

# GENERAL INFORMATION



## SECTION **GI**



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## PRECAUTIONS

The following precautions should be observed to ensure safe and proper service operations. These precautions are not described in each individual section.

1. Do not operate the engine for an extended period of time without proper exhaust ventilation.

Keep the work area well ventilated and free of any inflammable materials. Special care should be taken when handling any inflammable or poisonous materials, such as gasoline, refrigerant gas, etc. When working in a pit or other enclosed area, be sure to properly ventilate the area before working with hazardous materials. Do not smoke while working on the vehicle.



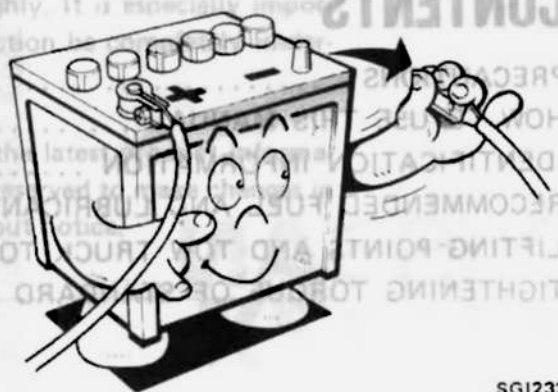
SG1285

2. Before jacking up the vehicle, apply wheel chocks or other tire blocks to the wheels to prevent the vehicle from moving. After jacking up the vehicle, support the vehicle weight with safety stands at the points designated for proper lifting before working on the vehicle. These operations should be done on a level surface.



SG1231

3. When removing a heavy component such as the engine or transaxle/transmission, take care not to lose your balance and drop it. Also do not allow it to hit against adjacent parts, especially the brake tube and brake master cylinder.
4. Before starting repairs which do not require battery power, always turn off the ignition switch, then disconnect the ground cable from the battery to prevent accidental short circuit.



SG1232

5. To prevent serious burns, avoid contact with hot metal parts such as the radiator, exhaust manifold, tail pipe and muffler. Do not remove the radiator cap when the engine is hot.

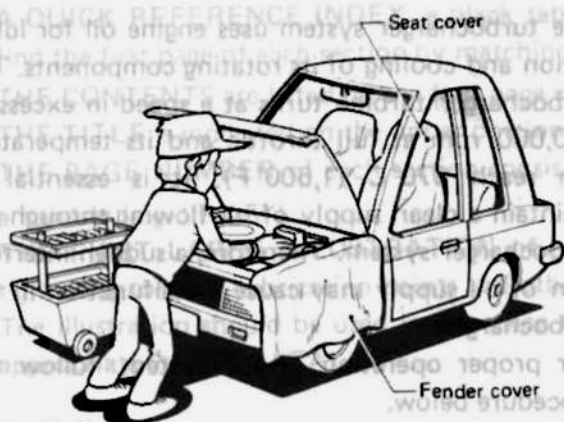


SG1233

6. To prevent scratches and soiling, protect fenders, upholstery and carpeting with appropriate covers before servicing. Take caution that keys, buckles or buttons on your person do not scratch the paint.

## PRECAUTIONS

### Precautions for a Catalyst



SG1234

7. Clean all disassembled parts in the designated liquid or solvent prior to inspection or assembly.
8. Replace oil seals, gaskets, packings, O-rings, locking washers, cotter pins, self-locking nuts, etc. as instructed and discard used ones.
9. Tapered roller bearings and needle bearings should be replaced as a set of inner and outer races.
10. Arrange the disassembled parts in accordance with their assembled locations and sequence.
11. Do not touch the terminals of electrical components which utilize microcomputers such as electronic control units. Static electrical charges stored in your body may damage internal electronic components.
12. After disconnecting vacuum hose or air hose, attach a tag which indicates the proper connection to prevent incorrect connection.
13. Use only the lubricants specified in the applicable section or those indicated under "Recommended Fuel and Lubricants".
14. Use approved bonding agents, sealants or their equivalents when required.
15. The use of the proper tools and recommended essential tools should be used where specified for proper, safe and efficient service repairs.
16. When effecting repairs on the fuel, oil, water, vacuum or exhaust systems, make certain to check all affected lines for leaks.
17. Dispose of drained oil or the solvent used for cleaning parts in an appropriate manner.

If a large amount of unburned fuel flows into the converter, the converter temperature will be excessively high. To prevent this, follow the procedure below.

1. Use unleaded gasoline only. Leaded gasoline will seriously damage the catalytic converter.
2. When checking for ignition spark or measuring engine compression, make tests quickly and only when necessary.
3. Do not run engine when the fuel tank level is low, otherwise the engine may misfire causing damage to the converter.
4. Do not place the vehicle on inflammable material. Keep inflammable material off the exhaust pipe.



Clean floor

SG1290

# PRECAUTIONS

## Precautions for E.F.I. or E.C.C.S. Engine

1. Before connecting or disconnecting E.F.I. or E.C.C.S. harness connector to or from any E.F.I. or E.C.C.S. control unit, be sure to turn the ignition switch to the "OFF" position and disconnect the negative battery terminal. Otherwise, there may be damage to control unit.
2. Before disconnecting pressurized fuel line from fuel pump to injectors, be sure to release fuel pressure to eliminate danger.
3. Be careful not to jar components such as control unit and air flow meter.



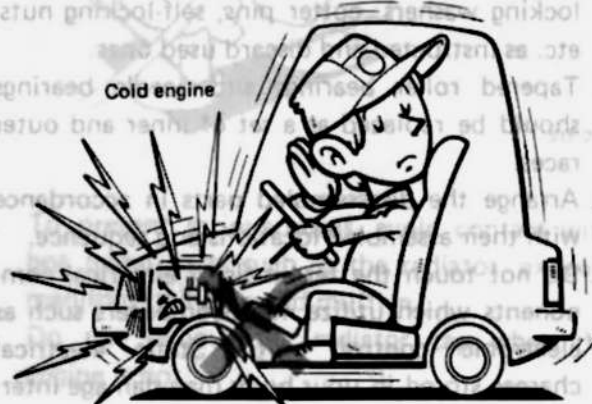
SG1291

## Precautions for Turbocharger

The turbocharger system uses engine oil for lubrication and cooling of its rotating components. The turbocharger turbine turns at a speed in excess of 100,000 rpm at full throttle and its temperature can reach 870°C (1,600°F). It is essential to maintain a clean supply of oil flowing through the turbocharger system. Therefore, a sudden interruption of oil supply may cause a malfunction in the turbocharger.

For proper operation of the system, follow the procedure below.

1. Always use the recommended oil. Follow the instructions for proper time to change the oil and proper oil level.
2. Avoid accelerating engine to a high rpm immediately after starting.



SG1292

3. If engine had been operating at high rpm for an extended period of time, let it idle for a few minutes prior to shutting it off.

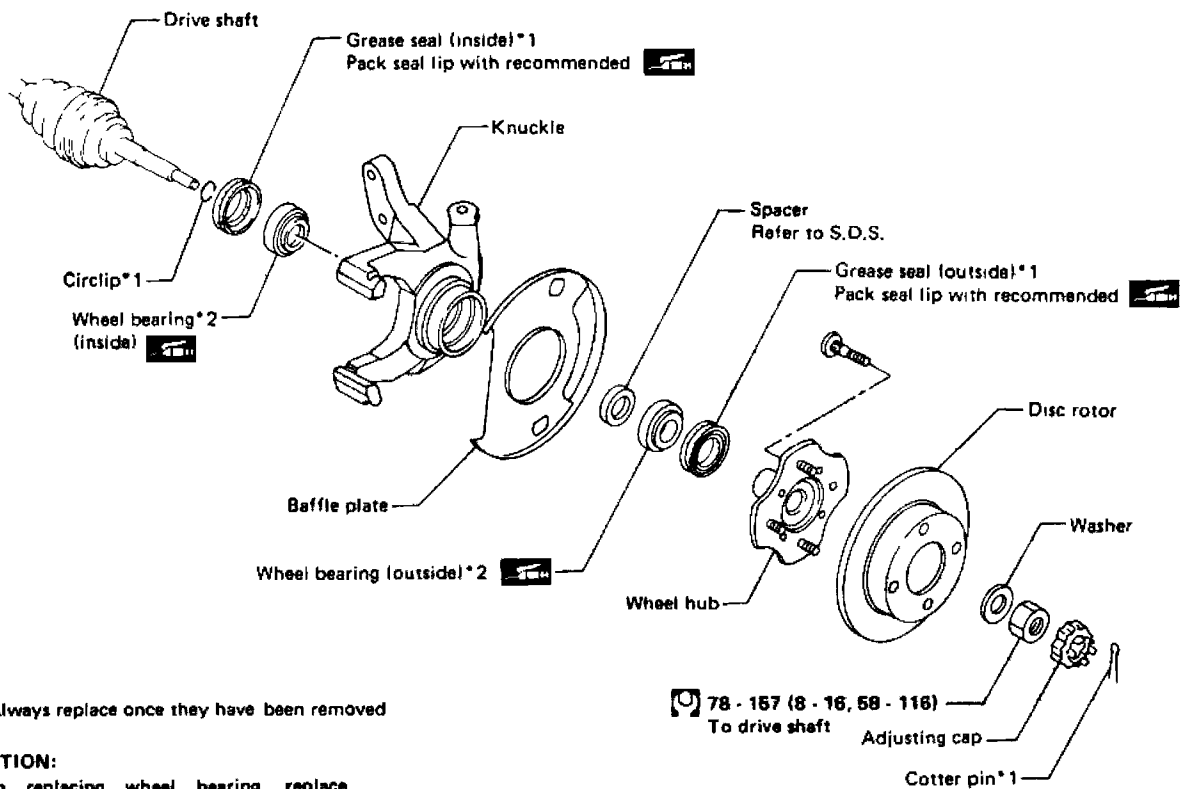


# HOW TO USE THIS MANUAL

1. **A QUICK REFERENCE INDEX**, a black tab (e.g. **FA** ) is provided on the first page. You can quickly find the first page of each section by matching it to the section's black tab.
2. **THE CONTENTS** are listed on the first page of each section.
3. **THE TITLE** is indicated on the upper portion of each page and shows the part or system.
4. **THE PAGE NUMBER** of each section consists of two letters, which designate the particular section, and a number (e.g. "FA-5").
5. **THE FIRST LARGE ILLUSTRATION** of each section is an exploded view (See below) and contains tightening torques, lubrication points and other information necessary to perform repairs. The illustration should be used in reference to the service matters only when ordering parts, refer to the appropriate PARTS CATALOG.

"Example"

## FRONT AXLE — Wheel Hub and Knuckle



\*1 Always replace once they have been removed

\*2

### CAUTION:

When replacing wheel bearing, replace inner and outer wheel bearings at the same time to prevent mix use of bearings of different brands.

: N·m (kg-m, ft-lb)

SFA494

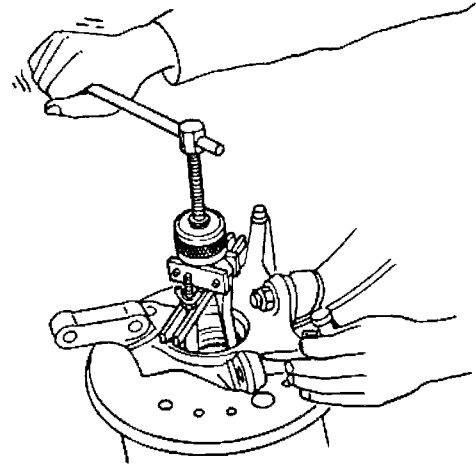
# HOW TO USE THIS MANUAL

6. THE FOLLOWING SMALL ILLUSTRATION shows the important steps such as inspection, use of special tools, knacks of work and hidden or tricky steps which are not shown in the previous large illustration. Assembly, inspection and adjustment procedures for the complicated units such as the automatic transaxle or transmission, etc. are presented in a step-by-step format where necessary.

"Example"

## KNUCKLE

- Remove wheel bearing outer races. When replacing wheel bearing, replace as a set of outer and inner wheel bearing assembly.



SFA540

7. The followings **SYMBOLS AND ABBREVIATIONS** are used:



: Tightening Torque



: Should be lubricated with grease.  
Unless otherwise indicated, use  
recommended multi-purpose grease.



: Should be lubricated with oil.



: Sealing point



: Checking point



: Always replace after every disassembly.

S.D.S.: Service Data and Specifications

L.H., R.H.: Left-Hand, Right-Hand

M/T: Manual Transaxle/Transmission

A/T: Automatic Transaxle/Transmission

Tool: Special Service Tools

8. The **UNIT** given in this manual are primarily expressed with the SI UNIT (International System of Unit), and alternately expressed in the metric system and in the yard/pound system.

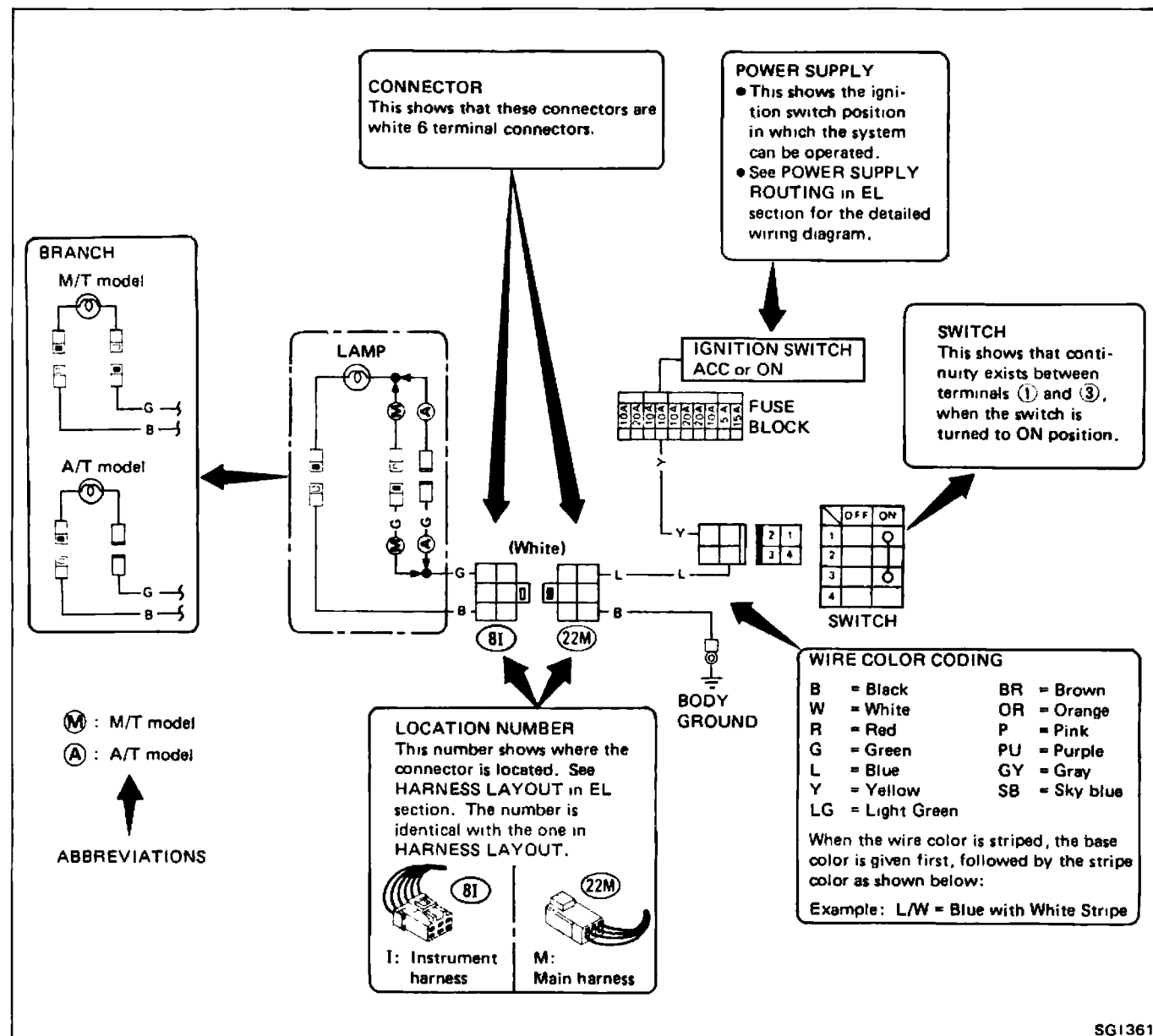
"Example"

Tightening torque

59 - 78 N·m (6.0 - 8.0 kg-m, 43 - 58 ft-lb)

9. Symbols used in **WIRING DIAGRAM** are shown below.

"Example"



SG1361

10. **TROUBLE DIAGNOSES AND CORRECTIONS** are included in sections dealing with complicated components.
11. **SERVICE DATA AND SPECIFICATIONS** and a list of **SPECIAL SERVICE TOOLS** are contained at the end of each section for quick reference of data and special tools.
12. The captions **WARNING** and **CAUTION** warn you of steps that must be followed to prevent personal injury and/or damage to some part of the vehicle.

# IDENTIFICATION INFORMATION

## Model Variation

| Body             | Desti-<br>nation | Model          |               |          | Engine   | Transmis-<br>sion | Differential<br>carrier | Road wheel* 1<br>size ... offset<br>mm (in) | Tire size                   |                    |
|------------------|------------------|----------------|---------------|----------|----------|-------------------|-------------------------|---------------------------------------------|-----------------------------|--------------------|
| Standard<br>roof | U.S.A.           | Non-California | 2<br>seater   | GL       | HL-JU    | VG30E             | FS5W71C                 | R200                                        | 6-1/2JJ-15<br>... 20 (0.79) | P215/<br>60R15 90H |
| T-bar<br>roof    |                  |                |               |          | HL-JAU   |                   | E4N71B                  |                                             |                             |                    |
|                  |                  |                |               |          | KHL-JU   |                   | FS5W71C                 |                                             |                             |                    |
|                  |                  |                |               |          | KHL-JAU  |                   | E4N71B                  |                                             |                             |                    |
|                  |                  |                |               | KHL-XU   | FS5W71C  |                   |                         |                                             |                             |                    |
|                  |                  |                |               | KHL-XAU  | E4N71B   |                   |                         |                                             |                             |                    |
|                  |                  |                |               | GL       | KHL-JTU  |                   | FS5R30A                 |                                             |                             |                    |
|                  |                  |                |               |          | KHL-JATU |                   | E4N71B                  |                                             |                             |                    |
|                  |                  |                | GLL           |          | KHL-XTU  | FS5R30A           |                         |                                             |                             |                    |
|                  |                  |                |               |          | KHL-XATU | E4N71B            |                         |                                             |                             |                    |
|                  |                  |                | 2+2<br>seater | GL       | KHLG-JU  | VG30E             | FS5W71C                 |                                             |                             |                    |
|                  |                  |                |               |          | KHLG-JAU |                   | E4N71B                  |                                             |                             |                    |
|                  |                  |                |               | GLL      | KHLG-XU  |                   | FS5W71C                 |                                             |                             |                    |
|                  |                  |                |               |          | KHLG-XAU |                   | E4N71B                  |                                             |                             |                    |
|                  |                  | California     | 2<br>seater   | GL       | HL-JV    | VG30E             | FS5W71C                 |                                             |                             |                    |
|                  |                  |                |               |          | HL-JAV   |                   | E4N71B                  |                                             |                             |                    |
|                  |                  |                |               |          | KHL-JV   |                   | FS5W71C                 |                                             |                             |                    |
|                  |                  |                |               |          | KHL-JAV  |                   | E4N71B                  |                                             |                             |                    |
|                  |                  |                |               | GLL      | KHL-XV   |                   | FS5W71C                 |                                             |                             |                    |
|                  |                  |                |               |          | KHL-XAV  |                   | E4N71B                  |                                             |                             |                    |
| GL               | KHL-JTV          |                |               | VG30ET   | FS5R30A  |                   |                         |                                             |                             |                    |
|                  | KHL-JATV         |                |               |          | E4N71B   |                   |                         |                                             |                             |                    |
|                  | GLL              |                |               |          | KHL-XTV  | FS5R30A           |                         |                                             |                             |                    |
|                  |                  |                |               |          | KHL-XATV | E4N71B            |                         |                                             |                             |                    |
| 2+2<br>seater    | GL               |                |               | KHLG-JV  | VG30E    | FS5W71C           |                         |                                             |                             |                    |
|                  |                  |                |               | KHLG-JAV |          | E4N71B            |                         |                                             |                             |                    |
|                  | GLL              |                | KHLG-XV       | FS5W71C  |          |                   |                         |                                             |                             |                    |
|                  |                  |                | KHLG-XAV      | E4N71B   |          |                   |                         |                                             |                             |                    |



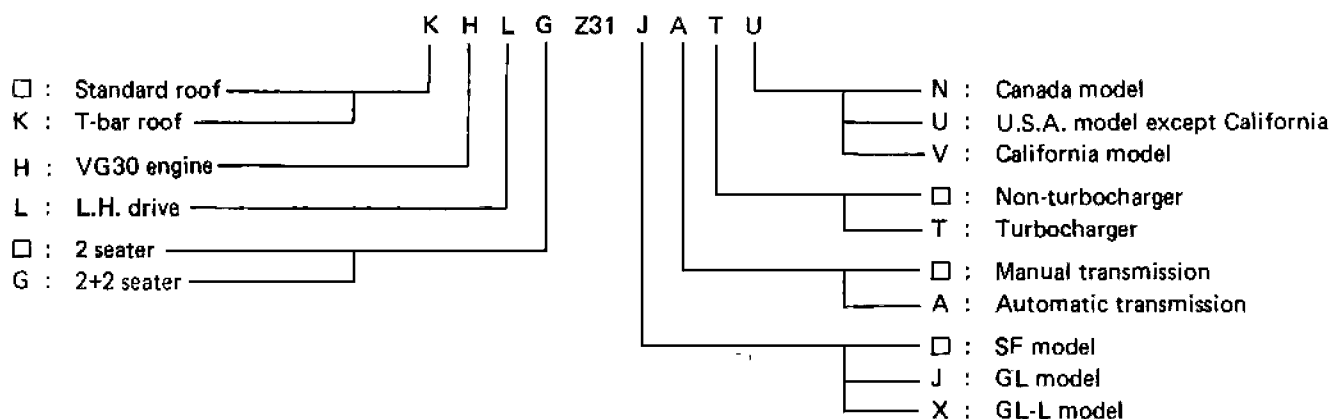
# IDENTIFICATION INFORMATION

## Model Variation (Cont'd)

| Body             | Desti-<br>nation | Model       |               |           | Engine   | Transmis-<br>sion | Differential<br>carrier | Road wheel *1<br>size ... offset<br>mm (in) | Tire size                   |                    |            |        |
|------------------|------------------|-------------|---------------|-----------|----------|-------------------|-------------------------|---------------------------------------------|-----------------------------|--------------------|------------|--------|
| Standard<br>roof | Canada           | 2<br>seater | SF            | HL-N      | VG30E    | FS5W71C           | R200                    | 6-1/2JJ-15<br>... 20 (0.79)                 | P215/<br>60R15 90H          |                    |            |        |
| T-bar<br>roof    |                  |             |               | KHL-N     |          |                   |                         |                                             |                             | GL                 | KHL-JN     | E4N71B |
|                  |                  |             | KHL-JAN       | FS5W71C   |          |                   |                         |                                             |                             |                    |            |        |
|                  |                  |             | GLL           | KHL-XN    |          | E4N71B            |                         |                                             |                             |                    |            |        |
|                  |                  |             |               | KHL-XAN   |          | FS5R30A           |                         |                                             |                             |                    |            |        |
|                  |                  |             | GL            | KHL-JTN   |          | E4N71B            |                         |                                             |                             | VG30ET             | FS5R30A    |        |
|                  |                  |             |               | KHL-JATN  | E4N71B   |                   |                         |                                             |                             |                    |            |        |
|                  |                  |             |               | GLL       | KHL-XTN  | FS5R30A           |                         |                                             |                             |                    |            |        |
|                  |                  |             |               |           | KHL-XATN | E4N71B            |                         |                                             |                             |                    |            |        |
|                  |                  |             | 2+2<br>seater | GL        | KHLG-JN  | VG30E             |                         | FS5W71C                                     | 6-1/2JJ-15<br>... 20 (0.79) | P215/<br>60R15 90H |            |        |
|                  |                  | KHLG-JAN    |               |           | E4N71B   |                   |                         |                                             |                             |                    |            |        |
|                  |                  | GLL         |               | KHLG-XN   | FS5W71C  |                   |                         |                                             |                             |                    |            |        |
|                  |                  |             |               | KHLG-XAN  | E4N71B   |                   |                         |                                             |                             |                    |            |        |
|                  |                  | GL          |               | KHLG-JATN | VG30ET   | E4N71B            |                         | 7-JJ-16<br>... 30 (1.18)                    |                             |                    | 225/50VR16 |        |
|                  |                  | GLL         |               | KHLG-XATN |          |                   |                         |                                             |                             |                    |            |        |

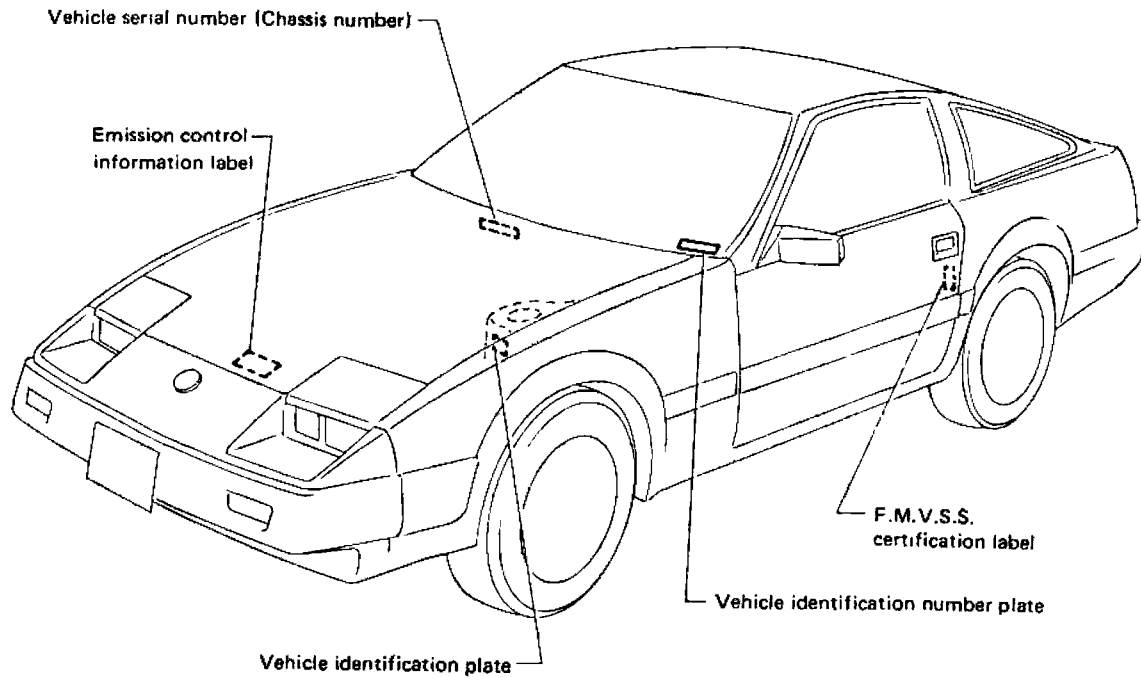
\*1: Pitch circle diameter is 114.3 mm (4.50 in).

### Prefix and suffix designations



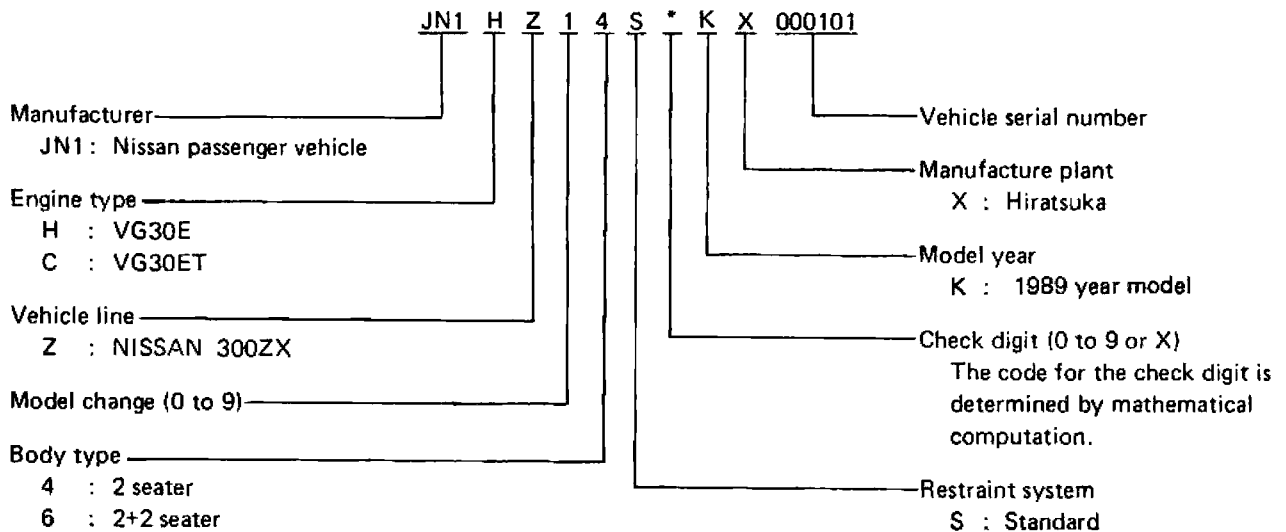
# IDENTIFICATION INFORMATION

## Identification Number



SGI341

## VEHICLE IDENTIFICATION NUMBER ARRANGEMENT



The production of the 1989 NISSAN 300ZX starts with the following vehicle identification numbers.

|                         |                   |
|-------------------------|-------------------|
| 2 seater turbo:         | JN1CZ14S*KX210001 |
| 2 + 2 seater turbo:     | JN1CZ16S*KX050001 |
| 2 seater non-turbo:     | JN1HZ14S*KX290001 |
| 2 + 2 seater non-turbo: | JN1HZ16S*KX220001 |

# IDENTIFICATION INFORMATION

## Identification Number (Cont'd)

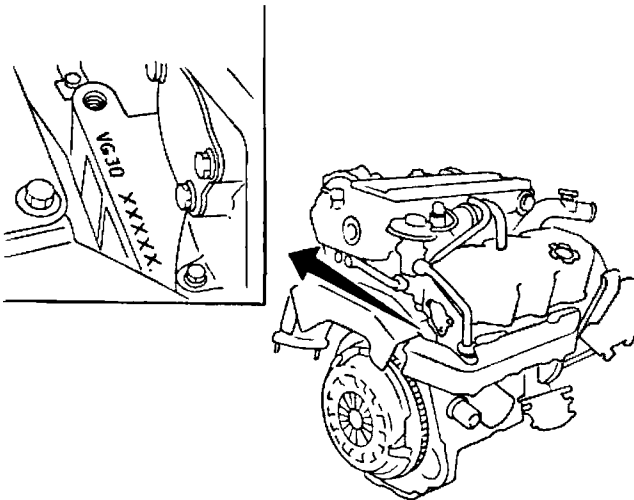
### IDENTIFICATION PLATE

|                                          |              |               |                 |
|------------------------------------------|--------------|---------------|-----------------|
| NISSAN MOTOR CO., LTD. JAPAN             |              |               |                 |
| 型式                                       | TYPE<br>TIPO | △             |                 |
| CHASSIS NO<br>NO DE CHASIS               |              | △             |                 |
| MODEL<br>MODELO                          |              | △             |                 |
| ○ カラー COLOR TRIM<br>トリム COLOR GUARNICION |              | △             | △               |
| エンジン ENGINE<br>ジン MOTOR                  |              | △             | △               |
| ミッション TRANS AXLE<br>アクスル TRANS. EJE      |              | △             | △               |
|                                          | 工場           |               | PLANT<br>PLANTA |
| 日産自動車株式会社                                |              | MADE IN JAPAN |                 |

- 1 Type
- 2 Vehicle identification number (Chassis number)
- 3 Model
- 4 Body color code
- 5 Trim color code
- 6 Engine model
- 7 Engine displacement
- 8 Transmission model
- 9 Axle model

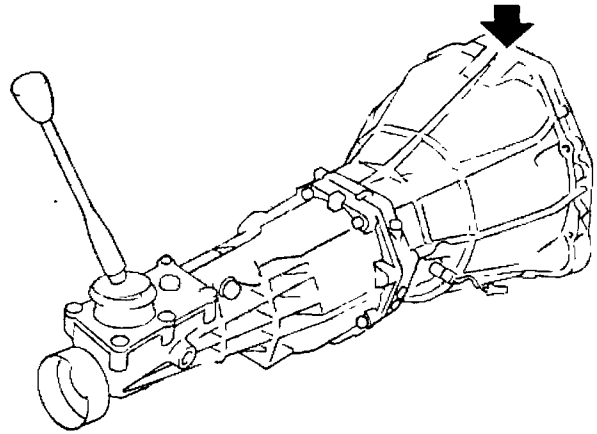
SGI315

### ENGINE SERIAL NUMBER



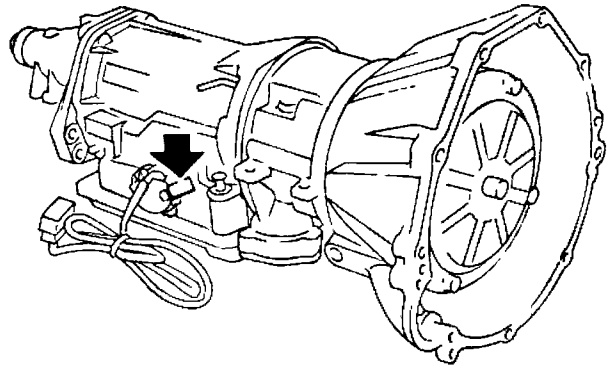
SGI279

### MANUAL TRANSMISSION NUMBER



SGI274

### AUTOMATIC TRANSMISSION NUMBER



SGI273

# IDENTIFICATION INFORMATION

## Dimensions

| Item                  |         | Model   | 2 seater                         | 2+2 seater    |
|-----------------------|---------|---------|----------------------------------|---------------|
|                       |         |         |                                  |               |
| Overall length        | mm (in) |         | 4,405 (173.4)                    | 4,605 (181.3) |
| Overall width         | mm (in) |         | 1,725 (67.9)                     |               |
| Overall height        | mm (in) |         | 1,295 (51.0)                     | 1,310 (51.6)  |
| Wheelbase             | mm (in) |         | 2,320 (91.3)                     | 2,520 (99.2)  |
| Tread                 | Front   | mm (in) | 1,455 (57.3) *1, 1,435 (56.5) *2 |               |
|                       | Rear    | mm (in) | 1,475 (58.1) *1, 1,455 (57.3) *2 |               |
| Min. ground clearance |         | mm (in) | 150 (5.9)                        |               |
| Overhang              | Front   | mm (in) | 945 (37.2)                       |               |
|                       | Rear    | mm (in) | 1,070 (42.1)                     |               |

\*1: Non-turbo models

\*2: Turbo models

# RECOMMENDED FUEL AND LUBRICANTS

## Fuel

Use unleaded gasoline with an octane rating of at least A.K.I. (Anti-Knock Index) number 87 (Research octane number 91).

## Approximate Refill Capacities

|                           | Liter  | US measure | Imp measure |
|---------------------------|--------|------------|-------------|
| Fuel tank                 | 72     | 19 gal     | 15-7/8 gal  |
| Coolant                   |        |            |             |
| Non-turbo model           | 10.5   | 11-1/8 qt  | 9-1/4 qt    |
| Turbo model               | 11.0   | 11-5/8 qt  | 9-5/8 qt    |
| Reservoir tank            | 0.8    | 7/8 qt     | 3/4 qt      |
| Engine                    |        |            |             |
| Refill capacity           |        |            |             |
| With oil filter change    | 4.0    | 4-1/4 qt   | 3-1/2 qt    |
| Without oil filter change | 3.6    | 3-7/8 qt   | 3-1/8 qt    |
| Transmission              |        |            |             |
| M/T FS5R30A               | 2.4    | 5-1/8 pt   | 4-1/4 pt    |
| FS5W71C                   | 2.0    | 4-1/4 pt   | 3-1/2 pt    |
| A/T                       | 7.0    | 7-3/8 qt   | 6-1/8 qt    |
| Final drive gear          | 1.3    | 1-3/8 qt   | 1-1/8 qt    |
| Power steering system     | 0.9    | 1 qt       | 3/4 qt      |
| Air conditioning system   |        |            |             |
| Refrigerant               | 1.0 kg | 2.2 lb     | 2.2 lb      |
| Compressor oil            | 0.15   | 5.1 fl oz  | 5.3 fl oz   |
| Water reservoir           |        |            |             |
| Windshield & rear window  | 3.0    | 3-1/8 qt   | 2-5/8 qt    |
| Headlamps                 | 2.2    | 2-3/8 qt   | 2 qt        |

## Lubricants

| Lubricant              |                                    | Specifications                                                                    | Remarks                                                             |
|------------------------|------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Engine oil             | Non-turbo engine                   | Genuine Nissan Motor Oil*1 or equivalent Energy Conserving Oils*2 of API SF or SG | For further details, refer to the recommended SAE viscosity number. |
|                        | Turbo engine                       | Genuine Nissan Motor Oil*1 or equivalent API SF/CC, SF/CD or SG                   |                                                                     |
| Gear oil               | Transmission                       | API GL-4                                                                          | —                                                                   |
|                        | Differential (exc. L.S.D.)         | API GL-5                                                                          |                                                                     |
|                        | Limited-slip differential (L.S.D.) | Only L.S.D. gear oil: API GL-5 and SAE 80W-90*3 approved for Nissan L.S.D.*4      |                                                                     |
| Automatic-T/M fluid    |                                    | Genuine Nissan ATF*1 or equivalent Type DEXRON®                                   | —                                                                   |
| Power steering fluid   |                                    | Type DEXRON®                                                                      | —                                                                   |
| Multi-purpose grease   |                                    | NLGI No. 2                                                                        | Lithium soap base                                                   |
| Brake and clutch fluid |                                    | Genuine Nissan Brake Fluid*1 or equivalent DOT 3                                  | US FMVSS No. 116                                                    |
| Anti-freeze            |                                    | —                                                                                 | Ethylene glycol base                                                |

\*1: Available in mainland U.S.A. through your Nissan dealer

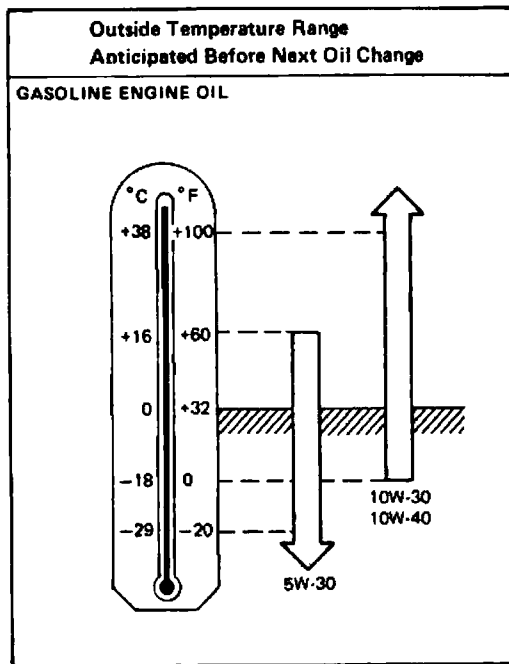
\*2: These oils can be identified by such labels as energy conserving, energy saving, improved fuel economy, etc.

\*3: SAE 90 is acceptable in temperatures above -18°C (0°F).

\*4: Contact your Nissan dealer for a list of approved oils.

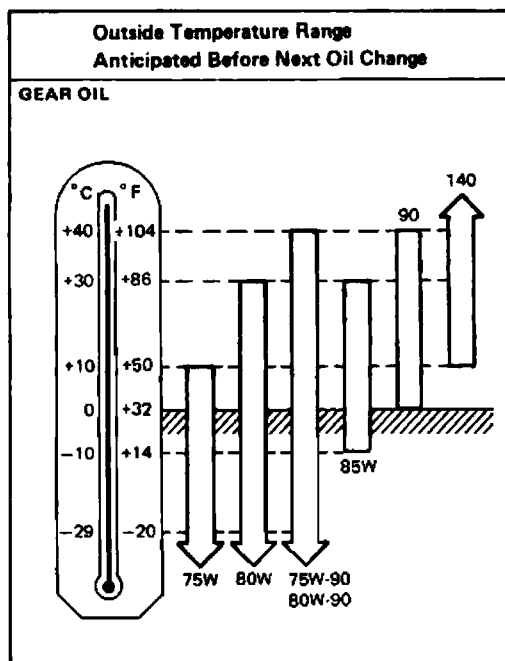
# RECOMMENDED FUEL AND LUBRICANTS

## SAE Viscosity Number



T10002

10W-30 is preferable if the ambient temperature is above  $-18^{\circ}\text{C}$  ( $0^{\circ}\text{F}$ ). 20W-40 and 20W-50 are usable if the ambient temperature is above  $10^{\circ}\text{C}$  ( $50^{\circ}\text{F}$ ) for all seasons.



T10003

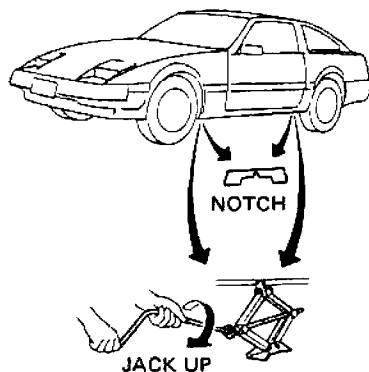
75W-90 for transmission and 80W-90 for differential are preferable if the ambient temperature is below  $40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ ).

# LIFTING POINTS AND TOW TRUCK TOWING

## WARNING:

- Never get under the vehicle while it is supported only by the jack. Always use safety stands to support the frame when you have to get under the vehicle.
- Place wheel chocks at both front and back of the wheel which is diagonally opposite the jack position.  
Example: If the jack is positioned at the front L.H. wheel, place wheel chocks at the rear R.H. wheel.

## Pantograph Jack

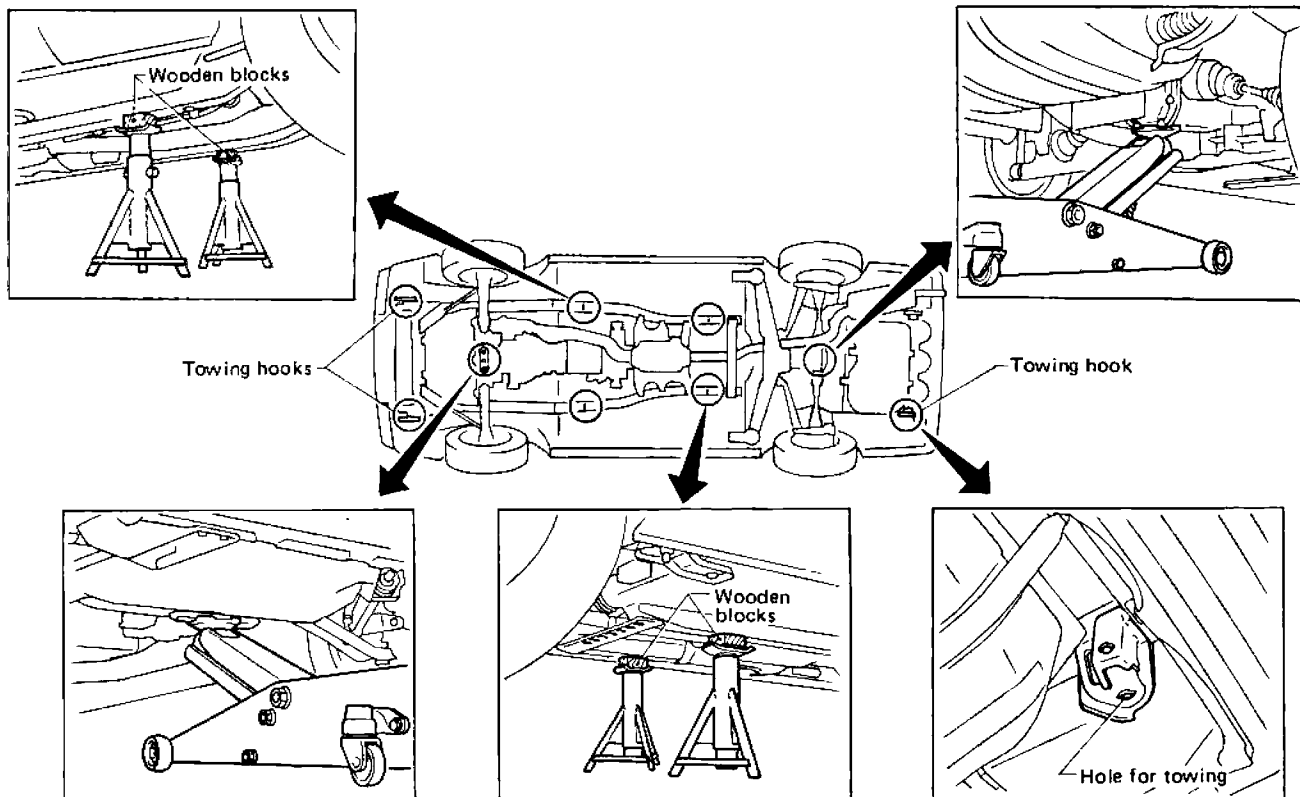


TR400

## Garage Jack and Safety Stand

### CAUTION:

- Place a wooden or rubber block between safety stand and vehicle body when the supporting body is flat.



SG1397

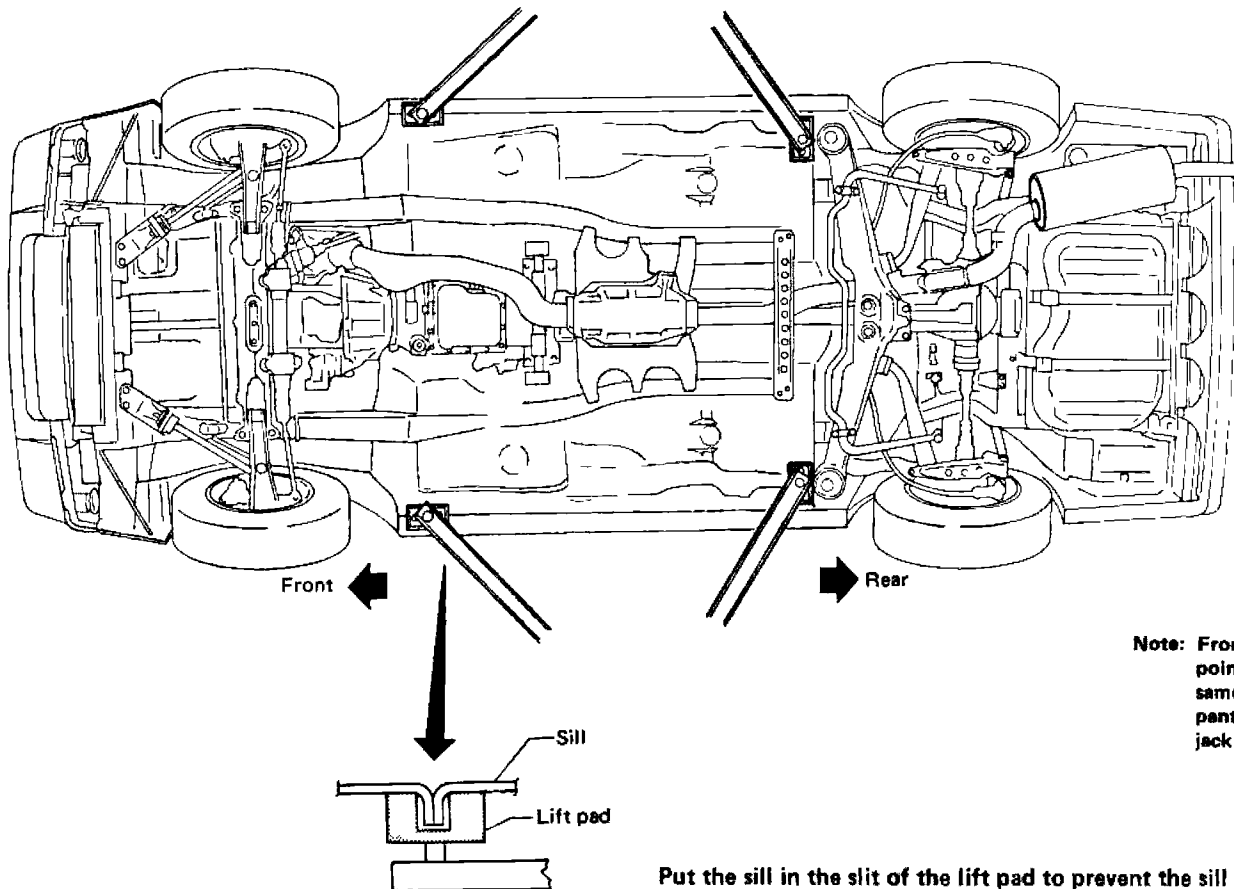
# LIFTING POINTS AND TOW TRUCK TOWING

## 2-point Lift

### WARNING:

When lifting the vehicle, open the lift arms as wide as possible and ensure that the front and rear of the vehicle are well balanced.

When setting the lift arm, do not allow the arm to contact the brake tubes and fuel lines.



**Note:** Front lift-up points are the same as pantagraph jack points.

Put the sill in the slit of the lift pad to prevent the sill from deforming. If the pad does not have the slit, prepare a suitable attachment with slit.

SG1483

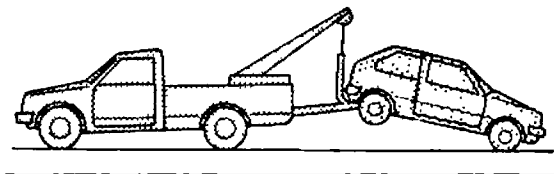


# LIFTING POINTS AND TOW TRUCK TOWING

## Tow Truck Towing

### CAUTION:

- All applicable State or Provincial (in Canada) laws and local laws regarding the towing operation must be obeyed.
- It is necessary to use proper towing equipment to avoid possible damage to the vehicle during a towing operation.  
Towing should be done in accordance with Towing Procedure Manual.
- Attach safety chains for all towing.
- When towing, make sure that the transmission, steering system and power train are in good order. If any unit is damaged, a dolly must be used.
- When towing with the front wheels on the ground:  
Turn the ignition key to the "OFF" position and secure the steering wheel in a straight-ahead position with a rope or similar device. Never place the ignition key in the "LOCK" position. This will result in damage to the steering lock mechanism.
- When towing with the rear wheels on the ground, release the parking brake and move the gearshift lever to neutral ("N" position).
- Do not tow your vehicle by the front end.



SG1494

NISSAN recommends that vehicle be towed with the driving (rear) wheels off the ground as illustrated.

### TOWING AN AUTOMATIC TRANSMISSION MODEL WITH FOUR WHEELS ON GROUND OR TOWING WITH FRONT WHEELS RAISED (With rear wheels on ground)

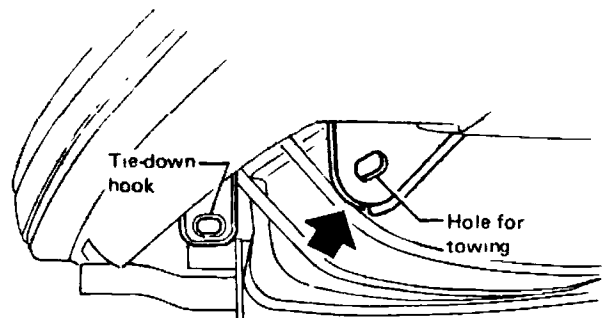
Observe the following restricted towing speeds and distance

|          |            |                   |
|----------|------------|-------------------|
| Speed    | km/h (MPH) | Below 50 (30)     |
| Distance | km (miles) | Less than 65 (40) |

If the speed or distance must be greater, remove the propeller shaft beforehand to prevent damage to the transmission.

### TOWING POINT

Rear



SG1479

- Never tow the vehicle using only the towing hooks. Use proper towing equipment when towing. Otherwise, the vehicle body will be damaged.
- Always pull the cable straight out from the vehicle. Never pull on the hook at a sideways angle.

# TIGHTENING TORQUE OF STANDARD BOLTS

| Grade | Bolt size | Bolt diameter* mm | Pitch mm | Tightening torque (Without lubricant) |      |       |                     |      |       |
|-------|-----------|-------------------|----------|---------------------------------------|------|-------|---------------------|------|-------|
|       |           |                   |          | Hexagon head bolt                     |      |       | Hexagon flange bolt |      |       |
|       |           |                   |          | N·m                                   | kg·m | ft·lb | N·m                 | kg·m | ft·lb |
| 4T    | M6        | 6.0               | 1.0      | 5.1                                   | 0.52 | 3.8   | 6.1                 | 0.62 | 4.5   |
|       | M8        | 8.0               | 1.25     | 13                                    | 1.3  | 9     | 15                  | 1.5  | 11    |
|       |           |                   | 1.0      | 13                                    | 1.3  | 9     | 16                  | 1.6  | 12    |
|       | M10       | 10.0              | 1.5      | 25                                    | 2.5  | 18    | 29                  | 3.0  | 22    |
|       |           |                   | 1.25     | 25                                    | 2.6  | 19    | 30                  | 3.1  | 22    |
|       | M12       | 12.0              | 1.75     | 42                                    | 4.3  | 31    | 51                  | 5.2  | 38    |
|       |           |                   | 1.25     | 46                                    | 4.7  | 34    | 56                  | 5.7  | 41    |
|       | M14       | 14.0              | 1.5      | 74                                    | 7.5  | 54    | 88                  | 9.0  | 65    |
| 7T    | M6        | 6.0               | 1.0      | 8.4                                   | 0.86 | 6.2   | 10                  | 1.0  | 7     |
|       | M8        | 8.0               | 1.25     | 21                                    | 2.1  | 15    | 25                  | 2.5  | 18    |
|       |           |                   | 1.0      | 22                                    | 2.2  | 16    | 26                  | 2.7  | 20    |
|       | M10       | 10.0              | 1.5      | 41                                    | 4.2  | 30    | 48                  | 4.9  | 35    |
|       |           |                   | 1.25     | 43                                    | 4.4  | 32    | 51                  | 5.2  | 38    |
|       | M12       | 12.0              | 1.75     | 71                                    | 7.2  | 52    | 84                  | 8.6  | 62    |
|       |           |                   | 1.25     | 77                                    | 7.9  | 57    | 92                  | 9.4  | 68    |
|       | M14       | 14.0              | 1.5      | 127                                   | 13.0 | 94    | 147                 | 15.0 | 108   |
| 9T    | M6        | 6.0               | 1.0      | 12                                    | 1.2  | 9     | 15                  | 1.5  | 11    |
|       | M8        | 8.0               | 1.25     | 29                                    | 3.0  | 22    | 35                  | 3.6  | 26    |
|       |           |                   | 1.0      | 31                                    | 3.2  | 23    | 37                  | 3.8  | 27    |
|       | M10       | 10.0              | 1.5      | 59                                    | 6.0  | 43    | 70                  | 7.1  | 51    |
|       |           |                   | 1.25     | 62                                    | 6.3  | 46    | 74                  | 7.5  | 54    |
|       | M12       | 12.0              | 1.75     | 98                                    | 10.0 | 72    | 118                 | 12.0 | 87    |
|       |           |                   | 1.25     | 108                                   | 11.0 | 80    | 137                 | 14.0 | 101   |
|       | M14       | 14.0              | 1.5      | 177                                   | 18.0 | 130   | 206                 | 21.0 | 152   |

1. Special parts are excluded.
2. This standard is applicable to bolts having the following marks embossed on the bolt head.

\*: Nominal diameter

| Grade    | Mark |
|----------|------|
| 4T ..... | 4    |
| 7T ..... | 7    |
| 9T ..... | 9    |

