
Fuel Cell Standards

XVII. Cathode Subsystem

XVII.f Air Flow Valves

Overview:

Classroom and lab topics

- Primary functions of the air flow valves
- Air flow valve types and their positive and negative attributes
- Normal valve positions during operation and shutdown
- Logic in determination of a fault
- Symptoms and faults caused by air flow valves

Description:

Proper operation of the cathode subsystem is contingent on very rapid and accurate control of air pressure and flow. These are accomplished by adjusting compressor speed and air flow valve positions.

Outcome (Goal):

Student will be able to explain the functions and faults of the air flow valves.

Objectives:

Students shall be able to:

1. Identify air leaks and repair
 2. Locate, inspect and replace the air flow valves
 3. Determine if a valve is intermittently sticking or frozen closed or open
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Tasks:

Students will

1. Locate, remove and replace the air flow valves using OEM instructions
 2. Use vehicle interface tools to exercise air flow valves
 3. Identify air flow valve periodic inspection and maintenance requirements using OEM service instructions
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To comment or offer suggestions on this standard, contact Ken Mays:

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