

Service

Category Engine/Hybrid System

Section	Engine Control	Market USA	Toyota Supports
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Applicability

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

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

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	MODEL PLANT DR		PRODUCTION CHANGE EFFECTIVE VIN		
Mirai	Mirai Motomachi		JTDAAAAA#PA007624		

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL2304	Reprogram the EV Control Computer		89981-#####*	8A	74

*Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP 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		QII
89981-62110	89981-62260		
89981-62120	89981-62270		
89981-62150	89981-62280	Computer, EV Control	
89981-62160	89981-62290		
89981-62170	89981-62300		
17C10-77030	17C10-77030	Regulator Assy, Fuel Cell Air Pressure	1
1A495-77020	1A495-77020	Gasket, FC Stack Air, No. 5	1

NOTE

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

Required Tools & Equipment

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

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

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

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- GTS+ software version 2023.02.001.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Calibration Information

MODEL	ENGINE		CALIBRATION ID		
MODEL	ENGINE	CALIBRATION ID #	PREVIOUS	NEW	
		CID 1	899836211500 899836211400 899836211300 899836211200 899836211200 89983621100	<u>899836211600 /</u> <u>899856202200</u>	
		CID 2	899856202100 899856202000		
		CID 1	899836212500 899836212400 899836212300 899836212200 899836212200 899836212100 899836212000	<u>899836212600 /</u> <u>899856202200</u>	
		CID 2	899856202100 899856202000		
Mirai	ЗКМ	CID 1	899836215500 899836215400 899836215300 899836215200 899836215200 899836215100 899836215000	<u>899836215600 /</u> <u>899856202200</u>	
		CID 2	899856202100 899856202000		
		CID 1	899836216500 899836216400 899836216300 899836216200 899836216100 899836216000	<u>899836216600 /</u> <u>899856202200</u>	
		CID 2	899856202100 899856202000		
		CID 1	899836217500 899836217400 899836217300 899836217200 899836217200 899836217100 899836217000	<u>899836217600 /</u> <u>899856204200</u>	
		CID 2	899856204100 899856204000		

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 Techstream to confirm if the EV control computer calibration has been updated. Is the calibration ID listed in Techstream the latest calibration?
 - **YES** This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
 - NO Continue to step 3.
- Determine if air sealing valve requires replacement. Is DTC P1F6C71 present?
 - YES Continue to step 4.
 - **NO** Go to step 6.
- Remove the air sealing valve.
 Refer to TIS, applicable model and model year Repair Manual:
 - <u>2021 2022</u> Mirai: Engine/Hybrid System – Intake/Exhaust – Intake / Exhaust: Air Control Valve: Removal"
- 5. Install the NEW air sealing valve.

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

- <u>2021 2022</u> Mirai: Engine/Hybrid System – Intake/Exhaust – Intake / Exhaust: Air Control Valve: Installation"
- Determine if the air pressure regulating valve requires replacement. Is DTC P1F6E71 present?
 - **YES** Continue to step 7.
 - NO Go to step 9.

Repair Procedure (continued)

- Remove the air pressure regulating valve.
 Refer to TIS, applicable model and model year Repair Manual:
 - <u>2021 2022</u> Mirai: *Engine/Hybrid System – Emission Control –* "A25A-FXS (Emission Control): Fuel Vapor Containment Valve: Removal"
- Install the NEW air pressure regulating valve.
 Refer to TIS, applicable model and model year Repair Manual:
 - <u>2021 2022</u> Mirai: *Engine/Hybrid System – Emission Control –* "A25A-FXS (Emission Control): Fuel Vapor Containment 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 <u>DCA-8000 Instruction Manual</u> located at TIS Diagnostics Tools & Equipment Battery Diagnostics.

Follow the procedures outlined in <u>T-SB-0107-20</u>, *ECU Flash Reprogramming With Security Signature*, and flash the EV control computer with the NEW calibration file update.

10. 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.