

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 value in normal operation
Steering angle	When driving straight	±2.5° deg
	When steering wheel is steered to RH by 90°	Approx. +90° 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 ±10%)
FR RH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within ±10%)

Item	Condition	Reference valve in normal operation
RR LH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within ±10%)
RR RH wheel speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within ±10%)
Vehicle speed	Vehicle stopped	0.00 km/h (MPH)
	When driving ^{*1}	Nearly matches the speedometer display (within ±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 valve 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
	Unknon	UNKNO
	Initialize	INT

Item	Condition	Reference valve in normal operation
BRAKE STATUS (RH)	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
	Unknon	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
PB WARNING 3	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 valve 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
PB SW indicator ^{*3}	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
	Parking switch indicator light is ON	On
	Parking switch indicator light is blinking	Blink
EPB warning 2	Parking switch indicator light is OFF	Off
	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.