

MIL ON With DTC(s) P1F6C71 and/or P1F6E71

Service Category Engine/Hybrid System

Section Engine Control

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021 - 2022	Mirai	

REVISION NOTICE

February 20, 2025 Rev1:

- The Warranty Information, Parts Information, Required Tools & Equipment, and Repair Procedure sections have been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2021 – 2022 model year Mirai vehicles may exhibit a MIL ON condition with one or both of the following Diagnostic Trouble Codes (DTCs) present:

- P1F6C71 – Air Sealing Valve Actuator Stuck
- P1F6E71 – Air Pressure Regulating Valve Actuator Stuck

The EV control computer logic has been modified to reduce the possibility of this condition. Follow the Repair Procedure in this bulletin to address this condition.

Production Change Information

This bulletin applies to vehicles produced BEFORE the Production Change Effective VIN shown below.

MODEL	PLANT	DRIVETRAIN	PRODUCTION CHANGE EFFECTIVE VIN
Mirai	Motomachi	2WD	JTDAAAAA#PA007624

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EL2304	Reprogram the EV Control Computer	0.5	89981-####*	8A	74
Combo A	R & R Air Sealing Valve (for DTC P1F6C71 Only)	1.0			
Combo B	R & R Air Pressure Regulating Valve (for DTC P1F6E71 Only)	2.0			

*Warranty claim MUST be submitted with the correct 10-digit OFF. Choose the correct OFF for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

APPLICABLE WARRANTY

- This repair is covered under the Toyota Fuel Cell System Warranty. This warranty is in effect for 96 months or 100,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
89981-62110	89981-62260	Computer, EV Control	—
89981-62120	89981-62270		
89981-62150	89981-62280		
89981-62160	89981-62290		
89981-62170	89981-62300		
17C10-77030		Regulator Assy, Fuel Cell Air Pressure	1
17C10-76010		Regulator Assy, Fuel Cell Air Pressure, No.2	1
1A495-77020		Gasket, FC Stack Air, No. 5	2*

*Two gaskets are needed per regulator assembly (valve). If two regulator assemblies need to be replaced, four gaskets will be needed.

NOTE

The EV control computer should NOT be replaced as part of the Repair Procedure.

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Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
DCA-8000 Battery Diagnostic Tool*	DCA-8000P T	1

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-368-6787 or by visiting *Home – Service Resources – Toyota Special Service Tools (SSTs)*.

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVI*	ADE	TSADVUNIT	1
Techstream 2.0		TS2UNIT	
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- GTS+ software version 2024.04.004.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 or by visiting *TIS – Diagnostics – Tools & Equipment – Techstream Order Portal*.

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Calibration Information

MODEL	ENGINE	CALIBRATION ID #	CALIBRATION ID	
			PREVIOUS	NEW
Mirai	3KM	CID 1	899836211500 899836211400 899836211300 899836211200 899836211100 899836211000	899836211600 / 899856202200
			899856202100 899856202000	
		CID 1	899836212500 899836212400 899836212300 899836212200 899836212100 899836212000	899836212600 / 899856202200
			899856202100 899856202000	
		CID 1	899836215500 899836215400 899836215300 899836215200 899836215100 899836215000	899836215600 / 899856202200
			899856202100 899856202000	
		CID 1	899836216500 899836216400 899836216300 899836216200 899836216100 899836216000	899836216600 / 899856202200
			899856202100 899856202000	
		CID 1	899836217500 899836217400 899836217300 899836217200 899836217100 899836217000	899836217600 / 899856204200
			899856204100 899856204000	
		CID 2		

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Repair Procedure

1. Confirm the condition exists.
Does the vehicle exhibit a MIL ON condition with one or both of the following DTCs present?
 - P1F6C71 – Air Sealing Valve Actuator Stuck
 - P1F6E71 – Air Pressure Regulating Valve Actuator Stuck
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
2. Use GTS+ to confirm if the EV control computer calibration has been updated.
Is the calibration ID listed in GTS+ the latest calibration?
 - **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - **NO** — Continue to step 3.
3. Determine if the air sealing valve requires replacement.
Is DTC P1F6C71 present?
 - **YES** — Continue to step 4.
 - **NO** — Go to step 6.
4. Remove the air sealing valve.
Refer to TIS, applicable model and model year Repair Manual:
 - [2021 – 2022](#) Mirai:
Engine / Hybrid System – Intake / Exhaust – Air Control Valve – Removal
5. Install the NEW air sealing valve.
Refer to TIS, applicable model and model year Repair Manual:
 - [2021 – 2022](#) Mirai:
Engine / Hybrid System – Intake / Exhaust – Air Control Valve – Installation
6. Determine if the air pressure regulating valve requires replacement.
Is DTC P1F6E71 present?
 - **YES** — Continue to step 7.
 - **NO** — Go to step 9.

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Repair Procedure (continued)

7. Remove the air pressure regulating valve.

Refer to TIS, applicable model and model year Repair Manual:

- [2021 – 2022](#) Mirai:
Engine / Hybrid System – Intake / Exhaust – Air Control Valve – Removal

8. Install the NEW air pressure regulating valve.

Refer to TIS, applicable model and model year Repair Manual:

- [2021 – 2022](#) Mirai:
Engine / Hybrid System – Intake / Exhaust – Air Control Valve – Installation

9. Reprogram the EV control computer.

NOTE

- The battery diagnostic tool MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic station, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in [T-SB-0107-20](#), *ECU Flash Reprogramming With Security Signature*, and flash reprogram the EV control computer with the NEW calibration file update.

10. Using GTS+, clear ANY DTCs and confirm the condition is no longer present.

NOTE

It may be necessary to turn the ignition switch OFF and wait for 10 minutes or more for ALL DTCs to clear.