

# SERVICE MANUAL

DATSUN 280Z  
MODEL S30 SERIES



**NISSAN**

**NISSAN MOTOR CO., LTD.**  
TOKYO, JAPAN

## SECTION GI

GI

# GENERAL INFORMATION

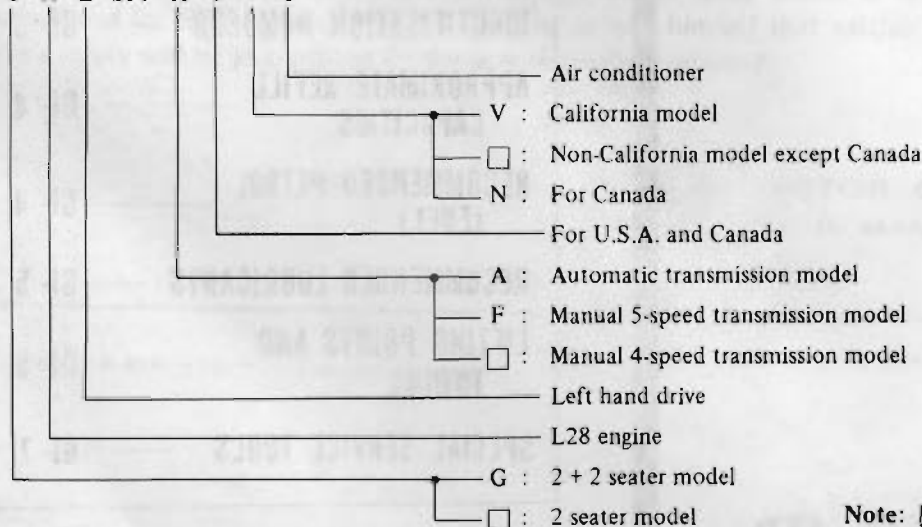
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# MODEL VARIATION

| 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                                    | Non-California models | HLS30UN               | F4W71B    | R200   |              |                      |            |
|             |                                             |                       | HLS30FUN              | FS5W71B   |        |              |                      |            |
|             |                                             |                       | HLS30AUN              | 3N71B     | R180   |              |                      |            |
|             | 2 + 2-seater                                |                       | GHLS30UN              | F4W71B    | R200   |              |                      |            |
|             |                                             |                       | GHLS30FUN             | FS5W71B   |        |              |                      |            |
|             |                                             |                       | GHLS30AUN             | 3N71B     | R180   |              |                      |            |

\*Specified by Emission regulations.

G H L S30 A U V C



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.

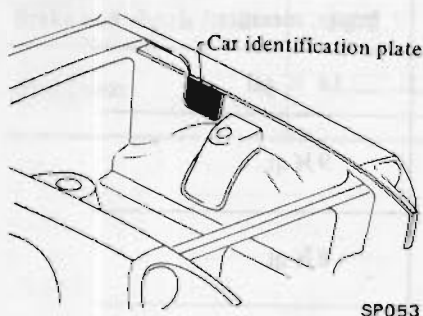


Fig. G1-1 Car identification plate location

### 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

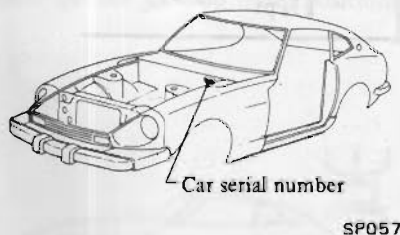


Fig. G1-2 Car serial number location

### 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. G1-3 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 G1-4.

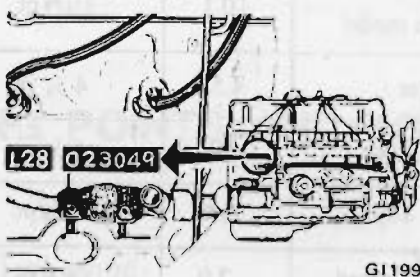


Fig. G1-4 Engine serial number location

### COLOR CODE NUMBER LABEL

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



Fig. G1-5 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.

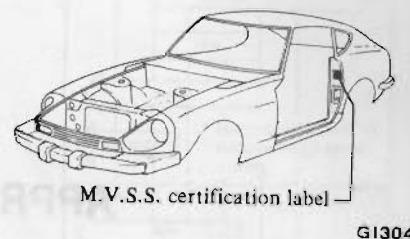


Fig. G1-6 M.V.S.S. certification label location

### EMISSION CONTROL INFORMATION LABEL

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

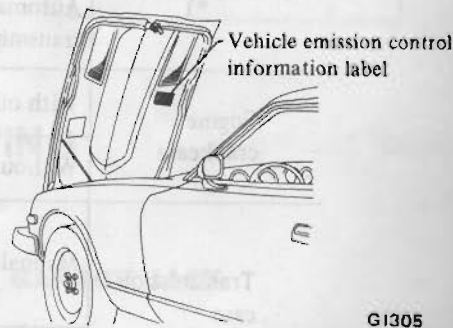


Fig. G1-7 Emission control information label location

### MANUAL TRANSMISSION NUMBER

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

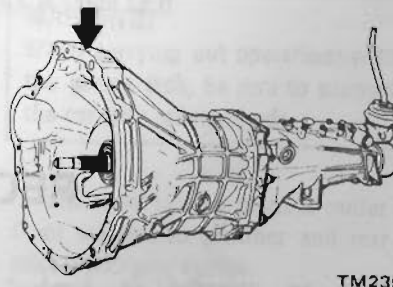
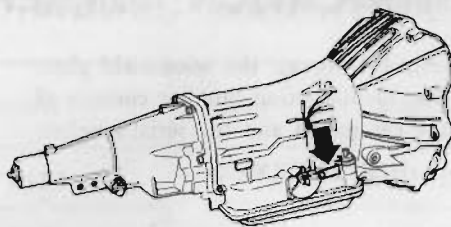


Fig. G1-8 Manual transmission number location

## 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     | 17 $\frac{1}{8}$ gal | 14 $\frac{1}{4}$ gal |
| Engine cooling system<br>*1 | Manual transmission model    |         | 10.3   | 10 $\frac{3}{8}$ qt  | 9 $\frac{1}{8}$ qt   |
|                             | Automatic transmission model |         | 10.1   | 10 $\frac{3}{8}$ qt  | 8 $\frac{3}{8}$ qt   |
| Engine crankcase            | With oil filter              |         | 4.5    | 4 $\frac{3}{4}$ qt   | 4 qt                 |
|                             | Without oil filter           |         | 4.0    | 4 $\frac{1}{4}$ qt   | 3 $\frac{1}{2}$ qt   |
| Transmission case           | Manual                       | 4-speed | 1.7    | 3 $\frac{3}{8}$ pt   | 3 pt                 |
|                             |                              | 5-speed | 2.0    | 4 $\frac{1}{4}$ pt   | 3 $\frac{1}{2}$ pt   |
|                             | Automatic                    |         | 5.5    | 5 $\frac{1}{2}$ qt.  | 4 $\frac{3}{8}$ qt   |
| Differential case           | R200                         |         | 1.3    | 2 $\frac{3}{4}$ pt   | 2 $\frac{1}{4}$ pt   |
|                             | R180                         |         | 1.0    | 2 $\frac{1}{8}$ pt   | 1 $\frac{3}{4}$ pt   |

\*1: Includes 0.8 liter (  $\frac{1}{8}$  US qt,  $\frac{3}{4}$  Imp qt) for heater and 0.62 liter (  $\frac{1}{8}$  US qt,  $\frac{1}{2}$  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 un-

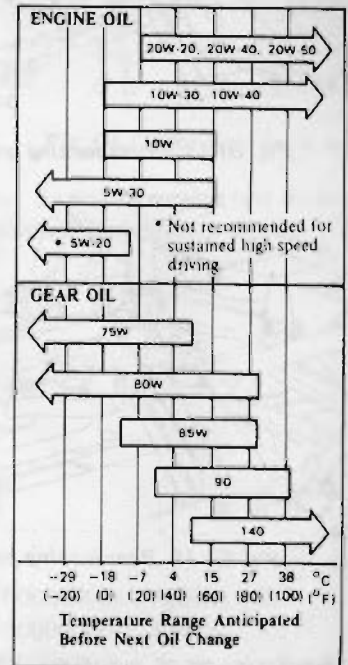
leaded gasoline to protect the catalytic converter from contamination.

## 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

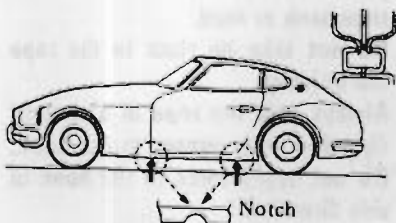


## LIFTING POINTS AND TOWING

### JACK UP

#### PANTOGRAPH JACK

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

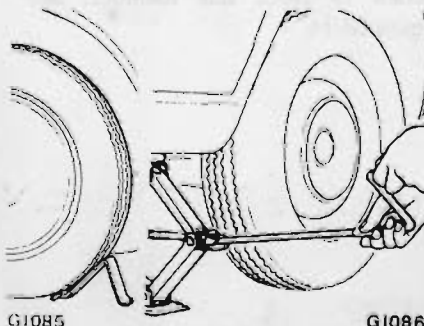


G1201

Fig. G1-10 Jacking point

#### WARNING:

- 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.
- Block the wheels diagonally with wheel chocks.



G1085

G1086

Fig. G1-11 Wheel chocks and jack

### GARAGE JACK

#### Note:

- When jacking up the front of the car, place the chocks behind the rear wheels to hold them.
- 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.

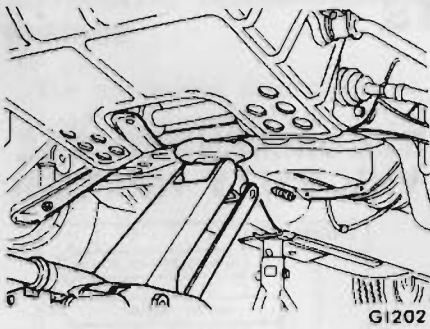


Fig. GI-12 Front jacking point

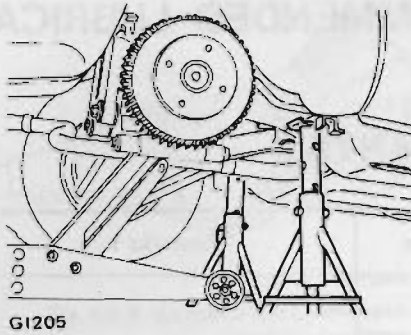
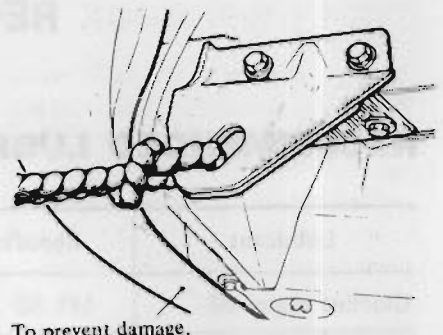


Fig. GI-15 Rear supportable points



To prevent damage, remove front apron and front fender front

GI306

Fig. GI-16 Front towing point

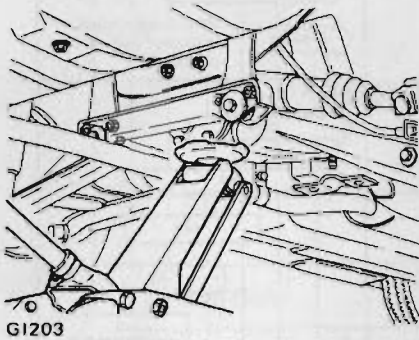


Fig. GI-13 Rear jacking point

## 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.

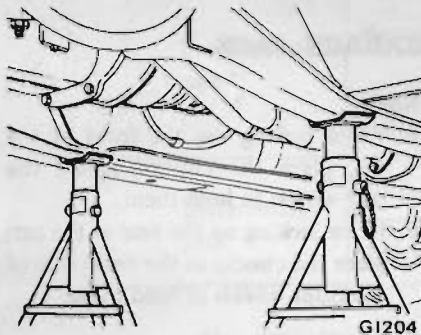


Fig. GI-14 Front supportable points

## TOWING

### CAUTION:

- It is necessary to use proper towing equipment, to avoid possible damage to the car during a towing operation.
- All applicable State or Provincial (in Canada) laws and local laws regarding the towing operation must be obeyed.
- 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:

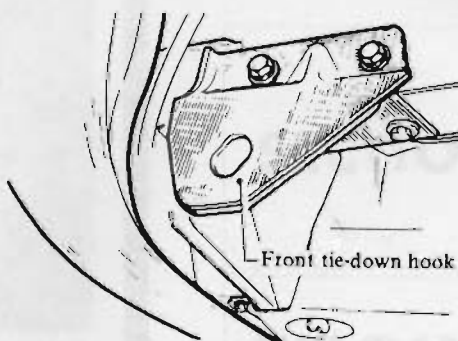
- Before towing, make sure that the transmission, axles, steering system and power train are in good order. If any unit is damaged, a dolly must be used.
- If the transmission is inoperative, tow the car with the rear wheels off the ground, or with the propeller shaft removed.
- When the car is towed with its front wheels on the ground, secure the steering wheel in a straight ahead position with the ignition key turned in "OFF" position.
- 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).
- Release the parking brake and set the gearshift lever in "Neutral" position before starting to tow the car.
- 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.
- Do not take up slack in the rope too quickly.
- 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.

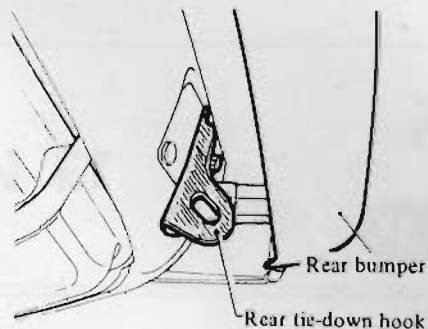
Front tie-down hook attached to either side member is also used as a towing hook.

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



GI307

Fig. GI-17 Front tie-down hook



GI308

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.