

ROAD TEST

AUTOMOTIVE ENTERTAINMENT

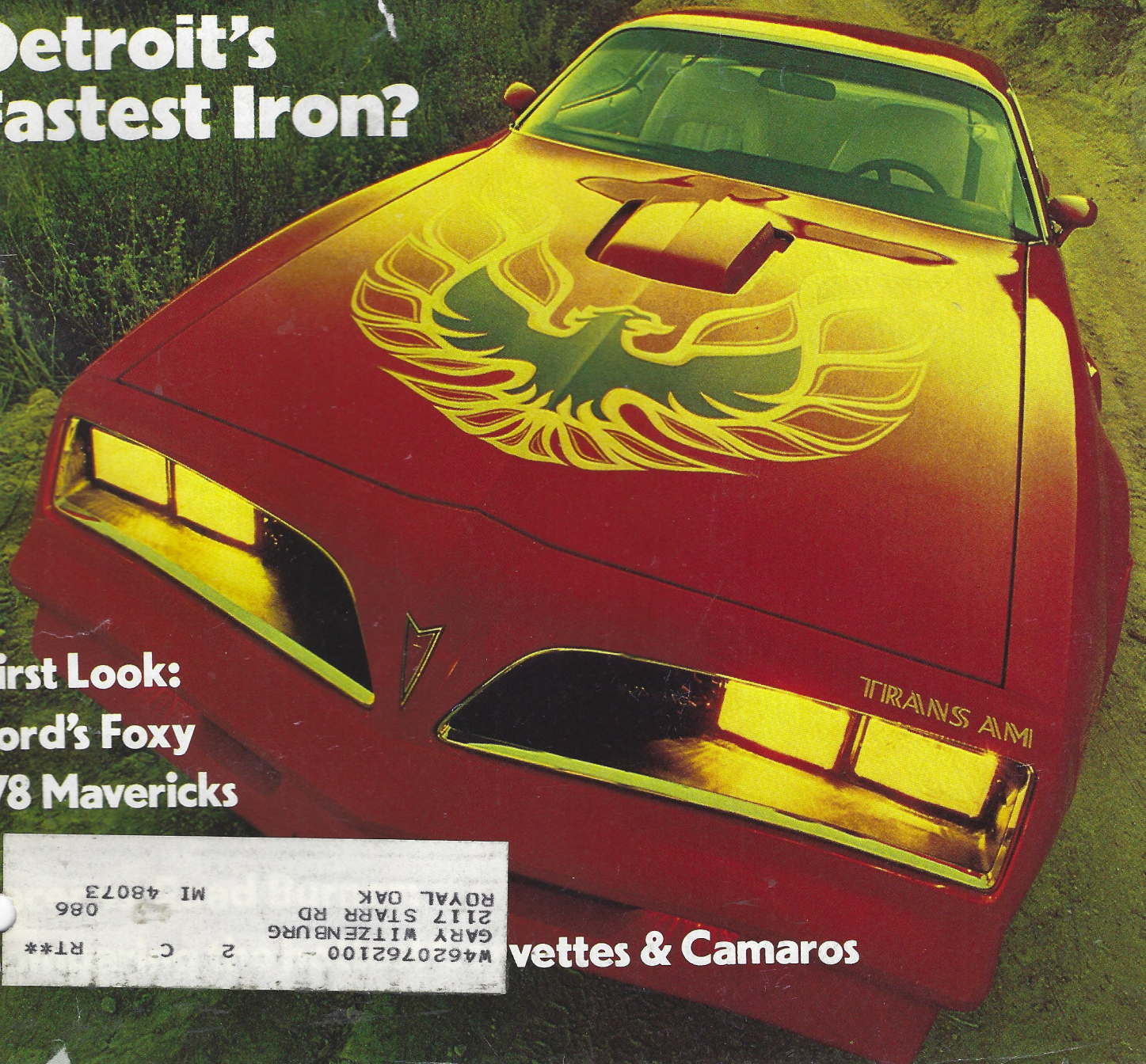
FIREBIRD 400 TRANS AM:

Detroit's Fastest Iron?

**First Look:
Ford's Foxy
'78 Mavericks**

P 086 MI 48073
ROYAL OAK
2117 STARR RD
GARY WITZENBURG
M4620762100 - 2 C RT**
C

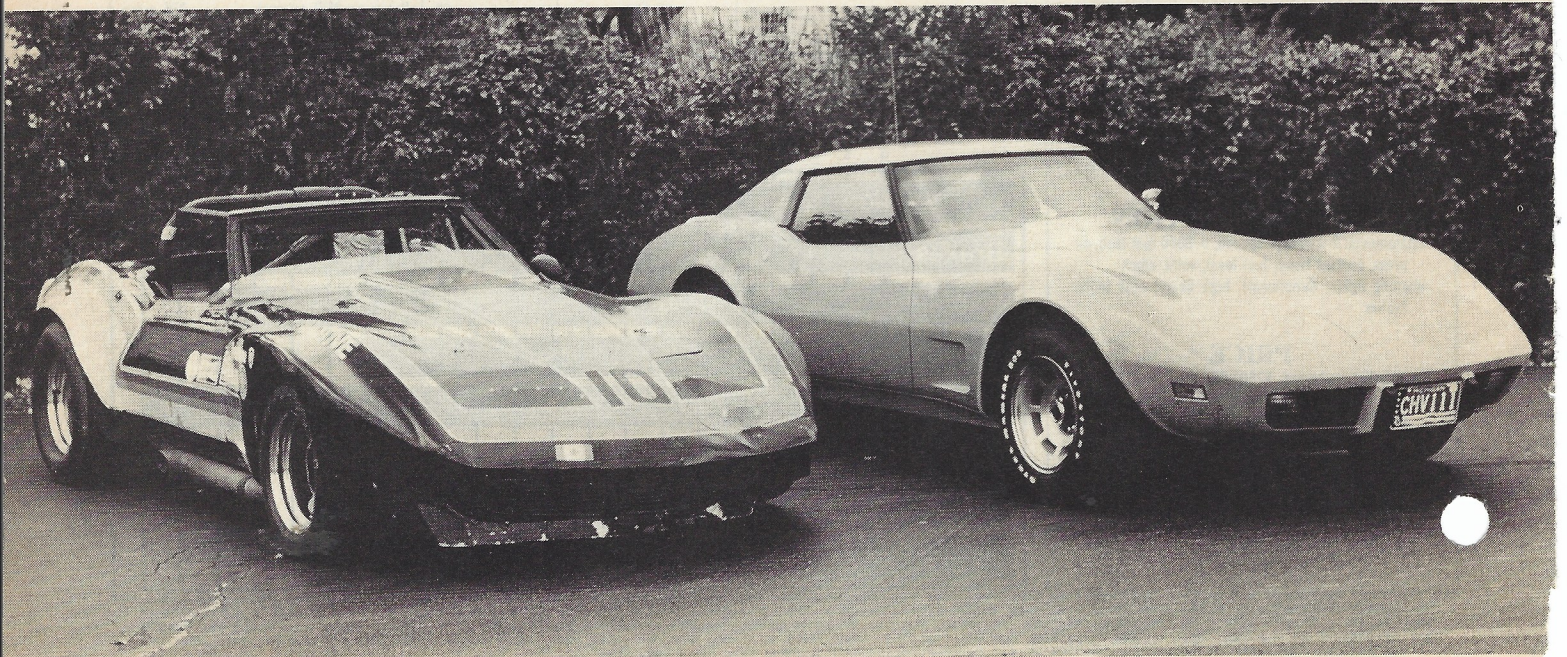
vettes & Camaros



The only differences between your Corvette or Camaro and the ones that win at Road Atlanta are money and about a million horsepower.



RACERS VS. ROAD BURNERS



by Gary Witzenburg

□ Ron Weaver planted his foot as deep as it would go and fought to keep his Corvette racer pointed in the proper direction as the green flag fell as his and 15 similar machines leapt toward Road Atlanta's first corner. Third-place starter Frank "Skip" Panzarella was first into the turn, followed by Northern California drivers David Mock and Gene Bothello, then Weaver and the rest.

He followed Bothello through the left-hand second turn and the sharp right that follows, down the steep hill through Turn Four and up to the hard-braking, left-hand Turn Five. Sixteen big-block Chevys roared as the group accelerated out of Five and down the straight into the fast, right-hand Turn Six. As Weaver braked and downshifted for Six, he gained a few feet on Bothello and then pulled alongside, the pair accelerating out of six, then braking and downshifting again for the sharp-right Turn Seven.

Taking the inside line into the slow, first-gear corner, Weaver got past Bothello and pulled alongside Mock, then the two drag-raced side-by-side down Atlanta's long back straightaway. Four gears and several seconds later, Mock backed off and fell in behind as they crested the hill at 160 mph and entered the steep, right-hand downhill sweeper. You can't go down there two-abreast in fast cars; Weaver had the inside so Mock had to give.

Two more laps passed before Weaver pulled even with Panzarella on the back straight and made the same move on him, passing into the lead on the same infamous flat-out downhill that has claimed many a race car in the past. Now in control, he managed to pull out a three-second advantage over Panzarella. But on the next lap Bothello got by into second and began closing the gap.

Emerging from under the Turn 11 bridge on lap seven, the four lead cars were still closely bunched, with Weaver's beautiful black machine in front followed by Bothello, Panzarella and Mock. It was obvious the leader was trying with everything he had as the car slid wide out of 11, accelerated down the steep hill, braked slightly and drifted through the 12th and last turn onto the start/finish straight.

Grabbing fourth gear at the start/finish line, Weaver roared on down the straight, then backed off and began braking for the 100+ mph first turn. Suddenly the Corvette spun viciously sideways, then backwards on around across the grass and into the wall of tires against the guardrail, smashing the

left-front corner. A slower car had blown an engine just a few moments earlier and Weaver had not seen the oil.

The others got through and Bothello ultimately won the 18-lap race to become A-Production National Champion. For Weaver, who had finished second to John Greenwood on one occasion and had gone off course and damaged his car while fighting for the lead the following year, it was another frustrating ending to a long, hard season.

It was also frustrating to us, for we were planning to test Weaver's car the following morning.

When we decided to test a pair of race cars after the annual SCCA amateur orgy known as the Champion Spark Plug Road Racing Classic, we were faced with a number of problems. First was deciding which cars to test. The debate was solved by agreeing on the two fastest "Production" sportscar and "Sedan" classes (A-Production and A-Sedan) and the most representative and competitive entries in those classes, namely the Chevrolet Corvette and Camaro, respectively.

Next was lining up a first-class sample of each. Most important was winning potential: there's no way to predict the winner of any Sports Car Club of America road race, but we wanted to test a car in each class that was at least capable of winning its national championship event.

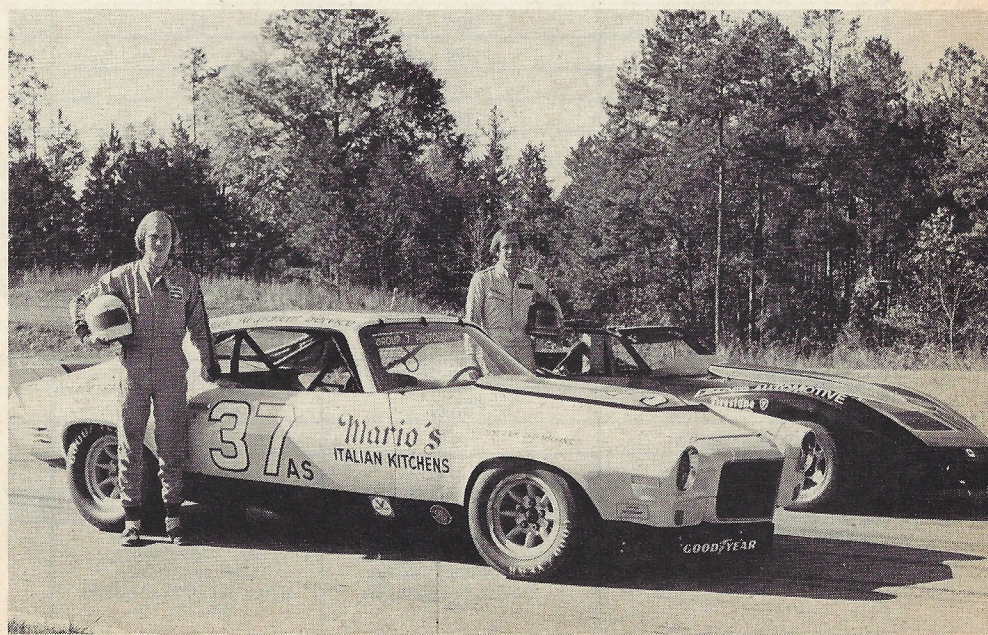
Ron Weaver, of Southfield, Mich., was an obvious choice in A-Production. A 38-year-old automotive engineer, Weaver has 15 seasons of racing to his credit and has been one of the country's fastest amateur Corvette drivers since 1968. Driving a '73-based car built from scratch by fellow

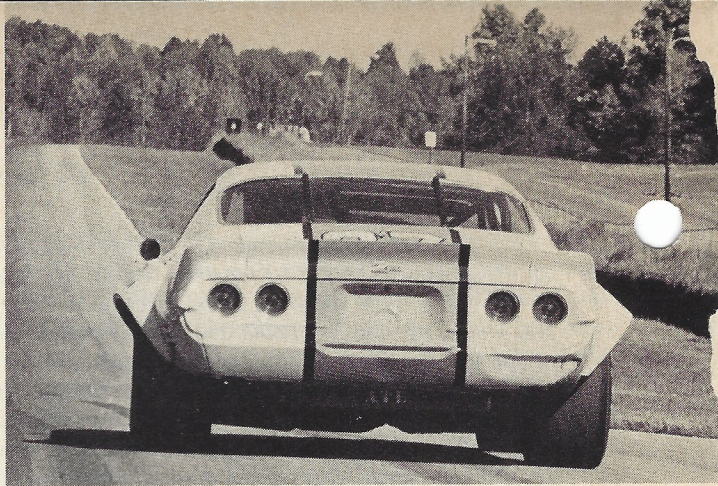
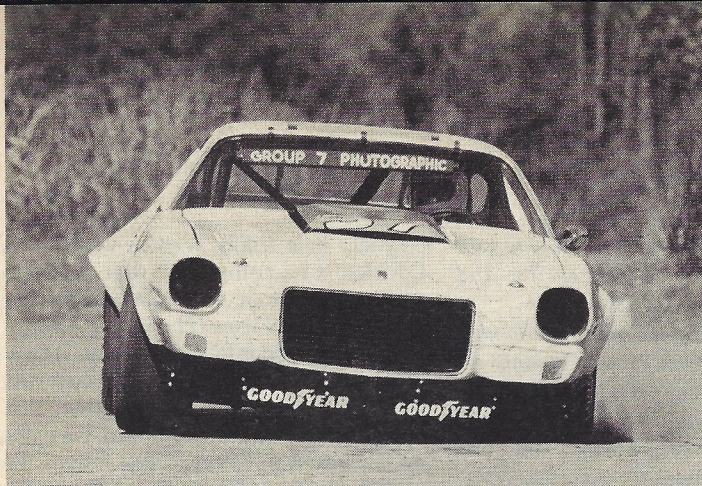
engineer Pete Klain, Weaver was Central Division Champion this year and also marked up a pair of SCCA professional TransAm series wins. The yellow/orange-striped Corvette is fast and pretty, Weaver is fast and experienced, and the combination looked hard to beat at Atlanta.

For a representative Camaro, we called on last year's SCCA class title holder, Jim Crittenden, from Glastonbury, Conn. The 27-year-old Crittenden, also an engineer and a partner in a medical diagnostic equipment company, has been racing since 1971 and in Camaros since '73. He has been Northeast Division A-Sedan champion for the past two years and, as mentioned, National Champion in '75. The car, also a 1973 model, is owned by Setauket, N.Y., garage operator Peter Archey and sponsored by Mario's Italian Kitchens.

Weaver was second-fastest after the first day of qualifying, but slipped to fourth after the second session, a result of some chassis-setting experimentation. "No problem," he said, "we'll just put the car back the way it's been all year. We're still planning to win this thing." And he might well have, except for the oily first turn and slow-reacting SCCA flag people. After the crash, Weaver, Klain and crew members Sam Cline and Mauri Henricks pieced the car's left front back together as best they could for our test—but we would have to make do with some fiberglass damage and misaligned front suspension.

Crittenden had fared better in his race the day before in spite of engine problems throughout practice and qualifying. A head gasket had been replaced early in the week, but water had continued to show up in the Camaro's oil so the engine was





SPECIFICATIONS	'77 STREET CORVETTE	WEAVER CORVETTE	'77 STREET CAMARO	CRITTENDEN CAMARO
ENGINE				
TYPE	OHV V-8	OHV V-8	OHV V-8	OHV V-8
DISPLACEMENT, CU. IN.	350	460	350	302
DISPLACEMENT, CC	5733	7542	5733	4942
BORE X STROKE, IN.	4.00 x 3.48	4.28 x 4.00	4.00 x 3.48	4.00 x 3.00
BORE X STROKE, MM	101.6 x 88.4	108.7 x 101.6	101.6 x 88.4	101.6 x 76.2
COMPRESSION RATIO	9.0:1	12.5:1	8.5:1	12.5:1
HP @ RPM, NET	210 @ 5200	635 @ 6700	170 @ 3800	490 @ 7500
TORQUE @ RPM	255 @ 3600	510 @ 4000	270 @ 2400	360 @ 4900
CARBURETION	1-4V	1-4V	1-4V	1-4V
DRIVELINE				
TRANSMISSION	3-SPEED AUTO	4-SPEED MANUAL	3-SPEED AUTO	4-SPEED MANUAL
GEAR RATIOS	2.52:1	2.20:1	2.52:1	2.20:1
1ST	1.52:1	1.64:1	1.52:1	1.64:1
2ND	1.00:1	1.28:1	1.00:1	1.28:1
3RD	NA	1.00:1	NA	1.00:1
4TH	3.55:1	3.55:1	3.08:1	4.33:1
DRIVING WHEELS	REAR	REAR	REAR	REAR
GENERAL				
WHEELBASE, INS.	98.0	98.0	108.0	108.0
OVERALL LENGTH	185.2	174.0	195.4	186.0
WIDTH	69.0	69.2	74.4	84.0
HEIGHT	48.0	48.0	49.2	48.5
FRONT TRACK	58.7	60.7	61.6	63.8
REAR TRACK	59.5	61.4	60.3	63.8
TRUNK CAPACITY, CU. FT.	7.8	0.0	6.4	0.0
CURB WT., LBS	3610	2870	3740	3060
DIST. FRONT/REAR, %	48/52	52/48	54/46	52/48
POWER TO WT. RATIO	17.2	4.5	22.0	6.2
BODY AND CHASSIS				
BODY/FRAME CONSTRUCTION	SEPARATE	SEPARATE	UNIBODY/F. STUB FRAME	UNIBODY/F. STUB FRAME
BRAKES, FRONT/REAR	VENTED DISC/VENTED DISC	VENTED DISC/VENTED DISC	VENTED DISC/DRUM	VENTED DISC/VENTED DISC
STEERING				
	RECIRC. BALL	RECIRC. BALL	RECIRC. BALL	RECIRC. BALL
RATIO	17.6:1	16:1	15.03:1	16:1
TURNS, LOCK TO LOCK	2.9	2.9	2.4	2.9
TURNING CIRCLE, FT.	37.0	37.0	38.5	37.0
FRONT SUSPENSION				
	INDEPENDENT, UPPER AND LOWER CONTROL ARMS, COIL SPRINGS, TUBULAR SHOCKS, ANTI-ROLL BAR	INDEPENDENT, UPPER AND LOWER CONTROL ARMS, COIL SPRINGS, ADJUSTABLE TUBULAR SHOCKS, ANTI-ROLL BAR	INDEPENDENT, UPPER AND LOWER CONTROL ARMS, COIL SPRINGS, TUBULAR SHOCKS, ANTI-ROLL BAR	INDEPENDENT, UPPER AND LOWER CONTROL ARMS, COIL SPRINGS, ADJUSTABLE TUBULAR SHOCKS, ANTI-ROLL BAR

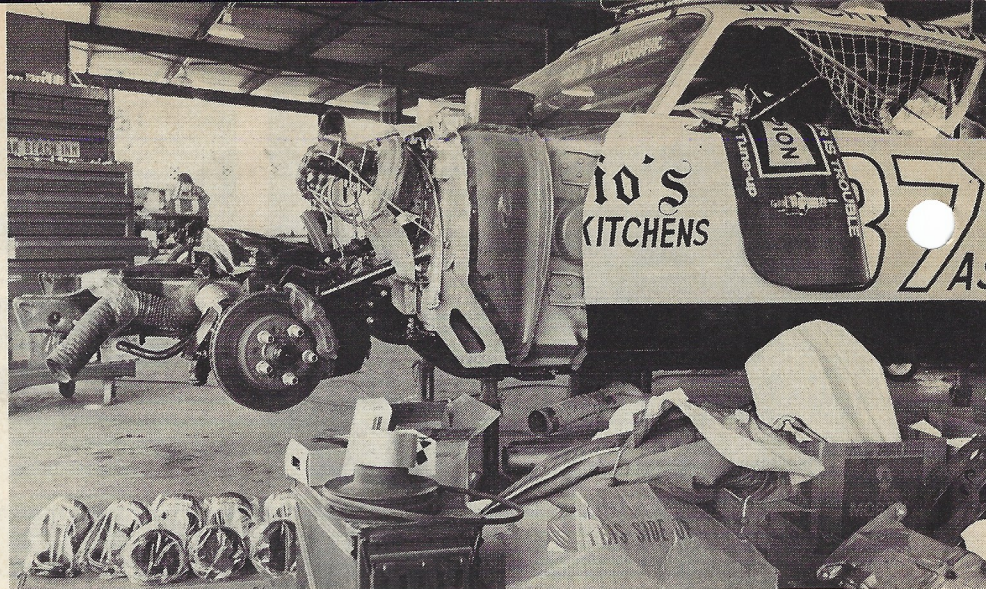


	'77 STREET CORVETTE	WEAVER CORVETTE	'77 STREET CAMARO	CRITTENDEN CAMARO
REAR SUSPENSION	INDEPENDENT, TRANSVERSE AND TRAILING ARMS, TRANSVERSE LEAF SPRING, TUBULAR SHOCKS, ANTI-ROLL BAR	INDEPENDENT, TRANSVERSE AND TRAILING ARMS, TRANSVERSE LEAF SPRING,* ADJUSTABLE TUBULAR SHOCKS	LIVE AXLE, LEAF SPRINGS, TUBULAR SHOCKS, ANTI-ROLL BAR	LIVE AXLE, LEAF SPRINGS, TUBULAR SHOCKS, ANTI-ROLL BAR, PANHARD ROD
WHEELS AND TIRES				
WHEELS	15 x 8	15 x 9.5	14 x 7	15 x 8
TIRES, FRONT/REAR	GR70 x 15B	10.5 x 24.0-15/13.0 x 27.0-15 (FIRESTONE)	FR78 x 14B	10.0 x 25.0-15/11.5 x 27.0-15 (GOODYEAR)
INSTRUMENTATION				
INSTRUMENTS	SPEEDOMETER, TACHOMETER, VOLTMETER, TEMP, OIL PRESS, FUEL LEVEL	10,000 RPM TACH, OIL PRESS, OIL TEMP, WATER TEMP, DIFF/TRANS TEMP, FUEL PRESS, AMMETER	SPEEDOMETER FUEL LEVEL	10,000 RPM TACH, OIL PRESS, OIL TEMP, WATER TEMP, AMMETER, FUEL PUMPS, IGNITION, WIPERS TAILLIGHTS, BLOWER
WARNING LIGHTS	DIRECTIONALS, HIGH BEAM, HAZARDS SEAT BELTS, BRAKES		GENERATOR, TEMP OIL PRESS, DIRECTIONALS HIGH BEAM, HAZARDS SEAT BELTS, BRAKES	
PRICE				
CHASSIS/BODY		\$16,000		\$20,000
ENGINE		5,500		5,000
TOTAL	\$9,852 (INCLUDES GYMKHANA SUSPENSION, AM/FM, HD BATT, L82 ENGINE, AUTO TRANS, ALUM WHEELS)	\$21,500	5,359 (INCLUDES LT OPTION, SPOILERS, F41 SUSPENSION, 14 x 7 WHEELS, AM/FM, RWL TIRES, LM 1 ENGINE, AUTO TRANS.)	\$25,000
TEST RESULTS				
ACCELERATION, SEC.				
0-30	3.0	1.8	3.2	1.9
40	4.6	2.7	4.7	2.8
50	5.8	3.4	6.6	3.4
60	7.3	4.0	8.6	4.0
70	9.7	5.1	11.7	5.3
80	11.7	6.3	15.2	6.7
90	NOT TESTED	7.6	NOT TESTED	8.6
100	NOT TESTED	9.0	NOT TESTED	11.0
SPEEDS IN GEARS, MPH				
1ST	(5600 RPM) 58	(7000 RPM) 72	(4200 RPM) 40	(8000 RPM) 66
2ND	(5600 RPM) 90	(7000 RPM) 67	(4200 RPM) 67	(8000 RPM) 90
3RD	(5200 RPM) 121	(7000 RPM) 123	(4200 RPM) 111	(8000 RPM) 115
4TH	NA	(7000 RPM) 157	NA	(8000 RPM) 143
ENGINE REVS @ 70 MPH	3000	3120	2900	3900

completely torn down. It turned out that the block was cracked, so it was replaced and the engine rebuilt on Friday. With only a few qualifying laps on a slightly sick engine he had been gridded fourth fastest and, like Weaver, was planning to win. But Saturday had brought heavy rainstorms and the crew was late in getting Crittenden's Camaro to the grid after changing to rain tires, forfeiting his fourth-place starting position. Nevertheless, he had driven quickly and steadily through the pouring rain to work his way into second at the flag—and the car was still in fine shape for our test.

Our third major problem was the test facility itself and the equipment we would have to use—or lack of it. Since the data had to be gathered at Road Atlanta, and on Monday morning only without the benefit of sophisticated test equipment, we decided to limit our experiments to three basic types: acceleration, skidpad and driving impressions on the 2.5-mile road course.

Road Atlanta's back "straight" is no drag strip—it's not very straight and its definitely not flat—but we were able to use a section that began with a slight downhill slope and then turned slightly uphill so that gravity effects were very nearly canceled out. Using gear ratios and tire diameters, we determined the rpm corresponding to 60 and 100 mph and based our acceleration figures on observed stopwatch measurements to those points, riding in the car to read the watch. Other



Undressed: Jim Crittenden's Camaro

acceleration data was extrapolated from the curve through those two points and zero.

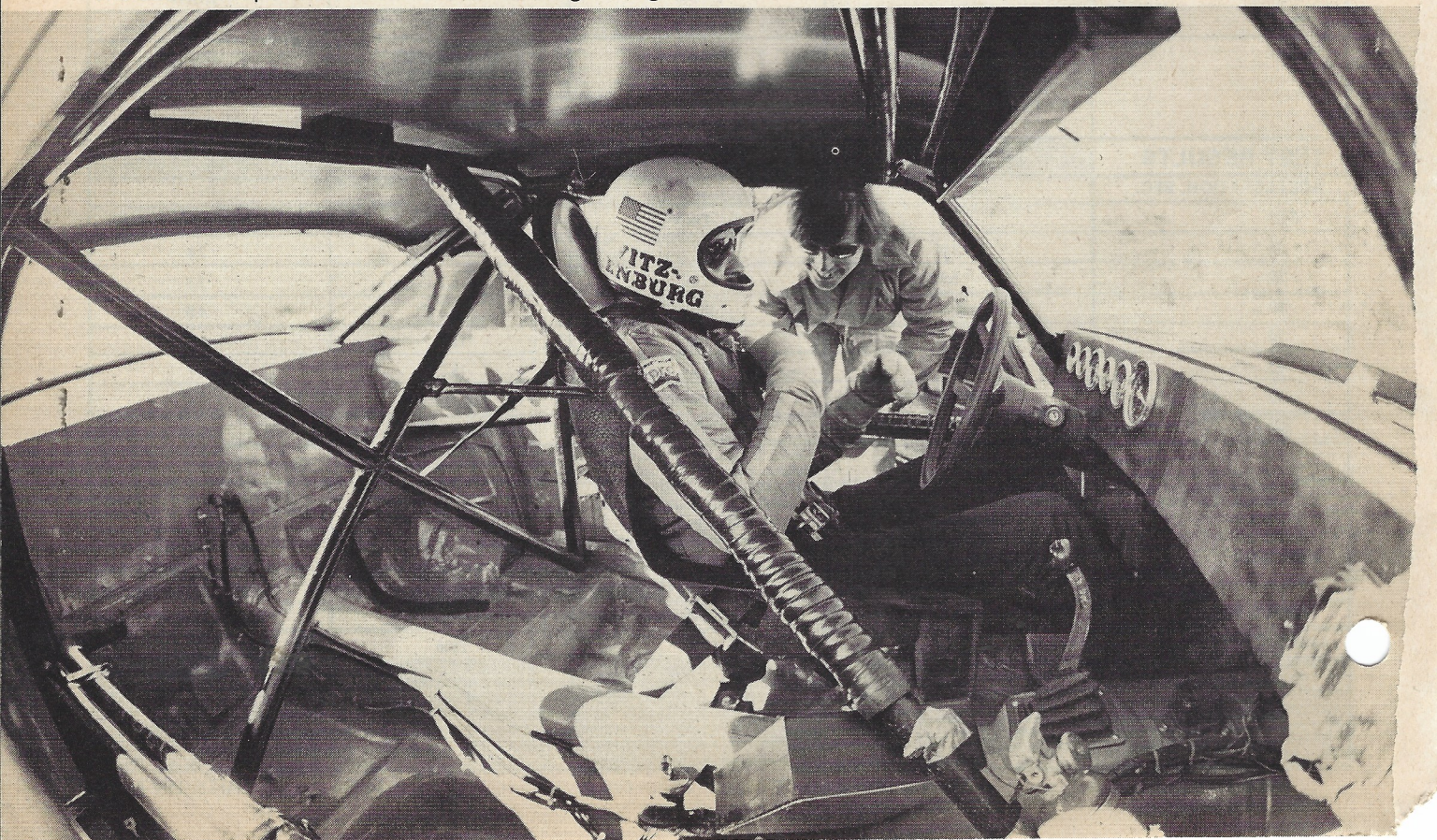
Road racing cars are not meant for accelerating out of the "hole." They're generally geared much taller, use harder, stiffer tires and have different weight distribution than drag-prepared machines, making getting off the line difficult without either bogging the engine or spinning the tires hopelessly. Nevertheless, our intrepid drivers made a couple of practice starts and three timed runs apiece, setting some pretty impressive "two-aboard" times in the process.

Weaver's Corvette had a tendency to jump sideways off the line, then spin its wheels stubbornly while he modulated the throttle trying for traction. Finally it would

grab and surge forward with acceleration so mind-bending it was difficult to stay in the car, much less read the watch. Sixty mph was attained in a stunning 3.8 seconds on the first run, 3.9 the second and 4.2 on the third, while 100 mph came up in 9.6, 8.9 and 8.7 seconds as the progressively hotter rear tires became more difficult to get off the line but apparently stuck better once they got rolling.

The high-revving small-block Camaro was more stable coming out but tended to spin its tires even more than the 'Vette. Crittenden's 0-60 times were 4.0, 3.8 and 4.3 seconds, while 0-100 took 11.0, 11.8 and a very respectable 10.0 seconds as the tires heated up. Averaging the runs, the 460 cid Corvette with a 3.55:1 axle did 0-60 in 4.0 seconds and 0-100 in 9.1. The

The author straps into the Camaro for an enlightening ride.

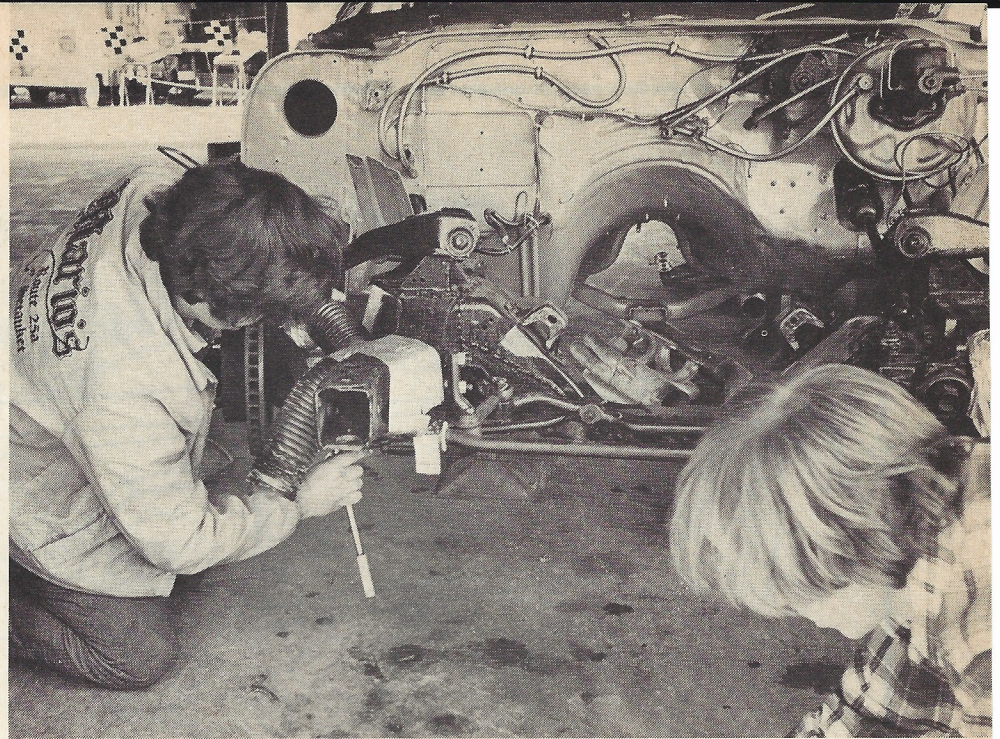


averages for the 302 cid, 4.33:1 axle Camaro were 0-60 in 4.0 seconds and 0-100 in 10.9.

Next we took a couple of laps around the fast and winding Road Atlanta course to see how each car felt at speed. As expected, there were marked differences. The incredibly powerful Corvette is allowed 9.5-inch wheels front and rear by SCCA production car rules, and the chassis is just not up to the power its engine puts out. It understeers slightly in tight turns but oversteers under almost all other conditions. Power must be applied very smoothly to prevent the thing from twitching violently sideways in spite of the adjustable 15/16", front sway bar and the lack of a rear one. IMSA racing Corvettes can use much larger wheels and tires and modified suspension geometry to better match power to traction, but it takes a brave and highly skilled man to go fast in an A-Production SCCA car.

The Camaro seemed less of a handful and more of a pleasure to drive. With only eight-inch wheels but much less low-end torque, it responded to throttle pressure through the turns with lovely and controllable drifts, going precisely where it was pointed with great precision and a minimum of fuss. The brakes were also terrific, and we quickly got the feeling that a few more laps in the pony car would have seen us cutting pretty respectable times.

Then we were off to the skidpad, a 75-ft. radius circle in Road Atlanta's lower paddock, which had just been cleared of nuts, bolts, beer cans and spent spark plugs accumulated the week before. This circle was a bit tight for race cars with locked rear axles and big, cold racing tires. Both cars tended to understeer off the circle and both managed roughly 10-second circuits in both directions. Average for three laps



Crittenden's crew getting involved in some of the glamour of racing.

was 9.7 sec. clockwise and 9.9 sec. counter-clockwise for the Corvette, and 9.9 sec. clockwise and counter-clockwise for the Camaro. This translates to lateral g figures of 0.96 for the Corvette and 0.94 for the Camaro.

What all those numbers mean in relation to street Corvettes and Camaros is not at all obvious by simply comparing the charts. The no-holds-barred racers are obviously many times more powerful and exponentially faster than their more mundane street counterparts, but the real surprise is in how they felt once you adjusted for the power and speed.

Both the Corvette and Camaro basically retained the feel of their lineage; despite being stripped-down combat-ready racers, there's no way you could imagine yourself in a Datsun or Ferrari. Of the two, the

Crittenden Camaro's ease of driving made it seem less radical, but a quick glance at its phenomenal acceleration and cornering prowess will dispel any illusions about its ultimate muscle.

Road racing is a very specialized form of motorsport, something not always appreciated by street racers. *Real* racers are made to go as fast as possible through every kind of corner, slow and fast, uphill and down, and to top out in high gear at the end of each course's longest straight. They would be as out of place in the McDonald's parking lot as your average street Camaro would be in Road Atlanta's Turn Four.

But as race cars to emulate, a street driver could do a whole lot worse than Weaver's Corvette or Crittenden's Camaro. ■

The impressive engine room and office of Weaver's Corvette.

