

A/C Compressor Inoperative with DTC B1476

Service Category Vehicle Interior

Section Heating/Air Conditioning

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2012 – 2013	Prius, Prius C	

Introduction

On start-up, some vehicles may exhibit a condition where the A/C system blows warm air and Diagnostic Trouble Code (DTC) B1476 is set. An updated A/C compressor is available to address this condition.

NOTE

If the vehicle does NOT have DTC B1476 (A/C Inverter Load System Malfunction) set as either a current or history DTC, this bulletin does not apply.

Production Change Information

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

MODEL	PLANT	LINE	PRODUCTION CHANGE EFFECTIVE VIN
Prius	Tsutsumi	1	JTDKN3DU#D0337986
		2	JTDKN3DU#D1640890
	Fujimatsu	1	JTDKN3DU#D5575249
		2	JTDKN3DU#D5575091
Prius C	Iwate	1	JTDKDTB3#D1031583
		2	JTDKDTB3#D1528111

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Warranty Information

OP CODE	DESCRIPTION	TIME	MODEL	OFF	T1	T2
AC1206	R & R A/C Compressor Assembly	2.8	Prius	88370-47080	7A	54
			Prius C	88370-52010		

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- For California specification Prius C vehicles sold, registered, and operated in California, Arizona ('12 MY only), Connecticut, Maine, Maryland, Massachusetts, New Jersey, Pennsylvania, Oregon, Rhode Island, Vermont, and Washington the A/C Compressor is covered under the California Emission Warranty. This warranty is in effect for 84 months or 70,000 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.

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
TIS Techstream		TSPKG1	
Techstream Lite		TSLITEDLR01	

* Essential SST.

NOTE

- Only **ONE** of the Techstream units listed above is required.
- Software version 8.10.021 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

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Parts Information

NOTE
Please refer to Repair Procedure to determine which Parts Group is required.

MODEL	PARTS GROUP	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Prius	A	88370-47080	88370-47081	Compressor Assy, w/Motor	1
		88460-47150	Same	Condenser Assy, w/Receiver	1
		88710-47150	Same	Tube & Accessory Assy, Air-Conditioned	1
		88710-47050	Same		
		88515-47040	Same	Valve, Cooler Expansion	1
		88501-47051	Same	Evaporator Sub-Assy, Cooler, No. 1	1
		88707-47041	Same	Pipe Sub-Assy, Suction	1
		88704-47051	Same	Hose Sub-Assy, Suction	1
		88704-47090	Same		
		88703-47040	Same	Hose Sub-Assy, Discharge	1
	B	88370-47080	88370-47081	Compressor Assy, w/Motor	1
	C	88370-47080	88370-47081	Compressor Assy, w/Motor	1
		88703-47040	Same	Hose Sub-Assy, Discharge	1
		88460-47150	Same	Condenser Assy, w/Receiver	1
	D	88370-47080	88370-47081	Compressor Assy, w/Motor	1
		88703-47040	Same	Hose Sub-Assy, Discharge	1
		88460-47150	Same	Condenser Assy, w/Receiver	1
		88710-47150	Same	Tube & Accessory Assy, Air-Conditioned	1
		88710-47050	Same		
	Prius C	A	88370-52010	88370-52011	Compressor Assy, w/Motor
88704-52260			Same	Hose Sub-Assy, Suction	1
88706-52600			Same	Pipe Sub-Assy, Liquid	1
88501-52120			Same	Evaporator Sub-Assy, Cooler, No. 1	1
88515-68010			88515-02530	Valve, Cooler Expansion	1
88707-52340			Same	Pipe Sub-Assy, Suction	1
88711-52420			Same	Hose, Cooler Refrigerant Discharge	1
88460-52170			Same	Condenser Assy, Cooler	1
B		88370-52010	88370-52011	Compressor Assy, w/Motor	1

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Parts Information (Continued)

MODEL	PARTS GROUP	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Prius C	C	88370-52010	88370-52011	Compressor Assy, w/Motor	1
		88711-52420	Same	Hose, Cooler Refrigerant Discharge	1
		88460-52170	Same	Condenser Assy, Cooler	1
	D	88370-52010	88370-52011	Compressor Assy, w/Motor	1
		88711-52420	Same	Hose, Cooler Refrigerant Discharge	1
		88460-52170	Same	Condenser Assy, Cooler	1
		88706-52600	Same	Pipe Sub-Assy, Liquid	1

Repair Procedure

1. Connect Techstream and verify B1476 is set as either a current or history DTC.
 - A. If DTC B1476 is NOT stored in the A/C Amplifier, this bulletin does NOT apply. Please go to the Problem Symptoms table and diagnose vehicle using the Repair Manual.

Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:

- 2012 / 2013 Prius:
Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Air Conditioning System: Problem Symptoms Table”
- 2012 / 2013 Prius C:
Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Air Conditioning System: Problem Symptoms Table”

- B. If DTC B1476 is stored, go to step 2.
2. Verify the HVAC system fan is working properly.
 - A. Connect Techstream to the DLC3.
 - B. Turn the ignition switch to IG-ON.
 - C. Turn Techstream ON, and enter the following menus:
Body Electrical / Air Conditioner / Active Test

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Repair Procedure (Continued)

D. Check operation by referring to the table below.

Air Conditioner:

TESTER DISPLAY	TEST PART	CONTROL RANGE	DIAGNOSTIC NOTE
Electrical Fan	HVAC Fan	OFF, ON	–

Does the fan blow when Active Test is set to ON?

- **YES** — Go to step 3.
- **NO** — This bulletin does NOT apply, continue diagnosis using the applicable Repair Manual.

3. Recover refrigerant from refrigeration system.

A. Recover the refrigerant from the A/C system using a refrigerant recovery unit.

B. Verify there is 470 g (16.6 oz) of refrigerant in the A/C system. If there is not, recharge the A/C system, clear the DTC, and return to step 1 and repeat the above diagnostics.

4. Remove the A/C compressor following the procedure in TIS.

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

- 2012 / 2013 Prius:
Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal”
- 2012 / 2013 Prius C:
Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal”

5. Check for potential metal contamination from the compressor, by disassembling the system in the following locations:

A. Check the A/C compressor ports for debris.

- If NO debris is found in the inlet or outlet lines, go to step 7 and replace Parts Group B.
- If debris is found in BOTH the inlet and outlet lines at the A/C compressor, go to step 6 and replace Parts Group A.
- If debris is found in the compressor outlet, go to step 5B.

B. Remove the receiver drier filter and check for debris.

- If debris is NOT found, go to step 8 and replace Parts Group C.
- If debris IS found, go to step 5C.

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Repair Procedure (Continued)

- C. Remove the expansion valve and check for debris.
 - If NO debris is present, go to step 9 and replace Parts Group D.
 - If debris IS present, go to step 6 and replace Parts Group A.
6. Replace the following A/C system components (Parts Group A):
 - Compressor
 - Evaporator
 - Condenser
 - Expansion Valve
 - All A/C Lines

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

2012 Prius:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Front Evaporator Temperature Sensor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Components”*

2013 Prius:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Front Evaporator Temperature Sensor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Components”*

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Repair Procedure (Continued)

2012 Prius C:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Front Evaporator Temperature Sensor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Removal / Installation”*

2013 Prius C:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Front Evaporator Temperature Sensor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Removal / Installation”*

7. Replace the A/C Compressor (Parts Group B).

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

- 2012 / 2013 Prius:
Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Installation”
- 2012 / 2013 Prius C:
Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Installation”

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Repair Procedure (Continued)

8. Replace the following A/C system components (Parts Group C):

- Compressor
- Discharge Hose
- Condenser

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

2012 Prius:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Components”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*

2013 Prius:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Components”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*

2012 Prius C:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*

2013 Prius C:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*

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Repair Procedure (Continued)

9. Replace the following A/C system components (Parts Group D):

- Condenser
- Discharge Hose
- High Side Hose
- Compressor

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

2012 Prius:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Components”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*

2013 Prius:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Components”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*

2012 Prius C:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*

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Repair Procedure (Continued)

2013 Prius C:

- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Condenser: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant Line: Removal / Installation”*
- *Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Compressor: Removal / Installation”*

10. Recharge the A/C system with refrigerant.

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

- *2012 / 2013 Prius: Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant: Replacement”*
- *2012 / 2013 Prius C: Vehicle Interior – Heating/Air Conditioning – “Heating/Air Conditioning: Refrigerant: Replacement”*

11. Verify proper A/C system operation.