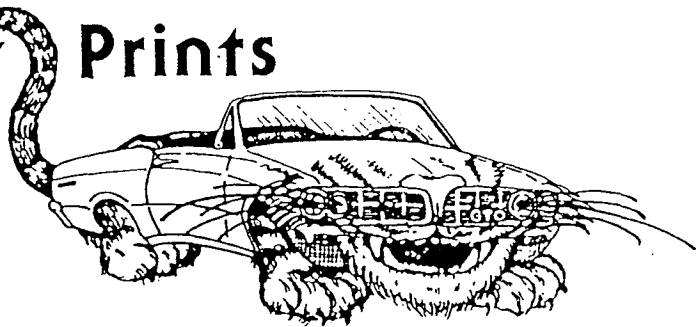


Paw Prints



A Publication of the GTO Association of Central Ohio

FEBRUARY 1991

TO ALL MY GTO FRIENDS,

WELL IT'S FEBRUARY, WHAT CAN YOU SAY ABOUT FEBRUARY EXCEPT IT IS SUPPOSED TO BE COLD. IT DIDN'T SEEM TO BE THAT BAD THIS YEAR BUT I AM STILL LOOKING FORWARD TO WARM WEATHER. SO MUCH FOR THAT.

I BET A LOT OF YOU ARE GETTING YOUR GTO'S READY FOR THIS YEARS' SHOWS AND CRUISES. GOOD LUCK TO ALL OF YOU. I HOPE TO SEE A LOT MORE OF YOU GET OUT THIS YEAR WITH THOSE SHINING GTO'S. PEOPLE REALLY ENJOY SEEING OUR CARS AND WE NEED TO GET OUT TO AS MANY SHOWS AND CRUISES AS WE CAN SO OTHER PEOPLE WITH GTO'S KNOW WE HAVE A CLUB AND WE CAN GET THEM TO JOIN IN ALL THE ACTIVITIES.

DON'T FORGET TO GET YOUR RESERVATIONS IN FOR THE GTO NATIONALS AT LOUISVILLE. CALL 1-800-626-2706 AND TELL THEM YOU WANT A ROOM AROUND MINE SO WE CAN ALL BE IN ABOUT THE SAME AREA AT THE MOTEL. YOUR RESERVATIONS NEED TO BE IN AS SOON AS POSSIBLE.

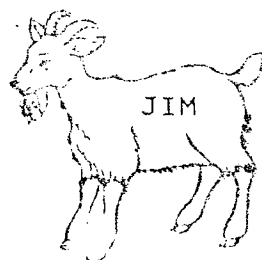
WE ALL HAD A GOOD TIME AT THE HOLIDAY PARTY. JEFF AND LYNN HAD THINGS FOR US TO ENJOY AND A LOT OF FOOD AND DRINK. IT'S A SHAME WE CANNOT GET MORE OF YOU TO SHOW UP TO TALK SO WE COULD GET TO KNOW EACH OTHER BETTER. MAYBE NEXT YEAR WE'LL HAVE A BETTER TURNOUT.

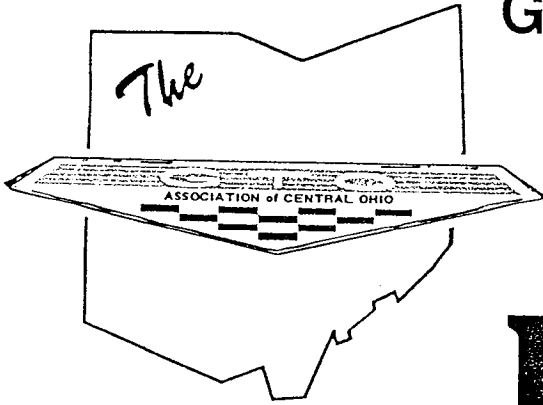
DENNIS KIRBAN HAS A NEW PRODUCT ON THE MARKET - CORRECT STYLE SPARK PLUG WIRES FOR GTO'S UP TO 1967. THEY RUN \$59.95 A SET AND LOOK REAL GOOD ACCORDING TO KIRBAN. HOPEFULLY THE WIRES WILL BE AVAILABLE FOR ALL GTO'S IN THE NEAR FUTURE.

DON'T FORGET THE SWAP MEET FEBRUARY 24TH. ALL GTOACO MEMBERS GET IN FREE SO BRING YOUR MEMBERSHIP CARDS AND WEAR YOUR NAME TAGS. LOOKING FORWARD TO SEEING EVERYONE THERE.

WELL THAT'S ENOUGH FOR NOW - SEE YOU SOON.

SO LONG FOR NOW





GTO Association of Central Ohio

Announces Their

ALL PONTIAC SWAP MEET Sunday, February 24, 1991

at **DENNIS PONTIAC** 2900 Morse Road
Columbus, Ohio 43231

Swap meet will feature parts for GTO's and all other Pontiacs

General Admission \$1.00

Doors open to public from 9:00 a.m. to 5:00 p.m.

10' x 10' vendor spaces available on a first come first serve basis at a cost of \$15.00 per space. Vendor set-up from 7:00 a.m. to 9:00 a.m.

For More Information

Call Dave Benson (614) 837-9545

CALENDAR

FEB. 24 ALL PONTIAC SWAP
DENNIS PONTIAC
FREE ADMISSION TO
GTOACO MEMBERS
SEE ABOVE

MARCH 2 FLEA MARKET & SWAP
FRANKLIN CO. FAIRGROUNDS
C.A.R.S. CLUB OF OHIO
HILLIARD, OH 7AM - 3 PM
891-5809 OR 237-4043

MARCH 3 SWAP MEET & CAR CORRAL
MOD-TIQUES CAR CLUB
CLARK CTY FAIRGROUNDS I-70 & RT-41
SPRINGFIELD, OH 8AM - 4PM
513/399-7320 OR 513/568-4081

MARCH 13 REGULAR MEETING
DENNIS PONTIAC
2900 MORSE ROAD
7:00 P.M.
EARTH ANGEL CRUISE
PRESENTATION

APRIL 10 REGULAR MEETING
DENNIS PONTIAC
2900 MORSE ROAD
7:00 P.M.

GTO Association of Central Ohio 1991 Officers

President	Jim Evans 13791 Cable Road Pataskala, OH 43062 614/927-5302
Vice President	Jeff Inskeep 598 Old Coach Road Westerville, OH 43081 614/891-6679
Secretary	Nancy Whaley 305 S. Market Street Lithopolis, OH 43136 614/837-4372
Treasurer	Richard Whaley 305 S. Market Street Lithopolis, OH 43136 614/837-4372
Directors	Dave Benson - 614/837-9545 Neal Blankenship - 614/459-0352 Andy Syrkin - 614/766-0346

January 9, 1991 GTO Association of Central Ohio Meeting

Jim Evans called the meeting to order. Last months minutes were approved. Members in attendance were Jim Evans, Mark Baker, Jon Leffler, Nancy Whaley, Jeff Ludwig, Dave Benson, Andy Syrkin, Jeff Kipp, Neal Blankenship, Jeff Inskeep, Lynn Inskeep, Kris Ten Eyck.

Andy Syrkin will be talking with Clark Rader at National Trails next week about out drag day. He will let us know more on this later.

New officers for 1991 are Jim Evans, President, Jeff Inskeep Vice President, Nancy Whaley Secretary, Richard Whaley Treasurer, Neal Blankenship, Andy Syrkin Board of Directors for two years, Dave Benson Board of Directors for one year.

Holiday Party at Inskeep's every one should have rsvp by now. Jeff Inskeep volunteered to get the door prizes that Bill Barton suggested that we have at the party.

Swap Meet February 24 at Dennis Pontiac. Dave Benson stated that the food vendor was taken care of. Advertising has been placed in Hemmings. Andy Syrkin suggested a mailing to all surrounding chapters.

Spring Show: It was decided to have three classes for firebirds, seven classes for GTO, five classes for all other Pontiacs.

Andy Syrkin judging chairman needs volunteers please call him and volunteer. Jim Evans wants to let Let's Go Cruising handle the cruises in after our show. We don't seem to have the manpower to handle a show and cruise in afterwards. Jim will talk to Jesse about this before we have a board of directors meeting. Jim will talk to Aaron about having a tent set up at Spring Show to protect people from the sun. Jim stated that the food vendor was set. Jeff Inskeep suggested shopping around for food vendor. Jim will talk to Aaron about sponsor money for trophies and which lot we will be using for the show.

50/50 Drawing: This months winner was Jeff Ludwig. \$6.00 goes to our charity.

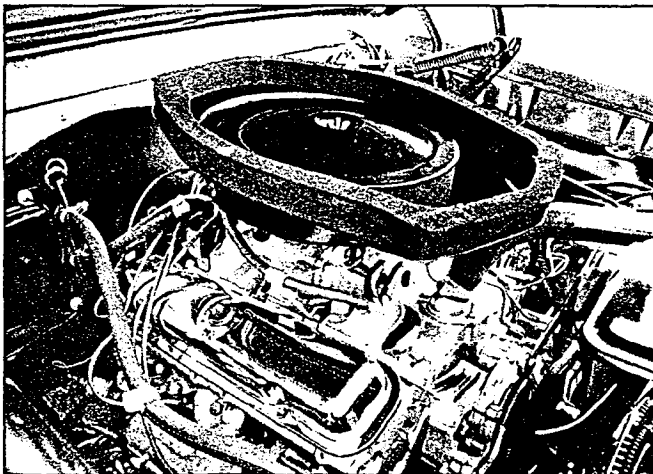
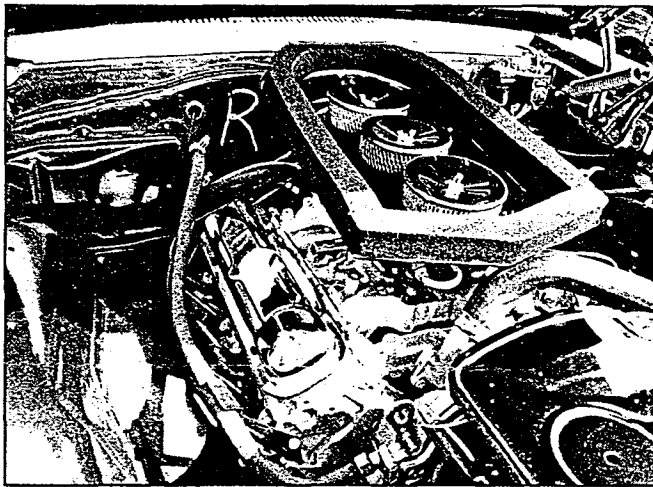
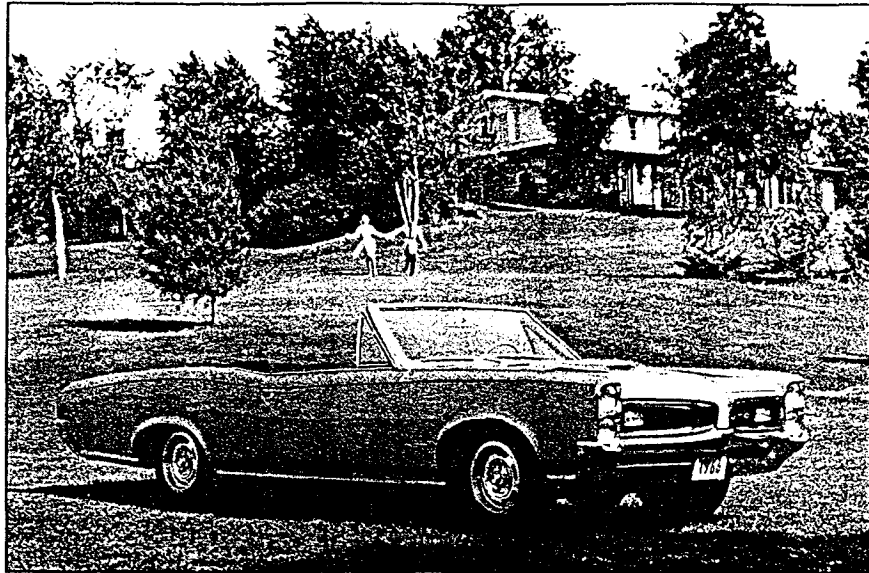
Meeting adjourned.

Respectfully submitted by:

Nancy Whaley
Secretary

The Holiday Party was held January 19, 1991 at Jeff & Lynn Inskeeps home. For once the weather was nice to us no snow or ice. Jeff & Lynn had a surprise for us. A magician. He was a lot of fun and showed us how some of the tricks were done. The only thing we could not get him to do was saw Neal Blankenship in half. We tried all evening but the magician's wife stated that he was not allowed around sharp objects. We looked over the club's photo album and numerous photos given to us by members and decided what year and what show they were about. Jeff did well with the door prizes two picnic baskets, shop towels, flashlight, and the grand prize won by Jan Benson was a boom box. Members in attendance were Mark Baker and Debbie, Jeff & Pat Ludwig, Jerry & Debbie Brownfield, Jim Dingess, Jim & Diane Evans, Richard & Nancy Whaley, Dave & Jan Benson, Jeff & Lynn Inskeep, Neal Blankenship. You missed a great party hopefully we will see more of you next year.

Powering The First- Generation GTOs



It is with the 1966 Tri-Power engines that questions of actual power output arise. While the dimensions of the short-block and heads remained identical to '65, the induction system featured a new intake manifold, which was casting No. 9782898. It is similar to the '65 manifold, but it was flanged to mount a larger center carb. The end carb numbers were the same as before: 7025178 for the front and 7025179 for the rear. The new center carb was numbered 7026075 for

manual transmissions and 7026074 for automatics; A.I.R. manual transmission versions used carb No. 7036175.

As it turned out, 1966 was the only year during which Pontiac used three large-base Rochester 2GC carbs on its Tri-Power systems. Yet, even with the extra airflow, Pontiac never re-rated the engine. It's highly unlikely that engine would have put out exactly the same horsepower and torque readings at exactly the same rpm levels.

A very rare 1966 389 Tri-Power Ram Air engine, block code XS. This was the first engine to use the new 9785744 camshaft. Ram Air pan was revised to accommodate the larger center carb.

Another rare bird—a 1967 400 Ram Air engine, block code XP. Ram Air system was redesigned to accommodate single Rochester Quadrajets 4-barrel.

Pontiac G

Year	HP	Tr
'66	335	M
	335	M
	335	A
	335	A
	360	M
	360	M
	360	A
'67	255	A
	255	A
	335	M
	335	M
	335	A
	360	M
	360	A
'67	Ram Air	
	360	M
	360	M
	360	A
	360	A

Furthermore, Pontiac released information on the increase with its dual carburetor kits.

Perhaps the crowning maddest was the introduction of the Tri-Power engine. Tri-Power was rated at the same horsepower and torque levels as the other engines. The XS consisted of basic componentry as a 400-horse engine, but with larger valves and valvesprings. The XS was assigned part No. 9785744. It featured 301/318 duration and .406-inch rocker arms.

Cars ordered with the Ram Air package had the same componentry in the trunk as the Tri-Power. The allocation by the dealer. The number of XS-coded cars has not been determined, if any Tri-Power engines were built.

Why weren't any more Tri-Power engines re-rated? Especially the XS engine, it's a matter of getting a better idea of the engine's capabilities. After the deluge of big-block engines in 1966, Pontiac had to keep some of the divisions, GM stated that cars could be re-rated to prevent that. GM and other divisions had to re-rate their engines in order to comply with the rulings. There's one way to skin a cat.

An in-depth look at the engines that made the first GTOs growl.
Part 2, 1966-67.

BY DON KEEFE

Editor's Note: In our last issue (January '91), we took an in-depth look at the engines that powered the first-generation GTOs in 1964 and '65. Here, we trace the development of the 1966-67 GTO engines.

Upping the ante: 1966

In an engineering sense, 1966 was, for the most part, a carryover year for the GTO and the rest of the Pontiac lineup. Yet, toward the end of the production run, a little more growl came from under the Tiger's hood.

The standard 4-barrel engine was again rated at 335 hp at 5000 rpm, with 431 lbs.-ft. of torque at 3200. Likewise, the optional Tri-Power mill was not re-rated from the factory either, kicking out an advertised 360 hp at 5200, with 424 lbs.-ft. of torque at 3600.

In the case of the 4-barrel engine, there is no need to question the similar power rating to that of the previous year. Except for casting numbers, it was the same engine. All '66 GTO cylinder heads carried casting No. 093 and the 4-barrel intake manifold was casting No. 9782896.

Carburetor numbers were a little more confusing for 1966, as Pontiac released A.I.R. versions of the GTO engines for use in California. The 4-barrel, manual trans carb number was 4033S, while the A.I.R. version was 4041S. Cars with automatic transmissions were assigned carb No. 4034S and its A.I.R. counterpart received carb No. 4030S.

Block and Head Codes, 1966-67

Block Code	Comp Ratio	Headcast Number	Valve Size Int/Exh-in.
WT	10.75	093	1.92/1.66
WW	10.75	093	1.92/1.66 A.I.R.
YS	10.75	093	1.92/1.66
XE	10.75	093	1.92/1.66 A.I.R.
WS	10.75	093	1.92/1.66
WV	10.75	093	1.92/1.66 A.I.R.
YR	10.75	093	1.92/1.66
XS	10.75	093	1.92/1.66 RA
XM	8.6	142	1.92/1.66
XL	8.6	142	1.92/1.66 A.I.R.
WT	10.75	670	2.11/1.77
WW	10.75	670	2.11/1.77 A.I.R.
YS	10.75	670	2.11/1.77
XE	10.75	670	2.11/1.77 A.I.R.
WS	10.75	670	2.11/1.77
WV	10.75	670	2.11/1.77 A.I.R.
YZ	10.75	670	2.11/1.77
YI	10.75	670	2.11/1.77 A.I.R.
XS	10.75	670 (97)	2.11/1.77
YR	10.75	670 (97)	2.11/1.77 A.I.R.
XP	10.75	670 (97)	2.11/1.77
XF	10.75	670 (97)	2.11/1.77 A.I.R.

No more Tri-Power: 1967

The 1967 model year opened with another corporate ruling already in effect. GM no longer allowed multiple carburetion on any of its products except for the Corvette. Having always been quite liberal with their interpretation of the rules, Pontiac engineers tried to circumvent the guideline by mounting three 2-barrel carbs on a common baseplate, theoretically making it one 6-barrel carburetor. But in the end, the '67 GTO came to market with a single 4-barrel Rochester Quadrajet carb.

Actually, a lot was new under the GTO's scooped hood. The 389 engine was replaced with a 400-cu.-in. version of the same engine family. Contrary to popular belief, the 400 was not just a .060-inch overbored 389, as the blocks were recast with three freeze plugs; the 389 had only two. Like the engine it replaced, it was a 2-bolt main-block. No 4-bolt 400s were made for 1967.

New cylinder heads adorned the 400 block. The intake ports were completely redesigned for increased flow and valvestem centers were relocated from 1.82 inches to 1.98 inches apart. This provided room for larger 2.11-inch intake and 1.77-inch exhaust valves. The combination of new ports and larger valves was said to increase flow between 30 and 35 percent over previous years. These GTO heads were casting No. 670 and gave 10.75:1 compression. They were the last with a closed-chamber design. The rocker studs were of a screw-in variety to ensure valvetrain longevity.

The intake manifold for the Quad-

rajet carb was an excellent design. Identified by casting No. 9786286, it was actually a decendent of the NASCAR Super Duty single 4-barrel intake. It was a high-rise design that featured freer-flowing, less-angular runners than the previous design for the Carter AFB.

The new intake was also a better-flowing unit than the Tri-Power manifold by virtue of the high-rise design, and the simple fact that more even fuel distribution was possible with one centrally located carburetor than with the three 2-barrels. Not only that, but the spread-bore design also had smaller primaries than the 1966 Tri-Power's center carb, giving the potential for better part throttle fuel economy.

Even to this day, an aftermarket intake is very hard-pressed to outperform the factory Quadrajet and two-plane. Pontiac engineers obviously got it right the first time.

The 400 was available in four versions: The base engine came with the 9779067 (P) cam, the 670 heads and the standard exhaust manifolds. This engine put out 335 at 5000 rpm, with 441 lbs.-ft. of torque at 3400. It used Quadrajet No. 7027263, with the A.I.R. version using 7037263. Automatics used 7027262, while the A.I.R. counterpart used 7037263.

The base 400 engine was available with a variety of transmissions, including the 3-speed Turbo-400 automatic, which finally became available in the GTO. It replaced the old Super Turbine 300, which was not as well-suited for performance use.

As strange as it seems, there was also a 2-barrel, low-compression 400-cubic-incher available in the GTO as a no-cost automatic trans-only option. It was, for the most part, a derivation of the regular gas engine found in the full-size Catalina. It developed a rather feeble 255 hp at 4400 rpm, with 397 lbs.-ft. of torque at 2400. It was for the person who wanted GTO looks with regular fuel economy.

This low-po version of the 400 used a mild hydraulic cam shared by the 326 and 326 HO engines. The cam featured 269/277 degrees of duration and .374/.406-inch lift. This cam went under 9777254 and was stamped U.

This particular engine used smaller 1.92-inch intakes and 1.66-inch exhausts housed in cylinder head casting No. 142. These heads actually were not the new style found on other GTO engines, but rather a 90cc version of the old-generation head. It used the 1966-style 2-barrel intake manifold casting No. 9784438. Carburetor numbers were 7027060 and 7037092 for A.I.R.-equipped cars.

Next up the ladder was the HO or Quadrapower engine. It produced 360

hp at 5100 rpm, with 438 lbs.-ft. of torque at 3600. This engine also used the 670 heads, but benefited from the slightly hotter 9779068 camshaft and newly introduced high-performance D-port exhaust manifolds; casting numbers were 9777646 for the left side and 977641 for the right.

The 360-horse engine used the same 4-barrel intake manifold as the standard version. The carburetor numbers for this engine were 7027263 for the manual transmission cars, while the A.I.R. version used carb No. 7037263. The automatic transmission version used carb No. 7027262, while its A.I.R. counterpart used carb No. 7037262.

Ram Air engine

The top-dog engine for the 1967 GTO was the Ram Air version of the 400. This was actually an upgraded version of the 360-horse 400 HO. It used the 301/313-degree 9785744 (H) camshaft, first used in the 1966 XS 389, and had a new design Ram Air pan for the single 4-barrel induction system.

Like the rest of the 4-barrel 400s, the Ram Air engine also used the common 670 heads and intake manifold casting number 9786286. Carburetor numbers for manual trans Ram Air models were 7027263 and 7037271; their A.I.R. equivalents used carb No. 7037263. Forty-nine-state automatic cars used 7027262 and the A.I.R. version used carb No. 7037262. Rounding out the package were the high-performance exhaust manifolds.

This engine was rated at (you guessed it) 360 horses at 5400 rpm, with 438 lbs.-ft. of torque at 3800. As you can see, the horsepower numbers were the same, although rpm levels were both a little higher.

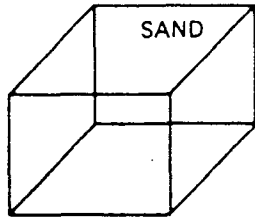
Late in the year, No. 97 heads were substituted for the 670s in the Ram Air engines. The differences between the two heads were in the machining process, as the 97s were set up for taller valvesprings and utilized polished valves. The castings themselves were, for the most part, the same. In fact, most 97s were 670 restamped by the factory.

During the first four years of the GTO's existence, a lot of developmental work went on with PMD's engines, and it showed. The engine received one displacement increase, two cylinder head upgrades, two new cams, two induction system revisions, factory Ram Air and a set of high-performance exhaust manifolds. Not too shabby, and a lot more was yet to come in the next four years. ■

BRAIN TEASERS

EXAMPLE

1.



SAND BOX

2.

MAN
BOARD

3. STAND

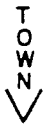
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6. ROAD
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7.



8.

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M. D.
B. A.
PH. D.

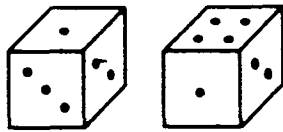
11. KNEE
LIGHT

12.

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13. CHAIR

14.



15.



16.



17.

MIND
MATTER

18. HE'S / HIMSELF

19. ECNALG

20. DEATH LIFE

21.





National Society
to Prevent Blindness
-Ohio Affiliate

1500 W. Third Avenue, Suite 200
Columbus, OH 43212-2874

January 17, 1991

Dear Nancy: Prevent Blindness Ohio received the check for \$50 from the CTO Association of Central Ohio today. Thanks for your continuing support of our vision programs. Congratulations too on the fine job you do in bringing together CTO-owners like my husband Bob, & me in the Central Ohio area.

Best wishes for a successful 1991.

Sincerely,
Sherry Williams



January 17, 1991

GTO Association of Central Ohio
c/o Nancy Whaley, Secretary
Box 215
Lithopolis, OH 43136

Dear Friends:

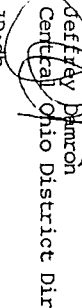
This is to acknowledge and thank you for the nice check we received recently. It certainly will help grant the wish of a very deserving child.

When a wish is granted, it is such a wonderful experience for a child who has suffered a lot of pain. It allows the family to have something positive happen for all of them - being able to share in a very happy time for the child who is losing his/her battle to a devastating disorder.

A Special Wish grants these wishes on a year round basis. Inasmuch as we have no "on-going" support from any agency, we must depend on caring individuals and groups such as yours to fund most of these wishes.

Thank you from all our "special" children. May all your wishes come true in 1991!

Sincerely,


Jeffrey Darrinon
Central Ohio District Director
JD:db

Enclosure

Anthony J. Cecalupo, M.D.
Tony Michael Penzone
Sue Ann Sheller
Jeffrey D. Darrinon
R. Andrew Johnson
Judi Walker, RN

CENTRAL OHIO BOARD OF DIRECTORS

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James N. Fickie

Westerville Special Olympics
Kathy Wagner, coordinator
1093 Smoke Burr Dr.
Westerville, OH 43081

January 21, 1991


Nancy Whaley
Secretary, GTO Club
Box 215
Lithopolis, OH 43136

Dear Ms. Whaley,

We would like to convey our thanks for the check in the amount of \$50.00 your club has given to the Westerville Special Olympics. The athletes are now working very hard in preparation for the upcoming Basketball season. The state tournament this year will be held in Bowling Green, Ohio in March.

The Westerville Special Olympic team has been together now for 4 years and each year we have become a closer and more determined unit. It is solely through contributions from people such as yourself that we have been able to continue this very important program. Again, from all of the athletes and their families a very sincere thank you!

Sincerely,


Cindy Smithson
Secretary
Westerville Special Olympics

FOR SALE: FIRESTONE REDLINE F-70 14 FROM COKER
NEW, NEVER MOUNTED \$390.00
GEOFF LUDWIG (614) 863-4354 6-9PM
(614) 860-4151 8AM-5PM

FOR SALE: 1968 PONTIAC GTO - YZ AUTO - CORRECT MATCHING
NUMBERS - A/C - PS1PB (DISC) - 3:23 POSI -
HIDEAWAYS - HIS & HER SHIFTER - 13 OPTIONS -
AEGENA BLUE - BLUE INT. - PROFESSIONALLY
RESTORED - PICTURES AVAILABLE - \$9,500.
BILL BARTON (614) 876-0832 LEAVE MESSAGE

FOR SALE: 1977 PONTIAC FIREBIRD - FORMULA - RARE -
T/A 6.6 LITRE W-72 400CU - 200HP (1 OF 832
INSTALLED IN FORMULA) 4 SPEED - ONE ADULT OWNER-
CORRECT MATCHING NUMBERS - 33.4K MILES - BUILD
SHEET - INVOICE STICKER - MINT - PICTURES
AVAILABLE - RUSTPROOFED - \$6,500.
BILL BARTON (614) 876-0832 LEAVE MESSAGE

FOR SALE: 1967 GTO HARDTOP-REBUILT WS ENGINE- 4 SP-
HOOH TACH- 3:90 POSI-NEEDS RESTORED (ROUGH)
\$3,000 (614) 474-4614

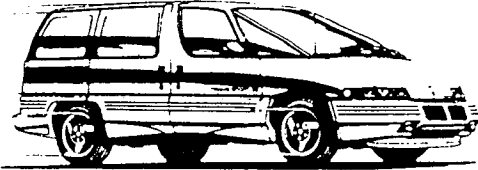
ANSWERS TO BRAIN TEASERS

1. SAND BOX
2. MAN OVERBOARD
3. I UNDERSTAND
4. READING BETWEEN THE LINES
5. LONG UNDERWEAR
6. CROSS ROADS
7. DOWNTOWN
8. TRICYCLE
9. SPLIT LEVEL
10. 3 DEGREES BELOW ZERO
11. NEON LIGHT
12. CIRCLES UNDER YOUR EYES
13. HIGH CHAIR
14. PARADISE
15. TOUCHDOWN
16. 6 FEET UNDERGROUND
17. MIND OVER MATTER
18. HE'S BESIDE HIMSELF
19. BACKWARD GLANCE
20. LIFE AFTER DEATH

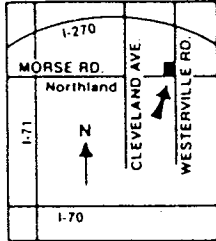
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PONTIAC

- SALES
- SERVICE
- PARTS • LEASING
- BODY SHOP

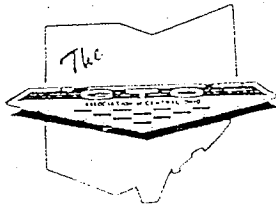


Mr. Goodwrench



471-2900

2900 MORSE RD.



Paw Prints

Jim Evans
 13791 Cable Road
 Pataskala, OH 43062
 614/927-5302

