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DATSUN 280Z

SERVICE MANUAL

1978

P/N 20066

DATSUN 280Z

SERVICE MANUAL

MODEL S30 SERIES

NISSAN

NISSAN MOTOR CO., LTD.
TOKYO, JAPAN

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FOREWORD

This service manual has been prepared for the purpose of assisting service personnel of authorized NISSAN/DATSUN dealers in providing effective service and maintenance of the 1978 DATSUN 280Z.

Since proper maintenance and service are absolutely essential in satisfying the DATSUN owners, this manual should be kept in a handy place for ready reference and should be carefully studied.

This manual includes procedures for maintenance adjustments, minor service operations, removal and installation, and for disassembly and assembly of components.

Some of these service operations require the use of Special Tools especially designed for effective performance of service operations.
The special tools are presented at the end of each section.

As you read through the maintenance procedures in this service manual, you will occasionally come across paragraphs headed NOTE, CAUTION or WARNING. A NOTE is supplemental information that is important to a particular procedure. CAUTION and WARNING warn of steps that must be followed to prevent damage to some part of the car and/or personal injury.

The Quick Reference Index on the first page enables the user to quickly locate the desired section. At the beginning of each individual section is a table of contents, which gives the page number on which each major subject begins.

All information, illustrations and specifications contained in this manual are based on the latest product information available at the time of publication approval. If your DATSUN model differs from the specifications contained in this manual, consult your NISSAN/DATSUN dealer for information.

Rights for alteration at any time of specifications and methods are reserved.

Liability for any personal injury or property damage occasioned by the use of this service manual in effecting maintenance or repair of your DATSUN is in no way assumed by Nissan Motor Co., Ltd.

Accordingly, anyone using a service procedure or tool which is not specifically recommended by NISSAN must first completely satisfy himself that neither his safety nor the car's safety will be jeopardized by the service method selected.

NISSAN MOTOR CO., LTD.
TOKYO, JAPAN

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Tokyo, Japan

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SECTION GI

GI

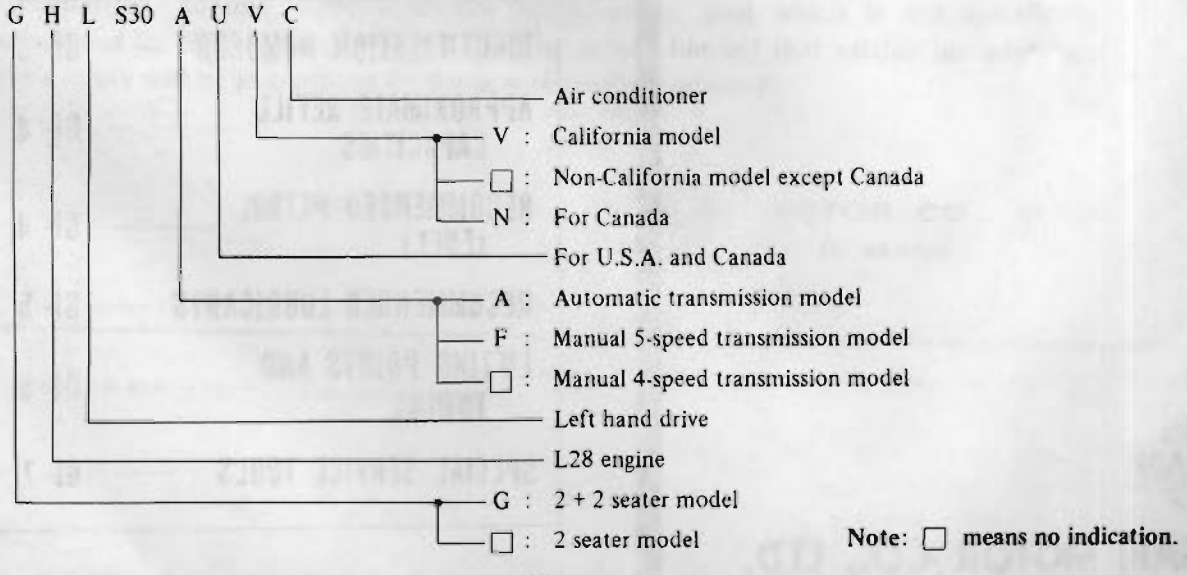
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MODEL VARIATION

Destination		Class	Model		Engine	Transmission	Differential carrier	
							Model	Gear ratio
U.S.A.	California and high altitude counties*	2-seater	California models	HLS30UV	L28	F4W71B	R200	3.545
				HLS30FUV		FS5W71B		
				HLS30AUV		3N71B	R180	
		2 + 2-seater		GHLS30UV		F4W71B	R200	
				GHLS30FUV		FS5W71B		
				GHLS30AUV		3N71B	R180	
	All low altitude counties except California	2-seater	Non-California models	HLS30U		F4W71B	R200	
				HLS30FU		FS5W71B		
				HLS30AU		3N71B	R180	
		2 + 2-seater		GHLS30U		F4W71B	R200	
				GHLS30FU		FS5W71B		
				GHLS30AU		3N71B	R180	
Canada		2-seater		HLS30UN		F4W71B	R200	
				HLS30FUN		FS5W71B		
				HLS30AUN		3N71B	R180	
		2 + 2-seater		GHLS30UN		F4W71B	R200	
				GHLS30FUN		FS5W71B		
				GHLS30AUN		3N71B	R180	

*Specified by Emission regulations.



Note: □ means no indication.

IDENTIFICATION NUMBERS

The unit and car numbers are stamped and registered at the factory.

The engine and car identification numbers are used on legal documents.

These numbers are used for factory communication such as Technical Report, Warranty Claim, Service Journal and other information.

CAR IDENTIFICATION PLATE

The car identification plate is located on the left hoodledge panel at the back of strut housing.

The plate contains the car type, engine capacity, maximum horsepower, wheelbase, engine type and car serial number.

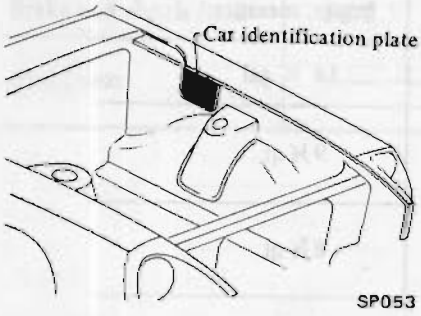


Fig. GI-1 Car identification plate location

CAR SERIAL NUMBER

The car serial number is stamped on the upper face of the left dash panel and is broken down as shown in the following figure.

HLS30-XXXXXX

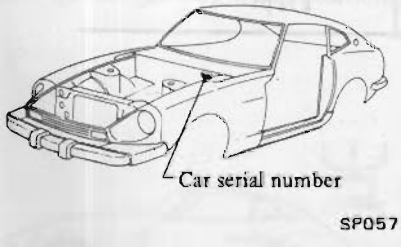


Fig. GI-2 Car serial number location

IDENTIFICATION NUMBER PLATE

The identification number plate is located on the upper surface of the instrument panel and can be seen from outside through the windshield glass. The identification number consists of the car model and the serial number.

(HLS30-XXXXXX)



Fig. GI-3 Identification number plate location

ENGINE SERIAL NUMBER

The engine serial number is stamped on the right side of the cylinder block.

The number is broken down as shown in the following Figure GI-4.

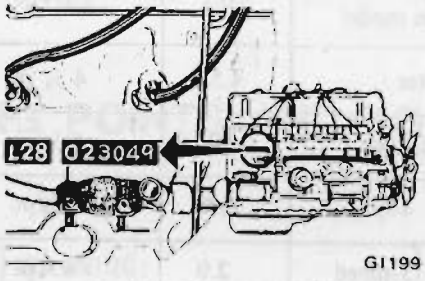


Fig. GI-4 Engine serial number location

COLOR CODE NUMBER LABEL

The body color code number label is attached to the top face of the radiator core support.

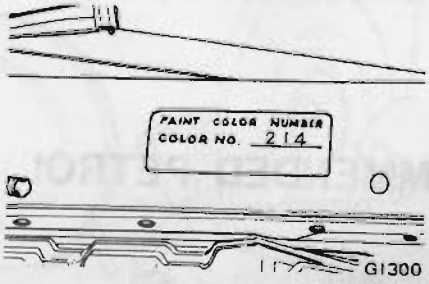


Fig. GI-5 Body color code number label location

M.V. S.S. CERTIFICATION LABEL

The M.V.S.S. certification label is affixed to the upper portion of the left lock pillar.

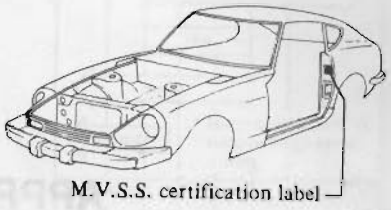


Fig. GI-6 M.V.S.S. certification label location

EMISSION CONTROL INFORMATION LABEL

The emission control information label is stuck on the inside panel of the hood.

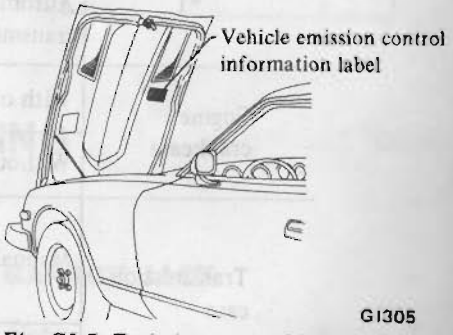


Fig. GI-7 Emission control information label location

MANUAL TRANSMISSION NUMBER

The transmission serial number is stamped on the front upper face of the transmission case.

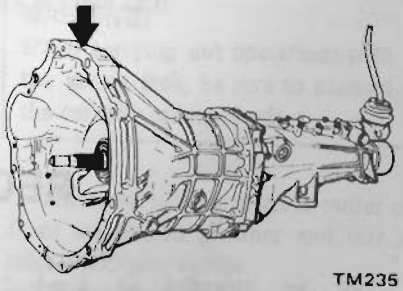
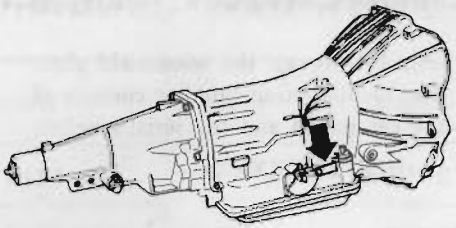


Fig. GI-8 Manual transmission number location

AUTOMATIC TRANSMISSION NUMBER

The transmission serial number is stamped on the right-hand side of the transmission case.



AT344

Fig. GI-9 Automatic transmission number location

APPROXIMATE REFILL CAPACITIES

			Liters	US measure	Imper. measure
Fuel tank			65	17⅛ gal	14 ¼ gal
Engine cooling system *1	Manual transmission model		10.3	10⅞ qt	9⅛ qt
	Automatic transmission model		10.1	10⅝ qt	8⅞ qt
Engine crankcase	With oil filter		4.5	4 ¾ qt	4 qt
	Without oil filter		4.0	4 ¼ qt	3 ½ qt
Transmission case	Manual	4-speed	1.7	3⅝ pt	3 pt
		5-speed	2.0	4¼ pt	3½ pt
	Automatic		5.5	5⅛ qt.	4⅞ qt
Differential case	R200		1.3	2¾ pt	2¼ pt
	R180		1.0	2⅛ pt	1¾ pt

*1: Includes 0.8 liter (⅞ US qt, ¾ Imp qt) for heater and 0.62 liter (⅝ US qt, ½ Imp qt) for reservoir tank.

RECOMMENDED PETROL (Fuel)

Use an unleaded or low-lead gasoline with a minimum octane rating of 91 RON (Research Octane Number).

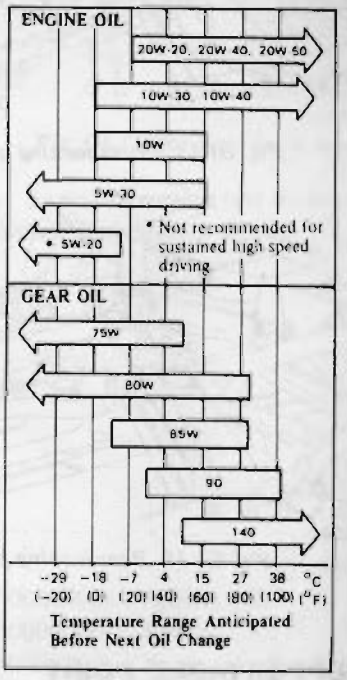
On California models, use only unleaded gasoline to protect the catalytic converter from contamination.

RECOMMENDED LUBRICANTS

RECOMMENDED LUBRICANTS

Lubricant		Specifications	Remarks
Gasoline engine oil		API SE	Further details, refer to recommended SAE viscosity chart.
Gear oil	Transmission and steering	API GL-4	
	Differential	API GL-5	
Automatic T/M fluid and power steering fluid		Type DEXRON	———
Multi-purpose grease		NLGI 2	Lithium soap base
Brake and clutch fluid		DOT 3	———
Anti-freeze		———	Permanent anti-freeze (Ethylene glycol base)

RECOMMENDED SAE VISCOSITY NUMBER



LIFTING POINTS AND TOWING

JACK UP

PANTOGRAPH JACK

Place a jack under the position where sill flange is cut for identification. Do not jack up other positions.

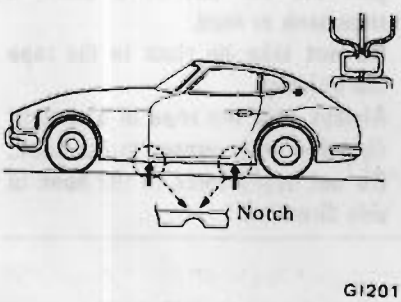


Fig. GI-10 Jacking point

WARNING:
a. Never get under the car while it is supported only by the jack. Always use safety stands to support frame when you have to get under the car.
b. Block the wheels diagonally with wheel chocks.

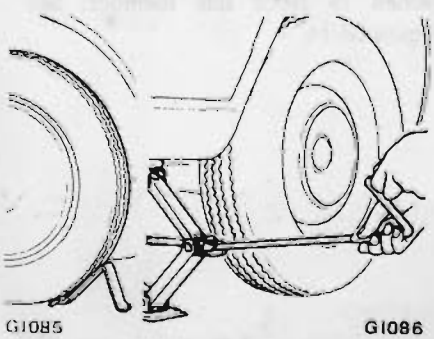


Fig. GI-11 Wheel chocks and jack

GARAGE JACK

Note:
a. When jacking up the front of the car, place the chocks behind the rear wheels to hold them.
b. When jacking up the rear of the car, place the chocks at the front side of the front wheels to hold them.

WARNING:
When carrying out operations with the garage jack, be sure to support the car with safety stands.

The front jacking point is center of front suspension member and rear is differential gear carrier.

Do not place a jack on the center portion of front suspension transverse link.

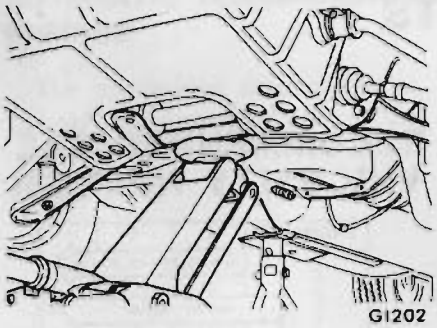


Fig. GI-12 Front jacking point

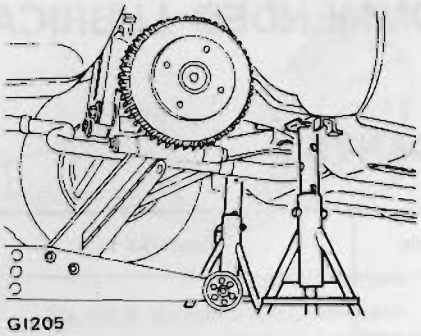


Fig. GI-15 Rear supportable points

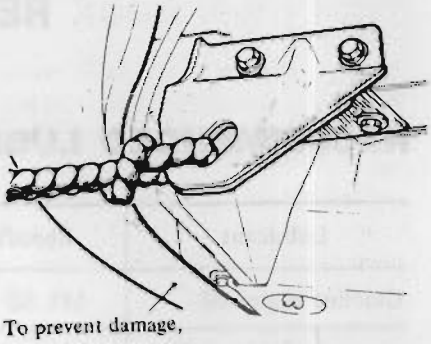


Fig. GI-16 Front towing point

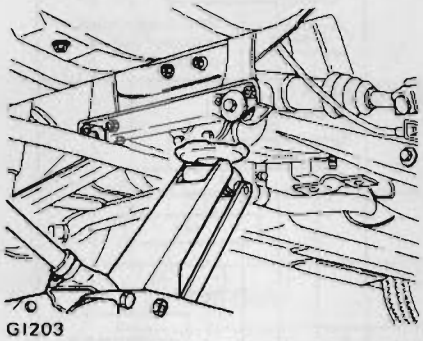


Fig. GI-13 Rear jacking point

SUPPORTABLE POINT

Front supportable points for stand are both front side members. Rear supportable points are on both sides of front differential mounting cross-member.

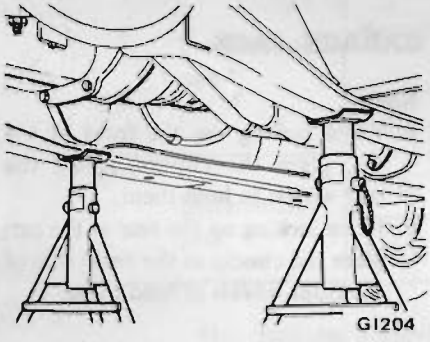


Fig. GI-14 Front supportable points

TOWING

CAUTION:

a. It is necessary to use proper towing equipment, to avoid possible damage to the car during a towing operation.
Towing is in accordance with Towing Procedure Manual at dealer side.

b. All applicable State or Provincial (in Canada) laws and local laws regarding the towing operation must be obeyed.

c. Only front hooks may be used for towing purposes. When front hooks are used for towing, remove front apron and front fender front to prevent possible interference with towing rope.

Note: Be sure to remove rear hooks before delivery of car.

When car is to be towed forward, connect a rope securely to hook attached to front side member. See Figure GI-16.

CAUTION:

a. Before towing, make sure that the transmission, axles, steering system and power train are in good order. If any unit is damaged, a dolley must be used.

b. If the transmission is inoperative, tow the car with the rear wheels off the ground, or with the propeller shaft removed.

c. When the car is towed with its front wheels on the ground, secure the steering wheel in a straight ahead position with the ignition key turned in "OFF" position.

d. When towing an automatic transmission model on its rear wheels, do not exceed 30 km/h (20 MPH) and a distance of 10 km (6 miles).

e. Release the parking brake and set the gearshift lever in "Neutral" position before starting to tow the car.

f. The car is equipped with a front towing hook as illustrated. However, this hook should be used only in an emergency situation, e.g., to pull the car out of a ditch, a snowbank or mud.

g. Do not take up slack in the rope too quickly.

h. Always pull the rope in a straight direction with respect to the hook. Do not apply force to the hook in side direction.

TIE-DOWN HOOK

There are four tie-down hooks. Two of them are located on front side members, and the other two on rear panel.

Front tie-down hook attached to either side member is also used as a towing hook.

Note: When fastening chains to rear transverse link, wrap them around link to avoid interfering with any adjacent parts.

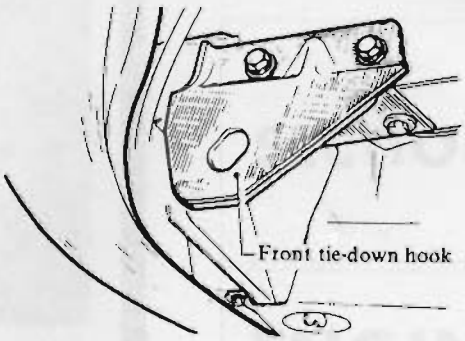


Fig. GI-17 Front tie-down hook

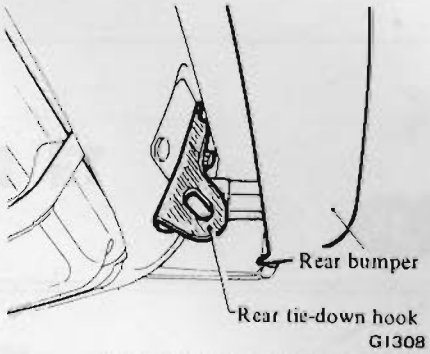


Fig. GI-18 Rear tie-down hook

Note: Be sure to remove rear tie-down hooks before delivery of car.

SPECIAL SERVICE TOOLS

Special Tools play very important role in the maintenance of cars. These are essential to the safe, accurate and speedy servicing.

The working times listed in the column under FLAT RATE TIME in FLAT RATE SCHEDULE are computed based on the use of Special Tools.

The identification code of maintenance tools is made up of 2 alphabetical letters and 8-digital figures.

The heading two letters roughly classify tools or equipment as:

ST00000000:	Special Tool
KV00000000:	Special Tool
EM00000000:	Engine Overhauling Machine
GG00000000:	General Gauge
LM00000000:	Garage Tool
HT00000000:	Hand Tool

Refer to Service Bulletin DATSUN 280Z for Special Tool List and further information on Special Tools.