



**G20**

**MODEL P10 SERIES**

**FOREWORD**

This supplement contains information concerning necessary service procedures and relevant data for the 1993.5 G20 vehicle.

All information, illustrations and specifications contained in this supplement are based on the latest product information available at the time of publication. If your INFINITI model differs from the specifications contained in this supplement, consult your INFINITI distributor for information.

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

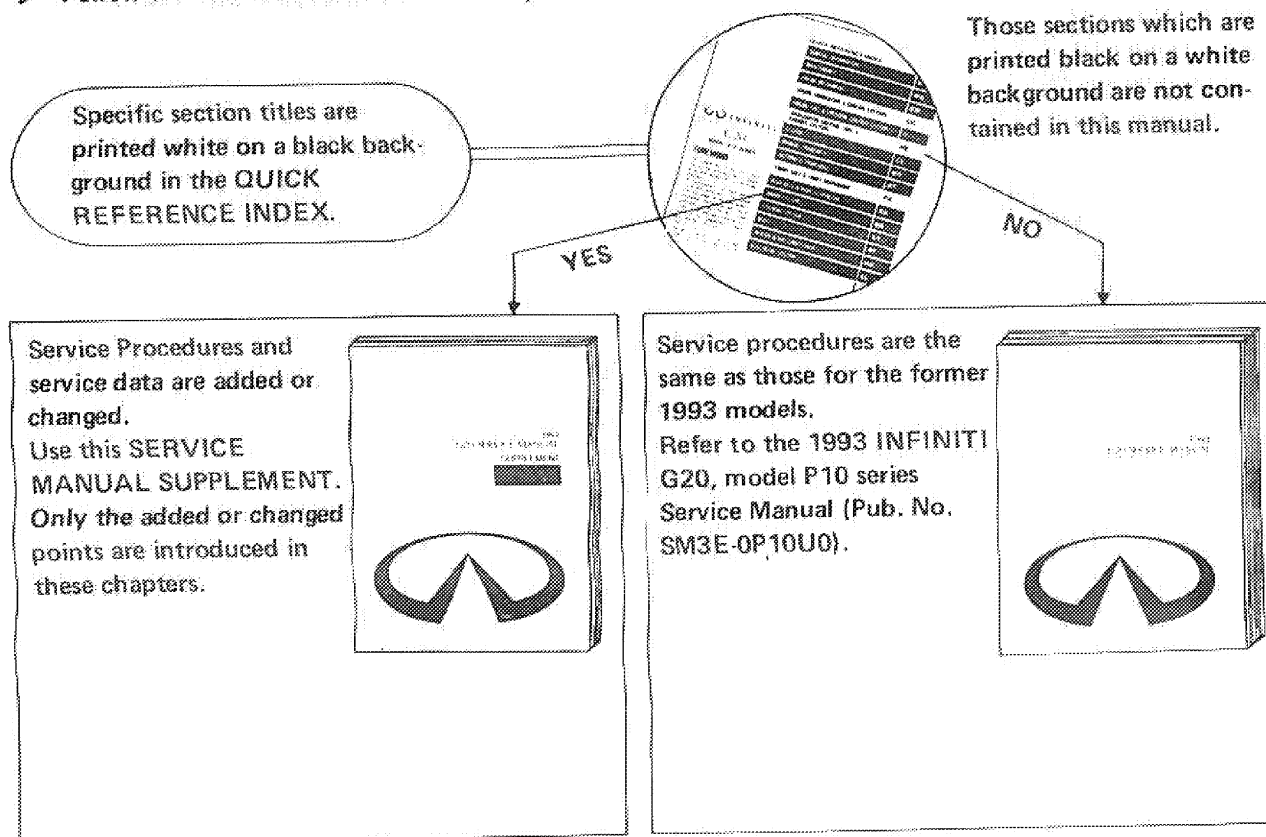
**QUICK REFERENCE INDEX**

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## HOW TO USE THIS MANUAL

- ▶ This Service Manual contains the new service procedures, service data and specifications for the 1993 INFINITI G20, model P10 series face-lift.
- ▶ This Service Manual does not contain the service procedures, etc. which are the same as those for the former 1993 models.  
Please use this manual in conjunction with the 1993 INFINITI G20, model P10 series Service Manual (Pub. No. SM3E-0P10U0).
- ▶ Follow the instruction below when using this manual.



## IMPORTANT SAFETY NOTICE

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

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

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 INFINITI must first completely satisfy himself that neither his safety nor the vehicle's safety will be jeopardized by the service method selected.

# GENERAL INFORMATION

## SECTION **GI**



### STARTING IDENTIFICATION NUMBER:

Oppama plant  
JNKCP01D\*PT 450021

### OUTLINE OF MODIFICATIONS:

#### Body

- SRS air bags have been adopted on both the driver and passenger sides.

#### Seat

- Front power support seats have been introduced.

#### Automatic transaxle

- An electronically controlled type automatic transaxle (RE4F03A) has been introduced.

#### Heater and air conditioner

- R134a refrigerant has been introduced.

#### Electrical system

- The keyless entry system has been introduced.

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## CONSULT CHECKING SYSTEM

### Function and System Application

Diagnostic test mode	Function	ECCS	A/T	Air bag	ASCD
Work support	This mode enables a technician to adjust some devices faster and more accurately by following the indications on CONSULT.	×	—	—	—
Self-diagnostic results	Self-diagnostic results can be read and erased quickly.	×	×	×	×
Data monitor	Input/Output data in the ECM can be read.	×	×	—	×
Active test	Diagnostic Test Mode in which CONSULT drives some actuators apart from the ECMs and also shifts some parameters in a specified range.	×	—	—	—
ECM part number	ECM part number can be read.	×	×	—	—
Function test	ECCS faults can be isolated to a general area, semi-automatically and in a short time, by following the directions on the screen.	×	—	—	—

×: Applicable

### Lithium Battery Replacement

CONSULT contains a lithium battery. When replacing the battery obey the following:

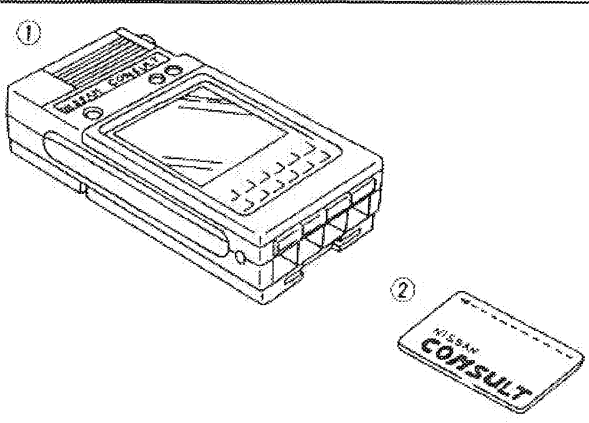
**WARNING:**

Replace the lithium battery with SANYO Electric Co., Ltd., CR2032 only. Use of another battery may present a risk of fire or explosion. The battery may present a fire or chemical burn hazard if mistreated. Do not recharge, disassemble or dispose of in fire.

Keep the battery out of reach of children and discard used battery conforming to the local regulations.

### Checking Equipment

When ordering the below equipment, contact your INFINITI distributor.

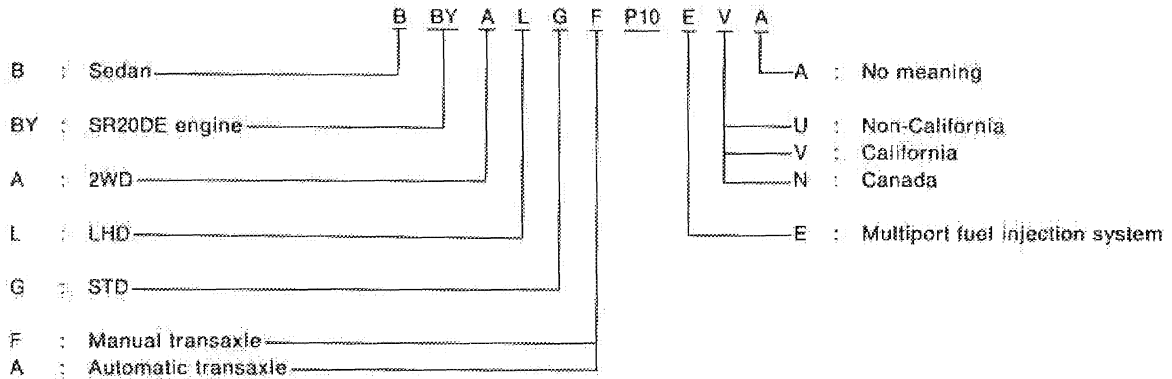
Tool name	Description
<b>NISSAN CONSULT kit</b> ① CONSULT unit and accessories ② Program card (UE920)	

## IDENTIFICATION INFORMATION

### Model Variation

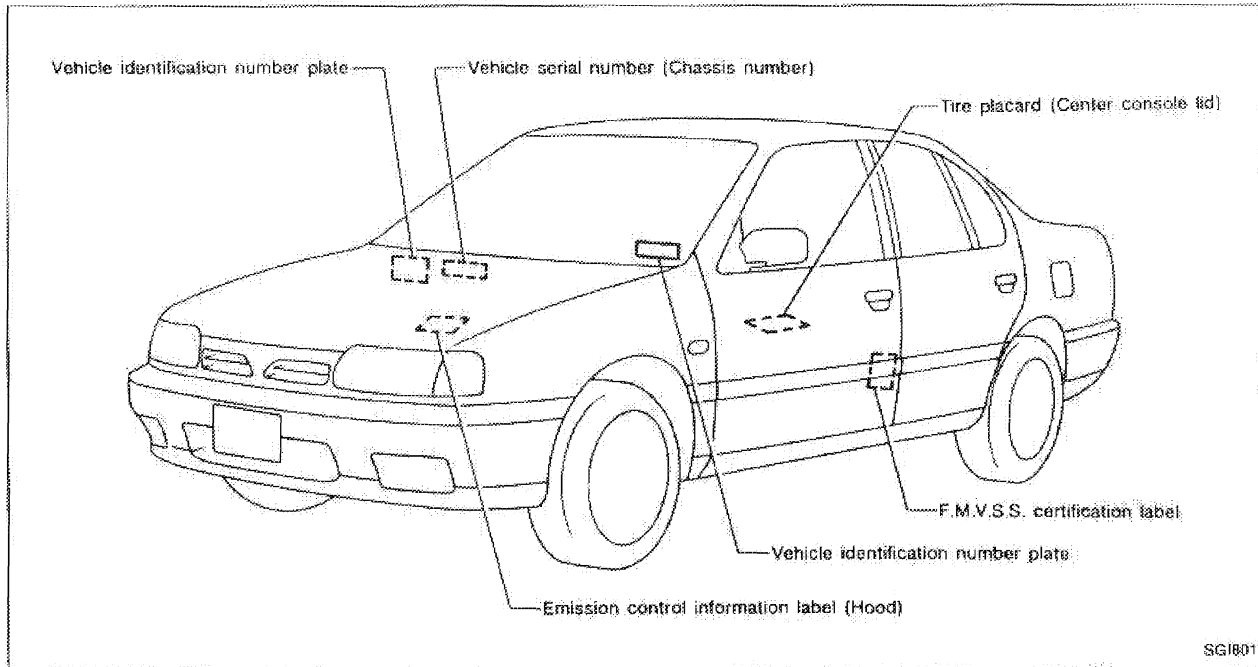
Body	Destination	Grade	Model	Engine	Transaxle
Sedan	Non-California	STD	BBYALGF P10 EUA	SR20DE	RS5F32A
			BBYALGA P10 EUA		RE4F03A
	California		BBYALGF P10 EVA		RS5F32A
			BBYALGA P10 EVA		RE4F03A
	Canada		BBYALGF P10 ENA		RS5F32A
			BBYALGA P10 ENA		RE4F03A

**Prefix and suffix designations:**

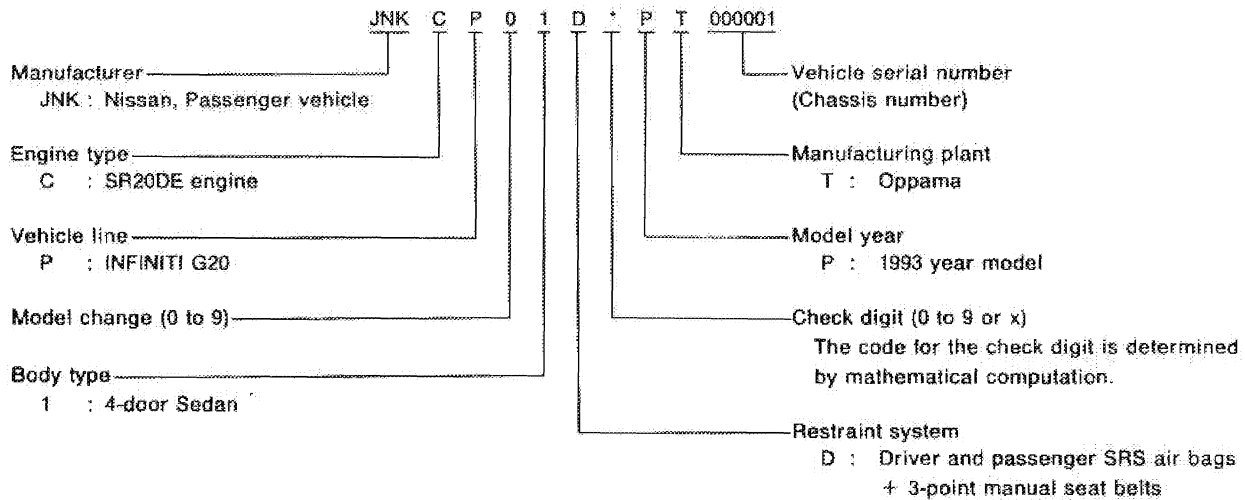


# IDENTIFICATION INFORMATION

## Identification Number



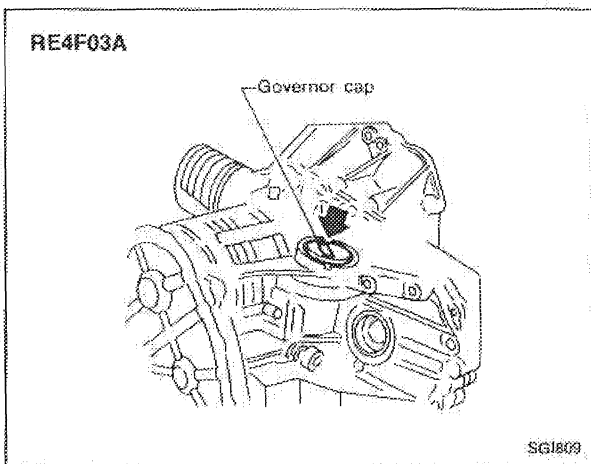
## VEHICLE IDENTIFICATION NUMBER ARRANGEMENT



## IDENTIFICATION INFORMATION

### Identification Number (Cont'd)

#### AUTOMATIC TRANSAXLE NUMBER



#### Dimensions

Unit: mm (in)

Model	Sedan	
Overall length	4,440 (174.8)	
Overall width	1,594 (66.7)	
Overall height	1,389 (54.7)	
Wheel base	2,550 (100.4)	
Tread	Front	1,471 (57.9)
	Rear	1,481 (57.5)

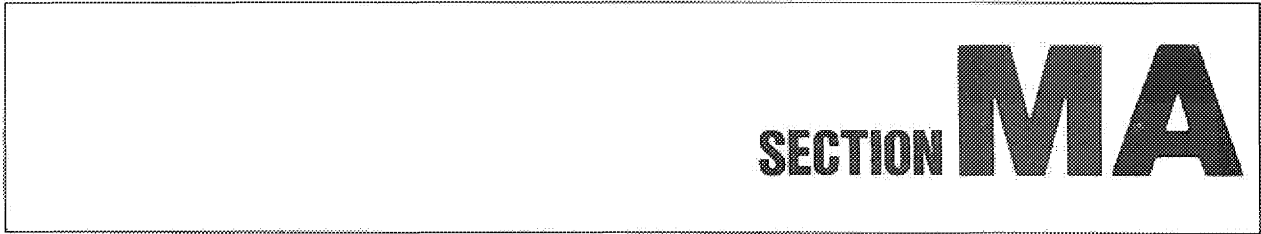
#### Wheels and Tires

Road wheel	Aluminum	6-JJ x 14
	Offset mm (in)	45 (1.77)
Tire size	Conventional	P195/65R1488H
	Spare	T125/70D15





# MAINTENANCE



MA

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## PRECAUTIONS

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### **Supplemental Restraint System "AIR BAG"**

The Supplemental Restraint System "Air Bag" helps to reduce the risk or severity of injury to the driver in a frontal collision. The Supplemental Restraint System consists of an air bag (located in the center of the steering wheel), sensors, a diagnostic unit, warning lamp, wiring harness and spiral cable. Information necessary to service the system safely is included in the BF section of this Service Manual.

#### **WARNING:**

- a. To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal collision, all maintenance must be performed by an authorized INFINITI dealer.
- b. Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.
- c. All SRS electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS "Air Bag".

## PERIODIC MAINTENANCE

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### Schedule 1

#### CHASSIS AND BODY MAINTENANCE

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Air bag system See NOTE (6).

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NOTE: (6) Inspect the air bag system 10 years after the date of manufacture as noted on the F.M.V.S.S. certification label.

### Schedule 2

#### CHASSIS AND BODY MAINTENANCE

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Air bag system See NOTE (4).

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NOTE: (4) Inspect the air bag system 10 years after the date of manufacture as noted on the F.M.V.S.S. certification label.



# ENGINE MECHANICAL

## SECTION **EM**

EM

### MODIFICATION NOTICE:

- The PAIR valve has been discontinued.
- The valve timing and the valve lift have been altered (For A/T models).

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## PRECAUTIONS

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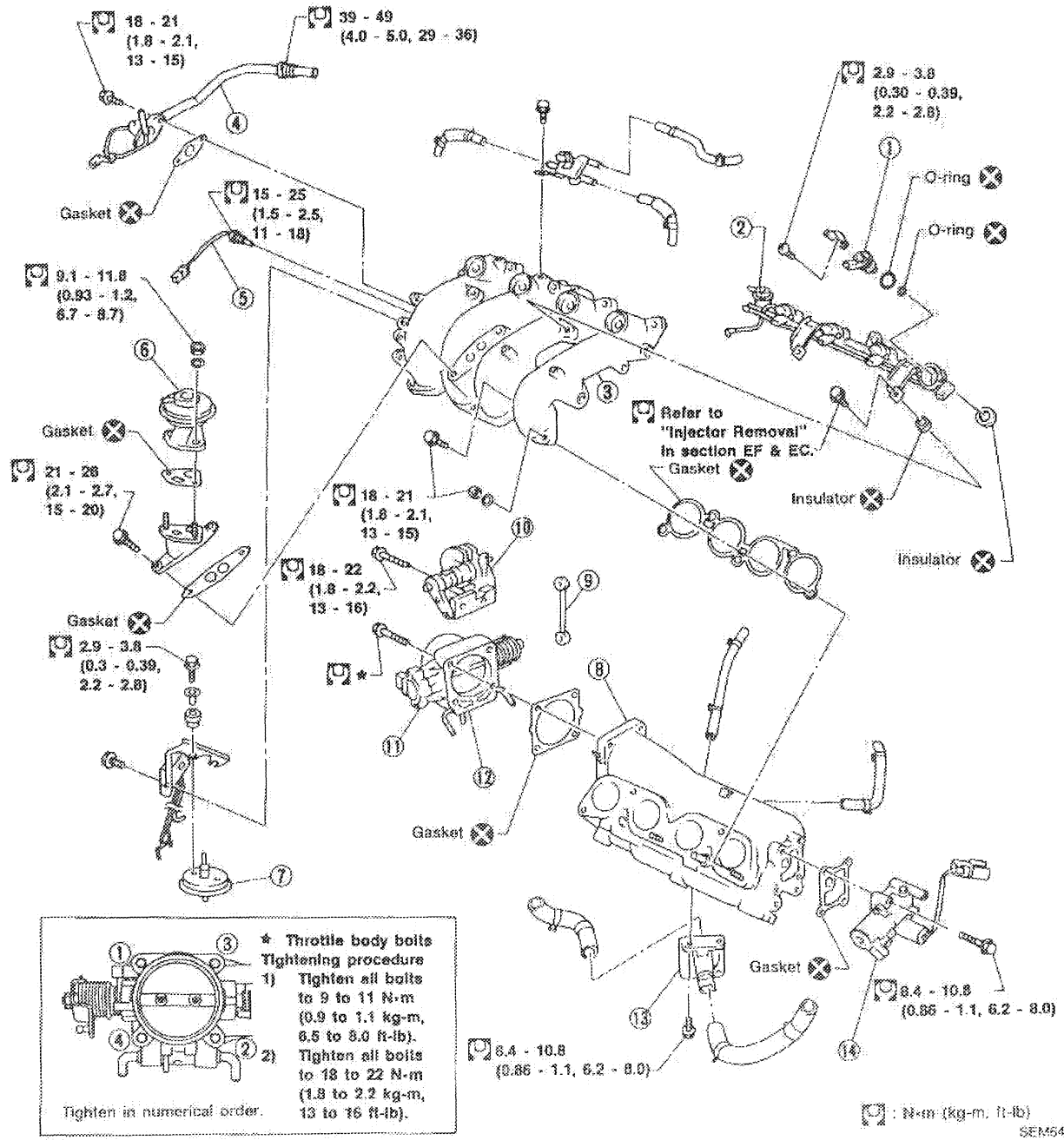
### Supplemental Restraint System "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System "Air Bag" and "Seat Belt Pre-tensioner" help to reduce the risk or severity of injury to the driver and front passenger in a frontal collision. The Supplemental Restraint System consists of air bags (located in the center of the steering wheel and on the instrument panel on the passenger side), seat belt pre-tensioners, sensors, a control unit, warning lamp, wiring harness and spiral cable. Information necessary to service the system safely is included in the BF section of this Service Manual.

**WARNING:**

- To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal collision, all maintenance must be performed by an authorized INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.
- All SRS air bag electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS SYSTEM.

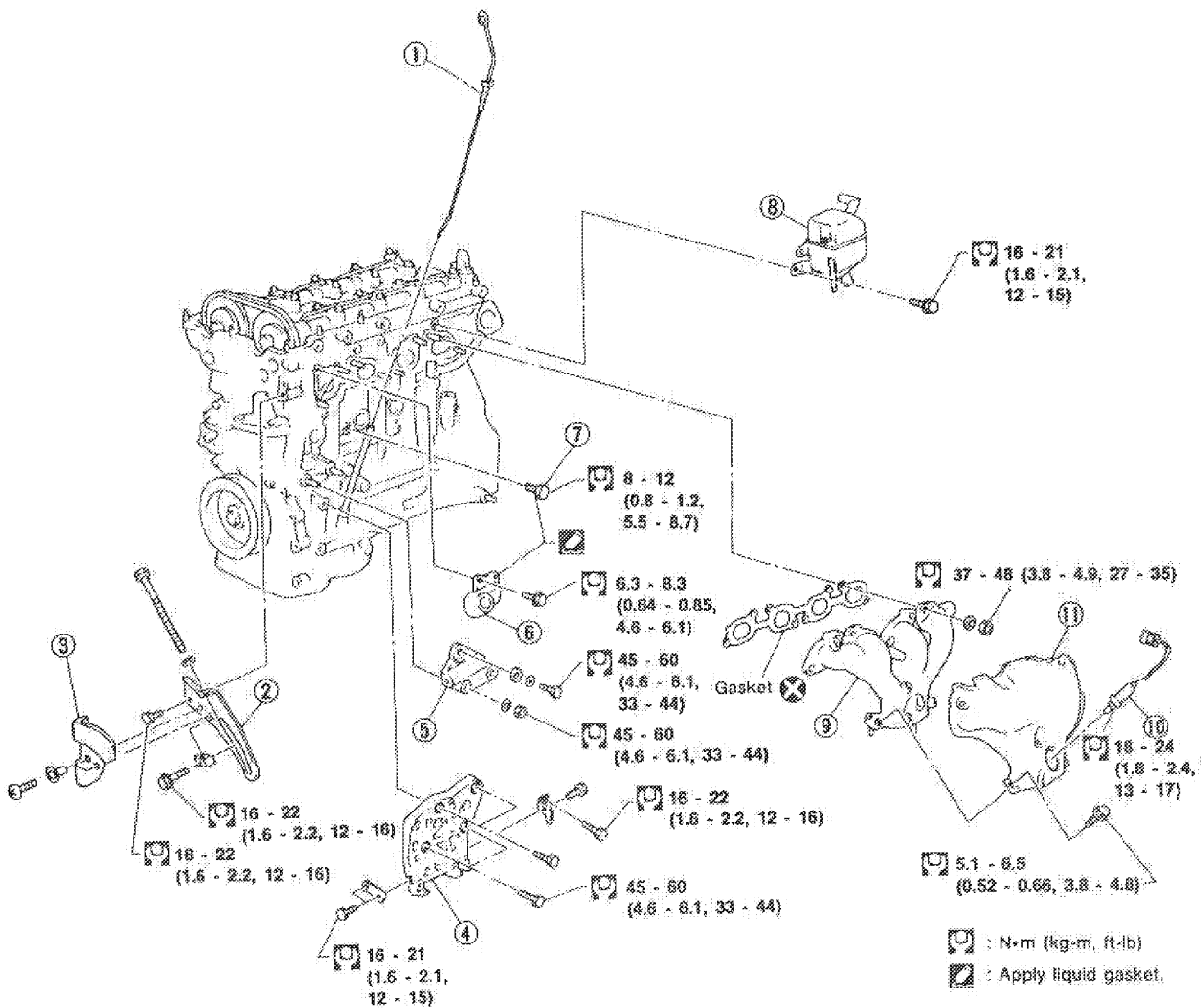
# OUTER COMPONENT PARTS



SEM547E

- |                          |                             |                            |
|--------------------------|-----------------------------|----------------------------|
| ① Injector               | ⑥ EGR valve                 | ⑪ Throttle position sensor |
| ② Pressure regulator     | ⑦ EGRC-BPT valve            | ⑫ Throttle body            |
| ③ Intake manifold        | ⑧ Intake manifold collector | ⑬ IACV-air regulator       |
| ④ EGR tube               | ⑨ Rod                       | ⑭ IACV-AAC valve           |
| ⑤ EGR temperature sensor | ⑩ Accel-drum unit           |                            |

## OUTER COMPONENT PARTS



SEM648E

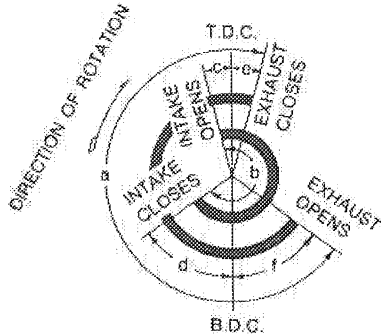
- |                            |                      |                          |
|----------------------------|----------------------|--------------------------|
| ① Oil level gauge          | ⑤ Alternator bracket | ⑨ Exhaust manifold       |
| ② Alternator adjusting bar | ⑥ Water outlet       | ⑩ Heated oxygen sensor   |
| ③ Air guide                | ⑦ Drain plug         | ⑪ Exhaust manifold cover |
| ④ Compressor bracket       | ⑧ Oil separator      |                          |



## SERVICE DATA AND SPECIFICATIONS (S.D.S.)

### General Specifications

Valve timing



EM120  
Unit: degree

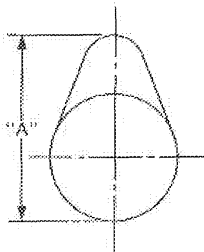
	a	b	c	d	e	f
M/T	240°	248°	13°	55°	3°	57°
A/T	240°	240°	13°	47°	3°	57°

### Inspection and Adjustment

#### CAMSHAFT AND CAMSHAFT BEARING

Unit: mm (in)

	Standard	Limit
Camshaft journal to bearing clearance	0.045 - 0.086 (0.0018 - 0.0034)	0.12 (0.0047)
Inner diameter of camshaft bearing	28.000 - 28.021 (1.1024 - 1.1032)	---
Outer diameter of camshaft journal	27.933 - 27.955 (1.0998 - 1.1006)	---
Camshaft runout [T.I.R.*]	Less than 0.02 (0.0008)	0.1 (0.004)
Camshaft sprocket runout [T.I.R.*]	Less than 0.25 (0.0098)	---
Camshaft end play	0.055 - 0.139 (0.0022 - 0.0055)	0.20 (0.0079)



EM671

Cam height "A"

Intake	
M/T	38.408 - 38.598 (1.5121 - 1.5196)
A/T	37.920 - 38.110 (1.4929 - 1.5004)
Exhaust	
	37.920 - 38.110 (1.4929 - 1.5004)
Wear limit of cam height	
	0.2 (0.008)
Valve lift	
Intake	
M/T	10.0 (0.394)
A/T	9.2 (0.362)
Exhaust	
	9.2 (0.362)

\*Total indicator reading



# ENGINE FUEL & EMISSION CONTROL SYSTEM

## SECTION EF & EC

### MODIFICATION POINT:

- Wiring diagrams have been changed.
- Diagnostic trouble code for signal circuit from A/T control unit to ECM has been added to Diagnostic test mode II (Self-diagnostic results).

EF & EC

## CONTENTS

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Closed Throttle Position (CTP) Switch (A/T models) .....	4		

Note: Refer to Foldout page for "ECCS WIRING DIAGRAM".

#### When you read wiring diagrams:

- Read GI section, "HOW TO READ WIRING DIAGRAMS".
- See EL section, "POWER SUPPLY ROUTING" for power distribution circuit.

When you perform trouble diagnoses, read GI section, "HOW TO FOLLOW FLOW CHART IN TROUBLE DIAGNOSES".

### Supplemental Restraint System "AIR BAG" and "SEAT BELT PRE-TENSIONER"

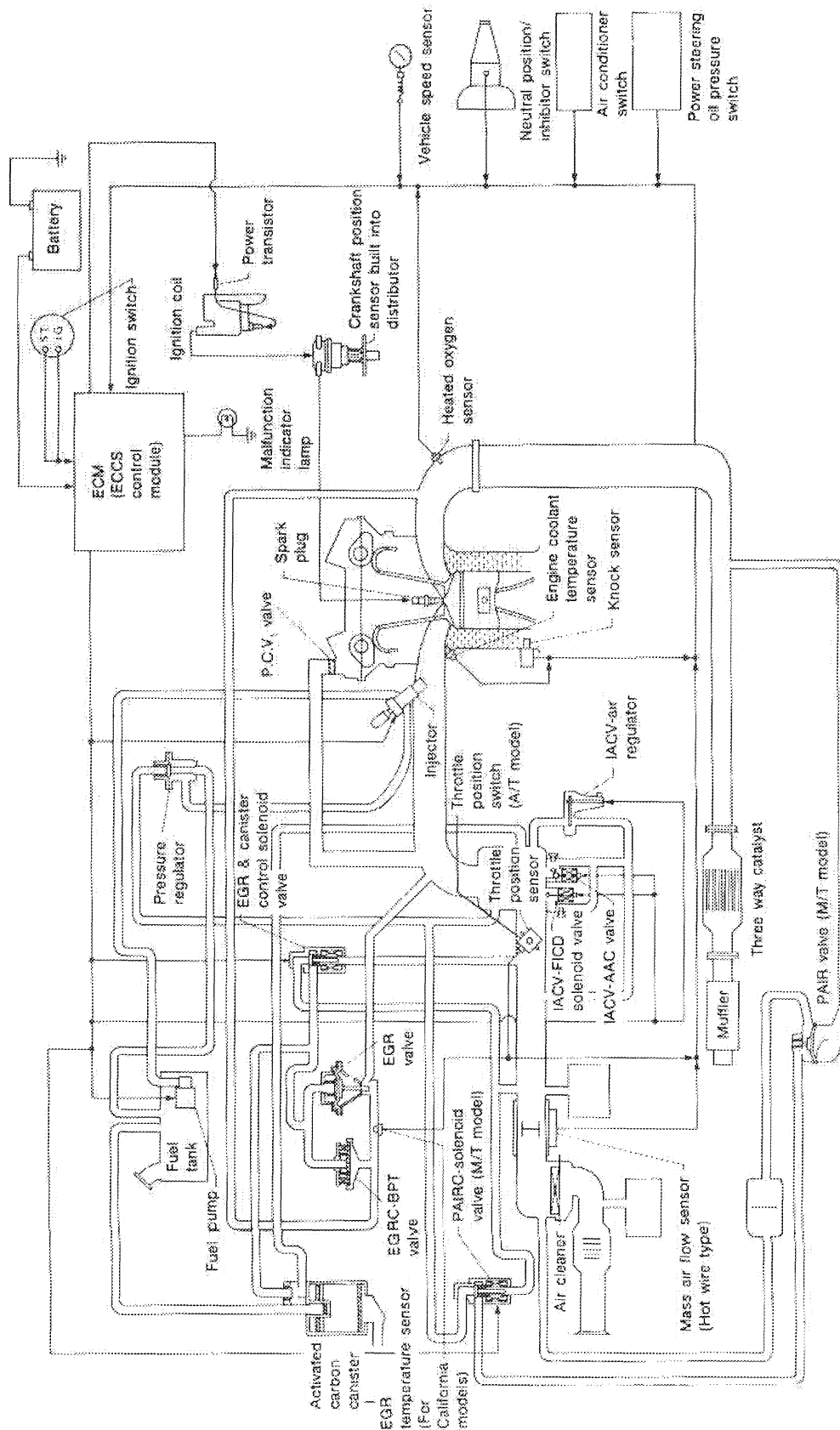
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## ENGINE AND EMISSION CONTROL OVERALL SYSTEM

### System Diagram



SEF225N

ET & EC-2