

**ATTENTION:**

GENERAL MANAGER ☐

PARTS MANAGER ☐

CLAIMS PERSONNEL ☐

SERVICE MANAGER ☐

IMPORTANT - All Service Personnel Should Read and Initial in the boxes provided, right.

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**SUBARU**

QUALITY DRIVEN® SERVICE

## SERVICE INFORMATION BULLETIN

**APPLICABILITY:** 2015-25MY Legacy & Outback 2.5L  
 2020-25MY Legacy & Outback XT 2.4L  
 2017-25MY Impreza & Crosstrek  
 2019-25MY Forester  
 2015-25MY WRX  
 2019-25MY Ascent  
 2022-25MY BRZ

**NUMBER:** 18-228-25R

**DATE:** 11/20/25

**REVISED:** 12/08/25

**SUBJECT:** DTC P2097 & DTC P2096 Diagnosis  
 / Service Manual Correction

### INTRODUCTION:

This service information bulletin announces the diagnostic procedures to be used when DTCs P2096 (POST CATALYST FUEL TRIM SYSTEM TOO LEAN BANK 1) and P2097 (POST CATALYST FUEL TRIM SYSTEM TOO RICH BANK 1) are detected by the Engine Control Module (ECM). If the DTCs listed above are detected by the ECM, follow the service procedures outlined below. This correction will be applied the Service Manual in the future.

### SERVICE PROCEDURE / INFORMATION:

**REMINDER:** Customer satisfaction and retention starts with performing quality repairs.

For non-PHEV vehicles, use the steps below to replace steps shown in the applicable Service Manual for DTCs P2096 and P2097

| Model                    | Year      | Steps that are replaced     |
|--------------------------|-----------|-----------------------------|
| Legacy & Outback 2.5L    | 2015-25MY | <a href="#">14 &amp; 15</a> |
| Legacy & Outback XT 2.4L | 2020-25MY | <a href="#">12 &amp; 13</a> |
| Impreza & Crosstrek      | 2017-23MY | <a href="#">14 &amp; 15</a> |
|                          | 2024-25MY | <a href="#">15 &amp; 16</a> |
| Forester                 | 2019-24MY | <a href="#">14 &amp; 15</a> |
|                          | 2025MY    | <a href="#">15 &amp; 16</a> |
| WRX                      | 2015-25MY | <a href="#">12 &amp; 13</a> |
| Ascent                   | 2019-25MY | <a href="#">12 &amp; 13</a> |
| BRZ                      | 2022-25MY | <a href="#">14 &amp; 15</a> |

**CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.**

Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

**Subaru of America, Inc. is ISO 14001 Compliant**

ISO 14001 is the international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

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## STEP 14 CHECK REAR OXYGEN SENSOR DATA

| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Revised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, read the value of [Oxygen sensor #12].</p> <ul style="list-style-type: none"> <li>Depress the clutch pedal. (MT model)</li> <li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Data Monitor</u></li> <li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li> </ul> <p>Is the value of [Oxygen sensor #12] 0.49 V or more?</p> <p>Yes: Go to 15.<br/>No: Go to 16.</p> | <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, <b>select [Injection Quantity Control]</b>.</p> <ul style="list-style-type: none"> <li>Depress the clutch pedal. (MT model)</li> <li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <b>COMMON (DIAGNOSTICS)&gt;Active Test</b></li> <li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li> </ul> <p><b>3. Increase the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)&gt;Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.</b></p> <p><b>Does the value of [Oxygen sensor #12] change (0.49V or higher)?</b></p> <p>Yes: Go to step below<br/>No: Go to 16.</p> |

## STEP 15 CHECK REAR OXYGEN SENSOR DATA

| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Revised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, read the value of [Oxygen sensor #12].</p> <ul style="list-style-type: none"> <li>Depress the clutch pedal. (MT model)</li> <li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Data Monitor</u></li> <li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li> </ul> <p>Is the value of [Oxygen sensor #12] 0.25 V or less?</p> <p>Yes: Go to 17.<br/>No: Go to 16.</p> | <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, <b>select [Injection Quantity Control]</b>.</p> <ul style="list-style-type: none"> <li>Depress the clutch pedal. (MT model)</li> <li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Active Test</u></li> <li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li> </ul> <p><b>3. Decrease the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)&gt;Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.</b></p> <p><b>Does the value of [Oxygen sensor #12] change (0.25V or less)?</b></p> <p>Yes: Go to 17.<br/>No: Go to 16.</p> |

Continued...

## STEP 15 CHECK REAR OXYGEN SENSOR DATA

| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Revised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, read the value of [Oxygen sensor #12].</p> <ul style="list-style-type: none"><li>• Depress the clutch pedal. (MT model)</li><li>• Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Data Monitor</u></li><li>• General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p>Is the value of [Oxygen sensor #12] 0.49 V or more?</p> <p>Yes: Go to 16<br/>No: Go to 17</p> | <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, <b>select [Injection Quantity Control]</b>.</p> <ul style="list-style-type: none"><li>• Depress the clutch pedal. (MT model)</li><li>• Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <b>COMMON (DIAGNOSTICS)&gt;Active Test</b></li><li>• General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p><b>3. Increase the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)&gt;Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.</b></p> <p><b>Does the value of [Oxygen sensor #12] change (0.49V or higher)?</b></p> <p>Yes: Go to step below<br/>No: Go to 17</p> |

## STEP 16 CHECK REAR OXYGEN SENSOR DATA

| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Revised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, read the value of [Oxygen sensor #12].</p> <ul style="list-style-type: none"><li>• Depress the clutch pedal. (MT model)</li><li>• Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Data Monitor</u></li><li>• General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p>Is the value of [Oxygen sensor #12] 0.25 V or less?</p> <p>Yes: Go to 18<br/>No: Go to 17</p> | <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, <b>select [Injection Quantity Control]</b>.</p> <ul style="list-style-type: none"><li>• Depress the clutch pedal. (MT model)</li><li>• Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <b>COMMON (DIAGNOSTICS)&gt;Active Test</b></li><li>• General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p><b>3. Decrease the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)&gt;Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.</b></p> <p><b>Does the value of [Oxygen sensor #12] change (0.25V or less)?</b></p> <p>Yes: Go to 18<br/>No: Go to 17</p> |

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For 2015-25MY WRX

2019-25MY Ascent

2020-25MY Legacy & Outback XT 2.4L

## STEP 12 CHECK REAR OXYGEN SENSOR DATA

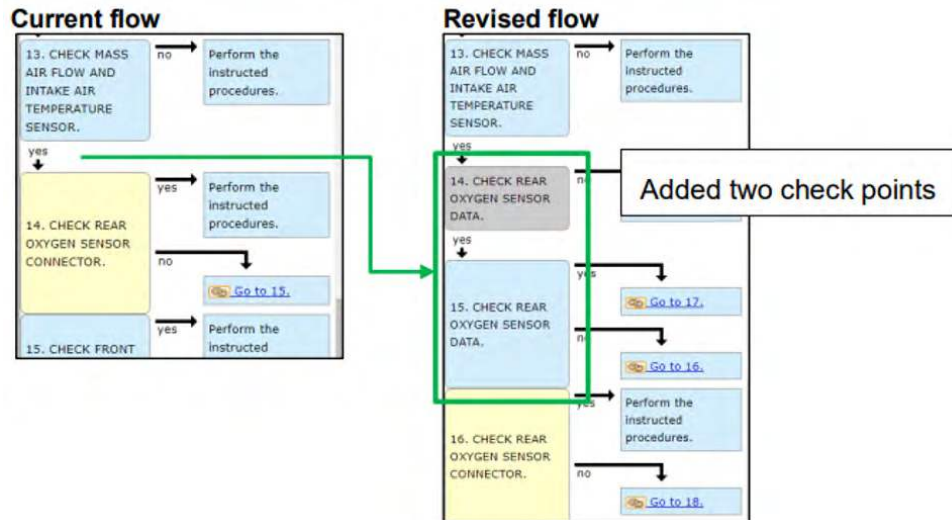
| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Revised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, read the value of [Oxygen sensor #12].</p> <ul style="list-style-type: none"><li>Depress the clutch pedal. (MT model)</li><li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Data Monitor</u></li><li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p>Is the value of [Oxygen sensor #12] 0.49 V or more?</p> <p>Yes: Go to 13<br/>No: Go to 14</p> | <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, <b>select [Injection Quantity Control]</b>.</p> <ul style="list-style-type: none"><li>Depress the clutch pedal. (MT model)</li><li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <b>COMMON (DIAGNOSTICS)&gt;Active Test</b></li><li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p><b>3. Increase the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)&gt;Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.</b></p> <p><b>Does the value of [Oxygen sensor #12] change (0.49V or higher)?</b><br/>Yes: Go to step below<br/>No: Go to 14</p> |

## STEP 13 CHECK REAR OXYGEN SENSOR DATA

| Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Revised                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, read the value of [Oxygen sensor #12].</p> <ul style="list-style-type: none"><li>Depress the clutch pedal. (MT model)</li><li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Data Monitor</u></li><li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p>Is the value of [Oxygen sensor #12] 0.25 V or less?</p> <p>Yes: Go to 15<br/>No: Go to 14</p> | <p><b>1.</b> Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.</p> <p><b>2.</b> Using the Subaru Select Monitor or a general scan tool, <b>select [Injection Quantity Control]</b>.</p> <ul style="list-style-type: none"><li>Depress the clutch pedal. (MT model)</li><li>Subaru Select Monitor<br/>For detailed operation procedures, refer to "Common (Diagnostics)". <u>COMMON (DIAGNOSTICS)&gt;Active Test</u></li><li>General scan tool<br/>For detailed operation procedures, refer to the general scan tool operation manual.</li></ul> <p><b>3. Decrease the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)&gt;Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.</b></p> <p><b>Does the value of [Oxygen sensor #12] change (0.25V or less)?</b><br/>Yes: Go to 15<br/>No: Go to 14</p> |

*Continued...*

For 2019-23MY Crosstrek Hybrid, use the steps below and insert them in between steps 13 and 14 shown in STIS for P2096 and P2097.



#### 14. CHECK REAR OXYGEN SENSOR DATA.

1.  
Warm up the engine until the engine coolant temperature exceeds 75°C (167°F) and keep the engine speed at 3,000rpm. (2 minutes maximum)
  2.  
Using the Subaru Select Monitor or a general scan tool, select [Injection Quantity Control].
    - Depress the clutch pedal. (MT model)
    - Subaru Select Monitor  
For detailed operation procedures, refer to "Common (Diagnostics)". COMMON (DIAGNOSTICS)>Active Test
    - General scan tool  
For detailed operation procedures, refer to the general scan tool operation manual.
  3.  
Increase the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)>Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.
- Does the value of [Oxygen sensor #12] change (0.49V or higher)?
- Yes: Go to step found on next page of TSB  
No: Go to step 14 of the trouble tree on STIS

#### 15. CHECK REAR OXYGEN SENSOR DATA.

1.  
Warm up the engine until the engine coolant temperature exceeds 75°C (167°F), and decrease the engine speed rapidly from 3,000rpm.
  2.  
Using the Subaru Select Monitor or a general scan tool, select [Injection Quantity Control].
    - Depress the clutch pedal. (MT model)
    - Subaru Select Monitor  
For detailed operation procedures, refer to "Common (Diagnostics)". COMMON (DIAGNOSTICS)>Active Test
    - General scan tool  
For detailed operation procedures, refer to the general scan tool operation manual.
  3.  
Decrease the Injection Quantity by 10% intentionally. Select COMMON (DIAGNOSTICS)>Data Monitor and read the value of [Oxygen sensor #12] to see if it changes. The value does not change immediately. Wait about 60 seconds.
- Does the value of [Oxygen sensor #12] change (0.25V or less)?
- Yes: Go to step 14 of the trouble tree on STIS  
No: Go to step 15 of the trouble tree on STIS

*Continued...*

**IMPORTANT REMINDERS:**

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.