SERVICE BULLETIN

MITSUBISHI MOTORS

QUALITY INFORMATION ANALYSIS
OVERSEAS SERVICE DEPT. MITSUBISHI MOTORS CORPORATION

SERVICE BULLETIN	**No.:** MSB-00E00-003		
	Date: 2000-05-30	**<Model>**	**<M/Y>**
Subject: YEAR MODEL CHANGES FOR 2001 L200		(EC)L200(K60, K70)	00-10
Group: GENERAL	**Draft No.:** 00SY0022915		
INFORMATION/ CORRECTION	**INTERNATIONAL CAR ADMINISTRATIO OFFICE**	Tomoaki Nitta T.NITTA - PROJECT LEADER AFTER SALES SERVICE & CS PROMOTION	

1. Description:

This Service Bulletin informs you of the year model changes for the 2001 L200

2. Applicable Manuals:

Manual	Pub. No.	Language	Page(s)
2000 L200 Workshop Manual Chassis	PWTE96E1-D	(English)	
	PWTS96E1-D	(Spanish)	
	PWTF96E1-D	(French)	
	PWTG96E1-D	(German)	

3. Details:

L200

WORKSHOP MANUAL SUPPLEMENT

FOREWORD

This Manual outlines changes in servicing proc e-dures related to the chassis including vehicle i n-spections, adjustments and improvements in the newly equipped models.

TECHNICAL INFORMATION MANUAL	PYTE96E1
WORKSHOP MANUAL	
ENIGINE GROUP	PWEE___ (looseleaf edition)
CHASSIS GROUP	PWTE96E1
	PWTE96E1-B (SUPPLEMENT)
	PWTE96E1-C (SUPPLEMENT)
	PWTE96E1-D (SUPPLEMENT)
ELECTRICAL WIRING	PHTE96E1
	PHTE96E1-A
	PHTE96E1-B
	PHTE96E1-D
	PHTE96E1-D (SUPLEMTENT)
BODY REPAIR MANUAL	PBTE96E1
PARTS CATALOGUE	T603B00□D□

All information, illustrations and product d e-scriptions contained in this manual are current as at the time of publication. We, however, re-serve the right to make changes at any time without prior notice or obligation.

MITSUBISHI MOTORS CORPORATION

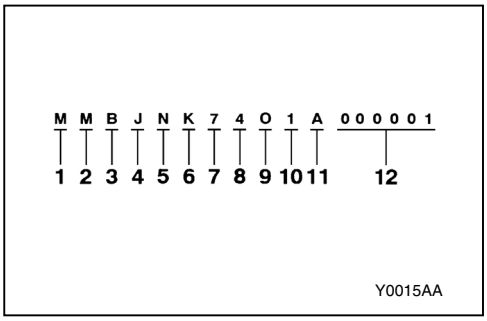
GROUP 00
GENERAL

VEHICLE IDENTIFICATION

MODELS

Model Code		Engine model	Transmission model	Fuel supply system
K62T	JERDEL6	4G63-SOHC (1,997mℓ)	R4AW2 (2WD-4A/T	MPI
	ENDEL6		R5M21 (2WD-5M/T)	
K64T	ENDL6	4D56 (2,477mℓ)	R5M21 (2WD-M/T)	Fuel injection
	ENDR6			
	CENDL6			
	JENDL6			
K75T	CENDEL6	4G64-SOHC (2,351 mℓ)	V5M21 (4WD-5M/T)	MPI
	GJENXEL6			
K74T	ENDFL6	4D56- Turbocharger with intercooler (2,477mℓ)	V5MT1 (4WD-5M/T	Fuel injection
	ENDFR6			
	JERDFL6		V4AW2 (AWD-4A/T	
	GJERXFL6		V5MT1 (4WD-5M/T	
	GJENXFL6			
	GJENXFR6			
	CENDFL6			
	GCENXFL6			
	JENDFL6			
	JENDFR6			
	JENHFL6			

CHASSIS NUMBER



No.	Items		Contents
1	Continent	M	ASIA
2	Country	M	THAILAND
3	Register code	B	Follow register
4	Body shape	C	Club cab
		J	Double cab
		O	Single cab
		Y	Single cab without rear body
		Z	Double cab without rear body
5	Transmission type	N	5-speed manual transmission
		R	4-speed automatic transmission
6	Vehicle line	K	Mitsubushi L200
7	Body type	6	Long wheelbase
		7	4WD, Long wheelbase
8	Engine type	2	4G63: 1,997mℓ petrol engine
		4	4D56:2,477mℓ diesel engine
		5	4G64: 2,351 mℓ petrol engine
9	Internal production control code	A	A, B, C…etc 0 (zero): No meaning
10	Model year	1*	2001
11	Plant	A	A, C: LARDKRABANG factory D, F: LAEMCHABANG factory
12	Serial number	-	-

NOTE
*: Indicates changes.

NOTES

GROUP 12

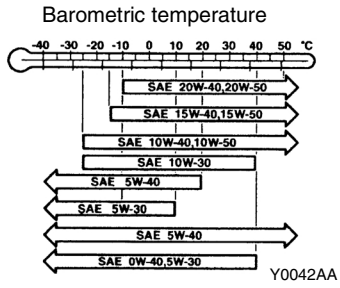
ENGINE LUBRICATION

GENERAL

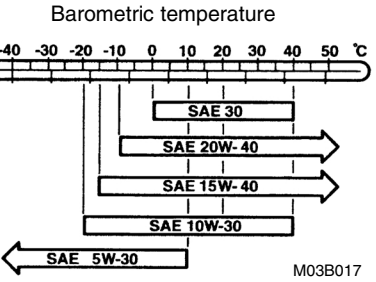
OUTLINE OF CHANGES

- A quality of the engine oil has been changed.

<4G6>



<4D5>



ON-VEHICLE SERVICE

specified engine oil (ACEA and API classification):
<4G6> ACEA A1, A2, A3/API SG or higher
<4D5> ACEA B1, B2, B3, B4/API CD or higher

NOTES

GROUP 42

BODY

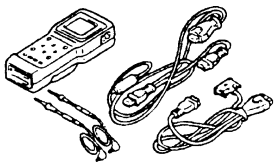
GENERAL

OUTLINE OF CHANGES

The following service procedures have been added due to the introduction of the keyless entry system as an optional equipment <GLS>.

KEYLESS ENTRY SYSTEM

SPECIAL TOOL

Tool	Number	Name	Use
	MB991502	MUT-II sub assembly	Encrypted codes recording

TROUBLESHOOTING

DIAGNOSIS FUNCTION

INPUT SIGNAL INSPECTION PROCEDURE

1. Connect the MUT-II to the diagnosis connector to check input signal. (Refer to '97 L200 Workshop Manual GROUP 00 – How to Use Troubleshooting/Inspection Service Points.)
2. The following input signals can be checked:
   - Ignition switch (IG1, ACC)
   - Driver's door switch
   - Every door switch
   - Key reminder switch
   - Driver's door lock actuator
   - Keyless entry transmitter (LOCK, UNLOCK)

   NOTE
   If the MUT-II cannot check all the input signals, the diagnosis circuit may be defective.

ETACS FUNCTION ADJUSTMENT PROCEDURE

The following functions can be adjusted by operating input switches, The adjustments will be stored in th ECU memory even after a battery cable is disconnected:

- Switching of keyless entry answerback function (From activation to deactivation, or vice versa)
- Initialisation of the above function (From deactivation)

1. Entry conditions to the adjustment mode
   The ETACS-ECU sounds a buzzer once when all of the following conditions are satisfied, and then enters the adjustment mode:
   - Diagnosis control: ON (Connect the MUT-II.)
   - Key reminder switch: OFF
   - Ignition switch: LOCK (OFF
   - Door switch: OFF (Close the door)
   - If all of the conditions above are satisfied, the tailgate switch will be turned in for more than 10 seconds.

2. Exit conditions from the adjustment mode
   The ETACS-ECU cancels the adjustment mode when any of the following conditions is satisfied:
   - Diagnosis control: OFF (Disconnect the MUT-II>)
   - Key reminder switch: ON (Pull out the ignition key.)
   - Ignition switch: Other than LOCK (OFF)
   - Door switch: ON (Open the door)
   - After the ETACS_ECU has entered the adjustment mode, no adjustment is made within 3 minutes (If any adjustment is made within 3 minutes, the ETACS-ECU monitors an adjustment operation for other 3 minutes.
   - Other warning buzzer(s) sounds
3. Adjustment of functions

Function	Adjustment procedure
Keyless entry answerback function	When the transmitter lock switch is turned on twice continuously within 2 seconds, the lock answerback function toggles on and off. • If the function toggles on, the buzzer sounds once (default condition). • If the function toggles off, the buzzer sounds twice, When the transmitter unlock switch is turned on twice continuously within 2 seconds, the unlock answerback function toggles on and off. • If the function toggles on, the buzzer sounds once (default condition). • If the function toggles off, the buzzer sounds twice,
Initialisation of all the ETACS functions (From deactivation to activation)	When the tailgate switch remains on for more than 20 seconds, th buzzer sounds twice and he answer-back function of the keyless entry system is initialised. The buzzer will sound in 10 seconds (indicating that the ETACS-ECU enters the adjustment mode), but the washer switch must remains off for 20 seconds in order to initialise all the functions. If the tailgate switch remains on for more than 20 seconds without entering the adjustment mode, the system enters the adjustment mode in 10 seconds, but does not initialise all of the functions.

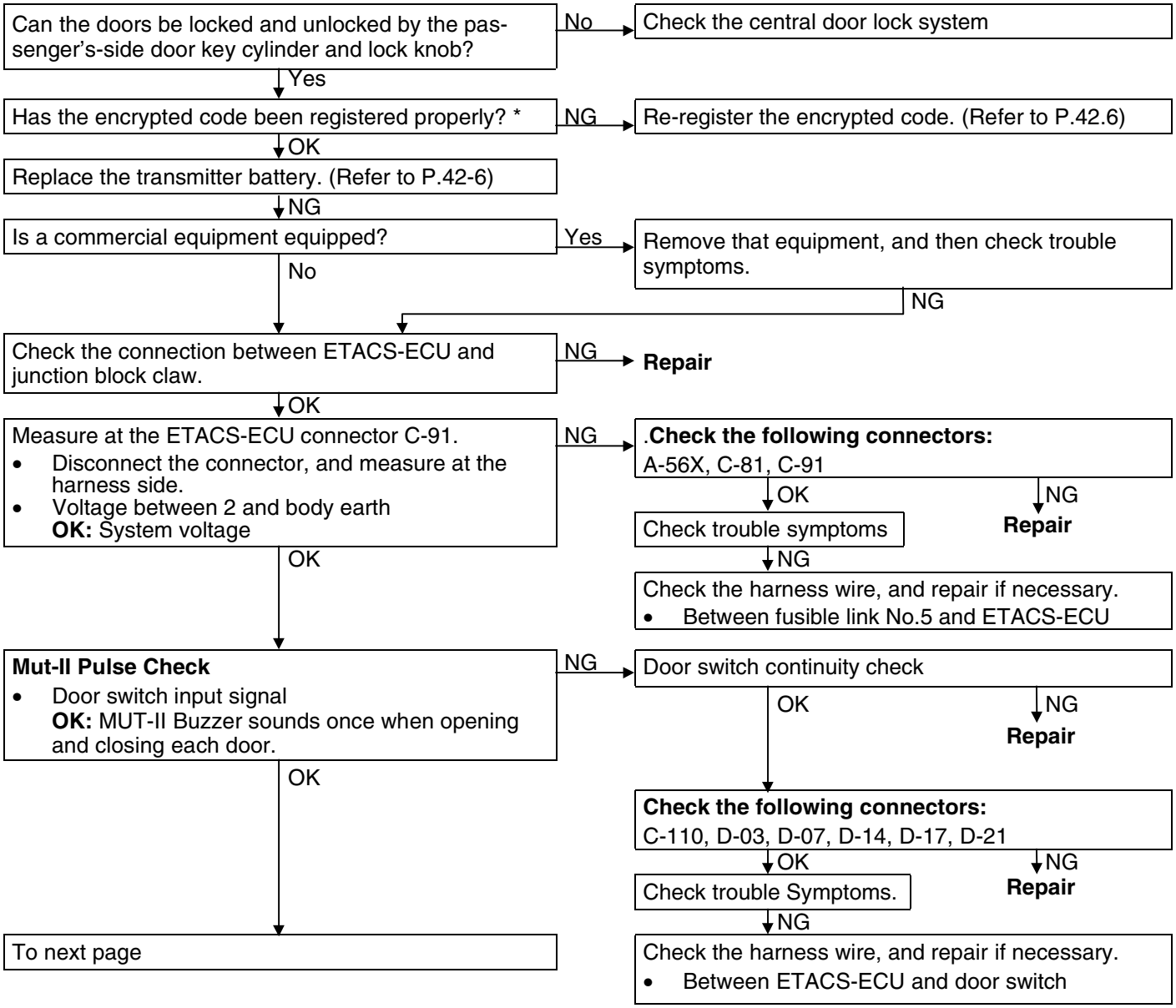
INSPECTION CHART FOR TROUBLE SYMPTOMS

Trouble symptom	Inspection procedure No.	Reference page
None of the doors can be locked or unlocked using th transmitter.	1	42-3
All of the doors can be locked and unlocked using th transmitter, but the room lamp or turn-signal lamp does not flash or illuminate. (However, the room lamp operates normally when the doors are opened and closed.)	2	42-4
Encrypted codes cannot be registered.	3	42-5

INSPECTION PROCEDURE FOR TROUBLE SYMPTOMS

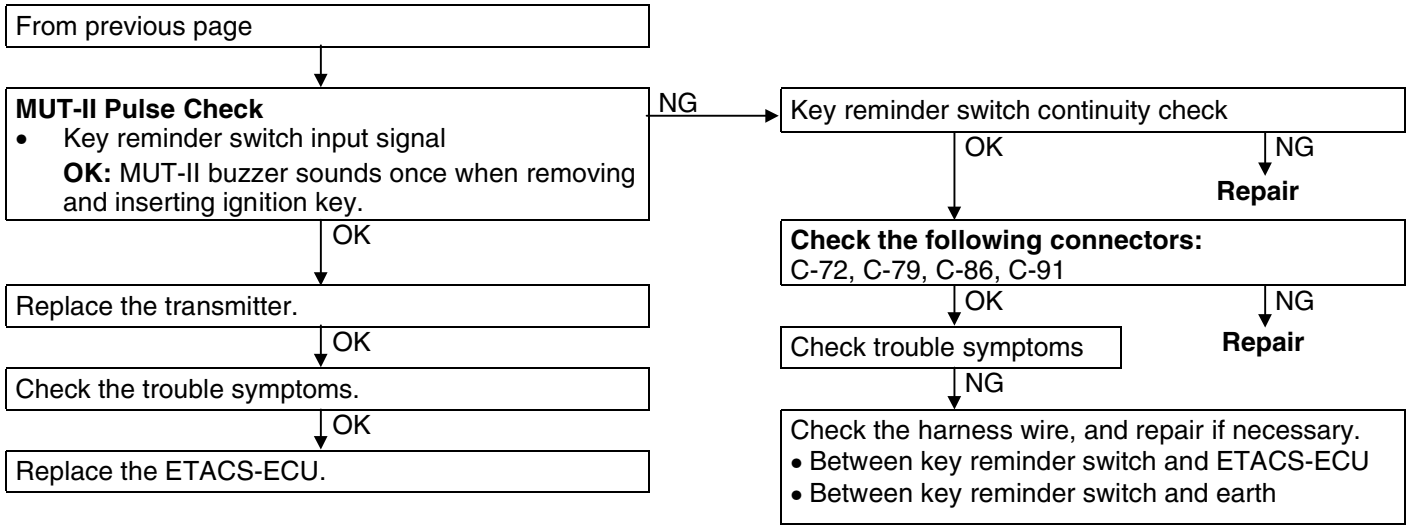
INSPECTION PROCEDURE 1

None of the doors can be locked or unlocked using the transmitter.	Probable cause
The cause may be a malfunction of the transmitter or ETACS-ECU, defective connection between ETACS-ECU and junction block, defective power supply voltage to ETACS-ECU input line due to commercial equipment, or the lock and unlock signals are not being sent to the ETACS-ECU.	• Malfunction of transmitter • Malfunction of ETACS-ECU • Malfunction of key reminder switch • Malfunction of wiring harness or connector • Malfunction of door switch • Defective connection between ETACS-ECU and junction block • Defective power supply voltage to ETACS-ECU input line due to commercial equipment



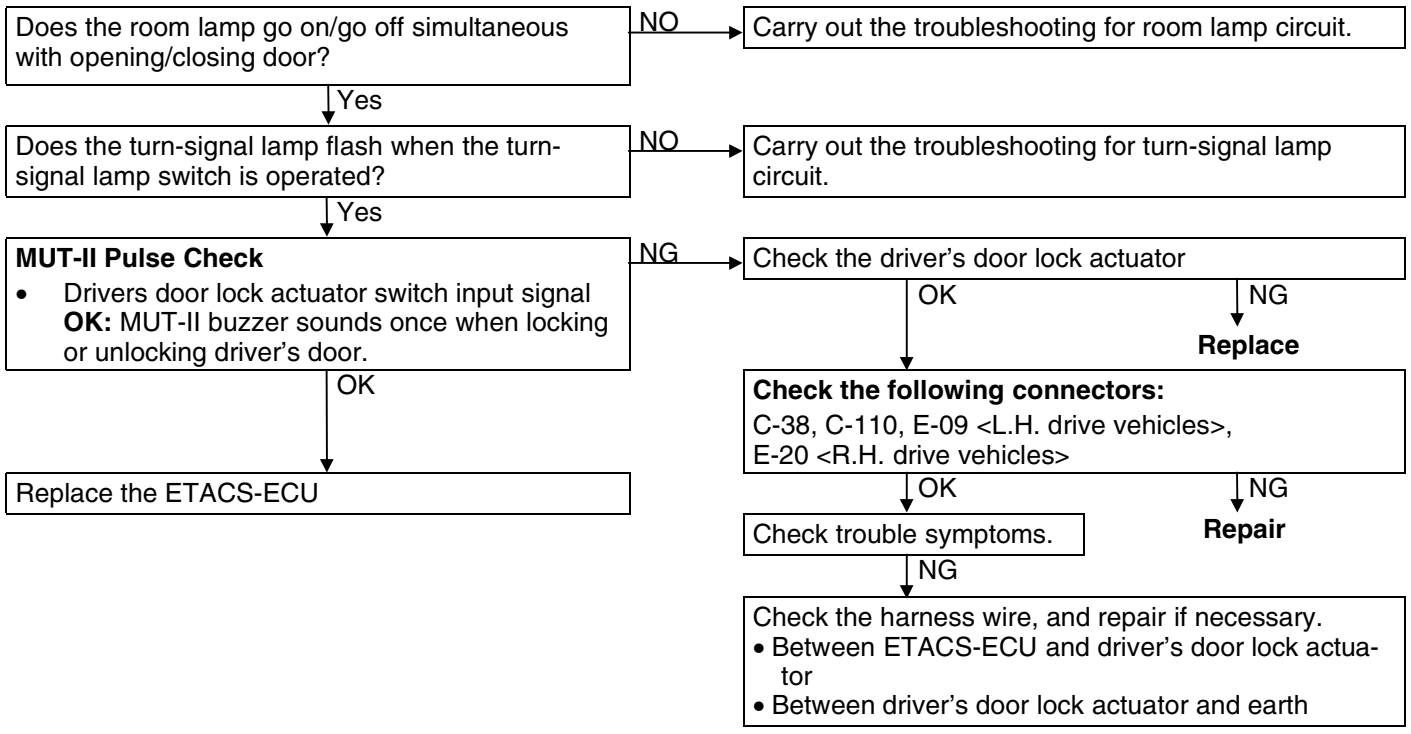
NOTE

*: This should be done if a transmitter, receiver or ETACS-ECU has been replaced, and if a secret cod has not been registered properly



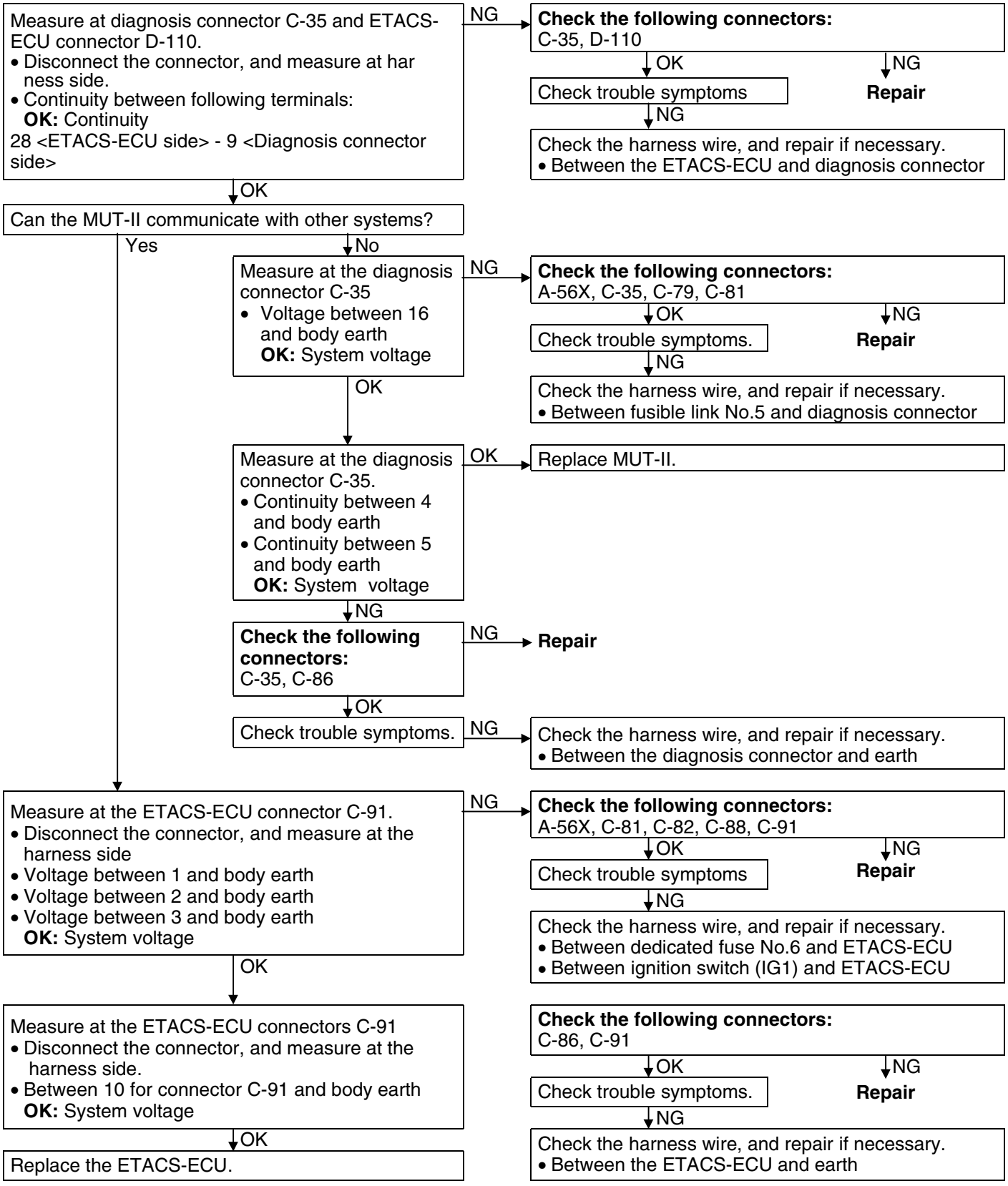
INSPECTION PROCEDURE 2

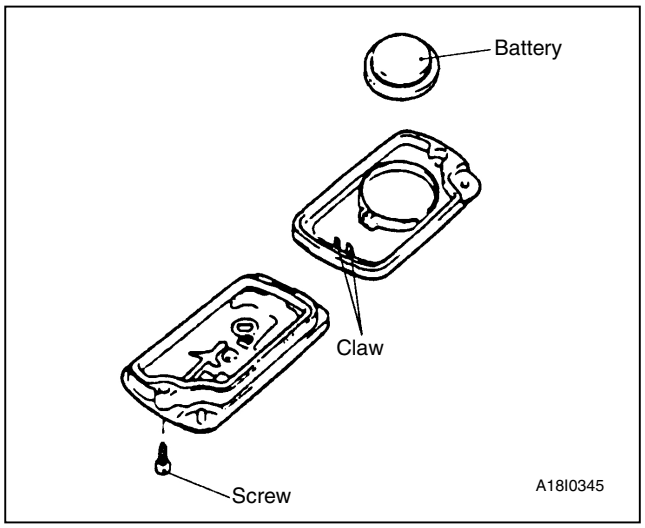
All of the doors can be locked and unlocked using th transmitter, but the room lamp or turn-signal lamp does not flash or illuminate. (However, the room lamp operates normally when the doors are opened and closed.)	**Probable cause**
If neither room lamp nor turn-signal lamp flash/illuminate, the cause may be a malfunction of the ETACS-ECU or driver's-side door lock actuator. If either room lamp or turn-signal lamp does not flash/illuminate, the cause may be a malfunction of the room lamp circuit or turn-signal lamp.	• Malfunction of ETACS-ECU • Malfunction of driver's door lock actuator • Burnt turn-signal lamp bulb • Malfunction of connector or wiring harness



INSPECTION PROCEDURE 3

Encrypted codes cannot be registered	Probable cause
The cause may be a malfunction of the diagnosis connector, ETACS-ECU or diagnosis output circuit.	• Malfunction of MUT-II • Malfunction of connector or wiring harness • Malfunction of ETACS-ECU





ON – VEHICLE SERVICE

HOW TO REPLACE A BATTERY OF THE TRANSMITTER

1. Remove the set screw to remove the battery from the transmitter.
   Install a battery with its (+) side face-down.
   Battery required for replacement:
   Coin type battery CR2032
3. Insert the claw, and then assemble the transmitter.
   Caution
   Do not let water or dust stick to the inside of the transmitter when it is open. Also, do not touch the precision electronic device.
4. Check to see if the keyless entry system operates.

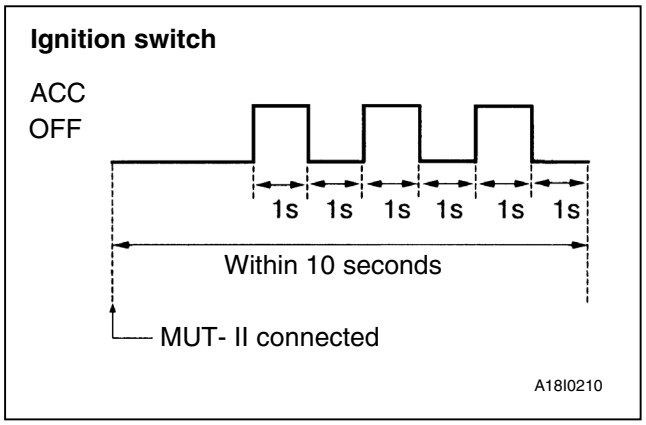
SECRET CODE REGISTRATION METHOD

Each individual secret code is registered inside the transmitter, and so it is necessary to register these codes with the EEPROM inside the ETACS-ECU in the following cases.

- When either the transmitter or ETACS-ECU in the following cases.
- If a second transmitter is to be used;
- If it appears that a problem is occurring because of faulty registration of a code.

A maximum of two different codes can be stored in the memory area of the EEPROM (two different transmitters can be used).
When the code for the first transmitter is registered, th previously- registered codes for two transmitters are cleared.
Therefore, if you are using more than two or are addin a second transmitter, the codes for all the transmitters must be registered at the same time.

1. Check that the doors lock normally when the key is used.
2. Connect the MUT-II to the diagnosis connector
   NOTE
   This will connect terminal (1) of the diagnosis con nectar to earth, and the system will be in secret code registration standby mode.
   Caution
   Always turn the ignition switch to OFF before connecting and disconnecting the MUT-II



3. Within 10 seconds after connecting the MUT-II, turn the ignition switch to ACC ON for 1 second an then to OFF for 1 second; repeat this procedure three times.

   NOTE

   The doors will lock and unlock once at this tim and the system will switch to registration mode.
4. Press the lock switch or unlock switch; of th transmitter switch, and then press it two times within 10 seconds of the first press. This will register the code.
5. After registration is completed, the doors will be automatically locked and unlocked once.
6. If you are using two transmitters or have added a second transmitter, the same registration procedure should be carried out for the second transmitter, and it should be carried out within one minute after registration of the code for the first transmitter has been completed. After the second registration is completed, the doors will be automatically locked and unlocked once.
7. Registration mode will be terminated under the following conditions.

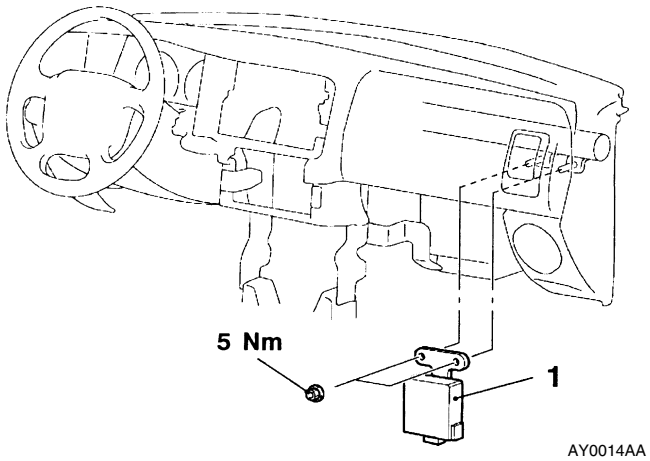
- When the secret codes for two transmitters hav been registered;
- When one minute has passed after registration mode started;
- If the MUT-II is disconnected (earth is released);
- If the ignition switch is tuned to ON;

8. After registration mode has been completed, carry out the followings to make sure that the keyless entry system operates.

- Pull the ignition key out.
- Close the all doors.

KEYLESS ENTRY SYSTEM

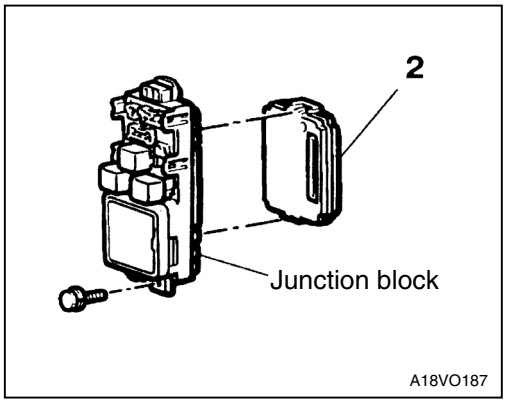
REMOVAL AND INSTALLATION



Keyless entry receiver-ECU removal steps

- Glove box assembly (Refer to GROUP 52A*.)

1. Keyless entry receiver-ECU



ETACS-ECU removal

2. ETACS-ECU

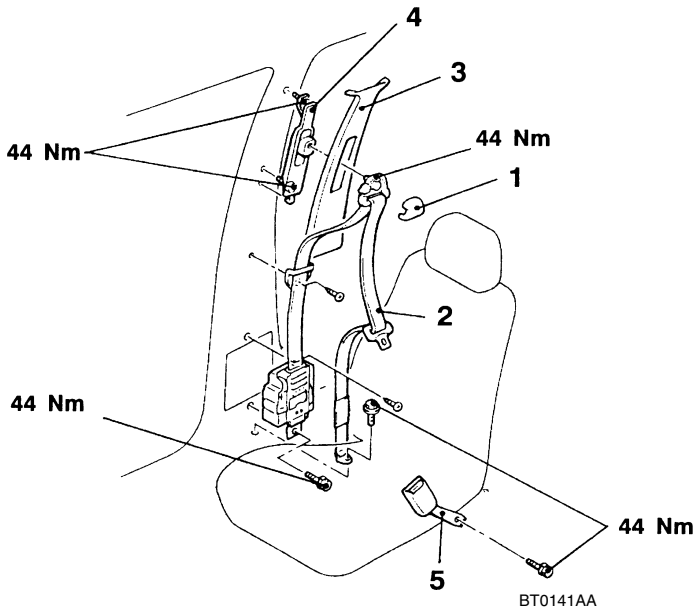
NOTE

*: Refer to '97 L200 Workshop Manual <Pub. No. PWTE96E1>

GROUP 52A
INTERIOR

GENERAL
OUTLINE OF CHANGE
- The following service procedures have been added due to the introduction of the adjustable seat belt anchor.
- On dual cab models, three-point ELR/child seat fixing mechanism (ALR) seat belts have been added for rear seat as an optional equipment. The service procedures are the same as previous one.

FRONT SEAT BELT
REMOVAL AND INSTALLATION



Outer seat belt removal steps
- Center pillar trim, lower or quarter trim, lower (refer to P.52A*.)

1. Sash guide cover
2. Outer seat belt
3. Center pillar trim, upper or quarter trim, upper (refer to P.52A*.)
4. Adjustable seat belt anchor.

Inner seat belt removal steps
- Front seat (refer to P.52A*.)

5. Inner seat belt

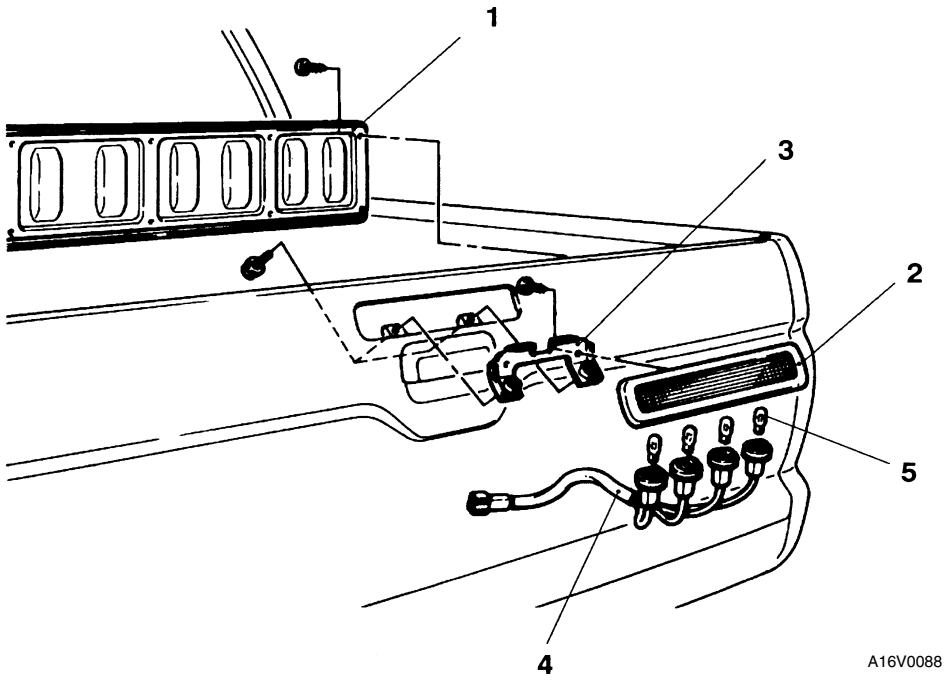
NOTE
*: Refer to '97 L200 Workshop Manual <Pub. No. PWTE96E1>.

NOTES

GROUP 54
CHASSIS ELECTRAL

GENERAL
OUTLINE IF CHANGES
- The following procedure has been added due to the addition of the high-stop lamp <4WD>.

HIGH-MOUNTED STOP LAMP
REMOVAL AND INSTALLATION



Removal steps
1. Rear gate panel
2. High mounted stop lamp
3. Lamp bracket
4. Bulb socket assembly
5. Bulb