Text and photos by A. B. Shuman

A Date With Three Strippers

Come with us down to where the smoke and lights are and meet a trio of tantalizing terpsichoreans — the Chevelle SS 454, Torino Cobra and the Road Runner 440 6-bbl.

Coming of age in America — 1970: tooling down to the local Big Boy in your shiny, new iron. Ergo, the SUPERCAR. But it's not just for kids. These gutsy intermediates are available with just enough velvet to capture the imagination of the briefcase gang as well. And that's their insurance; their ace in the hole. Even the establishment digs groovy cars ... for now, anyway. This year, they've continued to flourish and thrive, with ever-bigger engines, better handling, enough options to choke a memory bank and an abundance of gimmickry to amuse and delight this jaded old world.

IT WAS A GOOD PLAN, BUT . . .

As originally conceived, this was to be a no-holds-barred showdown between three comparably-equipped examples of the Supercar genre — a 360-hp SS 454 Chevelle, a 370-hp Drag Pack 429 Torino Cobra and a 390-hp 440 6-bbl. GTX, all with automatic transmissions, power steering and brakes, and gear ratios in the vicinity of 4:1. But logistics intervened and the grand design crumbled. We got our cars in mid-October, when new model demand was at a peak, with the result that we had to take what was available.

The Chevelle was fitted with a 450-hp 454-cubic-inch engine, alluded to by the computer as an LS-6 (that's LS as in Land Speed Record), Turbo Hydra-Matic transmission, 3.31:1 Positraction rear axle, F70x14 Firestone Wide Ovals and Cowl Induction hood. In addition, it had variable-ratio power steering and the SS 454 chassis and styling package, including power disc front/finned drum rear brakes, performance suspension with front and rear anti-sway bars, and 14 x 7 wheels. The engine breathes deeply through an 800 cfm Holley on an aluminum intake manifold, with valve action controlled by a .500-inch lift mechanical lifter camshaft. The heads are cast iron, but use large ZL-1 exhaust valves. This engine, as well as the 396 (which is actually a 402 this year), must be ordered with either a four-speed manual or Turbo Hydra-Matic transmission in the Chevelle. Our Turbo Hydro made full throttle upshifts at about 5200 rpm, but by shifting manually at 6000 we were able to improve our quarter-mile speeds and elapsed times. It's a very smooth shifting transmission, yet it's quite positive. The optional Cowl Induction hood is basically a rearward facing scoop, with vacuum-actuated internal flapper that picks up fresh air from the relatively high pressure area at the base of the windshield. There is an external trap door on the top of the scoop, but it's only for appearance sake (though it does tilt upward when the "real" one is working).

The Torino Cobra was the biggest

continued

of our trio of strip trippers, having gained a two-inch increase in tread width for '70 to allow shoehorning in the 429 CID canted valve head engine. Wheelbase was also increased by an inch (to 117) and overall length is 206.2 inches, up five (all in front) from last year. Our Cobra was equipped with the non-Drag Pack 370-hp Cobra Jet 429 with Shaker Scoop, SelectShift Cruise-O-Matic, 3.50:1 Traction-Lok rear axle, Competition Suspension, G78x14 fiberglass belted tires (though subsequent cars will have rayon belted tires), power steering, power front disc brakes and air conditioning, adding up to a test weight of just over 4000 pounds with our fifth wheel. The belt for the air conditioning compressor was removed for our tests to prevent damage. (Air conditioning is not available with anything higher numerically than a 3.25:1 rear axle, which our car originally had. The ratio was changed to 3.50:1 to give more representative performance.)

The various permutations of the 429 engine were discussed in the November issue, but there have been a few changes since then. To recapitulate briefly, the base engine is the 360-hp 429-4V, standard in the Torino Cobra. One step up is the 370-hp 429 Cobra, with hydraulic lifter camshaft, Rochester four barrel and big valves. The 429 Cobra Jet, also rated at 370-hp, is identical to the 429 Cobra, but has a functional ram air scoop. All of this has remained unchanged; however, the so-called "Super Cobra Jet," the beefed-up, top-of-the-line non-hemi 429 (also rated at 370 hp), is now referred to as the Drag Pack 429 Cobra Jet. It features a solid lifter cam, Holley carburetor, forged aluminum pistons, special connecting rods and an oil cooler. The Drag Pack option also includes a 3.91 or 4.30:1 gear ratio. Additionally, as of now, only Drag Pack Cobra Jets (i.e., ram air 429s) will be offered, whereas the Drag Pack was initially available with the non-ram Cobras as well. This may all sound very confusing, but it's infinitely easier to understand this way than it was previously.

At any rate, our test car had the "regular" 429 Cobra Jet, with hydraulic cam and Quadrajet carburetor. Its Select-Shift automatic, if placed in "D," will make full throttle upshifts at 5100 rpm. If the selector is placed in "2," the car will start in second gear, which could save a few towing fees when the snow flies. The shifting, especially when the transmission kicks down into second, is smooth, yet firm. For manual shifting, best results are achieved by moving the selector as the tach reaches 5400 rpm, with the engine gaining only about 100 rpm more before the shift is completed. There's no point to pushing the engine any higher, due to the design of the camshaft and the airflow capacity of the carburetor. The Competition Suspension package is included on all Torinos with other than the base 429-4V engine. It includes high rate front and rear springs (500 pounds per inch on the front, 210 pounds per inch rear), 1 3/16" Gabriel shocks fore and aft, and a .95-inch diameter front stabilizer bar (compared to the .75-inch standard bar). On cars with four-speed transmissions, the rear shocks are staggered, one ahead of the axle, one behind, a drag racing trick.

Rounding out the field was the new Road Runner. *New*, because it's no longer just a stripped-down Belvedere with a big engine and heavy suspension. The window sticker on our hardtop started out at $3034 and totalled out at $4417 delivered. Included in the list of equipment: 440 6-bbl. engine, four-speed manual transmission, Super Track Pak, Air Grabber, F60x15 Polyglas GT tires and vinyl buckets. (Normally we wouldn't mention that last item, but these are worthy of note, as they are exceptionally well-designed.) A Track Pak or Super Track Pak is mandatory with 440s and Hemis ordered with four-speed manual transmissions. The Super Track Pak includes a Hurst shifter with pistol grip handle, 4.10:1 Sure Grip rear axle, power disc brakes, dual point distributor, seven-blade Torque Drive fan and high performance radiator.

The engine is rated at 390 hp at 4700 rpm and carries three Holley two-barrel carbs. These carburetors were designed specifically for this setup and shouldn't be confused with the new Holley 500 cfm two barrel. Actually, their combined air flow capacity is about 1100 cfm, with the center carburetor being smaller than the outboard two. Idling and normal cruising is handled by the center jug, simplifying the emissions situation, with the auxiliary carburetors coming in "when needed," determined by engine vacuum. Vacuum actuation results in a smoother application of power and works out better than a mechanical linkage the vast majority of the time. The Road Runner's particular brand of fresh air delivery system is the Air Grabber, a flip-up trap door/scoop which is controlled by an under-dashboard switch. The sides of the Grabber, which is timed to come up within the interval of a stop light, is illuminated with the same eyes and teeth that distinguished the Flying Tigers' P-40's back in WW II. When not in use, it lies flush with the top of the domed hood, away from prying eyes and fingers.

PERFORMANCE

The massive 450-hp engine in the Chevelle *had* to come out as top dog in our forays on the quarter-mile. Even with the 3.31 rear axle it proved strong enough to produce a best elapsed time of 13.8 seconds (this, as in all of our tests, was with two people aboard and a fifth wheel on the back). The key to getting good times was the start, as it was easy to lose over a second due to excessive wheelspin. Best results were obtained by rolling out at idle and smoothly applying more throttle as the car moved out, shifting the transmission manually at 6000 rpm. Running the quarter in "Drive" resulted in times in the 14.5-second area. All runs were 15.0 seconds or better and speeds ran between 96.0 and 97.5 mph, a little lower than expected. The engine runs clean and strong all through the rpm range and gives no evidence of any strain even at 6000. It's a runner.

The engine in the Torino was the mildest of the three tested, yet the car had the quickest 0-30, 0-45 and 0-75 times, and matched the Chevelle's six seconds to 60 mph. It also ran the highest quarter-mile speed, 100.2, a fact which is even stranger in view of its weight. The weight obviously helped traction, as it was fairly easy to accelerate away from a standing start with only a modicum of wheelspin, but that same weight should have cut down the top end speed. Maybe this "shaped by the wind" thing is for real. Again, manually shifting the automatic gave the best results, with the slowest drag strip run being at 14.8 and the best a 14.5. Speeds ranged between 95.4 and 100.2, the majority being in the 99.5 mph bracket through the traps on top end.

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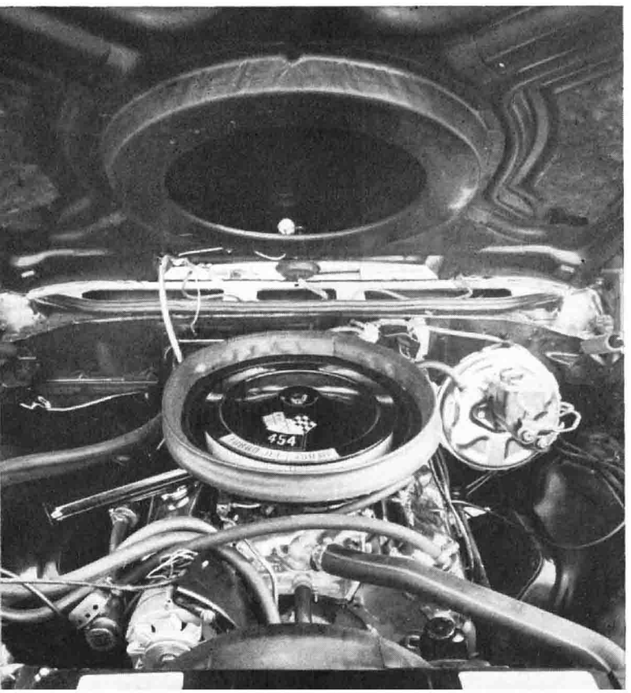
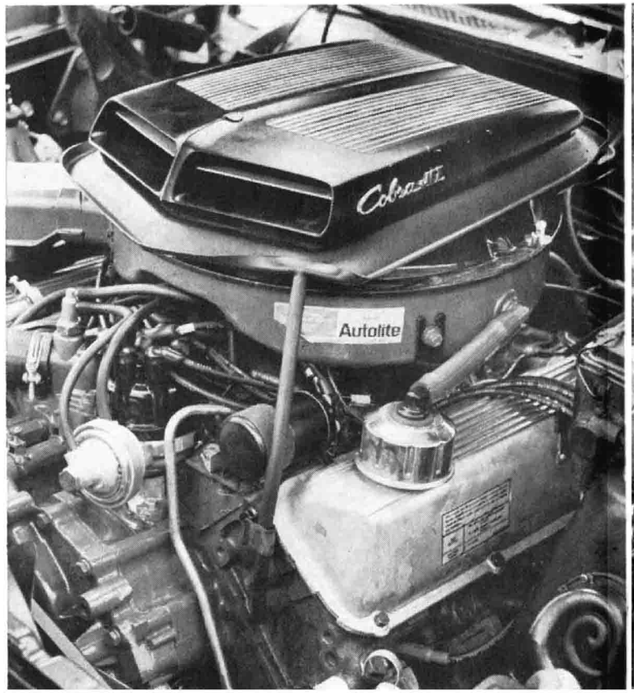
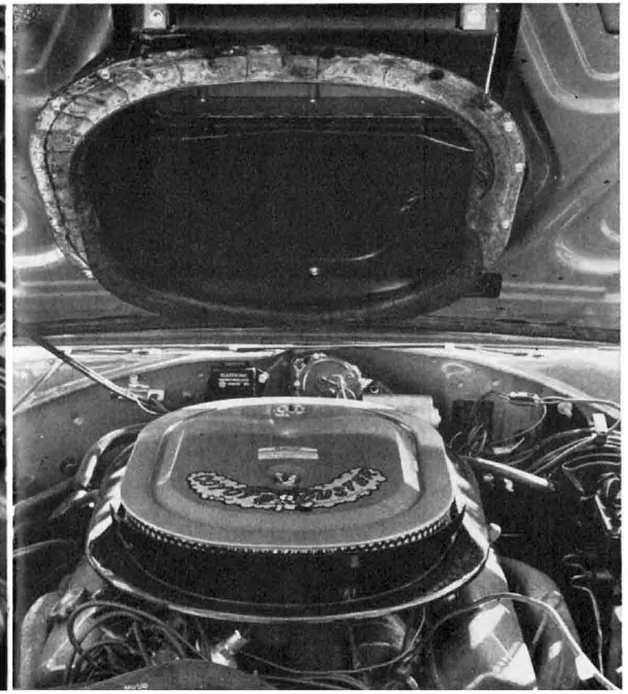
"...they were loaded with the creature comforts you usually don't associate with the breed. Could be were getting into a new bag—the mature Supercar."



450 horsepower from 454 cubic inches! That goes back to the old magical, mystery one-pound-per-cubic-inch barrier. Of course, Chevrolet would have to have it. Like the way their engine compartments seem to be uncluttered, too.

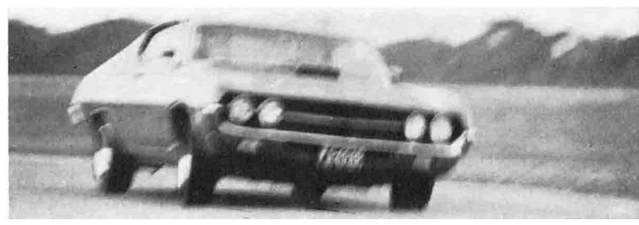


While Ford mills are less mighty, they also seem to be rammed into the car and randomly covered with wires and hoses. Things like spark plugs accessibility is too grim to be part of a high performance car. Shaker hood is great.



In the meantime, Chrysler is learning. The Road Runner compartment is a good backdrop for the engine and only a couple of the plugs are hard to get at. Progressive carburetor linkage saves gas mileage from total disaster.

Nurtured by the evolution of the Z-28, the Chevelles, even the big ones, dart like whippets through the tightest turns.



Unlike the other two, the Torino came around the bends in what amounted to a "confidence inspiring power slide."

On the other hand, the Road Runner tended to understeer at low speeds. Lack of power steering builds strong arms.

THREE STRIPPERS

continued

The combination of four-speed transmission and 4.10 rear axle should have given the Road Runner an edge on the drag strip, but traction and difficulty in shifting cancelled out any potential advantage. On the day we took the car to Irwindale Raceway, the wind had blown a light coating of sand onto the track surface. Even with those giant 8½-inch-wide Polyglas GTs, it was possible to take off from an idle and spin the tires all the way through first and most of second gear. The shifter, which has a familiar feel to anyone who's ever flown a fighter, is virtually indestructible, but proved hard to shift. Shifting effort is moderate for normal gear changes, but it increases abruptly with any attempt to speed-shift. This seemed unusual in view of Plymouth's efforts to improve shifting

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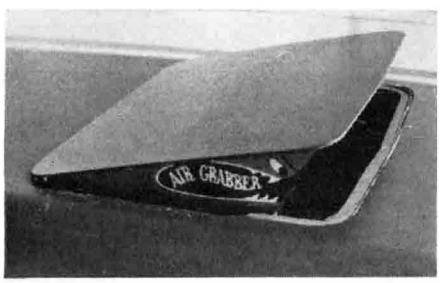
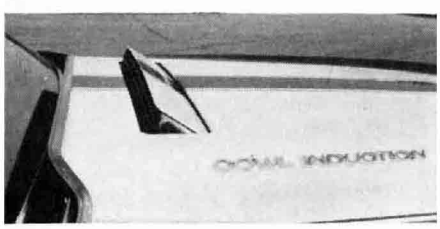


Hair, Teeth and Eyes

Good Vibrations



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SPECIFICATIONS

	CHEVELLE	TORINO	ROAD RUNNER
Engine	90° OHV V8	90° OHV V8	90° OHV V8
Bore & Stroke — ins.	4.25 x 4.00	4.36 x 3.59	4.32 x 3.75
Displacement — cu. in.	454	429	440
HP @ RPM	450 @ 5600	370 @ 5400	390 @ 4700
Torque: lbs.-ft. @ rpm	500 @ 3600	450 @ 3400	490 @ 3200
Compression Ratio	11:1	11.3:1	10.5:1
Carburetion	1 4-bbl.	1 4-bbl.	3 2-bbl.
Transmission	Automatic	Automatic	4-speed manual
Final Drive Ratio	3.31:1	3.50:1	4.10:1
Steering Type	Power, Variable-Ratio	Power	Power
Steering Ratio	18.7:1-12.4:1	20.6:1	28.8:1
Turning Diameter (Curb-to-curb-ft.)	42.0	42.8	40.6
Wheel Turns (lock-to-lock)	2.9	3.5	5.3
Tire Size	F70x14	G78x14	F60x15
Brakes	Power front disc, drum rear	Power front disc, drum rear	Power front disc, drum rear
Front Suspension	Independent, coil springs	Independent, coil springs, strut stabilized lower arms	Torsion bars
Rear Suspension	Linked; Salisbury axle fixed by control arms	Hotchkiss, semi-elliptic spring	Parallel, semi-elliptic spring
Body/Frame Construction	Welded perimeter with crossmembers	Unitized Frame	Unitized
Wheelbase — ins.	112.0	117.0	116.0
Overall Length — ins.	197.2	206.2	203.8
Width — ins.	75.4	76.8	76.4
Height — ins.	52.8	51.0	53.0
Front Track — ins.	61.3	60.5	59.9
Rear Track — ins.	60.3	60.0	59.2
Test Weight — lbs.	N.A.	4002	3935
Fuel Capacity — gals.	20.0	22.0 (20.0-Calif.)	19.0
Oil Capacity — qts.	5	5	5

PERFORMANCE

Acceleration			
0-30 mph	2.8 secs.	2.6 secs.	2.8 secs.
0-45 mph	4.3 secs.	4.2 secs.	4.7 secs.
0-60 mph	6.0 secs.	6.0 secs.	6.6 secs.
0-75 mph	9.0 secs.	8.8 secs.	9.2 secs.
Standing Start ¼-Mile	13.8 secs. 97.5 mph	14.5 secs. 100.2 mph	*14.4 secs. 99.0 mph
Passing Speeds			
40-60 mph	3.0 secs.	3.2 secs.	2.8 secs.
50-70 mph	3.7 secs.	3.5 secs.	3.2 secs.
Speeds in Gears			
1st ...mph @ rpm	55 @ 6000	48 @ 5400	31 @ 4700
2nd ...mph @ rpm	91.5 @ 6000	82 @ 5400	43 @ 4700
3rd ...mph @ rpm	100 @ 4400	100 @ 4500	60 @ 4700
4th ...mph @ rpm			85 @ 4700
MPH Per 1000 rpm (in top gear)	22.7	22.2	18.1
Stopping Distances			
From 30 mph	23.4 ft.	26.0 ft.	26.1 ft.
From 60 mph	118.6 ft.	128.0 ft.	125.5 ft.

*14.06/101.69 after tune

THREE STRIPPERS
continued

in their '70 cars, including internal changes to the transmissions. Of course, our Road Runner was just barely broken-in and perhaps the shifting will become freer with time. Owner reports say that shifting is usually no problem.

The optional factory tachometer is red-lined at 5000 rpm, but we stretched the shift points to 5400 rpm with no apparent adverse effects. At any rate, the car was going through the traps at the end of the quarter at close to 5500 in top gear, turning 99 mph. This gearing is obviously not very practical for the street, as the engine is turning over 3800 rpm at 70 mph. A better choice for all-around use would be the 3.54 option. Despite the traction and shifting problems, the Tor-Red Road Runner ran consistent mid-14 second quarters, with a best of 14.4 and a worst of 15.1. The speeds ranged between 94 and 99 mph. The car did have the best passing speeds, taking only 2.8 seconds to get from 40 to 60 mph and 3.2 to make it from 50 to 70, both in third gear. (For comparison, 50-70 in fourth gear was 3.9 seconds.) We made comparison runs with and without the Air Grabber deployed and found it cut 0-30 and 0-45 times significantly, but we couldn't detect any difference in the quarter.

HANDLING AND BRAKING

The Chevelle has the type of handling (and the performance to go with it) that makes you want to go flat-out into hard corners. It really sticks to the road, though there is a tendency to over-correct if you're not used to the variable-ratio power steering.The Road Runner, on the other hand, tends to understeer at low speeds, but you can put it into a turn, set the attitude and just hang in there, being quite comfortable at relatively high speeds. The Torino is completely different: The car goes through tight turns in a confidence-inspiring controlled slide. It's all very smooth ... and unusual. The lack of power steering on our Road Runner, combined with the wide tires, made parking a chore to say the least. Power steering with any of these big-engined cars would be a good thing.

The same forward weight bias that makes power steering a necessity also contributes to a tendency for the rear end to come around on hard braking, most noticeably in panic stops from 60 mph and above. All three cars exhibited this trait, but it was most pronounced on the Road Runner, though its stopping distances were good.

OBSERVATIONS

The Chevelle we tested was a prototype, basically an SS 396 with a bigger engine. Regular SS 454 production may have already started as you read this, but, as of now, the beginning date for LS-6 Chevelles is uncertain. Our guess is the first of the year. The car was a ball to drive because of the engine response and improved (over last year) suspension. Even though it was equipped with a mechanical lifter cam, engine noise at cruising speeds was low, due to the 3.31 rear axle. The Torino was even quieter, though a Drag Pack version (with mechanical cam and 3.91 gears) which we drove, was very noisy, giving the impression that you were somehow still in second gear instead of high at anything over 50 mph. The Road Runner was just plain turning a lot of "r's" at turnpike speeds, but the noise level really wasn't excessive. One thing — you didn't have to boot it to get it to jump at speeds of 60 mph and above; a little tickle with the toe was all that was needed.

As mentioned before, the Road Runner's bucket seats are tops, giving good lateral support, and are certainly preferable to the bench seat. The Ford seemed to have the best quality control in regards to interior and exterior finish overall, though it is difficult to generalize from such a limited sampling. Likewise, it isn't fair to pick any one of these cars as being better than the other two, because of the wide variance in engines and options, but we couldn't help but be impressed by the Chevelle. It was certainly the strongest — the most super — of the three, but we didn't have it long enough to determine how much work it would take to maintain its tune. Neither did we get a chance to drive it in heavy traffic, or even establish representative gas mileage figures. The Torino seemed to be the easiest to live with, though its hugesque dimensions made it difficult to park. Not that it requires a tugboat to get you into a berth, it's just a big car. The Road Runner was the closest thing to a strictly drag strip machine. The addition of power steering and a switch to a more realistic gear ratio would do wonders for its day-to-day driveability.

We were a bit concerned over our particular test car's performance compared to what other similarly-equipped Road Runners are doing, so we had the engine checked-out after our bout on the drag strip. Mopar expert Norm Thatcher diagnosed the problem as sticky valves and lifters, which he cured. He also richened the center carburetor and reset the ignition timing.

Going back out to the strip, we decided to employ a few of the drag racer's tricks: we pumped up the rear tire pressure to 35 psi (Polyglas tires give better traction with higher pressure) and loosened the fan belt. These are things the average owner could and would do. The cumulative effect was evident, with the car running a best elapsed time af 14.06 and a best speed of 101.6 in the quarter. There was a noticeable improvement in performance in the higher rpm range, thanks to Thatcher's tuning.

All three of the vehicles tested had, to varying degrees, the performance, handling and braking that you'd expect from a *Supercar*, but they were also loaded with the creature comforts you don't usually associate with the breed. Could be we're getting into a new bag — the mature Supercar. /MT