# **GENERAL INFORMATION**



# CONTENTS

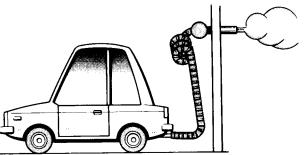
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# PRECAUTIONS

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

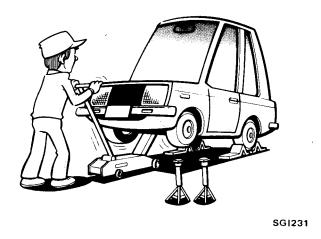
1. Do not operate the engine for an extended period of time without proper exhaust ventilation.

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.

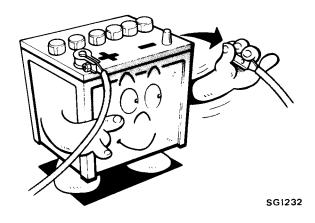


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2. Before jacking up the vehicle, apply wheel chocks or other tire blocks to the wheels to prevent the vehicle from moving. After jacking up the vehicle, support the vehicle weight with safety stands at the points designated for proper lifting before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



- 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.



5. To prevent serious burns, avoid contact with hot metal parts such as the radiator, exhaust manifold, tail pipe and muffler.

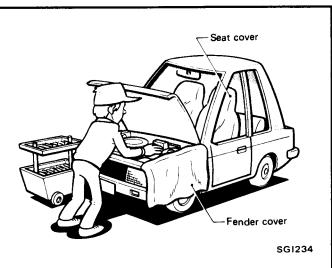
Do not remove the radiator cap when the engine is hot.



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

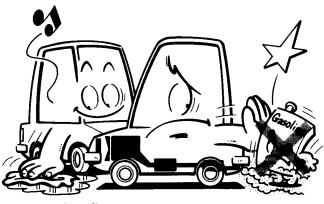


- 7. Clean all disassembled parts in the designated liquid or solvent prior to inspection or assembly.
- 8. Replace oil seals, gaskets, packings, O-rings, locking washers, cotter pins, self-locking nuts, etc. as instructed and discard used ones.
- 9. Tapered roller bearings and needle bearings should 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.

### Precautions for a Catalyst \_

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

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# PRECAUTIONS

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

- 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.



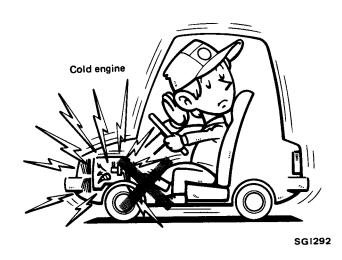
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### \_\_\_\_ Precautions for Turbocharger \_\_\_

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.

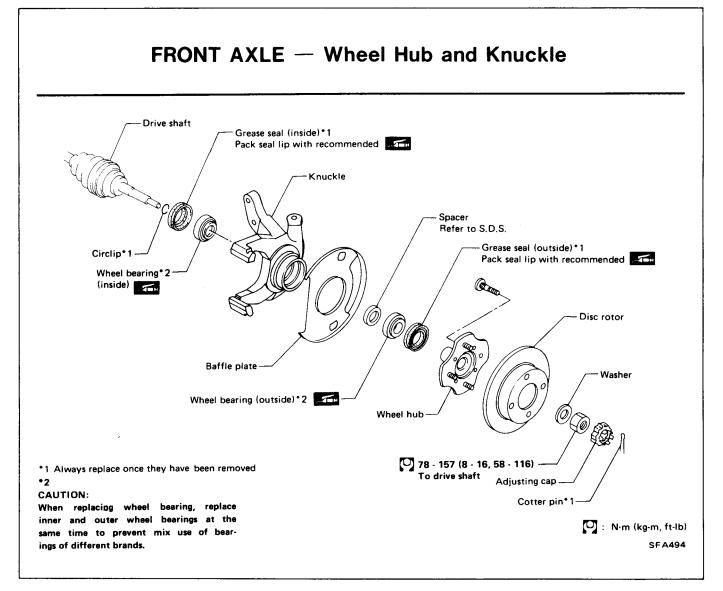


3. If engine had been operating at high rpm for an extended period of time, let it idle for a few minutes prior to shutting it off.

# 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"



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.

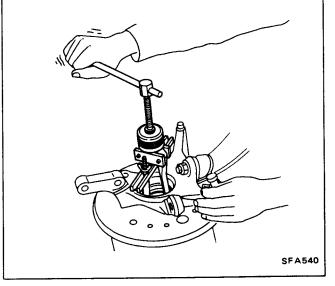
Assembly, inspection and adjustment procedures for the complicated units such as the automatic transaxle or transmission, etc. are presented in a step-by-step format where necessary.

### "Example"

### KNUCKLE

Remove wheel bearing outer races.

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



Service Data and Specifications

Manual Transaxle/Transmission

**Special Service Tools** 

Automatic Transaxle/Transmission

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

- 7. The followings SYMBOLS AND ABBREVIATIONS are used:
  - O : Tightening Torque
  - : Should be lubricated with grease. Unless otherwise indicated, use recommended multi-purpose grease.
    - : Should be lubricated with oil.



: Sealing point ĵ

- : Checking point
- : Always replace after every disassembly.
- 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.

S.D.S.:

M/T:

A/T:

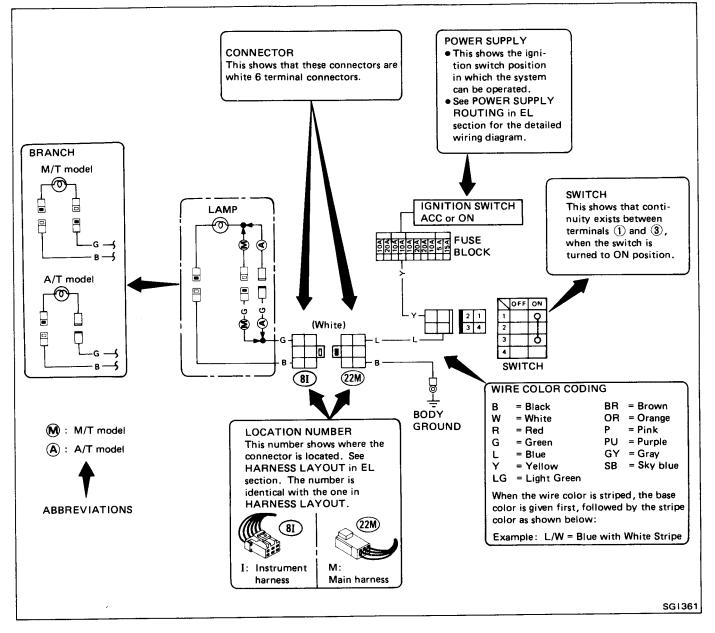
Tool:

"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"



- 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.

## \_\_\_\_\_Model Variation\_\_\_\_\_

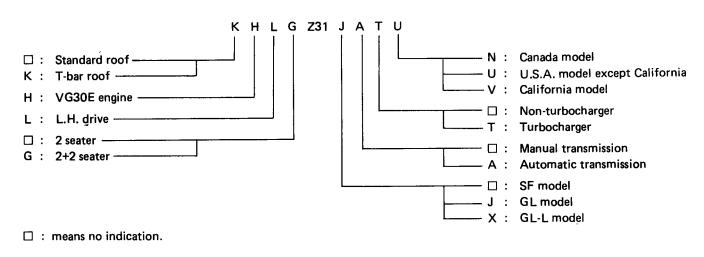
Body	De: na	sti- tion	Model		Model Endine I		Differential carrier	Road wheel*1 size offset mm (in)	Tire size															
Standard	Standard				HL-JU		FS5W71C			P215/														
roof					HL-JAU		E4N71B		6-1/2JJ-15															
				GL	KHL-JU	VG30E	FS5W71C																	
					KHL-JAU		E4N71B		10 (0.39)	60R 15 90H														
				GLL	KHL-XU		FS5W71C																	
			2 seater	GLL	KHL-XAU		E4N71B																	
		Non-California	360101	GL	KHL-JTU		BW T-5 (FS5R90A)																	
T-bar		-Cali			KHL-JATU	VG30ET	E4N71B		7-JJ-16	225/50VR16														
roof		Nor		GLL	KHL-XTU	- VG30ET	BW T-5 (FS5R90A)	R200	20 (0.79)															
					KHL-XATU		E4N71B																	
				GL	KHLG-JU	VG30E	FS5W71C		6-1/2JJ-15 10 (0.39)	P215/ 60R15 90H														
			2+2		KHLG-JAU		E4N71B																	
			seater	GLL	KHLG-XU		FS5W71C																	
	۲			GLL	KHLG-XAU		E4N71B																	
Standard	U.S.A.				HLJV	VG30E	FS5W71C																	
roof				GL	HL-JAV		E4N71B																	
					KHL-JV		FS5W71C																	
				GLL	KHL-JAV		E4N71B																	
					KHL-XV		FS5W71C																	
																	2 seater		KHL-XAV		E4N71B	]		
				GL	KHL-JTV		BW T-5 (FS5R90A)	-	7-JJ-16 20 (0.79)	225/50VR16														
T-bar		California			KHL-JATV	VG30ET	E4N71B																	
roof				GLL	KHL-XTV	VGSULT	BW T-5 (FS5R90A)																	
					KHL-XATV		E4N71B																	
				C1	KHLG-JV		FS5W71C																	
			2+2 seater	GL	KHLG-JAV		E4N71B	-	6-1/2JJ-15	P215/														
					KHLG-XV	VG30E	FS5W71C		10 (0.39)	60R15 90H														
					KHLG-XAV	1	E4N71B																	

Body	Desti- nation	Model		del	Engine	Transmis- sion	Differential carrier	Road wheel*1 size offset mm (in)	Tire size	
Standard roof				SF	HL-N				5-1/2JJ-14 30 (1.18)	P195/70R14
				KHL-N		FS5W71C		30 (1.10/		
			GL	KHL-JN	VG30E			6-1/2JJ-15 10 (0.39)		
			GL	KHL-JAN		E4N71B			P215/	
				KHL-XN	-	FS5W71C	R200		60R 15 90H	
1 		2	GLL	KHL-XAN		E4N71B				
		seater	GL	KHL-JTN	- VG30ET	BW T-5 (FS5R90A)		7-JJ-16 20 (0.79)	225/50VR16	
	Canada			KHL-JATN		E4N71B				
T-bar roof				KHL-XTN		BW T-5 (FS5R90A)				
				KHL-XATN		E4N71B				
				KHLG-JN		FS5W71C		6-1/2JJ-15 10 (0.39)	P215/ 60R15 90H	
			GL	KHLG-JAN		E4N71B				
		2+2	er GLL	KHLG-XN	VG30E 	FS5W71C				
		seater		KHLG-XAN		E4N71B				
			GL	KHLG-JATN				7-JJ-16 20 (0.79)	225/50\/P16	
			GLL	KHLG-XATN		E4N71B			225/50VR16	

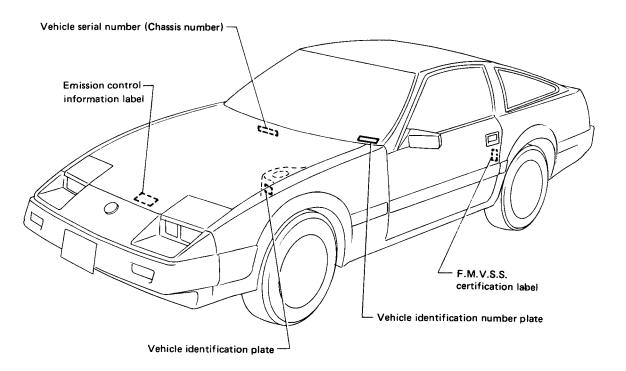
### \_Model Variation (Cont'd)\_\_\_\_\_

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

### Prefix and suffix designations

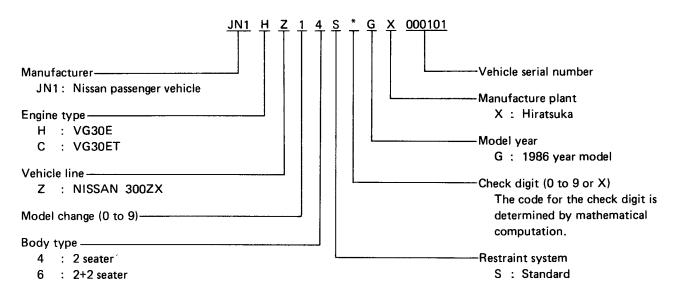


\_Identification Number\_



### SGI341

### VEHICLE IDENTIFICATION NUMBER ARRANGEMENT



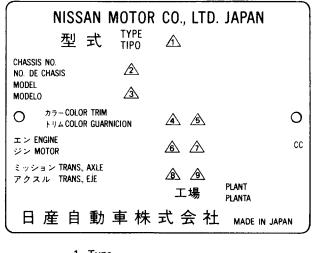
The production of the 1986 NISSAN 300ZX starts with the following vehicle identification numbers.

JN1HZ14S\*GX130004 JN1CZ14S\*GX100007 JN1HZ16S\*GX080002 JN1CZ16S\*GX020001

\*: Check digit (0 to 9 or X)

\_\_\_\_ Identification Number (Cont'd)\_\_\_\_

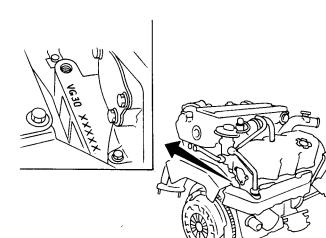
### IDENTIFICATION PLATE



- 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

SG|315

### ENGINE SERIAL NUMBER



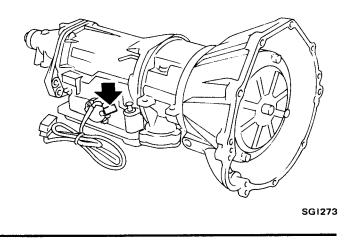
SG1279

# FS5W71C for non-turbocharger model

MANUAL TRANSMISSION NUMBER

AUTOMATIC TRANSMISSION NUMBER

SM T852



### \_Dimensions \_\_\_\_\_

Item		Model		010	
			2 seater	2+2 seater	
Overall length		mm (in)	4,335 (170.7)	4,535 (178.5)	
Overall width		mm (in)	1,690 (66.5), 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)	
,	Front	mm (in)	1,455 (57.3),	1,435 (56.5)*2	
Tread	Rear	mm (in)	1,475 (58.1), 1,455 (57.3)*		
Min. ground clearance mm (in)		150 (5.9)			
Over- hang	Front	mm (in)	945 (37.2)		
	Rear	mm (in)	1,070 (42.1)		

\*1: Model with side molding

-

\*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).

	Liter	US measure	lmp 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		A 1/A	0.1/0	
change	4.0	4-1/4 qt	3-1/2 qt	
Without oil filter	3.6	3-7/8 qt	21/0	
change	3.0	3-7/8 qt	3-1/8 qt	
Transmission				
M/T	1.9	4 pt	3-3/8 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	

### \_\_\_\_ Approximate Refill Capacities \_\_\_\_

### \_\_\_\_\_Lubricants \_

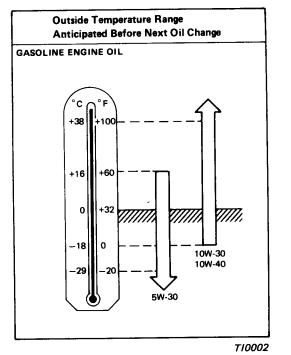
L	ubricant	Specifications	Remarks	
Engine	Non-Turbo engine	API SF (Energy Conserving Oils)*1		
oil	Turbo engine	API SF/CC or SF/CD	For further details, refer to the recommended	
	Differential	API GL-5	SAE viscosity	
Gear	Transmission except for Turbo model	API GL-4	number.	
oil	Transmission for Turbo model	API GL-4 (SAE80W-90) or Type DEXRON ®	_	
	ic-T/M and eering fluid	Type DEXRON ®	_	
Multi-pu	pose grease	NLGI No. 2	Lithium soap base	
Brake an	d clutch fluid	DOT 3	US FMVSS No. 116	
Anti-free	ze	_	Ethylene glycol base	

\*1: ENERGY CONSERVING OILS

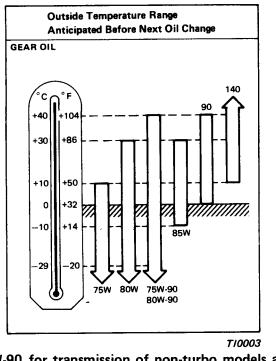
In order to improve fuel economy and conserve energy, new lower friction engine oils have been developed. These oils are readily available and can be identified by such labels as energy conserving, energy saving, improved fuel economy, etc.

# **RECOMMENDED FUEL AND LUBRICANTS**

### SAE Viscosity Number\_



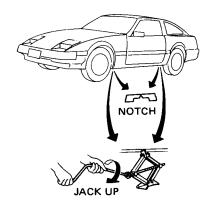
10W-30 is preferable if the ambient temperature is above  $-18^{\circ}$ C (0°F). 20W-40 and 20W-50 are usable if the ambient temperature is above 10°C (50°F) for all seasons.



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

### WARNING:

- a. 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.
- b. 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.



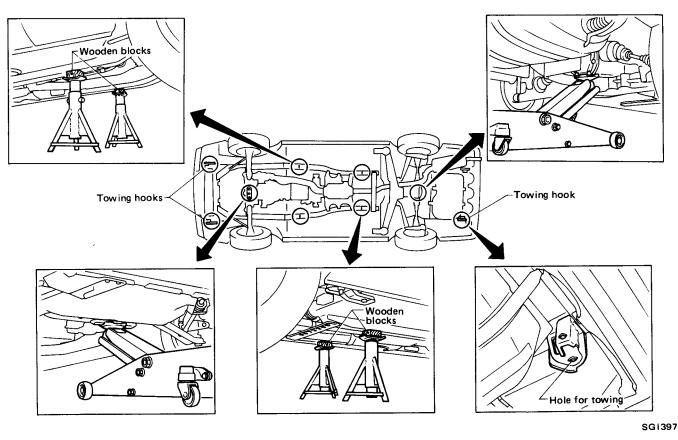
Pantograph Jack\_\_\_\_\_

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.



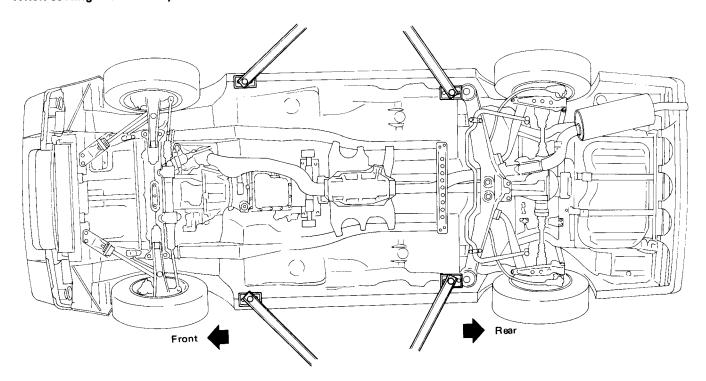
# LIFTING AND TOWING POINTS

\_\_\_\_ 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.



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### Towing\_

### CAUTION:

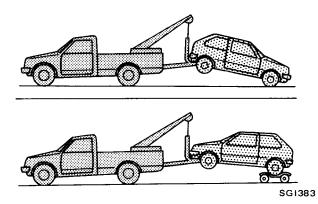
- All applicable State or Provincial (in Canada) laws and local laws regarding the towing operation must be obeyed.
- It is necessary to use proper towing equipment to avoid possible damage to the vehicle during a towing operation.

Towing is in accordance with Towing Procedure Manual at dealer.

- Always observe posted speed limits.
- Before 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 or the vehicle must be towed with rear wheels off the ground.
- When towing with the front wheels on the ground:

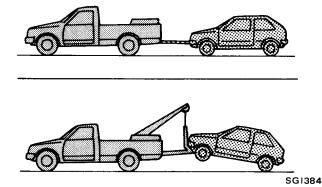
Turn the ignition key to the "OFF" position and secure the steering wheel in a straightahead position with a rope or similar device. Never place the ignition key in the "LOCK" position. This will result in damage to the steering lock mechanism.

• When towing with the rear wheels on the ground, release the parking brake and move the gearshift lever to neutral ("N" position).



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

TOWING WITH FOUR WHEELS ON GROUND OR TOWING WITH FRONT WHEELS RAISED (With rear wheels on ground)



### Automatic transmission models

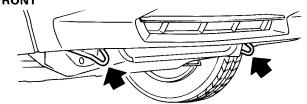
When towing as illustrated, observe the following restricted towing speeds and distances.

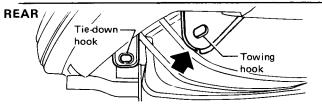
Speed	km/h (MPH)	Below 50 (30)
Distance	km (miles)	Less than 65 (40)

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

### **TOWING POINT**







SG1398

- Use only towing hooks. Otherwise, the vehicle body will be damaged.
- Do not apply force to the towing hook in a lateral direction. Keep the tow rope or similar device straight ahead, in line with the vehicle.

# TIGHTENING TORQUE OF STANDARD BOLT

<b>•</b> •		Bolt or nut	D'Ash mari		Tightening torque	
Grade	Bolt or nut size	diameter* mm	Pitch mm	N∙m	kg-m	ft-lb
	M6	6.0	1.0	3 - 4	0.3 - 0.4	2.2 - 2.9
			1.25	8 - 11	0.8 - 1.1	5.8 - 8.0
	M8	8.0	1.0	8 - 11	0.8 - 1.1	5.8 - 8.0
47		10.0	1.5	16 - 22	1.6 - 2.2	12 - 16
4T	M10	10.0	1.25	16 - 22	1.6 - 2.2	12 - 16
	M10	12.0	1.75	26 - 36	2.7 · 3.7	20 · 27
	M12	12.0	1.25	30 - 40	3.1 - 4.1	22 - 30
	M14	14.0	1.5	46 - 62	4.7 - 6.3	34 - 46
	M6	6.0	1.0	6 - 7	0.6 - 0.7	4.3 - 5.1
	M8	8.0	1.25	14 - 18	1.4 - 1.8	10 - 13
			1.0	14 - 18	1.4 - 1.8	10 - 13
		10.0	1.5	25 - 35	2.6 - 3.6	19 - 26
7T	M10		1.25	26 - 36	2.7 - 3.7	20 · 27
		12.0	1.75	45 - 61	4.6 - 6.2	33 - 45
	M12		1.25	50 - 68	5.1 - 6.9	37 - 50
	M14	14.0	1.5	76 - 103	7.7 - 10.5	56 - 76
	M6	6.0	1.0	8 - 11	0.8 - 1.1	5.8 - 8.0
			1.25	19 - 25	1.9 - 2.5	14 - 18
	M8	8.0	1.0	20 - 27	2.0 - 2.8	14 - 20
9Т			1.5	36 - 50	3.7 - 5.1	27 - 37
	M10	10.0	1.25	39 - 51	4.0 - 5.2	29 - 38
			1.75	65 - 88	6.6 - 9.0	48 - 65
	M12	12.0	1.25	72 - 97	7.3 - 9.9	53 - 72
	M14	14.0	1.5	109 - 147	11.1 - 15.0	80 - 108

1. Special parts are excluded.

-

2. This standard is applicable to bolts having the following marks embossed on the bolt head.

Grade	Mark
4T	 4
7T	 7
9T	 9

\*: Nominal diameter

M €

Nominal diameter of bolt threads (Unit: mm)
Metric screw threads