

July, 1989

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COMPETITION



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ROAR OVER AMERICA

Dirt Oval Nationals

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The LAST McCoy!

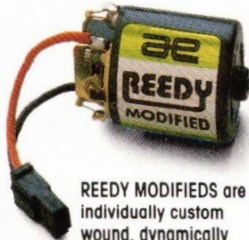
J-CAR/Ultima

IT'S WINNIN' TIME!

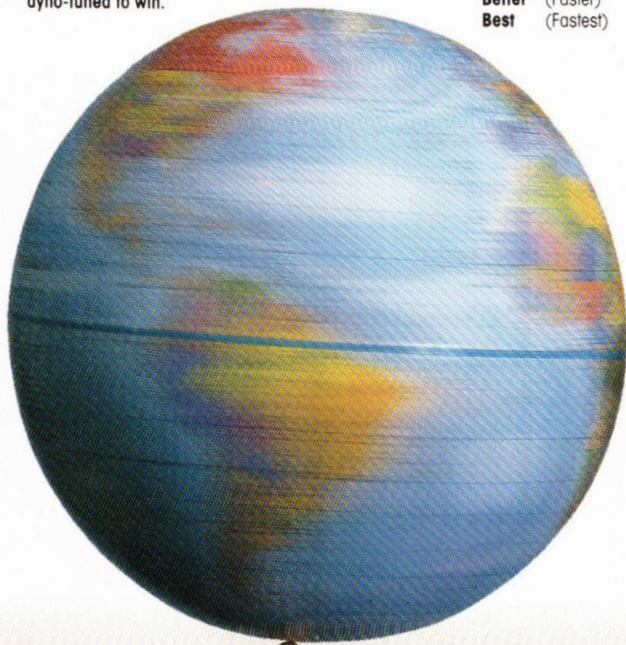
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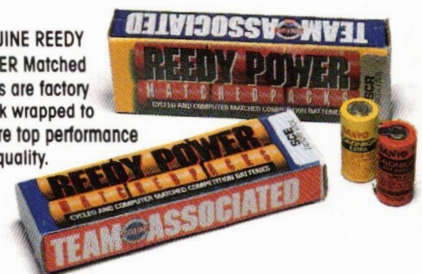
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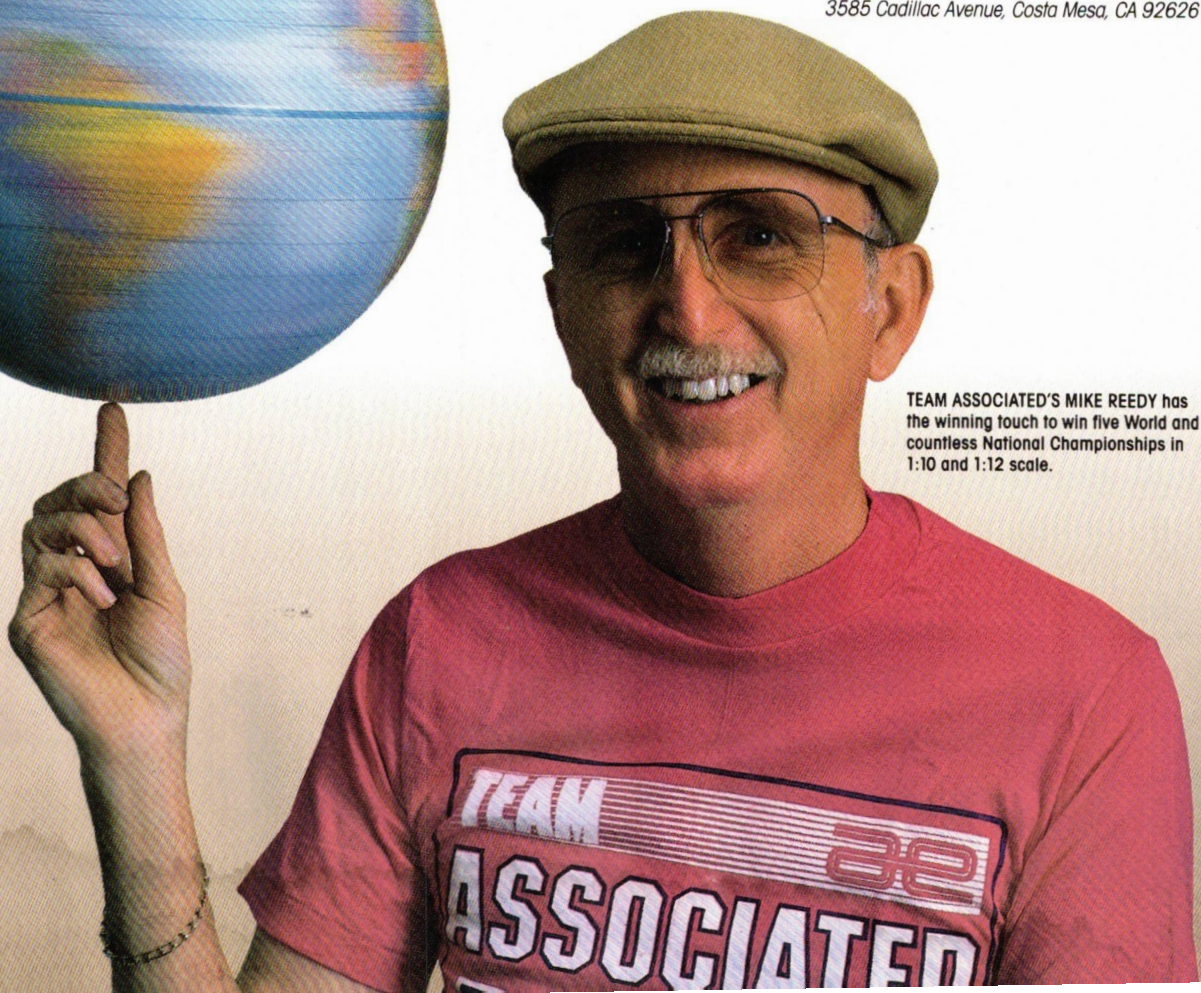
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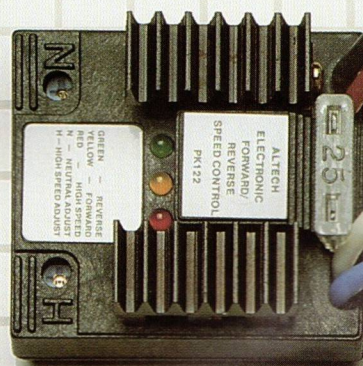


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MM:	48.0	42.0	29.68
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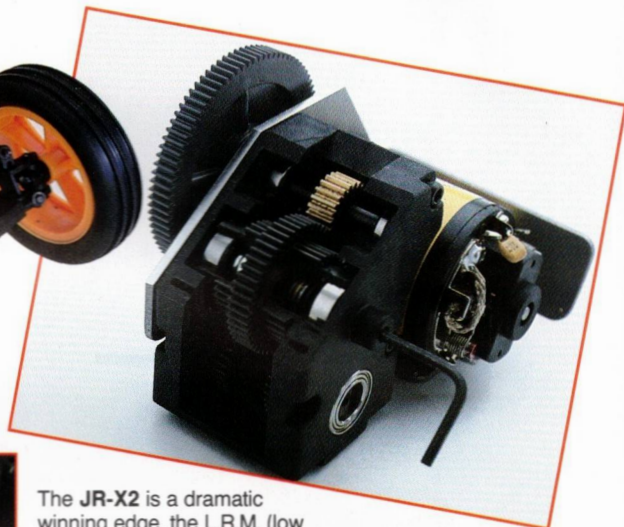
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The JR-X2 is the product of my many years of R/C car racing experience. It incorporates the many little things that helped me win 4 World Championships and numerous major titles around the world. The highly tested and developed design will help you be successful against the toughest competition.

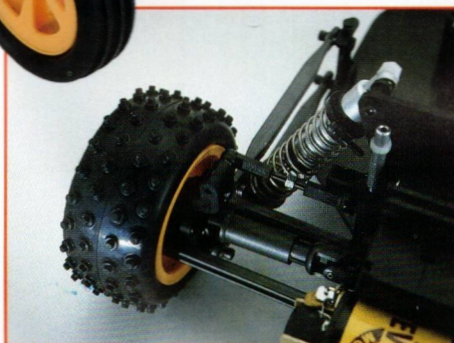
GIL LOSI JR.

JR-X2 FEATURES:

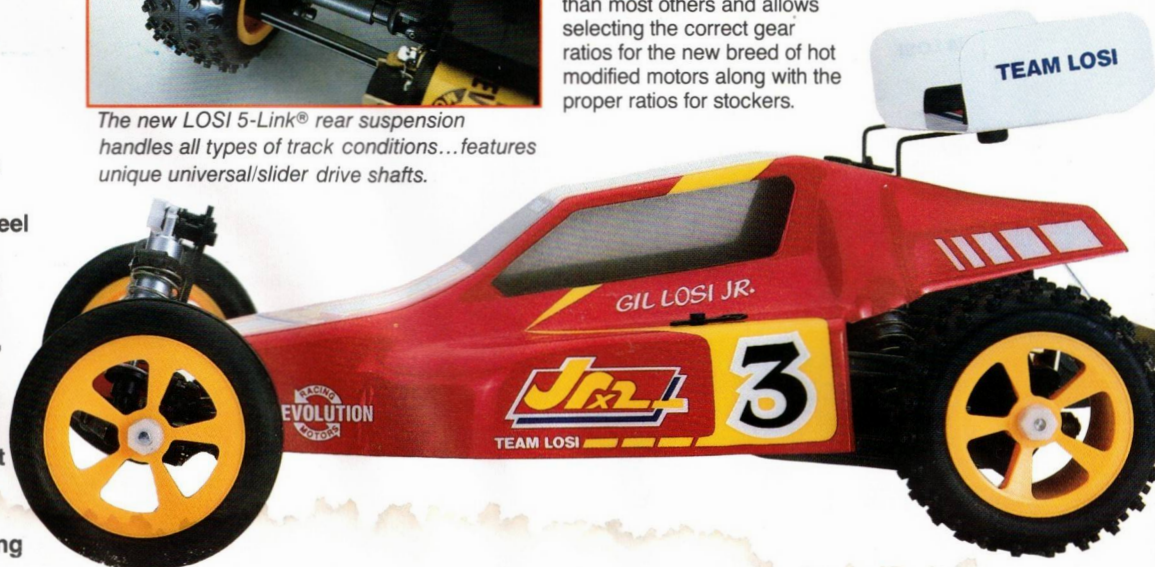
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ABOUT THE COVER

Cover photo of the J-Car/Ultima car. This car is produced for racing on dirt ovals, pavement and carpet. Check the complete article on page 43.

Finish the Lap Your On . . .

TOP TEN RANKING

Okay raise your hand, "How many of you saw the recent Leonard/Herns fight?" Let's see here, "One, two, three . . . Okay 10! Leonard was the champ and Herns the #1 ranked contender. The number one ranked. That got me thinking, right now, in each division, who is the number one driver. We have National and World Champions, but since these victories alot of these guys have been beaten. I want to know right now who is number 1!

Lets look at 1/8 on-road. Re-Pete Fusco is the current World Champion. That is a title that would strongly indicate number 1, agreed. Yet it was Ralph Burch, Jr. who recently defeated Fusco at the recent McCoy race. Wouldn't that indicate Burch is now number 1?

In the minds of many, including myself, at this writing Burch is number 1. Let me put myself in more hot water. At the second 1/12 World Championships Tony Neisinger came out the winner. Noticeably absent was Joel Johnson. Prior to those worlds, and immediately after Joel had consistently defeated Neisinger at many major events. For my money, at that time, Joel Johnson was the number 1 driver in the world, with or without a world championship. It wasn't until two years later in Las Vegas that Tony Neisinger truly became number 1 by defeating everybody, including Joel Johnson who finished a close second.

So where does all this take us. I firmly believe that the time has come for a ranking system to be formed. A system that within 30 days of a major event can reflect who is the top around.

There will be those that will say a ranking system is not needed. All one has to do is look at who finished first at the last big race and there you have it, the current number 1. I don't believe it is that simple.

Due to the format of our current electric racing just winning the A Main doesn't always tell you who was the best. Lets look at most any big race around, a race like the Nationals in 1/12. This year there were six rounds of qualifying, and as is customary at the Nationals, one A Main. With the exception of drag racing, I don't know of any major form of motor racing which has qualifying lengths equivalent to the main event length. Do we run a 500 mile qualifier for Indy?

At this Nationals, Rick Hohwart was the TQ. After six rounds of qualifying, nobody was able to run more laps, quicker than Rick. In the main he didn't do that well and subsequently doesn't have much to show for his efforts.

Lets take this example and bring it one step further. At a major event a few years back there was a driver who, after six rounds of qualifying put himself at the TQ spot. In addition to this he posted the next four quickest times. After leading the main for the first two laps a turn marshal accidentally stepped on his machine. Needless to say he didn't finish. After all he had done in qualifying, and taking into account what he was doing in the main, wasn't he the fastest on that day. The results didn't show it, but he was number 1.

Clearly just finishing in front of the A doesn't automatically mean you are tops, though, admittedly it usually does.

In the May, 1989 issue of ROAR's Rev-Up, they too have stated that it



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may be time to set up a ranking system. I don't know how they will conduct their ratings, however, I can tell you how we are doing ours.

Each month Competition Plus will fax ballots to key people in the R/C car world. Their votes will be tallied and the results will be published in each issue of Competition Plus, starting with the August issue. The system will be quick and is easily adapted to change.

In the beginning lets keep it simple. A top ten in three divisions:

1/12-1/10 On-Road

1/10 Off-Road

1/8 Gas On-Road

Within a few months we can expand this to include 1/4 scale, dirt and paved oval, just about any class that there is racing for.

As a reader you are encouraged to send us your top ten in any or all scales. Below our ranking we will publish the readers rankings. Keep in mind that this is a print medium, and unlike broadcast, there is a press time delay factor. Under our rankings will be the dates the votes were tallied. Any major event after that date would have an impact on the results, which will be published in the following issue.

Will there be disagreements? Of course, there will be and this will be part of the fun we can have with this. Some of the best times I've had over the years in racing have accrued without a transmitter. Kicking back with fellow racers discussing who is the best has always provided some fascinating conversations. Let this be a tool to stimulate more of these talks.

Another important service this ranking system can provide would be to those just new to our sport or spectators. I can't tell you how many times I've been to

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- Gas powered ZENOAH MAX 140 engine with recoil starter, centrifugal clutch and solid state ignition.
- Four wheel independent suspension with fully adjustable coil spring, oil filled shocks.
- Fully enclosed, hardened steel gear drive with quick change ratios (6:1 standard, 5:1 and 7:1 optional).
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- Ball bearings used throughout all high load points.
- Choose Thunderbird or Montecarlo body styles.
- Options available: radio system, servos, battery, polished wheels, anodizing (red, blue or gold).

See the RACO Grand National at your local hobby dealer, quarter scale race track, or contact:



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The RACO R/C quarter scale Grand National stock car won **80%** of the national races it entered in 1987. An **unmatched** record built on state-of-the-art design and the finest manufacturing techniques and materials. This all adds up to the reliability and capability of a winner!

a race and after a name was announced a spectator would quickly go to the results of Competition Plus to see what he has done in the past. This ranking system can be an important guide to spectators attending a regional or national event.

I should tell you that only the drivers and not their teams will be listed. This should eliminate

alot of the team bias that may cloud voting. I look forward to reading your picks and I am anxious to see if we agree. Whether we do or not, I'm sure we'll have alot of fun discussing it in future issues.

MAILBOX

MOTOR CONTROVERSY RESPONSE

Dear Peter:

Lately I find myself buying your magazine primarily for your editorials. We talked about team sizes on the phone, and Chuck Kimbrough stated the problem well.

I don't think we should encourage racing for money. I'm also not sure about television coverage. It would seem to be a two edged sword. We could use some coverage to develop interest in our sport and help its growth. Television coverage is generally limited to significant events with a broad appeal. Possibly the promotion of national events, by the individual race director or sanctioning body, would be a way of getting the coverage needed. Limiting the coverage to a short format would allow it to be included with other forms of motor sport reporting. Limited exposure would also limit the influx of sponsor dollars. It's the money spent by manufacturers, after all, that puts financial strain on non sponsored racers. We all want to be competitive. Unfortunately it takes money to participate. I wouldn't want to see the cost get out of reach of the people we are trying to attract.

It's encouraging to have people, like Bob Boucher, develop parts that have a long service life. A 100 race life, for a motor, is quite something. It's too bad that he doesn't have a motor that conforms more closely to ROAR regulations. I'm not in favor of unlimited design rules. Not even with a retail limit of \$80. I wouldn't want to be the one that had to check all of the motors for compliance.

A claimer clause might make an unlimited design rule work. At my home track, you could

claim any motor I'm running by replacing it with a new one. The only thing I ask is that it's the same brand and wind, as the one I'm running. On a local level, this has worked out pretty well. Complaints about a sponsored driver's unfair advantage are reduced.

In any case, you can't please everyone, no matter how you write the motor rules.

Well that's my two cents worth. I can't wait to see what hornet's nest you stir up next.

Best Regards,
Peter Mitchell

MOTOR CONTROVERSY REBUTTAL

Dear Mr. Mitchell:

Let me thank you, Mr. Mitchell, for applauding Astro for developing a motor with a long service life, he calls our Turbo-05 a 100 race motor. We chose to start our design with a clean sheet of paper rather than be arbitrarily constrained to a Japanese Yokomo can. We think the results speak for themselves.

Mr. Mitchell alludes to a problem with a more flexible design rule, and says he would not want to have to check all these motors for compliance. If the rules were more open there would be fewer rules to check, and fewer ways to cheat. I think the rule of 2000 motors is adequate to eliminate special one of a kind motors that would make racing a rich man's sport.

Mr. Mitchell complains rightly about the high cost of racing. Well we think our Turbo is a step in the right direction. First of all our Turbo Motors have a very long useful life, a life measured in months instead of minutes. Secondly all our Turbo Motors are all pretty much alike. The power varies about 2% over a

production lot of 100 motors. In contrast ferrite motors vary 10% and even 20%. The youngster getting into racing does not have to buy ten Turbos to find a best one . . . each and every Turbo is the best one.

Bob Boucher
AstroFlight

AN OPEN LETTER TO ALL ROAR MEMBERS!

As many of you know, during the past 18 months ROAR has come under some heavy criticism regarding stock motor timing. The popular theory is this is all ROAR's fault. If this is true, then it is actually our fault. For you see, we are ROAR. As participants in this sport, and of ROAR sanctioned events, we make up the organization known as ROAR. To assume ROAR is some ivory towered group that has been assigned the responsibility of watching over the sport is a mistake we are all guilty of. The problem, as I see it, is we as members have not seized that responsibility.

ROAR needs our help. Not our criticism, our help. The time has come for all of us to get involved! If you truly care about the future of this sport, and the future of ROAR, you must step forward and help.

This appeal is not from a manufacturer trying to capture market share. We have our share. As a major manufacturer I have enjoyed my share of the success of R/C racing. Much of that success has come indirectly from ROAR's ability to create the sound network of clubs and racing guidelines that currently exist. My appeal is an attempt to create market stability, so we may all continue to enjoy whatever benefit we derive from this great pastime. Be it racing,

PURE POWER

The POWER-MATE plugs directly into all Novak PEAK chargers and TURBOCHARGERS. (charger not included)



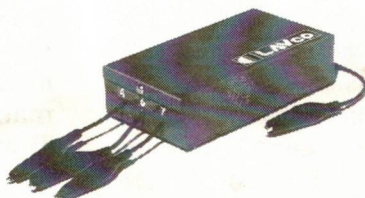
Ultra-stable voltage output makes the POWER-MATE the ideal power supply for your peak charger.

the POWER Mate

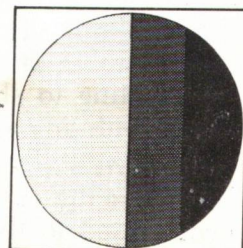
LAVco understands that Pro Drivers need serious equipment.

The POWER-MATE is a serious power supply that can deliver up to 10 amps of pure power. The POWER-MATE is packed with features such as short-circuit protection, ultra-stabilized voltage output, thermal melt-down protection, and a durable anodized aluminum case. Inside, you'll find a heavy duty transformer, dual-capacitor filtering, and a precision LAVco engineered circuit board. Plus, the POWER-MATE is small and lightweight so that you can eliminate heavy car batteries and bulky battery chargers from your pit area. LAVco builds serious equipment designed for Pro Drivers around the world.

— ULTIMATE COMPETITION SYSTEMS —



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Currently we produce in our Speedworks line of motors, a 25 turn motor with 5 degrees of timing. We feel this combination offers us the same performance as the current ROAR legal stock motor without shortening the life span of the motor; as is the case with 27 turn motors with 34 degrees of timing. Clubs and racers that have been using this motor agree with us, in fact the response has been overwhelming. We feel this motor is a viable means to the end of the current stock motor problem.

Let me restate, this is not an attempt to sell more motors! This is an attempt to bring ROAR members to the realization that the current stock motor situation is theirs to solve. ROAR, as an organization, is not at fault for not having a crystal ball into the future. When the current motor rules were established I am sure everyone involved felt they were sufficient to carry us into the future. It is now apparent that they were not. We now know that we need fixed timing. Timing that will offer the racer long lasting, dependable performance. However, reducing the timing on the current motors is not the answer. I'll think that you will agree, racers are probably not prepared to give up performance to gain this longevity. We feel the specifications we are proposing offer the best of both worlds. The 25 turns will offer us the performance levels that we have all come to enjoy, while the lesser degree of timing advance will insure longer motor life. These specifications are within the capability of all current stock motor manufacturers with little or no tooling changes. Furthermore, we at Trinity/Speedworks are willing to share this knowledge with any and all manufacturers. We support the concept of stock racing in ROAR. We are committed to the future of this sport.

We offer this alternative in

hope that racers will stop criticizing ROAR and start getting involved by offering valid solutions. The burden must be shared by all. We at Trinity/Speedworks feel our solution is a viable one. We are willing to support it further by asking that ROAR require that all motors approved for ROAR stock class racing carry a permanent universal marking readily signifying their ROAR legality. We need the stock class. We need uniformity in our stock motors. Most of all we need ROAR!

This is a challenge to all ROAR members to step forward and make a difference. I urge you to send your response today!

Ernie N. Provetti
President, Trinity Products Inc.

I support a stock motor rule maintaining all current specifications with a reduction in the number of winds to 25 and the timing advance limited to 5 degrees. All approved stock motors must carry a permanent universal marking indicating ROAR legality.

Name _____

ROAR Number _____

Please send to: ROAR Information Center, P. O. Box 7308, Athens, GA 30604

OPEN LETTER TO ROAR

Dear ROAR:

As a member of ROAR, I both resent and understand some of the critical comments about ROAR that have been flying forth in the various R/C magazines lately. ROAR has responded to these comments. Many of these comments also involve the stock motor issues. I would like to offer my own feelings in the following 4 areas:

1. ROAR exists to serve the interests of racers. This is not necessarily the same thing as promoting R/C car racing as a hobby. I've heard estimates from dealers who say that the hard

core racers (like me) make up only about 5% of the total R/C car world. ROAR should stick primarily to this one thing: RACING AND THE NEEDS OF RACERS. As long as ROAR looks out for the racer, I don't think racers will be all that critical of ROAR. If non-racers complain about ROAR, tough.

2. ROAR DOES A LOUSY JOB OF TALKING WITH THEIR MEMBERSHIP. I have been a member since January, and have yet to receive a single copy of Rev-Up, or any other communication of any nature from ROAR. I received my membership card, and rules book and that was that. I guess that nothing has happened in Region Six during the last 5 months and I'll have to assume that Region Six has nothing planned over the rest of the year either. This isn't an isolated incident: some local racers I talk to say they got their membership card but are still waiting for their rulebooks. I talked to a fellow who's been a member for two years: he says he's received one issue of Rev-Up.

This has fallout: not only do I remain in the dark about events, races, etc., but I have no forum to express how I am feeling about the stock racing, classes, event schedules, etc. Maybe ROAR expects me to buy R/C car magazines to keep informed of race events. I shouldn't have to.

ROAR!: TALK TO ME! NOW! Use Rev-Up as a forum for racers to tell you what we're feeling. If this happened, racers would be less inclined to take pot-shots at ROAR through the other magazines. Let's be honest: If the ROAR leadership were in touch with its general membership, the magazines would not be getting a ton of negative letters. This is a situation entirely of ROAR's own making. You lie in the bed you make. Let's get out of the Ivory Towers of IFMAR competition and National Championships.

Most of the major automobile clubs go OUT OF THEIR WAY

to keep their members informed: As a member of the Alfa Romeo Owners Club, (\$35.00 per year). I get a local chapter 8-12 page newsletter and a glossy 20 page national magazine monthly. This is a club with 5,000 members, that also provides insurance for Autocross, rallies, time trials, etc. ROAR, with 15,000 (\$25.00 per year) members, should be able to do better than an apparently non-existent (vaporware?) bi-monthly. And, even if ROAR doesn't have enough money (hard to believe) get some of the stock motor companies to chip in, they're making a fortune off of us, they can afford it. The industry benefits tremendously from ROAR.

3. It seems ROAR sets itself up to fail, or at least look weak. By publishing a list of "legal" bodies and motors that is now over a year old, ROAR puts itself in a weak position. What is legal and not legal should be more known every 2-3 months, at least. The very nature of such a list makes it USELESS IF NOT MAINTAINED. DON'T EVEN BOTHER USING MY DUES TO PRINT IT, IF YOU DON'T COMMIT TO MAINTAINING IT. It's hard to take serious what ROAR lists for stock motors when half of the motors available in the hobby shops are not on the list.

I've been at events where out-of-town racers show up with "legal" stock motors that we've never seen or heard of: motors that they are buying at their local hobby shops, motors that are supposedly ROAR legal. Likewise, we're using motors they've never seen! Thank God the race director knew what was what, in that instance. What's legal ROAR, do YOU know, and IF you do, when will you start telling your membership? If I go to a stock race in Texas while on vacation this summer, will they accept all of my "legal" motors as legal? I shouldn't have to depend on manufacturer's ads to find out what is legal and not legal.

4. The 1/10 stock and mod-

ified classes are great, just as they are. BUT: There is NO inexpensive way to start competitive on-road racing. The 1/10 stock class is not by ANY stretch of the imagination the low-cost way to get started in racing. Let's not even kid ourselves. The stock class is a great INTERMEDIATE competition level, but it is not for beginners.

1/10 scale stock racing is expensive and very competitive. In the greater San Diego area, there are many more people racing every week in the on-road stock classes than in modified. The modified pan classes get maybe 3-4 entries, where as the stock pan classes get 25-35. The same situation exists in the gearbox classes. Many of the top stock class racers, especially in the pan classes on big oval tracks, are using SCE cells. Titanium axles and frame pieces are becoming more common. At two of the local tracks I race at, the track record for stock cars is within 2 laps (38/40 and 31/33) of the open record. In essence, the only differences between stock racing vs. modified are one extra battery cell, about 10 turns on the armature and ball bearing in the motor.

The current situation with stock motors has just about reached a limit. The 30+ degree stock motors with cut/timed brushes are in some cases more finicky than modified motors. Ask most of the stock racers how many motors they have and they'll either laugh or cry: I'm working on an even dozen, all in the last four months. If I cook a stock motor, I can't send it back for an overhaul: I now have yet another practice motor. All it takes is one overgeared heat or main on a hot Saturday afternoon to cook a new stock motor.

Even though I really don't want to, I can see myself moving to modified just to save money on motors. After all, three stock motors, which barely last a couple of months, cost the same as one modified, which can be

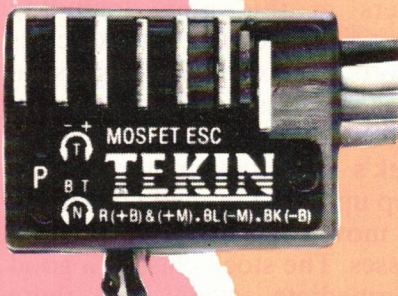
rebuilt and maintained for a much longer period. I'm not the only one saying this; many of the racers in this area, including some of the top stock class drivers are expressing disgust at the stock class situation.

ROAR!: I'm sick of buying this week's hot stock motor, just to keep up. But, I'm really not ready to move up to the modified classes. The stock class is a good intermediate step, but there needs to be a beginning class. I'm lucky. I can afford the small fortune it takes to be competitive in the stock classes, but what about the kids, and people on tight budgets. There needs to be a class where beginning racers can learn without spending a fortune, and still have a shot at an A main trophy. The learning curve for a newcomer in the stock class is very steep and expensive. All the best, most careful setup, and maintenance isn't going to do a racer a hill of beans if they haven't got the power to keep up. Nor is the casual-3-times-a-year-racer likely to be real thrilled with going down to his/her local track with a REALLY "stock" car and getting absolutely humiliated by all the semi-pros in the stock class. R/C racing is a great hobby, but racing with NO chance of winning is not all that exciting. Let's see how many keep coming back after a few experiences like that.

I feel the answer is not to eliminate the stock class, (although I feel tighter controls are needed) but to establish a production/sportsman class. This is not just a Novice issue and this is not a regional issue: ROAR should not depend on the local tracks to provide for the beginners AND for racers on a limited budget, which is the situation now.

I truly approve of the Trinity Speedworks Sportsman Race concept. Hopefully, there will be one in my area that I can participate in. But long term, even this is not enough. People tend to focus mostly on the motor part of

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NOT SHOWN: #BC 250 is similar to BC 100 but has LCD Digital Coulumb meter to measure charge going into battery pack and estimate run time.

#BC 250 - \$189.99

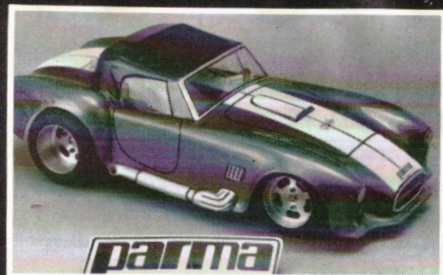


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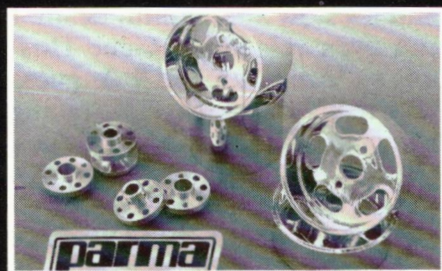
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#17310 98 Tooth \$4.00 #17311 102 Tooth \$4.00
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 Parma unveils their own 64 pitch spur gears! Molded out of tough nylon composite material, they're supplied in white (but can be dyed any color). An exclusive driving ring carrier/grease pocket design allows for smooth differential operation.



#10266 '50 Ford Custom Coupe Body \$19.00
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the stock class issue. ROAR must be proactive and address the full issue. John Thawley's suggestion of a new class is a positive step in the right direction, but I don't believe it goes far enough. Addressing only the motor does not go far enough to establish a low-cost racing class. Maybe it's time for Formula ROAR!

If the SCCA can design/produce an inexpensive Spec car, (Sports Renault, original Formula Vee) so can ROAR. ROAR could establish and certify the design of a spec car for on-road racing: Cars would have to conform to this with a minimum (tires, gears, springs, adjustments) of modifications. No graphite or titanium. Motors must be restricted to a truly stock motor (0 timing, sealed, locked commutator, cheap, etc.) Batteries would be limited to SC types ONLY. Maybe even 4 or 5 cells only. Any manufacturer could produce a car for this class. This would be a stepping stone to the more expensive stock/modified classes. And ROAR, if you do adopt such a class, maybe you will put the rules to a vote of your general membership first.

I haven't mentioned anything about off-road racing: This is something I don't do, therefore I don't feel I have a right to comment about it. I do believe that some of the situations and solutions are similar. In any case, entry-level production racing must become viable.

By the very nature of what ROAR is, The nation's largest sanctioning body for R/C racing, ROAR must accept responsibility for the success or failure of its racing classes. IMSA, SCCA, CART and NASCAR must accept the responsibility for the success or failure of their particular forms of racing. None of these sanctioning bodies have stayed the same over the last 40 years, and they've been the most successful when they've anticipated change not reacted to it or rejected it. An excellent example of accepting change or resisting it

is CART/USAC. The SCCA stuck with some of their production and sports classes for a long time, too long, and watched as they slowly got smaller and smaller fields.

ROAR should learn from those experience. Racers are racers: they'll do what they can to gain an advantage. This does not mean that ROAR can do nothing to promote low-cost, competitive racing. Nor does it mean that ROAR cannot talk to its membership and keep us informed. If ROAR fails in these areas, all it becomes is an insurance agent.

As a new member, maybe I should not criticize ROAR. On the other hand, I remember what it was like to be unable to afford to race my 1/8 scale Dynamics gas car, which I scrimped and saved for, when I was 17 years old. I remember slot car racing, and it's slow and painful death. I can even remember Gene Hustling's "AngleWinder"! I guess that really dates me. R/C racing has come a long way from then (1970's). Hopefully, so has ROAR. But since I have received NO news about ROAR since joining it's hard for me to tell.

I do not want to hear that changes can't be made. And I don't want to hear that everything is just fine. It's not. By the same token, not everything ROAR is doing is suspect. ROAR performs many valuable services for its members. BUT, ROAR, more than anything I want you to step forward and lead us. Please. I'm willing to work for it, and I'm willing to put up with a lot if I can feel a purpose and direction. I'm not sure if I get a sense of either from ROAR at this point in time.

Sincerely,
JIM COLLIS

ROAR'S RESPONSE

Dear Mr. Collis:

I would like to respond to your letter. Please be advised, I strongly disagree with the fact that you find it necessary to air

these differences in the pages of major magazines. There are many inaccuracies in your appraisals of our organization. Perhaps a little research on your part would have left you better informed. Instead, your position publicly defames the very organization you claim to truly care about.

The first area of your letter is very accurate! ROAR exists to serve the interests of the RACERS, Jim, that is what we do.

You then go on to say, "ROAR DOES A LOUSY JOB OF TALKING WITH THEIR MEMBERSHIP", you state that you have been a member since January, and have yet to receive a REV-UP. Jim, pick up the phone! I did. In one phone call I found out that your membership expires January 31, 1990. REV-UP is mailed every other month. The first issue mailed after you became a member was March. We printed and mailed 13,000 copies of that issue. You did not get one. You were not supposed to. Just as we must cut off our editorial and advertising deadlines in order to complete the magazine, we also must have a point to cut off our printing quantities. This is done the first of the month, two months prior to the cover date. January 1 is the cut off for the March issue. It is mailed on February 25. You will receive the March, 1990 issue as your final issue for your year membership. So you see, Jim, after all of your accusations about what ROAR hasn't done FOR YOU one phone call would have provided you with a simple, logical explanation. I hope you are enjoying your May, 1989 issue.

About the content of REV-UP. This is the members' forum. There is a simple method of using REV-UP as a key to unlock all of the information that has YOU puzzled. You will find numbers for your regional directors and his assistants. You will
(Continued on Page 28)

PIT BOARD

PEAK PERFORMANCE: Rick Hohwart from Peak Performance recently TQed and came in won the First EFRA 1/10 On-Road Grand Prix which was held in Austria. Rick was using the new Associated 10L powered by his own Peak Performance.

■

TRINITY: New 48 Pitch Ultima/Optima gear sets. Trinity is announcing its new under and overdrive gear sets for two of the most popular cars on the market. Each gear set comes with the cluster gear assembly and outdrive gear and are color coded for easy identification. All done in 48 pitch for a totally awesome gear mesh.

■

THUNDER FROM DOWN UNDER: Results just in from the 1/10 Worlds Warm-Up race held in Sydney, Australia. Several of the top drivers were on hand attempting to get a jump on their competition. The results were: Masami Hirosaka, Cliff Lett and Butch Kloeber came first, second and third in 2WD. For 4WD it was Cliff Lett and Masami Hirosaka, first and second.

■

FANTASTIC! 1.97 ET!: Don Moncsko sets new 1/4 mile ET record! Don from Naples, Florida ran the new Houge

Enterprises "Illusion" Top Fuel dragster to a new record elapsed time of 1.97 seconds. Mike's record setting rail was powered by a Trinity RC#2015 "Godzilla" 12 turn motor turning Trinity 48 pitch gears! The fuel was 12, 3/4 Sanyo Sub C SCR cells. The place was the Golden Old's, New Port Richey, FL.

■

MUSICAL CHAIRS: Over the last couple of months several drivers have been receiving new t-shirt wardrobes. The two latest are Kris Moore and Erik Soderquist. These off-road stars are now slated to run for Great Planes/Kyosho. They will still retain their TWISTER sponsorship for motors.

■

STAGE III CELEBRATES MILESTONE: May, 1989 marked the first anniversary of STAGE III "The Ultimate Cell Test" as an active business in the hobby industry. In just one short year over 2,500 tests have been performed consisting of over 80,000 cells and over 350,000 conditioning cycles! Stage III would like to thank the many distributors, dealers, and racers who have used our services over the past year. Without their commitment to quality and accuracy, this success story would not have been possible. We remain committed to the highest stan-

dards of precision and service in the years to come.

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NR/CTPA MOVED: The NR/CTPA has moved their National headquarters from Rochester, PA to Champaign, IL. All correspondence should be directed to:

National Radio Control Truck Pulling Association

P. O. Box 1488

Champaign, IL 61824-1488

(217) 586-2597

New England Regional Director Appointed: Doug Avery of Stafford Springs, CT has been appointed as the NR/CTPA New England Regional Director. Doug will be co-ordinating NR/CTPA clubs and events in the New England states. Doug can be reached at: Doug Avery, 91 Blair Road, Stafford Springs, CT 06076, (203) 684-5360

■

WIRE ERROR: I just opened my copy of the May, 1989 issue and noticed an error. The first letter from Johnathan Jones states he is looking for Robart wire, which is not the same as our Dragin' wire. Ours is silicone coated, tinned pure copper, and has 1,620 strands! At any rate, I'm sure it was an accident. Congrats for F. Dale Cauthen on his motor articles! Simple to follow and worth the price of the magazine alone!

■



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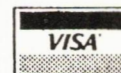
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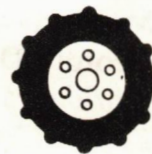
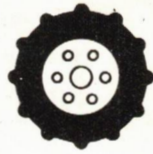
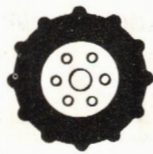


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JERRY IVANCIC



1989 ROAR Paved Oval Nationals

By John Thawley

Judging by the response to this event, it looks like Memorial Day will now see three major racing titles contested. The famed Indianapolis 500, the Coca Cola World 600 and now the ROAR Paved Oval Nationals. Anyone who witnessed the ROAR event will tell you it is an equal spectacle to its two counterparts.

This year's event was hosted by R/C Hobbies, this is the home of the infamous Peachbowl Speedway. Take it from someone who has seen a few race tracks, this place is gorgeous! If you think you are a dyed-in-the-wool oval racer, get in your car, grab a train or jump on a plane and go see the Peachbowl Speedway right now! It is awesome! Located in Snellville, just outside Atlanta, this facility is an oval racer's dream. The surface is a very smooth, consistent concrete with real neat high banks and two very, very, fast straight-aways. Although it was crowded for this event, the site has plenty of pit space and parking. As if that weren't enough, inside the newly constructed main building, there is another, smaller high-bank oval surrounded by more pitting space. In the front of the building, you'll find a pro shop that houses a huge selection of parts and go fast stuff, (including the all new TRC capped rubber tires, but more about that later) all with the oval racer in mind. I don't mean to dwell, but this place will leave you seriously pumped up!

The best feature about the Peachbowl is the "Kelley Boyz"! These guys will do anything for you! Lucky for me, I got to meet all four of them. There's "Pops Kelley", Roy, brother Craig, and the best looking of all, Roy's son, Paul. These guys know racing too! Craig made the 1/10 Modified A Main and Paul (who by the way is only about three feet tall), made the 1/10 Stock A Main. Let me tell you, this little guy can wheel that race car!

Practice for the Nats got started with racers showing up as early as Tuesday. By the time I arrived on Thursday, the place was hopping. Lap times being tossed around were about 5 to 5.5 seconds in modified and about 5.6 to 6 seconds in stock. But as the saying goes, "talk is cheap". A couple of early observations caught Kent Clausen ripping up the track with his Reedy powered 12L and Tony Neisinger looking unbeatable in his Trinity



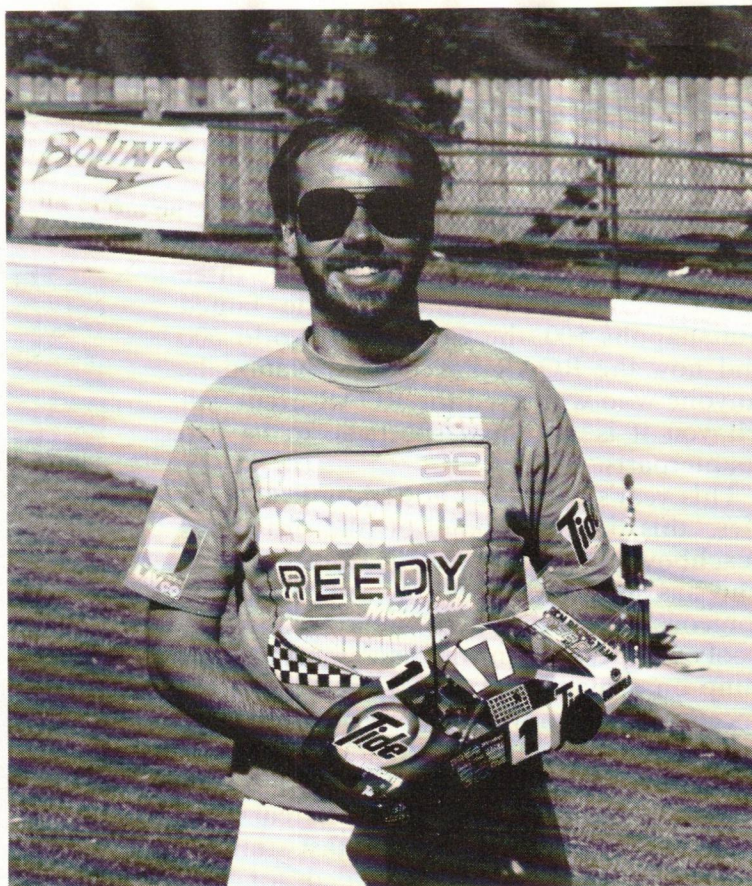
Hey Mister, Where do I put this?

powered prototype TRC car. But with such a wide level of skill on the track during practice, it is very hard to determine what's fast, although you can tell which cars are handling well. These two cars were definitely handling!

Handling is an important factor at the Peachbowl. This is not your usual "put it to the wood" type of oval. You must drive the car. Something that a lot of participants were having a hard time doing. It would be completely irresponsible of me if I did not mention the fact that a lot of drivers were guilty of driving too fast and beyond their ability. Drivers having trouble getting through the corners would still insist on going down the back straight at full throttle. I'm not sure if this is because oval is a new division, or if it is because many newer drivers get involved thinking it is easier. If the reason is the latter, the Peachbowl delivered a very hard

reality to those not prepared to slow down and drive! This was a driver's track and those that could drive loved every minute of it. Those that could not, in the opinion of this writer, handled the situation very poorly and very selfishly. But the mains told the truth. Lap times in the mains were just a little quicker in some cases, but, all in all, consistent with the overall qualifying times of each particular class. If it took 40 laps to make the G main, that was just about what it took to win the main.

Qualifying started out a little rough. Many felt the race directing was tough. Then again, others thought it was too easy. Those that thought it was too tough had probably been told to move over. Those that thought it was too easy had probably been taken out by one of those that wouldn't move over. But the proof is in the pudding! After the first round of qualifying, Jay Bowman, from Kalamazoo, Michigan was TQ with a 42/4:05.5. Jay qualified in the J qualifying round. Nick Cacciola was second fastest qualifying from the K heat. Nick's time was a 40/4:00.8. Alan Fetta was third fastest overall, starting in the A qualifier. Tom Coker was fourth and he started from the J qualifier. The fact is, of the top ten after the first round of 1/10 stock qualify-



Kent Clausen (Reedy/Associated) ROAR 1/12 Modified Paved Oval National Champion.

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ing, two came from the A qualifying heat, two from the J, and one each from the D, C, H, I, K and P heats. With those kind of results, I don't think anyone can honestly say they didn't get a fair shake in qualifying!

1/10 Scale modified was fast and furious. Once again, we saw people running horsepower without the handle. One man, Bob Hall, took his Phantom powered race car around the track a full lap faster than the second qualifier, Chris Doseck. Craig Kelley was third. Their times were 46/4:00.6, 45/4:00.5 and 45/4:01.0, respectively. Here again, we saw good qualifying with five of the top ten seeded in the A qualifier, two from the C and one each from the B, E and F. Other than the 46 lap run of Hall's, all the remaining times were within four seconds of each other. Pretty close racing to say the least!

The participation in 1/12 scale was not as abundant as it was in 1/10, however, the competition was good. After round one of qualifying, Michael Murphy was TQ in stock. Meanwhile, in what was one of the most exciting displays of driving this writer has ever seen. Tony Neisinger of Team Trinity and Kent Clausen of Associated, came over the line in a dead tie! Furthermore, they had broken the track record with run times of 57/5:00.1. I can't imagine what would have happened had they had to go another lap. It was incredible to watch! Bud Bartos picked up the third slot with a 57/5:04.9 with Terry Rott in fourth running a 56/5:04.0.

Round two saw many drivers picking up the pace. In 1/10 scale Stock, three new drivers moved into the top ten. Kevin Lanier became number two qualifier with a 42/4:06.1. Jill Simms picked up fourth slot and Matt Cupka moved into fifth.

In the 1/10 Modified, Terry Rott pulled up to match Bob Hall's TQ time of 46/4:00.6. Bud Bartos picked up fourth position with a 46/4:03.8, while David Timmerman and Randall Winslett moved into ninth and tenth, respectively.

Round two for the 1/12 scale cars saw Cliff Guest move into the TQ position in Stock. In Modified, Kent Clausen shattered any notion anyone may have had about him sharing the TQ position with Tony Neisinger. Clausen pulled the trigger and launched his 12L Tide car replica to a run time of 58/5:02.8. WOW! Chris Doseck moved into the top five with his 56/5:06.6 run, while Joe Lawrence and David Timmerman moved into ninth and tenth.

With the first day of qualifying completed, a lot of drivers took advantage of the "Kelley Boyz" gracious gesture of leaving the track open all night, just as they had done on



Terry Rott (CompositeCraft/Cam/TRC) ROAR 1/10 Modified National Champion.

Thursday. You would be amazed to see who was out there practicing. The guys who didn't have good qualifiers, right? Wrong! Would you believe Tony Neisinger? Chris Doseck? Joel Johnson? Terry Rott? These guys take this stuff seriously.

Saturday looked like rain, but the sky cleared off and became a gorgeous day for racing. Round three of 1/10 Stock got underway, and out of a clear blue sky, lightning struck. Young Paul Kelley pulled up in a David and Goliath fashion and knocked off a 42/4:03.1 TQ run. Matt Cupka moved up into second with a 42/4:04.8. Rodney Miles moved into ninth.

In round three of the 1/10 Modified class, the action was getting hot. Tim Lanier moved into the number three slot. Joel "Magic" Johnson picked up the sixth spot; Jim Dieter pulled up on the bubble.

Four new faces showed up in the third round of 1/12 scale stock. They were Doug Shirley in fifth, John Walters in sixth, Steve Rule in seventh and Bill Worrel in tenth.

Jim Dieter hooked up his 1/12 scale car and grabbed ninth slot in round three of the 1/12 modified qualifying. The rest just did some shuffling amongst the ranks. Clausen, not satisfied with his 58 lap run of round three tagged on another lap just for insurance. Rumors of steroid use were circulating in the pits. Clausen was untouchable. Neisinger had even put together his own 58 lap run only to come up short of Clausen.

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By F. Dale Cauthen

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sake. What comes out of these quick and easy molds is a gear that is more dense on one side and somewhat less than perfectly round. What you get when you mount these flawed gears up on your car is a bad gear mesh that results in slower run times, an overheated motor and short gear life.

In answer to my letter, Chuck Kimbrough of Kimbrough Products sent me an assortment of products so that I could test them on my racing cars and report the results to all of you who have been suffering the same frustrations that I have while using his competitor's products.

Before I get into the test results though, let me pass along the Kimbrough formula for perfect gears. At Kimbrough Products,

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As soon as these gears arrived, I installed an 81 tooth unit with the 19 tooth pinion on my graphite 12L. Previously the life expectancy of a gearset was one race day. By the end of the day,

(Continued on Page 74)



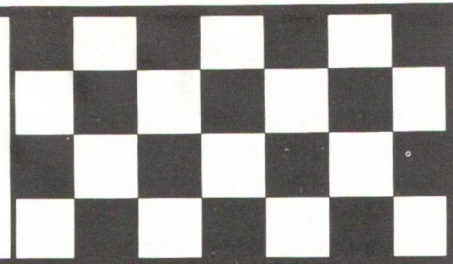
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Round four. Nothing but pressure! In 1/10 Stock, Kevin Lanier rises to the occasion and bumps Paul Kelley for the top spot on the pole. With a little shuffle amongst the top ten, the 1/10 Stock A Main is set.

In the fourth run for the 1/10 Modified boys, Neisinger looked like his Trinity/TRC combination would grab pole position honors. But, Bob Hall stayed with it and pulled out a 47/4:04.8 to TQ. Neisinger followed with a 47/4:05.3. David Timmerman moved into the sixth slot which put Dieter into the B Main via the "domino principal."

Both Michael Murphy and Hoyte Stacey came charging through the pack to push the limit of the 1/12 scale Stock class by both turning in 52 lap runs. Murphy was the fastest, and that earned him his position on the pole. Chad Jeffrey moved into the fourth slot causing a lot of

changes in the top ten. All, but Joe McAdam, were able to improve their times. That allowed them to hang onto their positions.

The only change that took place in the fourth round of 1/12 Modified was Bob Hall's move up into fourth. This simply moved everyone down one spot. Clausen did not go faster. I repeat; Clausen did not go faster!

With qualifying completed, the mains were set for Sunday's excitement. It was obvious by the times, qualifying had gotten progressively cleaner and faster. Looking at the Modified mains, there were no surprises. Bob Hall was a newcomer to me, but his Fantom motors were not. These motors are manufactured in Michigan. (That's right . . . USA). This is probably one of the prettiest motors you will ever lay eyes on and obviously, based on Bob Hall's performance, they are fast. The other outstanding perfor-

mance had to go to Kent Clausen's 1/12 scale acrobatics. I honestly can't believe that car went that fast. I really doubt the chassis of that car can handle any more power than what Kent was putting down. I was simply spectacular!

Sunday, of course, was the day for the Mains. The quality of racing was a credit to the qualifying process. The spread was extremely close in all of the mains. In 1/10 Stock, the difference from the F Main to the J Main was 1 lap! Anyone winning his main deserves a hearty congratulations. The racing was that close. All the results are included at the end of this article.

First up was the 1/12 Modified A Main. Clausen and Neisinger were sitting on the front row. This was going to be everything you could ever hope for in a main event. From the word go, this race was clean. We are talk-

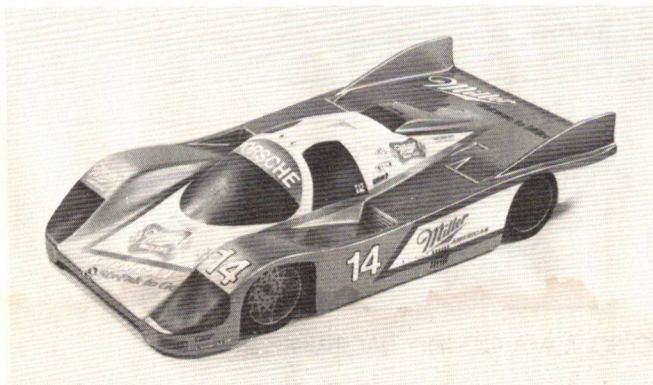
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ing flawless. No marshalling, no wrecks. Just awesome flat out racing. This had to be some of the prettiest racing ever witnessed anywhere. Unfortunately for Kent Clausen, he never got to see any of it. It was all going on behind him. He did get to see some of it as he lapped the field around the 4:30 mark, but that was about it. Now folks, these are 5 second laps we are talking about. There were several leaders early on. But once Clausen took the lead, he never looked back. Clausen became the new ROAR National Champion with a 59/5:01.4. Yes, Clausen went faster! Bartos finished in second with Neisinger just .3 of a second behind him in third.

After the crowd had caught its breath, the 1/12 Stock A Main came to the line. Sitting on the pole was Michael Murphy. Next to him was Hoyte Stacey. For five minutes, it was Murphy and

Stacey going at it. Hoyte had the lead early on. Murphy charged at about the halfway mark and took the lead. With a slight bobble by Murphy, it looked like Stacey would get another shot. It was not to be. Murphy finished about three seconds ahead of Stacey to become the 1989 National Champion. Cliff Guest finished in third.

There was no doubt; 1/10 scale Stock was going to be a thriller. The first five cars had less than five seconds separating them. When the flag dropped, it was nothing but dicing going into turn two. Lanier looked strong as he headed down the back straight. Ricky Jordan had the MTV car planted right in Lanier's rearview mirror. With about a minute in, the crowd favorite, Paul Kelley, began his charge. Kelley sliced through the pack like they were standing still. His confidence weaving through

traffic was overwhelming. Then disaster struck. Coming out of turn four, Kelley hooked up with another car putting him into a spin. Kelley got back underway and was able to charge back to fourth. Alan Fetta had gotten by him for third. Ricky Jordan showed up second, but, Kevin Lanier locked up the National Championship finishing with a 42/4:01.5.

With only the 1/10 scale Modified title left to be decided, the protective fence surrounding the track was wall-to-wall humanity. This was the one they all came to see. On the pole was the elusive Bob Hall and his Phantom powered race car. Two-time World Champion, Tony Neisinger and his Trinity/TRC combination occupied the outside. The flag dropped. Neisinger jumped out with Bob Hall in hot pursuit. Terry Rott, who had been third on the grid, came charging up on

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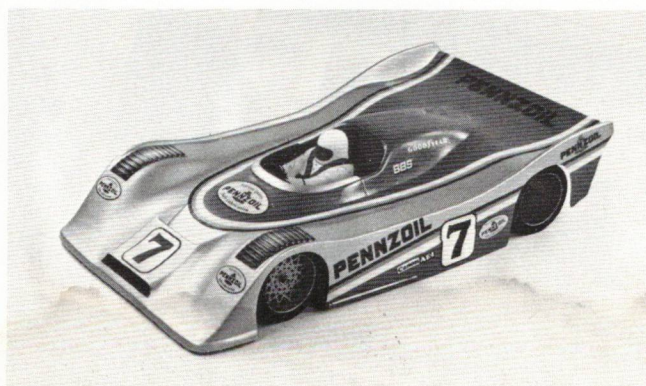
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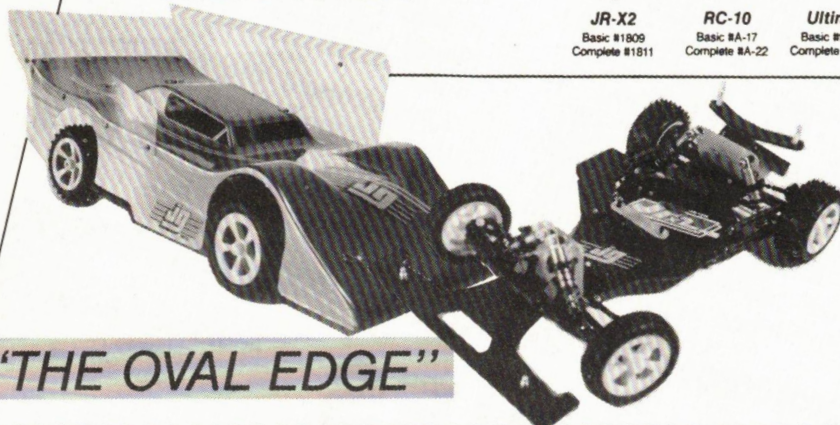
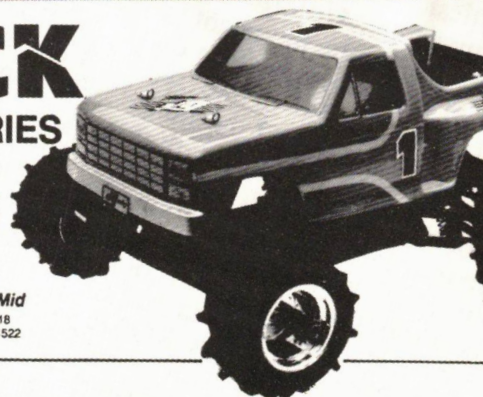
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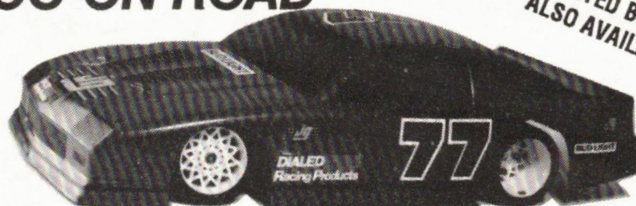
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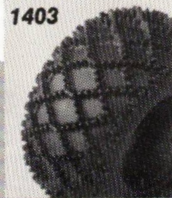
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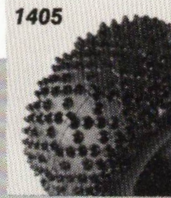
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the back of Hall. Hall yielded. Joel Johnson was next in line behind Hall. For four laps, Johnson dogged Hall. Hall would not yield. Hmmm. At about the halfway mark, Rott's Cam power was in control. Behind him, any changes taking place midway were quickly rearranging themselves as battery fatigue came into play. Ultimately, to the delight of the crowd, Terry Rott was the new National Champion. Tony Neisinger took second place just 1.5 seconds behind and Clausen finished in third, two seconds behind Tony. Interestingly enough, both Terry and Tony passed the TQ time set in qualifying by Bob Hall. Hall finished fourth.

This was a fantastic weekend. It was all you could hope for at a National event. If there are any complaints about this event, I am sure they will only come from the individuals who did not do as well as they had hoped. The facility was fantastic. The weather was great. (Warm, but great.) And the racing was phenomenal!

A quick thanks to Bolink, TRC and R/C Car Action for their support of this event and to all the folks that helped keep the event running smooth. A special thanks goes to Denny Smith and Linda Jordan for the fantastic job they did in the scorekeeping department. They kept things moving flawlessly. In closing, I urge you all to get down to the PEACHBOWL and go racing with the "Kelley Boyz".

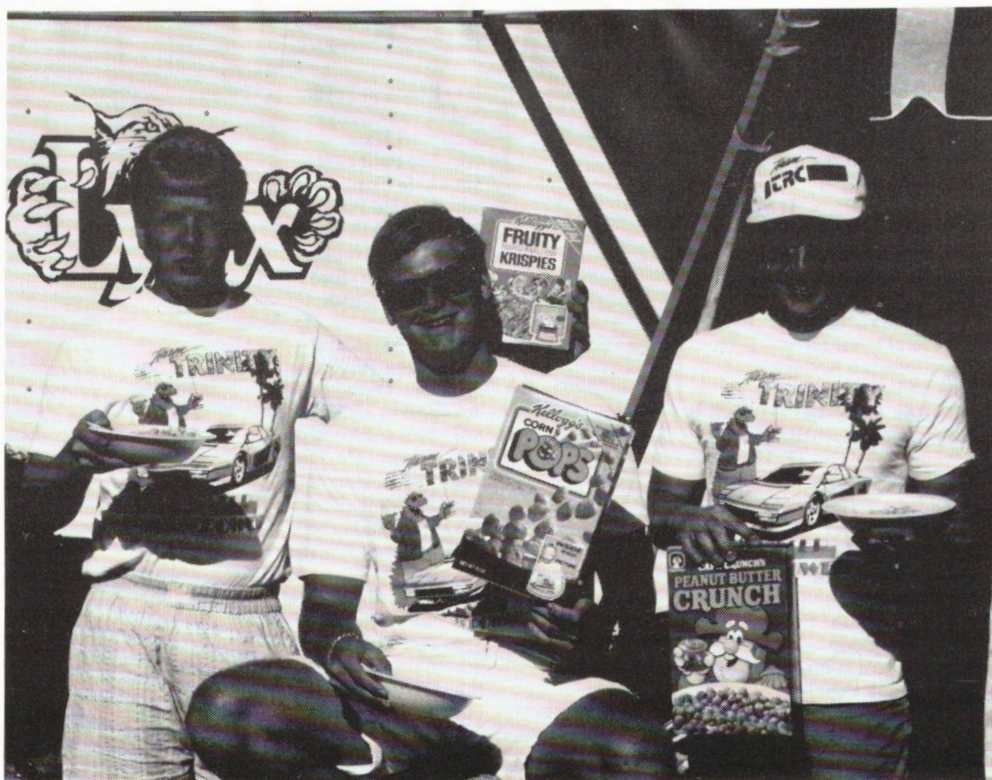
1/12 Stock

A Main

- 1st - Michael Murphy
- 2nd - Hoyte Stacey
- 3rd - Cliff Guest
- 4th - Stephen Miniea
- 5th - Bill Worrel
- 6th - Doug Shirley
- 7th - Steve Rule
- 8th - Joe Goodwin
- 9th - John Walters
- 10th - Chad Jeffrey

B-Main

- 1st - Ted McCarthy
- 2nd - Carey Slavin
- 3rd - Chuck Rayburn
- 4th - Tom Ickes
- 5th - Michael Cohen



Team Trinity "Cutting Up". Chris Doseck, Joel Johnson and Tony Neisinger.

- 6th - Ron Kwentos
- 7th - Neal Everhart
- 8th - Joe McAdam
- 9th - Chris Barnes

C Main

- 1st - Richard Price
- 2nd - Steve Vazquez
- 3rd - David Wilson
- 4th - Mike Clark
- 5th - Dana Turgeon
- 6th - Ron Crawford
- 7th - Vic Patterson
- 8th - William Little

1/12 Modified

A Main

- 1st - Kent Clausen
- 2nd - Bud Bartos
- 3rd - Tony Neisinger
- 4th - Chris Doseck
- 5th - Bob Hall
- 6th - Terry Rott
- 7th - David Timmerman
- 8th - Carl Christy
- 9th - Jim Dieter
- 10th - Frank Killam

B Main

- 1st - Ken Pohlman
- 2nd - Bob Novak
- 3rd - Bob Schoenau
- 4th - Joe Lawrence
- 5th - Jim Fuller
- 6th - Patrick Miller
- 7th - Eric Whitrock
- 8th - Shawn Redden
- 9th - Scott Smith
- 10th - Mike Mitzel

C Main

- 1st - Jim Hoffman
- 2nd - Bill Schoenau
- 3rd - Jeff Irish
- 4th - Mike Blackstock
- 5th - Ralph Burch
- 6th - Budde Wolf

- 7th - Jimmy Simmons
- 8th - Rick Pruitt
- 9th - Matt Dahm
- 10th - Tate McDaniel

D Main

- 1st - Ryan Pruyn
- 2nd - David Davis
- 3rd - Kirby Erdely
- 4th - Steve Schiewer
- 5th - Mike McBride
- 6th - Robert Thompson

E Main

- 1st - Cliff Rose
- 2nd - Edward Cosgrove
- 3rd - Donnie Glover
- 4th - Frank Tammaro
- 5th - Joe Gallo

1/10 Stock

A Main

- 1st - Kevin Lanier
- 2nd - Ricky Jordan
- 3rd - Alan Fetta
- 4th - Paul Kelley
- 5th - Rodney Miles
- 6th - Matt Cupka
- 7th - Jay Bowman
- 8th - Chuck Massey
- 9th - Nick Cacciola
- 10th - Jill Simms

B Main

- 1st - Justin Packard
- 2nd - Mike Tvarkunas
- 3rd - Joe Goodwin
- 4th - Tom Coker
- 5th - Forrest Whitson
- 6th - John Venidis
- 7th - Paul Covington
- 8th - Kevin Vermillion
- 9th - Joey Staples
- 10th - Chris Barnes

C Main

- 1st - Mark Johnson
- 2nd - Dennis Britt

3rd - Ryan Pruyn
 4th - Scott Smith
 5th - Bruce Triplett
 6th - Jeffrey Ball
 7th - Pearce Dickson
 8th - Stephen Miniea
 9th - Doug Shirley
 10th - John Jolley

D Main

1st - Richard Carpenter
 2nd - Joe Scarbrough
 3rd - Rick Barrick
 4th - Carey Slavin
 5th - Danny Monegan
 6th - Neal Everhart
 7th - Cameron Kellogg
 8th - Mike Breland
 9th - Don Moncsko
 10th - Jamie Harbell

E Main

1st - Mike Moore
 2nd - John Walters
 3rd - Steve Dunn
 4th - Mike Kohler
 5th - Don Ransom
 6th - Tom Alff
 7th - Carl Smith
 8th - Terry Coon
 9th - Howard Hanvey
 10th - Frank Pupelo

F Main

1st - Chad Jeffrey
 2nd - Brian Painter
 3rd - David Rodgers
 4th - Edgar Quinones
 5th - Lee Dodgen
 6th - Patrick Cupka
 7th - Jim Linder
 8th - Terry Hampton
 9th - Josh Moncsko
 10th - John Many

G Main

1st - Jon Lee Morris
 2nd - Jerry French
 3rd - Leroy Carrigg
 4th - Jerry Burch
 5th - Larry Bennink
 6th - Barry J. Spinner
 7th - William Green
 8th - Darrell Fuller
 9th - Jerry Cowart
 10th - Hershel Martin

H Main

1st - Ray Johnson
 2nd - Ernest Acosta
 3rd - Robert Killian
 4th - David Price
 5th - Ellis Smith
 6th - Randy Wheeler
 7th - Steve Williams
 8th - Joel Smith
 9th - Ted McCarthy
 10th - Charles Rencurrel

I Main

1st - Brian Bourke
 2nd - Richard Price
 3rd - Bob Gorman
 4th - Harry Morris
 5th - Ron Caviness
 6th - Pete Qusley
 7th - Leonard Suits
 8th - Kenneth Crossley
 9th - Brad Duncan
 10th - Ryan Tolleson

J Main

1st - Robby Britt
 2nd - Michael Pryor
 3rd - Bill Conner
 4th - Tony Staples
 5th - Billy Wilson
 6th - Bobby Howard
 7th - Bobby Ballew
 8th - Alex Love

9th - Mark Townsend
 10th - Jack Murdock

K Main

1st - Brandon Snyder
 2nd - Leon Carrigg
 3rd - Carl Hays
 4th - Vic Patterson
 5th - Kyle Cox
 6th - Donald Pittman
 7th - John Wilson
 8th - Gerald Hooker
 9th - Ron Crawford
 10th - Tony Smith

L Main

1st - Bill Morton
 2nd - Dana Turgeon
 3rd - Dan Oxenford
 4th - Jimmy Hollow
 5th - Richard Nemcovic
 6th - Edward Cosgrove
 7th - Scott Peterson
 8th - James Walters
 9th - Ryan Williams
 10th - Darrell Winslett

M Main

1st - Richard Genovesi
 2nd - Ron Armillei
 3rd - Jim Cole
 4th - Keith Rockett
 5th - Dan Thorlton
 6th - Malcolm Paul
 7th - Ronnie Hames
 8th - Robert Turner
 9th - James Johnson
 10th - Mike Chambers

N Main

1st - Jeff Wilkes
 2nd - Richard Crunkilton
 3rd - Danny Killian
 4th - Michael Ray
 5th - Wesley Jones
 6th - Reggie Jones

O Main

1st - Steve Bersig
 2nd - Shane Hamilton
 3rd - Joseph Walters
 4th - Dave Fein
 5th - Jencina Bersig

1/10 Modified

A-Main

1st - Terry Rott
 2nd - Tony Neisinger
 3rd - Kent Clausen
 4th - Bob Hall
 5th - Joel Johnson
 6th - Tim Lanier
 7th - Chris Doseck
 8th - David Timmerman
 9th - Bud Bartos
 10th - Craig Kelley

B Main

1st - Dennis Vindedahl
 2nd - Dwight Smith
 3rd - Jim Fuller
 4th - Bob Williams
 5th - Randell Winslett
 6th - Kim Davis
 7th - Jim Dieter
 8th - Rick Jordan
 9th - Bob Schoenau
 10th - Joe Lawrence

C Main

1st - Bernie Piatt
 2nd - Philip Simms
 3rd - Dave Pulfer
 4th - Jimmy Simmons
 5th - Mike McBride
 6th - Bill Schoenau
 7th - George David
 8th - Kevin Perry
 9th - Paul Davis
 10th - Bob Novak

D Main

1st - Frank Killam
 2nd - Carl Christy
 3rd - John Adams
 4th - David Davis
 5th - Bill Jeric
 6th - Andy Dobson
 7th - Craig Markle
 8th - Bill Horne
 9th - Ralph Burch
 10th - Rick Pruitt

E Main

1st - Budde Wolfe
 2nd - Michael Murphy
 3rd - Gary McAllister
 4th - Cliff Guest
 5th - Jim Hoffman
 6th - Hoyte Stacey
 7th - Mike Pulfer
 8th - Steve Rule
 9th - Raymond Birmele
 10th - Judd Nichols

F Main

1st - Bill Sell
 2nd - Sandy Strunk
 3rd - Mike Mitzel
 4th - Dave Monegan
 5th - Randy Ash
 6th - David Bryson
 7th - Donnie Glover
 8th - Snuffy Smith
 9th - Rob Cutman
 10th - Tate McDaniel

G Main

1st - David Whitesel
 2nd - J. Moskovitz
 3rd - Don Hill
 4th - David Johnson
 5th - Joe Randon
 6th - Kelly Packard
 7th - Paul Wynn
 8th - Eric Whitrock
 9th - Jim Bodine
 10th - Alex McKinney

H Main

1st - Bill Colvard
 2nd - Scott Linder
 3rd - Ken Pohlman
 4th - Cookie Prince
 5th - Jeff Irish
 6th - Darryl Bingner
 7th - Mike Dooley
 8th - Roger Vorba
 9th - John Wolfe
 10th - Jim Damarell

I Main

1st - Tom Ickes
 2nd - Randall Carte
 3rd - Tony Carrigg
 4th - Donn Rice
 5th - Scott Cole
 6th - Kevin Hubbard
 7th - Jerry Harper
 8th - Darren Farley
 9th - Tony Iafrati
 10th - Cliff Rose

J Main

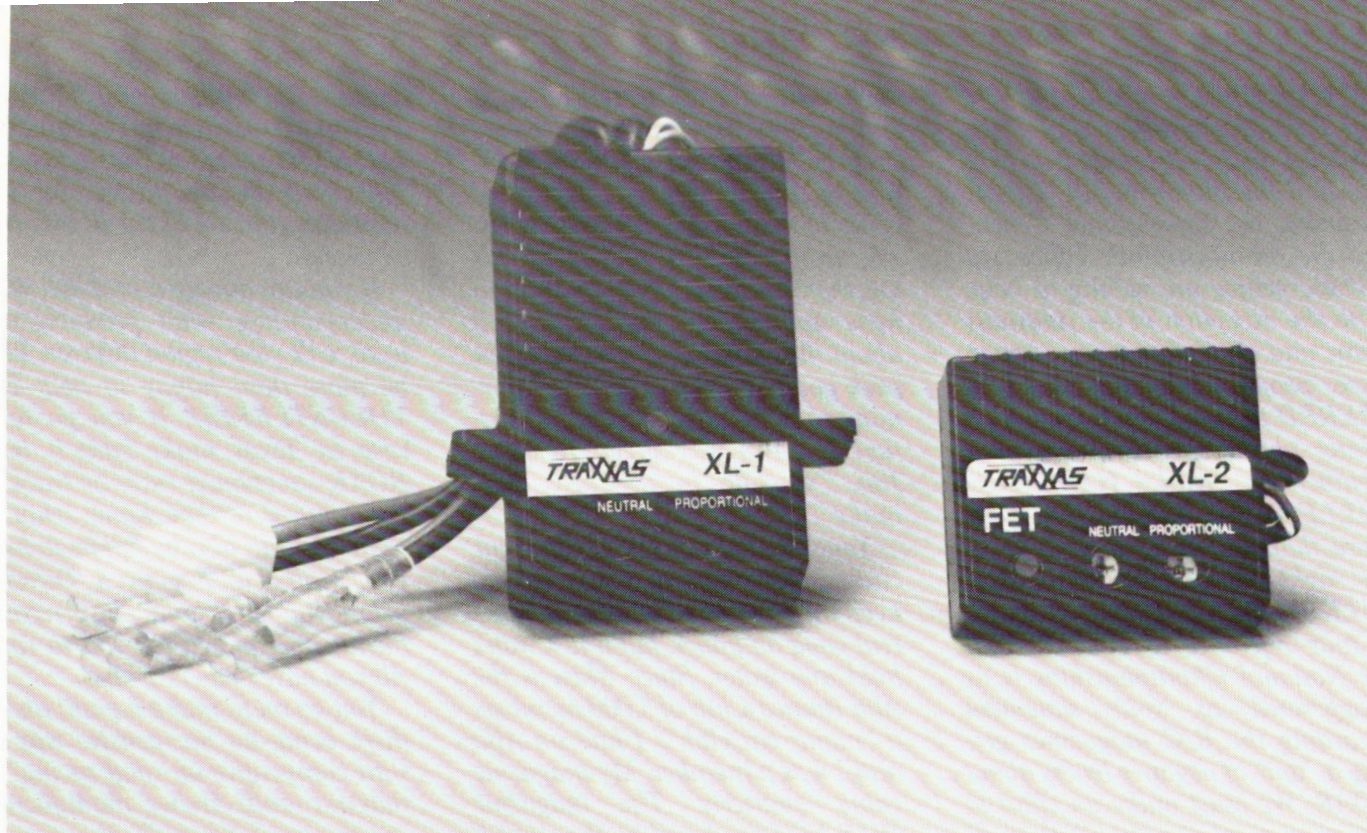
1st - Joe Huggins
 2nd - Ronald Moore
 3rd - David Wilson
 4th - Jerry Wynn
 5th - Robert Woods
 6th - William Little
 7th - Crayton Kines
 8th - Dan Moynihan
 9th - George Cole
 10th - Mike Blackstock

K Main

1st - Larry Pollock
 2nd - Glenn Jones
 3rd - Thomas Colella
 4th - Shaun McDuffie
 5th - Mike Clark
 6th - Tom Crowe
 7th - Frank Tammamaro, Sr.

L Main

1st - Chuck Rayburn
 2nd - John M. Lee
 3rd - Mike Renfro



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The XL-1, forward/reverse, E.S.C. will operate on 4-6 cell battery packs and is fully proportional in both forward and reverse. The neutral and proportional controls are easily adjusted with the built-in, two-color LED.

The XL-2, forward/brake, MOS-FET, E.S.C. is built for high-current applications such as racing with stock or modified motors, and use in big wheel, 2 or 4WD, monster trucks. The XL-2 is fully proportional in both forward and braking modes. It will operate on 4-8 cells, and also has a two-color LED for easy neutral and proportional adjustment.

Specifications:	XL-1	XL-2
Weight	3.4 oz.	2.0 oz.
Voltage Input	4-6 cell	4-8 cell
Max. Cont. Curr.	75 amp	100 amp
Max. Peak Curr.	150 amp	300 amp
Volt. Loss @10A.	.19 ohm	.025 ohm
Reverse	Fully Prop.	N/A
Brake	N/A	Fully Prop.
Forward	Fully Prop.	Fully Prop.
Proportional Cont.	yes	yes
Neutral Control	yes	yes
LED (2 color)	yes	yes
Sugg. Retail	\$59.99	\$69.99

TRAXXAS

12150 Shiloh Rd., Dallas, TX 75228

(Continued from Page 14)
also find the numbers of all the National Scale Directors. You will also find the number of the ROAR President, the Information Center, and the Administrator's Office. All of these people are willing to help. With the exception of the Administrator and the Information Center, these people have all VOLUNTEERED to help. The Information Center phone number is on your membership card. HAD YOU CALLED, they would have been more than happy to direct you to the right person for help. JIM! TALK TO ME!

Your reference to IFMAR, and the National Championships is as exaggerated as your statement regarding the R/C magazines getting a "ton" of negative letters about ROAR. We must make an effort to set an example at the "National" level in hopes that this will spread to the local level. Unfortunately, many local level promoters choose to "buck" the system and do things the "local" way. THIS discourages

"new" racers. I agree, ROAR must stay in tune with its general membership, but in turn racers and promoters must make a concerted effort to stay in touch with ROAR. We are a club. We are all in this together. These same racers seem to have no problem finding out all about the go fast stuff and the latest trick goody for their car. The information is out there. Communication is a two way street! To quote Jim, "you lie in the bed YOU make".

Your analogy of the "major car clubs" going out of their way to keep their members informed looks real good on paper, but it just won't hold any water. Since when is the Alfa Romeo Club of 5,000 members a "major car club"? I had an Alfa and I was a member. My magazine came quarterly. The magazine WAS NOT produced by the club! It is subsidized by Alfa, who is owned by Fiat, which is probably one of the largest auto makers in Europe. And let's not forget, you did buy one of their cars. The insurance you

refer to is supplemental to each individual participants auto insurance. (Vaporware Jim?) Let the Alfa club be subsidized by the manufacturer; we like a ROAR run by racers.

If you are having a problem with understanding what products are legal, call your region director, he'll be more than happy to help HE VOLUNTEERED! If you go to a race in Texas make sure it is a ROAR sanctioned race, or track. I am quite sure they know what is legal and will also be happy to help you. Call the Region 4 Director before you leave home, he'll recommend some places for you to race. All you have to do is ask!

You go on to make a point about there being no inexpensive way to start competitive on-road racing? Is that our fault? Are we, manufacturing the cars? You talk about stock racers using SCEs and titanium axles on oval tracks and modified lap times being 3 laps different. What's your point? You talk about gearbox cars. Does ROAR have

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FIVE STAR
FLEXAN PAINT
FLOOUIL
FOX
FUTABA
GONZO
HIGLEY

HI POINT
HOT TRICK
HOUGE ENTERPRISES
JG MFG
K&B
KIMBROUGH
KO PROPO
KYOSHO
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PREMIER DESIGN
PRO CUT STICKERS
PROLINE
PRO-SHOP
PRO-TECH
PRO-TRACK
RACECO
RACE MASTER
RACE PREP
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B&L TIRES
PACE SETTER
RACU
WCM

1/6 SCALE

MK ENGINEERING

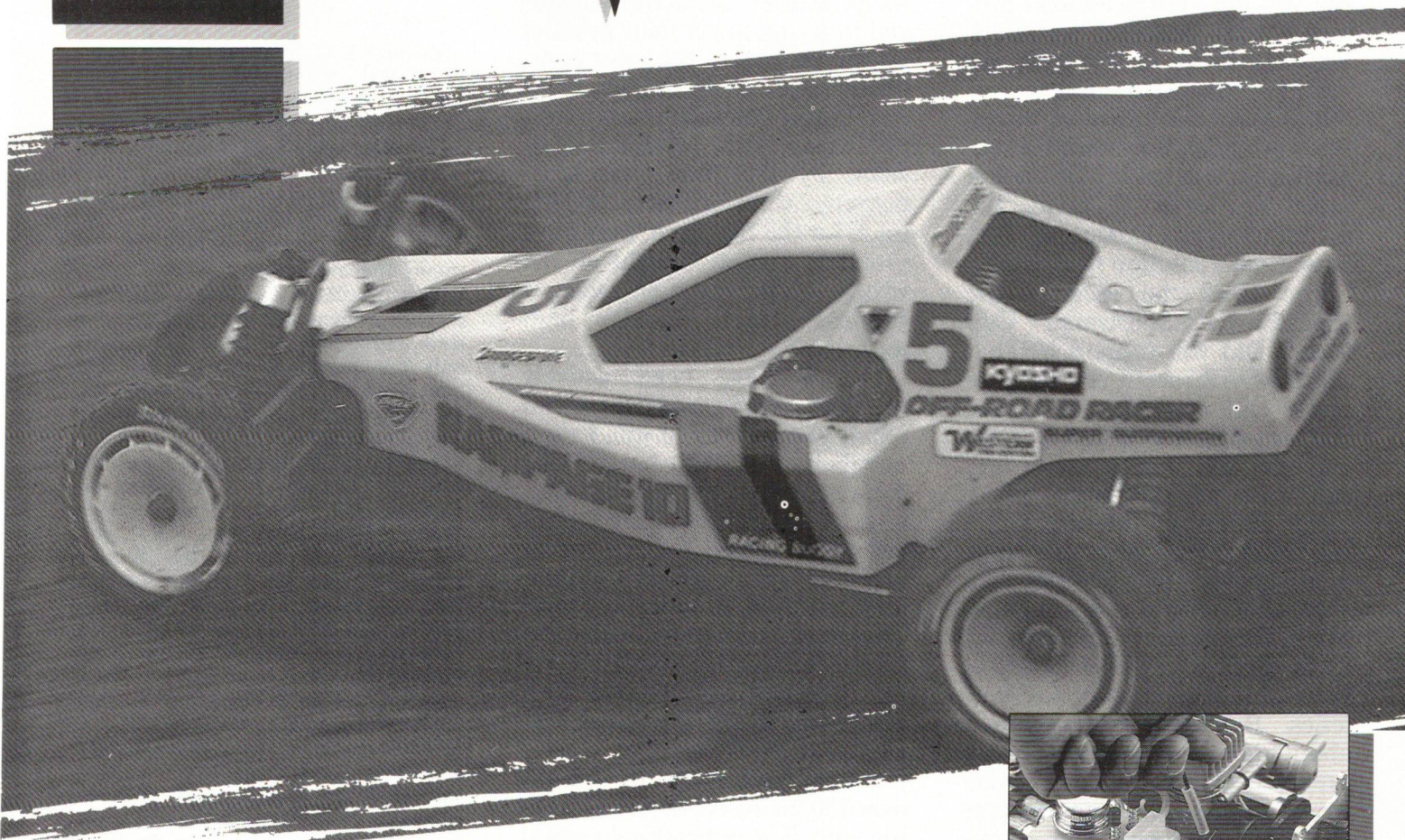
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Beginners can easily get on the gas racing rampage. The O.S. .12 CZ-R engine included with this rough-and-ready off-roader is built for endurance, high speeds, and simple operation. Maintenance is a breeze, and a handy recoil start system gets you moving almost immediately. Mounted mid-ship, the engine's balanced weight improves handling for masterful blasts of loud, pulse-pounding power.

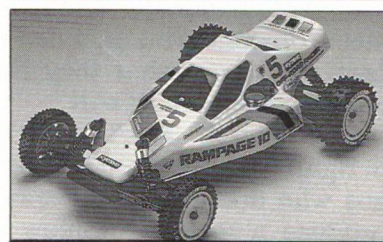
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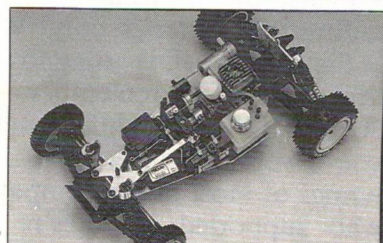
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rules for a gearbox class? Furthermore, what ROAR on-road rules call for are a seven cell modified class? Time to talk to the track owner, Jim!

I don't disagree with you regarding stock motors. It has become somewhat of a problem. But you have got to address problems with possible solutions. Your comments in this letter are merely repetitious quotes of things you have heard or things you have read, how about a suggestion for a solution? Or do you want to leave that to the manufacturers? Come on Jim, how about a solution from you?

You liked the idea of the "Speedworks Sportsman Cup Race". Did you support it? That was a ROAR race! I was the promoter and race director, I, like you, want to see things change and progress. I also know that 200 racers left that event with a better understanding about racing, ROAR, and what this sport is all about. They did not race cheaper. They did not win the A Main, they did have fun, they did learn. Sure, they learned about their cars, their motors and batteries. But, they also learned about playing by the rules, being prepared to race on time, courteous driving and sportsmanship. They learned that everything they read is not true. They learned that if they ask questions there are people willing to take the time to answer them. If you are ever fortunate enough to meet someone who attended this race ask them what they think about racing with ROAR.

FORMULA ROAR? ROAR designing cars? Aren't you the guy who doesn't like the way we produce a magazine? Now you want us to design a car? Jim, take a reality break! Wait! 0 degrees timing? SC batteries only? Who, at the local level, is going to tech this class? I remember the "Group 12" class. Unfortunately you wouldn't recognize the names of most of the companies who supported it. They're not around anymore. Personally, I

think laws of economics are best decided in the market place, not on the race track. Most racers waste money buying all the wrong stuff, not on all the right stuff. Your criticisms in this area should be directed at the hobby shops. I think you will find most manufacturers are actively involved in trying to get their product on the shelves at the most competitive price possible. The "entry level" racer you refer to is an over publicized myth. You fail to consider, by the time most participants show up at a ROAR track for the first time, they have probably already bought all the wrong equipment to go racing. I suppose that is ROAR's fault too?

Jim, I have been actively involved in R/C racing three and a half years. Just like you, I am a member of ROAR. As ROAR's Administrator I am an employee. As a ROAR member I am a committed volunteer. I am a region director, The Nationals Committee Chairman, Product Approval Chairman, and I sit on the By-Laws Committee. Locally, I am the President of the South East Michigan Radio Operated Car Club, (SEMROCC). The club is just over three years old and has over 150 members in good standing and a membership renewal rate of 95%. I race direct and race sometimes as often as four times a week. If you are offended by my response, I apologize. But, as a supporter of the efforts of all the volunteers trying to make this organization better, I found your criticisms equally offensive and in very poor judgement.

In your closing paragraph you state, "ROAR performs many valuable services for its members. BUT, ROAR, more than anything I want you to step forward and lead us." Well Jim, you can lead a horse to water, but, you can't make it drink!

Keep in Touch,

John Thawley

P.S. Jim! I'm curious! What was your reason for circulating your letter to the major magazines

three weeks before sending it to me?

Tacoma Challenge Cup Series

Tacoma R/C Raceway's Race Team has started a Challenge Cup Series that has grown to include nine active teams! This event happens every two months at different locations in the Northwest. The winning team hosts the next event at the off-road dirt track of their choice, and are not allowed to compete at their event. This has insured movement of the trophy after every event.

This Challenge Cup Event has been created to encourage local race teams to form and to travel to other tracks. After only three events, the goals of the team have been realized. At each event, the attendance has grown, and shows no sign of slowing!

The First Challenge Cup Race was held at Tacoma R/C Raceway in Tacoma, and attracted five teams to compete. Tom Jones' Team, K.R.P. won the event, and hosted the Second Challenge Cup Race at the Tacoma Raceway. Scott Brown of the Four Season Race Team had some bad luck in qualifying, but managed to bump up through six mains to win the A Main! Carlos Gonzales of Team Zinka, bumped up through three mains to take first in 2WD modified. Winning the Second Race was Team Zinka. This team is sponsored by a sun-screen products company. They hosted their event at the Tacoma facility due to the professional style they use in their race format. A major portion of this is due to the fact that they use a Wedge lap counting system. Over 108 racers attended the ZINKA Challenge Cup Race! The Tacoma Raceway Team won the Cup at the Zinka Challenge by a very large margin over the next closest team.

Currently, nine teams are racing for the cup. These are:

Tacoma R/C Raceway Race Team
KRP Raceway
Dirt Crashers Raceway
Four Seasons Raceway
Hales R/C Supply
Tearor Raceway
BDR Raceway
Team Zinka/Raceway Hobbies
Hotsy Racing Team

The Tacoma R/C Raceway Race Team would like to invite more race teams to compete with them and the other active race teams at the next coming Challenge Cup Races. We all hope to see you at the track!

THE TRACK RECORD

FROM

R/C PERFORMANCE CENTER

Here we are July already and the weather is hot here in New England. But those of you who race here at RCPC are cool and comfortable. June was a good month overall. We learned of a few problems relating to the computerized lap counting system. We also learned that our race schedule needed to be revised. The problems with the lap counting system have been addressed. We have installed a second antenna loop under the Oval track. The race schedule has also been changed. **AS OF JULY 1, we will hold OVAL TRACK RACES EACH AND EVERY SATURDAY** beginning at 5:00 p.m. This revised schedule will be good through the end of July and hopefully we will not have to make further changes.

As of this moment we have not advertised at all, yet the interest in the Super Oval Track is growing dramatically. Each week more and more new faces are seen in the pits. The number of people interested in joining in on the fun is growing as well. This is great for the sport and means more and better competition in the future. We hope that your support and suggestions continue, this will help make us not only the biggest, but the best as well.

As you may or may not know our inventory is growing rapidly, and our prices are not. We have added to our own product line the new **SUPER COOLER**. This **LIGHT WEIGHT** motor heat sink is without a doubt one of the most efficient motor coolers available. Our **MOTOR MAGIC** spray cleaner does a super job of cleaning your motors and not your wallet. Both of these items are currently being test marketed nationally. We are confident that you will like both of these items. **THEY ARE WINNERS!** Other new items are being tested now for release in the near future, so be on the lookout in future editions of the **TRACK RECORD**.

We are joining with other **NORRCA** tracks in the New England area to put together a Series type event for both Off-Road and Oval racing. So far things are looking good for an early fall off-road series. If you are aware of any tracks in the New England area that might want to be involved in these types of events please have the owners contact us as soon as possible.

We will announce a date for the **1989 NORRCA New England Indoor Carpet Oval Championship** in the August edition of **THE TRACK RECORD**. So again keep a lookout for the August issue of **Competition Plus** or if you want to get a jump on the news send for a subscription. Subscribers do receive their issues a bit earlier than the hobby shops.

Well thats it for this month. Again from all of us here at RCPC we thank you for your ongoing support. Don't forget that July 1st the entire facility should be fully functional including the Arcade, Snack Bar, and the Mini Golf. So bring the whole family for a night out at **R/C PERFORMANCE CENTER, The Year Round Play Ground**.

For more information or rules please call or write: John, Dom or George at:

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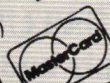
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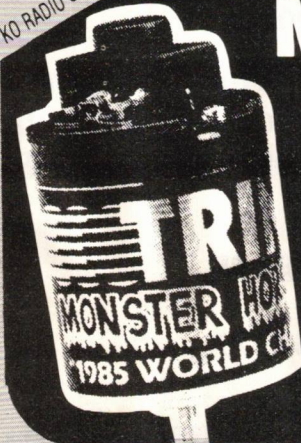
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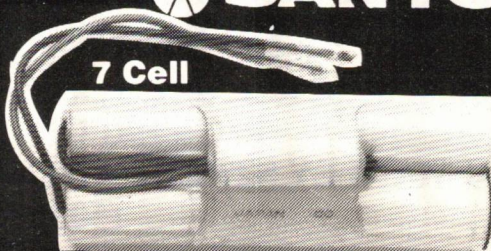


6 CELL



SANYO

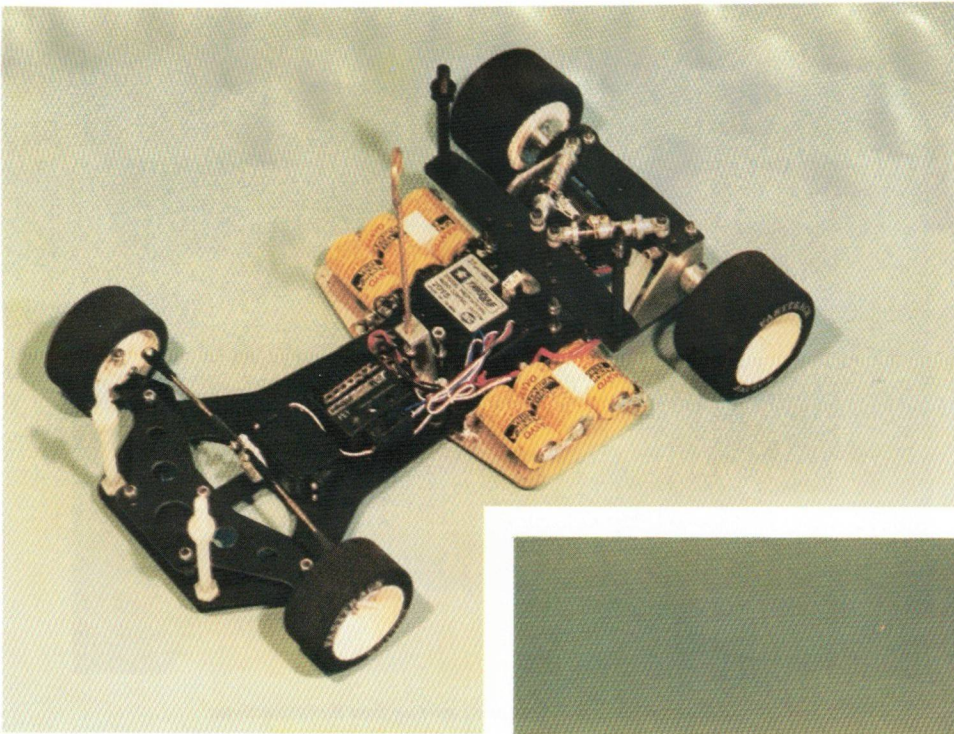
7 Cell



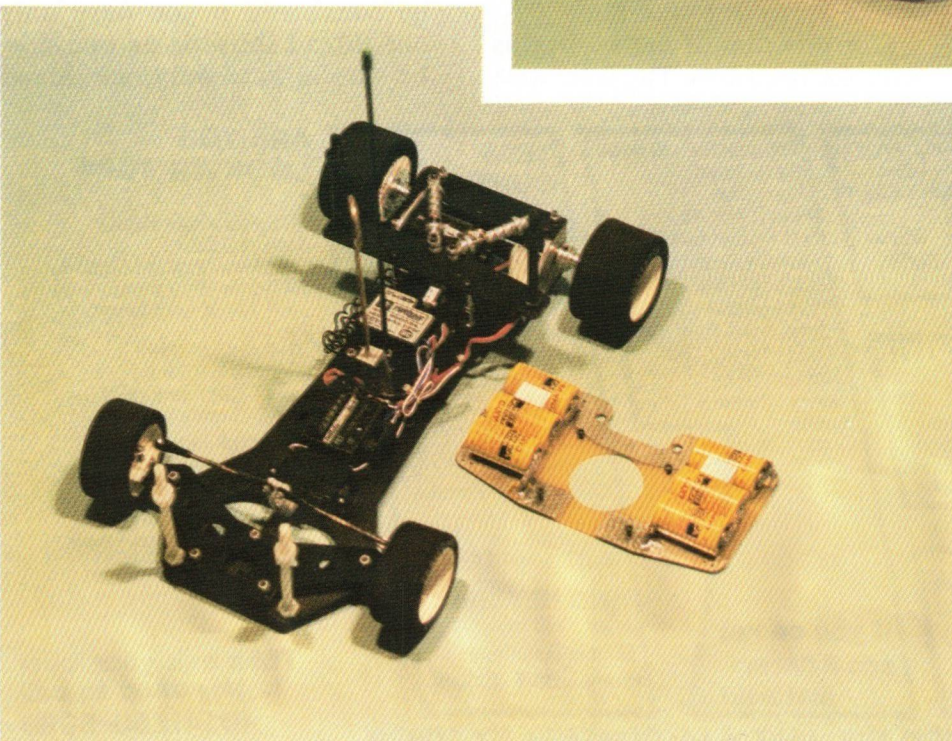
SUB C

Reviewing The BoLink Eliminator Enduro

By Jeff Palmer



Above: The completed car. Note the wiring organization. Right: The Enduro Richard Petty could love. Below: The batteries are mounted on a quick mount tray that attaches to the underside of the main chassis via screw mounts fitting in four key-hole slots. The battery carriage is secured by a locking rod.



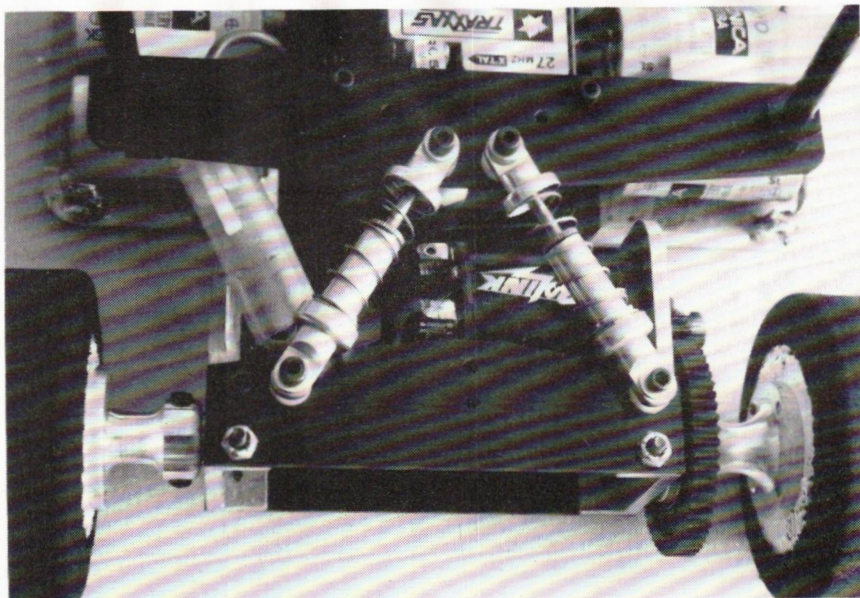
With the evolution of 10th scale on-road racing, endurance races are becoming more common, pitting driver, machine and pit crews against the clock. Bolink has been a pioneer in on-road racing for years. They introduced the Digger 10 in 1979 and the Eliminator 10 in 1987. Both of these cars have helped to advance on-road racing to its present level. The Eliminator Enduro is an endurance version of the popular Eliminator 10. It offers a new concept in quick change battery carriages specifically designed to improve pit time; this change allows the batteries to be swapped in a matter of seconds instead of minutes.

With the growing popularity of endurance races, this ability provides a distinct advantage.

The car chassis is a pan design, constructed of fiberglass. The front suspension is a fiberglass front axle plate suspended on 5 silicone rubber mounts. Caster and camber adjustments are provided through the tightening or loosening of these screws. The rear suspension is a basic T-bar design used in 1/12 scale. It has the added advantage of two oil filled coil-over shock absorbers for dampening. The batteries are mounted on a quick mount tray that attaches to the underside of the main chassis via screw mounts fitting in four key-hole slots. The battery carriage is secured by a locking rod.

CONSTRUCTION

The first item to be reviewed in any kit is the instructions. Those for the Enduro are written for someone who has assembled a kit before and has some working knowledge of R/C cars. The drawings, photos, and text are clear and easy to read. Each assembly references a numbered parts bag and in all cases, the parts referenced were in the bag. I liked the exploded drawing of the chassis and T-bar assembly, but it was incomplete. I found myself looking for a drawing or a picture to help me to attach the



The rear power pod. This one's missing from the instructions.

right rear shock to the motor bracket. I would like to see, at least, a top view photo of the completely assembled T-bar and motor bracket section. I feel this would add clarification to this portion of the instructions.

Several items that will help in the assembly of this kit are:

1. 1/4" and 3/16" nut drivers
2. 4/40 and 5/40 allen drivers
3. Loctite 242 Threadlock
4. Paragon "Ultralon"
5. Paragon "Formula One" Motor Spray or Motor Bath

Construction of the kit begins with the front end. The front axle

plate rests on five screws with silicone rubber tube spacers on each. Once you've placed the fiberglass axle plate on these screws and capped them with the lock-nuts, tighten the front two nuts until the top of the screws are flush with the top of the plastic grommet in the lock-nut. Next, tighten the two outside lock-nuts until 1-2 screw threads show above the lock-nut; this will give you the correct "positive caster" for good handling. Be sure to be consistent; if you have only one thread showing on one side, be sure to have only one thread

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Dahn's Dubro
Fine Design Gonzo
Great Grease Houge
Hot Trick JGKimbrough
KO Propo Lightspeed
Litespeed
Losi M&M
McAllister MIP
MRC MRP NMB Novak
Pactra Paragon Parma
Peak performance
Pitstop Power Pak
ProLine Procut
Pro Shop Protech

Protrack Ram Raceco
Race Master
Race Prep
Rcing Silks RCH
RC Performance Spec
Revtech Rockbusters
Rochester Rcw
Robinson Racing
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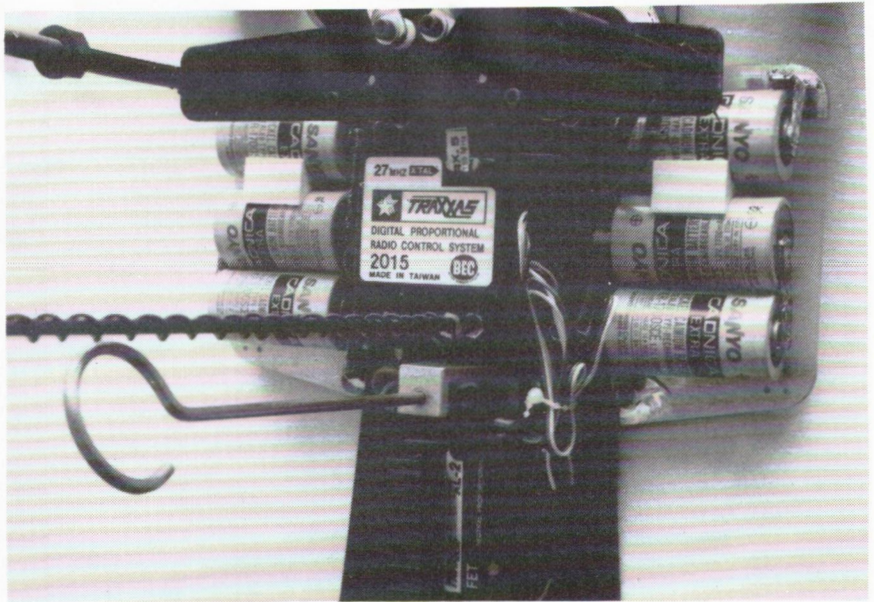
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showing on the other side. After assembling the steering block and installing them on the cross arm, lay the chassis on a flat surface and tighten the middle lock-nut until the front axles are parallel with the table top.

The next major assembly is the "T-bar Assembly". This assembly involves the rear suspension and motor brackets. The only difficulty with this assembly is getting the two motor brackets parallel. There is enough movement in the chassis screw holes that misalignment may cause the solid axle to bind slightly. To align the brackets and eliminate any binding, take the rear axle out of the diff assembly bag and insert it into its proper location in the assembled "T-bar". Loosen all eight screws which hold the brackets in place, one or two turns. Spin the axle. Does it spin freely? If not, move the brackets slightly and spin the axle again. Find the location where the axle spins the easiest and tighten one



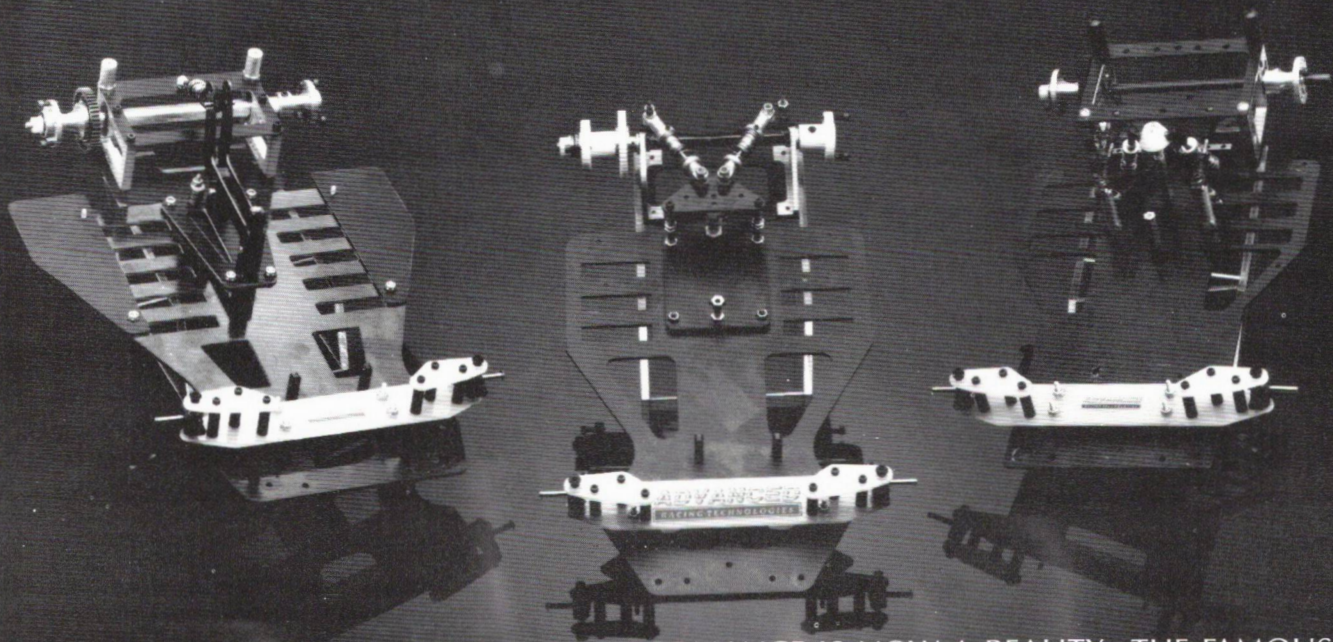
Wiring - Up close and personal.

screw on each bracket, while checking to make sure the axle spins freely. Tighten the remaining screw repeating this tightening and checking process. If the axle begins to bind, loosen the last screws tightened and work

with it until the screws can be correctly tightened.

The "Battery Tray Assembly" is next. Once the contacts are installed correctly, place a large allen wrench or small screw driver under the middle of the

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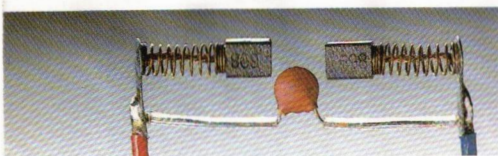
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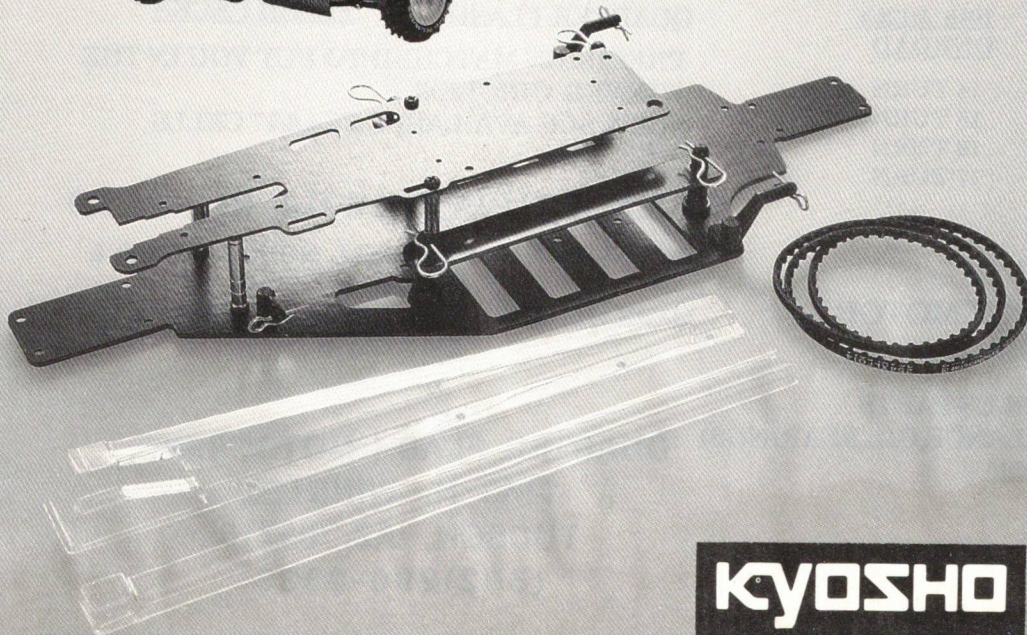
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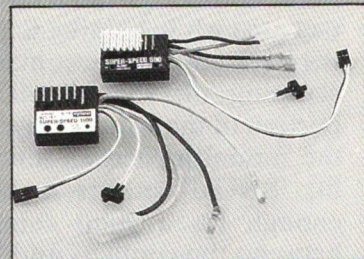
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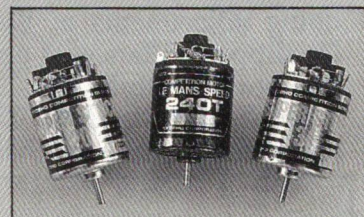
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contact and push the loose end of the contact towards the chassis. This will put a slight bow in the contact, giving it more contact area while helping to prevent the back edge of the contact from scraping off the circuit board portion of the battery tray. Adjust the mounting screws for a snug fit. "SNUG" means to be tight enough for a good connection between the contacts and battery tray, but loose enough to slide on and off. The lock rod hole on my battery tray needed some work. The locking rod should "snap" into position, when everything works correctly. I had to ream out the lock rod hole slightly until the proper "snap" was achieved. Use a small needle file or reamer to enlarge the hole.

The steering linkage in the kit will get the job done, but I hate doing adjustments at the track for slipped collars, so I opted for the more secure Bolink "Adjust-a-Link" kit (BL-5286). This kit uses turnbuckles and ball-links

that are screwed on. For me, this provides the type of front-end adjustment I like, with the added security "it only comes loose when it breaks".

The diff assembly is pretty standard. Start by cleaning ALL of the diff parts, thrust washers, diff balls, gears, hubs, with a good motor cleaner like Paragon's "Formula One". To help with the assembly process, assemble the left rear wheel and hub. Lay this assembly flat on the table with the hub sticking up. Next, place the left end of the axle into the axle hole of the wheel, but don't tighten the hub-to-axle lock-down screws. Now, with the axle sticking straight up in the air, assemble the diff. I always super glue the diff (drive) ring to its Associated hub or adapter plate. On the Enduro, start by placing several small dots of super glue around the seat area on the axle hub where the diff ring sits. Place the diff ring in the seat and give it a small

twist to spread the glue. Let this dry for 30 minutes or so. In the meantime, do the same for the other diff ring and adapter plate. Let it dry for 30 minutes too. Gluing the diff rings helps prevent excessive slippage in the diff. Place the diff balls in the spur gear, place the spur gear on the axle. Place a SMALL amount of diff lube on each ball. I use RC Performance Specialties diff lube. Assemble the diff to the point where the thrust bearing is to be installed. As noted earlier, lube each thrust bearing ball individually. Finish the assembly. Once the adjustment nut is on, you can pick up the complete diff assembly and install it without it falling apart. Make sure the axle spins freely!

Now we're down to some standard options, receiver, servo, motor, batteries, and speed controller. The bushings were the first to go; they were replaced by ball bearings. I'm a Futaba fan, so I chose the Futaba R102JE

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receiver and 132H servo with a Kimbrough 114 servo saver. For a speed controller, I chose the Traxxas XL-2 unit. I went with Bolink matched Sanyo SCEs and a Bolink BL-4025 on-road motor. The kit comes with a fine body, '88 Oldsmobile, but what I felt this car needed was the Richard Petty look, a blue and red '88 Pontiac Grand Prix — BL-2363. Now I'm ready to go to the track!

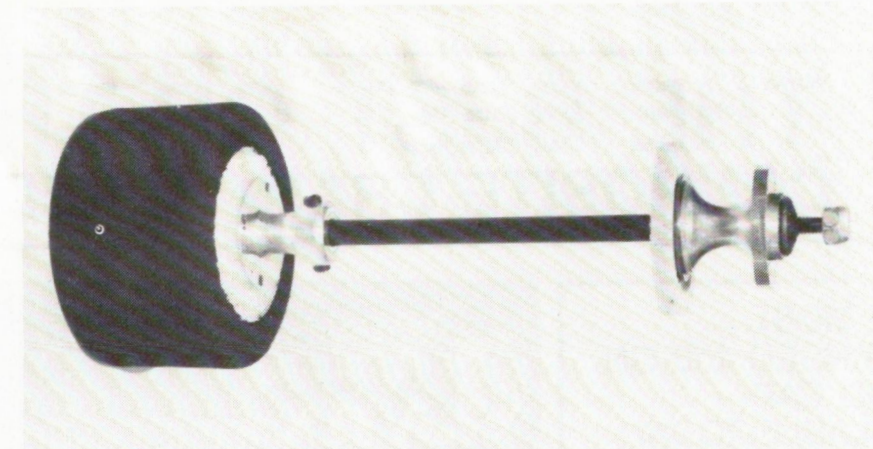
TRACK TEST

The first things to do at the track is align the steering and setup the diff; follow the instructions for both of these setups. Once the diff and steering was ready, I started out slow, trying to get a feel for the car and how it would handle. As my confidence grew, I began pushing the Enduro hard down the straight away and into the corners, but then I noticed some wheel hop, especially in the corners. Closer examination revealed the rear hubs to be out of round. To solve this problem, I replaced the entire rear axle and diff assembly with:

1. Bolink Left Aluminum Hub (BL-3514),
2. Bolink Right Aluminum Hub (BL-3518),
3. Bolink Graphite Axle (BL-5738)
4. Associated Diff Balls (BL-5751)
5. Associated Diff Rings (BL-5752)
6. Belleville Washer (BL-5753)
7. Bolink Rear Ball Bearings (BL-5453)

Take special note of the diff side aluminum hub (BL-3518), it requires an additional set of ball bearings (BL-5453). With the wheel hop problem solved, I started to work on the quickness of the car. The 32 pitch spur gear that comes in the kit, left a lot to be desired when it came to fine tuning torque vs. top end. Since the diff was apart, I swapped it for a 48 pitch Bolink spur gear which allows for a broader range of gear ratios. Now, the car was setup for my driving style.

With most of the technical pro-



Use the left rear wheel and hub as a stand to assemble the diff.

blems solved, the only ones left were those of the driver getting used to a new machine. The Enduro doesn't handle as well for me as the Bolink Eliminator 10, but it performed to a level that would allow me to make the "A" main at the local track. For me, the Enduro pushes too much in the corners and it wasn't stable coming out of a corner into a straight-away as I would like — here's where I'm really turning on the power.

CONCLUSION

The Enduro keeps with Bolink's basic design concepts — functional, sturdy and simple. The instructions aren't as well written or as clear as those for the Eliminator 10. Bolink needs to address its problems of out-of-round nylon hubs; this has been a problem with the Invader, Eliminator 10 and now the Enduro. Overall I rate the Enduro as a GOOD performer, but not in the class of the Eliminator 10. With some modifications discussed in this article, it can be a VERY GOOD performer. The Enduro is an excellent pioneer and a contender in the endurance racing class. 'Til next time, GOOD RACING!

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(Page 42 for Car Specifications)

CP

Back By Popular Demand



Trinity Products, Inc. is proud to announce that Joel "Magic" Johnson will be rejoining the Trinity Racing Team. Joel will once again be using Trinity "Monster Horsepower" motors and "Trinity Pushed" batteries in an effort to repeat as IFMAR World Champion.

Joel is currently the 2WD Off-Road World Champion having won his title in England in 1987. He will lead this year's American Team in their assault on the World Championship title in Australia this summer.

Joel will run his Kyosho cars in all the off-road races and official races under the Trinity/Kyosho banner.

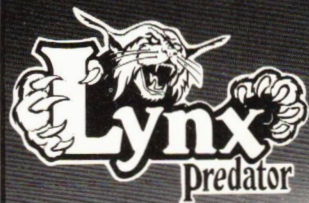
Joel will be joining team members Tony Neisinger, Bob Light, and Chris Doseck at all the on and off-road Nationals this year and will add extra depth to our racing team. Welcome back Joel! ■

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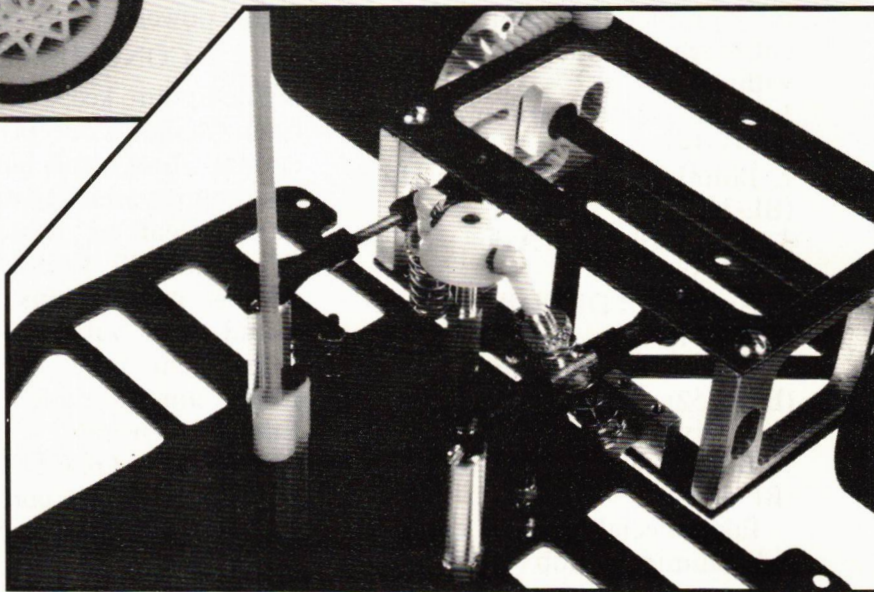
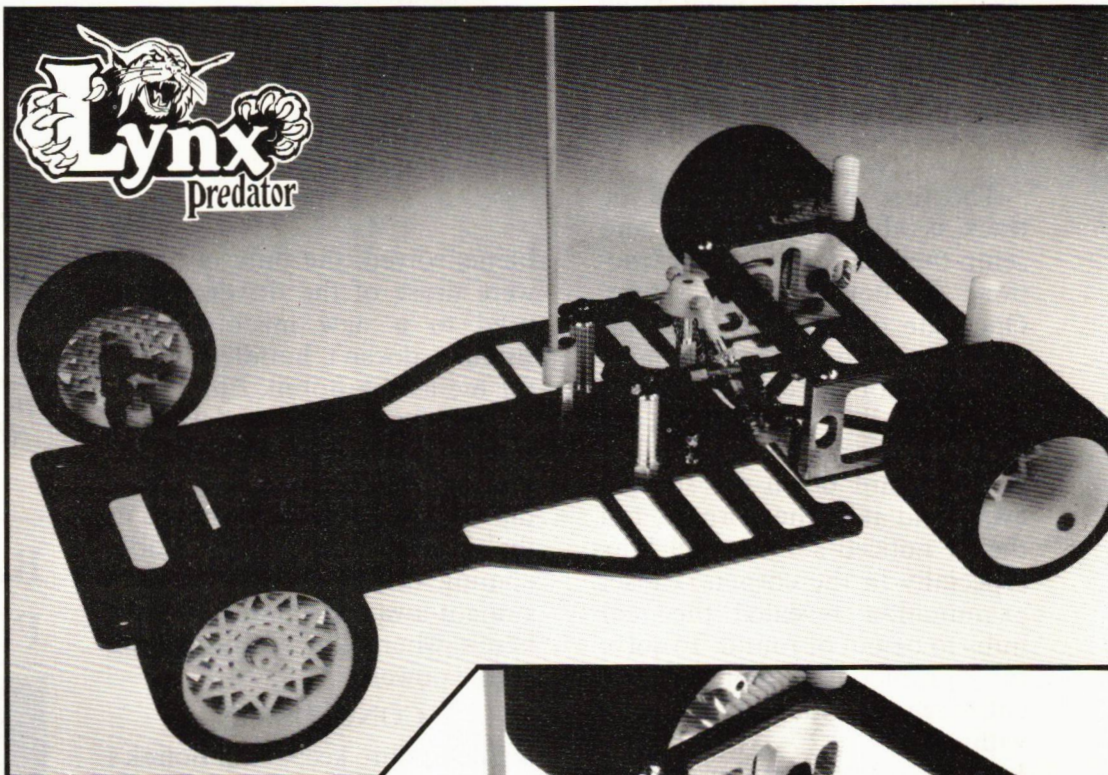
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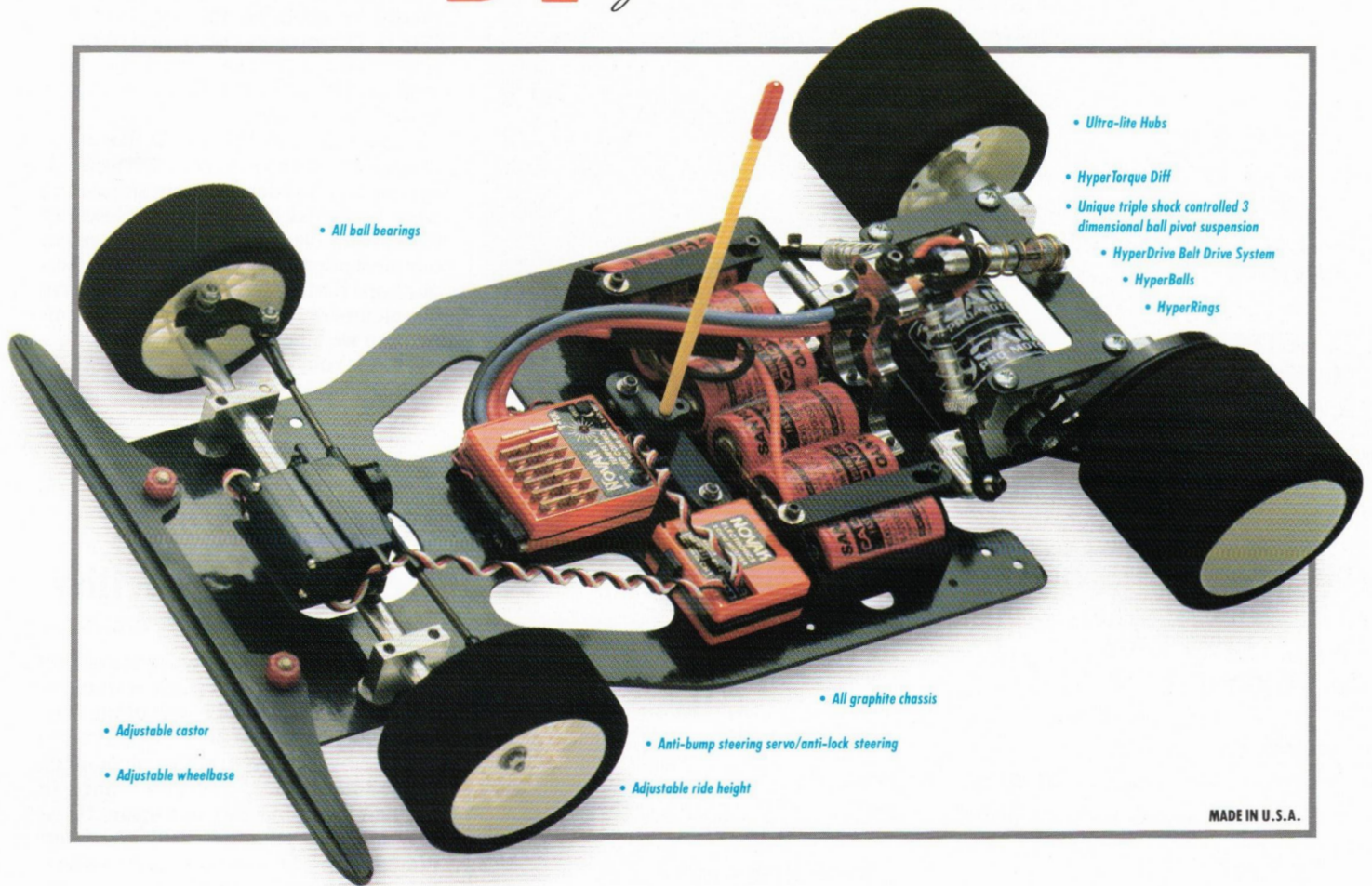


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BOLINK'S ELIMINATOR ENDURO CAR KIT SPECIFICATIONS

KIT:

Manufacturer.....Bolink
Model.....Enduro 10
Type.....On-road
Scale.....10th

CHASSIS & BODY:

Chassis Type.....Pan w/T-bar
Material.....Fiberglass
Body....'88 Oldsmobile Cutlass
Material.....Lexan

ELECTRICS:

Motor.....not included
Receiver.....not included
Speed Controller...not included

WHEELS:

Front.....Bolink
Rear.....Bolink

OPTIONS

WHEELS:

Front.....stock
Rear.....stock

ELECTRICS:

Motor.....Bolink
Receiver.....Futaba R102JE
Speed Controller...Traxxas XL-2

COMMENTS:

Changed out rear axle and hubs for graphite and aluminum (see text)
Changed spur gear for 48 pitch Bolink and installed ball bearings

ROAD TEST

HANDLING:

Acceleration.....Very Good
Cornering.....Good/Very Good
Rating.....Very Good

COMMENTS:

This is an above average handling car.

GENERAL:

Weight (w/6 cells).....46 oz.
Wheelbase.....10 in
Track Front/Rear.....7.6/6.5 in
Length.....18 in
Width.....9 in
Height.....4.5 in
Bearings/bushings....Bushings

SUSPENSION:

Front.....Spring
Rear.....Coil over shocks

DRIVE TRAIN:

Type.....Direct drive/ball
Ratio.....
Gears (pinion/spur).....14/54

TIRES:

Front.....Bolink green dot
Rear.....Bolink green dot

TIRES:

Front.....stock
Rear.....stock

CHASSIS & BODY:

Chassis.....stock
Material.....stock
Body....'88 Pontiac Grand Prix
Material.....Lexan

Front Wheel Drive Cars

After careful consultation with ROAR officials, racers, and manufacturers, ROAR would like to address the issue of class placement for front wheel propelled two wheel drive cars in Off-Road and Dirt Oval racing.

It is ROAR's position that these cars should compete in the appropriate 4 Wheel Drive class for a probationary period throughout 1989. This will apply to both the Off-Road and Dirt Oval classes in the 1/10 division.

Inasmuch as ROAR would like to encourage the development of this technology, we feel this development should not come at the risk of creating obsolescence of the equipment currently being used in our most popular class, 2 wheel drive. It is our hope that this position will best serve our members and preserve the good competition we all enjoy.

Thank You,
John Thawley

MRC New Service Facility

MRC has opened a new service facility in Signal Hill, CA to take care of your service needs. For everyone west of the Mississippi River, this MRC service center is staffed by factory-trained personnel. These technicians have been trained in our new service facility in Edison, NJ so they are totally familiar with our latest products and they are also hobbyists so they understand your needs as a consumer.

We have trained the staff to take care of such popular MRC products such as our QUICK CHARGERS including the RB460, RB465, RB475 and RB485. The service list also covers our hot performing radio systems such as the 2 channel stick R/C system and the Top Gun wheel radio. For more details on what services are available, call our West Coast service center:

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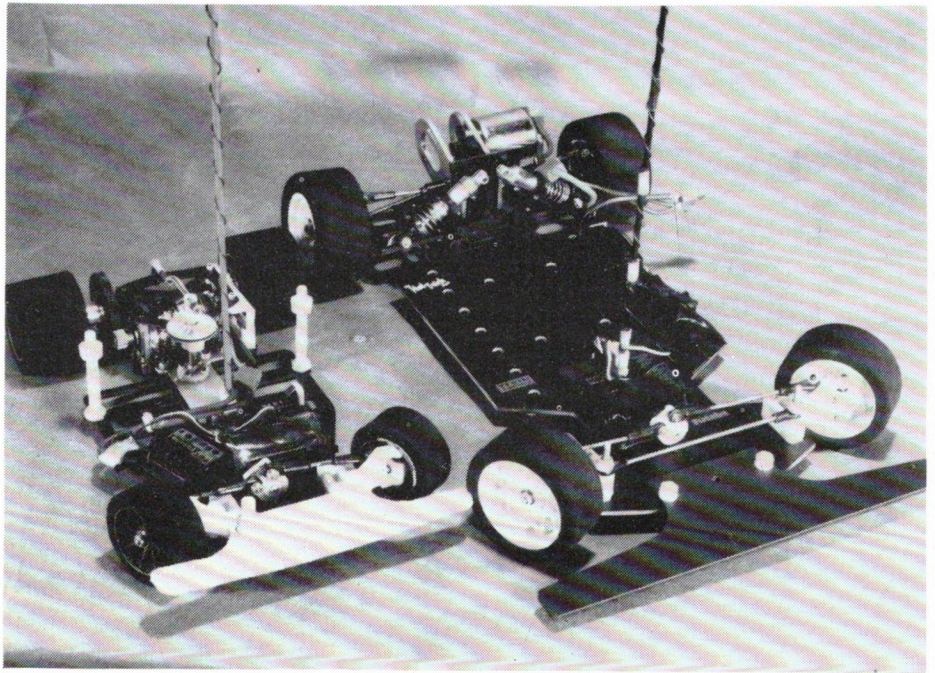
This is just one more reason why you should make MRC your hobby company for the most fun products built with quality and backed by dependable service from coast to coast!

JCAR/Ultima

By F. Dale Cauthen

In our March issue we brought you news of new life for BoLink's venerable Invader, courtesy of the JCAR company. Now Jay Hawley has turned his attentions to the popular Ultima and is producing a chassis for racing the successful off-road car on dirt ovals, pavement, and (are you ready for this?) carpet!

Our second JCAR Ultima chassis is the C-U model. This car is going to cause more arguments than anything else I've seen to date. Under ROAR rules this chassis, even with the DDS transmission, is a legal 2WD off-road car. Most carpet "off-road" tracks these days allow 12L front ends on adaptor plates. If you mounted up the DDS transmission on your off-road car, they probably wouldn't protest. But try entering this chassis, made to take a 12L front end with the DDS transmission, and you best be ready for the argument of your life. You do it your way, I'll do it mine. The car can be competitive in either class. But I've never seen full scale Baja buggies competing on a flat oval track and don't expect to. On the other hand, full scale Can Am and GT cars rate right up there with Grand National stockers as my favorite racing machines. So mine runs in on-road or "carpet car" class. For setup tips on the 12L front end, see the March article on the Invader conversion. The only changes made to the front end setup were substitutions of stiffer springs, Associated part number 4117 made of .002 wire and addition of 2 degree caster blocks for a little more stability in the front of the car. Use toe-in for more straight line stabilization. While increasing caster will improve stability, remember that suspension and traction always involve



Wide open spaces on the 1/10 scale car (right) simplify installation of electronics over limited space on the 1/12 scale chassis. Note the cut down bulkhead on the front of the DDS transmission.

tradeoffs. That increased stability from increased caster has a price in decreased steering. Too much toe in is worse. Putting in more toe than you need induces drag and decreases speed while accelerating tire wear.

Experiment until you get just enough that you don't have to touch the steering when on the straights. One of the first things you'll notice is that this car presents a very wide stance in the front, but the tires still fit neatly within a full body. With the shocks properly setup this car hooks up so much better in the rear than its straight axle counterparts that it can tend to push with the same tires that work well on the JCAR/Invader. Whereas my favorite front tires with the oval Invader were well worn down blue compound, to make the C-U chassis steer as well on the same track required using either full diameter blues or the smaller diameter BoLink "Flat-

Trackers" in green compound. Once dialed in with this setup, the car was actually easier to drive than the straight axle car. Now my toughest decision on race day is which car to race.

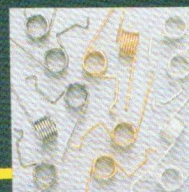
Part number DDS-U is a small miracle for a price of only \$80.00. Your original Ultima transmission contains a total of six gears. Those six gears mean three separate gear meshes on four separate shafts, riding on four more bearings than the JCAR DDS-U transmission uses. Each of those gear meshes induces drag. And with even the best ball bearings, everyone of those shaft ends adds more drag. All that drag robs power, and that lost power translates into laps you won't be making, that the guy who's lapping you will be making, if he's running one of these and you aren't.

Besides the difference in drag, every part that has to be forced to rotate by your motor uses up hor-



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#0003 350 2WD, 18 Turns, 34,000 RPM
#0004 Dirt Oval Stock, 2WD or 4WD
#0005 Super Speedway Stock, On-Road
#0012 The Road Beast, 20 Turns, 30,000 RPM



#4028, #4032 Lite
and #4033 Heavy
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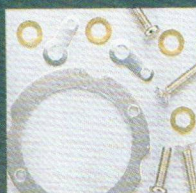


#4043 Motor Spacer,
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#0011 Sport Pack,
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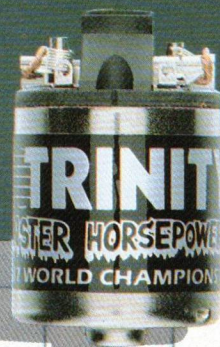
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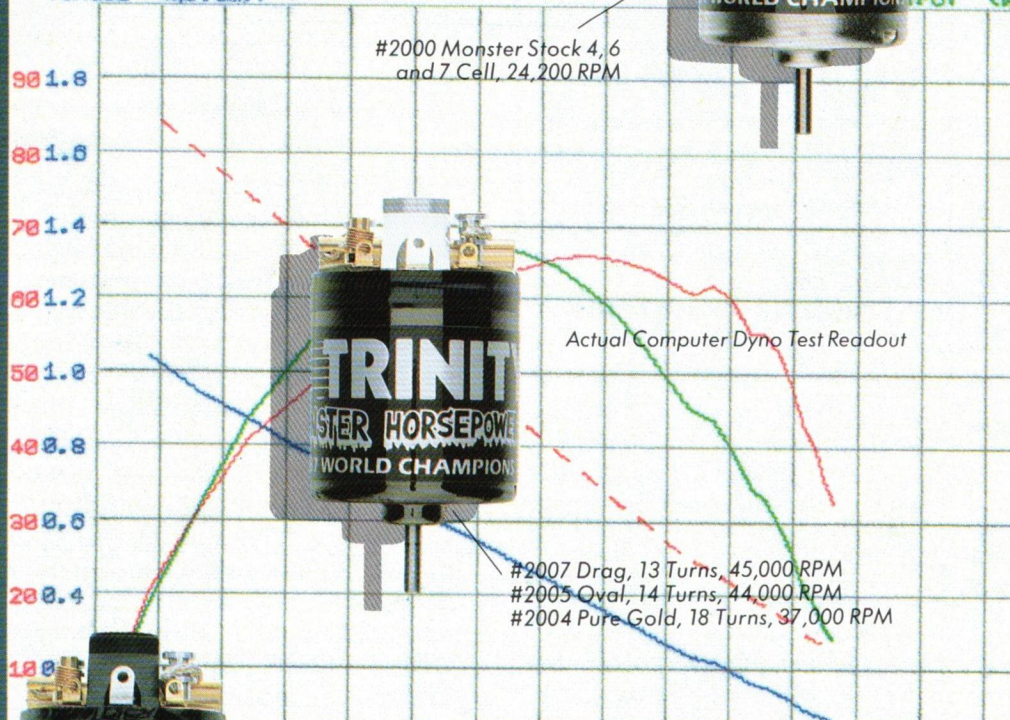
#5050 SCR 6 Cell Racing Pack
#5051 SCE 6 Cell Racing Pack



#5043 Matched SCE 4 Cell Set
#5044 Matched SCE 6 Cell Set
#5045 Matched SCE 7 Cell Set

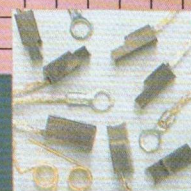
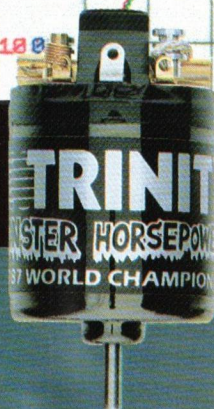


OVERALL EFFICIENCY (%)
TORQUE (kg.cm.)



TODAY

- #1012 Big Daddy, 10 Turns, 49,500 RPM
- #2014 Top Fuel, 11 Turns, 47,000 RPM
- #2015 Godzilla, 12 Turns, 46,200 RPM
- #2002 Sprint, 15 Turns, 41,000 RPM
- #1010 4 Cell Single, 15 Turns, 40,000 RPM
- #2008 Whippoorwill, 16 Turns, 39,500 RPM
- #1004 4 Cell Double, 16 Turns, 39,200 RPM
- #2011 Joel Johnson, 17 Turns, 39,000 RPM
- #1005 4 Cell Triple, 17 Turns, 38,000 RPM
- #1006 4 Cell Quad, 18 Turns, 36,000 RPM
- #2003 Enduro, 19 Turns, 35,000 RPM
- #1011 6 Cell Single, 19 Turns, 32,000 RPM
- #1007 6 Cell Double, 20 Turns, 29,000 RPM
- #1008 6 Cell Triple, 21 Turns, 28,000 RPM
- #1009 6 Cell Quad, 22 Turns, 27,000 RPM



#4005 Brushes/Springs,
#4006 Cut Brushes,
#4007 Timed Brushes and
#4035 Off Road Brushes.

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AT LAST...... a computer program that actually helps out during the race event. Registration, organizing qualifying heats, race scoring, class standings, and main assignments are standard features. And if you have the Bolink/AMB lap counting system, TrackMate enhances its operation.

AT LAST... over 2 years in the making, TrackMate was designed at trackside to quickly and easily handle all the exceptions that occur during a normal race day. Dropped cars, scratched cars, frequency changes, class changes, and heat changes are routine.

TrackMate runs on IBM compatible computers, includes an illustrated manual and a one hour training video.

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TrackMate is a trademark of TrackMate Systems

Switching the DDS transmission around to the "Ultima -Mid" configuration requires only the addition of Robinson's "tracker" toe-in adjuster.

cars, we quickly learned not to let anyone drive the car who hadn't learned to drive his own car with the same modification because with this uninhibited throttle response, it became easy to over-rev the high compression V8s and explode the motor. While the effect is less dramatic on our electric wonders, the car does become more energetic and thus slightly more demanding. Mostly though, it becomes more fun to drive. Have you ever noticed that when your motor lost its edge or your batteries starting losing their match that the car seemed more difficult to drive and you had to work at making clean laps? It is when the car is totally responsive to your input at the transmitter that the laps become effortless and sometimes a faster car is actually easier to drive.

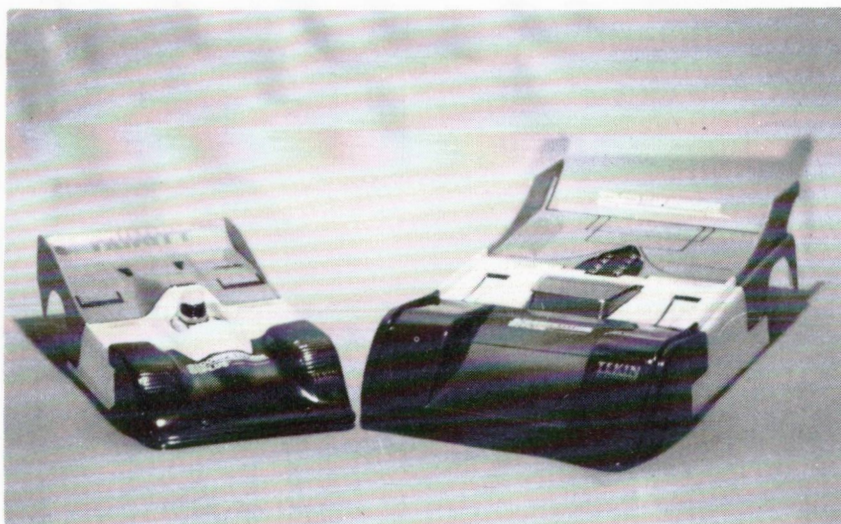
Included in the DDS package are two machined aluminum plates that replace your old gear-box case, a graphite composite shock mount, four flathead screws for mounting the diff to the chassis, the gear bushing needed for replacing the Kyosho gear with the Kimbrough diff gear, and the necessary cap screws for mounting the shock

mount to the diff plates. Sound a bit simpler than that plastic box full of shafts and gears you've been accustomed to wrestling around?

Some people I've shown this diff to have balked at the price. Consider though, the long term cost of racing parts. The Kyosho ball diff, while faultless in operation, will only last so long before the diff rings have to be replaced. By the end of the season, mine were cut far enough that the diff was getting scratchy. Since the rings aren't available separately, figure on spending forty bucks at least one a year to avoid spending the eighty bucks the JCAR diff will cost you. Having your diff rings turned to accept Associated or TRC rings will cost you another \$15.00, which brings the total cost of conversion to \$95.00. There again, you're getting a new graphite shock tower worth fifteen or twenty bucks, the rebuilds will only cost you five bucks or so for a new gear, rings, and diff balls. Seen one way, it may take you a couple of years to recoup the cost of the conversion. But then how much are laps worth to you? With the DDS transmission in the car, running

a Trinity Speedworks stock motor on six cells, got me forty-four laps. Just for grins, I put in a kit gearbox the next weekend and the car ran forty laps. These lap counts came from four minute oval heats during which the car did not have to be marshalled and no other undesirable events kept the car from running its best pace. Quite a difference. While there is no easy way to measure a differential's true efficiency in a racing situation, that's all I need to know to be sure that DDS transmissions will be in my racing Ultima this coming dirt season and whenever the JCRC C-U chassis gets to play on asphalt or carpet. Technology moves on guys and girls. Buy into it or watch it go by.

Winter ice has kept me from getting to try this car on pavement and there aren't any carpet tracks nearby big enough to run 10th scale road course so during the break between rounds at a



The "old/new" Associated Lola body on right is an excellent choice for your on-road Ultima while Trinity's RC #7301 "West BMW" is new for 12th scalers.

recent 12th scale race, I put the car down on the 12th scale road course to see how well it could handle on the narrow and twisty track. It was surprisingly similar to driving the graphite 12L. With very little dialing in, this car could be very competitive on any road course. It is actually easier to setup that most road cars. The

only catch being that adjusting the ride height means disassembling the shocks to add the necessary spacers to achieve the desired shock length. After this initial setup, though, the bottoms of the shocks can simply be moved to different lower arm holes for fine adjustments. Whether this diff works better

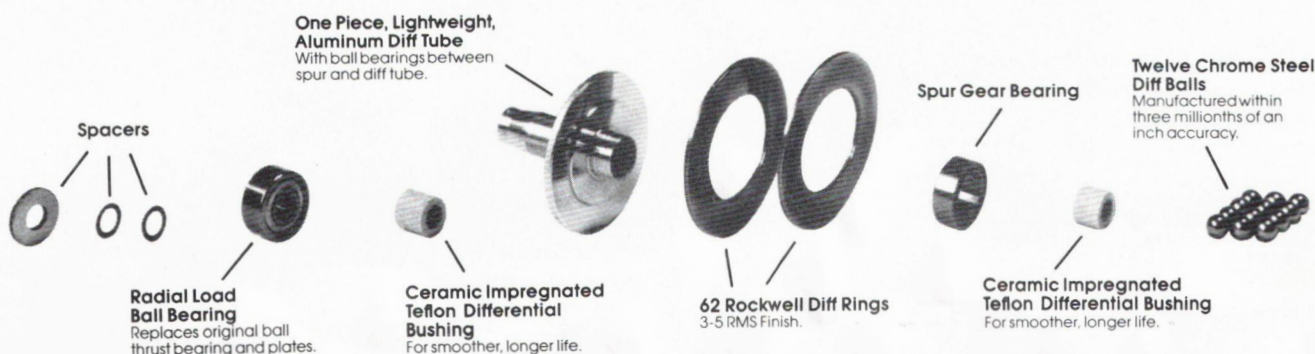
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At Team Pit Stop we take everything to the limit. Our approach has allowed us to become a leading producer of high performance R/C race products. One of our latest products is the RC-10 Differential Rework Kit. This kit allows you to remanufacture the original RC-10 differen-

tial to the smoothest, least frictional, straightest pulling differential system on any R/C car.

If you're serious about your racing this is one kit you need for your RC-10. Without it, you're not taking it to the limit.

RC-10 Differential Rework Kit (#9040) \$37.99



New for RC-10, 10th and 12th scale cars:

62 Rockwell Diff Rings 3-5 RMS Finish . . . \$ 5.99

Titanium Dog Bone for RC-10 \$12.99

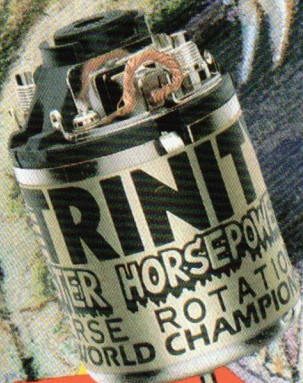
Also New for Schumacher:

- Front Diff Rework
- Rear Diff Rework
- Rear Integrator Rework

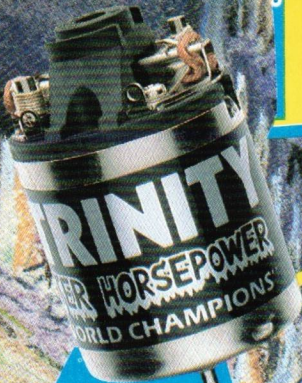


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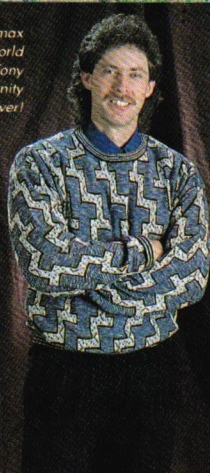
#2000 "Monster Stock" 4, 6 or 7 Cell, 24,200 Awesome RPMs

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If ROAR stock class is your bag and you strive to be totally awesome, then you need the most radical, mind-blowing motors around, and here they are: The Trinity Monster Horsepower Stock Motors. Score some in normal or reverse rotation, and you'll be totally prepped to shut down the competition and send 'em home. So, if you really want to be bad, then loose the nerd valley motors and get it on with Trinity Monster Horsepower!

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2 Time IFMAR World
Champion driver Tony
Neisinger chooses Trinity
Monster Horsepower!



Trinity rad motors don't need bogus hop-up kits to boost 'em to the max. All the trick tech items like 180° Springs, Capacitors and Lead Wires are in the box! Trinity sets you up right the first time.

Speedworks



#0004 Dirt Oval Stock 2WD or 4WD

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Era is here!



Trinity Speedworks motors are a totally awesome blend of power, durability, economy and style. Plus they're the fastest, most bitchin' stock motors money can buy anywhere!

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★ The **#2001 - "TYPHOON"** - A 12 turn triple designed for drag racing and 4 wheel or 2 wheel oval racing. Winston Carter obliterated the track record while setting 2 wheel modified top time at the R.O.A.R. Oval Nationals. Over 50,000 RPMs and exceptionally efficient, this motor also runs great on 6 cells.

★ The **#2002 - "ANNIHILATOR"** - An 11 turn double built for raw, almost undrivable horsepower. Erik Soderquist just set the one lap track record at Lake Whippoorwill while using just 1/4 throttle on his **"ANNIHILATOR"** powered 12th scale car. This is the hottest drag race or oval motor we've ever built, producing well over 50,000 RPMs.

★ The **#2003 - "CAROLINA MOUNTAIN MOTOR"** - A 13 turn triple. The fastest 4 wheel dirt oval or 10th scale asphalt oval motor you can buy. Erik Soderquist just won the R.O.A.R. 4 wheel Dirt Oval Championship with this motor, setting a new track record too! This motor also currently holds the National record for pro-stock "Drags". 48,000 RPMs.

★ The **#2004 - "FLASH"** - A 14 turn triple with lots of extra torque to pull heavy or direct drive cars. Jimmy Gouge used this motor to power his sprint car to the fastest lap times at the R.O.A.R. Nationals. 43,000 RPMs.

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TWISTER'S Standard and Premium Grade S.C.E. Batteries are rapidly becoming the standard of the industry. All of our batteries are matched twice to insure accuracy and our special cycling techniques will give you better performance and run time than your competition. Looking for the winner's circle? **TWISTER** Matched Batteries will get you there with power to spare!

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As part of **TWISTER MOTORS** ongoing consumer education program, we are pleased to announce the publication of our new "RC MOTOR TUNING GUIDE". The Guide is available FREE to anyone. The "RC MOTOR TUNING GUIDE" covers the care and tuning of the Radio Control Race Car Motor, with tips explaining how to get peak performance and maximum life from ANY RC motor. To get your copy of the "RC MOTOR TUNING GUIDE, call the **TWISTER MOTOR HOTLINE** number: 818-914-6177, write us or stop by our shop at 657 E. Arrow-Highway, Suite H, Glendora, CA 91740



THE UNFAIR ADVANTAGE!

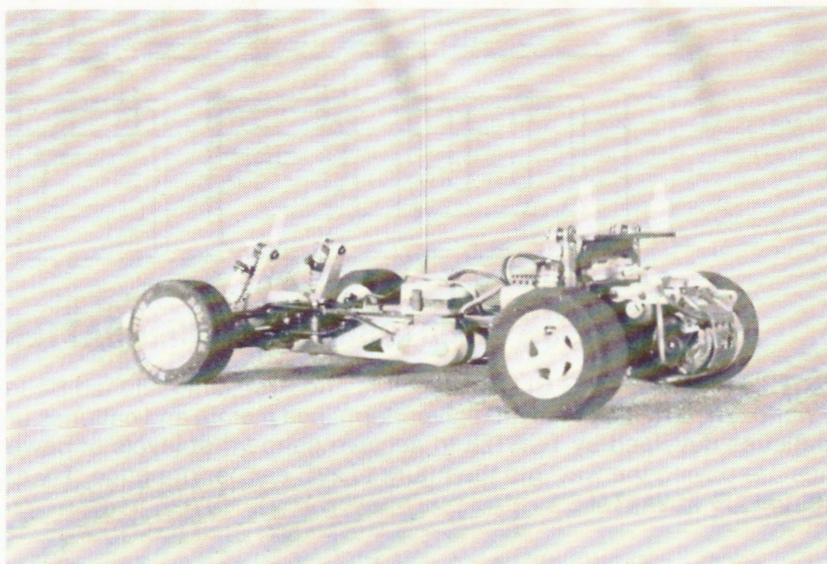
than a straight axle setup is open to discussion, but I couldn't really tell any difference in driving this car from the straight axle carpet cars I'm accustomed to driving.

Perhaps the most desirable characteristic of this car is its versatility. It is equally at home on pavement, carpet, or on a smooth dirt oval with RC10 front wheels and Kyosho dirt rears. Given the number of classes this car is capable of competing in, this means the owner get to race more often and in more different kinds of races than with the off-road chassis alone. If you are thinking the same thing and would like to build one of these little beasts of your very own, you will need the following parts:

B-10, RC-10 Bumper\$ 7.95
C-U Chassis 36.95
DDS-U Transmission 80.00
All from JCAR
52 Perkins Ave.
Norwich, CT 06030

(203) 887-6476
Associated 12L front end ...\$10.50
Associated Electrics
3585 Cadillac Ave.
Costa Mesa, CA 92626
BoLink front axles

BL5364 3.50
BoLink R/C Cars, Inc.
420 Hosea Rd.
Lawrenceville, GA 30245
(404) 963-0252
Trinity RC #7117 "Kyosho



Those of you who think you can compete on carpet or asphalt by simply modifying your old Ultima's suspension, take note of this failed experiment. This car on the stock Ultima chassis, lowered and fitted with pavement tires, worked very poorly.

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If you already have an Ultima, your existing bulkheads, lower arms, etc. will work with the DDS transmission and C-U chassis. If not, add about another \$50.00 to the total for a shaft set, lower arms, bulkheads, drive washers and swing-shafts. The swing-shafts are definitely the way to go over the old style dogbones as the swing-shafts function more smoothly, last longer and are infinitely more trouble free.

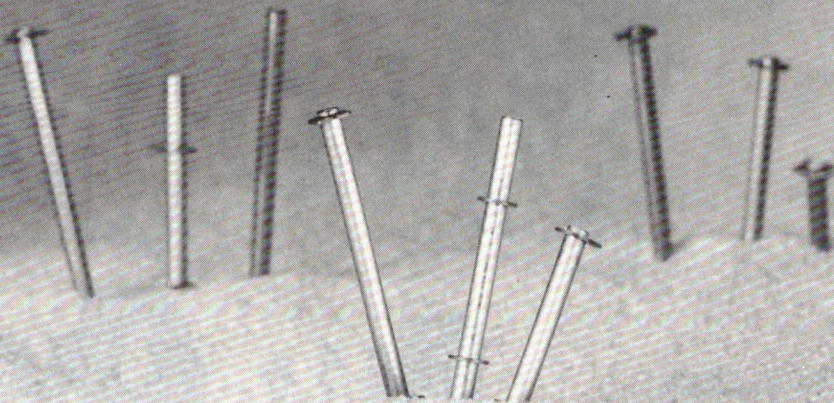
Should you not already have a Turbo Ultima or Thorpe ball diff, JCAR now offers complete diff kits. A Thorpe diff with the rings cut for Associated rings, with the rings and your choice of gears installed will run you \$65.00.

If your taste runs to RC10s, a complete transmission is available. The complete kit includes: dogbones, shock tower, machined diff with your choice of gears, output bearings in the larger and more efficient 8x14 size, Thorpe outdrives, all hardware and some nifty JCAR decals all for a list price of \$160.00. The JCAR DDS transmission will mount up on any chassis that would accept your original gearbox.

Mounting the DDS transmission on your stock chassis will allow you to use any diff gear up to a 93 tooth 48 pitch. Relieving the chassis slightly will allow use of the new 96 tooth Kimbrough gears and the best trick of all, purchasing a Robinson Racing part no. RRP-3005 "Trackers" allows you not only to adjust rear toe-in to suit your preference and traction conditions but by adjusting the "tracker" all the way in, you can now flip the diff around to run a mid motor configuration for the newest beastie around, the "Ultima-Mid"!

Rollover antennas are a niceity on road cars. The one shown is Paragon's "Classic", available at

PARTS AIN'T PARTS.



We've got the parts honed to win. Like our race-developed Titanium Hinge Pins. Half the mass of steel, they're the latest RC weight-loss program. Or our Steel Retaining Rings. Together, they're bullet-proof protection for RC10, YZ10, JRX2, Ultima and Optima Mid. RC Performance Specialties. Call us for the parts that are serious about winning.

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your hobby shop for around four bucks.

We used Tekin's new ESC 300 PT speed control and found it to function as beautifully on six and seven cells as it has on four cells in my 12L. The receiver likewise is Tekin's micro size 27mHz unit which is so small you won't believe a radio receiver could fit in such a small box.

You guys who want to run your Ultima year round can now set this chassis up with the 12L front end and basically just switch your DDS transmission and electronics back and forth between this chassis and your off-road chassis depending on whether you want to compete off-road, on carpet, or on asphalt.

Congratulations to JCAR on another winner!

CP

Ulster County Fair's R/C Car Races

The 1989 Ulster County Fair will be featuring the 2nd Annual R/C Car

Races; which will be held at the Ulster County Fairgrounds located on Libertyville Road in New Paltz, NY. The Ulster County Fair is scheduled to run from Wed., Aug. 2 - Sun., Aug. 6.

The R/C Car Races will be held on the 90 foot x 30 foot oval race track which was specially built for the cars last year.

Trophies will be awarded to the top three finishers in each of the four race classes: Production, Stock, Modified and the Open Truck. In the Modified Class, \$100 in purse money will be added to the trophies: \$50 first place, \$35 second place and \$15 third place.

Entry fees for this event will be \$10 - Production and Open Truck, \$15 - Stock Class, and \$20 - Modified Class. This pre-entry fee includes your admission to the Fair. Racers who do not pre-register for the events must pay the additional \$6 fair admission fee.

This year's Ulster County Fair will be featuring a special pay-one-price admission on each day of the Fair's run. This \$6 admission price includes entry to all entertainment events, and covers admission to all rides on the Fair midway.

Wed., Aug. 2 and Thurs., Aug. 3 will be open track days. The \$6 Fair admission must be paid for this open track practice time.

For additional information regarding the R/C Car Races, please contact: Greg Black at Mountain Wings in Ellenville (914) 647-3377, or the Ulster County Fair Office at (914) 255-1380.



Presents...

2nd Annual

MIDWEST

Sept. 8-10th

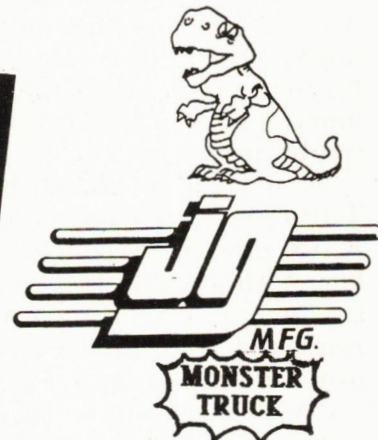
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2nd Annual Midwest Dirt Oval Championship
Kalamazoo, Michigan Sept. 8-10th

Godzilla-like Trophies: 1st-10th A Main, 1st-3rd all others
Fantom Motor's Top Qualifiers - Advantage Batteries Concourse
ROAR Rules - AMB Scoring - Dan's Stuff Sportsmanship Awards

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Class: _____ Frequency 1 _____ 2 _____

Entry Fee: \$20 per class

Don't be Stupid, Send Entry Immediately!

To: Midwest Dirt Oval, c/o Judd Nichols, 513 Ruth, Portage, Mi. 49061

Race Program with Rules, Maps, and Motel List will be sent

For information: Judd Nichols (616) 327-0274, Jay Bowman (616) 344-2466

3rd Annual Michigan Dirt Oval Duel Aug. 6th

Very Special Thanks to

Boca Bearing - MRP - RAM - AstroFlight - R&D Hobby
Power Push Batteries - Roadrunner Motors - Futaba
Competition Plus - Team CRP - Midwest RC Car News
C & M Cobra - Victor Electronics - RRP Tires - Proline



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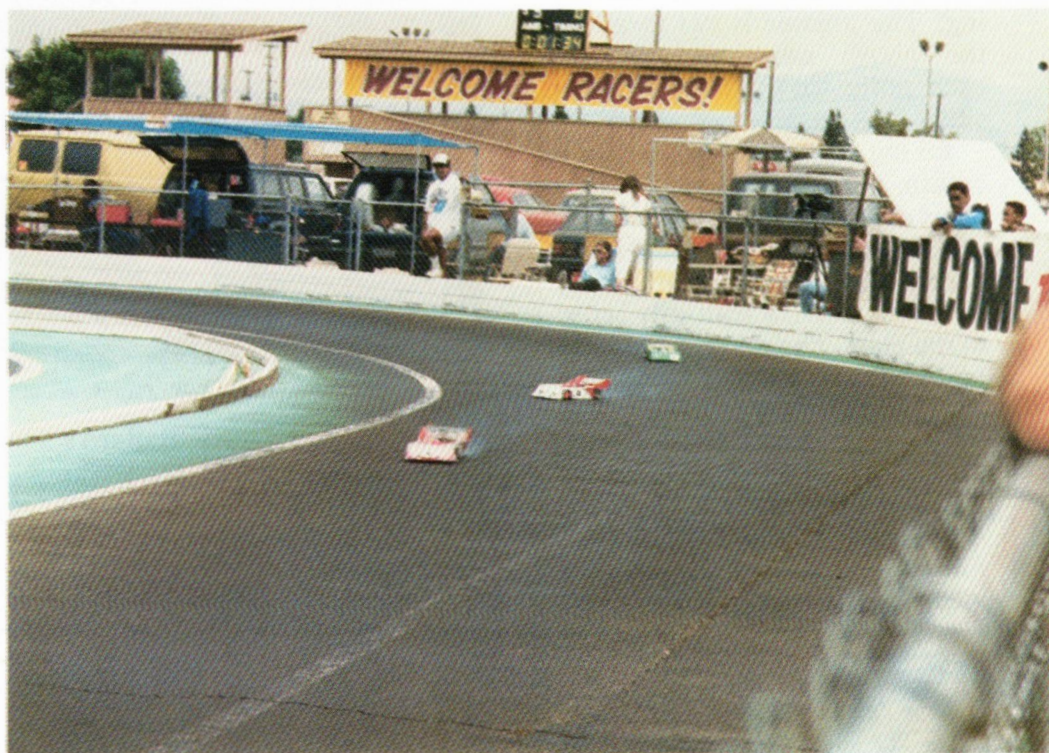
The McCoy: The End of an Era

By Peter Barana

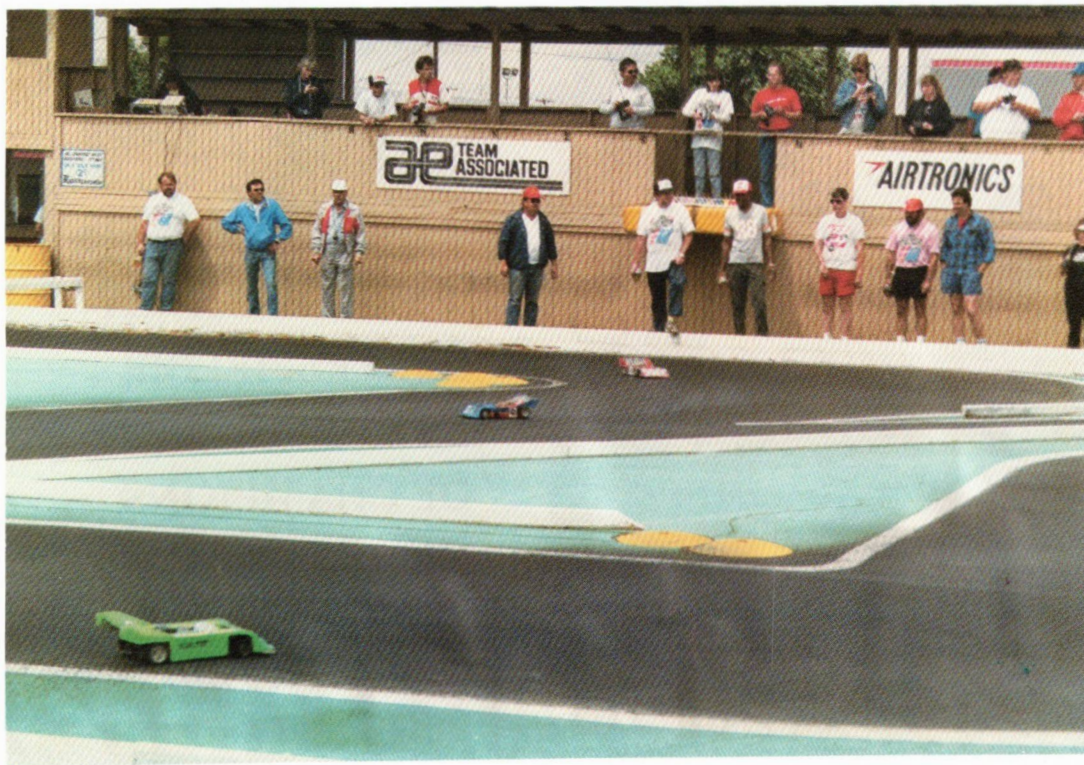
Flash! The 1/8 scale class is dead!

Back in the late '70s, several influential people in the R/C world truly felt that way. In the mid 1980's, however, the 1/8 division began to show some signs of life again. There were at least 4 different manufacturers/importers actively participating and campaigning 1/8 road machines in the U.S. It was an exciting time indeed to participate in the 1/8 class.

As I write this article, now, things have again changed. One need not be a prophet, psychic or have any other mystical powers to say that 1/8 scale has seen better days. In all honesty, only Associated continues to maintain a



Action like this will soon be a fond memory. The 1/8 track will soon close at the Ranch Pit Stop.



serious commitment to 1/8 scale in this country.

As if things were not bad enough, one of the worlds best known 1/8 scale circuits, the Ranch Pit Shop in Pomona, California will soon no longer run 1/8 cars. The final nail in the 1/8 scale coffin may be the announcement that 1989 is the final running of the McCoy race. After 17 years, the premiere event in this class will no longer be run.

So about 10 years after the first scent of death for the fastest scale in R/C cars was detected, we are back at

full circle. This time, however, the vital signs are weaker. Could this be the end of 1/8, and if so, what the heck went wrong? Was it too expensive? Did the speeds involved dictate that only an elite few could ever drive them well? How about the mess, noise and technology of the suspension 4WD cars, was it too overwhelming? The answer is yes to all of the above questions, though, each point isn't equally responsible.

Taking a moment to look within, even the R/C car magazines can be at fault for their lack of coverage, though, only R/C News, and ourselves would be able to cover 1/8 with any sense of the class. The other magazines are caught up promoting the world to drive on 75mHz, or too busy trying to put monster truck tires on any and all cars, charger, speed controls or themselves.

So where does all this leave us? Shouldn't I be celebrating on the victories of this year's 2WD



Terry Ballard was the winner of the 2WD Last McCoy!

McCoy champ, Terry Ballard's big win? Not only did Terry win his main by a comfortable six laps, but was also TQ in the 2WD class. Ballard was truly awesome the entire weekend long.

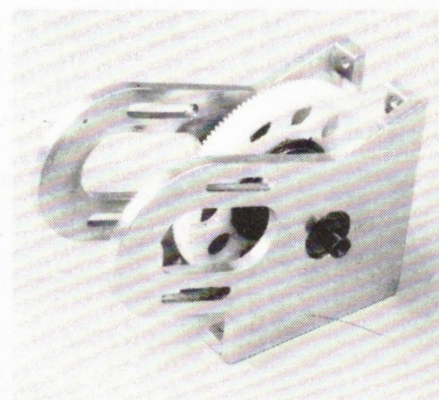
Let's not forget the 4WD McCoy champ either. Wherever there is a major race worldwide, it seems that the one name that is always near the top is Ralph Burch, Jr. The 1989 McCoy 4WD



TM



ROB CUTMAN - Invitational - Breaks Track Record By 2 Laps - Blows Away the Whole Field. JOHN PETERSON - Sprint Cars - Wins A Main, Breaks Track Record by 1 ½ Laps. JAY BOWMAN - BOB FELLEBAUM - A MAIN in 2WD OPEN.



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OF CHAMPIONS**

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race was not to be any different. After Burch became the only guy to run 15 laps in qualifying all weekend, he proceeded to win the championship by a full lap.

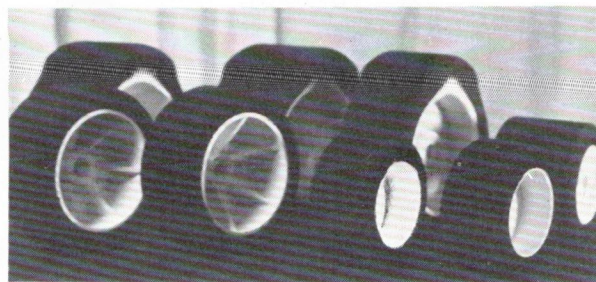
These are two great performances that are deserving of... of... a celebration. As you may have already guessed, though, I'm not in the mood to celebrate. I am in a pensive mood, I feel the need to answer several "why" questions. Why hasn't 1/8 caught on like other classes? Why at large "showcase" races like this year's McCoy, does the general public not get motivated enough to get involved in this scale by purchasing a car. Showcase races in other scales like the Trinity ShootOut, or the Reedy Race directly generate a growth in our sport, with respect to their classes. At these races people get excited when they see Cliff Lett and Kris Moore go over a jump together. So excited that they soon wind up buying an off-road car. The same happens at 1/12th races. Yet at 1/8 races, the event doesn't have the direct selling power. The answers to this may lie in something I touched on earlier, cost! Getting into 1/8 scale is not cheap. Staying competitive isn't either. A big reason why component prices stay lofty is because so many of the parts need to be imported. It has been almost 10 years since we (the U.S.) have produced a competitive engine. We get our power from Europe, more specifically Italy in the form of OPS, Picco, Rossi, and Nova Rossi. Tires are another major expense and they usually originate from overseas. An example of why a certain product can cost so much can be easily illustrated. Let's take a tire for example. Somewhere the foam sheet is made. From there a European tire manufacturer cuts them into donuts. From this stage they are imported into this country by an importer. A U.S. importer sells them to a distributor. He then resells the tire to a dealer. From there, you and I buy the tire and go race. Do you see how many people need to make a living off that one tire? Obviously the answer is to make accessories right here in the USA. Well, that's easier said than done.

While cost may have stunted 1/8 scale's growth, it alone by no means was the answer to the downfall of this scale. While R/C racing can by no means be considered cheap, its cost can be manageable. Yet there are a few fortunate racers who have the income to truly say money is no object. They buy anything and everything for their cars. How come these racers haven't looked too hard at 1/8th?

Although 1/8 is the fastest scale we currently run, speed was not a major factor in the decline of 1/8. Where speed caused some problems in this class was with regards to track size requirements. With actual speeds at about 60 mph reached in about 2.5-3 seconds the track needs to be fairly large. Combine track size with the added negative of noise and you have very few places that can even accommodate a track.

It is my opinion, and the opinion of other knowledgeable people, that the big decline in 1/8th

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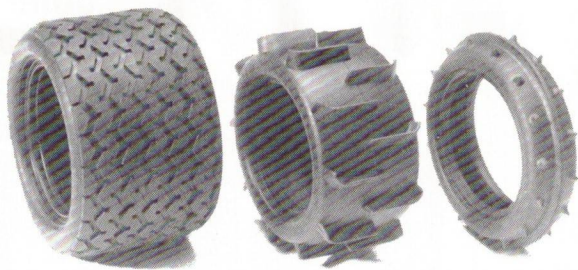
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has to do with the technology and sophistication of today's 1/8 race cars. My first statement opening this article was the revelation back in the late 1970's that 1/8 was dead. At this time, you had a great deal of drivers abandoning their messy, noisy and most importantly unreliable 1/8 gas cars for the quiet, clean and reliable 1/12th electric.

Reliability is the key word here. While the no-diff, pan cars handled poorly, they did stay in one piece. Keeping the engine lit was another story. The first 1/8 club events I saw were a joke to put it mildly. Cars would go around the track for 3, maybe 4 laps, then flame out. At this point, the racer's pit man would sprint on the track to retrieve the car, restart it, and the driver would then continue the race. A few laps later the same racer and pitman would repeat the process all over again. Never before was the racing adage of, "To finish first, you've got to finish first", more appropriately applied. A few years later, technology advanced and soon 6 hour, 10 hour and even 24 hour races became possible. The cars ran and ran well and fast.

With the reliability problem cured 1/8 started to comeback. In the mid 1980's, a new technology in this sport had come upon us. I find it ironic that technology advances that had once helped bring back 1/8 from certain extinction in the past, this time were now in large part responsible for its demise. Yes, technology can kill. The new wave in 1/8 was 4WD. The fact that 4WD cars were developed

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for R/C was not new in 1/8 road. The 1/10 electric crowd was racing 4WD, in a separate class, and it had no ill effects in this electric division. In fact, today 4WD cars are still a minority among off-road racers. The big class in off-

road is 2WD.

Early on in 1/8 4WD cars were resisted. At the start of the season here in California, the first series races had only 3 4WD cars. The other 50 or so machines were 2WD. Then things changed

almost overnight. At the Worlds in Japan, 4WD was the class in 1/8. It appeared the 2WD car would go the way of the pan car.

Working with a 4WD car in 1/10 is simple when compared to a 1/8 road car. For the most part, your gearing concerns center around the pinion and spur. Since tire diameters are the same front and rear, you just go race. The road 1/8 cars are quite different. You have the same pinion and spur, but now you have the added complication of gearing front and rear ends. Since road tires are not the same diameter front and rear, gearing must be figured out in association with tire diameters in order to figure the correct pull of the front end with respect to the rear. Measurements of front and rear tires are critical. A driver must then figure each tire's respective wear. At the start of a 40 minute main, a 4WD car must be just that 4WD at the 20 minute mark, 30 and 40 minute mark. If the fronts were to

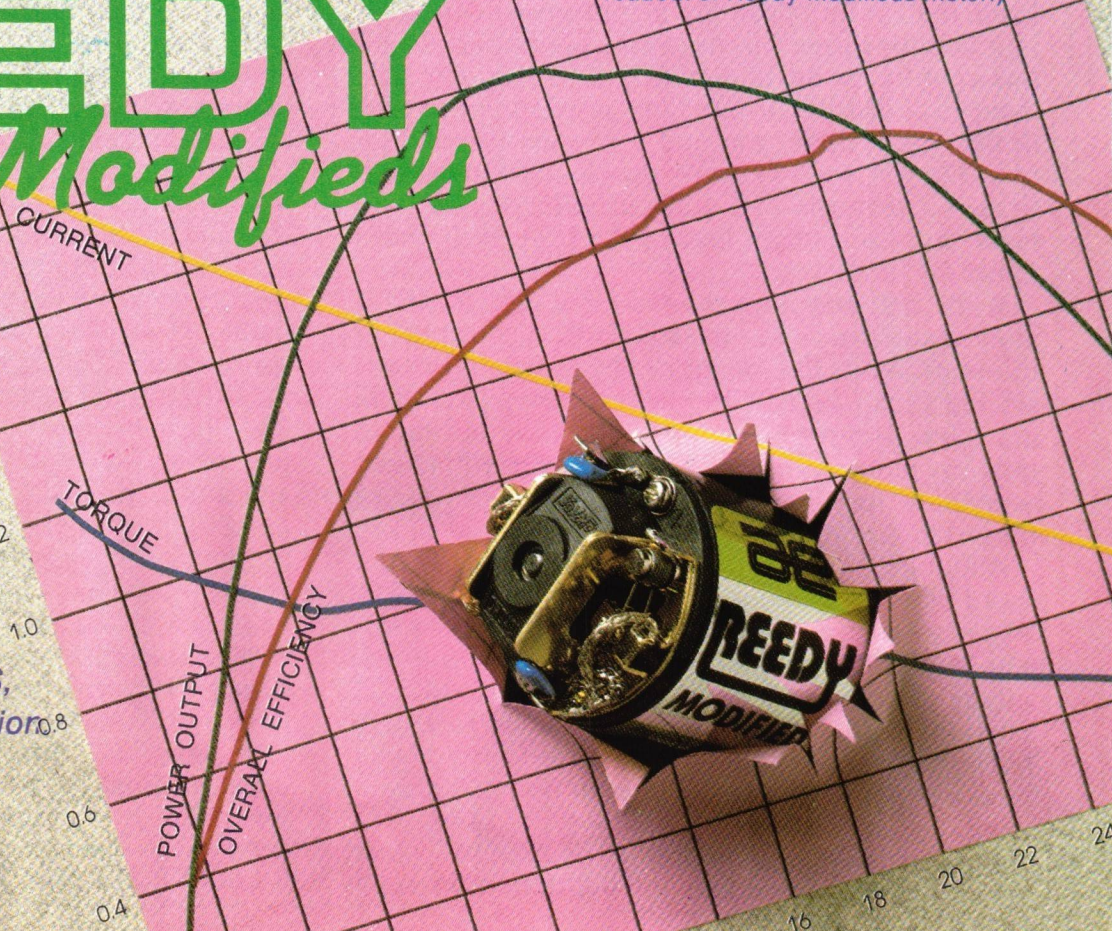
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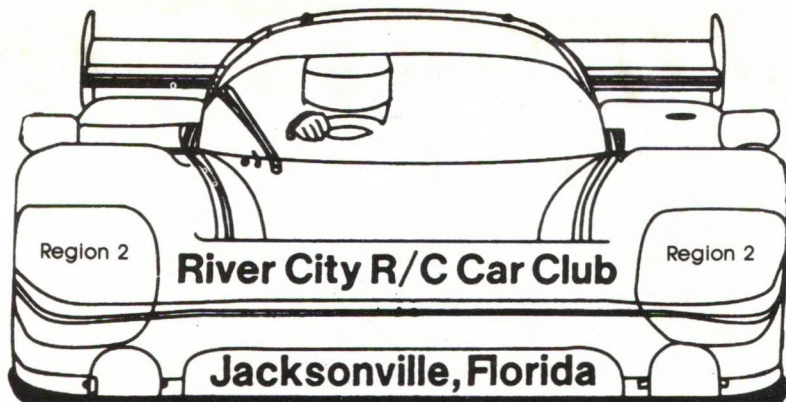
(Graph shown represents actual computer readout of Reedy Modifieds motor.)



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fast, or the rears . . . well, the cars performance will be effected, to say the least.

Some say a halt of importation/production of 4WD cars was in order. It didn't happen. There main argument, other than it will effect the popularity of 1/8, was that R/C car racing is a scale sport. Since, with the recent exception of a few cars, full scale road racing was 2WD, 1/8 should mimic that and thus remain 2WD. The same argument was applied to 1/10 off-road early on. Racers said a 4WD car should be saddled with a truck body. It didn't happen in 1/10 and likewise it didn't happen in 1/8.

So where does all these leave us. There are still some strong pockets of 1/8 racing around the country. Without a race like the McCoy, a race which united North American 1/8 scalers from Canada to Mexico, these pockets are like tiny islands in the ocean. Just like tiny islands in the ocean which vanish with the continued

pounding of the surf and wind, so will the 1/8 division vanish unless certain steps are taken to halt the erosion.

It should be noted here that in other parts of the world, the 1/8 gas division is still strong. They have a solid road racing program, and are further bolstered by 1/8th off-road. The gas buggies were raced here, but they met with relatively little success. Why other parts of the world have sustained success in 1/8 is another story altogether.

Is 1/8 dead? The patient still has a pulse, but it is a faint one. Will it make it? I know better than to guess, but I sure hope so. There are some changes that can be made to stimulate interest again. I don't know if those concerned are prepared to make them.

2 Wheel Drive A Main

1st - Terry Ballard
2nd - Steve Dunlavy
3rd - Mark Miranda

4th - Gil Losi, Sr.
5th - Gay Sullivan
6th - Paul Nadeau
7th - William (Bill) Carter
8th - Jim Gillet
9th - Bill Heyworth
10th - Joe Zimmerman
B Main

1st - Bob Dunlavy
2nd - Barry Schultz
3rd - Derrick Stevens
4th - Charlie Farrar
5th - Jim Hatchel
6th - Brian Murray
7th - Steve Aderholt
8th - Mike Alexander
9th - Lee Miranda
10th - Michael Fisher
C Main

1st - Jamie Goudeau
2nd - David Whitman
3rd - John Holland
4th - Joe Owens
5th - Lee Chapin
6th - Mike Cervantes
7th - Ken Davenport
8th - Bill Boan
4 Wheel Drive
A Main

1st - Ralph Burch, Jr.
2nd - Re-Pete Fusco
3rd - Roddy Roem
4th - Gary Kyes
5th - Cliff Lett
6th - Mike Swauger
7th - Kevin Mercadante
8th - Barry Grossenbaucher
9th - Butch Kloeber

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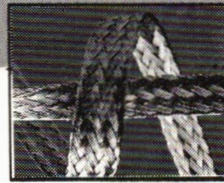
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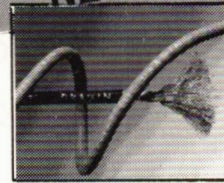
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B Main
 1st - Curtis Husting
 2nd - Rick Davis
 3rd - Bill Goldsmith
 4th - Thomas Wong
 5th - Mike Jones
 6th - Ron Williams
 7th - Dan Stokes
 8th - Akihisa Hashimoto
 9th - Bill Bowerman
 10th - John Hodgson
C Main
 1st - Rusty Husband
 2nd - Ruben Serrano
 3rd - K.C. Shackelford
 4th - Eustace Moore
 5th - Mark Linder
 6th - Craig Jesmer
 7th - Omar Formisano
 8th - Chuck Esterline
 9th - Larry Stevens
 10th - Craig Fox
D Main
 1st - Robert Marino
 2nd - Ernie Nidiffer
 3rd - Louis Przybyla
 4th - Chris Gilbert
 5th - Dave Clark
 6th - David Van Dalsen
 7th - Bruce Metras
 8th - Pete Fusco
 9th - Steve Faller
 10th - Bernie Rico
E Main
 1st - Bard Bradbury
 2nd - Daniel Harms
 3rd - Paul Chour

4th - Mike Queller
 5th - Al Vega
 6th - Bob Urban
 7th - Dale Bowman
 8th - Carl Petri
 9th - Emilo Lopez
 10th - Lester Prather
F Main
 1st - Edward Mullen
 2nd - Roxanne Cook
 3rd - Mike Schulter
 4th - John Pagel
 5th - Roger Garcia
 6th - Daniel Reese
 7th - Dean Jamieson
 8th - David Bressel
 9th - Dominic Incantilupo
 10th - Glenn Williams
G Main
 1st - Carlos Mastretta
 2nd - Steve Campbell
 3rd - IB
 4th - Scott Dickson
 5th - Miguel Vasquez
 6th - Marcial Garcia
 7th - Carl Bruno
 8th - John Meyers
 9th - Rob Peters
 10th - Fernando Ruiz
H Main
 1st - Glenn Dement
 2nd - Alejandro Diaz
 3rd - Stuart Krum
 4th - Antonio Aaron
 5th - Frank Caron
 6th - Neil Vegliante
 7th - Mike Marino
 8th - Victor

9th - Oscar Valenzuela
 10th - Mike Procalle
I Main
 1st - Terry Owyong
 2nd - Leroy Shintaku
 3rd - Saul Bueno
 4th - Moto Shibashi
 5th - Fredrick Pickens
 6th - Matt Clark
 7th - Jose Prieto
 8th - Mickey McCabe
 9th - Lee Clark
 10th - Chris Chan
J Main
 1st - Mark Serio
 2nd - Antonio Aaron, Jr.
 3rd - Wiley Savant
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CUSTOM WORKS



Burlington, North Carolina



ROAR 1/10th Scale

By Jay Bowman

Tornadoes had devastated the City of Winston-Salem only a few days before, but a Twister in the form of Eric Soderquist ripped up nearby Burlington, NC at the 2nd ROAR Dirt Oval Nationals.

Dave and Margaret Guerin's R/C Hobby Workshop and Raceway hosted the 1989 edition of the ROAR Nats, dirt oval style. This year's Nationals will be remembered for the crush of entries that overflowed and promoted angry calls to ROAR. The result of the bounty of entries had even resulted in "scalping" spots and begs the question, "shouldn't there be some sort of qualifying to enter a National event?" Stay tuned because ROAR members expect an answer to this question soon.

Three hundred and fifty entries were accepted with over a hundred turned away for the first ROAR Nationals of 1989. Those who made it were in for a treat as the competition was sweet, but the competition was between driver and track more so than among contestants. R/C Hobby is located precariously at the fork of two roads. Limited area for pits and parking was anticipated

to be a problem, however, the staff and racers made the best of it and I heard few complaints during the enjoyable weekend. The track surface was worth complaint, not because it wasn't smooth and well cared for, but because it had a personality; a very nasty personality. The surface, like the weather that weekend, changed like a chameleon by the hour; first icy with red pepper sand then shifting to hard pack with a glassy surface. Drivers scrambled with tire selection to get a purchase on this nightmarish ground. They tried mini-pins, moved on to octograbbs and Advances; some fools even braved foams. Areas of the track were invisibly damp so a clean full-power exit from a corner may lead to an uncontrolled spin in mid-straightaway. . . "don't step on the soap!" It wasn't until the mains that the track appeared to have stabilized, but by then it was too late as many drivers had shied away from horsepower. They found out that high speed could be attained late Sunday afternoon in the Mains.

2WD STOCK

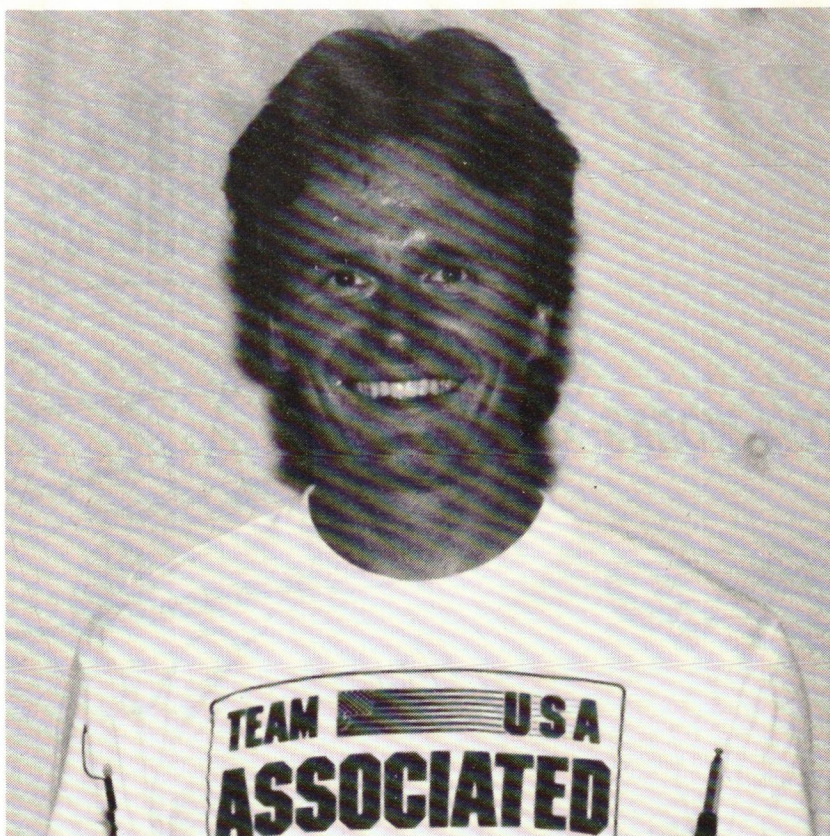
Let's turn back the history

book one year to see who holds the 1988 crown and we find Sean O'Campo drove his Cox Turbo Scorpion to victory. This year we were guaranteed a new winner as Sean wasn't in attendance. With an existing track record of 29/4:04 the drivers found the track quite treacherous. Jim McCallum was only able to achieve 29 laps in the first go-round. Rounds two and three set up Randy Bartlett at TQ (30/4:03) with Sammy Blackwell, Jeff Swartz, and Terry Troup also crossing the line with 30. The A Main field was set with 10 completely new entries from last year's feature. Interestingly enough only 14 of the 95 cars were able to achieve 29 laps on this arrogant surface.

The TQ curse struck again as Bartlett faltered in the main. This allowed local favorite Sammy Blackwell a significant lead and he never looked back. Team Pit Stop's "Chain Gang" gave up an ovation as Sammy whipped up 31 laps 4:08 and the right to a National title and also a track record by one lap over the field. In second was Pennsylvania's Terry Troup with a strong J-Car performance followed closely by third qualifier Jeff Swartz.

4WD STOCK

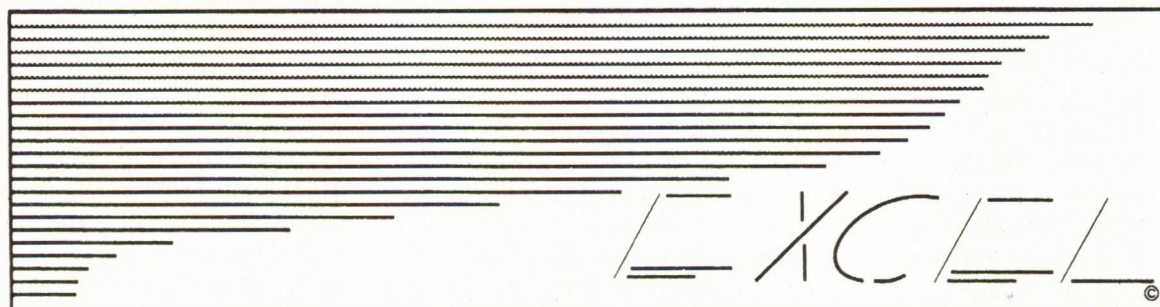
Perhaps it is somewhat ridiculous to race a Dominator with a stock motor and 6 cells using basically an on-off switch for a speed control but the drivers in this class still make it an interesting contest. When last we met, "the Little Dude" Chris Doseck took his Dominator to winner's circle in 1988 and the fair-haired ace of winter 1/12 scale was back to defend his honor. He was to face a completely new field except for holdovers Landgraff and Bodman. But his work was cut out for him right from the bell as "the Virginian" Warren Darby reset the track record by a lap on first effort with a 31/4:01. It didn't last long as fellow statesman Jeff "Pretty Boy" Floyd upped the ante to 32/4:01, a mark that would not be eclipsed in the finals. Round three was scored by Custom Works' Brian Landgraff to set the stage for the 1989 version of the Gunfight at the OK corral. When the gates opened 10 cars spewed forth, each easily capable of 31 laps, but the chase was between the Dude,



Cliff Lett (Associated/Reedy) was the ROAR 2WD Dirt Oval Modified National Champion.

Darby, and Floyd. Each menaced during the race, however, it was Warren Darby's sterling skills that prevailed as he dashed

across the line unseating Doseck from the throne. Doseck and Floyd finished together only 2 seconds behind Darby's Race



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You may jump up for some popcorn as we discuss the TRACKMASTER sponsored Best Engineering and Concours, but don't dally as the best is yet to come. Concours judging provided a difficult choice with an excellent supply of colorfully painted wedges to choose from. The judges' choice for first was a modestly painted JG T-Bird driven by "Fast" Dennis Dorrity, but the incredible interior detail has made this car a winner time and again for the creator, GONZO's Lee Ashby. Detailed air cleaner, wheel covers, roll cage and fuel tank with an eye for absolute realism insured its win. Ken Caniff's ride was equally as exquisite as every bit of the Heartbeat was hand painted by Dan Toll. Bill Hennins, Bob Shea and Jay Bowman (painted by Mike Ogle) filled out the field and led the Parade of Cars.

Best Engineering honors went to the hand-crafted chain drive of Bob Sanford with Bob Shea's polished ride second followed by Rob Cutman's infamous J-Car/Terminator.

Sprint Cars

Find a seat as the excitement level's about to get higher. JG is an excellent choice as a sponsor for this class as they have had a great deal to do with the evolution and popularity of not only the sprint car class but dirt oval racing in general. This year JG hosts the 8th Annual West Coast Dirt Oval, easily the most prestigious event in dirt oval and a race that really began with a strong sprint car class. Last year's ROAR Champion, John "The Hammer" Smith, a JG driver, returned to take on all comers looking for a shot at his title. NORRCA Champ and JG teammate John Peterson appeared ready to knock him down as his J-Car/Ultima had just convincingly won the Reedy/Novak Race of Champions, leaving the Hammer back at the blacksmith shop. Round one saw Losi's Jim Gouge (last year's 7th place

finisher and the only other A-Main repeater this year) put up 29 laps and dared anyone to come within a lap of him. Hammer and NORRCA 2WD Champ Tyler Clements found only 28 in the first round. Then it was the Hammer in round two who boasted 30 laps with Gouge at 29 and Reedy's Clements at 28. But from out of nowhere came Mike Lemanczyk in round three. Mike used a newly ROAR legalized Fantom powerplant to TQ at 30/4:02 thereby pounding a serious dent in the armor of the Hammer. Three other drivers jumped into contention with 29 laps run bumping down Clements and bursting the bubble Reedy/Novak 4WD Champ John Oldt was sitting on, pushing him into the B.

A more exciting race could not be found when the flag fell on the A Main as Mike Lemanczyk charged out of the hole and into the lead. It was up to the Hammer to hunt him down. They dueled in a seesaw match-up, first Mike and then John, never more than 24 inches apart around the track. They powered into the corners, countersteering and dicing it out through backmarkers. Late in the race coming out of turn

two Mike took the inside and hooked a wheel on the boards turning Smith free. The Hammer drove his Peak Performance powered low-slung Ascot racer "wide open" the rest of the way to become the first repeating ROAR National Dirt Oval Champion. Guess who was the bridesmaid, yep, Twister's John Peterson repeated his 2nd place finish from last year and Mr. Excitement Mike Lemanczyk introduced us to Fantom motors with a third.

2WD MODIFIED

TPS "Chain Gang" is a good representative for this class as 2WD for 1989 promises to be the Year of the Transmission; everybody's got one. The stalwart is the RC10, but MIP, TPS, TrackMaster, J-Car, DC Racing Products, Ultimas, JRX2s and Fast Eddie Knoles all had transmissions in contention. The year is still young and we should plan to see numerous new contraptions on the market quite soon.

Sherman set the Way-Back machine: we saw Scott Quillen (alot heavier back then) power his Losi-prepped RC10 past TQ Cliff "Another Trophy?" Lett for the 1988 victory. Although Scott's lost weight and returned to Rev-Tech, his RC10 transmission

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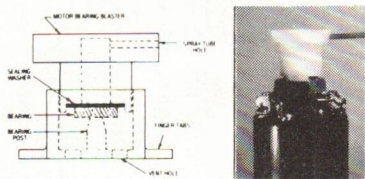
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is till the freest spinning this author has ever witnessed. This year's field was missing Losi's Rossetti, Associated's Halsey, and Twister's Moore (probably all out jumping dirt piles). No matter, we had Win Carter to captivate our interest as he posted 33 laps on his first little jaunt to disintegrate the old track record of 31! Win finished 9th last year but the changeover from Cam to Twister apparently gave him a power boost at this show. RevTech's Rob Cutman also sliced up 33 laps in his J-Car with Lett and Quillen lurking just around the corner with 32. Round two found ROAR champ-repeater John "Hammer" Smith, and just-crowned champ Sammy Blackwell entering the elite with 32 laps. Reedy/Novak Race of Champions Invitational Winner Martin Buchanon and JG's Steve McAffe also ascended to a higher ground. Round three added Peak Performance's Ed Krupa to the two drivers with 33 lap runs (Ed was TQ in last year's Stock class).



Eric Soderquist was the 4WD Dirt Oval Modified National Champion.

Fast Eddie Knoles with his antique Cox Scorpion and soon to be released FET transmission rounded out the field.

Just say GO! Win Carter's MIP/Twister 12-turn blistered away from the field. He was gone, see you next year. Some say arrogant, others know its confidence, Win set sights on a win today. No one was around when his right front knobby came loose and unravelled his dreams of victory. Whistling around him came the field with teammate Eddie Knoles at the head of the pack. Eddie, Jr., one of the most gentlemanly of R/C drivers, cruised effortlessly through traffic, "coming through Dude." Locked up tight for another victory, the NORRCA National Champion cranked out the laps but little did he know that a killer shark was lurking. Eddie thought it was safe to enter a Nationals, but he forgot that Cliff Lett was there. Last lap - turn four - small pile up on the inside - no problem for Eddie, just dish to the outside to avoid the tie-up. Steady, smooth, and admittedly slow Lett was on the inside in a heartbeat and pounced on the finishline three tenths of a second ahead of Knoles! That fraction of a second must seem like an eternity when replayed in Eddie's mind as Cliff added the 2WD title to the already legendary Lett heritage.

After the race, Eddie admitted, "Dude, I just didn't know Lett

was that close behind." Ed may be disappointed but he's still the NORRCA National Champ. The winner? Well, Cliff seemed surprised with his success as he stated, "yesterday this motor was a bullet, but today it was a pig." Well that porker turned 34 laps! Is it done with mirrors or is Cliff's car some alien techno-creation, no it's just an RC10 but it does have 1/8 scale progressive springs, handtooled shocks and new gearbox innards designed by Lett. Still Cliff had to knock the Florida dirt off his equipment, dirt he had accumulated from last year's Nationals, so does this guy ever have to practice?

4WD Modified

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Storm clouds were brewing everytime the four wheel monsters erupted on the track, but do you remember last year? An ex-Yamaha team member started his roll as the most prolific R/C Champion with his 4WD win at the Nationals. Remember he had to battle Mr. Four Wheel Curtis Strawn for that title. Would Cliff Lett be up to the task to repeat and also take home a second Championship from this Nationals?

After a whipping at the Reedy/Novak Dirt Oval and some embarrassment at Whippoorwill, Twister's Mike Walker hadn't been sitting on his thumbs. Twister-sponsored Jim Griffeth pumped out 35/4:02 to break the old record set by Warren Darby at 4:04. Local favorite Cam-powered Chris Smith and RevTech's Brian Landgraff also surpassed the 35 lap barrier. Round two saw Mr. Lett crunch 35/4:01 and added Twister's Eric Soderquist and Russ Hawkins along with RevTech's Martin

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Buchanon in the 35 lap fraternity. Warren Darby must not like his track records broke so he popped 36/4:02 to TQ the event with RevTech power. Midwest Dirt Oval Champ Tom Adams and RevTech's Bob Fellenbaum filled out the A.

Front row saw Darby, Lett, and Griffeth (RevTech, Reedy, and Twister) waiting for the buzzer. Mayhem let loose as Darby got sideways springing Soderquist and Landgraff. A four minute sprint with Landgraff a quarter lap behind. Both cars were equally fast but took different lines, Landgraff entered the turns higher and deeper, slicing in at the apex while Soderquist turned sooner and chattered his Ogle-painted Premier wedge coming off the corner.

They muscled through traffic, never losing sight of each other Landgraff, gave chase but was unable to gain ground. The track had become hard-packed and perfect for the narrow foams the front runners sported, but at the end of four minutes it was Twister's Soderquist two seconds in front of Landgraff with Darby third, Lett fourth, and Buchanon's SRP-1 fifth. Soderquist had ripped 37 laps and returned alittle sparkle to Mike Walker's face. Soderquist had won the '88 NORRCA title and seemed to have arisen from the dead to take the '89 ROAR win.

Twister's Mike Walker was

beside himself, with a smile that the Cheshire cat would envy. He was ecstatic about a new airplane prop dyno he learned about from Redline Motor's Dave Wilhams (who says old dogs can't learn new tricks). He felt he could duplicate track conditions and deliver prescribed horsepower for any track, "It's is so easy, the rest of the manufacturers would just laugh and wouldn't believe it anyway!"

After the red dust from the Twister touchdown settled, the racers packed it up but were already anticipating the remainder of the dirt oval circus for 1989: East Coast Oval, NORRCA Nats, and Midwest Dirt Oval.

2WD STOCK

A MAIN

- 1st - Sammy Blackwell
- 2nd - Terry Troup
- 3rd - Jeff Swartz
- 4th - David Kiser
- 5th - James Doby
- 6th - Randy Bartlett/TQ
- 7th - Bob Pecker
- 8th - Jim McCallum
- 9th - Denvil McCallum
- 10th - Eric Dobbins

B MAIN

- 1st - Todd Fox
- 2nd - John Dupree
- 3rd - Ron Roether

C MAIN

- 1st - Kim Petticord
- 2nd - Terry Blackwell
- 3rd - Ray Turner

D MAIN

- 1st - Greg Gottorf
- 2nd - Dennis Fields
- 3rd - Bob Sanford

E MAIN

- 1st - Jeff Deroche
- 2nd - Bill Henning
- 3rd - Cecil Collins

F MAIN

- 1st - John Ross
- 2nd - Bill Tillman
- 3rd - Wendell Minter

G MAIN

- 1st - Ken Swindell
- 2nd - Chris Bonner
- 3rd - Bob Ramsay

H MAIN

- 1st - Gordie Beidl
- 2nd - Randy Carter
- 3rd - Steve Landrith

I MAIN

- 1st - Ed Clement
- 2nd - Harry Meikle
- 3rd - Jim Harris

J MAIN

- 1st - D.J. Arrington
- 2nd - Jeff Birt
- 3rd - Aric Williams

4WD STOCK A MAIN

- 1st - Warren Darby
- 2nd - Chris Doseck
- 3rd - Jeff Floyd/TQ
- 4th - Brian Landgraff
- 5th - Dave May
- 6th - Tom Adams
- 7th - Jack Rimer
- 8th - Greg Banks
- 9th - Shawn Hamby
- 10th - Brian Hawthorne

B MAIN

- 1st - Sean Young
- 2nd - Art Austin
- 3rd - Brian Romberger

C MAIN

- 1st - Tye Gaskin
- 2nd - Kent Young
- 3rd - John Oldt

D MAIN

- 1st - Jim Smith
- 2nd - Dennis Cutman
- 3rd - Wayne Day

E MAIN

- 1st - Joey Caldwell
- 2nd - Bill Frame
- 3rd - Will Francis

SPRINT CARS A MAIN

- 1st - John Smith
- 2nd - John Peterson
- 3rd - Mike Lemanczyk/TQ
- 4th - Jim Gouge
- 5th - Scott Moody
- 6th - Scott Snyder
- 7th - Ed Laskey
- 8th - Ed Lands
- 9th - Tyler Clements
- 10th - Doug Suggs

B MAIN

- 1st - David Markert
- 2nd - Jeff Deroche
- 3rd - Chip Smith

C MAIN

- 1st - Joe Hifco
- 2nd - Mike Sullivan
- 3rd - Scott Tucker

2WD MODIFIED A MAIN

- 1st - Cliff Lett
- 2nd - Eddie Knoles
- 3rd - Martin Buchanan
- 4th - Scott Quillen
- 5th - Rob Cutman
- 6th - Ed Krupa
- 7th - Win Carter/TQ
- 8th - Steve McAfee

9th - Sammy Blackwell

B MAIN

1st - Bobby Beard

2nd - Jay Bowman

3rd - Dave Markert

C MAIN

1st - Bob Novak

2nd - Randall Winslett

3rd - James Doby

D MAIN

1st - John Winner

2nd - John Peterson

3rd - Terry Troup

E MAIN

1st - Randy Bartlett

2nd - Gordie Beidler

3rd - Chris Dippel

F MAIN

1st - Bill Henning

2nd - John Fulk

3rd - Ray Player

G MAIN

1st - Harry Henning

2nd - Denise Caniff

3rd - Debbi Layton

4WD MODIFIED

A MAIN

1st - Erik Soderquist

2nd - Brain Landgraff

3rd - Warren Darby/TQ

4th - Cliff Lett

5th - Martin Buchanan

6th - Tom Adams

7th - Jim Griffeth

8th - Russ Hawkins

9th - Chris Smith

10th - Bob Fellenbaum

B MAIN

1st - James Lehman

2nd - Scott Quillen

3rd - Rob Cutman

C MAIN

1st - Larry Wedemeyer

2nd - Ed Krupa

3rd - Wayne Dodson

D MAIN

1st - Tom Ferguson

2nd - Greg Banks

3rd - Randall Winslett

E MAIN

1st - Ray Barker

2nd - Seth Ward

3rd - Doug Piner

F MAIN

1st - Dennis Dorrity

2nd - Cecil Hand

3rd - Rob Astarita

G MAIN

1st - Bill Dees

2nd - Ron Roether

3rd - Craig Carey

H MAIN

1st - Shawn Hamby

2nd - Randy Bowen

3rd - James Stoudt

I MAIN

1st - Jeff Schwartz

2nd - Jim Smith

3rd - Jim Harris

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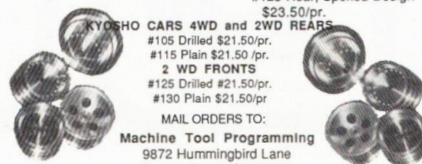
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Reedy/Novak Dirt Oval Race of Champions

By Jay Bowman - Photos by Rob Bishop

Grandma put your teeth in your pocketbook 'cause you're in for a wild ride! The 1989 Reedy/Novak Race of Champions, Dirt Oval installment, featured some new faces in the top spots and the debut of some new equipment. Just like the Race of Champions Off-Road version, the race program consisted of 21 drivers competing for points in both two and four wheel categories. The remaining racers battled it out in qualifiers for the traditional mains.

A bit of controversy always brews whenever invitations are sent out. The selection process for this race was no different as Brian Landgraff and Mike Reedy collaborated on the selections. The Invitational drivers in attendance are listed in the order of their finish along with a little biographical information. Significant absences included Cliff Lett, Kris Moore, and all of the Losi drivers. No surprise was the West Coast no-show of Team Trinity. Chris "Little Dude" Doseck was signed up for the program but wasn't there at post time and alternates (Halsey, Light, Fuller, Jeff Davis, and Dieter) were not in attendance so the show ran with only 20 entries.

Dr. Sam's lavish Racer's Haven provided an excellent venue for this event although a severe dust storm blew through the day before, the only sequelae were a few roadblocks of tumbleweed. Also dust packed through ventilation openings into Racer's Haven, Autographs and especially RevTech's shop. It must have been magical dust for RevTech as Neal McCurdy's crew literally ruled this race and after the wind died down there was very little Twister left of Mike Walker's Team.

Racer's Haven sports a huge



Invitational Class Martin Champion Buchanan driving for RevTech, SRP, Novak, Dan's R/C Stuff and Racer's Haven.

asphalt track alongside a sunken dirt track. This hard white dirt track is covered by an enormous open air roof that cost in excess of fifty G's. The oval surface would never "blue-groove" during the weekend as it was so hard and abrasive that foam tires were just abused into dust. It was interesting to see so much foam tire truing for stagger on a dirt oval.

The so-called non-invitational class was filled with many capable drivers, some of which may have done better than the Invitational crew. The Sprint car class looked to be a renewal of the feud between JG teammates

John "The Hammer" Smith (ROAR Champ) and John Peterson (NORRCA Champ), however, both the Hammer and World Series Champ Cary Mendez had difficulties coping with the solid bite of the Bakersfield track. Kyosho's Peterson, on the other hand, found the track to the liking of his J-Car equipped sprinter as he reset the track record, top qualified and won. Close behind were RevTech's Kevin Stevens and Tem Raskin who had placed third at the '88 ROAR Nats.

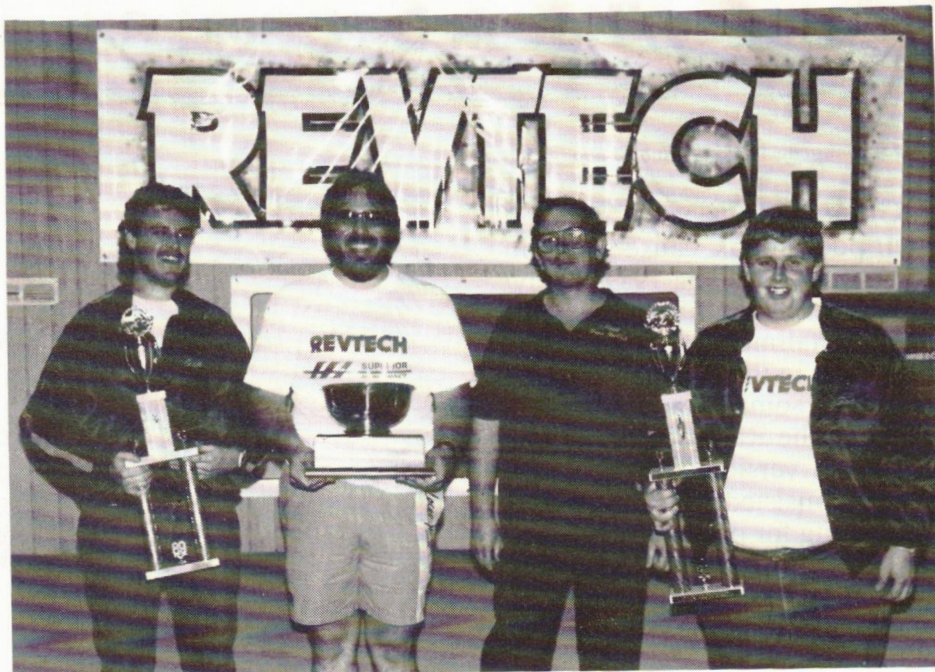
Two wheel open saw many new drivers enter the A Main ranks with a field that included

three new direct drive cars including two J-Cars and Peterson's Agitator/Ultima experiment. No surprise was Chip Riesbol as top qualifier, but 41 laps with an RC10, get real! In case you missed out, RevTech's Riesbol not only broke the track record for two wheel, but he also outqualified the Dominators by a lap. Chip was the TQ and finished second in stock at the NORRCA Nats. So he has a heck of a future even though he just got his driver's license. In the A Main it was a two-horse race as Peak Performance's Rich Stratton dueling bumper to bumper with Chip. Rich was also a TQ at the NORRCA Nats, but his was in open class. Only half a second separated the two as Reisbol squeaked out the win with Tucson's Marty Esch only a half lap behind Stratton at the buzzer.

Diminutive Paul Pat was top qualifier in four wheel as he turned 40 laps with his Checkpoint powered Dominator. This stoic youngster finished fifth in open at the NORRCA Nats, but befell the TQ curse this weekend as Bethlehem, PA's John Oldt scorched the track, took home the trophy and a sponsorship from RevTech. AYK's Tem Rasikin finished right on his heels with Pat a distant third.

The Invitational class fielded 20 drivers shuffled at random for each of 6 heats of 2WD and 6 heats of 4WD competition. The winner would be decided by tabulating points for their best finishes during the 12 heats.

Although the Invitational initially appeared to be a Lett-down with Cliff's absence, the enthusiasm was quick to return at the start of the first round of 2WD heats. Rob Cutman's brand new J-Car (put together only two days before) turned heads as he turned 41 laps and immediately beat the 2WD track record by 2 laps. His smooth running Wizard front end and direct drive trans. slithered past the field, passing at will and lapping nearly everyone at a torid pace. Drivers in the pits



Proud papa, Neal McCurdy, with his stable (l. to r.) Quillen, Buchanan, McCurdy, and Cutman.

dropped their tools to gather trackside to marvel at this speed demon. Every heat he would slash to the inside or if bullied, he'd pass with ease on the outside of the corners. His yellow and purple Andy's vette seemed unstoppable as he turned laps faster than event the Dominators.

Quietly Martin Buchanan was also winning consistently. His RevTech powered RC10 lost only one of his six two-wheel heats and that was, of course, to Cutman. Tallying points at the end of Day One found Cutman and Buchanan deadlocked, having both won five heats and each finishing second in one heat. A real surprise was youngster Marchase, normally a four-wheel expert, this Reedy driver posted points to stay in the running. Just as surprising was the mediocre showing by Erik "the Wunderkind" Soderquist who is usually an ace at two-wheel, both oval and off-road.

Big thunder was expected for Day Two as the four-wheels were pulled out and because the field was definitely stacked with experts of the Dominator genre, some close racing was anticipated.

You wanted excitement, well the first round of four-wheel set the tone as Scott Quillen and Rob Cutman cranked it up door handle to door handle for four minutes. At the finish with the crowd already breathless Cutman and Quillen entered turn four full-bore and only one was expected to exit alive. Cutman's nose touched Quillen's rear quarterpanel (Unser, Jr. style) upsetting them both. Cutman finished on his side-dam, skittering only an inch in front of Quillen whose Dominator finished backwards; both with a 41/4:05.

Later Marchase found the horses and pumped up a 42 lap run pushing the track record up two alps from the week before. But it was Scott Quillen who complicated the proceedings as he never looked back and never lost again during the day. Point leaders Buchanan and Cutman also appeared to be intent on maintaining their success with consistent finishes. However, the deciding race was Cutman's second heat in which he had a half lap lead when he literally drove the wheels off the car. The left rear tire of his ride slipped off, costing him the champion-

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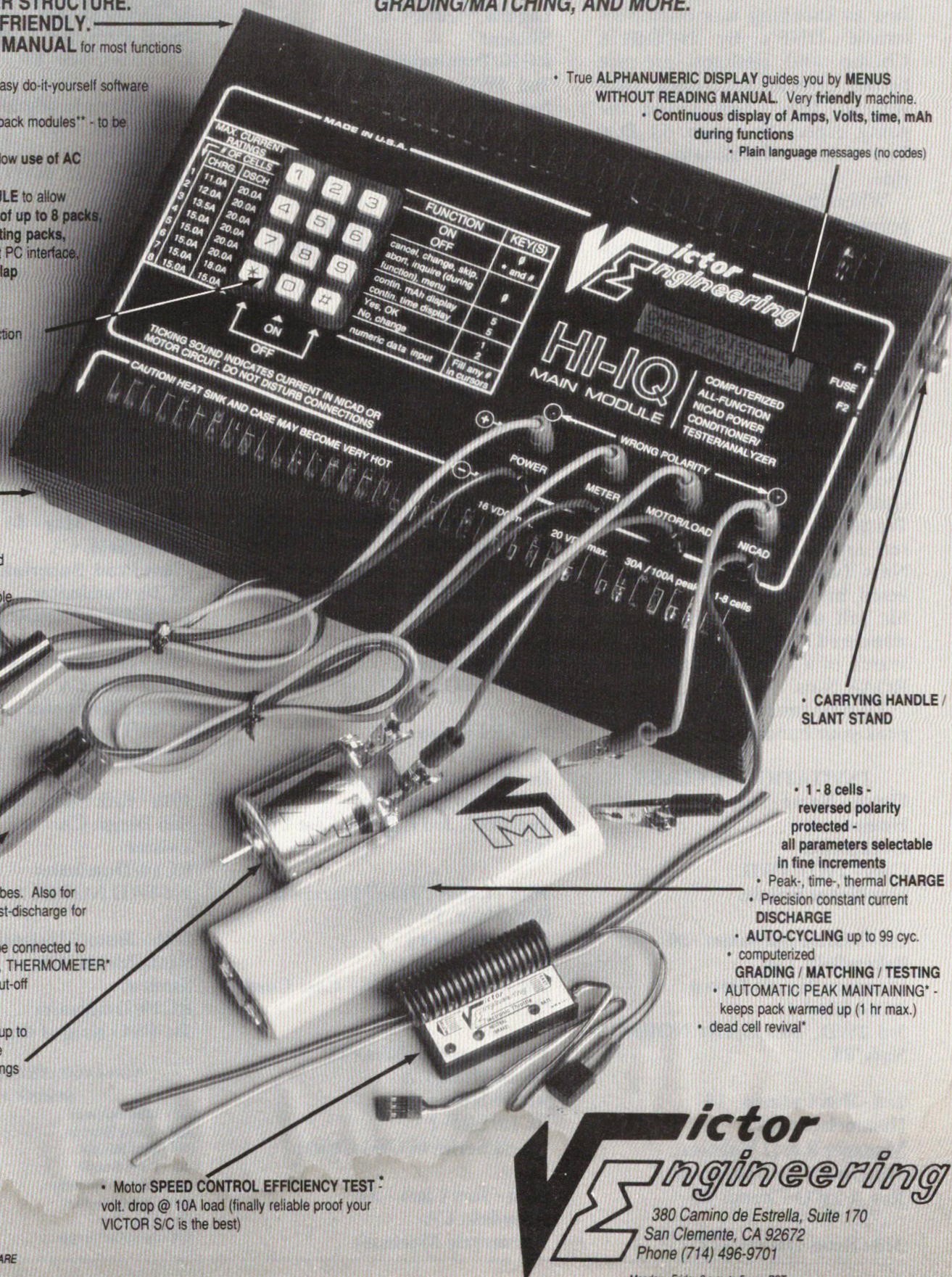
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SRP's Sean Young and Curtis Strawn gave expected good performances during the day but Eddie Knoles, normally a two-wheel king, surprised many with his prowess in the Dominator. Just as shocking was uncharacteristic DNF's by NORRCA Champ and perhaps pre-race betting favorite Soderquist. Two-wheeler Tom Clark found the going especially tough on Day Two without a Dominator-design ride.

When the dust cleared and the points were totalled from the 12 heats of racing a bit of controversy had to brew . . . who won? Seems that there was an assumed tie between Buchanan and Cutman, however, Bob Novak soon cleared the matter up and crowned Racer's Haven's own Martin Buchanan. The real winner was RevTech as Neal McCurdy culled the top three spots: Buchanan, Cutman, and Quillen and avenged the Team Twister drilling that had occurred last fall at the NORRCA Nats. Twister's Mike Walker pocketed his stop watch, scratched his salt and pepper beard and wandered out into the night in search of a whirlwind before the ROAR Nats.

Til next time . . . don't forget to peak your batteries.!

INVITATIONAL CLASS

Finish - Name - Age
Hometown
Occupation
Cars - 2WD/4WD
Significant Finishes

1st - Martin Buchanan - 30
Bakersfield, CA
Manager Racer's Haven
RC10/SRP-1
3rd 2WD, 10th Sprint NORRCA Nats '88

2nd - Rob Cutman - 19
Hummelstown, PA
Manager R & D Hobbies
Wizard J-Car/Dominator
Reg. 1 2WO Champ '88

3rd - Scott Quillen - 22

Bakersfield, CA
RevTech Technician
RC10/Dominator
ROAR 2WD Champ '88

4th - Danny Marchase - 15
Laguna Niguel, CA
Student
RC10/Dominator
2nd 4WO, 10th 4WS NORRCA Nats '88

5th - Eddie Knoles, Jr. - 19
Diamond Bar, CA
Student
Cox Scorpion/Dominator
1st 2WO NORRCA Nats '88

6th - Gary Demory - 29
Costa Mesa, CA
Radio Control Hobbies
RC10/Dominator
10th 2WO ROAR Nats '88

7th - Sean Young - 14
Newport Beach, CA
Student
RC10/SRP-1
TQ, 3rd 4WS, 6th 4WO NORRCA Nats '88

8th - Mark Gray - 28
Hesperia, CA
G & G Hobbies & Raceway
RC10/Dominator
2nd B 4WO JG '87

9th - Ed Krupa - 25
Nazareth, PA
Dental Student/Temple
DC Prods/Dominator
2nd 2WS, 3rd C 2WO East Coast '87

10th - Randy "Jake" Flurer - 29
Bethlehem, PA
Jake's Lettering
RC10/Dominator
3rd 2WS, 1st B 2WO East Coast '87

11th - Russ Hawkins - 38
Costa Mesa, CA
Auto Mechanic
RC10/SRP-1
World Series of Oval Champ

12th - Tom Clark - 34
Palmdale, CA
Motorcycle Mechanic

RC10/Radiant
1st 2WO RC News Speedweek

13th - Chris Smith - 27
King, NC
King R/C
RC10/Dominator
2nd B 4WS, 2nd C 4WO, 3rd C 2WS East Coast '87

14th - Brian Landgraff - 20
Bakersfield, CA
Custom Works
3rd 4WS, 5th 4WO ROAR Nats '88

15th - Curtis Strawn - 17
Torrance, CA
Student
RC10/SRP-1
1st 4WO '87 & '88 JG

16th - Eddie Norris - 32
Bakersfield, CA
Service Manager
RC10/Dominator
1st 4WO, 5th 4WS East Coast '87

17th - Dave May - 44
Bakersfield, CA
Plant Prod. Superintendent
RC10/Dominator
2nd B 4WO NORRCA Nats '88

18th - Bob Novak - 49
Santa Ana, CA
Novak Electronics
RC10/Dominator
8th 4WO NORRCA Nats '88

19th - Erik Soderquist - 21
San Diego, CA
Twister
RC10/Dominator
1st 4WO NORRCA Nats '88

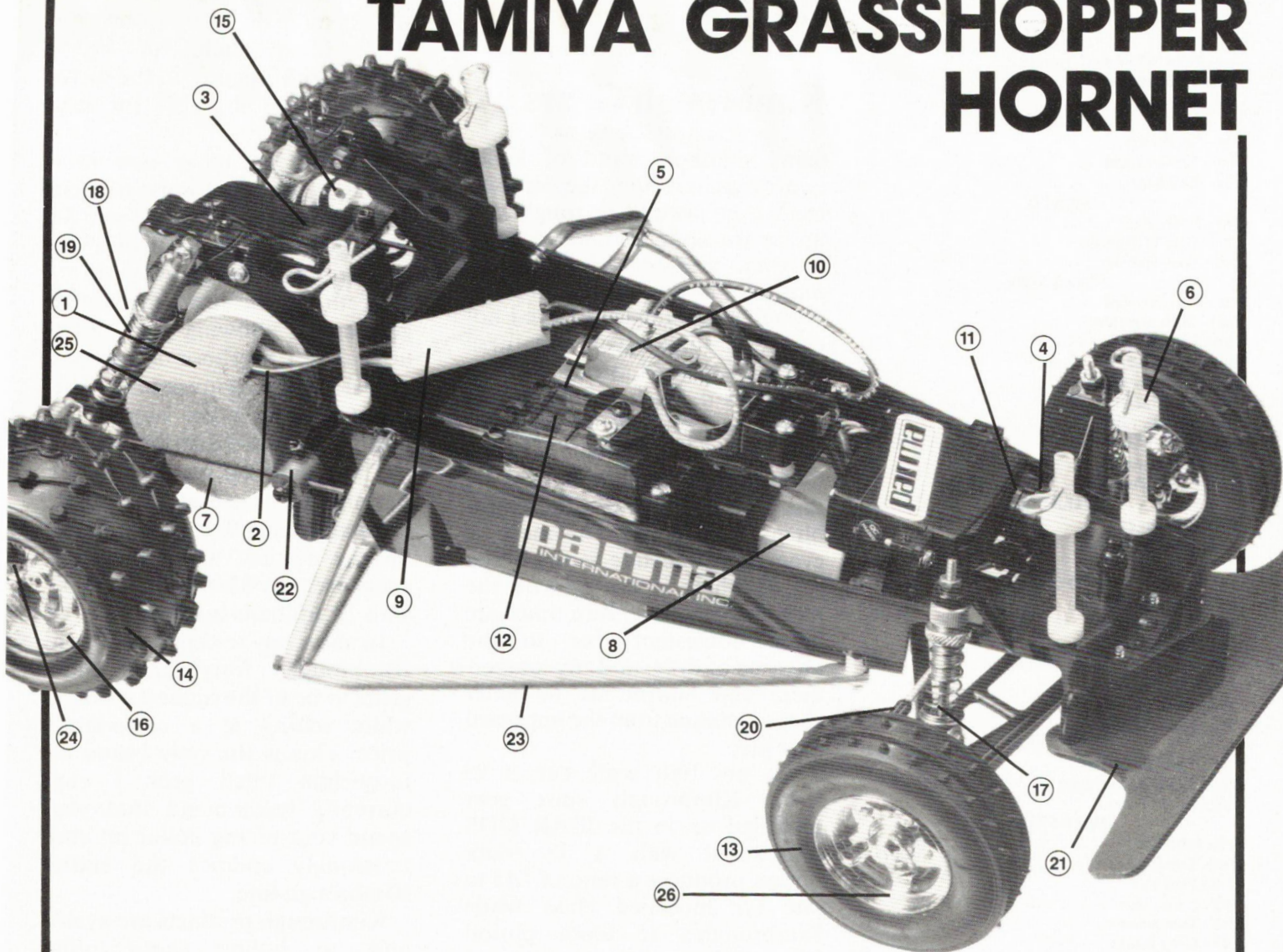
20th - Jason Mariscal - 12
Santa Maria, CA
Student
RC10/Dominator
1st 4WO King of the Oval '87

NON-INVITATIONAL MAINS

SPRINT A

1st - John Peterson
2nd - Kevin Stevens
3rd - Tem Raskin
4th - Dave Barber
5th - Eddie Mondragon
6th - David Markert
7th - Greg Dee
8th - Joe MacGregor

TAMIYA GRASSHOPPER HORNET



①	4042	Motor capacitor kit	\$ 2.00	⑭	12023	Rear "V" spiked tires, 1-1/2"	Pr/\$ 6.95
②	4050	Silicone hook-up wire	\$ 2.50	⑮	12110	Aluminum rear hubs	Pr/\$18.00
③	6000J	17 tooth machined steel pinion	\$ 4.00	⑯	12111	Rear chrome wheels, 1-1/2", 3 pc.	Pr/\$ 8.00
④	8038	"Super Gripper" hood pins	6/\$ 1.50	⑰	12601	Front shocks for Grasshopper/Hornet	Pr/\$16.50
⑤	8055	Servo tape 1" X 3 ft.	\$ 2.60	⑱	12610	Rear Frog shocks	Pr/\$17.00
⑥	10450	Universal adjustable body mounts	\$ 6.50	⑲	12641	Progressive rear springs	Pr/\$11.00
⑦	11011	"Cool Filter" end bell cover, foam	\$ 2.75	⑳	12827	Rod end kit for Grasshopper/Hornet	\$ 6.50
⑧	11250	6 cell matched Sanyo SC pk w/female plug	\$30.00	㉑	13202	Skid plate bumper for Frog	\$ 4.00
⑨	11500	Heavy duty Tamiya/Kyosho connector set	\$ 2.10	㉒	13224	Rear adjustable anti-roll bar	\$13.00
⑩	11518	Assembled resistor control with reverse	\$24.00	㉓	13277	3 pt. aluminum side nerf bar	Pr/\$25.00
⑪	11810	Universal servo saver	\$ 5.00	㉔	13626	Chrome plated "knock-off" nuts	4/\$ 3.60
⑫	11850	Servo with Futaba plug	\$20.00	㉕	14024	Cyclone stock motor	\$28.00
⑬	12011	Front spiked narrow ribbed tires, 1-1/2"	Pr/\$ 7.95	㉖	12105	Front chrome wheels, 3 pc	Pr/\$ 6.25

OTHER PARMA PARTS NOT SHOWN

8039	Quick-clip bent hood pins	4/\$ 1.50	12104	Front gold, 3 piece wheels	Pr/\$ 6.25
8047	3" tie wraps	12/\$ 1.75	12106	Front, 2.1" front wheels	Pr/\$ 6.00
10213	Grasshopper, clear body	\$13.00	12107	Front track adjust. wheels	Pr/\$11.00
11010	Dust cap motor cover	\$ 1.75	12108	Rear gold, 3 piece wheels	Pr/\$ 7.00
11011	"Cool Filter" end bell cover	\$ 2.75	12112	Rear wheels, 2.1"	Pr/\$ 7.50
11501	Pre-wired Tamiya/Kyosho connector set	\$ 3.00	12868	Front dual wheel adaptors	Pr/\$ 5.00
11515	Resistor speed controller without reverse	\$15.00	13002	Rear dual wheel adaptors	Pr/\$ 7.00
11801	Vertical whip antenna with mount	\$ 2.50	13211	Full width bumper	\$ 4.50
11802	Horizontal whip antenna with mount	\$ 2.25	13625	Wheel knock-off nuts	6/\$ 2.40



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10th - Steve Allen

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1st - John "Hammer" Smith
2nd - Rick Abatey
3rd - Jim Gouge

Sprint C

1st - Steve Perry
2nd - Steven Redd
3rd - Bob Kizziar

Sprint D

1st - Eddie Barr
2nd - Dan Witkowsky
3rd - Tony Gabriel

2WO A Main

1st - Chip Reishol
2nd - Rich Stratton
3rd - Marty Esch
4th - Danny Egger
5th - Bob Fellenbaum
6th - Joe MacGregor
7th - Greg Brydle
8th - Nick Bruce
9th - Jay Bowman
10th - John Peterson

2WO B Main

1st - Pat Griggs
2nd - George Vardzik
3rd - Mike Terry

2WO C Main

1st - Jeremy Hyatt
2nd - Scott Barber
3rd - Tom Adams

2WO D Main

1st - Steve McAfee
2nd - Dick Pat
3rd - Jon Shigtomi

2WO E Main

1st - David Markert
2nd - Eddie Mondragon
3rd - Eddie Perez

4WO A Main

1st - John Oldt
2nd - Tem Raskin
3rd - Paul Pat
4th - Casey Roy
5th - Tom Adams
6th - Greg Banks
7th - Joe Hifko
8th - George Vardzik
9th - Charles Ferrari
10th - Brian Blazer

4WO B Main

1st - Phil McKinney
2nd - Scott Reed
3rd - Mike Bodman

4WO C Main

1st - Joe Rojas

2nd - Tom Rotella, Jr.
3rd - Zale Schuster

Kimbrough Gears

(Continued from Page 20)

using another brand of lesser quality gears, either the pinion's teeth were skewed or roughened up, or the spur gear was scuffed or even warped. After a solid month of racing, these new Kimbrough gears, not only have I not ruined a single gear, but these still look as good as new. During this month, the car has run at least one race per week, often two. Including practice runs, there are at least thirty runs on this pinion and spur with no problems whatsoever. The mesh is even from one side to the other, so that there is no bind on the motor at any time. Run times are more consistent due to the absence of drag, and my temperament and budget are in better shape resulting from the improved gear life.

On my 10th scale car, a 93 tooth Kimbrough spur gear mounted up in the JCAR DDS differential with a 13 tooth pinion produces a ratio of 7.15 to one for modified class while Kimbrough's 15 tooth pinion (the smallest they recommend using) produces a 6.20 ratio for stock class road courses and their 19 tooth pinion with the same spur gear gives me a 4.89 ratio for stock class oval racing. The same smooth mesh and long gear life have been the rule.

For those tight road courses, I add six more diff balls in the provided inner circle for super smooth diff function in the turns with the diff set stiff for fast acceleration.

Kimbrough's other new product is an adapter for use of their gears on the Losi JRX2. 81 and 84 tooth gears can be used with the kit gear cover, while gears up to 96 teeth can be run without the gear cover, allowing gear ratios up to 3.95:1 for those outrageous monster truck conversions. The adapter is free on request to hobby shops and distributors.

The machined hardened steel pinions are priced at \$5.00 each, comparable to other good pinions on the market, while the spur gears are only \$3.00 each or \$4.00 with 12 diff balls installed.

In short, my testing has shown Kimbrough forty-eight pitch gears to be of the highest quality, while selling at a reasonable price. This is the only brand of forty-eight pitch gear I can currently recommend that you spend your racing dollar on and I strongly endorse the entire Kimbrough line.

Kimbrough products are available to hobby shops only through their distributors. For a list of products and distributors, write to: Kimbrough Products, 1420 East St. Andrews Place, Unit F, Santa Ana, CA 92705.

QUICK PIT

- 360-degree swivel
- 180-degree tilt
- Solid oak stand & clamp
- Universal clamp, 2 1/4 to 6 inches
- Breaks down to fit into toolbox

— Made in USA —

The only stand with a

180-degree tilt

Will fit all 1/10 - & 1/12-scale cars

Display your car with PRIDE — Repair it with EASE



\$34.95

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Oak



\$39.95

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Racing Schedule

— 1/8 & 1/4 Scale —

OUTLAW MOTOR SPEEDWAY

Every first & third Saturday - 1/4 Scale
Dirt Oval. 7920 Webster, Highland, CA.
Call (714) 864-1770

THE RANCH PIT SHOP

1655 E. Mission Blvd., Pomona, CA
91766. (714) 623-1506. Every second
Sunday.

MACHESNEY PARK RACEWAY

1/4 Scale - Large asphalt Oval and Drag
Strip. Racing every Saturday April thru
October. 1220 Shappert Dr., Machesney
Park, IL 61111. (815) 282-1311.

CAJON R/C SPEEDWAY

1875 Joe Crosson, El Cajon, CA 92020.
Fastest paved oval and road course in
CA. 1/4 Scale every other Sunday. 1/8
scale racing. July 16, Aug. 27, Sept. 24,
Oct. 22, Nov. 19 and Dec. 3. Hot Line
(619) 449-0788/Parts 449-9948.

ALJO/PALTRINERI'S RACING

Race Track - Upper Marion School
Complex, Crossfield Rd. King Of
Prussia, PA. just off Rt. 202. Race Direc-
tor: Arc Paltrineri (215) 277-5181.
July 2, Aug. 13, Aug. 27, Sept. 3, Oct. 22,
Nov. 5.

1989 SOUTHERN CA CAR SERIES

Sept. 24 -El Cajon; Oct. 8 - Ranch Pit
Shop; Nov. 19 -El Cajon. CanAm
Bodies, Entry Fee \$10.00 per class.
Classes: Novice, Flat Pan. 2WD, 4WD.

HOBBY CORNER RACEWAY

Large indoor dirt oval track - racing year
round - 1/8 scale racing Wednesday
evenings - 1/8 and 1/4 scale racing Satur-
days. 2195 E. Garfield, Decatur, IL
62526. (217) 429-4477.

— 1/10 Scale —

G & S Off-Road Raceway

Every Sunday - San Carlos & Meridian
Avenue, San Jose, CA.

KANSAS R/C RACING CLUB

Every 2nd Sun. - Junction City - 1 p.m.
Every 4th Sun. - Enterprise - 1 p.m.

CENTRAL NEW YORK

Lawrence Race Park

2509 Macedon Center Road, Palmyra,
NY 14522. (315) 597-6429. 1/10 and 1/12
electric auto racing. Nov.-Mar. Carpet
racing 1/12 scale. Oval and road racing.
April-Oct.

BIR INDOOR SEASON

Fridays - 7:30 p.m. Oval racing call (201)
352-6955. Saturdays - 12:00 p.m. Indoor
Off-Road racing. BIR Hobby Shop, 550
North Avenue, Union, NJ.

REECE'S R/C RACERS

1st & 3rd Sundays at Spinner's Airport
Raceway, 2nd & 4th Saturdays at Reece's
R/C Racers. (209) 784-0922.

PANTHORN RACEWAY

Panthorn Park, Burritt St., Southington,
Conn. Every Saturday May 1st to Nov.
1st. Off-Road, Oval, Baja, Truck Pulling.
Call (203) 628-9345 Ben Carr, 272-9326
Pete Church, 237-6976 Bob Lavoie, 879-

2316 Steve Magnani.

R/C HOBBIES RACEWAY

Route 163 Bozrah, CT

Racing Every Sunday - May 1 to Oct. 30.
For more information call: R/C Hob-
bies. (203) 886-9441, ask for Mike or Bob.

R & R HOBBY

We have 1/10 scale dirt tracks both
inside and outside, also 1/12 tracks both
inside, also 1/12 tracks both inside and
outside. R & R Hobby -1414 N. 24th St.,
Quincy, IL 62301, (217) 228-1133.

HAL'S HOBBY SHOP

Every Saturday from 9:30 a.m. to 4 p.m.
Practice: Track open all week. Hal's
Hobby Shop, 4886-A Hercules, El Paso,
TX 79904. (915) 755-1914.

RIVER CITY R/C OFF-ROAD

Racing is every Saturday, sign-ups 3
p.m., racing starts at 3:30 p.m. (512) 656-
5724 evenings.

MASON DIXON R/C CAR CLUB

Every Sunday at 1:00 p.m. Track location
at Hagerstown Fairgrounds, Hagers-
town, Maryland. Call King's R/C Cars,
219 E. Washington St., Hagerstown, MD
21740, (303) 739-0080.

SHORR

Racing every 1st and 3rd Sundays. P.O.
Box 438, East Haven, CT, (203) 469-2594
or (203) 481-5813, Dave Seales.

AA R/C RACEWAY & HOBBIES

We are located at the famous Sandhill
Ranch in Brentwood, CA. For info call
(415) 757-6594, AA R/C Raceway,
Sandhill Ranch, Route 2 143 B,
Brentwood, CA 94513.

MODEL CAR WORLD & RACEWAY

Indoor Racing - 7041 N. Pecos, Denver,
CO 80221, (303) 426-5255. Every Wednes-
day - 1/12 Carpet Every Friday - Oval 1/
10 Dirt Every Saturday - Off-Road 1/10
Dirt. All races start at 7:00 p.m. - Practice
all other times.

TEAM RACE R/C CAR CLUB

Fridays: 6:30 p.m. 1/10 scale 505 Spring
Ridge, Clinton, MS 39056. Call (601)
924-0722.

ANTIOCH R/C RACEWAY

5631 Lone Tree Way, Antioch, CA 94509.
Every Wed. & Fri. 6:30 p.m., Every Sat. &
Sun. 10:30 a.m. Call Jack Hanson (415)
754-5700.

F/X CITY RACEWAY

Every Saturday 1 p.m. The Frame
Gallery, 13340 F. Franklyn Farm Road,
Herndon, VA 22071. For info call Eric
Zelman, (703) 471-4499.

RIVER CITY RACEWAY

On Quincy Road, Wichita Falls, Texas.
Every 2nd & 4th Sundays at noon. Call
(817) 691-1478.

WALT'S HOBBY & CRAFT

4300 West Genesee Street, Syracuse, NY
13219. (315) 468-6544. 1/10 Off-Road rac-
ing on unique indoor clay track. Mon.
eves (sprints). Racing 7 p.m. - Sat. After-
noons racing at 1 p.m. Computerized
scoring. Daily practice.

HITT'S HOBBY AND RACEWAY

Tuesdays: Oval Asa, Full Bodies
Thursdays: Off-Road - Stock
Saturdays: Off-Road - Novice
Sundays: Off-Road - Modified
Oval and Off-Road: 853 Wren Rd.,
Goodletsville, TN 37072. For info call
Ben or Kent (615) 859-3465.

CARCLUB - COCHRANTON AREA

The Carclub races Fridays starting at 6
p.m., Saturdays starting 9 a.m. Sundays
starting at noon. Large indoor carpet -
dirt outdoor. Call for info Harry Turner,
120 W. Adams St., Cochranton, PA
16314. (814) 425-7788.

QUEEN CITY R/C RACEWAY

1/12, 1/8 and 1/10 scale cars. Every
Friday - 7 p.m. -Open Class Every at. -2
p.m. Stock & Open. Every Sun. - 2 p.m.
Drag Racing 5050 S. Federal Blvd.,
Englewood, CO 80110, (303) 730-1391.

PDQ RACEWAYS & HOBBIES

1/8, 1/10, 1/12 Scales

Call times and details. 429 Bankhead
Highway, Mableton, GA 30059, (404)
941-2626.

NEW ENGLAND'S

PINE BANKS R/C RACEWAY

We are located in Melrose, Mass. For
info contact: B & B R/C Accessories at
(617) 324-4465 or Brian Branon at (617)
322-9554.

GROUND ZERO RACEWAY

Sunday: Noon to 6 p.m. 1/10 Off-Road &
1/12 carpet races at 2 p.m. Sign up Noon
to 1:30 Tuesday - 1/12 carpet races at
7:30. Friday - 1/10 Dirt Oval races at
7:30. Saturday -Informal Junior Races
(16 & under). Speciality clinics. 208th
and West Dodge Rd., Omaha NE (402)
289-4184.

SROKA'S INDOOR R/C

Racing every Sunday - Oval racing every
4th Sunday. 5216B Arboga Rd., Marys-
ville, CA 95901. Call Michael or Vickie
Sroka (916) 742-6148 or (916) 741-3051.

FLINT R/C CAR CLUB

Flint, MI. Summer: Every other Sun.
from May to Sept., Fall & Winter 1/12 4
cell on carpet. For info: Ralph Herndon
(313) 658-5390 or Tom Hoos (313) 658-
1043.

MILE-HI R/C SPEEDWAYS

Thurs. & Sat. Off-Road, Fri. Carpet,
Sunday 2 p.m. 178 S. Kalamath, Denver,
CO 80221, (303) 722-6766.

AMERICAN HOBBIES

Thursday Night Oval Racing
Sunday Off-Road & Oval
For info call (201) 446-2010.

C.A.R. CLUB

Racing at Tamarack Raceways. Contact
Harry Turner, 120 W. Admans St.,
Cochranton, PA 16314, (814) 524-7788.
Racing every Sunday.

ARROW HOBBIES

Wed. Nights - 1/10; Every other Fri.
night 1/8 Sprint Cars only; Sat. nights 1/
10 dirt oval. 2710 So. 1-35 West,

NORRCA

NATIONAL ORGANIZATION FOR RACING RADIO CONTROL AUTOS

1989 DIRT OVAL NATIONALS

AUGUST 17TH - 20TH BAKERSFIELD, CA

HOSTED BY RACERS HAVEN

- * NORRCA MEMBERSHIP IS REQUIRED * (MEMBERSHIP IS AVAILABLE AT TRACK OR THROUGH NORRCA)
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- * ENTRIES LIMITED * PRE-ENTRIES CLOSE AUG. 11TH * ENTRIES DAY OF RACE IF AVAILABLE \$50.00 * STOCK MOTORS WILL BE SUPPLIED
- * SCHEDULE: AUG. 17TH PRACTICE ALL CLASSES 8AM-1PM, 2PM - 8PM 1ST QUALIFIER * 18TH 7:30 AM CONCOURS, 8 AM 2ND QUALIFIER, 3PM 3RD QUALIFIER * 19TH 8AM 4TH QUALIFIER, 2:30-4:30 TROPHY DASH 4:30 - 6:30 OPEN PRACTICE * 20TH 8AM OPEN CLASS MAINS BEGIN * 11:30 STOCK MAINS BEGIN * 4PM TROPHY PRESENTATION * ALL SCHEDULED TIMES ARE APPROXIMATE. SCHEDULE MAY VARY AND CAN BE ADJUSTED AT ANYTIME * RACERS HAVEN - 7401 WHITE LANE, BAKERSFIELD, CA

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NORRCA OFFICIAL 1989 DIRT OVAL NATIONALS ENTRY FORM

NAME _____ PHONE _____

ADDRESS _____

CLASS(ES): 2W STOCK _____ 2W OPEN _____ 4W STOCK _____ 4W OPEN _____ OUTLAW SPRINT _____

2W FREQUENCIES 1. _____ 2. _____ 3. _____ SPONSOR(S) _____

4W FREQUENCIES 1. _____ 2. _____ 3. _____ CAR _____ MOTOR _____ RADIO _____

ENTRY FEE: \$35.00 1st CLASS, \$25 EA. ADD'L. CLASS. STOCK CLASS \$40.00 (INCLUDES 1 MOTOR). NO ENTRY REFUNDS. SEND ENTRY & CHECK PAYABLE TO: NORRCA, 1530 W. 8th St., #117, UPLAND, CA 91766. FOR ADD'L. INFO CALL RACERS HAVEN (805) 835-0441 or NORRCA (714) 981-9641.

NORRCA # _____ COMP +

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AUG 10th



DEADLINE
AUG 10th

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REGION III

1/10 & 1/12 6 CELL On-Road

Championship

AUGUST 18, 19 & 20, 1989

- 124' x 48' Ozite Track
- 36' Carpeted Stand
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- Spectator Bleachers
- Huge Pit Area w/Electric
- AMB Lap Counting
- Video Game Room
- 15,000 Sq. Ft. Facility
- Air Conditioned Comfort
- Handicapped Stand
- New, Clean Surroundings



ENTRY FEE: MODIFIED \$30⁰⁰ STOCK \$40⁰⁰

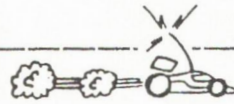
CAN-AM or GTP Bodies Only!
(No driver figures required)

Stock entry includes hand-out motor.
1st Additional Motor \$15⁰⁰
2nd Additional Motor \$20⁰⁰
Limit 3 per driver

Registration confirmation, area hotel accommodations, information and direction package will be mailed upon receipt of your registration. **HAVE A BLAST AT METRO/FAST!!**



REGISTRATION FORM



R.O.A.R. Membership required. Non-Members may sign up on race day.

NAME _____ PHONE () _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

CAR(S) 1. _____ 2. _____ 3. _____ FREQ. 1. _____ 2. _____ 3. _____

CIRCLE
CLASS(ES) 1/10 6 cell stock 1/12 6 cell stock 1/10 6 cell open 1/12 6 cell open

* PLEASE MAKE CHECKS PAYABLE TO: METRO/FAST - 950 W. IRVING PARK ROAD - HANOVER PARK, IL 60103
MASTERCARD & VISA ACCEPTED FOR PHONE IN REGISTRATION - CALL (312) 213-3977

Burleson, TX (817) 295-2821.

BLASTERS OFF-ROAD CLUB

Every Sun. at noon-weather permitting. ROAR. 42 Riel Dr., St. Albert, Alberta, Canada. Call Fred at (403) 457-9333. In winter on carpet.

BUCKLEY SPEEDWAY

37 Douglas Street, Hartford, CT. Every Sunday April 1st to Nov. 31st Black Top Oval. For more information call "Ziggy" or Debbie Kwasnicki (203) 246-4778.

HOBBY HAVEN RACEWAY

1756 First Street, Livermore, CA 94550 AC power, paved parking, computer scoring, trophy races, trophy dashes, gift certificates. Coming soon night racing & oval races. For info (415) 443-5828 M-F 10-6 p.m.

RADIO OPERATED AUTO RACING OF ROCHESTER

110 Anderson Ave., Behind Village Gate (274 N. Goodman St.)

7:00 p.m. - Monday Pro Night

7:00 p.m. - Tuesday Boy Scout Nite

7:00 p.m. - Wednesday Teen Night

7:00 p.m. - Thursday Indoor Clay

7:00 p.m. - Friday Roar Meetings

7:00 p.m. - Sat. & Sun. Family Days

HOBBY HUT

2665 Park Marina Dr., Redding, CA 96001, (916) 241-3737. 1/10 Off-Road Racing. Norcal Mini Off-Roaders. Ask for Kevin Paschke.

USA RACEWAYS

6083 Dixie Highway, Bridgeport, Michigan, (517) 777-7USA.

Every Thursday Oval & Off-Road

Every Fri. Indoor Carpet Oval

R.C. BUGGYWORLD & RACEWAY

7511 Hamilton Ave. - RT. 127, MT. Healthy, OH 45231, 522-0809. Wednesday night off-road and oval on alternating weeks. Also carpet races on Monday nights 40 x 80 banked oval.

OUTLAW MOTOR SPEEDWAY

7920 Webster, Highland, CA, (714) 864-1770. Tues. Tamiya Off-Road; Thur. Off-Road & Dirt Oval; Fri. 1/10 & 1/12 on-road; 1st Sun. Dirt Oval; 2nd Sun. 1/10 & 1/12 On-Road; 3rd & 4th Sun. Off-Road.

LITTLES HOBBIES

Monday Nite - 1/10 Trucks

Tuesday Nite - 1/10 Sprint Cars

Wed.-Fri. - Open Practice Available

Sat. - 11 a.m. 2WD 6 yrs. to 16 yrs.

Sun. - 11 a.m. - All Classes Indoor Clay Oval and Road Track Fast -Stock & Modified Classes. Bolink AMB Lap Counter. 111 Main St., Rt. 66, Hebron, CT 06248, (203) 228-4942.

R/C WORLD & TRACK

New indoor facility for 1/10 off-road and oval dirt racing. Wed. and Fri. -oval. Sat. Daytime and Evening off-road. Practice anytime. Call Glen or Debbie at (303) 789-0838, 2788 S. Federal, Denver, CO 80202.

FAST LANE R/C

On Road Asphalt Track. 21616 Golden Triangle, Saugus, CA. Call (805) 255-

2404.

RPM R/C RACEWAY

1112 S. 16th, Elwood, IN 46254. Indoor off-road racing every Sunday at 12:00 noon. For info call (317) 552-7758.

REC. R/C RACEWAY

1/10 scale clay oval track. Racing Sat. - Oval 10-2:30 - Racing at 3:00 p.m. - Sunday - Off-Road 10-2:30 Racing at 3 p.m. Call Erin Clancy (914) 868-7715. Route 82 to Standfordville, NY 12581.

MADISON AREA RADIO CONTROL CAR ASSOCIATION, INC.

Factory Outlet Mall, Madison, Wisconsin. 1/10 and 1/12 scale carpet racing. Practice Sat. Afternoon Racing 6 p.m. Sat. & 7 p.m. Tues. George Jerdee (608) 873-7286.

THE RANCH PIT SHOP

1655 E. Mission Blvd., Pomona, CA 91766 (714) 623-1506. Every Wednesday night at 6 p.m. Alternating Oval and Off-Road.

COMPETITION HOBBY

Off-Road racing indoors on dirt. Every Wednesday night 6:30 -Sunday 12 noon. Juniors (12 and under) & Novice Saturday 12 noon. 8169 S. State St., Midvale, UT 84047, (801) 562-9452.

CONNECTICUT AUTO RACING TEAM

1/10 Off-Road and Sprint Car Oval. 37 Douglas Street, Hartford, CT 06114, Zig (203) 246-4778.

HOBBYTOWN

1/4 Mile High Banked Indoor Carpet Tracks at two of our stores. The Lincoln track is at our Sutter Place Mall store located at 5221 S. 48th St., Lincoln, NE 68516 (402) 483-7427. The Omaha track is located at Rockbrook Village at 11011 Elm Street, Omaha, NE 68144, (402) 391-5669.

Tues. - 7 p.m. - Lincoln

Wed. - 7 p.m. - Omaha

Sat. - 1 p.m. - Lincoln & Omaha

Sun. - 1 p.m. - Lincoln & Omaha

ROMAC

1/10 and 1/12 on large carpet oval (Northern Lights Mall) N. Syracuse, NY. Thursday evenings and Sunday afternoons. Information call (315) 468-1463 or (315) 468-6544.

COOPER'S RC RACE CENTER

Racing every Sunday 2 p.m.

Open Wed. and Fri. 6 p.m.

Open Sat. & Sun. 12 noon

Oval and Off-Road

Contact Norris, Rt. 4 Box 122B, Chatham, VA 24531, (804) 724-4182.

VICTORIA HOBBY SHOP

Every Saturday - 2 p.m. - Off-Road; Every Sunday - 2 p.m. -Ovals.

5211 John Stockbauer, Victoria, TX 77904, (512) 575-3270.

M.H.O.R. R/C RACEWAY

155540 E. Batavia Dr., Aurora, CO 80011, (East on 17th Ave. at Chambers

Rd.). Indoor 1/10 Off-Road Racing on Wed. & Sat. Practice/Track Time Tues., Thur., Fri., Sun. Complete Hobby Shop, pit area has AC & DC power, a nice clean handicap accessible racing facility. For info call Jess Brockman, (303) 343-0151 after 3 p.m. MST. Closed Monday.

HOBBYTOWN RACEWAY

4915 W. Elm, McHenry, IL 60050, (815) 344-1777. Hobbytown Raceway, 219 W. Cedar Lake Rd., Round Lake, IL 60073. Indoor - Dirt 80' straightaways, (312) 546-0707. Oval Racing every Friday 7 p.m.; Off-Road Sunday 10 a.m.

BNS COMPETITION HOBBIES

Route 7, Box 380, Anderson, SC 29624, (803) 224-8591, Contact Bob Sanford. Racing and Open Practice Wed. 6:30 p.m., Every Saturday 1:00 p.m. 1/10 Dirt Oval.

DESERT HOBBIES & RACEWAY

Off-Road racing 1st & 3rd Sundays. Sign in 10-11:15 a.m. Every Friday nite 7:30 p.m. 25 minutes from San Bernardino. 17210 Main St., Hesperia, CA 92345, (619) 94858.

TAIT'S HOBBY SHOP

Sat. Off-Road 12 noon, 2WD/4WD Monster Trucks. Sun. Dirt Oval 12 noon 2WD/4WD Any body style. Mon. Indoor Oval Carpet 7 p.m. 1/10 & 1/12. Tues. Truck/Car Pulls 7 p.m.. Wed. Outlaw Dirt Oval 7 p.m. 2WD/4WD Stock cars/ 2WD Sprints. Friday. Off-Road 7 p.m. 2WD/4WD Off-Road cars. 3270 Bay Rd., Saginaw, MI 48603, (517) 799-3900.

J.G.S.

Wisconsin's finest off-road race track. Perfectly groomed 100 ft. straightaway, computer scoring, drivers stand, starting lights. Racing every other Sunday 1 p.m. Menomonee Falls, WI (414) 255-2040.

TRACKSIDE RACEWAY

Dirt Oval Racing every Thursday night 6 p.m. Fully stocked hobby shop, computer scoring, lights, bleachers, concessions. Menomonee Falls, WI (414) 255-2040.

WAGONHILL HOBBIES

Indoor 1/10 & 1/12 on-road racing every Friday night. Outdoor Off-Road every Saturday Night. 225 S. Board St, Grove City, PA, (412) 458-4711.

DIXIE R/C HOBBY SHOP

Every weekend Sat. & Sun. The races will alternate between oval and motocross starting May 14 with oval and May 15 with motocross. Dixie R/C Hobby Shop, P. O. Box 135, Ramseur, NC 27316, after 6 p.m. (919) 824-2770.

BREMEN RACEWAY

Clay Oval Track 60 x 100 ft. Under roof, lighted Friday nights 7 p.m. May thru Sept. Call for information (219) 546-3807. Bremen Hobbies, 308 N. Bowen, Bremen, IN 46506.

WEST TEXAS R/C RACEWAY

3477 Lee Blvd. - Racing every Sunday. 1/

10 scale off-road and oval dirt. Mailing address: 301 Edith Dr., El Paso, TX 79915. For more information call Hector (915) 772-1382.

JIM'S R/C SPECIALTIES

3107 S.W. Van Buren, Topeka, KS 66611 (913) 273-4070. Racing off-road every Sunday 12 noon to 5 p.m. Oval racing every Saturday night 6 p.m.

EAGLE HOBBY CENTER & RACEWAY

Every Saturday night at 7:30 p.m. 1/12 4 cell stock and modified. 1/10 6 cell stock on-road, call for body style. Eagle Hobby Center & Raceway, 3601 Shepherd, Balch Springs, TX 75180, (214) 557-5290.

SUMMIT SPEEDWAY

Summer Schedule: 1/10 Indoor Oval Outdoor Tri-Oval - Fridays 7 p.m.; Tuesdays off-road 6:30 p.m.; Saturday nights and Sundays. Call for more information (219) 489-RACE.

ACTION SPEEDWAY

Indian River's Facility

1/10 scale half mile clay oval & off-road. Two story covered drivers' stand, large pit area close to track, ample parking, classes for young and old, beginner's to expert's, and truck pulls. Coming soon - 1/10 scale super speedway and road course, night racing, full electric, and concessions. For further information call Trace or Chip Button (407) 231-9410 or Doug Upton (407) 569-8793.

THE INSIDE TRACK

Every Wednesday - 7 p.m. and Saturday 6 p.m. Classes: 2WD Stock and Modified, 4WD Stock and Modified and Monster Trucks. For more information call (312) 898-5649. 725 Hill Avenue, Aurora, IL 60505.

ABC R/C

Clay track racing every Saturday 1 p.m. Truck pulls every Tuesday 6:30 p.m. Complete R/C headquarters, 1441B E. Main Street, Waukesha, WI 53186, (414) 542-1245.

TC'S R/C'S

Inside and outside race track and RC shop. 1537 Freeport Road, Natrona Heights, PA 15065, call 226-8802.

BROCKTON INTERNATIONAL SPEEDWAY

Monday night 1/10 & 1/12 oval racing 5:30 to 7:30 Practice. Races start 7:30 p.m. 1217 Main st, Brockton, MA. For more information call Ruben (508) 588-9355.

SONOMA COUNTY RACEWAY

806 Brookwood Avenue, P. O. Box 9565, Santa Rosa, CA 95405 - 1/10 Dirt Oval, 1/10 Off-Road, 1/10 & 1/12 Asphalt. Mark White (707) 571-7565, Schedule info (707) 571-8044, Competition Products (707) 571-8048.

ALL IN 1 RACEWAY

5612 S. 108th St. Hales Corners, WI. 1/10 scale indoor dirt track. High speed semi-oval and true off-road courses. Practice Tues, Thurs., and Fri. 6 - 9 p.m. Racing Wednesday nights at 6 p.m., Sat. & Sun. at 1 p.m. For more information call (414)

QUALITY GRAPHITE PARTS

We custom-manufacture 1/8, 1/10 and 1/12-scale chassis and parts to your designs. Use for 12-L, RC-10, Optima Mid, Ultima, Ovalsprint. On and off-road.

Stiff, light-weight material with excellent diagonal twist strength. Cylinder battery slot optional. NO GLASS OR FILLERS.

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7953 Mission Bonita Drive
San Diego, CA 92120

PHONE: (619) 562-6123

425-4060.

THE SQUARE ROUNDHOUSE SPEEDWAY

Saturdays - 3 Events per month -Off-Road, Monster Truck Pulls and Oval Race. Oval dirt track and Off-road track. 1468 Lander Avenue, Turlock, CA 95380, (209) 668-4454, Ask for Harold Lindquist.

COASTAL BEND SANDBLASTERS R/C CAR CLUB

Races first thru 3rd Sundays, 2 p.m. start. Bill Witt Park, Yorktown Road, Corpus Christi, TX. Call Pete Broadway (512) 992-4448.

CAJON R/C SPEEDWAY

1875 Joe Crosson, El Cajon, CA 92020. Fastest paved oval & road course in CA. 1/10 & 1/12 scale every Friday night. Please call for off-road dates. Hot Line (619) 449-0788/Parts 449-9948.

RADIO CONTROLLED HOBBIES & RACEWAY

Indoor Off-Road racing every Tuesday & Thursday evening beginning at 7 p.m. and Saturdays at 5 p.m. Open 7 days a week. 2011 Placentia Ave., Costa Mesa, CA 92627. For more info call (714) 631-1555.

RADIO CONTROL RACE WORLD

150 Clove Road, Staten Island, NY, (718) 448-0385. Wed. - Fri. 7-10 p.m. Open practice. Saturday 4:30-6 p.m. Race Registration. Sunday 12-5 p.m. Practice/Truck Pulls. Large indoor 1/10 off-road.

R/C RACEWAYS

1/10 indoor dirt oval. 100' straightaways. Wed. 6 p.m. oval. Friday 6:30 p.m. oval. Sunday 12 noon oval or off-road. For more information call (219) 747-6414. 2710 Nuttman, Ft. Wayne, IN 46804.

R/C PERFORMANCE CENTER

Tues. 7:30 p.m. - Practice 5:30 p.m.; Sun. 12 Noon - Practice 11 a.m.; Thurs. 1/10 Outlaw dirt ovals 7:30 p.m. - Practice 5:30 p.m. Route 27, 270 Main St., Hanson, MA 02341. For more information call John or Dom (617) 294-8980.

PARLOR HOBBIES

1/10 on Asphalt - Full bodies -Grand National or ASA bodies preferred. Rabbit Lane & 34 Broad St., Matawan, NJ

566-3158. July 9 - 16 -23; Aug. 6 - 13 - 20 - 27; Sept. 17 - 24; Oct. 1 -8 - 22 - 29; Nov. 5 - 12 -19.

R/C SPEED CENTER R/C ADDICTION

2810 N. Pacific Hwy., Medford, OR 97501, Call Gene or Betty Skelton, (503) 779-8298. 1/10 and 1/12 scale, banked dirt oval racing, dirt off-road racing, sled pulls, mudbog. Racing every week, year around.

BROTHER-IN-LAWS R/C RACING

1/10 scale dirt oval. Racing every Sunday. Signups 10 a.m. Open Practice 12-6 Tues. - Sat. pit tables, 110 volt power. Call Bob (619) 949-5252. 16175 Main Street, Hesperia, CA.

CORCAR - COLUMBUS, OHIO

1/10 off-road racing May thru Sept. every Sunday. Signups start at 10:30 a.m. Excellent dirt track, computer scoring and picnic area. For information call Ray Williams (614) 890-2983.

MACHESNEY PARK RACEWAY

1220 Shappert Dr., Machesney Park, IL, (815) 282-1311. Racing every Fri. - Clay Track - Summer; Racing every Sat. - Large Asphalt Oval - Summer; Racing every Sat. - Drag Racing - Summer; Racing Every Sat. - Carpet -Winter.

CENTRAL MARYLAND ELECTRIC RACING CLUB

(CMERC) Community R/C Speedway

Middletown Park, Middletown, Maryland. 100' x 50' dirt oval, 14' wide lanes, 2' banked turns. No electricity available. Contact John Mauchamer, (301) 698-9545.

SCHENECTADY R/C SPEEDWAY

Indoor Oval Carpet Racing. 1/10 & 1/12 and Monster Trucks. 955 State St., Schenectady, NY, (518) 370-3747.

THE COCKEYSVILLE ASTRODOME

C.A.R. Cockeysville Astrodome Racers, Inc., 10854 York Rd. (Rear) Cockeysville, MD, (301) 666-1098. High Bank Oval racing on concrete (indoors). Benches, Power, Grandstands. 7 p.m. Mon. - Open Practice; 7 p.m. Tues. - Rookie & Stock Practice; 7 p.m. Wed. - Computer Organized Racing; 7 p.m. Thurs. - Modified & Ultra-lite Practice; 7 p.m. Fri. -

SCORE, SAVANNAH SKATE AND HOBBY AND THE HOBBY SHOP PRESENT:

1989 REGION 2 1/10 SCALE OFF-ROAD CHAMPIONSHIPS

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REEDY
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SEPT. 28 - OCT. 1*

PERMANENT CORNER MARSHALLS

FREE T-SHIRTS

ROAR

SANCTION #028927
LEVEL 3

LOCATION: Lake Mayer Raceway, Lake Mayer Park
Montgomery Crossroads, Savannah, Georgia.

CLASSES: 2 WD Modified and 4 WD Modified - 6-7 cell
approved batteries, approved modified motor. 2 WD
Stock - 6 cell approved batteries, handout motors.

RULES: ROAR membership required. May join at track.
ROAR rules apply.

ENTRIES: Limited to the first 300 cars. Limited to two
cars per entrant.

AWARDS: Trophies for concours 1-3, A mains 1-10,
other mains 1-3.

FEES: Modified \$30.00. Stock \$40.00 with one motor.
Additional motors \$10.00 (limit two). Additional T-shirts
\$10.00. Late entry \$10.00. No refunds.

INFORMATION: Packet sent on receipt of entry (rules,
schedule, and lodging).

CONTACT: Phil Hurd (912) 355-6033 or Ted
Migchezbrink (912) 897-1944

ENTRY FORM

MAIL TO: SCORE, 1 Melinda Circle, Savannah, Georgia 31406
MAKE CHECKS PAYABLE TO: SCORE

ENTRY DEADLINE: September 20th

Name: _____ ROAR #: _____

Address: _____ State: _____ Zip: _____

CLASS: 2 WD Modified _____ 4 WD Modified _____ 2 WD Stock _____

FREQUENCIES: Class 1st _____ 2nd _____ 3rd _____

Class 1st _____ 2nd _____ 3rd _____

Affiliation/Sponsor: _____

T-Shirt Size: SM _____ MD _____ LG _____ XL _____ XXL _____ Amount Enclosed: \$ _____

*September 28th - Practice • September 29th - One Qualifier • September 30th - Two Qualifiers • October 1st - Main Events

Trucks & Buggies Practice; 5 p.m. Sat. - Computer Organized Racing; 1 p.m. Sun. - Computer Organized Racing. Art LaPole (301) 889-2070.

BOB'S R/C SUPPLY & RACEWAY

Indoor Carpet Racing! Tues. 1/10 Oval; Fri. 1/12 Road Course; Sat. Monster Trucks. Stock & Modified. Snack bar. Call Bob, Nancy or Kevin (319) 232-2235, 935 Sheerer Ave., Waterloo, IA 50701.

EBERSOLE HOBBY & R/C RACEWAY

Off-Road and Oval. Races Wed., Thurs., Sat., and alternate Sun. 11417 W. Highway 54, Wichita, KS 67209. Len Ebersole, (316) 722-8888.

METRO-FAST RACEWAY & HOBBIES

125' x 48' indoor carpet track, pitting for 140+, power, hobby shop, video entertainment, food bar. Oval - Fri., Kid's racing every Sat. morn and alternate Sun. on on-road & off-road. 950 W. Irving Park Rd., Hanover Park, IL 60103, (312) 213-3977.

MID-CAROLINA R/C SUPER SPEEDWAY

The speedway is located on Flint Hill Rd, Off 1-77/Carowinds exit, So. of Charlotte, NC. 1/10 & 1/12 High-Speed Banked Quad-Oval and Road Course. 385 ft. plus 26 degrees banking in turns concrete track. Fred Penland (704) 373-2535 7:30 a.m. to 4:30 p.m.

BROWNIE'S HOBBIES

Off-Road Dirt Track, hobby shop. Wed. eves and Sat. afternoons for practice. Racing - Fri. eves. 4WD & 2WD. Track open April - November. 124 Bennett St., Staten Island, NY 10302, (718) 727-2194.

ROADRUNNER R/C CENTRAL

5620 Bellaire, Houston, TX 77081, (713) 661-7574. 1/12 Carpet Oval or Road Course Thurs. Nite. 1/10 Carpet Oval Tues. & Fri. nite & Sun. pm.

ROADRUNNER R/C NORTH

12760 Veterans Memorial, Houston, TX 77014, (713) 537-7758. 1/10 Dirt Oval Wed, Fri. nite. 1/10 Dirt Off-Road Sat. & Sun.

ROADRUNNER R/C SOUTH

12902 Player, Houston, TX 77014, (713) 728-2277. 1/10 Indoor Dirt Off-Road Wed., Fri., & Sat.

NORTHERN MINI-RACERS

NMR Raceway, P. O. Box 415, 3524 E. Burdick, Minot, North Dakota 58701. 1st & 3rd Sun. 1/10, 6 cell, NASCAR bodies, oval racing on carpet. Roger Lee, (701) 839-4731, 839-5294; Pat McWethy, (701) 839-8868, 852-6254.

ASHEVILLE HOBBY SPEEDWAY

Racing Wed. & Sat. - 7:30. 1/10 & 1/12 Asphalt Oval -Indoors. Hwy. 25, Naples, NC 28760, (704) 684-9814. Jack or Sharon Murdock.

HOBBY CENTER

High banked carpet oval track. Racing Fri. - 7:30 p.m. 1/10 NASCAR, trucks, 2WD gearbox hot rod, 4WD wedge bodies, 1/12 scale. Any body ROAR stock motors all classes. Open practice during store hours. (502) 683-7611. 1233 Sweeney St., Owensboro, KY 42301.

R/C MOTORPLEX & HOBBY

Outside Tracks: One of Midwest's largest

paved oval (160 x 115) with paved infield road course. Indoor Tracks: Dirt off-road & dirt oval. Carpet road course & oval. 1/12, 1/10 & 1/8. Snack bar, game room R/C hobby shop. 303 Herbert Rd., McHenry, IL 60050, (815) 385-1240. Bob Oaks or Jim Bostrom.

SACRAMENTO MINI-WHEELS RACEWAY

Indoor racing with 1/10 & 1/12 scale. Two tracks with off-road, dirt oval, and on-road. The on-road track is etched concrete. Racing Wednesday (off-road). Fri. (on-road). Every other Sat. (dirt oval). Sun. (off-road). 8711 Elder Creek Rd., Sacramento, CA 95826. Paul or Marge Schiager (916) 383-4011.

RAPID TRANSIT RACEWAY

2104 Broadway, Schenectady, NY 12306, (518) 372-0777. Summer Store Hours: Mon. - Fri. 4 p.m. - 10 p.m., Sat. 11 a.m. - 5 p.m.. Race Schedule: Mon, Tues. & Sat. Open for Practice. Wed. 7:30 p.m. Stock & Mod. Thurs. 7:30 p.m. Sprint Car. Fri. 7:30 p.m. Sportsman & Open Class.

NORTHERN ALBERTA SCALE CAR AUTO RACING

1/12 and 1/10 On-Road Racing. 1/12, 4 cell indoors on carpet during winter. 1/10, 6-cell outdoors during summer. Dean Simpson (403) 481-8634, 17319 69th Ave., Edmonton, Alberta, Canada T5T-3S7.

HOBBY CORNER RACEWAY

Sun. - alternating oval & off-road 1 p.m. Tues. - oval racing 7 p.m. Large indoor dirt oval track with 4 foot banks. 2195 E. Garfield, Decatur, IL 62526 (217) 429-4477.

PHILLY RADIO CONTROLLED RACERS R/C CAR CLUB

Announcing the opening of a paved race track for R/C 1/10 on-road. ROAR rules. Sun., April - November. 11 a.m.. 7790 Dungan Rd., N. E. Philadelphia. Jon (215) 224-4822 or Bernie (215) 831-1835.

— 1/12 Scale —

GLASS CITY RADIO CONTROL

Racing 1/10 & 1/12. Clayton White (1/12) (419) 882-2518 or Mike Marshall (1/10) (313) 241-5321.

S.T.A.R.C.

Wed. Night - S.T.A.R.C. Club Series. Rockton, Ontario, Canada. Sam Burke (519) 621-5424.

TEAM RACE R/C CAR CLUB

Fri. 6:30 p.m. indoor track, 505 Spring Ridge Rd., Clinton, MS, (601) 924-0722.

NORTHERN MINI-RACERS

NMR Raceway, P. O. Box 415, 3524 East Burdick, Minot, ND 58701. 1st & 3rd Sat., 1/12, 4-cell, Can-Am/GTP bodies, road racing on carpet. Roger Lee, (701) 839-4731 or 839-5294. Pat McWethy, (701) 839-8868 or 852-6254.

KOUNTRY KLIN HOBBY

1/12 scale small indoor carpet track & hobby store. Box 247, 324 Railroad Ave., N. Mohall, ND 58761, (701) 756-6307.

USA RACEWAYS

6083 Dixie Highway, Bridgeport, Michigan 48722, (517) 777-7USA

Tue. Nite On-Road; Sat. Nite On-Road; Every Other Sat. Eve. Stock On-Road

THE RANCH PIT SHOP

1655 E. Mission Blvd., Pomona, CA

91766, (714) 623-1506. Every 4th Sun. 1/12 & 1/10 On-Road Combined Program.

OMAHA NEBRASKA RADIO OPERATED AUTO DRIVERS

On-Road 6 cell racing two nights per month. ROAR rules apply. (402) 331-3931.

S.O.R.C.R.C.C.

Southern Ontario Radio Control Race Car Club in Toronto, Ontario, Canada. Racing Alternating Sun. nites October - April. 6 p.m. to 10 p.m. Scott Reynolds 298-4941 or Gary Joi 421-9061.

CENTRAL MARYLAND ELECTRIC RACING CLUB

COMMUNITY R/C SPEEDWAY

Middletown Park, Middletown, Maryland. 100' x 50' dirt oval, 14' wide lanes, 2' banked turns, drivers stand, no electricity available, open to the public. Mark Coats (301) 694-7420.

FLORIDA STATE SERIES

Sept. 30 & Oct. 1 - Ft. Lauderdale

Nov. 4 & 5 - Orlando

Steve Whitney (407) 631-8761

HOBBIES PLUS & R/C RACEWAY

1/10 & 1/12 scale indoor carpet racing. Tri-Oval & on-road, 60+ pit areas w/ electric, hobby shop, 7 days, open practice. Also Sun. A.M. 1/10 off-road dirt (150 x 70) and 1/8 gas off-road. 650 Amherst Street, Nashua, NH 03063, (603) 882-9200.

— Special Events — **ROAR REGION VI** **OVAL SERIES**

August 6 - R/C Outlaw, Highland, Stock, Mod. & Sprint

For further information call Cliff Soderberg, (213) 988-1006.

1989 ROAR NATIONALS

1/10 Off-Road - July 25-30, SEM-ROCC, Sterling Heights, MI. Contact John Thawley, (313) 644-0669.

1/8 Gas - August 7-13. St. Louis Car Club, St. Louis, MO. Contact Joe Poole, (618) 462-5334.

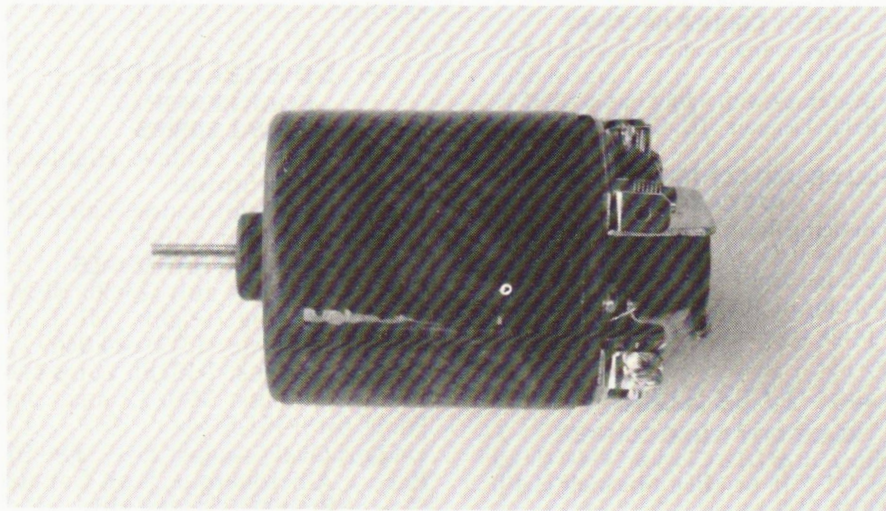
1/4 Dirt Oval - August 25-27. Two Bit Racers, Albuquerque, NM. Contact George Brazil (505) 345-7413.

1/4 Paved Oval - Aug. 31-Sept. 3. Racers Haven, Bakersfield, CA. Contact Marty Buchanon, (805) 835-0441.



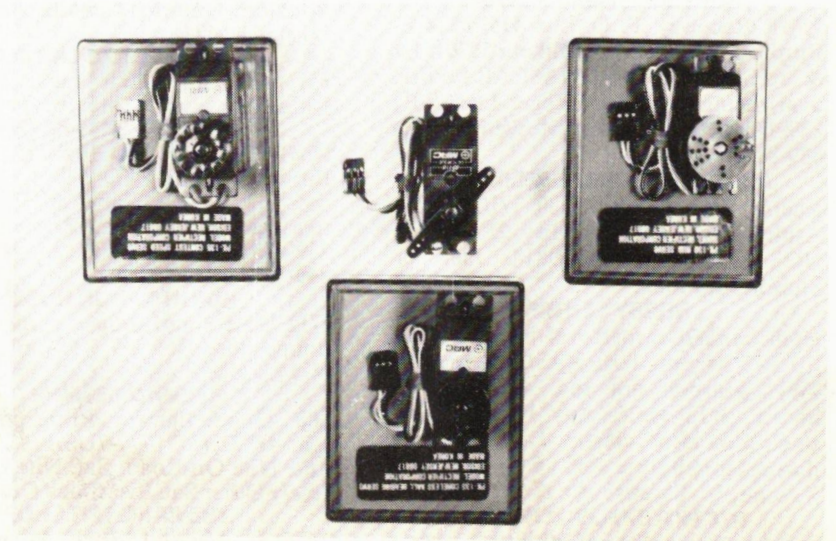
NEW PRODUCTS

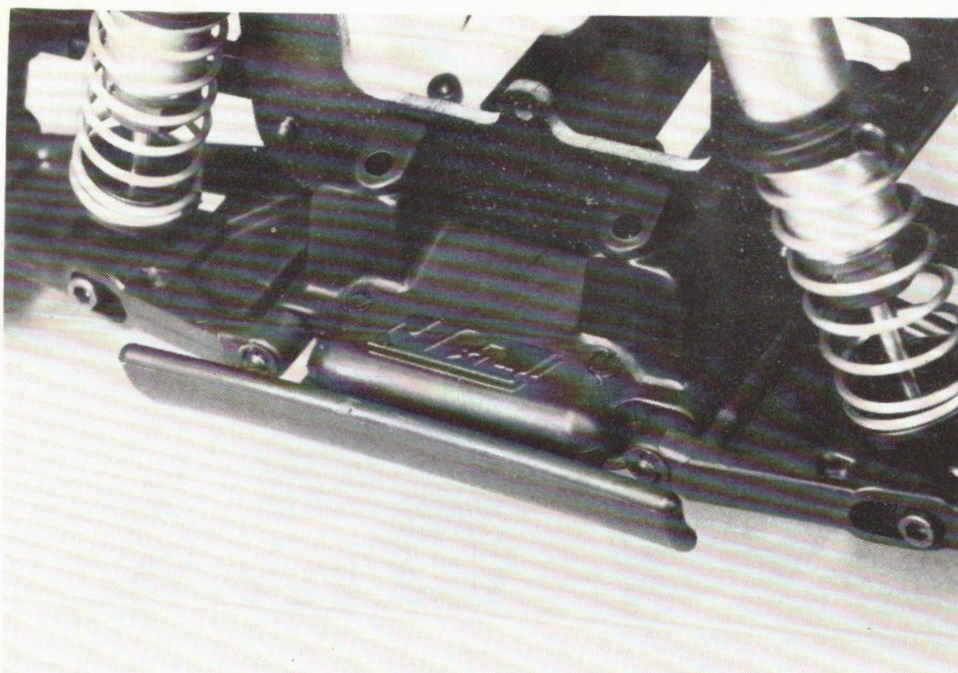
The Original Monster Truck. The Parma Bigfoot 4x4x4. This awesome '89 Ford truck body and decal have the style and detail Parma is famous for. Recreated in perfect 1/10 scale. It is designed to be a direct replacement for the Clodbuster and fits many other trucks with the use of Parma Body Mount Kits. See it at your local Parma Dealer. Parma International Inc., 13927 Progress Parkway, North Royalton, OH 44133.



Peak Performance is proud to present the "WILD THING". After extensive testing and refining by Peak Performance team drivers in world class competition, this meticulously hand-crafted, uniquely constructed 14 turn, 4WD off-road wet magnet modified motor is now available to the public at hobby stores everywhere. The "WILD THING" assures a sizzling performance while running cool for longer life expectancy. Designed for use with SCE 1700 batteries. Peak Performance, 1362 E. Edinger, Unit B, Santa Ana, CA 92705, (714) 667-6865.

We have now introduced a full range of servos compatible with Our Top Gun 2 channel wheel R/C system, our 2 stock 2 channel R/C system and our brand new narrowband 4 channel R/C system. PK-130 Mini Servo: For applications requiring a small size servo. PK-133 High Torque Servo: When the situation demands a tough, high speed, high torque servo. PK-119 Standard Servo: The word Standard hardly fits the description of this reliable workhorse. PK-135 Contest Servo: Small with torque. MRC, 200 Carter Dr., Edison, NJ 08817, (201) 248-0400.





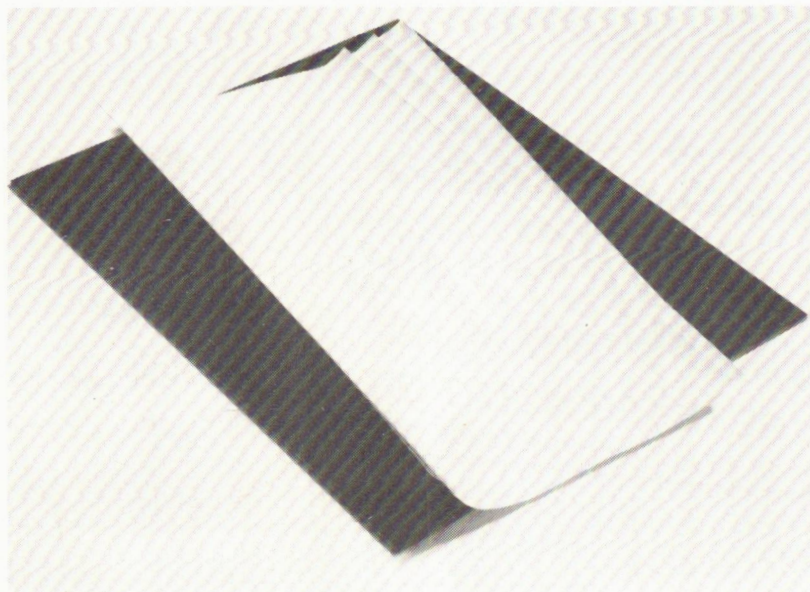
The new Mini Bumper Kit (#A-4005) for the JR-X2 offers protection and performance. This compact injection molded bumper protects the bulkhead and inner pin location on the JR-X2. It also includes spacers, hardware and instructions which can be utilized to actually increase the responsiveness of the JR-X2. Designed by World Champion Gil Losi, Jr. The new bumper will enhance the performance and reliability of your JR-X2. Available now at better shops worldwide. Team Losi, Inc., 1655 E. Mission Blvd., Pomona, CA 91766, (714) 623-1506.

Part No. 0009 Monster Mash 2 (Reverse Rotation) Reverse Rotation Truck Motor. Can be used in the MRC Clodbuster or Kyosho Double Dare. New "Radically Oriented" wet magnets, dual ball bearings, adjustable timing. 16 turn single wind, 36,200 RPM. 4-6 minute races. Lots of torque. \$39.99. Trinity Prodcuts, Inc., 1901 E. Linden Ave., Unit 8, Linden, NJ 07036, (201) 862-1705.



Futaba 2PD/Magnum AM 2 Channel Pistop Grip System. Designed for advanced and expert R/C car and boat racers, the new 2PD Magnum AM system is outfitted with all of the popular competition features. Adjustable steering rate, BEC, trim/sub-trim fine tuning and easy to reach throttle neutral and brake adjusters are among the many special functions. The Magnum AM system is available with a choice of S9301 (S131S), S9601 (S135) or S132H servos. The Magnum AM is available on 27 and 75 MHz surface bands. Futaba Corporation of America, 4 Studebaker, Irvine, CA 92718. (714) 455-9888.

New ACOMS Technisport R/C System. This versatile 2 channel wheel radio has features of higher cost radios but at an easy to afford price. The grip can be changed for either left hand or right hand operation. The receiver is a compact BEC design that takes up less room and performs well under the stress of play or competition. The bonus is a one year limited warranty on this system that few other manufacturers can even contemplate for their systems. Altech Marketing has put its efforts into this R/C System to make it the best value for your modeling dollar. Altech Marketing, P. O. Box 391, Edison, NJ 08818, (201) 248-8738.



New Graphite Chassis Blank for Carpet Cars. Part No. 9827. Chassis comes complete with instructions for cutting and adhesive paper or tracing. It measures 9 x 11 x .090. Retail \$79.00 each. Twinn-K, Inc., P. O. Box 31228, Indianapolis, IN 46231, (317) 839-6579.

Kyosho hits the NASCAR scene with the release of their new on-road Buick Stocker. This 1/12 scale almost ready-to-run NASCAR replica features a rear axle diff and an adjustable, independent front suspension for great handling. Designed for the beginner, the Buick Stocker is about 80% factory assembled and the chassis design makes radio installation and servo adjustment remarkably easy. Speed is no problem since the Buick Stocker includes a competition-proven LeMans Stock 05 electric motor. The Kyosho Buick Stocker is distributed to leading retailers nationwide by Great Planes Model Distributors, P. O. Box 4021, Champaign, IL 61820.



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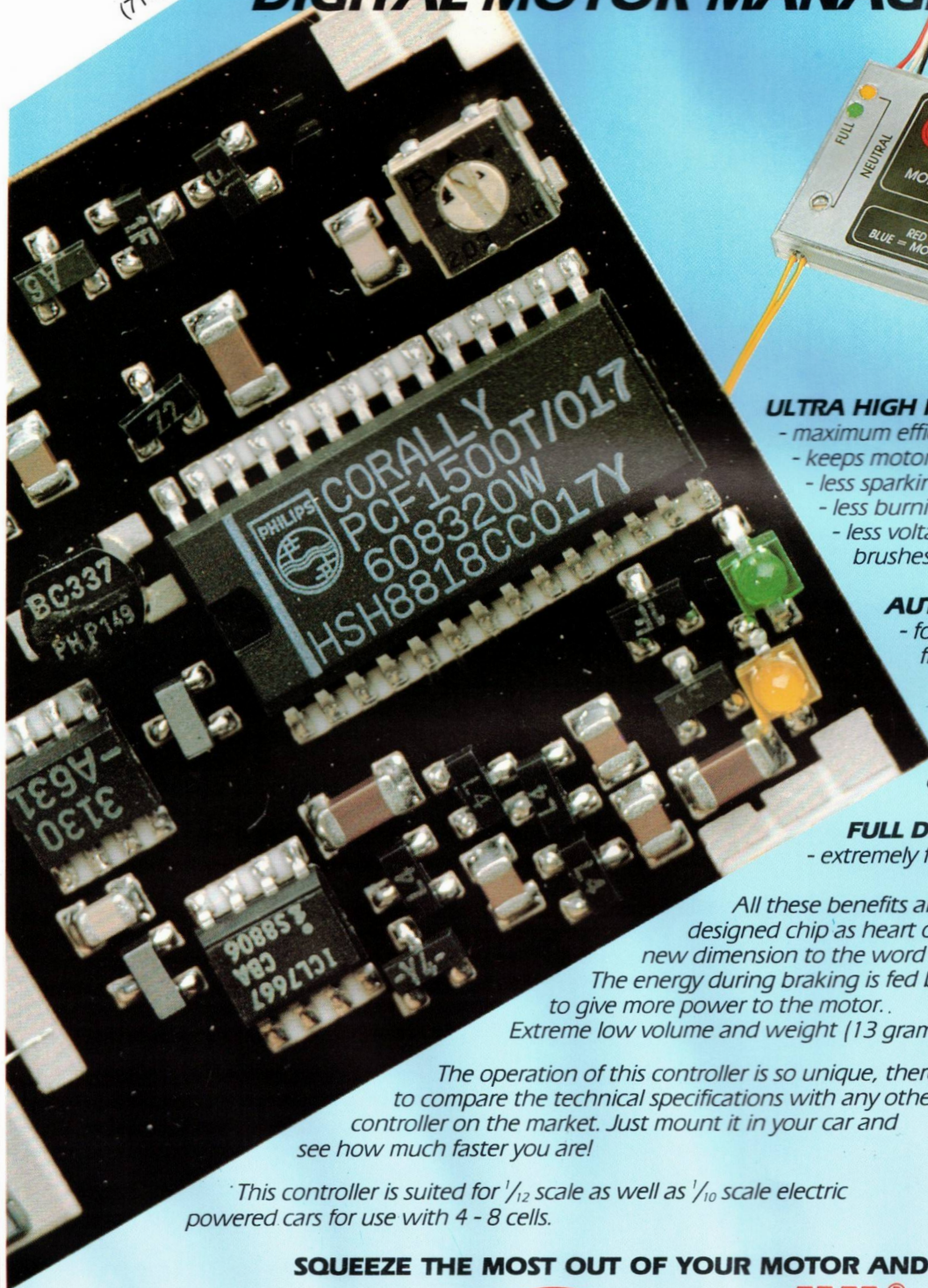
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RACING PRODUCTS

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for U.S.A. **TEKIN**
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THE MISSING LINK

CORALLY SPEED CONTROLLER. DIGITAL MOTOR MANAGEMENT SYSTEM.



ULTRA HIGH FREQUENCY OPERATION

- maximum efficiency of the motor
- keeps motor temperature down
- less sparking of the brushes
- less burning-in of the commutator
- less voltage drop between commutator and brushes

AUTOMATIC TORQUE OPTIMISER

- for maximum power at minimum current flow
- increases the efficiency of the motor
- no wasted peak-current of the battery, results in longer running time and faster laps, especially in the last minutes of the race.

FULL DIGITAL TECHNOLOGY

- extremely fast response and reliable operation.

All these benefits are possible by the use of our own custom designed chip as heart of the controller. This gives a completely new dimension to the word "speed-controller".

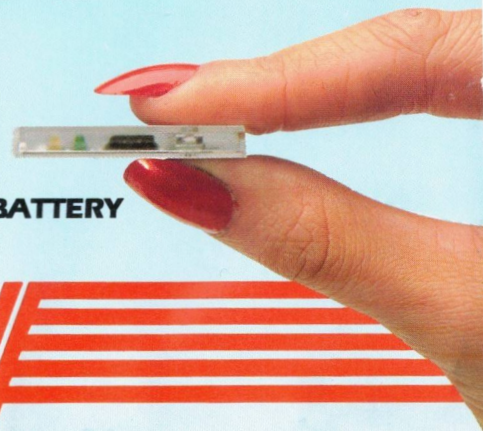
The energy during braking is fed back to the battery, to enable the battery to give more power to the motor.

Extreme low volume and weight (13 grams for the controller only).

The operation of this controller is so unique, there is no use to compare the technical specifications with any other controller on the market. Just mount it in your car and see how much faster you are!

This controller is suited for $\frac{1}{12}$ scale as well as $\frac{1}{10}$ scale electric powered cars for use with 4 - 8 cells.

SQUEEZE THE MOST OUT OF YOUR MOTOR AND BATTERY



CORALLY®

Made by **CORALLY** Holland. Distributed by **PK MODEL RACING**,
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MAGNUM FORCE.



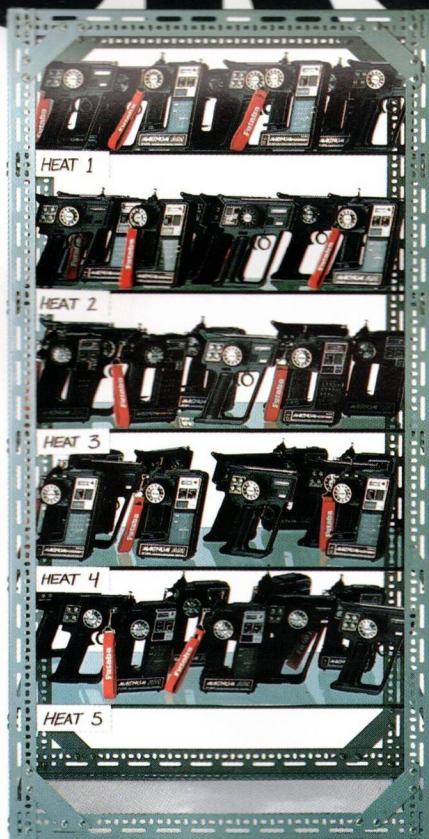
Tony Neisinger wins the 1989 Futaba Grand Prix with Magnum.

Every race day, more and more Magnums are showing up at the track. That's because Futaba makes a complete selection of Magnum pistol-grip systems to suit every kind of radio controlled car. Each Magnum system is loaded with competition features to give you an edge, whether it's your first race or the World Championships.

Get a grip on our hot, new 2PB/Sport. With a price as comfortable as its ergonomically designed case, the Sport is the perfect Magnum for the beginner. Servo reverse switching and convenient throttle and steering trims make set-up in any car or boat easy, and the Sport ESC option includes our MC112B MOS/FET speed control with reverse.

MOVE INTO THE WINNERS CIRCLE

Our grown up Magnum 2PBKA/Junior gives you some extra moves to put on the competition. Full range steering rate lets you perfectly balance your car's



handling, even as track conditions change. Fine trimming and ATV controls let you dial in race set-ups fast, and are positioned for easy adjustment.

Racing options for the Junior system include the MC112B and a choice of S148, S132H or S9601 servos.

THE ALL NEW MAGNUM AM

The Magnum 2PD/AM is just what the serious racer ordered. Compact, yet fully equipped with pro-style, fine tune controls like steering rate, brake trim, throttle ATL, ATV and sub trim. The Magnum AM transmitter also lets you customize wheel throw and spring tension.

Like all Magnum 2 channel systems, the 2PD includes our new, narrow-band R102JE receiver. S9301 servos, the choice of most top 1:10 on and offroad drivers, are included, or you can choose S132H or S9601 versions.



Servo reversing, throw adjustment and sub-trimming can be individually preset on the 2PD control panel.

THE ULTIMATE MAGNUM

Racers who want it all turn to the awesome Magnum 3PB/PCM. The 3PB has everything you need for world class competition, in any class. Electronic trimming with sub trims and LED read-outs, programmable mixing, dual rates and exponential, plug-in RF module, DSC and more make the 3PB a uniquely refined and versatile performer.

And the incredible interference protection and resolution of Futaba's exclusive PCM 1024 put it in a class by itself.



2PB/Sport

(2PB and 2PBKA available with MC112B speed control)



2PBKA/Junior



2PD/AM

(2PD and 3PB available with S9301, S9601 or S132H servos)



3PB/PCM1024

MAGNUM
Futaba

Futaba Corporation of America
Four Studebaker, Irvine, CA 92718

Midnight PUMPKIN

The 1953 Ford Pick-up that combines 50's style with the latest technology from Tamiya.

Tamiya takes you back to the 50's with an awesome combination of classic beauty and brute strength. The full size pick-up was called the "Pumpkin" for its round contoured body style, bulging hood and fenders. Tamiya's 1/12 kit is a beauty, guaranteed to turn heads for miles around. The classic body sits high atop monster tires ready to eat up the turf.

THE BEAUTY OF THE F100

From the chrome-plated bumper in the front to the chrome-plated bumper bringing up the rear, this truck was designed to be hot and nasty! Look at its chrome grille...the blue flames racing across the fenders...the chrome flood lights high atop the roll bar.

It's a blast from the past!



But making it beautiful is never enough at Tamiya. They also made it tough. So the body features injection-molded plastic for detailing and super resiliency.

THE TOUGHNESS OF TAMIYA

We made the F100 tough, inside and out. Inside, we started with an engineering resin plastic chassis/frame. Then we installed a sealed gear box, which incorporates precision differential gearing for better cornering. A powerful 540 motor. And three-step speed controller.

THE APPEAL OF ITS ENGINEERING

Outside, the first thing you'll notice are the 5" high tires that'll clear all but the biggest obstacles. To keep it down to earth and under control, we also installed independent swing arms in the front and a rigid swing axle suspension in the rear, and smoothed it with heavy-duty coil shock dampers for smooth sailing over the toughest terrains.

The result? A customized pickup with classic 50's good looks and powerful 80's technology that'll take you where you want to go. The Midnight Pumpkin from MRC/Tamiya. It's a blast from the past built for R/C's future.



Model Rectifier Corporation
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