Toyota Corona SR & Celica GT 5-Speeds, Datsun 710, American Matador Road Tests

MARCH 1974

UK 35p

SWEDEN KR. 7.00 INKL. MOMS

ONE DOLLAR

Hydrogen: New & Clean Fuel for the Future



Datsun 260Z 2-by-2 at the Tokyo Show



choice of experts ...made by experts

Little wonder that so many seasoned racing drivers and mechanics use OILZUM. These pros respect their motors—and rely on the years of petroleum know-how that make OILZUM motor oils outstanding.

Your engine may not be put to the grueling demands of the track—but it deserves the same carefully engineered quality. OILZUM protection comes in formulations with high stability and lubricity for every kind of driving, from single grade premium oil to super-sophisticated racing oil—and a customized two-cycle motor oil, too.

Next time, go with the experts—the experts who ${\it use}$ OILZUM . . . the experts who ${\it make}$ OILZUM.

THE WHITE+BAGLEY CO.

103 Worcester Center Boulevard Worcester, Massachusetts Cleveland and Detroit



backed by Over Eighty Years of Petroleum Research



SUMMARY

		0-60 mph,	Stopping Distance from	Cornering	Interior Noise @ 70 mph,	Fuel Economy,
Make & Model	Issue	sec.	80 mph, ft	Capability, g	dBA	mpg
Alfa Romeo 2000 GTV	8-72	9.6	287	0.715	78	23.8
Audi Fox Audi 100LS*	9-73 11-72	12.7	303 296	na 0.652	81 78	27.0 20.0
Austin Marina GT	6-73	15.7	308	0.632	78	24.0
BMW 3.0CS	7-73	10.0	282	0.741	73	16.0
BMW 2002tii	10-71	9.8	315	0.726	na	-22.7
Capri 2600 V-6	3-72	10.4	277	0.690	78	24.0
Chevrolet Camaro Z28*	S-GT	7.5	295	0.736	76	12.3
Chevrolet Voca CT	2-74 6-73	7.4 13.5	247 312	0.726 0.731	83 76	14.5 26.0
Chevrolet Vega GT Citroen SM	S-GT	9.5	299	0.731	74	15.0
Datsun B210	12-73	16.7	346	0.653	84	27.5
Datsun 260Z	2-74	10.0	272	0.720	77	20.0
Datsun 610	1-73	14.0	384	0.615	82	24.5
Ferrari Dino GTS	2-74	8.0	323	0.850est	83	15.5
Ferrari 365 GTB4	S-GT	5.9	270	na	na	12.0
Ferrari 365 GTC4 Fiat 124 Spider 1600	7-72 4-73	7.3 12.5	315 319	na 0.723	78 83	12.6 23.2
Fiat 124 Spider 1600 Fiat 128 SL1300	9-72	15.2	305	0.723	80	29.0
Ford Mustang II Mach 1	1-74	13.8	283	0.683	75	16.5
Honda Civic	5-73	14.1	281	0.662	84	30.0
Hornet 360*	3-73	9.1	306	0.652	76	16.0
Jaguar XJ6*	2-73	11.7	313	0.737	73	13.5
Jaguar XJ12*	5-73	8.6	296 263	0.720 0.725	72 80	9.0 12.0
Jaguar E-Type V-12 Jensen-Healey	2-74 3-73	8.0 9.7	305	0.723	84	24.5
Jensen Interceptor III*	10-73	10.4	300	0.714	73	11.5
Lamborghini Jarama	6-72	7.2	280	0.810	80	10.9
Lotus Europa Special	11-73	9.6	287	0.824	83	27.5
Maserati Bora	5-73	7.2	261	0.823	78	11.5
Mazda RX-2 Mazda RX-3	5-72 8-72	10.4	289 281	0.679	na 76	18.1 18.0
Mercedes-Benz 220 Diesel	6-71	27.5	254	0.092 na	na l	25.4
Mercedes-Benz 280*	2-73	11.7	285	0.679	73	14.5
Mercedes-Benz 450SE*	6-73	10.6	260	0.704	71	13.0
Mercedes-Benz 450SL*	2-74	10.2	289	0.700	80	15.5
MGB MG Mid	S-GT	13.7	329	0.700	84 84	22.0 24.0
MG Midget Opel Manta	S-GT S-GT	15.5 13.3	356 321	0.722 0.665	76	22.5
Pantera	5-73	7.6	256	0.816	80	10.5
Peugeot 504	11-72	15.9	339	0.652	76	20.0
Peugeot 504 Diesel	9-73	28.1	na	na	76	29.5
Porsche 911 2.7	1-74	7.9	273	na	79	17.5
Porsche 911S/Carrera Porsche 914 2-liter	1-74 2-73	7.5	273 285	na 0.742	79	16.0 24.5
Renault 15	10-72	15.7	307	0.662	82	23.5
Renault 17	12-72	12.5	310	0.675	82	28.0
Saab 99EMS	2-73	11.9	296	0.682	75	24.5
Saab Sonett III	7-72	13.4	276	0.723	78	26.4
Subaru GL	12-72 S. C.T.	15.6	318	0.645	80	27.0
Toyota Celica Toyota Corolla SR-5	S-GT 8-73	13.6 13.7	297 272	0.636 0.693	76 78	22.0 23.0
Toyota Mk II*	8-73	12.4	269	0.615	77	17.5
Triumph Spitfire 1500	5-73	15.4	274	0.720	84	25.0
Triumph TR6	S-GT	10.7	280	0.680	84	19.5
Triumph Stag*	S-GT	11.6	340	0.714	79	15.0
TVR 2500M Volkswagen Sports Bug	S-GT 9-73	10.6	343 283	0.783 0.704	82 81	26.0 23.0
Volvo 144E	11-72	14.5	292	0.632	74	19.5
Volvo 164E*	1-72	12.0	273	0.690	na	17.7

* automatic transmission na-data not available



TOYOTA CELICA GT

The new 5-speed version with crisper suspension, wider wheels & tires and even more standard equipment



WITH AUTOMOTIVE BARGAINS about as scarce as gasoline these days it's nice to find a small, sporty, economical car that does just about everything right—the Toyota Celica GT. The GT is a new

model that supplements the Celica line; the Celica ST, introduced in this market in 1971 as one of the new class of compact sporty cars that also includes the Opel Manta, Capri and most recently Ford's Mustang II, continues as a separate model with the GT a more sporting offshoot.

To understand our enthusiasm for the GT you must first know a bit about the basic ST model. It's first and foremost a typical Toyota: solidly built, well trimmed and fully equipped. A partial list of the equipment standard on the Celica includes front disc brakes, radial tires, rear-window defroster, carpeting, complete instrumentation, individual seats with reclining seatbacks, and tinted glass all around. The interior is friendly to an enthusiastic driver, with controls, instrumentation, ventilation and driving position that rival those of much more expensive GTs.

The engine is a proven design—a 1968-cc single-overhead-cam 4-cylinder—also used in U.S. Corona and pickup truck models, and the suspension is relatively sophisticated (for a Toyota) with MacPherson struts and coil springs up front and a coil-sprung solid axle located by four trailing links and a Panhard rod at the rear.

It's a car with adequate if not outstanding performance and brakes that continue to improve. If the styling is a bit pretentious—particularly the side stripes (moved to the rocker panels on the GT) and the hood vents (reduced in size in 1973)—it is also a compact and handsome basic design, with ample room for front passengers and adequate space for two children or two semi-comfortable adults at the rear. The Celica ST's major failings have been those of every other Toyota we have ever tested, with the exception of the exotic 2000 GT of six years ago and the new Corona (see the road test in this issue): horrible, tire-scrubbing understeer and vague, unresponsive steering.

Though major revaluations of the yen have wiped out much

of the price advantage the Celica once enjoyed—the base price of the 1974 Celica ST with 4-speed is \$3249 whereas three years ago it cost \$600 less—it's still clearly competitive with its German rivals Opel and Capri and considerably less expensive than a comparably equipped Mustang II.

But here's the bargain part we were talking about. For a paltry \$200 more than the price of the ST the shrewd shopper can get a Celica GT with a 5-speed transmission in place of the 4-speed; 5-in.-wide styled-steel wheels and 185/70-13 radials instead of the standard 4½-in. pressed-steel rims and 165-13s; a padded 4-spoke "Porsche-like" steering wheel and padded shift knob; "breathing" woven vinyl seat inserts; an AM/FM radio in place of the ST's AM; and most importantly revised suspension that eliminates most of our past criticism of Celica handling.

The transformation of the Celica from ST to GT has to be driven to be believed. The GT has much better balance than the ST, and though the spring rates have been increased this isn't the "better handling by stiff springs" we usually find in a Japanese car. The GT rides a bit firmer but it isn't affected nearly as much by dips and culverts as the more softly sprung

PHOTOS BY JOE RUSZ

ST: the : to th are (impo corn at t our the thro Pors was T high and cons

> With City Bi year

tivel netice Cali hot-jetti fron 100 incremple year our

position specification in the specification in the

min

exa into dro a v we tha

sea Th vas stri of to the

G car

ST: someone did the right things with the shock valving. On the skidpad the GT generates a competitive 0.693g compared to the ST's mediocre 0.636. The GT's wider wheels and tires are contributing factors, but reduced understeer is even more important. And this improvement goes beyond steady-state cornering. Though the steering still has too much free play at the center position it is more precise and responsive and our Celica GT could be positioned precisely and quickly around the pylons of our slalom course. Of all the cars we've put through this test of transient response—including several Porsches, a Corvette and an E-Type Jaguar—only a Dino Ferrari was faster.

There is one area of handling that still needs improvement: high-speed stability. Above 60 mph the front end becomes light and the car is sensitive to side winds. A front spoiler helps considerably, as we found when driving a 1973 ST equipped with a spoiler from The Toy Store (9058 Culver Blvd, Culver City, Calif. 90230).

Braking is better too. A larger-capacity booster is new this year but the size of the front discs and rear drums is the same, so we attribute the shorter stopping distances—10 ft from 60 mph and 30 ft from 80—to the wider tires.

The differences between this engine and last year's are relatively minor—all carburetors are equipped with an electromagnetic fuel shut-off valve to reduce run-on or "dieseling," and California cars have exhaust-gas recirculation, an automatic hot-air intake for the air cleaner, and different carburetor jetting. Despite the addition of shock-absorber bumper units front and rear and increased roof strength (which add about 100 lb to the curb weight of 1974 Celicas) and no advertised increase in power, our GT test car was slightly quicker to 60 mph and through the quarter-mile than the ST we tested last year. Even more surprisingly, fuel economy was better—and our test car was a California version.

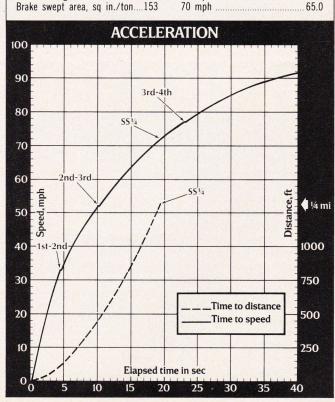
The engine was not free of drivability faults, however—no surprise these days. There was a bit of lean surge at light throttle openings and a disturbing amount of surge for two or three minutes after a hot start. One particularly annoying characteristic of this engine is the action of a device called the "throttle positioner." To reduce hydrocarbon emissions during deceleration this positioner holds the engine at 1800 rpm until car speed drops to 10 mph. So, on deceleration at low speeds you have a choice: disengage the clutch and let the engine race, or leave it alone and let it begin to lug as speed falls. The latter approach causes the car to shudder and shake at 25 mph or below in 5th gear, 20 mph in 4th and so on.

The 5-speed gearbox, however, is one of the slickest we have ever shifted. Its lever position is excellent and the linkage light and precise. Unlike the Corolla's 5-speed, which requires an exaggerated motion to get into 5th, with this gearbox the throw into 5th is short and direct. In 5th gear engine revs at 60 mph drop from 3500 rpm (for the 4-speed ST) to 2975, so there's a worthwhile reduction in engine noise and probably engine wear; and the lower engine speed must account for part of that improved fuel economy mentioned earlier.

The padded steering wheel and shift knob and the porous seat inserts make the interior even more likable than before. This year's single-loop inertia seat-shoulder belts are also a vast improvement over last year's two-strap belts, which restricted movement and put the diagonal strap across the neck of skinny drivers. But Toyota has designed the inertia reels to click noisily during cornering and hard braking, to inform the driver they are working, and anyone who drives the least bit vigorously is going to be annoyed by them. One thing we continue to hope for and never find is a day-night mirror. Maybe next year, Toyota?

Overall, however, we have few complaints with the Celica GT. With its several important refinements it's a much better car than the ST for little more money, and though it's available only in the 5-speed version (automatic is offered in the ST) this seems entirely appropriate to its sporty nature. Few sporting cars offer such value.

PRICE List price, all POE \$3499 Price as tested \$3499	ROAD TEST RESULTS
	ACCELERATION
ENGINE & DRIVE TRAIN	Time to distance, sec:
Typesohc inline 4	0-100 ft4.2
Bore x stroke, mm88.5 x 80.0	0-500 ft10.7
Displacement, cc/cu in1968/120	0-1320 ft (¼ mi)
Compression ratio	Speed at end of ¼ mi, mph72.0
Bhp @ rpm, net97 @ 5500	Time to speed, sec:
Torque @ rpm, lb-ft 106 @ 3600	0-30 mph
Fuel requirementregular, 91-oct	0-50 mph
Transmission 5-sp manual	0-60 mph
Gear ratios: 5th (0.85) 3.32:1	0-80 mph
4th (1.00)	0-90 mph
3rd (1.39) 5.43:1	SPEEDS IN GEARS
2nd (2.04) 7.98:1	
1st (3.27) 12.79:1	5th gear (5150 rpm) 104
CHASSIS & BODY	4th (6000) 104 3rd (6000) 77
Body/frame unit steel	2nd (6000) 52
Brake system 9.1-in. disc front,	1st (6000) 33
9.0 x 1.6-in. drum rear; vacuum	
assisted	FUEL ECONOMY
Wheels styled steel, 13 x 5J	Normal driving, mpg24.5
Tires Dunlop SP, 185/70HR-13	BRAKES
Steering type recirc ball	
Turns, lock-to-lock	Minimum stopping distances, ft:
Suspension, front/rear: MacPherson	From 60 mph
struts, coil springs, tube shocks,	From 80 mph
anti-roll bar/live axle, four trailing	Control in panic stop very good
links, Panhard rod, coil springs,	Pedal effort for 0.5g stop, lb27
tube shocks	Fade: percent increase in pedal effort
	to maintain 0.5g deceleration in
GENERAL	6 stops from 60 mph
Curb weight 2430	Overall brake rating very good
Weight distribution (with driver),	HANDLING
front/rear, % 56/44	Speed on 100-ft radius, mph 32.2
Wheelbase, in	Lateral acceleration, g 0.693
Track, front/rear 51.2/51.4	Speed thru 700-ft slalom, mph53.0
Length	
Width	INTERIOR NOISE
Height	All noise readings in dBA:
Fuel capacity, U.S. gal	Constant 30 mph
CALCULATED DATA	50 mph
Lb/bhp (test weight)27.5	70 mph 78
Mph/1000 rpm (5th gear) 20.2	SPEEDOMETER ERROR
Engine rays/mi (60 mph) 2975	30 mnh indicated is actually 29.0



2975

30 mph indicated is actually....29.0

60 mph

Engine revs/mi (60 mph).....

R&T steering index