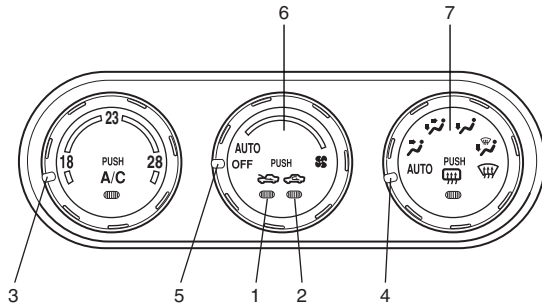


NOTE:

- For shifting back to current DTC mode, perform step 1) to 4).
- To finish DTC check, rotate any one of temperature selector, air flow selector, and blower speed selector.



I3RH0A722005

DTC Clearance

S3RH0A7224004

NOTE:

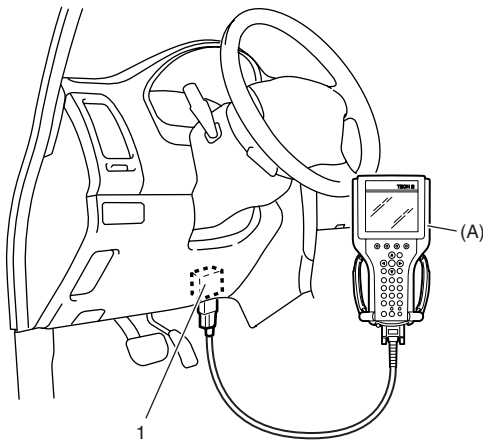
Only history DTC(s) can be cleared. Current DTC(s) can not be cleared unless the problem(s) is fixed.

Using SUZUKI Scan tool

- Turn ignition switch to OFF position.
- Connect SUZUKI scan tool to data link connector (DLC) (1) located on underside of instrument panel at driver's seat side.

Special tool

(A): SUZUKI scan tool



I3RH0A710005

- Light over sunload sensor vertically with an incandescent lamp approximately 60 W apart from about 100 mm (3.94 in.).

NOTE:

If sunload sensor is not lighted over with an incandescent lamp, DTC B1504 is detected as current DTC even though there is not any malfunction.

- Turn ignition switch to ON position.

- Erase DTC according to instructions displayed on SUZUKI scan tool.

NOTE:

To know how to use SUZUKI scan tool, refer to operator's manual for SUZUKI scan tool.

- After completing the clearance, turn ignition switch to OFF position, and then disconnect SUZUKI scan tool from DLC.

Not Using SUZUKI Scan Tool
NOTE:

In case of malfunctions related to temperature selector, blower speed selector, and/or air flow selector on HVAC control module, the following procedure can not be used. However, SUZUKI scan tool can be used to perform DTC clearance.

- Ensure that fresh air indicator (1) and recirculation air indicator (2) operate properly.
- Light over sunload sensor vertically with an incandescent lamp of approximately 60 W part from about 100 mm (3.94 in.).

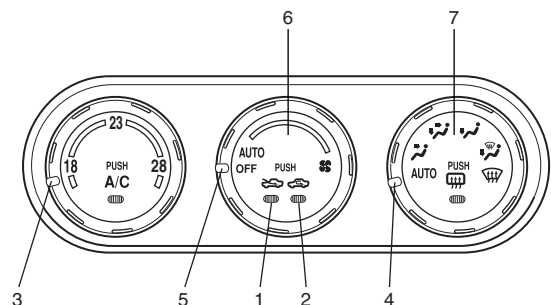
NOTE:

If sunload sensor is not lighted over with an incandescent lamp, DTC B1504 is detected as current DTC even though there is not any malfunction.

- Set the following selectors to the specified positions respectively.
 - Temperature selector (3): Maximum cool position
 - Air flow selector (4): AUTO position
 - Blower speed selector (5): OFF position
- Keep air intake switch (6) and rear defogger switch (7) pressed, and then turn ignition switch to ON position for indicating current DTC(s).
- Press rear defogger switch (7) for shifting to history DTC mode.
- To clear history DTC(s), press rear defogger switch (7) for more than 3 seconds.

NOTE:

To finish DTC clearance, rotate any one of temperature selector, air flow selector, and blower speed selector.






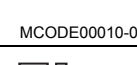














I3RH0A722005

DTC Table

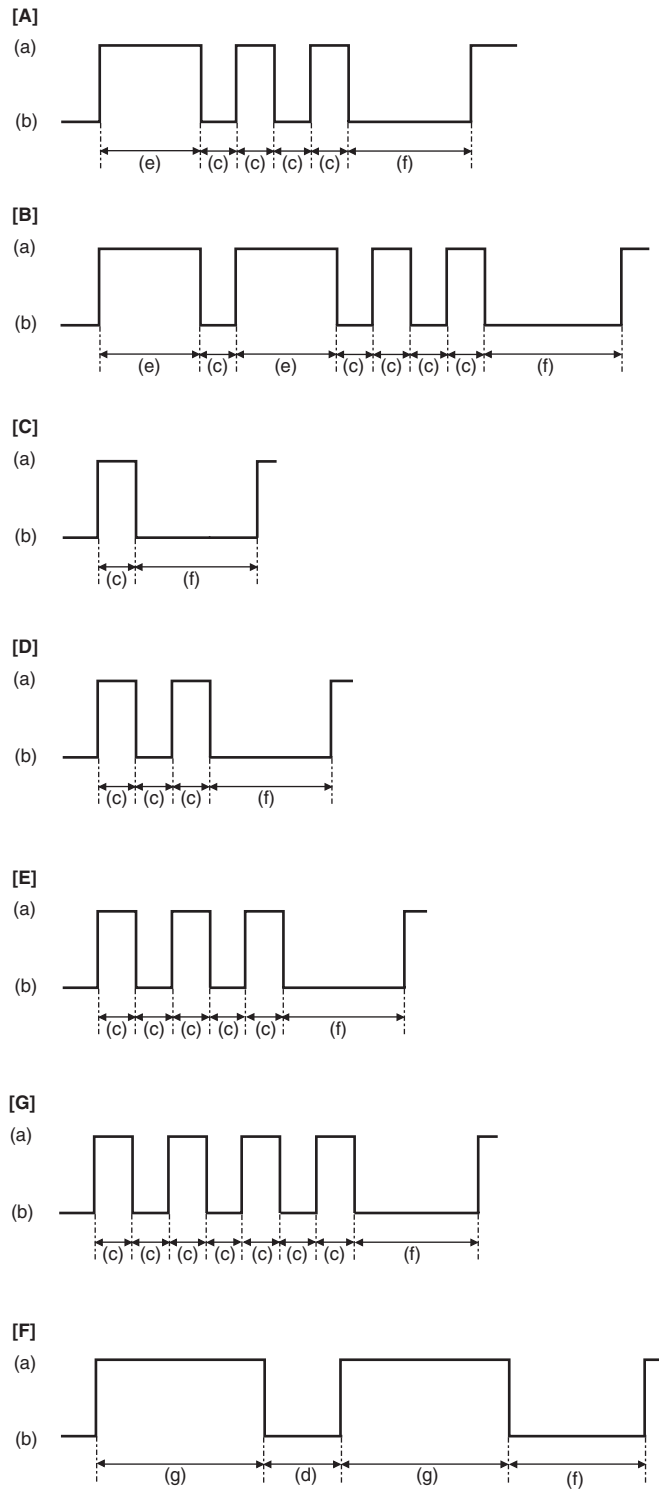
CAUTION:

Be sure to perform "Air Conditioning System Check: Automatic Type" before starting diagnosis.

DTC No. (displayed on SUZUKI scan tool)	DTC (indicated by recirculati on air indicator lamp)	Recirculation air indicator lamp flashing pattern	Fresh air indicator lamp flashing pattern (See the second table)	Priority	Diagnosis	
B1501	01		1	1	Outside air temperature sensor and/or its circuit malfunction	Open
			2	2		Short
B1502	02		1	3	Inside air temperature sensor and/or its circuit malfunction	Open
			2	4		Short
B1503	03		1	5	A/C evaporator outlet temperature sensor malfunction	Open
			2	6		Short
B1504	04		2	19	Sunload sensor and/or its circuit malfunction	Open
			1	20		Short
B1510	10		1	7	ECT sensor and/or its circuit malfunction	Open
			2	8		Short
			4	9		Communication error
B1511	11		1	10	Temperature control actuator (position sensor) and/or its circuit malfunction	Short to 5 V electrical power
			2	11		Short to ground
B1512	12		1	12	Air flow control actuator (position sensor) and/or its circuit malfunction	Short to 5 V electrical power
			2	13		Short to ground
B1513	13		3	14	Temperature control actuator and/or its circuit malfunction	Lock
B1514	14		3	15	Air flow control actuator and/or its circuit malfunction	Lock
B1520	20		1	16	Temperature selector and/or its circuit malfunction	Short
B1521	21		1	17	Blower speed selector and/or its circuit malfunction	Short
B1522	22		1	18	Air flow selector and/or its circuit malfunction	Short
—	—		Normal	—	Normal	

	Normal	1	2	3	4
Fresh air indicator lamp flashing pattern					

Example



[A]: DTC No.12 (Recirculation indicator lamp flashing pattern)	[F]: Fresh air indicator lamp flashing pattern No.4	(d): 1 second
[B]: DTC No.22 (Recirculation indicator lamp flashing pattern)	[G]: Normal	(e): 1.5 seconds
[C]: Fresh air indicator lamp flashing pattern No.1	(a): Indicator ON	(f): 2 seconds
[D]: Fresh air indicator lamp flashing pattern No.2	(b): Indicator OFF	(g): 3 seconds
[E]: Fresh air indicator lamp flashing pattern No.3	(c): 0.5 seconds	

Fail-Safe Table

S3RH0A7224006

When any of the following malfunctions (DTCs) is detected, fail-safe mode is activated.

However, when HVAC control module detects normal operation of A/C system, fail-safe mode is canceled.

DTC No.	Trouble Area	Fail-Safe Operation	
		Detection of malfunction when ignition switch is turned ON	Detection of malfunction during ignition switch is ON
B1501	Outside air temperature sensor and/or its circuit	20 °C (68 °F)	HVAC control module keeps condition just before detection.
B1502	Inside air temperature sensor and/or its circuit	25 °C (77 °F)	
B1503	A/C evaporator temperature sensor	0 °C (32 °F)	
B1504	Sunload sensor and/or its circuit	175 W/m ²	
B1510	Water temperature sensor and/or its circuit	80 °C (176 °F)	
B1511	Temperature control actuator (position sensor) and/or its circuit	The operation of actuator stops.	
B1512	Air flow control actuator (position sensor) and/or its circuit		
B1513	Temperature control actuator and/or its circuit		
B1514	Air flow control actuator and/or its circuit		
B1520	Temperature selector and/or its circuit	23 °C (73 °F)	
B1521	Blower speed selector and/or its circuit	1st	
B1522	Air flow selector and/or its circuit	DEF	

NOTE:

In case that all of temperature selector, blower speed selector, and air flow selector are abnormal, the operation of air conditioning system stops.

Scan Tool Data

S3RH0A7224007

As the data values given in the following are standard values estimated on the basis of values obtained from the normally operation vehicles by using a scan tool, use them as reference values. Even when the vehicles are in good condition, there may be cases where the checked values do not fall within each specifies data range. Therefore, judgement as abnormal should not be made by checking with these data alone.

Scan Tool Data	Condition	Normal Condition / Reference Value
TEMP CONT SWITCH	Each reference value is relative to the position of temperature selector of HVAC control module.	Max Cool, 18 °C (64 °F), 18.5 °C (65 °F) – 27.5 °C (81.5 °F), 28 °C (82 °F), Max Hot
CABIN TEMPERATURE	Reference value is relative to in-car temperature.	–6.5 °C – 57.25 °C (20.3 °F – 135.05 °F)
OUTSIDE AIR TEMP	Reference value is relative to outside air temperature.	–23.3 °C – 65.95 °C (–9.94 °F – 150.71 °F)
EVAPORATOR TEMP	Reference value is relative to temperature of evaporator.	–29.7 °C – 59.55 °C (–21.46 °F – 139.19 °F)
COOLANT TEMP	At specified idle speed after warming up.	1.3 °C – 90.55 °C (34.34 °F – 194.99 °F)
SUNLOAD	Reference value depends on the situation.	0 W/m ² – 4447.8 W/m ²
MODE CONT SWITCH	Each reference value is relative to the position of air flow selector of HVAC control module.	AUTO, VENT, BI-LEVEL, FOOT, DEF-FOOT, DEF
FAN CONT SWITCH	Each reference value is relative to the position of blower speed selector of HVAC control module.	AUTO, OFF, 1st, 2nd – 7th, 8th