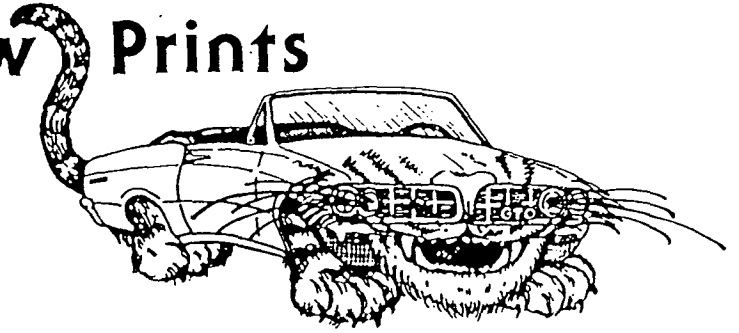


Paw Prints



A Publication of the GTO Association of Central Ohio

DECEMBER 1990

TO ALL MY GTO FRIENDS,

THERE'S NOT A WHOLE LOT GOING ON THIS TIME OF YEAR. IT'S TIME TO PUT ALL THOSE GTO'S TO BED FOR THE WINTER EXCEPT FOR THOSE OF US WHO ARE JUST STARTING TO TEAR ANOTHER ONE APART IN AN ATTEMPT TO GET READY FOR OUR SHOW AND THE NATIONALS IN 1991.

JERRY & DIANA BROWNFIELD, RICHARD & NANCY WHALEY, AND DAVE & JAN BENSON HAD THEIR CARS AT VETS FOR THE THANKSGIVING WEEKEND AND I HEAR THE CAR SHOW WAS PRETTY GOOD. WE NEED MORE PARTICIPATION LIKE THAT FROM OUR MEMBERS SO OTHER PEOPLE KNOW WE DO EXIST.

DON'T FORGET THE HOLIDAY PARTY, JANUARY 19, AT THE INSKEEPS. PLEASE CALL LYNN OR JEFF AT (614) 891-6679 TO LET THEM KNOW IF YOU'RE COMING.

YOU'LL NOTICE YOUR VOTING BALLOT IN THE NEWSLETTER. PLEASE TAKE THE TIME TO FILL THESE OUT RIGHT AWAY AND SEND THEM BACK TO ME SO WE CAN GET THEM COUNTED AS SOON AS POSSIBLE. ALL YOUR VOTES ARE IMPORTANT SO IF I FORGOT TO SEND ONE PLEASE CALL ME AT (614) 927-5302.

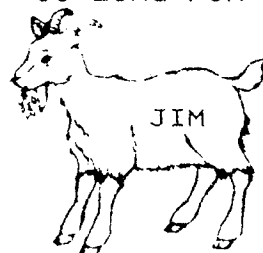
WE ALSO HAVE OUR SWAP MEET COMING UP ON FEBRUARY 24TH AT DENNIS PONTIAC. SOME ADS HAVE ALREADY BEEN SENT OUT SO IF YOU HAVE PARTS TO SELL OR ARE ABLE TO GIVE US A HAND PLEASE CALL DAVE BENSON AT HOME (614) 837-9545.

I WOULD LIKE TO CONGRATULATE NEAL BLANKENSHIP FOR BEING VOTED IN AS THE GTOAA PRESIDENT AND WISH HIM LUCK IN HIS NEW ENDEAVOR. I KNOW HE WILL DO A GOOD JOB.

DIANE & I WANT TO WISH ALL OF YOU A MERRY CHRISTMAS, AND A SAFE AND HAPPY NEW YEAR. WE WANT TO SEE EVERYBODY BACK SAFELY NEXT YEAR SO DON'T FORGET THOSE DESIGNATED DRIVERS.

SEE YOU AT THE MONTHLY MEETING ON WEDNESDAY NIGHT, DECEMBER 12TH.

SO LONG FOR NOW,



FOR SALE
CLUB T-SHIRTS
PONTIAC T- SHIRTS
GOLF SHIRTS
NAME TAGS
JACKETS
CODE BOOKS
JUDGING STANDARD
CALL (614)837-4372

GTO Association of Central Ohio 1990 Officers	
President	Jim Evans 13791 Cable Road Pataskala, OH 43062 614/927-5302
Vice-President	Doug Smith 5895 Watkins Rd. S.W. Pataskala, OH 43062 614/927-0942
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	Nick Anspach - 216/236-3523 Jeff Inskeep - 614/891-6679 Neal Blankenship - 614/459-0352

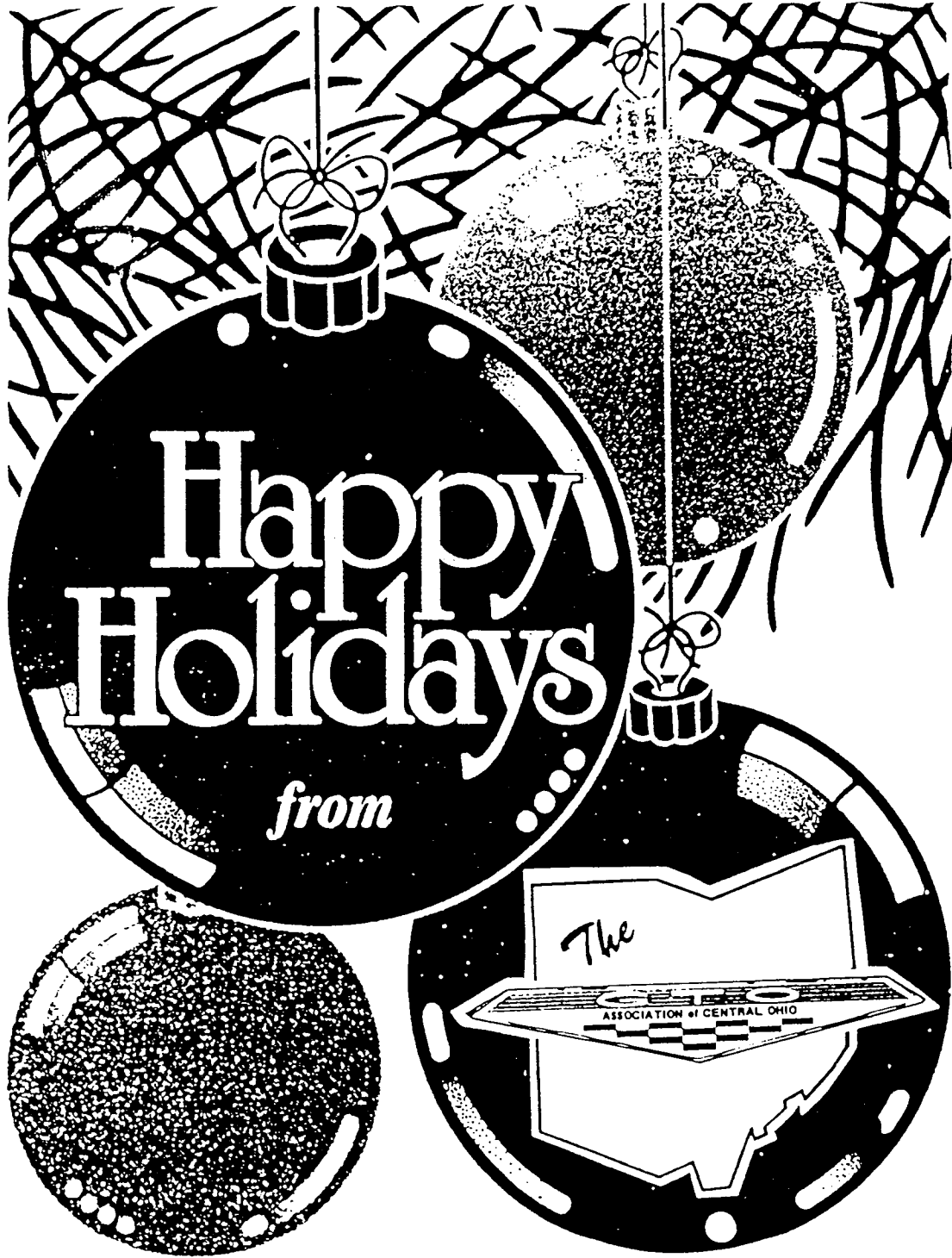
CALENDAR

DEC. 12 REGULAR MEETING
DENNIS PONTIAC
2900 MORSE ROAD
7:00 P.M.

JAN. 9 REGULAR MEETING
DENNIS PONTIAC
2900 MORSE ROAD
7:00 P.M.

JAN. 19 GTOACO HOLIDAY PARTY
at The Inskeep's
598 Old Coach Road
Westerville, OH 43081
(see map enclosed)
RSVP 614/891-6679
Plan on being there for
an evening of fun.
8:00 p.m. - till ???

FEB. 24 GTOACO Indoor Swap Meet
Dennis Pontiac



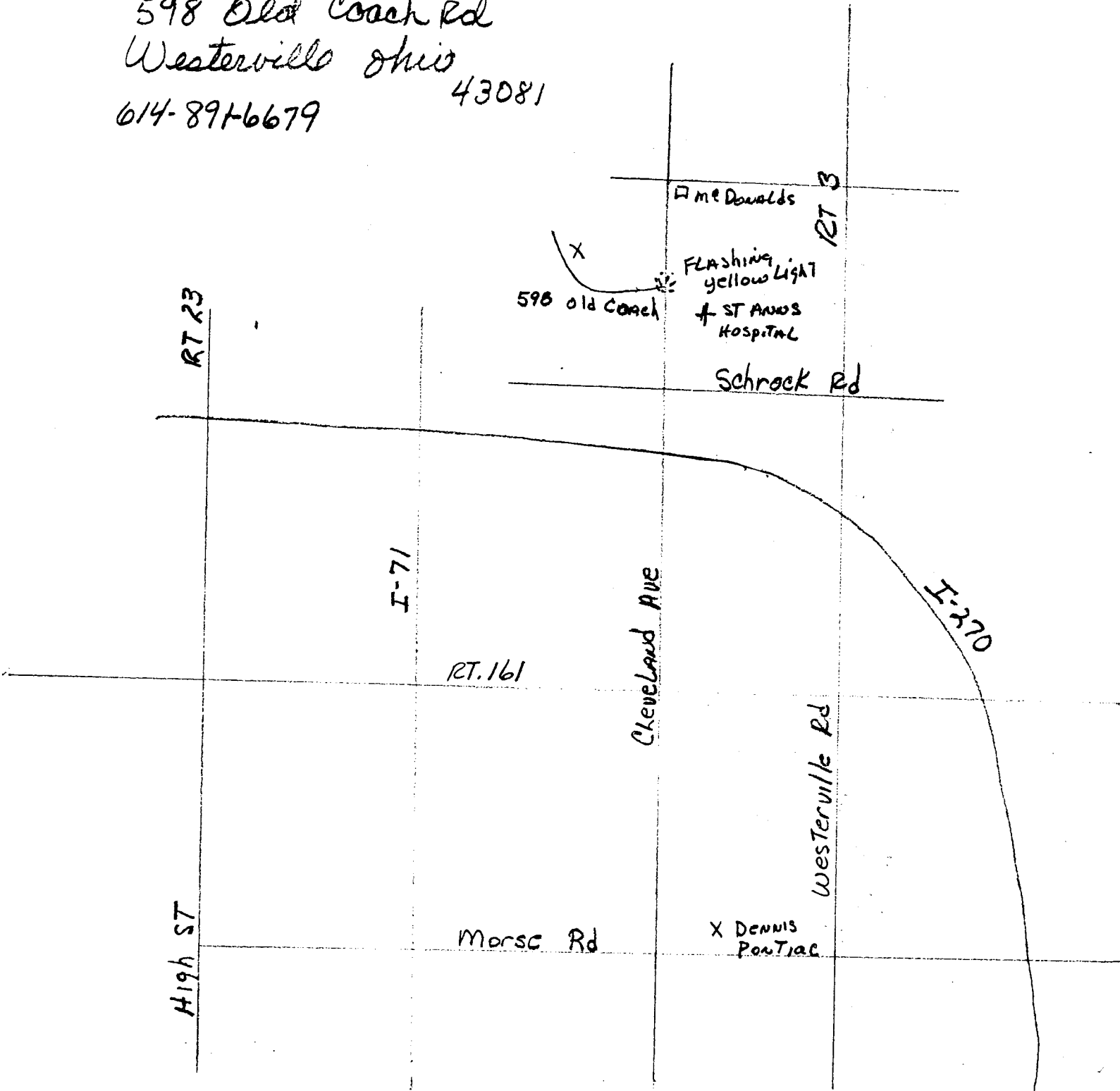
Jeff + Lynn Inakeep.

598 Old Coach Rd

Westerville Ohio

614-891-6679

43081



November 14, 1990 GTO Assoc of Central Ohio Meeting

Meeting was called to order by Jim Evans. Motion was passed to accept last months minutes in Paw Prints.

Report was given by Nancy Whaley as to how much money we have in the charity fund \$64.50. Discussion was held on which charity or charities to give this money to. Kurt Pearce wanted to go with one charity. Bill Barton wants to stay with four and tive more money. Bill made motion to give \$50. to same four charities as last year. Seconded by Jan Benson. Motion passed.

Election update: Doug Smith will be running for Vice President and not Bd of Directors. Nick Anspach declined nomination to Bd of Directors as he feels he lives to far away. Dean Dabe made motion to close nominations, seconded by Bill Barton. Jeff Inskeep will print ballots. Jim Evans will count ballots.

Swap Meet: February 24, on Sunday. This is a change from two day event we had planned as Dennis Pontiac cannot close their service department on Saturday. It was decided to make Pontiac parts only as we do not know if we could handle all GM parts and due it successfully and not hurt the spring show. Jim Evans will contact Doug Smith and get a vendor to sell food.

Drag Day in Spring: Andy Syrkin is checking with Clark Rader at National Trails and he has offered to give us 1-2 lanes for this event. National Trails will make all the arrangements. We need to decide when we want to hold this and report to National Trails. Jim will get with Andy and possible date will be in late May.

Spring Show reminder: Date is set for June 15.

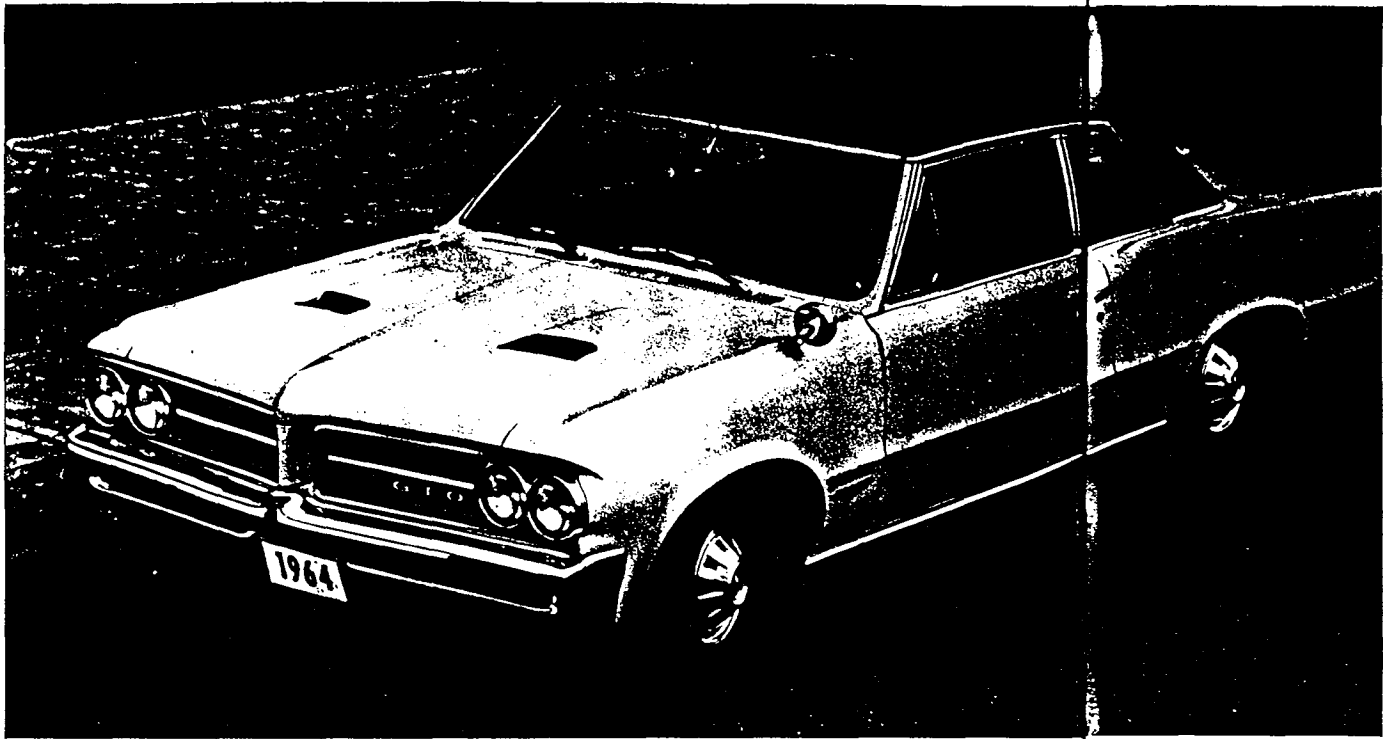
Club Photo Album: Anyone who has pictures of any of our events please donate them to the club for our album. We need to get this together for the National meet in June. Please call Nancy Whaley 837-4416 or mail them to her at Box 215 Lithopolis Oh 43136. We need these immediately.

50/50 Drawing: Kurt Pearce was this months winner \$7.50.

Meeting adjourned:

Members in Attendance:

Jim Evans	Nancy Whaley
Bruce Scott	Richard Whaley
Dean Dabe	Bill Barton
Jeff Ruffer	Neal Blankenship
Jim Lowry	Kurt Pearce
Jan Benson	Dave Benson



1964 GTO sport coupe.

Powering The First-Generation GTOs

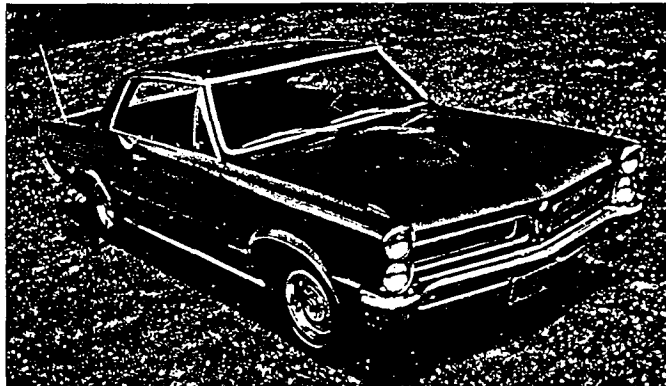
A year-by-year look at the engines that made the first GTOs growl. Part 1

BY DON KEEFE

When the first Pontiac GTO burst upon the automotive scene in the fall of 1963, it single-handedly redefined the way people thought about high-performance cars.

Due to GM's corporate ban on racing, Pontiac could not continue to rely on extremely low-volume, exotically powered factory race cars. As great as the Super Duty Catalinas and Grand Prixes were, they were far too expensive to sell in volume. And, of course, selling lots of cars is what makes Detroit tick. Another course of action was called for.

Pontiac decided that similar power-



1965 GTO Hardtop Coupe.

to-weight ratios were possible in a smaller and more economical platform, with much wider customer appeal than the Super Duty cars. Pontiac's upscale version of the new GM

A-body, the LeMans, was selected as the new performance flagship. However, a few changes were needed under the hood to bring the car up to snuff.

Corporate rules did not allow an engine of more than 330 cubic inches to be installed in an intermediate car as *standard equipment*. However, that minor obstacle was circumvented by a small loophole. The 389-cubic-inch Pontiac V8 would be offered as an *option* on the LeMans GTO. The musclecar, as we know it, was born.

The 1964 edition

Although many people think that the 389 in the GTO was just plucked from the full-size lineup and dropped in, that is incorrect. The differences between the GTO and the full-size engines are numerous. In terms of camming, cylinder heads and carburetion, the GTO 389 was a unique combination of components used on full-size car versions of the 389 and 421.

The 1964 389 GTO engine was available in two versions; the first one released was the single 4-barrel engine. It put out 325 horsepower at 4800 rpm, with 428 ft.-lbs. of torque at 3200. The second 389 was the Tri-Power version. It was added to the engine lineup after a few weeks of production. It put out 348 hp at 4900 rpm, with 428 ft.-lbs. of torque at 3600.

There were no ot
between the two eng
the induction system
could be had with 3-
close- and wide-ratio
or a 2-speed ma
With its 1-1/2
stroke and 6-1/2-inc
the basic block dime
389 were pretty muc
previous incarnatio
that was used on all
cars and manual-tra
Grand Prixes in 1964
mounted starter.

Previously, all sta
ed on the bellhousin
selected blocks that
sions cast in them fo
starter setup, these
vehicles that actual
was done in anticipa
generation of autom
sions. By 1965, all P
would be cast in this

The cylinder head
GTO engine were sh
Tri-Power and 421 H
engines. Carrying ca
9770716, these head
inch intake, 1.66-inc
and 68cc combustion
well as being the bes
mance heads availab
period, they were the
able with pushrod oi
the Super Dutys. The
fact, a street derivati
heads. All other head
used a rocker stud oi

The 1964 389 GTO
Pontiac's "second hot
that year. It was ass
524009 and 150
cam. It featu 73/



The 1964 389 Tri-Power
heads and Tri-Power fro

SCHNEIDER
PERFORMANCE
SERIES
MUSCLECARS

January 1991

Volume IX, No. 1

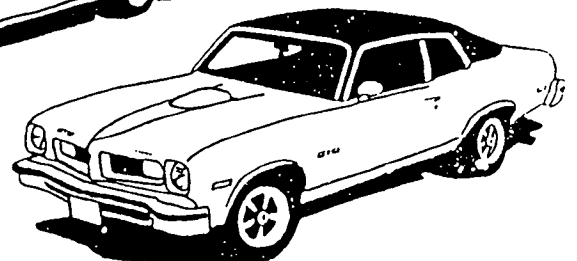
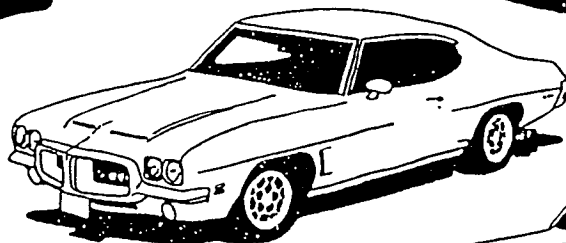
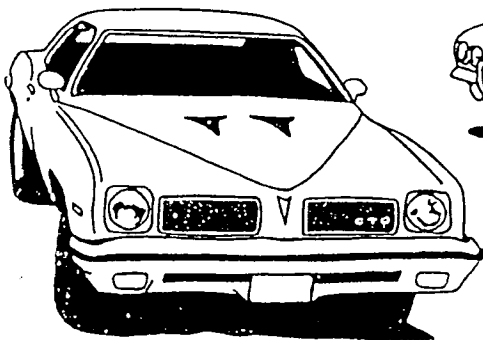
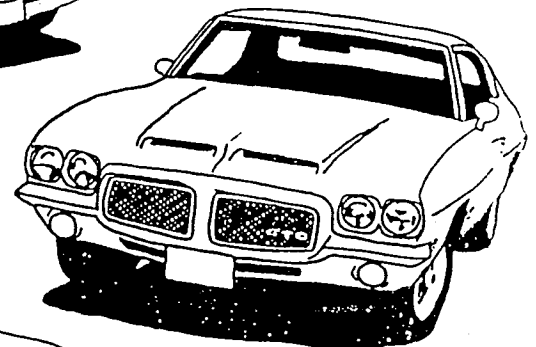
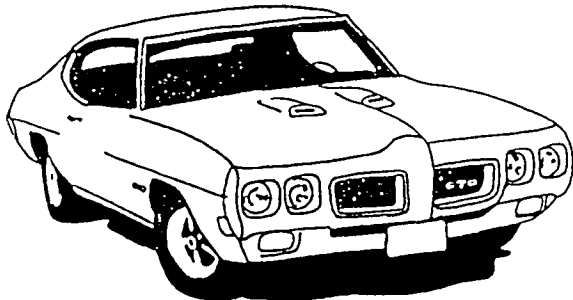
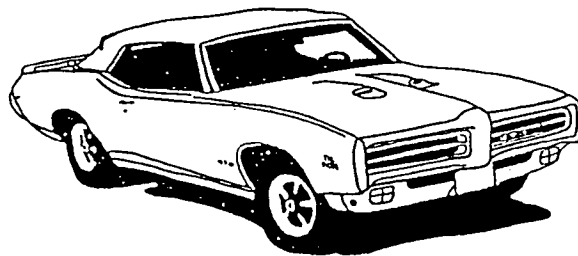
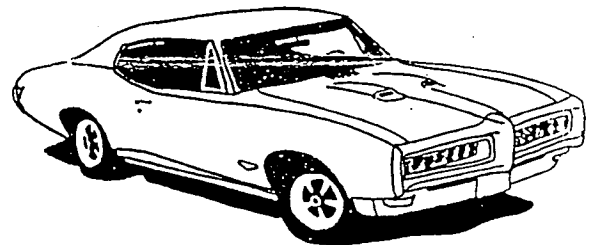
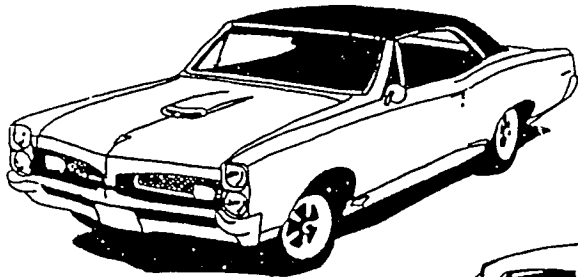
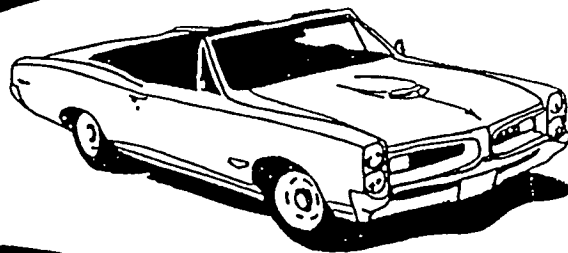
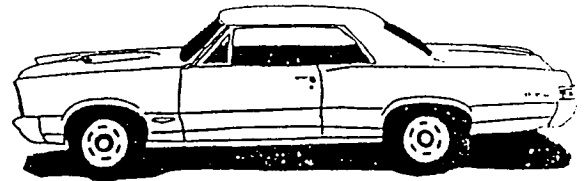
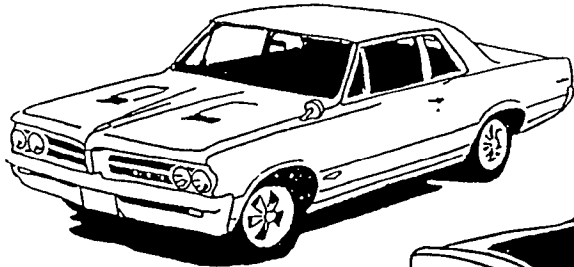
CSK PUBLISHING CO., INC.

299 Market St., Saddle Brook, NJ 07662

201-712-9300

GTOACO

TURN IT ON, WIND IT UP,
BLOW IT OUT, COLOR YOUR GTO...



ELECTION BALLOT FOR 1991 GTOACO OFFICERS

This ballot must be returned no later than January 5, 1991.

Vote for one in each of these categories.

President - Jim Evans _____ write in

Vice President - Jeff Inskeep Doug Smith

Secretary - Nancy Whaley Debbie Scott

Treasurer - Richard Whaley _____ write in

Vote for not more than 2 in this category.

Directors (2 Year Term)

Neal Blankenship Andy Syrkin

Vote for not more than 1 in this category.

Director (1 Year Term)

John Leffler Dave Benson

Results of elections will appear in the January Paw Prints.

STAMP

FOLD

PLACE
STAMP
HERE

Jim Evans
13791 Cable Road
Pataskala, OH 43062

differences
s, other than
th engines
ed manual,
speed manuals

re, t ch
nnec rods,
ns of the GTO
he same as
A new feature
-powered A-
nissioned
s the block-

rs were mount-
While other
r had provi-
lock-mounted
re the only
sed them. This
n of GM's new
: transmis-
iac blocks
shion.
sed on the
d with the 421
Tri-Power
ng No.
atured 1.92-
xhaust valves
ambers. As
reet perfo-
in the 1963-64
ly heads avail-
3, other than
16s were, in
of the SD
at the time
g system.
ngine used
it" camshaft
red part No.
own "C"
9 del f

duration and .406-inch lift with 1.5:1 rocker arms. In the interest of valve-train longevity, Pontiac camshafts have, for the most part, followed a pattern of fairly long duration and relatively short lift.

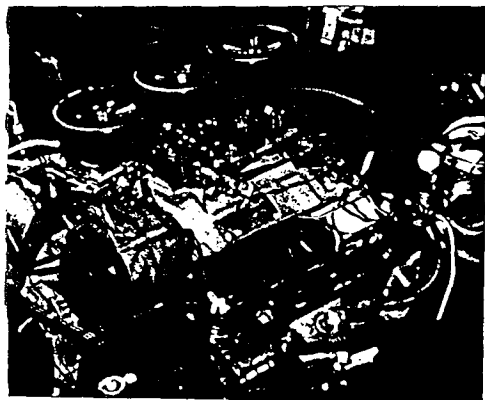
The intake and manifolds for the GTO engines were areas where things were a bit more standardized. The 4-barrel manifold was a cast-iron, two-plane design shared by all 326, 389 and 421 engines that year. It bore casting No. 9770274 and mounted a Carter AFB 4-barrel carb. No. 3647S, for manual transmission models. GTOs with automatic transmissions used carb No. 3649S. These carbs were shared by various other 389 4-barrel engines.

Like their 4-barrel siblings, the Tri-Power engines used componentry common to the "big car" 389 and 421 engines. The manifold was a cast-iron two-plane design that was flanged for three Rochester 2-barrel carbs. It was casting No. 9775088; the front carb number was 7024178 and the rear number was 7024179. The center carbs were numbered 7024175 for manual trans models, and automatics used carb No. 7024173. The center carbs were smaller than the end units, and only center carbs used a choke.

Exhaust manifolds were not of a high-performance design at this early stage. It was a few years before the GTO would be blessed with free-flowing, long branch exhaust manifolds. In the meantime, the GTO made do with the standard exhaust manifolds, like those found on 326 A-cars.

Modernization begins: 1965

For the 1965 model year, the GTO returned stronger than ever. The stan-



line was the year's top engine combination. It used the 716 the 421 HO, and put out 348 horsepower at 4900 rpm.

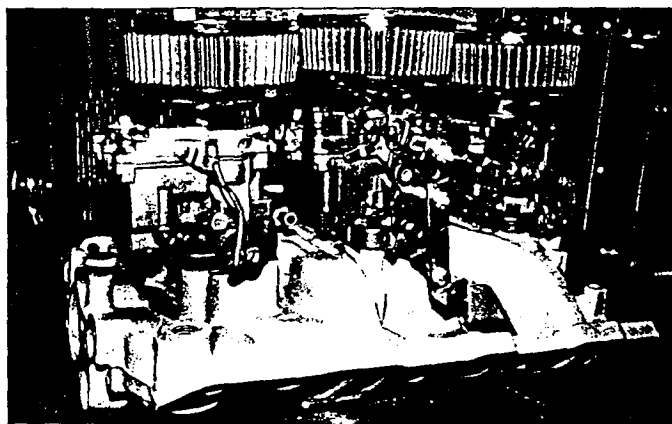
45

Pontiac GTO Block and Head Codes 1964-65

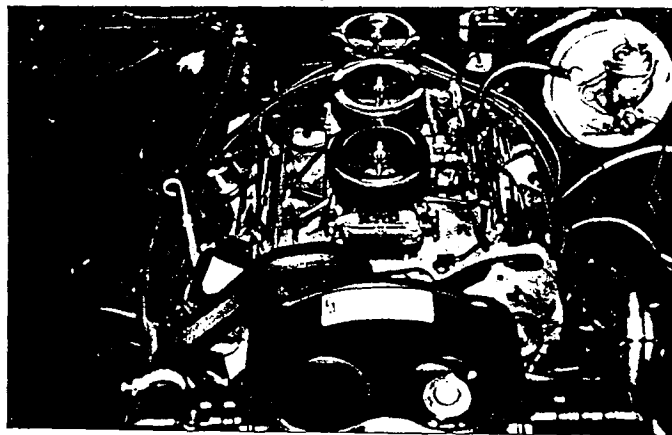
Year	HP	Trans Code	Block Ratio	Comp Number	Headcast Int/Exh-in.	Valve Size
'64	325	Manual	78X	10.75	9770716	1.92/1.66
		Auto	79J	10.75	9770716	1.92/1.66
	348	Manual	76X	10.75	9770716	1.92/1.66
		Auto	77J	10.75	9770716	1.92/1.66
'65	335	Manual	WT	10.75	77	1.92/1.66
		Auto	YS	10.75	77	1.92/1.66
	360	Manual	WS	10.75	77	1.92/1.66
		Auto	YR	10.75	77	1.92/1.66

*Note: All '64 GTOs used No. 524009 (C) cam.

*Note: 335-hp GTOs used 9779067 (P) cam and 360-hp used 9779068 (S) cam.



A freshly rebuilt 1965 Tri-Power unit. Note the smaller center carburetor.



A new cam, heads and revised Tri-Power unit brought the horsepower of the 1965 Tri-Power 389 GTO engine from 348 to 360, while the base 4-barrel went from 325 to 335 horses.

46

standard 389 4-barrel engine now put out 335 hp at 5000 rpm, with 431 ft.-lbs. of torque at 3200. The optional 389 Tri-Power engine was up to 360 at 5200 rpm, although torque dropped 4 ft.-lbs., to 424 at 3600.

The power increase for '65 was due to several factors. While the 4-barrel engine retained the same cam profile as in 1964, the part number was changed from 524009 to 9779067 and the identifying letter stamp was changed from C to P.

Tri-Power engines benefited from a hotter camshaft. Now designated the S cam, part No. 9779068, it was the same profile as the earlier 9770543 cam used in the 1963-64 421 HO engines. It featured 288/302 degrees of duration and .406-inch lift with 1.5:1 rocker arms.

Newly designed cylinder heads were also used. Like the previous 716s, they were also used on 421 and 421 HO Tri-Power engines. Carrying casting No. 77, they boasted smoother port contours; the intake manifold bolt patterns were changed as well. This pattern represented a new era of standardization of the Pontiac V8 and was retained for the duration of its production life.

The intake port revisions and the subsequent bolt pattern change necessitated the implementation of redesigned intake manifolds.

The most obvious difference in the new manifold was the revised water-neck area, which didn't have as much excess material around it, and the V-shaped heat risers.

The '65 single 4-barrel manifold bore casting No. 9778816 and mounted a single Carter AFB carb, No. 3895S for cars with manual transmissions; automatics used carb No. 3896S. As before, this induction system was also used intact on various big car 389 and 421 engines.

Tri-Power-equipped cars used manifold casting No. 9778818 and carb numbers were the same as the previous year: 7024178 for the front and 7024179 for the rear. The center carbs were numbered 7024175 for the manual trans models, while automatics used carb No. 7024173.

As a result of fresh-air induction testing by Royal Pontiac supertuner Milt Schornack, Pontiac released a dealer-installed Ram Air package for the 1965 GTO in August of that year. Available under part No. 984716, it consisted of a steel pan that fitted over the carburetor airhorns and a foam seal that took up the gap between the pan and hood. There were also extra grilles for the hood scoop to be installed in cold weather. These were needed because the originals would be cut to open the scoop and make it functional.

While the factory did not release updated figures rating the engine with the Ram Air kit, it is generally accepted that it was good for about 10 extra horses. The extra power didn't come from any real ram effect, as the scoop was not efficient enough to accomplish that. It was merely the result of drawing cool outside air to the carburetors, rather than from the hot underhood area.

In the next installment, we'll trace the development of the 1966-67 GTO engines. ■

To: All GTOAA Affiliated Chapters
From: Gary Butcher
Subject: Update
Date: November 5, 1990

This memo is intended as an update regarding the current and proposed future status of the GTOAA.

On Sunday November 4, 1990 the GTOAA Board of Directors held a conference call to discuss the current status of the Association.

A brief overview of the gleanings from this conference call are as follows:

Proposed:

1. Lars Grimsrud will step down from the Board of Directors and will assume the editor duties of the Legend.
2. Neal Blankenship will step down from the Board of Directors and serve as interim President.
3. The number of Board members will be reduced from 5 to 3.
4. The Board of Directors will consist of Beth Butcher, Robert Maher, and Richard Whaley.
5. The Board members will serve predetermined terms. Current members' terms will be staggered to initiate the cycle.
6. Mike Radke has been appointed Regional Chapter Representative. Mike will be reporting directly to the Board with his primary contact person being Beth Butcher. Mike will also be working cooperatively with the Chapter Coordinator to implement the Chapter Representative Program.
7. Gary Butcher will serve as the Chapter Coordinator - Beth will not be serving in this position while serving as a Board member.
8. A public relations position will be created to maintain contact with major publications, enhance our visibility, and solicit adds for the Legend.
9. Effective with the January issue, the Legend will be published monthly.

On December 1, 1990 the Annual Meeting of the Board of Directors will occur. The above recommendations/proposals will be formally voted on at this meeting.

I would ask that all Chapters read these proposals carefully. For several months now rumblings have been brewing about change. These proposals indicate to me a willingness on the part of the Board to address member/Chapter concerns. I also understand that several Chapters have set deadlines by which time to decide upon maintaining their affiliation. In light of the above proposals I would ask that all Chapters give this gesture, by the Board, the opportunity to be implemented.

During the last few years I have talked with many members. We have been through the good, the bad, and the ugly. Response from the membership upon learning of these proposed changes is generally optimistic. We all have a common interest and goal - Our interest is the GTO, Our Goal - a vital and thriving organization. Each Chapter has an opportunity to help our organization thrive.

Call me - we need to discuss our organization's future.

WANTED WANTED WANTED WANTED WANTED WANTED

Dave Benson wants any old 45 records. If you have any you want to get rid of call Dave at 614 837-9545.

FOR SALE FOR SALE FOR SALE FOR SALE

1968 GTO frame off 1985, engine rebuilt 10-90 400 miles since. options - hideway headlites, tilt steering wheel, tinted glass, rally guage cluster, electric trunk release. Every moving part has been replaced or rebuilt including all hoses, filters, exhaust system, radiator, power brake unit, shifter, headlite system.

Price \$15,700 Appraised \$16,200

Call Chris Alberti, 1952 Hemlock St., Columbus Oh 43217
614 497-0635

FOR SALE FOR SALE FOR SALE FOR SALE

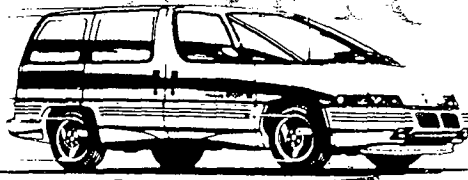
1974 Ram Air Shaker complete. wiring, solenoid etc.

Call Jay Knowles 459-8718

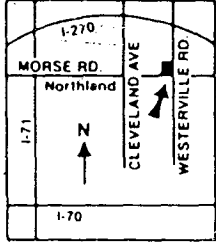
The monthly parts (for sale and or needed) section is free of charge for GTOACO members. If you have an ad you would like to be run please send it (preferably typed) to Jim Evans 13791 Cable Rd, Pataskala, OH 43062.

DENNIS PONTIAC

- SALES
- SERVICE
- PARTS • LEASING
- BODY SHOP

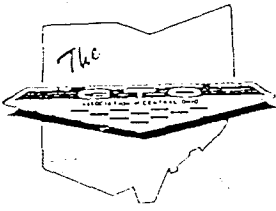


Mr. Goodwrench



471-2900

2900 MORSE RD.



The Paw Prints

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