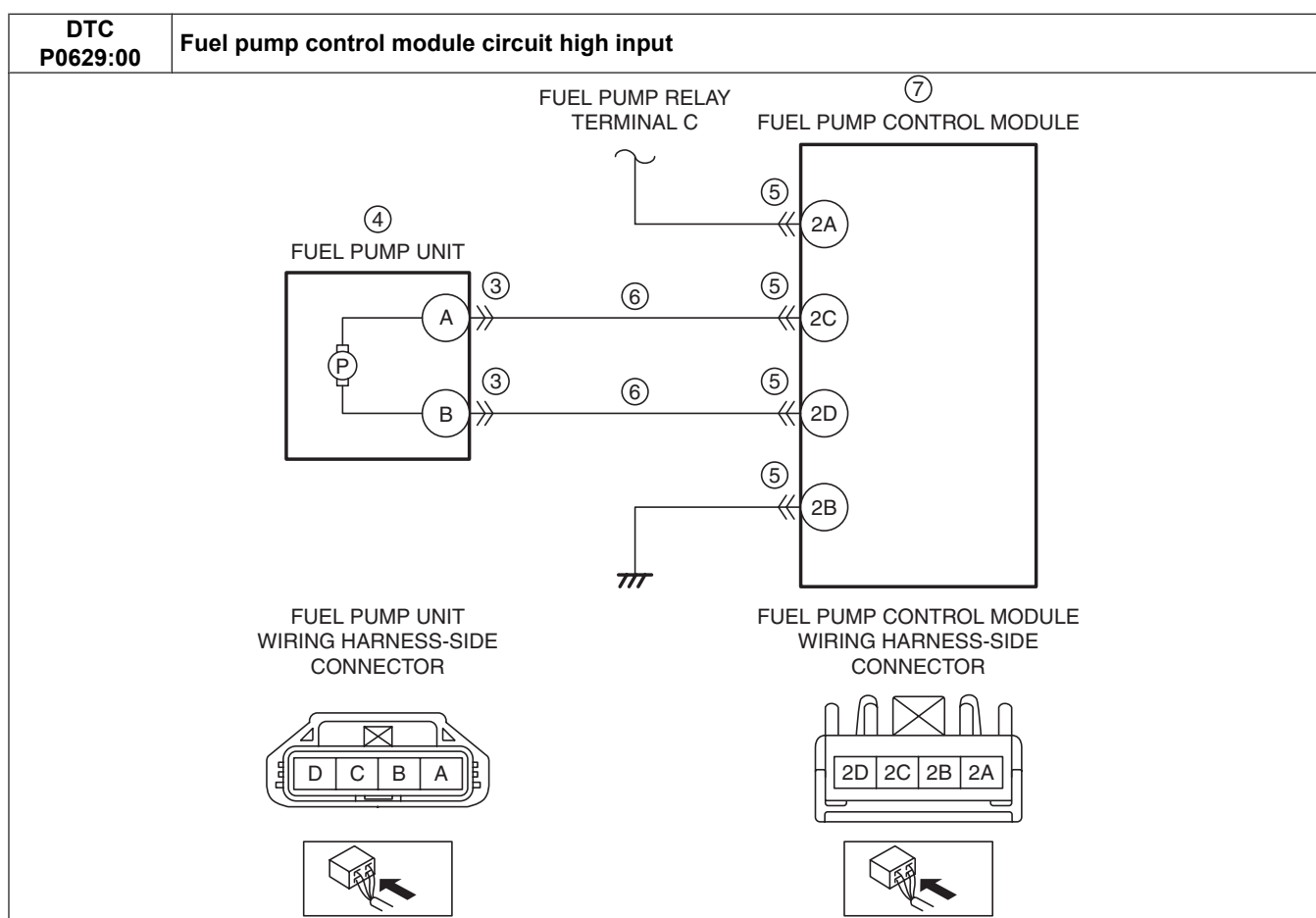


Caution

- Vehicle specifications differ depending on the vehicle identification number (VIN).
 - Type A VIN:
 - JM0 KE***** 100001—
 - JM6 KE***** 100001—
 - JM7 KE***** 100001—
 - JM8 KE***** 100001—
 - JMZ KE***** 100001—
 - KE10** 100001—
 - Type B VIN:
 - JM0 KE***** 200001—
 - JM6 KE***** 200001—
 - JM8 KE***** 200001—
 - JMZ KE***** 200001—
 - KE10** 200001—

| | |
|--------------------------------|---|
| DTC P0629:00 | Fuel pump control module circuit high input |
| DETECTION CONDITION | <ul style="list-style-type: none"> • Over-current is detected. Diagnostic support note <ul style="list-style-type: none"> • This is a continuous monitor (CCM). • The check engine light illuminates if the PCM detects the above malfunction condition during the first drive cycle. (Type A VIN) • The check engine light does not illuminate. (Type B VIN) • FREEZE FRAME DATA (Mode 2) is not available. (Type B VIN) • FREEZE FRAME DATA (Mode 2) is available. (Type A VIN) • Snapshot data is available. • DTC is stored in the PCM memory. |
| FAIL-SAFE FUNCTION | <ul style="list-style-type: none"> • Stops fuel pump control |
| POSSIBLE CAUSE | <ul style="list-style-type: none"> • Fuel pump unit connector or terminals malfunction • Fuel pump unit malfunction • Fuel pump control module connector or terminals malfunction • Short to power supply in wiring harness between the following terminals: <ul style="list-style-type: none"> — Fuel pump unit terminal A—Fuel pump control module terminal 2C — Fuel pump unit terminal B—Fuel pump control module terminal 2D • Fuel pump control module malfunction • PCM malfunction |



Diagnostic Procedure

| STEP | INSPECTION | ACTION | |
|------|---|--------|---|
| 1 | VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED <ul style="list-style-type: none"> Has the FREEZE FRAME DATA (Mode 2)/ snapshot data been recorded? | Yes | Go to the next step. |
| | | No | Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step. |
| 2 | VERIFY RELATED SERVICE INFORMATION AVAILABILITY <ul style="list-style-type: none"> Verify related Service Information availability. Is any related Service Information available? | Yes | Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step. |
| | | No | Go to the next step. |
| 3 | INSPECT FUEL PUMP UNIT CONNECTOR CONDITION <ul style="list-style-type: none"> Switch the ignition off. Disconnect the fuel pump unit connector. Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). Is there any malfunction? | Yes | Repair or replace the connector and/or terminals, then go to Step 8. |
| | | No | Go to the next step. |
| 4 | INSPECT FUEL PUMP UNIT <ul style="list-style-type: none"> Inspect the fuel pump unit. (See FUEL PUMP UNIT INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Is there any malfunction? | Yes | Replace the fuel pump unit, then go to Step 8. (See FUEL PUMP UNIT REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) |
| | | No | Go to the next step. |
| 5 | INSPECT FUEL PUMP CONTROL MODULE CONNECTOR CONDITION <ul style="list-style-type: none"> Disconnect the fuel pump control module connector. Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). Is there any malfunction? | Yes | Repair or replace the connector and/or terminals, then go to Step 8. |
| | | No | Go to the next step. |

| STEP | INSPECTION | ACTION | |
|------|---|--------|---|
| 6 | INSPECT FUEL PUMP UNIT CIRCUIT FOR SHORT TO POWER SUPPLY <ul style="list-style-type: none"> • Verify that the fuel pump unit and fuel pump control module connectors are disconnected. • Switch the ignition ON (engine off). • Measure the voltage at the following terminals (wiring harness-side): <ul style="list-style-type: none"> — Fuel pump unit terminal A — Fuel pump unit terminal B • Is the voltage 0 V? | Yes | Go to the next step. |
| | | No | Repair or replace the wiring harness for a possible short to power supply, then go to Step 8. |
| 7 | INSPECT FUEL PUMP CONTROL MODULE <ul style="list-style-type: none"> • Inspect the fuel pump control module. (See FUEL PUMP CONTROL MODULE INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is there any malfunction? | Yes | Replace the fuel pump control module, then go to the next step. (See FUEL PUMP CONTROL MODULE REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) |
| | | No | Go to the next step. |
| 8 | VERIFY DTC TROUBLESHOOTING COMPLETED <ul style="list-style-type: none"> • Always reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Perform the KOEO or KOER self test. (See KOEO/KOER SELF TEST [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Is the same DTC present? | Yes | Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) Go to the next step. |
| | | No | Go to the next step. |
| 9 | VERIFY AFTER REPAIR PROCEDURE <ul style="list-style-type: none"> • Perform the “AFTER REPAIR PROCEDURE”. (See AFTER REPAIR PROCEDURE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) • Are any DTCs present? | Yes | Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) |
| | | No | DTC troubleshooting completed. |