

SERVICE MANUAL

DATSUN 240Z SPORTS
MODEL S30 SERIES
CHASSIS & BODY



NISSAN MOTOR CO., LTD.
TOKYO, JAPAN

GI

SECTION GI

GENERAL INFORMATION

MODEL IDENTIFICATION	GI- 2
IDENTIFICATION NUMBER	GI- 2
GENERAL VIEW	GI- 3
GENERAL SPECIFICATIONS	GI- 4

GENERAL INFORMATION

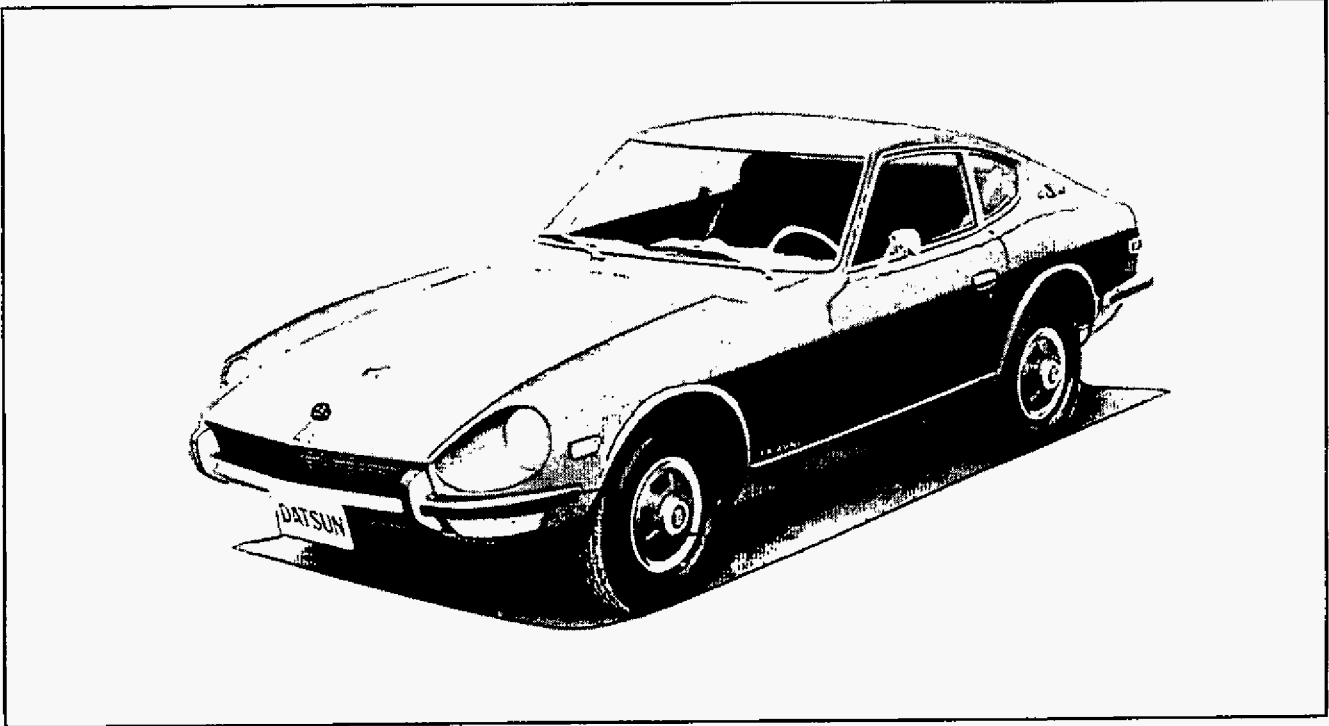


Fig. GI-1 DATSUN 240Z SPORTS (Model HLS30-U)

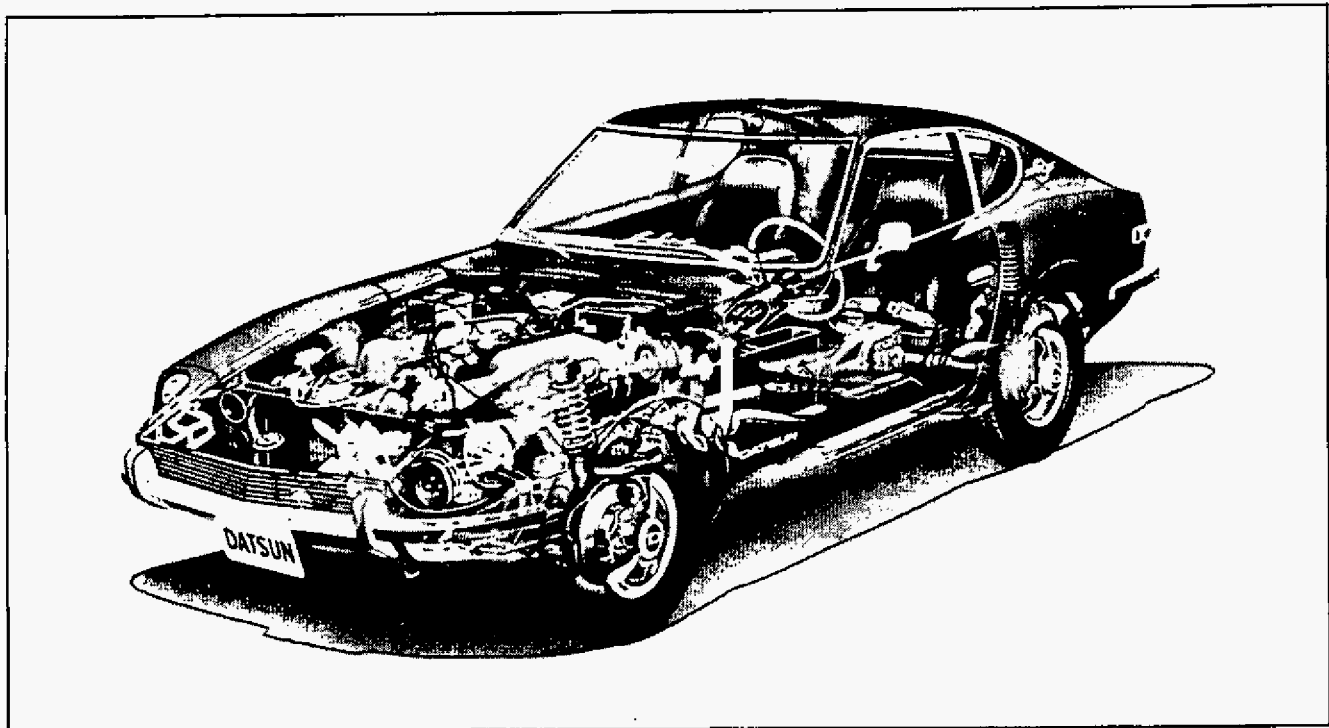


Fig. GI-2 Clairvoyant view (Model HLS30-U)

GI-1

CHASSIS

MODEL IDENTIFICATION

Vehicle model	Engine model	Transmission - speeds	Remark
HLS30-U	L24 (SU carb.)	F4W71A-4	Left hand drive for U.S.A. Canada.
HLS30	L24 (SU carb.)	FS5C71A-5	Left hand drive
HS30-U	L24 (SU carb.)	FS5C71A-5	Right hand drive

IDENTIFICATION NUMBER

The identification number is stamped on instrument panel, and can be seen from outside. (For U.S.A.)

The body number plate identifies the type of car, engine capacity, maximum horse power [SAE (New)],

wheel base, engine number and car number.

The body number plate is attached to the right front strut housing.

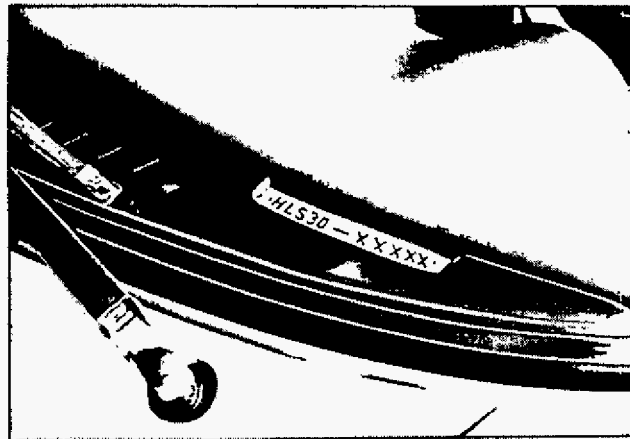


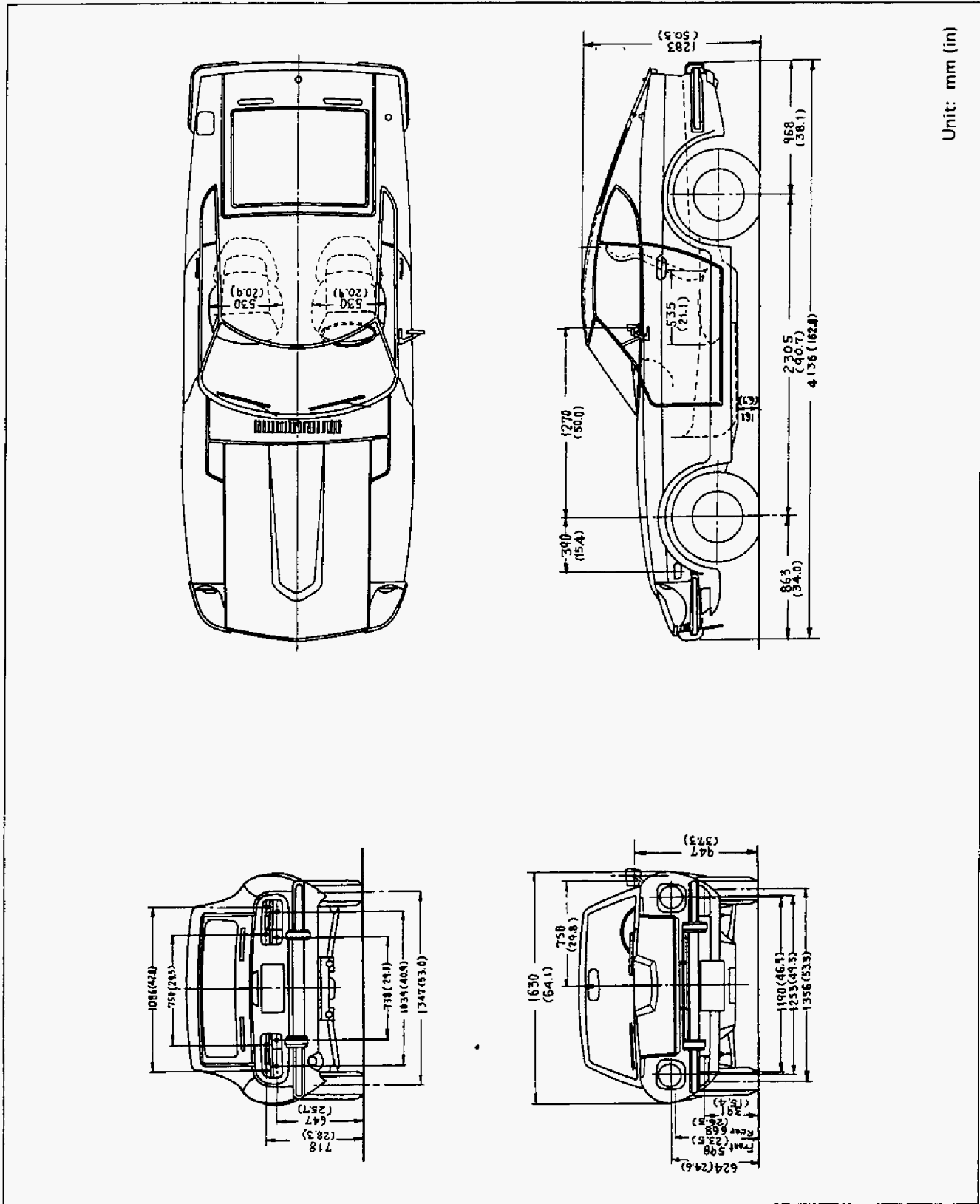
Fig. GI-3 Identification number

DATSUN		TYPE	HLS30
ENGINE CAPACITY	2,393 cc		
MAX. HP at RPM	151 HP at 5,600 rpm		
WHEEL BASE	2,305 mm		
ENGINE NO.	L24-	<input type="checkbox"/>	<input type="checkbox"/>
CAR NO.	HLS30-	<input type="checkbox"/>	<input type="checkbox"/>
NISSAN MOTOR CO., LTD.			
YOKOHAMA JAPAN			

Fig. GI-4 Body number plate

GENERAL INFORMATION

GENERAL VIEW



CHASSIS

GENERAL SPECIFICATIONS

Item		Model	DATSUN 240Z SPORTS		
			HLS30-U	H(L)S30-(U)	
Dimensions & Weight	Overall length		4,136 mm (162.8 in)	←	
	Overall width		1,630 mm (64.1 in)	←	
	Overall height		1,283 mm (50.5 in)	←	
	Wheel base		2,305 mm (90.7 in)	←	
	Tread	Front		1,356 mm (53.3 in)	←
		Rear		1,347 mm (53.0 in)	←
	Minimum road clearance		161 mm (6.3 in)	←	
	Seating capacity		2	←	
Performance	Vehicle weight		1,044 kg (2,300 lb)	1,025 kg (2,260 lb)	
	Maximum speed		200 km/h (125 mph)	205 km/h (129 mph)	
	Maximum grade ability (Sin θ)		0.436	0.436	
	Minimum turn radius		4.8 m (15.7 ft)	←	
	Engine model		L24 (SU carb.)	←	
	Clutch type		Dry single disc Diaphragm spring.	←	
Transmission	Model		F4W71A	FS5C71A	
	Synchro type		Warner	Servo	
	Control system		Floor shift	←	
	Gear ratio	1st		3.549	2.957
		2nd		2.197	1.858
		3rd		1.420	1.311
		4th		1.000	1.000
5th			—	0.852	
Reverse		3.146	2.922		
Final gear	Gear type		Hypoid gear	←	
	Gear ratio		3.364	3.900	

GENERAL INFORMATION

		Speedometer gear ratio	17/6	19/6
Suspension	Front	Type	Independent strut type	←
		Spring	Coil spring	←
		Shock absorber type	Telescopic double-acting	←
	Rear	Type	Independent strut type	←
		Spring	Coil spring	←
		Shock absorber type	Telescopic double-acting	←
		Drive shaft	Ball spline	←
Brake system	Front		Girling-Sumitomo S-16 type Disc brake	←
	Rear		Leading training type with Self-adjuster	←
		Drum	Aluminum drum with fins	←
	Parking		Mechanical operated on rear wheels	←
	Master Vac		6 in	←
	Master cylinder		7/8 in tandem Master cylinder	←
	Skid control valve		Proportioning valve	←
Fuel tank	Tank capacity		60 ℓ (15.9 US gal 13.2 UK gal)	←
	Reservoir tank capacity		*4.2 ℓ (1.1 USgal 0.9 UK gal)	—
		Battery	N50	←
Steering	Gear type		Rack-and-pinion	←
	Lock to lock		2.7	←
Wheel & Tire	Size		175SR-14 175HR-14 6.45H14-4PR	6.45H14-4PR 165HR-14 6.95H14-4PR
	Rim size		4½J x 14	←

* For U.S.A. California

LUBRICATION CHART

GI-6

MAINTENANCE FREQUENCY EVERY					LUBRICATION	MAINTENANCE PERIODS											
50,000 km (30,000 miles)	40,000 km (24,000 miles)	20,000 km (12,000 miles)	10,000 km (6,000 miles)	5,000 km (3,000 miles)		1,000 km (600 miles)	3,000 km (2,000 miles)	6,000 km (4,000 miles)	10,000 km (6,000 miles)	15,000 km (9,000 miles)	20,000 km (12,000 miles)	25,000 km (15,000 miles)	30,000 km (18,000 miles)	35,000 km (21,000 miles)	40,000 km (24,000 miles)	45,000 km (27,000 miles)	50,000 km (30,000 miles)
				●	Change engine oil.	●	●	●	●	●	●	●	●	●	●	●	●
	○				Lubricate foot operated bushings.					○				○			
				○	Check transmission & differential gear oil level, top up if necessary.		○	○	○	○	○	○	○	○	○		
●					Change transmission & differential gear oil.	●										●	
			○		Grease distributor shaft & cam heel.			○		○		○		○		○	
	○				Grease hand brake system linkage.									○			
	○				Grease brake shoe metal-to-metal contact parts.									○			
●					Change suspension ball joint grease.											●	
●					Change wheel bearing grease.											●	
●					Change rear axle drive shaft joint & ball spline grease.											●	
●					Change steering linkage ball joint grease.											●	
●					Change steering gear grease.											●	
			○		Check steering grease reservoir (replace if necessary).			○		○		○		○		○	
●					Change propeller shaft joint grease.											●	
	○				Grease wiper motor linkage.									○			
	○				Grease window regulator & lock.									○			
		○			Grease body metal-to-metal contact parts.					○				○			
		●			Change brake fluid.					●				●			
●					Change cooling water (Long Life Coolant).									●			

○ = Clean, check, adjust or supply ● = Change

CHASSIS

CHECKING CHART

GI-7

MAINTENANCE FREQUENCY EVERY					CHECKING POINTS (ENGINE)	MAINTENANCE PERIODS												
50,000 km (30,000 miles)	40,000 km (24,000 miles)	20,000 km (12,000 miles)	10,000 km (6,000 miles)	5,000 km (3,000 miles)		1,000 km (600 miles)	3,000 km (2,000 miles)	6,000 km (4,000 miles)	10,000 km (6,000 miles)	15,000 km (9,000 miles)	20,000 km (12,000 miles)	25,000 km (15,000 miles)	30,000 km (18,000 miles)	35,000 km (21,000 miles)	40,000 km (24,000 miles)	45,000 km (27,000 miles)	50,000 km (30,000 miles)	
				○	Adjust valve clearance.	○		○		○		○		○		○		○
				○	Check ignition timing (adjust if necessary).	○		○		○		○		○		○		○
				○	Check fan belt tension.	○		○		○		○		○		○		○
	○				Measure compression pressure.													○
	●				Change air cleaner element (viscous type).													●
	○				Check fuel line for leak.		○											○
	●				Change cartridge type fuel strainer.													●
		○			Check fuel pump for proper function.					○								○
	○				Retighten carburetor & fitting parts.		○											○
					Overhaul carburetor.													
			●		Change cartridge type oil filter.		●		●		●		●		●		●	
		○			Check battery for electrolyte specific gravity.	○				○				○				○
		●	○		Check (or change) spark plugs.		○		○		●		○		●		○	
				○	Check distributor breaker point.		○	○	○	○	○	○	○	○	○	○	○	○
	○				Check condenser for proper function.													○
		○			Check alternator, regulator for proper function.					○				○				
		○			Check alternator brush.					○				○				
		○			Check starter for proper function.					○				○				
			○		Check engine for oil and water leaks.	○			○		○			○				○
	○				Retighten cylinder head, manifolds & exhaust pipe flange.	○												○
					Check for weak or damage of engine mountings.													○
					Retighten engine mountings.	○												○
			○		Adjust idling speed.		○		○		○		○		○		○	
			○		Check engine starting condition, abnormal noise and exhaust color.		○		○		○		○		○		○	
			○		Check high tension cable.				○		○		○		○		○	
			○		Clean ignition coil distributor and battery.				○		○		○		○		○	

Special maintenance for emission control system is described on page GI-9.

○ = Clean, check, adjust or supply ● = Change

GENERAL INFORMATION

MAINTENANCE FREQUENCY EVERY					CHECKING POINTS (CHASSIS & BODY)	MAINTENANCE PERIODS											
50,000 km (30,000 miles)	40,000 km (24,000 miles)	20,000 km (12,000 miles)	10,000 km (6,000 miles)	5,000 km (3,000 miles)		1,000 km (600 miles)	3,000 km (2,000 miles)	6,000 km (4,000 miles)	10,000 km (6,000 miles)	15,000 km (9,000 miles)	20,000 km (12,000 miles)	25,000 km (15,000 miles)	30,000 km (18,000 miles)	35,000 km (21,000 miles)	40,000 km (24,000 miles)	45,000 km (27,000 miles)	50,000 km (30,000 miles)
					Check clutch & brake pedal free play.	○											
				○	Check clutch & brake system for oil leak or defect.	○	○	○	○	○	○	○	○	○	○	○	○
			○		Check clutch operation.		○			○				○			○
			○		Check foot & hand brake operation.		○			○				○			○
○					Check brake drum for wear.												○
		○			Check drum brake lining.					○							○
				○	Check disc brake lining pad.				○	○	○	○	○	○	○	○	○
		○			Check master vac for proper function. (Change rubber parts every two years.)					○							○
	○				Overhaul Master-Vac.												○
○					Overhaul master cylinder, wheel cylinder & caliper assembly.												○
				○	Check steering wheel free play.	○	○	○	○	○	○	○	○	○	○	○	○
		○			Retighten steering gear housing.	○				○							○
	○				Retighten steering coupling & joint.	○											○
				○	Check steering linkage for loose connection.	○	○	○	○	○	○	○	○	○	○	○	○
		○			Retighten steering knuckle.	○				○							○
○			○		Check and retighten front and rear suspension parts.		○		○	○		○		○			○
	○				Check P-valve operation.												○
		○			Check strut assembly.												○
		○			Check wheel alignment and turning angle.					○							○
			○		Rotate wheel position.				○	○			○				○
			○		Check wheel disc for damage.				○	○			○				○
			○		Measure wheel balance (correct if necessary).				○	○			○				○
		○			Retighten propeller shaft universal joint flange.	○				○							○
		○			Check propeller shaft spline and joint for wear or damage.					○							○
		○			Retighten transmission case and differential carrier.					○							○
	○				Check exhaust pipe & muffler fitting parts.												○
			○		Check wire harness and contact parts.				○	○		○		○			○
		○			Retighten door hinge, lock & striker (align door if necessary).					○				○			○
			○		Road test.	○				○			○				○
○					Check headlight aiming.												○
○					Check wheel bearing for wear.												○

SPECIAL MAINTENANCE FOR EMISSION CONTROL SYSTEM

MAINTENANCE FREQUENCY EVERY				CHECKING POINTS	MAINTENANCE PERIODS													
40,000 km (24,000 miles)	20,000 km (12,000 miles)	10,000 km (6,000 miles)	5,000 km (3,000 miles)		1,000 km (600 miles)	3,000 km (2,000 miles)	6,000 km (4,000 miles)	10,000 km (6,000 miles)	15,000 km (9,000 miles)	20,000 km (12,000 miles)	25,000 km (15,000 miles)	30,000 km (18,000 miles)	35,000 km (21,000 miles)	40,000 km (24,000 miles)				
				Engine	Check ignition timing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
					Check engine idling.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>				Engine major tune-up.					<input type="radio"/>								<input type="radio"/>
	<input checked="" type="radio"/>		<input type="radio"/>		Check or replace spark plugs.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="radio"/>		<input type="radio"/>		Check or replace distributor breaker points.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	<input type="radio"/>				Check high tension cable.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>				Apply grease to distributor rotor shaft, cam, and wick.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>				Replace carburetor air cleaner element.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>			Crank- case emission	Check for leaks of hoses and hose connections.					<input type="radio"/>							<input type="radio"/>	
	<input type="radio"/>				Check for proper function of crankcase ventilation control valve.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>			Exhaust emission	Check for proper function of air pump.					<input type="radio"/>							<input type="radio"/>	
	<input type="radio"/>				Check for proper function of relief valve.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>				Check for proper function of check valve.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>				Check for proper function of anti-backfire valve.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>				Check for leaks of air gallery and nozzle connections.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>				Check for leaks of hoses and hose connections.					<input type="radio"/>								<input type="radio"/>
	<input type="radio"/>		<input type="radio"/>		Check air pump belt tension.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>			Check operating negative pressure of throttle control valve, adjust if necessary.					<input type="radio"/>								<input type="radio"/>	
	<input type="radio"/>			Evapo- rative emission	Check hoses, hose connectors and piping for leaks.					<input type="radio"/>							<input type="radio"/>	
	<input type="radio"/>				Check for proper function of flow guide valve.					<input type="radio"/>								<input type="radio"/>

○ = Clean, check, adjust or supply ● = Change

CHASSIS

JACKING UP AND TOWING THE CAR

CONTENTS

JACK UP	GI-10	Supportable point	GI-10
Pantograph jack	GI-10	TOWING	GI-11
Garage jack	GI-10		

JACK UP

Pantograph jack

Apply a jack to the indicated position where sill flange is cut for identification. Do not jack up other position.

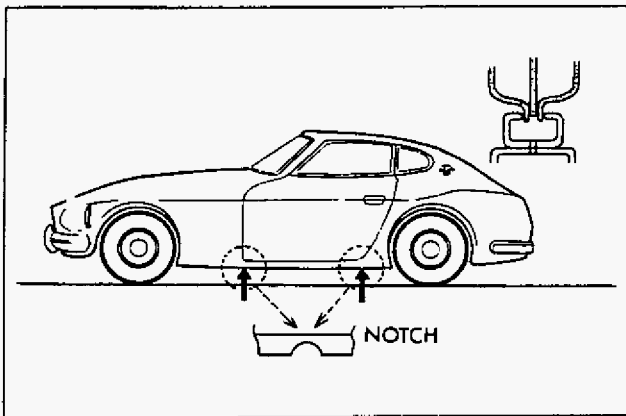


Fig. GI-6 Jacking point

Garage jack

The front jacking point is center of front suspension member and rear is differential gear carrier.

Do not apply a jack to center portion of front suspension transverse link.

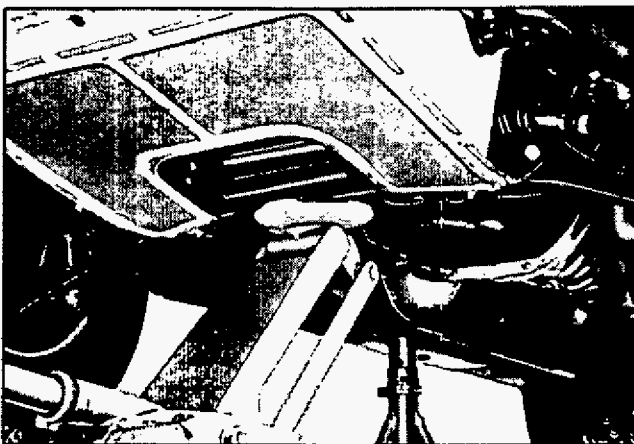


Fig. GI-7 Front jacking point

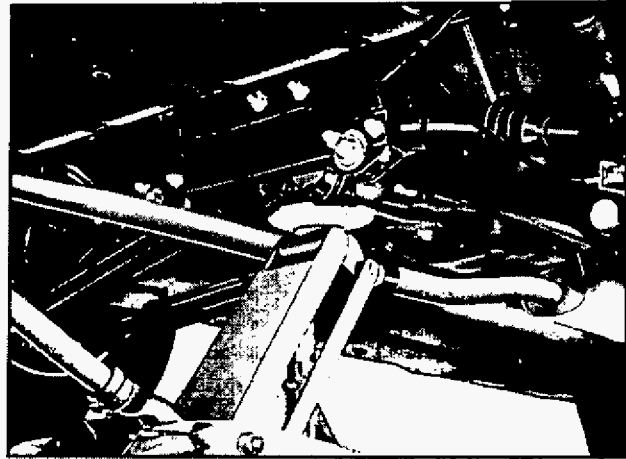


Fig. GI-8 Rear jacking point

Supportable point

Front supportable points for stand are both front side members. Rear supportable points are both sides of front differential mounting cross member.

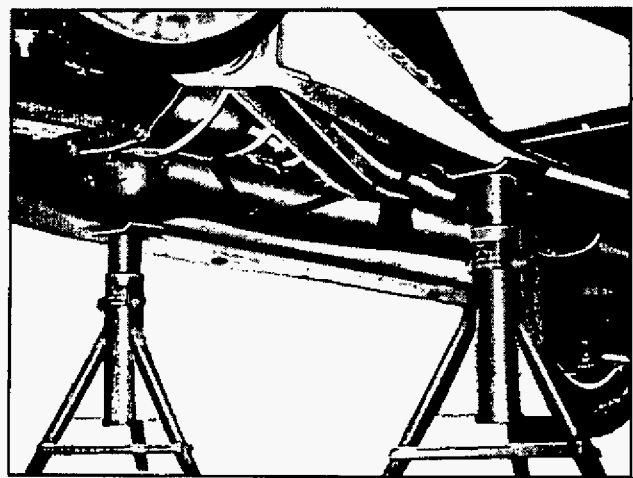


Fig. GI-9 Front supportable point

NISSAN FACTORY SERVICE MANUAL & PARTS MICROFICHE CD END-USER LICENSE AGREEMENT

NOTICE TO USER: THIS IS A CONTRACT. BY PURCHASING AND USING THE SERVICE MANUAL/MICROFICHE ON CD, YOU ACCEPT ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT.

This End User License Agreement accompanies the Service Manual/Microfiche on CD product and related explanatory materials. Please read this Agreement carefully. By purchasing and using the Service Manual/Microfiche on CD, you are implying that you have carefully read, agree with, and will adhere to the conditions set forth in this agreement. If you do not wish to accept the terms of this End User Agreement please do not use the Service Manual/Microfiche on CD. You will not be permitted to use the Service Manual/Microfiche on CD without consenting to this end user agreement.

Upon your acceptance of this Agreement, Courtesy Nissan grants to you a nonexclusive license to use the Service Manual/Microfiche on CD, provided that you agree to the following:

USE OF SOFTWARE

You may install the contents of the CD on a hard disk or other storage device for personal use only. Each Service Manual/Microfiche on CD comes with a single user license. Under no circumstances should the contents of the Service Manual/Microfiche CD be placed on a server for purposes of distributing or allowing access to the material over a network.

COPYRIGHT AND TRADEMARK RIGHTS

The Service Manual/Microfiche CD is owned by Courtesy Nissan and its structure and organization, all graphics and coding are considered intellectual property of Courtesy Nissan. The Service Manual/Microfiche on CD is also protected by United States Copyright Law and International Treaty provisions. This Agreement does not grant you any intellectual property or resale rights to the Service Manual/Microfiche CD.

RESTRICTIONS

You agree not to modify, adapt, translate, reverse engineer, decompile or disassemble the PDF file on the Service Manual/Microfiche CD. The Service Manual/Microfiche on CD is licensed and distributed by Courtesy Nissan for single user utilization of its contents only. Licensed users will be permitted to use the contents of the Service Manual/Microfiche CD for multimedia presentation to an audience from a single machine using a large display or projection device but the Service Manual/Microfiche CD may not otherwise be distributed, sold to or made accessible to multiple users.

NO WARRANTY

The software is being delivered to you AS IS and Courtesy Nissan makes no warranty as to its use or performance. COURTESY NISSAN DOES NOT AND CANNOT WARRANT THE PERFORMANCE OR RESULTS YOU MAY OBTAIN BY USING THE SERVICE MANUAL/MICROFICHE CD OR DOCUMENTATION, NOR MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, AS TO NONINFRINGEMENT OF THIRD-PARTY RIGHTS, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT WILL COURTESY NISSAN BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES FOR ANY REASON.



Courtesy Nissan Parts
1777 North Central Expressway
Richardson, TX 75080
(800)527-1909

GOVERNING LAW AND GENERAL PROVISIONS

This Agreement will be governed by the laws of the State of Texas, USA, excluding the application of its conflicts of law rules. This Agreement will not be governed by the United Nations Convention on Contracts for the International Sale of Goods, the application of which is expressly excluded. If any part of this Agreement is found void and unenforceable, it will not affect the validity of the balance of the Agreement, which shall remain valid and enforceable according to its terms. You agree that the Service Manual/Microfiche on CD will not be shipped, transferred or exported into any country or used in any manner prohibited by the United States Export Administration act or any other export laws, restrictions or regulations. This Agreement shall automatically terminate upon failure by you to comply with its terms. This Agreement may only be modified in writing signed by and authorized officer for Courtesy Nissan.

Courtesy Nissan
1777 North Central Expressway
Richardson, TX 75080
USA

YOUR ACCEPTANCE OF THE FOREGOING AGREEMENT IS IMPLIED UPON PURCHASING AND USING THE SERVICE MANUAL/MICROFICHE CD.