Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2021 Mazda 6 Service and Repair Manual

Go to manual page

- Wiring harness between EPS control module terminal 2D and connector C-64
- EPS control module

W

Possible cause

- Connector terminal disconnection, poor contact, damage, deformation, corrosion
- Open circuit in wiring harness between connector C-64 and connector C-63
- Connector C-64 malfunction
- Connector C-63 malfunction

System wiring diagram

SRS air bag system. (See AIR BAG SYSTEM SERVICE WARNINGS [STANDARD DEPLOYMENT CONTROL SYSTEM - MEXICO SPEC.].) (See AIR BAG SYSTEM SERVICE WARNINGS [TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA/ISRAEL SPEC.].) (See AIR BAG SYSTEM SERVICE CAUTIONS [STANDARD DEPLOYMENT CONTROL SYSTEM - MEXICO SPEC.].) (See AIR BAG SYSTEM SERVICE CAUTIONS [TWO-STEP DEPLOYMENT CONTROL SYSTEM - US/CANADA/ISRAEL SPEC.].)

- SAS control module power supply voltage-related wiring harness and fuse
- SAS control module body ground related wiring harness
- SAS control module connector
- Connector C-63
- Wiring harness between SAS control module terminal 3Q and connector C-63
- Wiring harness between SAS control module terminal 3S and connector C-63
- SAS control module

Y

Possible cause

- Connector terminal disconnection, poor contact, damage, deformation, corrosion
- Connectivity master unit (CMU) power supply voltage or body ground malfunction
- Open circuit in wiring harness between connectivity master unit (CMU) and connector C-63
- Connector C-63 malfunction
- Connectivity master unit (CMU) malfunction

System wiring diagram

— Between active driving display terminal K and active driving display terminal L

Without active driving display

Possible cause

- Connector terminal disconnection, poor contact, damage, deformation, corrosion
- Instrument cluster power supply voltage or body ground malfunction
- Open circuit in wiring harness between instrument cluster and connector C-63
- Connector C-63 malfunction
- Instrument cluster malfunction

System wiring diagram

AB

Possible cause

- Connector terminal disconnection, poor contact, damage, deformation, corrosion
- Instrument cluster power supply voltage or body ground malfunction
- Open circuit in wiring harness between active driving display and instrument cluster
- Instrument cluster malfunction
- CAN circuit in active driving display malfunction

System wiring diagram

Step	Inspection		Action
1	**INSPECT FOR SHORT TO GROUND BETWEEN CONNECTOR C-63 AND REAR BODY CONTROL MODULE (RBCM)** • Disconnect the negative battery terminal. (See NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.) • Disconnect connector C-63. • Inspect for continuity at the following terminals: — Between DLC-2 terminal L and body ground — Between DLC-2 terminal K and body ground • Is there continuity?	Yes	Go to Step 7.
		No	Go to the next step.
2	**INSPECT FOR SHORT TO GROUND BETWEEN CONNECTOR C-63 AND CLIMATE CONTROL UNIT** • Inspect for continuity at the following terminals: — Between climate control unit terminal 1K and body ground (with full-auto air conditioner) — Between climate control unit terminal 1M and body ground (with full-auto air conditioner) — Between climate control unit terminal Q and body ground (with manual air conditioner) — Between climate control unit terminal S and body ground (with manual air conditioner) • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 4.
3	**INSPECT CAN LINE IN CLIMATE CONTROL UNIT FOR SHORT TO GROUND** • Disconnect the climate control unit connector. • Inspect for continuity at the following terminals: — Between climate control unit terminal 1K (wiring harness side) and body ground (with full-auto air conditioner) — Between climate control unit terminal 1M (wiring harness side) and body ground (with full-auto air conditioner) — Between climate control unit terminal Q (wiring harness side) and body ground (with manual air conditioner) — Between climate control unit terminal S (wiring harness side) and body ground (with manual air conditioner) • Is there continuity?	Yes	Repair or replace the wiring harness between the climate control unit and connector C-63 because the wiring harness is shorted to ground.
		No	Replace the climate control unit because there is a short to ground in the climate control unit. (See CLIMATE CONTROL UNIT REMOVAL/INSTALLATION [FULL-AUTO AIR CONDITIONER].) (See CLIMATE CONTROL UNIT REMOVAL/INSTALLATION [MANUAL AIR CONDITIONER].)

Step	Inspection		Action
17	**INSPECT FOR SHORT TO GROUND BETWEEN CONNECTOR C-71 AND REAR BODY CONTROL MODULE (RBCM)** • Disconnect the rear body control module (RBCM). • Connect connector C-71. • Inspect for continuity at the following terminals: — Between DLC-2 terminal L and body ground — Between DLC-2 terminal K and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the rear body control module (RBCM) and connector C-71 because the wiring harness is shorted to ground.
		No	Go to the next step.
18	**INSPECT FOR SHORT TO GROUND BETWEEN BLIND SPOT MONITORING (BSM) CONTROL MODULE (LH) AND REAR BODY CONTROL MODULE (RBCM)** • Inspect for continuity at the following terminals: — Between rear body control module (RBCM) terminal 4L (wiring harness side) and body ground — Between rear body control module (RBCM) terminal 4I (wiring harness side) and body ground • Is there continuity?	Yes	Go to the next step.
		No	Replace the rear body control module (RBCM) because there is a short to ground in the rear body control module (RBCM). (See REAR BODY CONTROL MODULE (RBCM) REMOVAL/INSTALLATION.)
19	**INSPECT FOR SHORT TO GROUND BETWEEN BLIND SPOT MONITORING (BSM) CONTROL MODULE (LH) AND CONNECTOR C-39** • Disconnect connector C-39. • Inspect for continuity at the following terminals: — Between rear body control module (RBCM) terminal 4L (wiring harness side) and body ground — Between rear body control module (RBCM) terminal 4I (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the rear body control module (RBCM) and connector C-39 because the wiring harness is shorted to ground.
		No	Go to the next step.
20	**INSPECT CAN LINE IN BLIND SPOT MONITORING (BSM) CONTROL MODULE (LH) FOR SHORT TO GROUND** • Disconnect the blind spot monitoring (BSM) control module (LH) connector. • Inspect for continuity at the following terminals: — Between blind spot monitoring (BSM) control module (LH) terminal C (wiring harness side) and body ground — Between blind spot monitoring (BSM) control module (LH) terminal D (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the blind spot monitoring (BSM) control module (LH) and connector C-39 because the wiring harness is shorted to ground.
		No	Replace the blind spot monitoring (BSM) control module (LH) because there is a short to ground in the blind spot monitoring (BSM) control module (LH). (See BLIND SPOT MONITORING (BSM) CONTROL MODULE REMOVAL/INSTALLATION.)

Step	Inspection		Action
7	**INSPECT FOR SHORT TO GROUND BETWEEN DSC HU/CM AND CONNECTOR C-53** • Inspect for continuity at the following terminals: — Between DSC HU/CM terminal AF and body ground — Between DSC HU/CM terminal AC and body ground • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 9.
8	**INSPECT CAN LINE IN DSC HU/CM FOR SHORT TO GROUND** • Disconnect the DSC HU/CM connector. • Inspect for continuity at the following terminals: — Between DSC HU/CM terminal AF (wiring harness side) and body ground — Between DSC HU/CM terminal AC (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the DSC HU/CM and connector C-53 because the wiring harness is shorted to ground.
		No	Replace the DSC HU/CM because there is a short to ground in the DSC HU/CM. (See DSC HU/CM REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)].) (See DSC HU/CM REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITHOUT CYLINDER DEACTIVATION)].)
9	**INSPECT FOR SHORT TO GROUND BETWEEN RADAR UNIT AND CONNECTOR C-53** • Inspect for continuity at the following terminals: — Between radar unit terminal D and body ground — Between radar unit terminal C and body ground • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 50.
10	**INSPECT CAN LINE IN RADAR UNIT FOR SHORT TO GROUND** • Disconnect the radar unit connector. • Inspect for continuity at the following terminals: — Between radar unit terminal D (wiring harness side) and body ground — Between radar unit terminal C (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the radar unit and connector C-53 because the wiring harness is shorted to ground.
		No	Replace the radar unit because there is a short to ground in the radar unit. (See RADAR UNIT REMOVAL/INSTALLATION.)
11	**INSPECT FOR SHORT TO GROUND BETWEEN CONNECTORS C-55,C-54 AND INSTRUMENT CLUSTER** • Disconnect connectors C-55,C-54. • Inspect for continuity at the following terminals: — Between DLC-2 terminal F and body ground — Between DLC-2 terminal E and body ground • Is there continuity?	Yes	Go to Step 14.
		No	Go to the next step.

Step	Inspection		Action
20	**INSPECT FOR SHORT TO GROUND BETWEEN AUDIO AMPLIFIER AND CONNECTOR C-71** • Inspect for continuity at the following terminals: — Between audio amplifier terminal 2L and body ground — Between audio amplifier terminal 2N and body ground • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 22.
21	**INSPECT CAN LINE IN AUDIO AMPLIFIER FOR SHORT TO GROUND** • Disconnect the audio amplifier connector. • Inspect for continuity at the following terminals: — Between audio amplifier terminal 2L (wiring harness side) and body ground — Between audio amplifier terminal 2N (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the audio amplifier and connector C-71 because the wiring harness is shorted to ground.
		No	Replace the audio amplifier because there is a short to ground in the audio amplifier. (See AUDIO AMPLIFIER REMOVAL/INSTALLATION.)
22	**INSPECT FOR SHORT TO GROUND BETWEEN ELECTRIC PARKING BRAKE CONTROL MODULE AND CONNECTOR C-71** • Inspect for continuity at the following terminals: — Between electric parking brake control module terminal 2G and body ground — Between electric parking brake control module terminal 2F and body ground • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 24.
23	**INSPECT CAN LINE IN ELECTRIC PARKING BRAKE CONTROL MODULE FOR SHORT TO GROUND** • Disconnect the electric parking brake control module connector. • Inspect for continuity at the following terminals: — Between electric parking brake control module terminal 2G (wiring harness side) and body ground — Between electric parking brake control module terminal 2F (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the electric parking brake control module and connector C-71 because the wiring harness is shorted to ground.
		No	Replace the electric parking brake control module because there is a short to ground in the electric parking brake control module. (See ELECTRIC PARKING BRAKE CONTROL MODULE REMOVAL/INSTALLATION.)

Step	Inspection		Action
37	**INSPECT FOR SHORT TO GROUND BETWEEN START STOP UNIT AND CONNECTOR C-64** • Inspect for continuity at the following terminals: — Between start stop unit terminal 2M and body ground — Between start stop unit terminal 2O and body ground • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 39.
38	**INSPECT CAN LINE IN START STOP UNIT FOR SHORT TO GROUND** • Disconnect the start stop unit connector. • Inspect for continuity at the following terminals: — Between start stop unit terminal 2M (wiring harness side) and body ground — Between start stop unit terminal 2O (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the start stop unit and connector C-64 because the wiring harness is shorted to ground.
		No	Replace the start stop unit because there is a short to ground in the start stop unit. (See START STOP UNIT REMOVAL/INSTALLATION.)
39	**INSPECT FOR SHORT TO GROUND BETWEEN EPS CONTROL MODULE AND CONNECTOR C-64** • Inspect for continuity at the following terminals: — Between EPS control module terminal 2B and body ground — Between EPS control module terminal 2D and body ground • Is there continuity?	Yes	Go to the next step.
		No	Go to Step 41.
40	**INSPECT CAN LINE IN EPS CONTROL MODULE FOR SHORT TO GROUND** • Disconnect the EPS control module connector. • Inspect for continuity at the following terminals: — Between EPS control module terminal 2B (wiring harness side) and body ground — Between EPS control module terminal 2D (wiring harness side) and body ground • Is there continuity?	Yes	Repair or replace the wiring harness between the EPS control module and connector C-64 because the wiring harness is shorted to ground.
		No	Replace the EPS control module because there is a short to ground in the EPS control module. (See STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.)
41	**INSPECT FOR SHORT TO GROUND BETWEEN CONNECTOR C-64 AND INSTRUMENT CLUSTER** • Inspect for continuity at the following terminals: — Between instrument cluster terminal B and body ground — Between instrument cluster terminal D and body ground • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness between connector C-19 and connector C-64 because the wiring harness is shorted to ground.