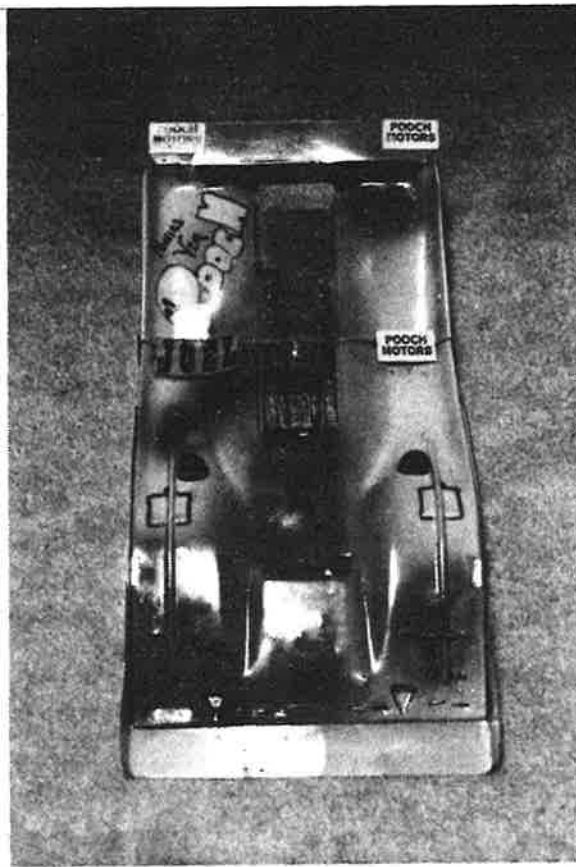
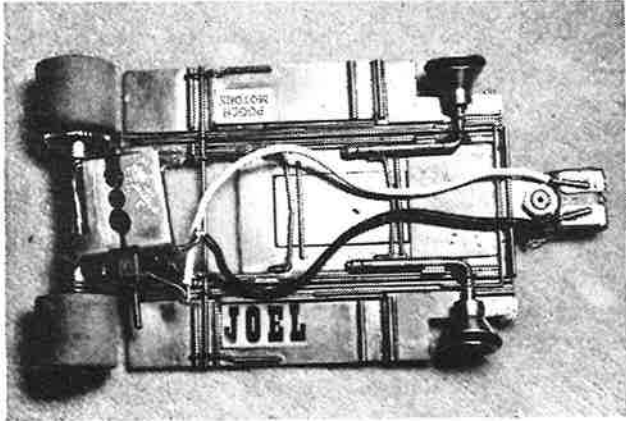


MONTAGUE WINS M.A.R. NATIONALS

MINIATURE AUTO *Racing* NEWSPERMAGAZINE



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- *N.C.C. race series results

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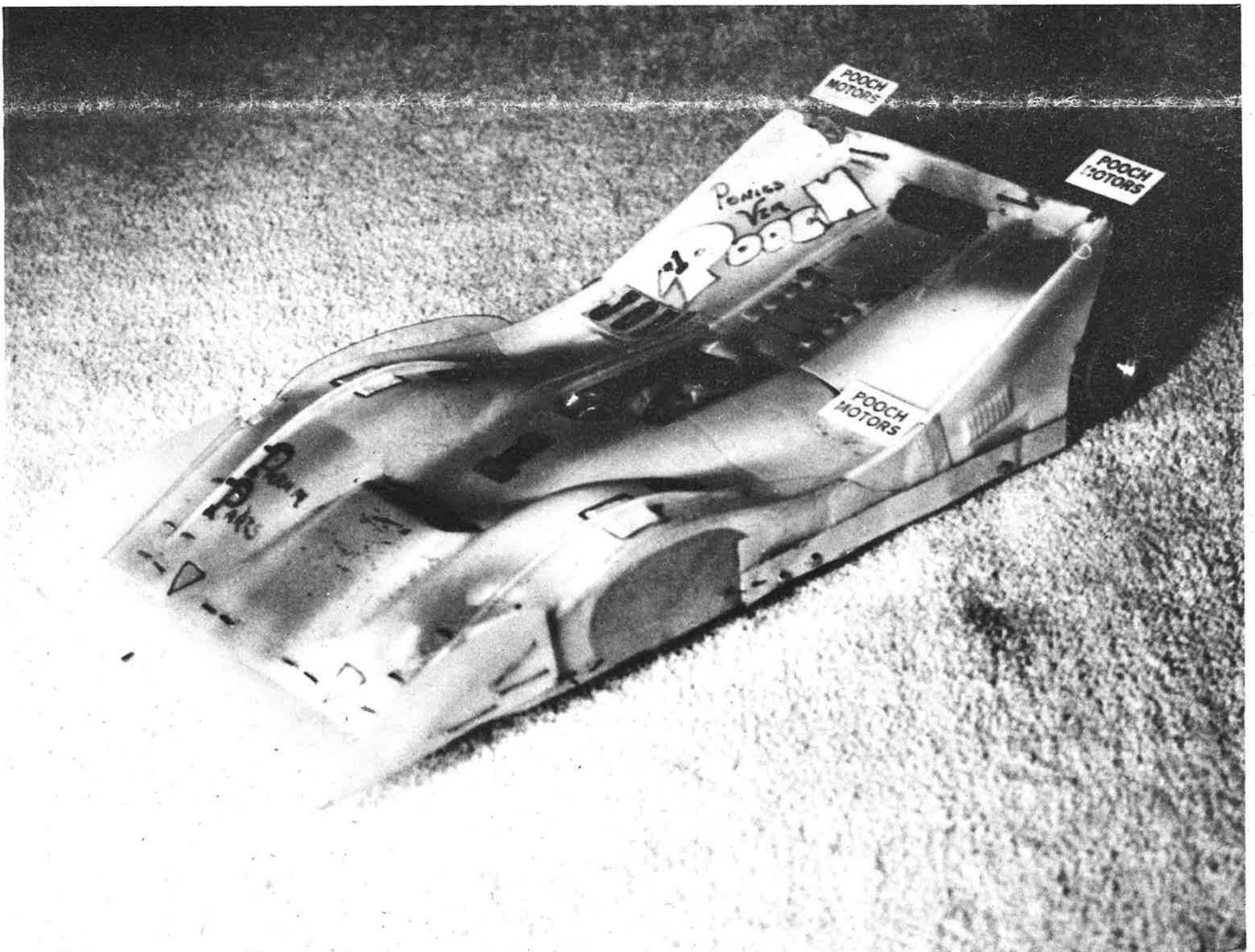
- *National races - "when" and "where"

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- *Build an H.O. scratchbuilding jig
- *Add a pan to your H.O. car for better handling

PROFILE

- *Aj's 1/32 scale "WINN-WAGEN" - and a host of accessories for the 1/32 scale scratchbuilder



MINIATURE AUTO RACING

NEWSPERMAGAZINE

EDITOR & PUBLISHER Ray Hoy
CIRCULATION MANAGER / Felicia Martinez
GRAPHIC DESIGN / Laura Price

ASSOCIATE EDITORS / Gil Aubin, Jim Bandagski, Judy Beaver, Dan Camilleri, Ted Coates, Steve Deiters, Philippe de Lespinay, Fred Goodwin, Ron Granlee, Bob Haze, Jim Honeycutt, Gene Husting, Richard Mueller, Brick Price, Tony Przybylowicz, Bob Rule Tom Wright.

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11th HOUR NEWS...

*Aj's second 1/32 scale RTR — an L&M Porsche, catalog W-011 — will soon be available. Reports indicate the new body will cover an improved, factory soldered chassis. Power is by the Twinshaft Mabuchi FT160D. \$8.95. Good news, indeed, for mid-scale buffs everywhere.

*It appears Europe is in trouble as far as its slot racing publications go. Only brief coverage is given in their model publications, which could account for MAR's increasing popularity over there. For that reason, we will be giving more space to European events and racing trends, which should interest you.

*Wouldn't it be nice if we could see more European/American competition? The most serious problem, of course, is the high expense of travel these days. Still... who knows?

the editor's slot

Ray Hoy



In addition to putting out this newspaper each month, I make what I laughingly call "my living" as a professional writer/photographer. That's me doing my thing, above. The shot was taken by a fellow photographer while I was on assignment covering the Hennessey Cup Races at Marina Del Rey, California, recently.

The Hennessey Cup was a new experience for me. I've covered a lot of Can-Am and other auto races, while putting in my stint as editor of **Motorcade Magazine** a few years ago. What amazed me the most was the fact that if you ignored the brutal Off-Shore Racers floating restlessly in the Marina, just beyond the race crowd, that very crowd would pass for the international auto racing jet set. Same fire suits, same sophisticated women, same influx of big bucks manufacturers, representatives and drivers — just different types of racing vehicles.

I had plenty of time to sit around and watch the goings-on after the race was over. With an X-rated drink in my hand, and plenty of beautiful women to watch as they cruised through the dinner jackets looking for new worlds to conquer, I indulged in my favorite sport — people watching.

Suddenly I was comparing this incredible sport (off-shore power boat racing) with model car racing. The only difference is money and promotion. Well, perhaps we can't muster the money that this international crowd can (Hennessey does not, after all, produce Kool-Aid, they

produce something a bit stronger and a trifle more expensive), and promotion does, after all, cost money also. However, in a smaller way we can pattern our hobby/sport after theirs.

For years I've been frustrated (along with other people in the industry) trying to come up with a way to promote slot car racing. Damn it anyway, it's such an exciting hobby that it's unbelievable that it's not bigger than it is! What's wrong? Why haven't we reached the heights that all of us know this industry is capable of?

Once slot car racing was a multi-million dollar a year business. There are still plenty of firms making big bucks out of it, but most of them are mass merchandisers (Aurora, Tyco, Cox, etc.). The equipment that is available now is just downright superb, and reasonably priced, too. Why then, isn't the industry growing?

Look around you. The number of 1/24 shops in the country, dwindling at an alarming rate for a few years, has stabilized, but I can't really say it's growing. The shops that are still in business are run by (usually) pretty sharp people. A good businessman is necessary to make a success out of any venture. The bad businessmen are gone; the good guys are still here. Needless to say, we really didn't need the other type anyway.

Our salvation lies in 1/32 and HO racing, plus 1/24 group racing. Where does pro racing fit in? There's a place for it, to be sure. Pro racing is to model car racing, what Can-Am racing is to SCCA "little guy" racing. Everyone would like to be able to drive like a pro. Every SCCA driver who pushes his MG around a track would dearly love to drive a Can-Am car.

Pro racing should be used to draw crowds, to interest people in slot car racing. Get them started in group racing (or 1/32 or HO) and let them work their way up the ladder, if they wish. Many drivers don't have the desire (or money) to go pro. It's not necessary, you know! If you set out to

be the very best Group 12 driver in the country, then you've got something to shoot for — you can be the NCC National Group 12 Champion, thanks to the new NCC series.

As far as MAR goes, I plan to go at it hot and heavy on HO, 1/32 and Group racing articles. Hard-core "how to" stories are planned, and each issue will be worth keeping as a reference guide.

We will not abandon pro racing, by any means. In fact, we've some very interesting pro articles planned by some of the hottest drivers in the country.

MAR is here to stay, as is the slot racing industry. We've all been through some incredibly tough times during the past few years. I've had enough personal setbacks to last me a lifetime, but I'm still here. So is MAR. So is slot car racing.

MAR is getting into more shops in Europe and Asia, thanks to a recent, rather novel way of introducing our publication over there. American slot racing manufacturers (our advertisers) will soon begin to enjoy the fruits of our labors along these lines.

We also plan to make MAR a more internationally flavored publication. Tom Wright, a Canadian, has the first of a series of 1/32 articles in this issue. We're opening lines of communication with overseas correspondents, and are planning a series of MAR/EUROPE races in 1/32 and 1/24 scales.

We've had our troubles; probably so have you. Life isn't easy sometimes, but it sure beats the hell out of what is in second place. We've got some interesting plans for you readers and manufacturers alike.

Thanks for sticking with us, through the past, very grim couple of years. I promise you it will be worth it, as the next few years promise great things for MAR and for slot car racing.

Support the N.C.C.

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Aj's has the high performance parts to make your A/FX Super.

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- Solid brass chassis
- New Angle Winder Gears
- Snap on/off McLaren type body
- Ready-to-run

\$8.95

The racing program the world awaited! Every part of the Winnwagen is new and contains many new futuristic engineering features. While the new Winnwagen comes equipped with the new Twinshaft Mabuchi 16D motor, any can motor will fit. The Winnwagen comes ready to run. Equipped with a snap on/off McLaren type body, it will feature solid brass chassis with new angle winder gears and new self-locking brass braid. The Winnwagen is a real step into the future!

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Team Champion regaining old form

"Team who?" That could have been the question just a few months ago. Once one of the most dreaded teams in slot racing, Team Champion had been inactive as late as February of this year. Then Bob Rule, gone from the reins of Champion for over two years, began to feel a yearning for competition after only a few months back on the job.

First came the "Ole Fashion Arco Race," held in Cincinnati. Rule called on two old friends and top racers of yesteryear, Dave Willits of Tampa, Florida and Eddie Simpson of Atlanta. He outfitted Ray Gardner and Bob Cozine with Pooch RTR's and took his entire staff and headed for the race.

Asked how the team did, he said, "They didn't even know we were there. Cozine and Garner went fast, but look what they had. I want to race and win with what I make and sell. Willits and Simpson ate it; we weren't properly prepared."

Then came the "East Coast Arco." Rule, Willits and Simpson came again, with Champion armatures this time. On one of the toughest tracks to drive in the U.S. (not just another King track, but a different, hard-to-drive custom track), Simpson, running as a semi-pro in only his second race in over three years, set fast time with a new Champion machine wound armature. Willits turned fourth fastest time in only his second race in 18 months. Simpson finished second in his race and Willits sixth.

Next came the **Miniature Auto Racing Nationals** at The Slot Shop in Elyria, Ohio, a race which annually draws more top name racers from coast to coast than any other race. To make the A consi is a feat in this race.

Simpson had a bad qualifying time and ended up in the B consi. It was run at 4:30 a.m. (his teammates were home, sleeping). He ate it, with no one to pit for him. Willits had sixth fastest time in the pro race, leading the semi by a huge margin with less than a minute to go (8-10 laps lead). His shunt wire melted and a lead wire came off. His car stopped, but he finished second and moved to the main. Dave qualified and raced a new Champion 24 wire (5824). He changed motors, raced a 40-minute main, battling Pepe (of Neat Things fame) most of the way for second. He got snuffed at the line for third by Walt LaBree of High Performance Equipment, and was relegated to a strong fourth place (not bad for a race which drew a record 127 entries).

Who beat Dave? Joel Montague, running a motor made up of Champion can-magnets. In second place was Pepe, running Champion can, magnets and armature blank set up by Steube. And in third place was Walt LaBree, running Champion can, magnets and armature blank set up by High Performance Equipment. In fact, the entire main event was made up of Champion cans and magnets, eight for eight.

Russ Boyington, whose company, "Bullit Motors" has been engaged in some very heavy armature testing for Champion, recently announced that

Continued on page 5

TK 521 \$1.70



Excuse use of excessive force of life of high performance Indy Radicals.

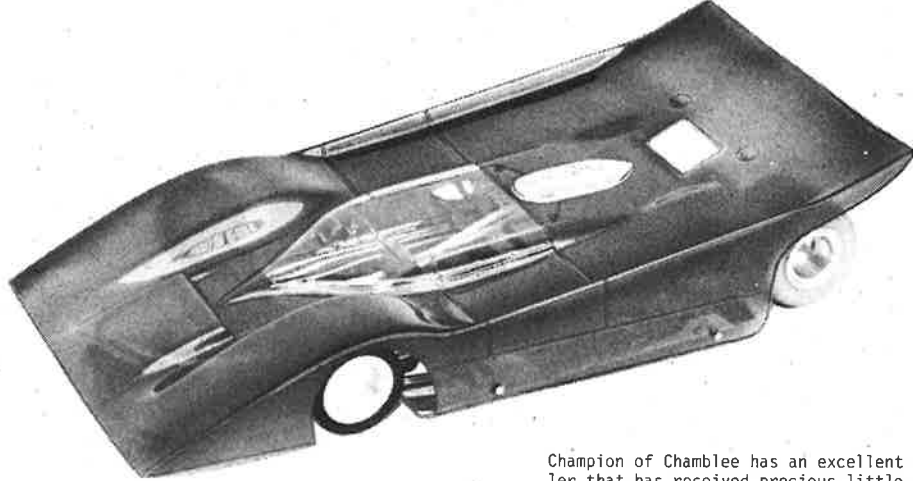
Aj's H.O. scale "Indy Radicals" have been out long enough now to prove their value on H.O. tracks all over the world. Featuring a new type of rubber (labeled "WINNSPONGE" by Aj's), carefully fitted to a telescopic wheel that is beautifully balanced, the "Radical" is

TK 520 \$1.50



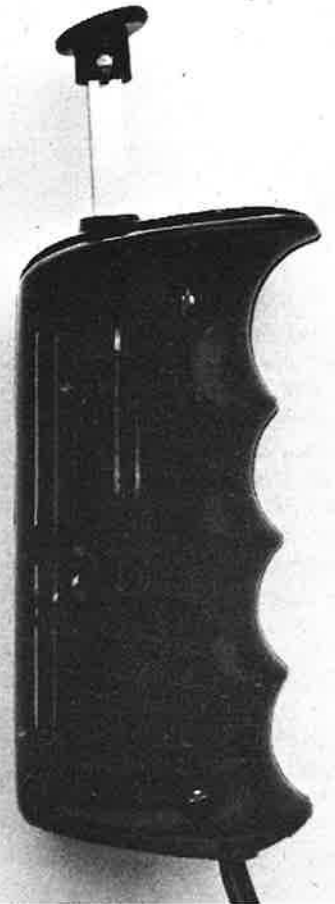
Excuse use of excessive force of life of high performance Indy Radicals.

27 scale inches wide. The diameter is .475" and the width is .312". Available in set-screw configuration (left) complete with set-screw axle, set-screws and wrench at \$1.70, or threaded, complete with threaded axle and jam nuts, at \$1.50.

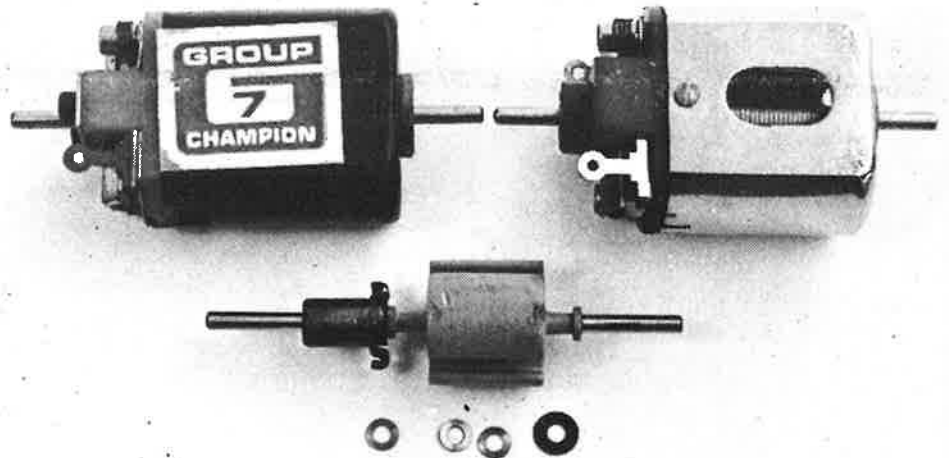


Check out Champion's new Group 15 ready-to-run at your nearest raceway. Selling for \$19.95, it features a rod chassis, Challenger motor with super Arco magnets, bullet-proofed endbell, Arcolite axle, S.S. wheels and a sports car body. Legal for all Group 15 racing. It's also available in kit form for just \$16.95.

Champion of Chamblee has an excellent controller that has received precious little fanfare so far. Featuring a 5-ohm resistor, it's perfect for Group racing. Translucent "Arco Blue" in color, it comes complete with three alligator clips. \$8.95 at raceways everywhere. If you want to change resistors, they're available in 5, 8, 12, 15 and 65 ohm units. We suggest you send 25¢ for the most complete catalog of slot racing parts imaginable. Champion of Chamblee, Dept. MAR, 5620 New Peachtree Rd., Chamblee, Ga. 30341.

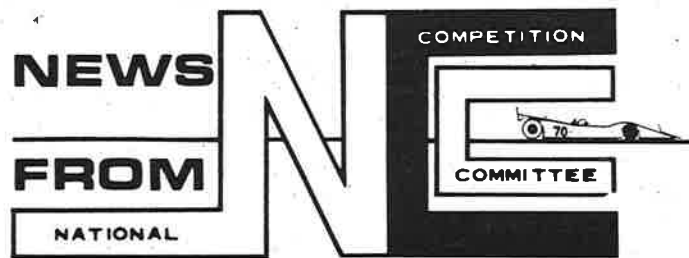


Aj's Iso-Flotation pan for the A/FX is now on the market. It's precision machined to snap on to the bottom of the A/FX chassis to put the added weight at the lowest possible point. It is engineered so that anyone can easily install or remove it. 60¢.



Champion also has motors (and they're back in a BIG way judging from the latest "Big Bucks" races around the U.S.). From left to right is their Group 7 motor and Group 12 motor. The Group 12 is a 26-D fitted with Arco magnets. Each motor is hand selected for rpm's

and smoothness. Legal for all NCC Group 12 races. \$7.95. The .006 Hi-Rev stack with drill blank shaft (unwound) that is shown is pre-coated using Champion's new "DelHi" coating. Their "ChampTreat" comm is included too. \$4.99.



N.C.C. RESULTS - 1ST 10-WEEK SERIES WINNERS

TRACK	RACER	REGION 1		POINTS
		RACE	POINTS	
Oakland	Fast Eddie	12	40	
Oakland	Paul Stewart	H0	34	
Oakland	Mad Dog	20	37	
Empire	Jim Bowes	15	27	
Hobbies	Tim Burgess	20	30	
REGION 2				
Parkway	Brian Houston	12	10	
Parkway	Rod Stumer	1/32	10	
Parkway	Gary Santa	H0	10	
Grand	V.C. Santiago	15	64	
Prix				
Grand	Rod Allen	1/32	44	
Prix				
Parkway	Scott Stewart	15	10	
REGION 3				
B&E Rcw	Kraig Dayton	12	20	
B&E Rcw	Rick Sloan	20	20	
LeMans	M. Loewendic	15	24	

Slot Shop	Ron Keener	1/32	20
Slot Shop	Ron Keener	12	14
Parma	Bill Balog	12	66
Parma	Don Andrews	H0	(tie)61
Parma	Bob Tonsik	H0	(tie)61
Minks	Dan Irwin	12	10
Minks	Dan Irvin	1/32	10
Minks	Mark McGuire	20	10
Minks	Steve Smith	H0	10
HobbyFair	Rick Maher	15	61
HobbyFair	Pat Brewer	1/32	70
STP	Alan Masley	15	10
STP	Virgile Bech	12	10
REGION 4			
RacePlace	Ronnie Snow	12	60
B&J Rcw	Steve Buccilli	15	24
Mr. B	David Laveck	12	10
Mr. B	Dave Willis	20	10

These NCC placques have been mailed to the winners of each classification, in each region. (No results have been received yet for the second 10-week series. We will print them as soon as we have them.) The third 10-week series begins the first week in October.



MAR
Tech
TIPS

CHAMPION OF CHAMBLEE

By Bob Rule

Plans for our fall and winter race sponsorship are not yet finalized. There will be at least two Arco races, but no location has been decided on. A central location for an annual event is being considered, but no decision has been made.

A group 20 race package is almost ready and any shop that is interested in running a Champion Group 20 race series is invited to write for details. The race series will be for the Original Group 20 only - one chassis (the original Gp 20) and one armature (a Champion Gp 20). We double code our Gp 20 armatures for easier tech inspection. An orange coating is used on the armature blank before it's wound, and then the N.C.C. Gp 20 tag goes on after it's finished. A racing jacket and plaque are part of the prizes. Posters, race charts, etc. will also be furnished.

Our armature line is expanding almost faster than we can tell you about it. The first thing I did when I returned to Champion was call all of the rewinders using our components

(Steube, Wittenhauer, Ford, Pooch, Boyington) and asked them what the latest hot set-up was. Our engineer Rick Jordan took all of this information and updated our entire motor line to 1973½ standards. Then our own Charlie Brown set out to produce the hottest armature line in the industry and I think he's done it. Rich and Charlie have worked many long hours on the project. We have a new Group 15, updated Gp 20, all new 24-25, 26 wire combos, both hand-wound and machine-wound. Our stock No. 5825A (25 ga) and No. 5824A (24 ga) are hand-wound and extremely fast and dependable at \$12.00. Our No. 5835A is a machine-wound Group 7, 25 gauge, at \$12.00. No. 5826-A is Rocket 26 wire at only \$7.95.

Our new magnets are distributed all over the country now, and being accepted by almost everyone. At the recent Western States Race all eight of the pro main and amateur main entrants were using Arco magnets, both Blue Dots and White Dots. Mura now uses White Dot magnets in all their motors (can anyone remember back before there was an Arco Magnet?).

Our motor parts are being used more and more in pro set-ups. Bill Steube now uses our .006 blank and Arco magnets in all his race set-ups, as well as in all the Group 7 armatures and motors he sells.

Our new jig wheels will make chassis building or straightening a snap. They are available in 5/8" - 13/16" - 3/4" - 7/8" - either in pairs or



Champion jackets are now available at your local raceway for \$10.00 each. Colorful and sharp looking! (Dealers - Write to Champion for special dealer price.) Champion of Chamblee, Dept. MAR, 5620 New Peachtree Rd., Chamblee, Ga. 30341.

sets of four, any combination. Each set comes with axle, set screws and a 3/32" reducer so the wheels can be used on either 1/8" or 3/32" set-ups.

Our new 3/32" - 5/8" O-Ring front tire is the lightest on the market (we think). Available in both our blind hole hub and regular No. 392-\$1.69.

Our Arco juice is being used widely now by racers, not only to clean up the over-glued tracks, but to clean their pick-up braid (and some even use it on their comms). A 1-oz. bottle is only \$.79 - No. 2920.

Each month we'll try to keep you abreast of new products and happenings and product uses around Champion.

MAR
EVENTS

FALL CAN-AM SERIES
Rosecrans Raceway, 123 N. Tamarind Ave., Compton, Ca. 90222. One race each weekend (Sat.) for Group 27 cars. Series extends through the actual Can-Am series. 1/2 of each week's entry fee is set aside until the end of the series. Other awards from manufacturers. Races start each Saturday at 7pm. Eight, 3-minute heats in the main. Entry fee is \$1.50 each race. Points awarded on 9-7-6-5-4-3-2-1 basis, with 1/2 point for all other entrants. 20 races - best 16 finishes count toward the point total.

OCT. 20, 1973
USRA OPEN
Crash & Burn Raceway, 19751 Sherman Way, Canoga Park, Ca. 91306.

OCTOBER 20, 1973
1973 Indiana HOPRA race
644 Merwin St., Louisville, Ky. Contact Geo. Sherlock, 502-634-4880 (Southern Series).

OCTOBER 20, 1973
Group 7 race, Broadway Hobbies, 1506 S. Shaver, Pasadena, Tex. 135' custom track.

OCTOBER 20, 1973
TRI-STATE "BIG SIX" SERIES RACE
Del's Raceway, 3197 Linwood Ave., Cincinnati, Ohio 45208. The third of a series of six races (all to be run on the third Saturday of each month). Points will be accumulated to determine the top 16 places. The top 16 will then have a run-off on Saturday, Jan. 26, '74. The best four finishes will count toward your total, with a mandatory three entries. Each race, the entry fee will be divided as follows: 40% to the track, 40% to the series kitty, 10% to first place (that night), 6% to second place and 4% to third place. RACE DIRECTOR: Art Dietrich, 5850 Farlook Dr., Cincinnati, Ohio 45239. Ph: 513-521-7622.

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NOW!

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The best rear rubber available

- No. 415 1/8 AXLE 7/8 O.D. Pr. 1.50
- No. 415B 3/32 AXLE 13/16 O.D. Pr. 1.50

New front wheels

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- No. 67 1/8 AXLE 3/4 O.D. Pr. 1.50
- No. 31 JET BRAID Pr. .25
- No. 408 RACER'S BRAID Pr. .35
- No. 54 JET GUIDE 25
- No. 999 GEAR PULLER 1.85
- No. 19 LEAD WIRE 39
- No. 20 LEAD WEIGHT 49
- No. 24 DROP ARMS 1.19
- No. 25 BAT PANS 1.19
- No. 502 3/32 HARDENED AXLES 45

NEW - NEW - NEW

- No. 5100 LGR SHUNTED BRUSHES 79
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|-----------------|------------------|-----------------|
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| ASSOCIATED | CAMEN | T.C.P. HO PARTS |
| CHAMPION | LEE GILBERT | SUPER II |
| PARMA | AGUIRRE | AURORA AFX |
| MURA | KING KONTROLLERS | TYCO |
| FAAS GEARS | BIG "O" | RIGGEN |
| M.A.C. | SPEED/SPORT | A.J.'S |

Send 35¢ for catalog, be sure to tell us what scale you want. We ship anywhere in the world. For overseas, double for postage.

WE ALSO SUPER ZAP MAGNETS AS GOOD OR BETTER THAN NEW — 50¢ pr. Both 1/24th magnets & the new AFX & Super magnets in HO.

SHOP OWNERS ATTENTION!

We are now Distributor for Champion, Faas, Associated, Aguirre, TCP, Neat Things, Big "O", Go Eng., Lee Gilbert, Camen, Green Sinks Controller Bolts. More to be added soon.

MAR
PROFILE

Club racing is alive and well in Trenton, N.J., thanks to the Mercerville Slot Car Club, located at 315 Montana Ave., Trenton, N.J. 08619.

Races are held every Tuesday evening. Classes include Sports,

Grand Prix, Modified Stock, and NASCAR. Each event is usually five minutes long, with a 10-minute feature and a consolation race.

The track is approximately 96' in length, with four lanes. Power is by a 12-volt car battery. Lap counters and a Galab timer complete the setup.

The track itself is made up of Tru-Flex rail and rubber road bed, with Gypsum Hydrocal cement poured for roadway. The result is a no-maintenance track, except for occasional cleaning.



TEAM CHAMPION
Continued from page 3

he will be using Champion's new "Eliminator" series armatures in his custom motor setups.

The decision was made after Russ tested a batch of the new Champion armatures and noticed virtually no difference between them and the ones supplied to him by custom winders (Russ does no winding). Bullit Motors are custom motors using other manufacturers' armatures.

"They looked and sounded so good I had to try one in a race," he said.

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Cobra gears in 32, 33, 34, 35 and 36 tooth - 59¢. Special built cars on request.

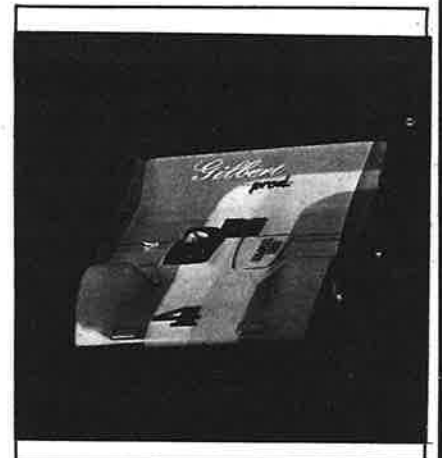
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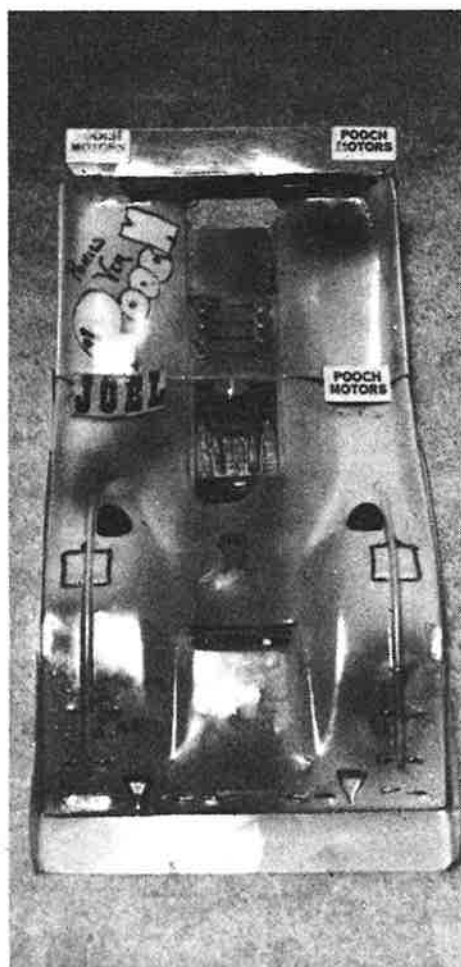
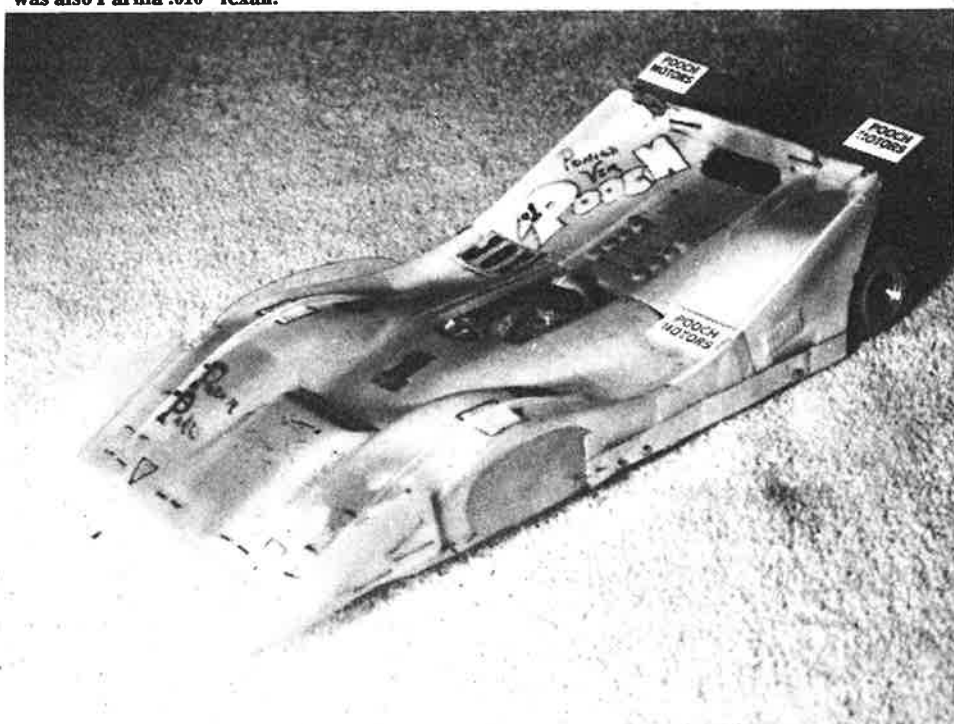
MONTAGUE WINS M.A.R. NATIONALS

When the dust settled over Elyria, it was (once again) "Mr. Wizard" who proved he is still the King of Model Car Racing.



This photo, taken during the pro sign-ups, could have easily been taken after the main. Note the happy looks on the Camen crew, Jan Limpach (Mr. "Eight-Eighty-Eight") on the left, and the pro main winner, Joel Montague, on the right.

Body was a MAC/Lancer Porsche 917 that Joel painted himself. A Sundance interior was used. Instead of a large hole, vents were cut in key areas to prevent the marshalls from catching their fingers in them and pulling the car back out of the slot. The body was cut behind the driver's area and lowered in the center and then reinforced with Parma lexan. Shovel diaplane was also Parma .010" lexan.



By Jim Bandagski

Well, you heard about the Western States, about how hot and miserable the weather was, how the timer acted up, how the Beautox was making the track Greaser City, how many of the top pros sat around wishing for an earth-quake to hit, how it was a royal East-West drama. Well, what would you say if I told you that it happened again . . . almost!

The site was the **Miniature Auto Racing Nationals**, the Midwest (now known as the Mid-Coast, and don't forget it) Big Buck Bang. The first two races of its kind were held at Parma International raceway. This year it switched to the Blue King track at the Slot Shop in Elyria, Ohio, run by Paul and Donna Hubbell.

Everything was set. The track was original surface but reworked just prior to the event. Because of the lack of big races since the Hubbells put the King in, the lap record stood at 4.07. A few laps around the track a week before the race told the locals that the record didn't stand a chance. And to boot, Paul sent the timer out to be calibrated to make everything neat. That's where the fun started.

It was obvious that this was going to be the biggest race that the Slot Shop had ever hosted. It was. 123 entrants signed in for the two-day event of the Labor Day weekend. There were all kinds of rumors going around on who was coming and when he would probably show up, so we all sat around and waited as the race week rolled around. And as we waited, we began to feel the effects of the warmest days of the year.

The first group to roll into town was the San Francisco syndicate, on Tuesday. From the instant they hit the track, Steve "Spider-Man" Kessler, Al Chuck, and the Aguirres showed the home crowd what Beautox was all about. And there was no way that you weren't going to see it if you were there.

Through the middle of the week, a few more familiar faces began to show up. If you were from the West, you came early to waste your glue; if you were from the East you came late and didn't do a whole lot of running. It was something that was just noticeable.

Came the day of the race. Around the Midwest area, the format for running races is to reserve Saturday for non-pro drivers and Sunday for the pros. Each group qualified and raced on their day with the field of non-pro drivers being split down the middle to form a B and a C group. Pros ran as a A group. For Saturday, 78 hopefuls took to the track for a crack at the tons of race goodies being given to the track.

The timer that had been promised to be back in plenty of time never showed up. Fortunately, Paul Hubbell found one that he could borrow. Unfortunately, it didn't like the warm weather any more than some of us did. So, as usual, there were some grumblings on Saturday about the times that were being read off. It took a couple of attacks on the innards of the timer before some people were satisfied.

But timer or no timer, one thing was obvious. Some people just didn't have it together. They weren't going as fast as they thought they were and were content to blame it on the timer. But you could see it when they ran.

PRO RACE.

1. Joel Montague-471
2. Philippe de Lespinay-463
3. Walt LaBree-451
4. Dave Willits-450
5. John Laster-443
6. Don Aspenson-410
7. Gary Cooper-395
8. Tom Pumpkin-262

SEMI-PRO RACE.

1. Don Aspenson-419
2. Mitch Rader-416
3. Dan Dougherty-397
4. Jim Bandagski-381
5. Rande Marshall-372
6. Dave Field-343
7. Rod Strummer-293
8. Tim Critchfield-220

AMATEUR RACE.

1. Rich Akard-199
2. Ray Nunes-195
3. Ron Kenner-185
4. Sam Shields-179
5. Mark Garrett-172
6. Bobby Crissy-155
7. Dave Barker-129
8. Martin Morrison-121

Now this part is a bit of personal theory, but it seemed that many of the racers on both days had themselves a bit psyched. Nobody wanted to run anything conventional or normal. Guys were almost going crazy trying to outdo the next guy in who had the weirdest chassis or the most improbably gear ratio. That and the funny track surface and a half-dozen different kinds of additives were really beginning to hurt some guys.

Some guys did make it however. Top time for the day went to your truly, with a 4.13. The other sitout spots in the B main went to Rod Strummer of S. Dakota, Rande Marshall from the Tri-State area of Ohio, and Tim Critchfield, also local. When the field had been divided, Martin Morrison became top man for the C group, a 4.70.

The C group ran from the E consi. When the 20-minute main had finished, Rich Akard from the Indy area was the winner by four laps over Ray Nunes of Toronto. Third was Ron Kenner, fourth Sam Shields, fifth Mark Garrett, sixth Bobby Crissy, seventh Dave Barker, and last was Martin Morrison.

By the time the B main was over it was 8:00 in the morning. And with the rays of sunlight, Don Aspenson had waged a fight back and forth with Don gaining a commanding lead and then running into trouble. But then everyone was in trouble as crashing was heavy-sided. It was nineteen laps from second to third where Dan Dougherty had finished. Fourth was Jim Bandagski, fifth Randy Marshall, sixth Dave Field, seventh Rod Strummer, and eighth Tim Critchfield. Most of them were to return the next day, especially Aspenson.

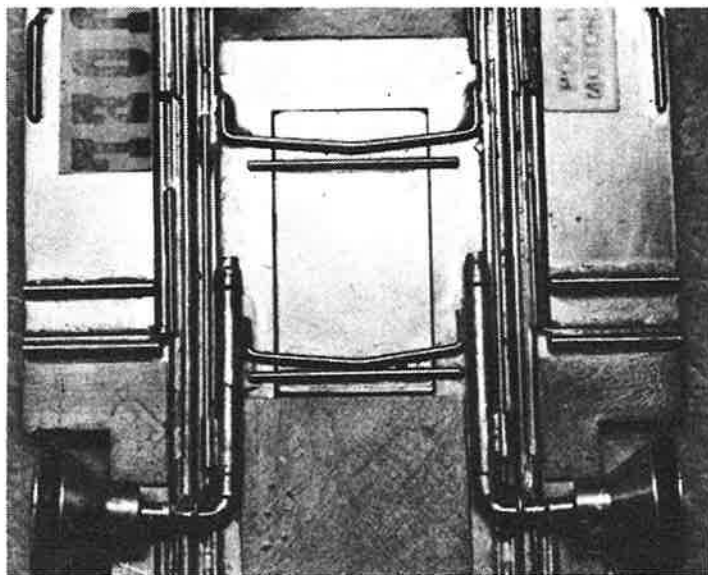
After a few hours break, the pros were ready. We got out of the track at 8:00 and it was re-opened at 12:00 for sign-ins for the next group. It was a bit warm, as a most impressive field put their money down. 45 drivers had entered when it had finished. Too bad the times weren't as impressive as the field.

Philippe was probably the most impressive in practice before the race day, but then a lot of drivers were not showing what they had. It was before a handful of hangers-on that Mr. Wizard, Joel Montague, showed that he was refreshed and the man to contend with, as usual. He, too was running a funny car, meaning unusual set-up, but he also had his act together. Most everyone else didn't. But then Philippe had his own act. At about the halfway mark of his qualifying session, he wanted a power change. Yes, he got it and a 4.12 for his efforts. Good enough, for a while at least.

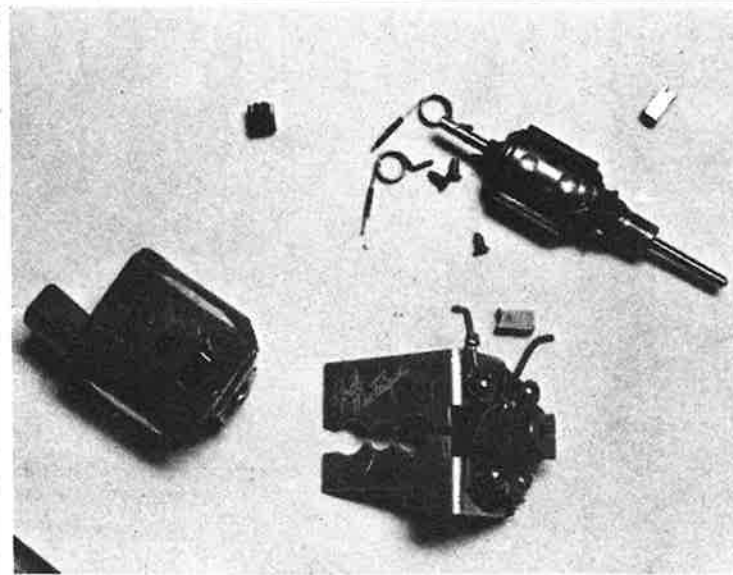
Top time at that point had been a 4.29 by Dave Willits, and the field was half gone. It was almost all gone when it finally happened — the track record was broken. Somebody had made his way through. Yes, Joel had added another to his collection with a 4.05 with a back-up of 4.09. The Frenchman was almost bumped to third starting spot by John Laster, who you all know is also a Camen member. A 4.13 was the best though, and Montague missed a one-two starting spot for his crew.

The rest of the gang was in trouble, but then who wasn't? Don Aspenson

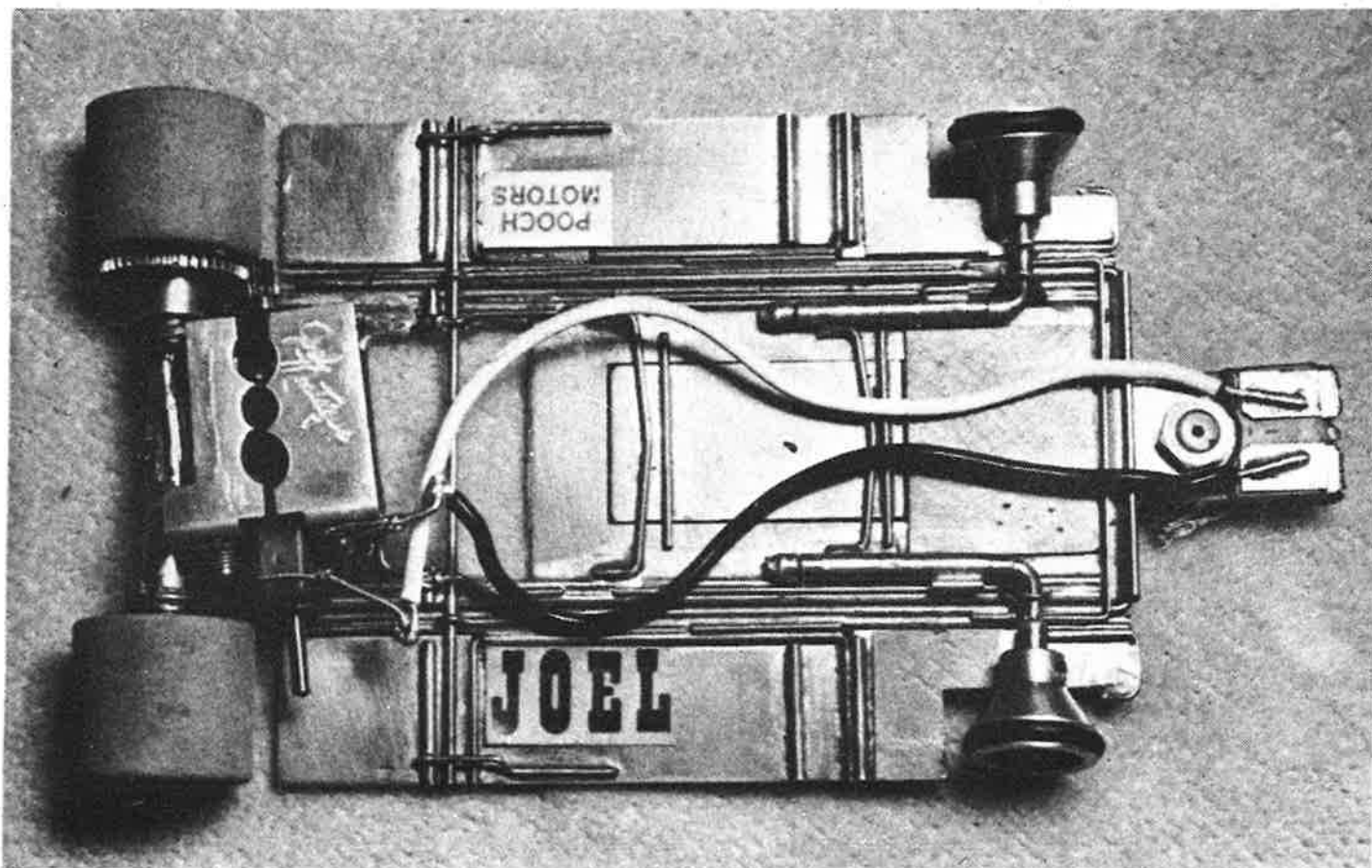
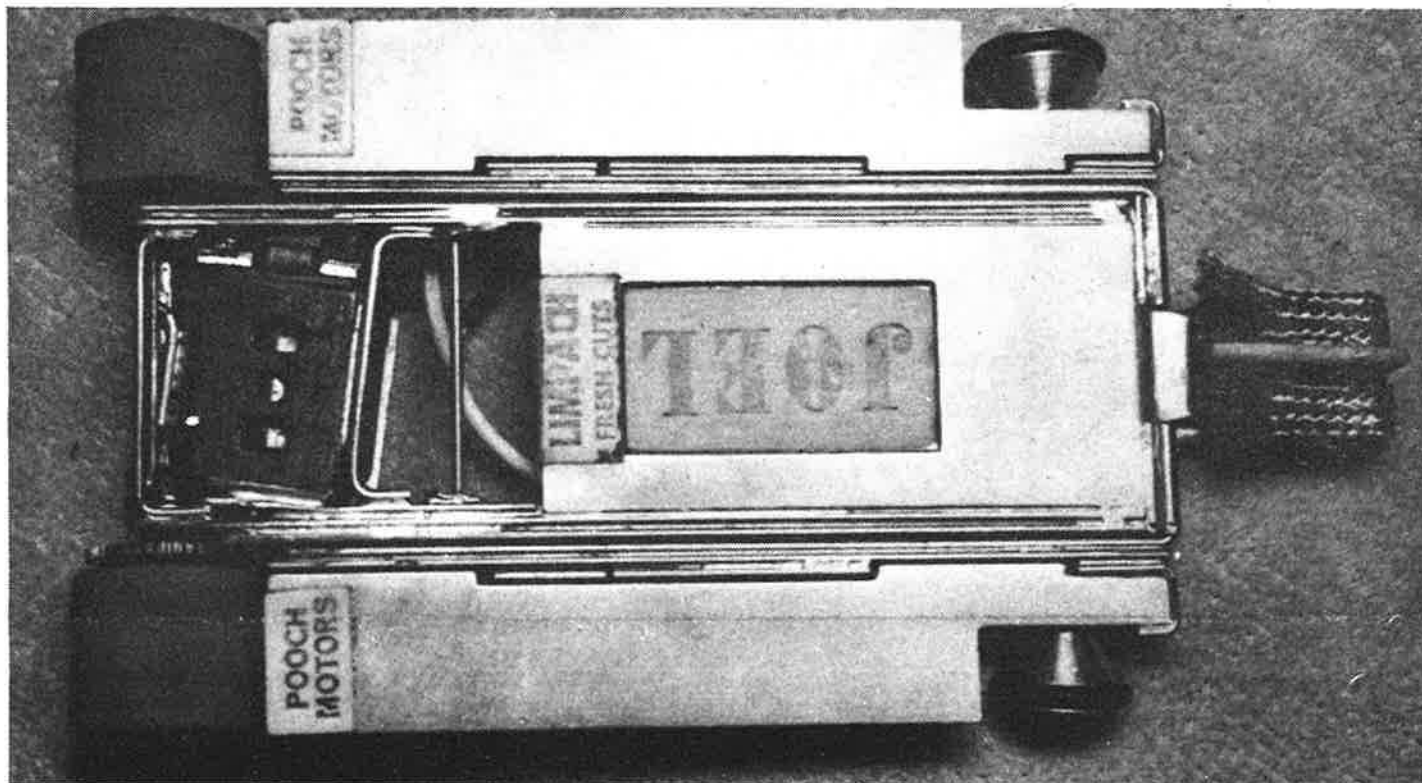
Continued on page 12



Close-up of front end system. The toe-out feature has not been proven yet, but is same theory as used in dirt track racers in 1:1 scale. Note the combination of spring and up-stops on front wheel set-up.



Motor was a Pooch Limited Edition 26-27 cut and balanced by Camen. Stack diameter was .510". White Dot magnets were used without shims in a Camen Champion can and endbell set-up with an air gap of .530". Mura endbell hardware was used with the exception of Pooch buss bars. The gear ratio was 8/42 with Limpach 13/16" tires.



Chassis was designed and built by Joel Montague to specs by Jan Limpach. Termed the "Tripod Iso," it offers the best features of the Diamond and the Iso chassis. Joel feels that this is the best front end set-up going. Note center "clicker" in the drop arm. A sliding weight was used in the hole to dampen vibrations. This was first used by Camen teammate, Mitch Kiel. Name of chassis is derived from the three support points formed by the guide and the two front wheel pivots. Car, however, showed excessive wear on the guide. All components are Parma.

By the MAR staff



1) You get more than just a car when you buy a Winnwagen. Included is a complete accessory kit containing a set-screw wrench, double ended wrench for adjusting jam nuts and guide flag nut, plus washers and screws. Incidentally, the Winnwagen comes as a complete ready-to-run for \$8.95, or complete except for motor, for \$5.00.

2) The top view of the brass chassis shows the rugged features of the Winnwagen. Note the use of the latest new low profile 3/16" shank pickup with hex nut for fine adjustment. Self-locking braidclips with new solder-on/clip-in features are used. The new motor mounting system allows any and all can motors to be used. The standard motor found in the Winnwagen is Aj's Twinn-shaft Mabuchi 160-D, featuring a thick can, wide brushes, stronger magnets and hard-to-melt endbell.

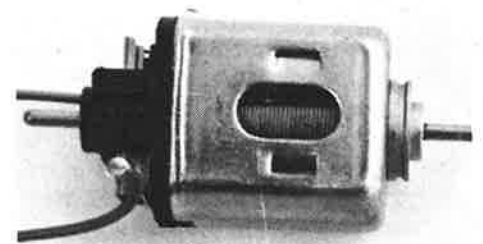
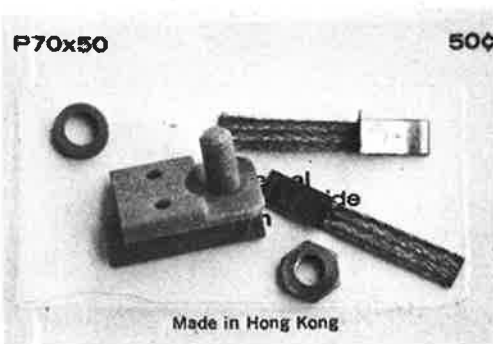
3) The bottom of the chassis shows off the motor mounting method. 1/8" ID shims are used for precision gear adjustment. The Winnwagen has a standard body that is virtually indestructible. You can replace it easily with a concours-type clear plastic body, for serious club racing.

4) The Winnwagen chassis can be purchased separately for just \$2.50, an unreal bargain for scratchbuilders. Complete plans and parts are included for ALL can motors, too.

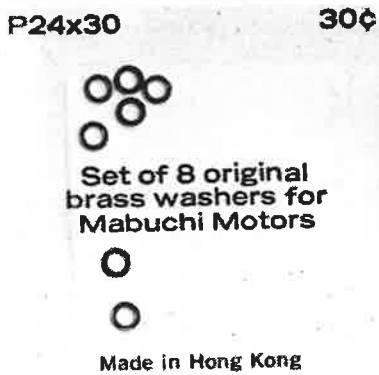
5) Extra accessories include the Winnflag, complete with threaded guide pin, hex nut, multi-strand Winnbraid and clips, for 50¢. The braid is also available individually for 25¢.

6) Aj's Twinn-Shaft 160D motor is a ballbearing can incorporating stronger magnets, hard-to-melt endbell, wide brushes, leadwires and C-clip. Holes for #2 self-tapping screws are in the endbell. \$4.00. The replacement Twinn-Shaft armature (fits all 16D and 160D motors) sells for \$1.50. The motor brush and spring set sell for 40¢; the brass washer kit for 30¢.

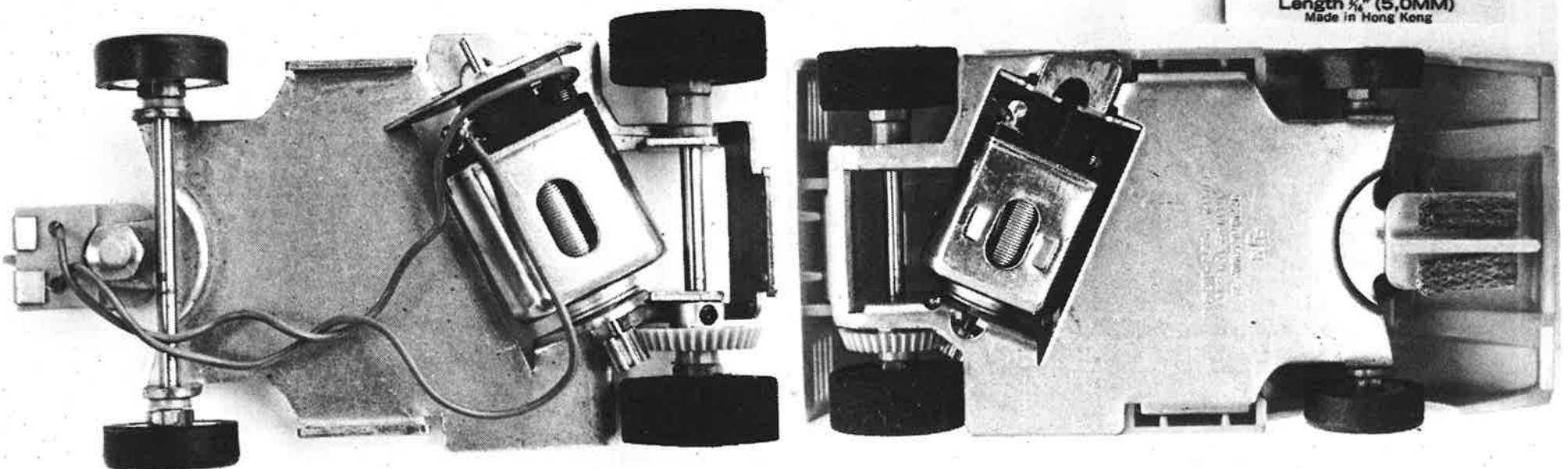
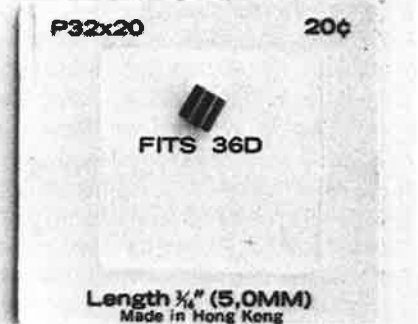
7) A 34 tooth anglewinder gear (48 pitch for 1/8" axle with set-screw) is available for 50¢. Eight tooth brass pinions (48 pitch) for .078" or .091" shafts (each 3/16" + .5.0 mm long). The .078" are for 16D, 26D and Mura type motors; the .091" for 36D motors. Priced at 20¢ each. Not shown, but also available is an injection molded 1/4" O.D. spacer and brass shim assortment for 1/8" and 3/32" axles and 3/16" guide pins. The nylon spacers are self-lubricating type. 50¢. Axles and tires and wheels? Of course! We suggest you send a long self-addressed stamped envelope for Aj's latest 1/32 scale catalog, to Twinn-K, Inc., Dept. MAR, P.O. Box 31228, Indianapolis, Indiana 46231.



MAR PROFILE



Twinn-K, Inc., of Indianapolis, has long been a noted manufacturer of superb 1/24 and H.O. slot racing equipment. Their new 1/32 scale line features top-notch quality control and reasonable prices, and it's backed by a racing program which promises to push 1/32 scale racing to the forefront of slot car racing in this country. Take a look at Aj's "Group 32" line-up of mid-scale machinery.

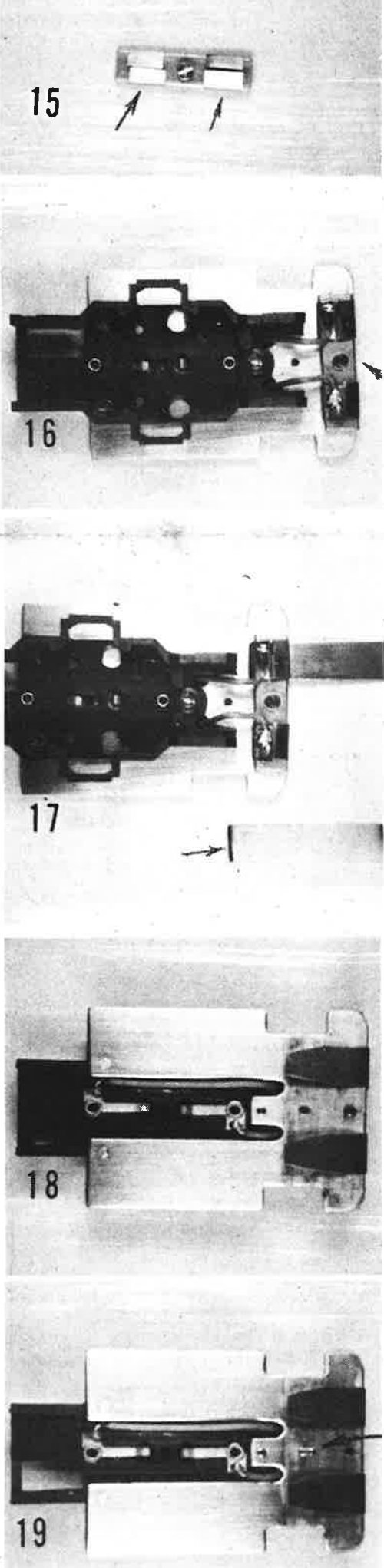
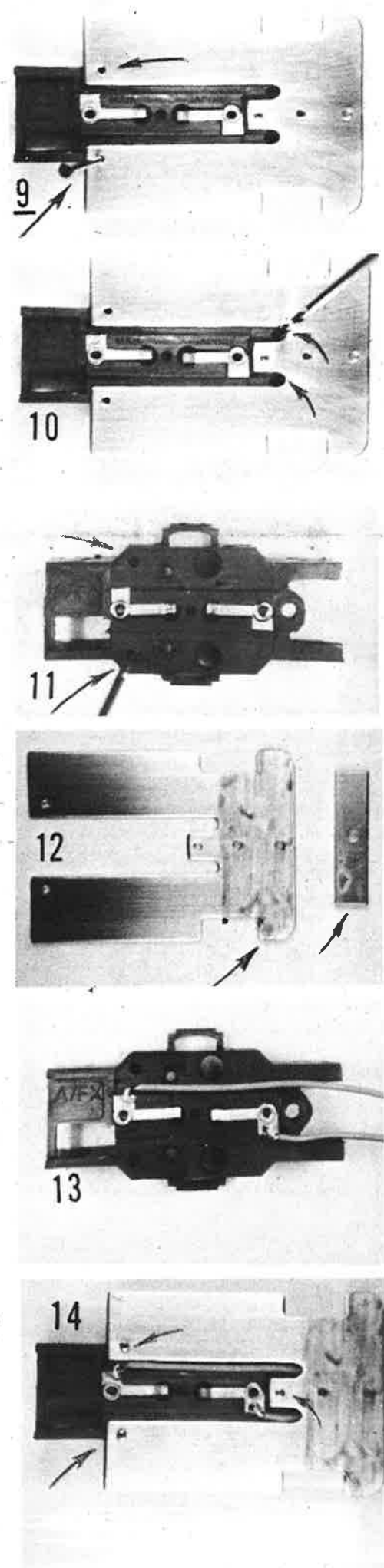
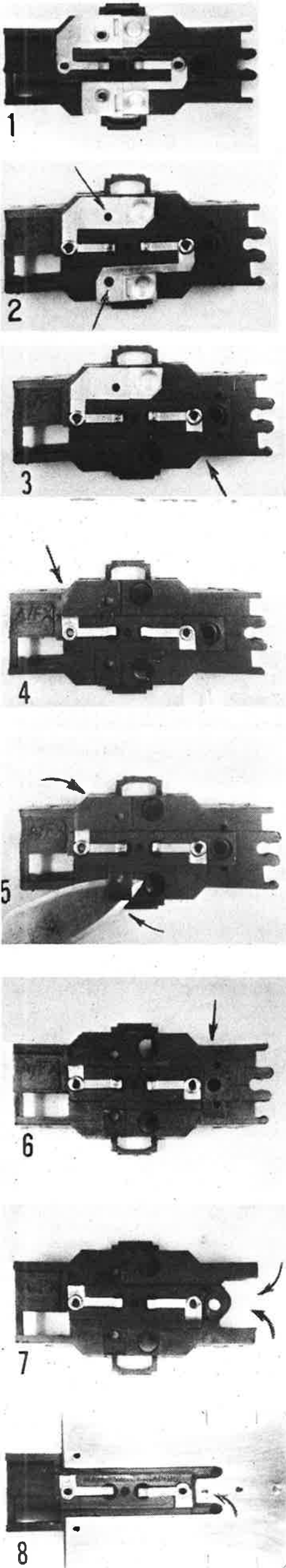


"PANNING" FOR GOLD



Photos by Marty Thalison

The installation of a suitable pan on your A/FX can provide you with the handling necessary to get you into the winner's circle — and the "gold" (trophy, that is). Here's how to mount T.C.P.'s Super "Pro-Pan" — the right way!
By Tom Coyne



- 1) Completely disassemble the A/FX car, or start with a new A/FX chassis.
- 2) Cut off, or drill out, the rivets which secure the pick-up holders in place and remove the pick-up holders.
- 3) Cut off the right brush spring with a sharp X-Acto knife.
- 4) Cut off the left brush spring with the same knife.
- 5) If the knife is still sharp, use it to shave off the raised portion of the chassis which was hidden by the brush spring holders.
- 6) Knife still sharp? Good! Now shave off the raised portion of the chassis at the forward body mounting screw hole.
- 7) Cut the front of the chassis as shown to make room for the motor lead wires and the new guide pin. Note that photo shows exactly how much to remove. (You don't have to be this fussy, but it helps.)
- 8) Remove your new Super Pro-Pan carefully from the package to avoid losing the small screws. Use one of the small screws to mount the chassis to the pan, temporarily, through the body mounting screw hole. Install the screw from the top side of the chassis.
- 9) Be sure the pan is on straight before proceeding. Hold the nail, from the kit, with a wooden clothes pin. Heat the nail and push it through the chassis, using the two threaded holes at the rear of the pan as guides. Do not discard the nail at this time, because you might want to use it as your guide pin.
- 10) Drill two 1/16" holes in the forward portion of the chassis for the motor lead wires.
- 11) Remove the Super Pro-Pan and enlarge the holes made in Step #9 with the 1/16" drill.
- 12) Tape the forward portion of the Super Pro-Pan and the brass wiper holder with Scotch plastic mending tape to prevent shorts.
- 13) Polish the ends of the A/FX brush springs with an ink eraser. Now, carefully solder one end of each piece of wire to each brush spring. See photo. Do not use too much heat, as you may melt the chassis. Bend the wire up through the forward cut out area in the chassis. The motor lead wires may fall away from the chassis, so secure them in place with tape, epoxy or plastic cement.
- 14) Mount the Super Pro-Pan by installing the small screws from the top side of the chassis. Install the forward screw first. After installing the two rear screws, be sure none of the bare motor lead wire touches the pan.
- 15) Cut a half-inch piece of the phosphorous bronze wiper material from each wiper and fold them around the wiper holder. Be sure the wiper holder has been wrapped with insulating tape such as the Scotch mending tape.
- 16) Mount the wiper holder to the Super Pro-Pan with the remaining small screw. Clean the bronze which is wrapped around the wiper holder (Step #15) with the ink eraser. Cut off the excess motor lead wire and solder to the wiper holders. See photo. Do not use too much heat when soldering.
- 17) Fold up the back edge of the wipers approximately 1/32". This will prevent them from falling from under the wiper holder. Loosen the wiper holding screw and slide the wipers between the holder and the pan. File the screw flush with the bottom of the pan after tightening. Be careful not to tear off the insulating tape from the pan. Be sure wipers are completely insulated from each other. If they short out, your controller will burn up!
- 18) Trim the wipers to within one-half inch from the pan and cut to your favorite shape. (A tapered wiper seems to work best.) Fold the wipers flat against the pan. The wipers may work a little better if they are at a slight angle, rather than flat against the pan.
- 19) Install the hex head bolt in the pan for the guide pin. File the sides of the bolt for smooth operation in the slot. The nail from the kit can be soldered to the pan in place of the hex head bolt, although both are too long and will have to be cut off. Your Super Pro-Pan is now completely mounted, so reassemble your car and go to it.

NOTE: The T.C.P. Super Pro-Pan is available for \$1.25, in .025" or .032" brass (complete with hardware) at most hobby shops. A self-addressed, stamped envelope to T.C.P., 210 West Main St., Otisville, Mich. 48463 will get you a price list of the latest T.C.P. goodies.

TOOLS REQUIRED:
X-Acto knife; emery board; small flat file; ink eraser (pencil type is best); soldering gun and solder; wood clothes pin; 1/16" drill; small screwdriver; T.C.P. "0" wrench; Scotch plastic mending tape.

THE "JIG THING"

If you're into the H.O. scratch-building bag, sooner or later you're going to want a building jig to assure that the chassis you're building is true and in perfect alignment. Here's how. By Dale Flanagan

The jig shown in this article is the type that I've been using for scratch-building for quite some time. It's simple to build, easy to use, and assures you a straight chassis. (If the car doesn't have parallel axles, it won't handle right, and will "crab" down a straight, or during braking.) The jig is very similar to the type used by 1/24 scale racers. In fact, for the base of my jig I used an old slate block that I used to use for 1/24 scale building.

Construction of the jig is simple. Just cut out the paper pattern with this article and use rubber cement to glue it down to a suitable base. A 1/24 slate jig block is probably the best thing to use, but any suitable base that is absolutely flat and fairly heat resistant can be used. A table top is not recommended!

The holes in the jig base are 1/16" in diameter to fit the 1/16" wire jig pins. Both the jig pin holes and wires have to be straight or things just won't line up right. For this reason I used a Dremel drill press stand to drill the jig holes and cut the jig wires. The Dremel rig is the best possible for the serious H.O. scratch-builder.

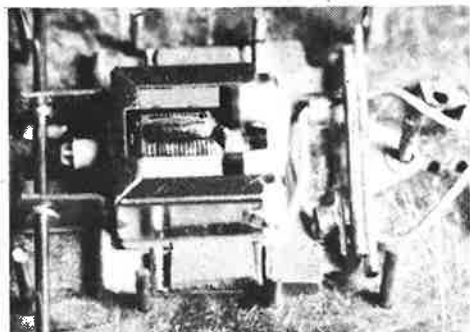
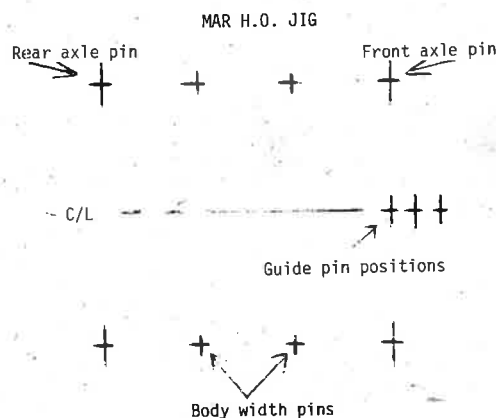
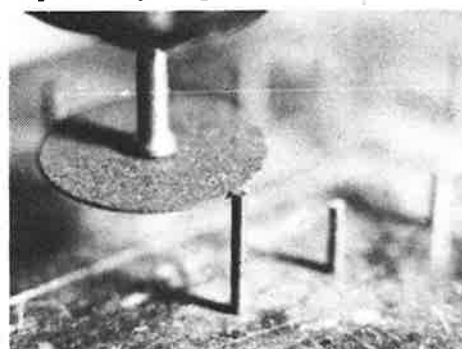
The jig is spaced to give a car 1 5/16" wide, with a 1 7/16", 1 1/2", or 1 9/16" wheelbase and a guide lead of 0", 1/8", or 1/4" from the front axle. I usually use the 0" or 1/8" pin position and 1 7/16" wheelbase when building a car. This size wheelbase and guide pin lead will fit most competition type H.O. bodies.

Two pieces of 1 3/4" long 1/16" wire act as jig axles. If you want independent rotating front wheels, you can use a piece of 1 3/4" long 1/16" pin tube for a front axle and trim the tube down to the proper width after building.

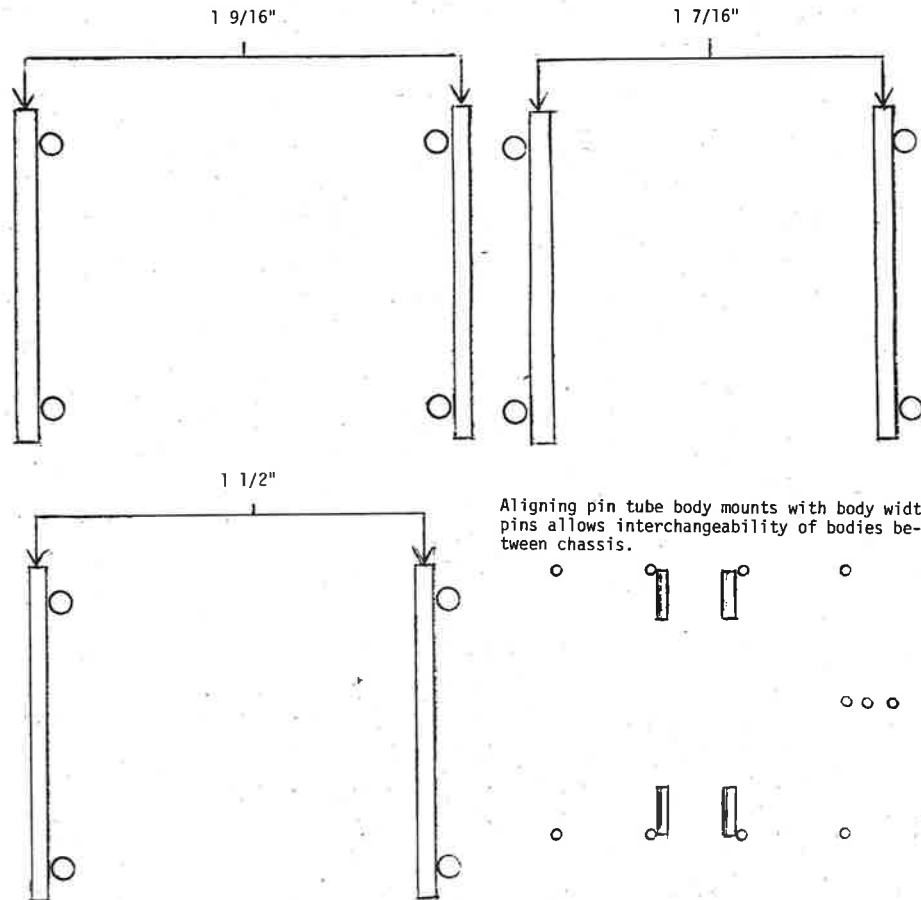
To get proper ground clearance, a piece of thin (1/32" or 1/64") balsa

wood can be used when soldering in the front axle tube and rear axle bearings. Put the balsa under the chassis and fit the wheels to the axles. When you solder in the axles you get automatic ground clearance equal to the thickness of the balsa. Then you can remove the balsa and tires from the axle and finish up the chassis.

The pictures and drawings are self-explanatory, so good building!



SKETCH SHOWING JIG AXLE POSITIONS TO OBTAIN VARIOUS WHEELBASES



Aligning pin tube body mounts with body width pins allows interchangeability of bodies between chassis.

1) Use rubber cement to fasten the jig template to the jig surface. A 1/24 scale slate building block is used here for the jig surface.

1/16" wire is used for the jig pins. Using a Dremel cutting disc and the Dremel drill press, pins of uniform height are obtained.

A Dremel tool and Dremel drill press is used to drill the 1/16" jig pin holes. The drill press assures accurate hole placement.

2) Here's a typical scratchbuilt H.O. chassis in the jig. Note the use of 1/16" wire jig axles and spacing of pin tube body mounts.

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1/32 SCENE

Beginning with this issue, MAR will carry a regular 1/32 section, which we will expand in size and scope, from month to month. 1/32 racing is growing rapidly in this country, as well as around the world. It's the "coming" scale, in our opinion.

1/32 GEARING TO WIN

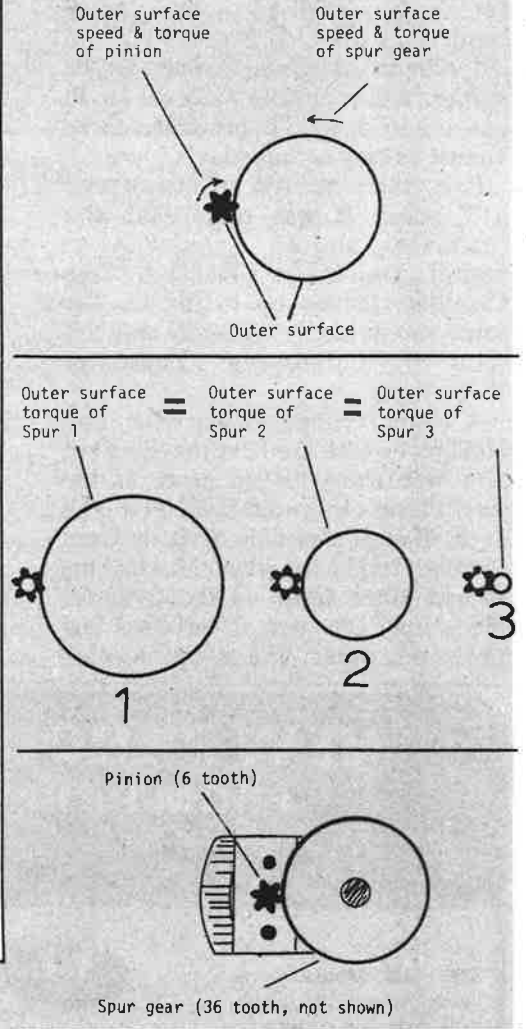
By Tom Wright

Many racers I know have said they cannot use smaller rear tires because they would be forced, then, to use a smaller spur gear, which would reduce torque. They simply cannot understand how a 4:1 or 5:1 gear ratio can possibly have as much torque as a 6:1 ratio.

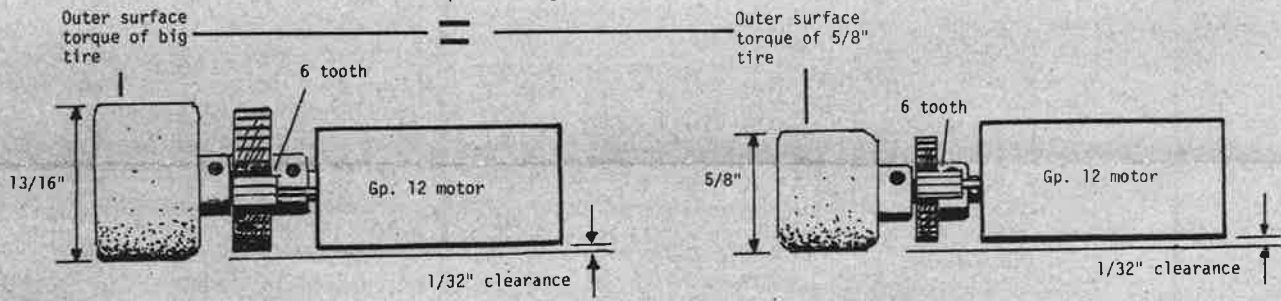
They're overlooking the size of the rear tires, which is as important as the gear ratio. Speed and torque are related. The greater the speed, the less the torque becomes, and vice versa. Another important thing to know is that the outer surface speed of a spur gear is equal to the outer surface speed of the pinion gear (as long as the gears don't slip). This means that if the diameter and the surface speed of a pinion gear is constant, it does not matter what the size of the spur gear is; the outer surface speed of the spur gear will always be the same, therefore, the torque will always be the same at the outer surface. (NOTE: Outer surface speed is not the same thing as revolutions-per-second.)

Since the outer surface torque of the spur gear is equal to the outer surface torque of the pinion, the outer surface torque of the tires will be the same no matter what size they are, as long as there is a 1/32" ground clearance for the spur gear. There is no loss in torque by using 5/8" diameter wheels, and there is 1/32" ground clearance for the spur gear (unless your spur gear ran on the track before).

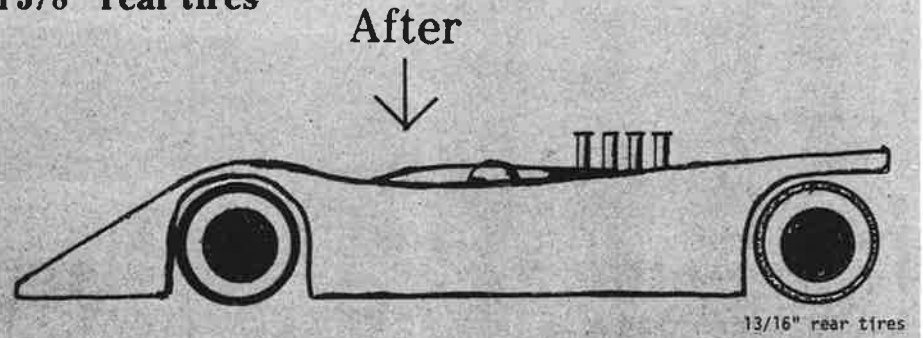
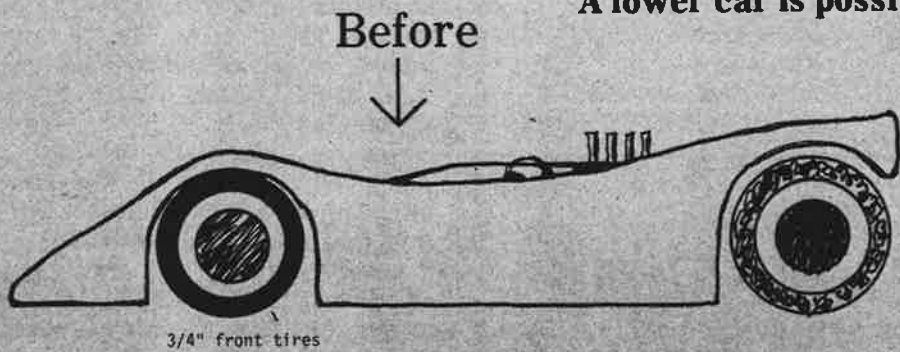
If there are any questions on this subject (or on any other phase of 1/32 racing), write to me, Tom Wright, 57 Sunnyside Ave., Ottawa, Ontario K1S-0P9, Canada. I don't have all the answers, but I'll sure try.



NOTE: Outer surface torque of tires is slightly less than the outer surface torque of the gears



A lower car is possible with 5/8" rear tires



Most racers changed the front tires, but not the back tires, because of their false ideas about gear ratios.

In 1971, the Canadian rules for 1/32 scale cars changed. They now state that front and rear tires may have a minimum diameter of 5/8".

1/32 racers gear their cars for torque, because the straights on home 1/32 layouts are short, requiring quick acceleration. Racers have been using a 6 tooth pinion and a 36 tooth spur gear to get a 6:1 ratio for high torque.



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MAR NATS

Continued from page 7

somehow picked-up a few more hundredths over his B group time to put him in the final sit-out for the money. And so the die was cast for an evening of agony. It promised to be almost as long as Saturday's race.

Everything started underway with a F consi. It was there that Jim Macartney started an assault on higher finishings. He and Dan Camilleri moved up to the E. The same two went one higher as they left some of California's finest in their wake.

A slight change of pace as Jim McElhiney took the first move-up but Jim Macartney moved again as the two completely outdistanced the pack. Two of the early arrivals from the West fell by the wayside. After his second place finish in the D consi, Macartney got back to business and grabbed first move-up again,

dragging yours truly along with him. Sundance was just edged out. From the C to the B.

Camen's Mitch Kiel took a move-up into the A as another host of the country's best went nowhere. But Jim Macartney again migrated to another race, just beating Russ Boyington.

But humans are only human and Jim Macartney lost in his bid for another move-up as he lost by a lap to Dave Simerka, who followed Gary Cooper into the semi. It was Gary who did a little traveling after he left Jan Limpach and Mitch Kiel back in the A. The pair were having nothing but problems.

The semi proved to make the main a very competitive one as while the qualifying times had given the race the look of another Western States race, there was not going to be a lack of ability in it. Pumpkin Man led a contingent of drivers consisting

of Dave Willits, Walt LaBree, and Gary Cooper into the race for money. And if anyone wants to get technical, in a race of this size, with as many capable drivers around as there were, there has got to be more pros watching than in it. After all, only eight of them can run at a time.

But the main event didn't turn out to be much of a race after all. By the third heat, most of the spots were decided. Joel took charge and did just that. He ran away. Philippe made a charge at Joel in the final heats as Joel moved to the gutters and Philippe to the center, but there was no way that the Diamond-man was going to catch Mr. Wizard unless maybe they added a couple of more heats. Walt LaBree stayed third from the third heat on, just as the top two had from the same period. But as the battling duo pulled away, Dave Willits was closing fast on Walt. At

one point they were tied but Walt got a lap in on Dave after Dave had slipped past him in the seventh heat but then fell back to fourth at the end (same as in the third heat). Don Aspenson and John Laster waged a battle for fifth, with Don getting it for a bit; but then he ran into trouble in the seventh heat and was of no further trouble to John Gary Cooper around in seventh, molesting no one from the fourth heat on and was last of the running, as the Pumpkin Man had become a DNF.

And so another East-West clash had ended, with the East having the edge again as Joel strolled home handily with an eight-lap lead to take the \$175 in cash and a few other items.

It was also 6:00 in the morning on Labor Day and time for everyone to get some good, wholesome sleeping done. It was probably a good rest for Joel, as it was an All-Montague victory. He had built his own chassis, his own motor (naturally) and his own body set-up, as he had done funny things to the body.

But you can't argue much when you don't win, and this was the third win for Montague in the past five East-West contests. A second place is also in the five as well as an "Oh, well."

The Slot Shop track record is also the seventh record that he holds currently. He has held records at 32 tracks in the last four years.

It was also a welcome win for the man who had just come off a long promotion tour and a less-than-satisfactory finish on the West Coast. But as Joel pointed out, each race is different and you have to run each one separately and concern yourself with the one you are running in. That comes from a professional.

A picnic, courtesy Parma International, followed the race, and it was as wild as the race itself. Next year the picnic will be sponsored by Champion and Parma, and will feature races of a very unusual nature, on an imaginary Blue King track layed out behind the Parma building!

It could only happen in slot car racing, but then, that's half the fun of attending a bash like this one. Don't miss next year's MAR Nationals.

A word of thanks and gratitude to all of the following who contributed to the prize list: Team Checkpoint; Bullitt Motors; Parma; Jim Aguirre; Walt LaBree; Bartos Chassis; Auto World; Rigger; Champion; Dremel; Badger; Tony P.; Ziegman Chassis; Mura; RehCo; Limpach; Camen; Lucas Bodies; AJ-Twinn-K; Dodge Motor Co.; Edelbrock; Firestone; Valvoline; STP; Cragar; Revell; Goodyear; Coca Cola; Nationwide Auto Parts; Champion Spark Plugs; Keystone Mags; Mallory Ignition; B.F. Goodrich; Thrush; AMT; Hurst; Grebers Garage; Elyria, Ohio, and of course, Miniature Auto Racing Magazine and The Slot Shop.

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PARMA WINS!

at the MAR Nationals held at The Slot Shop in Elyria, Ohio

SEPT. 1ST & 2ND

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Congratulations to Joel, Don and Rich, and all the other hard-runners at the MAR Nats!

Ray Hoy & Staff
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