WHEEL AND TYRE

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GENERAL INFORMATION

E31BAAH

Tubleless tires are equipped.Radial types are installed on 2WD vehicles for the European and Australian markets, and on 4WD vehicles.
Two types of wheel are provided for Europe and general export; simple, strong steel wheels, and fashionable "stylized" wheels.
Three types of wheel are provided for Australia; simple, strong steel wheels, fashionable "stylized" wheels, and aluminum wheels.

SPECIFICATIONS

E31CA--

GENERAL SPECIFICATIONS

VEHICLES FOR EUROPE

[Applicable through November production, 1987]

Items	2WD	4WD
Wheel		
Tyre size		
Van	185R14C-8PR	215SR15
Mini-bus	185SR14	215SR15
Wheel type	Steel type	Steel type
Wheel size	5-J×14	5.5-JJ×15 or 6-JJ×15
Amount of wheel offset mm (in.)	40 (1.57)	22 (0.87)

[Applicable from December production, 1987]

Items	Van		Mini-bus	
	2WD	4WD	2WD	4WD
Wheel				
Tyre size	185R14C-8PR	215R15 100Q	185SR14	215R15 100Q
Wheel type	Steel type	Steel type	Steel or aluminum type	Steel type
Wheel size	5-J×14	5.5-JJ×15 or 6-JJ×15	5-J×14 or 5.5-JJ×14	5.5-JJ×15 or 6-JJ×15
Amount of wheel offset mm (in.)	40 (1.57)	22 (0.87)	40 (1.57)	22 (0.87)

Items		185R14C-8PR	185SR14	215SR15/215R15 100Q
Tyre inflation pressure kPa (kg/cm², psi)				
Van				
Front	When unladen	300 (3.0, 43)	–	180 (1.8, 26)
	When loaded	300 (3.0, 43)	–	180 (1.8, 26)
Rear	When unladen	300 (3.0, 43)	–	230 (2.3, 33)
	When loaded	400 (4.0, 57)	–	230 (2.3, 33)
Mini-bus				
Front	When unladen	–	230 (2.3, 33)	200 (2.0, 28)
	When loaded	–	230 (2.3, 33)	200 (2.0, 28)
Rear	When unladen	–	230 (2.3, 33)	200 (2.0, 28)
	When loaded	–	230 (2.3, 33)	200 (2.0, 28)

VEHICLES FOR GENERAL EXPORT

Items	2WD			4WD
	P01V, P01W	P05W, P03WHSRPLW	Excluding P01V, P01W, P03WHSRPLW, P05W	
Wheel				
Tyre size				
Front	6.00-13-6PRLT	185SR14	6.00-14-6PRLT	215SR15
Rear	6.00-13-8PRLT	185SR14	6.00-14-8PRLT or *6.00-14-6PRLT	215SR15
Wheel type	Steel type	Steel type	Steel type	Steel type
Wheel size	4-J×13	5-J×14	5-J×14	5.5-JJ×15 or 6-JJ×15
Amount of wheel offset mm (in.)	40 (1.57)	40 (1.57)	40 (1.57)	22 (0.87)

Items		6.00-13-6PRLT	6.00-13-8PRLT	6.00-14-6PRLT*
Tyre inflation pressure kPa (kg/cm^2, psi)				
Van				
Front	When unladen	220 (2.2, 31)	–	–
	When loaded	300 (3.0, 43)	–	–
Rear	When unladen	–	240 (2.4, 34)	–
	When loaded	–	425 (4.25, 60)	–
Mini-bus				
Front	When unladen	220 (2.2, 31)	–	280 (2.8, 40)
	When loaded	300 (3.0, 43)	–	280 (2.8, 40)
Rear	When unladen	–	240 (2.4, 34)	280 (2.8, 40)
	When loaded	–	425 (4.25, 60)	325 (3.25, 46)

Items		6.00-14-6PRLT	6.00-14-8PRLT	185SR14	215SR15
Tyre inflation pressure kPa (kg/cm^2, psi)					
Van					
Front	When unladen	325 (3.25, 46)	325 (3.25, 46)	–	180 (1.8, 26)
	When loaded	325 (3.25, 46)	325 (3.25, 46)	–	180 (1.8, 26)
Rear	When unladen	325 (3.25, 46)	325 (3.25, 46)	–	230 (2.3, 33)
	When loaded	425 (4.25, 60)	425 (4.25, 60)	–	230 (2.3, 33)
Mini-bus					
Front	When unladen	325 (3.25, 46)	325 (3.25, 46)	230 (2.3, 33)	200 (2.0, 28)
	When loaded	325 (3.25, 46)	325 (3.25, 46)	230 (2.3, 33)	200 (2.0, 28)
Rear	When unladen	325 (3.25, 46)	325 (3.25, 46)	230 (2.3, 33)	200 (2.0, 28)
	When loaded	425 (4.25, 60)	425 (4.25, 60)	230 (2.3, 33)	200 (2.0, 28)

NOTE
* means 6.00-14-6PRLT tires are installed on P03WSZUL front and rear wheels.

VEHICLES FOR AUSTRALIA

Items	2WD			4WD
	P03V, P13V, P05V	P03W	P04W	
Wheel				
Tyre size	185R14C-8PR	185SR14	185SR14	215SR15
Wheel type	Steel type	Steel type	Aluminum type	Steel type
Wheel size	5-J×14	5-J×14	5.5-JJ×14	5.5-JJ×15 or 6-JJ×15*
Amount of wheel offset mm (in.)	40 (1.57)	40 (1.57)	40 (1.57)	22 (0.87)

Items	185R14C-8PR	185SR14	215SR15
Tyre inflation pressure kPa (kg/cm^2, psi)			
Van			
Front			
When unladen	300 (3.0, 43)	–	180 (1.8, 26)
When loaded	300 (3.0, 43)	–	180 (1.8, 26)
Rear			
When unladen	300 (3.0, 43)	–	230 (2.3, 33)
When loaded	400 (4.0, 57)	–	230 (2.3, 33)
Mini-bus			
Front			
When unladen	–	230 (2.3, 33)	200 (2.0, 28)
When loaded	–	230 (2.3, 33)	200 (2.0, 28)
Rear			
When unladen	–	230 (2.3, 33)	200 (2.0, 28)
When loaded	–	230 (2.3, 33)	200 (2.0, 28)

NOTE
* indicates Mini-bus.

SERVICE SPECIFICATIONS

E31CB--

Items	Specifications
Limit	
Wheel runout mm (in.)	
<Steel wheel>	
Radial	1.2 (0.05)
Lateral	1.2 (0.05)
<Aluminum wheel>	
Radial	1.0 (0.04)
Lateral	1.0 (0.04)
Tread depth of tyre mm (in.)	1.6 (0.06)

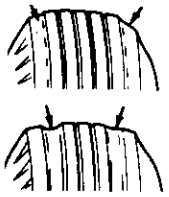
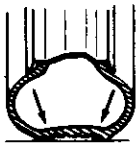
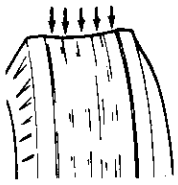
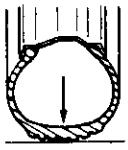
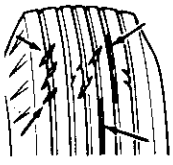
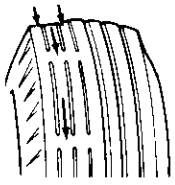
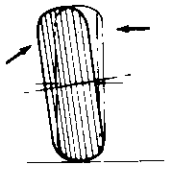
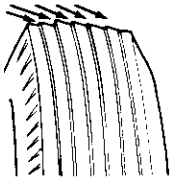
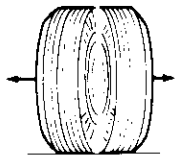
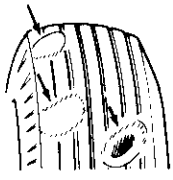
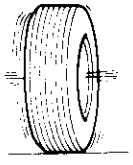
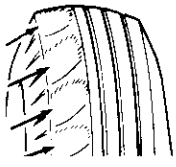
TORQUE SPECIFICATIONS

E31CC--

Items	Nm	kgm	ft.lbs.
Hub nuts for steel wheel	120–140	12–14	87–101
Hub nuts for aluminum type wheel	120–140	12–14	87–101
Holder mounting bolt	20–30	2.0–3.0	14–22
Spare tyre carrier to body <4WD>	9–14	0.9–1.4	7–10

TROUBLESHOOTING

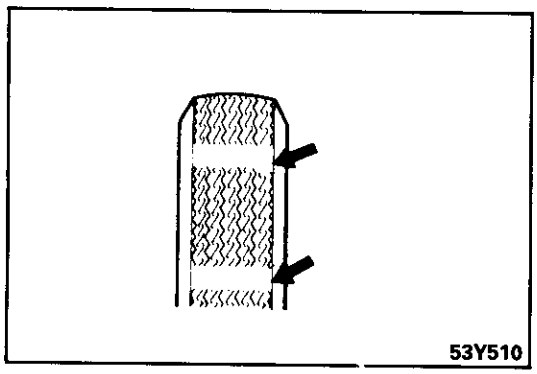
E31EA--

Symptom	Probable cause	Remedy	Reference page
Rapid wear at shoulders 	Under-inflation or lack of rotation 	Adjust the tyre pressure	31–2, 3, 4
Rapid wear at center 	Over-inflation or lack of rotation 		
Cracked treads 	Under-inflation		
Wear on one side 	Excessive camber 	Inspect the camber	Refer to GROUP 33 FRONT SUSPENSION– Service Adjustment Procedures
Feathered edge 	Incorrect toe-in 	Adjust the toe-in	
Bald spots 	Unbalanced wheel 	Adjust the imbalanced wheels	–
Scalloped wear 	Lack of rotation of tyres or worn or out-of- alignment suspension	Rotate the tyres Inspect the front suspension alignment	Refer to GROUP 33 FRONT SUSPENSION– Service Adjustment Procedures

SERVICE ADJUSTMENT PROCEDURES E31FAAA

CHECKING OF TYRE INFLATION PRESSURE

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


53Y510

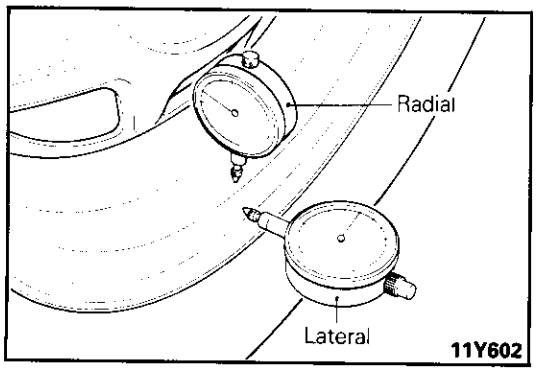
CHECKING OF TYRE WEAR E31FBAA

Measure the tread depth of tyres.

Limit: 1.6 mm (0.06 in.)

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 (0.06 in.) or less, wear indicators will appear.



11Y602

CHECKING OF WHEEL RUNOUT E31FCAA

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 : <Steel wheel>
Radial 1.2 mm (0.05 in.)
Lateral 1.2 mm (0.05 in.)
<Aluminum wheel>
Radial 1.0 mm (0.04 in.)
Lateral 1.0 mm (0.04 in.)

If wheel runout exceeds the limit, replace the wheel.

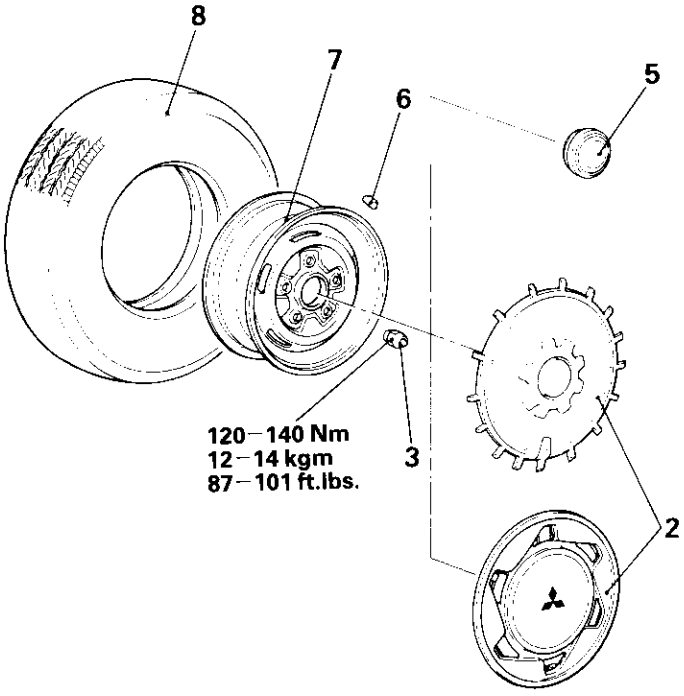
WHEEL AND TYRE

E31GA--

REMOVAL AND INSTALLATION

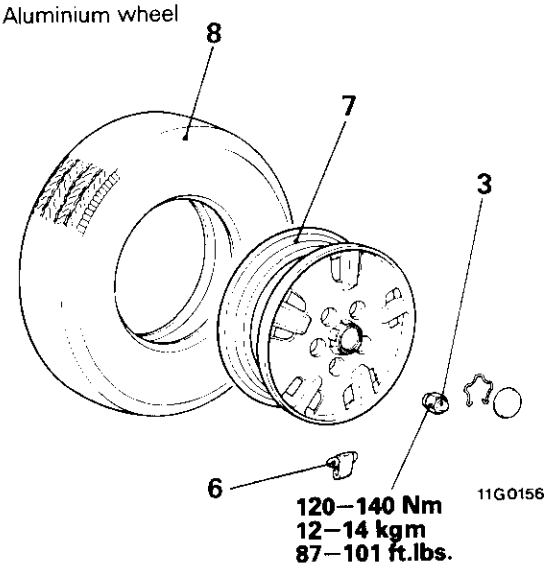
2WD

Steel wheel



11G0199

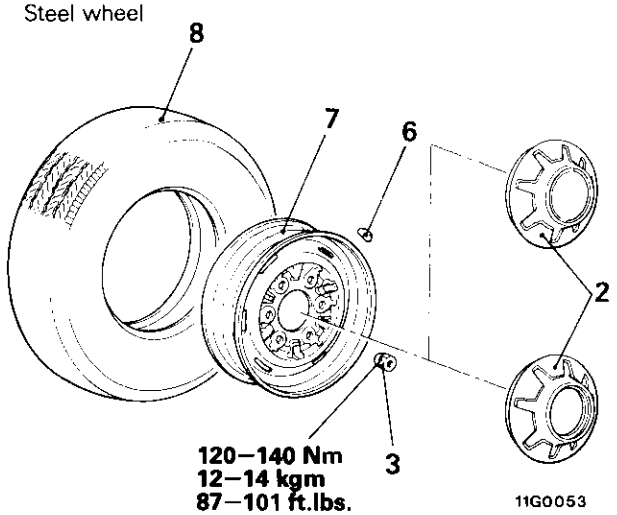
Aluminium wheel



11G0156

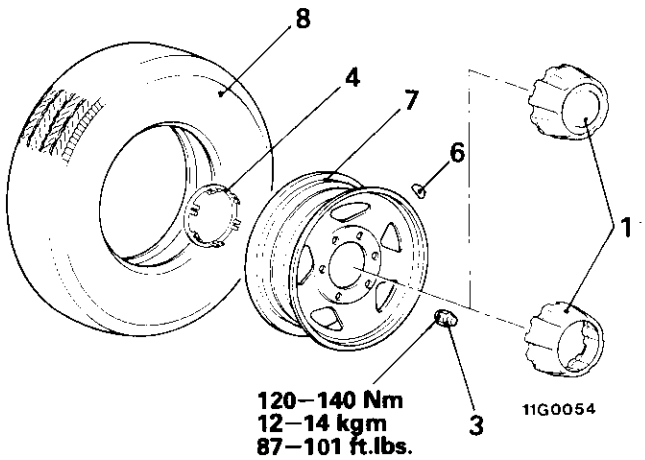
4WD

Steel wheel



11G0053

Stylized wheel



11G0054

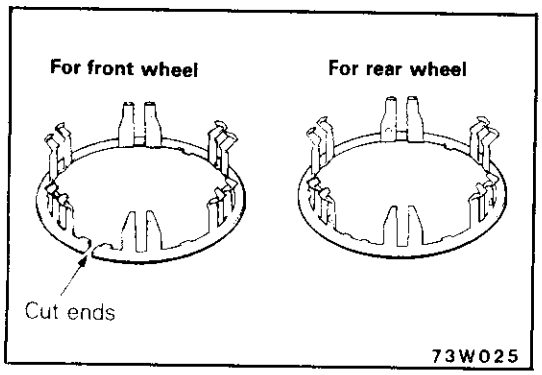
Removal steps

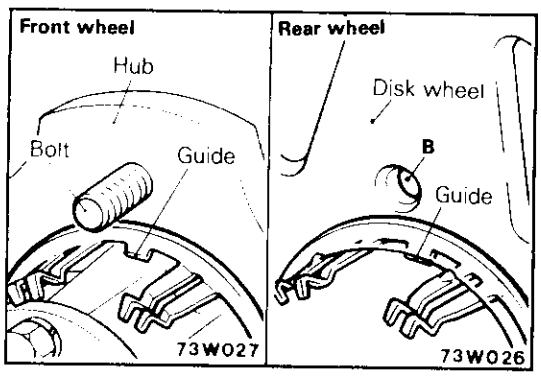
1. Center cap (4WD)
2. Wheel cover
3. Hub nuts
- ◆◆ 4. Center cap holder
5. Center cap (2WD)
6. Balance weight
7. Disk wheel
8. Tyre

Post-installation Operation

- Checking of Tyre inflation pressure (Refer to P. 31–2, 3, 4.)

NOTE
(1) Reverse the removal procedures to reinstall.
(2) ◆◆: Refer to "Service Points of Installation".





SERVICE POINTS OF INSTALLATION E31GDAD

4. INSTALLATION OF CENTER CAP HOLDER

NOTE
Note that the center cap attaching metal fittings for the front and rear wheels are different in shape.

(1) Align any of the guides (three projections) inside the fitting with a bolt position, and install the fitting on the hub, while using care to make sure that the cut ends are not opened.
(2) Align any of the guides (three projections) inside the fitting with the position of a wheel attaching hole (B) and install the fitting properly to the disk wheel from inside the disk wheel.

TYRE CHAINS AND SNOW TYRES E31GGAC

1. Use tyre chains only on rear wheels. Do not use tyre chain on front wheels.

   NOTE
   May also be installed on front wheels in only 4 wheel operation of 4WD vehicles. Drive under 30 km/h (18.6 mph).

2. When using snow tyres, use them on all four wheels for maneuverability and safety.

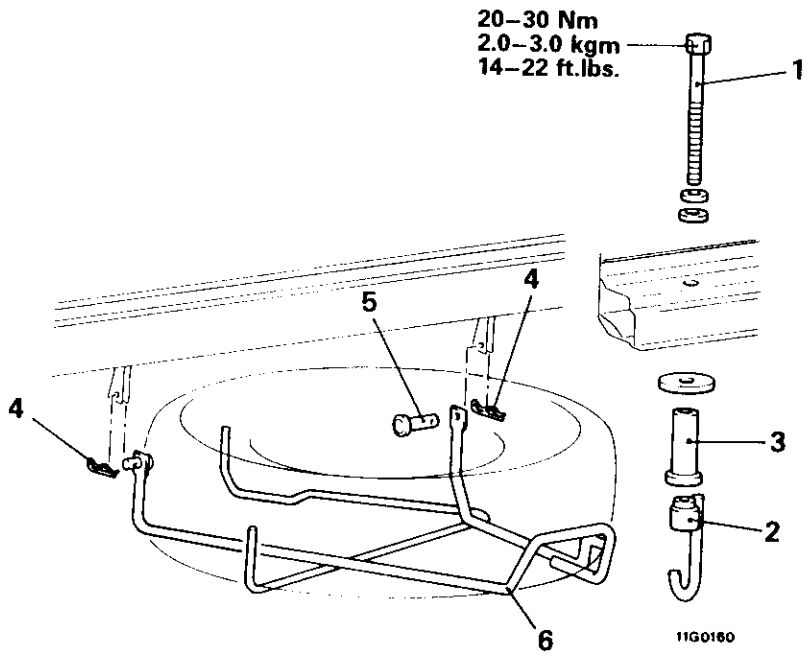
INSTRUCTIONS FOR ALUMINIUM TYRE WHLLES E31GFAA

Aluminium is vulnerable to alkalies. If a vehicle washing detergent has been used, or salt from sea water or road chemicals has adhered, wash the vehicle as soon as possible. After washing the vehicle, apply body or wheel wax to the aluminium type wheels to prevent corrosion.
When cleaning the vehicle with steam, do not direct steam onto the aluminium type wheels.
When tightenings nuts for aluminium type wheels, particularly observe the following:
(1) Clean the hub surface of aluminum type wheels.
(2) After finger-tightening wheel nuts, tighten them to specifications.
(3) Do not use an impact wrench or push the wrench by foot to tighten the wheel nuts.
(4) Do not apply oil to the threaded portions.

SPARE TYRE CARRIER

REMOVAL AND INSTALLATION <2WD>

E31HA--

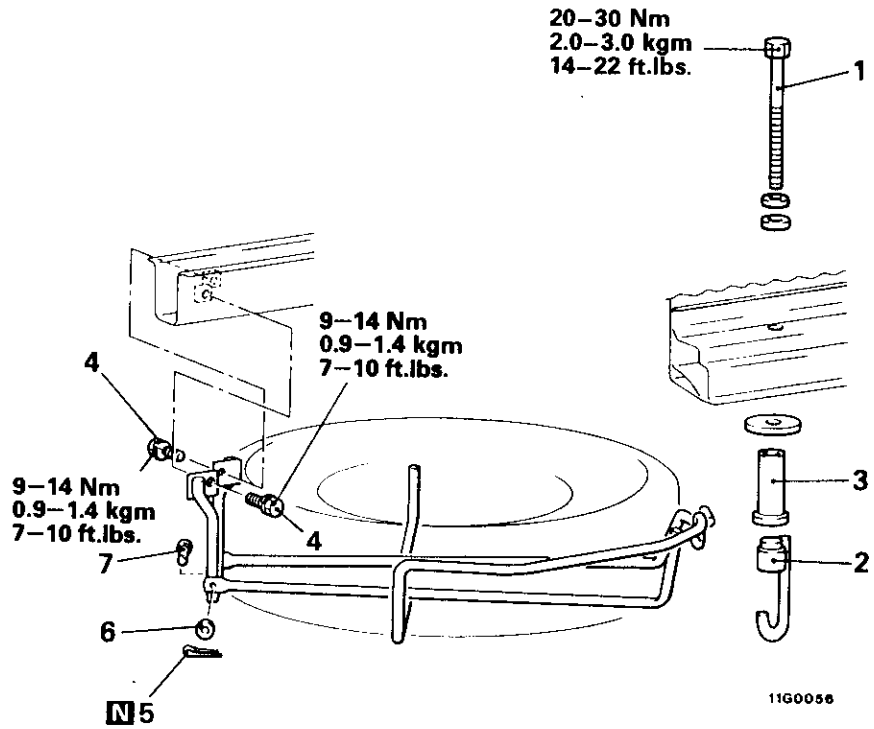


Removal steps

1. Bolt
2. Holder assembly
3. Spacer
4. Snap pins
5. Clevis pin
6. Spare tyre hanger assembly

NOTE
Reverse the removal procedures to reinstall.

REMOVAL AND INSTALLATION <4WD>



Removal steps

1. Bolt
2. Holder assembly
3. Spacer
4. Bolts
5. Split pins
6. Washers
7. Clevis pins

NOTE
(1) Reverse the removal procedures to reinstall.
(2) N : Non-reusable parts

NOTES