

## GENERAL DESCRIPTION

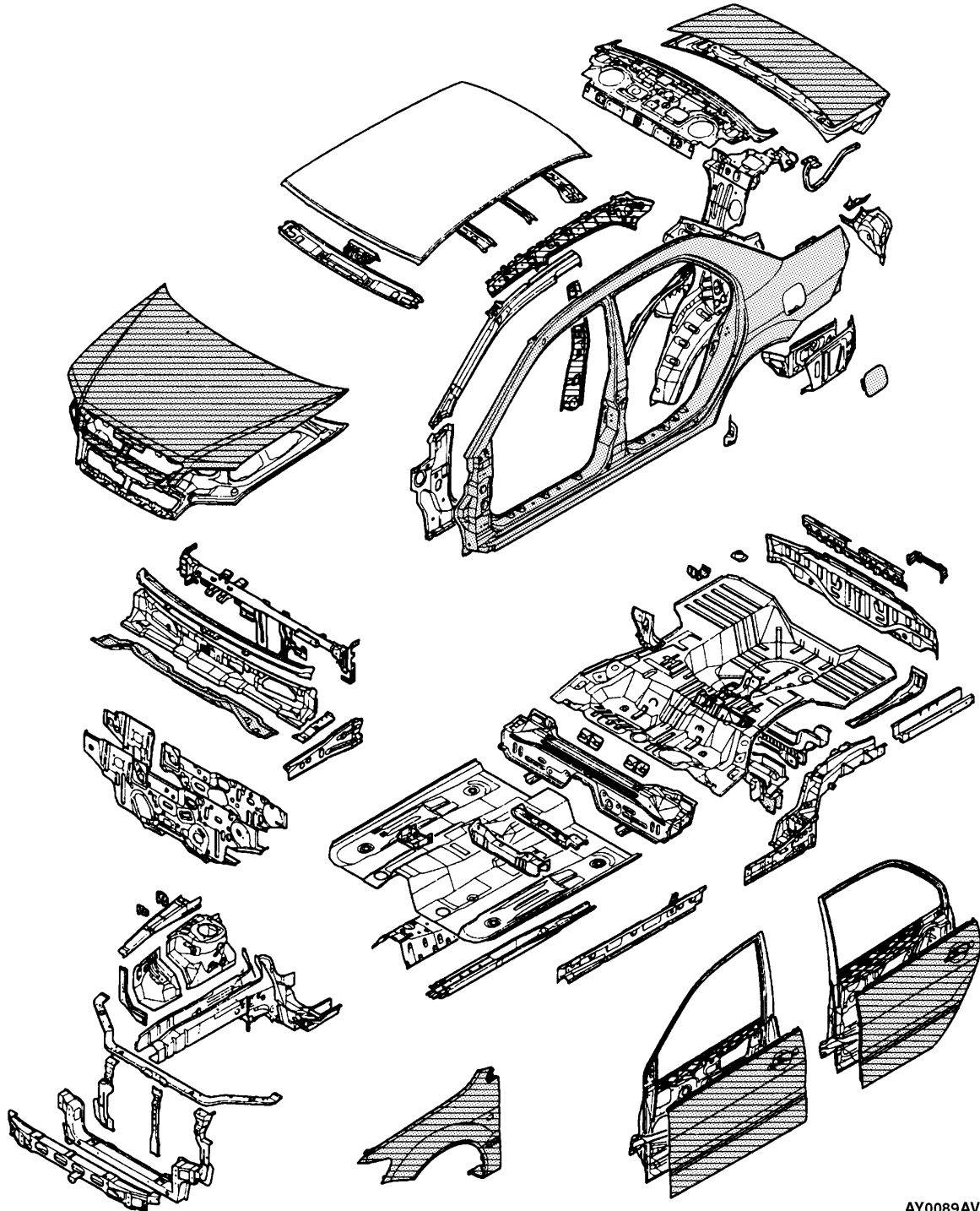
### FEATURES

Weight reduction and high rigidity	Use of high-tensile steel panels and steel plate with uneven thickness
Reduction of vibration, noise, and aerodynamic noise	Effective layout of acoustic materials and sound proof materials
Improvements in safety	<ol style="list-style-type: none"><li>1. Unbreakable resin materials at the door trim on the occasion of impact have been adopted to protect passengers from the side impact of the vehicle.</li><li>2. One-touch power windows with safety mechanism (with the function to be enabled after the ignition key is turned to the OFF position) have been installed&lt;Vehicles for Hong Kong&gt;.</li><li>3. Inside lock cables have been adopted at the front doors to improve safety on the occasion of impact.</li><li>4. Impact safety body RISE(Realized Impact Safety Evolution) has been adopted for the main body.</li><li>5. Side door beams have been adopted to improve safety on the occasion of impact.</li></ol>
Improvements in operation quality	<ol style="list-style-type: none"><li>1. The multi-mode keyless entry system (with the power window control function) has been adopted. &lt;Vehicles for Hong Kong&gt;</li><li>2. The central door lock system to lock/unlock all doors has been installed. (some models)</li><li>3. High rigidity in the suspension mounting part</li></ol>
Improvements in commercial value and appearance	A sunroof has been installed as an option. (some models)
Improvements in convenience	<ol style="list-style-type: none"><li>1. Hinge protrusion to the loading space has been reduced by reducing the size of the trunk lid hinge.</li><li>2. Adoption of larger front door pockets</li></ol>



## MAIN BODY

### BODY PANELING

Due to the adoption of impact safety fortified body RISE (Realized Impact Safety Evolution) with the high impact energy absorbing front and rear structure and high rigidity cabin structure, a high level safety has been secured at all-direction impact test.



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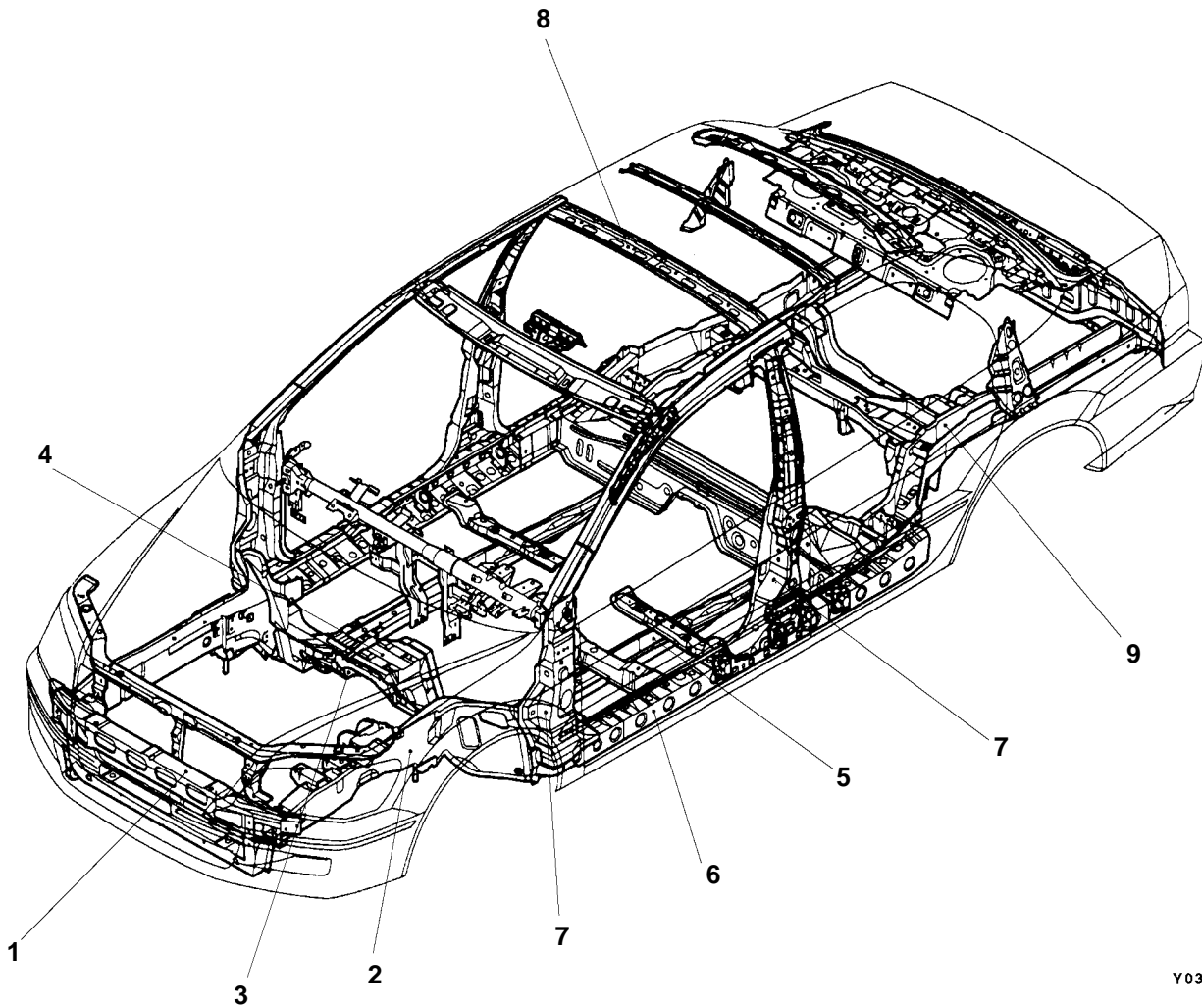
-  : Anti-corrosion steel panels
-  : High-tensile steel panels

### BODY SHELL

#### IMPACT SAFETY BODY RISE(REALIZED IMPACT SAFETY EVOLUTION)

The following structure has made improvements in reducing passenger injury rate at the front, rear or side collision, securing survival space, and enhancing passenger rescue performance.

1. Addition of front bumper reinforcement
2. Application of enlarged and linear cross section of front side member
3. Addition of dash panel cross member
4. Application of thicker dash panel lower
5. Application of enlarged cross section of front floor side member
6. Application of enlarged cross section of side sill outer reinforcement
7. Application of thicker front pillar reinforcement and center pillar reinforcement
8. Application of enlarged cross section of roof bow
9. Application of enlarged cross section of rear floor side member



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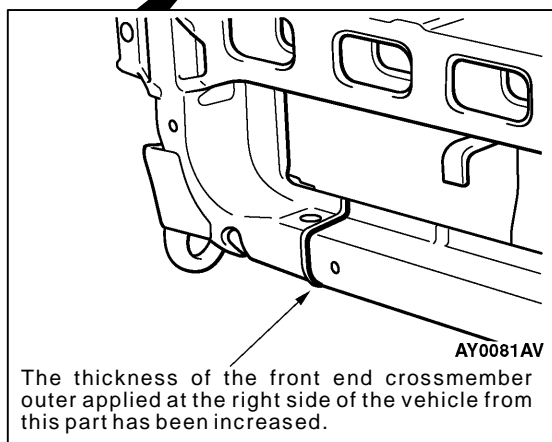
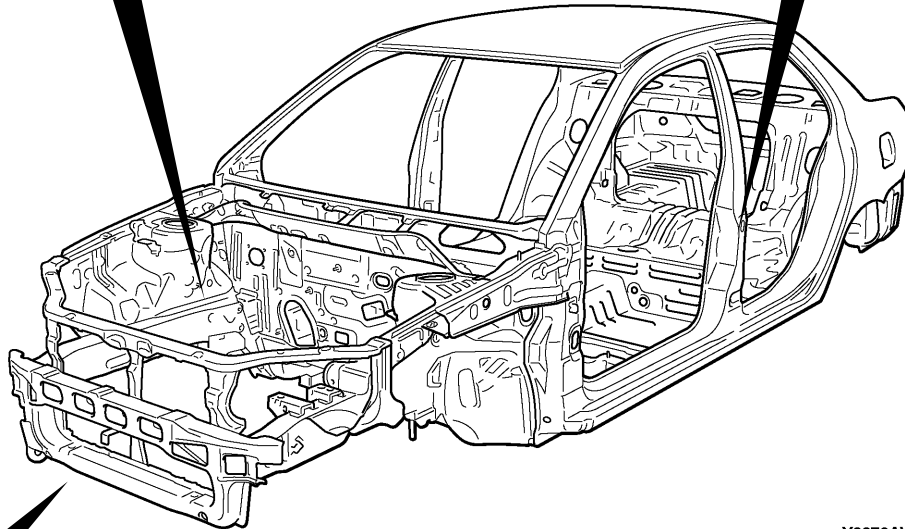
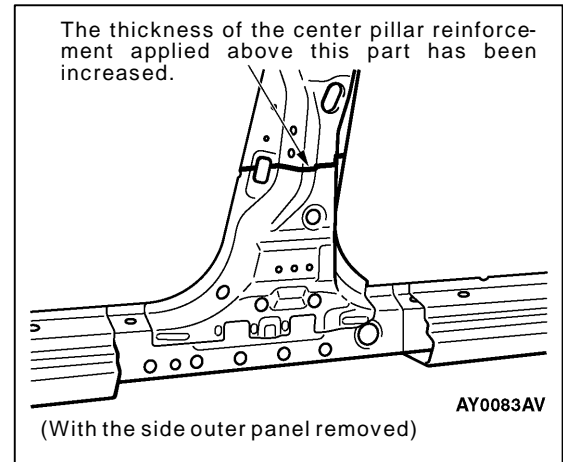
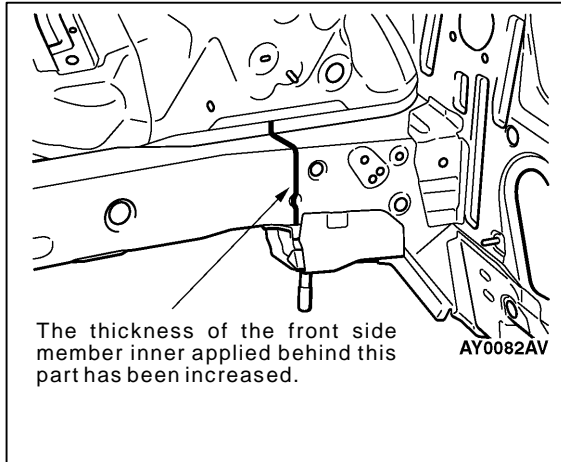
### STEEL PLATE WITH UNEVEN THICKNESS

Due to the adoption of steel plate with uneven thickness\* for the following parts, the incorporate structure of uneven thickness has improved impact safety and has reduced weight.

1. The thickness of the front end crossmember outer applied at the right side of the vehicle has been increased.
2. The thickness of the front side member inner applied at the rear has been increased.
3. The thickness of the center pillar reinforcement applied at the upper has been increased.

#### NOTE

\*: Steel plates with different thickness welded together to make one steel plate

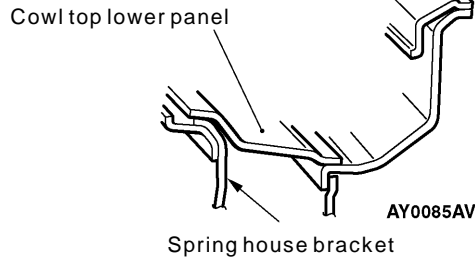


## OPERATIONAL STABILITY

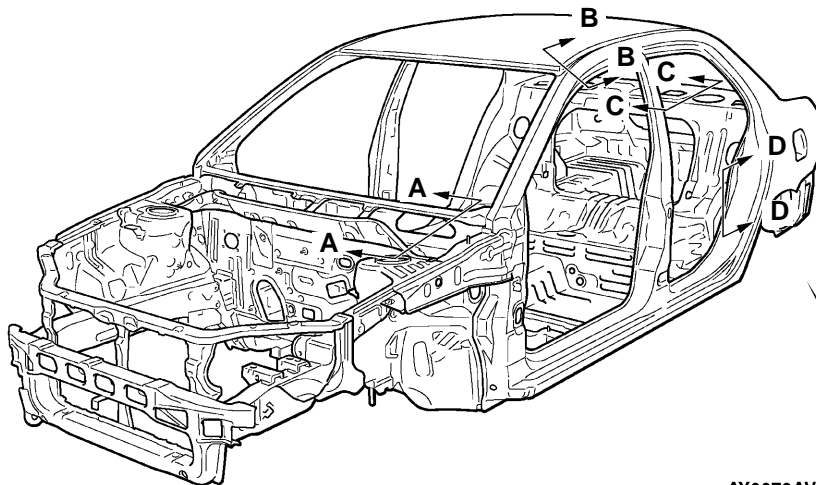
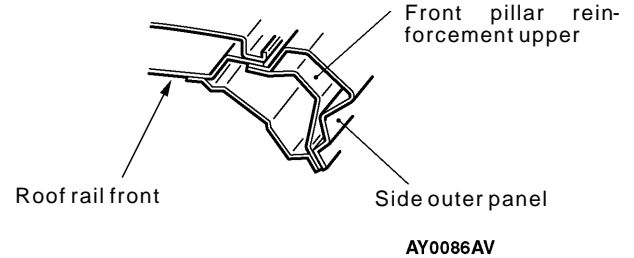
The adoption of the following structure to increase rigidity of the suspension mounting part has improved driving stability and has reduced noise from the road.

1. The spring house bracket has been directly attached to the cowl top lower panel to increase rigidity of the front suspension in the horizontal and vertical directions.
2. The roof rail front, front pillar reinforcement upper, and side outer panel have been jointed with each other to increase torsion rigidity.
3. The rear shelf extension has been added to the front of the rear shelf to produce closed surface structure and the top surface of the rear shelf and rear wheel house have been added to increase torsion rigidity.
4. The rear shock absorber assembly has been sustained at the lower position to increase rigidity of the body in the horizontal and vertical directions.

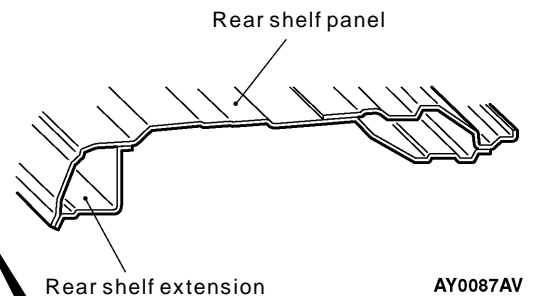
**Section A – A**



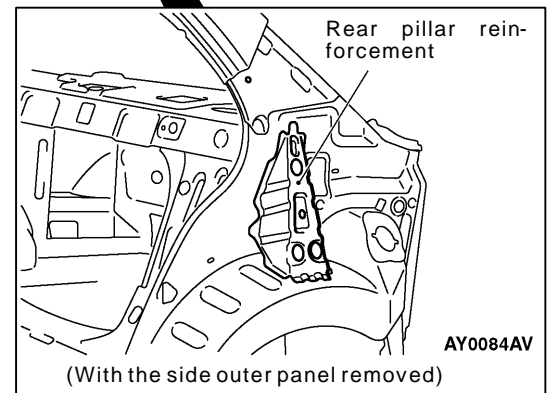
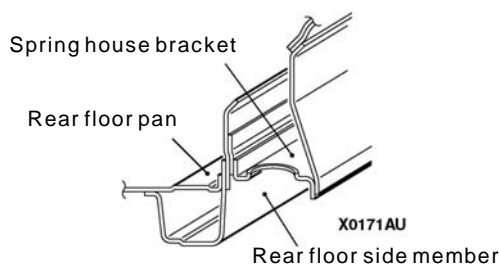
**Section B – B**



**Section C – C**



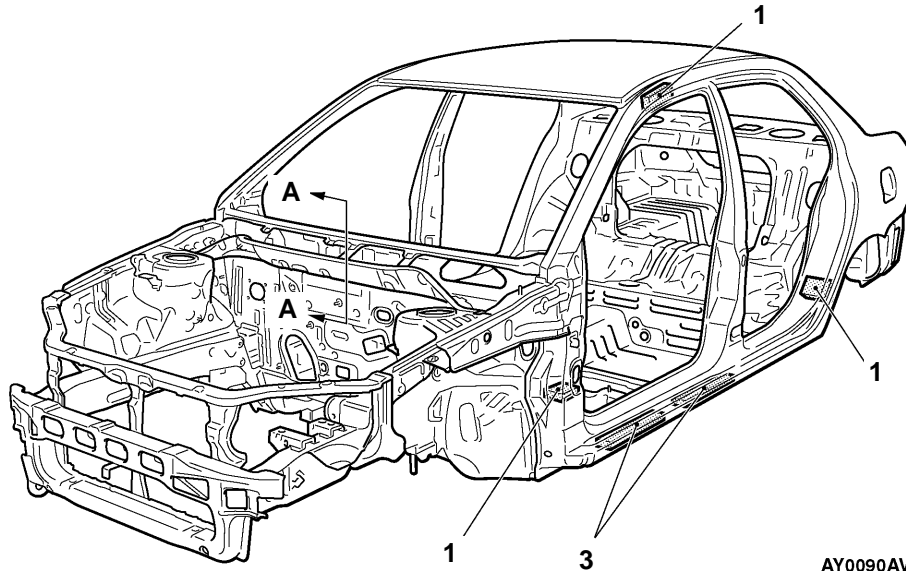
**Section D – D**



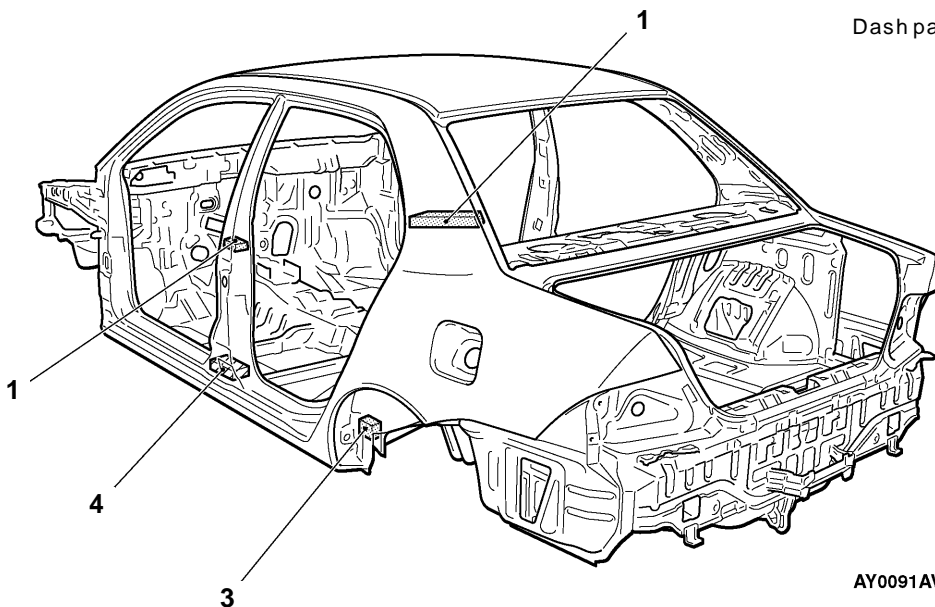
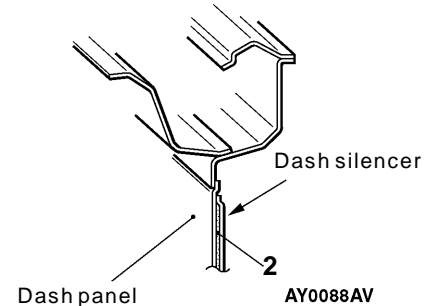
### QUIETNESS

The adoption of the following items has improved quietness.

1. Foaming sound absorption materials have been filled into the front pillar, the roof side rail, the center pillar, the rear pillar, and the inside the wheel house arch to prevent noise getting inside the vehicle.
2. Steel plate restricted anti-vibration materials (silencer sandwiched inside the panel) has been adopted to suppress operating sound and the vibration from the engine.
3. Filling high rigid foam materials into the side sill and the rear floor side member to suppress panel vibration has reduced noise from the road.
4. Urethane foam has been inserted into the center pillar to prevent noise getting into the vehicle.



AY0090AV Section A – A





## **BODY COLOUR CHARTS**

### **[VEHICLES FOR GENERAL EXPORT]**

Colour	Body colour code	Colour number	Body colour name	Composi- tion of film	Engine compartment and luggage compartment colour	
					Colour number	Colour name
SILVER	A37	AC11237	Legato Grey	Metallic	AC11256	GREY
SILVER	A69	AC11169	Satellite Silver	Metallic	AC10595	GREY
GREEN	F26	AC11326	Forester Green	Pearl	CMG17001	MEDIUM GREEN
SILVER	H22	CMH10022	Cryolite Silver	Pearl	CMH17001	SILVER
RED	R20	CMR10020	Rose Red	Metallic	CMR17001	RED
BLUE	T38	AC11238	Nares Blue	Pearl	AC11312	BLUE
WHITE	W38	AC10983	Scotia White	Solid	AC10863	WHITE
BLACK	X42	AC11342	Amethyst Black	Pearl	AC10903	BLACK

### **[VEHICLES FOR GCC]**

Colour	Body colour code	Colour number	Body colour name	Composi- tion of film	Engine compartment and luggage compartment colour	
					Colour number	Colour name
SILVER	A26	AC11126	Symphonic Silver	Metallic	AC11235	LIGHT GREY
SILVER	A37	AC11237	Legato Grey	Metallic	AC11256	GREY
SILVER	A69	AC11169	Satellite Silver	Metallic	AC10595	GREY
GREEN	F26	AC11326	Forester Green	Pearl	CMG17001	MEDIUM GREEN
SILVER	H22	CMH10022	Cryolite Silver	Pearl	CMH17001	SILVER
RED	R20	CMR10020	Rose Red	Metallic	CMR17001	RED
BLUE	T38	AC11238	Nares Blue	Pearl	AC11312	BLUE
WHITE	W38	AC10983	Scotia White	Solid	AC10863	WHITE

**NEW COLOUR NUMBER**

**Example**

<b>C</b>	<b>M</b>	<b>H</b>	<b>10</b>	<b>022</b>
1	2	3	4	5

**(Body colour code H22)**

**Main  
Index**

**Group  
TOC**

No.	Item	Content
1	Identification code	C: The colour number is indicated.
2	Manufacture center code	M: Japan (Automobile Engineering Center) T: Japan (Truck and Bus Engineering Center)
3	System colour code	W (N): White H (A, U): Silver/Gray X (J): Black R (P): Red Y (C, S, E, M, K): Brown/Yellow (including Orange, Maroon, and Gold) G (F, L): Green/Olive B (T, D): Blue V: Purple ( ) Codes within the parenthesis can be also used.
4	Colour classification code	From 10 to 16: The body colour is indicated. 17: The body inner panel colour is indicated.
5	Specific number	Serial number numbering management



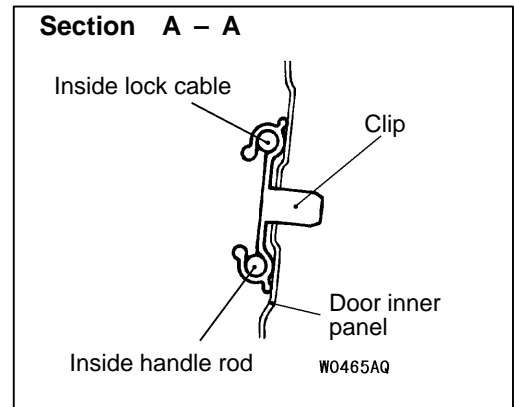
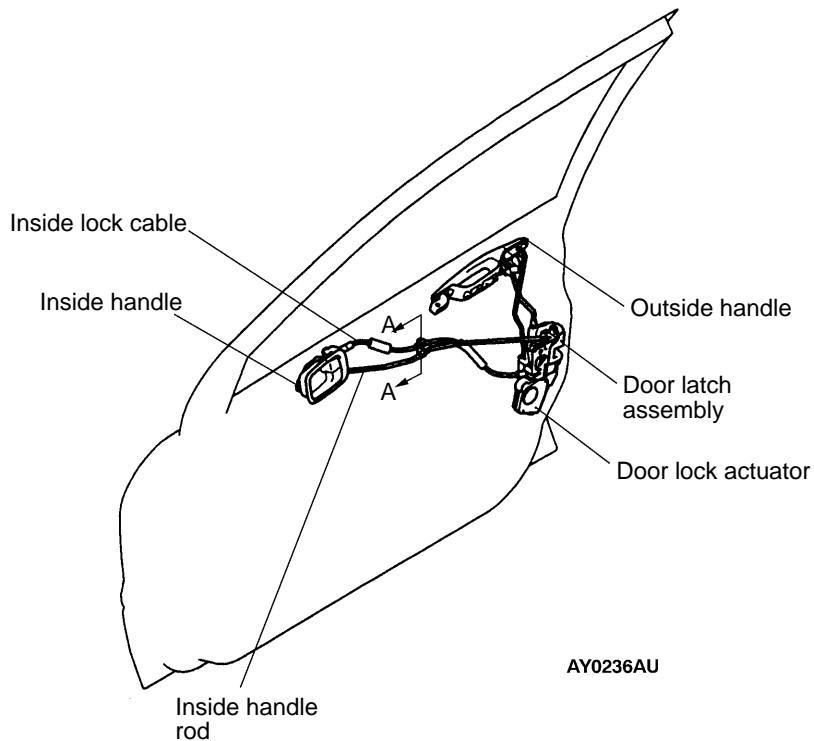
# DOOR

## DOOR LOCK

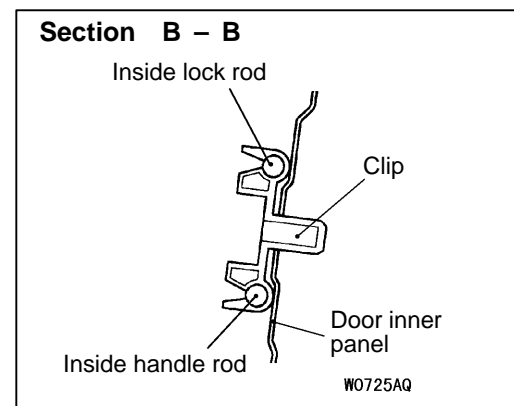
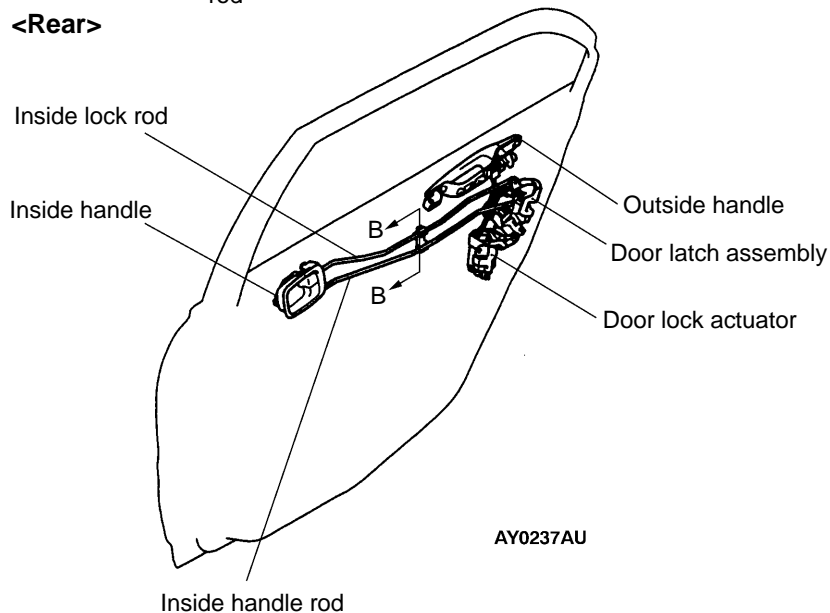
- (1) The central door lock to lock/unlock all doors with a key cylinder at the driver's door has been installed.
- (2) The door lock prevention function by ETACS control when the ignition key is left has been adopted.<Vehicles for Hong Kong> (Refer to GROUP7 – ETACS.)
- (3) The multi-mode keyless entry system (with the power window control function) has been adopted.<Vehicles for Hong Kong>

## CONSTRUCTION DIAGRAM

<Front>



<Rear>



## KEYLESS ENTRY SYSTEM

The multi-mode keyless entry system has been adopted. <Vehicles for Hong Kong>

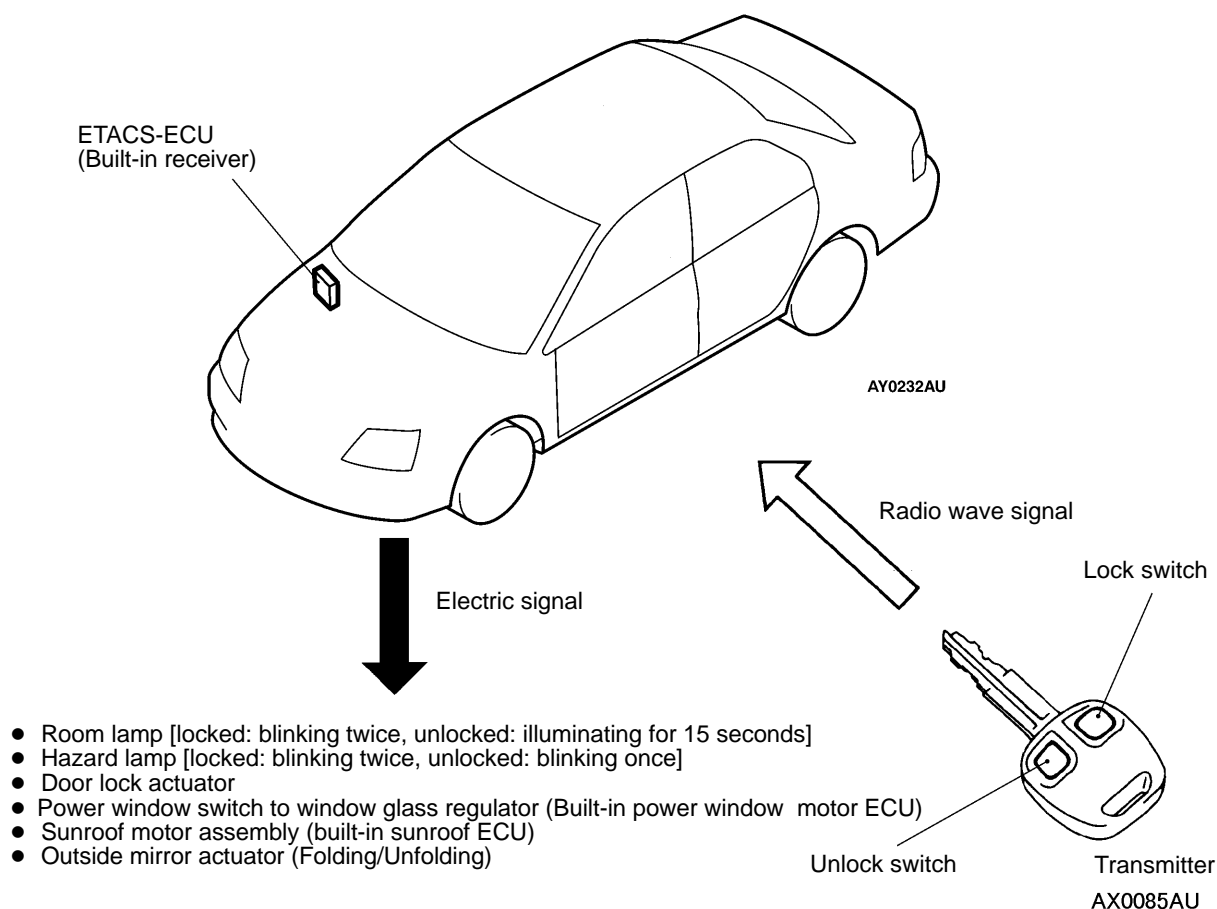
The system has the following features:

- 2-knob transmission switch type (lock/unlock switch) has been adopted for the transmitter.
- ETACS-ECU has built-in receiver and reception antenna.
- Passwords (up to 4 items) can be registered by the MUT-II.
- Answer back function
- The lock/unlock switch enables to lock/unlock all doors, close the power windows fully, close the sunroof fully, and fold/unfold the outside mirror. Fully closing operation of the power window and the sunroof can be done as an option. Also, opening operation of the power windows can be added ([Refer to SWS.](#))

### NOTE

Refer to '01 Technical Information Manual for the PAJERO (Pub. No. PYJE0002) for details on the Multi-Mode Keyless Entry System.

### CONSTRUCTION DIAGRAM



## WINDOW GLASS REGULATOR

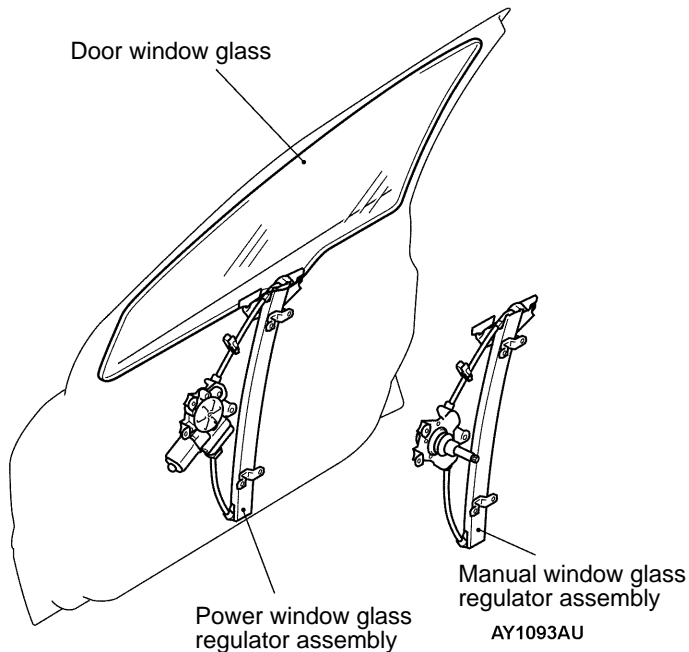
- (1) Small-size and light-weight wire winding style has been adopted for the window glass regulator.
- (2) The power window with the safety function to activate the descending movement of the door window glass for 150 mm when jammed hand or neck is detected during the ascending movement of the door window glass has been adopted to increase safety.<Vehicles for Hong Kong>
- (3) The operation method of the power window switch in which the switch knob is pressed to activate the descending movement of the door window glass and the pulled up to activate the ascending movement has been adopted to increase safety.
- (4) The one-touch mechanism to fully open and close windows has been adopted for the power window switch located at the driver's seat side. Furthermore, the lock switch to prevent the opening and closing operations of the door window glasses by the power window switches located at the passenger's seat side and rear seats has been featured.
- (5) Multiple communication system (SWS) has been adopted for signal transmission to the main switch at the power window.<Vehicles for Hong Kong>
- (6) After the ignition switch is turned to the OFF position, window glasses can be opened and closed with the timer function (30 seconds) of the power window.

### NOTE

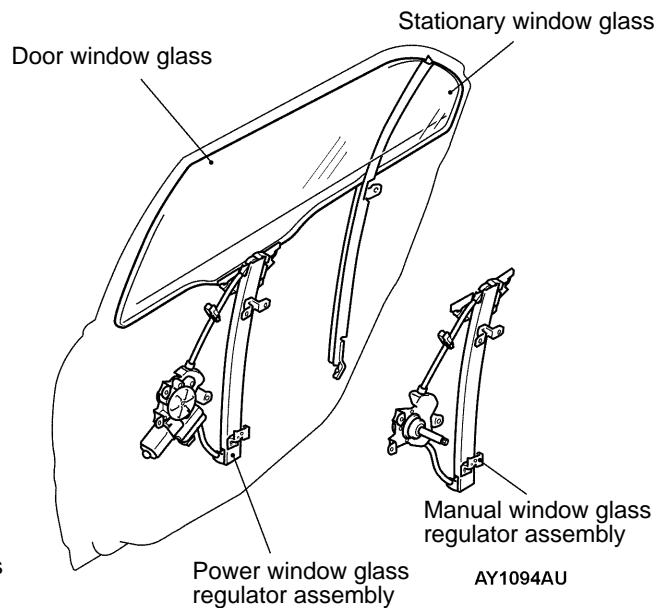
Refer to SWS for the detail on SWS (Multiplex Wireless System).

## CONSTRUCTION DIAGRAM

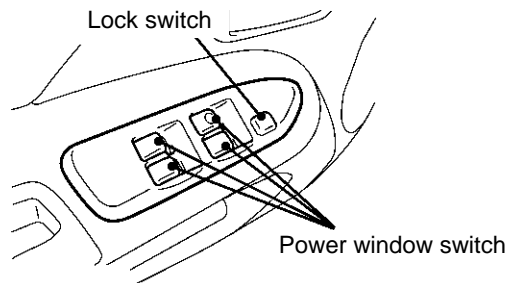
<Front>



<Rear>



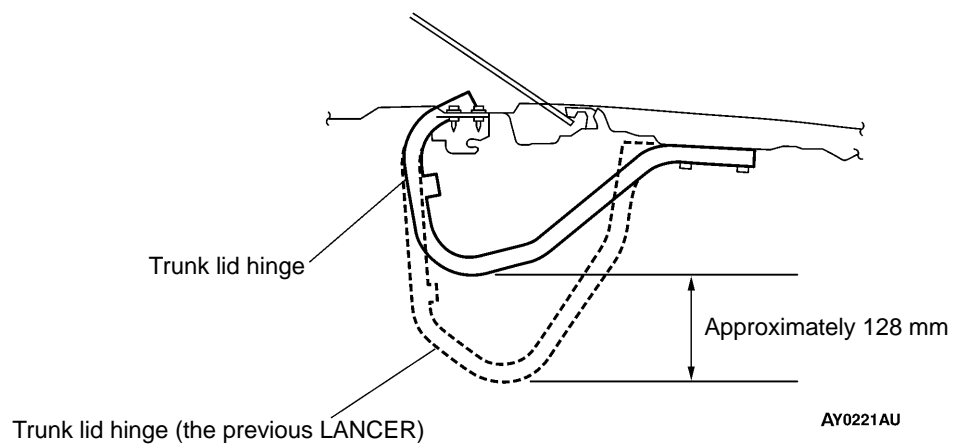
### Power window switch (driver's side)



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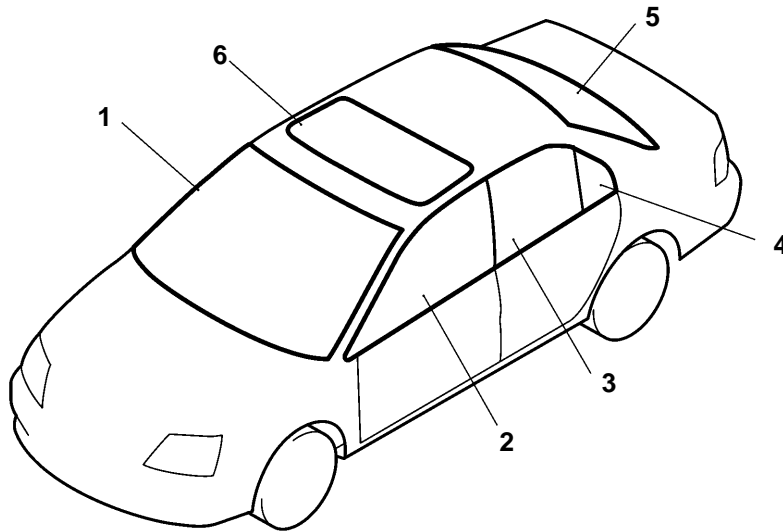
## TRUNK LID

Downsizing of the trunk lid hinge and reduction of the hinge protrusion has increased practicality.



## WINDOW GLASS

Laminated glasses for the windshield and tempered glasses for other areas have been used.



AY0233AU

No.	Name	Type	Thick- ness (mm)	Coloration	Visible ray trans- missivity rate (%)
1	Windshield	Laminated glass	4.7	Green	78
2	Front door window glass	Tempered glass	3.5	Green	81
3	Rear door window glass		3.1	Green	82
4	Rear stationary window glass		3.1	Green	82
5	Rear window glass		3.1	Green	82
6	Roof lid glass		4.0	Dark gray	18

### NOTE

- The figure at the visible ray transmissivity is a reference value. There could be marginal errors.

## SUNROOF

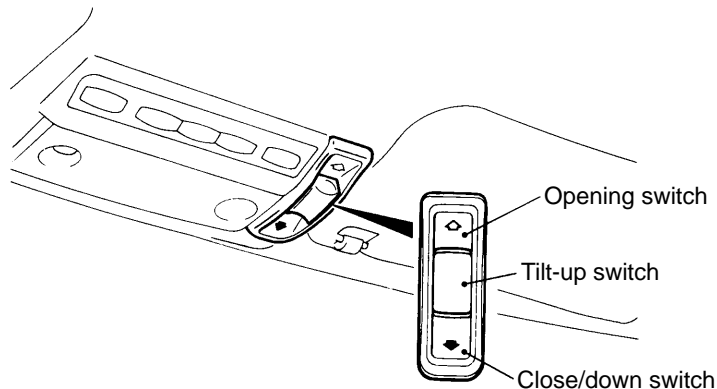
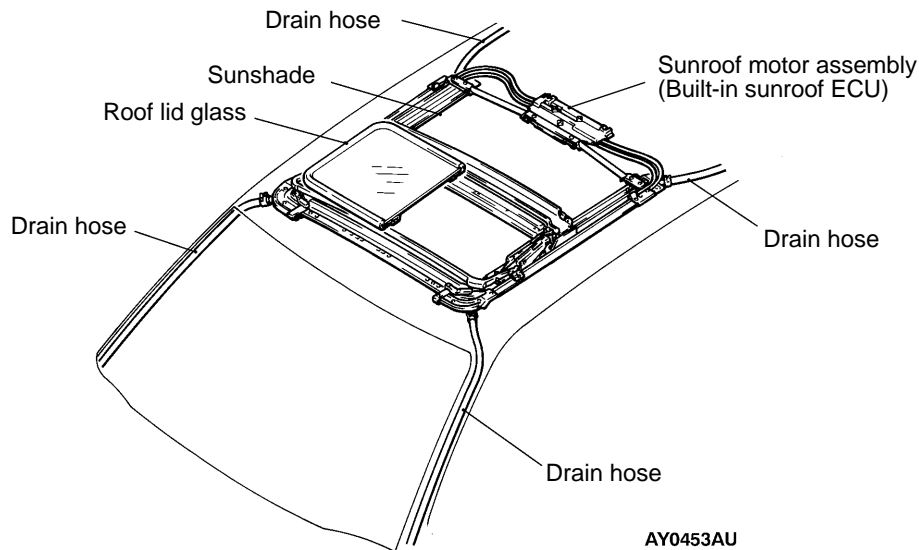
The power sliding glass sunroof with the tilt-up function to provide sufficient ventilation by tilting up (30mm) as well as sufficient sunlight and a sense of emancipation by opening the sunshade even if the roof lid glass is fully closed has been installed to some models as an option. This sunroof has the following features:

- All functions, including sliding open/close, tilting up/down, and stop can be done by operating a single switch. Also, all functions can be done out by one touch operation.
- Jamming prevention mechanism in which the roof lid glass moves toward an opposite direction and stops during sliding close or tilt down movement when the outside force is applied has been adopted.
- Due to the abolition of manual operation at the malfunction, a new function of moving the roof by every approximately 30 mm to the fully closed position has been adopted whenever the close/down switch is pressed after jamming prevention mechanism is disabled when a reverse movement repeated for 5 times or more is triggered by deformation or when jamming prevention mechanism is activated erroneously.
- After the ignition switch is turned to the OFF position, the sunroof can be operated for 30 seconds. (If the driver's seat door is open during that particular time, the sunroof can be operated for another 30 seconds. However, as soon as the door is closed, the key off operation function is disabled.)
- Fully closing operation as a transmitter adjustment function can be done with the lock switch. (Refer to GROUP7 – SWS.)

### NOTE

Refer to '96 Technical Information Manual for the COLT/LANCER (Pub. No. PYME9502) for details on the sunroof-ECU.

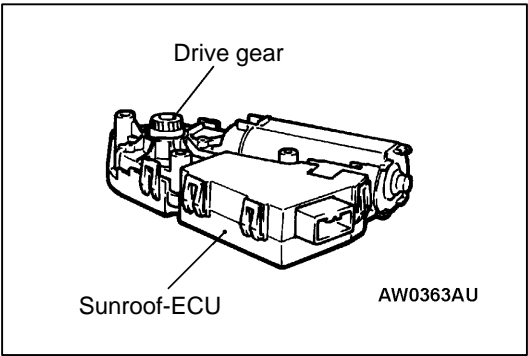
### CONSTRUCTION DIAGRAM



DESCRIPTION OF STRUCTURE AND  
OPERATION

MOTOR

The motor is installed to the front of the housing. It consists of the motor body, drive gear and sunroof-ECU.



SUNROOF-ECU

The sunroof-ECU has a built-in microprocessor which controls motor operation in accordance with

signals from the sunroof switches and from the ETACS.

SYSTEM DIAGRAM

