

# DATSUN 180SX

SERVICE MANUAL  
MODEL S110 SERIES





# DATSUN

## Model S110 Series

### FOREWORD

This service manual has been prepared primarily for the purpose of assisting service personnel in providing effective service and maintenance of the model S110 series.

This manual includes procedures for maintenance, adjustments, removal and installation, disassembly and assembly of components, and trouble shooting.

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

The right is reserved to make changes in specifications and methods at any time without notice.

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## HOW TO USE THIS MANUAL

- ▶ This Service Manual is designed as a guide for servicing cars.
- ▶ This manual is divided into 18 sections. The first half of the manual presents sections which concern the engine, and the second half presents sections which deal with the chassis and body.
- ▶ A **QUICK REFERENCE INDEX** is provided on the first page. Refer to this index along with the index of the particular section you wish to consult.
- ▶ The first page of each section lists the contents and gives the page numbers for the respective topics.
- ▶ **SERVICE DATA AND SPECIFICATIONS** are contained in each section.
- ▶ **TROUBLE DIAGNOSES AND CORRECTIONS** are also included in each section. This feature of the manual lists the likely causes of trouble and recommends the appropriate corrective actions to be taken.
- ▶ A list of **SPECIAL SERVICE TOOLS** is included in each section. The special service tools are designed to assist you in performing repair safely, accurately and quickly.
- ▶ The measurements 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.
- ▶ In the text, the following abbreviations are used:

S.D.S.:	Service Data and Specifications	L.H., R.H.:	Left Hand, Right Hand
 :	Tightening Torque	M/T, A/T:	Manual Transmission, Automatic Transmission
- ▶ The captions **CAUTION** and **WARNING** warn you of steps that must be followed to prevent personal injury and/or damage to some part of the car.



## IMPORTANT SAFETY NOTICE

The proper performance of service is essential for both the safety of the mechanic and the efficient functioning of the car.

The service methods in this Service Manual are described in such a manner that the service may be performed safely and accurately.

Special service tools have been designed to permit safe and proper performance of service. Be sure to use them.

Service varies with the procedures used, the skills of the mechanic and the tools and parts available. Accordingly, anyone using service procedures, tools or parts which are not specifically recommended by NISSAN must first completely satisfy himself that neither his safety nor the car's safety will be jeopardized by the service method selected.

**DATSUN**

**Model S110 Series**

# SECTION **GI**

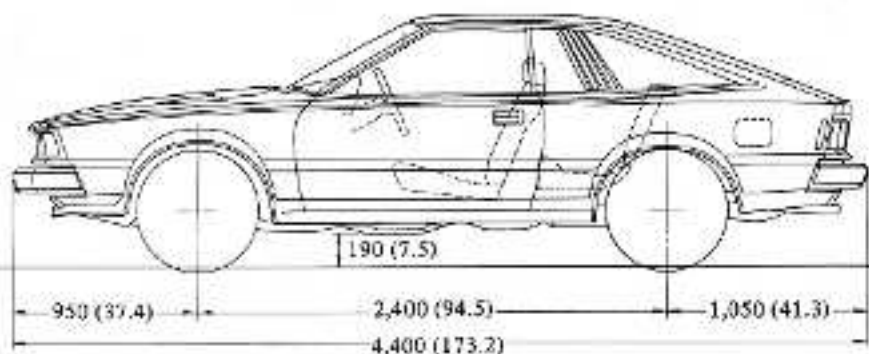
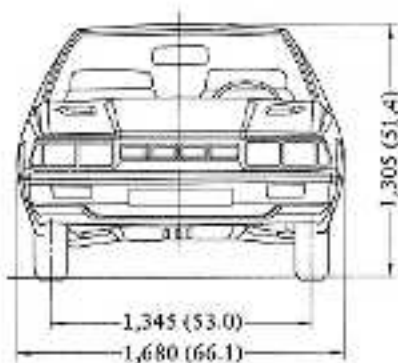
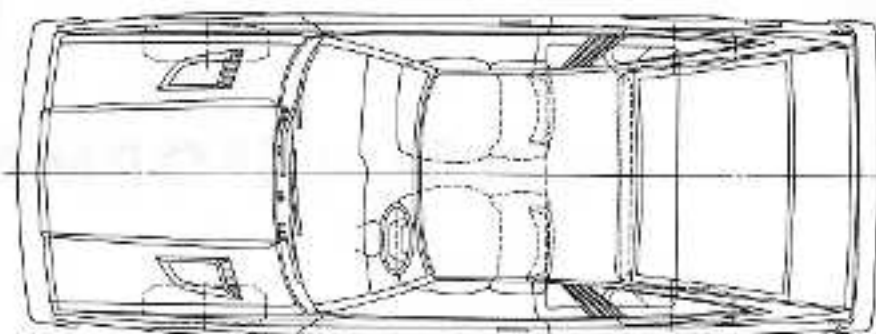
**GI**

## **GENERAL INFORMATION**

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## GENERAL VIEWS



Unit: mm (in)

5G1008

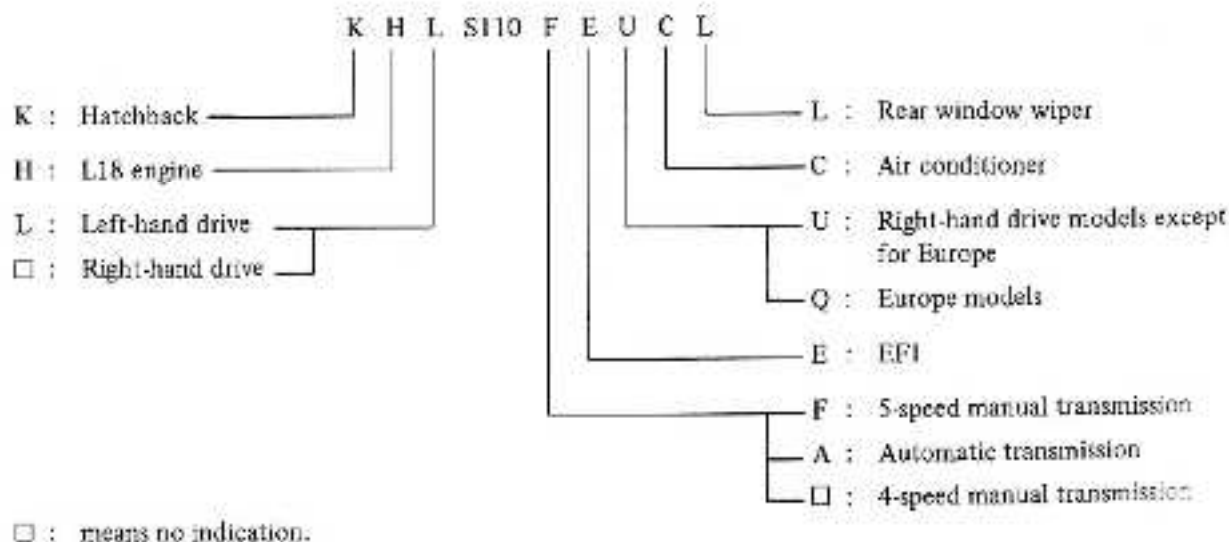
## MODEL VARIATION

	Model	Engine	Transmission	Differential carrier	Road wheel Size ... Offset mm (in)	Tire size		
							L.H. drive	R.H. drive
Europe	Hatchback	KHLS110FEQ	KHS110FEQ	L18E	FS5W63A	HI65B	5J-14 ... 25 (0.98) 5-1/2JJ-14*1 ... 25 (0.98) 4-T x 16*2 ... 35 (1.38)	185/70 SR14 T135/ 70D16*2
		KHLS110AEQ	KHS110AEQ					
Except Europe	Hatchback	KHLS110E	KHS110EU	L18E	F4W63L	HI65B	5J-14 ... 25 (0.98)	165SR-14
		KHLS110FE	KHS110FEU		FS5W63A			
		KHLS110AE	KHS110AEU		3N71B			

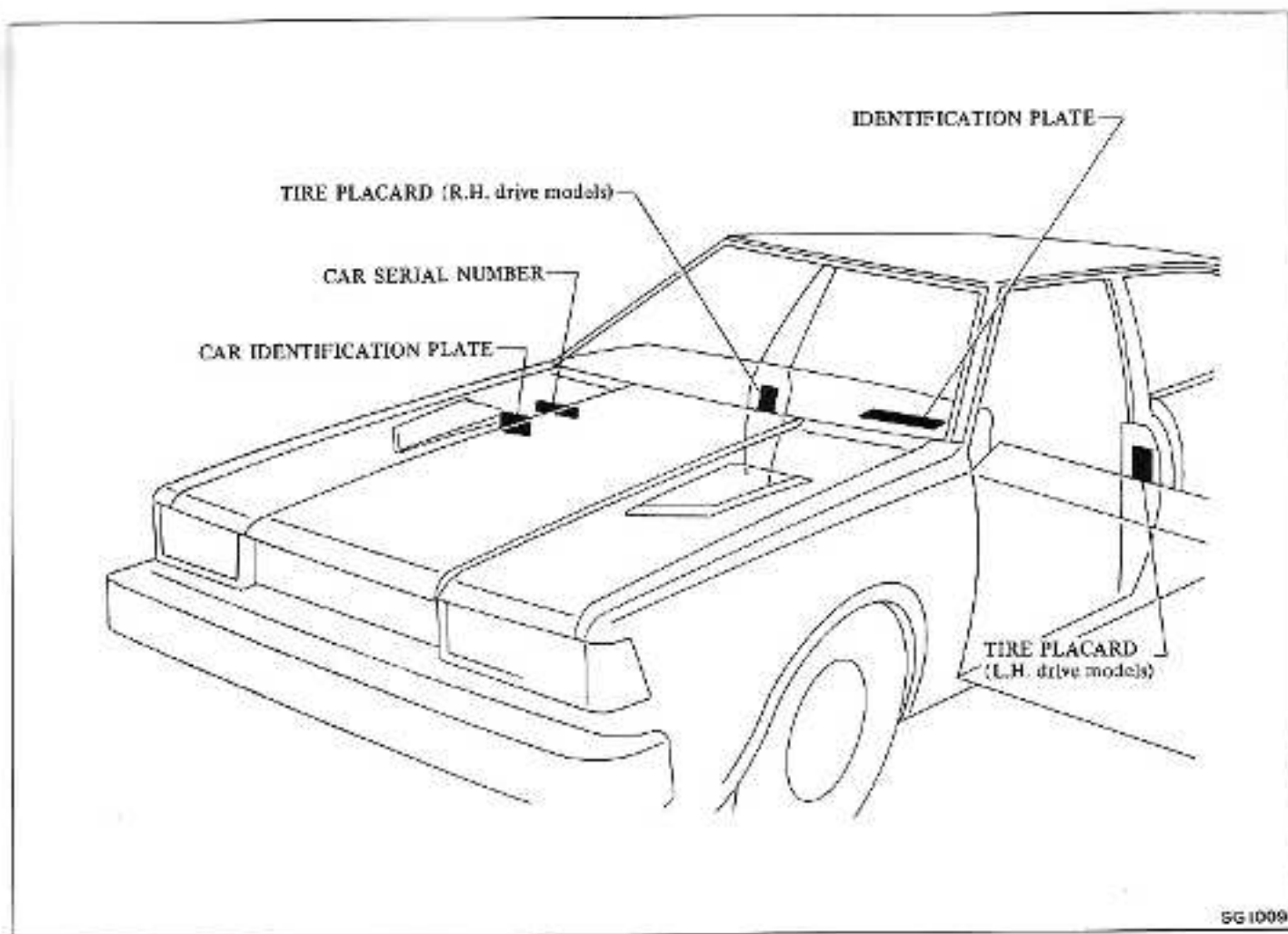
\*1: Aluminum wheel (Option)

\*2: Spare tire for L.H. drive model

## Prefix and suffix designations

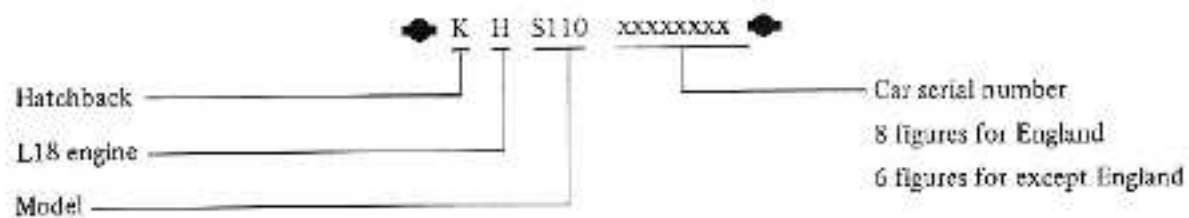


## IDENTIFICATION NUMBERS



5G 1099

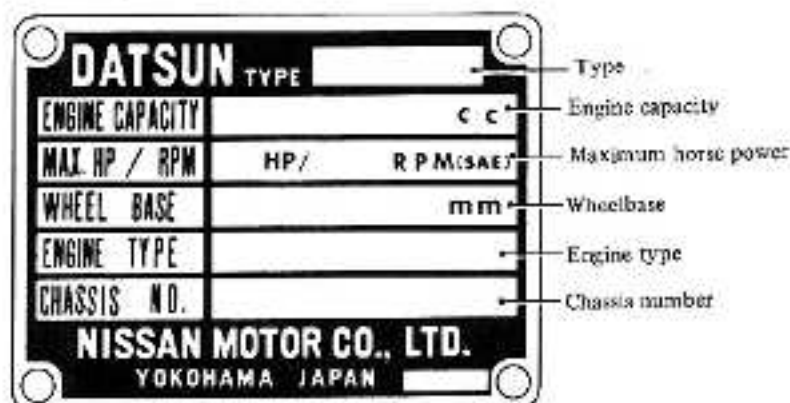
### CAR SERIAL NUMBER





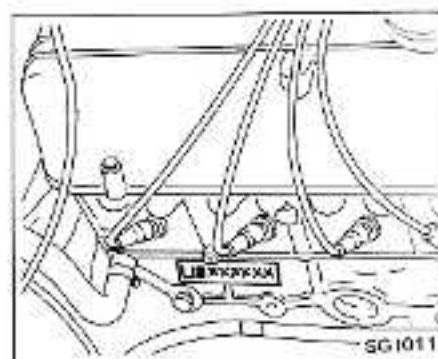
**CAR IDENTIFICATION PLATE**

Non-Europe

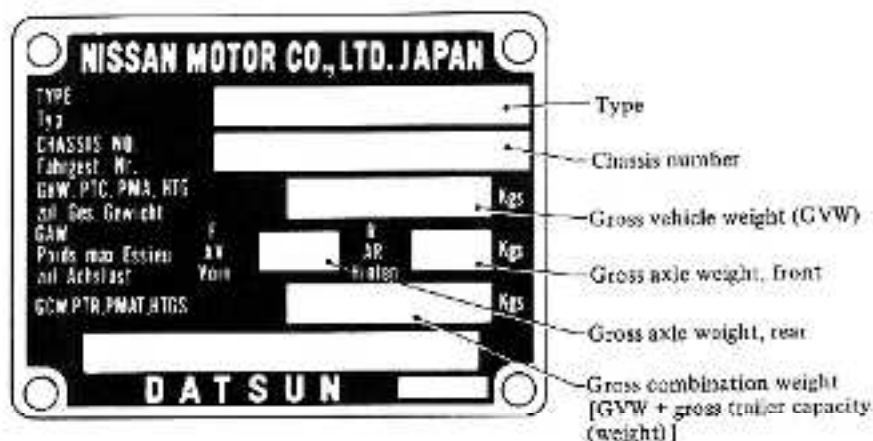


**ENGINE SERIAL NUMBER**

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

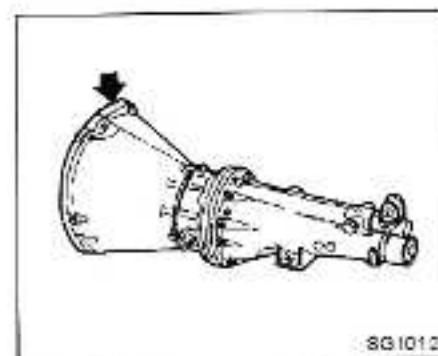


Europe except England

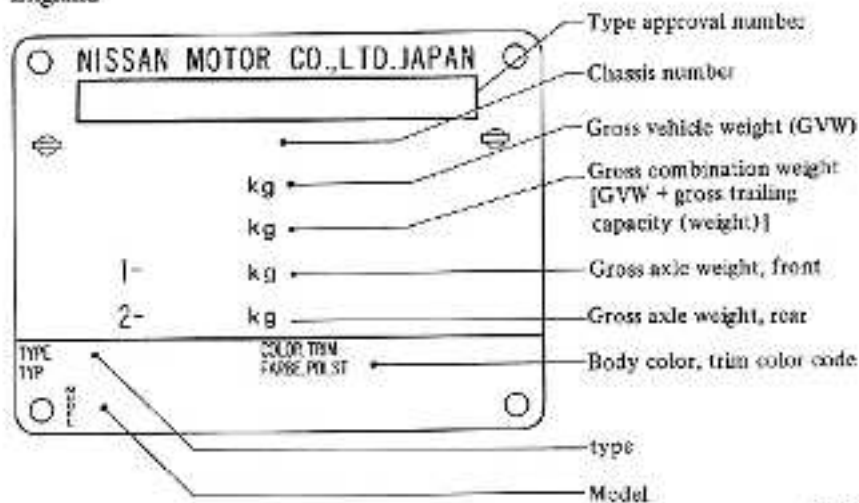


**MANUAL TRANSMISSION NUMBER**

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

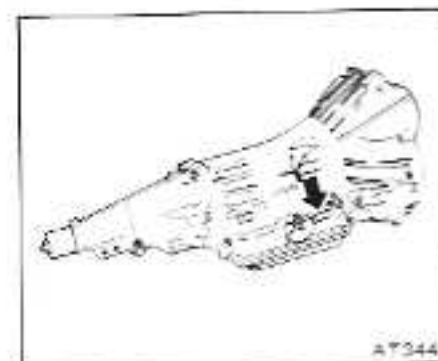


England



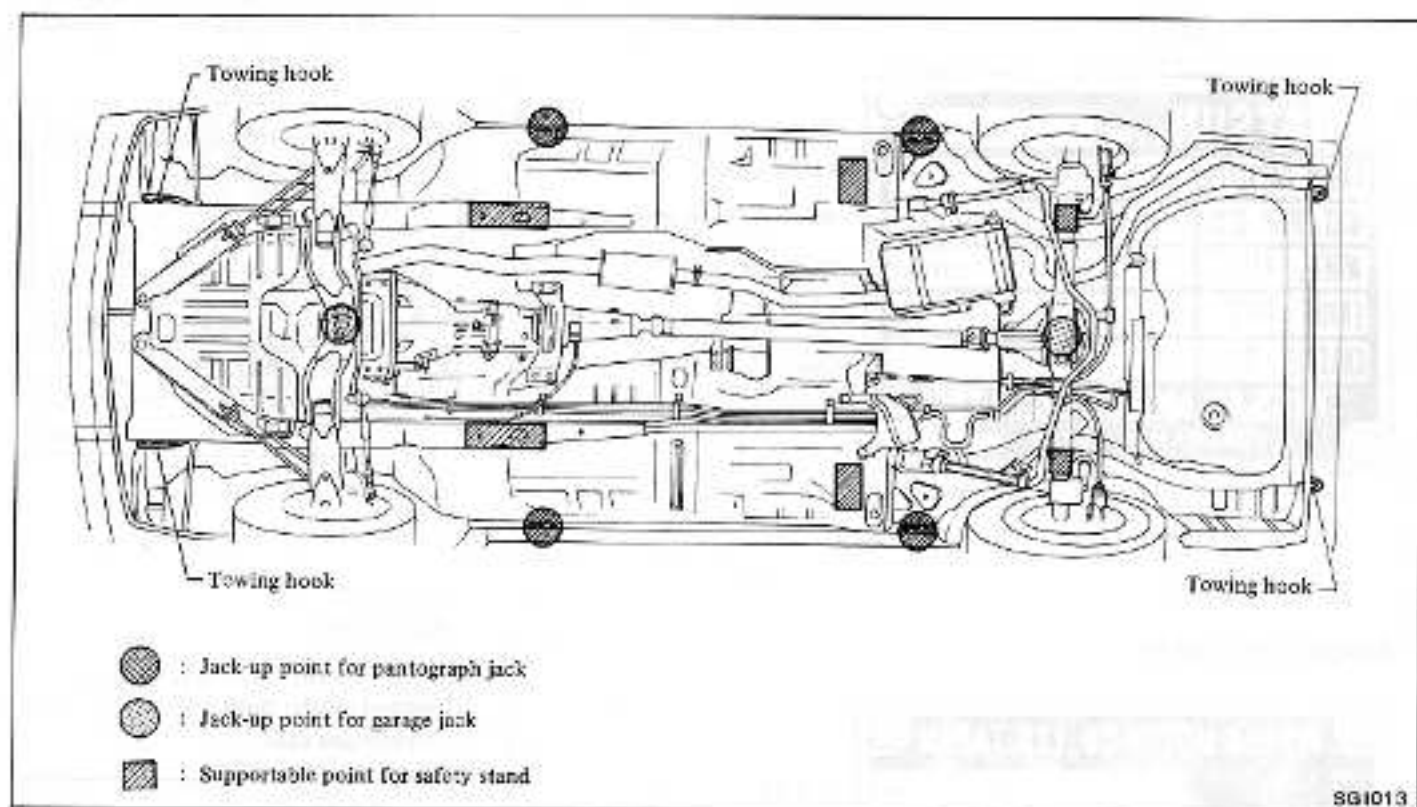
**AUTOMATIC TRANSMISSION NUMBER**

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



SG1010

## LIFTING POINTS AND TOWING



### PANTOGRAPH JACK

**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.
- Place wheel chocks at both front and back of the wheel diagonally opposite the jack position.

Apply the pantograph jack furnished with the car to the position indicated below in a safe manner.

### GARAGE JACK AND SAFETY STAND

**WARNING:**

- When carrying out operations with the garage jack, be sure to support the car with safety stands.
- When jacking up the rear (front) of the car, place the chocks at the front (rear) of the front (rear) wheels to hold them.

**CAUTION:**

Always place a wood block between safety stand and car body when supporting body with safety stand.

Apply the garage jack and safety stand to the position indicated below in a safe manner.

### TIE-DOWN

#### FRONT SIDE

Use front towing hooks for tie-down.

#### REAR SIDE

Use rear towing hooks for tie-down.

### TOWING

**CAUTION:**

- It is necessary to use proper towing equipment to avoid possible damage to the car during a towing operation.

- Towing is in accordance with Towing Procedure Manual at dealer side.
- 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 30 km (20 miles).
  - Release the parking brake and set the gearshift lever in "Neutral" position before starting to tow the 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

Special Tools necessary to service operations relating to CHASSIS & BODY of this model are available as a Special Tool Set having the following number.

**Special Tool Set:**  
**Set 80 S110 GAKV00103500**

## 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	2.9 - 3.9 (0.3 - 0.4, 2.2 - 2.9)
	M8	8.0	1.25	7.8 - 10.8 (0.8 - 1.1, 5.8 - 8.0)
			1.0	7.8 - 10.8 (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	5.9 - 6.9 (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	7.8 - 10.8 (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

