GENERAL

CONTENTS

VEHICLE IDENTIFICATION 2
Models 2
Chassis Number 4

MAJOR SPECIFICATIONS 5

HOW TO USE TROUBLESHOOTING/ INSPECTION SERVICE POINTS 12
Troubleshooting Contents 12
How to Use the Inspection Procedures 13
Connector Measurement Service Points 14
Connector Inspection 15
Inspection Service Points for a Blown Fuse ... 16
Points to Note for Intermittent Malfunctions ... 16

VEHICLE IDENTIFICATION

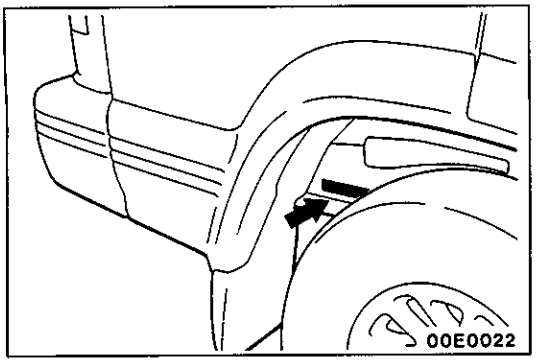
MODELS

<2-DOOR MODELS>

Model code		Body style	Engine model	Transmission model	Fuel supply system
V24C	NSFL6	Canvas top	4D56 [2,477 mℓ] with turbocharger and inter-cooler	V5MT1 (5M/T)	Injection
V23C	GNHVL6/R6	Canvas top with wide fender	6G72 [2,972 mℓ]		MPI
	GRHVL6/R6			V4AW3 (4A/T)	
V24W	NDFL6	Wagon	4D56 [2,477 mℓ] with turbocharger and inter-cooler	V5MT1 (5M/T)	Injection
	NHFL6/R6				
	NAFL6				
	NBFL6				
V24WG	NXFL6/R6	Wagon with wide fender			
	NCFL6				
V26W	NHFL6	Wagon	4M40 [2,835 mℓ] with turbocharger and inter-cooler	V5M31 (5M/T)	
V26WG	NXFL6/R6	Wagon with wide fender			
V23W	NHVL6	Wagon	6G72 [2,972 mℓ]	V5MT1 (5M/T)	MPI
	GNXVL6/R6	Wagon with wide fender			
	GRXVL6/R6			V4AW3 (4A/T)	
V25W	GNXML6/R6		6G74 [3,497 mℓ]	V5M31 (5M/T)	
	GRXML6/R6			V4AW3 (4A/T)	

<4-DOOR MODELS>

Model code		Body style	Engine model	Transmission model	Fuel supply system
V44W	NDFL6	Wagon	4D56 [2,477 mℓ] with turbocharger and inter-cooler	V5MT1 (5M/T)	Injection
	NDFCL6	Wagon without 3rd seat row			
	NHFL6	Wagon			
V44WG	NXFL6/R6	Wagon with wide fender			
V46W	NDFL6	Wagon	4M40 [2,835 mℓ] with turbocharger and inter-cooler	V5M31 (5M/T)	
	NDFCL6	Wagon without 3rd seat row			
	NHFL6/R6	Wagon			
	RHFR6			V4AW3 (4A/T)	
	NAFCL6	Wagon without 3rd seat row		V5M31 (5M/T)	
	NBFL6	Wagon			
V46WG	NXFL6/R6	Wagon with wide fender		V5M31 (5M/T)	
	RXFL6/R6			V4AW3 (4A/T)	
	NCFL6			V5M31 (5M/T)	
V43W	NHVL6/R6	Wagon	6G72 [2,972 mℓ]	V5MT1 (5M/T)	MPI
	RHVL6/R6			V4AW3 (4A/T)	
	GNXVL6/R6	Wagon with wide fender		V5MT1 (5M/T)	
	GRXVL6/R6			V4AW3 (4A/T)	
V45W	GNXML6/R6		6G74 [3,497 mℓ]	V5M31 (5M/T)	
	GRXML6/R6			V4AW3 (4A/T)	



CHASSIS NUMBER

The chassis number is stamped on the side wall of the frame near the right rear wheel.

⛢	J	M	B	0	N	V24	0	T	J	3	00001	⛢
	1	2	3	4	5	6	7	8	9	10	11	

1. Asia

2. Japan

3. MITSUBISHI
   A: Right hand drive for Europe
   B: Left hand drive for Europe

4. Sort
   0: 4 or 2-door with tailgate (backdoor)
   A: 2-door semi-open (canvas top)

5. Transmission
   N: 5 × 2-speed manual transmission
   R: 4 × 2-speed automatic transmission

6. Development order
   V23: 2,972 mℓ
   Petrol engine <2-door models>
   V24: 2,477 mℓ
   Diesel engine <2-door models>
   V25: 3,497 mℓ
   Petrol engine <2-door models>
   V26: 2,835 mℓ
   Diesel engine <2-door models>
   V43: 2,972 mℓ
   Petrol engine <4-door models>
   V44: 2,477 mℓ
   Diesel engine <4-door models>
   V45: 3,497 mℓ
   Petrol engine <4-door models>
   V46: 2,835 mℓ
   Diesel engine <4-door models>

7. Body style
   0: Frame

8. Model year
   T: 1996

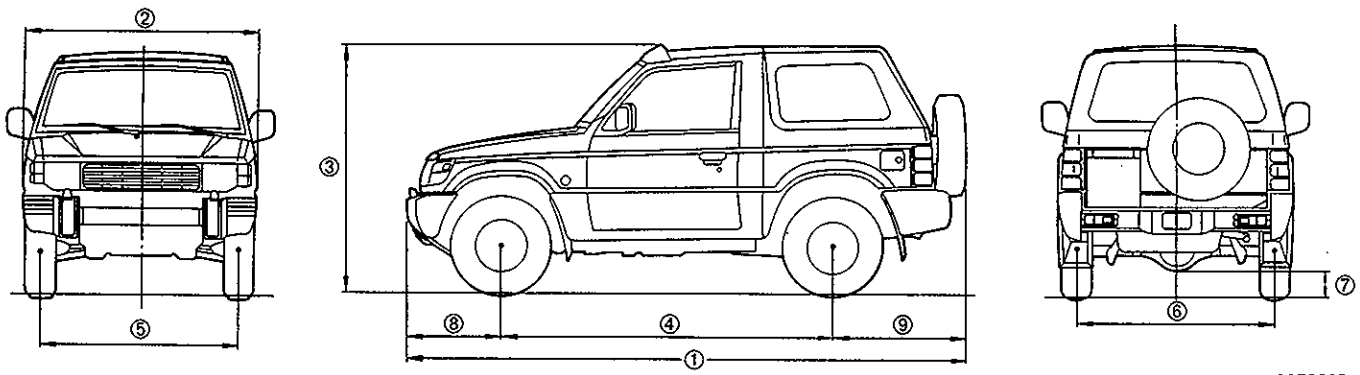
9. Plant
   J,P,Y: Oye Plant of NAGOYA Motor Vehicle Works

10. Engine specification
    0: Without turbocharger, with catalyzer.
    3: With turbocharger, without catalyzer.

11. Serial number
    00001 ~

MAJOR SPECIFICATIONS

CANVAS TOP



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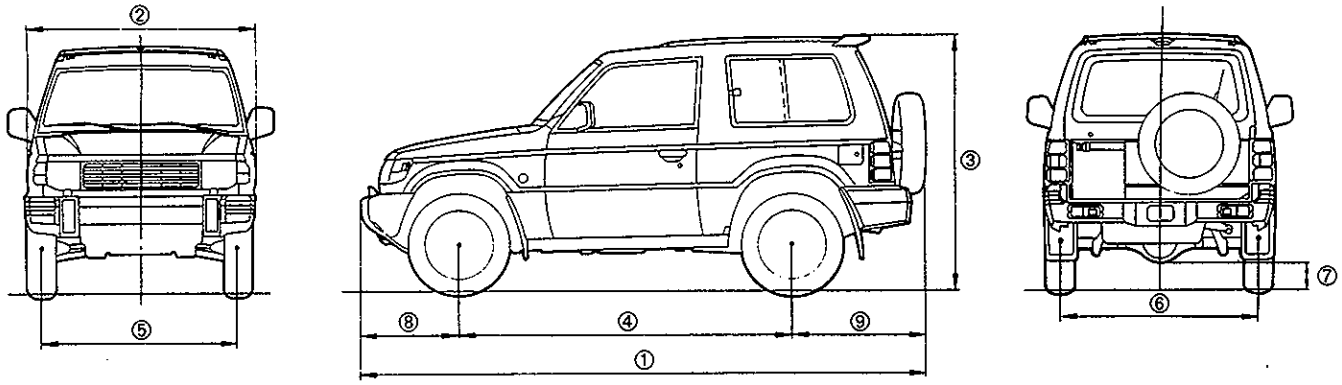
Items		V24CNSFL6	V23CGNHVL6/R6	V23CGRHVL6/R6
Dimensions mm				
Overall length	①	4,075	4,145	
Overall width	②	1,695	1,785	
Overall height (unladen)	③	1,805	1,845	
Wheelbase	④	2,420	2,420	
Track–front	⑤	1,420	1,465	
Track–rear	⑥	1,435	1,480	
Ground clearance (laden)	⑦	205	215	
Overhang-front	⑧	675	720	
Overhang-rear	⑨	980	1,005	
Weight kg				
Kerb weight		1,655 – 1,800	1,725 – 1,855	1,735 – 1,865
Max. gross vehicle weight		2,510	2,350	2,350
Max. front axle load		1,100 or 1,070 *1	1,200 or 1,030*1	1,200 or 1,030*1
Max. rear axle load		1,650 or 1,565*1	1,650 or 1,405*1	1,650 or 1,405*1
Seating capacity		4		
Engine				
Model		4D56	6G72	
Total displacement	mℓ	2,477	2,972	
Transmission				
Type		5-speed manual	5-speed manual	4-speed automatic
Model		V5MT1	V5MT1	V4AW3

NOTE
*1 : Vehicles for Belgium and France

METAL TOP



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<VEHICLES WITH PETROL ENGINE>

Items		V23WNHVL6	V23WGNXVL6/R6	V23WGRXVL6/R6	V25WGNXML6/R6 V25WGRXML6/R6
Dimensions mm					
Overall length	①	4,120	4,145		4,145
Overall width	②	1,695	1,785		1,785
Overall height (unladen)	③	1,835	1,845		1,845
Wheelbase	④	2,420	2,420		2,420
Track–front	⑤	1,420	1,465		1,465
Track–rear	⑥	1,435	1,480		1,480
Ground clearance (laden)	⑦	205	215		205
Overhang-front	⑧	720	720		720
Overhang-rear	⑨	980	1,005		1,005
Weight kg					
Kerb weight		1,735 – 1,865	1,760 – 1,875	1,770 – 1,885	1,810 – 1,925
Max. gross vehicle weight		2,350	2,350	2,350	2,350
Max. front axle load		1,200 or 1,030*1	1,200 or 1,030*1	1,200 or 1,030*1	1,200 or 1,050*1
Max. rear axle load		1,650 or 1,405*1	1,650 or 1,405*1	1,650 or 1,405*1	1,780 or 1,345*1
Seating capacity		5			
Engine					
Model		6G72	6G72	6G72	6G74
Total displacement mℓ		2,972	2,972	2,972	3,497
Transmission					
Type		5-speed manual	5-speed manual	4-speed automatic	5-speed manual or 4-speed automatic*2
Model		V5MT1	V5MT1	V4AW3	V5M31 or V4AW3*2

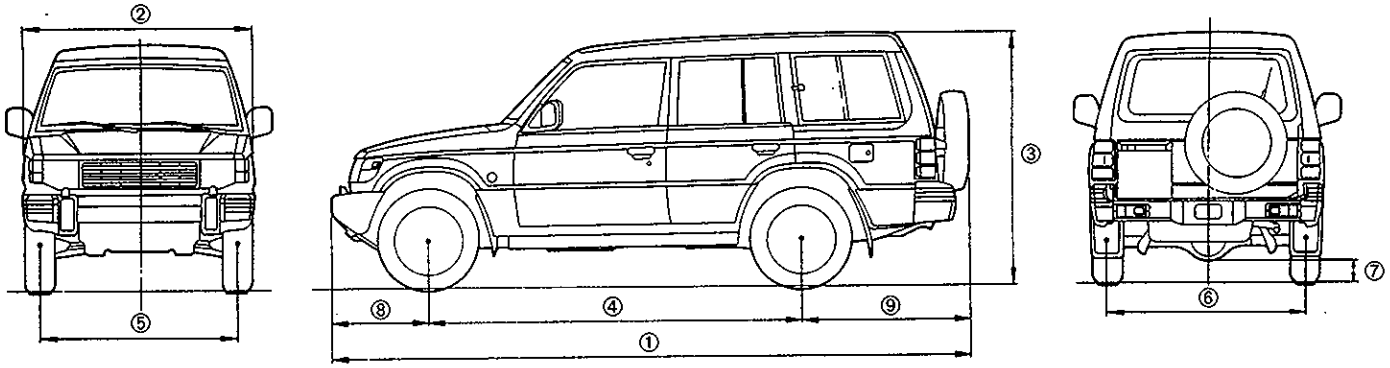
NOTE
*1 : Vehicles for Belgium and France
*2 : V25WGRXML6/R6

<VEHICLES WITH DIESEL ENGINE>

Items		V24WNAFL6 V24WNDFL6	V24WNBFL6 V24WNHFL6 /R6	V24WGNCFL6 V24WGNXFL6/ R6	V26WNHFL6	V26WGNXFL6/R6
Dimensions mm						
Overall length	①	4,075	4,120	4,145	4,120	4,145
Overall width	②	1,695	1,695	1,785	1,695	1,785
Overall height (unladen)	③	1,805	1,805	1,815	1,835	1,845
Wheelbase	④	2,420	2,420	2,420	2,420	2,420
Track-front	⑤	1,420	1,420	1,465	1,420	1,465
Track-rear	⑥	1,435	1,435	1,480	1,435	1,480
Ground clearance (laden)	⑦	205	205	225	190	205
Overhang-front	⑧	675	720	720	720	720
Overhang-rear	⑨	980	980	1,005	980	1,005
Weight kg						
Kerb weight		1,680 – 1,820	1,730 – 1,900	1,755 – 1,905	1,830 – 2,000	1,855 – 2,005
Max. gross vehicle weight		2,510	2,510	2,510	2,510	2,510
Max. front axle load		1,100 or 1,070*1	1,100 or 1,070*1	1,100 or 1,070*1	1,200 or 1,115*1	1,200 or 1,115*1
Max. rear axle load		1,650 or 1,565*1	1,650 or 1,565*1	1,650 or 1,565*1	1,780 or 1,440*1	1,780 or 1,440*1
Seating capacity		5				
Engine						
Model		4D56			4M40	
Total displacement mℓ		2,477			2,835	
Transmission						
Type		5-speed manual			5-speed manual	
Model		V5MT1			V5M31	

NOTE
*1: Vehicles for Belgium and France

WAGON



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<VEHICLES WITH PETROL ENGINE>

Items		V43WNHVL6/R6 V43WRHVL6/R6	V43WGNXVL6/R6 V43WGRXVL6/R6	V45WGNXML6/R6	V45WGRXML6/R6
Dimensions mm					
Overall length	①	4,700	4,725	4,725	
Overall width	②	1,695	1,785	1,785	
Overall height (unladen)	③	1,890	1,900	1,900	
Wheelbase	④	2,725	2,725	2,725	
Track-front	⑤	1,420	1,465	1,465	
Track-rear	⑥	1,435	1,480	1,480	
Ground clearance (laden)	⑦	205	215	205	
Overhang-front	⑧	720	720	720	
Overhang-rear	⑨	1,255	1,280	1,280	
Weight kg					
Kerb weight		1,925 – 2,085 or 1,920 – 2,105*3	1,955 – 2,115	1,995 – 2,150	1,990 – 2,145
Max. gross vehicle weight		2,650	2,650	2,720	2,720
Max. front axle load		1,200 or 1,075*1	1,200 or 1,075*1	1,200 or 1,090*1	1,200 or 1,090*1
Max. rear axle load		1,650	1,650	1,780 or 1,670*1	1,780 or 1,670*1
Seating capacity		7			
Engine					
Model		6G72		6G74	
Total displacement mℓ		2,972		3,497	
Transmission					
Type		5-speed manual or 4-speed automatic*3	5-speed manual or 4-speed automatic*4	5-speed manual	4-speed automatic
Model		V5MT1 or V4AW3*3	V5MT1 or V4AW3*4	V5M31	V4AW3

NOTE
*1 : Vehicles for Belgium and France
*3 : V43WRHVL6/R6
*4 : V43WGRXVL6/R6

<VEHICLES WITH DIESEL ENGINE>

Items		V46WNDFL6	V46WNDFCL6 V46WNAFCL6	V46WNBFL6 V46WNHFL6/R6
Dimensions mm				
Overall length	①	4,655		4,700
Overall width	②	1,695		1,695
Overall height (unladen)	③	1,890		1,890
Wheelbase	④	2,725		2,725
Track–front	⑤	1,420		1,420
Track–rear	⑥	1,435		1,435
Ground clearance (laden)	⑦	190		190
Overhang-front	⑧	675		720
Overhang-rear	⑨	1,255		1,255
Weight kg				
Kerb weight		1,960 – 2,095	1,920 – 2,055	2,010 – 2,180
Max. gross vehicle weight		2,720	2,720	2,720
Max. front axle load		1,200 or 1,145*1	1,200 or 1,145*1	1,200 or 1,145*1
Max. rear axle load		1,780 or 1,655	1,780 or 1,655*1	1,780 or 1,655*1
Seating capacity		7	5	7
Engine				
Model		4M40		
Total displacement mℓ		2,835		
Transmission				
Type		5-speed manual		
Model		V5M31		

NOTE
*1 : Vehicles for Belgium and France

Items		V46WRHFR6	V46WGNCFL6 V46WGNXFL6/R6	V46WGRXFL6/R6
Dimensions mm				
Overall length	①	4,700	4,725	
Overall width	②	1,695	1,785	
Overall height (unladen)	③	1,890	1,900	
Wheelbase	④	2,725	2,725	
Track–front	⑤	1,420	1,465	
Track–rear	⑥	1,435	1,480	
Ground clearance (laden)	⑦	190	205	
Overhang–front	⑧	720	720	
Overhang–rear	⑨	1,255	1,280	
Weight kg				
Kerb weight		2,005 – 2,175	2,045 – 2,180	2,050 – 2,185
Max. gross vehicle weight		2720	2,720	2,720
Max. front axle load		1,200 or 1,145*1	1,200 or 1,145*1	1,200 or 1,145*1
Max. rear axle load		1,780 or 1,655	1,780 or 1,655*1	1,780 or 1,655*1
Seating capacity		7		
Engine				
Model		4M40		
Total displacement mℓ		2,835		
Transmission				
Type		4-speed automatic	5-speed manual	4-speed automatic
Model		V4AW3	V5M31	V4AW3

NOTE
*1 : Vehicles for Belgium and France

Items		V44WNDFL6	V44WNDFCL6	V44WNHFL6	V44WGNXFL6/R6
Dimensions mm					
Overall length	①	4,655	4,655	4,700	4,725
Overall width	②	1,695	1,695	1,695	1,785
Overall height (unladen)	③	1,860	1,860	1,860	1,870
Wheelbase	④	2,725	2,725	2,725	2,725
Track–front	⑤	1,420	1,420	1,420	1,465
Track–rear	⑥	1,435	1,435	1,435	1,480
Ground clearance (laden)	⑦	205	205	205	215
Overhang–front	⑧	675	675	720	720
Overhang–rear	⑨	1,255	1,255	1,255	1,280
Weight kg					
Kerb weight		1,865 – 2,000	1,840 – 1,975	1,915 – 2,110	1,950 – 2,120
Max. gross vehicle weight		2,650	2,650	2,650	2,650
Max. front axle load		1,200 or 1,075*1	1,100 or 1,090*1	1,100 or 1,090*1	1,100 or 1,090*1
Max. rear axle load		1,650	1,650	1,650	1,650
Seating capacity		7	5	7	7
Engine					
Model		4D56			
Total displacement mℓ		2,477			
Transmission					
Type		5-speed manual			
Model		V5MT1			

NOTE
*1 : Vehicles for Belgium and France

HOW TO USE TROUBLESHOOTING/INSPECTION SERVICE POINTS

Troubleshooting of electronic control systems for which the MUT-II can be used follows the basic outline described below. Furthermore, even in systems for which the MUT-II cannot be used, part of these systems still follow this outline.

TROUBLESHOOTING CONTENTS

1. STANDARD FLOW OF DIAGNOSTIC TROUBLESHOOTING

The main procedures for diagnostic troubleshooting are shown.

2. SYSTEM OPERATION AND SYMPTOM VERIFICATION TESTS

If verification of the trouble symptoms is difficult, procedures for checking operation and verifying trouble symptoms are shown.

3. DIAGNOSTIC FUNCTION

The following diagnostic functions are shown.
- Method of reading diagnostic codes
- Method of erasing diagnostic codes
- Input inspection service points

4. INSPECTION CHART FOR DIAGNOSTIC TROUBLE CODES

5. NSPECTION PROCEDURE FOR DIAGNOSTIC TROUBLE CODES

Indicates the inspection procedures corresponding to each diagnosis code. (Refer to the next page for how to read the inspection procedures.)

6. INSPECTION CHART FOR TROUBLE SYMPTOMS

If there are trouble symptoms even though the results of inspection using the MUT-II show that all diagnosis codes are normal, inspection procedures for each trouble symptom will be found by means of this chart.

7. INSPECTION PROCEDURE FOR DIAGNOSTIC SYMPTOM

Indicates the inspection procedures corresponding to each trouble symptoms classified in the Inspection Chart for Trouble Symptoms. (Refer to the next page for how to read the inspection procedures.)

8. SERVICE DATA REFERENCE TABLE

Inspection items and normal judgement values have been provided in this chart as reference information.

9. CHECK AT ECU TERMINALS

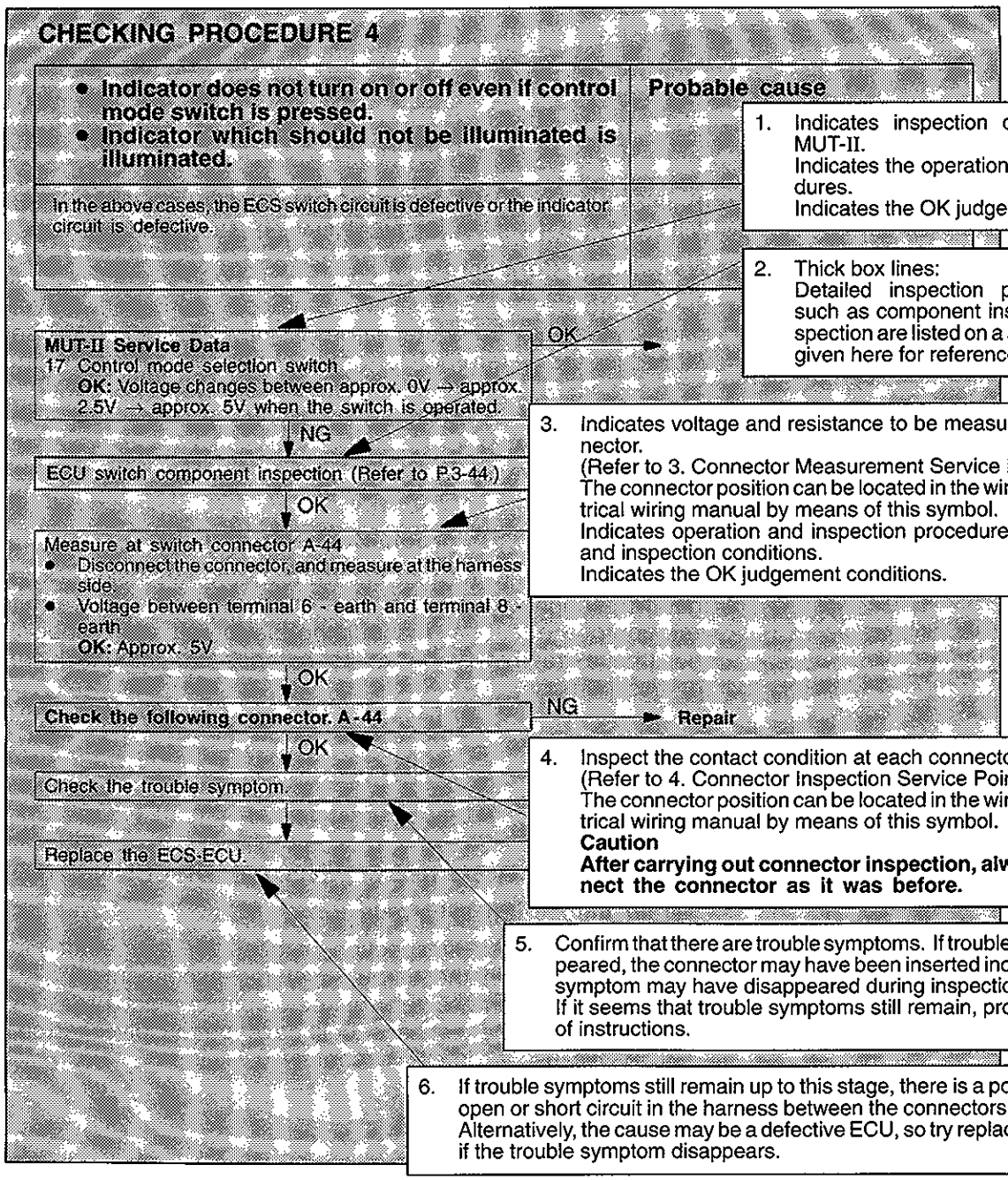
Terminal numbers for the ECU connectors, inspection items and standard values have been provided in this chart as reference information.

10. INSPECTION PROCEDURES USING AN OSCILLOSCOPE

When there are inspection procedures using an oscilloscope, these are listed here.

HOW TO USE THE INSPECTION PROCEDURES

The causes of a high frequency of problems occurring in electronic circuitry are generally the connectors, components, the ECU and the harnesses between connectors, in that order. These inspection procedures follow this order, and they first try to discover a problem with a connector or a defective component.



1. Indicates inspection carried out using the MUT-II.
   Indicates the operation and inspection procedures.
   Indicates the OK judgement conditions.
2. Thick box lines:
   Detailed inspection procedures (methods) such as component inspection and circuit inspection are listed on a separate page, and are given here for reference.
3. Indicates voltage and resistance to be measured at a particular connector.
   (Refer to 3. Connector Measurement Service Points.)
   The connector position can be located in the wiring diagram in the electrical wiring manual by means of this symbol.
   Indicates operation and inspection procedures, inspection terminals and inspection conditions.
   Indicates the OK judgement conditions.
4. Inspect the contact condition at each connector terminal.
   (Refer to 4. Connector Inspection Service Points.)
   The connector position can be located in the wiring diagram in the electrical wiring manual by means of this symbol.
   Caution
   After carrying out connector inspection, always be sure to reconnect the connector as it was before.
5. Confirm that there are trouble symptoms. If trouble symptoms have disappeared, the connector may have been inserted incorrectly and the trouble symptom may have disappeared during inspection.
   If it seems that trouble symptoms still remain, proceed to the next stage of instructions.
6. If trouble symptoms still remain up to this stage, there is a possibility that there is an open or short circuit in the harness between the connectors, so check the harness. Alternatively, the cause may be a defective ECU, so try replacing the ECU and check if the trouble symptom disappears.

HARNESS INSPECTION

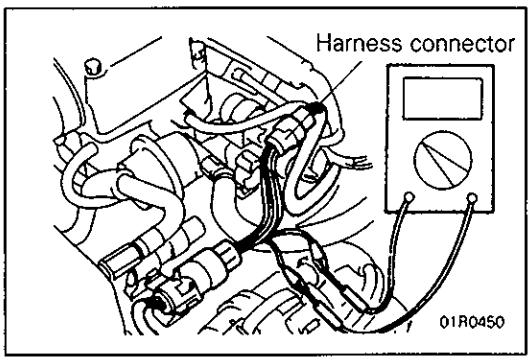
Check for an open or short circuit in the harness between the terminals which were defective according to the connector measurements. Carry out this inspection while referring to Volume 2 Electrical manual. Here, "Check harness between power supply and terminal xx" also includes checking for blown fuses. For inspection service points when there is a blown fuse, refer to "Inspection Service Points for a Blown Fuse."

MEASURES TO TAKE AFTER REPLACING THE ECU

If the trouble symptoms have not disappeared even after replacing the ECU, repeat the inspection procedure from the beginning.

CONNECTOR MEASUREMENT SERVICE POINTS

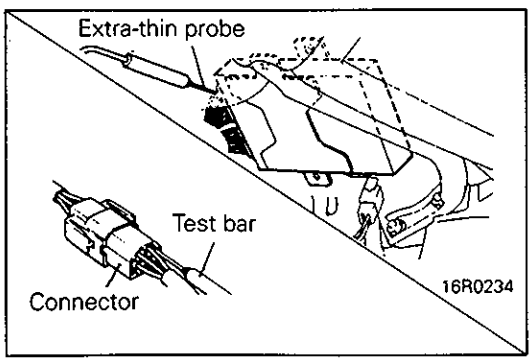
Turn the ignition switch to OFF when connecting and disconnecting the connectors, and turn the ignition switch to ON when measuring if there are no instructions to the contrary.



IF INSPECTING WITH THE CONNECTOR CONNECTED (WITH CIRCUIT IN A CONDITION OF CONTINUITY)

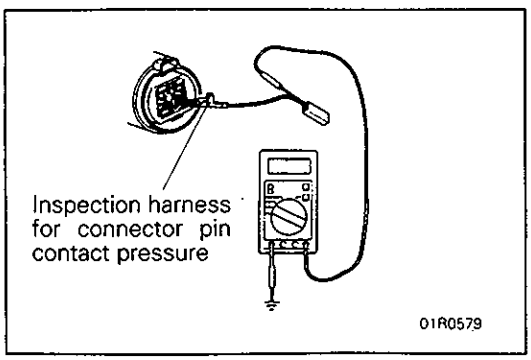
Waterproof Connectors

Be sure to use the special tool (harness connector). Never insert a test bar from the harness side, because to do so will reduce the waterproof performance and result in corrosion.



Ordinary (non-waterproof) Connectors

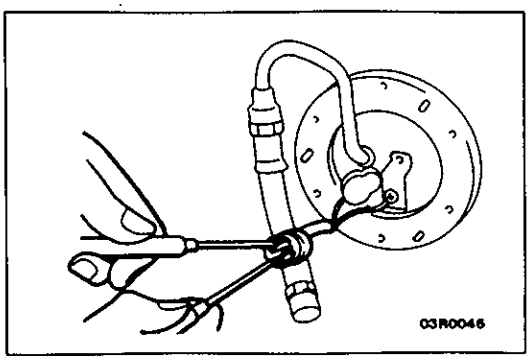
Check by inserting the test bar from the harness side. Note that if the connector (control unit, etc.) is too small to permit insertion of the test bar, it should not be forced; use a special tool (the extra–thin probe in the harness set for checking) for this purpose.



IF INSPECTING WITH THE CONNECTOR DISCONNECTED

<When Inspecting a Female Pin>

Use the special tool (inspection harness for connector pin contact pressure in the harness set for inspection).
The inspection harness for connector pin contact pressure should be used. The test bar should never be forcibly inserted, as it may cause a defective contact.



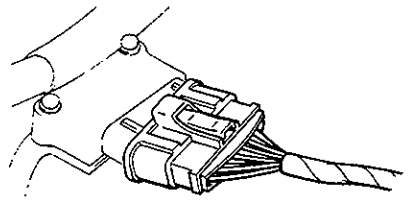
<When Inspecting a Male Pin>

Touch the pin directly with the test bar.

Caution

At this time, be careful not to short the connector pins with the test bars. To do so may damage the circuits inside the ECU.

Connector disconnected or improperly connected



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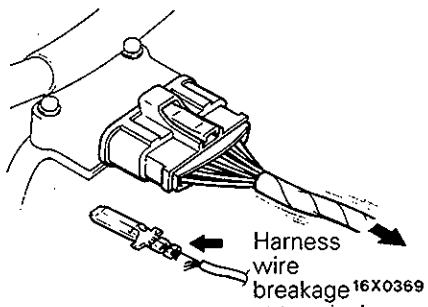
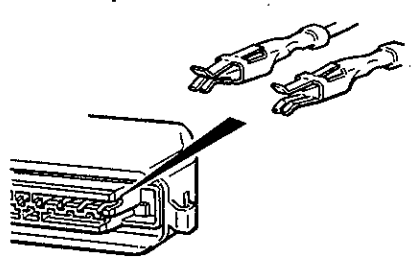
Defective connector contact



Low contact pressure



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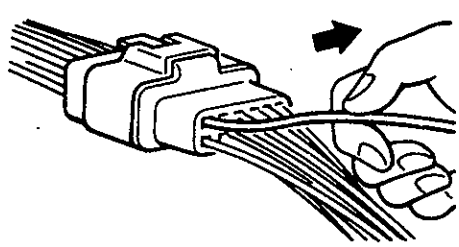
CONNECTOR INSPECTION

VISUAL INSPECTION

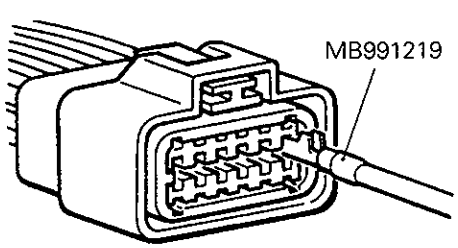
- Connector is disconnected or improperly connected
- Connector pins are pulled out
- Due to harness tension at terminal section
- Low contact pressure between male and female terminals
- Low connection pressure due to rusted terminals or foreign matter lodged in terminals



16R1317

CONNECTOR PIN INSPECTION

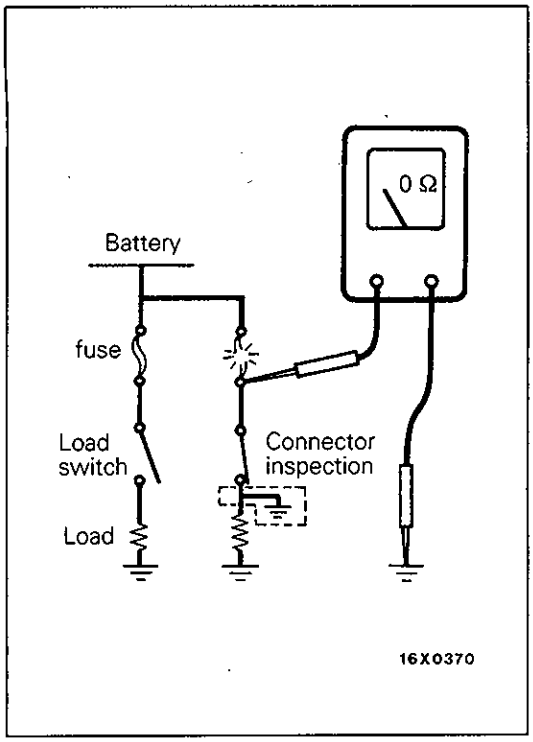
If the connector pin stopper is damaged, the terminal connections (male and female pins) will not be perfect even if the connector body is connected, and the pins may pull out of the reverse side of the connector. Therefore, gently pull the harnesses one by one to make sure that no pins pull out of the connector.



16R1318

CONNECTOR ENGAGEMENT INSPECTION

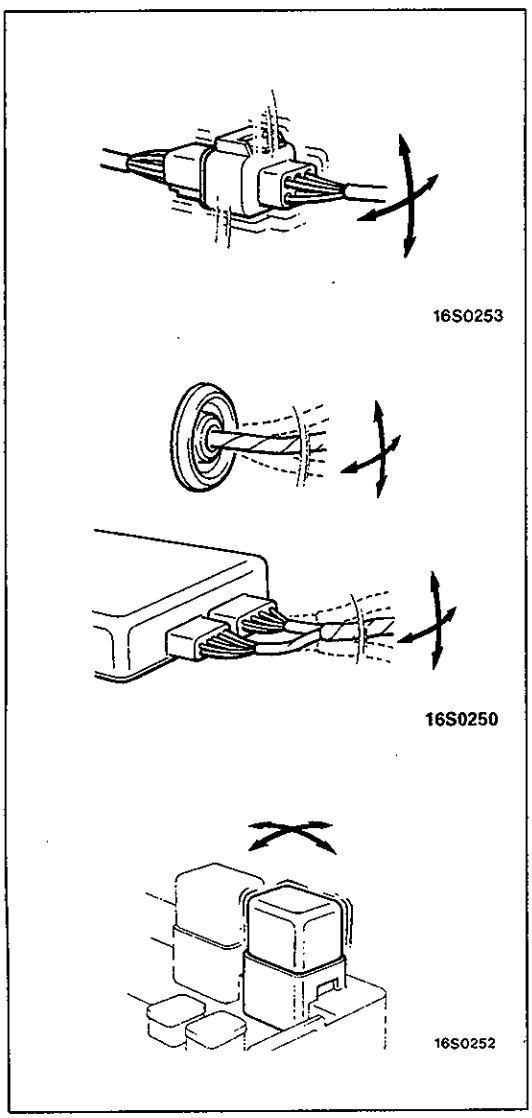
Use the special tool (connector pin connection pressure inspection harness of the inspection harness set) to inspect the engagement of the male pins and female pins. (Pin drawing force : 1 N or more)



INSPECTION SERVICE POINTS FOR A BLOWN FUSE

Remove the fuse and measure the resistance between the load side of the fuse and the earth. Set the switches of all circuits which are connected to this fuse to a condition of continuity. If the resistance is almost 0 W at this time, there is a short somewhere between these switches and the load. If the resistance is not 0 W, there is no short at the present time, but a momentary short has probably caused the fuse to blow.

The main causes of a short circuit are the following.
- Harness being clamped by the vehicle body
- Damage to the outer casing of the harness due to wear or heat
- Water getting into the connector or circuitry
- Human error (mistakenly shorting a circuit, etc.)



POINTS TO NOTE FOR INTERMITTENT MALFUNCTIONS

Intermittent malfunctions often occur under certain conditions, and if these conditions can be ascertained, determining the cause becomes simple. In order to ascertain the conditions under which an intermittent malfunction occurs, first ask the customer for details about the driving conditions, weather conditions, frequency of occurrence and trouble symptoms, and then try to recreate the trouble symptoms. Next, ascertain whether the reason why the trouble symptom occurred under these conditions is due to vibration, temperature or some other factor. If vibration is thought to be the cause, carry out the following checks with the connectors and components to confirm whether the trouble symptom occurs.
The objects to be checked are connectors and components which are indicated by inspection procedures or given as probable causes (which generate diagnosis codes or trouble symptoms).
- Gently shake the connector up, down and to the left and right.
- Gently shake the wiring harness up, down and to the left and right.
- Gently rock each sensor and relay, etc. by hand.
- Gently shake the wiring harness at suspensions and other moving parts.

NOTE
If determining the cause is difficult, the flight recorder function of the MUT-II can also be used.