



• CAR OF THE YEAR!
TORONADO
CROSS-COUNTRY
ROAD TEST

by John Ethridge, Technical Editor

In conducting this 1966 Car of the Year road test, we chalked up one of our most memorable experiences with automobiles. We found that merely being custodian of a car that attracts so much attention did wonders for our ego. Too, the Toronado kindled and maintained our enthusiasm at a high level through what would otherwise have been boring parts of the trip. But you'll see we somehow managed to get ourselves into a very trying situation, as if something were needed to break the monotony, that made the occasion even more unforgettable.



TORONADO REMAINED FRESH AND FIT AFTER 20-MILE POUNDING ON UNPAVED MOUNTAIN ROAD. TRACTION AND HANDLING WERE OUTSTANDING.

PHOTOS BY BOB D'OLIVO, DARRYL NOREBERG

TORONADO



WE CREST RUGGED INDEPENDENCE PASS, 12,095 FEET ABOVE SEA LEVEL — THE SHORT BUT DIFFICULT WAY TO ASPEN, COLO., SKI RESORT.



Water temperature scarcely rose during long climbs up grades.



Tornado garnered its share of attention wherever we took it.

FROM THE MOMENT we drove out the the gates of GM's Milford, Mich., proving grounds and headed west, the Tornado was the center of attention nearly everywhere we went. We were as interested in trying the car in the varied climate and conditions between Michigan and California as in gathering comments and reactions from people along the way. Details on the car had just been released to the daily press, but Toronados wouldn't appear in showrooms until some 3 weeks later.

The mere sight of the Tornado had an electric effect upon some motorists we'd overtake or meet. The typical driver would let us pass and pull away a short distance, while he digested what he'd seen. Then suddenly he'd accelerate, overtake, and seesaw back and forth by us several times while he checked the nameplate and thoroughly looked us over. After satisfying themselves, most would resume their normal speed, but others would blast past us and off into the distance. This, perhaps, was some form of one-upmanship. More likely, however, they were trying to restore a shaken confidence in their own cars, which suddenly seemed obsolete.

More than once we noticed that a driver traveling in the opposite direction through town would make a quick and sometimes illegal U-turn, then madly pursue us through traffic for a better look. One Cadillac driver we met on the open highway in Kansas was so engrossed by the sight that

he wandered onto the shoulder, sending up a spray of dirt and gravel. (To the best of our knowledge, however, no one suffered any damage because of our presence during the whole trip.)

By far and away the most-asked question after finding out the name of the car was: "Do you notice anything strange or peculiar when driving because of the front-wheel drive?" The answer was always: "No, none whatever when driving normally. Only when going very fast through tight corners is there any clue to the fact that it's a fwd car. Then the front wheels first make chirping noises as they break traction under power. More than likely, if you got into the car and drove it without being told it was fwd, you may never discover it's anything out of the ordinary."

Second most-asked question was spread pretty evenly between gas mileage and price. We don't recall anyone asking if the absence of vent panes affected passenger comfort. A surprising number of people we talked to were pre-sold on fwd as being a good thing. Quite a few were fairly well informed on the subject ("I understand they're very good on snow and in gusty winds"). But most surprising of all is that we've yet to meet one who claimed, "It's no good. They tried it before and couldn't make it work, and it won't work now." The closest things to skeptics that we found were those who had a wait-and-see attitude.

The reaction to the Tornado's styling was one of uni-



We had tough time keeping curious sight-seers away long enough to snap this shot.



Street scene in historical mining town of Leadville, Colo., recalls many past grand-deers. But Baby Doe Tabor in her heyday never had anything to match our Torino.

versal and unqualified approval. Only one person asked if the car were American or foreign, the vast majority immediately sensing that it came from this side of the water.

In most sections of the country between Milford and Los Angeles, people were free with questions about the Torino. Nearly all the inquiries were intelligent, but the ones we heard in larger cities, especially in the West, reflected more automotive savvy. The Kansas farm towns provided the most disinterested set of onlookers we found anywhere. Here, middle-aged and older folk seemed not to care at all. The younger set were content to look from a distance, not asking any questions. Perhaps this was all due to shyness. We left with the distinct feeling that nothing less than a Torino painted bright yellow and labeled JOHN DEERE in green letters would break the ice here.

Ever since we'd seen a film clip of a pre-production Tor-

onado tearing up a snowy hill, leaving all else behind, we've had a desire to try it ourselves. It was with this end in mind that we pushed on (*pulled on* probably being a more suitable term for a fwd car) into the Colorado Rockies in search of the white stuff. Our quest brought us to altitudes over 12,000 feet, but to no avail. Unseasonable heat had melted recent snowfall in most places. The closest we came was seeing old snow across a ravine along the road, but with no way to drive on it.

Though foiled in our attempts to find snow, the high altitudes enabled us to make several interesting observations. Because the headlamps use vacuum power to open and close, they required considerably more time to cycle at high altitudes. The reason becomes clear when you remember that "vacuum power" is nothing more than atmospheric pressure operating against an evacuated chamber.



ADVANCED AS IT IS, TORONADO NEEDS GAS TO RUN — SAME AS ORDINARY CARS. HERE WE MAKE IT THE HARD WAY INTO MEXICAN HAT, UTAH.



THIS IS HOW TO MAKE IT THE EASY WAY INTO DOWNTOWN LAS VEGAS. EVEN HERE, TORONADO STOLE SHOW FROM ONE-ARMED BANDITS, NEONS.

Thus in high altitudes, where the pressure's less, there's less force available for doing work in a vacuum setup.

Also at altitudes above 10,000 feet, engine power dropped to a mere shadow of what it was nearer sea level. Even so, we had no trouble overtaking and passing during our sortie through the high mountains.

Due to a combination of poor planning and a headwind, we pushed (the correct word, this time) into Mexican Hat, Utah, with a dry fuel tank. We'd been stopping and turning around or backing up for photographs on several occasions since gassing up for that leg, using more gasoline than odometer mileage indicated.

The engine hit its last lick just as we were admiring the sombrero-shaped piece of sandstone precariously perched upon a pedestal of like material, carved by the wind and the San Juan River, from which the tiny village of Mexican Hat gets its name. We shifted into neutral and let our momentum carry us over a slight rise, from which we could see a service station at the bottom of the hill about a mile away. We thought we had it made, but the car coasted to a stop anyway. The reason was apparent when we stepped out to shift into muscle drive and found we were bucking a 30-40-mph headwind. Judging from the effort it took to open the big Toronado door (window up) against the wind, we're certain we could have flung both doors open and sailed on, if only the wind had been from the opposite direction.

After gasping "gas!" and bolting down a few swallows of water that tasted like it came straight from the San Juan River (come to think of it, it probably *did*), we conducted a post-mortem to determine why we ran out of gas. Service stations are few and far between in this part of the country, so we didn't want it to happen again. We found we'd driven within a few miles of our longest distance without topping up—243.3 miles. We'd also been driving faster—nearly 75-mph average *including stops* and, naturally, got what turned out to be the poorest gas mileage for the trip—10.7 mpg.

To top it off, we could pack only 22.7 gallons into the bone-dry "24-gallon" tank. The last 2 gallons or so had to be added a squirt at a time when jouncing the rear of the car. The automatic shut-off on the pump filler hose came into play when the tank had slightly more than 20 gallons in it. Believing the tank would actually hold 24 gallons and knowing approximately what mileage we were getting, we'd been ignoring empty gauge readings. But it turned out that the gauge wasn't kidding, and we'd come close to suffering the same catastrophe several times before!

Incidentally, when coasting and pushing the car, we discovered what it was like without power assist. While requiring lots of effort, the Toronado was by no means impossible to steer. In fact, the steering was much easier than we'd imagined it would be.

As an overall evaluation of the Toronado, we can say



UNABLE TO FIND SNOW, WE TRIED SOME STEEP, SANDY GRADES, MADE IT UP OKAY, STARTLED UNKNOWNING HINTERFOLK WITH FRONT WHEELSPIN.



All controls, instruments cluster in front of driver. Perfectly flat floor allows new freedom to both driver and passengers.

TORONADO ACCESSORY PRICE LIST

Tinted body glass	\$ 19.27
Tinted windshield	28.12
Electric 4 window lifts	104.00
Deluxe seat belts	14.74
6-way power seat	94.79
Reclining seat (passenger only)	31.60
Head rests	std. 42.13
Head rests	deluxe 52.66
Vacuum trunk lid release	12.64
Vacuum door locks	44.73
Front floor mats	std. 9.90
Front floor mats	deluxe 6.25
Rear floor mats	7.29
Door edge guard molding	4.74
Rear window defroster	21.06
Air conditioning	421.28
Comfortron air conditioning	484.47
Glare-proof tilt mirror	4.43
Remote-control outside mirror	9.48
Superlift rear shock absorbers	39.49
Cruise control	89.52
Tilt and telescoping steering column	78.99
Chromium wheels and trim rings	std. 89.57
Chromium wheels and trim rings	deluxe 71.09
Trim rings (std. only)	18.43
Whitewall tires	48.76
Radial-ply oversize whitewall tires	73.72
Cornering lamps	36.86
Signal-seeker AM-FM radio	173.78
Deluxe radio	86.89
Electric antenna	29.12
Rear seat speaker	15.80
Vanity mirror, hood, trunk, & door lamps, deluxe	18.64
Vanity mirror, hood, & trunk lamps, std.	5.47
Heavy-duty engine cooling	36.86



TORONADO

continued

that it's probably the most comfortable road car conceived to date. This is based on our experience with it on all types of roads — not just super-highways. We drove it 20 miles over a winding dirt road with potholes and washboard surfaces. Dust sealing was excellent. (Here, we used the recirculation button on the air conditioner.) Handling was so superior that we had no trouble leaving other cars behind.

The fact that the Toronado uses front-wheel drive, is more stable, and handles better than any car its size is apt to overshadow its excellent ventilation/heating/air-conditioning system. We had occasion to use it in every mode of operation, and it worked flawlessly. You can get all the outside air you want without lowering the windows. It flows into and out of the passenger compartment smoothly and silently, which again can make a big difference in the way you feel at the end of a day's drive. We cruised through Nevada (no speed limit) at 90 mph. When we got to Las Vegas and lowered the window, the noise of city traffic seemed deafening by comparison.

The faults we found in the car were either minor or cropped up only under unusual circumstances. Long-legged drivers who smoke and use the seat belt furnished won't be long in discovering they can't reach the ashtray. The old standby of sports-car drivers, the beanbag ashtray, will have to do.

We found that the windscreen wipers on the test car tended to lift over 80 mph, but will stay put until 100 when the headlamps are open. (Okay, we agree, nothing but an idiot would drive that fast on wet roads.)

For the sake of the record, our test covered 2769 miles, used 3 quarts of oil (the car had only 75 miles on it when we got it), and averaged 12.3 mpg, with a best of 14.7 mpg recorded at a steady 60-65 mph.

The Toronado's a truly outstanding car, and this first model is highly perfected. We think it's destined to become a classic in its own time.

/MT

1966 TORONADO

2-door, 6-passenger hardtop

OPTIONS ON TEST CAR: Deluxe appointment package, air conditioner, power reclining seat, power windows, AM-FM radio, tinted glass, misc. access.

BASE PRICE: \$4997

PRICE AS TESTED: \$6217 (plus tax and license)

ODOMETER READING AT START OF TEST: 75 miles

RECOMMENDED ENGINE RED LINE: 5200 rpm

PERFORMANCE

ACCELERATION (2 aboard)

0-30 mph	3.4 secs.
0-45 mph	5.9 secs.
0-60 mph	9.5 secs.

PASSING TIMES AND DISTANCES

40-60 mph	5.1 secs., 372 ft.
50-70 mph	5.6 secs., 492 ft.

Standing start 1/4-mile 17.2 secs. and 82 mph

Speeds in gears @ shift points

1st	47 mph @ 5000 rpm	3rd	114 mph @ 5000 rpm
2nd	82 mph @ 5100 rpm		(observed)

Speedometer Error on Test Car

Car's speedometer reading	31	47	53	63	73	84
Weston electric speedometer	30	45	50	60	70	80

Observed mph per 1000 rpm in top gear: .23 mph

Stopping Distances—from 30 mph, 29.5 ft.; from 60 mph, 167 ft.

SPECIFICATIONS FROM MANUFACTURER

Engine

Ohv V-8
Bore: 4.126 ins.
Stroke: 3.975 ins.
Displacement: 425 cu. ins.
Compression ratio: 10.5:1
Horsepower: 385 @ 4800 rpm
Horsepower per cu. inch: 0.905
Torque: 475 lbs.-ft. @ 3200 rpm
Carburetion: 1 4-bbl.
Ignition: 12-volt coil

Driveshaft

None used

Differential

Spiral-bevel with planetary gear-set. Standard ratio: 3.21:1

Suspension

Front: Independent with transverse links, torsion bar, tubular shocks, and anti-roll bar
Rear: Beam axle with single-leaf springs and vertical and longitudinal tubular shocks.

Wheels and Tires

15x6 JK ventilated, 5-lug, steel disc wheels
8.85x15 4-ply tires

Gearbox

Turbo Hydra-Matic 3-speed; column-mounted lever

Steering

Semi-reversible recirculating ball nut, with coaxial power assist
Turning diameter: 43 ft.
Turns lock to lock: 3.4

Brakes

Hydraulic, duo-servo, with integral vacuum power assist, finned cast-iron drums
Front: 11-in. dia.x2.75 ins. wide
Rear: 11-in. dia.x2.00 ins. wide
Effective lining area: NA
Swept drum area: 328.2 sq. ins.

Body and Frame

Welded perimeter frame to rear of passenger compartment
Wheelbase: 119.0 ins.
Track: front, 63.5 ins., rear, 63.0 ins.
Overall length: 211.0 ins.
Overall width: 78.5 ins.
Overall height: 52.8 ins.
Curb weight: 4800 lbs.