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# **WHEEL AND TYRE**

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# WHEEL AND TYRE

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## 31-2 WHEEL AND TYRE – General Information/Service Specifications

### GENERAL INFORMATION

31100010030

Both steel type and aluminium type wheels have been adopted. The type of wheel used depends on the vehicle model.

A compact spare tyre has been adopted as the spare tyre in some models.

Items		1300	1800
Wheel	Type	Steel type Aluminium type* <sup>1</sup>	Steel type Aluminium type* <sup>1</sup>
	Size	14 × 5.5J 14 × 5.5JJ* <sup>2</sup>	14 × 5.5J 14 × 5.5JJ* <sup>2</sup>
	Amount of wheel offset mm	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3
Tyre	Size	175/65R14 82T	185/65R14 86H
Spare wheel	Type	Steel type Aluminium type* <sup>2</sup>	Steel type Aluminium type* <sup>2</sup>
	Size	14×4.0T 14×5.5J* <sup>1</sup> 14×5.5JJ* <sup>2</sup>	15×4.0T 14×5.5J* <sup>1</sup> 14×5.5JJ* <sup>2</sup>
	Amount of wheel offset mm	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3
Spare tyre	Size	T125/70D15 (High pressure) 175/65R14 82T* <sup>1</sup>	T125/70D15 (High pressure) 185/65R14 86H* <sup>1</sup>

#### NOTE

\*<sup>1</sup>: Optional items

\*<sup>2</sup>: Optional items<R.H. drive vehicles>

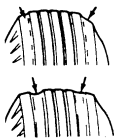
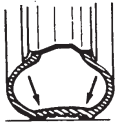
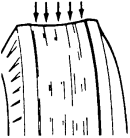
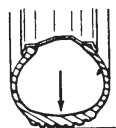

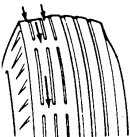
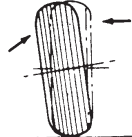
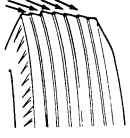
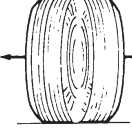
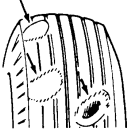
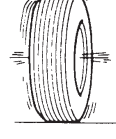
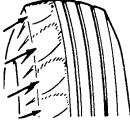
### SERVICE SPECIFICATIONS

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Items		Limit
Tread depth of tyre mm		1.6
Wheel runout (Radial runout) mm	Steel wheel	1.2 or less
	Aluminium wheel	1.0 or less
Wheel runout (Lateral runout) mm	Steel wheel	1.2 or less
	Aluminium wheel	1.0 or less

**TROUBLESHOOTING**

31100070038

Symptom		Probable cause		Remedy	Reference page
Rapid wear at shoulders	 <p>11X0109</p>	Under-inflation or lack of rotation	 <p>11X0116</p>	Adjust the tyre pressure.	31-5.
Rapid wear at centre	 <p>11X0110</p>	Over-inflation or lack of rotation	 <p>11X0117</p>		
Cracked treads	 <p>11X0111</p>	Under-inflation		Adjust the tyre pressure.	31-5.
Wear on one side	 <p>11X0112</p>	Excessive camber	 <p>11X0118</p>	Inspect the camber.	Refer to GROUP 33A – On-vehicle Service.
Feathered edge	 <p>11X0113</p>	Incorrect toe-in	 <p>11X0119</p>	Adjust the toe-in.	
Bald spots	 <p>11X0114</p>	Unbalanced wheel	 <p>11X0120</p>	Adjust the imbalanced wheels.	–
Scalloped wear	 <p>11X0115</p>	Lack of rotation of tyres or worn or out-of-alignment suspension		Rotate the tyres and inspect the front suspension alignment.	Refer to GROUP 33A – On-vehicle Service.

**ON-VEHICLE SERVICE**

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**TYRE INFLATION PRESSURE CHECK**

Check the inflation pressure of the tyres. If it is not within the standard value, make the necessary adjustment.

**TYRE WEAR CHECK**

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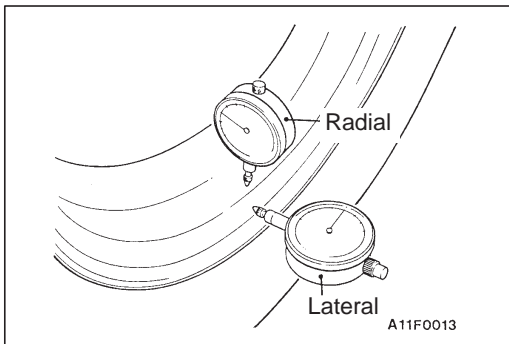
Measure the tread depth of tyres.

**Limit: 1.6 mm**

If the remaining tread depth is less than the limit, replace the tyre.

**NOTE**

When the tread depth of tyres is reduced to 1.6 mm or less, wear indicators will appear.

**WHEEL RUNOUT CHECK**

31100110037

Jack up the vehicle so that the wheels are clear of the floor. While slowly turning the wheel, measure wheel runout with a dial indicator.

**Limit:**

Item	Steel wheel	Aluminium wheel
Radial runout mm	1.2	1.0
Lateral runout mm	1.2	1.0

If wheel runout exceeds the limit, replace the wheel.

**WHEEL AND TYRE**

31100130033

**INSTALLATION SERVICE POINT**

Tighten the wheel nut to the specified torque.

**Tightening torque: 98–117 Nm**

## GROUP 31

# WHEEL AND TYRE

### GENERAL

#### OUTLINE OF CHANGES

The wheel and tyre have been changed as follows.

#### GENERAL SPECIFICATION

Items		1300		1800,1900	
		FAMILY, COMFORT	SPORT	FAMILY, COMFORT	SPORT
Wheel	Type	Steel type Aluminium type*1	Aluminium type	Steel type Aluminium type*1	Aluminium type
	Size	14 × 5.5J	14 × 5.5JJ	14 × 5.5J	15 × 6.0J
	Amount of wheel offset mm	46	46	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3	114.3	114.3
Tyre	Size	175/65 R14 82T	185/65 R14 86H	185/65 R14 86H	195/55 R15 84V
Spare wheel	Type	Steel type Aluminium type*2	Steel type Aluminium type*2	Steel type Aluminium type*2	Steel type Aluminium type*2
	Size	15 × 4.0T 14 × 5.5J*1	15 × 4.0T 14 × 5.5J*1	15 × 4.0T 14 × 5.5J*1	15 × 4.0T 15 × 6.0J*1
	Amount of wheel offset mm	46	46	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3	114.3	114.3
Spare tyre	Size	T125/70 D15 (High pressure) 175/65 R14 82T*1	T125/70 D15 (High pressure) 185/65 R14 86H*1	T125/70 D15 (High pressure) 185/65 R14 86H*1	T125/70 D15 (High pressure) 195/55 R15 84V*1

#### NOTE

\*1: Optional items

\*2: Optional items <R.H. drive vehicles>

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## NOTES

## GROUP 31

# WHEEL AND TYRE

### GENERAL

#### OUTLINE OF CHANGES

- Due the introduction of 1600 engine models, wheel and tyre specifications have been revised.
- A 15-inch wheel and tyre is now available as option. <FAMILY, COMFORT>
- Spare tyre specification has been revised.

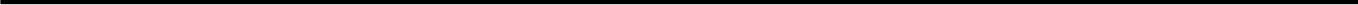
#### GENERAL SPECIFICATION

Items		1300	1600,1800		1900
		FAMILY, COMFORT	FAMILY, COMFORT	SPORT	FAMILY, COMFORT
Wheel	Type	Steel type Aluminium type*	Steel type Aluminium type*	Aluminium type	Steel type Aluminium type*
	Size	14 × 5.5J 15 × 6.0J*	14 × 5.5JJ 15 × 6.0J*	15 × 6.0J	14 × 5.5J 15 × 6.0J*
	Amount of wheel offset mm	46	46	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3	114.3	114.3
Tyre	Size	175/65 R14 82T 195/55 R15 85H*	185/65 R14 86H 195/55 R15 85H*	195/55 R15 85H	185/65 R14 86H 195/55 R15 85H*
Spare wheel	Type	Steel type	Steel type	Steel type	Steel type
	Size	15 × 4.0T 14 × 5.5J* 15 × 6.0J*	15 × 4.0T 14 × 5.5J* 15 × 6.0J*	15 × 4.0T 15 × 6.0J*	15 × 4.0T 14 × 5.5J* 15 × 6.0J*
	Amount of wheel offset mm	46 44*	46 44*	46 44*	46 44*
	Pitch circle diameter (P.C.D.) mm	114.3	114.3	114.3	114.3
Spare tyre	Size	T125/70 D15 (High pressure) 175/65 R14 82T* 195/55 R15 85H*	T125/70 D15 (High pressure) 185/65 R14 86H* 195/55 R15 85H*	T125/70 D15 (High pressure) 195/55 R15 85H*	T125/70 D15 (High pressure) 185/65 R14 86H* 195/55 R15 85H*

#### NOTE

\*: Optional items





**NOTES**

## GROUP 31

# WHEEL AND TYRE

### GENERAL

#### OUTLINE OF CHANGE

The tyre specification has been revised. <1300>

#### GENERAL SPECIFICATION

Item	1300	
	New	Old
Tyre size	185/65 R14 86H	175/65 R14 82T


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## NOTES



# SERVICE BULLETIN

QUALITY INFORMATION ANALYSIS  
OVERSEAS SERVICE DEPT. MITSUBISHI MOTORS CORPORATION

<b>SERVICE BULLETIN</b>		No.: ESB-01E00-011	
		Date: 2002-03-19	<Model>      <M/Y> (EC)SPACE STAR      02-02 (DG0A)
<b>Subject:</b> ADDITION OF SPECIAL MODEL FOR 2002 SPACE STAR			
<b>Group:</b> GENERAL	<b>Draft No.:</b> 01CH006		
<b>INFORMATION</b>	INTERNATIONAL CAR ADMINISTRATION OFFICE	 O. Kai - E.V.P. & G.M. After Sales Service Dept.	

## 1. Description:

This Service Bulletin informs you of addition of the special model <Joint Action Model (JAM)> for the 2002 SPACE STAR.

## 2. Applicable Manuals:

Manual	Pub. No.	Language	Page(s)
'02 SPACE STAR Workshop Manual chassis SUPPLEMENT	CMXE99E1-B	(English)	
	CMXS99E1-B	(Spanish)	
	CMXF99E1-B	(French)	
	CMXG99E1-B	(German)	
	CMXD99E1-B	(Dutch)	
	CMXW99E1-B	(Swedish)	
'99-'02 SPACE STAR CD-ROM	CMXX99E3-CD	(English)	
	CMXX99E3-CD	(Spanish)	
	CMXX99E3-CD	(Swedish)	
	CMXZ99E3-CD	(French)	
	CMXZ99E3-CD	(German)	
	CMXZ99E3-CD	(Dutch)	
	CMXZ99E3-CD	(Italian)	

# SPACE STAR

## WORKSHOP MANUAL SUPPLEMENT

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### FOREWORD

This manual outlines changes in servicing procedures related to the chassis including vehicle inspections, adjustments and improvements in the newly equipped models. Use the following manuals in combination with this manual required.

#### TECHNICAL INFORMATION MANUAL

- IMXE99E1(Basic)
- IMXE99E1-A (Supplement)

#### WORKSHOP MANUAL

##### CHASSIS GROUP

- CMXE99E1(Basic)
- CMXE99E1-A (Supplement)
- CMXE99E1-B (Supplement)

##### ENGINE GROUP

- PWEE\_\_\_\_\_
- (Looseleaf edition)

##### ELECTRICAL WIRING

- EMXE99E1(Basic)
- EMXE99E1-A (Supplement)
- EMXE99E1-B (Supplement)

##### BODY REPAIR MANUAL

- BMXE99E1

##### PARTS CATALOGUE

- C606H502D\_

All information, illustrations and product descriptions contained in this manual are current as at the time of publication. We, however, reserve the right to make changes at any time without prior notice or obligation.



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# GENERAL

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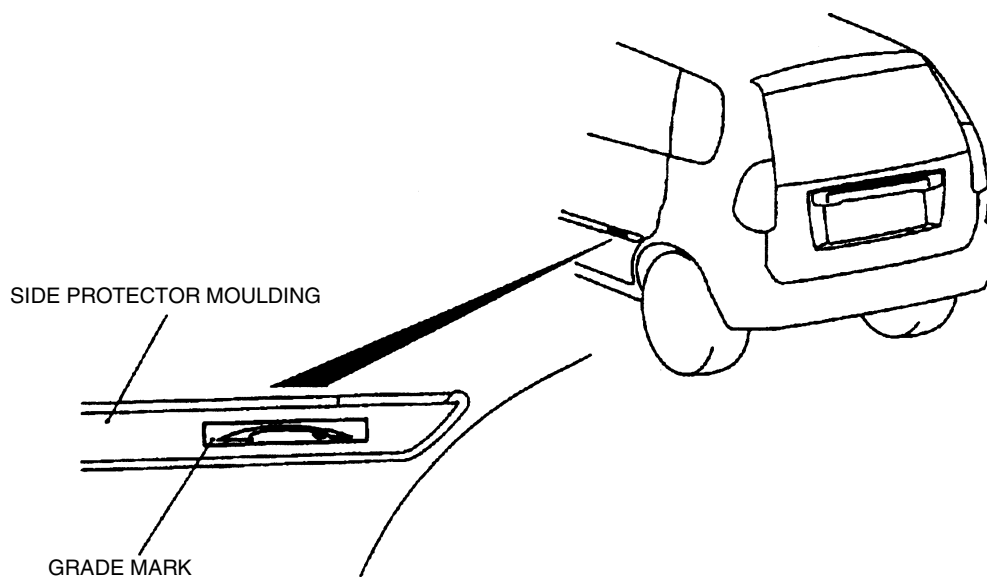
## TARGETS OF DEVELOPMENT

The SPACE STAR has attained a good reputation since it has been launched in the market. In order to meet more needs in the market, a special model <Joint Action Model (JAM)> has been added. This is to diversify the launched models and to attain their improved marketability.

## TECHNICAL FEATURES

A new model (JAM) has been added. The new model has the following features.

1. Interior trim exclusively for the JAM has been employed.
2. Color center panel exclusively for the JAM has been employed.
3. Color combination meter panel exclusively for the JAM has been employed.
4. Color inner door handles exclusively for the JAM have been employed.
5. 15-inch aluminium wheels exclusively for the JAM have been employed.
6. As a grade mark on the side protector moulding, the grade mark exclusively for the JAM has been added.



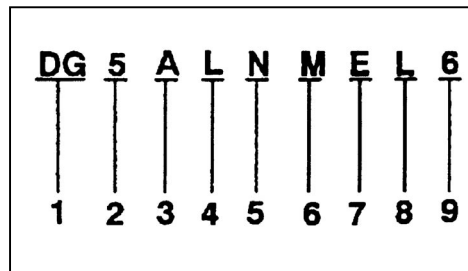
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7. The color key door mirror has been employed.
8. The roof rails have been made standard equipment.

# VEHICLE IDENTIFICATION

## MODELS

Model code		Engine Model	Transmission model	Fuel supply system
DG3A	LNME6/R6	4G18 MPI (1,584 mL)	F5MR1 <5M/T>	MPI (Electronically Controlled Multi Point Fuel Injection)
DG4A	LNMF6/R6	F9Q1(1,870 mL)	F5MV1 <5M/T>	DI-D (Direct Injection Diesel)
DG5A	LNMC6/R6	4G93 GDI (1,834 mL)	F5M42 <5M/T>	GDI (Gasoline Direct Injection)
	LRMC6/R6		F4A42 <INVECS-II 4A/T>	

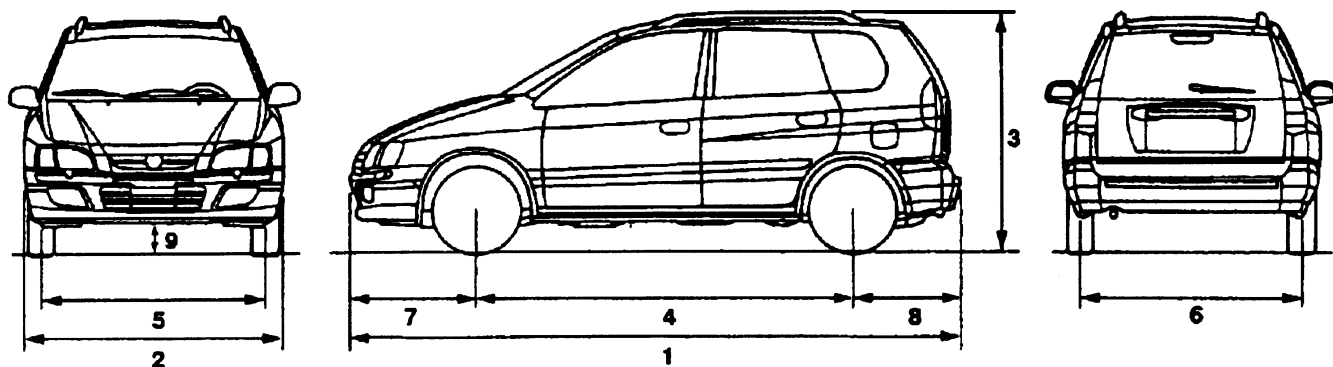


## MODEL CODE

No.	Items	Contents
1	Development	DG: MISTUBISHI SPACE STAR
2	Engine type	3: 1,584 mL petrol engine 4: 1,870 mL diesel engine 5: 1,834 mL petrol engine
3	Sort	A: Passenger car
4	Body style	L: 5-door
5	Transmission type	N: 5-speed manual transmission R: 4-speed automatic transmission
6	Trim level	M: JAM
7	Specification engine feature	C: GDI E: MPI F: DI-D
8	Steering wheel location	L: Left hand R: Right hand
9	Destination	6: For Europe



## MAJOR SPECIFICATIONS



AV0109AJ

Items		DG3A LNMEL6, LNMER6	DG5A LNMCL6, LNMCR6
Vehicle dimensions mm	Overall length	1 4,030	4,030
	Overall width	2 1,715	1,715
	Overall height (unladen)	3 1,555	1,555
	Wheelbase	4 2,490	2,490
	Track-front	5 1,475	1,475
	Track-rear	6 1,470	1,470
	Overhang-front	7 835	835
	Overhang-rear	8 695	695
	Ground clearance (unladen)	9 155	150
Vehicle weight kg	Kerb weight	1,175	1,240
	Max. gross vehicle weight rating	1,690	1,730
	Max. axle weight rating-front	880	920
	Max. axle weight rating-rear	850	850
Seating capacity		5	
Engine	Model No.	4G18	4G93
	Total displacement mL	1,584	1,834
Transmission	Model No.	F5MR1	F5M42
	Type	5 speed-manual	
Fuel system	Fuel supply system	MPI	GDI

Items			DG5A LRMCL6, LRMCR6	DG4A LNMFL6, LNMFR6
Vehicle dimensions mm	Overall length	1	4,030	4,030
	Overall width	2	1,715	1,715
	Overall height (unladen)	3	1,555	1,555
	Wheelbase	4	2,490	2,490
	Track-front	5	1,475	1,475
	Track-rear	6	1,470	1,470
	Overhang-front	7	835	835
	Overhang-rear	8	695	695
	Ground clearance (unladen)	9	150	145
Vehicle weight kg	Kerb weight		1,255	1,260
	Max. gross vehicle weight rating		1,730	1,730
	Max. axle weight rating-front		920	920
	Max. axle weight rating-rear		850	850
Seating capacity			5	
Engine	Model No.		4G93	F9QT
	Total displacement mL		1,834	1,870
Transmission	Model No.		F4A42	F5MV1
	Type		4 speed-automatic	5 speed-manual
Fuel system	Fuel supply system		GDI	DI-D

**GROUP 31  
WHEEL AND TYRE**

**GENERAL**

**OUTLINE OF CHANGE**

With addition of a special model <Joint Action Model (JAM)>, the specifications have been established as follows:

**GENERAL INFORMATION  
SPECIFICATIONS**

Items		Special model <Joint Action Model (JAM)>	Base model (COMFORT)
Wheel	Type	Aluminium type	Steel type Aluminium type*
	Size	15 x 6.0J	14 x 5.5J, 14 x 5.5JJ*, 15 x 6.0J*
	Amount of wheel offset mm	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3
Tyre	Size	195/55R15 85H	185/65R14 86H, 195/55R15 85H*
Spare wheel	Type	Steel type	Steel type
	Size	15 x 4.0T, 15 x 6.0J*	15 x 4.0T, 14 x 5.5J*, 15 x 6.0J*
	Amount of wheel offset mm	46	46
	Pitch circle diameter (P.C.D.) mm	114.3	114.3
Spare tyre	Size	T125/70 D15 (High pressure) 195/55R15 85H*	T125/70 D15(High pressure) 185/65R14 86H*, 195/55R15 85H*

**NOTE**

\*: Optional items