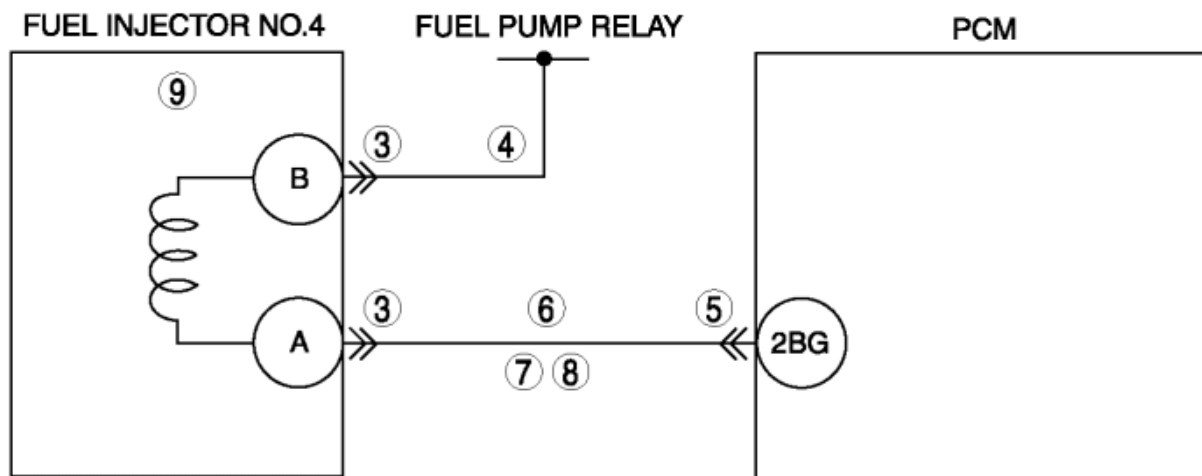


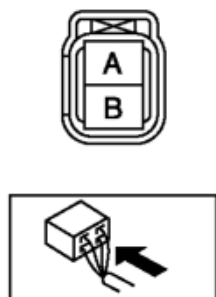
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DTC P0204:00 [MZI 3.7 V6]

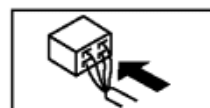
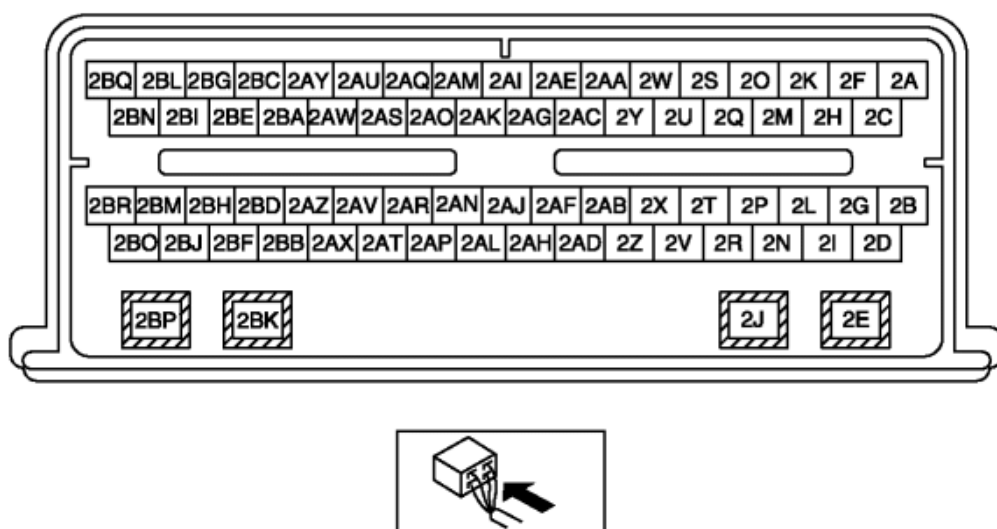
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DTC P0204:00        | Injector circuit/open—cylinder No.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DETECTION CONDITION | <ul style="list-style-type: none"><li>• The CCM monitors the operation of the fuel injector drivers in the PCM. The test fails if the fuel injector circuitry is inoperative.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                      |
| POSSIBLE CAUSE      | <ul style="list-style-type: none"><li>• Fuel injector No.4 connector or terminal malfunction</li><li>• PCM connector or terminal malfunction</li><li>• Open circuit between fuel pump relay and fuel injector No.4 terminal B</li><li>• Open circuit between fuel injector No.4 terminal A and PCM terminal 2BG</li><li>• Short to ground between fuel injector No.4 terminal A and PCM terminal 2BG</li><li>• Short to power supply between fuel injector No.4 terminal A and PCM terminal 2BG</li><li>• Fuel injector No.4 malfunction</li><li>• PCM malfunction</li></ul> |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



**FUEL INJECTOR NO.4  
WIRING HARNESS-SIDE CONNECTOR**



**PCM  
WIRING HARNESS-SIDE CONNECTOR**



## Diagnostic procedure

| STEP | INSPECTION                                                                                                                                                                                                  | ACTION                                                                                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b>VERIFY FREEZE FRAME DATA HAS BEEN RECORDED</b> <ul style="list-style-type: none"> <li>Has FREEZE FRAME DATA been recorded?</li> </ul>                                                                    | Yes Go to the next step.                                                                                                                                                     |
|      |                                                                                                                                                                                                             | No Record FREEZE FRAME DATA on the repair order, then go to the next step.                                                                                                   |
| 2    | <b>VERIFY RELATED REPAIR INFORMATION AVAILABILITY</b> <ul style="list-style-type: none"> <li>Verify related Service Bulletins availability.</li> <li>Is any related Service Bulletins available?</li> </ul> | Yes Perform repair or diagnosis according to available Service Bulletins. <ul style="list-style-type: none"> <li>If vehicle is not repaired, go to the next step.</li> </ul> |
|      |                                                                                                                                                                                                             | No Go to the next step.                                                                                                                                                      |
| 3    | <b>INSPECT FUEL INJECTOR NO.4 CONNECTOR FOR POOR CONNECTION</b>                                                                                                                                             | Yes Repair or replace suspected part, then go to Step 10.                                                                                                                    |

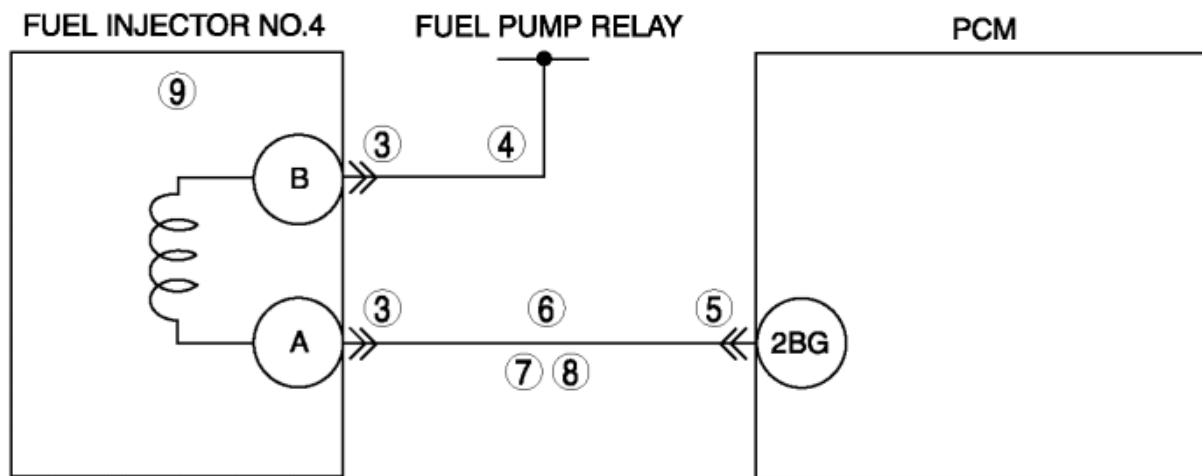
|   |                                                                                                                                                                                                                                                                                                                                                                                                           |     |                                                       |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>• Switch the ignition to off.</li> <li>• Disconnect the fuel injector No.4 connector.</li> <li>• Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>• Are there malfunction?</li> </ul>                                                                                                                                            | No  | Go to the next step.                                  |
| 4 | <b>INSPECT FUEL INJECTOR NO.4 POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 connector is disconnected.</li> <li>• Switch the ignition to ON (Engine off).</li> <li>• Measure the voltage between fuel injector No.4 connector terminal B and body ground.</li> <li>• Is the voltage greater than 10 V?</li> </ul>                                 | Yes | Go to the next step.                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Repair for an open circuit, then go to Step 10.       |
| 5 | <b>INSPECT PCM CONNECTOR FOR POOR CONNECTION</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 connector is disconnected.</li> <li>• Switch the ignition to off.</li> <li>• Disconnect the PCM connector.</li> <li>• Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>• Is there malfunction?</li> </ul>                                                  | Yes | Repair or replace suspected part, then go to Step 10. |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Go to the next step.                                  |
| 6 | <b>INSPECT FUEL INJECTOR NO.4 SIGNAL CIRCUIT FOR OPEN INSPECT FOR OPEN CIRCUIT IN WIRING HARNESS</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 and PCM connectors are disconnected.</li> <li>• Measure the resistance between fuel injector No.4 terminal A (wiring harness-side) and PCM terminal 2BG (wiring harness-side).</li> <li>• Is the resistance less than 5 ohms?</li> </ul> | Yes | Go to the next step.                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Repair for an open circuit, then go to Step 10.       |
| 7 | <b>INSPECT FUEL INJECTOR NO.4 SIGNAL CIRCUIT FOR SHORT TO GROUND IN WIRING HARNESS</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 and PCM connectors are disconnected.</li> <li>• Measure the resistance between fuel injector No.4 connector terminal A (wiring harness-side) and body ground.</li> <li>• Is the resistance greater than 10 kilohms?</li> </ul>                         | Yes | Go to the next step.                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Repair for a short circuit, then go to Step 10.       |
| 8 | <b>INSPECT FUEL INJECTOR NO.4 SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY IN WIRING HARNESS</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 and PCM connectors are disconnected.</li> </ul>                                                                                                                                                                                                  | Yes | Repair for a short circuit, then go to Step 10.       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Go to the next step.                                  |

|    |                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                                                                                                                                                                                                         |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <ul style="list-style-type: none"> <li>Switch the ignition to ON (Engine off).</li> <li>Measure the voltage between fuel injector No.4 terminal A (wiring harness-side) and body ground.</li> <li>Is any voltage present?</li> </ul>                                                                                                                                                                        |     |                                                                                                                                                                                                                         |
| 9  | <b>INSPECT FUEL INJECTOR NO.4</b> <ul style="list-style-type: none"> <li>Inspect the fuel injector No.4.</li> <li>(See <a href="#">FUEL INJECTOR INSPECTION [MZI 3.7 V6]</a>.)</li> <li>Is there any malfunction?</li> </ul>                                                                                                                                                                                | Yes | Replace the fuel injector No.4, then go to the next step.                                                                                                                                                               |
|    |                                                                                                                                                                                                                                                                                                                                                                                                             | No  | Go to the next step.                                                                                                                                                                                                    |
| 10 | <b>VERIFY TROUBLESHOOTING OF DTC P0204:00 HAS BEEN COMPLETED</b> <ul style="list-style-type: none"> <li>Verify that all disconnected connectors reconnected.</li> <li>Clear the DTC from the PCM memory using the M-MDS.</li> <li>Start the engine.</li> <li>Perform the KOEO or KOER self-test.</li> <li>(See <a href="#">KOEO/ KOER SELF TEST [MZI 3.7 V6]</a>.)</li> <li>Is same DTC present?</li> </ul> | Yes | Repeat the inspection from Step 1. <ul style="list-style-type: none"> <li>If the malfunction recurs, replace the PCM.</li> </ul> (See <a href="#">PCM REMOVAL/ INSTALLATION [MZI 3.7 V6]</a> .)<br>Go to the next step. |
|    |                                                                                                                                                                                                                                                                                                                                                                                                             | No  | Go to the next step.                                                                                                                                                                                                    |
| 11 | <b>VERIFY AFTER REPAIR PROCEDURE</b> <ul style="list-style-type: none"> <li>Perform the "AFTER REPAIR PROCEDURE".</li> <li>(See <a href="#">AFTER REPAIR PROCEDURE [MZI 3.7 V6]</a>.)</li> <li>Are any DTCs present?</li> </ul>                                                                                                                                                                             | Yes | Go to the applicable DTC inspection.<br>(See <a href="#">DTC TABLE [MZI 3.7 V6]</a> .)                                                                                                                                  |
|    |                                                                                                                                                                                                                                                                                                                                                                                                             | No  | Troubleshooting completed.                                                                                                                                                                                              |

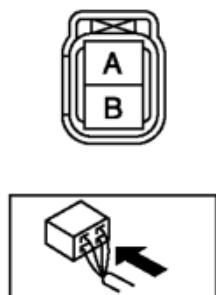
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DTC P0204:00 [MZI 3.7 V6]

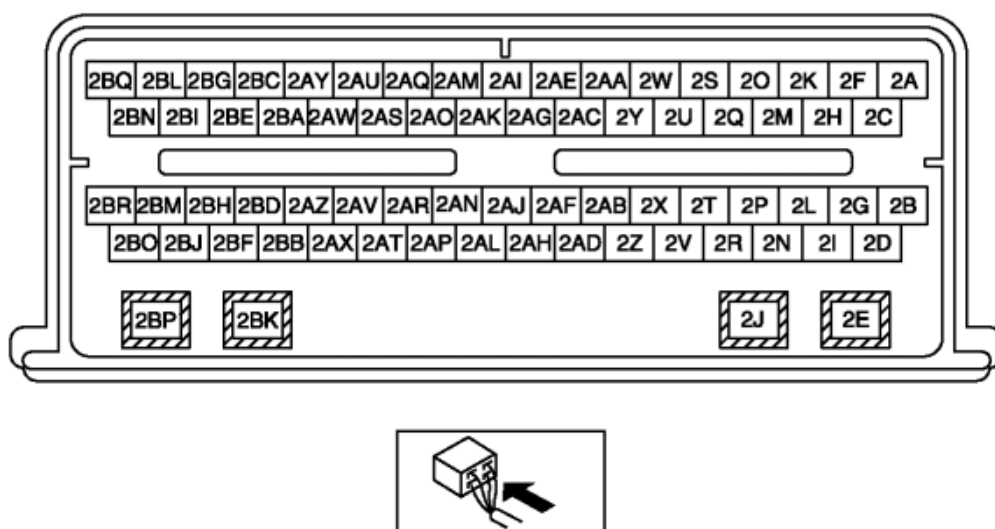
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DTC P0204:00        | Injector circuit/open—cylinder No.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| DETECTION CONDITION | <ul style="list-style-type: none"><li>• The CCM monitors the operation of the fuel injector drivers in the PCM. The test fails if the fuel injector circuitry is inoperative.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                      |
| POSSIBLE CAUSE      | <ul style="list-style-type: none"><li>• Fuel injector No.4 connector or terminal malfunction</li><li>• PCM connector or terminal malfunction</li><li>• Open circuit between fuel pump relay and fuel injector No.4 terminal B</li><li>• Open circuit between fuel injector No.4 terminal A and PCM terminal 2BG</li><li>• Short to ground between fuel injector No.4 terminal A and PCM terminal 2BG</li><li>• Short to power supply between fuel injector No.4 terminal A and PCM terminal 2BG</li><li>• Fuel injector No.4 malfunction</li><li>• PCM malfunction</li></ul> |
|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



**FUEL INJECTOR NO.4  
WIRING HARNESS-SIDE CONNECTOR**



**PCM  
WIRING HARNESS-SIDE CONNECTOR**



## Diagnostic procedure

| STEP | INSPECTION                                                                                                                                                                                                  | ACTION                                                                                                                                                                       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b>VERIFY FREEZE FRAME DATA HAS BEEN RECORDED</b> <ul style="list-style-type: none"> <li>Has FREEZE FRAME DATA been recorded?</li> </ul>                                                                    | Yes Go to the next step.                                                                                                                                                     |
|      |                                                                                                                                                                                                             | No Record FREEZE FRAME DATA on the repair order, then go to the next step.                                                                                                   |
| 2    | <b>VERIFY RELATED REPAIR INFORMATION AVAILABILITY</b> <ul style="list-style-type: none"> <li>Verify related Service Bulletins availability.</li> <li>Is any related Service Bulletins available?</li> </ul> | Yes Perform repair or diagnosis according to available Service Bulletins. <ul style="list-style-type: none"> <li>If vehicle is not repaired, go to the next step.</li> </ul> |
|      |                                                                                                                                                                                                             | No Go to the next step.                                                                                                                                                      |
| 3    | <b>INSPECT FUEL INJECTOR NO.4 CONNECTOR FOR POOR CONNECTION</b>                                                                                                                                             | Yes Repair or replace suspected part, then go to Step 10.                                                                                                                    |

|   |                                                                                                                                                                                                                                                                                                                                                                                                           |     |                                                       |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------|
|   | <ul style="list-style-type: none"> <li>• Switch the ignition to off.</li> <li>• Disconnect the fuel injector No.4 connector.</li> <li>• Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>• Are there malfunction?</li> </ul>                                                                                                                                            | No  | Go to the next step.                                  |
| 4 | <b>INSPECT FUEL INJECTOR NO.4 POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 connector is disconnected.</li> <li>• Switch the ignition to ON (Engine off).</li> <li>• Measure the voltage between fuel injector No.4 connector terminal B and body ground.</li> <li>• Is the voltage greater than 10 V?</li> </ul>                                 | Yes | Go to the next step.                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Repair for an open circuit, then go to Step 10.       |
| 5 | <b>INSPECT PCM CONNECTOR FOR POOR CONNECTION</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 connector is disconnected.</li> <li>• Switch the ignition to off.</li> <li>• Disconnect the PCM connector.</li> <li>• Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>• Is there malfunction?</li> </ul>                                                  | Yes | Repair or replace suspected part, then go to Step 10. |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Go to the next step.                                  |
| 6 | <b>INSPECT FUEL INJECTOR NO.4 SIGNAL CIRCUIT FOR OPEN INSPECT FOR OPEN CIRCUIT IN WIRING HARNESS</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 and PCM connectors are disconnected.</li> <li>• Measure the resistance between fuel injector No.4 terminal A (wiring harness-side) and PCM terminal 2BG (wiring harness-side).</li> <li>• Is the resistance less than 5 ohms?</li> </ul> | Yes | Go to the next step.                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Repair for an open circuit, then go to Step 10.       |
| 7 | <b>INSPECT FUEL INJECTOR NO.4 SIGNAL CIRCUIT FOR SHORT TO GROUND IN WIRING HARNESS</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 and PCM connectors are disconnected.</li> <li>• Measure the resistance between fuel injector No.4 connector terminal A (wiring harness-side) and body ground.</li> <li>• Is the resistance greater than 10 kilohms?</li> </ul>                         | Yes | Go to the next step.                                  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Repair for a short circuit, then go to Step 10.       |
| 8 | <b>INSPECT FUEL INJECTOR NO.4 SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY IN WIRING HARNESS</b> <ul style="list-style-type: none"> <li>• Fuel injector No.4 and PCM connectors are disconnected.</li> </ul>                                                                                                                                                                                                  | Yes | Repair for a short circuit, then go to Step 10.       |
|   |                                                                                                                                                                                                                                                                                                                                                                                                           | No  | Go to the next step.                                  |

|    |                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                                                                                                                                                                                                         |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <ul style="list-style-type: none"> <li>Switch the ignition to ON (Engine off).</li> <li>Measure the voltage between fuel injector No.4 terminal A (wiring harness-side) and body ground.</li> <li>Is any voltage present?</li> </ul>                                                                                                                                                                        |     |                                                                                                                                                                                                                         |
| 9  | <b>INSPECT FUEL INJECTOR NO.4</b> <ul style="list-style-type: none"> <li>Inspect the fuel injector No.4.</li> <li>(See <a href="#">FUEL INJECTOR INSPECTION [MZI 3.7 V6]</a>.)</li> <li>Is there any malfunction?</li> </ul>                                                                                                                                                                                | Yes | Replace the fuel injector No.4, then go to the next step.                                                                                                                                                               |
|    |                                                                                                                                                                                                                                                                                                                                                                                                             | No  | Go to the next step.                                                                                                                                                                                                    |
| 10 | <b>VERIFY TROUBLESHOOTING OF DTC P0204:00 HAS BEEN COMPLETED</b> <ul style="list-style-type: none"> <li>Verify that all disconnected connectors reconnected.</li> <li>Clear the DTC from the PCM memory using the M-MDS.</li> <li>Start the engine.</li> <li>Perform the KOEO or KOER self-test.</li> <li>(See <a href="#">KOEO/ KOER SELF TEST [MZI 3.7 V6]</a>.)</li> <li>Is same DTC present?</li> </ul> | Yes | Repeat the inspection from Step 1. <ul style="list-style-type: none"> <li>If the malfunction recurs, replace the PCM.</li> </ul> (See <a href="#">PCM REMOVAL/ INSTALLATION [MZI 3.7 V6]</a> .)<br>Go to the next step. |
|    |                                                                                                                                                                                                                                                                                                                                                                                                             | No  | Go to the next step.                                                                                                                                                                                                    |
| 11 | <b>VERIFY AFTER REPAIR PROCEDURE</b> <ul style="list-style-type: none"> <li>Perform the "AFTER REPAIR PROCEDURE".</li> <li>(See <a href="#">AFTER REPAIR PROCEDURE [MZI 3.7 V6]</a>.)</li> <li>Are any DTCs present?</li> </ul>                                                                                                                                                                             | Yes | Go to the applicable DTC inspection.<br>(See <a href="#">DTC TABLE [MZI 3.7 V6]</a> .)                                                                                                                                  |
|    |                                                                                                                                                                                                                                                                                                                                                                                                             | No  | Troubleshooting completed.                                                                                                                                                                                              |