SERVICE BULLETIN

MITSUBISHI MOTORS

GLOBAL AFTER SALES OFFICE, MITSUBISHI MOTORS CORPORATION

PURPOSE : CORRECTION	ISSUE NO. : MSB-14EXL23-501	DATE : 2014-03-04
SUBJECT : ROAD TEST AND DATA LIST REFERENCE		<DESTINATION/MODEL> (AS SHOWN BELOW) <M/Y> 15
GROUP : CVT(Gr:23)		ASX(GA0W)

1. Description :

Please refer to the attached document for the information about the change of mention in the applicable service manual. (Correction of the data of the road test and the data list reference table in the troubleshooting of CVT “F1CJC/W1CJC”)

2. Affected service manuals :

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2015 ASX Workshop ManuaL for EUR/RUSSIA/ SOUTH AFRICA	CGA E15E1-CD (English) CGA F15E1-CD (French) CGA G15E1-CD (German) CGA S15E1-CD (Spanish) CGA I15E1-CD (Italian) RUSSIA:N/A	G-23A: ROAD TEST (M231-20-780-64900-01)	Refer to attached sheet 1(1/5-2/5)
		G-23A: DATA LIST REFERENCE TABLE (M231-20-810-81400-01)	Refer to attached sheet 1(3/5-5/5)

Applicable manual	Pub. No.	Applicable title (INFO ID)	Contents
2015 ASX Workshop Manual for G.EXP/GCC/ MMAL/NZ	PWPE1412R(ENG) PWPS1413R(SPA) MMAL:AU900418 NZ:DRAFT	G-23A: ROAD TEST (M231-20-780-64900-01)	Refer to attached sheet 1(1/5-2/5)
		G-23A: DATA LIST REFERENCE TABLE (M231-20-810-81400-01)	Refer to attached sheet 1(3/5-5/5)

3. About the details :

Please refer to the attached document (Attached sheets 1)

Steps	Conditions for test/ operation	Test/Operation	Judgement standard	Check item	Diagnosis code No.	Checking procedure in case of error
5	Engine warming up	Drive the vehicle for 15 minutes or more to raise the CVT fluid temperature to 45 to 100°C	Data list No.5 Voltage drops gradually	CVT fluid temperature sensor	P0712, P0713	Malfunction of CVT fluid temperature sensor
			Data list No.22 Fluid temperature rises gradually			
			The relevant diagnosis code is not detected.		P0711	
			The relevant diagnosis code is not detected.	G sensor	P1798	Malfunction of G sensor
			The relevant diagnosis code is not detected.	Brake fluid pressure sensor	P1799	Malfunction of brake fluid pressure signal
			The relevant diagnosis code is not detected.	ABS/ASC	P1773	Malfunction of ABS/ASC
6	Engine: Idling	Selector lever position: P Accelerator pedal: Fully closed	Data list No.11 ~~600 to 800 r/min~~ <Incorrect> 600 to 900 r/min <Correct>	Engine revolution	–	Malfunction of engine system
		Selector lever position: N	<Added> Data list No.42 0 to 0.8 A	Line pressure solenoid valve	P0962, P0963	Malfunction of line pressure solenoid valve
			<Added> Data list No.2 0.2 to 0.7 V	Primary pressure sensor	P0847, P0848	Malfunction of primary pressure sensor
			<Added> Data list No.3 1.4 to 1.9 V	Secondary pressure sensor	P0842, P0843	Malfunction of secondary pressure sensor
			<Added> Data list No.46 0 to 0.8 A	Secondary pressure solenoid valve	P0776, P0966, P0967	Malfunction of secondary pressure solenoid valve
			<Added> Data list No.21 1.0 to 1.2 MPa			
			<Added> Data list No.48 Approx. 1.0 A	Select pressure solenoid valve	P2720, P2721	Malfunction of select pressure solenoid valve

Steps	Conditions for test/ operation	Test/Operation	Judgement standard	Check item	Diagnosis code No.	Checking procedure in case of error
7	Selector lever position: D	Stop the vehicle (depress the brake pedal) <Added>	Data list No.13 Pulley gear ratio: less than 2.62	Gear ratio	P0730	Incorrect gear ratio
			Data list No.48 <Added> 0.6 to 0.9 A (The displayed value is different from the one for N range)	Select pressure solenoid valve	P2720, P2721	Malfunction of select pressure solenoid valve
	<Added> (at approx. 20 km/h)	During driving	Data list No.20 <Added> 0.2 to 0.6 MPa Data list No.21 <Added> 0.2 to 0.6 MPa	Primary pressure sensor and secondary pressure sensor	P084A	Abnormality in fluid pressure sensor function
			Data list No.44 <Added> 0.7 to 0.9 A Data list No.20 <Added> 0.2 to 0.6 MPa	Primary pressure solenoid valve	P0969, P0970, P0971	Malfunction of primary pressure solenoid valve
			Data list No.1 <Added> Speed detected: more than 0 r/min (nearly the same as the turbine speed)	Primary pulley speed sensor	P0715	Malfunction of primary pulley speed sensor
	<Added> Stop the vehicle, and then accelerate to 60 km/h on a level road		Data list No.40 <Added> 0.4 to 0.6 A Data list No.12 <Added> Amount of slippage: less than 15 r/min	Lock-up solenoid valve	P0741, P2763, P2764	Malfunction of lock-up solenoid valve
			Data list No.8 <Added> Speed detected: more than 0 r/min (nearly the same as the tachometer)	Turbine speed sensor	P2765	Malfunction of turbine speed sensor
			Data list No.10 <Added> Approx. 48 × Vehicle speed (speedometer display) Data list No.13 <Added> Pulley gear ratio: 0.3 to 2.7	Secondary speed sensor	P0720	Malfunction of secondary pulley speed sensor

DATA LIST REFERENCE TABLE

M1231208100814

Item No.	Display on M.U.T.-III	Check conditions <Added>		Normal conditions
1	Primary speed sensor (Input)	• Engine: Idling • Selector lever position: N • After warm-up		More than 0 r/min
2	Primary pressure sensor signal	• Engine: Idling • Selector lever position: N • After warm-up		0.2 − 0.7 V
3	Secondary pressure sensor signal	• Engine: Idling • Selector lever position: N • After warm-up		1.4 − 1.9 V
4	Vehicle speed sensor signal	~~Driving conditions~~ <Incorrect> ← While the vehicle is driven <Correct>		Nearly the same as the speedometer display
5	CVT oil TEMP. sensor signal	Ignition switch: ON	CVT fluid temperature: approx. 20°C	2.01 – 2.05 V
			CVT fluid temperature: approx. 50°C	1.45 – 1.50 V
			CVT fluid temperature: approx. 80°C	0.90 – 0.94 V
6	Power supply voltage	Ignition switch: ON		System voltage
7	Solenoid drive voltage	Ignition switch: ON <Added>		System voltage
8	Turbine revolution sensor signal	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D • After warm-up		1,200 − 1,700 r/min
9	Primary speed (Control)	While the vehicle is driven		Nearly the same as the tachometer display
10	Secondary speed (Control)	While the vehicle is driven		Approx. 48 × Vehicle speed (speedometer display)
11	Engine revolution	~~Driving conditions~~ <Incorrect> While the vehicle is driven <Correct> <Added>		Nearly the same as the tachometer display
12	Slip revolution	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D		−15 to +15 r/min
13	Real change gear ratio	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D		0.4 − 0.7
14	Acceleration/ deceleration value	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D		Approx. 0 G

Item No.	Display on M.U.T.-III	Check conditions	Normal conditions
15	Accelerator position	Accelerator pedal: Fully closed	0%
		Accelerator pedal: Depressed	Opening angle value increases in response to the depression amount of the accelerator pedal
		Accelerator pedal: Fully opened <Added>	100%
16	Real engine torque	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D	Approx. 40 Nm
17	Engine torque (After correction)	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D	Approx. 40 Nm
18	Input torque	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D	Approx. 40 Nm
19	Torque ratio	• Engine: Idling • Selector lever position: P	Approx. 1.0
		While the vehicle is driven	Value depends on driving condition
20	Primary pressure	• Engine: Idling • Selector lever position: N • After warm-up	0.45 − 0.55 MPa
21	Secondary pressure	• Engine: Idling • Selector lever position: N • After warm-up	1.0 − 1.2 MPa
22	CVT oil temperature	Driving after engine has warmed up <Added>	Gradually increases
23	Vehicle speed (Inference)	While the vehicle is driven	Nearly the same as the speedometer display
24	Real vehicle speed	While the vehicle is driven	Nearly the same as the speedometer display
25	Turbine revolution (Control)	While the vehicle is driven	Nearly the same as the tachometer display
26	Target input pulley revolution	While the vehicle is driven	Nearly the same as the tachometer display
27	Target change gear ratio	• Vehicle speed: 0 km/h • Engine: Idling • Selector lever position: N	2.631 − 0.378
28	Target LU differential pressure	• Engine: Idling • Selector lever position: N • After warm-up	Approx. 0 MPa
29	Target line pressure	• Engine: Idling • Selector lever position: N • After warm-up	1.0 − 1.2 MPa
30	Target primary pressure	• Engine: Idling • Selector lever position: N • After warm-up	0.45 − 0.55 MPa

Item No.	Display on M.U.T.-III	Check conditions <Added>		Normal conditions
31	Target secondary pressure	• Engine: Idling • Selector lever position: N • After warm-up		1.0 − 1.2 MPa
32	Target select pressure	• Engine: Idling • Selector lever position: N • After warm-up		Approx. 0 MPa
39	LU solenoid monitor current	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D		0.4 − 0.6 A
		• Vehicle speed: 0 km/h • Engine: Idling • Selector lever position: N		Approx. 0 A
40	LU solenoid output current	From lockup release to engage		0 − 0.7 A
41	Line PRS.SOL.monitor current	• Vehicle speed: 0 km/h • Engine: Idling • Selector lever position: N		0.8 − 1.0 A
42	Line PRS.SOL.output current	From low line pressure to high line pressure		0 − 0.8 A
43	Primary PRS.SOL.monitor current	• Vehicle speed: 0 km/h • Engine: Idling • Selector lever position: N		0.7 − 0.9 A
44	Primary PRS.SOL.output current	From low primary pressure to high primary pressure		0 − 0.8 A
45	Secondary PRS.SOL.monitr current	• Engine: Idling • Selector lever position: N		0.7 − 0.9 A
		Engine: Stalled		0 − 0.3 A
46	Secondary PRS.SOL.output current	From low secondary pressure to high secondary pressure		0 − 0.8 A
47	Select solenoid monitor current	• Vehicle speed: Driving at constant speed of 60 km/h • Selector lever position: D		0.6 − 0.9 A
48	Select solenoid output current	• Vehicle speed: 0 km/h • Engine: Idling • Selector lever position: N		Approx. 1.0 A
49	Indicator P output	• Ignition switch: ON • Engine: Stopped	Selector lever position: P	ON
			Selector lever position: Other than the above	OFF
50	Indicator R output	• Ignition switch: ON • Engine: Stopped	Selector lever position: R	ON
			Selector lever position: Other than the above	OFF