

High-Insulation Fuel Cell Stack Coolant

Service
 Category General

Section Outline-General

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2016	Mirai	

Introduction

Hydrogen fuel cell powered vehicles like the Mirai use a special high-insulation coolant designed to prevent high voltage ground faults and associated MIL "ON" (Malfunction Indicator Light) condition. This special coolant and special water mix **MUST** be used any time coolant is added to the fuel cell (FC) cooling system reservoir or when major services are performed on the fuel cell stack and/or fuel cell cooling system. Use of water or any coolant other than "Toyota Genuine FC Stack Coolant" could result in damage to the fuel cell stack and/or cooling system.

Parts Information

PART NUMBER	PART NAME	QTY
08889-80350	FC Stack Coolant Assy.	20 L

Precautions

Fuel Cell Coolant

Inspect at specified intervals. When performing inspections, check that the coolant level is between the "FULL" and "LOW" lines on the see-through reservoir tank.

Use the following product:

- "Toyota Genuine FC Stack Coolant."
 - In order to safely cool the fuel cell stack, which is at high voltages, the fuel cell stack coolant is an exclusive high insulation product.
 - Never use water or other kinds of coolants as they will cause damage.
 - Coolant changes are unnecessary.
 - Do not reuse coolant that has been removed from the radiator.
 - Coolant is colorless.

High-Insulation Fuel Cell Stack Coolant

Procedure

Coolant level should be inspected at each service interval to confirm that the coolant level is between the "FULL" and "LOW" lines on the see-through reservoir tank. If coolant is below the "LOW" line on the reservoir, ONLY special FC stack coolant should be added.

NOTICE

DO NOT TOP-OFF WITH WATER OR ANY OTHER COOLANT.

Fuel cell stack coolant is a colorless ethylene-glycol product available as a full-service kit containing 10 liters of FC stack coolant concentrate and 10 liters of special deionized water. The Full-service Kit requires mixing approximately equal parts of FC stack coolant concentrate with special deionized water. The coolant concentrate comes in 5 containers each half filled. Add special deionized water, approximately 2 liters, to fill each container. Do not use any other mixing container to prevent contamination. A little left over special deionized water is normal.

NOTICE

Freshly mixed coolant has a maximum shelf life of 2 weeks and must be discarded if NOT used.

If coolant is drained from the FC stack cooling system, DO NOT REUSE. Replace drained FC stack coolant with new, freshly mixed, "Toyota Genuine FC Stack Coolant".

NOTICE

Filling the fuel cell cooling system with anything other than FC stack coolant may cause a loss of high voltage insulation requiring multiple cooling systems flushes to correct.