SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CHANGE	ISSUE NO. : MSB-14EXML37-002	DATE : 2014-05-19
SUBJECT : ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION		<DESTINATION/MODEL> (MMNA/USTP/EUR/RUSSIA /G.EXP/GCC/MMAL/NZ <M/Y> 08-14
GROUP : Steering (Gr:37)		LANCER/LANCER EX(CY0A) LANCER SPORTBACK(CX0A)

1. Description :

Please refer to the attached document for the information about the change of mention in the applicable service manual.(Additional notes about the removal and installation of EPS-ECU have been established)

2. Affected service manuals :

Please refer to the attached document (Attached sheet 1)

3. About the details :

Please refer to the attached document (Attached sheets 2-5)

For overseas market】

Attached sheet 1(1/2)

<MMNA>

LANCER/LANCER SPORTBACK (GS41/GS44S)

Applicable manual	Pub. No.	Applicable title (INFO-ID)	Content
2011 LANCER/LANCER SPORTBACK Service manual	MSCD-106B-2011	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89802-01)	Attached sheet 3 (1/3)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 3 (2/3)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13501-01)	Attached sheet 3 (3/3)
2012 LANCER/LANCER SPORTBACK Service manual	MSCD-106B-2012	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89802-01)	Attached sheet 3 (1/3)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 3 (2/3)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13501-01)	Attached sheet 3 (3/3)
2013 LANCER/LANCER SPORTBACK Service manual	MSCD-106B-2013	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89802-01)	Attached sheet 3 (1/3)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 3 (2/3)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13501-01)	Attached sheet 3 (3/3)
2014 LANCER/LANCER SPORTBACK Service manual	MSCD-106B-2014	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89802-01)	Attached sheet 3 (1/3)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 3 (2/3)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13501-01)	Attached sheet 3 (3/3)

<G.EXP/GCC>

LANCER/LANCER EX (GS41)

Applicable manual	Pub. No.	Applicable title (INFO-ID)	Content
2008 LANCER/LANCER EX Workshop manual	PWME0701R(ENG) PWMS0702R(SPA)	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-07000-01)	Attached sheet 4 (1/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2009 LANCER/LANCER EX Workshop manual	PWME0802R(ENG) PWMS0803R(SPA)	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-40100-01)	Attached sheet 4 (1/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2010 LANCER/LANCER EX Workshop manual	PWME0901R(ENG) PWMS0902R(SPA)	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-40100-01)	Attached sheet 4 (1/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)

<MMAL/NZ>

LANCER/LANCER SPORTBACK (GS41/GS44S)

Applicable manual	Pub. No.	Applicable title (INFO-ID)	Content
2012 LANCER Workshop manual	AU900216 NZ:DRAFT	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-092-15800-01)	Attached sheet 5 (1/3)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-56100-01)	Attached sheet 5 (2/3)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-19100-01)	Attached sheet 5 (3/3)
2012 LANCER SPORTBACK Workshop manual	AU900217 NZ:DRAFT	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-092-15800-01)	Attached sheet 5 (1/3)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-56100-01)	Attached sheet 5 (2/3)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-19100-01)	Attached sheet 5 (3/3)

<EU/RUSSIA>
LANCER/LANCER SPORTBACK (GS41/GS44S)

Attached sheet 1(2/2)

Applicable manual	Pub. No.	Applicable title (INFO-ID)	Content
2008 LANCER Workshop manual	CG1E08E2-CD(ENG) CG1F08E2-CD(FRE) CG1G08E2-CD(GER) CG1S08E2-CD(SPA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-40100-01)	Attached sheet 4 (1/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2009 LANCER Workshop manual	CG1E09E1-CD(ENG) CG1F09E1-CD(FRE) CG1G09E1-CD(GER) CG1S09E1-CD(SPA) CG1I09E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-68300-01)	Attached sheet 4 (2/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2009 LANCER SPORTBACK Workshop manual	CG4E09E1-CD(ENG) CG4F09E1-CD(FRE) CG4G09E1-CD(GER) CG4S09E1-CD(SPA) CG4I09E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-68300-01)	Attached sheet 4 (2/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2010 LANCER Workshop manual	CG1E10E1-CD(ENG) CG1F10E1-CD(FRE) CG1G10E1-CD(GER) CG1S10E1-CD(SPA) CG1I10E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-94000-01)	Attached sheet 4 (3/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2010 LANCER SPORTBACK Workshop manual	CG4E10E1-CD(ENG) CG4F10E1-CD(FRE) CG4G10E1-CD(GER) CG4S10E1-CD(SPA) CG4I10E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89800-01)	Attached sheet 4 (4/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2011 LANCER/LANCER SPORTBACK Workshop manual	CG1E11E1-CD(ENG) CG1F11E1-CD(FRE) CG1G11E1-CD(GER) CG1S11E1-CD(SPA) CG1I11E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89800-01)	Attached sheet 4 (4/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2012 LANCER/LANCER SPORTBACK Workshop manual	CGSE12E1-CD(ENG) CGSF12E1-CD(FRE) CGSG12E1-CD(GER) CGSS12E1-CD(SPA) CGSI12E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89800-01)	Attached sheet 4 (4/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)
2013 LANCER/LANCER SPORTBACK Workshop manual	CCAE13E1-CD(ENG) CCAF13E1-CD(FRE) CCAG13E1-CD(GER) CCAS13E1-CD(SPA) CCAI13E1-CD(ITA) RUSSIA:N/A	POWER STEERING GEAR BOX AND LINKAGE REMOVAL AND INSTALLATION (M372-01-091-89800-01)	Attached sheet 4 (4/6)
		POWER STEERING GEAR BOX AND LINKAGE DISASSEMBLY AND ASSEMBLY (M372-01-111-04403-01)	Attached sheet 4 (5/6)
		ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU) REMOVAL AND INSTALLATION (M372-00-630-13500-01)	Attached sheet 4 (6/6)

<Added>

Attached sheet 3(1/3)

• The steering gear and linkage assembly should be replaced together with the electric power steering-ECU.

POWER STEERING GEAR BOX AND LINKAGE

REMOVAL AND INSTALLATION

M1372010901898

⚠ CAUTION

- **Before removing the steering wheel, driver's air bag module assembly and Knee Air Bag Module refer to GROUP 52B, Service Precautions , Driver's Air Bag Module and Clock Spring and Knee Air Bag Module(s) <Vehicles with knee air bag>.**
- **The bolts and nuts marked with * are coated with the friction coefficient stabilizer. When removing these parts, make sure that they are free of damage, remove any dust and dirt on the bearing surfaces and the threads, and tighten to the specified torque.**
- **After the installation, perform a calibration for the ASC-ECU to learn the steering wheel sensor neutral point (Refer to GROUP 35C – On-vehicle Service – Steering Wheel Sensor Calibration) <Vehicles with ASC>.**

Pre-removal Operation	Post-installation Operation
• Steering Wheel Assembly Removal (Refer to P.37B-93). • Front Scuff Plate and Cowl Side Trim Removal (Refer to GROUP 52A – Interior Trim). • Heated Seat Switch, Selector or Gearshift Lever Knob, Floor Console Panel Assembly Removal (Refer to GROUP 52A – Floor Console Assembly). • Inside Transmission Antenna Assembly (Front) Removal (Refer to GROUP 42B – Outside Transmission Antenna Assembly, Inside Transmission Antenna Assembly, Receiver Antenna Module) <Vehicles with KOS>. • Floor Console and Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console). • Instrument Panel Cover Lower and Instrument Panel Lower Removal (Refer to GROUP 52A – Instrument Lower Panel). • Steering Column Cover Removal (Refer to P.37B-94). • Engine Room Under Cover and Engine Room Side Cover Removal (Refer to GROUP 51 – Under Cover). • Lower Arm Assembly Removal (Refer to GROUP 33 – Lower Arm). • Stabilizer Link Removal (Refer to GROUP 33 – Stabilizer Bar). • Centermember and Front Roll Stopper Assembly Removal (Refer to GROUP 32 – Engine Roll Stopper and Centermember).	• Centermember and Front Roll Stopper Assembly Installation (Refer to GROUP 32 – Engine Roll Stopper and Centermember). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer Bar). • Lower Arm Assembly Installation (Refer to GROUP 33 – Lower Arm). • Engine Room Under Cover and Engine Room Side Cover Installation (Refer to GROUP 51 – Under Cover). • Steering Column Cover Installation (Refer to P.37B-94). • Instrument Panel Cover Lower and Instrument Panel Lower Installation (Refer to GROUP 52A – Instrument Lower Panel). • Floor Console and Floor Console Side Cover Installation (Refer to GROUP 52A – Floor Console). • Inside Transmission Antenna Assembly (Front) Installation (Refer to GROUP 42B – Outside Transmission Antenna Assembly, Inside Transmission Antenna Assembly, Receiver Antenna Module). • Heated Seat Switch, Selector or Gearshift Lever Knob, Floor Console Panel Assembly Installation (Refer to GROUP 52A – Floor Console Assembly). • Front Scuff Plate and Cowl Side Trim Installation (Refer to GROUP 52A – Interior Trim). • Steering Wheel Assembly Installation (Refer to P.37B-93). • Front Wheel Alignment Check and Adjustment (Refer to GROUP 33 – On-vehicle Service/Front Wheel Alignment Check and Adjustment).

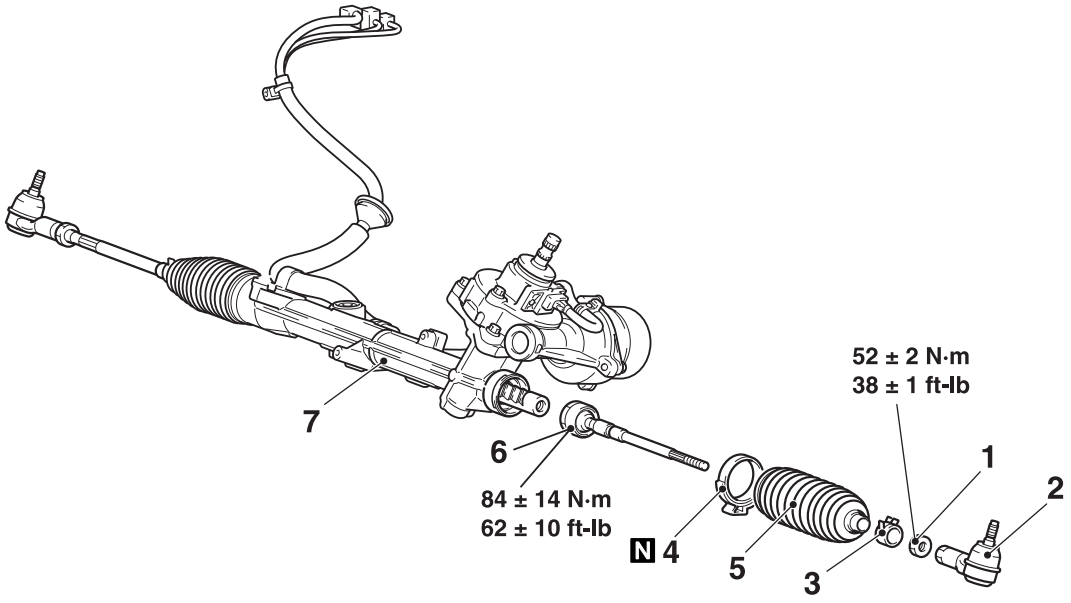
Attached sheet 3(2/3)

CAUTION
The gear housing should be replaced together with the electric power steering-ECU.

<Added>

DISASSEMBLY AND ASSEMBLY

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		Disassembly steps
>>C<<	1.	Jam nut
>>C<<	2.	Tie-rod end
	3.	Clip
>>B<<	4.	Band
<<A>>	5.	Bellows
>>A<<	6.	Tie-rod
	7.	Gear housing

Required Special Tool:

- MB992209 or MB992908: Boot band clipping tool
- MB992249: Variable spanner

CAUTION
The electric power steering-ECU should be replaced together with the gear housing.

Attached sheet 3(3/3)

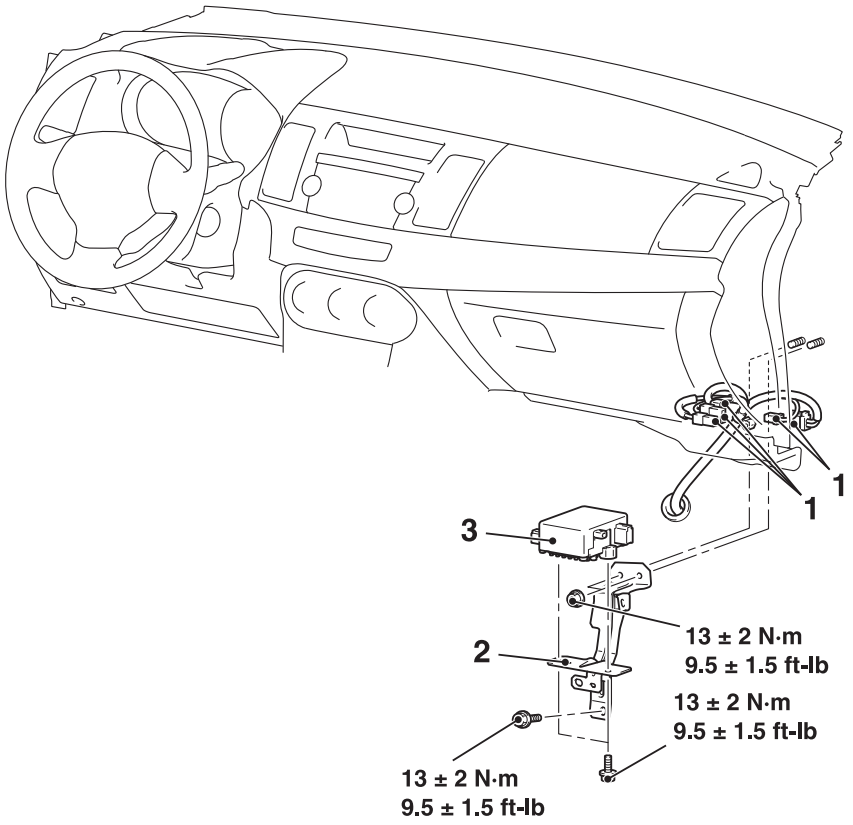
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ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU)

REMOVAL AND INSTALLATION

M1372006300135

Pre-removal Operation	Post-installation Operation
• Bottom Cover Removal (Refer to GROUP 52A – Glove Box). • Cowl Side Trim Removal (Refer to GROUP 52A – Trim).	• Cowl Side Trim Installation (Refer to GROUP 52A – Trim). • Bottom Cover Installation (Refer to GROUP 52A – Glove Box).



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Removal steps

>>A<< 1. Electric power steering-ECU connector

Removal steps (Continued)

2. Electric power steering-ECU bracket
3. Electric power steering-ECU

<Added>

Attached sheet 4(1/6)

• The steering gear and linkage assembly should be replaced together with the electric power steering-ECU.

POWER STEERING GEAR BOX AND LINKAGE

REMOVAL AND INSTALLATION

M1372010901401

⚠ CAUTION

- **Before removing the steering wheel, driver's air bag module assembly and Knee Air Bag Module refer to GROUP 52B, Service Precautions , Driver's Air Bag Module(s) and Clock Spring <Vehicles with SRS air bag> and Knee Air Bag Module . <Vehicles with knee air bag>**
- **The parts indicated by * are the bolts with friction coefficient stabilizer. In removal, ensure there is no damage, clean dust and soiling from the bearing and thread surfaces, and tighten them to the specified torque.**

Pre-removal operation	Post-installation operation
• Driver's Air Bag Module and Steering Wheel Assembly Removal (Refer to P.37B-60). • Front Scuff Plate and Cowl Side Trim Removal (Refer to GROUP 52A – Interior Trim). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Removal (Refer to GROUP 52A – Floor Console). • Interior Transmitter Antenna Assembly (Front) Removal (Refer to GROUP 42B – Exterior Transmitter Antenna Assembly, Interior Transmitter Antenna Assembly, Receiver Antenna Module Removal). • Floor Console and Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console). • Instrument Panel Cover Lower and Instrument Panel Lower Removal (Refer to GROUP 52A – Instrument Lower Panel). • Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console). • Footrest Removal. • Steering Shaft Cover Removal (Refer to P.37B-63). • Engine Room Under Cover and Engine Room Side Cover Removal (Refer to GROUP 51 – Under Cover). • Lower Arm Removal (Refer to GROUP 33 – Lower Arm). • Stabilizer Link Removal (Refer to GROUP 33 – Stabilizer). • Centremember and Front Roll Stopper Assembly Removal (Refer to GROUP 32 – Engine Roll Stopper and Centremember).	• Centremember and Front Roll Stopper Assembly Installation (Refer to GROUP 32 – Engine Roll Stopper and Centremember). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer). • Lower Arm Installation (Refer to GROUP 33 – Lower Arm). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer). • Lower Arm Assembly Installation (Refer to GROUP 33 – Lower Arm). • Engine Room Under Cover and Engine Room Side Cover Installation (Refer to GROUP 51 – Under Cover). • Steering Shaft Cover Installation (Refer to P.37B-63). • Footrest Installation. • Floor Console Side Cover Installation (Refer to GROUP 52A – Floor Console). • Instrument Panel Cover Lower and Instrument Panel Lower Installation (Refer to GROUP 52A – Instrument Lower Panel). • Floor Console Installation (Refer to GROUP 52A – Floor Console). • Interior Transmitter Antenna Assembly (Front) Removal (Refer to GROUP 42B – Exterior Transmitter Antenna Assembly, Interior Transmitter Antenna Assembly, Receiver Antenna Module Installation). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Installation (Refer to GROUP 52A – Floor Console). • Front Scuff Plate and Cowl Side Trim Installation (Refer to GROUP 52A – Interior Trim). • Steering Wheel Assembly and Driver's Air Bag Module Installation (Refer to P.37B-60). • Wheel Alignment Check and Adjustment (Refer to GROUP 33 – On-vehicle Service – Front Wheel Alignment Check and Adjustment).

• The steering gear and linkage assembly should be replaced together with the electric power steering-ECU.

Attached sheet 4(2/6)

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POWER STEERING GEAR BOX AND LINKAGE

REMOVAL AND INSTALLATION

M1372010901683

⚠ CAUTION

- **Before removing the steering wheel, driver's air bag module assembly and Knee Air Bag Module refer to GROUP 52B, Service Precautions , Driver's Air Bag Module(s) and Clock Spring <Vehicles with SRS air bag> and Knee Air Bag Module . <Vehicles with knee air bag>**
- **The parts indicated by * are the bolts with friction coefficient stabilizer. In removal, ensure there is no damage, clean dust and soiling from the bearing and thread surfaces, and tighten them to the specified torque.**

Pre-removal operation	Post-installation operation
• Steering Wheel Assembly and Driver's Air Bag Module Removal (Refer to P.37B-57). • Front Scuff Plate and Cowl Side Trim Removal (Refer to GROUP 52A – Interior Trim Removal and Installation). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Removal (Refer to GROUP 52A – Floor Console Assembly Removal and Installation). • Inside Transmission Antenna Assembly (Front) Removal (Refer to GROUP 42B – Exterior Transmitter Antenna Assembly, Interior Transmitter Antenna Assembly, Receiver Antenna Module Removal and Installation). • Floor Console and Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console Removal and Installation). • Instrument Panel Cover Lower and Instrument Panel Lower Removal (Refer to GROUP 52A – Instrument Lower Panel Removal and Installation). • Steering Shaft Cover Removal (Refer to P.37B-60). • Engine Room Under Cover and Engine Room Side Cover Removal (Refer to GROUP 51 – Under Cover Removal and Installation). • Lower Arm Removal (Refer to GROUP 33 – Lower Arm Removal and Installation). • Stabilizer Link Removal (Refer to GROUP 33 – Stabilizer Bar Removal and Installation). • Centremember and Front Roll Stopper Assembly Removal (Refer to GROUP 32 – Engine Roll Stopper and Centremember Removal and Installation).	• Centremember and Front Roll Stopper Assembly Installation (Refer to GROUP 32 – Engine Roll Stopper and Centremember Removal and Installation). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer Bar Removal and Installation). • Lower Arm Installation (Refer to GROUP 33 – Lower Arm Removal and Installation). • Engine Room Under Cover and Engine Room Side Cover Installation (Refer to GROUP 51 – Under Cover Removal and Installation). • Steering Shaft Cover Installation (Refer to P.37B-60). • Instrument Panel Cover Lower and Instrument Panel Lower Installation (Refer to GROUP 52A – Instrument Lower Panel Removal and Installation). • Floor Console and Floor Console Side Cover Installation (Refer to GROUP 52A – Floor Console Removal and Installation). • Inside Transmission Antenna Assembly (Front) Installation (Refer to GROUP 42B – Exterior Transmitter Antenna Assembly, Interior Transmitter Antenna Assembly, Receiver Antenna Module Removal and Installation). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Installation (Refer to GROUP 52A – Floor Console Assembly Removal and Installation). • Front Scuff Plate and Cowl Side Trim Installation (Refer to GROUP 52A – Interior Trim Removal and Installation). • Steering Wheel Assembly and Driver's Air Bag Module Installation (Refer to P.37B-57). • Wheel Alignment Check and Adjustment (Refer to GROUP 33 – On-vehicle Service – Front Wheel Alignment Check and Adjustment).

• The steering gear and linkage assembly should be replaced together with the electric power steering-ECU.

POWER STEERING GEAR BOX AND LINKAGE

REMOVAL AND INSTALLATION

M1372010901940

⚠ CAUTION

- **Before removing the steering wheel, driver's air bag module assembly and Knee Air Bag Module refer to GROUP 52B, Service Precautions , Driver's Air Bag Module(s) and Clock Spring and Knee Air Bag Module . <Vehicles with knee air bag>**
- **The parts indicated by * are the bolts with friction coefficient stabilizer. In removal, ensure there is no damage, clean dust and soiling from the bearing and thread surfaces, and tighten them to the specified torque.**
- **After the installation, perform a calibration for the ASC-ECU to learn the steering wheel sensor neutral point (Refer to GROUP 35C – On-vehicle Service – Steering Wheel Sensor Calibration).**

Pre-removal Operation	Post-installation Operation
• Steering Wheel Assembly and Driver's Air Bag Module Removal (Refer to P.37B-59). • Front Scuff Plate and Cowl Side Trim Removal (Refer to GROUP 52A – Interior Trim Removal and Installation). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Removal (Refer to GROUP 52A – Floor Console Assembly Removal and Installation). • Inside Transmission Antenna Assembly (Front) Removal (Refer to GROUP 42B – Exterior Transmitter Antenna Assembly, Interior Transmitter Antenna Assembly, Receiver Antenna Module Removal and Installation). • Floor Console and Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console Removal and Installation). • Instrument Panel Cover Lower and Instrument Panel Lower Removal (Refer to GROUP 52A – Instrument Lower Panel Removal and Installation). • Steering Shaft Cover Removal (Refer to P.37B-62). • Engine Room Under Cover and Engine Room Side Cover Removal (Refer to GROUP 51 – Under Cover Removal and Installation). • Lower Arm Removal (Refer to GROUP 33 – Lower Arm Removal and Installation). • Stabilizer Link Removal (Refer to GROUP 33 – Stabilizer Bar Removal and Installation). • Centremember and Front Roll Stopper Assembly Removal (Refer to GROUP 32 – Engine Roll Stopper and Centremember Removal and Installation).	• Centremember and Front Roll Stopper Assembly Installation (Refer to GROUP 32 – Engine Roll Stopper and Centremember Removal and Installation). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer Bar Removal and Installation). • Lower Arm Installation (Refer to GROUP 33 – Lower Arm Removal and Installation). • Engine Room Under Cover and Engine Room Side Cover Installation (Refer to GROUP 51 – Under Cover Removal and Installation). • Steering Shaft Cover Installation (Refer to P.37B-62). • Instrument Panel Cover Lower and Instrument Panel Lower Installation (Refer to GROUP 52A – Instrument Lower Panel Removal and Installation). • Floor Console and Floor Console Side Cover Installation (Refer to GROUP 52A – Floor Console Removal and Installation). • Inside Transmission Antenna Assembly (Front) Installation (Refer to GROUP 42B – Exterior Transmitter Antenna Assembly, Interior Transmitter Antenna Assembly, Receiver Antenna Module Removal and Installation). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Installation (Refer to GROUP 52A – Floor Console Assembly Removal and Installation). • Front Scuff Plate and Cowl Side Trim Installation (Refer to GROUP 52A – Interior Trim Removal and Installation). • Steering Wheel Assembly and Driver's Air Bag Module Installation (Refer to P.37B-59). • Wheel Alignment Check and Adjustment (Refer to GROUP 33 – On-vehicle Service – Front Wheel Alignment Check and Adjustment).

<Added>

Attached sheet 4(4/6)

• The steering gear and linkage assembly should be replaced together with the electric power steering-ECU.

POWER STEERING GEAR BOX AND LINKAGE

REMOVAL AND INSTALLATION

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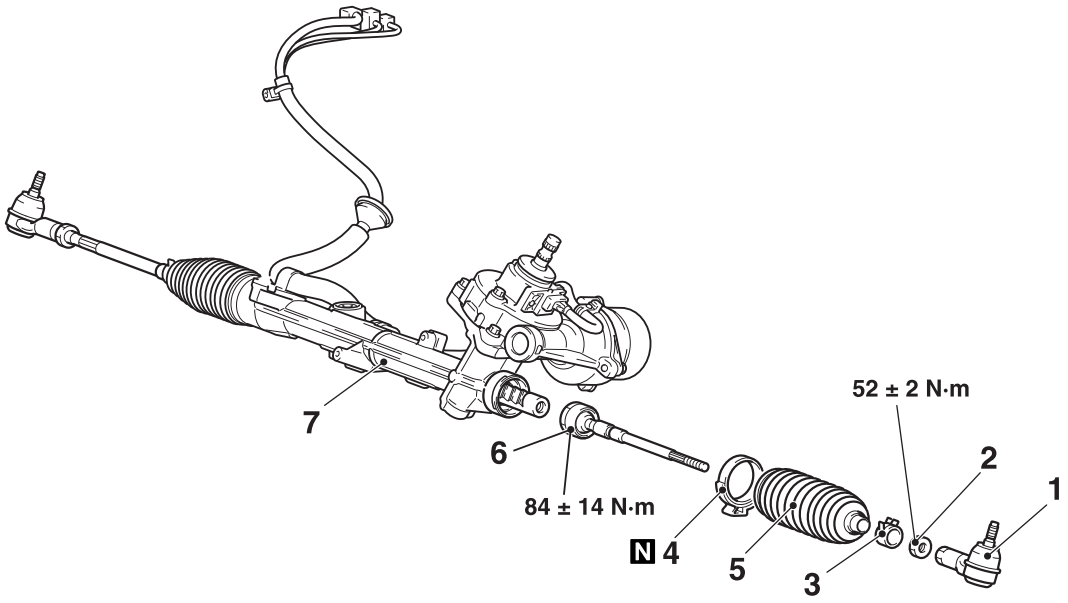
⚠ CAUTION

- **Before removing the steering wheel, driver's air bag module assembly and Knee Air Bag Module refer to GROUP 52B, Service Precautions , Driver's Air Bag Module and Clock Spring and Knee Air Bag Module(s) <Vehicles with knee air bag>.**
- **The parts indicated by * are the bolts with friction coefficient stabilizer. In removal, ensure there is no damage, clean dust and soiling from the bearing and thread surfaces, and tighten them to the specified torque.**
- **After the installation, perform a calibration for the ASC-ECU to learn the steering wheel sensor neutral point (Refer to GROUP 35C – On-vehicle Service – Steering Wheel Sensor Calibration) <Vehicles with ASC>.**

Pre-removal Operation	Post-installation Operation
• Steering Wheel Assembly Removal (Refer to P.37B-61). • Front Scuff Plate and Cowl Side Trim Removal (Refer to GROUP 52A – Interior Trim). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Removal (Refer to GROUP 52A – Floor Console Assembly). • Inside Transmission Antenna Assembly (Front) Removal (Refer to GROUP 42B – Outside Transmission Antenna Assembly, Inside Transmission Antenna Assembly, Receiver Antenna Module) <Vehicles with KOS>. • Floor Console and Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console). • Instrument Panel Cover Lower and Instrument Panel Lower Removal (Refer to GROUP 52A – Instrument Lower Panel). • Steering Column Cover Removal (Refer to P.37B-62). • Engine Room Under Cover and Engine Room Side Cover Removal (Refer to GROUP 51 – Under Cover). • Lower Arm Assembly Removal (Refer to GROUP 33 – Lower Arm). • Stabilizer Link Removal (Refer to GROUP 33 – Stabilizer Bar). • Centremember Assembly Removal (Refer to GROUP 32 – Engine Roll Stopper and Centremember).	• Centremember Assembly Installation (Refer to GROUP 32 – Engine Roll Stopper and Centremember). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer Bar). • Lower Arm Assembly Installation (Refer to GROUP 33 – Lower Arm). • Engine Room Under Cover and Engine Room Side Cover Installation (Refer to GROUP 51 – Under Cover). • Steering Column Cover Installation (Refer to P.37B-62). • Instrument Panel Cover Lower and Instrument Panel Lower Installation (Refer to GROUP 52A – Instrument Lower Panel). • Floor Console and Floor Console Side Cover Installation (Refer to GROUP 52A – Floor Console). • Inside Transmission Antenna Assembly (Front) Installation (Refer to GROUP 42B – Outside Transmission Antenna Assembly, Inside Transmission Antenna Assembly, Receiver Antenna Module). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Installation (Refer to GROUP 52A – Floor Console Assembly). • Front Scuff Plate and Cowl Side Trim Installation (Refer to GROUP 52A – Interior Trim). • Steering Wheel Assembly Installation (Refer to P.37B-61). • Front Wheel Alignment Check and Adjustment (Refer to GROUP 33 – On-vehicle Service/Front Wheel Alignment Check and Adjustment).

DISASSEMBLY AND REASSEMBLY

M1372011101044



<Added>

CAUTION
The gear housing should be replaced together with the electric power steering-ECU.

AC802304 AB

		Disassembly steps
>>C<<	1.	Tie-rod end
>>C<<	2.	Lock nut
	3.	Clip
>>B<<	4.	Band
<<A>>	5.	Bellows
>>A<<	6.	Tie-rod
	7.	Gear housing

CAUTION
The electric power steering-ECU should be replaced together with the gear housing.

Attached sheet 4(6/6)

<Added>

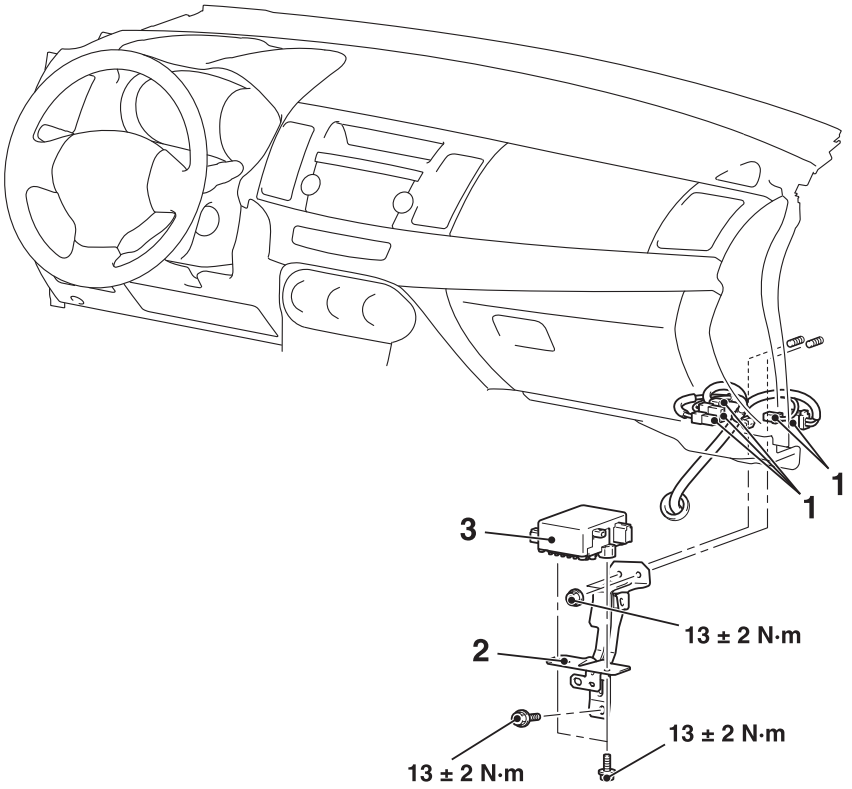
ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU)

REMOVAL AND INSTALLATION

M1372006300135

Pre-removal Operation	Post-installation Operation
• Bottom Cover Removal (Refer to GROUP 52A – Grove Box). • Cowl Side Trim Removal (Refer to GROUP 52A – Trim).	• Cowl Side Trim Installation (Refer to GROUP 52A – Trim). • Bottom Cover Installation (Refer to GROUP 52A – Grove Box).

<LHD>



AC612831AC

• The steering gear and linkage assembly should be replaced together with the electric power steering-ECU.

POWER STEERING GEAR BOX AND LINKAGE

REMOVAL AND INSTALLATION

M1372010902158

⚠ CAUTION

- **Before removing the steering wheel, driver's air bag module assembly and Knee Air Bag Module refer to GROUP 52B, Service Precautions , Driver's Air Bag Module and Clock Spring and Knee Air Bag Module(s) <Vehicles with knee air bag>.**
- **The parts indicated by * are the bolts with friction coefficient stabilizer. In removal, ensure there is no damage, clean dust and soiling from the bearing and thread surfaces, and tighten them to the specified torque.**
- **After the installation, perform a calibration for the ASC-ECU to learn the steering wheel sensor neutral point (Refer to GROUP 35C – On-vehicle Service – Steering Wheel Sensor Calibration) <Vehicles with ASC>.**

Pre-removal Operation	Post-installation Operation
• Steering Wheel Assembly Removal (Refer to). • Front Scuff Plate and Cowl Side Trim Removal (Refer to GROUP 52A – Interior Trim). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Removal (Refer to GROUP 52A – Floor Console Assembly). • Inside Transmission Antenna Assembly (Front) Removal (Refer to GROUP 42B – Outside Transmission Antenna Assembly, Inside Transmission Antenna Assembly, Receiver Antenna Module) <Vehicles with KOS>. • Floor Console and Floor Console Side Cover Removal (Refer to GROUP 52A – Floor Console). • Instrument Panel Cover Lower and Instrument Panel Lower Removal (Refer to GROUP 52A – Instrument Lower Panel). • Steering Column Cover Removal (Refer to). • Engine Room Under Cover and Engine Room Side Cover Removal (Refer to GROUP 51 – Under Cover). • Lower Arm Assembly Removal (Refer to GROUP 33 – Lower Arm). • Stabilizer Link Removal (Refer to GROUP 33 – Stabilizer Bar). • Centremember Assembly Removal (Refer to GROUP 32 – Engine Roll Stopper and Centremember).	• Centremember Assembly Installation (Refer to GROUP 32 – Engine Roll Stopper and Centremember). • Stabilizer Link Installation (Refer to GROUP 33 – Stabilizer Bar). • Lower Arm Assembly Installation (Refer to GROUP 33 – Lower Arm). • Engine Room Under Cover and Engine Room Side Cover Installation (Refer to GROUP 51 – Under Cover). • Steering Column Cover Installation (Refer to). • Instrument Panel Cover Lower and Instrument Panel Lower Installation (Refer to GROUP 52A – Instrument Lower Panel). • Floor Console and Floor Console Side Cover Installation (Refer to GROUP 52A – Floor Console). • Inside Transmission Antenna Assembly (Front) Installation (Refer to GROUP 42B – Outside Transmission Antenna Assembly, Inside Transmission Antenna Assembly, Receiver Antenna Module). • Heated Seat Switch, Shift Knob, Floor Console Panel Assembly Installation (Refer to GROUP 52A – Floor Console Assembly). • Front Scuff Plate and Cowl Side Trim Installation (Refer to GROUP 52A – Interior Trim). • Steering Wheel Assembly Installation (Refer to). • Front Wheel Alignment Check and Adjustment (Refer to GROUP 33 – On-vehicle Service/Front Wheel Alignment Check and Adjustment).

CAUTION
The gear housing should be replaced together with the electric power steering-ECU.

Attached sheet 5(2/3)

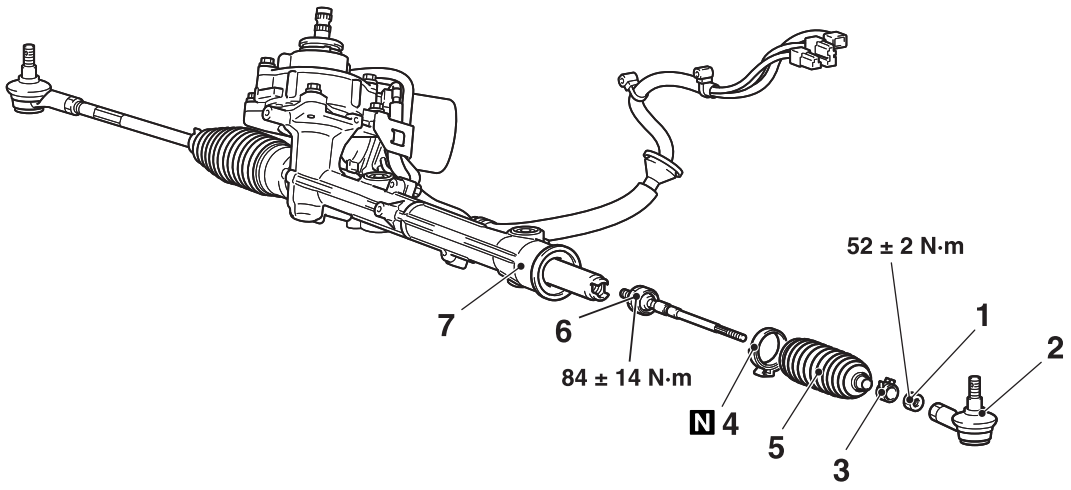
<Added>

NOTE: When measuring, remove the bellows from the rack housing. Measure the pinion torque through the whole stroke of the rack.

2. If not within the specification, replace the steering gear and linkage assembly (Refer to).

DISASSEMBLY AND REASSEMBLY

M1372011101361



ACB01436AB

		Disassembly steps
>>C<<	1.	Lock nut
>>C<<	2.	Tie-rod end
	3.	Clip
>>B<<	4.	Band
<<A>>	5.	Bellows
>>A<<	6.	Tie-rod
	7.	Gear housing

CAUTION
The electric power steering-ECU should be replaced together with the gear housing.

Attached sheet 5(3/3)

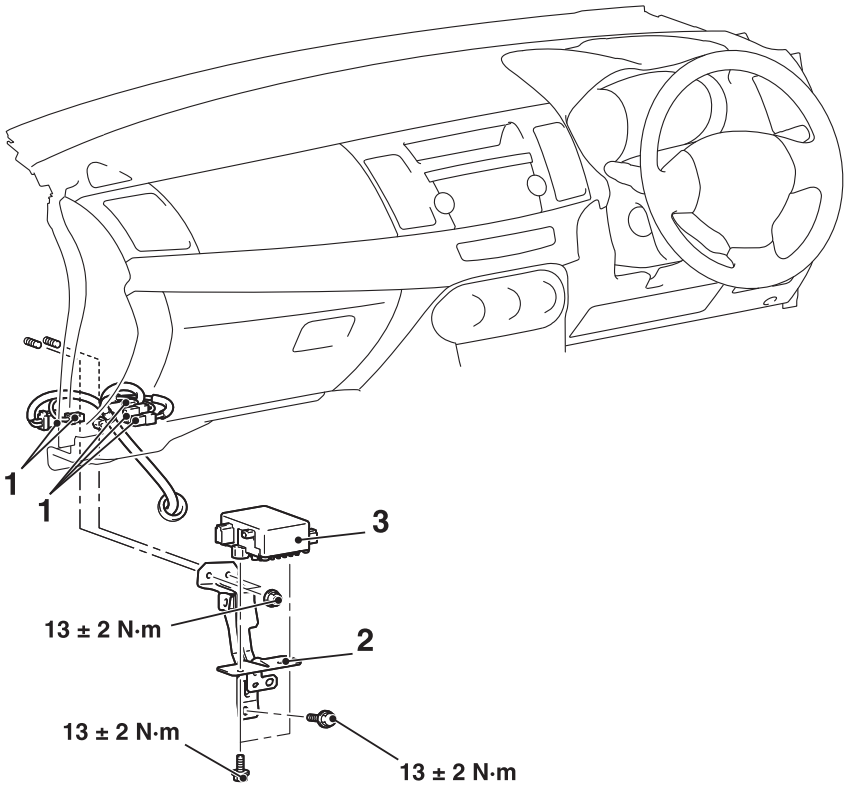
<Added>

ELECTRIC POWER STEERING CONTROL UNIT (EPS-ECU)

REMOVAL AND INSTALLATION

M1372006300191

Pre-removal Operation	Post-installation Operation
• Bottom Cover Removal (Refer to GROUP 52A – Grove Box). • Cowl Side Trim Removal (Refer to GROUP 52A – Trim).	• Cowl Side Trim Installation (Refer to GROUP 52A – Trim). • Bottom Cover Installation (Refer to GROUP 52A – Grove Box).



AC710020 AC

Removal steps

1. Electric power steering-ECU connector

Removal steps (Continued)

2. Electric power steering-ECU bracket
3. Electric power steering-ECU