don't be defensive or argue with the scrutineer. The scrutineer is an unpaid volunteer, and is doing it for the love of the sport and for your safety. In any case, you don't get to race until the scrutineer passes the car. Be nice to the man !!!

Some minor infringements may be noted in your logbook as requiring attention prior to the next meeting. Please make sure these items are attended to, if you don't you will not be able to race and are liable to a fine !

Transponders

Most meetings will do their timing by the use of a transponder. A transponder is a small "black box" which allows the organizers to record your lap times electronically. This ensures accurate lap times and saves the need for people to do timekeeping.

Timing loops are fitted at the start finish and pit lanes of the major circuits to detect the transponder as it goes by in your car.

The transponder does need to be fitted according to the organizers directions otherwise it may not necessarily register your times, and your lap records may go unrecognized !

Transponders are an expensive item but can often be rented from the organizers which can help keep costs down. Don't lose it, or accidentally take it home after the meeting. You might be billed for it !!

Drivers Briefing

Once documentation and scrutineering is completed, **all drivers are expected to attend drivers briefing.** The officials of the meeting are introduced, and matters of importance or concern are advised to the drivers.

If you don't understand the briefing, do ask for clarification, because it is very likely there are a bunch of other drivers who are as puzzled as you are !

Do make sure you attend. They may well do a roll call, and it is regarded as most unacceptable not to be there. Also, make sure your pit crew don't run your race engine during the drivers briefing!

The Clerk of the Course can impose a fine for not attending drivers briefing

Novice briefing

If it is your first race at a particular circuit, you will be expected to make that known on your entry form, and to attend a briefing for new drivers. It is a requirement that you attend, and is again very much with safety in mind.

Each circuit is different, and the organizers need to know that everyone on track understands what is happening. Do make sure to attend.

Pre Race

Time for a final check of fluid levels, torque up the wheelnuts, check the tyre pressures and give the car a final "once-over" to ensure that it is all ready for the race.

Favorite mistakes are leaving objects in the car to rattle around in the race or to be a danger in a crash, (spare tyre ?) or even not doing up all the wheel nuts. Get into a checking routine and stick to it. Perhaps make up and use a check-list?

Practice

You will get a call to go to the dummy grid for practice. You should be in your race suit and ready to go at short notice, helmet and gloves ready, and the car warmed up.

Practice should more properly be called qualifying. Your "practice" times will be used to allocate the start positions on the starting grid, and usually fastest car to the front. Getting a good grid position has obvious advantages at race time, so practice needs to be approached seriously.

Think about what cars are around you during practice, try and get positioned so that you can get in a good fast lap without other cars interfering. (Not always easy with 30+ other cars on track)

A few dollars previously spent on a testing day at the circuit is a wise investment and will allow you to get the best result from the race meeting. It will allow you to set your car up, and to optimize your driving technique in a relaxed timeframe, rather than trying to figure out problems or change things during the short time available at the meeting.

Note: You are normally required to have completed at least 2 laps of practice before being allowed to compete in a race. If not, you may be allowed to start off the back of the grid, but at the Clerk of the Course's discretion.

With practice completed, you will return to the pits. You should re-check the car, to confirm there are no leaks or other problems, refuel if needed and make sure that it is ready for the race.

Results from the practice are generally posted on a notice board, as may be the grid for the race itself.

The Race

When called to the dummy grid, move up, and be ready to be shown into your position on the dummy grid. You will be expected to maintain this position during the warm-up lap and the start itself. (Unless instructed by an official, don't move into an apparently vacant spot.)

You should be belted into your car with your helmet on prior to the race before yours finishing. If you are not ready to go you may be prevented from starting the race.

You will be waved away onto the track for your warm-up lap. This will give you time to warm up the tyres and the brakes, so they are working acceptably for the start.

Be careful not to surprise any of your fellow competitors with dramatic weaving or crash stops during the warm up lap. (If you want to weave to warm up the tyres, remember, use no more than 50% of the track width !) Damaging another competitor's car on the warm up lap is not going to increase your popularity!

When you get to the starting grid, you move up to your allocated position, and obey any instructions of the grid marshals.

Keep an eye on the start line. A white sign saying "30 Seconds" will be shown when the pole position car is in place. When the starter is ready to start another sign with "5 Seconds" will be shown. The race will start around 3 to 5 seconds later.

The Start

The start of a race may be by lights or by flag. It will be specified in the Supplementary Regulations and will be discussed at drivers briefing. The normal methods of starting are a red light being extinguished, or the national flag being waved.

Shortly after the "5 Second" board, you will need to have the engine revving to starting RPM, and be ready to go. Then when the flag drops or the lights go out, you are off !

Be careful not to creep over the line at the start as you may get penalized. Some starting grids are slightly sloped, and you may need to use the handbrake.

The start and first corner are, as any motorsport fan knows, the most hazardous times in a race. To restate the old cliché, you aren't going to win the race on the first corner, but you might well lose it there.

Things to watch at the start;

- Not too much wheel-spin, it is slow and unproductive.
- Make sure there is a gap before committing your car to it !
- Look out for stalled cars ahead of you !
- Look out for the occasional very fast car coming from behind !

Remember -

- Your tyres aren't up to full heat / adhesion yet
 - Your brakes may not yet be hot and fully effective
 - Keep a good look out well ahead and be prepared to react if an incident does occur
-

Handicap start

The handicap or reverse grid race, requires that competitors start at staggered times, slowest first, with the aim that all cars have the opportunity to be in the lead at race end.

The supplementary regulations will usually state the start procedure, and it will be mentioned at the drivers briefing.

The most common method is for the cars to assemble on the starting grid in their time groups, and as each group starts, the next group will roll up to the starter's flag. A marshal with a red flag will usually stand in front of the waiting cars, and release each group in turn to go to the starter.

Alternatively, the starter may require the cars to stay stopped on the starting grid and he may move down the grid. Once the first group of cars is started, he then moves on to the next group and so on.

Incidents

If an incident occurs, the flag marshals will display the appropriate flags.

Watch for the flags and do take note of them. Favorite foul-ups are:

- Yellow – Means no overtaking. (But some miss the flag and do overtake)
- Red – Race stopped, cease racing. (If shown in practice, return to pits, if shown in race, return to start grid.)

The rules on flag signals may change slightly from time to time. Check your current copy of the Motorsport Manual so you know exactly what you are supposed to do.

You can get fined, or have your licence endorsed for not obeying flag signals. E.g. overtaking under the yellow flag.

Worse, you could be endangering an injured competitor or a flag marshal going to assist at an incident. Keep your eyes open and stay aware of the flags.

Being lapped/overtaken by a faster car

No matter how good a driver you are, there will come a time when you will be overtaken by another car. While it is the overtaking driver's responsibility to overtake safely, it is also up to you to select your line through the corner, hold a consistent line in the corner, and not make any sudden manoeuvres that may be dangerous. i.e. no blocking

Not willingly conceding a position is what racing is all about, and when competing on level terms with another competitor, not a problem, but for a much quicker car coming up to you, it is both pointless and unsafe to try and defend the position.

Do not try to suddenly pull out of the way for the car approaching from the rear.

Be predictable, maintain your line, and let the other driver overtake in a safe manner.

If possible try to signal the overtaking driver which side you wish them to pass on. As well as signaling the obvious it lets the other driver know you have seen them.

In a handicap or reverse grid race, there is a possibility for numbers of cars to be passing at once. While contesting strongly for a position and resisting being overtaken is perfectly OK with someone of similar capability, when there are a pack of much faster cars close behind, it is hazardous indeed to try and obstruct them overtaking. Discretion is advised !

The finish - Keep concentrating - no sudden slow-ups

One lap before the finish, a "last lap" board will be displayed at the start line. At the finish of the race, the traditional chequered flag will be displayed.

Don't brake suddenly, stop or lose concentration waving to another competitor. Any number of accidents have happened after the end of the race. Keep going at a reasonable, but reduced speed.

Be aware that the track is still operating, that there will be other cars still racing and that accidents can still happen. You need to stay aware of warning flags and for other cars that may be returning slowly to the pits after stopping during the race, also for recovery vehicles or flag marshals that may be near the circuit.

Don't loosen your belts or remove your helmet until you have stopped your car at your pit.

Slow in the pits please !

Respect the pit lane speed limits posted at the pit entry. The pits generally have two lanes. The outer lane or "fast" lane is limited to 40 km/h. The inner lane is limited to 15 km/h. 40 km/h seems very slow after a race, so do take it easy.

There are likely to be people working in and around the pits, as well as other cars coming and going. Speeding in the pits is a danger to all concerned.

Withdrawal from the meeting

If you are going to withdraw from the meeting during the day, please make sure you advise the secretary of the meeting. This will help the accuracy of the results, and the officials won't be looking out for your car unnecessarily.

Accident damage

If your car is involved in an accident on track it must be re-scrutineered to confirm that it is OK to continue racing. The car may only return to racing at the discretion of the clerk of the course.

Learning from others' experience

The old saying goes, that experience is what you get, right after you needed it.

There is an easier way...

The drivers and others associated with your race Series have accumulated many years of knowledge about the cars and the New Zealand motorsport scene. New drivers are encouraged to contact us at HRC or other competitors for information or assistance.

We are happy to help and to answer questions

Remember... the only silly question is the one you didn't ask, that got you a DNF !

Document courtesy of Trofeo Series website