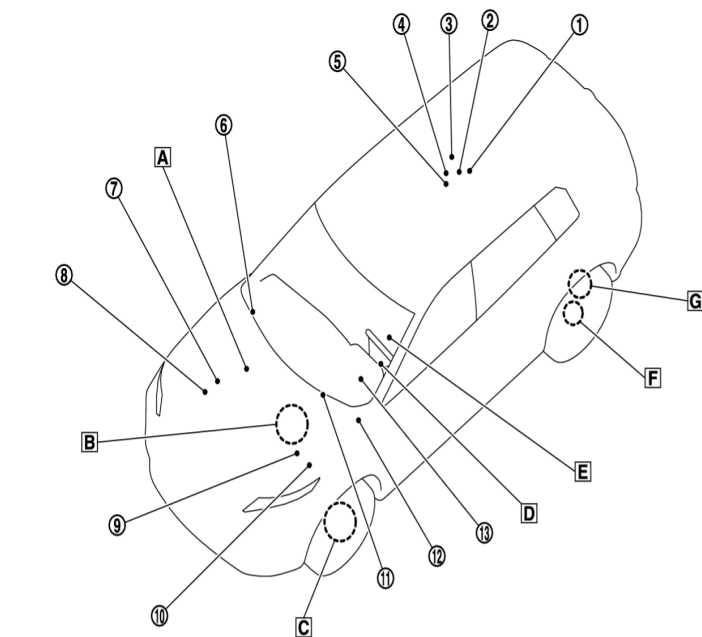




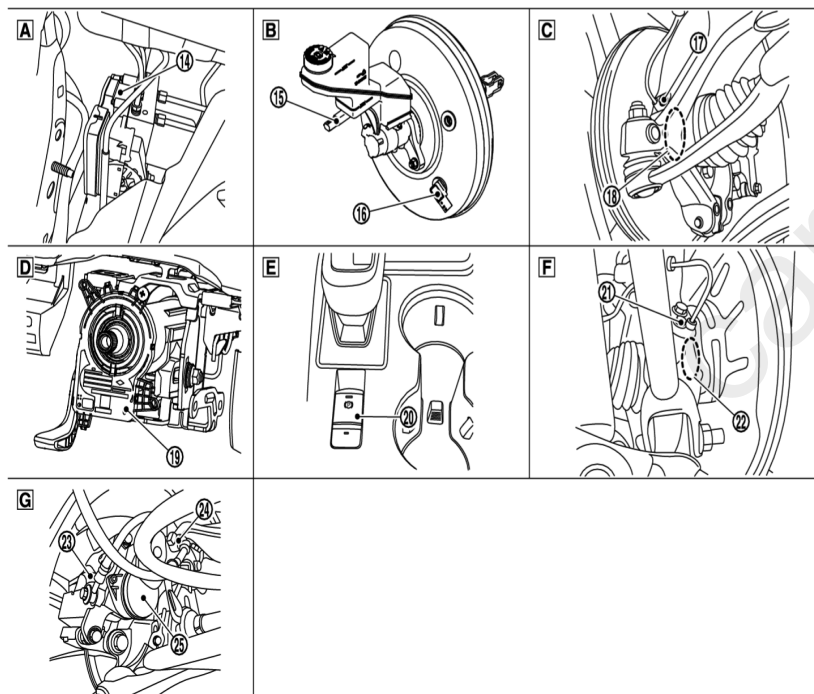
Component Parts Location

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A	Engine room (RH side)	B	Engine room (LH side)	C	Steering knuckle
D	Back of spiral cable assembly	E	Center console	F	Rear axle housing
G	Rear axle housing				

① Parking brake actuator harness (RH)	② Parking brake actuator (RH)	③ Rear brake caliper assembly (RH) Chassis control module Refer to Component
④ Rear RH sensor rotor	⑤ Rear RH wheel sensor	⑥ Parts Location  for detailed installation location. ECM Refer to Component
⑦ Front RH wheel sensor	⑧ Front RH sensor rotor	⑨ Parts Location  for detailed installation location. BCM Refer to Component
⑩ Parts Location  for detailed installation location. IPDM E/R Refer to Component	⑪ Parts Location  for detailed installation location. TCM Refer to Component	⑫ Parts Location  for detailed installation location. BCM Refer to Component
⑬ Parts Location  (7 inch information display) for detailed installation location. Combination meter Refer to Component	⑭ ABS actuator and electric unit (control unit)	⑮ Brake fluid level switch
⑯ Steering angle sensor	⑰ Front LH wheel sensor	⑱ Front LH sensor rotor
⑲ Steering angle sensor	⑳ Parking brake switch	㉑ Rear LH wheel sensor



②②	Rear LH sensor rotor	②③	Rear brake caliper assembly (LH)	②④	Parking brake actuator harness (LH)
②⑤	Parking brake actuator (LH)				

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DTC Index

Self Diagnostic Result

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1040-63	Emergency brake					DTC Description ➡
C1040-64	Emergency brake					DTC Description ➡
C1040-92	Emergency brake					DTC Description ➡
C1041-55	Configuration		○			DTC Description ➡
C1042-04	Cut valve 1	○	○	○		DTC Description ➡
C1043-04	Cut valve 2	○	○	○		DTC Description ➡
C1046-04	Suction valve 1	○	○	○		DTC Description ➡

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1047-04	Suction valve 2	○	○	○		DTC Description 
C1048-04	Valve relay	○	○	○		DTC Description 
C1048-11	Valve relay	○	○	○		DTC Description 
C1048-92	Valve relay	○	○	○		DTC Description 
C1049-04	FR LH ABS IN valve	○	○	○		DTC Description 
C104A-04	FR LH ABS OUT valve	○	○	○		DTC Description 
C104B-04	FR RH ABS IN valve	○	○	○		DTC Description 
C104C-04	FR RH ABS OUT valve	○	○	○		DTC Description 
C104D-04	RR LH ABS IN valve	○	○	○		DTC Description 
C104E-04	RR LH ABS OUT valve	○	○	○		DTC Description 
C104F-04	RR RH ABS IN valve	○	○	○		DTC Description 
C1050-04	RR RH ABS OUT valve	○	○	○		DTC Description

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
						
C1051-04	Pump motor	○	○	○		DTC Description 
C1051-13	Pump motor	○	○	○		DTC Description 
C1051-1C	Pump motor	○	○	○		DTC Description 
C1054-89	Control unit	○	○	○	○	DTC Description 
C1056-13	Battery power supply					DTC Description 
C1056-16	Battery power supply	○	○	○	○	DTC Description 
C1056-17	Battery power supply	○	○	○	○	DTC Description 
C1058-04	Control unit	○	○	○	○	DTC Description 
C1058-42	Control unit	○	○	○	○	DTC Description 
C1058-44	Control unit	○	○	○	○	DTC Description 
C1058-49	Control unit	○	○			DTC Description 

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1058-51	Control unit	○	○	○	○	DTC Description 
C1058-92	Control unit	○	○	○	○	DTC Description 
C105A-92	Control unit	○	○	○		DTC Description 
C105D-7B	Brake fluid level low	○				DTC Description 
C105F-85	Control unit					DTC Description 
C105F-92	Control unit					DTC Description 
C1061-02	FR LH wheel sensor	○	○			DTC Description 
C1061-07	FR LH wheel sensor	○	○			DTC Description 
C1061-09	FR LH wheel sensor	○	○			DTC Description 
C1061-11	FR LH wheel sensor	○	○			DTC Description 
C1061-12	FR LH wheel sensor	○	○			DTC Description 
C1061-13	FR LH wheel sensor	○	○			DTC Description

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
						
C1061-1C	FR LH wheel sensor	○	○		○	DTC Description 
C1061-38	FR LH wheel sensor	○	○			DTC Description 
C1061-4A	FR LH wheel sensor	○	○			DTC Description 
C1061-64	Wheel sensor FL	○	○			DTC Description 
C1063-02	FR RH wheel sensor	○	○			DTC Description 
C1063-07	FR RH wheel sensor	○	○			DTC Description 
C1063-09	FR RH wheel sensor	○	○			DTC Description 
C1063-11	FR RH wheel sensor	○	○			DTC Description 
C1063-12	FR RH wheel sensor	○	○			DTC Description 
C1063-13	FR RH wheel sensor	○	○			DTC Description 
C1063-1C	FR RH wheel sensor	○	○		○	DTC Description 

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1063-38	FR RH wheel sensor	○	○			DTC Description 
C1063-4A	FR RH wheel sensor	○	○			DTC Description 
C1063-64	Wheel sensor FR	○	○			DTC Description 
C1065-02	RR LH wheel sensor	○	○			DTC Description 
C1065-07	RR LH wheel sensor	○	○			DTC Description 
C1065-09	RR LH wheel sensor	○	○			DTC Description 
C1065-11	RR LH wheel sensor	○	○			DTC Description 
C1065-12	RR LH wheel sensor	○	○			DTC Description 
C1065-13	RR LH wheel sensor	○	○			DTC Description 
C1065-1C	RR LH wheel sensor	○	○		○	DTC Description 
C1065-38	RR LH wheel sensor	○	○			DTC Description 
C1065-4A	RR LH wheel sensor	○	○			DTC Description

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
						
C1065-64	Wheel sensor RL	○	○			DTC Description 
C1067-02	RR RH wheel sensor	○	○			DTC Description 
C1067-07	RR RH wheel sensor	○	○			DTC Description 
C1067-09	RR RH wheel sensor	○	○			DTC Description 
C1067-11	RR RH wheel sensor	○	○			DTC Description 
C1067-12	RR RH wheel sensor	○	○			DTC Description 
C1067-13	RR RH wheel sensor	○	○			DTC Description 
C1067-1C	RR RH wheel sensor	○	○		○	DTC Description 
C1067-38	RR RH wheel sensor	○	○			DTC Description 
C1067-4A	RR RH wheel sensor	○	○			DTC Description 
C1067-64	Wheel sensor RR	○	○			DTC Description 

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1068-95	Front wheel sensor	○	○			DTC Description 
C1069-95	Rear wheel sensor	○	○			DTC Description 
C106A-04	Wheel sensor	○	○	○	○	DTC Description 
C106A-55	Wheel sensor		○			DTC Description 
C106A-62	Wheel sensor	○	○	○	○	DTC Description 
C106A-64	Wheel sensor	○	○	○	○	DTC Description 
C106B-64	Stop light SW	○			○	DTC Description 
C106C-01	Pressure sensor	○				DTC Description 
C106C-02	Pressure sensor	○				DTC Description 
C106C-16	Pressure sensor	○				DTC Description 
C106C-17	Pressure sensor	○				DTC Description 
C106D-01	Brake booster					DTC Description

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
						
C106E-54	Steering angle sensor	○				DTC Description 
C106E-55	Steering angle sensor	○				DTC Description 
C106E-64	Steering angle sensor	○				DTC Description 
C106F-54	Steering angle sensor	○				DTC Description 
C1070-01	Side G sensor	○	○			DTC Description 
C1070-54	Side G sensor	○	○			DTC Description 
C1070-64	Side G sensor	○	○			DTC Description 
C1071-54	Decel G sensor		○			DTC Description 
C1071-61	Decel G sensor	○	○			DTC Description 
C1071-64	Decel G sensor	○	○			DTC Description 
C1072-01	Yaw rate sensor	○				DTC Description 

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1072-64	Yaw rate sensor	○				DTC Description 
C1072-83	Yaw rate sensor	○	○			DTC Description 
C1073-01	Vacuum sensor			○		DTC Description 
C1073-1C	Vacuum sensor		○			DTC Description 
C1073-55	Vacuum sensor		○			DTC Description 
C1073-64	Vacuum sensor					DTC Description 
C1076-55	Not configured	○	○	○		DTC Description 
C1077-55	TCM		○			DTC Description 
C1077-92	TCM					DTC Description 
C1078-55	Not configuration		○			DTC Description 
C1079-55	Not configuration		○			DTC Description 
C107A-55	Not configuration		○			DTC Description

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
						
C107B-53	ASC function					DTC Description 
C107C-53	Not configuration					DTC Description 
C1080-86	ECM	○			○	DTC Description 
C1082-86	CAN comm err (TCM)				○	DTC Description 
C1083-86	Steering angle sensor	○				DTC Description 
C1085-86	Combination meter	○				DTC Description 
C1086-86	CAN comm err (BCM)	○			○	DTC Description 
C1087-86	IPDM E/R				○	DTC Description 
C1088-86	AV system					DTC Description 
C1090-86	ADAS control unit					DTC Description 
C1092-86	4WD invalid data					DTC Description 

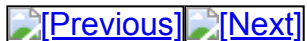
DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
C1096-86	Chassis control module				○	DTC Description 
C1098-86	AVM control unit					DTC Description 
C10AA-63	Pump motor					DTC Description 
C10AC-54	Calibration incomplete	○				DTC Description 
C10AF-01	Pressure sensor					DTC Description 
C10B0-01	Parking brake actuator (RH)				○	DTC Description 
C10B0-09	Parking brake actuator (RH)				○	DTC Description 
C10B1-01	Parking brake actuator (LH)				○	DTC Description 
C10B1-09	Parking brake actuator (LH)				○	DTC Description 
C10B2-01	Parking brake switch				○	DTC Description 
C10B2-64	Parking brake switch				○	DTC Description 
C10B3-44	Parking brake control module				○	DTC Description

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
						
C10B3-49	Parking brake control module				○	DTC Description 
C10B3-53	Parking brake control module				○	DTC Description 
C10B3-55	Parking brake control module				○	DTC Description 
C10B3-68	Parking brake control module				○	DTC Description 
C10B4-98	Overheat				○	DTC Description 
C10B5-76	Parking brake assembly check				○	DTC Description 
C10B6-68	Parking brake system					DTC Description 
C10B7-16	Parking brake power supply				○	DTC Description 
C10B7-17	Parking brake power supply				○	DTC Description 
C10B8-77	Parking brake system				○	DTC Description 
C10B9-77	Parking brake system				○	DTC Description 

Network-DTC

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
U0073-88	Control module comm Bus D Off	○			○	DTC Description 
U0076-00	Control module comm Bus D Off	○				DTC Description 
U0076-88	Control module comm Bus D Off	○			○	DTC Description 
U2140-87	CAN comm err (ECM)					DTC Description 
U214E-87	CAN comm err (combination meter)					DTC Description 
U214F-87	CAN comm err (BCM)	○			○	DTC Description 
U2152-87	CAN comm err (ADAS control unit)					DTC Description 
U2156-87	CAN comm err (steering angel sensor)	○				DTC Description 
U2240-87	CAN comm err (ECM)	○			○	DTC Description 

DTC	Display item	ASC warning light	ABS warning light	Brake warning light	Electric parking brake warning light	Refer to
U2241-87	CAN comm err (TCM)				○	DTC Description 
U224A-87	CAN comm err (AWD/4WD)					DTC Description 
U224E-87	CAN comm err (combination meter)					DTC Description 
U2252-87	CAN comm err (ADAS control unit)					DTC Description 
U225B-87	CAN comm err (IPDM E/R)				○	DTC Description 
U2275-87	CAN comm err (AVM)					DTC Description 
U2276-87	CAN comm err (CCM)				○	DTC Description 



M.U.T.-III SE Function

APPLICATION ITEMS

M.U.T.-III SE can display each diagnostic item using the diagnostic test modes as follows.

Diagnosis mode	Description
Self Diagnostic Result	Display DTC which ABS actuator and electric unit (control unit) memorizes
Data List	Displays ABS actuator and electric unit (control unit) input/output data in real time
Special Function *1	• Enables an operational check of a load by transmitting a driving signal from the ABS actuator and electric unit (control unit) to the load • Displays ABS actuator and electric unit (control unit) part number • Displays causes of automatic system cancellation occurred during system control
Configuration *1	The vehicle specification can be written when ABS actuator and electric unit (control unit) is replaced

*1: After work, perform self-diagnosis for "Read All DTCs" and erase self-diagnosis result.

SELF DIAGNOSTIC RESULT

Refer to [DTC Index](#) 

When “Active DTC” is displayed on self-diagnosis result

- The system is presently malfunctioning.

When “Stored DTC” is displayed on self-diagnosis result

- System malfunction in the past is detected, but the system is presently normal.

Freeze frame data (FFD)

When DTC is detected, a vehicle state shown below is recorded and displayed on M.U.T.-III SE.

Item	Unit	Description
ODO/TRIP METER	km	Displays the total mileage (Odometer value) of the moment a particular.
DTC count	Count	Displays the number of times DTC is detected.

DATA MONITOR

note	The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to M.U.T.-III SE display items.
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Item (Unit)	Note
Steering angle (deg)	Displays the steering angle.
Battery voltage (V)	Displays the voltage value applied to ABS actuator and electric unit (control unit).
FR LH wheel speed (km/h)	Displays the wheel speed calculated by front LH wheel sensor.
FR RH wheel speed	Displays the wheel speed calculated by front RH wheel sensor.

Item (Unit)	Note
(km/h)	
RR LH wheel speed (km/h)	Displays the wheel speed calculated by rear LH wheel sensor.
RR RH wheel speed (km/h)	Displays the wheel speed calculated by rear RH wheel sensor.
Vehicle speed (km/h)	Displays the vehicle speed.
Odometer (m)	Displays the odometer.
Decel G sensor (m/s ²)	Displays the decel G.
Side G sensor (G)	Displays the side G.
Yaw rate sensor (deg/s)	Displays the yaw rate.
Mastewr cylinder pressure (bar)	Displays the brake fluid pressure.
Valve, pump motor (Off / On)	Displays the valve amd pimp moter status.
FL/RR valve (On / Off)	Displays the front LH and rear RH valve status.
FR/RL valve (On / Off)	Displays the front RH and rear LH valve status.
FL/RR pump (On / Off)	Displays the front LH and rear RH pump motor status.
FR/RL pump (On / Off)	Displays the front RH and rear LH pump motor status.
RR RH ABS OUT valve (On / Off)	Displays the ABS OUT valve status of rear RH.
RR RH AND IN valve (On / Off)	Displays the ABS IN valve status of rear RH.
RR LH ABS OUT valve (On / Off)	Displays the ABS OUT valve status of rear LH.

Item (Unit)	Note
RR LH ABS IN valve (On / Off)	Displays the ABS IN valve status of rear LH.
FR RH ABS OUT valve (On / Off)	Displays the ABS OUT valve status of front RH.
FR RH ABS IN valve (On / Off)	Displays the ABS IN valve status of front RH.
FR LH ABS OUT valve (On / Off)	Displays the ABS OUT valve status of front LH.
FR LH ABS IN valve (On / Off)	Displays the ABS IN valve status of front LH.
Front tire diameter (mm)	Displays the front tire diameter.
Transmission type (M/T / A/T / CVT / DCT / Not)	Displays the Transmission type.
Parking brake type (1 / 2 / 3 / 4 / 5)	Displays the parking brake type.
Stop light (On / Off)	Displays the Stop light status.
AEB/IEB max torque 4 (Nm)	Displays the maximum permissible braking torque of automatic emergency braking (moderate mode).
AEB/IEB max torque 3 (Nm)	Displays the maximum permissible braking torque of automatic emergency braking (strong mode).
AEB/IEB max torque 2 (Nm)	Displays the maximum permissible braking torque of automatic emergency braking (city mode).
AEB/IEB max torque 1 (Nm)	Displays the maximum permissible braking torque of automatic emergency braking (pedestrian mode).
Electric parking mode (Mode1 / Mode2)	Displays the electric parking mode.
ACTUATOR VOLT (RH) (V)	Displays the voltage value applied to the parking brake actuator (RH side).
ACTUATOR VOLT (LH) (V)	Displays the voltage value applied to the parking brake actuator (LH side).
ACTUATOR CURRENT (RH)	Displays the current value applied to the parking brake actuator (RH side).

Item (Unit)	Note
(A)	
ACTUATOR CURRENT (LH) (A)	Displays the current value applied to the parking brake actuator (LH side).
SLOPE RATIO (%)	Displays the slope ratio.
BR FORCE EST (RH) (KN)	Displays the estimated braking force applied to the rear brake (RH side).
BR FORCE EST (LH) (KN)	Displays the estimated braking force applied to the rear brake (LH side).
PB SW (PULL / N / PUSH / MALF)	Displays the parking brake switch status.
MALF LEVEL (NORMAL / REPAIR / STOP)	Displays the malfunction level of electric parking brake system.
BRAKE STATUS (LH) (ACT 1 / ACT 2 / ACT 3 / RLS 1 / RLS 2 / RLS 3 / RLS 4 / UNKNO / INT)	Displays the electric parking brake system status (LH side).
BRAKE STATUS (RH) (ACT 1 / ACT 2 / ACT 3 / RLS 1 / RLS 2 / RLS 3 / RLS 4 / UNKNO / INT)	Displays the electric parking brake system status (RH side).
BR DISC TEMP 1 (°C)	Displays the (current) temperature of the brake disc rotor.
BR DISC TEMP 2 (—)	Displayed but not used.
PB ACTIVE STATUS DISP (REL / ACT 1 / ACT 2 / UNCON)	Displays the active status of electric parking brake system.
PB MALF DISP (NORMAL / MALF 1 / MALF 2)	Displays the malfunction status of electric parking brake system displayed on the information display in the combination meter.
VEHICLE STATUS (NOT / WARN)	Displays the vehicle status.

Item (Unit)	Note
EPB warning 1 (Warning / Off)	Displays the information display in the combination meter displaying status.
PB WARNING 1 (NO / WARN 1 / WARN 2)	Displays the information display in the combination meter displaying status.
PB WARNING 2 (NO / WARN 1 / WARN 2)	Displays the information display in the combination meter displaying status.
PB WARNING 3 (NO / WARN)	Displays the information display in the combination meter displaying status.
PB WARNING 4 (NO / WARN 1 / WARN 2)	Displays the information display in the combination meter displaying status.
PB SW indicator (On / Blink / Off)	Displays the status of parking brake switch indicator.
EPB warning 2 (Not / Warn 1 / Warn 2 / Warn 3)	Displays the information display in the combination meter displaying status.

ACTIVE TEST

The active test is used to determine and identify details of a malfunction, based on self-diagnosis test results and data obtained in the data monitor. In response to instructions from M.U.T.-III SE, instead of those from ABS actuator and electric unit (control unit) on the vehicle, a drive signal is sent to the actuator to check its operation.

caution	• Never perform active test while driving the vehicle. • Always bleed air from brake system before active test. • Never perform active test when system is malfunctioning.
note	• "TEST IS STOPPED" is displayed approximately 10 seconds after operation start. • When performing active test again after "TEST IS STOPPED" is displayed, select "BACK". • ABS warning light, brake warning light and ASC warning light may turn ON during active test. This is not a malfunction.

ABS MOTOR

When "On" or "Off" is selected on display screen, the following items are displayed when system is normal.

Test item	Display item	Display	
ABS MOTOR	MOTOR RELAY	On	Off
	ACTUATOR RLY	On	On

PARKING BRAKE SWITCH INDICATOR

When "On" or "Off" is selected on display screen, the following items are displayed when system is normal.

Test item	Display item	Description
PB SW indicator ON	On	Parking brake switch indicator is turned ON.
	Off	Parking brake switch indicator is turned OFF.

ELECTRIC PARKING BRAKE OPERATION

When "On" or "Off" is selected on display screen, the following items are displayed when system is normal.

Test item	Display item	Description
BRAKE OPERATION	On	Electric parking brake is applies.
	Off	Electric parking brake is stops.

ELECTRIC PARKING BRAKE RELEASE

When “On” or “Off” is selected on display screen, the following items are displayed when system is normal.

Test item	Display item	Description
BRAKE RELEASE	On	Electric parking brake is releases.
	Off	Electric parking brake is stops.

WORK SUPPORT

Function name	Item	Description
ECU Information	—	Displays ABS actuator and electric unit (control unit) part number
Actuator Test	—	Enables an operational check of a load by transmitting a driving signal from the ABS actuator and electric unit (control unit) to the load
Learning	INITIALIZATION POSITION ADJUSTMENT	Perform the initial position adjustment of the piston of the rear caliper assembly.
	START BRAKE PAD REPLACEMENT	Return the piston of the brake caliper assembly before replacing rear brake pad.
	FINISH BRAKE PAD REPLACEMENT	Push out the piston of the brake caliper assembly after replacing rear brake pad.
Sensor calibration	ST ANGLE SENSOR ADJUSTMENT	Perform neutral position adjustment of steering angle sensor.
	DECEL G SEN CALIBRATION	Perform decel G sensor calibration.
	SIDE G SEN CALIBRATION	Perform side G sensor calibration.

ECU IDENTIFICATION

ABS actuator and electric unit (control unit) part number can be read.

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Reference Value

VALUES ON THE DIAGNOSIS TOOL

note	The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to M.U.T.-III SE display items.
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Item	Condition	Reference valve in normal operation
Steering angle	When driving straight	$\pm 2.5^\circ$ deg
	When steering wheel is steered to RH by 90°	Approx. $+90^\circ$ deg
	When steering wheel is steered to LH by 90°	Approx. -90° deg
Battery voltage	Ignition switch ON	10 – 16 V
FR LH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within $\pm 10\%$)
FR RH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within $\pm 10\%$)

Item	Condition	Reference value in normal operation
RR LH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within $\pm 10\%$)
RR RH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within $\pm 10\%$)
Vehicle speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within $\pm 10\%$)
Odometer	Always	Nearly matches the odometer display
Decel G sensor	When stopped	Approx. 0 m/s^2
	During acceleration	Positive value
	During deceleration	Negative value
Side G sensor	Vehicle stopped	Approx. 0 G
	Right turn	Negative value
	Left turn	Positive value
Yaw rate sensor	Vehicle stopped	Approx. 0 deg/s
	Turning right	Negative value
	Turning left	Positive value
Master cylinder pressure	Brake pedal not depressed	Approx. 0 bar
	Brake pedal depressed	(-40) – 300 bar (Pressure increases according to pedal effort)

Item	Condition	Reference valve in normal operation
Valve, pump motor	Active	On
	Inactive	Off
FL/RR valve	Active	On
	Inactive	Off
FR/RL valve	Active	On
	Inactive	Off
FL/RR pump	Active	On
	Inactive	Off
FR/RL pump	Active	On
	Inactive	Off
RR RH ABS OUT valve ^{*2}	Active	On
	Inactive	Off
RR RH AND IN valve ^{*2}	Active	On
	Inactive	Off
RR LH ABS OUT valve ^{*2}	Active	On
	Inactive	Off
RR LH ABS IN valve ^{*2}	Active	On
	Inactive	Off
FR RH ABS OUT valve ^{*2}	Active	On
	Inactive	Off
FR RH ABS IN valve ^{*2}	Active	On
	Inactive	Off
FR LH ABS OUT valve ^{*2}	Active	On
	Inactive	Off
FR LH ABS IN valve ^{*2}	Active	On
	Inactive	Off
Front tire diameter	Always	Tire diameter (mm)

Item	Condition	Reference valve in normal operation
Transmission type	M/T models	M/T
	A/T models	A/T
	CVT models	CVT
	DCT models	DCT
	Type is not configuration	Not
Parking brake type	Manual parking models	1
	Electric parking brake models (Cable type)	2
	Electric parking brake models (drum brake type)	3
	Electric parking brake models (disc brake type)	4
	Type is not configuration	5
Stop light	Stop light is turned ON	On
	Stop light is turned OFF	Off
AEB/IEB max torque 4	When moderate mode	Depends on the vehicle status
AEB/IEB max torque 3	When strong mode	Depends on the vehicle status
AEB/IEB max torque 2	When city mode	Depends on the vehicle status
AEB/IEB max torque 1	When pedestrian mode	Depends on the vehicle status
Electric parking mode	Customer mode	Mode 1
	Factory mode	Mode 2
ACTUATOR VOLT (RH)	Ignition switch ON	10 - 16 V
ACTUATOR VOLT (LH)	Ignition switch ON	10 - 16 V
ACTUATOR CURRENT (RH)	Active	Approx. 16.9 A
	Inactive	Approx. 0 A

Item	Condition	Reference value in normal operation
ACTUATOR CURRENT (LH)	Active	Approx. 16.9 A
	Inactive	Approx. 0 A
SLOPE RATIO	When on a level road	0 %
	When on a sloping road	(-90) % - 90 %
BR FORCE EST (RH)	Active	0 KN
	Inactive	9 - 25.0 kN
BR FORCE EST (LH)	Active	0 KN
	Inactive	9 - 25.0 kN
PB SW	Parking brake switch is pulled	PULL
	Parking brake switch is not operated	N
	Parking brake switch is pushed	PUSH
	Parking brake switch is malfunctioning	MALF
MALF LEVEL	Normal	NORMAL
	Malfunctioning (part replacement required)	REPAIR
	Malfunctioning (function stopped)	STOP
BRAKE STATUS (LH)	Apply (start)	ACT 1
	Apply (during)	ACT 2
	Apply (end)	ACT 3
	Release (start)	RLS 1
	Release (during)	RLS 2
	Release (end)	RLS 3
	When replacing brake pad	RLS 4
	Unknnon	UNKNO
	Initialize	INT

Item	Condition	Reference value in normal operation
BRAKE STATUS (RH)	Apply (start)	ACT 1
	Apply (durnig)	ACT 2
	Apply (end)	ACT 3
	Release (start)	RLS 1
	Release (during)	RLS 2
	Release (end)	RLS 3
	When replacing brake pad	RLS 4
	Unknnon	UNKNO
	Initialize	INT
BR DISC TEMP 1	Always	Changes according to (current) temperature of disc rotor
BR DISC TEMP 2	Displayed but not used	—
PB ACTIVE STATUS DISP	Release	REL
	Apply (when the parking brake switch is pulled once)	ACT 1
	Apply (when the parking brake switch is pulled twice ore more)	ACT 2
	Not confirmed	UNCON
PB MALF DISP	Normal	NORMAL
	Malfunction	MALF 1
	Displays but not used	MALF 2
VEHICLE STATUS	No warning	NOT
	Vehicle is move backward	WARN
EPB warning 1	No warning	Off
	When the driver gets out of the vehicle without activating electric parking brake system.	Warning

Item	Condition	Reference valve in normal operation
PB WARNING 1	No warning	NO
	When the condition that the electric parking brake system is turned ON under the condition that it is unable to be activated. (Displays the “Press brake pedal” by information display in the combination meter)	WARN 1
	When the condition that the electric parking brake system is turned ON again under the condition that it is unable to be activated. (Displays the “Press brake pedal” by information display in the combination meter)	WARN 2
PB WARNING 2	No warning	NO
	When the parking brake switch is pressed without depressing the brake pedal. (Displays the “Press brake pedal” by information display in the combination meter)	WARN 1
	When the parking brake switch is pressed again without depressing the brake pedal. (Displays the “Press brake pedal” by information display in the combination meter)	WARN 2
PB WARNING 3	No warning	NO
	When the parking brake switch is continued to be pulled while the vehicle is travelling. (Displays the “Release parking brake” by information display in the combination meter, master warning light turns ON and buzzer is operate)	WARN

Item	Condition	Reference value in normal operation
PB WARNING 4	No warning	NO
	When the electric parking brake system cannot be cancelled automatically after trying this without fastening the seat belt. (Displays the "Release parking brake" by information display in the combination meter)	WARN 1
	When the electric parking brake system cannot be cancelled automatically after trying this again without fastening the seat belt. (Displays the "Release parking brake" by information display in the combination meter)	WARN 2
PB SW indicator ^{*3}	Parking switch indicator light is ON	On
	Parking switch indicator light is blinking	Blink
	Parking switch indicator light is OFF	Off
EPB warning 2	When electric parking brake system is normal.	Not
	When the malfunctioning of electric parking brake system is detected.	Warn 1
	When the critical malfunctioning of electric parking brake system is being detected.	Warn 2
	When the malfunctioning of electric parking brake signal is detected.	Warn 3

*1: Confirm tire pressure is standard value.

*2: Display occasionally changes On/Off for a moment after ignition switch is turned ON. This is operation for checking purposes and is not a malfunction.

*3: Refer to [System Description](#)  for ON/OFF/BRINK conditions of each warning light and each indicator light, buzzer and information display in the combination meter.