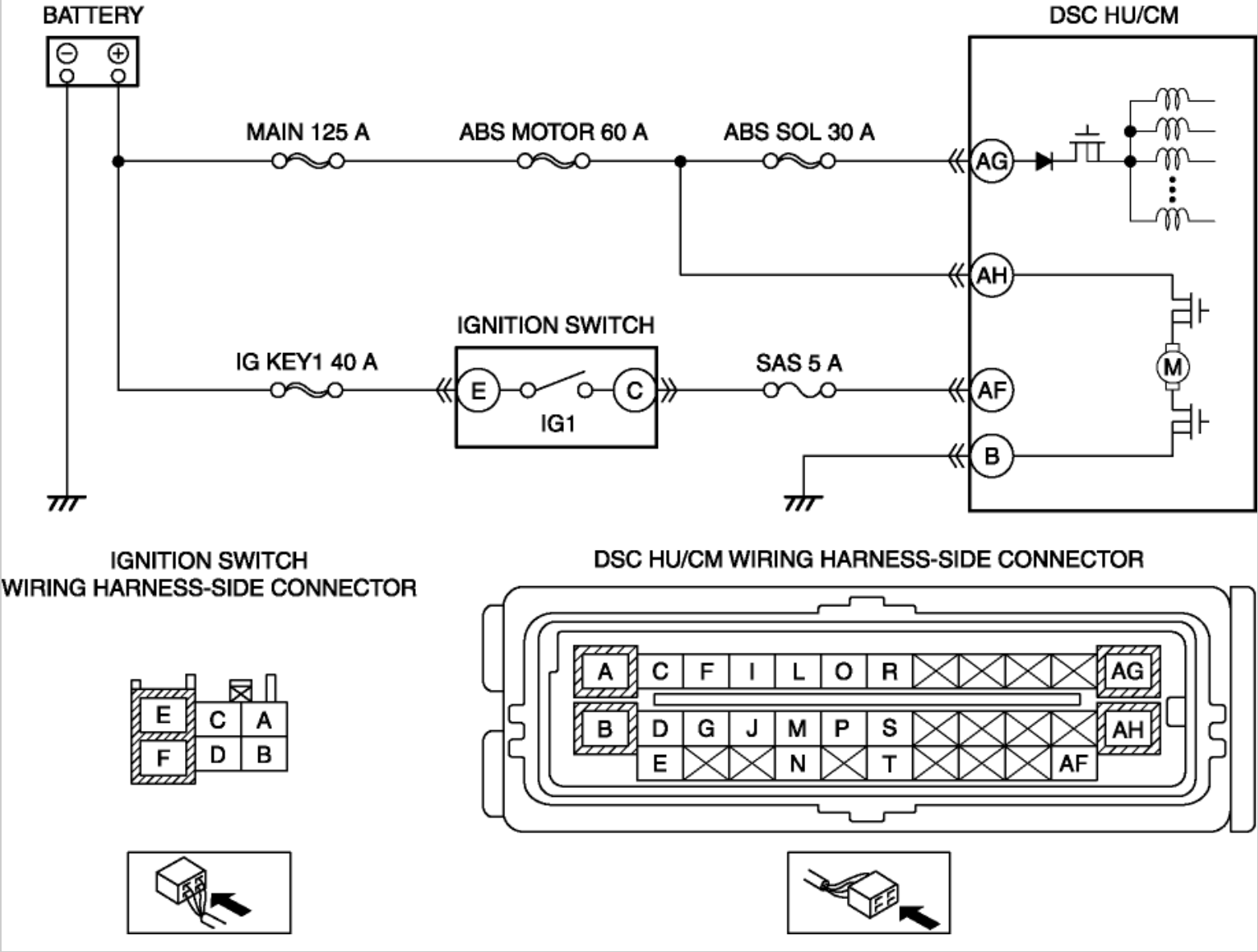


2012 - Mazda6 - Brakes

DTC U3003:16/ U3003:17/ U3003:1C [DYNAMIC STABILITY CONTROL (DSC)]

Without Advanced Keyless Entry And Push Button Start System

U3003:16	Power supply system
U3003:17	
U3003:1C	
DETECTION CONDITION	U3003:16 - The vehicle speed exceeds 3 km/ h { 2 mph} and the voltage at DSC HU/CM terminal AF is 10 V or less. U3003:17 - The voltage at DSC HU/CM terminal AF is 16 V or more. U3003:1C - Low ignition voltage (10 V or less) is detected at the voltage monitor of the solenoid valve or motor monitor. - The ABS wheel-speed sensor power supply for all four wheels decreases for a continuous 60 s with the ignition voltage at 10 V or less.
POSSIBLE CAUSE	- Fuse malfunction - MAIN 125 A fuse - ABS MOTOR 60 A fuse - IG KEY1 40 A fuse - ABS SOL 30 A fuse - SAS 5 A fuse - Battery malfunction - Generator malfunction - Connector or terminal malfunction - Ignition switch malfunction - Short to ground or open circuit in wiring harness between following terminals: - DSC HU/CM terminal AG and battery positive terminal - DSC HU/CM terminal AH and battery positive terminal - DSC HU/CM terminal AF and battery positive terminal - DSC HU/CM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT FUSE • Switch the ignition to off. • Disconnect the negative battery cable. • Remove the following fuses: ▪ MAIN 125 A fuse ▪ ABS MOTOR 60 A fuse ▪ IG KEY1 40 A fuse ▪ ABS SOL 30 A fuse ▪ SAS 5 A fuse • Inspect the fuses. • Are there any malfunction?	Yes Replace the malfunctioning fuse, then go to Step 8. No Install the fuses, then go to the next step.
	INSPECT BATTERY	

2	- Inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes Recharge or replace the battery, then go to Step 8. (See BATTERY RECHARGING [MZR 2.5].) (See BATTERY RECHARGING [MZI 3.7 V6].) (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5].) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6].) No Go to the next step.
3	INSPECT GENERATOR - Inspect the generator. (See GENERATOR INSPECTION [MZR 2.5].) (See GENERATOR INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes Replace the generator, then go to Step 8. (See GENERATOR REMOVAL/ INSTALLATION [MZR 2.5].) (See GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6].) No Go to the next step.
4	INSPECT IGNITION SWITCH CONNECTOR CONDITION - Disconnect the ignition switch connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 8. No Go to the next step.
5	INSPECT IGNITION SWITCH - Inspect the ignition switch. (See IGNITION SWITCH INSPECTION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Is there any malfunction?	Yes Replace the ignition switch, then go to Step 8. (See IGNITION SWITCH REMOVAL/ INSTALLATION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) No Go to the next step.
6	INSPECT DSC HU/ CM CONNECTOR CONDITION - Disconnect the DSC HU/CM connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 8. No Go to the next step.
7	INSPECT BATTERY POWER SUPPLY CIRCUIT FOR SHORT OR OPEN CIRCUIT - Reconnect the ignition switch connector. - Reconnect the negative battery cable. - Switch the ignition to ON. - Measure the voltage between following terminals and body ground: - DSC HU/CM terminal AG (wiring harness-side) - DSC HU/CM terminal AH (wiring harness-side) - DSC HU/CM terminal AF (wiring harness-side) - Is the voltage B+ ?	Yes Go to the next step. No Repair or replace the wiring harness for a possible short to ground or open circuit, then go to the next step.

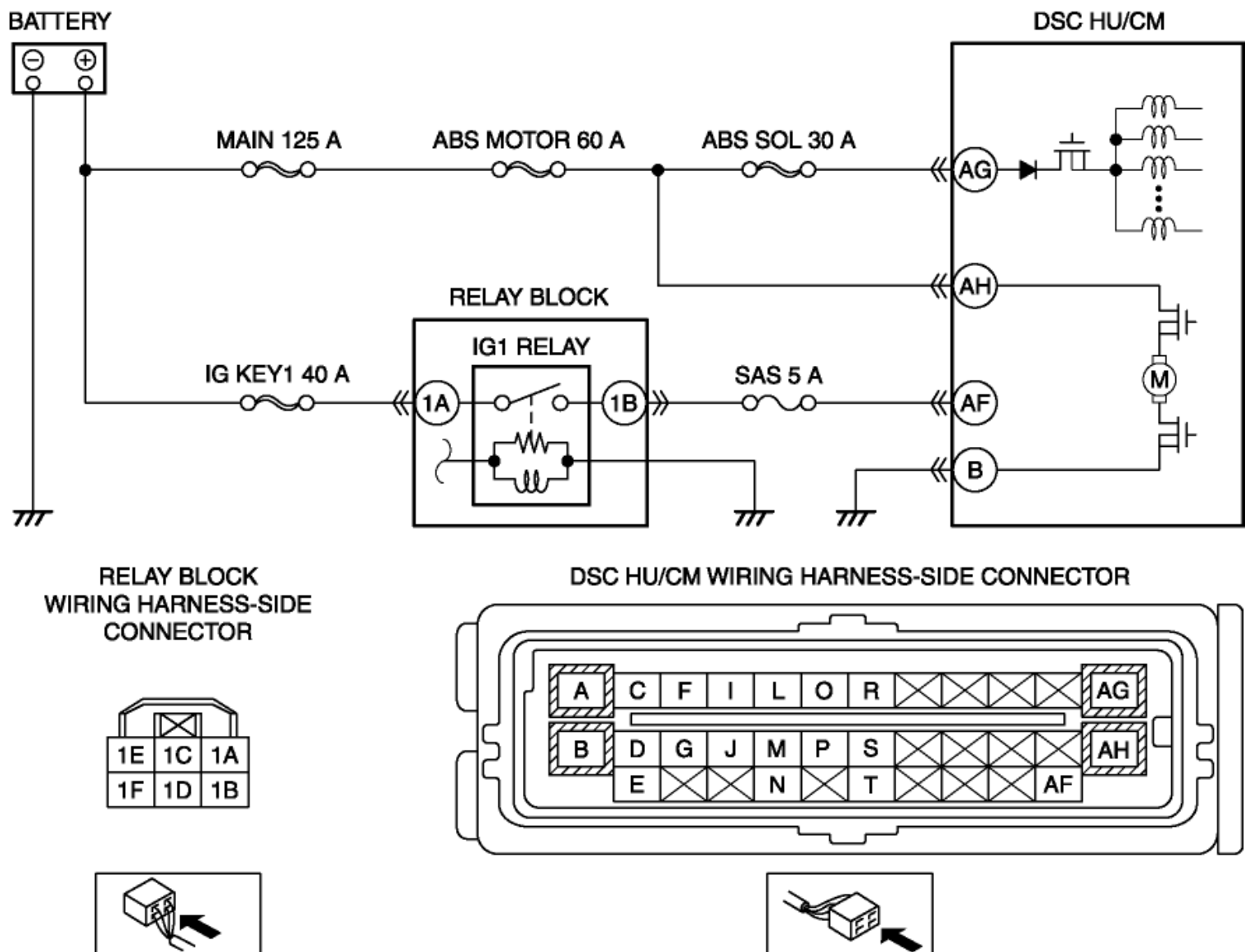
8	VERIFY DTC TROUBLESHOOTING COMPLETED - Make sure to reconnect the disconnected connectors. - Reconnect the negative battery cable. - Clear the DTC from the DSC HU/CM memory using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) - Drive the vehicle at speed of 20 km/ h { 12 mph} or more. - Gradually slow down and stop the vehicle. - Perform the DSC HU/CM DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) - Is the same DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/ CM REMOVAL/ INSTALLATION .)
		No	Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)] .)
		No	DTC troubleshooting completed.

With Advanced Keyless Entry And Push Button Start System

U3003:16	Power supply system
U3003:17	
U3003:1C	
DETECTION CONDITION	U3003:16 - The vehicle speed exceeds 3 km/ h { 2 mph} and the voltage at DSC HU/CM terminal AF is 10 V or less. U3003:17 - The voltage at DSC HU/CM terminal AF is 16 V or more. U3003:1C - Low ignition voltage (10 V or less) is detected at the voltage monitor of the solenoid valve or motor monitor. - The ABS wheel-speed sensor power supply for all four wheels decreases for a continuous 60 s with the ignition voltage at 10 V or less.
	- Fuse malfunction - MAIN 125 A fuse - ABS MOTOR 60 A fuse - IG KEY1 40 A fuse - ABS SOL 30 A fuse

POSSIBLE CAUSE

- SAS 5 A fuse
- Battery malfunction
- Generator malfunction
- Connector or terminal malfunction
- Relay block malfunction
- Short to ground or open circuit in wiring harness between following terminals:
 - DSC HU/CM terminal AG and battery positive terminal
 - DSC HU/CM terminal AH and battery positive terminal
 - DSC HU/CM terminal AF and battery positive terminal
- DSC HU/CM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT FUSE	Yes Replace the malfunctioning fuse, then go to Step 8.

	• Switch the ignition to off. • Disconnect the negative battery cable. • Remove the following fuses: ▪ MAIN 125 A fuse ▪ ABS MOTOR 60 A fuse ▪ IG KEY1 40 A fuse ▪ ABS SOL 30 A fuse ▪ SAS 5 A fuse • Inspect the fuses. • Are there any malfunction?	No	Install the fuses, then go to the next step.
2	INSPECT BATTERY • Inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) • Is there any malfunction?	Yes	Recharge or replace the battery, then go to Step 8. (See BATTERY RECHARGING [MZR 2.5] .) (See BATTERY RECHARGING [MZI 3.7 V6] .) (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5] .) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
3	INSPECT GENERATOR • Inspect the generator. (See GENERATOR INSPECTION [MZR 2.5].) (See GENERATOR INSPECTION [MZI 3.7 V6].) • Is there any malfunction?	Yes	Replace the generator, then go to Step 8. (See GENERATOR REMOVAL/ INSTALLATION [MZR 2.5] .) (See GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
4	INSPECT RELAY BLOCK CONNECTOR CONDITION • Disconnect the relay block connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 8.
		No	Go to the next step.
5	INSPECT RELAY BLOCK • Inspect the relay block. (See RELAY BLOCK INSPECTION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • Is there any malfunction?	Yes	Replace the relay block, then go to Step 8. (See RELAY BLOCK REMOVAL/ INSTALLATION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.
6	INSPECT DSC HU/ CM CONNECTOR CONDITION • Disconnect the DSC HU/CM connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 8.
		No	Go to the next step.
7	INSPECT BATTERY POWER SUPPLY CIRCUIT FOR SHORT OR OPEN CIRCUIT	Yes	Go to the next step.

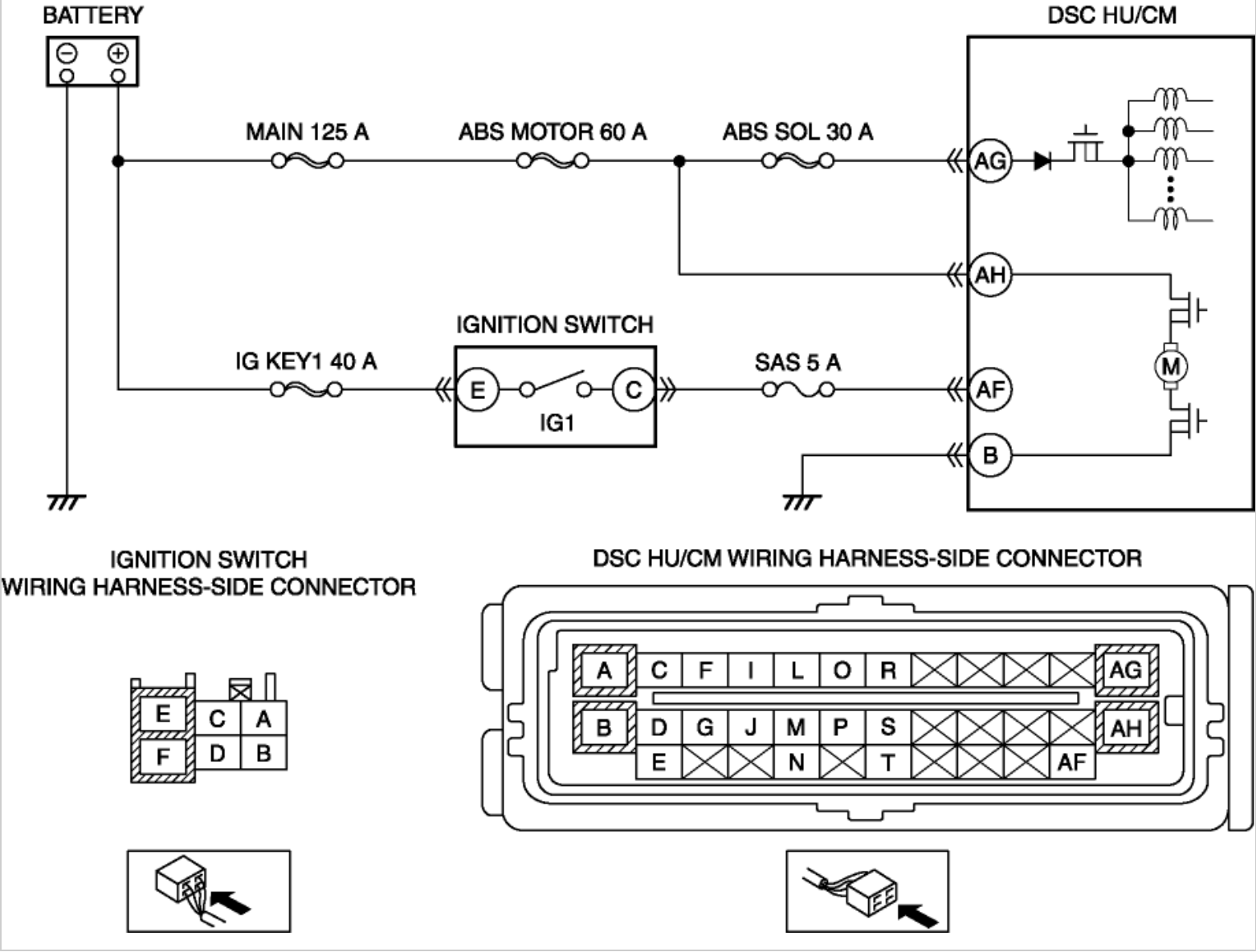
	• Reconnect the relay block connector. • Reconnect the negative battery cable. • Switch the ignition to ON. • Measure the voltage between following terminals and body ground: ▪ DSC HU/CM terminal AG (wiring harness-side) ▪ DSC HU/CM terminal AH (wiring harness-side) ▪ DSC HU/CM terminal AF (wiring harness-side) • Is the voltage B+ ?	No	Repair or replace the wiring harness for a possible short to ground or open circuit, then go to the next step.
8	VERIFY DTC TROUBLESHOOTING COMPLETED • Make sure to reconnect the disconnected connectors. • Reconnect the negative battery cable. • Clear the DTC from the DSC HU/CM memory using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Drive the vehicle at speed of 20 km/h { 12 mph} or more. • Gradually slow down and stop the vehicle. • Perform the DSC HU/CM DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Is the same DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/ CM REMOVAL/ INSTALLATION .)
		No	Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Brakes

DTC U3003:16/ U3003:17/ U3003:1C [DYNAMIC STABILITY CONTROL (DSC)]

Without Advanced Keyless Entry And Push Button Start System

U3003:16	Power supply system
U3003:17	
U3003:1C	
DETECTION CONDITION	U3003:16 - The vehicle speed exceeds 3 km/ h { 2 mph} and the voltage at DSC HU/CM terminal AF is 10 V or less. U3003:17 - The voltage at DSC HU/CM terminal AF is 16 V or more. U3003:1C - Low ignition voltage (10 V or less) is detected at the voltage monitor of the solenoid valve or motor monitor. - The ABS wheel-speed sensor power supply for all four wheels decreases for a continuous 60 s with the ignition voltage at 10 V or less.
POSSIBLE CAUSE	- Fuse malfunction - MAIN 125 A fuse - ABS MOTOR 60 A fuse - IG KEY1 40 A fuse - ABS SOL 30 A fuse - SAS 5 A fuse - Battery malfunction - Generator malfunction - Connector or terminal malfunction - Ignition switch malfunction - Short to ground or open circuit in wiring harness between following terminals: - DSC HU/CM terminal AG and battery positive terminal - DSC HU/CM terminal AH and battery positive terminal - DSC HU/CM terminal AF and battery positive terminal - DSC HU/CM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT FUSE • Switch the ignition to off. • Disconnect the negative battery cable. • Remove the following fuses: ▪ MAIN 125 A fuse ▪ ABS MOTOR 60 A fuse ▪ IG KEY1 40 A fuse ▪ ABS SOL 30 A fuse ▪ SAS 5 A fuse • Inspect the fuses. • Are there any malfunction?	Yes Replace the malfunctioning fuse, then go to Step 8. No Install the fuses, then go to the next step.
	INSPECT BATTERY	

2	- Inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes Recharge or replace the battery, then go to Step 8. (See BATTERY RECHARGING [MZR 2.5].) (See BATTERY RECHARGING [MZI 3.7 V6].) (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5].) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6].) No Go to the next step.
3	INSPECT GENERATOR - Inspect the generator. (See GENERATOR INSPECTION [MZR 2.5].) (See GENERATOR INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes Replace the generator, then go to Step 8. (See GENERATOR REMOVAL/ INSTALLATION [MZR 2.5].) (See GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6].) No Go to the next step.
4	INSPECT IGNITION SWITCH CONNECTOR CONDITION - Disconnect the ignition switch connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 8. No Go to the next step.
5	INSPECT IGNITION SWITCH - Inspect the ignition switch. (See IGNITION SWITCH INSPECTION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) - Is there any malfunction?	Yes Replace the ignition switch, then go to Step 8. (See IGNITION SWITCH REMOVAL/ INSTALLATION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) No Go to the next step.
6	INSPECT DSC HU/ CM CONNECTOR CONDITION - Disconnect the DSC HU/CM connector. - Inspect the connector and terminals (corrosion, damage, pin disconnection). - Is there any malfunction?	Yes Repair or replace the connector or terminals, then go to Step 8. No Go to the next step.
7	INSPECT BATTERY POWER SUPPLY CIRCUIT FOR SHORT OR OPEN CIRCUIT - Reconnect the ignition switch connector. - Reconnect the negative battery cable. - Switch the ignition to ON. - Measure the voltage between following terminals and body ground: - DSC HU/CM terminal AG (wiring harness-side) - DSC HU/CM terminal AH (wiring harness-side) - DSC HU/CM terminal AF (wiring harness-side) - Is the voltage B+ ?	Yes Go to the next step. No Repair or replace the wiring harness for a possible short to ground or open circuit, then go to the next step.

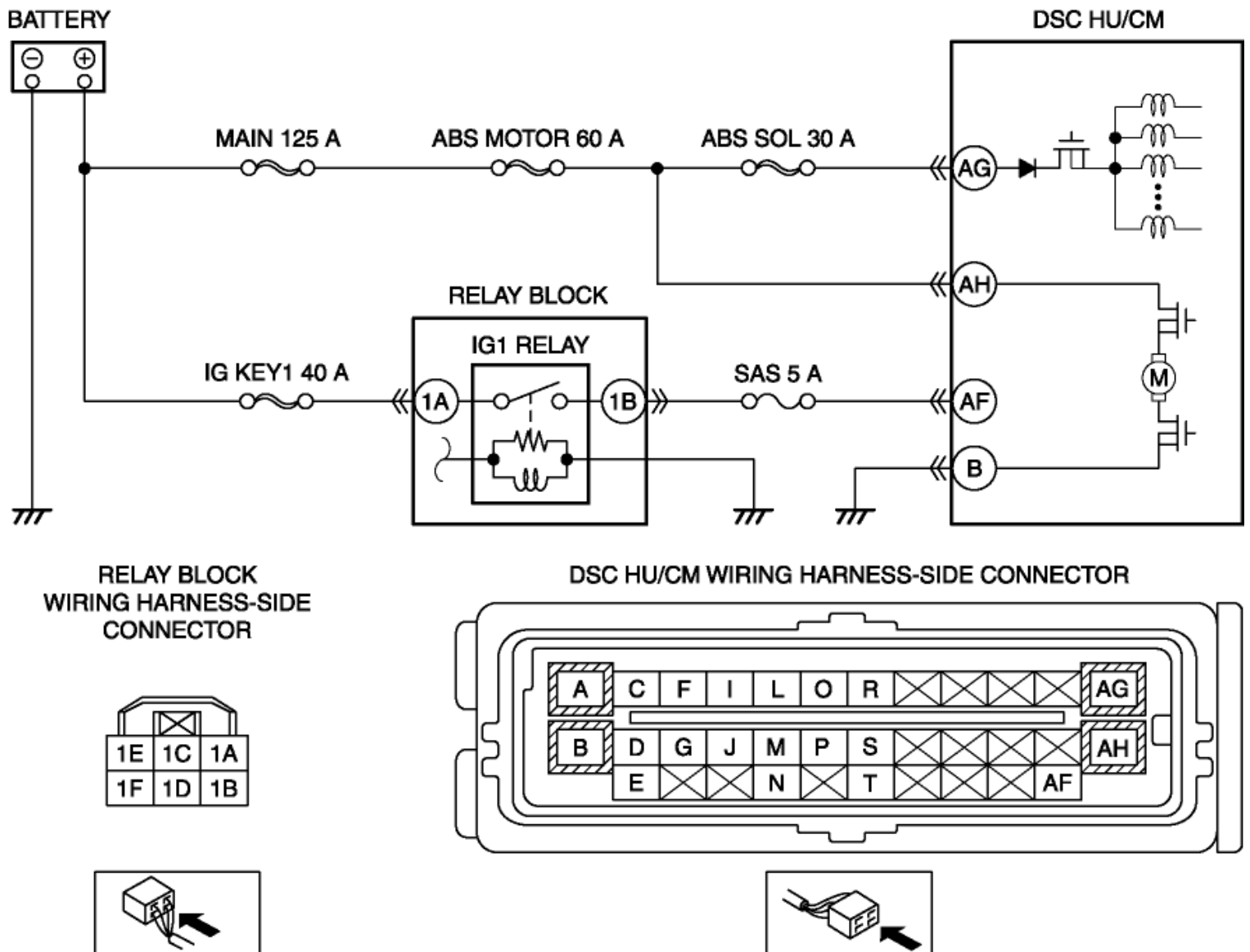
8	VERIFY DTC TROUBLESHOOTING COMPLETED - Make sure to reconnect the disconnected connectors. - Reconnect the negative battery cable. - Clear the DTC from the DSC HU/CM memory using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) - Drive the vehicle at speed of 20 km/ h { 12 mph} or more. - Gradually slow down and stop the vehicle. - Perform the DSC HU/CM DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) - Is the same DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/ CM REMOVAL/ INSTALLATION .)
		No	Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)] .)
		No	DTC troubleshooting completed.

With Advanced Keyless Entry And Push Button Start System

U3003:16	Power supply system
U3003:17	
U3003:1C	
DETECTION CONDITION	U3003:16 - The vehicle speed exceeds 3 km/ h { 2 mph} and the voltage at DSC HU/CM terminal AF is 10 V or less. U3003:17 - The voltage at DSC HU/CM terminal AF is 16 V or more. U3003:1C - Low ignition voltage (10 V or less) is detected at the voltage monitor of the solenoid valve or motor monitor. - The ABS wheel-speed sensor power supply for all four wheels decreases for a continuous 60 s with the ignition voltage at 10 V or less.
	- Fuse malfunction - MAIN 125 A fuse - ABS MOTOR 60 A fuse - IG KEY1 40 A fuse - ABS SOL 30 A fuse

POSSIBLE CAUSE

- SAS 5 A fuse
- Battery malfunction
- Generator malfunction
- Connector or terminal malfunction
- Relay block malfunction
- Short to ground or open circuit in wiring harness between following terminals:
 - DSC HU/CM terminal AG and battery positive terminal
 - DSC HU/CM terminal AH and battery positive terminal
 - DSC HU/CM terminal AF and battery positive terminal
- DSC HU/CM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	INSPECT FUSE	Yes Replace the malfunctioning fuse, then go to Step 8.

	• Switch the ignition to off. • Disconnect the negative battery cable. • Remove the following fuses: ▪ MAIN 125 A fuse ▪ ABS MOTOR 60 A fuse ▪ IG KEY1 40 A fuse ▪ ABS SOL 30 A fuse ▪ SAS 5 A fuse • Inspect the fuses. • Are there any malfunction?	No	Install the fuses, then go to the next step.
2	INSPECT BATTERY • Inspect the battery. (See BATTERY INSPECTION [MZR 2.5].) (See BATTERY INSPECTION [MZI 3.7 V6].) • Is there any malfunction?	Yes	Recharge or replace the battery, then go to Step 8. (See BATTERY RECHARGING [MZR 2.5] .) (See BATTERY RECHARGING [MZI 3.7 V6] .) (See BATTERY REMOVAL/ INSTALLATION [MZR 2.5] .) (See BATTERY REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
3	INSPECT GENERATOR • Inspect the generator. (See GENERATOR INSPECTION [MZR 2.5].) (See GENERATOR INSPECTION [MZI 3.7 V6].) • Is there any malfunction?	Yes	Replace the generator, then go to Step 8. (See GENERATOR REMOVAL/ INSTALLATION [MZR 2.5] .) (See GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
4	INSPECT RELAY BLOCK CONNECTOR CONDITION • Disconnect the relay block connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 8.
		No	Go to the next step.
5	INSPECT RELAY BLOCK • Inspect the relay block. (See RELAY BLOCK INSPECTION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • Is there any malfunction?	Yes	Replace the relay block, then go to Step 8. (See RELAY BLOCK REMOVAL/ INSTALLATION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)
		No	Go to the next step.
6	INSPECT DSC HU/ CM CONNECTOR CONDITION • Disconnect the DSC HU/CM connector. • Inspect the connector and terminals (corrosion, damage, pin disconnection). • Is there any malfunction?	Yes	Repair or replace the connector or terminals, then go to Step 8.
		No	Go to the next step.
7	INSPECT BATTERY POWER SUPPLY CIRCUIT FOR SHORT OR OPEN CIRCUIT	Yes	Go to the next step.

	• Reconnect the relay block connector. • Reconnect the negative battery cable. • Switch the ignition to ON. • Measure the voltage between following terminals and body ground: ▪ DSC HU/CM terminal AG (wiring harness-side) ▪ DSC HU/CM terminal AH (wiring harness-side) ▪ DSC HU/CM terminal AF (wiring harness-side) • Is the voltage B+ ?	No	Repair or replace the wiring harness for a possible short to ground or open circuit, then go to the next step.
8	VERIFY DTC TROUBLESHOOTING COMPLETED • Make sure to reconnect the disconnected connectors. • Reconnect the negative battery cable. • Clear the DTC from the DSC HU/CM memory using the M-MDS. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Drive the vehicle at speed of 20 km/h { 12 mph} or more. • Gradually slow down and stop the vehicle. • Perform the DSC HU/CM DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)].) • Is the same DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the DSC HU/CM, then go to the next step. (See DSC HU/ CM REMOVAL/ INSTALLATION .)
		No	Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSIS [DYNAMIC STABILITY CONTROL (DSC)] .)
		No	DTC troubleshooting completed.