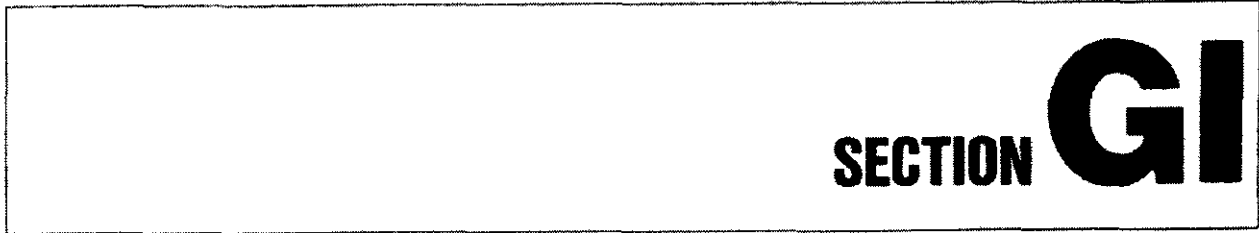


# GENERAL INFORMATION



## CONTENTS

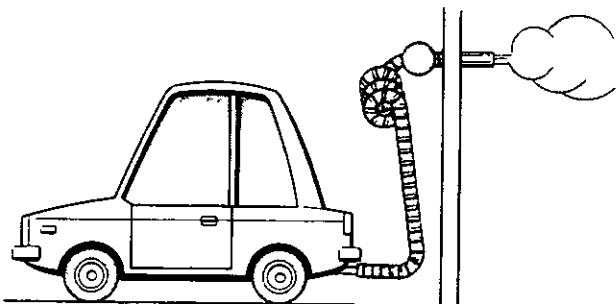
PRECAUTIONS	GI- 2
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LIFTING, TOWING AND TIE-DOWN POINTS	GI-15
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# PRECAUTIONS

Observe the following precautions that are not described in each individual section to ensure safe and proper service operations

- 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. If you are working in a pit or other enclosed area, be sure to properly ventilate before working with hazardous materials. Do not smoke while working on the vehicle.



SGI285

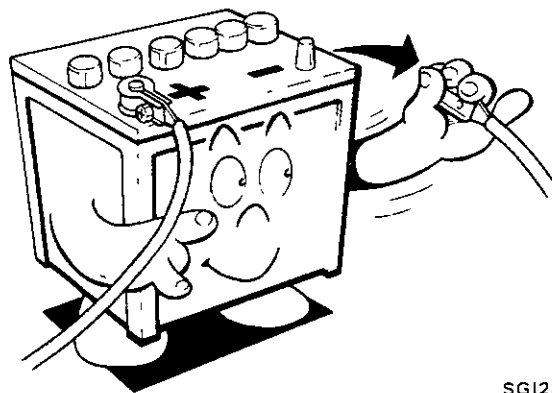
- 2 Before jacking up the vehicle, apply wheel chocks or other tire blocks to the wheels to prevent the vehicle from moving. After jacking up the vehicle, support the vehicle weight with rigid racks at the points designated for proper lifting and towing before working on the vehicle.

These operations should be done on a level surface.



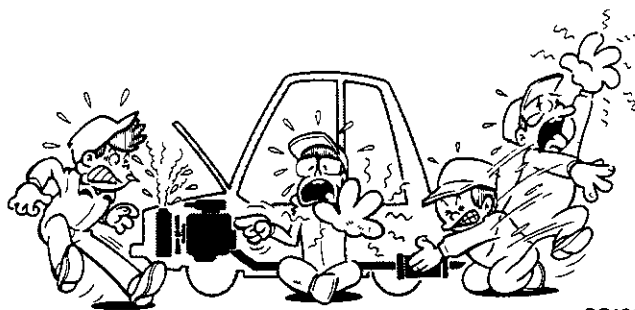
SGI231

- 3 When removing a heavy component such as the engine or transaxle/transmission, take care not to lose your balance and drop it or cause it to hit against adjacent parts, especially against the brake parts such as brake tube and 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.



SGI232

- 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.

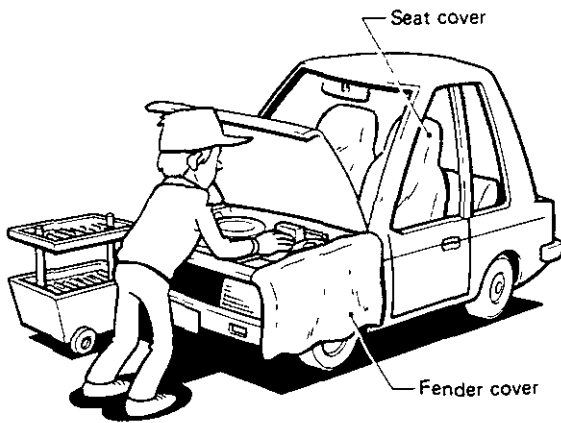


SGI233

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

# PRECAUTIONS

## Precautions for a Catalyst

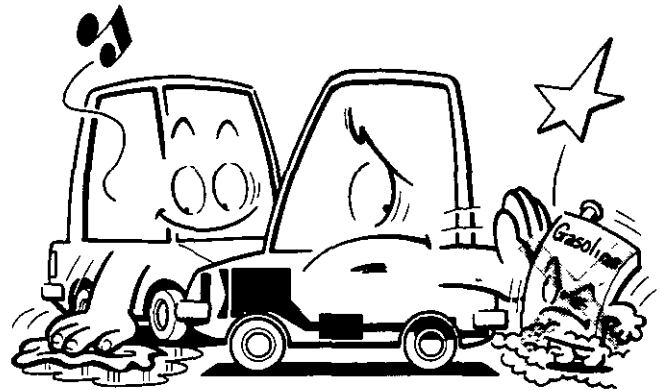


SG1234

- 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 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 agent, 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 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 catalytic converter
- 2 When checking for ignition spark or measuring engine compression, make tests quickly and only when necessary.
- 3 Do not run engine with low fuel in the fuel tank, otherwise engine may misfire causing damage to the converter
- 4 Do not place vehicle on inflammable material. Keep inflammable material off 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. 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.



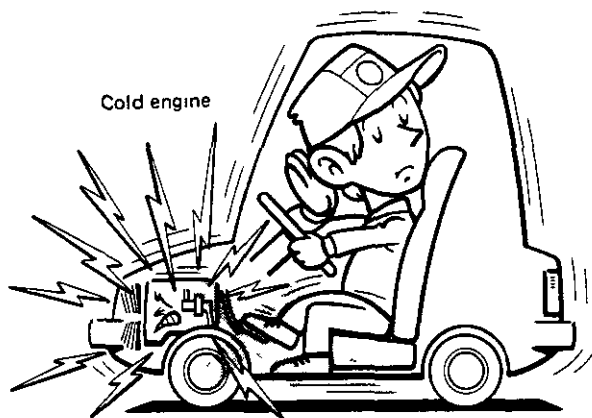
SGI291

## 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.



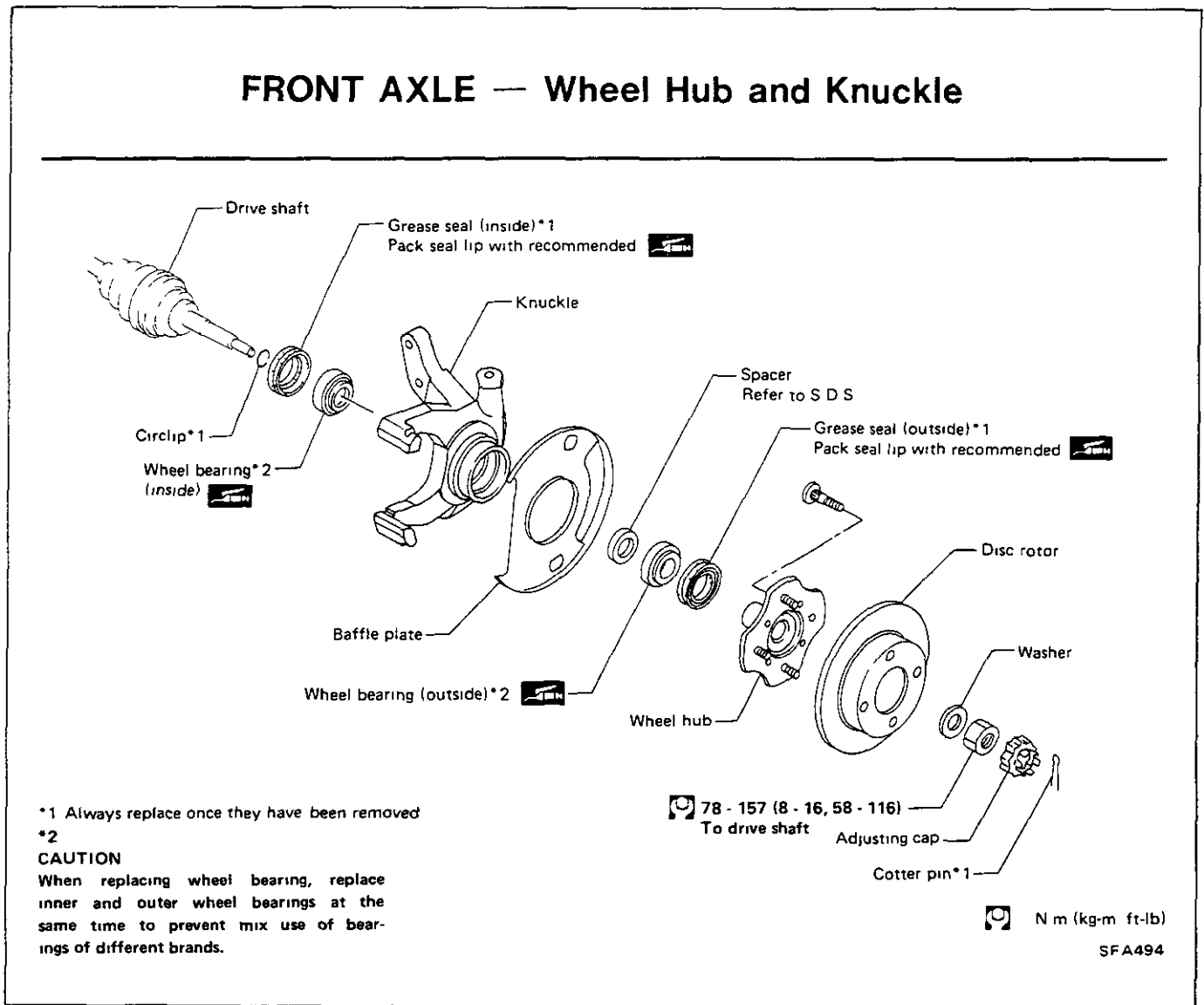
SGI292

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 and contains tightening torques, lubrication points and other information necessary to perform repairs.

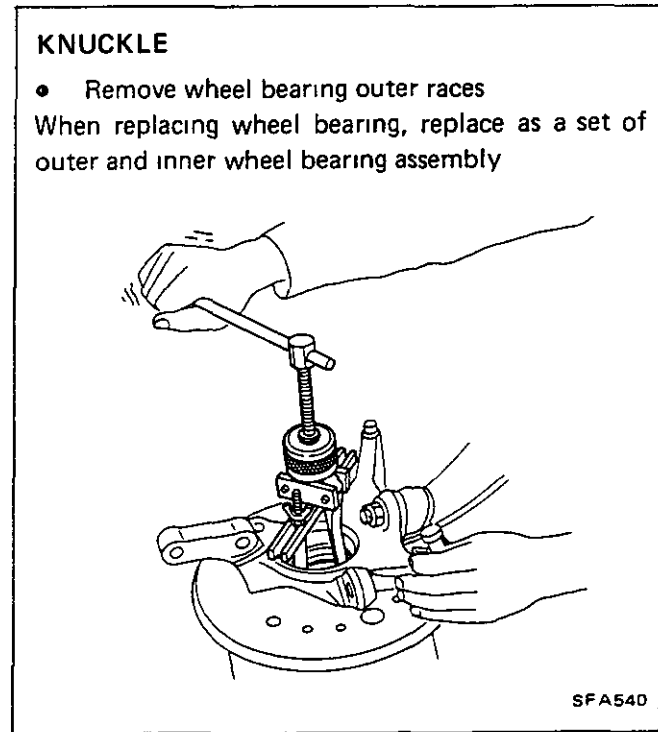
"Example"



# 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”



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

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”

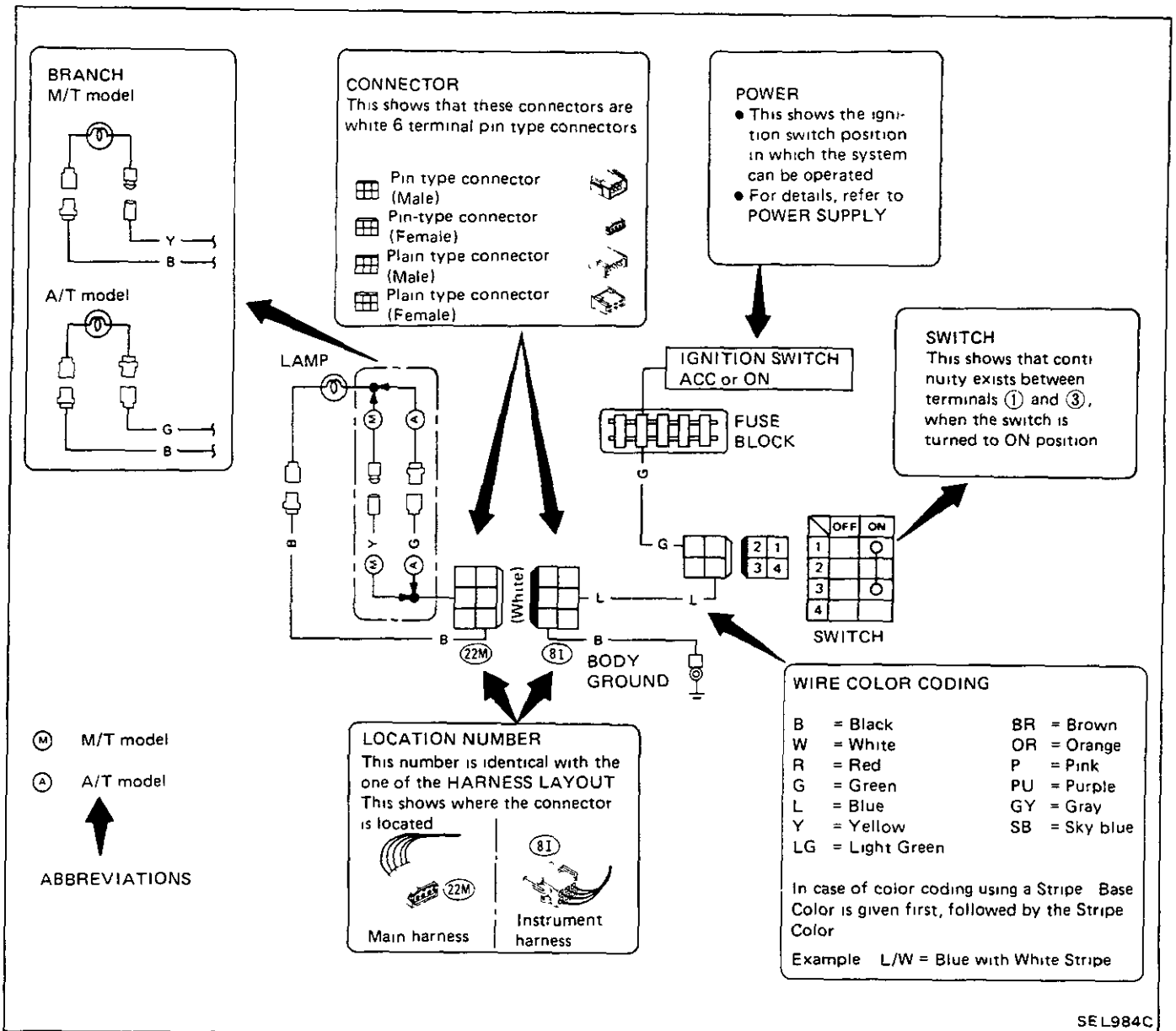
Tightening torque

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

# HOW TO USE THIS MANUAL

9. Symbols used in WIRING DIAGRAM are shown below

“Example”



10 **TROUBLE DIAGNOSES AND CORRECTIONS** are included in sections dealing with complicated units.

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	Destination	Model	Engine	Transmission	Differential carrier	Road wheel size offset mm (in)	Tire size		
Standard roof	USA	Non-California	2 seater	HL-U	VG30E	FS5W71C	5-1/2JJ-14 30 (1 18)	P195/70R14	
				HL-AU		E4N71B			
				HL-JU		FS5W71C			
				HL-JAU		E4N71B			
				HL-XU		FS5W71C			
				HL-XAU		E4N71B			
			2+2 seater	HL-JTU	VG30ET	BW T-5 (FS5R90A)	6-1/2JJ-15 30 (1 18)	P215/60R15	
				HL-JATU		4N71B			
				HL-XTU		BW T-5 (FS5R90A)			
				HL-XATU		4N71B			
				HLG-JU		VG30E			FS5W71C
				HLG-JAU					E4N71B
		HLG-XU	FS5W71C						
		HLG-XAU	E4N71B						
		California	2 seater	HL-V	VG30E	FS5W71C	5-1/2JJ-14 30 (1 18)	P195/70R14	
				HL-AV		E4N71B			
				HL-JV		FS5W71C			
				HL-JAV		E4N71B			
				HL-XV		FS5W71C			
				HL-XAV		E4N71B			
			2+2 seater	HL-JTV	VG30ET	BW T-5 (FS5R90A)	6-1/2JJ-15 30 (1 18)	P215/60R15	
				HL-JATV		4N71B			
				HL-XTV		BW T-5 (FS5R90A)			
				HL-XATV		4N71B			
HLG-JV	VG30E			FS5W71C					
HLG-JAV				E4N71B					
HLG-XV		FS5W71C							
HLG-XAV		E4N71B							



# IDENTIFICATION INFORMATION

## Model Variation (Cont'd)

Body	Destination	Model	Engine	Transmission	Differential carrier	Road wheel size offset mm (in)	Tire size	
Standard roof	Canada	2 seater	HL-N	VG30E	FS5W71C	R200	5 1/2JJ-14 30 (1 18)	P195/70R14
			HL-AN		E4N71B			
			HL-JN		FS5W71C			
			HL JAN		E4N71B			
			HL-XN		FS5W71C			
			HL XAN		E4N71B			
			HL-JTN	VG30ET	BW T-5 (FS5R90A)			
			HL-JATN		4N71B			
			HL-XTN		BW T-5 (FS5R90A)			
			HL XATN		4N71B			
		2+2 seater	HLG-JN	VG30E	FS5W71C			
			HLG JAN		E4N71B			
			HLG XN		FS5W71C			
			HLG-XAN		E4N71B			
			HLG-JTN	VG30ET	BW T-5 (FS5R90A)			
			HLG-JATN		4N71B			
			HLG-XTN		BW T-5 (FS5R90A)			
			HLG-XATN		4N71B			
T-bar roof	USA	Non-California	2 seater	KHL-JU	VG30E	FS5W71C	6 1/2JJ-15 30 (1 18)	P215/60R15
				KHL-JAU		E4N71B		
				KHL-XU		FS5W71C		
				KHL-XAU		E4N71B		
				KHL-JTU		VG30ET		
			KHL-JATU	4N71B				
			KHL-XTU	BW T-5 (FS5R90A)				
			KHL-XATU	4N71B				
			2+2 seater	KHLG-JU	VG30E			
				KHLG-JAU		E4N71B		
		KHLG-XU		FS5W71C				
		KHLG-XAU		E4N71B				

# IDENTIFICATION INFORMATION

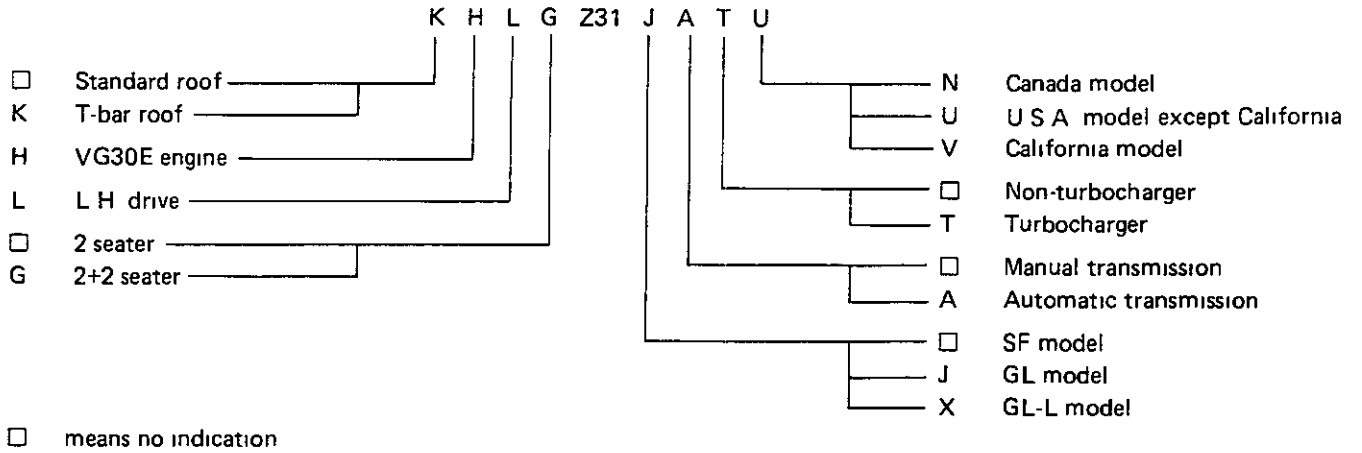
## Model Variation (Cont'd)

Body	Destination		Model	Engine	Transmission	Differential carrier	Road wheel size offset mm (in)	Tire size				
T-bar roof	U.S.A.	California	2 seater	KHL-JV	VG30E	FS5W71C	6-1/2JJ-15 30 (1 18)	P215/60R15				
				KHL-JAV		E4N71B						
				KHL-XV		FS5W71C						
				KHL-XAV		E4N71B						
				KHL-JTV	VG30ET	BW T-5 (FS5R90A)						
				KHL-JATV		4N71B						
				KHL-XTV		BW T-5 (FS5R90A)						
				KHL-XATV		4N71B						
			2+2 seater	KHLG-JV	VG30E	FS5W71C						
				KHLG-JAV		E4N71B						
				KHLG-XV		FS5W71C						
				KHLG-XAV		E4N71B						
			Canada		2 seater	KHL-N			VG30E	FS5W71C	5-1/2JJ-14 30 (1 18)	P195/70R14
						KHL-AN				E4N71B		
	KHL-JN	FS5W71C										
	KHL-JAN	E4N71B										
	KHL-XN	FS5W71C										
	KHL-XAN	E4N71B										
	KHL-JTN	VG30ET				BW T-5 (FS5R90A)	6-1/2JJ-15 30 (1 18)	P215/60R15				
	KHL-JATN					4N71B						
	KHL-XTN					BW T-5 (FS5R90A)						
	KHL-XATN					4N71B						
	2+2 seater					KHLG-JN			VG30E	FS5W71C		
						KHLG-JAN				E4N71B		
						KHLG-XN				FS5W71C		
						KHLG-XAN				E4N71B		
		KHLG-JTN	VG30ET	BW T-5 (FS5R90A)								
		KHLG-JATN		4N71B								
KHLG-XTN		BW T-5 (FS5R90A)										
KHLG-XATN		4N71B										

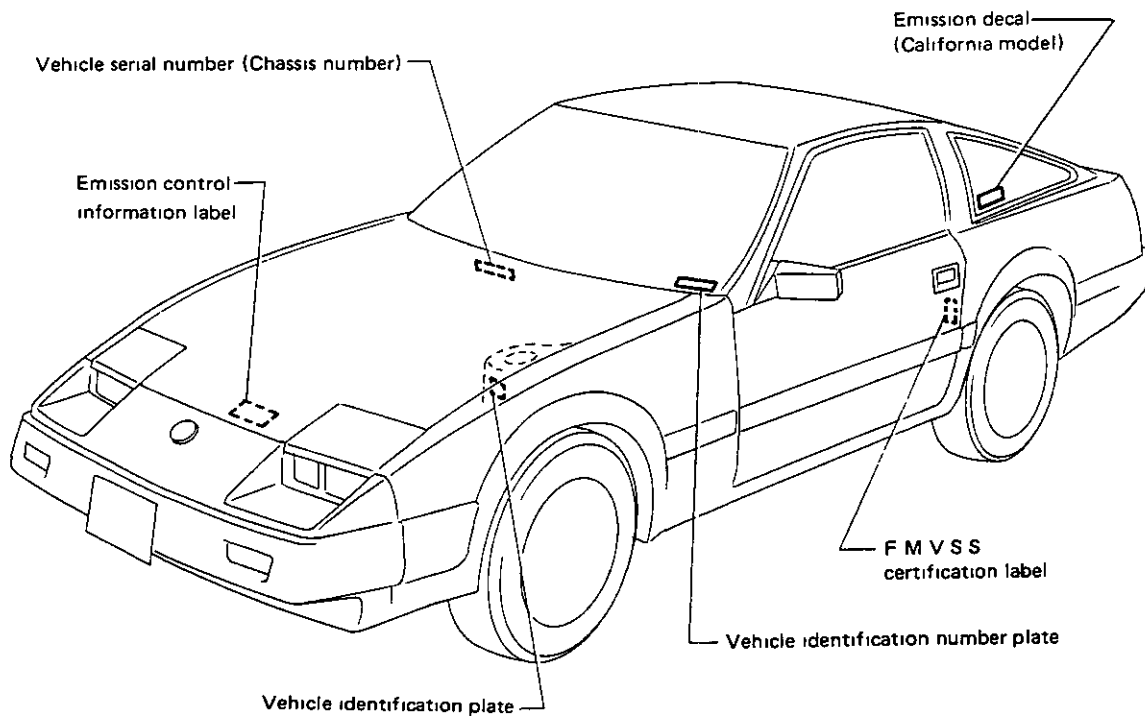
# IDENTIFICATION INFORMATION

## Model Variation (Cont'd)

### Prefix and suffix designations



## Identification Number



# IDENTIFICATION INFORMATION

## Identification Number (Cont'd)

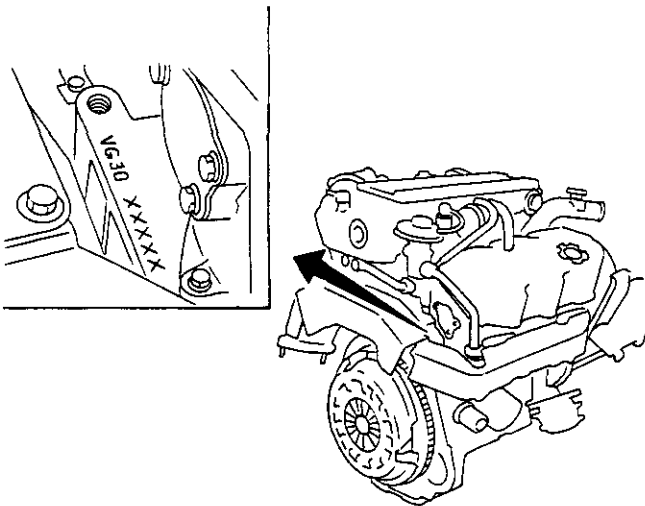
### IDENTIFICATION PLATE

NISSAN MOTOR CO, LTD JAPAN			
型式	TYPE	△	
	TIPO		
CHASSIS NO		△	
NO DE CHASIS			
MODEL		△	
MODELO			
○ カラー-COLOR TRIM		△ △	○
トリム-COLOR GUARNICION			
エ ENGINE		△ △	CC
MOTOR			
ミノノノ TRANS AXLE		△ △	
アクスル TRANS. EJE			
	工場	PLANT	
		PLANTA	
日産自動車株式会社			

- 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

SG1269

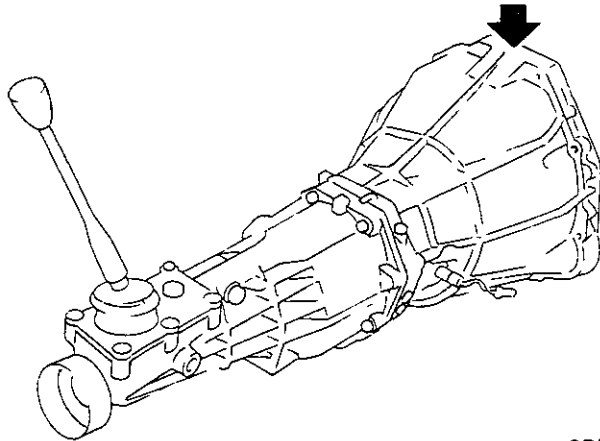
### ENGINE SERIAL NUMBER



SG1279

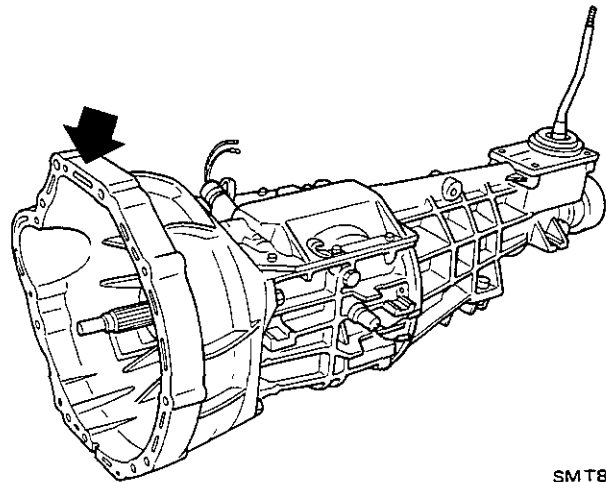
### MANUAL TRANSMISSION NUMBER

FS5W71C for non-turbocharger model



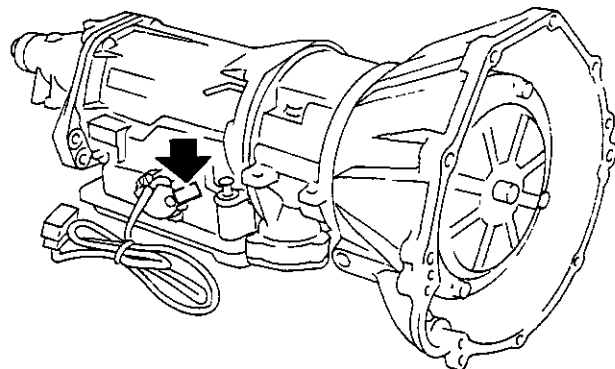
SG1274

BW T-5 (FS5R90A) for turbocharger model



SMT852

### AUTOMATIC TRANSMISSION NUMBER



SG1273

# IDENTIFICATION INFORMATION

## Dimension

Item		Model	
		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)
Tread	Front mm (in)	1,415 (55 7)	
	Rear mm (in)	1,435 (56 5)	
Min ground clearance mm (in)		150 (5 9)	
Over- hang	Front mm (in)	945 (37 2)	
	Rear mm (in)	1,070 (42 1)	

\* Model with side molding

# 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			
With oil filter change	4.0*	4-1/4 qt*	3-1/2 qt*
Without oil filter change	3.3*	3-1/2 qt*	2-7/8 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	1-7/8 pt	1-5/8 pt
Air conditioning system			
Refrigerant	0.9 kg	2.0 lb	2.0 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

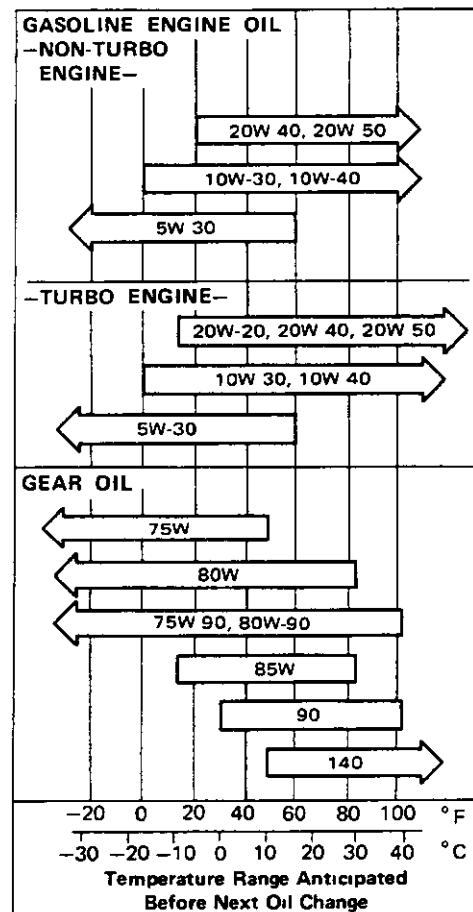
\* indicates necessary amount of oil to be replaced when performing maintenance.

## Lubricants

Lubricant	Specifications	Remarks
Engine oil	Non-Turbo engine	API SF (Energy Conserving Oils)
	Turbo engine	API SF/CC or SF/CD*1
Gear oil	Transmission except for Turbo model	API GL-4
	Transmission for Turbo model	API GL-4 (SAE75W-90) or Type DEXRON
	Differential	API GL-5
Automatic-T/M and power steering fluid	Type DEXRON	—
Multi-purpose grease	NLGI No. 2	Lithium soap base
Brake and clutch fluid	DOT 3	US FMVSS No. 116
Anti-freeze	—	Ethylene glycol base

\*1 On models equipped with a turbocharger, use 10W-30, 10W-40, 20W-20, 20W-40 or 20W-50 except under extremely cold conditions. Use 5W-30 only under extremely cold conditions.

## SAE Viscosity Number

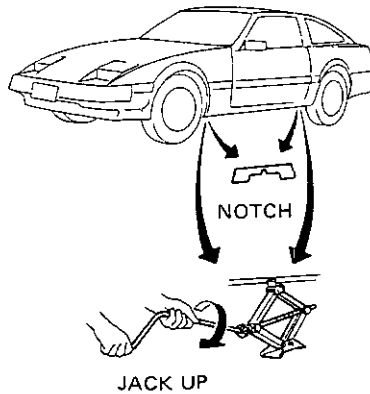


# LIFTING, TOWING AND TIE-DOWN POINTS

## WARNING:

- a Never get under the vehicle while it is supported only by the jack. Always use safety stands to support 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.

## Pantograph Jack

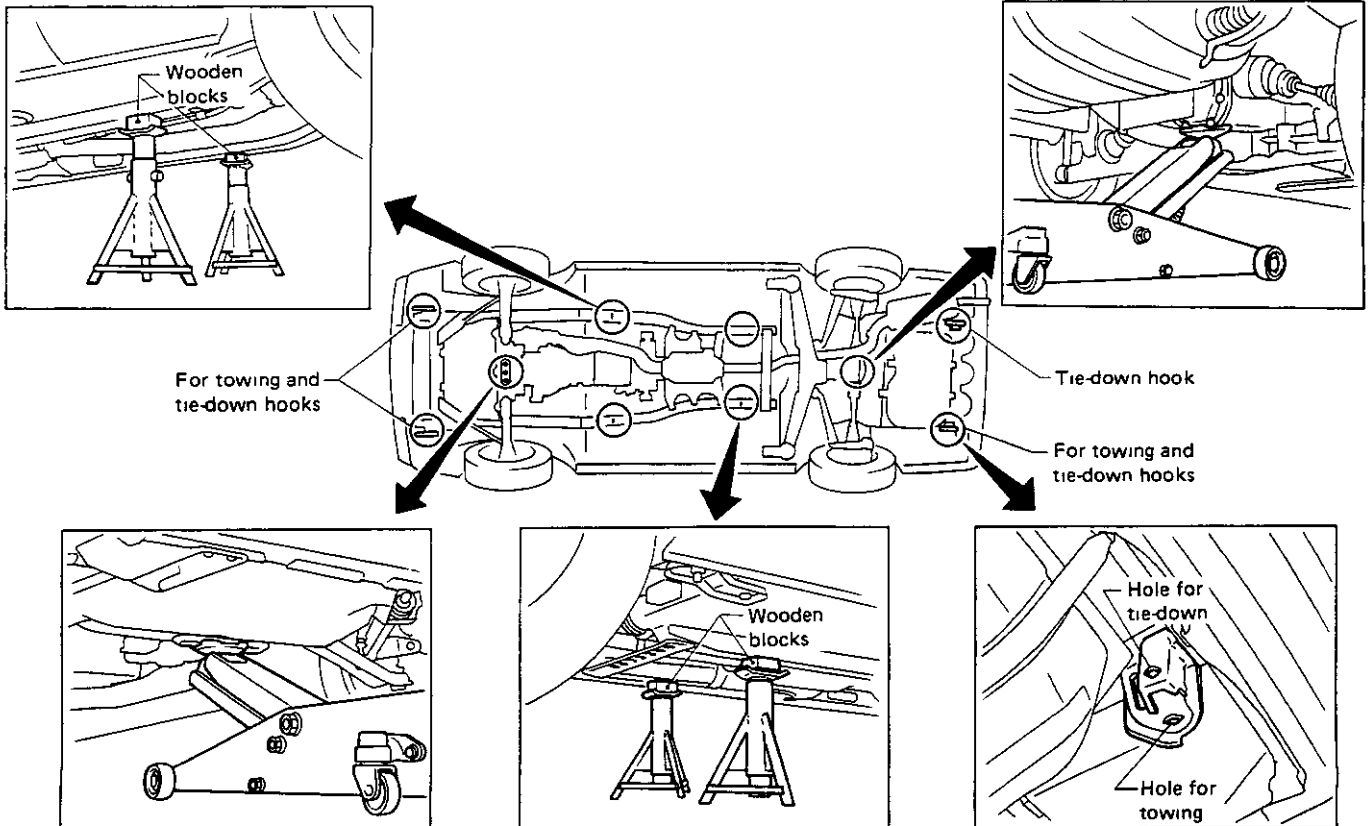


TR400

## Garage Jack and Safety Stand

## CAUTION.

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



SG1272

# LIFTING, TOWING AND TIE-DOWN POINTS

## Towing

---

### FRONT TOW:

Not recommended with conventional sling type equipment on the turbocharger model because the towing rope or chain will come into contact with the spoiler and damage may result

### CAUTION:

- a. 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 side.
- b. All applicable State or Provincial (in Canada) laws and local laws regarding the towing operation must be obeyed.
- c. 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.
- d. If the transmission is inoperative, tow the vehicle with the rear wheels off the ground, or with the propeller shaft removed
- e. When the vehicle 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.
- f. When towing an automatic transmission model, try to restrict towing speed below 30 km/h (20 MPH) and towing distance less than 30 km (20 miles).  
With manual transmission model, try to restrict towing speed 80 km/h (50 MPH) and towing distance less than 80 km (50 miles).  
If the speed or distance must necessarily be greater, remove the propeller shaft beforehand to prevent damage to the transmission.
- g. Release the parking brake and set the gearshift lever in "Neutral" position before starting to tow the vehicle.
- h. 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

Grade	Bolt or nut size	Bolt or nut diameter* mm	Pitch mm	Tightening torque		
				N m	kg-m	ft-lb
4T	M6	6.0	1.0	3 - 4	0.3 - 0.4	2.2 - 2.9
	M8	8.0	1.25	8 - 11	0.8 - 1.1	5.8 - 8.0
			1.0	8 - 11	0.8 - 1.1	5.8 - 8.0
	M10	10.0	1.5	16 - 22	1.6 - 2.2	12 - 16
			1.25	16 - 22	1.6 - 2.2	12 - 16
	M12	12.0	1.75	26 - 36	2.7 - 3.7	20 - 27
1.25			30 - 40	3.1 - 4.1	22 - 30	
M14	14.0	1.5	46 - 62	4.7 - 6.3	34 - 46	
7T	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
	M10	10.0	1.5	25 - 35	2.6 - 3.6	19 - 26
			1.25	26 - 36	2.7 - 3.7	20 - 27
	M12	12.0	1.75	45 - 61	4.6 - 6.2	33 - 45
1.25			50 - 68	5.1 - 6.9	37 - 50	
M14	14.0	1.5	76 - 103	7.7 - 10.5	56 - 76	
9T	M6	6.0	1.0	8 - 11	0.8 - 1.1	5.8 - 8.0
	M8	8.0	1.25	19 - 25	1.9 - 2.5	14 - 18
			1.0	20 - 27	2.0 - 2.8	14 - 20
	M10	10.0	1.5	36 - 50	3.7 - 5.1	27 - 37
			1.25	39 - 51	4.0 - 5.2	29 - 38
	M12	12.0	1.75	65 - 88	6.6 - 9.0	48 - 65
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

