

COMPLETE ROAD TEST REPORT: PORSCHE 914

ROAD & TRACK ^{ICD}

APRIL 1970

UK 5/-

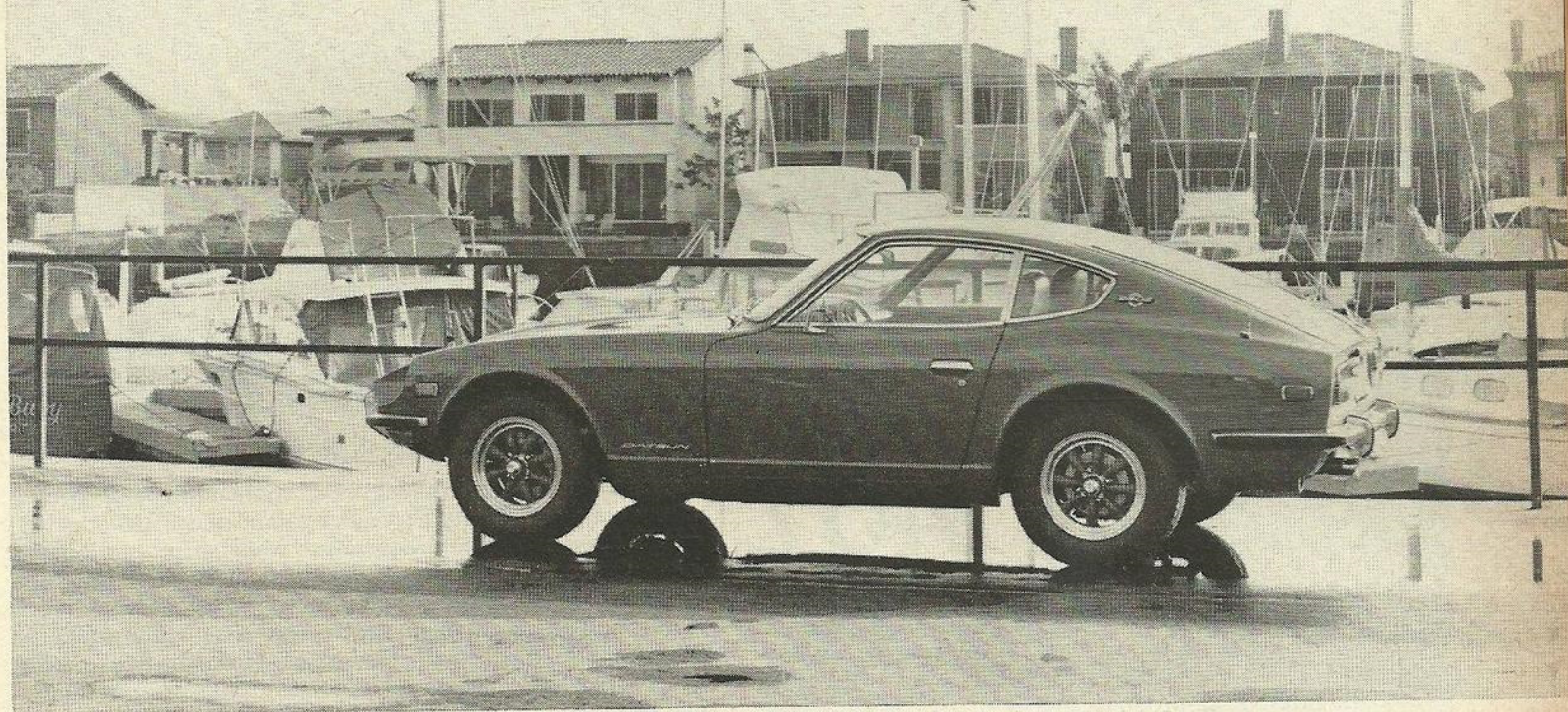
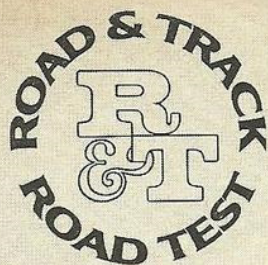
SWEDEN KR. 6:-INKL. MOMS

SEVENTY-FIVE CENTS

TESTS: DATSUN'S NEW 240 Z, LAMBORGHINI MIURA S, FIAT 850 RACER, 11-LITER GT FROM MERCEDES-BENZ



Fastest Lamborghini - the 168-mph Miura S



DATSUN 240Z

*New standards in performance and elegance
for medium-priced 2-seat GT cars*

DATSUN DATSUN HAS HAD a sizable portion of the U.S. sports car market for a number of years now with the 1600 Sports and its 2-liter derivative. Both of these models are based on British design influences, which is logical since the British were dominating the sports car market when the Japanese first took a serious look at it. Although the 1600 and 2000 Sports have been greatly improved during the last few years, they still exemplify the old formula: stark 2-seat open bodywork, strong but noisy engine, good roadholding with few concessions to riding comfort, good performance for the money.

But Nissan Motors had been studying the latest German and Italian design practices (not to mention carefully examining the situation in this country) and two years ago we

saw the first result: the totally modern Datsun 510 sedan, with its single-overhead-cam engine and all-independent suspension. It was to be expected that Nissan would not be long in producing a sports derivative of the 510. Perhaps we expected only a lower, lighter 2-seat version of the sedan, using the 4-cyl unit. But the resulting 240Z (fully described in the January issue) surprised everyone by having a structure all its own, entirely new independent rear suspension, a 6-cyl 2.4-liter stretch of the 510's 1.6-liter four, and a classy fastback body that owes nothing to any previous Nissan product.

Since the styling of the 240Z is the first thing you see (and probably the most important factor in what we think will be a tremendous penetration into the GT market), we'll begin ➡➡➡



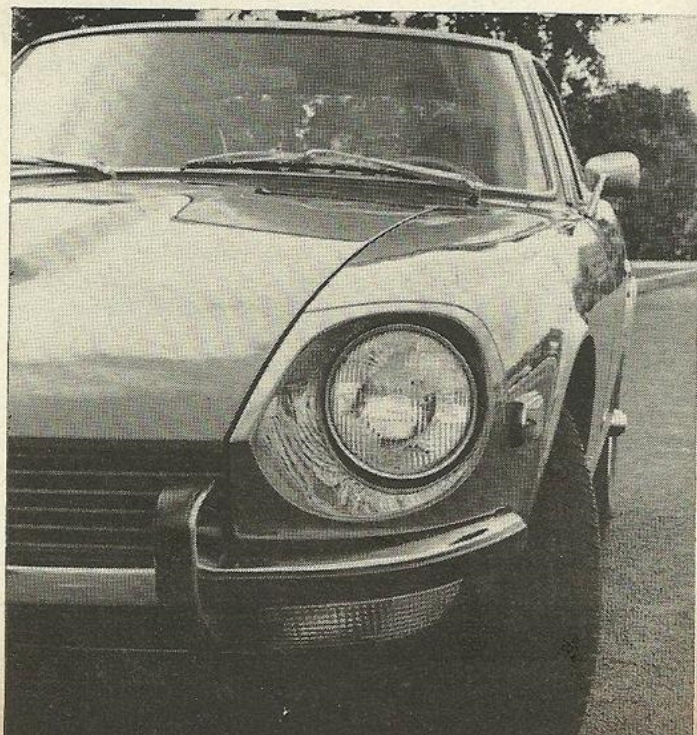
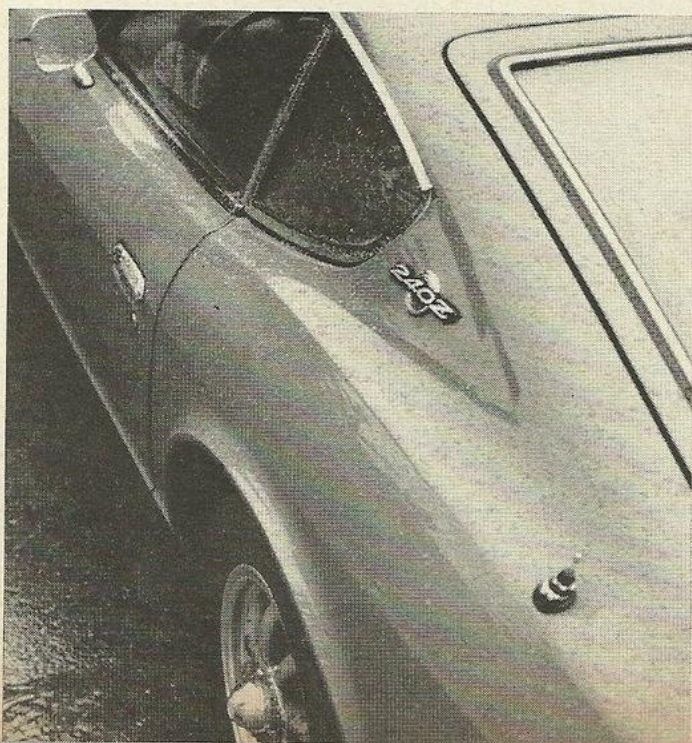
STROTHER MAC MINN PHOTOS

DATSUN 240Z

with the body lines. There are several obvious influences on the 240Z, among them the Jaguar E-Type coupe, the Toyota 2000 GT, the Porsche 911 series and even the Ferrari 275 GTB. In a Nissan-produced movie that we saw recently on the development of the 240Z, the exterior forms and seating packages of all the contemporary GT cars were carefully evaluated and compared to the forms that Nissan was considering (using R&T's own Road Test data panel drawings, we were pleased to note). The Jaguar was the one getting the most attention from the Nissan stylists and en-

gineers; this is not surprising, because the E-Type opened up a market all its own nine years ago and the 240Z could do worse than be a \$3500 equivalent with the proportionately higher sales potential. Regardless of its influences, the 240Z is a very good design: clean, crisp and contemporary if perhaps sitting a bit high on its wheels. Our capable artist Werner Bühner has again produced a thorough R&T Styling Analysis, which appears on pages 64-65. Driving around in the car, one thing that surprised us slightly was the lack of attention it received; while it was admired by those who had the occasion to see it up close, it didn't make anyone gawk as it went by. A handsome but not startling shape.

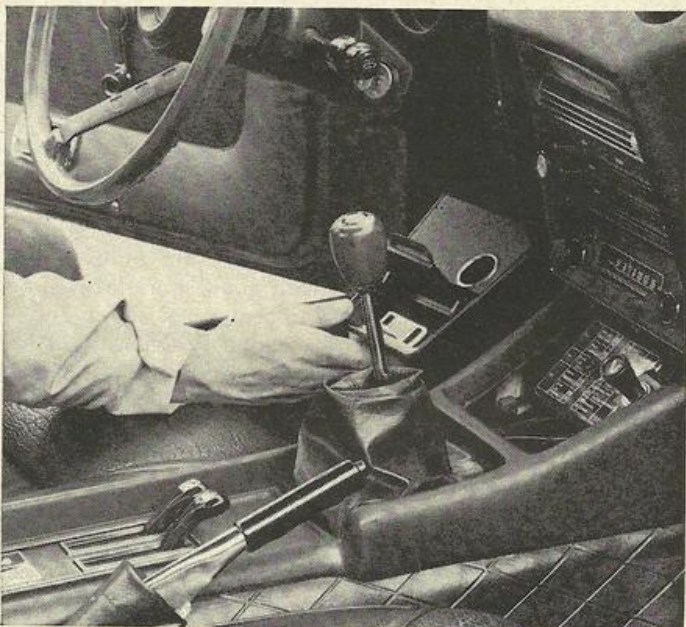
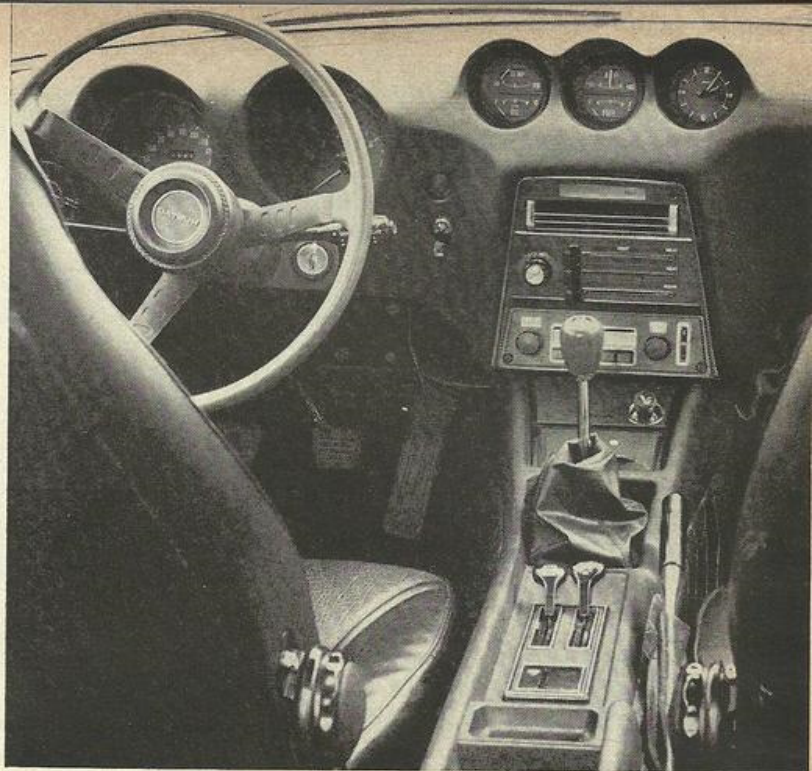
Inside the car, the driver and passenger are immediately impressed by a very modern layout which would seem almost Corvette-like if it weren't more tastefully done in



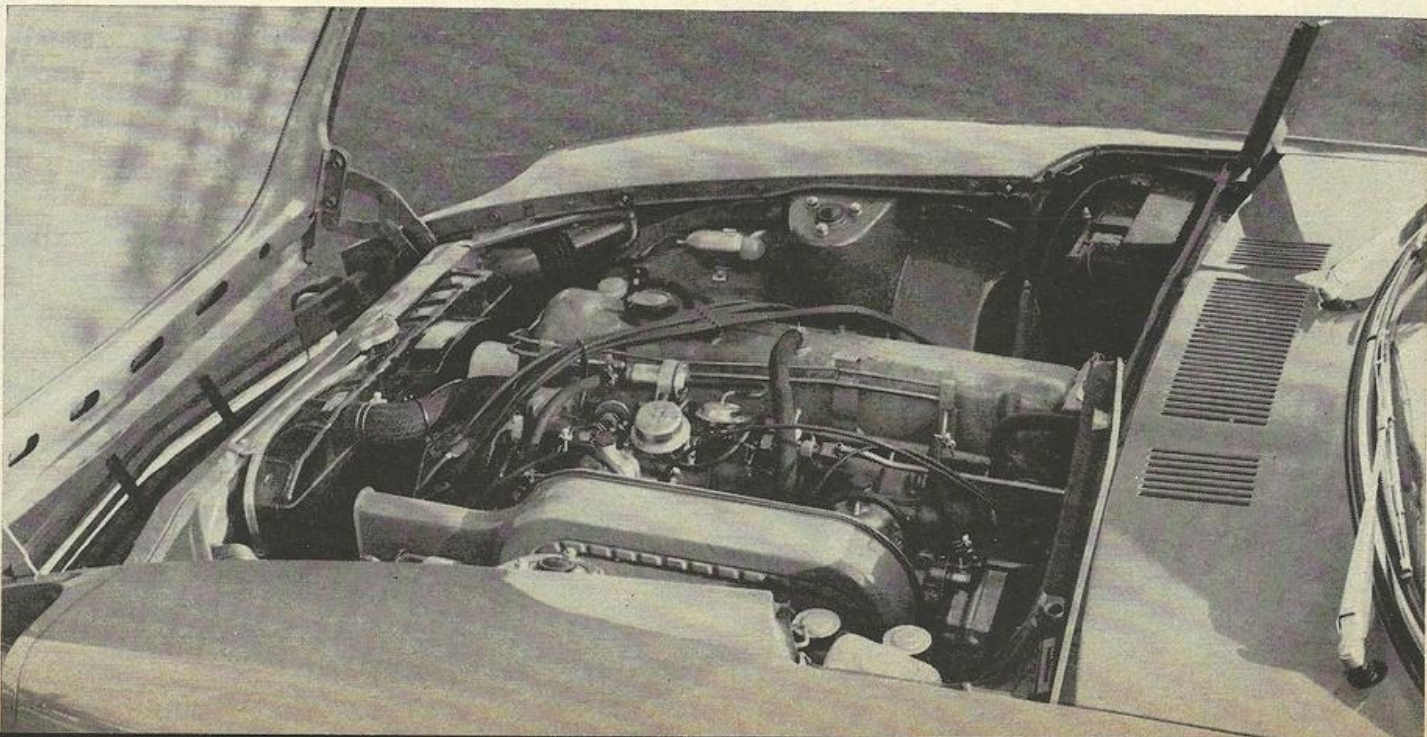
black vinyl. In fact, the lack of color is so severe that only the warm wood grains of the steering wheel rim (simulated) and gearshift knob (real) provide relief. For one interested in the business of driving, this simplicity is satisfyingly functional. The seats and the positions of all the controls are equally right: every member of our staff found the seating comfortable for him, a rare occurrence on even the most luxurious cars. The backrests are adjustable only through about 10 degrees, sufficient for seating variations but not permitting full reclining. Speedometer and tachometer are large dials right in front of the driver; both were steady and accurate, actually reading about 1 percent slow. The speedometer was a bit disconcerting, beginning at 20 mph; we realize that accuracy suffers below this speed, but we'd like to see the 10 and 0 at least marked on the instrument. The central console is topped by three dials containing the water temperature/oil pressure and alternator charge/fuel level gauges plus an accurate clock. These three faces are a bit far from the normal line of sight to suit us, but they are clearly readable. Below them are the heater/ventilation controls, which are comprehensive and should be very effective. We weren't able to evaluate them properly, however, because the Nissan people were still having trouble getting them connected up right (ours was an early pre-production 240Z). Beneath these controls, and the standard-equipment signal seeking radio with its delightfully fast electric antenna, is a lift-out ashtray which very conveniently exposes the fuse box. Between the shift lever and the handbrake are the choke and hand throttle.

Much appreciated little touches are the padded headliner and push-on-and-off flush interior light lenses. Not so well appreciated were the day/night mirror knob, which didn't provide the same field of view in both positions; the windshield wipers, which as often as not would stop in mid-stroke rather than park themselves when switched off; and the fact that the backrests don't swing forward to give access to the luggage platform from the side. Rear access from the lift-up window/tailgate is fine, however, and the 240Z accepts a really generous amount of luggage, as much as two people would want to take along. This is a good result of designing a car specifically for two passengers—no awkward compromises as are often forced by the 2+2 configuration. The luggage platform is well detailed, with handsome carpeting and useful straps for suitcases.

The 240Z six is quiet and smooth at low engine speeds, as you would expect, but has an almost unpleasant rumbly growl when wound out. We found the power peak to be at about 5500 rpm rather than the 6000 quoted; there is certainly no value in going up to the 7000-rpm redline! By ➡➡➡



A clever touch, typical of the well-thought-out interior, is the lift-out ash tray which gives access to the fuses.





COMPARISON DATA

	Datsun 240Z	Alfa Romeo 1750 GTV	Fiat 124 Coupe	Opel GT
List price	\$3526	\$4681	\$3174	\$3395
Curb weight, lb	2355	2288	2110	2105
0-60 mph, sec	8.7	9.9	11.3	10.8
Standing ¼-mi.	17.1	17.3	18.6	17.7
Speed at end	84.5	80	74	77
Panic stop from 80 mph, % g	84	90	81	81
Fade in 6 stops from 60 mph, %	10	nil	54	nil
R&T wear index	39	60	74	42
R&T steering index	1.10	1.26	0.99	0.99
Fuel economy, mpg	21.0	22.0	24.0	27.5

DATSUN 240Z


European standards, the output is probably less than the 150 bhp claimed, but the 17.1-sec quarter-mile time was in the ballpark for the calculated lb/bhp figure. Acceleration is better than that of any other GT in its price class and along with the styling this will be a major selling point. Getting off the line is smooth with only moderate wheelspin. Gearing is intentionally tall to give the 240Z good cruising performance and a high top speed (we got 122 mph at 5800 rpm), but means that there is a definite lack of snap when trying to accelerate from a low engine speed in 4th, or even 3rd. The gearbox has a nice action with good short throws, but the synchromesh was all too easy to beat, especially in 2nd.

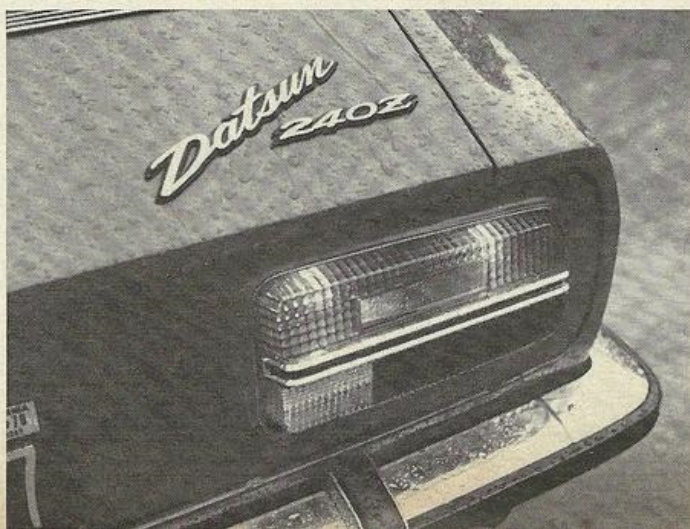
The steering was a bit of an enigma. When we first had the car it seemed light, precise and absolutely first-rate. On our second experience (to recheck the fuel economy which had been disappointingly low at about 17 mpg) the steering was unaccountably heavy, requiring real effort on tight turns. Since the tires were the same, we can only conclude that the steering is highly sensitive to front-end adjustments and that some incorrect setting was made. Except for this, handling is very good and roadholding really excellent. On the skid pad, we recorded 33.0 mph, equal to 0.728g. This is just a hair better than the speed achieved by the Porsche 914! The Datsun can really be driven hard; flung enthusiastically into corners, its near-neutral handling (helped by the near 50/50 weight distribution) makes it very stable, with just a hint of oversteer allowing the tail to hang out but not come around. Ride is far better than on previous Datsun sports cars but still quite abrupt on choppy surfaces; it would seem that Nissan engineers still have something to learn about shock absorbers. The noise level is low, except for the rear axle, which "comes in" at 40-50 mph; at 70 the

car is a pleasure to cruise, with the engine turning only 3350 rpm and the wind noise slight. The hood panel tended to vibrate at highway speeds.

The spoked wheels shown in the photos are an extra-cost option. We weren't able to get them properly balanced in time for our performance runs, so we ran with the standard disc wheels and covers and Bridgestone 175-14 radials.

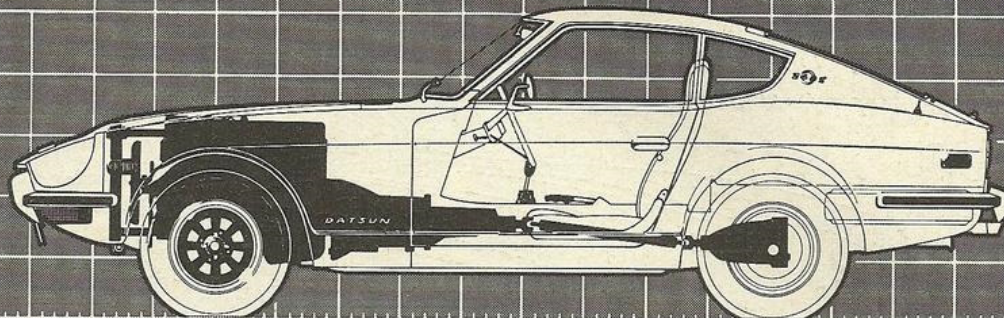
The brakes were very strong, recording 84%g with excellent control in the panic stop and only 10% increase in pedal pressure over the six half-g stops. Under wet driving conditions, however, they were badly affected by spray and had to be ridden to remain effective.

The basic list price of the 240Z is \$3526 and at this price it is a super-bargain, with a combination of styling, performance and handling far ahead of anything else under \$4000. None of the shortcomings mentioned are serious; they are certainly not obtrusive at the asking price and many of the minor ones will probably disappear as the car gets into full production. One thousand units per month are expected for the American market initially, with more later when the market is established. What will the 240Z compete with? The accompanying Comparison Data panel lists the Opel GT, Fiat 124 Coupe and the Alfa Romeo 1750 GTV; because of price, the 4-cyl Porsche 914 (tested in this issue) can also be included. The Fiat 124 Coupe is almost a full 4-seater, but with comparatively modest performance; the Alfa GTV is a 2+2 with performance very close to that of the Datsun but costing \$1000 more. So the Opel GT, with a price near that of the 240Z but lacking some of its performance, style, comfort and sophistication, is perhaps the closest competitor (and the one which could suffer in sales as a result). But we expect to see the Datsun establish a market of its own, one which will force other makers to come up with entirely new models to gain a share in it. The Japanese industry is no longer borrowing anything from other nations. In fact, a great struggle may be ahead just to prevent a complete reversal of that cliché. 





ROAD TEST DATSUN 240Z



SCALE: 10" DIVISIONS

PRICE

List price, all POE.....\$3526
Price includes radial tires, signal seeking radio with power antenna (standard equipment)

IMPORTER

Nissan Motor Corp. USA
137 E. Alondra, Gardena, Calif.

ENGINE

Type.....6 cyl inline, sohc
Bore x stroke, mm.....83.0 x 73.3
Equivalent in.....3.27 x 2.90
Displacement, cc/cu in.....2393/146
Compression ratio.....9.0:1
Bhp @ rpm.....150 @ 6000
Equivalent mph.....126
Torque @ rpm.....148 @ 4400
Equivalent mph.....92
Carburetion...two Hitachi-SU (1V)
Type fuel required.....premium
Emission control.....air injection

DRIVE TRAIN

Transmission.....4-speed manual
Gear ratios: 4th (1.00).....3.36:1
3rd (1.42).....4.77:1
2nd (2.20).....7.39:1
1st (3.55).....11.92:1
Final drive ratio.....3.36:1

CHASSIS & BODY

Layout...front engine, rear drive
Body/frame.....unit steel
Brake type: 10.7-in. disc front, 9.0 x 1.6-in. drum rear, vacuum assisted
Swept area, sq in.....310
Wheels.....steel disc, 14 x 4 1/2 J
Tires.....Bridgestone 175 SR-14 radials
Steering type.....rack & pinion
Overall ratio.....17.8:1
Turns, lock-to-lock.....3.5
Turning circle, ft.....31.5
Front suspension: MacPherson struts, lower lateral arms, compliance struts, coil springs, tube shocks, anti-roll bar
Rear suspension: Chapman struts, lower A-arms, coil springs, tube shocks

ACCOMMODATION

Seating capacity, persons.....2
Seat width.....2 x 21.0
Head room.....36.5
Seat back adjustment, degrees: 10
Driver comfort rating (scale of 100):
Driver 69 in. tall.....90
Driver 72 in. tall.....70
Driver 75 in. tall.....65

INSTRUMENTATION

Instruments: 160-mph speedo, main & trip odo, 8000-rpm tach, water temp, oil pressure, ammeter, fuel level, clock
Warning lights: directionals, high beam, handbrake, emergency flashers

MAINTENANCE

Service intervals, mi:
Oil change.....3000
Filter change.....6000
Chassis lube.....30,000
Minor tuneup.....6,000
Major tuneup.....12,000
Warranty, mo/mi.....12/12,000

GENERAL

Curb weight, lb.....2355
Test weight.....2769
Weight distribution (with driver), front/rear, %.....51/49
Wheelbase, in.....90.7
Track, front/rear.....53.3/53.0
Overall length.....162.8
Width.....64.1
Height.....50.6
Ground clearance.....5.7
Overhang, front/rear.....34.4/37.7
Usable trunk space, cu ft.....8.5
Fuel tank capacity, U.S. gal.....15.9

CALCULATED DATA

Lb/bhp (test weight).....18.4
Mph/1000 rpm (4th gear).....21.0
Engine revs/mi (60 mph).....2850
Engine speed @ 70 mph.....3350
Piston travel, ft/mi.....1378
Cu ft/ton mi.....87.2
R&T wear index.....39
R&T steering index.....1.10
Brake swept area sq in/ton.....263

ROAD TEST RESULTS

ACCELERATION

Time to distance, sec:
0-100 ft.....4.3
0-250 ft.....6.4
0-500 ft.....9.5
0-750 ft.....12.2
0-1000 ft.....14.5
0-1320 ft (1/4 mi).....17.1
Speed at end of 1/4 mi, mph...84.5
Time to speed, sec:
0-30 mph.....3.2
0-40 mph.....4.9
0-50 mph.....6.6
0-60 mph.....8.7
0-70 mph.....11.8
0-80 mph.....15.2
0-100 mph.....27.1
Passing exposure time, sec:
To pass car going 50 mph...6.3

FUEL CONSUMPTION

Normal driving, mpg.....21.0
Cruising range, mi.....335

SPEEDS IN GEARS

4th gear (5800 rpm).....122
3rd (6500).....97
2nd (6500).....63
1st (6500).....37

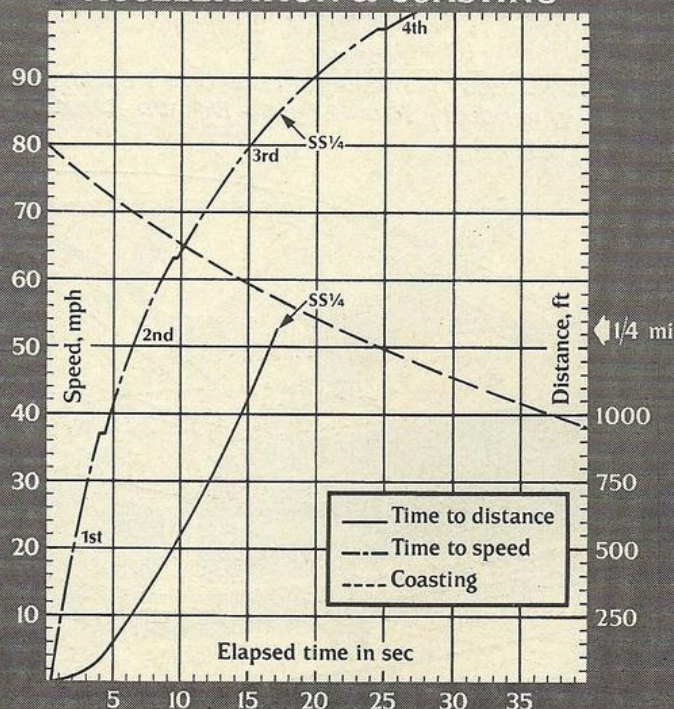
BRAKES

Panic stop from 80 mph:
Max. deceleration rate, % g .84
Stopping distance, ft.....287
Control.....excellent
Fade test: percent increase in pedal effort to maintain 50%-g deceleration rate in 6 stops from 60 mph.....10
Parking: Hold 30% grade?.....yes
Overall brake rating.....very good

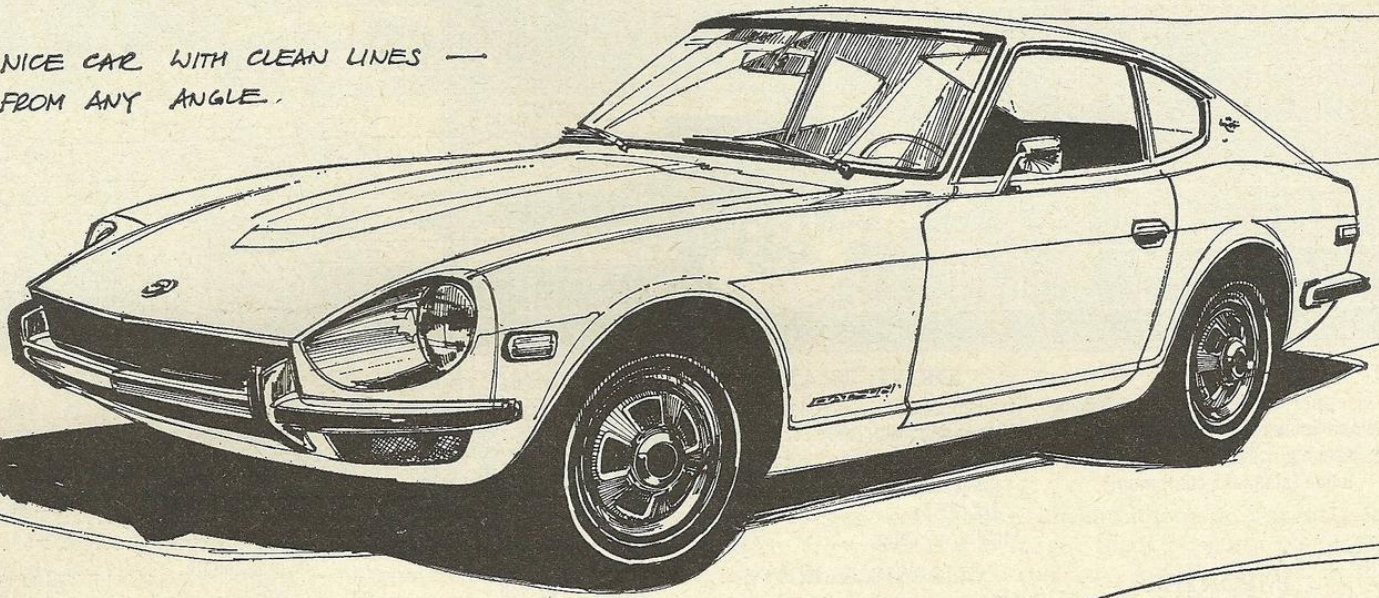
SPEEDOMETER ERROR

30 mph indicated is actually...31.5
40 mph.....41.5
60 mph.....61.3
80 mph.....81.0
100 mph.....100.6
Odometer, 10.0 mi.....10.1

ACCELERATION & COASTING

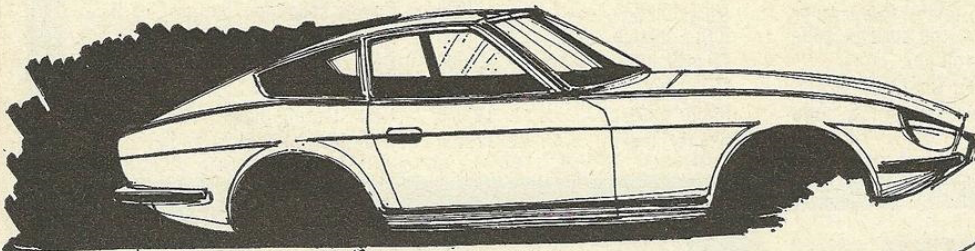
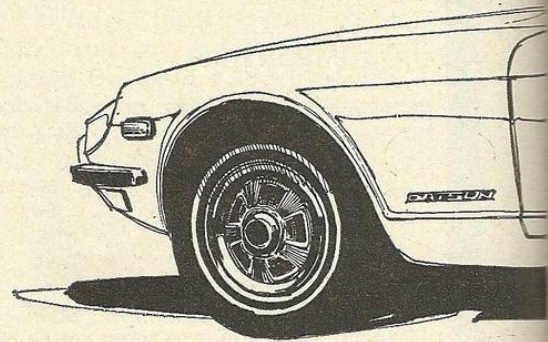


A NICE CAR WITH CLEAN LINES —
FROM ANY ANGLE.

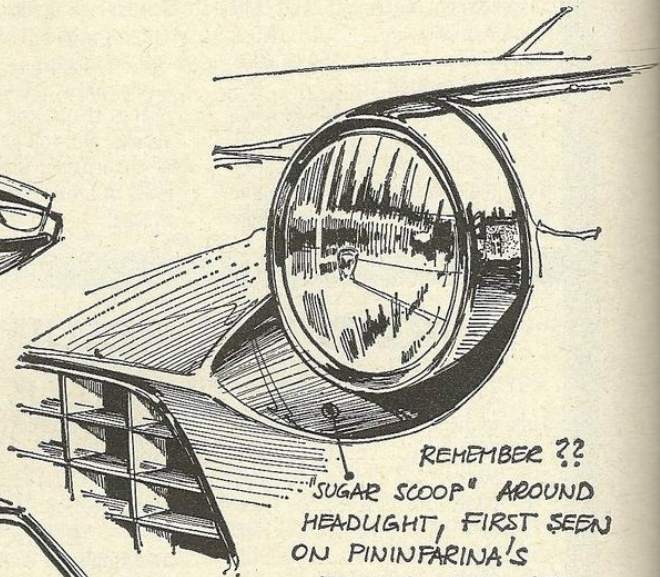


R & T STYLING ANALYSIS DATSUN 240Z

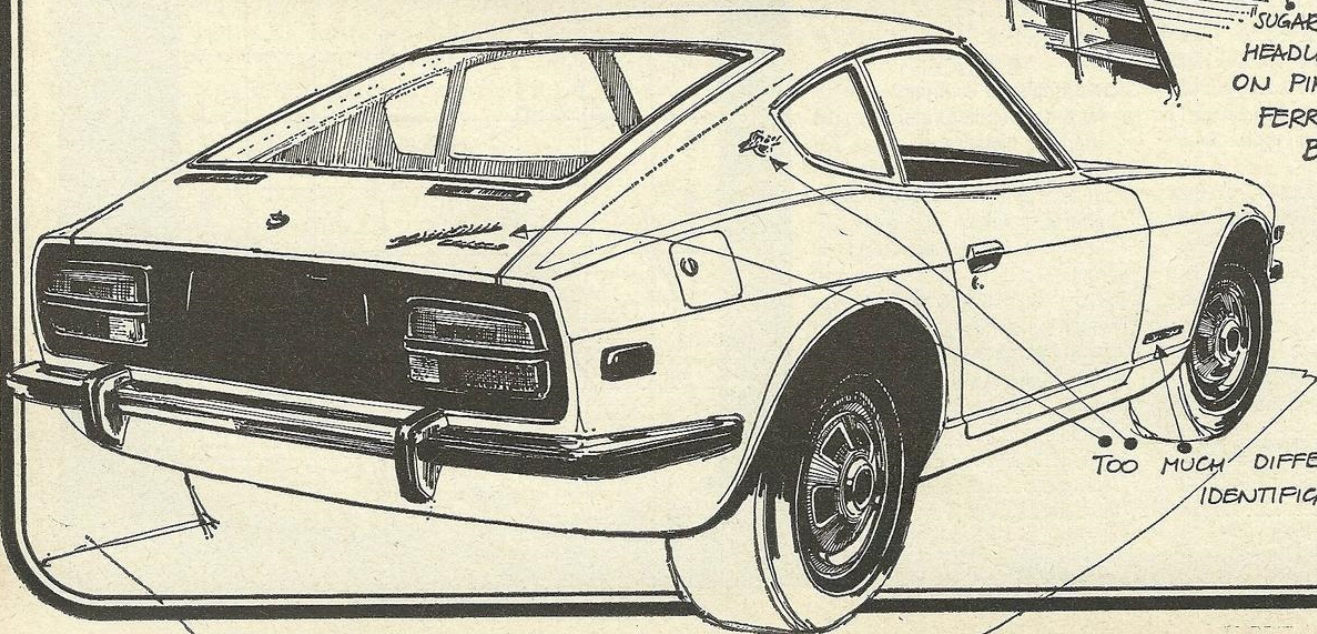
DRAWINGS BY WERNER BÜHRER



R&T PROPOSAL
SAME BODY; STRETCHED ROOF LINE; BIGGER QUARTER
WINDOW; ROCKERPANEL PAINTED DARK.



REMEMBER ??
"SUGAR SCOOP" AROUND
HEADLIGHT, FIRST SEEN
ON PININFARINA'S
FERRARI 250 GT
BACK IN 1958.



TOO MUCH DIFFERENT
IDENTIFICATION

QUARTER WINDOW
AND ROOF LINE
MIGHT BE
ONLY SERIOUS
POINT OF
DISCUSSION

ANY SPORTIER
COCKPIT
WANTED?

BÜHRER '76

VERY NICE DETAIL, SPOILED ONLY
BY SEAM - UNFORTUNATELY
NECESSARY AT THE
LOW PRICE.

BEST VIEW FOR
THIS CAR :
VERY NICE CHARACTER
LINES, GOOD PROPORTIONS
BETWEEN BODY AND
GREENHOUSE.

← WHEELCOVERS ONLY -
CONSEQUENCE OF THE PRICE.

