SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-13EXML35-502	DATE : 2013-10-30
SUBJECT : BRAKE PEDAL INSPECTION		<Affected Destination/Model> (As shown below) <M/Y> 13-14
GROUP : SERVICE BRAKE(Gr:35)		OUTLANDER/OUTLANDER PH-EV(GF0W)

1. Description :

Please refer to the attached document for the correction of the error in writing existing in the applicable service manual.

2. Affected service manuals :

Destination	Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
EU/ RUSSIA	2014 OUTLANDER/OUTLANDER PHEV Workshop Manual	CGFE14E1-CD(ENG) CGFF14E1-CD(FRE) CGFG14E1-CD(GER) CGFS14E1-CD(SPA) CGFI14E1-CD(ITA)	SERVICE SPECIFICATIONS (M351-00-032-53601-01)	Attached sheet 3
MMAL/ NZ/ CHINA	2013 OUTLANDER Workshop Manual	AU900304 (AUSTRALIA), DRAFT (NEW ZEALAND, CHINA)	SERVICE SPECIFICATIONS (M351-00-032-61100-01)	Attached sheet 4
			BRAKE PEDAL INSPECTION (M351-00-351-06400-01)	Attached sheet 5
EXP/ GCC/ BRAZIL	2014 OUTLANDER Workshop Manual	PWRE1303R (ENG) PWRS1304R (SPA)	SERVICE SPECIFICATIONS (M351-00-032-78500-01)	Attached sheet 6
MMNA	2014 OUTLANDER Service Manual	MSCD-007B-2014	SERVICE SPECIFICATIONS (M351-00-032-76300-01)	Attached sheet 7
			BRAKE PEDAL INSPECTION (M351-00-351-03101-01)	Attached sheet 8

3. About the details :

Please refer to the attached document (Attached sheet 3-8)
(The applicable workshop/service manual has the error in writing about the clearance between the brake pedal and the floor panel at the time of depressing the brake pedal)

Attached sheet 3

SERVICE SPECIFICATIONS

Item			Standard value	Limit
Brake pedal height mm			221.8 – 227.8	–
Dimension from the brake booster stud bolt end to the clevis hole centre mm			75.8 – 80.2	–
Brake pedal free play mm <Incorrect>			3 – 8	–
~~Pedal-to-floor clearance when brake pedal is depressed mm [Pedal depression force: approx. 500 N]~~		Russia	~~80 or more~~	–
		Europe	~~65 or more~~	–
Brake pedal distortion mm	Distance from the pedal pad surface to the level surface	LHD	240 – 246	–
		RHD	246 – 252	–
Fluid pressure generated by brake booster non-servo effect test kPa	Pedal depression force: 100 N	Russia	0 – 600	–
		Europe	0 – 520	–
	Pedal depression force: 300 N	Russia	1,030 – 2,220	–
		Europe	890 – 1,910	–
Fluid pressure generated by brake booster servo effect test kPa	Pedal depression force: 100 N	Russia	6,570 – 8,330	–
		Europe	5,520 – 7,720	–
	Pedal depression force: 300 N	Russia	10,370 – 11,560	
		Europe	8,950 – 9,970	–
Front disc brake	Brake pad thickness mm		10.0	2.0
	Brake disc thickness mm	Russia	26.0	24.4
		Europe	24.0	22.4
	Brake disc run-out mm		–	0.06
	Brake drag force N		68 or less	–
Rear disc brake	Brake pad thickness mm		9.0	1.5
	Brake disc thickness mm		10.0	8.4
	Brake disc run-out mm		–	0.08
	Brake drag force N		68 or less	–

<Correct>

Pedal-to-floor clearance when brake pedal is depressed mm [Pedal depression force: approx. 500 N]	65 or more	-

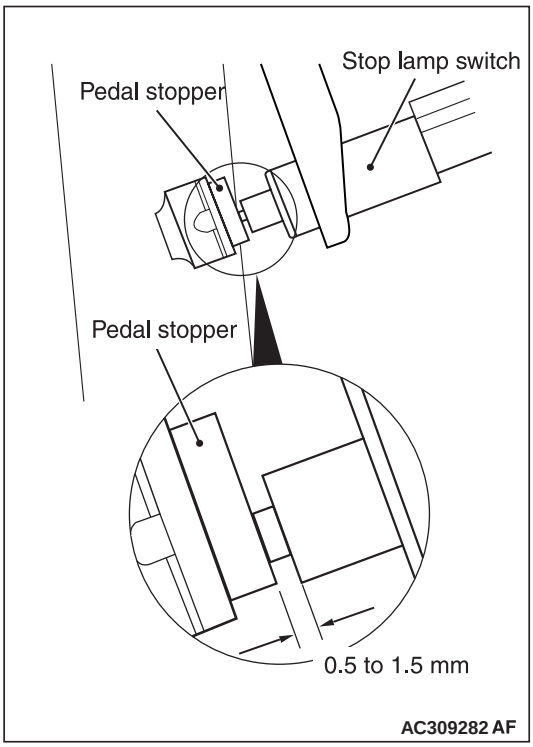
Attached sheet 4

SERVICE SPECIFICATIONS

Item			Standard value	Limit
Brake pedal height mm			221.8 – 227.8	–
Dimension from the brake booster stud bolt end to the clevis hole centre mm			75.8 – 80.2	–
Brake pedal free play mm			3 – 8	–
Pedal-to-floor clearance when brake pedal is depressed mm [Pedal depression force: approx. 500 N]			~~80 or more~~	–
Brake pedal distortion mm	Distance from the pedal pad surface to the level surface	Vehicles for China	240 – 246	–
		Vehicles for Australia and New Zealand	246 – 252	–
Fluid pressure generated by brake booster non-servo effect test kPa	Pedal depression force: 100 N		0 – 600	–
	Pedal depression force: 300 N		1,030 – 2,220	–
Fluid pressure generated by brake booster servo effect test kPa	Pedal depression force: 100 N		6,570 – 8,330	–
	Pedal depression force: 300 N		10,370 – 11,560	
Front disc brake	Brake pad thickness mm		10.0	2.0
	Brake disc thickness mm		26.0	24.4
	Brake disc run-out mm		–	0.06
	Brake drag force N		68 or less	–
Rear disc brake	Brake pad thickness mm		9.0	1.5
	Brake disc thickness mm		10.0	8.4
	Brake disc run-out mm		–	0.08
	Brake drag force N		68 or less	–

<Correct> 65 or more

<Incorrect>

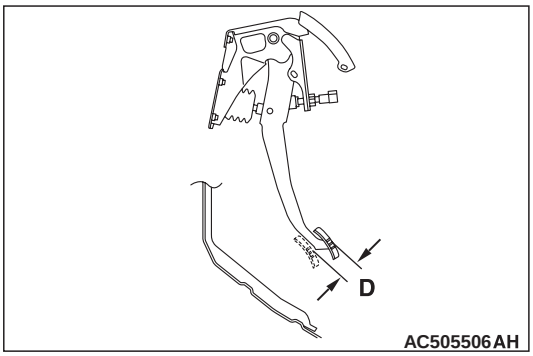


7. After checking the brake pedal height, install the stop lamp switch in the following procedure:
   (1) Screw in the stop lamp switch until its thread contacts the pedal stopper, then turn the switch approximately one eighth of a clockwise turn to fix it. While doing this, pull and hold the brake pedal by hand.
   (2) Check that the clearance between the stop lamp switch and the pedal stopper is as shown in the figure.

⚠ CAUTION

Make sure that the stop lamp is not illuminated when the brake pedal is not depressed.

   (3) Connect the stop lamp switch connector.
8. Recover the floor carpet under the brake pedal.

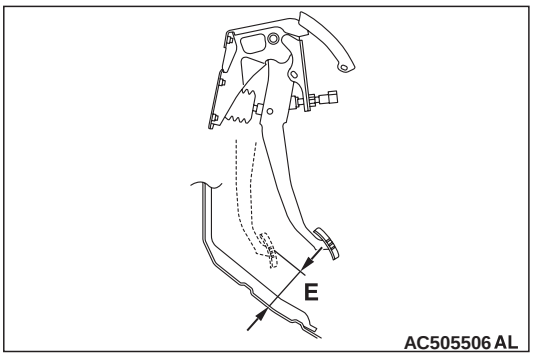


BRAKE PEDAL FREE PLAY CHECK AND ADJUSTMENT

1. With the engine stopped, depress the brake pedal 2 or 3 times to relief the vacuum in the brake booster. Then, press the brake pedal with your finger and check if the pedal stroke until the pedal becomes heavy (play) is within the standard value.

   Standard value (D): 3 – 8 mm
2. When the brake pedal free play is not within the standard value, check the brake pedal-to-clevis pin looseness, clevis pin-to-booster operating rod looseness, brake pedal height, and stop lamp switch position, and adjust or replace as necessary.

BRAKE PEDAL-TO-FLOOR PANEL CLEARANCE CHECK AND ADJUSTMENT



1. Turn up the floor carpet under the brake pedal.
2. Start the engine and depress the brake pedal with approximately 500 N, and measure clearance between the brake pedal and the floor panel.

   Standard value (E): ~~80 mm or more~~ <Incorrect>
3. When the clearance is not within the standard value, check for the air in the brake line and thickness of the disc brake pad, and correct or replace as necessary.
4. Recover the floor carpet under the brake pedal.

<Correct>
65 mm or more

Attached sheet 6

SERVICE SPECIFICATIONS

Item			Standard value	Limit
Brake pedal height mm			221.8 – 227.8	–
Dimension from the brake booster stud bolt end to the clevis hole centre mm			75.8 – 80.2	–
Brake pedal free play mm			3 – 8	–
Pedal-to-floor clearance when brake pedal is depressed mm [Pedal depression force: approx. 500 N]			80 or more	–
Brake pedal distortion mm	Distance from the pedal pad surface to the level surface	LHD	240 – 246	–
		RHD	246 – 252	–
Fluid pressure generated by brake booster non-servo effect test kPa	Pedal depression force: 100 N		0 – 600	–
	Pedal depression force: 300 N		1,030 – 2,220	–
Fluid pressure generated by brake booster servo effect test kPa	Pedal depression force: 100 N		6,570 – 8,330	–
	Pedal depression force: 300 N		10,370 – 11,560	
Front disc brake	Brake pad thickness mm		10.0	2.0
	Brake disc thickness mm		26.0	24.4
	Brake disc run-out mm		–	0.06
	Brake drag force N		68 or less	–
Rear disc brake	Brake pad thickness mm		9.0	1.5
	Brake disc thickness mm		10.0	8.4
	Brake disc run-out mm		–	0.08
	Brake drag force N		68 or less	–

<Correct> 65 or more

<Incorrect>

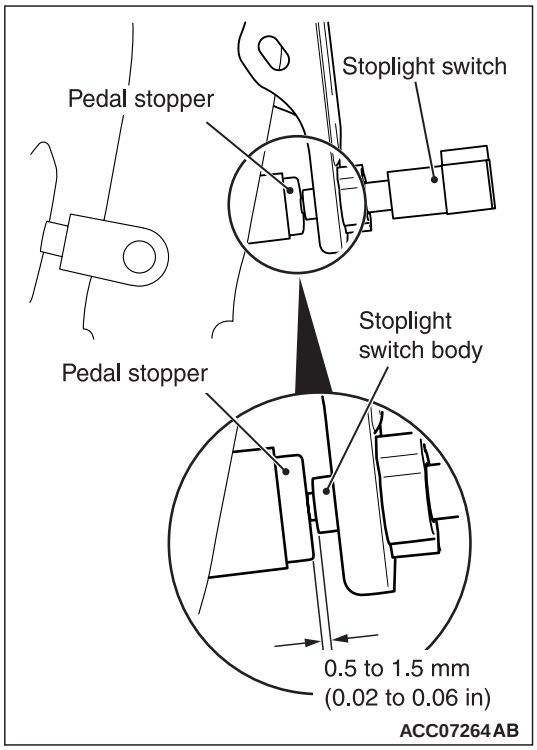
Attached sheet 7

SERVICE SPECIFICATIONS

Item		Standard value	Limit
Brake pedal height mm (in)		221.8 – 227.8 (8.7 – 9.0)	–
Dimension from the brake booster stud bolt end to the clevis hole center mm (in)		75.8 – 80.2 (2.98 – 3.16)	–
Brake pedal play mm (in) <Incorrect>		3 – 8 (0.12 – 0.31)	–
~~Pedal-to-floor clearance when brake pedal is depressed mm (in) [Pedal depression force: approx. 500 N]~~		~~85 (3.3) or more~~	–
Front disc brake	Pad thickness mm (in)	10.0 (0.39)	2.0 (0.08)
	Brake disc thickness mm (in)	26.0 (1.02)	24.4 (0.96)
	Brake disc runout mm (in)	–	0.06 (0.0024)
	Brake drag force N (lb)	68 (15.3) or less	–
Rear disc brake	Pad thickness mm (in)	9.0 (0.35)	1.5 (0.06)
	Brake disc thickness mm (in)	10.0 (0.39)	8.4 (0.33)
	Brake disc runout mm (in)	–	0.08 (0.0032)
	Brake drag force N (lb)	68 (15.3) or less	–
Brake pedal distortion mm (in)		240 – 246 (9.4 – 9.7)	–

<Correct>

Pedal-to-floor clearance when brake pedal is depressed mm (in) [Pedal depression force: approx. 500 N (112 pounds)]	65 (2.6) or more	—

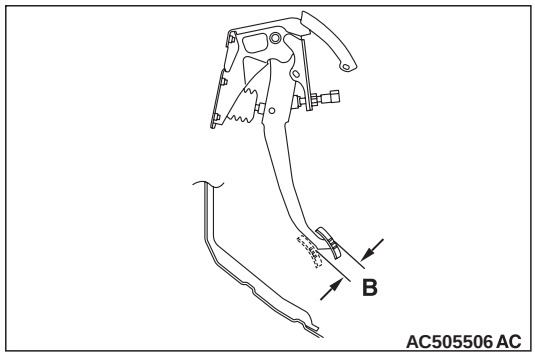


7. After checking the brake pedal height, install the stoplight switch in the following procedure:
   (1) Insert the stop light switch into the key hole on the plate.
   (2) While holding the brake pedal upwards, push in the stop light switch to the stop position.
   (3) Lock the stop light switch body by twisting it clockwise.
   (4) Check that the clearance between the stoplight switch and the pedal stopper is as shown in the figure.

⚠ CAUTION

Make sure that the stoplight is not illuminated when the brake pedal is not depressed.

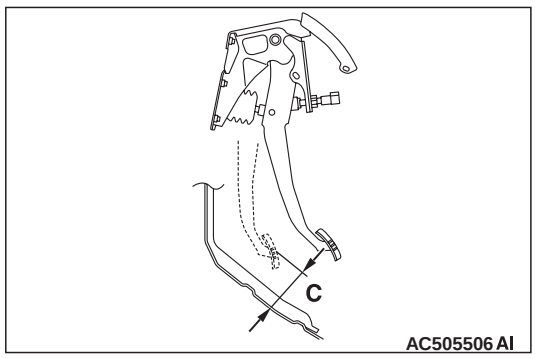
   (5) Connect the stoplight switch connector.
8. Check the key interlock mechanism and the shift lock mechanism (Refer to GROUP 23A – On-vehicle Service, Shift Lock Mechanism Check).
9. Recover the floor carpet under the brake pedal.



BRAKE PEDAL PLAY CHECK AND ADJUSTMENT

1. With the engine stopped, depress the brake pedal 2 or 3 times to relieve the vacuum in the brake booster. Then, press the brake pedal with your finger and check if the pedal stroke until the pedal becomes heavy (play) is within the standard value.

   Standard value (B): 3 – 8 mm (0.12 – 0.31 inch)
2. When the brake pedal play is not within the standard value, check the brake pedal-to-clevis pin looseness, clevis pin-to-booster operating rod looseness, brake pedal height, and stoplight switch position, and adjust or replace as necessary.



BRAKE PEDAL-TO-FLOOR PANEL CLEARANCE CHECK AND ADJUSTMENT

1. Turn up the floor carpet under the brake pedal.
2. Start the engine and depress the brake pedal with approximately 500 N (112 pounds), and measure clearance between the brake pedal and the floor panel. <Incorrect>

   Standard value (C): ~~85 mm (3.3 inch) or more~~
3. When the clearance is not within the standard value, check for the air in the brake line and thickness of the disc brake pad, and correct or replace as necessary.
4. Recover the floor carpet under the brake pedal.

<Correct>
65 mm (2.6 inch) or more