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DRAG RACING'S COMPLETE MAGAZINE

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FEATURES

'68 SNEAK PREVIEW *Drag Racing's New Look* 12
 MANUFACTURERS' FUNNY CAR CHAMPIONSHIP by A. B. Shuman..... 20
 '68½ BETTER IDEAS FROM FORD *New Engines from Dearborn* 22
 DODGE FEVER — MR. NORM STYLE '68 Funny Charger 26
 SS 396 CHEVELLE — *Drag Test* by John Raffia 30
 39 HORSES FOR \$99 *Economy Head Package* 32
 THOSE FANTASTIC ALTEREDS *In Color* 38
 MOPAR WINDAGE TRAY *Budget Horsepower* 42
 CLUTCH-FLITE SCATTERSHIELDS by Tex Smith 47
 SEVEN-SECOND SENSATION *Mondello-Matsubara Altered* 48
 STREET ROD PROJECT — *In Color* 50
 OIL FILTERS AND DRAG RACING *Tech Report* 54
 BORING AND HONING *Quick Tips* 58
 STRAIGHT OUT OF A BOTTLE *Tech Report* 60
 CONTINENTAL ELECTRA 400 AL *Bike Test* 62

DEPARTMENTS

POINT OF VIEW..... 6
 MAIL RUN 8
 STRAIGHT SCOOP .. 10
 ISCA 69
 CC/SHOPS 77
 CC/GASSERS 84

COVER

Chevrolet, dominant nameplate in the Stock winner's circle for eons, made new drag history in 1967 by completely mastering the Funny Car ranks at NHRA's big Indy go, and Pete Seaton's "Shaker" was one of the best there. Photo by Al Yates.



CC/ACTION SHOWCASE
 Joe Davis "Jewel T" climaxed great year by winning Tulsa Finals. Photo by Pat Brollier.

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POINT OF VIEW

Our CAR CRAFT masthead has taken on a new addition. Under the familiar red logo you will now find the declaration that we are "Drag Racing's Complete Magazine." This statement means a lot more than being just a fancy slogan: It is the editorial policy of CAR CRAFT. The wild and exciting world of organized drag racing has enjoyed a fantastic growth pattern during the past 10 years, but with concentrated effort this pattern will be completely overshadowed by the gains in the immediate future. CAR CRAFT says it is "Drag Racing's Complete Magazine" and we fully intend to live up to that claim by actively and enthusiastically taking part in every aspect of the motor sport fraternity's fastest and fastest growing brand of auto racing. Reports of "what's happening" will be augmented with projections as to what is going to happen, with our comments on both dropped in where appropriate. We will continue to concentrate on our proven format of "how to" articles, drag tests, event coverage, car features, and road tests, but we are also planning some very special projects in the issues ahead. Our very successful "All-Star Drag Racing Team" will be expanded this year in order to extend recognition to every bracket of 1320 activity. Although most of the feature and technical articles will be generated from the nation's drag strips, we are continually developing new information pipelines into Detroit to bring CC readers the very latest from the various manufac-



DRAG RACING'S COMPLETE MAGAZINE

turers. While the vast majority of these articles will be drag racing oriented, CC readers will find plenty of ideas and information that can be applied to their street machines as well in each issue. In fact, these combination strip 'n street presentations will form the backbone of our monthly presentation. □ In support of the "Drag Racing's Complete Magazine" concept, our staff is taking some new steps forward, also. Two new names will appear on our masthead. On the editorial side, you will be enjoying the journalistic efforts of A. B. Shuman. Moving into the Technical Editor's slot, A.B. brings a strong and interesting drag racing background to CAR CRAFT. An accomplished columnist, A.B. is also well acquainted with the routines of "gear box drill," having campaigned a variety of machinery on East Coast drag strips. More recently, however, he has been controlling a different kind of vehicle as a Naval Lieutenant flying multiple engine aircraft. A.B. decided to trade the Navy blue for CC's yellow and black uniform—their loss and our gain. Terry Cook has been moved over to the Feature Editor's slot in order to better use his learned verbiage. □ The other new name on our staff is Salvatore "Sal" Fish. He's our new advertising man. As "Drag Racing's Complete Magazine," CC is offering a strong, directed market to speed equipment manufacturers and dealers, and the ads Sal will be generating will prove to be as interesting and informative as the features from our other staff members. □ The addition of these new CC'ers is just a preview of even more exciting things ahead for CAR CRAFT readers. Plan on spending a lot of your spare time in the months ahead working on your set of wheels, because we fully intend on generating so much excitement that you won't be able to resist the urge to try out all kinds of wild and different new ideas. Watch for them! □ Also keep tuned in real close to the drag racing plans and programs of the Detroit manufacturers as they are announced. During the past few years the car builders have been both praised and condemned for their direct and indirect participation in the sport. There will be major changes in the weeks ahead that will bring additional comments from both camps. You have to keep in mind that the youth-oriented, in spite of the concentrated campaigns being waged by opponents of the idea, wield a terrific influence on the designs of motor vehicles, and that our drag strips are still the undisputed "world's largest outdoor new car showroom." There's more to it than just selling cars, however; the engineers are constantly testing new ideas and launching research and development programs with direct drag racing ties. Any automobile that will perform efficiently under the terrific stresses of an all-out quarter-mile run will handle day-to-day driving without even working up a sweat. To be effective a race car must be both reliable and safe. And the information gained in the construction of these vehicles will contribute much more to safer cars than a lot of conversation by those outside the industry. □ This is an unmitigated, blatant "plug." This writer was recently extended the opportunity to participate in a "once in a lifetime" thrill. I am now a plaque owning, card carrying Honorary Blue Angel. Claim of membership in and association with this elite group of U.S. Navy fliers, even on an honorary basis, will be widely exclaimed. Lt. Dave Rottgering, USN, was at the controls of the Grumman F9F-8 "Cougar" during our indoctrination flight, which took on even more special meaning when I learned that Dave, a fellow drag racing enthusiast, was making his last flight in "Navy Seven" as a member of the 'Blues. The next day he left for combat duty in Viet Nam ("The big show, where you really have to fly"). The basic intent of these indoctrination flights for members of the press and news media is to acquaint as many people as possible with the opportunities being offered in the air arm of the U.S. Navy. Check them out. You might not ever fly with the 'Blues (thrills like six G's, weightless flight and inverted passes at wide open throttle), but, again, you might — at the time of my indoctrination flight, three of the Blue Angels had been commissioned from the enlisted ranks.

— DAN ROULSTON

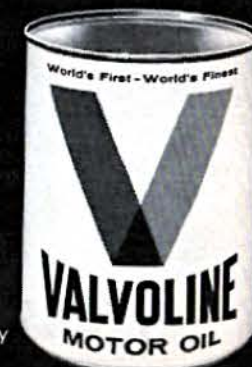
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MAIL RUN



Huzzah's for SEMA

In reference to your article on page 66, December '67 CC, I say, "Hats Off!" With more organizations like SEMA, organized drag racing would be far safer and more respected by people outside racing. When I finish this letter, I plan to write for the material offered in the article. I wish everyone connected with racing or interested in racing could read this article.

BUD PAGITT
Cayuga, Texas

Suspension Ends Marital Bliss

I am writing to let you know that T-Buckets are the action in Canada. Using all of your measurements, I have constructed a chassis of 3 1/2 x 2 1/2 aluminum tubing. I am using a tube front end and late Ford rear. I hope to have a hp to weight ratio of about 3.5:1 using a 289 Ford engine. Since the frame weighs only 31 lbs., it normally resides in my living room, located on the third floor of my apartment. For some odd reason, my wife complains when I bring the front and rear ends up to take measurements. Your Street Rod Project (June '67 - Feb. '68) series must be responsible for the sharp increase of interest shown up here, so keep up the good work.

G. YATES
Ontario, Canada

We always suspected that series' author Dick Scritchfield was a home wrecker. Now we've got proof! - Ed.

Raising a Tempest

I have a 1963 Pontiac Tempest LeMans and would like to know how to raise the rearend of my car without great expense or modification to the frame. I put some small spacers in the rear springs and that didn't raise it enough. Also, the rear wheels fold in when I drive. I would appreciate any information that you might be able to give me on my problem.

ALLEN MOEHLE
Glendora, California

I'm afraid that you do have a problem, Al. Using conventional methods to try to raise the Tempest swing-axle will result in toeing-in of the rear tires. One solution might be to jack up the car, lower the rearend, install longer springs, then relocate the spring mounts on the frame. This may entail more than what you want just for styling. - Ed.

College Knowledge

I am a second year college student at Cuyahoga Community College in Parma, Ohio. I'm writing a term paper on "The History of Drag Racing" and would greatly appreciate any information you could give me.

8 CAR CRAFT □ FEBRUARY 1968

Although I don't have a subscription to your magazine, I feel it's the best around. You did a great job on "Snoopy's Laughing Jag" in your November issue.

I race a 1962 T-Bird at Norwalk (Ohio) dragstrip and have won G/PSA with an e.r. of 16.71 and 82.94 mph. To me this doesn't seem too bad as it is a stock 390 cu. in. engine with all power except air conditioning. Thank you for your time. It's greatly appreciated, and keep up the great work with your magazine.

RICHARD R. PASKERT, JR.
Cleveland, Ohio

We suggest that you get hold of the September, October, and November 1966 issues of CAR CRAFT, Rich. In them you'll find Dan Roulston's three part history of our sport, with plenty of pix and info that should be right down your alley. If you don't have them, you can write CC Back Issues at 5959 Hollywood Blvd., L.A. 90028. - Ed.

We've Got the Answer

I own a 289 high performance Mustang and I would like to know how much it would cost to have it produce 400 horsepower. In the November issue, you have an article on it. Could I run it on the street and strip?

TERRY MCKENNA
Los Angeles, Calif.

Our November issue gave you one way to go, Terry. Now turn to pages 22-25 of this issue for the latest approach to making the Mustang muscular. You'll find more answers there. - Ed.

Parts Chasing

In the article, "400 Horses From 289 Inches" (November '67 CC), the stock Ford pistons (serial no. C6FE61108) are not available to the public (sic). A friend and I are building a 289 on this basis, and we called Holman & Moody to order the pistons, but they didn't have any in stock. Could you give us the information on how to obtain them? All help will be appreciated.

ROGER GARRETT
Hueytown, Ala.

We traced 'em down for you, Roger. Write Shelby American, 4390 190th St., Torrance, Calif. 90504. - Ed.

Road Runner

In your December issue, you had an article concerning the Sox & Martin Hemi "Road Runner." I have a few questions pertaining to the facts: Was Sox & Martin's engine the same hemi I can purchase for \$714 at my local Plymouth dealer? Did Mr. Raffa cover completely the engine work by Mr. King, or only the highlights? 10.94 seems a bit healthy for just what work was performed. What kind of shifter unit was in the "Road Run-

ner"? I am not familiar with the lock-out augmentation. Was the 4.88 an installed option or installed after delivery?

Keep up the good work you've been doing in your magazine.

MICHAEL GERRIE
Toledo, Ohio

In order, Mike—the \$714 price you quote is for the code 73 MoPar option. This is the listed amount you pay for the street hemi package over and above the price of the Road Runner as delivered with the standard 383 engine. This version includes, in addition to the engine, a 70-amp/hour battery, heavy-duty front and rear suspensions, F70 red stripe nylon tires, heavy-duty front and rear brakes, 4-speed trans, big fuel lines, six-blade fan, etc. Performance-wise we believe this to be one of the best buys being offered in the bi-perf field. Because the "Road Runner" story broke just before presstime we had to cut a few corners on the engine work Jake did in order to get the info to you in the December issue. Terry Cook's article in the January '68 CAR CRAFT on Dick Landy's Dodge hemi goes into more detail on hemi building, if you're interested. Basically, the operations performed by Landy and King are similar. The shifter unit was by Hurst, and the 4.88 rear was factory installed. Okay? Hope we've helped you out. - Ed.

"Little Guy" Rebels

After reading your editorial in the December issue, I felt that I had to write and agree with you. Our local drag strip is a classic example of forgetting and ignoring the little guy. The result? It has been closed more than open during the past two years.

The last race I went to, they paid \$25.00 for Volkswagen Eliminator, so we had the thrill of watching three (3) VW's go putt-putt down the strip. Yet, we Pure Stock class winners didn't even get to run for a Handicap Eliminator trophy. Too busy running Super Stock, Stock and Street Eliminators.

I waited two hours after winning my class and still couldn't get my trophy. The strip manager was "too busy" standing around talking to give it to me. Needless to say, I will now drive about 250 miles round trip to Phenix City, Ala., to race rather than 80 miles to the one locally. I don't mind waiting in turn, but I don't like being ignored!

RAY MORRISON
Macon, Georgia



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THE SWITCH IS ON . . . as predicted, the big changeover to superchargers among "funny" cars is going strong. As evidence we offer the recent Manufacturers' Funny Car Championship at Orange County International Raceway, where three-quarters of the forty "funnies" entered had puffers. Rumors are also circulating concerning the need for a 2400-pound unblown "funny" class, as the number of outmoded and obsolete "funnies" is growing, and this would create a nationally accepted class for them to compete in.

WHEELIE WONDER . . . "Wild Bill" Shrewsbury reports that in addition to his new "L. A. Dart" wheelie machine with Keith Black power, he will be getting a new four-speed hemi-Barracuda for SS/B class competition. Keith Black will handle the tuning chores . . . on a stocker?!

IT'S ONLY A RUMOR . . . That the turbine man from STP, Andy Granatelli, is building twenty turbine machines up in Canada for the next 500 and hiding it with a curtain of "the new intake limitations have killed the turbines." More recent rumors say he's only building a second car for '68, an addition to the one which almost won Indy with Parnelli in '67. And then there's a rumor that says the recent rumor is just a rumor and that the original rumor is . . .

STOP THE PRESSES . . . late word from Detroit on the results of that "Summit Conference" which NHRA held to decide upon the horsepower factoring on '68 Super Stockers with reps from Chrysler Corporation, Ford Motor Company, and General Motors on hand. Results? Chevrolet's 396 inchers will get a boost in horsepower by NHRA; the 325 was raised to 360, and the 375 was bumped to 425 horsepower. Although many non-Chevy competitors and manufacturers complained vigorously about old "low ratings" of Chevy engines, now it's the Chevy racers' turn to howl that their cars can't be competitive with the new factoring. In the Ford camp, word was passed that no tunnel port kits on 427's would be legal, as they were at the '67 Indy Nationals, unless fifty cars come down the assembly line with the units installed. The single four-barrel 427 was boosted to 410 horsepower and the dual four, 427 to 460 horses, putting the hurts on Ford, Super Stock competition wise. As for Chrysler . . . they came out smelling like a rose. Their street Hemi 426 incher was *dropped* in horsepower by NHRA, from 525 to 480, thus allowing them to run in same classes as last year, except at a lighter weight.

The changes were made in accordance with NHRA's "new thinking" i.e., in '68 the stock car classification factor will not necessarily reflect the ratio of a car's advertised horsepower to its shipping weight, as in the past. Rather, NHRA hopes that the new rules will more truly reflect the performance potential of each model. We'll all have to wait and see how the performance-rating procedure works out; it should make for a very interesting year in things Super Stock.

WHAT MAJOR TOBACCO MANUFACTURER . . . (cigarettes and cigars) is negotiating with top fuel-car designers and builders with regard to their entry into the dragster ranks? Filter tip fuelers anyone?

"CHARGER III," the super-wild flip top dream car, really has Corvette owners in a dither. Who copied whose front end design?

EVERYONE'S ASKING . . . "Do you know where I can find a big buck sponsor for my race car?" yet it seems that they're all sitting and waiting for opportunity to knock. Let's face it . . . the majority of the money deals are a result of the industrious few going out and turning over rocks and presenting an honest promotional program to sponsor candidates. Want to find a big sponsor? First thing you have got to do is wash your clothes and shave, then clean up your race car. Next, work up some sort of a promotional brochure containing pertinent

accomplishments of your car, spectator attendance statistics, and the influence of drag racing on the public. The last step involves going from firm to firm, after arranging interviews with someone in the PR department, and presenting your prospectus. It can be anyone from a shoe manufacturer to a string of drive-in restaurants or motels. The speed equipment game has about had it with guys asking for sponsorship, but the straight auto equipment manufacturers still represent a partially untapped source . . . like the battery, muffler and other replacement parts companies. Even related firms, such as the petroleum companies, might be willing to listen to your pitch. But above all, remember . . . they ain't gonna come knocking at your door!

WHAT MANUFACTURER whose initials are FoMoCo, are rumored to have a turbine-type car — ala the Chrysler program of two years ago — running around the test track? No word officially yet, but maybe there'll be a consumer testing program similar to the MoPar venture. Listen for the whine.

INSURANCE is always a major problem when it comes to race cars or customs. Straight Scoop has it on a "first-word" basis that a major underwriter is in the throes of packaging an "all inclusive" policy for total replacement value of a racing or custom vehicle. More details to follow!

SEEMS AS IF THERE'S A NEW TREND in dragsters coming. The super-beautiful, wildly painted, superbly constructed, hand-crafted, full-bodied machine may be temporarily on the way out. This is attested to in looking over some of the wild machinery being tested on local area tracks . . . when the builders were asked what they planned for a nose piece, or cowl, etc. . . . they all gave you that "does Garlits have it?" look. Seems "Big Daddy" still is the man most revered when it comes to the dragsters.

OUR CANADIAN NEIGHBORS up north are in for a real treat next season. Seems some of the factory "honchos" in Canada are seriously thinking about allotting some funds in the area of drag racing sponsorship in both the dragster and the funny-car field.

DRAG BOATING is making inroads eastward. Seems there's talk by a local night club owner (Detroit) and power-boiler enthusiast at the unlimited level about constructing a 1/4 mile "wet straightaway" with floating bleachers yet! We still haven't figured out how the spectators are going to get to their floating bleachers . . . but that's a minor problem.

AT THIS TIME OF THE YEAR the rumor mill isn't turning out as many tidbits in the Midwestern and Eastern areas as usual so we turned our attention to the West Coast and found to our surprise that the super meet reported to be in the works in the midwest is already being planned for a new (or relatively so) super strip in the L.A. area — wherever and whenever it's got to be unreal: 10 grand for TFE and 250 little ones for first round losers — wow!

HIGH ATOP DRAGSTER HILL . . . that "gruesome twosome" who have been doing it to everyone lately, John "The Zookeeper" Mulligan and budding engine man, Tim Beebe, are reportedly switching to a "funny" car. Odd that one of the best running fueler teams chooses to abandon their new full-bodied rail with Chrysler power and switch to a Chevy powered plastic car. But then again, as we look back and remember, it was a Chevy powered Altered that "Terrible Tim" started with. First love . . . true love.

MORE LATE RUMORS . . . Jim and Alison Lee, the extremely talented husband-wife team from The Plains, Va., apparently will not be on the scene next year. The Lee's had a number of great moments last season, including the mind-boggling 6.88-213.28 BB/Fuel Dragster record, but fell just short of winning a big national meet. The BB/F e.t. record stood as an all-time low for all classes for a time and is still on the books as the national class record, along with the speed mark. Hank Westmoreland, who did the handling from mid-season on, has apparently signed with Jim Busby on the West Coast for '68. More on these developments later.

IRWINDALE RACEWAY, always among the most progressive, has come up with still another new item and this one just may mean saving some lives. Manager Steve Gibbs was behind the move that led to the installation of a signal device at the end of the strip which is set off by any car running out of braking room. An air hose arrangement (much like those you run over in service stations) placed near the end of the strip triggers off a flashing light, warning ambulance and crash crew immediately that somebody is in trouble. Chrondex Corp. built the device to Gibbs' specs, and the racers heartily approve.

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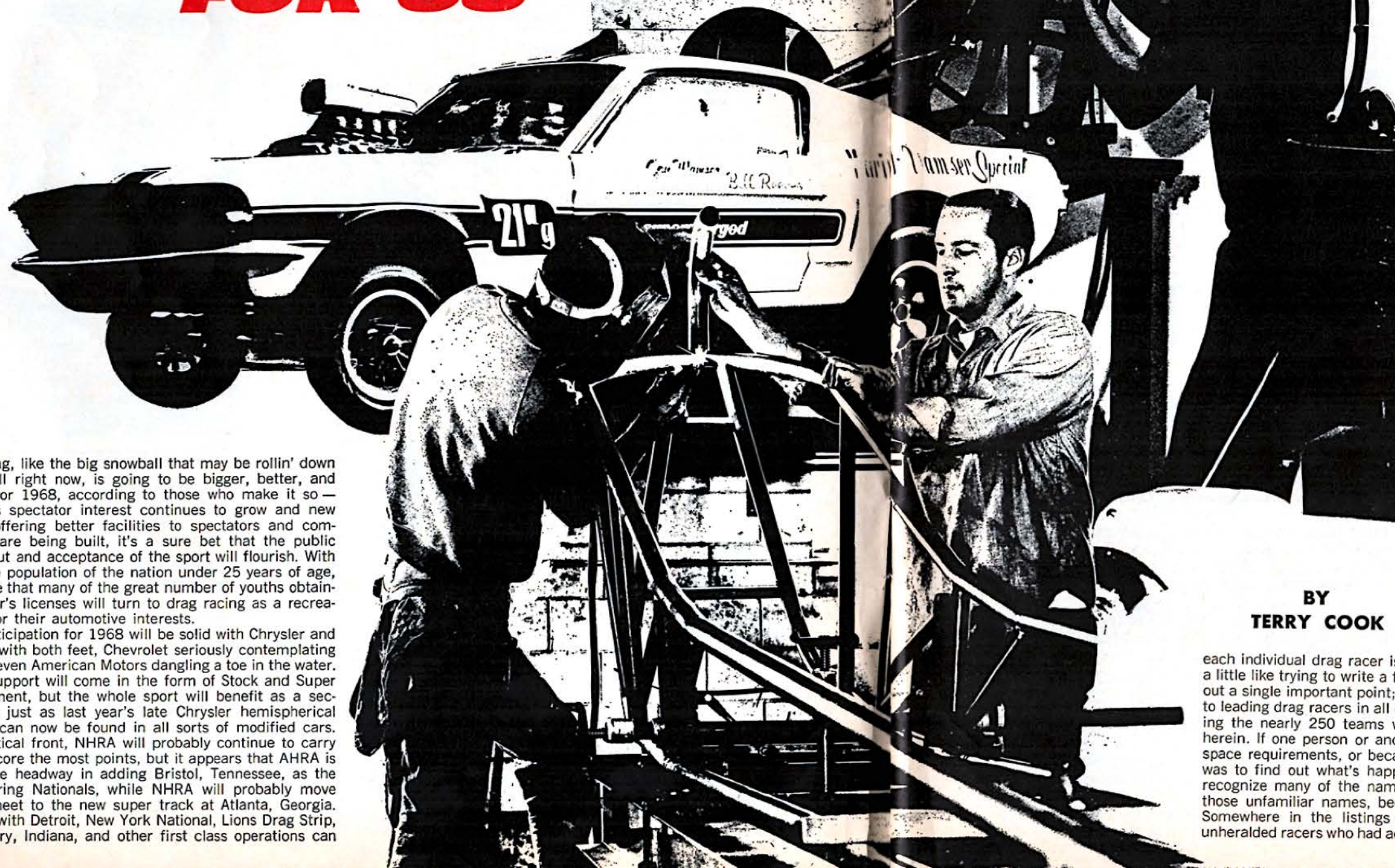
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SNEAK PREVIEW

DRAG RACING'S NEW LOOK FOR '68



Drag racing, like the big snowball that may be rollin' down your hill right now, is going to be bigger, better, and faster for 1968, according to those who make it so — the racers. As spectator interest continues to grow and new super strips offering better facilities to spectators and competitors alike are being built, it's a sure bet that the public education about and acceptance of the sport will flourish. With nearly half the population of the nation under 25 years of age, we can foresee that many of the great number of youths obtaining their driver's licenses will turn to drag racing as a recreational outlet for their automotive interests.

Factory participation for 1968 will be solid with Chrysler and Ford going in with both feet, Chevrolet seriously contemplating jumping, and even American Motors dangling a toe in the water. This Detroit support will come in the form of Stock and Super Stock involvement, but the whole sport will benefit as a secondary result, just as last year's late Chrysler hemispherical head engines can now be found in all sorts of modified cars.

On the political front, NHRA will probably continue to carry the ball and score the most points, but it appears that AHRA is making notable headway in adding Bristol, Tennessee, as the site of its Spring Nationals, while NHRA will probably move their spring meet to the new super track at Atlanta, Georgia. Bristol, along with Detroit, New York National, Lions Drag Strip, U.S. 30 in Gary, Indiana, and other first class operations can

only bolster the American Hot Rod Association's reputation. NASCAR's operations seem to be waning, with AHRA taking over their circuit in part, but the Drag Racing Division of NASCAR may have something even more appealing up its sleeve. And, perhaps the stirring example of success set by the Midwest UDRA may inspire other chapters of that racer's association to rise to the fore.

As for the competition, it will be tighter than ever and present record performances will continue to be bettered at a steady pace. Tire development is currently going at full tilt, with M&H and Goodyear concocting stickier compounds for the fuel dragsters, which later appear in the form of smaller tires for all other class competitors to utilize. This season may be the year of the automatic transmission, as Alteredds, Gassers, and even some Dragsters are being redesigned with the idea of putting all that horsepower to the ground in a "gentle" manner for best results.

Just as we did in last year's racing preview, we have gone to some of the top names in dragging and asked their opinions concerning the directions the sport will take in the coming season, especially in the Stock, Funny, and Dragster categories. Some of the predictions may sound like science fiction right now, but will more than likely be history one year from now.

In the Funny ranks, look for a whole rash of new blown cars. This really seems the hot setup for '68 in the "factory configured" classes. Ranks will probably be thinned in the smaller engine displacement classes among the match racers and several "name" drivers may return to at least part-time Super stock action; but the "funny" racers, as well as track promoters, know the appeal of the match racers at the turnstiles, and so you can expect plenty of action in this category despite the opinions of many second-guessers who buried the "funnies" at the end of the '67 season. Speeds of 200 miles per hour should become numerous, if not commonplace, and e.t.'s should dip into the mid-sevens in both the East and West before the season is very old.

Watch for some AA/Fuel Dragsters to dip to the 6.30's this season, with speeds approaching 240 mph, as new tire developments continue to headline the drag scene. Clutch-Flite transmissions might provide a "semi-slipper" which gets the power to the ground, a problem drag racers have been wrestling with since the Year One. Watch for a batch of dual-engined Gas Dragsters, as these cars will be able to utilize the big new AA/Fuel Dragster slicks and power application methods of the fuelers, the second engine providing the needed horsepower. New tires will appear for the AA/Gas Dragsters and Junior Fuelers that will put them in the 7.25 neighborhood. (Don't be surprised if M&H unveils a 15-inch wide, 33-inch high slick for the big fuelers to try to turn.)

Stocker competition in '68 will be more populated with competitors, more popular with the spectators because of this increased participation of name drivers, and more confusing, due to the addition of major classes. Without a doubt, there should be a lot of 10-second competition in the Super Stock ranks, with SS/A cars getting down toward the nines, SS/B and SS/C Chevys, Fords, and MoPars solidly in the tens, and perhaps even 10-second SS/D machines.

One final note before you jump into the 1968 Sneak Preview: the whole idea is to give you an insight into what a cross section of the front running competitors are planning for the coming season and what trends you can expect to see develop in their respective classes. The concept of a cross section should be held in mind throughout, for attempting to tell what

BY
TERRY COOK

each individual drag racer is going to do in the coming year in this eight-page article would be a little like trying to write a five-thousand word essay on the history of the world, without leaving out a single important point; in short, impossible. Approximately 450 questionnaires were mailed to leading drag racers in all classes for a fair representation of each group. Information concerning the nearly 250 teams which returned the questionnaires properly filled out is contained herein. If one person or another was not included with the preview, it was strictly because of space requirements, or because some entries were not returned in time for inclusion. The idea was to find out what's happening in drag racing — from AA/Fuel dragster to U/Stock. You'll recognize many of the names, but some may seem unfamiliar. Here's a tip: keep an eye on those unfamiliar names, because they're all highly qualified front-runners and record setters. Somewhere in the listings are the Ed Millers and Benny Osborns of 1968 — the formerly unheralded racers who had aces back to back when it counted. (CONTINUED ON FOLLOWING PAGE)

NEW LOOK FOR '68

TOP FUEL DRAGSTERS

These "ultimate" cars are definitely on the upswing in popularity, and, though "big car" racing is getting more expensive with each passing year, you can expect to see more AA/Fuelers than ever before. Watch for some more strong cars to come out of the East and mid-six second runs becoming commonplace. The fives will most likely remain out of reach for '68, but if new tire and, just as important, power train developments continue, the fives may be within sight by the end of the year. Look for some wild automatic transmission cars to pop up next season, perhaps starting a new trend. Chevrolet may sport a hemi fueler and the SOHC Fords will again be strong, but Chryslers will still dominate the scene — the trusty old 392's, not the late 426's. No changes in AA/F NHRA rules were made.

EARL BINNS — (Winterset, Ia.) — will get a new California Chassis Engineering car for his Chrysler engine.
ALAN BOCKLA — (Wheatridge, Colo.) — will run present Woody car in the "rare air" mountain high country.
LOUIS BOYD & WAYNE GRIFFITH — (Norma, Okla.) — will stay with their current Chrysler powered machine for '68.
BOB CREITZ & VIC BROWN — (Inglewood, Calif.) — have moved to California and will run for Donovan Engineering.
AL & BOB DAUERNHEIM — (Hanover, N.J.) — will get a new car and run for Pete Van Iderstine's Speed Center.
FRED FORKNER — (Wilmington, Del.) — will race present car.
DON GARLITS — (Seffner, Fla.) — is building a new 190-inch car and will stick with the Wynns-Fram-Crower late Chrysler. He returned first-questionnaire; quick reflexes remain.
CASPARY-STOKEY & HAMPSHIRE — (L.A., Calif.) — Jeep will drive the new Fuller car which is already in sixes.
HOLLY-NONKERVIS-MORRISON & VENERABLES — (Angelton, Tex.) — Ray Collier to drive Precision Specialties car.

JIM HUNDLEY & JOE BOGGS — (Charlestown, W. Va.) — A Collett chassis with Torque-Flite for AHRA Champs.
VANCE HUNT & WATUS SIMPSON — (Arlington, Tex.) — will run current Woody. Still one of Texas' strongest.
BOBBY LANGLEY — (Everman, Tex.) — will keep present car.
JIM & ALISON LEE — (The Plains, Va.) — strong East Coast team may get new Don Long car for Ed Pink Chrysler.
ROLAND LEONG & MIKE SNIVELY — (L.A., Calif.) — will run one "Hawaiian," using early and late Black Chryslers.
ART MALONE — (Tampa, Fla.) — may buy new Woody car for '68, which is his 14th year of drag racing.
TOM McEWEN — (Long Beach, Calif.) — Outspoken "Mongoose" will run his own Woody-Chrysler with independent front suspension. Tim Beebe will build engines. 'Goose is due to win a big one sooner or later.
CLYDE McKABA & PHIL MILLER — (New Lebanon, N.Y.) — SOHC Ford will power their new Don Long or Woody chassis.
BILL MULLINS — (Birmingham, Ala.) — will run present car and switch back and forth between Top Fuel and Top Gas.
BENNIE OSBORN — (Sand Springs, Okla.) — NHRA World Champ will have Woody stretch his present car, retains MoPar power. Definitely a strong up and comer.
DAVE POWERS & JOHN RILEY — (Dubuque, Ia.) — will campaign their Wynns Woody on Midwest UDRA circuit.
BUB REESE & COOPER HAYDEN — (Linthicum Heights, Md.) — new Don Long chassis and Walt Barbin Chrysler.
PETE ROBINSON — (Atlanta, Ga.) — Steve "Mandrill" Carbone will continue to drive Pete's new SOHC Ford Woody.
JERRY RUTH — (Seattle, Wash.) — "King of the Northwest" is picking up a new Don Long car with full Tom Hanna body.
LEW SHAW — (Lynwood, Wash.) — Ron Rolstead will drive the new Chrysler powered Woody with swoopy Hanna body.
RAY STURGIS — (Erie, Pa.) — will revamp his old S&M car.
WARREN-COBURN & MILLER — (Bakersfield, Calif.) — The "Ridge Route Terrors," James, Roger & Marvin, will run two fuelers next season, both Woody cars.
JOHN WIEBE — (Newton, Kans.) — Starbird Customs will cloak new Woody car with full body.
SCOTT WILSON — (London, Ont.) — Canadian racer may get new Lakewood car with Bergler body. Will keep SOHC Ford.



Just an example of fuelers '68, Tom McEwen will be in there thrashin'. The "Mongoose" is an M&H tire representative on the racers' level, and you can bet he will be busy in the coming season, as tires will play an all-important role. Goodyear should strike back.

TOP GAS DRAGSTERS

Keying on the success of the phenomenal "Freight Train" twin-Chevy machine, watch for a new crop of dual-engine gassers to pop up, some with Chryslers, some with Chevys. If tire and clutch advancements make any headway at all, there will be a host of cars running under 7.50 consistently. The Clutch-Flite or other similar two-gear automatics will start sprouting up on cars like Oties, Minnick's, and other hard runners. It's going to be a heck of a year here.
CARPENTER-BOLEY & RHODES — (L.A., Calif.) — "Gas House Gang" plans a new Roy Fjastad Speed Products car for '68.
RON COLSON & GARY WOOD — (Oregon, Ill.) — will build a dual "Rat Motor" Chevy gasser with a 185-inch wheelbase.
GORDY CRAIG — (Olympia, Wash.) — new rails for his Woody.

ERNIE HALL — (Cornelius, Ore.) — is building a new 160-incher.
HERB HOOVER & GARY HADDOCK — (Hays, Kans.) — will continue to run their present 472-cube Dodge powered rig.
RALPH LINCOLN & JACK JONES — (San Diego, Calif.) — Ralph is retiring; famed Junior Fueler will be sold. Jack will drive new Lockerman Porting Service SPE Chrysler AA/D.
RON & GENE LOGGHE — (Fraser, Mich.) — Bob Pacitto will drive new Logghe car with SOHC Ford power.
DICK McFARLAND — (Plantation, Fla.) — is getting new Woody.
KY MICHAELSON — (Minneapolis, Minn.) — has ordered a new Race Car Specialties rig from California for his 436 Chevy.
MONTY MONTGOMERY — (Claremont, Calif.) — strong new man in Top Gas will run his present Woody chassis.
TONY NANCY — (Sherman Oaks, Calif.) — is "way out" again, this time considering mounting the engine atop the rearend of a new car. Will continue with upholstery work.
DON POWELL & WARREN BURNETT — (Charleston, S.C.) — a

new Woody is in the works for their gas and fuel Chevy.
JOHN PUSCH & DON CAIN — (Kansas City, Mo.) — Indy Champs will run same car with 463 Chrysler.
JOHN PETERS & BILLY SCOTT — (Santa Monica, Calif.) — John has famed "Freight Train" for sale; may quit racing.
JOHN RASMUSSEN & GERRY GLENN — (Hermosa Beach, Calif.) — will get new Woody chassis for DeSoto Junior Fueler with Gene Adams. Their AA/D Clutch-Flite Chrysler will continue to run at the head of the single-engine pack.



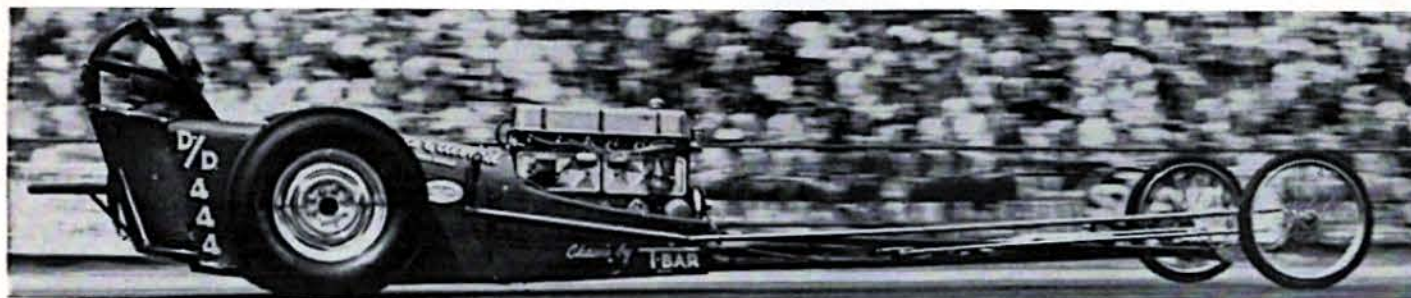
Gordy Craig's AA/D is currently running consistent 7.60's, but will have to deal with new crop of twin-engine rigs in '68.

JOHN REED — (Decatur, Ga.) — will build an all-new car.
BILL & OTIE SMITH — (Akron, Ohio) — are getting a super light new car from Woody Gilmore; Art Arfons automatic trans.
"JET CAR" BOB SMITH — (San Jose, Calif.) — is back with a Fuller car with Cervel body and Waterman Chrysler.
RICKEY TOPE — (Oxford, Mich.) — is getting a new Logghe car with Al Bergler body. Ramchargers build the engines.

LOWER CLASS DRAGSTERS

Watch for more Clutch Flites to pop up in the lower dragster classes, making use of larger, stickier tires. The National Hot Rod Association has eliminated BB/FD class due to poor turnout during last year's competition. Although NHRA has no class for Fuel Modified Roadsters or Competition Coupes, performances like Larry Dixon's recent six-second run in Fireside Inn Fuel Modified Roadster don't go unnoticed, and the appearance of more cars of this type and calibre could influence NHRA to provide a class for them.

ROGER ALLRED & MARVIN CLARK — (Amarillo, Tex.) — will continue to run their T-bar chassied D/D.
AL BERGLER — (Mt. Clemens, Mich.) — is slightly modifying his beautiful and competitive streamlined Chrysler AA/C.
JON BROOK & BOB ATHA — (Tulsa, Okla.) — are rebuilding their T-bar chassied injected Chrysler B/FD.
DON COBB — (Oklahoma City, Okla.) — will run controversial 402-inch (201 each) dual six-cylinder Chevy D/D.
SMOKEY COLE — (Tumwater, Wash.) — To be competitive, will update '66 Tulsa Champ AA/C with transmission.
JERRY DAVIS & JERRY GODDARD — (Olympia, Wash.) — will go to "slider" clutch or Clutch-Flite for their Chrysler AA/C.
STEVE DAVIS & DICK GUNDERSON — (Wilmington, Calif.) — are building an 810-pound DF/D rig with Tempest four.
DON DEANE — (Carmel, Ind.) — will replace Chevy-Bantam coupe B/C with Austin roadster-Dodge for same class.



Roger Allred and Marvin Clarke's single-six D/ Dragster runs out of Amarillo, Texas and has been highly competitive to date, but, unless rules are changed, the team will have to compete against dual engined rigs in the '68 NHRA national points' chase.

DUWAYNE ENGINES — (Fargo, N.D.) — will get new chassis and big 427-inch Chevy for AA/C class competition.
DAVE & JOHN HASTY — (Kansas City, Kans.) — father and son team are updating their D/FD; may go automatic route.
BRIAN HANSELL & DON SHERWIN — (Winnipeg, Mann.) — Canadian team will run same C/D, may add Clutch-Flite.
CLYDE HARNISH — (Staten Island, N.Y.) — will run trusty four-speed, Model-A frame car, for both B/C and C/D.
JUDE KILCHRIST & NORM NEELY — (Lake Charles, La.) — are rebuilding for A/FD due to NHRA rules changes that eliminate both B/FD and C/FD classes.
JERRY KING-JACK CROSS & JERRY MANN — (Seattle, Wash.) — will lengthen their unblown Chevy fuel burning dragster.
JOE LAW — (Fairmount, W. Va.) — will add weight to his A/C for new class break and may build 426 Hemi unblown fueler.
HOWARD MARJAMA — (Minneapolis, Minn.) — will replace small block Chevy with big Chevy or Chrysler for AA/C.
VIC McCROSKEY — (Gresham, Ore.) — World's oldest rail driver at 71, will field a new Jim Davis chassis C/GD.
DENNIS NICHOLS & GARY POESCHL — (Santa Ana, Calif.) — will stick with their present C/GD for the new season.
LEE PLATE — (Baltimore, Md.) — has new C/GD for '68 with a Clutch-Flite. Sponsored by Racing Parts & Machine Co.
NORM RIES — (Cincinnati, O.) — will run in AA/D and BB/D with new Logghe car using Hallamatic Torque Flite trans.
SIZEMORE-WHITE & PRYG — (Detroit, Mich.) — new Logghe car is slated. Stormin' six-cylinder Ford will run D/D class. May run old car with Chevy engine as back-up machine.
FRANK SMITH — (Oklahoma City, Okla.) — switched to Plymouth hemi. Beaman of Tulsa is building his new A/D chassis.
GARY SULLIVAN & DALE RAUSTADT — (Minneapolis, Minn.) — are getting a new George Wepplo chassis for their B/D.
DAVE WEISS & JERRY VERHILL — (Renton, Wash.) — will have a new 150-inch, 309-cube Chevy powered A/FD this season.
WALT WENEY & JIM AMOLE — (Spring City, Pa.) — will get a new S&W chassis and may forsake their Chevy for Chrysler.
BOB WILLIAMS — (El Cajon, Calif.) — will get a new Devine chassis, sticking with his 301 Chevy for Junior Fuel racing.
JIM WOHLFEIL — (Pontiac, Mich.) — will have a new Logghe 289 Ford A/F, plus late Chrysler AA/F with Les Green.

FUNNY CARS

Although it seems as if the Funnies are being upstaged a bit at this point by the growing interest in Super Stocks, 1968 will still see notable "funny" activity, as hard core fans and owners alike are convinced that the all-out, "factory image" participation is the way to go. Superchargers will be a necessity in top of the category competition, and Chevrolets like Doug's Headers' Corvair and Seaton's "Shaker" just might dislodge the mighty factory Mercurys from their long reign of rule. NHRA has cut back on the Exhibition Stocker classes, now offering only one class for blown cars and one for normally aspirated "funnies" (S/XS and A/XS). But the "Glamorous Glassers" will still be with us, giving fans some spectacular racing.

(continued on following page)

NEW LOOK FOR '68

BOB BOWEN — (Far Rockaway, N.Y.) — will add weight to his Ford Fairlane (originally Phil Bonner's) and switch to the 2700-pound NASCAR class, as no NHRA B/XS remains. **ROBERT CHAPMAN** — (Milwaukee, Wis.) — Chapman Automotive's blown Chrysler "Out-A-Site" Camaro will tour. **DON GAY** — (Dickinson, Texas) — sparkling new Firebird is powered by the expected supercharged Osteen-built Pontiac. **DAVE GRASSI & WALT AUSTIN** — (Seattle, Wash.) — have replaced their Dart with Charlie Allen's '67 car. **DICK JESSE** — (Highland Park, Mich.) — "Mr. Unswitchable" will go the Firebird route, with blown Pontiac power. **DICK LOEHR** — (Okemos, Mich.) — has built a new Mustang for '68 racing. John Skiba prepares blown Max Curtis Ford. **ART MALONE** — (Tampa, Fla.) — may go to a supercharger in an attempt to make his Mustang competitive. **DON NICHOLSON** — (Atlanta, Ga.) — has gone to a blower in an attempt to remain atop the heap. "Dyno" is a bit apprehensive about 200 mph speeds in "funny" configuration cars. Will switch to glass Mustang body; may go to a stocker. **ED SCHARTMAN** — (Cleveland, Ohio) — since Ford Motor Co.



Someone forgot to tell Roy Gay and "wrench" James Osteen that Pontiacs and nitro don't mix. Their new Firebird runs in '7s.



First '68 "funny" to emerge was Don Schumacher's "Stardust." Injected Illinois Dodge has Fiber Glass Ltd. Charger body.



During construction stages, Dick Loehr's Chrysler-Mustang had all the earmarks of a winner. It's already run a wild 7.90.

is building no more "funnies," he'll run his present car, with addition of a blower. Eddie wants to get a stocker for "insurance," in the event "funny" racing falls flat in '68.

BILL SHREWSBERRY — (Mansfield, Ohio) — "Wild Bill" has a brand new '68 wheelie Dart, this time with blown power. May also handle a stocker. **DON SCHUMACHER** — (Park Ridge, Ill.) — will run injected '68 Charger on Midwest UDRA unblown "funny" circuit. **GENE SNOW** — (Ft. Worth, Tex.) — has completed his new '68 Dart with T-Bar chassis. Will run with supercharger. **J. C. SOUTH** — (Birmingham, Ala.) — will cash in his "funny" and get a Super Stocker. **DAVE STRICKLER** — (York, Pa.) — likewise, will sell his "funny" 'Vette and pick up on a Camaro — for Super Stock. **BOB SULLIVAN** — (Kansas City, Kan.) — will continue to run his blown Chrysler powered topless Camaro. **CONNIE SWINGLE** — (Bixby, Okla.) — will keep running his wheelie truck for exhibition, along with Bill "Maverick" Golden, Bill Shrewsberry, and the rest of the bumper-draggin' gang. Wheelies are still exciting, although old hat. **DOUG THORLEY** — (L.A., Calif.) — the current "King of the Funnies" will continue to run his Corvair with blown Chevy power. Also, "The Header King" will have a new blown Chevy powered Corvette Shark, and an all-Rambler, Logghe-chassised Javelin with a blown 480 inch AMC engine. Javelin to be sponsored by SoCal Rambler Dealers.

ALTERED COUPES

No real changes in the Altered class as far as NHRA rules are concerned, with the exception that Modified Sports cars with 25% engine setback will run in the present Altered classes. Automatic transmissions will make their mark here.



Gene Mori will be back with his ChevWagen Altered. Maryland machine uses Chevy for power, Volks body for crowd appeal.

JOE DAVIS & WES INGRAM — (Campbell, Calif.) — hold three different class records with their immaculate AA/A, "Jewel T." Will continue to run with this car, fresh from Tulsa win. **KEITH FERRELL** — (Fairborn, Ohio) — will continue to run "sano" "Dogcatcher" Chevy, '33 Willys panel in B/A rather than Gas class, as it fits better, inches to weight wise. **JERRY KNUTH** — (Rockford, Ill.) — will modernize his 427 A/A Ford "T" roadster with Ford C-6 automatic. **BOB LEE & TOM BURFORD** — (West Hollywood, Fla.) — plan new chassis and top chop for their Chevy-powered deuce C/A. **PHIL LIPPARD & PUDGE TARBETT** — (Silver Springs, Md.) — will have run in AA/FA with small Chevy as there is no A/FA class for them to race in under current NHRA rules. **ALVIN MARCELLUS & WILLIE BORSCH** — (L.A., Calif.) — a lighter chassis is slated for world's fastest (203.60) AA/FA. **GENE MORI** — (Brandywine, Md.) — will chop the top on his original VW bodied 352-inch Chevy powered B/A. **GLEN PARKER** — (San Jose, Calif.) — will update his D/A which is sponsored by Dos Palms Machine. **CODY PARR** — (Oklahoma City, Okla.) — will keep his blown Chevy-T AA/A and build a similar car, unblown, for A/A. **CHARLIE SEABROOK** — (Bridgetown, N.J.) — D/A man will run same Austin roadster, refine XKE Jag engine for better



Frozen food "King" Charlie Seabrook doesn't use his "big inch" bank book for racing. Jaguar powered Austin D/A is home built.

performance, and go the automatic transmission route.

KAY SISSELL — (El Monte, Calif.) — will repaint and chrome his Chevy-six, Ford "T" D/A; will go to B&M Clutch-Flite. **DICK STOCKSDALE** — (Baltimore, Md.) — veteran will run his reliable Chevy powered '31 Ford roadster in B and C/A.

STREET ROADSTERS

The NHRA rules changes leave the unblown A, B, and C/SR classes untouched, but the blown cars will run in their respective Gas supercharged classes. For the first time, this allows small cubic inch, supercharged street roadster to compete in BB/G or CC/G. Watch for more Clutch-Flites.

JACK HARRIS & DENNIS SAENGER — (Ogden, Utah) — will go to a Junior Fueller, switching from their Ford-Chevy B/SR. **HOWIE NYE** — (Norwich, Conn.) — will continue with his Chevy powered Plymouth in B/SR class. **JAN RIEDEL** — (Tiffin, Ohio) — will go to a Clutch-Flite for his Chevy C/SR; may also build six-cylinder D/A. **DAVE RUDY** — (Tipp City, Ohio) — four-speed for his B/SR. **BUDDY SHUMATE** — (Antioch, Tenn.) — new fuel injection is slated for his hard-running C/SR.

GAS SUPERCHARGED COUPES

Without a doubt, the big switch to late model cars is on. Forced by George Montgomery's success with his immaculate AA/G SOHC Ford Mustang, a large portion of the big blown coupe contingent are going to late cars as a basis for their new machines, feeling that the aerodynamics of Mustangs, Barracudas and Camaros far surpass that of early Willys coupes. The late car trend is even infiltrating the unblown Gasser ranks. No rules changes other than blown Street Roadster being thrown into the blown Gasser classes. **JOE & LEE AIROSO** — (Tulare, Calif.) — a roll cage, different engine combo and B&M Clutch-Flite for their BB/G. **JIM BUCKWHEAT & BILL COLEMAN** — (Flint, Mich.) — will go to a 6-71, bigger injection, four-speed for their CC/G. **BOB CHIPPER** — (Johnson City, N.Y.) — will switch from Chevy power to a Clutch-Flite hemi in his '33 Willys BB/G. **EARL DODY** — (Lakewood, Colo.) — will chop his Chrysler hemi motivated '33 Willys in an attempt to be competitive. **PAUL FROST** — (Dayton, Ohio) — will shelve his '40 Willys in favor of an all-glass '33 Willys with Chrysler power. **BARB HAMILTON** — (Willoughby, Ohio) — will rebop her CC/G '37 Willys with help of Chuck Finders. Clutch-Flite and new suspension too. Partner is Nancy Leonello.

JOE & TOM HRUDKA — (Parma, Ohio) — those "Mr. Gasket" boys will be busy with a blown Chevy, an all-glass AA/G Camaro, a new engine for their Anglia C/Gasser and a Chevy-Willys CC/G. These guys love to race. **BILL LINDER JR.** — (Rochester, N.Y.) — will rebuild his '37 Willys with 287 inches of Chevy for power. It's a CC/G. **BOB LOMBARDI** — (Brooklyn, N.Y.) — more glass parts, a tube front end and Clutch-Flite for his '39 Willys BB/G. **"BIG JOHN" MAZMANIAN** — (Whittier, Calif.) — will run his chopped Austin AA/G Chrysler and may build a new car. But it would definitely not be a late car, "violating the tradition and history of gas supercharged cars." **JACK MERKLE** — (Ridgewood, N.Y.) — will continue his Chevy crusade with his hard-running '33 Willys AA/G. **GEORGE MONTGOMERY** — (Dayton, Ohio) — a larger engine and a new glass front end are slated for his SOHC Mustang. **K. S. PITTMAN** — (L.A., Calif.) — is debating over new and late body for new car. May go Camaro. His Willys still good. **SELKIRK-BORK & MEYERS** — (Peoria, Ill.) — will stuff a blown Chrysler into a glass Camaro AA/G going for broke. **DON SMITH & CLEM GOLDENSTIEN** — (Minneapolis, Minn.) — will lighten their Chrysler powered AA/G '38 Willys pickup. **NELSON STOLTZ & RAYMOND VELASQUEZ** — (Marion, Ind.) — will field an all-new blown Chrysler '67 'Cuda.

UNBLOWN GAS COUPES

Two additional classes have been added for the unblown Gassers, now offering the choices of A/G through K/G for enthusiasts. Hemi powered Anglias should increase in popularity, teaming late Detroit engineering in the engine and transmission department with small frontal area coupes which have heavy traditional gas coupe flavor.

FRANK BELL & FRED ZALEWSKI — (Kenosha, Wis.) — will go to a bigger Chevy engine and chop their Anglia B/Gasser. **GARRETT BROS. & LAVERNE HEMPHING** — (Hanover, Pa.) — glass parts will update their '56 Chevy F/G machine. **HASS BROS.-BESHORE & DOWNING** — (Fremont, Neb.) — will sell I/G Buick and buy Arlen Vanke's '67 SS/B Plymouth. **FRED HURST-JIM THORPE & DON BOOTH** — (Dayton, Ohio) — one of the world's strongest A/Gassers, will switch from '40 Willys to a '68 Barracuda for more A/G competition. **JOHNSON-TRAVIS & MARTIN** — (West Frankfort, Ill.) — will sell I/G and buy Arlen Vanke's '67 SS/B Plymouth. **MIKE LOVE** — (Bicknell, Ind.) — may switch from E/G '55 Chevy to a D/MSP Corvette. Gene Moody builds the engines. **DEAN LOWRY** — (Riverside, Calif.) — will keep the fans on their feet with his Corvette-eating H/G EMPI Volkswagen. **HARRY LUZADER** — (Monroeville, Pa.) — will stay with his '32 Ford coupe, which is powered by a Chevy. It's a D/Gasser. **JACK MITCHELL & ULREY BROS.** — (Bedford, Ind.) — will field a new SOHC Ford powered Prefect for A/G class.

(continued on following page)



The Kenosha Kids, Frank Bell and Fred Zalewski, will chop the top on their immaculate Chevy/Anglia B/Gasser. It's a runner!

NEW LOOK FOR '68



Casser competitor Skip Hess has switched from Anglia to SOHC Mustang, with blower, for AA/GS. Hanna handled aluminum.



Those Mallicoat twins will be back — with a blown Barracuda for AA/G class. All-glass body is legal, and it should wail.



In case you can't read that "flower power" lettering on the door, it says "Gene Schwartz." His Chevy will run in E/G class.



Paul Frost will replace his '40 Willys AA/G with a chopped all-glass '33 Willys in an effort to fight off late models.

FERD NAPFEL — (Cantonsville, Md.) — will rebuild his famed '55 Chevy F/Gasser and continue to race rival Clyde Seigle.
OLLIE OLSON — (West Palm Beach, Fla.) — will retire his famed '40 Willys and go to a Dodge hemi A/G Anglia.
NORM PADDACK — (Indianapolis, Ind.) — will trade his Chrysler hemi B/G '40 Willys for an A/G or AA/G Chrysler-'67 Opel Cadette.
PAUL & HORACE REINFORD — (Pottstown, Pa.) — will retire the famed "Moose" D/G '38 Chevy and go to B/SR.
TONY RUSSO & BOB SANTO — (Brooklyn, N.Y.) — will go to a tilt front end and new aluminum on their G/G Willys.
RICK STICKEL & BOB RIFFLE — (Columbus, Ohio) — will try A/G by replacing the 301 Chevy in their Anglia with a 427.

FRED TEIXEIRA — (Fresno, Calif.) — will lighten his B/G '40 Willys. Keith Black builds late Chrysler engine.
BUTCH THUNEY — (Des Moines, Ia.) — a Clutch-Flite, coil springs and tube axle will update his C/G Chevy.
RICHARD TITSWORTH — (Toledo, Ohio) — sold his C/G '62 Chevy II and is building a B/G '49 Anglia with 310 Chevy.
AL TSCHIDA — (St. Paul, Minn.) — will compete his strong '33 Willys with 327 Chevy motivation in B/G for '68.

MODIFIED SPORTS

Under the new rules, Modified Sports Cars with a 10% engine setback must run under Gas Coupe classes and cubic inch to weight breaks, and those with 25 percent setback must compete in Altered classes. It's highly debatable whether the Modified Sports car will be able to "hack it" in either Gas or Altered class, but time will tell.



Deloy Naeb's '66 Tulsa Street Champ Corvette will be running in Gas class next season, as NHRA has dumped Modified Sports.

JACK ANDERSON & BILL MARTIN — (Elkhorn, Neb.) — will move the engine back to 25% mark, remove top, and windshield, placing them in Altered class under new rules.
BOB CALLAHAN — (Atlanta, Ga.) — will update his D/MSP 'Vette, but will be forced to compete in gas coupe class.
PETE CONSILIO — (Shrewsbury, Mass.) — will field a 351-inch Cobra powered XKE Jag for former B/MSP.
NEIL "PAPPY" ELLIS — (Warren, Mich.) — won Nationals St. Elim. in partnership with Dave Kanners in '67; will run solo this year with a new Logghe-Fiberglass Trends coupe.
LARRY FORSTALL — (Narberth, Pa.) — will switch from C/MSP '57 'Vette to Chevy powered B/FD or B/GD.
SAM GIANINO — (Royal Oaks, Mich.) — is revamping his C/MSP '57 'Vette with tube axle. Is aiming for 10's.
DAVE KANNERS & RON READER — (Birmingham, Mich.) — a 452-inch Chevy will power their Logghe-built special. They will run under the Midwest Auto Parts banner again in '68.
BILL MANNING & JAMES GIPSON — (Amarillo, Tex.) — will go to tube front end on their 301-Chevy powered MG.
DELOY NAEB — (Brighton, Colo.) — will stick with the D/MSP Corvette that took him to Street title at Tulsa '66 Finals.

MODIFIED PRODUCTION

There are no significant changes in the NHRA rules concerning the Modified Production classes. Watch for more of the two- to three-year-old Super Stocks to show up in modified form, bolstering the strength of these classes.

EARL BRITT — (Sioux Falls, S.D.) — will stay with his E/MP, "The Pizza Man," the world's fastest six-cylinder Corvette.
JOHN DAY — (Waterloo, Ia.) — another E/MP current record holder, will stick with his Chevy-six powered '60 Falcon.
ROSS GILBERT — (Lancaster, Pa.) — will run a '40 Chevy B/MP with 327 power; is selling his record holding C/MP.



Ross Gilbert's famed '55 Chevy C/MP wagon will be replaced this season with his B/MP '40 Chevy with a 327 mill.



Earl Britt's "world's fastest six-cylinder Corvette" will stay in E/MP next season. Joe Cunningham builds engines for Earl.

JIM HALE — (Ft. Smith, Ark.) — will go with two cars, his '64 Plymouth A/MP and an SS/AA '68 Plymouth.
JAY KALMUS — (Lake Hiawatha, N.J.) — D/MP record holder will stay in that class and switch over to F/G for part of the season. Tony Feil and Speed Center will sponsor.
RAY MODERT — (Dixon, Ill.) — will continue to run his '64 Chevy II in AHRA's G/XS Formula 6 class.
DICK MOROSO — (York, Pa.) — will stick with C/MP Corvette but will streamline as much as rules allow. His booming snoop, Stahl-Moroso, Inc., keeps him plenty busy.
RALPH RIDGEWAY — (Springfield, Mass.) — will repaint his strong C/MP '55 Chevy and field a Z-28 '68 Camaro for S/SE.
GLEN SELF — (Durante, Okla.) — will stick with his present car, but go to a bigger engine. He'll run in E/ and F/MP.
RICHARD WOOD & LOUIE GUIDI — (Fremont, Calif.) — will continue with their D/MP '56 Chevy Station Wagon.

SUPER STOCKERS

Without a doubt, these "cream of the Detroit crop" cars will continue to grow in popularity among both competitors and spectators this season, as indicated by their sudden renaissance in '67. Watch for factory participation by Ford, Chrysler, and perhaps even Chevrolet, in addition to American Motors. Many "funny" car names will continue to slip back into the Super Stock ranks, where ten second competition is expected. SS Match racing will also blossom at strips across the country as promoters jump on the bandwagon, pairing names like Sox-Martin, Platt, Jenkins, Stahl, Landy, Schartman, perhaps even Nicholson, and many more.

Due to expected growth, NHRA has expanded the Super Stock classes from SS/A to SS/F, and to a similar grouping for cars with automatic transmissions. Watch for some really heavy artillery to come off the Detroit assembly line, like SS/B Camaros and even hemi Barracudas for the new SS/A class. Detroit "summit conference" meeting of NHRA and auto manufacturing representatives decided new factoring, not available at press time. As a result, all classes in preview are based upon '67 rules.

DICK ARONS — (Southfield, Mich.) — will sell his 396 SS/EA and buy another Turbo-Hydro 396 Camaro, either the 350- or 375-horse version for SS/CA or SS/DA.

JOE ARVAY — (Trenton, Mich.) — plans to stick with his '67 Plymouth 2-door hardtop 426-incher in SS/BA class.

WELDON CHRISTIAN — (Tulsa, Okla.) — will switch from SS/EA to B/ or C/SA with his 440 GTX. May get a 383.

TOMMY CLISE — (Lonaconing, Md.) — wants to stay with his 343 horsepower '62 Plymouth; will run SS/DA or SS/EA.

LARRY COOPER — (Monroe, La.) — tentatively plans to stick with his SS/AA Dodge; may switch class to fit rules.



Up-and-comer in the Super Stock ranks is Tom Myl. Pennsylvania student will try for a hemi Road Runner for SS/BA or SS/CA.



Paul Palmer's "Bat Wagon" '63 Dodge wagon will run in SS/EA, which was last year's SS/DA class before new NHRA classes.



If Mary Ann Foss doesn't come up with a new Dodge for '68, she will be running her trusty '65 Hemi, perhaps in SS/BA.



First pictures of Plymouth's 68½ Hemi Barracuda? Perhaps. At press time Chrysler Corporation still denies "big fish" rumors.

TOM CRUTCHFIELD — (Kokomo, Ind.) — will keep his 426-inch SS/AA Dodge. May also run a '63 Dodge wagon in SS/DA.

MARY ANN FOSS — (Bellville, Ohio) — may field a new Dodge for '68; most likely will run '65 Dodge in SS/AA with her dad, Pete Frech. A strong Midwest combination.

(continued on page 64)

MANUFACTURERS' FUNNY CAR CHAMPIONSHIP



What make of car is really "King Clown" among the funnies? Forty-odd match racers recently met at Orange County International Raceway to see if they could find out . . . By A. B. SHUMAN



Final run of the night pitted the two quickest cars of the meet in an all-out banzai blast for bucks. Ed Schartman subdued the rainbow-hued, Roy Gay driven Firebird with a 7.86.



Doug Thorley's Corvair had to drop out after two rounds with transmission woes, but only after copping top speed laurels with two 191 mph runs on innerliner-equipped M&H slicks.

NESTLED IN THE rustic town of East Irvine, California, hard by the El Toro Marine Corps Air Station, is what just has to be one of the best designed racing plants around. And while sleek supersonic jets flashed overhead, Orange County International Raceway recently put on a jet age show of its own: the first Manufacturers' Funny Car Championship. Over 12,000 enthusiastic spectators came early and stayed late to see the country's quickest plastic cars—divided into six "factory" teams—battle through three adrenalin-generating rounds to determine which brand was best. Added incentive to win came from the generous \$22,000 cash purse.

Team banners were set up in the pits and by late afternoon the characteristic sight of wildly painted flip-top bodies pointing skyward, surrounded by throngs of fans, showed that the funny afficianados were out in force to support their favorite make. Rallying 'round the Mercury flag were the supercharged Comets of Don Nicholson, Eddie "The King" Schartman, Dee Keaton, Pete Gates and the venerable Jack Chrisman. Plymouth was trying to win the meet over with Butch Leal's "California Flash," the "Hemi-Cuda," the "Melrose Missile," the "Lime-Fire" 'Cuda, and Larry Reyes' "Supercuda."

Young Roy Gay headed up the Pontiac team with the "Infinity" Firebird, and got backing from Don Sappington's

"Phoenix Bird," Steve Montrelli's "New Breed," and Lou Arrington's pair, the "Brutus" GTO and his new "Brutus II" Firebird. The colorful Dodge group featured Roger Lindamood's large Charger, Mr. Norm's "Super Charger," and the long Darts of Charlie Allen, Al Vanderwoude, and Rich "Samson" Hammons. Ford unbridled the Mustangs of Gas Ronda, Dick Loehr, Tommy Grove, Bob Blinn, and Snodgrass & Mahnken. Defending the Chevrolet name were Dick Harrell, Chapman Automotive, Doug Thorley, Pete Seaton, and Kelly Chadwick. Ford, Chevy, and Plymouth used a strategy of employing both blown and unblown cars.

Not leaving anything to chance, the OCIR management had a dozen back-up cars ready to move right in if anything happened to one of the thirty primary entries. Waiting in the wings were such "alternates" as Jim Liberman, the Pisano Brothers, Steve Bovan, Randy Walls and the Engine Masters. The result was an exceptionally smoothly run program with nary a lag and only one single.

The method used to decide the winning
(continued on page 68)



ABOVE — Dyno Don had a tough time with the Corvairs, losing to Doug's Headers in the first round and Seaton's Super Shaker in the third. Starting line personnel had to rely on dragster-style filter masks because of heavy nitro fumes.

RIGHT — Youthful smoker. Mr. Norm's two-week-old Charger displayed awesome power with smoky burnouts and runs in high eighties. Won two out of three races.

BELOW LEFT — In a pre-race confab by the Infinity Firebird, boss wrench, James Osteen bench races about the Pontiac with Eddie Schartman. Dickinson, Texas, 'Bird flew to runner-up honors with runs of 7.90, 7.96 and 8.24 plus warm-up 7.94.

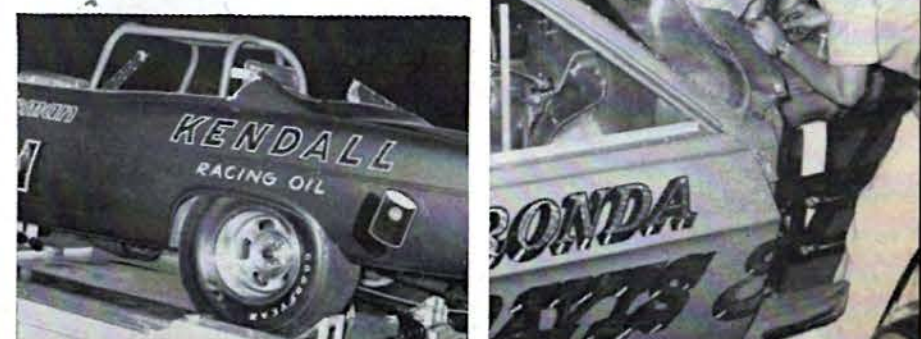


ABOVE — Dickie Harrell brings home another win for the Chevrolet camp with fine 7.94-180.72 victory over Charlie Allen. Purple Dart shut off with woes.

RIGHT — Ed Pink was on hand to help Gas Ronda. The injected Mustang did well by winning two of its three races, hit 8.30.

BOTTOM LEFT — Nifty Orange County electronic scoreboard displays the results of second round match that set top speed and low e.t. marks for the meet.

BELOW — Jack Chrisman, who started the "topless" craze for funnies, found himself in a roadster again when the 6-71 let go on a warm-up, but he was not hurt.



Photos by Bob Swaim

'68 1/2 Better Ideas From

302 — Two fresh versions here — one's hot and the other will scald ya!

428 — Tunnel ports for the "Big Guy," and a whole new list of options.

BY TERRY COOK

SMALL BLOCK FORD engine lovers, arise! Those guys up Dearborn way have given you something to shout about. Around introduction time last September, Ford Motor Company unveiled their 302 incher, which in essence was a 289 with a 1/8-inch factory stroke job. At the same time Ford announced that they were discontinuing their high performance 289 engine, much to the dismay of performance oriented customers. But don't fret; Ford, indeed, has a "better idea" concerning healthy, small block engines and a hint of big things to come in a robust, big block performer.

The harbinger of higher horsepower comes in the form of two new performance versions of their 302. If you want to know the crux of the difference between the original engine released last

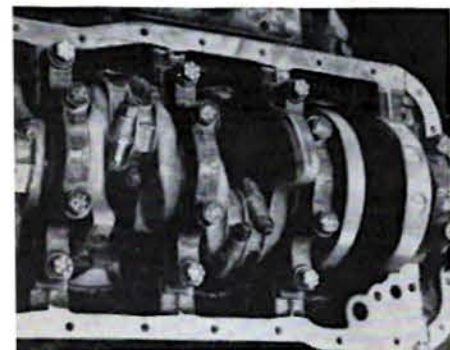
September and the two '68 1/2 versions, it can be summed up in two words... tunnel ports. Yep, those wild NASCAR-type heads have been tooled up for the production line, and, in short, give the 302 an even stronger outlook on life. No more prattle, now, as we know you're more than a little anxious to find out what's going on in '68 1/2.

STANDARD PRODUCTION 302 TUNNEL PORT ENGINE

First you must understand that there are two versions of the engine, the "mild" 240 horsepower version, which will be available in Cougars and Mustangs, and the high performance engine, which will not be installed on the assembly line. The standard production 302 engine will carry a five year and 50,000 mile warranty, which is outstanding from a maintenance standpoint.

After attending the engine preview in Detroit, we chased down Hank Lenox, Ford design engineer who was assigned to the 302 tunnel port project from the beginning. Hank is one of the capable hands under the direction of T. A. Landis, manager of the Special Engine Department at Ford. With the help of Messrs Lenox and Landis, we were able to get the complete word on the new 302's, and their help is appreciated.

Working from the bottom up, the first difference we spot on the standard production 302 tunnel port engine is the four-bolt main caps on the intermediates (mains 2, 3, and 4), while the normal two-bolt caps are used on mains one and five. The new four-bolt caps are nodular cast iron, rather than the regular grey iron, offering a little more material strength, as well as strength of



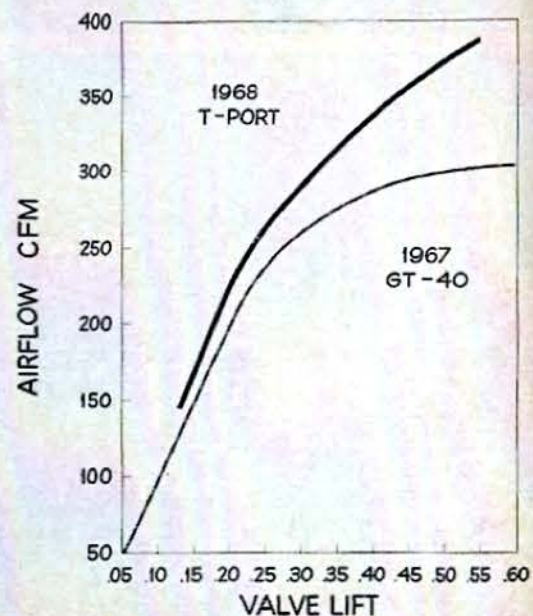
LEFT — One notable feature of Ford's new 302-incher is the four-bolt caps on the intermediate mains, 2, 3, and 4. The end mains, 1 and 5, have the normal two-bolt caps. New caps give lower end beef.

RIGHT — Do the new tunnel ports work? Just take a look at this chart comparing the 302 tunnel port heads to the GT-40 heads previously used. Any more questions?

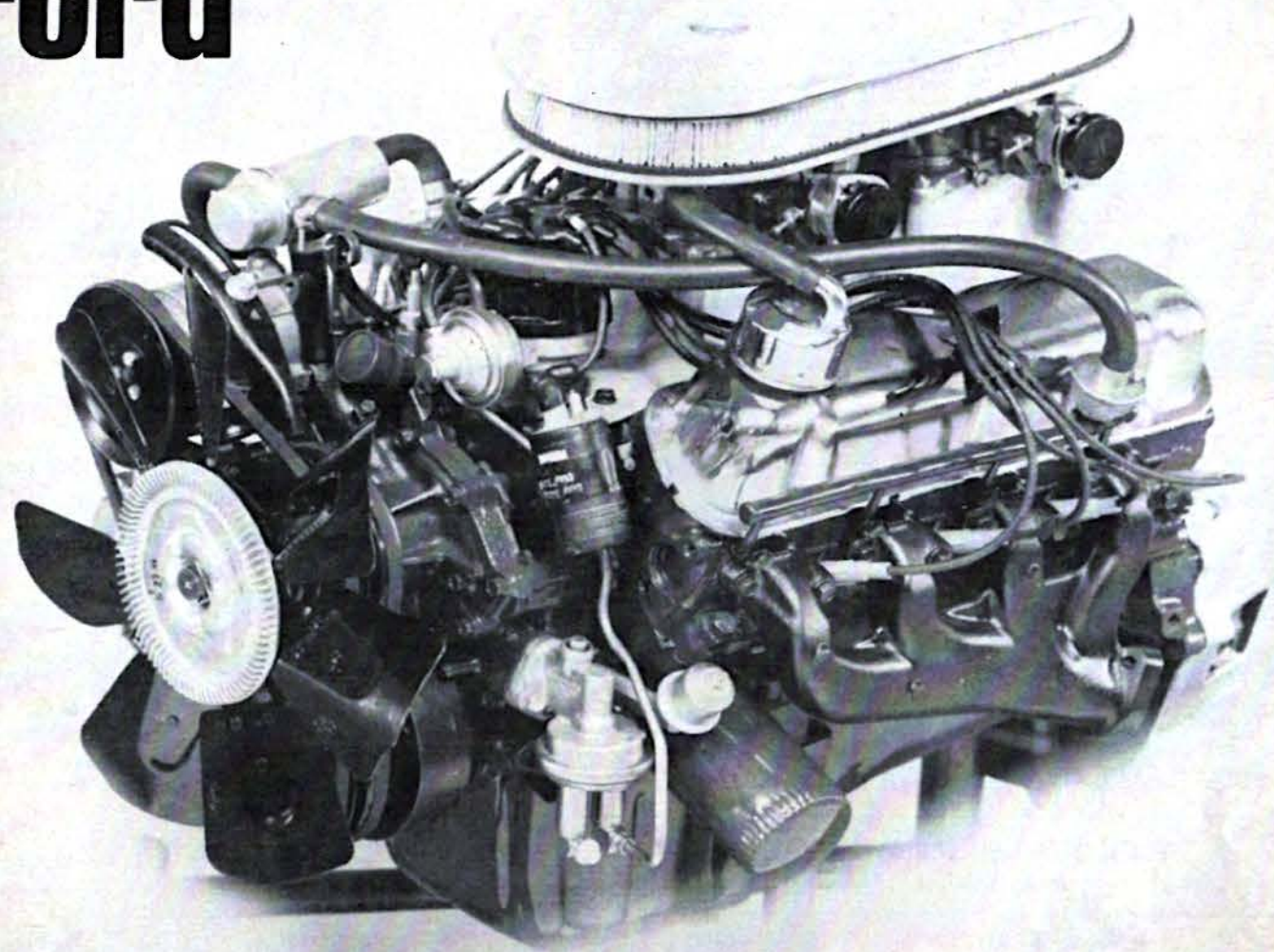
BELOW — This is her! Giant 2.20-inch tunnel ports with push rod sleeve are a duplicate of big 427-type heads. That hardened hollow alloy steel rocker shaft allows adjustment and high rpm operation.



AIR FLOW COMPARISON



Ford



Photos by Ford Photographic

design. The bearings are the same as those used on the 289 cubic inch engines, but the crankshaft differs from its fore-runners. With a higher nodularity (90 percent), the crank is selected for quality and has a 3.00-inch stroke for the 302, as compared to the 2.87-inch stroke which resulted in the 289. The connecting rods are almost identical to the standard items, with the exception that larger 5/8-inch bolts replace the 3/4-inch bolts previously used, and that the bolt has a circular head, rather than a T-head. In addition, the bolt surface is spot faced rather than broached.

The pistons are flat tops with valve reliefs, cast aluminum, and have a compression ratio of 10.5:1. The wrist pin and rings are standard production items, and since the bore of the 302 is identical to that of the 289 at 4.00 inches, the pistons may be used in the smaller engine if desired. Since the stroke in the 302 is an eighth of an inch

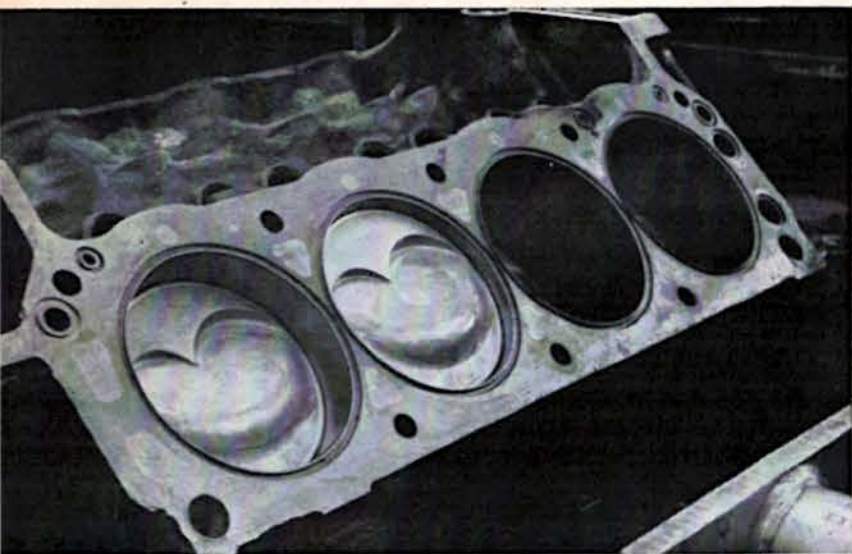
longer than its "little brother," the bore or barrel extends down further than in the 289 for piston stability and better oil control.

Since the 302 engine is a close relative of the 289, many of the parts and pieces are interchangeable. The oil pan and pump are standard production, along with the front cover and water pump. Since slightly heavier rods are used, the harmonic balancer, or dampener, on the front of the engine is slightly different, but the flywheel and rear components are still standard items. One small difference can be noted in the machining for the overhead oiling system, in the event one wishes to convert to the rocker arm system used in the high performance version of the 302, which will be explained a little later on.

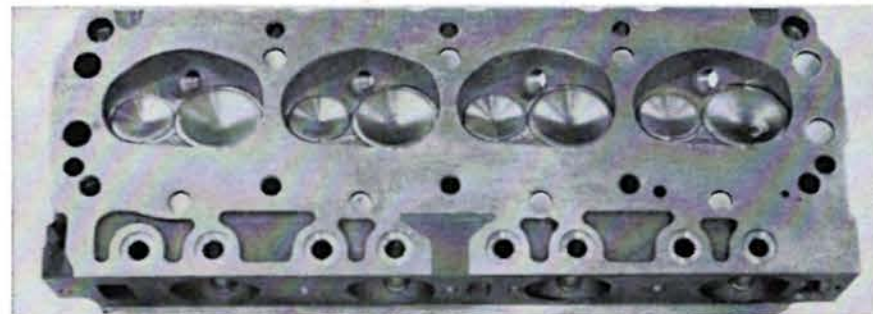
Before we take a look at the heads, note that the head gasket is a standard matrix of steel and mattress material, .045 thick. The heads themselves

are cast iron, but feature the tunnel intake ports, similar to those used in the NASCAR Grand National 427's and the famed SOHC 427's. In essence, the port is round, with a diameter of 2.20 inches on the manifold surface, the passage running directly from the manifold to the valve. Rather than weaving around the push rod and thus constricting the flow, the port is a "straight shot," with the push rod running through the center of the port, protected within a steel tube. Unlike the tunnel port kits used on some 427's where the push rod runs through the port in the intake manifold, in the 302 the push rod runs through the port in the head itself. The accompanying pictures illustrate the system. Production type studs and cast rocker arms like those on the 289 are used on the regular 302 engine. A mild camshaft was selected for this 302, partially

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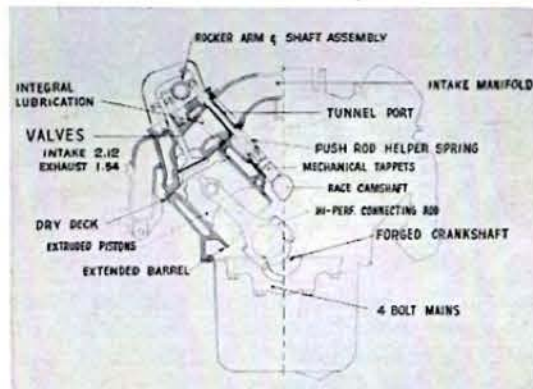
ABOVE — Hank Lenox, project engineer for the 302 and Joseph P. Eastman, right, section supervisor for high performance engines, helped make the 302 reality. LEFT—Dry-deck technique features plugged water and oil galleys, with O-ring grooves around each cylinder.



ABOVE — Essentially, the combustion chambers of the 302 resemble those of their brother, the 289. One exception is valve sizes, 2.15 intakes and 1.56 exhausts. LEFT — How much carburetion do you want? There is a choice between a single four or dual four-barrel manifold for the standard and high performance 302.

SPECIFICATIONS ON FORD'S 302 TUNNEL PORT PERFORMANCE ENGINES

	PRODUCTION STREET VERSION	PERFORMANCE RACING VERSION
Horsepower	240 @ 5000 rpm	not available
Torque	310 @ 3000 rpm	not available
Displacement	302 cubic inches	302 cubic inches
Bore	4.00 inches	4.00 inches
Stroke	3.00 inches	3.00 inches
Compression Ratio	10.5 to 1	12.5 to 1
Intake Manifold	aluminum two-plane dual four barrel	aluminum two-plane single four-barrel or dual four-barrel
Exhaust Manifolds	low restriction cast iron headers	welded steel tubing headers
Carburetors	(2) four-barrel Ford carbs, size not available	(1 or 2) four-barrel Holley(s), size not available
Rocker Arms	1.60:1 spherical seat	1.60:1 shaft mounted
Intake Valves	2.01 inches	2.15 inches
Exhaust Valves	1.53 inches	1.56 inches
Valve Lash	none required (hydraulics)	.020 hot intake & .025 hot exhaust
Head Gaskets	composition with metal grommets	metal combustion seals & rubber O-rings for oil and water sealing
Crankshaft	special nodular iron casting	forged alloy steel
Pistons	cast aluminum flat top with valve reliefs	extruded aluminum with pop-up dome and valve reliefs
Ignition	single breaker coil	breakerless transistor
Main Bearing Caps	four-bolt mains on 2, 3, & 4; two-bolt caps on 1 & 5	four-bolt main on 2, 3, & 4; two-bolt caps on 1 & 5
Cylinder Heads	tunnel intake ports	tunnel intake ports



ABOVE — Cutaway diagram schematically depicts how the pushrod passes through the intake's port and how the chamber gets a straight shot of air.



ABOVE — The standard 302 engine uses the flat top piston for 10.5:1 compression, while the high performance mill uses pop-ups for 12.5:1 ratio.

68½ BETTER IDEAS FROM FORD

accounting for the low horsepower rating. Tappets are hydraulic and are production equipment, as are the push rods, valve springs, retainers, and seals. The valves on this 302 are surprisingly large, 1.53-inch exhaust and 2.01-inch intake, and when combined with the tunnel intake ports, the engine must be rated as a real "breather."

Final features of the standard 302 are the external equipment, a cast aluminum dual four-barrel intake manifold and a set of low restriction cast iron exhaust headers, which are similar to those of the high performance 271-horse 289, with the exception of different flanges to match the exhaust ports.

After skimming through the features of the new production 302 tunnel port engine, you can see it has all the makings of a potential stormer. About that conservative 240 horsepower rating which Ford has hung on the engine, keep in mind things like the mild camshaft, hydraulic tappets, and especially the maze of smog control devices of the thermactor-type emission package, as

they help explain the "low" rating. With a few simple changes for racing, the rating will climb surprisingly.

HIGH PERFORMANCE 302 TUNNEL PORT ENGINE

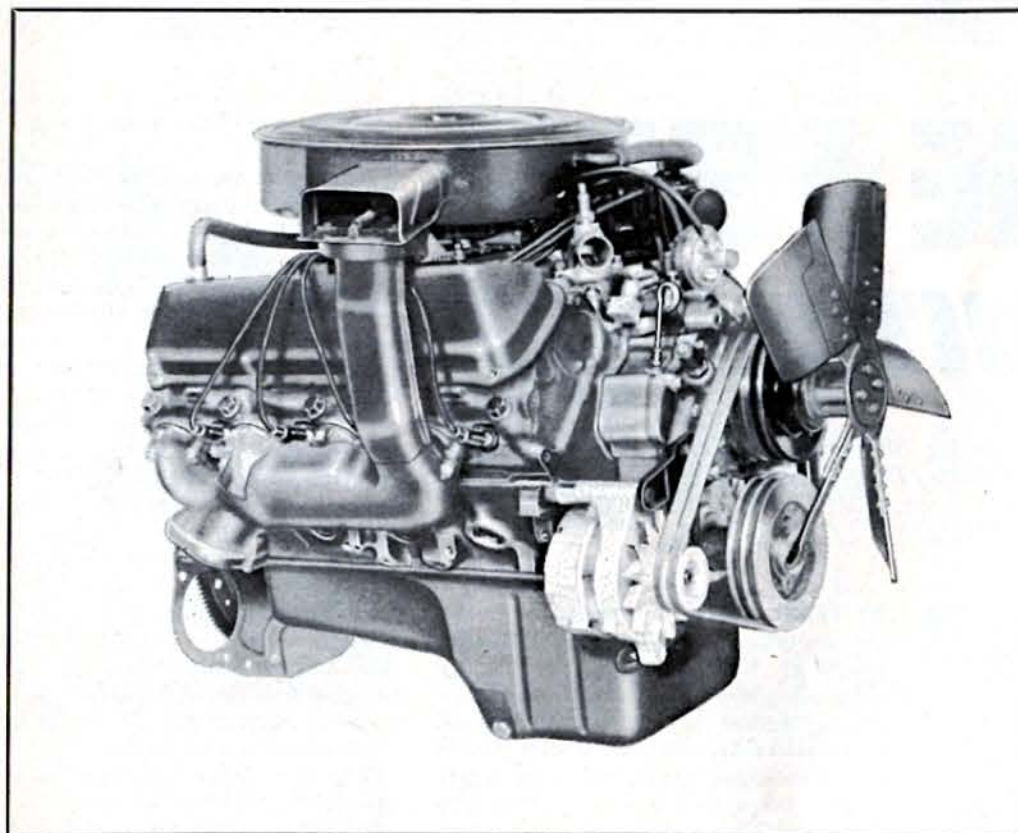
While only the standard production 240-horse, 302 tunnel port engine will be available on an assembly line basis, for those who wish to go racing Ford has a hopped-up version which is available separately, for dealer or owner installation. In addition, the high performance parts needed to convert the standard engine to a stormer are available separately, in "package" form.

The difference between the standard and high performance 302 begins with the crankshaft, which is forged steel rather than nodular cast iron, and has 180-degree registered cross drilling for centrifugal oiling of the rods. Those rods, incidentally, are identical to the standard 302 units, but the lower main bearings have been grooved for better oiling. The pistons are extruded, as compared to the cast aluminum of the standard 302 pistons, and with pop-

ups and deeper valve reliefs, for the high lift cam, produce a final compression ratio of 12.5 to 1. Pistons use pressed pins which are extruded and internally tapered for more strength, but provisions have been made in the pin bosses for a full floating conversion, if desired. The light piston (490 grams) accept ¼-inch compression rings, thinner than those in the standard engine, along with a three-piece chrome oil ring. Ring lands in the high performance piston are spaced farther apart for additional strength.

Although the lower end is similar to that of the standard engine, the high performance offering includes a strong relief spring for 85 pounds oil pressure, as compared to the standard 50 pounds. It also has a high speed rear crankshaft rubber lip seal, as opposed to the normal "rope" type seal. The oil pan is the same on both versions of the 302. Up front, however, the standard front cover and water pump are replaced with aluminum parts for light weight. Also, the dampener is tuned for the different frequency of the forged crank. The flywheel on the high performance engine is nodular iron for greater strength, whereas grey cast iron is used

(continued on page 70)

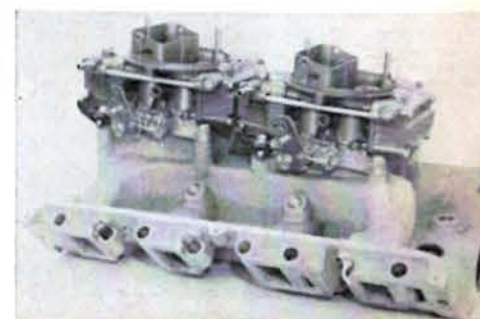
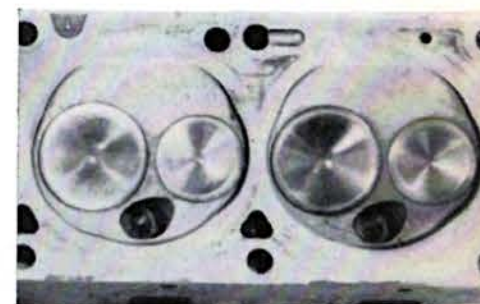


ABOVE — Although not depicted here, Ford's 428 Cobra Jet has a special air cleaner with a cold air package duct in the top for increased power. Standard engine is rated at 335.

ABOVE RIGHT — The pistons in the standard release 428 engine look like this, with dual valve reliefs for left or right bank installations. Standard compression ratio is a decent 10.7:1.

CENTER RIGHT — Cylinder heads on the 428 sport 2.06-inch intake valves and 1.625-inch exhausts. Good news is that the 427 tunnel port heads bolt right on and are available now.

BOTTOM RIGHT — While the release engine comes with a 735 CFM single four carburetor, an aluminum dual four manifold is available for the high performance option and 785 CFM carb.





DODGE FEVER Mr. Norm style

The hot one from Dodge for '68 is, of course, the slick new Charger, but Mr. Norm and Gary Dyer have made a few alterations to theirs . . . like a blower, tube chassis and fiberglass body — and a total weight of 1700 pounds!



"Mr. Norm" Kraus of Grand-Spaulling Dodge in Chicago is the man behind it all. He has solid knowledge of drag science, but due to business, driver Dyer maintains car.

BY TERRY COOK ■ Just how far can the evolution of "funny" car design progress? Last year's batch of tube-chassied, glass-bodied match race machines seemed to reach the limit of way-out construction. What can you do to top one-piece bodies and space frame chassis when you have seemingly run the gamut? This is the problem which renowned driver Gary Dyer and "Mr. Norm" Kraus faced when they tackled the job of building a new machine, trying to top the outstanding performance of their '67 Charger. Famed for their high-stepping Chicago-based Grand Spaulding Dodge stormer, the Midwest team set out to do the difficult . . . im-

prove on what was already a top performer.

Because of the popularity of their '67 model and the clean lines of the '68, Mr. Norm chose the new Charger as a basis for their new match racer. Fiberglass Ltd. in Hillside, Illinois, made the one-piece '68 Charger body, which was narrowed by removing a 10-inch strip down the center and glassing the two halves back together. The purpose of the narrowing was to offer less surface area in the hood, deck, and top area, thus reducing the chance of "flying" in the traps due to aerodynamic instability. (See CAR CRAFT, Oct. 1966.)

With the body shell ready to go, Gary loaded Mr. Norm's '67 Charger on the truck and started for California. Upon arrival, he headed for Frank Huszar's Race Car Specialties in Tarzana, with the goal in mind of building a new machine to surpass the '67 car in accomplishments — no mean feat.

The space frame chassis RCS came up with is based on a set of 1½" OD, .049" chrome moly rails, with a "long" wheelbase of 128 inches to combat wheelie tendencies. The roll cage, which was built into the chassis, looks similar to current dragster cage design and protects Gary from any angle. It is constructed of 1¼" OD, .065-wall chrome moly tubing.

Up front, in the suspension depart-

ment, a pair of Logghe Stamping coil shocks link to a 1½" OD, .109-wall chrome moly tube axle. A pair of P & S spindles mount a pair of Halibrand 15-inch magnesium wheels which sport Pirelli tires, inflated to 50 pounds each. A duo of 25-inch radius rods on each side of the chassis locate the front end with eight degrees of caster, and the 57-inch front tread has a toe-in of ¼-inch. Race Car Specialties provided the aluminum steering box, and a dragster-type butterfly wheel sends the action through the box to an idler, then on to the front end. Heim joints used in the front end are all solid ¾-inch items.

Meanwhile, back in the traction department, a late Dodge rearend housing with 3.73 cogs was narrowed 11 inches,

providing a rear tread of 54½ inches. The housing is positioned by a pair of adjustable Koni coil shocks and a pair of 34-inch traction bars. Goodyear 11.75 x 16 slicks and Halibrand wheels are slowed by a set of Airheart speedway calipers. A foot pedal linking to a Girling master cylinder actuates the brake system. Special sway bars located at the front and rear help keep the Charger on the straight and narrow, and braces aft of the chassis provide the tilt point for the one-piece fiberglass body.

In the engine compartment, a stock displacement 426 hemi has received the full Dyer treatment, including M/T rods and Ansen buttonless 8.5 to 1 pistons. The ports have been cleaned

up and Donovan intake and exhaust valves are pushed by a Crower roller camshaft and kit. A Cragar manifold and drive unit mounts the supercharger and spins it at 26 per cent over crankshaft speed. Hilborn's PG-175 pump sucks the nitro blend from a neat 3½ gallon aluminum fuel tank and feeds it to a low-profile Hilborn four port injector. Port nozzles are not used on the Dyer modified magnesium 6-71 blower. Spark is sent to Champion spark plugs by a Vertex magneto.

Gary modified the Torque-Flite transmission and uses only second and high on competition runs, as this combination provides the best elapsed times for the car. The convertor is a stock stall-speed unit, but seven clutches are used, rather than the five used in stock hemi transmissions, and a B&M short rear shaft allows the use of a 24½-inch drive shaft. As an experiment, Dyer may go to the lighter dual-disc clutch, high-gear-only setup in search of 7.50-200 performance.

The water is circulated through the block by the stock fuel pump, using a small two gallon water reservoir tank for cooling. This eliminates the need for a battery and electric pump, thus saving weight. An eight quart deep pan, with Milodon pickup and windage tray,

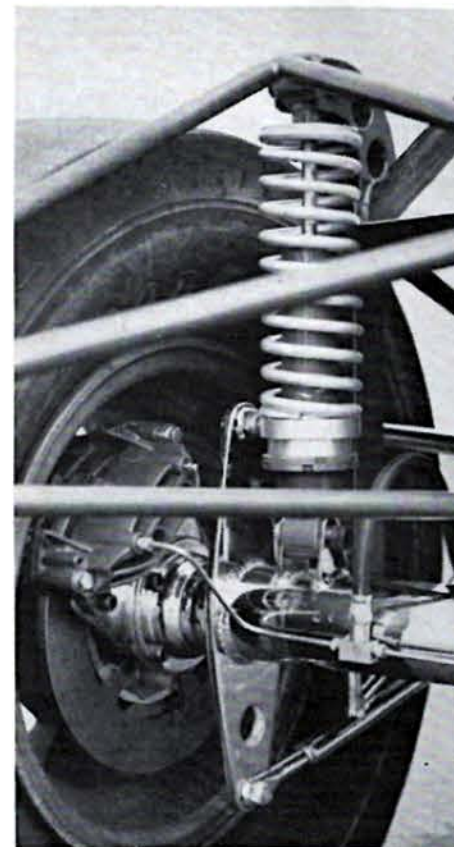
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TOP — Let's talk about a safe roll cage. Race Car Specialties looked to dragster design and came up with this ultra-safe construction to afford Gary "insurance."

ABOVE — The 1¼-inch .065 o.d. cage has a smaller tube to serve as a head strap, keeping Gary's helmet in place. Interior looks stark, but it is functional.

RIGHT — Initial tests at Irwindale in new rig proved promising. Dyer, nearly hidden at the rear quarter window, guided the Charger to a wringing-out 8.15 e.t.



That Koni coil-shock is the basis of the rear suspension. A Hurst-Airheart Indy Speedway caliper on each rear wheel is used with the Chute Metal Co. parachute.



How to build a better mousetrap. With tilt-body in "up" position, the wild new Windy City Charger is just waiting to be sprung on some competition. Any takers?



mr. norm style

supplies the filterless oil system with Kendall 70-weight oil for lubrication. The stock starter is used, and 12 volts of power are supplied by plugging an external battery into a special aircraft connection plug.

Engine location is an all-important point, as "steerability" as well as maximum traction is sought. The engine is set back 36 per cent, resulting in a 46-inch distance between the forward-most

spark plug and the front wheel centerline. Dyer pointed out that the critical anti-wheelie dimension is the distance between the center of the rear housing and the rear engine plate. On Dyer's new mount, that distance is 61 inches. For chassis tuning, a secondary motor mount position, four inches to the rear and one inch higher than the primary mount, is available.

In the safety department, Tom Ab-

bott of Chute Metal Company supplied the parachute, five-point-mounting shoulder harness and seat belt, ballistic nylon transmission shield and the blower cover. A four-inch spoiler on the rear of the car, as well as a seven-degree rake in body attitude, helps cancel the aerodynamic "flying" characteristics of the car.

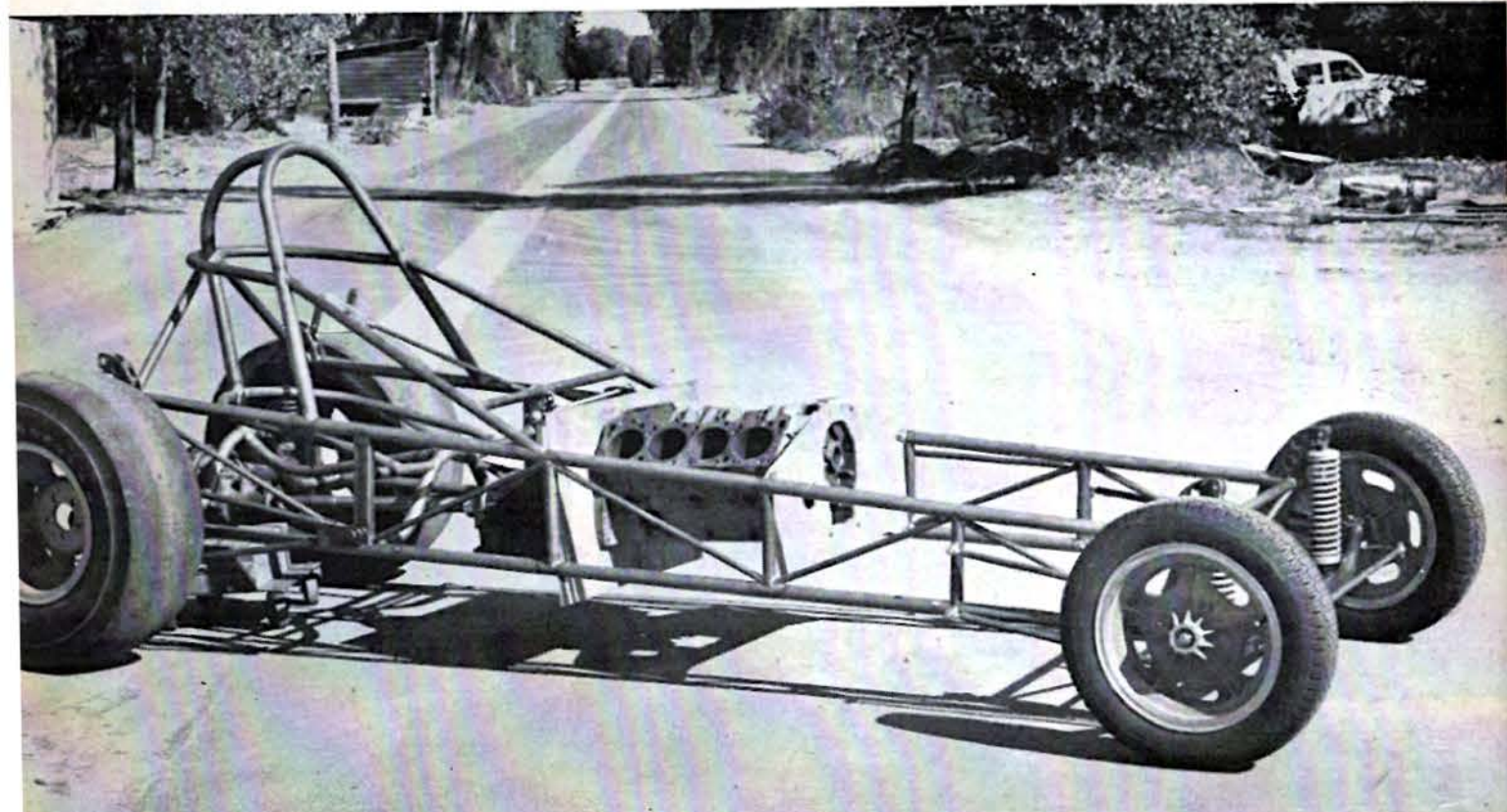
The body shell was sent out to the shop of up-and-coming California painter "Molly," where it received the full treatment. The front windshield was then installed and the body mounted, ready for some racing. Going back to our original question — "How can you build a better match racer?" — through

conscientious weight-saving and design, Mr. Norm's '68 Charger ended up about 20 per cent lighter than its famed predecessor. The complete chassis and engine tip the scales at a scant 1518 pounds and, with the addition of the 170-pound body shell, a total weight of 1688 pounds was achieved. It was difficult, but through sound engineering and the application of all the "tricks" learned in building earlier match racers, the new Charger of Mr. Norm reached its intended mark. In addition, special care in the suspension department provides a comer that should have little trouble in eclipsing last year's outstanding performance record.



ABOVE — "Ahhh yes, it's a thing of beauty," Frank Huszar of Race Car Specialties, driver Gary Dyer, and Mr. Norm, on right, all seem to agree. Famed painter "Molly" didn't spare the horses, or the color, on body. Cigar puffing Dyer contemplates the bright future of the new Charger. Gary has accumulated a vast experience behind the wheel of a long line of Mr. Norm "funnies." To say he is a capable shoe is an understatement.

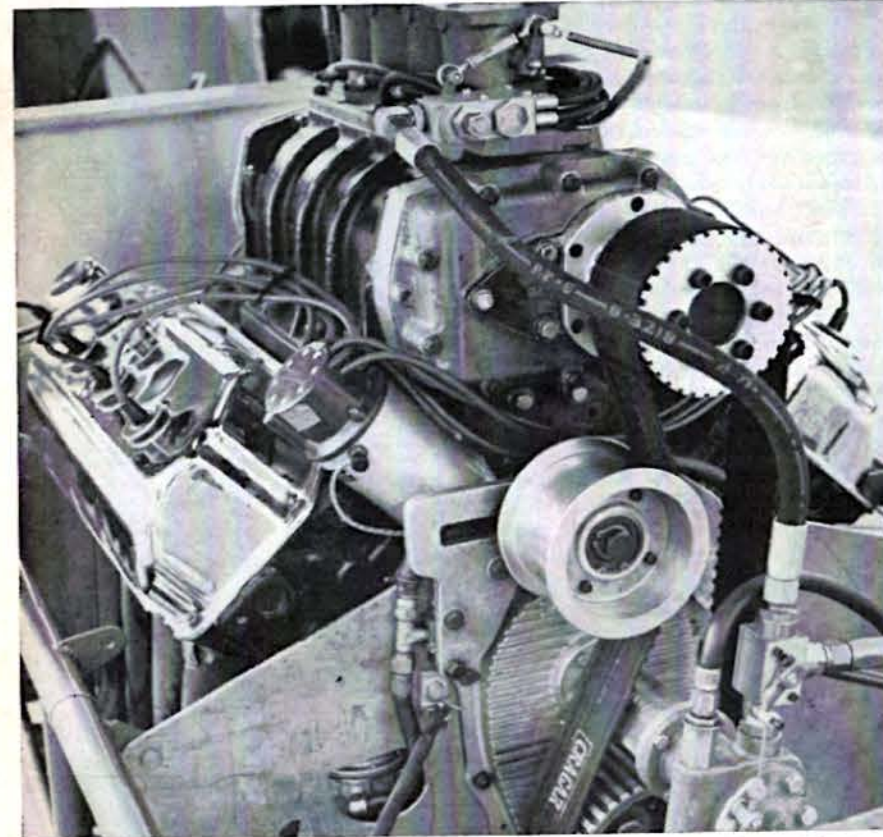
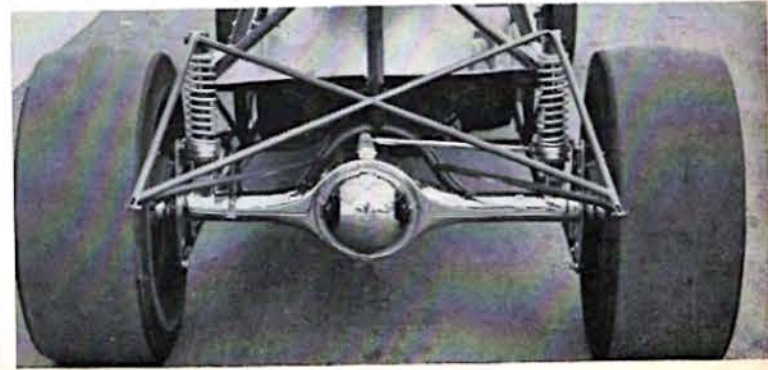
BELOW & BOTTOM — Although both pictures are of the same finished product, a little trick camera work by CAR CRAFT's staff photog shows the difference achieved when the 10-inch section is removed from body.



ABOVE — In early construction phases, the "funny" almost resembled a dragster, with rear-mounted driver's position and dragster-like cage. The 128-inch wheelbase adds to the "new look" in chassis technique.

LEFT — "Up front where it counts," a pair of Logghe coil-shocks snub the action of the .109-wall 1½-inch o.d. RCS tube front axle. A pair of P&S forged spindles mount Halibrand Mags for a 57-inch front tread.

BELOW — The late Dodge rearend was narrowed 11 inches by RCS and uses a 3.73 posi rear. Big 11.75 x 16 Goodyears on Halibrand wheels get the power to the ground. Narrow 54½-inch tread helps in handling.



ABOVE — Source of power is this Hilborn-injected 426-inch Dodge, with Dyer-modified magnesium supercharger providing the puff. Ansen pistons and M/T rods are used internally, along with Donovan intake and exhaust valves. Vertex magneto sparks the nitromethane blend, while the Cragar drive spins the blower at 26 per cent over crankshaft speed. Camshaft, roller tappets, and springs are Crower.

BELOW — The 1968 Dodge Charger one-piece replica body was made by Fiberglass Ltd. in Illinois, and was narrowed 10 inches by the same firm at Mr. Norm's request. The idea of narrowing the body is based upon the idea that less surface area will be exposed for the aerodynamic forces to act upon. In other words, the car is less apt to take off and fly at the finish line, a current hazard.



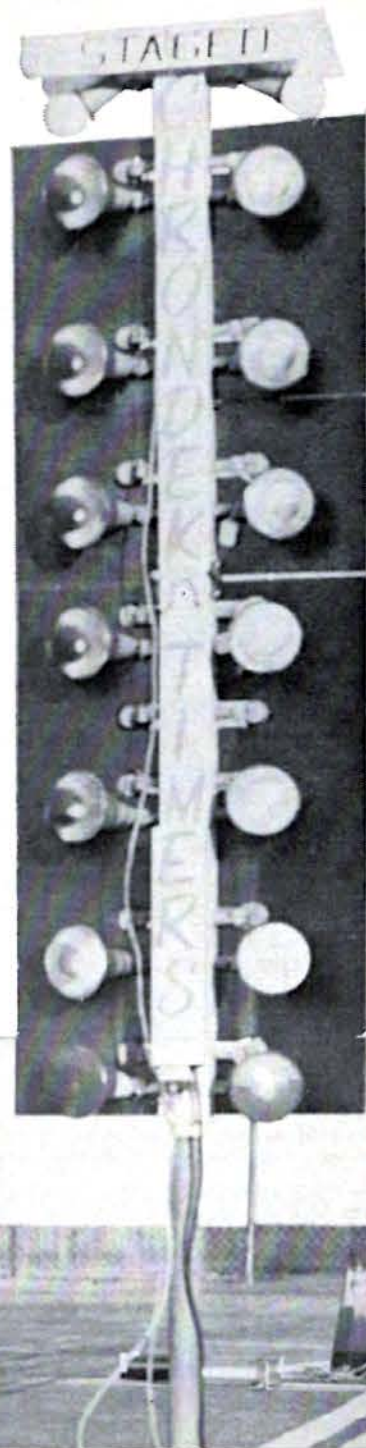
Photos by Bob Swain

SS 396 CHEVELLE

Can a beautiful 375-hp street performer
find happiness on the drag strip?
Well now, that all depends...

BY JOHN RAFFA

AS THE LIGHTS come down, you squeeze the engine towards six grand, slide your left foot off the clutch, stab the loud pedal between the last yellow and the green, and bang! — 375 horses (a 425 Performance Rating via NHRA's new system) launch you off the line for a near record run. Right? Wrong! At least that's the way it was on every run we made with this month's drag test vehicle, a '68 Chevrolet SS 396 Chevelle hardtop. Oh, the horses are there, all right (just witness that "drive-in idle" of the L-78 engine option), but somebody back in Detroit forgot to couple 'em up to the drive train in the properly prescribed quarter-mile manner; so, instead of a clean break away from the line and solid punch from the green on, we got a big jump, then a letdown — like "Bog City." But don't despair, 'cause once you get the gears you're going to need in this model, you'll have a bear on your hands! □ Let's get back out of the driver's seat for a second and take a look around the '68 Chevelle, then come back to the gearing problems. The wheelbase on our coupe is 112 inches, actually down three inches from last year's 115 (overall length remains 197 inches, however), but the all-new body will fool you — it looks like a bigger car than the '67. We suspect that much of the illusion of growth comes from the rakish fastback rear roofline treatment; it gives the car a very massive and impressive look. The silver blue exterior finish on our car was excellent and nicely complemented by the all-black interior motif. Opening and closing of the doors gave us the nice solid sound and feel too often lacking in much of today's "Detroit Iron" and made us wonder a bit about the weight of the car. A preliminary check with the AMA spec book told us that our model SS 396 carried a shipping weight of 3550 pounds, a bit heavier than we'd supposed, even with the power brakes and steering options our "guinea pig" had. Next, we wanted to know where the Chevelle fit into NHRA's 1968 plans, so we put in a call to NHRA headquarters. Since our test car was equipped with a pair of Casler eight-inch slicks (not the "cheater" variety), the car as tested would have to be placed in the Super Stock



Photos by Dick Scritchfield

brackets. NHRA informed us that our car, with slicks, would run in SS/D, while it would fall into A/S if prepared for the Stock classes. (NHRA'S 1968 rule book classifies Stocks, Super Stocks and Sports cars via the aforementioned Performance Rating method, not ac-

ording to weight and advertised horsepower figures as in the past.) The old SS/D e.t. record was held by Wally Booth's outstanding Camaro at 11.70, but a more meaningful figure for our purposes is the old SS/E record, since its factor figures are much closer to the

'68 SS/D class than were the old SS/D marks. Another Camaro, that of Volpe-Pizzi-Rose of Philadelphia, held that record at the end of the '67 season at 11.98. (Due to the gearing in our test car, all quarter-mile trial runs were made in the first three gears only;

therefore, any comparison of top end figures on the test car with the listed standards would be meaningless. Top speeds for our Irwindale Raceway trials were in the 102-104 mph category in third gear.)

Okay, let's climb back in and take a look around. The thing that pleased us most after getting situated behind the wheel was the vision — forward, to the rear and to the sides. It's superb — no unexpected protruberances jumped at you from the dash or windshield, and glare was at a minimum.

Seat belts fastened? Okay, crank it up! Plenty of guts there (once we carefully slipped our fingers around the key recess in front of us — no mean feat if you've got "fat fingers") — with the idle at about a grand. The new tach may take a little getting used to, but we think it's a real winner. The tach "face" is printed vertically in 500 rpm increments from zero to 7000 (yellow line at 5800, red at 6,000), and the horizontal needle moves vertically from bottom to top as you rev the engine. We found it quite legible in its position directly in our line of sight, and not in any way obtrusive.

On the first run, I took it to 4800 and popped the clutch. Immediately, it felt great, torquing the rear slightly to the right. Just as I corrected for the torque, however, the bog came. The tach needle dipped deeply, then began to climb

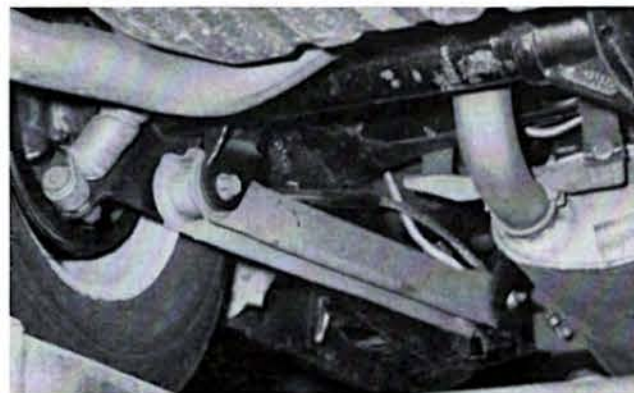
slowly back toward the top of the dial. I shifted easily into second and let the tach needle run into the yellow, shifted to third and saw the traps beginning to approach. Just as I was thinking about going for high gear, I cleared the traps, wondering at this point just what kind of cross-country number I had in the rear. Later inspection at the nearest Chevrolet agency revealed that we'd been testing with a 3.08 gear in the Salisbury rear! No wonder we had that bog off the line and a seemingly interminable wait between gear changes.

I planned my "attack" a little differently for the next run. Taking the tach all the way into the yellow zone, I popped the clutch hard and hoped the bog would be overcome. No dice. Casler's tires were just too much for that blankety-blank gear in the rear, so it was bog time again. I let the needle go all the way to the red line, set for my best Ronnie Sox-type "git a hat" shift and banged hard. Nothing. The shift hung between first and second, in neutral. I had to get almost all the way off the power before I could make the shift. Second to third met with a little less resistance with the power shift method, but it was still there — definitely. Through the traps and back to the line again. This time I came off again in the six grand neighborhood, waited out the bog and shifted a lot easier — kind of a compromise between

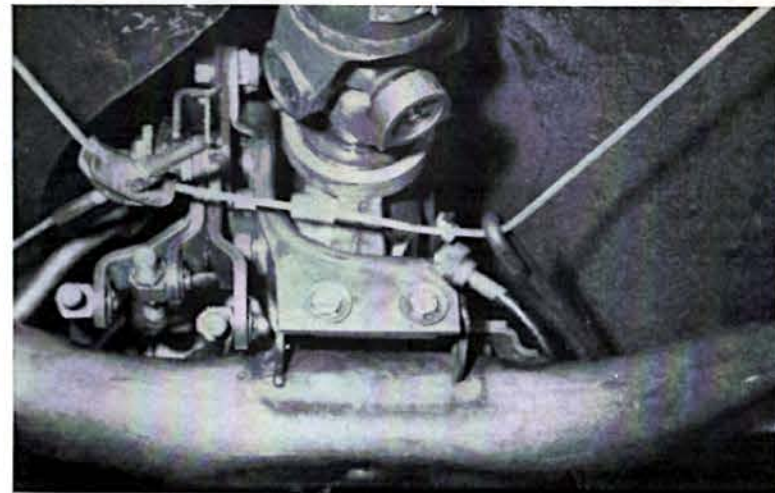
my version of the Sox "explosion shift" and your grandmother's handling of the same apparatus. I got second this time, but not without a lot of effort spent. Third came quite easily using this method and the Chevelle's time felt fairly respectable making it through the traps (still in third).

Checking with Steve Gibbs, track manager at Irwindale, who'd been recording the times in the tower, I found the clockings on the three runs read 14.32, 14.27 and 14.02, respectively. We were a bit disappointed, especially when compared to the '67 SS/E record of 11.98, but upon reflection and weighing all factors involved, they don't seem really bad at all. First, consider our "big hangup" — the one between gear changes. Now, when you first look at the Chevy shifting mechanism in this year's four-speed models, you get a very confident feeling. Nestled there between the seats is a most familiar looking sight — the flat handle that has come to mean "Hurst" in the minds of most do-it-yourself drivers. There's even the familiar block lettering on the handle, only here it spells "Muncie." Too bad. But a handle only controls the action, so we had to look a little further. Let's glance under the floor. Gadzooks, zounds, and holy mackerel, Andy! Look at that action. What we'd found was one of the wildest mazes of linkage it

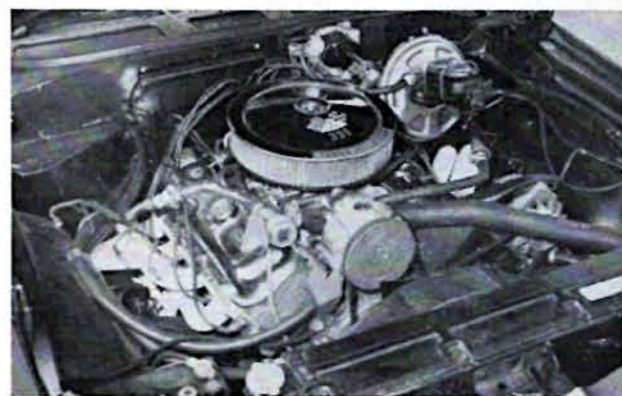
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ABOVE — Factory rear suspension does great job of preventing rearend windup and keeps power going to the ground. RIGHT — Tie to crossmember dampens road noise effectively, but raises havoc with quarter-mile shifting tactics.



ABOVE — Casler slicks did great job of launching 396's 375 horses off the line, but 3.08 "bog" gear pulled rpm way down just off line. RIGHT — Full power was delivered after disconnecting smog devices (visible above headers) and installing a set of tubular Hooker headers.



**BUDGET
HP**



BY TERRY COOK ■ Looking for a place to invest your speed equipment dollar that will give you a good return? Famed port 'n polisher Joe Mondello has come up with a small block Chevrolet head deal that gives you about one horsepower for each \$2.50 you spend. And yes, his horsepower porting plan is good for both street and strip machines utilizing the 1961 or later 327 Chevy fuel injection heads. ■ Extensive dynamometer testing has shown that a 39 horsepower gain can be realized from the "package" which includes opening of the exhaust ports, installation of a larger set of chromed exhaust valves, knurlizing the valve guides, and a good valve seat job. Since the factory machined radius under the intake seat works efficiently, these ports remain untouched, and only the exhaust passages are ported. For performance reasons, and because of the size of most popular headers, the inside diameter of the exhaust ports arrived at after porting is 1 1/4 inches. By keeping the port and header diameters equal, the base of the exhaust valve seat maintains a better scavenging system. Since stock pistons are used in the majority of engines which use this package, the combustion chambers remain untouched. ■ When Mondello's Porting receives the heads, they go directly to the hot tank, where they are boiled. Next, they are magnafluxed and pressure checked at 60 pounds to assure that they are not cracked and in need of repair. The exhaust valve pockets are then scribed and machined to accept the 1 1/4-inch hard-chromed oversized valves, which Mondello supplies. The exhaust ports are roughed out to a minimum shape with carbide burrs, then rough stoned to remove the carbide burr serrations. The port is then polished with a #60 grit resin cloth, a #80 grit glue bond cloth, and finished with a #150 grit glue bond cloth. After the exhaust ports are finished, the head is pressure checked again. If any leaks are detected they are sealed with a unique fluid that has 80 per cent cast iron in suspension. The cast iron finds the leaks and plugs them, the suspension hardening permanently. ■ Next, if the customer has specified them for his heads, the head is machined for Perfect Circle seals. The guides are then knurlized by running a threaded tool through them, causing a portion of the walls to be raised — similar to a tapped hole. This step produces less friction for the valve stems because of less wall contact area and because the knurlized guides retain more oil for better lubrication. After that, the guides are fitted to the valves, giving the

proper stem clearance (between .0005 and .00075). ■ Both the intake and exhaust valve seats are ground at 45 degrees, the area below the seat is cut at 70 degrees, and the topping angle above the seat is cut at between 36 and 39 degrees, depending upon the chamber configuration and the shape of the valve head. The intake seats are .060 wide, but the exhaust seats are .080 to .090 so that more heat can be dissipated, producing longer valve life. Mondello's process uses concentric pilots when grinding the valve seats to assure contact in the center of the guide, preventing the valve from rocking back and forth in the guide and producing an undesirable wear pattern. In short, using tapered pilots (.0005 of an inch taper in 3 1/2 inches) assures that the valve seats and guides are concentric with one another within .0005 and .00075, which is "dead nuts" in anybody's book. ■ The valves themselves are cut at 44 degrees, providing a one degree angle of interference for proper seating over a long period. A large Quick-Way three-ball-chuck valve refacer is used, which in Mondello's estimation is far superior to the Collett or "finger" type chuck as far as accuracy and concentricity are concerned. The rocker arm tips of the used valves are then dressed on the same machine, assuring accurate valve lash settings. The valves are then cleaned with a special solvent which removes cast iron particles and grease, and then the guides are cleaned with a nylon brush and air hosed dry. Next, the guides are lubricated with Valv-Gard, a special substance which fills the knurled portion of the guides and cannot be washed out by incoming gasses, protecting the valves from galling or sticking. After installation, the valves are moved up and down to work the lubricant into the guides. ■ Assembly procedure for the heads is as follows: After the valves are placed in the head, the retainers are seated by tapping them against the keepers with a plastic hammer. The valves are then pulled up tight against the seats and the spring height is measured with a telescopic gauge. The retainers and keepers are removed, the proper number of shims installed, and then the head undergoes final assembly. ■ So there you have it, ported and polished exhaust passages, hard chromed oversized exhaust valves, knurlized guides, and a good valve seat job. With the usual mild cam, street header system, carburetor and ignition warm-up, Mondello's package will give your small block Chevy another 39 horsepower to dispose of at your convenience. Perhaps 39 horses aren't enough to satisfy you, but remember that this is only a starting point to street performance modifications. One more thing to realize is that those exotic claims about adding 100 horsepower with only one piece of equipment are exaggerated. This one isn't. That's pretty good return for a \$99 investment in anybody's book. Even the record book!

Looking for a wise investment that will reap dividends in the form of performance? Here's how those heads off your small block Chevy can be re-worked to give you...

39 HORSES

FOR \$99

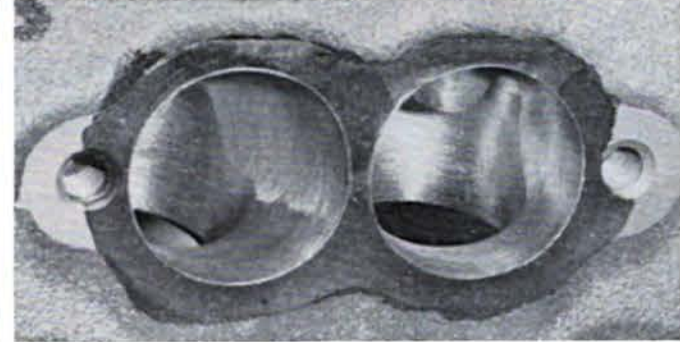
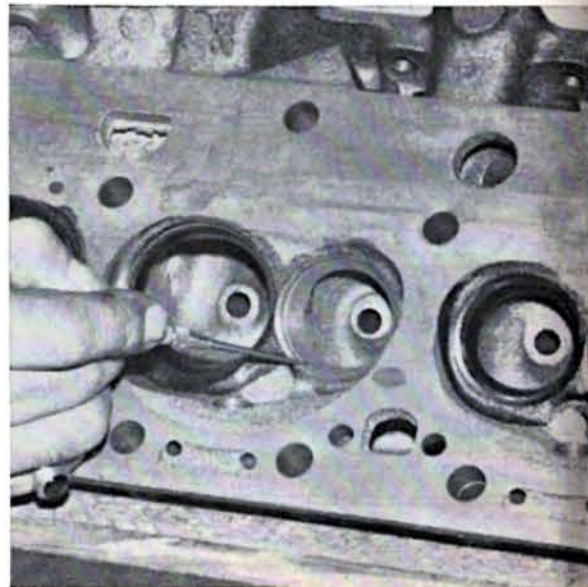
Photos By Bob Swaim



ABOVE — The stock 1 1/2-inch Chevrolet exhaust valves, on right, are discarded and replaced with a new set of hard-chromed 1 1/4-inch valves.

RIGHT — Seats in the heads are critical, and intakes should be .060 of an inch wide, while exhausts must be between .080 and .090 wide.

LEFT — The valves themselves were ground on a precise three-ball chuck refacer, thus giving a highly concentric and accurate fit in seat.



ABOVE — Talk about slick ports, these numbers almost have the Grand Canyon beat! Mondello's porting treatment of the exhausts was accomplished with carbide burrs and resin cloth.

LEFT — One step in the process involved knurlizing the old valve guides. This provides less friction, thus robs less horsepower. Serrations on inside of guide also hold more oil.

RIGHT — Prior to the porting procedure, the new gaskets are laid over the exhaust ports and the new opening is then scribed into the head. This serves as a guide when porting.



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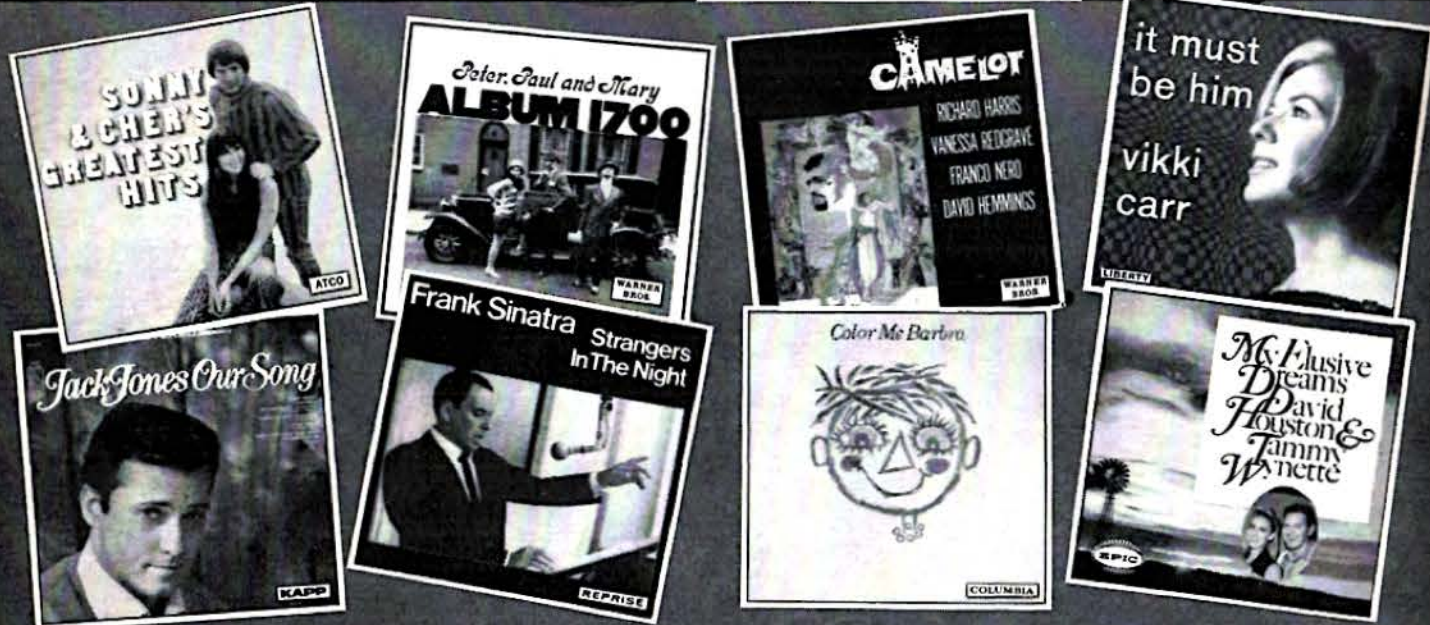
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VANILLA FUDGE You Keep Me Hanging On 8 MORE LIBERTY	Cary Lewis & THE PLAYBOYS, LISTEN! She'd Rather Be With Me LIBERTY • 10 • 10 MORE	THE SORCERER'S APPRENTICE 3 OTHER WORKS LEONARD BERNSTEIN New York Philharmonic REPRISE	FRANK SINATRA THAT'S LIFE PLUS Winchester Cathedral What Now My Love REPRISE • 7 MORE	We Can Fly! Up, Up and Away THE JOHNNY MANN LIBERTY SINGERS	RAVI SHANKAR IN NEW YORK You Talk Too Much 10 MORE MONUMENT	TRINI LOPEZ-NOW! There's A Kind Of Hush You Talk Too Much 10 MORE DISNEY	JAY AND THE TECHNIQUES Apples, Peaches, Pumpkin Pie SMASH	THE ASSOCIATION RENAISSANCE Pandora's Golden Hebbie Jeebies 11 MORE VALIANT
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5804. Plus: Bang Bang, Eleanor Rigby, Ticket To Ride, etc.	5797. Also: Reason To Believe, Young And Carefree, etc.	3782. Night On Bald Mountain, William Tell Overture, etc.	3728. Also: The Impossible Dream, Give Her Love, etc.	5598. Plus: Yellow Balloon, Somethin' Stupid, 11 in all	5587. An unusually delightful album of entertainment	5502. Plus: Sunny, Born Free, I Wanna Be Free, 12 in all	5793. Plus: Lovin' For Money, Here We Go Again, 11 in all	3733. Plus: I'm The One, All Is Mine, No Fair At All, etc.
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SEPTEMBER OF MY YEARS FRANK SINATRA It Was A Very Good Year 13 MORE REPRISE	SUPER STARS SUPER HITS 24 HITS! ALL THE DEETS BY Neil Diamond - The Doors Mitch Ryder - Sonny & Cher Anita Francis - Joe Cuba and many more... COLUMBIA RECORD CLUB	ROGER MILLER'S GOLDEN HITS England Swings King of the Road Diana, Me 9 MORE DISNEY	DAVE BRUBECK'S Greatest Hits Take Five Bossa Nova U.S.A. 9 MORE LIBERTY	Baja Marimba Band RIDES AGAIN AM Mauri - Guaraniz Walk On By - 9 more	JOHNNY MATHIS SINGS Sunny Somewhere My Love 10 MORE NEWLINE	Barbra Streisand People Absent Minded Me Fine And Dandy 10 MORE COLUMBIA	HOROWITZ IN CONCERT Recorded Live at the 1968 Carnegie Hall Concerts COLUMBIA • 12 records set	SIMON & GARFUNKEL PAROLEY CASE BOOMTOWN 10 MORE COLUMBIA
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2346. Also: Once Upon A Time, Don't Wait Too Long, etc.	5226. Also: Keith, The Young Rascals, The 4 Seasons, etc.	2276. Also: Kansas City Star, In The Summertime, etc.	2414. Also: The Duke, Camptown Races, Trolley Song, etc.	3656. Plus: Brasilia, Ride Heart, A Spanish Rose, 12 in all	3789. Also: I Wish You Love, Who Can I Turn To, 8 more	1646. Also: Love Is A Bore, My Lord And Master, Autumn, etc.	3767-3768. Two Record Set (Counts As Two Selections)	3442. Also: A Poem on the Underground Wall, Cloudy, etc.
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The Very Best of ROY ORBISON Only The Lonely Crying • 7 more MONUMENT	JIM NABORS By Request Sunrise, Sunset More - More 8 MORE DISNEY	Andre Kostelanetz and his Orchestra THE KOSTELANETZ SOUND OF TODAY Born Free + Allie Games That Lovers Play 8 MORE DISNEY	Holiday for Harpsichord E. POWER BIGGS Fun-Filled Favorites 8 MORE DISNEY	THE 4 SEASONS NEW GOLD HITS PHILIPS Tell It to the Rain Beggin' • 8 more	THE NEW COLUMBIA CHRISTY MINSTRELS GREATEST HITS Chum Chum Cher-ee Today • 8 more	PHILIPPE ENTREMONT piano RITUAL FIRE DANCE plus Hungarian Rhapsody No. 2 9 MORE DISNEY	BEETHOVEN Symphony No. 9 "Choral" EUGENE ORMANDY The Philadelphia Orchestra THE MORMON TABERNACLE CHOIR COLUMBIA • Soloists	PAUL REVERE & THE RAIDERS THE SPIRIT OF '67 The Great Airplane Strike Hungry • 9 more
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2686. Also: Running Scared, Blue Angel, It's Over, 12 in all	5228. Plus: Cabaret, Time After Time, Hasta Luego, etc.	3798. Also: Summer Wind, Guantanamera, Cabaret, etc.	2897. "The most fun since Tom Swift." - Wash. Sun. Star	5376. Plus: Let's Ride Again, C'mon Marianne, 6 more	2416. Plus: Green, Green, We'll Sing In The Sunshine, etc.	3760. "...nothing less than genius." - London Daily Tel.	5485. "...greatest virtuoso arch. of all time." - N.Y. Times	3632. Also: Louise, Undecided Man, Good Thing, 12 in all
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JACK JONES LADY 3855. Plus: Free Again, Nice 'N' Easy, It's Over, 12 in all	MAGNIFICENT MARCHES EUGENE ORMANDY The Philadelphia Orchestra COLUMBIA	TONY BENNETT I Let My Heart In San Francisco Tender Is the Night Smile • 9 more DISNEY	JIMMIE RODGERS CHILD OF CLAY plus I'll Say Goodbye Turnaround 8 MORE DISNEY	MOBY GRAPE COLUMBIA	TO SIR, WITH LOVE (Original Sound-track) COLUMBIA	BOBBY VEE Come Back When You Grow Up LIBERTY	THE HAPPY WONDERLAND OF BERT KAEMPFERT Danke Schoen 23 MORE (2-record set) POLYDOR	2413. Plus: P. T. 109, The Cajun Queen, Steel Men, etc.
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IMAGINE GETTING ONE RECORD FREE FOR EVERY RECORD YOU BUY! That's the fabulous "discount" the Columbia Record Club offers its members all year round... just about a 50% saving on all records ordered through the Club! Remember - this is not a special "sale" offered from time to time... members enjoy this greatest-of-all discount right from the beginning - and for as long as they remain in the Club! And to demonstrate the full benefits of this truly unique record-buying plan, we'll send you 12 records FREE right now!

THAT'S RIGHT! JOIN NOW AND GET 12 RECORDS FREE - any 12 of the hit albums shown here. We'll give you these 12 free records in advance for just buying one record now at the regular Club price... and agreeing to buy a record a month during the coming eleven months. In short, within a year you'll have a sizable library of 24 records of your choice - but you'll have paid for only twelve of them.

FREE SUBSCRIPTION TO MUSIC MAGAZINE. You'll have no problem in selecting a record a month during your membership, because the Club offers up to 300 different records each month to choose from... all described in the monthly Club magazine, which you receive free. You'll find hit albums from every field of music - the best-sellers from over 70 different record labels! You may accept the monthly selection for the field of music in which you are mainly interested... or take any of the other records offered.

RECORDS SENT ON CREDIT. Upon enrollment, the Club will open a charge account in your name... you pay for your records only after you have received them - played them - and are enjoying them. They will be mailed and billed to you at the regular Club price of \$4.98 (Classical, occasional Original Cast recordings and special albums somewhat higher), plus a small mailing and handling charge.

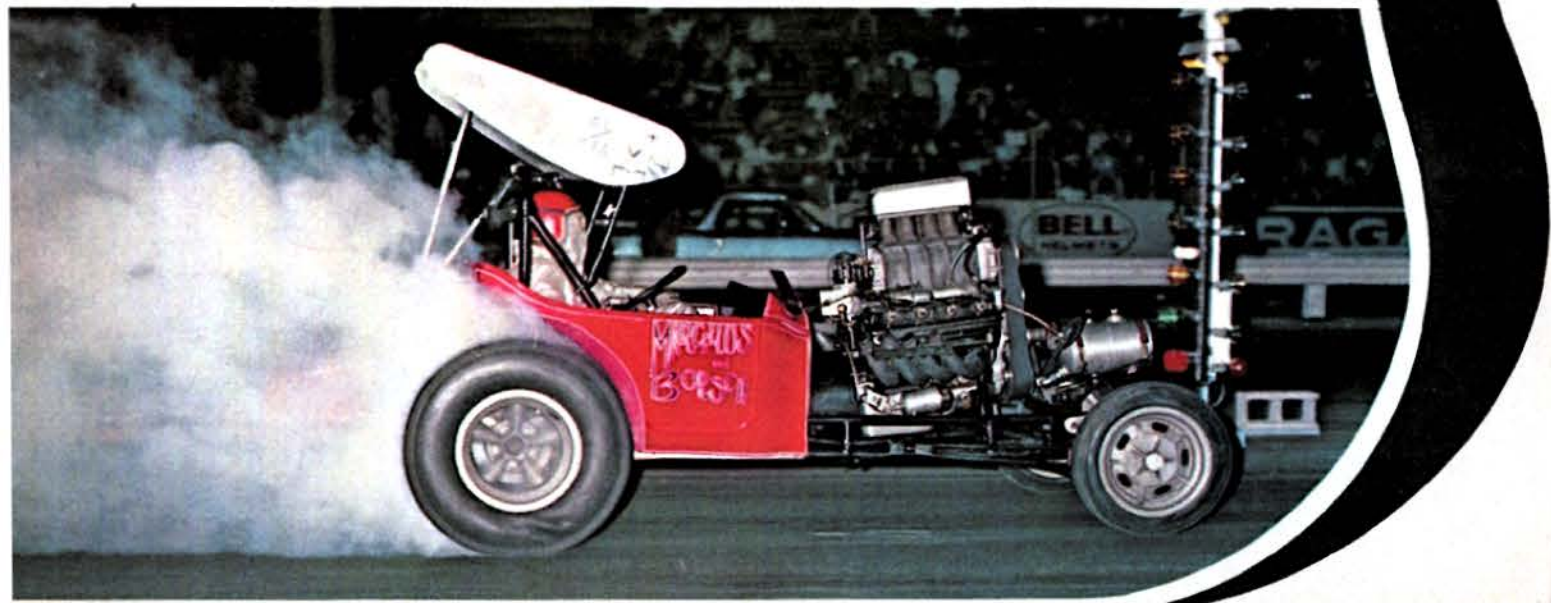
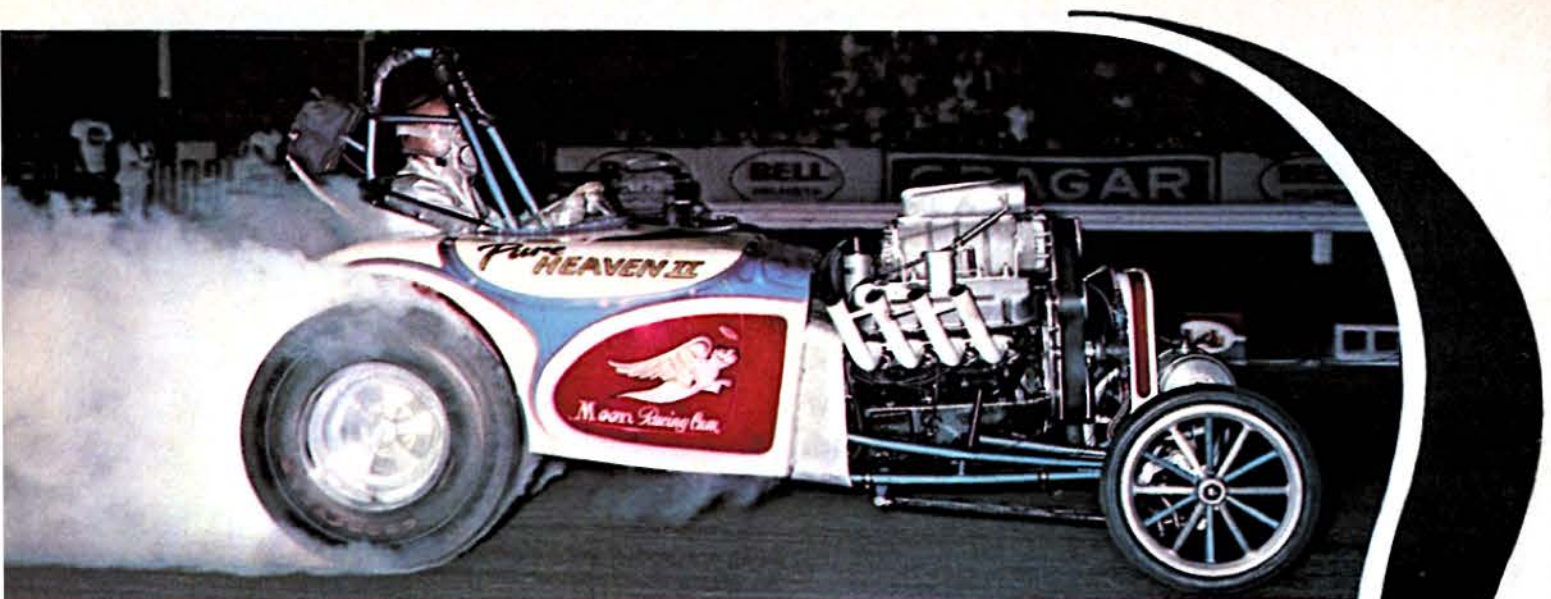
YOU GET MORE FREE RECORDS... as soon as you complete your enrollment agreement, you continue to receive ONE RECORD FREE FOR EVERY RECORD YOU BUY! There are no "savings certificates" to accumulate, no delays, no limitations - every time you buy a record, you choose one free! The Columbia bonus plan is the best one in existence today! Under this plan you pay as little as \$2.79 a record (including all shipping charges) for all the records you want - for as long as you want. What's more, when you do continue your membership, you only have to buy four records a year to remain a member in good standing.

MAIL THE CARD TODAY! Just write in the numbers of your twelve free records and first selection (for which you will be billed only \$4.98, plus postage and handling). Be sure to indicate whether you want your records in stereo or regular high-fidelity; also the type of music in which you are mainly interested. Send no money now - just the postpaid card.

* Records marked with a star (*) have been electronically re-channelled for stereo effect.

COLUMBIA RECORD CLUB, Terre Haute, Indiana

Jerry Vale Time Alone Will Tell Plus: My Cool Friends Don't Run Free • This Is My Song 4 MORE DISNEY	PERCY FAITH Today's Themes For Young Lovers Can't Take My Eyes Off You Windy • 8 MORE DISNEY	PETULA CLARK These Are My Songs Don't Sleep In The Subway This Is My Song 10 MORE DISNEY	WES MONTGOMERY A Day in the Life 10 MORE DISNEY	NANCY SINATRA Country, My Way Jackson 10 MORE DISNEY
5559. Also: Games That Lovers Play; My Love, Forgive Me, etc.	5420. Plus: Mary In The Morning, Release Me, etc.	5487. Plus: I Will Wait For You, Lover Man, Groovin', etc.	5788. Plus: Windy, Eleanor Rigby, The Joker, 10 in all	5488. Plus: When It's Over, Lay Some Happiness On Me, etc.
Jerry Vale Time Alone Will Tell Plus: My Cool Friends Don't Run Free • This Is My Song 4 MORE DISNEY	PERCY FAITH Today's Themes For Young Lovers Can't Take My Eyes Off You Windy • 8 MORE DISNEY	PETULA CLARK These Are My Songs Don't Sleep In The Subway This Is My Song 10 MORE DISNEY	WES MONTGOMERY A Day in the Life 10 MORE DISNEY	NANCY SINATRA Country, My Way Jackson 10 MORE DISNEY
5559. Also: Games That Lovers Play; My Love, Forgive Me, etc.	5420. Plus: Mary In The Morning, Release Me, etc.	5487. Plus: I Will Wait For You, Lover Man, Groovin', etc.	5788. Plus: Windy, Eleanor Rigby, The Joker, 10 in all	5488. Plus: When It's Over, Lay Some Happiness On Me, etc.
BOOTS RANDOLPH Boots With Strings The Shadow of Your Smile Michelle 10 MORE MONUMENT	SERGIO MENDES & BRASIL '66 Mais Que Nada Day Tripper 10 MORE AM	FARON YOUNG'S GREATEST HITS The Yellow Bandana Rhinestones 10 MORE DISNEY	Golden Greats by THE VENTURES Walk, Don't Run Telstar • 10 MORE LIBERTY	THE ROLLING STONES FLOWERS Have You Seen Your Mother, Baby Mother's Little Helper 10 MORE DISNEY
3747. Plus: Dear Heart, Yesterday, Unchained Melody, etc.	3578. Also: One Note Samba, Berimbau, Tim Dom Dom, etc.	2477. Plus: Live Fast, Love Hard, Die Young; 9 more	5584. Plus: Apache, The Lonely Bull, Wipe-Out, 12 in all	5562. Plus: Ruby Tuesday, Please Go Home, My Girl, etc.
ALLEY CAT-GREEN ONIONS plus BILL JUSTIS SMASH	THE BYRDS' Greatest Hits Mr. Tambourine Man Turn! Turn! Turn! All I Really Want To Do 8 MORE DISNEY	GEORGE JONES Country Heart Walk Through This World With Me The Race Is On 22 MORE DISNEY	TWO RECORDS COUNT AS ONE SELECTION	BOB DYLAN'S GREATEST HITS Mr. Tambourine Man Blowin' in the Wind It Ain't Me, Babe I Want You • 4 MORE COLUMBIA INCLUDES POSTER
1044. Also: Rinky Dink, The Stripper, Take Five, etc.	5561. Plus: Eight Miles High, My Back Pages, 50, 11 in all	3695. Two-Record Set (Counts As One Selection). Also includes Ship Of Love, If You Believe, White Lightning, etc.		3858. Plus: Rainy Day Women, Like A Rolling Stone, etc.
JIMMY DEAN'S GREATEST HITS The First Thing Every Morning Big Bad John 9 MORE COLUMBIA	THE ROMEROS World of Flamenco TWO-RECORDS COUNT AS ONE SELECTION COLUMBIA • 2-RECORD SET	A BUD SHANK SPOONFUL OF JAZZ Go To Bed in Memphis New York Summer 10 MORE DISNEY	TWO RECORDS COUNT AS ONE SELECTION	BEE GEES' 1st I Love Somebody New York Mining Disaster 1941 12 MORE DISNEY
2413. Plus: P. T. 109, The Cajun Queen, Steel Men, etc.	5318. Two-Record Set (Counts As One Selection). "...a dazzling display in a group of flamenco pieces." - N.Y. Times	5790. Plus: Lovin' You, Younger Girl, Daydream, 7 more		5552. Plus: Close Another Door, Holiday, 14 in all



THOSE FANTASTIC ALTEREDS

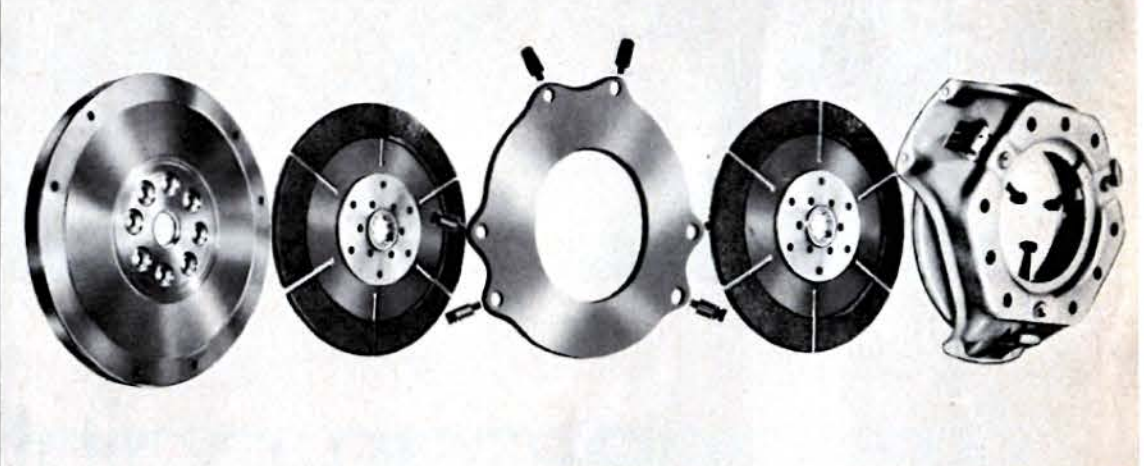
Thanks to those "slider" clutches, the "short thingies" are currently putting on the best show between heaven and . . . hades.

BY TERRY COOK ■ Just when the "doom dealers" started saying that the altered coupes and roadsters were on the downgrade, a small but fiercely active group of California Fuel Altered owners went out and changed everybody's mind. Currently, there's a hard core of fuel "T's," Fiats and Austins that are busy busting all the previous barriers and, surprisingly enough, the group is split engine-wise almost down the middle, with both Chrysler and Chevy power getting the call for fuel guzzling. ■ As an example of the action, at a recent meet at Irwindale, California, Leon Fitzgerald pumped his Anaheim Speed Engineers' Austin/Chevy "Pure Heaven" to a 7.97-191.88 as partners R. T. Reed and Richard Rockman looked on with approval. A seven second altered? Read on, McDuff.

speeds over 200 mph? Certainly they have no more horsepower than they have had for the past few years, so why the breakthrough? The answer lies in the clutch and tire combination: it's simply a matter of getting that horsepower to the ground. Basically, it's the same "slider" clutch and low pressure M&H slick combo that has put the AA Fuel Dragsters in the sixes, that allows the twin-Chevy "Freight Train II" AA Gas Dragster to run those 7.30's at 200 mph and helps the single-engine Chrysler gas dragsters to run those 7.6's with consistency. In addition, the "slider" clutch and tires helped Larry Dixon's "Fireside Inn" AA Fuel Modified Roadster to run a storming 7.02-213 and "Junior Fuel" standouts Allison & Crowe to cut elapsed times like 7.6 seconds. ■ Looking deeper into

sparks and fire can be seen shooting from the bottoms of the bellhousings at night races. Although normal operation will produce temperatures in the 400-degree (Fahrenheit) range, misuse and negligent maintenance of the assembly may produce much higher temperatures. The danger lies in the fact that the metals used in the clutches will begin to melt at around 1000 degrees, according to Schiefer Manufacturing, and will distort at lower temperatures, increasing the problem. ■ The culprit is usually negligence, as a unit of this type demands careful attention by the racers and Schiefer recommends disassembly and inspection of each unit every six runs. Unfortunately, most racers tend to overuse the unit, and continue to run it without inspection. By trying to

Those wild and woolly alteredds of Marcellus & Borsche, Mondello & Matsubara, Rich Guasco and the Anaheim Speed Engineers are busy busting into the sevens, thanks to the "Slider" clutch. Dual-disc assembly pictured at right is the secret to lower elapsed times and higher speeds as the slicks can "glue up" at the starting line and give the maximum traction. Tire smoke is a thing of the past in a high gear machine, as low pressure slicks don't spin with the new combination. Modified roadsters and other rails also benefit.



Joe Mondello and Sush Matsubara uncorked a blistering 7.78-192.70 with their immaculate Chevy/Fiat to bolster the Chevy camp. And then there are the Chryslers. Rich Guasco recently switched from small block Chevy to big Chrysler power, and the results were amazing. Driver Dale Emery aimed the "Pure Hell" Austin/Chrysler to an unbelievable 7.65-197.36 for the lowest elapsed time ever recorded by a blown fuel altered machine, asserting once again that Rich Guasco is still the altered "king." In the heavy artillery department, the marching Marcellus & Borsch winged Chrysler/"T" roadster, with "one-handed" Willie Borsch at the wheel, broke the speed barrier with a 7.79-203.60 pass. ■ Now why is it that the Fuel Alteredds are suddenly running in the sevens at

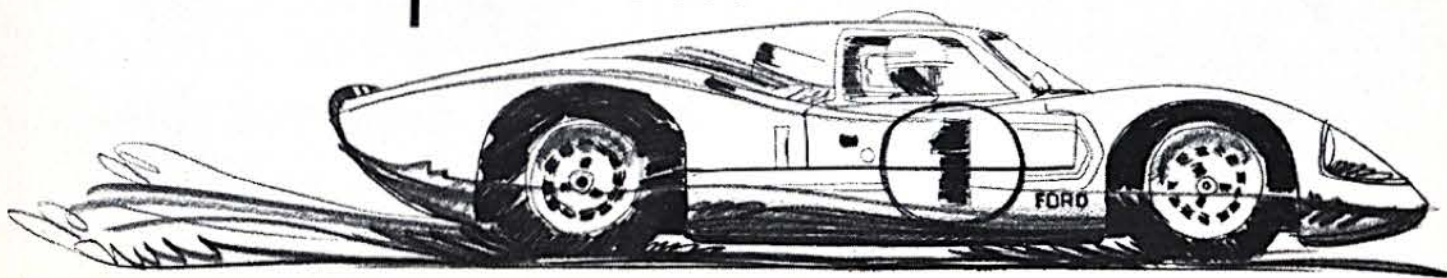
the combination, we find that the tires are just a stickier compound from M&H, used with the widespread practice of low pressures, often near five pounds. The game seems to be "how low can you go?" As for the clutches, the idea of setting up the unit so that it purposely slips for the first eighth-mile is really the secret to lower elapsed times for cars using the high-gear-only double disc setup. In essence, the clutch acts as a torque converter and does the spinning, rather than the tires. Unfortunately, the "slider" clutch is creating a hazard, as at least one of them has failed and come sailing through a dragster bellhousing. Because of the slipping condition which is built into these specially modified units, tremendous temperatures are created within the unit, and

"pre-load" or warm a clutch prior to a run in hopes of a better elapsed time, chances are that damage to the unit will result. Often, racers try to "hop-up" their own assemblies by reducing the suggested static pressure clearances, or by removing springs. By doing this, they open themselves to trouble. Schiefer Manufacturing has delegated authorized dealers — Keith Black, Ed Pink, and Donovan Engineering — to set up and maintain the dual disc "slider" assemblies. It is highly recommended that the units be purchased through these distributors, rather than buying a dual disc unit from the manufacturer and trying to give it the "hop-up" treatment yourself. In addition, a ballistic nylon shield should be wrapped around bellhousings containing "slider" clutches. A word to the wise . . .



1968 Torino GT fastback's only concession to convention is six-passenger seating, if you prefer

Anyone can paint stripes
on a car...we earned ours
at Le Mans...Sebring...
Indianapolis...



When you go fastback or GT...
you've got to go Ford!

And one of the reasons why is the newest member of Ford's winning fastback pack, the Torino GT. Built on a 116-inch wheelbase, this one sports such standard equipment items as a 302-cu. in. V-8, SelectShift transmission, unique GT stripes and identification, styled steel wheels and wide-oval tires.

But, Ford didn't stop with one well-bred fastback, it went on to make an entire pack . . . five models in three different sizes . . . small, medium, and large. Ford calls them the Mustang Fastback 2+2, Torino GT fastback, Fairlane 500 fastback, Ford XL fastback and Ford Galaxie 500 fastback. People who consider driving a sport call them great. The reasons why are as varied as the selection of models and options.

Consider five different V-8's for the XL. These run all the way from a new 302-cu. in. jewel with special light-weight pistons, to the proven 428-cu. in. V-8. These range from 210 to 390 hp. With five V-8's each for Torino, Fairlane and Mustang, the fastback pack really lays on V-8 choice.

They're not stinting on transmissions either. On most of these engines you can have either 3-speed, 4-speed, or syrup-smooth 3-range SelectShift. That's the automatic that leaves the option to shift or not to shift up to you. Ford doesn't let you build in all this go without having something special in the stop department. That something is a new optional floating-caliper disc brake that quickly disperses heat for high fade resistance, more uniform braking action.

There are eight V-8's, three transmissions, two suspensions, three tire options, two brake setups and five models . . . if your choice is GT or fastback, is there any doubt that Ford gives you the biggest choice? There's no need to choose things like stripes, low-restriction exhaust, and special wheel covers . . . Ford includes these in the special GT packages available for both Ford and Mustang.

If there's a fastback in this mix with your name on it, the nicest surprise is yet to come. Just because it's pretty doesn't mean that Ford is going to twist your arm. You'll see what we mean when you check the price tag. Get the message? Ford did . . . loud and clear.



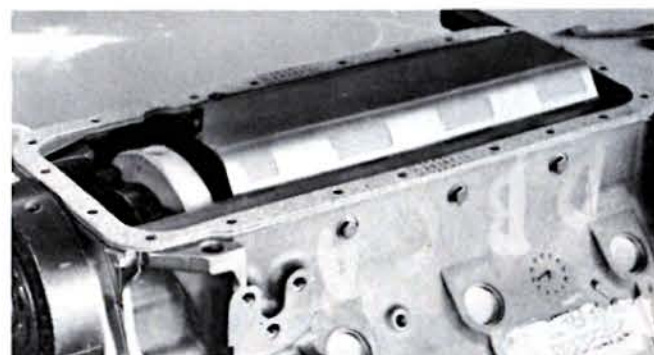
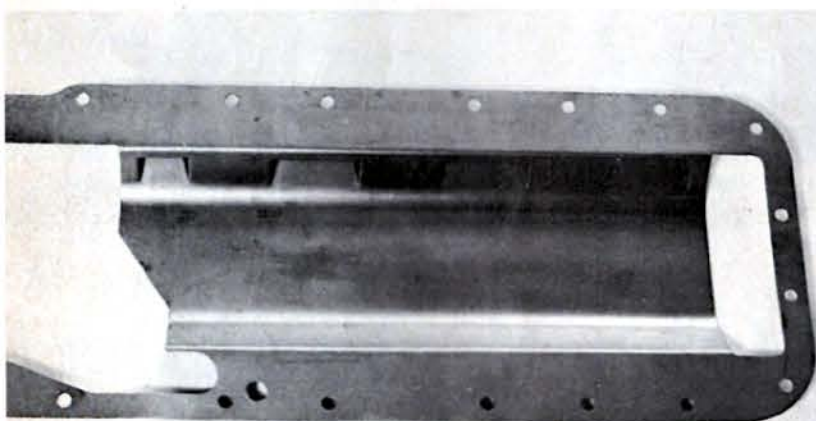
Ford ...has a better idea.

**BUDGET
HP**

MOPAR WINDAGE TRAY

Striking oil is usually profitable, but in your crankcase it's costing you horsepower

By Bob Swaim



Super stock star Dick Landy found that 14 hp was gained when a 383-inch engine was equipped with the windage tray.

Two pan gaskets must be used, with the tray sandwiched in between. Pan bolts hold tray, gaskets and pan in place.

Horsepower saver is available from MoPar, part #2863983, for \$1.95, and don't forget to pick up extra pan gasket.

OUT OF THE corner of your eye you watch the tach needle climb to six thou. Bang! You're into second and you wait patiently for the needle to reach the next shift point. While you're resting between shifts, did you ever have any thought as to what is happening inside your engine? Sure, the plugs are firing, the valves are opening and closing, the pistons are moving up and down, the crank is turning, but unless you have MoPar's latest "goodie," your crank is dragging through a pan full of frothy oil. So what? So it's costing you 10-14 horsepower to rotate your oil covered crank!

To illustrate how this loss of horsepower occurs, let's imagine that we have an electric fan whirring away over in the corner. Open up a can of 30-weight

engine oil and pour it into the turning blades of the fan and watch what happens. After wiping the oil out of your eyes, you would observe that besides making a heck of a mess, the speed of the fan has decreased considerably. The increased drag caused by the oil on the fan blades is what caused the slow-down of the fan, and this is essentially what is happening inside your crankcase at moderately high RPM. The revolving throws of the crankshaft cause a terrific amount of turbulence that whips the oil into a heady foam. Subsequently, the oil comes into contact with the rotating crank and creates a drag which uses up horsepower.

To cut down turbulence and to keep the crankshaft and the oil separated, Chrysler engineers have designed a

device that bolts between the pan and the block of "B" series engines and is adaptable to most other MoPar mills. Called a windage tray, it also provides the additional benefits of acting as a baffle and keeping the oil in the sump during rapid acceleration, and it allows the addition of an extra quart of oil to the high revving Hemi engine. This insures that the oil pickup never sucks air, a problem in the past.

The trays are now available from your friendly Plymouth or Dodge parts man, part number 2863983, for a nominal \$1.95. Installation requires two pan gaskets, so you had better pick up some extra ones while at the store. After buttoning up your engine you can expect 10 to 14 more usable horsepower to help "git it on." ©

When Ford spent \$250,000 on this experimental car, they weren't about to cut corners on the oil filter. So they used an Autolite filter.

Like you buy. Under \$4.



From the ground to the roll bar, this car is only three feet tall. It was built by Ford to test new design concepts. At a cost of \$250,000. The movable control panel cost \$10,000. (It adjusts to the driver.) The hand-formed aluminum body cost \$50,000.

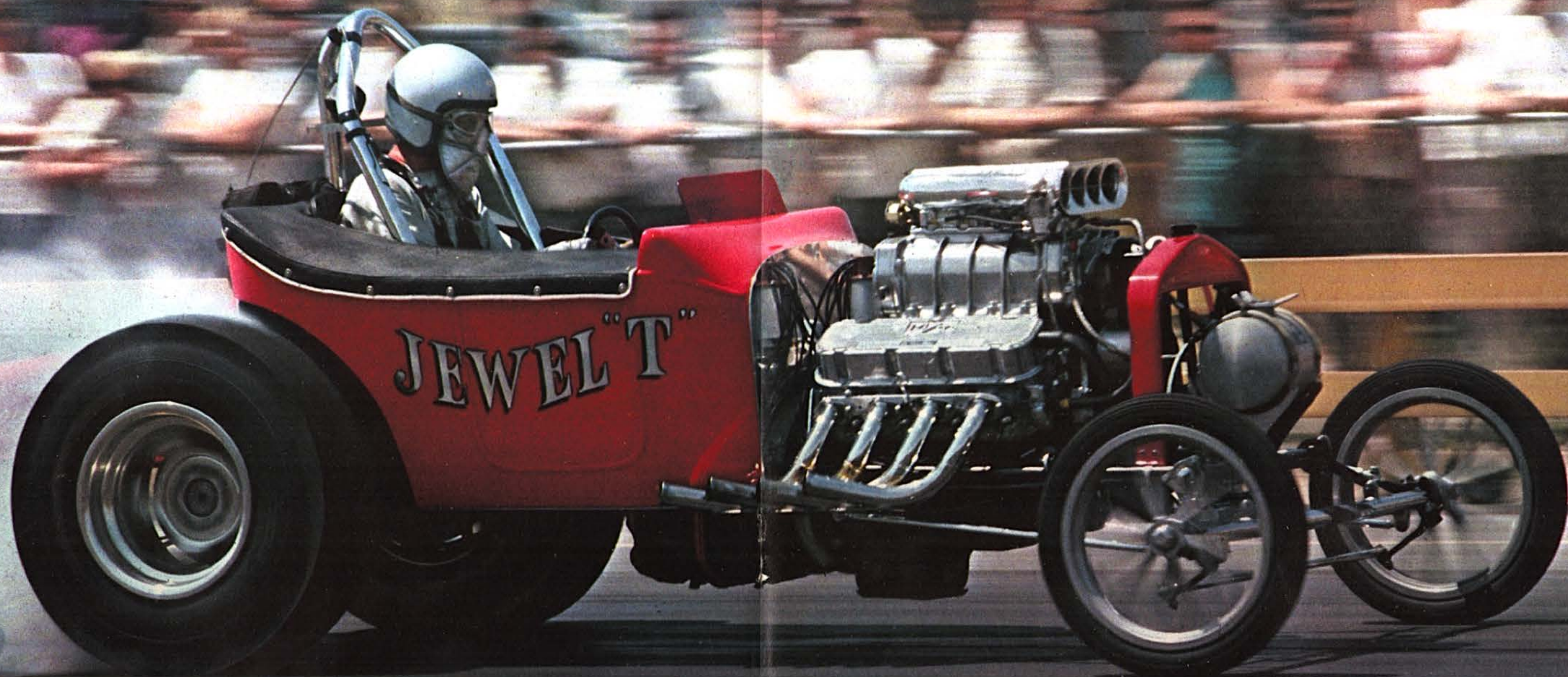
And the oil filter? Less than \$4. It's an Autolite oil filter. The same kind you buy. What's a \$4 Autolite oil filter doing in a \$250,000 car? Simple. There is no better filter at any price.

The Autolite filter is a two-stage filter. A depth filter that removes up to ten times as much dirt and sludge as ordinary filters. It can actually double the life of your oil. What's more, it has an up-front bypass valve to prevent trapped dirt from washing back into your engine.

So put this kind of filter in your kind of car. Whatever kind you drive. Autolite... the only name you need to know for filters, spark plugs, batteries, shock absorbers and complete ignition systems.

Autolite 





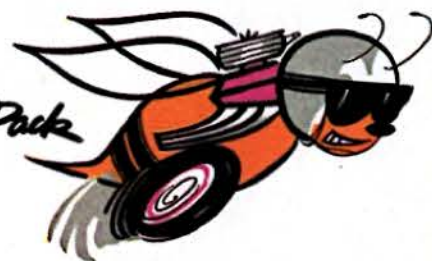
CAR CRAFT **ACTION** SHOWCASE

"Jewel T" — 1967 NHRA Super Eliminator World Champ



CHARGER R/T The Clean Machine.

Run with the Dodge Scat Pack



Dodge Charger R/T for '68, most exciting of the super cars. With all this standard equipment:

- 440-cubic-inch Magnum V8 engine—biggest standard engine in any super car
- Choice of a rugged four-speed manual or shifttable three-speed automatic box
- Heavy-duty torsion bars, sway bar and shocks
- Heavy-duty (11-inch) brakes
- An extra leaf in the right rear spring to tame the torque
- F70 x 14" Red Line wide tread tires
- Disappearing headlights
- Foam-padded, vinyl-trimmed bucket seats up front
- Full instrumentation (no idiot lights)
- Electric clock
- Bumblebee stripe

Optional: Dodge's formidable Hemi 426 that pours out 425 bhp @ 5000 rpm and 490 lbs.-ft. of torque @ 4000 rpm.

Next step is to see Charger R/T and put it through its paces. The first few feet in Charger R/T will change your idea of cars completely.

Dodge



SPECIAL OFFER Write: Dodge Scat Pack HQ, Dept. C, PO Box 604, Detroit, Michigan 48221.

Send me the Scat Pack decals, lapel badges and catalog of goodies. Here's my quarter.

Name _____

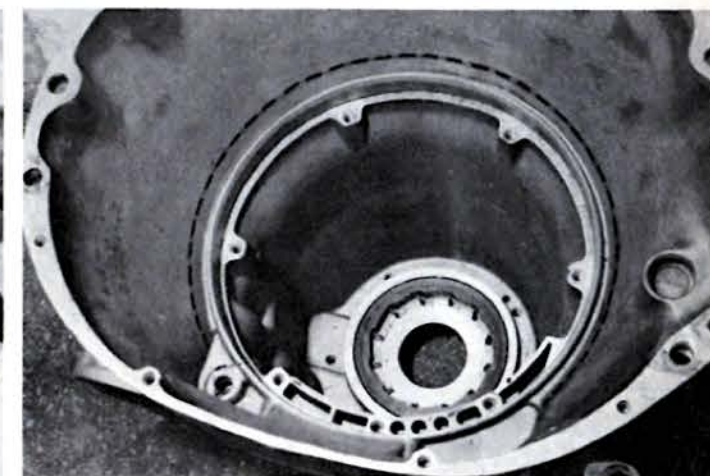
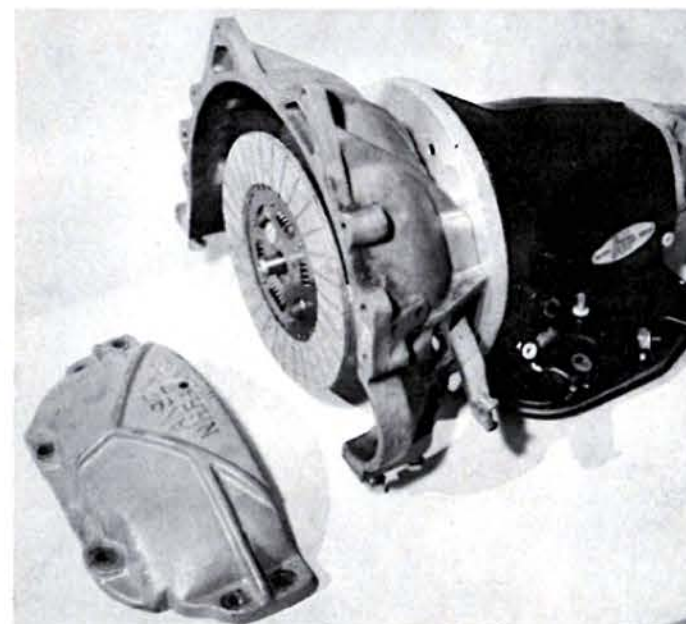
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RACING JACKET Show your stripes right away. Order your special all-nylon, red Scat Pack racing jacket. Comes in sizes for everyone! Men: S-M-L-XL-XXL. Women: S-M-L. Children: 6-8-10-12-14-16. Send \$9.95 for each jacket (check or M.O.) to Hughes-Hatcher-Suffrin, Shelby at State, Detroit, Michigan 48226.

CLUTCHFLITE



ABOVE — "Cut on the dotted 'line.'" Just like opening a box of cereal, the housing is measured and then machined to take the B&M adaptor. Cut is made exactly five inches from block.

LEFT — Ready to run, the ClutchFlite offers a neat package combining dependability and safety. Ansen safety shield was used for the photos, but any type can be adapted the same way.

SCATTERSHIELDS

BY TEX SMITH ■ The ClutchFlite recently introduced by B&M Automotive looks like the trick stuff for small engines needing automatic transmission performance. Already the idea has had tremendous effect on little cuber times, enough of an effect to start the big switch. In answer to a flurry of requests, Bob and Don Spar have now introduced another companion to the clutch assembly, a do-it-yourself bellhousing scatter-shield.

The whole thing is terribly simple. The bellhousing of any big Chrysler TorqueFlite transmission may be cut from the gear case, and using a special adaptor, any approved cast or hydro-formed scattershield housing bolted in place. Here's how it works.

The TF transmission bellhousing is marked and cut just ahead of the front pump register, or exactly five inches from the block mounting surface. Any kind of method can be used for the separation, from milling saw, to sabre saw to drilling a jillion holes in the housing. Being precise isn't too important, but by keeping right on the five inches the final gap between trans case and adaptor plate can be held around .060-inch.

After the cut has been cleaned and all metal shavings blown away, the B&M is bolted on. The stock pump mounting bolts are removed and replaced by longer ones that also mount the adaptor, said adaptor carefully machined from 356 T6 aluminum alloy. The front face of this adaptor has been

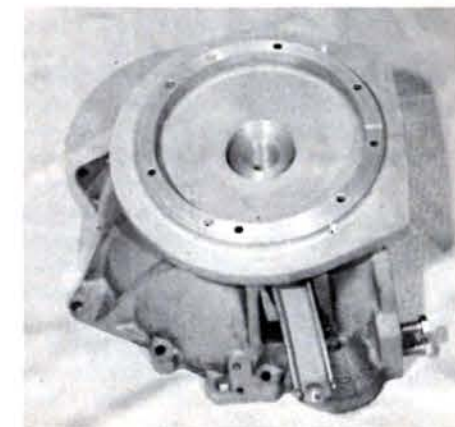
drilled according to customer order for either General Motors or Ford bellhousings. Big MoPar bellhousings won't fit because of housing depth, which is too long. Even the stock bellhousing throw-out arm drops right in place.

Although the very nature of a ClutchFlite unit considerably reduces the possibility of clutch-pressure plate failure (with a ClutchFlite, the clutch is engaged on the line only), this scatter-shield combination is a natural. It's much heavier than the piece of aluminum bellhousing it replaces, about 50 pounds worth, but should a clutch unit let go, at least it won't wipe out the stock bellhousing. Besides, a scatter-shield is required anyway, and this is the neatest way to go. ©



LEFT — Everything that is needed for the installation of the scattershield is laid out in kit form. The stock mounting bolts are replaced by longer ones. The adaptor is machined from a strong aluminum alloy by B&M. This installation combines the best features of both an automatic and standard trans for drag racing applications, as well as for the street. The entire project can be handled in the back yard garage.

RIGHT — After the housing has been cut just ahead of the front pump register, adaptor can be bolted on. It is extremely important that the cut has been cleaned up and all metal shavings blown away. Front of the adaptor is drilled for either General Motors or Ford bellhousings, permitting the stock throwout arm to drop into its place for trouble free installation.





Photos by Jim Kelly

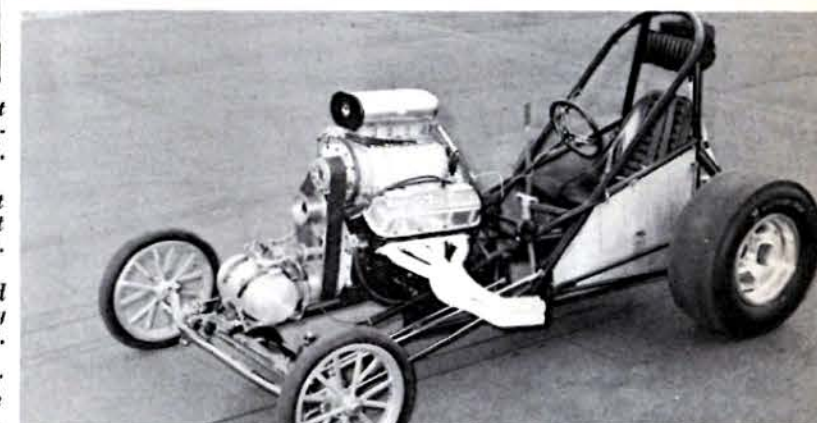
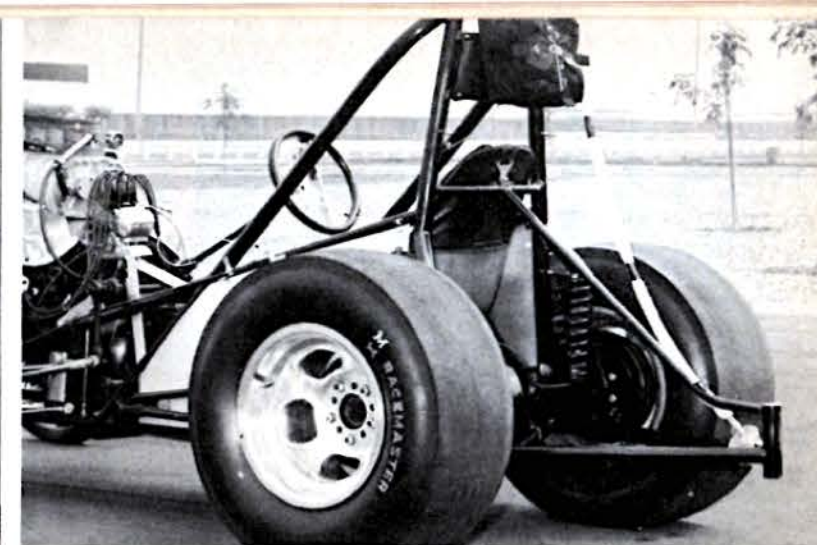


ABOVE — Shop manager Sush and boss man Joe take a few minutes out from busy duties at Mondello's Porting Service to ponder their fire-breathing "drag-iron." Smiles are clue to more tricks in store for 427.

LEFT — Lettering by Tom Kelly, set atop the sparkling purple paint by Cerney, makes the Mondello and Matsubara Fiat one of the sharpest moving billboards around. Fiberglass Trends produced the coupe's body.

ABOVE RIGHT — Rear is dominated by big M&H 11.00 x 16's mounted on polished Halibrand wheels. Reliable 'chute and all other safety gear bear the Simpson label. Switch to meaty 12-inch slicks is imminent.

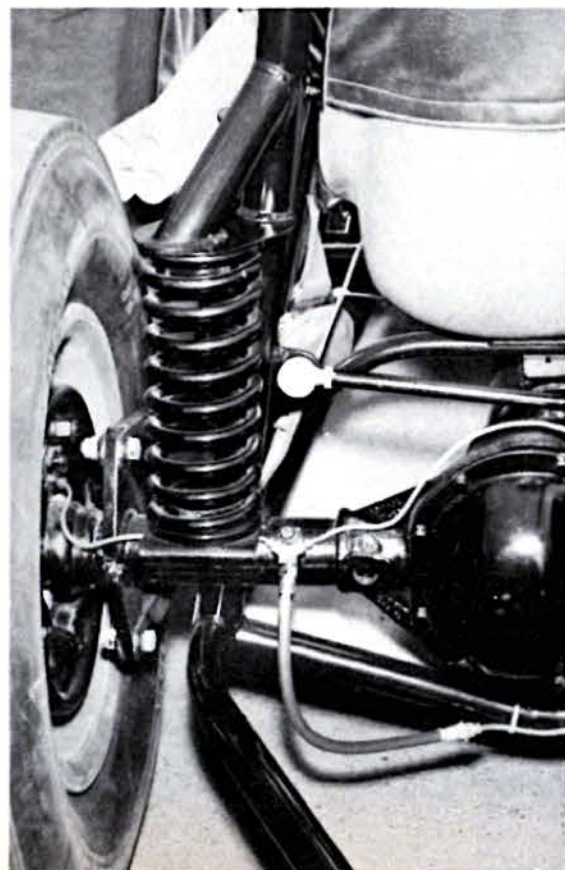
RIGHT — 96-inch w.b. Ed Weddle chassis does the job. Cragar blower drive spins the Bowers-prepped 6-71. The Sperex-sprayed headers are by Doug. Stock Chevy lower end has four-bolt mains, hacks the problem.



RESTING ON A SHORT 96-INCH WHEELBASE, JOE MONDELLO'S "TERRIBLE TOPOLINO" GIVES DRIVER SUSH MATSUBARA A REAL...

SEVEN-SECOND SENSATION

BY A. B. SHUMAN ■ Typical of the front-running Southern California Fuel Alters is the lively Fiat of Joe Mondello and Yasushi Matsubara. Built to augment dyno tests of Joe's porting theories, as well as to give the boys a chance to join in the fracas, the tiny Topolino made its debut by grabbing both ends of the NHRA A/Altered record with marks of 9.32 and 154 using an injected 389 cubic inch small block Chevy on gas. A little over a year ago the team switched to a blown 427 inch Chev engine and now holds title to the world's quickest and fastest Chev-powered Altered, backing up that claim with clockings of 7.78 and 192.70. Keeping the purple coupe on the straight and narrow is the job of "Sush" (rhymes with whoosh) Matsubara, manager at Mondello's highly successful head porting emporium. Joe admits to having driven the machine, but prefers to twist the wrenches and have that pride of ownership that comes with watching the car zip through the quarter in record-setting fashion. Lending vital helping hands to the project are Tommy Miller, Chet Husted, and Lance Kaufman, the energetic crewmembers.



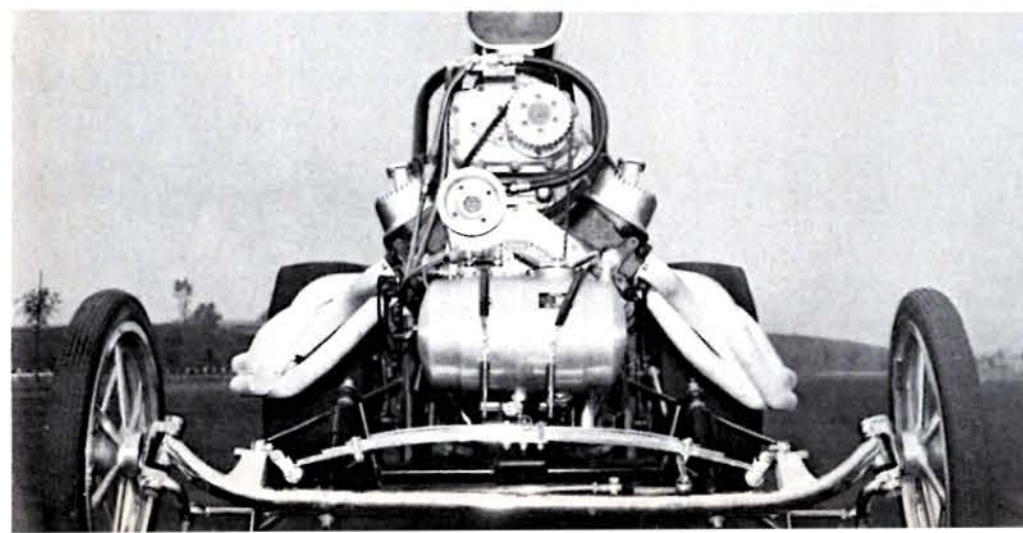
LEFT — Narrowed '54 Ford rear can be run both rigid and suspended. When sprung, little Weddle sway bar comes into play. Stock drums use Velvetouch linings.

BELOW — Joe's gold pencil points out key to car's split personality rear suspension. Setup allows strip-side change.



LEFT — Steel Ross steering box translates Sush's commands to the helm into action. Ed Pink set up the Schiefer slider clutch for the team, while the Logghe Brothers stamped the bellhousing. Samurai sword brake handle goes to Girling master cyl.

BELOW — No torsion bars here! Simple transverse leaf, damped by tiny Nash Metropolitan shocks, takes care of the front end. American spoked magnesium wheels ride on Ford spindles, hold 2.50 x 18 Pirelli skins. Simple, but it works.



Power originates in a stock bore and stroke 427 block and is dished out by a Schiefer flywheel and "slider" clutch. Residing in the engine are a C&T hard-chrome crank, Federal Mogul bearings, M/T rods, Venolia 7:1 pistons and full-floating wrist pins. Milodon buttons fight piston scuffing, while a Milodon swinging pickup drinks up 60 weight Valvoline from deep down in the 9 quart capacity pan and delivers it the factory high performance oil pump. The stock four-bolt main caps are hefty enough to handle the thrashing of full bore runs without need for further lower end support. Heads, as might be expected, are by Mondello's Porting Service, featuring ported intake and exhaust passages, trick "M&M" combustion chamber treatment, Donovan 2 1/4-inch intake valves and 1 3/16 exhausts, Mondello roller rocker arms, and 30-inch long Sperex-sprayed exhaust stacks by Doug. The camshaft is an experimental grind by Howard and uses plain old flat tappets. A hint of future potential is the moderate 60% nitro mix that the team runs. So keep your eye on this one — Alters are still very much alive and kicking.

STREET ROD PROJECT

-in person!

YOU'VE BEEN READING ABOUT IT FOR EIGHT MONTHS, NOW HERE IT IS IN ITS ENTIRETY — THE CAR CRAFT 1923-T ROADSTER PICKUP, WHICH CAN BE ASSEMBLED FROM MAIL ORDER PARTS... BY DICK SCRITCHFIELD



BACK IN our November '66 issue we ran a questionnaire asking you, the reader, the type of hot rod you would like to see built: one that you'd like to own; one that you could build if you only knew how. Our plan was to take as many of your ideas as possible and build them into a street/show rod.

The next thing we knew, we were buried under a deluge of questionnaires requesting that we build everything from an '05 Studebaker to a '36 Ford sedan. By and large, however, the '23-T roadster pickup was the one that garnered the most votes, along with the small block Chevy and four-speed trans.

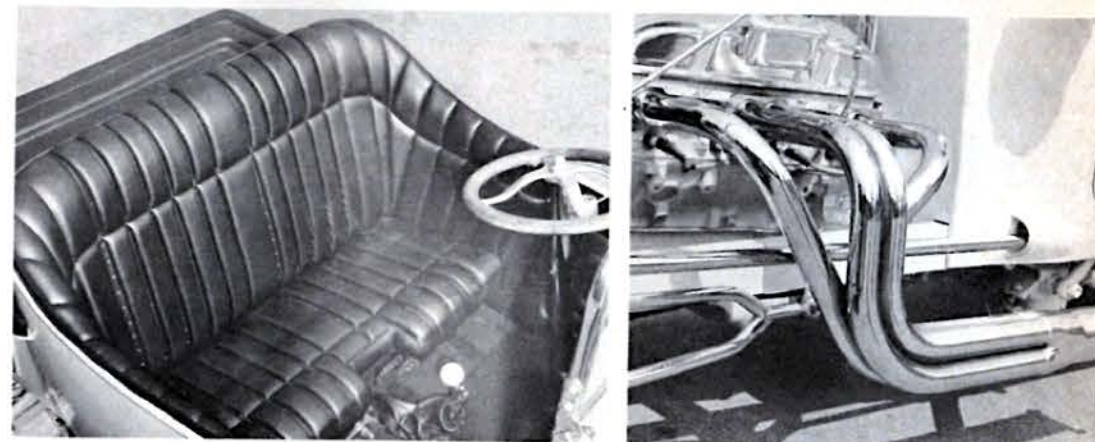
As with the entire project, the object was to build a rod that could be built by anyone with the necessary tools. Not too much knowledge was needed, as Car Craft and the L.A. Roadster Club would be supplying this. It was also realized that parts found in California are not always readily available in other parts of the country. To resolve this dilemma, we did business with our advertisers who specialize in mail order. If you couldn't find the exact part locally, it could be ordered, ready-made.

On the West Coast a large percentage of the vintage parts are found at automotive swap meets. Naturally a guy in Illinois doesn't have the same chance of finding these hard-to-get parts at swap meets, so we had to rule out any item not obtainable through the mail or over the local parts counter.

We wanted to use some new ideas and some modern parts on this project, so here again we turned to Chevrolet, in this case, Corvair. Here was the lightest of the American cars with easy to obtain parts, available through any Chevrolet dealer in the world.

Probably the biggest headache in building a rod is the use of arc and gas welding. Unless you've had experience with them it's best left to a professional. To solve this problem for the average rodder we built a frame for which just the rails could be ordered, or, if you preferred, as a complete chassis ready for wheels and tires, with all the welding finished. By following closely through the series, all that was left was picking out and ordering the parts and

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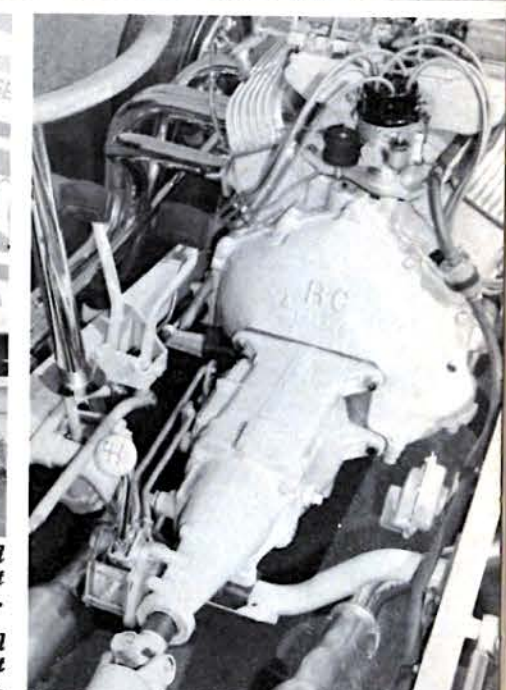
New look in interiors is provided with wide pleats and air vents—by Tony Nancy, using black olive Federan. Muntz Stereo and speakers are mounted under seat by Hurst Competition/Plus shifter, Line/Loc and Renault brake handle.

TOP RIGHT — Headers are made from Cyclone Automotive's mandrel bends and flange kits, plated at Astro Plating in Van Nuys, Calif. Valley Head Service did all head work before adding Mr. Gasket's "sealers." Plugs are AC.

RIGHT — 14 gallon fuel tank takes advantage of all bed space in this pickup by snaking around battery in Cal Auto's body. Paint is Joe Andersen's Custom Mix Kit in pearl lemon applied by Scritchfield. Striping by Jeffries.



Some cars really fly! CC's roadster gets loaded aboard Flying Tigers plane for shipment to Detroit for exhibit in the 1968 International Championship Auto Shows.



Driver is protected by R. C. Industries shatterproof bell housing. Two-piece unit allows flywheel removal without moving upper housing. Crossmember is C-T Automotive's.



All finished and ready for tour, builder Dick Scritchfield takes spin in street rod. Body is Cal Automotive's fiberglass replica of 1923-T behind a '67 327 Chevrolet engine and "new" 1915 radiator. First of its kind to feature coil spring suspension. Wheels are Cragar S/S mounting Goodyear Sports Car Specials.



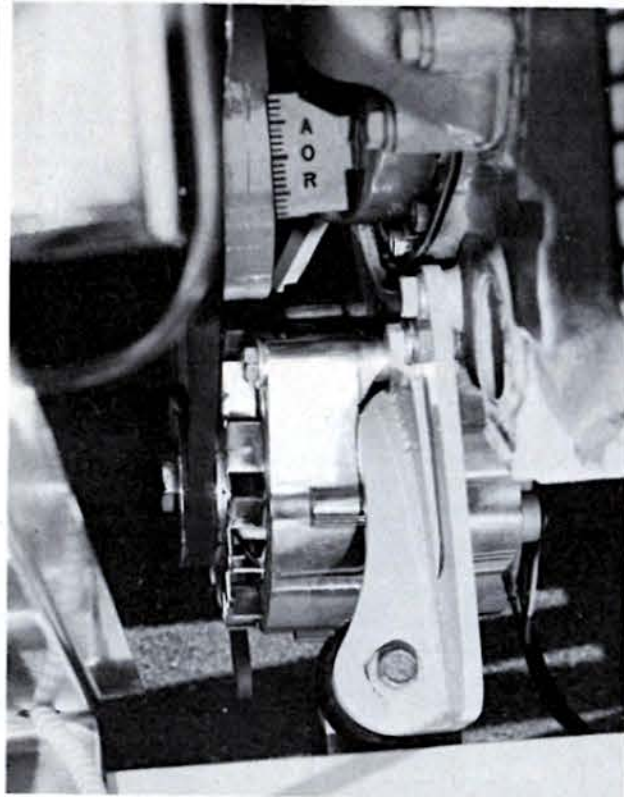
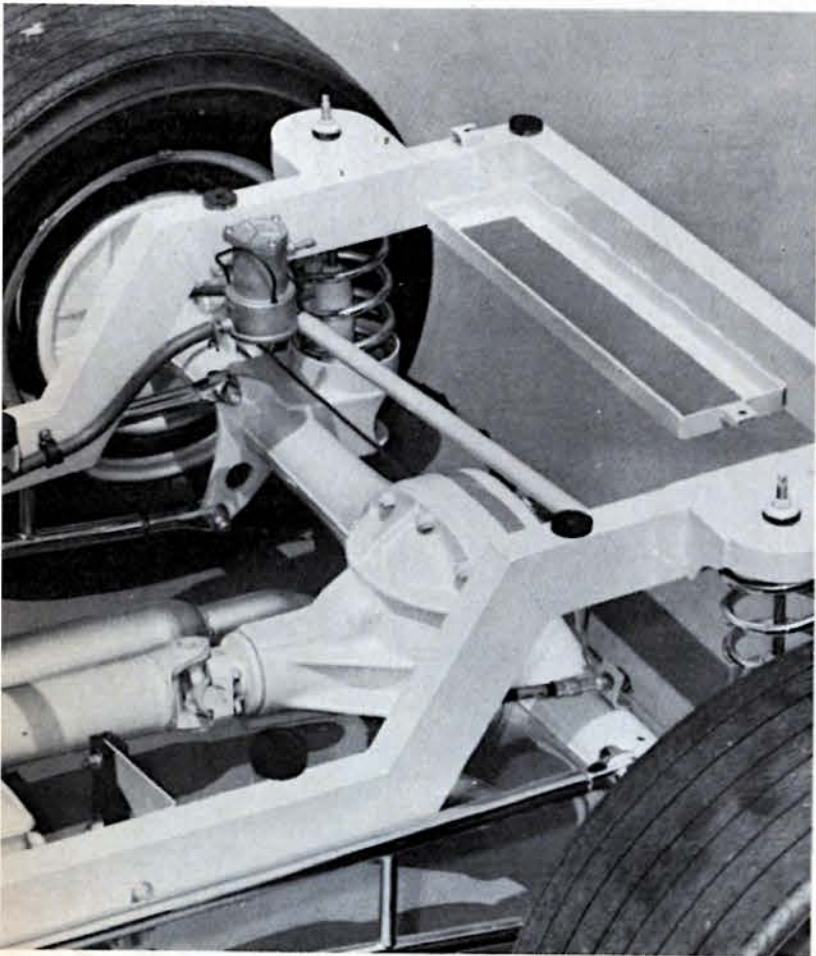
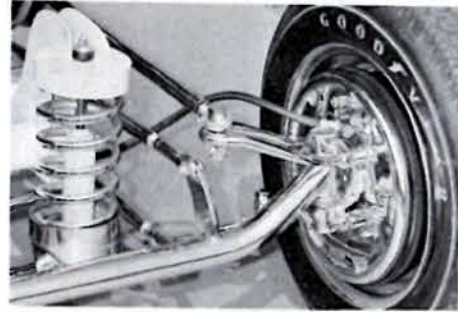
STREET ROD PROJECT



Some of the L. A. Roadster Club members who assisted in building the "T" give their final approval of the finished product.

327 machined by Reath, balanced by C-T, and assembled by Proffitt features Isky cam, Schiefer clutch, Weber flywheel, Venolia pistons, Grant rings, Mallory.

Speed Products axle and Dragmaster Co. steering arm mate well to Chevy brakes.



Alternator mounts upside down to lower edge of front Speed Products engine mount. Lower adjusting bracket is formed from cardboard and then transferred to steel.

Positioning of Conelec fuel pump and battery are located in the bed area. Driveshaft was chopped to 13", balanced by C-T Automotive. Chassis is epoxy yellow.

hanging it together with hand tools. Speaking of hand tools, we found that Crescent Tool Company had the right tool for our every need during building. You can't get far without the right tool, so their products were a big help.

A number of questionnaires were accompanied by letters which asked for a rundown on the costs of building the "T." Our car was built for show as well as street, so expenses were added that would not have been necessary had the car been built on a strict budget. It all depends on how much you want to spend and the final result you wish to obtain. We have seen beautiful street rods built for as little as \$1000 and as high as \$5000 for the same basic style. If you get into a lot of chrome, an expensive paint job and engine reworking, it's going to mount up. To duplicate Car Craft's car exactly would probably run you close to \$3500 here on the Coast. You don't need to go as far as we did; or, of course, you can even go further.

If you live in the vicinity of any of the International Championship Auto Shows, you will have a chance to see for yourself the finished car as it tours the circuit. Eventually, it will be awarded to the high points winner.

If you missed any of the series, back issues are available by writing: Car Craft Back Issues, Petersen Publishing Company, 5959 Hollywood Boulevard, Los Angeles, California 90028, enclosing 50c for the issue you need.

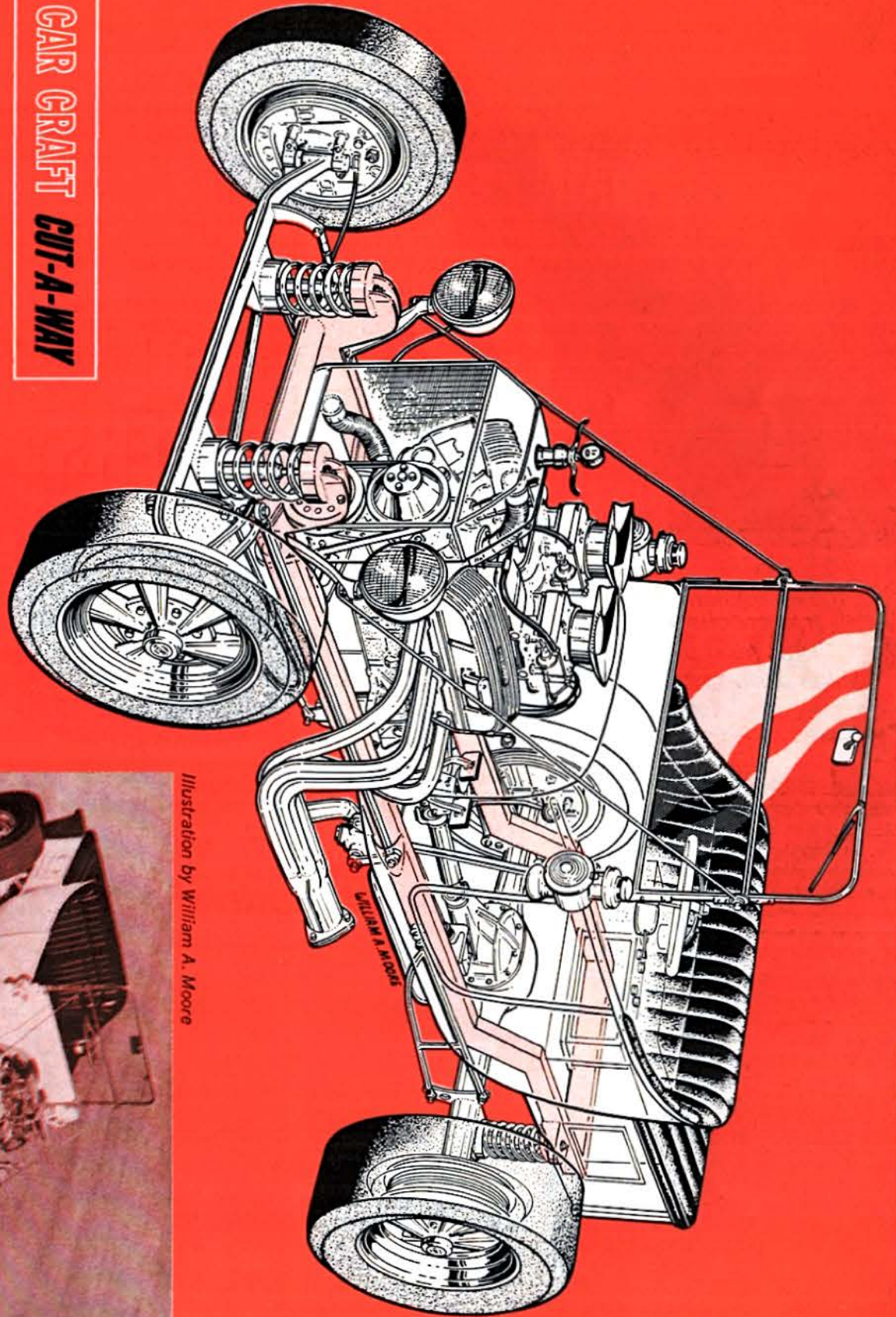
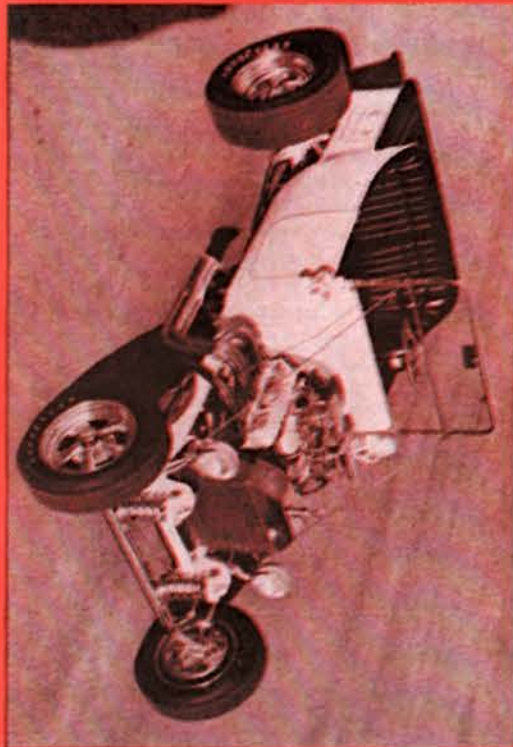
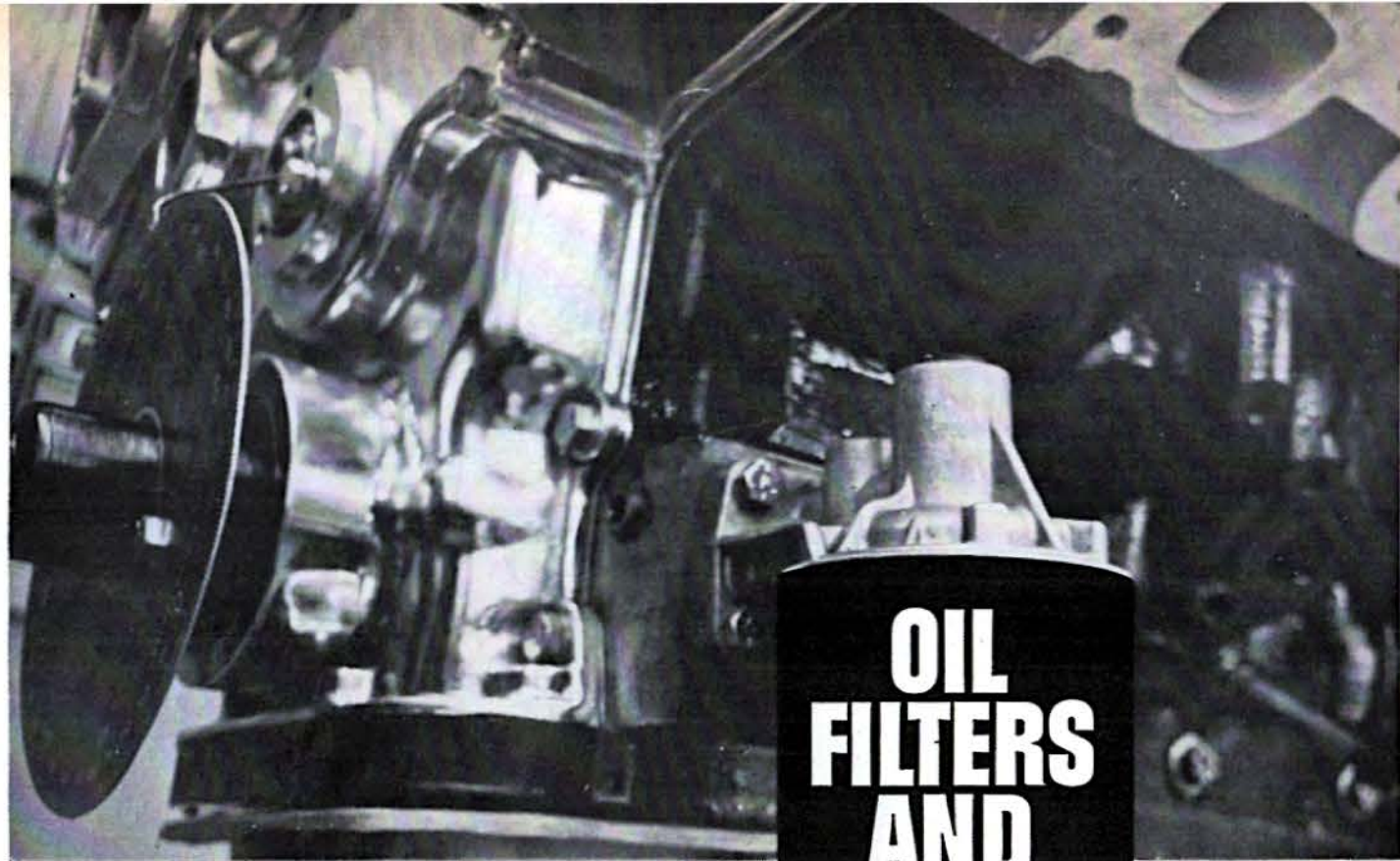


Illustration by William A. Moore



CAR CRAFT CUT-A-WAY

It looks like a Ford, but almost every item except the body and radiator is of General Motors origin. A hot 327 Chevrolet sends power through a 4-speed Muncie to a late Chevy rear end. A Cal Automotive 'glass body mounts on a Speed Products Engineering chassis incorporating Corvair steering, springs and shocks, '54 Chevy front spindles and brakes — more than adequate for the 1800 pound, 98-inch wheelbase rod. Lemon Pearl body and epoxy yellow frame are Joe Andersen "paint-by-the-number" custom mixture kits.



OIL FILTERS AND DRAG RACING

If you want your engine to live under the tremendous strain of quarter-mile runs you need plenty of oil — clean oil. A high performance filter is bolt-on insurance for your investment.

BY A.B. SHUMAN ■ The key to any engine's longevity is adequate lubrication. For a racing engine, that goes double. And probably the least emphasized, least understood part of the all-important oil system is that little ol' oil filter. So, unless you're one of those finicky types who doesn't use a filter and simply changes the oil after every run, you might find some engine saving information in the following dissertation.

First, the oil in your engine has three major functions: it lubricates, it cools, and it carries away tiny pieces of metal and other contaminants that otherwise might block lubrication or cause excessive engine wear. It is with this third function that the main importance of the oil filter lies. For, while today's so-called dispersant oils are designed to carry dirt and other contaminants in solution, the oil filter must grab hold of, and hang on to, the larger particles, particularly any abrasives, as the oil passes through.

But if oils have changed radically, the same has not generally held true for filters. Development of high performance automotive oil filters is extremely recent but more and more manufacturers are becoming interested. This has led to fil-

ters which have been specially designed to withstand the unique rigors of drag racing. Before we delve into the advantages of these units, however, let's take a look at oil filters in general.

Every filter is made up of two basic components: a filter housing and a cartridge. These may be separate units, or they may be combined into a single screw-on canister. Whatever their construction, they are designed to perform the same functions. The housing holds the filter cartridge and must provide minimum resistance to oil flow, have enough space to store accumulated dirt and metal particles, and be able to withstand the high pressures caused by high output oil pumps and cold starts.

All late model engines employ what is known as a "full-flow" oil system. This contrasts with the older partial-flow systems in that *all* of the oil coming from the pump passes through the filter before rushing on its way to all those little nooks and crannies in the engine. In most partial-flow systems only about 10 per cent of the oil passes through the filter on each circuit through the engine. If the filter becomes clogged not too much is affected. But let the filter in a full-flow system become blocked and

there could follow what is coolly referred to as a frozen engine. To prevent such costly disasters, all full-flow filters have a little safety device called a "bypass," or "relief," valve. This valve is located in the housing of most one-piece filters, and in the engine block or filter center bolt on replacement-type filters. It is designed to open when contaminants restrict flow and cause oil pressure inside the filter housing to build up. Thus the engine is "guaranteed" lubrication at all times; but once the bypass valve opens, effective filtration ends. Under "street" driving conditions it takes 6,000 to 8,000 miles before the "goop" in the filter is heavy enough to cause the oil pressure to overcome the spring on the bypass valve.

The bypass valve often plays a very important roll in racing, even though the filter on a racing engine hardly ever accumulates enough dirt to get blocked. For example, a hemi running at high rpm may require over nine gallons of oil per minute. No standard filter can handle this type of flow, due to internal restriction. This causes pressure inside the filter to increase and the bypass opens. Oil starvation is thus prevented but there may be one drawback. If the by-

pass valve is located in the filter housing, it is quite possible for accumulated dirt to be washed off the filter element and carried back into the oil system — this time in much higher concentrations than when it was first filtered out. Thus, certain engines, such as Pontiac, utilize a bypass mounted on the engine where the filter attaches. With this design the oil does not have to flow through the filter when the bypass is open and there is no danger of washing dirt back into the oil supply.

A feature commonly included in throwaway filters is the anti-drainback valve, which prevents dirty oil from draining back from the filter when the engine is shut down. As soon as the engine is started, the valve opens and allows oil to flow through the filter to the engine's bearings.

Now for the filter itself. In a filter element, the material which does the actual filtration is called the *media*. This media can be made of high quality cellulose paper, cotton waste, wood fiber, or even threads from old G.I. fatigues.

Media are classified by the way in which they work. Paper, for example, is a *surface-type media*. It is usually folded accordion-style in the filter to expose the maximum amount of area to the dirty oil. While oil is able to pass through the paper, contaminants cannot; instead, they are deposited on its surface. Because surface-type media afford a very large filtering area with a minimum restriction to flow, they are used in almost all full-flow filters.

When a large mass of porous material is used to trap contaminants *within* the mass itself, rather than on its surface, it is called a *depth-type media*. Due to the inherent restriction imposed by this type of media, it is generally considered much better suited to partial-flow oil systems than to full-flow systems. As a result, this design has not received much interest for use in racing. Filters which use both surface-type and depth-type media have been developed, but they are generally for use with partial-flow filtering systems.

Since surface-type media are the favorite for use in modern high performance engines, let's take a closer look at their physical makeup. While commonly referred to as "paper," these media are actually paper of a very special kind. A brief synopsis of their manufacturing process is useful in understanding the "mechanics" of filters.

First, the raw materials are chopped up and vigorously mixed with water in giant mixing machines. Then the water is drawn out of the pulpy mixture, generally in a large settling tank, and the material forms a uniform mat. A light "cooking" removes any remaining water. The mat of fibers is then treated with a special resin which acts like a glue to hold the fibers in position with-

out clogging any pores. The resin must not only be able to provide enough strength for the media to withstand the forces of flow and differential pressure, but it must also resist decomposition caused by moisture or unburned fuel in the oil.

Sometimes several types of "paper" are combined before the resin is added. In this way it is possible to utilize many different fiber lengths, diameters, and distributions. The larger fibers provide strength and stop the more gross elements of contamination, while the smaller fibers catch the microscopic pieces. When combined, the desired effect is to have an interlocking mesh of fibers, much like a woven fabric, but lacking the uniformity of a weave.

Before the media is "stuffed into the can" it may be both pleated and corrugated. The ends of the media are bonded together so that a single continuous piece is formed. It is then placed in the filter cartridge. If it is a spin-on type, the canister is sealed with a base plate. The base plate has one large hole in its center — surrounded by several smaller holes, provision for mounting on the engine, and a gasket which serves as a seal. The dirty oil enters the filter through the circle of small holes, passes through the media, and exits through the large central hole. Contaminants are held in the space between the media and the inner wall of the housing.

When engineers discuss filtration they talk in terms of *microns*. To the physical chemist, a micron is a particle hav-

ing a diameter of from .01 to .0001 millimeter, the average being .001 millimeter, or *39 millionths of an inch*. Of course, when particles get to below a certain size they no longer constitute a problem as far as engine wear is concerned. Most engineers consider abrasives in the 10-20 micron range as causing the greatest wear, followed closely by particles in the 20-40 micron bracket.

The next logical question is, "How can you construct a filter that will stop such tiny particles and still have decent flow?" This is the major problem facing filter designers. Naturally, a compromise is often the solution, and flow characteristics will be balanced off with filtration to give the best combination for the specific application. This "compromise" isn't as bad as it may sound, because of the two ways in which filtering occurs. First, particles which are too large to pass through the openings in the media are wedged in the mesh of fibers. Second, the minute particles which can easily pass through even very small openings may be caught on the broad surfaces of fibers which are many times wider than the particles themselves. It may take several passes through the filter for this second type of filtration to take place, but it is best to catch as many contaminants as soon as possible. This is referred to as "first pass efficiency." This is the percentage of foreign matter removed from the oil in its first cycle through the filter in relation to the total amount of foreign

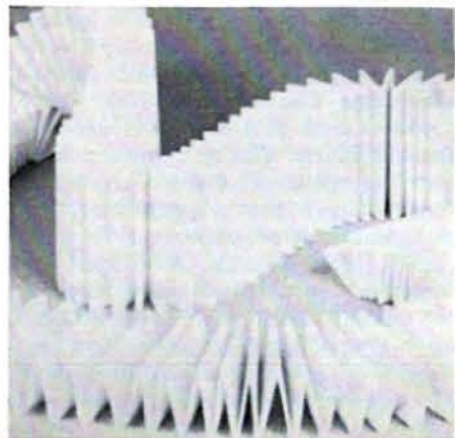
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ABOVE — The most radical of the new breed of filters is Guardian's RG-200X, handmade with viscose rayon media. Units are available from Holman-Moody for \$20.

ABOVE RIGHT — Surface-type media uses different sized fibers in a scientifically determined "helter-skelter" arrangement.

RIGHT — Up to nine feet of filtering "paper" is stuffed into auto racing filters.



OIL FILTERS AND DRAG RACING

matter that has accumulated in the oil. Get the picture so far? O.K., let's talk about racing.

What are the differences between the filtration problems in a passenger car and those in a race car? The big difference is in the environments in which the filters must work. Racing engines may use oils as heavy as 70 weight. Oil pressures may jump from zero to over 160 psi on starting. Unburned nitromethane may dilute the oil. Engines may not be run long enough for oil temperatures to stabilize. Heavy duty racing oil pumps can inhale over 14 gallons of oil per minute. The strain of high horsepower may cause pieces of the block to break off and fall into the oil system. Internal bypassing in the oil pump and windage may aerate the oil into a mass of bubbles. High speed/rpm vibrations may cause abrasives to cut through the media.

Had enough? If filters are faced with so many potential problems, and the amount of dirt accumulated in a drag racing engine (where the oil may be changed every ¼-mile) is so little, why even bother with a filter? The answer is simple: to save the engine. A small chip from an aluminum valve spring retainer or some sand from a casting imperfection is all that it takes to blow a \$3000 racing engine. Besides, how many drag racers have their own private oil well? For the vast majority of us a filter is the answer. Fortunately, the filter manufacturers have realized this and have taken on the challenge of building that better filter. Here's what some have to offer:

The AC Spark Plug Division of General Motors has spent three years developing a new filter material which combines natural and synthetic fibers. Engineers claim higher flow and efficiency, greater strength and increased heat resistance for the ACron filter. The ACron element has 540 square inches of area and uses "W"-shaped folds instead of "V" folds on the pleats. The housing is .0187-inch steel.

Baldwin Filters (J. A. Baldwin Manufacturing Co., Kearney, Neb. 68847) produces both spin-on and replacement element filters. The spin-ons are surge tested to withstand 600 psi of oil pressure, using a heavy gauge steel base plate and a stress-point free "pressure vessel" style housing. Additional features include a bypass valve designed for racing, reinforced center tube, a large area of high flow paper, and heat-cured resins which resist breakdown. The same media and resins are used in the replacement type elements, which

have been acclaimed by Chevy enthusiasts for being able to remove chips coming from aluminum valve spring retainers. The Chevy unit (P-18-HD) also has a plain steel wrapper, with no paint to be removed by dissolved fuel in the oil supply.

Baldwin engineers chose to use pleats with rounded corners, rather than sharp bends, which they feel may thin and weaken. Round pleats also increase the filtering area, giving over 600 square inches in the 72-pleat racing filters, and probably contribute to the ability to stop aluminum filings.



Exhaustive testing lies behind all racing filter design features. Here a filter undergoes surge testing to evaluate its ability to withstand fatigue failure because of internal cyclic pressure changes.

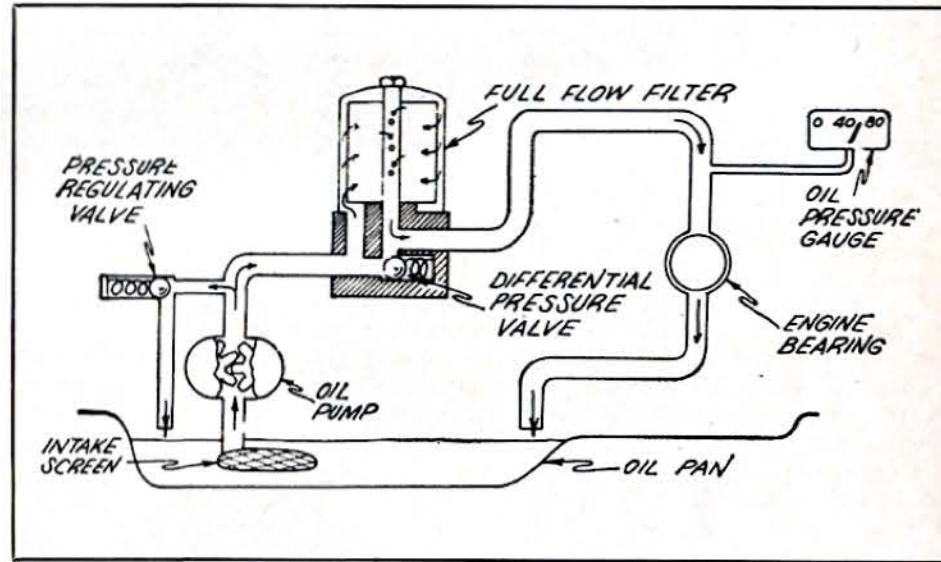
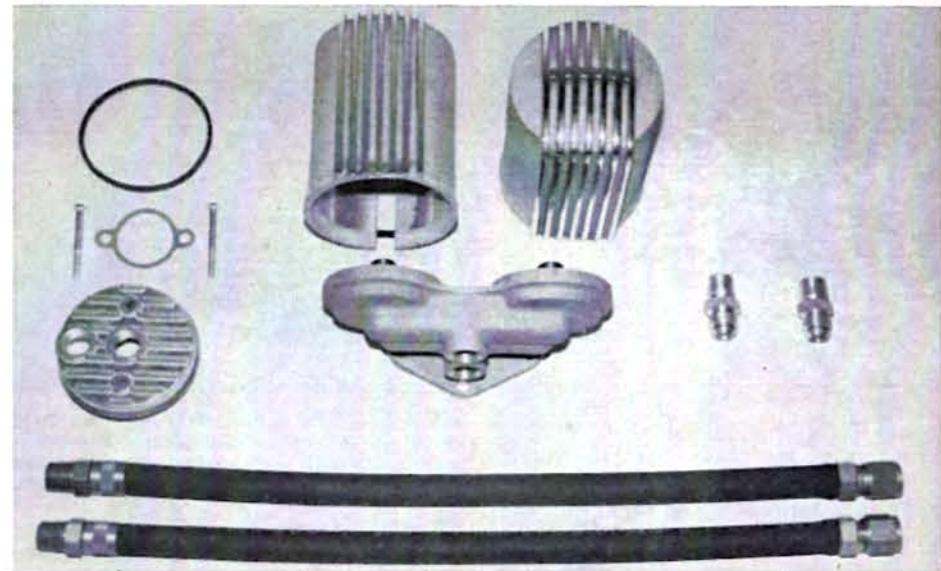


Diagram shows basic full-flow oil system. Used in all late model engines, it has brought about need for more efficient filters having a low restriction to flow. Differential pressure valve is engine's insurance policy; bypasses clogged filter, saving expensive engines.



Many racers and engine builders swear by dual filter setup, such as offered by Trans-Dapt of California. Assembly uses two spin-on filters and has advantage of remote mounting. For all-out racing applications standard single filters are too restrictive.

The base plates are made of .134-inch thick Cor-Ten steel and the housings are formed from .024-inch Cor-Ten. Since drag racing engines accumulate very little dirt, they choose to employ a strong bypass valve to keep oil going through the filter even under very high differential pressures.

A unique feature of Baldwin filters is the use of an "O" ring instead of a conventional gasket, chosen because it has the property of becoming more effective as pressure increases. The ring has a "safety flap" for insurance. This safety flap is on the inside of the ring and if the ring is damaged or foreign matter prevents a good seal, oil pressure will force the flap into the hole to stop the leak before any damage is done.

The cotton base media is heavily impregnated with phenolic resin, both with and against the "grain."

The Fram Corporation of Providence, Rhode Island, has used experience gained in racing, particularly at the Indy 500, to develop a completely new line specifically for racing. Utilizing a cellulosic media which is pleated and corrugated to increase effective filter area, and resin binders which have been proven to be compatible with nitromethane, the design aim has been to trap particles in the 10-20 micron range.

Currently, there are three models available: HP-1, for Chrysler and Ford; HP-2, for Buick, Olds, and Pontiac; and the HPC-3, for Chevrolets. The HP-1 and HP-2 are spin-on types and utilize housings which are free of stamped gripping surfaces and other potential weak points. This pays off with a 500 psi minimum burst pressure for these filters. Heavy steel base plates resist warping, and enlarged input and center-

tube ports reduce flow restriction.

The HPC-3 cartridge solves the "paint in the oil" problem, so long the bane of Chevy junior fuel racers, by using anodized end caps and a tin-plated shell. The .025-inch plated steel center tube is corrugated for added strength.

Tests show a 40 per cent lower pressure drop than standard filters in the high flow ranges encountered in racing. The HP-1 bypass valve is set to open at 7-9 psi differential pressure, while the HP-2 and HPC-3 use bypass valves that are part of the engine. Both the HP-1 and -2 feature anti-drainback valves.

The gasket is a positive seal type, set in a deep channel in the .140-inch thick base plate. The channel prevents seal movement and assures maximum sealing effectiveness.

For special applications, the HP-1 fits Trans-Dapt remote dual and single filter mounting bases, while the HP-2 fits Milodon's oil pump conversion kit that uses the AC PM-704 filter.

For more information contact the High Performance Filter Department, Fram Corporation, Providence, Rhode Island 02916.

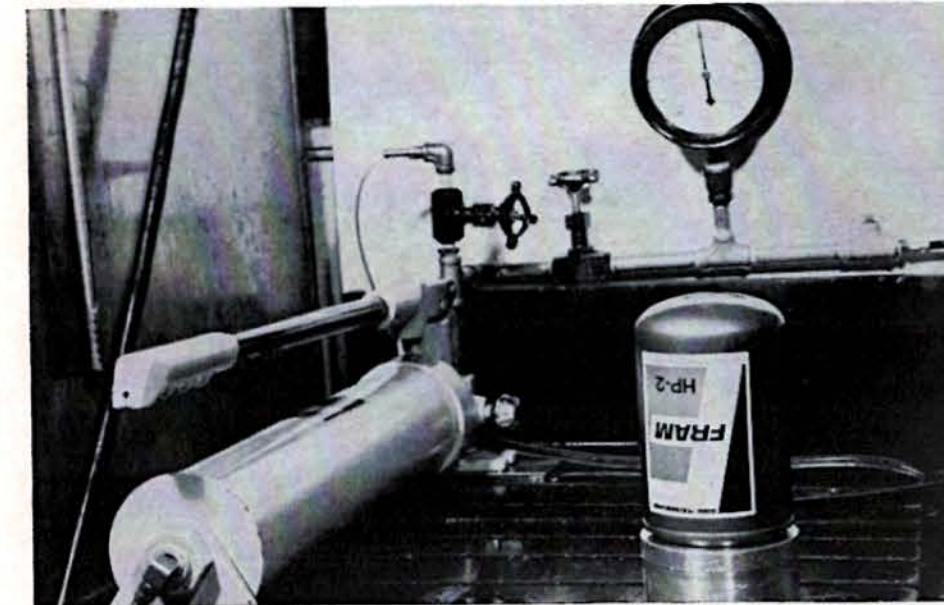
The Guardian Filter Company (Walker Manufacturing Corp., Racine, Wisc.) is so interested in drag racing that they actually own a competition car, the 200 mph Guardian AA/Gas Dragster campaigned by the Mano Bros. The hottest item they have is presently in the prototype stage, and is a radical departure from conventional racing filter design. First, it uses a depth-type media. Yes, you read it right — a depth-type media in a full-flow system. The RG-200X is a spin-on filter featuring a molded viscose rayon "bun" rather than a pleated paper element. The type and arrangement of the filtering material provides long life and high flow. The rayon is completely resistant to acids, water, and exotic fuels while it performs its job of contaminant removal.

The second feature, which is available on all production Guardian Filters having a bypass valve, is the patented "up front" position of the valve at the filter base plate. This gets around the problem of having accumulated dirt wash off the element and back into the engine when the bypass opens. This should be of particular interest to owners of Ford and Chrysler engines.

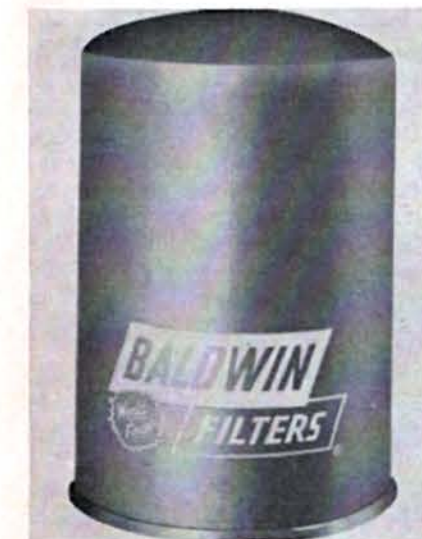
Guardian uses a media of high base weight in their surface-type filters to ensure high initial efficiency and immediate removal of harmful abrasives. The resins used in the media are heat cured at high temperatures and can withstand oil temperatures up to 300° Fahrenheit.

Guardian has eliminated all stress-producing flutes and flats from their filter housings and use heavy-duty, low

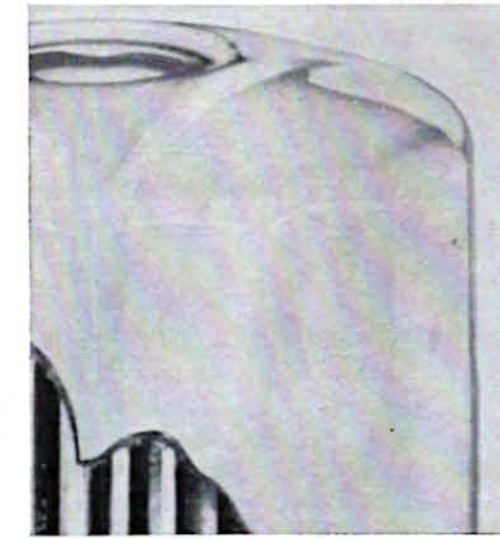
(continued on page 74)



Special test bench checks ability of complete housing and base plate assembly to stand up to extremely high pressures, as would be encountered in racing engines with heavy oil. Standard filters burst at 250 psi; high performance units take 500-600 psi.

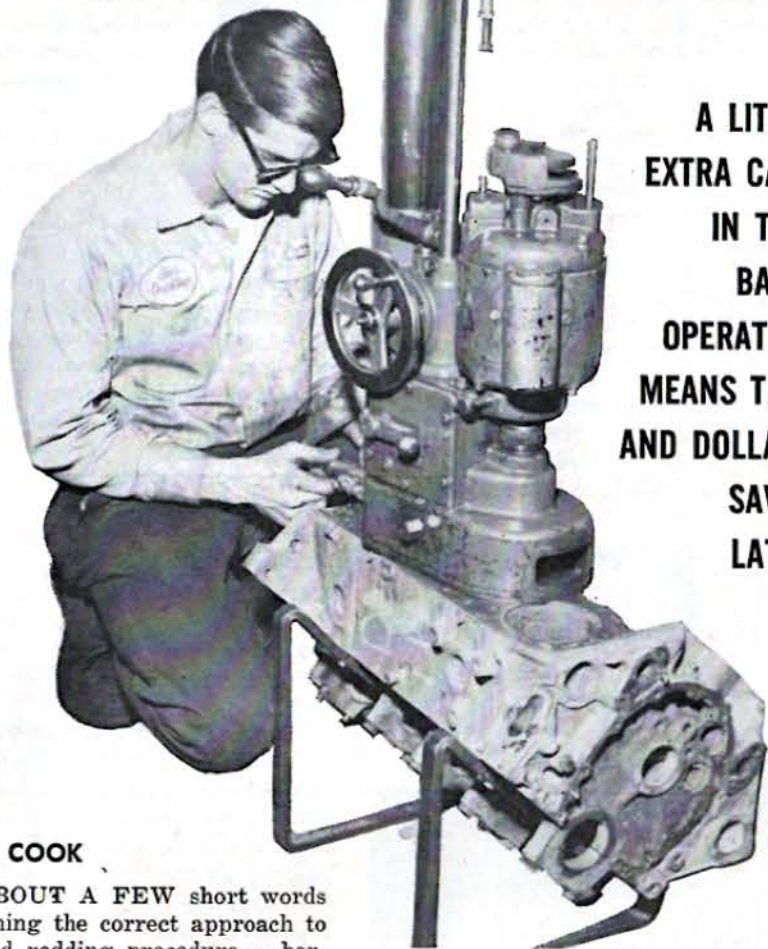


Flutes and other stamped gripping surfaces can be potential weak spots on thin-walled conventional housings.



Stress-point free "pressure vessel" style filter housings such as those made by Fram, Baldwin and Guardian are well-suited to job.

BORING AND HONING



**A LITTLE
EXTRA CARE
IN THIS
BASIC
OPERATION
MEANS TIME
AND DOLLARS
SAVED
LATER**

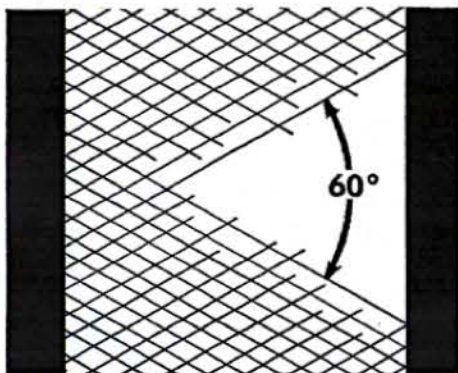
BY TERRY COOK

HOW ABOUT A FEW short words concerning the correct approach to that old rodding procedure... boring and honing? Even if you're a seasoned veteran, this refresher course isn't going to hurt you, and... you might even learn something you didn't know.

Basically, we got a tip or two from three different sources, providing a cross section of professional opinions for you to digest. The first source was Chrysler Corporation's brochure, "Basic Performance Tuning and Modification Tips for Dodge Engines, Chassis, and Transmissions," which, in this case, is applicable to any type of engine. Under "Cylinder Block Preparation," MoPar's comment was, "Honing the cylinder bores is a very critical process. The hone should be equipped with a medium stone that will produce a fairly rough surface of 30 to 40 micro inches. The stones should be cleaned frequently to prevent them from scratching the walls. Honing should be a cross hatch pattern, uniform from top to bottom, having an included angle of 45 to 60 degrees. The bores should never be honed dry; use kerosene as a cutting fluid." And don't forget soap and water, and light oil when you're done.

Another source was Wally Booth, knowledgeable Super Stock competitor from the Detroit area who you met in

the December 1967 CAR CRAFT. Wally's sagacious comments were as follows: "After determining the amount you wish to bore the engine, remember not to go to the full .030 or .060 overbore limit if building for Super Stock or Stock class, as honing or wear will open the bore past the legal limit. Not only the grit of the hone is important, but also the material of the hone itself. Go to the best and most experienced shop for boring and honing if building an NHRA class machine. One common mis-



How to achieve a good crosshatch is shown here. The angle of the pattern is found by determining the angle between the lines. Use a slow motor to turn the hone.

take is too rough a hone. Boring never leaves a perfect surface, and a good man on the hone can make up for boring irregularities."

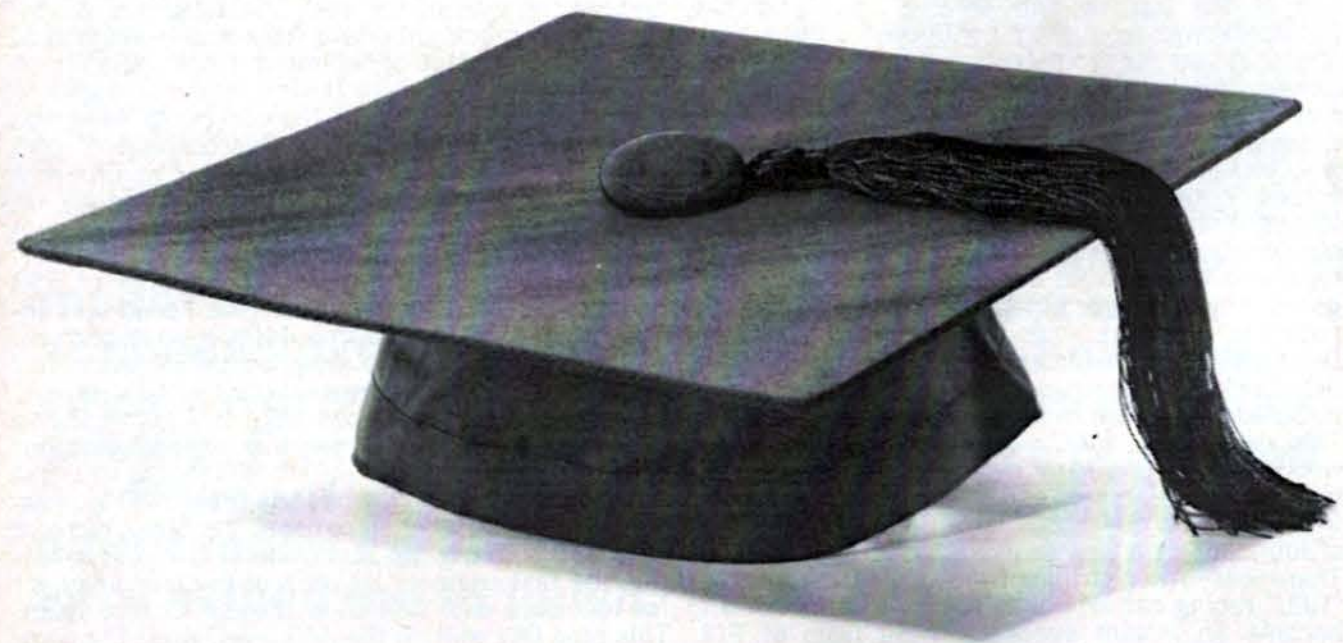
The third source of information was Tony Feil of Competition Engines in Hanover, New Jersey. Since building engines for street and strip is his "bag," Feil is qualified and offers a solution from a different approach, that of aiming for the correct ring gap. "First of all, remember this general rule: the gaps on the rings should not be too tight, as this will produce ring tension, scraping the rings against the cylinder walls, creating friction. On the other hand, if the gaps are too big there will be little friction, but compression will be sacrificed. We are aiming for the optimum ring gap that will hold compression yet produce a 'friction free' setup.

"As an example, for a four-inch bore, run .016 to .018 of an inch gap clearance. After initial boring and checking of ring gap, you can figure how much more boring is necessary to achieve the desired gap clearance. Multiply 3.1416 (Pi) times the diameter of the bore. This will give you the circumference which in essence is the distance around the ring, plus the desired end gap. Remember that after getting close to the correct dimension by boring, you can switch to honing to arrive at the correct bore size. If working with a .030 overbore limit, as in NHRA Super Stock classes, you can go to a .0285 to .0295 overbore, which leaves a bit of meat for possible future re-honing, but keeps you inside the legal limit.

"As a general rule, hone a lot of material out of the block. When boring, leave a lot of 'meat' for the honing step. Use a micrometer in the holes during the honing process, as this will tell you where you stand in relation to the overbore limit. Decide upon the type of finish you wish to achieve with the hone in accordance with the type of ring and the use of the engine itself (street only, street and strip, or strip only). For instance, use a 200 grit wet stone for an all-purpose Eastern climate street engine when using a chrome ring, as the engine will be absorbing dirt and carbon, and generally will be running 'dirty' from contaminants picked up on the street."

In summary, remember that the finish the hone leaves on the walls will help the rings seat correctly, and that the amount of overbore and ring gap are two critical dimensions to watch. One last tip? It's easier to control the cross-hatch pattern desired when honing if a "slow" motor is used. ©

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Our booklet describes the opportunities for you in a new car dealership. We like our business. Perhaps you would, too. But, our country is filled with many opportunities... just waiting for the man with the right hat.



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STRAIGHT OUT OF A BOTTLE

Something as simple as a change answer to a major drag racing chassis builder Joe Schubeck's

in rearend and transmission lube may be the problem... galled gears. Veteran dragster pilot and BFL passed a brutal list of tests with flying colors.

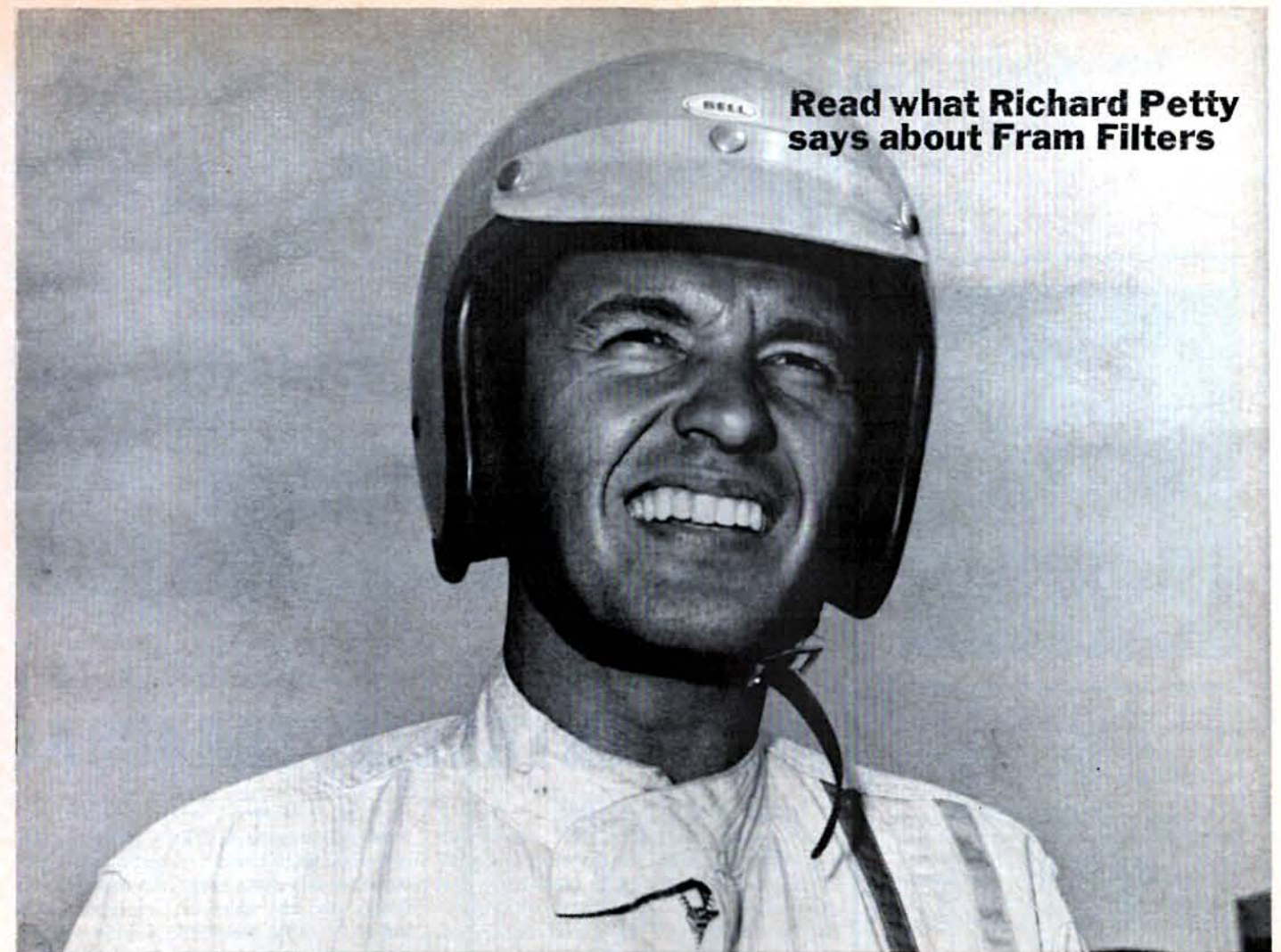
One of drag racing's more perplexing problems may have been solved through the determined efforts of a racer turned businessman. Joe Schubeck's is a perfect example of the "build a better mousetrap" approach that has maneuvered many top racing competitors into successful business situations. As one of the top handlers in the dragster ranks, Schubeck was frequently confronted with a problem that was far from being unique with his machines. After making numerous "straight as an arrow" runs, race cars would suddenly decide to make a sharp left or right hand turn. Needless to say, you are busy enough holding a supercharged screamer in a straight line without making like a left-right racer as a special attraction. ● Schubeck, a graduate engineer from Trial and Error University, narrowed the problem down to the rearend spider gears. Any galling or binding of these gears would, naturally, interfere with their normal operation. During his search for an answer to the problem, Schubeck became engaged in conversation with a petroleum engineer from Cleveland Oil Products. This resulted in, first, a visit to Schubeck's Lakewood Chassis Company by the engineer, followed by a series of lab sessions in search of the answer to Schubeck's question, "Isn't there a better type of lubricant than we now have available to us?" ● There was! After stringent lab testing, Schubeck's "BFL" racing car lube was put on the market and became an instant success. These tests of BFL, in comparison with three generally used products, resulted in strong evidence that rearend spider gear galling, with its resulting "built in turns," should become a thing of the past. ● Test one was an oxidation test which consisted of adding 200 grams of oil to a 400 ml. beaker and heating it in an oven at 300 degrees F for 100 hours. The lube was then removed, cooled to room temperature, and weighed to determine any weight loss. A 210-degree viscosity test was then run on the oxidized oil to see if there was a viscosity increase present. BFL recorded a 4.3% weight loss and 13.3%

viscosity increase, compared to a low of 5.6-13.8 and a high of 6.8-16.5 for the comparison products. ● A 30-day storage solubility test was then run to determine the amount of additive that may tend to drop out of a lubricant by its merely sitting. The oil was stored for 30 days in a centrifuge tube; and, at the end of the test, the tube was centrifuged with precipitation naphtha and reweighed to find the percentage of sediment. Once again it was BFL to the rescue, with 0.40% loss, compared to a range of 0.51-0.74% for the others. ● Next was the very critical S.A.E. test. This consists of running two bearings against each other at different speeds and in different directions. A steadily increasing pressure is applied until a maximum weight is achieved or the bearings score. The normal speed is 1000 rpm with a maximum of 550 pounds. For this test, however, the speed was increased to 1500 rpm with a 440 pound maximum. The bearings were also weighed before and after to show comparison in wear characteristics. ● BFL and one of the other lubes were still going strong at the maximum, while the other two dropped out at 180 and 190 pounds. Weight loss for the BFL test bearings was 2.9 mg., while the other 440 lb. runner lost 7.4 mg. By comparison, the other two lost 10.6 and 10.0 mg. ● Just to make things interesting, the test engineer let each of the four lubes sit for two days and then tried the S.A.E. test again. This time BFL still hit the 440 level, while the comparison lube that had reached the same performance well mixed, dropped out at 220 pounds this time. Numbers three and four went out at 160 pounds pressure each. ● Still not satisfied, the engineer put the test tubes in a 200-degree oven for 48 hours. It was then removed and the S.A.E. test run again. This time the BFL did experience slight scoring at 410 pounds, but the others failed at 220-140-136 pounds. ● A lot of figures, perhaps, but what it comes down to is a possible answer to a major drag racing problem—going straight. And after all, that's the name of the game. ☺

Photo by Eric Rickman



Arrows point out areas of galling on spider gear and shaft. BFL was specially prepared to end this problem and the ill-handling effects that often result.



Read what Richard Petty says about Fram Filters

"Winning the NASCAR Grand National Championship meant driving over 10,000 miles... most of it at speeds over 180 miles per hour. That beats an engine worse than 100,000 miles of open highway driving. Fram oil, air and gasoline filters protected my Plymouth every inch of the way. Although they didn't make car 43 go any faster, Fram Filters sure helped me to finish!"

Richard Petty knows that Fram Filters give the best protection against engine wear that money can buy. That's because Fram Filters scientifically remove wear causing dirt. Keep precision engine parts frictionless clean. Next time you bring your car in for service, follow Richard



Petty's advice. Insist on Fram—the filters that prevent engine wear. They won't make your car go any faster, but they will help you to get where you're going. Fram Performance-Proven Filters. They work on the track. They work on the road. Fram Corporation, Providence, R. I. 02916.

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In the market for a marvelous mini-bike with two-speed gearing for mini-speeds to spare? Then scope out this one, the latest from Rupp Manufacturing...

CONTINENTAL ELECTRA 400 AL

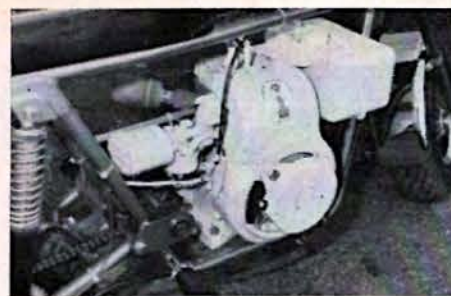
BY TERRY COOK □ Question: What's small enough to fit in your trunk but big enough to get you around the pits in style? The answer, a mini-bike, the drag racer's best friend. And what's the hot setup as far as these shrunken scooters go? How about taking a squint at this new offering from Rupp Manufacturing of Mansfield, Ohio?

As far as mini-bikes go, this number is really plush. The cushioned seat features a "kick-up" at the rear to insure your position. A sealed beam headlight and a combination brake and taillight are standard equipment on this bike, allowing night use, and acting as a safety factor during the day, as the brake light operates when you use the handgrip, handlebar-mounted brake. An on-off, high-low beam switch is also located on the handlebar. Then, there are the plated fenders to limit the amount of splash and trash that is thrown toward the driver in mucky weather, and, perhaps the nicest feature of the machine, it is fully suspended, with a coil-over-shock arrangement on the rear and an internal spring in each of the front forks.

The Continental Electra from Rupp comes with either of two Tecumseh four-cycle engines, either the four-horse version or the more powerful six-horsepower model. Offering a new two-speed clutch option for better application of the power, the bike can reach forty miles an hour with the four-horse engine or touch fifty with the six-horsepower powerplant. The two-speed unit boils down to a pair of centrifugal

clutches in series, operating as follows: when the engine is idling, both clutches are disengaged, but when the twist-grip throttle is rotated, the first clutch engages and the bike gets underway. At about 25 mph, when the engine reaches a specified rpm, the second clutch kicks in, effecting a gear change and offering a "second" gear. Since the two-speed unit is contained within the linking of two centrifugal clutches, no clutch pedal or cable is required, and the unit operates automatically.

As for the testing of the vehicle itself, we went to extremes to give the Electra a rigorous workout. Since it contains all the necessary equipment to make it legal in traffic, the machine was tested first on the street. The unit tested was the four-horsepower version, and the initial getaway was a pleasant surprise, considering the relatively small engine. The shift from first to second gear was effected smoothly, but might be quickened by adjustment, as there is a perceptible lag during the low-high transition. The bike easily offered enough pep to keep up in city traffic, but understandably is not a freeway machine. The engine started easily under all conditions, although a bit of choking may be required if the mill hasn't been turned over for a while. After feeling out the bike on the streets, we journeyed to the fields for the first real examination. Although the bike is no Rolls Royce, the suspension really performed in smoothing out hidden bumps. The only "hairy" situation occurs when you clamp on the brake at



Power for the new Rupp mini comes from a reliable Tecumseh four-cycle single-cylinder engine, and is transmitted to the rear wheel by a two-speed centrifugal clutch arrangement. With suspension on both front and rear wheels, the ride is surprisingly smooth, even on the roughest terrain. Headlight and taillight make night driving possible for streetable rig.

high speed in the dirt, as the rearend has a tendency to "wash out." This is, of course, a characteristic of most rear brake only two-wheeled vehicles, and stopping from high speeds in the dirt should be effected smoothly, rather than with violent application of the binders. After wringing the mini out of the fields and dirt trails, we gave it the supreme

SPECIFICATIONS FOR MODEL TESTED

WHEELBASE 36 inches
WEIGHT 85 pounds
SUSPENSION Coil over shock
ENGINE Tecumseh 4-cycle,
6-horsepower
TRANSMISSION .. Centrifugal 2-speed
TOP SPEED 40 mph (approx.)

test by venturing over to Rupp Manufacturing's own asphalt TT course, a closed circuit twist and turn track with flat and banked corners. I will be the first to admit that I'm no pro, but after a period of education and adjustment I began to pour on the coal with gusto, leading me to conclude that this bike can handle anything within reason in the way of twists and turns. The fold-away foot pegs, which are standard equipment, came into play again, as they did on the dirt, and without them I'm sure I would have more than one skinned kneecap. In conclusion, the bike is sturdily built, handles as much as the seasoned mini driver can dish out, and rides exceptionally smoothly because of front and rear suspension. If you're in the market for a pit bike than can double on the street, in the fields, or even at the TT track, you need not look any farther.

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If you're 30% over normal weight, you run twice the risk of heart attack in middle age.



KEEP PHYSICALLY FIT

Exercise regularly and moderately. Physically active people have a lower heart attack risk.



DON'T SMOKE CIGARETTES

Heavy cigarette smokers get coronary disease at a rate 2 to 3 times higher than non-smokers.



SEE YOUR DOCTOR REGULARLY

Only he can help control blood pressure and advise on weight, exercise and the diet for you.

GIVE...so more will live HEART FUND

Contributed by the Publisher

IT'S THE GREATEST!

The greatest "LIL" INDIAN MINI-BIKE ever produced. It's the Model 600.

It's the only mini-bike with Mini-Matic 2-speed automatic transmission. It's got the stuff that the outdoorsman waited for, that can take man and boy side by side over fields, hills and trails.

Imagine how it performs on prone cement!

It's got a low gear ratio of 9.6 to 1, a high gear of 5.0 to 1, whipped into action by a 3 hp B & S engine.

And it's got all the muscle, speed and economy of our three other "Lil" Indians.

Send 25c for information on all four.



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DEPT. CC-2

14580 FIELDING

DETROIT, MICHIGAN 48223

NEW LOOK FOR '68

(continued from page 19)

DON GROTHEER — (Oklahoma City, Okla.) — is selling his '67 SS/B Plymouth and picking up a '68... Plymouth, of course.

HARRY HOLTON — (Patterson, Calif.) — will switch from his '65 426 Hemi Plymouth to an SS/AA Hemi Barracuda.

BILL IRELAND — (Portland, Ore.) — wants to go from '67 SS/B Fairlane to a '68 Ford for same class.

GARY ISAACSON — (Marshalltown, Ia.) — will continue to run his SS/AA Plymouth with Brown and Seoville.

BILL IZYKOWSKI — (Hillside, N.J.) — will sell his '66 A/S Chevy and go to SS/C with a Tony Feil-prepped '68 Camaro.

BILL JENKINS — (Berwyn, Pa.) — "King of the drag stockers" will go to an L-89 396 Camaro, or perhaps 427 Camaro if Yenko makes them available.

PETE KOST — (Everett, Wash.) — will keep his 400-inch 360-horse "442" Olds, but will switch from SS/E to B/SA class.

DICK LANDY — (Sherman Oaks, Calif.) — will campaign two cars, both '68's; a 426 Hemi Charger in SS/B and a 440 Magnum wedge which his brother Mike will drive in SS/EA. May run an SS/A, too.

JUDY LILY — (Wheatridge, Colo.) — will swap her SS/B 426 Belvedere in on a '68 Road Runner and may try SS/AA.

HANK McALEENAN — (Largo, Fla.) — will stick with his '65 426 Dodge Coronet and continue to campaign in SS/AA class.

ED MILLER — (Rochester, N.Y.) — late word from the Tulsa champ indicates he and partner Kip Guenther will be chasing '68's "money tree" with a brand new SS/A Hemi Barracuda, Leroy Chrysler Plymouth will continue sponsorship.

ERNIE & DOUG MUSSER — (Reading, Pa.) — are waiting for the NHRA factoring decision. May run two Chevy Super Stocks with their stepfather, "Dink" Lawrence, and ace mechanic Lee Crupi. Pooling talent may pay off.

TOMMY MYL — (Coraopolis, Pa.) — may sell his '67 Plymouth Hemi and get a new Vanke-prepared Road Runner for SS/BA.

AL OLSTER — (Passaic, N.J.) — will continue to run with his Jenkins-prepared '63 Plymouth 426 wedge in SS/BA class.

HUBERT PLATT — (Atlanta, Ga.) — will hang in there with his strong SS/B '67 Ford Fairlane with 427-425 engine.

RONNIE SOX & BUDDY MARTIN — (Burlington, N.C.) — Plymouth Clinic men will run an SS/B Hemi Roadrunner and a GTX 440 SS/E. Jake King will twist wrenches. Third car will be a Hemi Barracuda. Also, look for a fourth car on AHRA 3400-pound circuit.

JERE STAHL — (York, Pa.) — sharp stocker man says no '68 racing for him due to increased business responsibility. He may just show up with a stocker, however... a FORD?!

TAGEN-SMITH & JOHNSON — (Minneapolis, Minn.) — Bob, Greg, and Duane plan to stay with their SS/E "442" Olds.

ED TERRY — (Hayward, Calif.) — may cash in his 427 Fairlane SS/B that won class at Indy, only to be disqualified because of factory part number mix-up. He might get a new '68 Fairlane, perhaps a SS/F 428 Mustang.

JACK THOMAS — (Hinsdale, Ill.) — is getting a new 426 Hemi '68 Dodge Charger for Midwest UDRA Super Stock circuit.

STEVE TOTH & JOHN KOVALICK — (Edison, N.J.) — will stick with their '63 Plymouth 426 wedge "L.S.D." in SS/CA class.

MIKE, JOHN & BILL ULREY — (Seymour, Ind.) — will sell '66 Fairlane, which ran 425 horses for SS/B and 410 horses for SS/C, and go to '68 SS/B Fairlane.

ARLEN VANKE — (Akron, Ohio) — veteran from Ohio will run under RC Industries banner with a new Road Runner.

JACK WERST — (Morristown, Pa.) — will switch from SS/B '67 Plymouth to an SS/A or SS/AA Hemi, either 'Cuda or Road Runner, depending upon what Plymouth makes available "over the counter."

ROBERT L. WILLIAMS — (Warren, Mich.) — will keep Nationals class winning "Hillbilly" SS/B Belvedere and run out of Birmingham Chrysler-Plymouth agency.

DAVE WREN — (Missoula, Mont.) — will sell his SS/CA '63 426 Plymouth and get a new Hemi Road Runner for SS/BA.

STOCKERS

The NHRA has increased their stocker program, adding ten more classes. Manual transmission classes now run from A/S to U/S (with the exclusion of an S/S class designation to avoid confusion), and automatic cars will fit from A/SA to M/SA. Rather than add additional classes, the '67 weight per horsepower breaks were simply broken down further, putting everyone closer together. The idea is to have more classes for the most popular cars, competitor-wise, providing fairer competition and increased participation. Watch for the stockers to grow in popularity, riding on the coattails of their big brothers, the Super Stockers. NOTE: Because the new NHRA classifications were not available at press time, all reference to classes is based on the 1967 NHRA rules. 1968 classes will be based on a Performance Rating factor, rather than strictly horsepower-to-weight.



Pete Preston will switch from this C/SA Plymouth to an SS/E Camaro by Jenkins, as the bucks are better in Super Stock.



Who said the stockers were "little guys"? The Wheatley Brothers, of Maryland, were showing some class at the '67 Nationals.

ROGER AHO — (Plymouth, Mich.) — his K/S Chevy won class at '67 Indy. He'll run a Chevy, with Chet Fleming, in another class. Count on record setting performance.

JOHN ARCHAMBAULT — (Philadelphia, Pa.) — will continue to run his H/SA '57 Chevy Sedan Delivery for '68 season.

JOHNNY BARTLETT — (Salem, Ore.) — will stay in K/S, but his 1954 Buick Century 2-door will be replaced with a similar 4-door, as it better fits the class.

BILL BEAM & CLYDE PITKIN — (Salt Lake City, Utah) — will stick with their tough F/S '57 Chevy 270-horse 2-door wagon.

JEFF BOCKMIER — (Spokane, Wash.) — is switching from his B/SP '57 'Vette roadster to a C/SP '65 Corvette to fit class.

(continued on page 66)

THE INSULT THAT MADE A MAN OUT OF 'MAC'



CHARLES ATLAS, World's No. 1 Body Builder, says:

Don't Be Half A Man!

Let ME SHOW How I Can Make You a Real HE-MAN From Head to Toe — in Just 15 Minutes a Day!

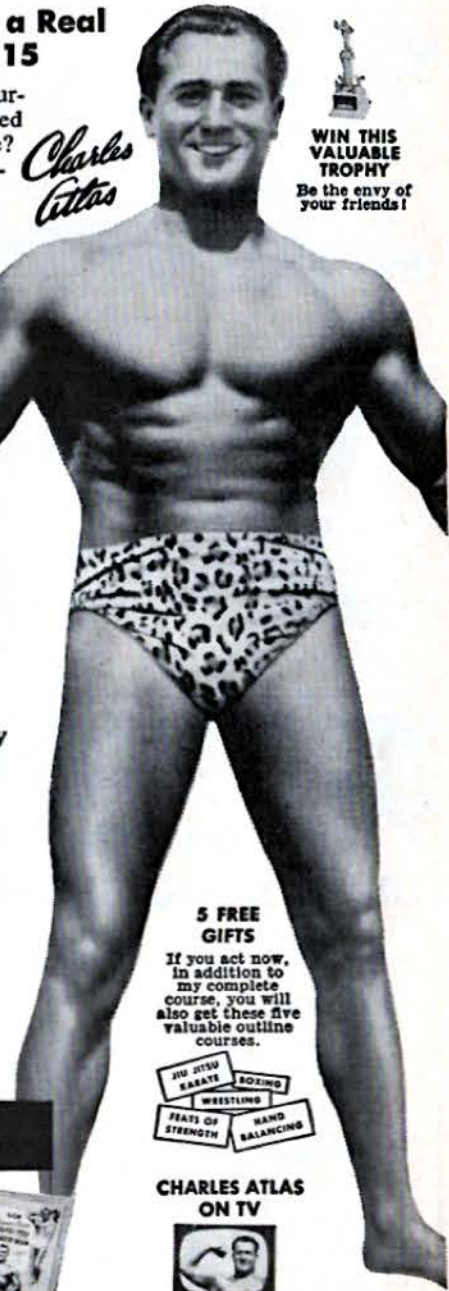
Take a good honest look at yourself! Are you proud of your body — or are you satisfied to go through life being just "half the man" you could be? No matter how ashamed you are of your present physical condition — or how old or young you are — the "sleeping" muscles already present in your body can turn you into a real HE-MAN! Believe me, I know — because I was once a skinny, scrawny 97-pound half-alive weakling! People used to laugh at my build and make fun of me. I was ashamed to strip for sports or the beach... shy of girls... afraid of healthy competition.

HOW I CHANGED FROM A "MOUSE" TO A MAN!

One day, I discovered a secret that changed me from a timid, frightened scarecrow into "The World's Most Perfectly Developed Man" — a "magic formula" that can help turn you, too, into a marvellous physical specimen... a real HE-MAN from head to toe... a man who STANDS OUT in any crowd! What's my secret? "DYNAMIC-TENSION" — the natural method! No theory. No gadgets or contraptions. You just do as I did. Simply take the "sleeping" muscles already present inside your own body — build them up — use them every day in walking, bending over, reaching, even sitting! Almost before you know it, you're covered with a brand-new suit of beautiful, rock-hard SOLID MUSCLE!

MY SECRET BUILDS MUSCLES FAST!

Just 15 minutes each day in the privacy of your own room — that's all it takes to make your chest and shoulder muscles swell so big they almost split your coat seams... to turn your fists into sledge-hammers to give you a battering ram punch... to put solid inches of muscle on your torso... to build mighty legs that never tire!



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If you act now, in addition to my complete course, you will also get these five valuable outline courses.



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- BIG ARM MUSCLES
- BROAD BACK & SHOULDERS
- TIRELESS LEGS
- MORE WEIGHT
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NEW LOOK FOR '68

(continued from page 64)

RICHARD BOYCE - (Ft. Benning, Ga.) - is trading in his '59 El Camino I/SA for an L/S six-cylinder, 230-inch, 140-horse Camaro. Could be a stormer in that class.

BOBBY BROWN & J. W. TAYLOR - (Spring Lake, N.C.) - will switch from 396-375 Chevelle to a 375-horse A/S '68 Camaro.



Chevy wagons are popular in Modified Production as well as in Junior Stock. Richard Wood and Louie Guidi's car is an example.



Cal Method's '57 9-passenger wagon is a tough Washington F/S Chevy. The 283-horse, 283-inch rig finished third in points.

ED COLLIER - (Connersville, Ind.) - will continue with his F/SA 273-275 '65 Barracuda, but will go the blueprint route.

GEORGE CURETON - (Wilmington, Del.) - National Champion will run in both G/SA and I/SA with same '56 Chevy Sedan Delivery that won at Tulsa.

JOHN DIANNA - (Van Nuys, Calif.) - flipped his H/S Chevy in a freak accident last year, but will be back with a strong G/SA Chevy Sedan Delivery with a hydro and 265-inch 225-horse engine.

GRAHAM DOUGLAS & ED FORYS - (Pasadena, Calif.) - will run the same '60 Pontiac wagon that won '67 Internationals Stock Eliminator.

BILL EHRSAM - (Sylvania, Ohio) - will run M/S '51 Stude.

JIM ELMER - (Portland, Ore.) - will stay in A/SP, as his L-88 Corvette was finished late last year.

JERRY GOFFINET - (Dayton, Ohio) - plans to stick with his E/SA 396-326 Impala, the car he won class with at Indy.

KEN & JACK GUNNING - (Philadelphia, Pa.) - will keep the G/S wagon, a class winner at Bristol and Indy runner-up.

TED HARBIT - (Frankton, Ind.) - is staying with the M/S '51 Stude that has won class at four of last six Nationals.

JIM HAYTER - (Cushing, Okla.) - will run his F/S '57 Chevy wagon, plus a 245-horse '57 4-door Chevy wagon in G/S.

ED HEDRICK - (Wellsville, N.Y.) - will continue to switch between 325, 300, & 271-horses on his B/, C/, & D/SP Cobra.

JIM HIEB - (Seattle, Wash.) - will retire his E/SA Rambler for a J/SA Javelin SST. Seattle Rambler will sponsor.

MIKE HOOVER - (Lansing, Mich.) - will stay with his '66 Chevelle 396-375, as he feels it's the best car for A/S.

TONY JAMES - (Whittier, Calif.) - will run same H/SA '57 Chevy. An example of good West Coast Junior Stockers.

ALEX JARRELL JR. - (Hockessin, Del.) - will keep his '56 Chevy 9-passenger wagon and concentrate on H/S class.

JESEL BROS. & TONY MASSARI - (West Long Branch, N.J.) - will run two trucks, a '56 Chevy Sedan Delivery in F/SA



Another wagon for Modified Production, Richard Doane's '55 Nomad, runs in D/MP out of Ohio. Engine is a 288 cube Chevy.

(rather than G/SA as it did last year) and a G/ & I/SA '56 Cameo pickup. A little "shotgunning" of classes?

DR. G. E. JOHNSTON - (Poteall, Okla.) - physician-surgeon will stick in A/SA but switch his '62 413-inch Dodge for a '63 426-inch wagon. Who said dragging was for kids?

DOUG KAHL - (Holt, Mich.) - will retire his controversial '62 Plymouth C/SA and drive for Ted Spehar. (See Spehar).

BRUCE KELLY & LYNN IRVIN - (Bremen, Ohio) - Nationals D/S class champs will stick with their '57 Chevy 283 sedan.

KRUTZ & CALDERHEAD - (Wilmington, Del.) - will stick with their strong H/SA 292-inch 220-horse Chevy Sedan Delivery.

GORDON KURTZ & PHIL SPITLER - (Montoursville, Pa.) - after winning G/SA class at Indy, team is selling its '58 Chevy Sedan Delivery and switching to a B/SA Camaro.

BOB LAMBECK - (Sherman Oaks, Calif.) - NHRA D/S record holder and Division 7 Points Champ will stick with his trusty '57 Chevy. Tough to beat his '67 performance.

L. "DINK" LAWRENCE - (Reading, Pa.) - will sell his Jenkins-prepared I/S and I/SA Chevy Utility Sedan, which won class at '67 Indy, to run with Lee Crupi and stepsons, the Musser brothers.

MATTHEWS & BENDER - (Mechanicsville, Va.) - will stay

with their 283-inch 270-horse '57 Chevy 210 E/Stock that has run 12.78. Will continue for Stahl-Moroso.

DOUG MENTZER - (Downingtown, Pa.) - plans to keep his 274-inch 195-horse I/S '55 Chevrolet Station Wagon.

BILL PARHAM & GORDON PAYNE - (Skiatook, Okla.) - will keep their controversial blown '57 Ford E/SA record holder.

PATRICK BROS. - (Omdro, Neb.) - will switch from their F/S Chevy wagon to a 283-283 Chevy 2-door sedan for D/S.

RUSS REYNOLDS - (Astoria, Ore.) - will retain his '63 Plymouth wagon and keep switching between SS/DA and A/SA.

TED ROHDE - (Salem, Ore.) - plans to update the engine and chassis on his M/S '50 Olds, NHRA record holder.

CARMEN ROTUNDA - (Bellville, N.J.) - will stick with his 283-270 C/S Corvette. Lee Crupi will continue to help.

TOM RUSSELL - (Muskegon, Mich.) - plans to keep running his Ted Spehar-prepared D/SA '62 Plymouth 361-305 Fury.

JOHN G. SARGL - (Beaumont, Tex.) - will stay with his "one-of-a-kind" 421-inch 405-horse B/SA '61 Catalina.

SAM SHINABERY - (Ft. Wayne, Ind.) - Sam to stick with his L/S 160-horsepower '52 Olds and sub-record racing.

TED SPEHAR - (Birmingham, Mich.) - MoPar man will throw in with Doug Kahl on a 235-horse '66 Dart for F/SA and also field a 270-horsepower 1968 Barracuda.

JAMES WAIBEL - (Lakeland, Fla.) - strong stocker man from the South will forsake his E/S 283-270 '57 Chevy for a '62 327-340 Corvette which he will run in E/SP class.

JAY & BUCK WHEATLEY - (Cambridge, Md.) - will switch the F/S '57 Chevy wagon over to J/S, plus field an N/SA 1955 Chevy Sedan Delivery with 195-horse engine.

WORRELL BROS. - (Trevose, Pa.) - Ken and Jack will run a new '53 Olds L/S sedan with the 165-horse engine, an M/S 135 H.P. '50 Olds coupe, and the trusty N/S 135-horse 303-inch '50 Olds wagon.

GUS ZUIDEMA - (Worcester, Mass.) - will switch from A/SP Cobra to a Super Stock. Still undecided on car.

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FUNNY CHAMPIONSHIP

(continued from page 21)

manufacturer was simple. There were three rounds of fifteen races each. Each win was good for one point for the team, or half a point if an alternate had to be used. This put the pressure on the primary cars. An additional bonus of one point went for low e.t. of each round.

Racing started promptly at 7:30 p.m. — following display of all the cars and introduction of the teams — with a good contest between the Doug's Headers Corvair and Don Nicholson's Comet. Don was plagued with too much low end horsepower and smoked through with an 8.17/181.08 behind Doug's 8.12/191.28 clocking. Next, Roy Gay, driving the Infinity for the first time in competition, met and defeated Gas Ronda with a sizzling 7.96. Not bad for a Pontiac-powered Pontiac!

Jim Liberman was in to pinch-hit for Jack Chrisman, who lost the blower and the roof of his car during a warm-up run. Jungle Jim scored half a point for the Mercury boys by zipping through ahead of a badly crossed-up Roger Lindamood in 8.06 seconds. Dick Loehr lost to Mr. Norm's 7.96 due to a foul, but copped low e.t. of the round with a 7.95. This kept Ford in the running even though the Chevrolets won every one of their first round matches to grab the coveted lead.

The second round was highlighted by smoking Eddie Schartman's win over Doug's Headers, 7.85 to 7.97. The Corvair turned 191.88 mph, top speed of the meet, on the run, while "Fast Eddie" copped meet low e.t. Dyno Don wasn't able to make this round, but the Pisano Brothers' Camaro brought home the win over Mr. Norm. This proved to be the evening-up round and, as the cars headed for the final, tension was quickly building.

Loehr, who was out for the second round, came back in the third to win over Steve Bovan's stand-in for Doug's Headers, out with transmission problems. This signaled a Ford rally: Ronda over Harrell, Grove over Sappington, and the ex-fuel altered "Psycho" over Vanderwoude's "Flying Dutchman." In the race of the night, Gary Dyer hung on to the Super Charger to score a hairy win over Ed Schartman's 7.87 with a quick-on-the-tree 8.01.

Don Nicholson tried valiantly to nurse his ailing steed to a win but could only manage an easing off 9.45 to lose to Seaton's "Super Shaker." Liberman got a bit crossed up in the race against Butch Leal, but fishtailed on to win when the "California Flash" cautiously lifted. Roger Lindamood, who was doing a great job of handling his big car, thundered to an 8.30-181.08 win for Dodge, and Dee Keaton won an easy 8.85 victory over Samson.

When the smoke finally cleared, the

score stood at Ford 9, Chevrolet 9, Mercury 8½, Pontiac 8, Plymouth 6, and Dodge 4½. The first place tie was broken by totaling e.t.'s, which found Chevy the "winnah" with a total of 124 seconds to 134 for Ford.

As a topper, the two low e.t. cars of the night met in a single "sudden death" bash for \$500. This pitted Schartman (7.85) against Gay (7.90). Eddie smoked the Goodyears out of the chute in a four-foot wheelie, as is his style, and really started to move out at the midpoint. The top end lights showed Schartman the victor with a 7.86 and 184.42 to Roy Gay's 8.10-175.09.

Eddie's win at OCIR was another in a string of victories he's been putting together at the expense of other top name match racers in the country who gathered in Southern California's tropic climes for the winter months. Blown or unblown, Schartman has been the guy to catch for the past few months and the only sign of letup he's shown was a brief vacation over the Christmas and New Year's holidays. Rumors are strong that both Schartman and Don Nicholson may be switching car bodies in the near future (probably by the time this is read), with Eddie going to a Cougar or Mustang body and Dyno Don committed to another Mustang. Regardless of the nameplates they exhibit, however, these two will still be the guys the rest of the pack will have to catch as the 1968 season progresses.

As a result of the meet's great acceptance by racers and spectators, the OCIR management and NHRA announced shortly after the meet's conclusion that they had signed a five-year contract to hold similar meets during the first weekend each May, beginning May 4-5, 1968. The \$50,000 meet, to be known as "The Manufacturers' Championship," will closely follow the format used at the November bash, with the main difference being that the five spots on each team will be filled through open competition qualifying. Also, each qualified car will run in five matches (instead of three), and additional cash prizes will be awarded on the basis of qualifying times.

The Championship will also be open to Super Stock class cars, though details for their inclusion were not final at presstime. We'll pass on the particulars as they become available.



"Remember George, come home right after you're eliminated!"



SHOW CIRCUIT

February hosts several major International Championship Auto Shows including our 9th Annual Autorama in Buffalo on Feb. 2-4, Dallas on Feb. 9-11, Indianapolis on Feb. 16-18, and Baltimore on Feb. 23-25. Other ISCA sanctioned events during the month are Chicago-Navy Pier, Milwaukee, and Peoria, Ill. ● Cy Kubista of Rochester, Minn., has announced his contention for the 1967-68 I.C. crown by winning the Car Craft Magazine Award with his 1923 T-roadster at the Milwaukee, Chicago, and Minneapolis shows. Brad Stewart won with his T-roadster pickup at St. Paul. Late word from Ray Farner is that Jerry Nims with his T-roadster pickup from Hamilton, Ontario, took the Car Craft Award at Ray's Des Moines and Denver events. The early front-runner, Bud Pearce and his 4-BEES 1931 Ford pickup won at New York, so there's quite a battle for top point-winning rod this season. Other contenders are Carmen Chiodo with his X-TREME coupe and Marty Hahnfeld with his X-Tee-C roadster, both from Chicago. ● Now we've seen everything! Larry Midgorden of Denver, Colorado, has restyled a 1958 Jeep, powered it with a Chevy mill, and is winning his class plus many special awards on the current show tour. In the custom classes, Don Gajdosz of Milwaukee has been getting the nod from the judges with his 1957 Chev radical custom, HINT OF MINT. And Jack Florence of Fostoria Styling in Holland, Michigan, has radically restyled a Toronado called the F.S.X. for Merle Taggart of Ohio. Featuring a chopped top with front and rear extended a total of twenty inches, Taggart's Toronado promises to be a real threat this season.

● In an effort to offer further prizes for car owners from areas where it is difficult to enter many shows, the ISCA has created two Divisional Championships. One of these includes all Canadian I.C. events and the other covers all I.C. shows west of the Mississippi. Car owners may still compete in the overall 1967-68 points race; but at the close of the season, division winners will be decided on the basis of best accumulation of points at any three Canadian shows and any four western events. Speed equipment and a \$200 cash prize will be awarded in Canada, while, a Kellison Sand Piper body and Yamaha sportcycle are among the prizes for the western division. ● Last summer, most ISCA Co-ordinators and many I.C. Show Chairmen met at the offices of Promotions, Inc., in Detroit for the purpose of making a better, more organized effort toward the International Championship and the International Show Car Association. The results of these meetings are apparent in the greater success of the events, themselves, and in better teamwork on the part of Bob Reynolds, ISCA Director, and his staff of Co-ordinators. In general, everyone commented that they had gained a better understanding of the problems and objectives of the ISCA/ICAS show world. ● For further information, write: ISCA, 19717 East Nine Mile Road, St. Clair Shores, Michigan, 48080. — Bill Moeller

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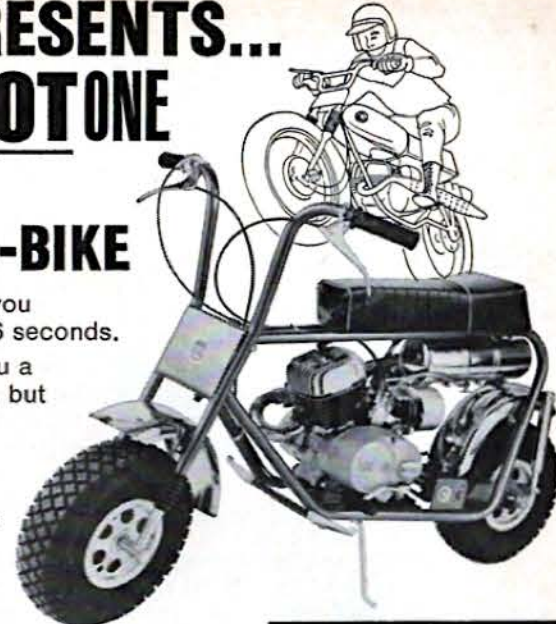
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FORD ENGINES
(continued from page 25)

on the standard production flywheel.

Heads for the hi-perf 302 are the same casting as used on the standard engine, but that's where the similarities end. For openers, larger valves are used—like 1.56-inch exhaust and a giant 2.15-inch intake. These are forged high alloy steel valves, as compared to the smaller cast valves which come through on the standard engine. The racing version features pressed-in Meehanite G-4000 cast iron guides, while the valve guides on the standard engine are simply machined into the heads. For better oil control, Teflon valve seals have been pressed onto the bosses and replace the standard umbrellas. The thermactor bosses, which are present in the exhaust port of the standard engine, are missing (but not missed) in the HP heads, since the engine is for racing purposes and does not have to pass the emission requirements of a production engine.

A hardened spring seat, new high load valve springs and revised retainers, which are a screw machine product (as opposed to the standard stamping), are just a few more goodies that set the high performance engine apart from its relatives. But the really notable difference between the standard and

HP head is the hardened and ground, hollow alloy steel rocker shaft which replaces the studs and 289-type rocker arms. The shaft has a twofold purpose on the HP 302—a stiffer valve train for better operation at high rpm's, and easier valve setting. The cast iron shaft rockers also have a 427-type adjustment screw. The shafts are supported by six aluminum stands on each head, giving the engine a remarkably different appearance.

The cam is a radical .330-lift, 298-degree duration solid lifter shaft, with 109 degrees of overlap, and can accentuate the valve train at rpm's up to 8500 without floating. The push rods have helper springs to help achieve this.

One of the interesting features of the HP 302 is employment of the "dry deck" technique, which was developed on Ford's DOHC Indy engine. In essence, all the water passages between the head and block are plugged with the exception of one galley at the rear of each head. The deck surfaces of the block have an O-ring groove cut around each cylinder bore, 1/8-inch wide and .100 deep. A special circular wafer, composed of three strips of flat stainless steel, sandwiched by a pair of corrugated strips and then wrapped in another sheet of stainless steel, replaces the gaskets. After one of these

wafers is slipped into each O-ring groove around every cylinder, the head is then placed on the block, compressing the circular sandwich and forming a seal. Since only four of these rings are needed on each bank to seal the compression, the normal head gaskets are not used and a .010-inch air space exists between the head and block surfaces. Rubber O-rings and plugs seal all the oil and water galleys and, in short, a simple but effective solution to gasket problems is achieved for racing purposes. This system, however, is not recommended for street use; the standard thin gasket should be used there.

The high performance 302 comes with either a single or dual four-barrel manifold and was designed specifically for Trans-American Sedan Racing. But as is the case in many of the Detroit performance offerings, the engine that was originally created for some other purpose gets the drag racing application... in a hand-me-down fashion. Although Ford has yet to release a horsepower rating on the high performance 302, our estimate would be that the engine has in excess of 400 horses on tap!

STANDARD TO PERFORMANCE CONVERSION

What's the best feature of all these factory high performance parts? What

if we told you that in addition to being able to bolt them onto your standard production 302, you could also bolt them onto your 289! Imagine, a set of bolt-on tunnel port heads, with big valves, available at your local dealer. In addition, those pistons and aluminum front end parts will slip right into your engine with a minimum of trouble.

Let's take a quick look to see what is involved in switching your standard production 302 or 289 over to a performance "neck-snapper." Remember, however, that you will have to deal with the local constables if you delete the emission package on your street machine, but if you are building strictly for competition, you can forget the smog unit without worry.

One easy combination would be to bolt the standard production 302 tunnel port heads onto your 289 for more efficient breathing. Since the special oiling is not necessary unless you go to the rocker shaft valve train, no modifications are required, and the standard 302 manifold will bolt right up.

If you desire the high performance 302 tunnel port heads with larger valves and rocker shaft, the oiling system must be modified by drilling the oil passage to feed into the rocker shaft. Use a .030-inch thick shim gasket, as dry-decking is out for street use.

Another variation, for those who wish to switch their standard production 302 heads over to the rocker shaft valve train, can be accomplished by drilling and tapping the studs for the rocker stands and modifying the oil system for overhead lubrication. Big valves can be added by drilling out the head and inserting the pressed-in guides, in addition to recutting the valve seats. The new push rods can be used with or without the helper springs, depending upon the rpm range desired.

If you want to go the "full boat," you can slip in the high performance solid lifter cam, along with the helper spring push rods, the high performance pistons, tunnel port heads and rocker shaft valve train. Either the two-four or single-four manifold will bolt right on, as well as the aluminum front cover and water pump. Get the picture? Even though the high performance engine is great news, the best news of all is the interchangeability and availability of the parts.

Ford hasn't forgotten the "big inch" engine lovers, as they have added a whole new string of high performance options for the 428. Dubbed the "Cobra Jet," the first thing you should get clear is not to relate this engine to the famed 427 from Ford, as it is an entirely different engine and has a lot more than "one silly cubic inch larger" going for it. To illustrate this, the bore and stroke of the 427 are 4.23 x 3.78, while the critical dimensions of the

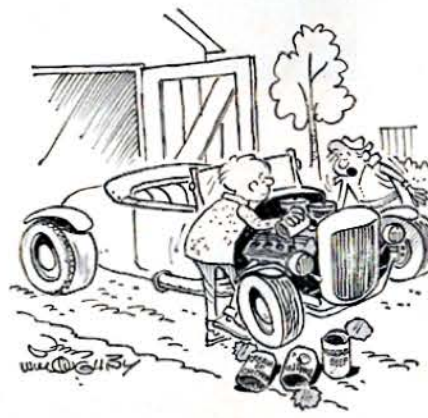
428 cubic inch engine are 4.13 x 3.98.

Originally introduced in September of 1967 as the Thunderbird V-8 engine, the 428 was also optional in all full-sized Fords. The '68 1/2 release engine, however, has received a muscle-building course from the factory engineers. The standard release engine sports a compression ratio of 10.7:1, large intake ports with a 2.06-inch intake valve and 1.625-inch exhausts. New low restriction cast exhaust headers and a cast iron duplicate of the aluminum hi-perf intake manifold are standard equipment on the newly released engine. A big 735 CFM four-barrel sits atop the standard engine for carburetion.

In addition to the standard '68 1/2 release engine, high performance goodies are available for those who wish to wring the engine out in an effort to obtain its full potential. Lightweight valves, plus 4V, 6V, and 8V aluminum intake manifold options are just the beginning. How about a special set of 427 Fairlane exhaust headers? Perhaps a giant 785 CFM carb is your cup of tea. How about a high performance solid lifter camshaft from the factory, along with a deep sump oil system to feed the racing engine's needs? Another interesting feature is a special air cleaner which has a duct atop it to serve as a selective cold air package. And then there are the good old tunnel port heads, available through dealerships, which bolt onto the engine for increased performance.

Surprisingly enough, the standard 428 "Cobra Jet" engine is rated at only 335 horsepower. Here again, an explanation of the horsepower rating may come from the power-robbing smog emission package and the mild hydraulic cam which comes in the standard engine. But with a little work to remedy things along this line, the "Cobra Jet" will slip right into a Super Stock Mustang, and just might run, if you get what I mean.

We'll get hold of one real soon and wring it out for you. It should be interesting...



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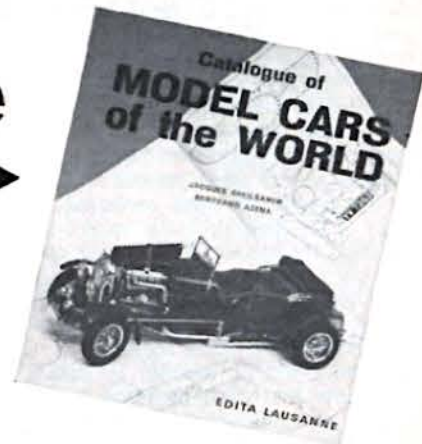
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SPECIAL AWARDS ISSUE

MOTOR TREND
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CHEVELLE (continued from page 31)

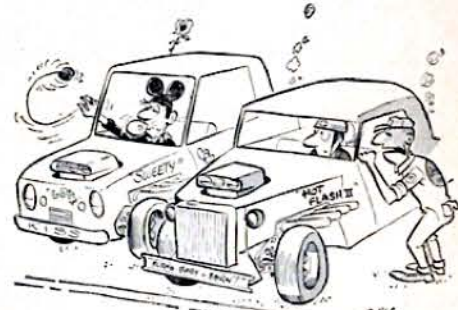
had ever been our mispleasure to encounter. Not only that it was all tied to the *crossmember*, not to the trans itself. It didn't take much figuring from there to determine that when the engine torques under power, the linkage arms are strained at all kinds of angles from their mounting positions on the crossmember, binding against the member and effectively closing the normal shift gates. The gate can only open again when you release pressure on the gas pedal, relieving the twist against the shift arms. What's it all mean? From here, it looks as if your first purchase after buying your new Chevelle should be a positive shifter that mounts on the trans — Hurst or otherwise.

While we're talking transmission, here's another tip that may help you toward record performance: stick with the 2.20 low gear four-speed option, at least on this model. Our car was thus equipped, and even though the 3.08 rear hurt us in winding up the engine, we're sure matters would have been even worse with the 2.54 low option because of the "long haul" between changes.

In the rear, there are no less than 11 ring and pinion sets available from Chevrolet for the SS 396. They range from 2.73 to 4.88, with the latter probably the best choice for strictly dragging and the 4.10 as probably the best street-strip compromise ratio.

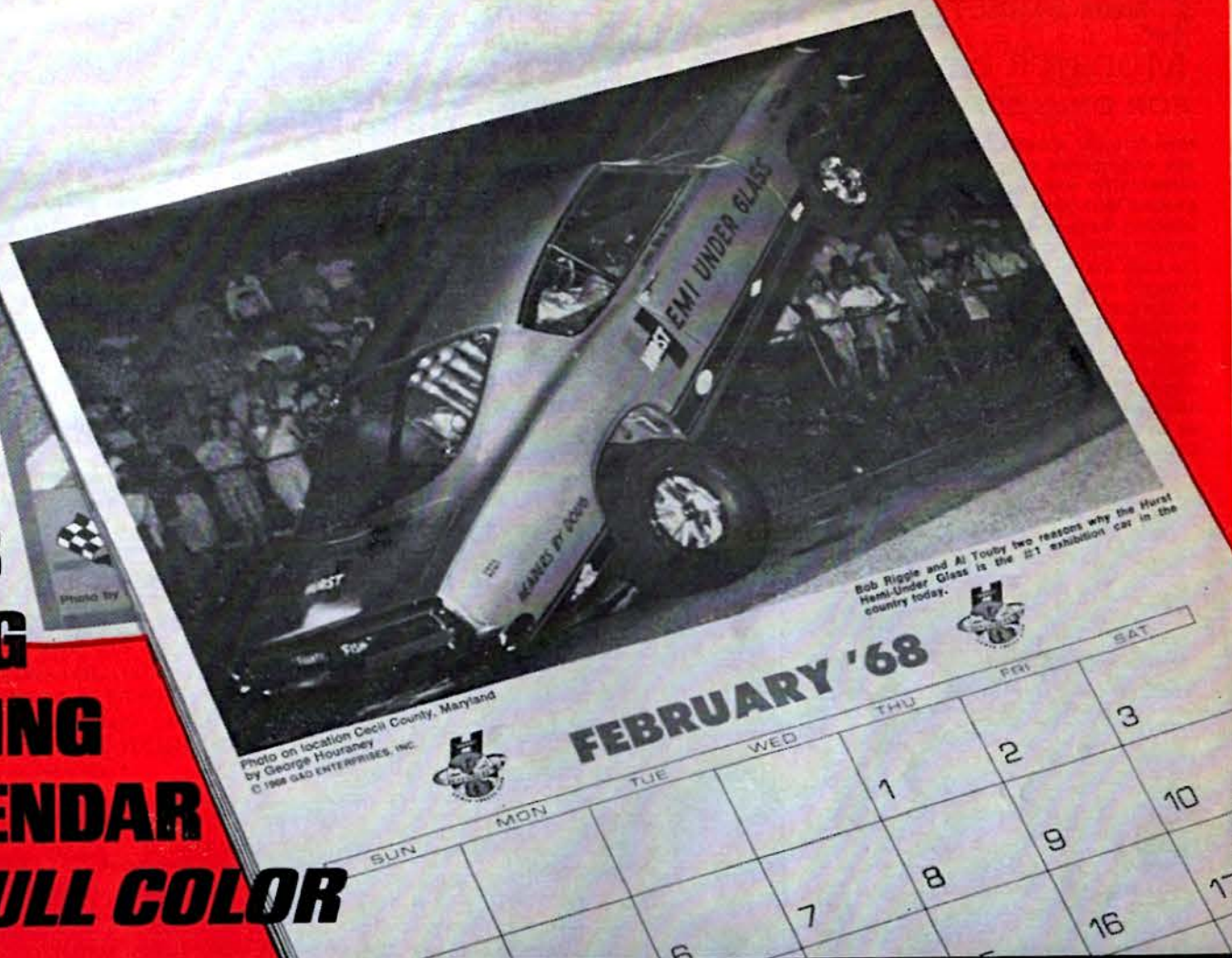
What else can you do to edge your way towards the record marks? Make sure you've got a good set of headers. We had a set installed for us by Hooker Headers that fit with an absolute minimum of cutting — just a couple of notches in the inner fender wells that can be rewelded right back to stock appearance should you ever want to go back to the stock system.

Then, of course, an engine blueprinting is in order, and you can go to work on the suspension, although we found that the factory installed heavy-duty suspension did an excellent job of handling all the gobs of torque the 396 puts out. After that, head for the strip and start looking for a new place to store all the "gold" you're about to win with your '68 Chevelle.



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OIL FILTERS
(continued from page 57)

restriction base plates. Resistance to weakening caused by continuous hydraulic surges was borne out in tests where complete units were subjected to surges from 0 to 106 psi for 25,000 cycles, at a rate of 30 cycles per minute.

Chrysler Corporation has joined in the fray and has just released a special racing oil filter called the L-130. It's a spin-on unit designed for high flow and fits Ford products as well as Chrysler. They're available through your friendly MoPar dealer.

Purolator Products (970 New Brunswick Avenue, Rahway, N.J.) first really got into racing during preparations for the 1965 Indy race. Purolator filters had been used successfully on the Offies, so when problems began to crop up with the filtering system on Fords, the mechanics gave 'em a try. The result was that all Ford-powered cars switched to Purolator filters, including the winning Lotus of Jim Clark.

The filters used were little different from the standard Purolator line, with the exceptions that they had a larger element, higher pressure setting on the bypass valve and a specially constructed housing. The element was the production filter media - resin-treated, multi-layer cellulose paper. As a matter of fact, some of the cars did run a standard "over the counter" model, since some pitmen preferred a spin-on filter.

At this time Purolator does not have a racing type oil filter that is generally available to the public, believing that their regular line fulfills the requirements adequately for the present. This may sound a bit pretentious, but they have had long experience in the oil filter field. They were the first to use pleated paper construction in surface-type filters, coiling 7 to 9 feet of paper into each filter.

The high-strength base plate has large oil passage ports and a gasket retainer which flexes as the filter is tightened. This provides protection against loosening of the filter due to engine vibration. The bypass valve is engineered to open at 7-8 psi of pressure differential.

Varicam offers a high capacity racing filter which is specifically designed for remote installation, making it compatible with everything from a Fueller to a Modified Production car. The light-weight (three pounds) unit features aluminum mounting brackets which will withstand the shattering vibrations of drag racing. The 70-pleat media has 530 square inches of triple density paper, giving almost 1600 square inches of effective filter area.

Exhaustive tests by Nicson Marine have proven the ability of the resins to withstand high concentrations of nitromethane in the oil. In addition, the interior of the housing is plated to prevent corrosion and the generation of harmful contaminants within the filter itself.

Quite unusual is the plated and magnetized bypass valve spring which acts to neutralize acids and hold metal particles. The valve is set to open at 12 psi.

There are three neoprene gaskets in the filter and mounting base. These gaskets will withstand 300 psi of pressure. Use of proper hoses allows a less than one per cent flow restriction through the filter.

Ideally suited for engine swaps, the remote setup allows individual mounting for header and frame clearance and ease of accessibility.

More information can be had from Varicam, Incorporated, 6034 Soledad Mountain Road, La Jolla, California 92037.

As a parting shot, here's what racers and builders have to say about filters. JOHN DURBIN (Doug's Headers) - Doug's engine uses a cartridge type filter and the biggest problem has been fuel in the oil causing the paint to peel off the end caps. We've had the best results with Fram and AC. We change the oil and the filter after every three or four runs, depending on how many runs we'll be making that day.

SID WATERMAN - I started with a



Varicam's universally adaptable remote mounting filter uses triple density filter element to give "effective" filtering area of nearly sixteen hundred square inches.

stock Chrysler filter, but went to a smaller and less bulky DeSoto housing. It took a cartridge type filter and I used an element that didn't have paint on it to prevent contamination. Later I switched to a Milodon setup and ran a standard screw-on filter. One cold day it blew right off the car. I now use a Guardian viscose rayon filter and am really pleased. Before, I changed filters once a week, running the same filter through an entire weekend of racing. The Guardian is good for 40 to 50 runs in a fueller and up to sixty in a gas dragster. The problem in gas dragsters is not fuel dilution, but metal contamination. If standard filters are used on

(continued on page 76)

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OIL FILTERS
(continued from page 74)

blown engines they should be changed every two weeks.

HOLLY HEDRICH (Keith Black Racing Engines) — On the late Hemi's we use something a little different — a disc-type porous bronze sump filter from a Rolls-Royce Merlin aircraft engine. These are hard to come by, but they have high flow, can handle even cold 60-70 weight oil, and can be disassembled for cleaning. For early Chryslers we use a sidemount filter and change it when we change the oil. It's a real good idea to use a filter whenever possible, keeping it close to the engine if it's a remote unit. A dual filter is good insurance on the late Hemi's.

DICK LANDY — When we ran on fuel we had to be very careful with the heavy-weight oils in a cold engine. We didn't



Chrysler Corp. is latest to jump into racing filter field with MoPar L-130 used by such racers as Roger Lindamood on his "Color Me Gone" match race Dodge.

rev the engines or make a run until the oil got up to temperature, because we had little trick to get more use out of each filter. Since the fuel from the oil would collect in the filter, after we changed the filter we'd turn the old one over and let it drain in a special bucket we made. The following week we'd use that filter again. By alternating we could use each filter four or five times, since they didn't accumulate that much dirt and we were changing the oil and filter after every second run.

Now we use a Fram, because it has high flow capacity and strong construction. We change oil every week in the "stockers" and change the filter every other oil change.

A trek through the pits at any major drag strip will show that racers are using all the filters mentioned in the story. As with almost everything else, it's a matter of taste and personal experience. But, it's hoped that the information in this article may shed a little more light in this area, and that it pointed out that there are very definite differences between filters.

Straight Talk from Bill Jenkins about LAKEWOOD Safety Bell Housings!

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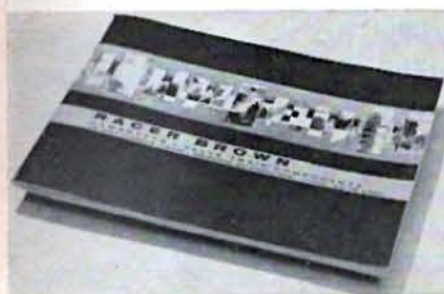


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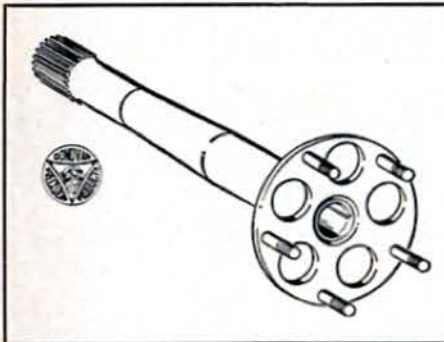
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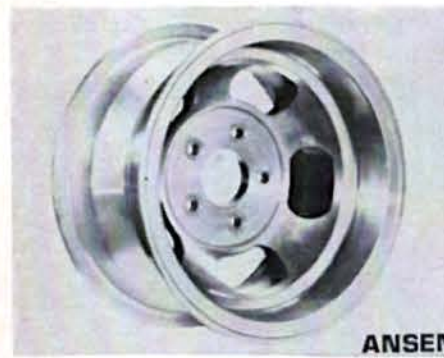
RACER BROWN'S NEW CATALOG

This all-new 80-page camshaft and valve train catalog includes all the latest profiles and "trick" kit equipment for domestic and foreign engines, pages of accessory items, selection of proper camshaft, plus 13 bonus pages of the newest and most complete technical data available related to camshafts and valve train components. For novice and professional alike. For your postpaid copy and a new decal, send \$1.00 to: Racer Brown, Inc., 108 W. Florence Ave., Dept. CC, Inglewood, Calif. 90301.



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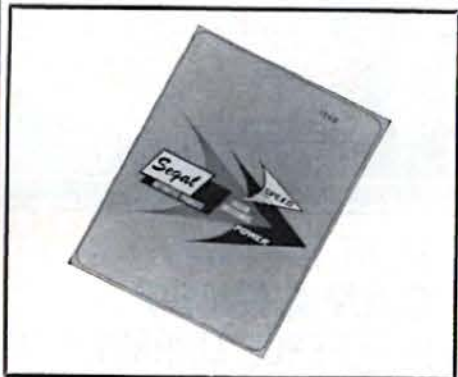
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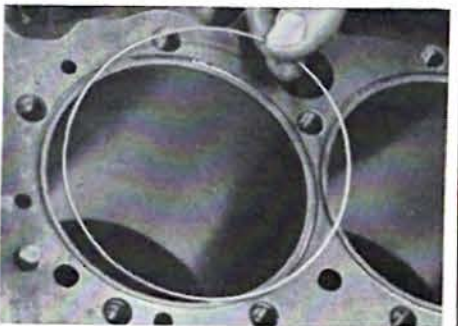
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MPC announced the introduction of the Ramcharger Dune Buggy, a new 1/25 scale model car kit. Comes with a tubular rail chassis holding the big 426 Dodge Ramcharger engine. There are four tires in the rear and two up front. Also included are a roll bar, racing steering wheel, Ford Model T windshield, racing headers, mag wheels, racing bucket seat, a wire flag mast, and a sun top. Kit also includes paint and brush set. Contact: Sam Bushala MPC, 126 Groesbeck Highway, Dept. CC, Mt. Clemens, Michigan 48043.



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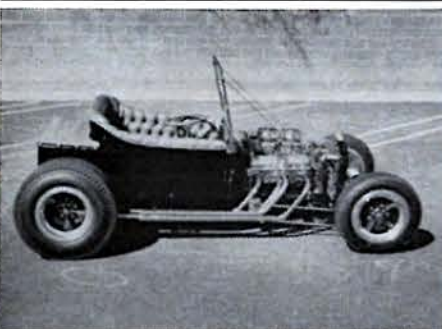
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CC SHOPS



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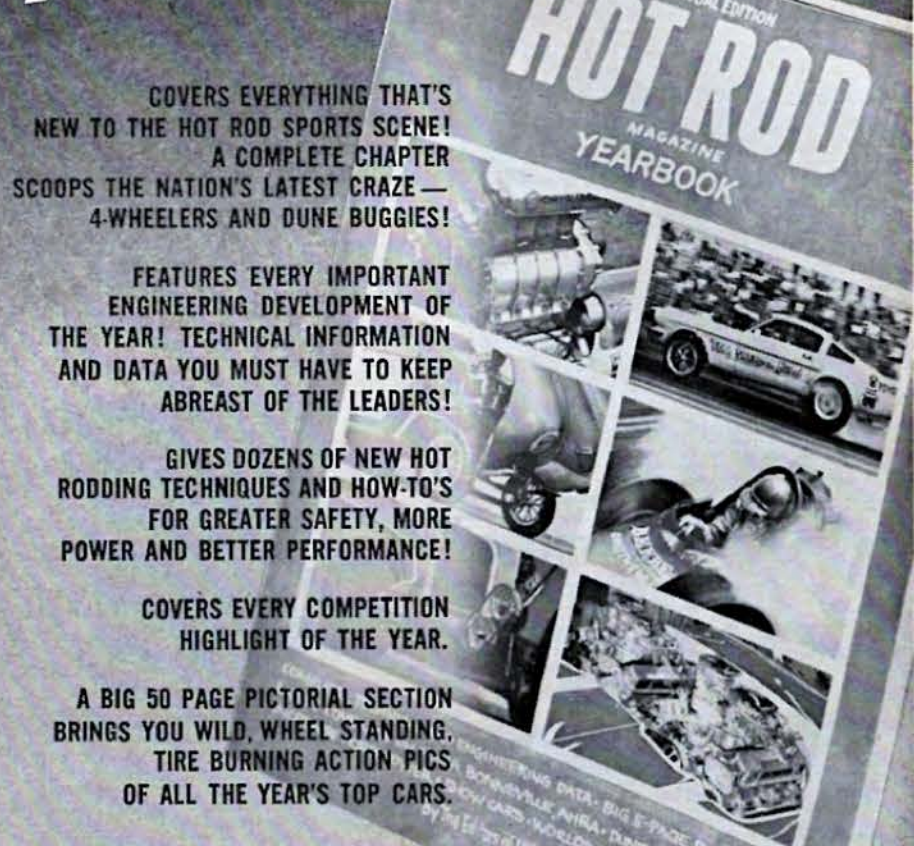
NEW OIL FILTER WRENCH
This new oil filter wrench is designed to remove disposable oil filters when operating in extremely tight areas such as on the 1967 Pontiac and Chrysler 6. The wrench is used with 3/8-in. square drive extension and ratchet wrench. Provides a positive friction grip with enough leverage to exceed normal requirements. Will not puncture or crush oil filters. For additional information write: K-D Manufacturing Co., 3575 Hempland Rd., Dept. CC, Lancaster-Hempfield Industrial Park, Lancaster, Pa. 17604.



CAMSHAFT GEAR DRIVES
Keith Black has developed a super-close tolerance three-gear drive unit that can be used to replace stock timing chains. These units, which do not reverse camshaft rotation, are said to offer quick, simple installation and are easily transferred from one engine to another. These camshaft gear drive units and two-piece aluminum covers are available for 392/426 Chrysler hemi's and 327/396/427 Chevrolets. Write: Keith Black Racing Engines, Inc., 11120 Scott Ave., Dept. CC, South Gate, Calif. 90280.

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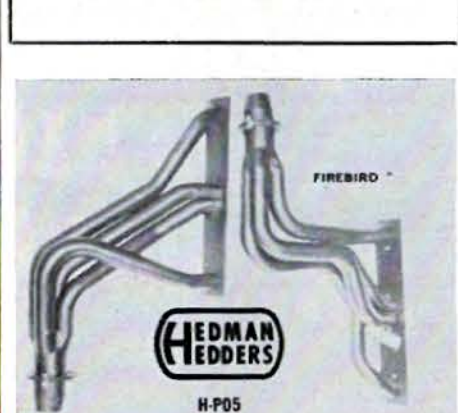
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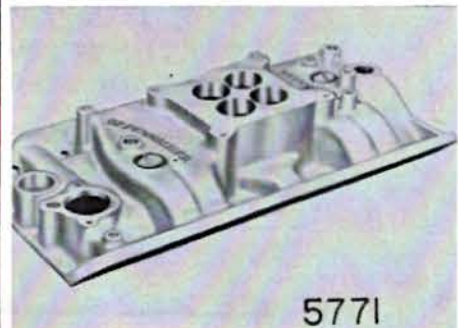
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SAFETY CATALOG
Bill Simpson, of Simpson Safety Equipment Co., has just released a new catalog giving full details on his latest development, the Simpson "Heat Shield" Suit, a superior fire-repellant driver's suit, and a complete line of safety equipment designed just for the oval track and sports car racer. For your copy, send 50c, requesting catalog R-767 to: Simpson Safety Equipment Co., 25028 S. Vermont Ave., Dept. CC, Harbor City, California 90710.



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Offenhauser Equipment Co., has announced an all new aluminum manifold for American Motors 290 and 343 cubic inch engines. This Hi Rise Single Quad Manifold accepts stock quad carburetor and standard jetting in most cases. Offers better than 15 percent horsepower increase to the performance-minded power enthusiasts. Listed as part #5771 and priced at \$105.00. Write: Offenhauser Equipment Co., 5300 Alhambra Ave., Dept. CC, Los Angeles, Calif. 90032

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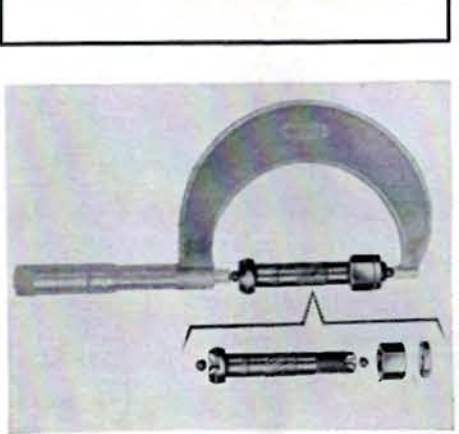
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OH, REALLY?

Joe: What's green and goes 180 miles an hour?

Moe: I don't know, what?

Joe: Grass Ronda!

LAND OF LINCOLN

While it may be true that you can't fool all of the people all of the time, those highway interchanges come pretty close.

HE'S SO DUMB THAT

He thinks that dual quad owners are population exploders.

When I told him I was "Top Stock Eliminator," he told me he had no idea I hunted.

ROUND 'N ROUND SHE GOES . . .

A woman neighbor down the street got a ticket the other day for making an "O" turn. She started to make a "U" turn and changed her mind.

REVELATION

"I pledge ten per cent of my income," sputtered the newly immersed Baptist. "Hallelujah!" shouted the fire-and-brimstone evangelist. "We've got a tither in our tank."

HE'S SO DUMB THAT

He thinks a promoter is an experienced engine.

HEAVENLY DAZE

At the scene of an accident, two lady drivers were arguing about whose fault it was. One woman said, "My husband is a minister. What do you think he'll say?" The other woman quickly replied, "My husband isn't a minister. What do you think he'll say?"

HE'S SO DUMB THAT

He thinks a fan belt is something you carry to a football game in a flask.

AND AFTERWARD

The same man telephoned a police station and excitedly reported that his steering wheel, brake pedal, and accelerator had been stolen. A sergeant promised to investigate, but soon the telephone rang again. "Don't bother," said the same voice - this time with a hiccup. "I got into the back seat by mistake."

DAFFYNITION

Pedestrian: someone who has found a parking spot.

HOT IRON(Y)

Isn't it ironic that Ford put the blacksmiths out of business and now its biggest seller is Mustang?

DAFFYNITION

Super Stock: A lot o' bull
Wide Boots: The Jolly Green Giant's shoes.
Alka Selzer: Top Gas Eliminator.
Universal Joint: An international bar.

BEST FROM (A)BROAD

Bobby: Now Miss, what gear were you in at the time of the accident?
Campy woman driver: I was wearing go-go boots, mini-skirt, and a blouse.

DIDJA HEAR ABOUT

The Christmas Tree that wouldn't go on because it had stage fright?

EAR-Y FEELING

Woman Driver to Friend: "The part I don't like about parking is that noisy crash."

TAX BRAKE

According to unofficial sources, there's going to be a new income tax form for touring pro's next year. It's really very simple; just follow the tax bureau's instructions:

1. Give an answer to each of the following:
 - a. What was your income last year?
 - b. What were your expenses?
 - c. How much have you left?
2. Send it in.

IN PASADENA

Then there's the guy who took a corner too fast and knocked over the famous little old lady there. He slammed on the brakes, stuck his head out the window and shouted, "Hey! Look out!" "Why," she shouted in reply. "You coming back?"

FROM PISMO BEACH

Q. How do you drive a dune buggy?
A. Tickle it.

HUH?

Parnelli: "Boy, am I hungry!"
Mario: "Me too, let's eat up the street."
Parnelli: "Naw, I hate asphalt."

HE IS SO DUMB THAT

He thinks a spark plug is something for electrical leaks.

WHAT'S IN A NAME

Jack: "Isn't it amazing the way they name cars after animals? They have the Cougar, the Falcon, the Mustang, the Cobra, the Impala . . ."

Sam: Yeah, yeah, you ought to see my Vulture.

Jack: I don't think I ever heard of that kind of car.

Sam: Oh, it isn't a car, it's my wife!

HAVE YOU HEARD ABOUT

The new Super Strip in Rhode Island? The shutoff area is in Connecticut.

IMPORT(ANT)

What about the new British sports car called the Rolls-Kinardley? It rolls down one hill and kinardley roll up the next.

THE TRAFFIC PROBLEM

We know two newweds who got into their car in San Francisco, heading for Los Angeles on their honeymoon. When they got there, they let their kids out.



A MILLION FANS DISCOVER THE PRIVATE WORLD OF SANDY POSEY

Only two years ago, a shy, young receptionist made a demonstration record. It was called "Born A Woman." And she gained a million fans. But, Sandy Posey is a private person. She is a serious vocalist and songwriter. She needs time to think things out, to be alone. After all, her songs are of her quiet world. So Sandy insists, despite the interviews, meetings and rehearsals, that she have time, not to be a star. This is where Coke often comes in. Sandy finds her ideas and lyrics go better, Coke after Coke. Because Coca-Cola is the only soft drink with the taste she never gets tired of. We're glad Coke is part of her private world.



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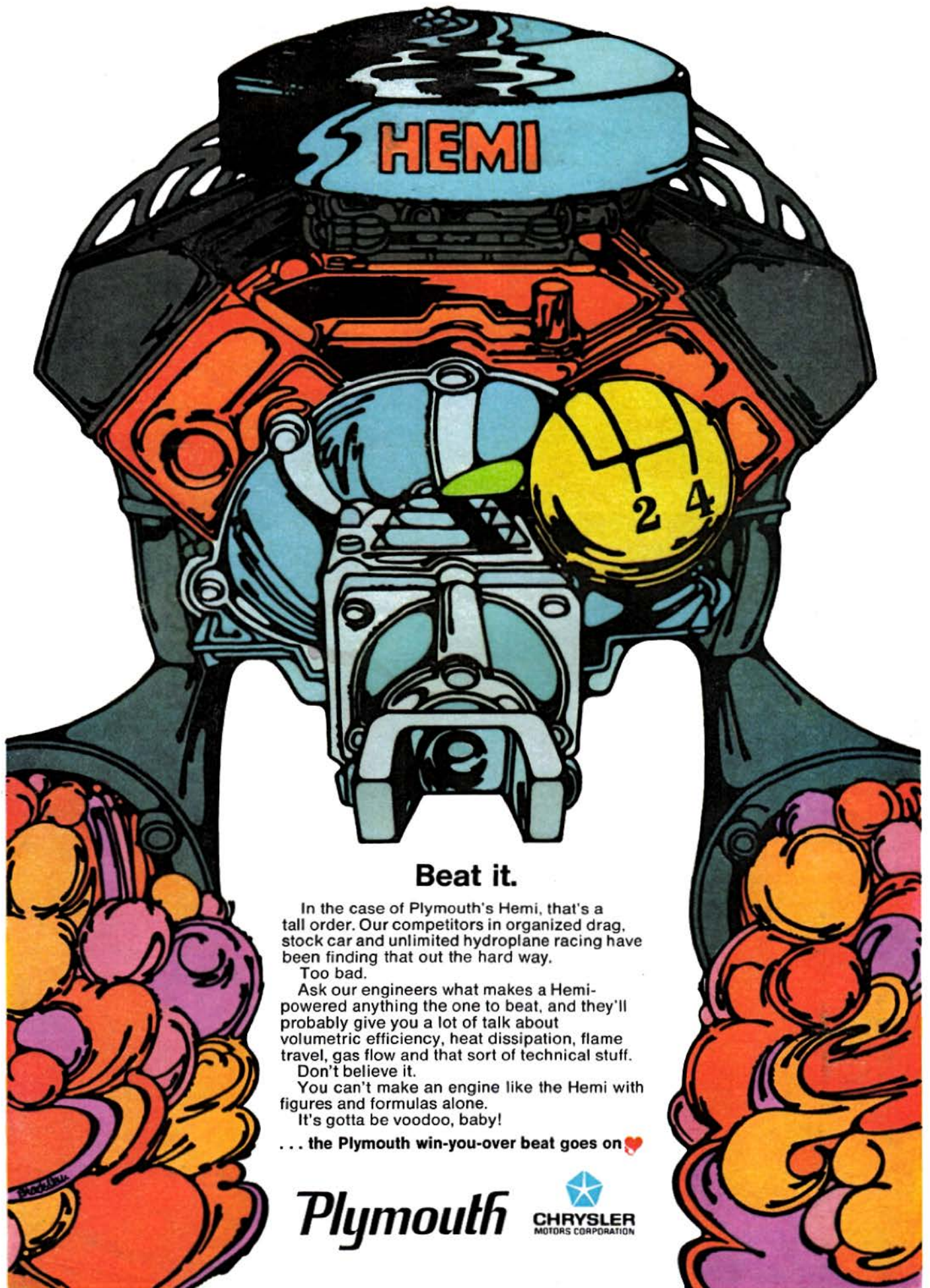
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