# **FOREWORD**

Nissan Motor Co., Ltd. proudly presents the brand new GT coupe, the "Datsun 240Z Sports", in addition to the popular Datsun 510 and the high performance Datsun Sports.

The "Datsun 240Z Sports" is a two-seater, two-door, hard-top coupe. The special roomy and comfortable interior is designed and upholstered in true GT fashion with all the necessaty safety features.

The "Datsun 240Z Sports" has the most advanced mechanisms such as rack and pinion steering gear, independent rear suspension. Therefore, the "Datsun 240Z Sports" can be driven safely under any driving conditions.

The high performance, reasonable price, high rate of production, and all other features of this GT coupe make it one of the world's most unique GT cars. The name "Datsun 240Z Sports" will be impressed deeply upon the hearts of people.

This Service Bulletin thoroughly describes the "Datsun 240Z Sports".

In addition to this Service Bulletin, the following literature and manuals are availabel for dealers and service men concerned:

Service Manual — Datsun 240Z Sports Chassis and Body

Service Manual - L20A, L24 Series Engine

Wall Charts - Datsun 240Z Sports (8 sheets per set)

Service Slide Film—Datsun 240Z Sports (7 reels)

Flat Rate Schedule for the Maintenance of the Datsun 240Z Sports

A special service tool set (Set No.ST09110000) is also available for the Datsun 240Z Sports car.

The new "Datsun 240Z Sports" series begine from the following chassis number (identification number).

HLS30U, HLS30UN, HLS30 · · · · · · HLS30-00006

NISSAN MOTOR CO., LTD.

17-1, 6-CHOME, GINZA-HIGASHI, CHUO-KU TOKYO, JAPAN

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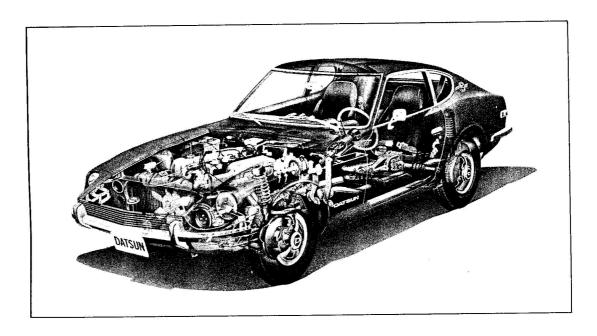
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# ENGINEERING FEATURES AND SELLING POINTS

The "Datsun 240Z Sports" is an entire new GT Coupe, which features:

- 1. The seating comfort equivalent to that of an ordinary sedan and its popularity as a very practical two-seater GT Coupe, with which anyone can be familiarized.
- 2. The flowery two-door hard top coupe styling, deluxe interior, the chassis layout adopting the most advanced mechanisms such as I.R.S. (Independent Rear Suspension), rack and pinion steering, disc brake with master-vac, the OHC engine with the SU twin-carburetor which is proud of SS-1/4 mile 16.3 second high dash performance, and other safty devices as a GT coupe.
- 3. The most advanced techniques adopted widely as the DATSUNS symbolic car amongst all the Nissan/Datsun vehicles represented by the Datsun 510, Datsun Sports, etc.
- 4. Very reasonable price for its outstanding performance as GT Coupe, presented from the world-wide unrivalled Nissan's mass-production system.



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The "Datsun 240Z Sports" is a 2-seater hard top coupe. The fast back body styling with the wide open tail gate reduces air resistance and increases space in the luggage compartment.

The rider compartment is sufficiently adjustable so that anyone from little woman such as Japanese woman 25 percentile (4.9 ft (150 cm) high) to big man such as American 97.5 percentile (6.2 ft (189 cm) high) can have comfortable seating. In spite of its wide rider compartment space, the total height is very low (50.5 in. (1283 mm)). This unique body design comes from the floor lowered to the maximum extent, or in other words, it comes from the suspension layout.

For the purpose of obtaining outstanding handling and soft riding comfort and securing a large luggage space in the rear, the independent rear suspension is an indispensable mechanism. The semi-trailing type independent skspension which has recently been adopted by the Datsun 510 and other high class sedans in world-wide countries, is an outstanding mechanism suitable for mass-production. With this suspension mechanism, however, floor cannot be lowered beyond a certain level due to the suspension member. For the above reason, the strut type independent rear suspension is newly developed for the "Datsun 240Z Sports". Moreover, this new independent rear suspension is suitable for the GT car since the horizontal rigidity is high. With this suspension system, the floor can be made flat and lowered to the maximum extent since it does not require suspension member.

As for the proportion of the "Datsun 240Z Sports", the wheel base has been resulted from basing on the six-cylinder OHC engine and length of leg of a big man such as American man 97.5 percentile, and the total length has been decided by adding extra front and rear spaces for in the case of collision. The flowery styling of the "Datsun 240Z Sports" with the long and flowing hood and sleek fast back rear styling has been completed by covering the above described chassis design with an aerodynamic curve.

#### 1. BODY STYLING

The long hood and cut end fast back coupe body styling suitable as a GT car in the new generation features its flowery aerodynamic curve, the sharp front end which braces the stream line, and hopped up rear fender.

The front view, including the clear cut solid state grille and lamps and the sharp hood front end, provides nimble feeling like a jaguar. With intense long hood and cut end fast back silhouette, the side view gives highest impression as GT coupe.

The rear view, including the wide tread securely supporting the body (characteristic rear view of the GT car) and the side way spread rear finisher, impresses the high stability not only when it is stopped but also run away.

Eight fresh new body colors suitable to the fast back style, are available.

# ENGINEERING FEATURES AND SELLING POINTS

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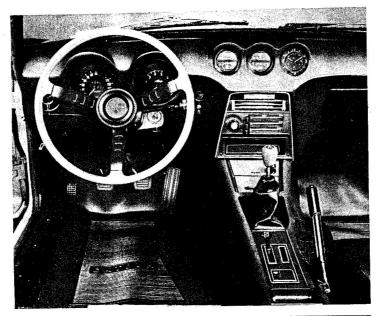


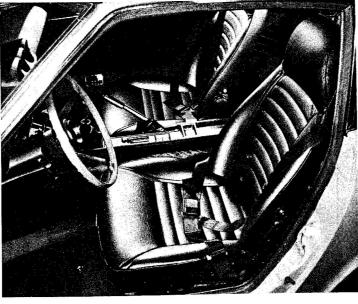
# 2. INTERIOR AND INSTRUMENT

The non-reflecting meters and gauges on the instrument panel enclosed by deep peaks are properly arranged so that movement of driver's eyes point can be minimized during driving. Together with the floor console, the center console - the center for decoration of instruments - occupies the center position of the interior design.

The seat holds the driver softly and securely, fitting the driver to the car as a part of the machine, and adopts the flowery high seat back which combines seat back and head rest to a single unit, improving the safety.

The space behind the seats is designed not only for luggage space but also for wide rider compartment space feeling.





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### 3. SAFETY

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The "Datsun 240Z Sports" is the most safety car since many experiences obtained from various model vehicles which have been manufactured by Nissan Motors are fully adopted.

The outstanding handling is created from the powerful power performance, the fully independent suspension system, and the sharp and accurate rack and pinion steering gear. Moreover, the above handling together with the safety devices such as disc brake with Master Vac, rear brake with the proportioning valve, make sure the quick escaping from an imminent accident.

As for the safety in the event of collision, the seat belt, rigid door, and the safety-proof laminated windshield glass protect the rider from being thrown out of the car. Moreover, the unique body structure which absorbs shock and energy of collision at the front and rear of the body safely protects the rider together with the highly safety interior design.

It may be needless to say, the "Datsun 240Z Sports" completely satisfies the MVSS (Motor Vehicle Safety Standard).



30 MPH head on barrier test

## A. BODY CONSTRUCTION

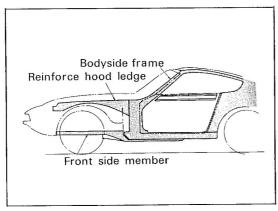
In order to absorb an energy generated during collision, strength and rigidity of the rider compartment are increased in proportion to both ends of the body. With this construction, deformation of the rider compartment is reduced to the minimum when the body is crushed.

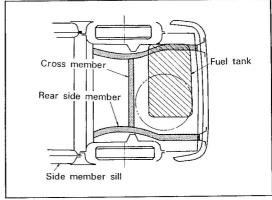
For the front collision, the energy is effectively absorbed because cross-sectional area of the front side member is increased gradually from the front end to the rear. To the upper portion of the hood ledge, a reinforcement member is applied, the cross-sectional area of the reinforcement member is also increased gradually toward the rear.

The highly rigid doors protect the rider compartment from breakdown. The power train also absorbs energy from collision because of the full independent suspension, therefore, the rear engine mounting and rear suspension mounting are sufficiently reinforced.

For the rear collision, the fuel tank is enclosed by the rear side member, and the rear side member is properly curved at the middle so that an energy during collision can be easily absorbed.

In order to protect riders during collision, the instrument panel is entirely covered with pad (foamed urethane rubber), completely eliminating exposed part of the instrument panel. Moreover, for the panels which are used as cores for the instrument panel, the thickness is minimized, and the panels also absorb an energy from collision sufficiently.

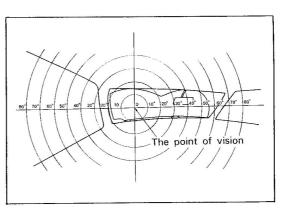




#### B. FIELD OF VIEW

The front quarter field of view is increased because no side ventilator window is used, and with the large windshield glass, a sufficient front field of view is provided. Furthermore, with the powerful 2-speed windshield wipers and defroster, safe driving is promised under any weather conditions.

The rear field of view is excellent as well as an ordinary sedan together with the electric defroster, the safety is further improved.



#### C. SEAT

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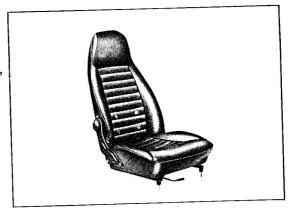
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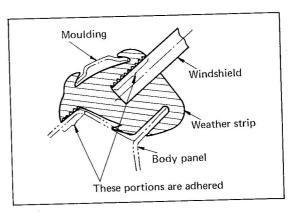
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Strength of the seat completely satisfies the provisions of praragraphs 202 and 207 of the MVSS, and moreover, careful consideration has been given on the safety by adopting the high seat back which combines the seat back and head rest to a single unit.



## D. WINDSHIELD GLASS

Reinforced (laminated) windshield glass 0.2362 in (6 mm) thick is secured by means of adhesive.



### E. DOOR

Safety of rider during collision is improved by adopting the highly rigid door panel and especially strengthened hinge.

The door uses one sheet of glass having no side ventilator window and completely eliminates any projections, improving both field of view and safety.

The door lock is of a pinion and rack type, and therefore, the door does not open although the internal rod is deformed during collision. The door lock is of a knob lock type. Both the outer and inner door handles are arranged flush with the outer and inner door panels, eliminating projection. In addition, the door is so constructed that the door cannot be locked unless it is closed completely.

The door hinge uses a coil spring at the lower hinge. With this construction, the door is always balanced while opening, and does not open rapidly. Consequently, the door never strikes against any obstacles.

The assistant side door is equipped with an assist-strap, improving safety of rider in the assistant seat.

It may be needless to say, but the door completely satisfies the provisions of the paragraphs 201 and 206 of the MVSS.

#### F. HOOD

The hood is hinged at the front side, therefore, it is not opened by air pressure although the hood is unlocked erroneously during driving.

Furthermore, the hood is secured with the safety catch not only during driving but also in the event of collision.

#### G. TAIL GATE LOCK

In spite of its compact shape, the tail gate lock sufficiently withstands against load of 551.2 lb (250 kg). The key cylinder adopts an idle swing mechanism. With this construction, the key cylinder idles although the key cylinder pushbutton is depressed accidentally during collision, and the tail gate is never unlocked.

### H. WIRING HARNESS

In order to improve the safety, fuses are used for ten poles, and the following circuits are arranged completely independently.

Horn:

The horn circuit is arranged independently to be prevented from other parts troubles.

Head lamp

(right and left):

Both side head lamps are also arranged independently to be prevented from other parts troubles. Moreover, both side

fuses are arranged separately so that both side head lamps do not go out simultaneously when a trouble occurs on the

head lamp.

Cigar lighter:

The cigar lighter is independently arranged so that it does

not affect other circuits when a trouble occurs on the

cigar lighter.

### ENGINE COMPARTMENT

All electrical equipment and auxiliary engine parts are separated from heat source (exhaust manifold) and installed on the right side.

#### OTHERS

In order to prevent accelerator pedal over stroke, the stopper size is increased.

Galvanized steel pipe is used for the entire brake line, and it is arranged along the highest position in the floor tunnel so that the brake line is completely protected from damaging due to obstacles on the road surface.

#### 4. RELIABILITY

#### A. HIGH SPEED DRIVING

The handling, vibration-proof, heat-resistance, and windshield wiper characteristics as a GT car during high speed and long continuous driving have been carefully examined, and then, sufficient considerations have been given on the individual systems for reliability.

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## B. SERVICE FREE

Aiming at "Service Free" GT car, requirements of lubrication and adjustment for the individual units are reduced to the minimum. For example, it is service free for the suspension and steering gear and linkage.

Moreover, day to day care parts (brake fluid, clutch fluid, battery electrolyte, engine oil, etc.) are positioned adequately so that they can be easily inspected.

## C. WIRING AND PIPING

Not only both side independent head lamp circuits but all other electrical circuits are completely protected by the duplicate or triplicate safety devices. For instance, the fusible wiring which is safe even against a short-circuit in the power supply circuit, switch grounding system, etc., improving the reliability.

For completing, the rust-proof, galvanized steel pipe are used for the brake line and tin-alloy plated steel pipe for the fuel line. Moreover, vinyl coated clamps are adopted, and the brake line and fuel line are clamped separately from the wiring. In addition to the above matter, sufficient consideration concerning the piping layout are given on the influences from muddy water and haet, improving the reliability.

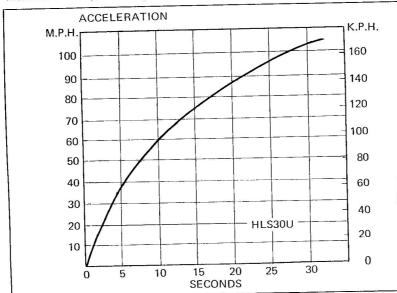
### D. DURABILITY

The light but highly rigid body construction has been carefully examined. Moreover, the floor and surroundings use galvanized steel sheet, and the parts necessary are detonar-coated additionally, completing the rust-proof.

#### 5. PERFORMANCE

# A. OUTSTANDING MAXIMUM SPEED AND ACCELERATION

With the powerful OHC six-cylinder engine, the "Datsun 240Z Sports" marks the maximum speed of 125 MPH (200 km/h), 129 MPH (205 km/h) with 5-speed transmission, and is proud of its high performance of SS 1/4 miles 16.3 seconds.



S	peeds in go	ears
Gear	mph	rpm
4th	124	6,000
3rd	.88	6,000
2nd	57	6,000
1st	35	6,000

#### B. SHARP AND ACCURATE HANDLING

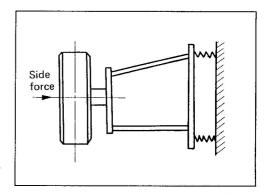
The rack and pinion type steering is a new feature of the "Datsun 240 Z Sports". When combines with the full independent suspension system, which offers the driver the easiest and most accurate car handling.

The turning circle between walls has been reduced to only 15.7 ft (4.8 meters) in spite of the long wheel base GT car. Therfore, tight parking places and heavy city traffic will pose no problem for the driver of the "Datsun 240Z Sports".

#### C. EXCELLENT ROAD HOLDING AND RIDING

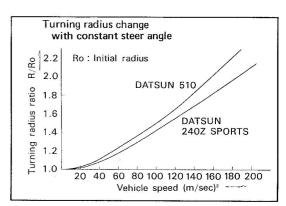
Camber fluctuation during cornering is minimized by adopting the strut type rear independent suspension, and a slight negative camber is applied. Then, the tire road holding is improved, and axle steer does not occur. Consequently, the rear wheels are difficult to skid, indicating very fine stability.

Moreover, with the carefully designed suspension layout (full independent suspension, sufficient wide tread, and low gravity center), a soft riding comfort



equivalent to that of ordinary sedans is obtainable. In spite of the soft riding comfort, rolling during cornering is extremely minor, and unstable feeling is completely eliminated.

The handling is stable with a low under steer equivalent to that for ordinary sedans.



#### 6. EXCELLENT SEATING AND RIDING COMFORT

For the seating and riding comfort, sufficient considerations are given on the prevention of noise and vibration, improvement of riding comfort, calm and well harmonized atmosphere of the rider compartment, high ventilation performance, etc., improving it to the maximum extent as the most practical GT cars.

Ordinarily preventions of noise and vibration are likely to be disregarded for GT cars. For the "Datsun 240Z Sports", however, sound insulator for the floor and dash-board are carefully selected, the differential insulator and strut mounting insulator are sufficiently examined for the material and characteristics, and then the noise and vibration, particularly the differential and road noise, are reduced to the minimum.

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ded for e floor mounting nd then educed Conventionally riding comfort is also likely to be disregarded for sports cars. The "Datsun 240Z Sports", however, adopts the full independent suspension system and provides the riders with fine riding comfort equivalent to ordinary sedans by well harmonizing stability and riding comfort which mutually oppose.

Through the wide door and the seat positioned at a comparatively high level, the rider can get on and off readily; the most suitable driving position can be easily selected beacuse the seat can be widely adjusted toward the front and rear; consequently, the driver does not feel any fatigue even during a long distance driving.

For the rider compartment ventilation, the fresh air system has been adopted. To the space below the instrument panel, fresh air is sent from the dash side ventilator; to the upper part of the rider, fresh air is sprayed from the forced jet nozzles located in both sides of the instrument panel; to the center portion of the rider compartment, fresh air is supplied from the console ventilator. And air flows away from outlet valves on the tail gate; accordingly, the rider compartment is always filled with fresh air.

# **MODEL VARIATIONS**

Models	Engine type	Transmission type-speeds	Final gear	Tire size	
HLS30U <sub>*1</sub>	L24 <sub>*2</sub>	F4W71A-4	3.364	175SR-14 175HR-14 6.45H14	U.S.A *3 (Canada)
HLS30UN	L24	F4W71A-4	3.364	175SR-14 175HR-14 6.45H14	Canada
HLS30	L24	F5C71A-5	3.900	6.45H14	LH drive
HS30U	L24	F5C71A-5	3.900	6.45H14	RH drive

- \*1: HLS30UV; Vehicle with evaporative emission control devise.
- \*2: Engine with emission control device.
- \*3: The state of Ontario (Canada)

# **BODY COLOR**

	Body color number	Body color	Unholstery color
1	901	Silver gray (metallic)	Black
2	903	Universal blue (metallic)	Blue or black
3	904	Kilimanjaro white	Blue or black
4	905	Monte Carlo red	Black
5	907	Racing green	Brown or black
6	918	New sight orange	Black
7	919	Sunshine yellow	Black
8	920	Safari gold	Black

# **EQUIPMENT VARIATIONS**

### **EXTERIOR PARTS**

	ITEM	HLS30U HLS30UN	HLS30 HS30U
1	Side marker lamp	Std.	Opt
2	Side flasher lamp	No	Opt
3	Anti-sun glass	Std	Opt
4	Rear window electrical defroster	Std	Opt
5	Outside door mirror	Std	Opt
6	Fuel lid lock	No	Std

### INTERIOR PARTS

	ITEM	HLS30U HLS30UN	HLS30 HS30U
1	Passing light	No	Opt
2	Hazard warning light	Std	Opt
3	Room lamp	Std	Std
4	Map lamp	Std	Std
5	Step lamp	No	Opt
6	Inspection lamp	Std	Std
7	Glove box lamp	Std	Opt
8	Steering lock	Std	Std
9	Ignition key removal warning buzzer	Std	No
10	Heater	Std	Std
11	Clock	Std	Std
12	Radio (Standard)	No	Opt
13	Radio (Auto tuning)	Std	Opt
14	Car stereo (AM)	No	Opt
15	Power antenna	Std	Opt
16	Reclining seat	No	Opt
17	Foot rest (Assistant side)	No	Opt

"Std" means standard equipment.

"No" means equipment not available.

"Opt" means optional equipment at extra cost.

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## MECHANICAL COMPONENTS

### 1. ENGINE

Model L24 engine mounted on the "Datsun 240Z Sports" is a newly developed 6-cylinder engine, and many of the component parts are interchangeable and commonly used with those of the Model L16 engines, mounted on the Datsun 510 series vehicles.

The displacement of the L24 engine is 146 cu in (2,399 cc), the compression ratio is 9.0, the maximum output is 151 HP at 5,600 rpm, and the maximum torque is 145.7 ft lb (20.1 kg-m). The L24 engine, equipped with an SU-twin carburetor, displays high performance, flat torque characteristics. Thus, the L24 engine is a highly practical engine suitable for the "Datsun 240Z Sports".

