

## Fuel Cell Standards

XVII. Cathode Subsystem

# XVII.g Exhaust System

#### Overview:

#### Classroom and lab topics

- Primary functions of the air/hydrogen exhaust system
- Methods to deal with excess hydrogen in exhaust gases
- Sensors in the exhaust
- Faults caused by air flow restriction in the exhaust
- Water management in the exhaust gases

#### Description:

The exhaust system routes the oxygen depleted air, water vapor and in some situations any unreacted hydrogen to the atmosphere. It is also responsible for muffling the large volume of air exiting the vehicle. Some systems also incorporate hydrogen detection and other functions.

## Outcome (Goal):

Student will be able to explain the functions and basic components of the exhaust system

# Objectives:

#### Students shall be able to:

- 1. Identify exhaust leaks and repair
- 2. Locate, inspect and replace the hydrogen sensor if implemented



NSF / ATE Grant Award # 1700708 Northwest Engineering and Vehicle Technology Exchange (NEVTEX)



## Tasks:

#### Students will

- 1. Locate, remove and replace the exhaust assembly using OEM instructions
- 2. Identify any exhaust inspections and required preventative maintenance using OEM service instructions

To comment or offer suggestions on this standard, contact Ken Mays:

| Ken Mays     | NEVTEX         |
|--------------|----------------|
| 541-383-7753 | kmays@cocc.edu |

