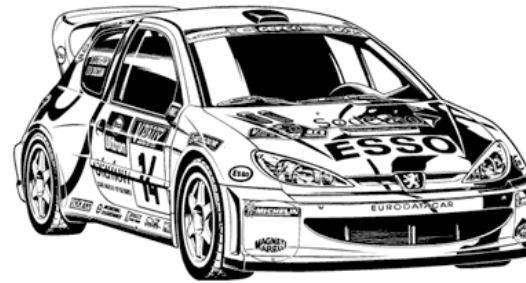


Coming Events

12 th – 13 th May Sun 13 th May	Castle Coombe Ashby Bedworth Tiverton West London	Tamiya Eurocup 4/9 Kyosho World Cup 2/6 BRCA IC10 National 3/10 HPI Challenge South 3/8 Summer Series 2
Sun 20 th May	Aldershot West London Halifax	Club Meeting Summer BRCA Summer Touring 2/7 HPI Challenge North 4/8
26 th - 28 th May Sun 27 th May	Ashby Wombwell Snetterton Mendip Chessington West London	Pete Golder Grand Prix BRCA IC10 National 4/10 BTCC Schumacher Cup 2/9 HPI Challenge South 4/8 Hotrods, ASCAR Adrian Jacobs Memorial race
Mon 28 th May		
2 nd – 3 rd Jun Sun 3 rd Jun	Southend Aldershot	Tamiya Eurocup 5/9 Club Meeting Summer
Sun 10 th Jun	Aldershot Stafford Southend Stonehaven West London	Kyosho World Cup 3/6 BRCA Summer Touring 3/7 BTCC Schumacher Cup 3/9 HPI Challenge North 5/8 Summer Series 3
Sun 17 th Jun	Aldershot Halifax Tiverton	Club Meeting Summer BRCA IC10 National 5/10 HPI Challenge South 5/8
Sun 24 th Jun	Bedworth West London Ashby	BTCC Schumacher Cup 4/9 Summer Series 4 Summer Series 2
30 th Jun – 1 st Jul Sun 1 st Jul	Wrexham Aldershot Wombwell	Tamiya Eurocup 6/9 Club Meeting Summer HPI Challenge North 6/8
Sun 8 th Jul	Aldershot Ashby Snetterton West London	BRCA IC10 National 6 BTCC Schumacher Cup 5/9 HPI Challenge South 6/8 Summer Series 5
14 th – 15 th Jul Sun 15 th Jul	Snetterton Aldershot Bedworth West London	Tamiya Eurocup 7/9 Club Meeting Summer Kyosho World Cup 4/6 BTCC Schumacher Cup 6/9
Sun 22 nd Jul	Ashby Halifax	BRCA IC10 National 7/10 BRCA Summer Touring 4/7
Sun 29 th Jul	Snetterton Southend Ashby Stafford West London	Kyosho World Cup 5/6 HPI Challenge South 7/8 Tamiya Eurocup 8/9 Torc 9/13 Summer Series 6



AMCC News 32

May 2001

Club Membership Closed

The Committee was hoping to keep the club membership open to allow for newcomers to join us at our site to run their cars, but new applications have already exceeded the end of years projected figures. We have therefore closed our competition membership intake for this year.

A two tier membership was planned for this year, one was for membership to the club for practice purposes and the other, a full membership, was to allow for practice and racing use. This proposal was rejected at the AGM before it was fully heard leaving us with a large club membership and no proper control over race entry size, which brings us to the next and painful subject of pre-booking.

Pre-Booking

A pre-booking system has finally been forced upon us, we tried to hold back on this as it would mean a great upset to a number of racers not being able to race when they wanted, but due to a meeting held on April 8th where we had an unwanted record of 152 race entries, we were left with an embarrassing 18 heats.

Full details of the pre-booking system should by now have reached you by post from our race director, Richard Cox. I am sure we will have many complaints from those being unable to race but the other option is as we had on April 8th, only 2 qualifying rounds and finals.

The current lack of tracks in the south is probably the main reason why the Aldershot Model Car Club is so popular, also the fact that our track is open most days of the year for testing and practice use. The Electric drivers have the luxury of six local tracks, Aldershot, Racal Decca, West London, Crystal Palace, Southend and Southampton, whilst those wishing to drive IC powered cars have only two, Aldershot and Crystal Palace.

There has long been talk of separating the Electric and IC classes to different weekends but we are only allowed so many race days a year, and I can't see the Electric drivers agreeing to only one race meeting a month so that idea is more than likely a no go.

AMCC will be restricting future Club race meetings to 14 heats during the Summer season (April - September) and 12 heats during the Winter season (October - March).

AMCC Summer 1, 8th April 2001

GT/F1		
Andy Carless	*	16: 5m 12.52s
Micheal Harris	Corally	11: 4m 31.45s
Neal Stevenson	*	10: 5m 19.23s
Scale Modified		
Scott Smart	*	18: 5m 13.56s
Ian Southwell	*	18: 5m 14.04s
Glenn Westwood	Associated	17: 5m 00.79s
Joel Ross	*	17: 5m 07.25s
Luke Bennetts	*	17: 5m 16.39s
Bob Ryan	*	17: 5m 17.77s
Mark Soper	*	16: 5m 02.93s
Ronnie Flint	*	16: 5m 17.75s
Stephen Abbott	*	15: 4m 32.89s
Robert Clark	*	15: 4m 49.87s
Craig Maher	*	15: 4m 56.47s
Russell Bailey	*	15: 5m 01.45s
Paul Guppy	*	14: 4m 42.64s
Tom Limbrick	*	13: 4m 28.30s
Luke Taylor	*	12: 4m 36.73s
Mark Cripps	*	11: 4m 37.74s
Robert Crawley	*	04: 2m 12.13s
IC-10		
Marcus Epstein	Yokomo	18: 5m 16.68s
Chris Dugan	*	17: 5m 17.44s
Tony Dimaiolo	Serpent	17: 5m 16.73s
Koshi Kelly	Picco	17: 5m 07.58s
IC Scale		
Mark Green	Serpent	20: 5m 14.79s
Aaron Wearn	Mugen	19: 5m 12.28s
Stephen Brown	*	18: 5m 01.70s
Rob Warren	Yokomo	18: 5m 13.40s
Ashley Bond	Thunder	18: 5m 15.46s
Alex Gardiner	Mugen	16: 5m 07.27s
Karl Jansen	*	15: 5m 10.93s
Wayne Honey	HPI	15: 5m 16.44s
Chris Gardiner	*	13: 5m 00.95s
Steve Graham	*	13: 5m 10.44s
Mark Van Niekerk	*	13: 5m 26.28s
Stephen Woods	*	12: 5m 08.14s
Alan Stacey	*	11: 3m 42.66s
Jon Clarke	*	06: 2m 32.67s
Scale Stock		
Olly Jefferies	Yokomo	16: 5m 09.26s
James Cann	*	16: 5m 14.71s
Simon Hamblett	*	16: 5m 18.33s
Robert Digby	Yokomo	15: 5m 09.80s
Nic Swindells	HPI	15: 5m 14.30s
Dominic Skinner	*	15: 5m 18.08s
Robert Hancock	*	14: 5m 04.87s
Kevin Bailey	*	14: 5m 21.72s
Daniel Miller	*	13: 5m 10.76s
Matthew Timms	*	11: 5m 26.76s
Chris Miller	*	08: 4m 04.03s

with an engine that runs hotter, gets poor fuel economy and is more difficult to tune. If your engine's manufacturer doesn't recommend a specific percentage of nitro, you may have to experiment to establish the proper balance of horsepower and efficiency.

Nitro Fuel - Part 3 (an article by Chris Chianelli)**NOW, HOW MUCH NITRO SHOULD YOU RUN?**

When engineers design an engine, one of their primary considerations is the type of fuel to be used. The compression ratio and the timing and duration of the intake and exhaust ports take fuel composition into consideration. For example, Fédération Aéronautique Internationale engines—popular in model airplane competitions—are designed to run on pure methanol. The competition rules specify that fuel must not contain nitro. Adding nitro to the fuel used in these high-compression engines usually results in poor performance and high running temperatures.

Similarly, RC car engines are designed to run with a certain percentage of nitromethane. An engine designed to run on fuel with 20 percent nitro is configured for a certain compression ratio and a fuel/air ratio that provides ideal performance. Introducing a considerably higher concentration of nitro allows a greater overall amount of fuel volume. It can result in higher compression (air is the only compressible component in the fuel mix), detonation (when fuel explodes rather than burns) and higher operating temperatures. These outcomes show the fuel exceeds the design limitations of the engine. Even if none of these symptoms are patently obvious, combustion is compromised, and that prevents fuel from being completely burned. It can create an unstable idle and erratic fuel-mixture settings. These conditions are common in engines running on higher than recommended percentages of nitromethane. Essentially, the answer to the “How much nitro?” question is that you should follow the engine manufacturer's recommendations.

There is a “window” of about 5 percent both above and below the recommended percentage of nitro you can have in your fuel before engine performance will be noticeably affected. If a manufacturer recommends 20 percent nitro, you can get away with 25 percent. Go beyond that, and you are likely to wind up

More to come in issue 33

How to: Dial-in your Rebuildable Stock Motor ? - Part 2

Trinity's Jim Dieter tells you how.

Cut the comm

You'll need a motor lathe for this step, but don't worry if you don't have one; someone at the track who has one is bound to be willing to cut your comm for a soda or a slice of pizza, or your hobby shop may offer comm-cutting as a service. If you do have a lathe, just skim the comm to true it; try to reduce its diameter as little as possible so that you'll get maximum wear from your motor. If you have a “Pro” motor, this step has already been done for you at the factory.

Jim Dieter “When the comm segments are pressed onto the armature at the factory, they bow slightly. The skim cut ensures a perfectly true comm, and that reduces the likelihood of brush bounce and guarantees that the brushes will have the best possible contact. I usually coat the comm with black marker so I can see any ‘high spots’ still left after the first pass. I make the next pass only just deep enough to get rid of the high spots, so I keep as much of the comm material as I can.”

Centre the armature in the can

It's important for the armature to be centred in the magnets' magnetic field; if it isn't, your motor won't be as powerful or as efficient as it could be. To align the armature, reassemble the motor without armature shims or spacers, and leave the brushes out. Spin the armature; it will centre itself. Pull the armature shaft out of the can's nose, and note how much play there is. Remove the armature, add shims to take up the play, and repeat the process until there is just the slightest free play when you pull on the armature shaft after centring it by spinning it in the can. Then add shims to the commutator side of the armature until there is just a tick of play when you push on the armature shaft; if there's no play, the arm is pressing against the bushings, and that causes friction. Make sure you can feel just a tick of play! If you need extra shims, buy Trinity's shim kit (part no. 4027)

The number of shims required on each end of the armature varies with the motor. Determining how many shims to install can be tedious, but it's well worth the time.

Jim Dieter “If the armature has no shims on the nose bushing side but you need the armature to sit lower in the can, you can shave the nylon off the armature shaft with your motor lathe. Remove as little material as necessary. When you reassemble the motor, try using Trinity's Teflon shims (part no. 4030) in place of steel shims where the shims contact the bushings. Friction is the enemy, and the Teflon shims are another way to fight friction.”

More to come in Issue 33

Track Records

(Latest Update April 1st 2001)

IC 10	Mark Ambler	Serpent	21: 5m 04.87s	11.6.00
F-1 / GT	Gerald Page	Associated	21: 5m 08.63s	17.9.00
Scale Modified	David Spashett	Yokomo	21: 5m 09.55s	3.9.00
IC Scale	Chris Grainger	Yokomo	20: 5m 03.11s	17.12.00
Scale Stock	Chris Wilkinson	Associated	18: 5m 12.83s	1.10.00