SUBJECT: PORTABLE HYDROGEN VENT STACK - ASSEMBLY PROCEDURE

Description: This bulletin describes the procedure to assemble the Portable Hydrogen Vent Stack assembly in order to properly vent the vehicle’s fuel cell stack.

Applicable Vehicles: All Tucson and Nexo Fuel Cell Electric Vehicles

SST Information

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<td>Portable Hydrogen Vent Stack</td>
<td>HVS01</td>
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Assembly Procedure:

A. HVS01 Assembly

1. The assembled Hydrogen Venting Stack should be used in an approved Hydrogen Gas venting area.

2. Open the Portable Hydrogen Vent Stack case.

   Carefully remove all components from the case.

   - 1 Tripod
   - 3 Leg Braces
   - 2 Extension Pipes
   - 1 T-top
   - 3 Water Weights
   - 6 Safety Cones
   - 1+ Grounding Cables
   - 1 Material List / Drawing
3. Locate the tripod.

Safely assemble the tripod in an open unobstructed area with a 15 foot radius measured from the vent stack.

4. Extend the legs of the tripod by lifting the locking tabs located at the top of the tripod.

Fully extend the legs.

Push the locking tab down to secure the fully extended legs.
5. Locate the three leg braces.

Insert the pins at the end of the braces into the holes at the feet of each individual tripod leg as displayed in the photo.

6. To ensure stability of the vent stack assembly, fill the provided water weights with tap water.

Drape the water weights over the tripod corners.

Sandbags can be used as an alternative, but do not use any weights over 25 lbs.
7. Locate both extension pipes.

Connect the extension pipe fittings together by hand being careful to not cross thread the fittings.

Tighten the compression nut fitting.

Use one wrench to tighten the nut and a second wrench to hold the coupling to provide counter rotation while tightening the extension pipe connection.

**CAUTION**

Do not over-tighten.

8. Locate the T-top.

Tighten the connection the same as in step #7, using one wrench to tighten and a second wrench to provide counter rotation to the T-top extension pipe connection.

**NOTICE**

Connect all parts on the ground before attaching to the tripod.
9. After building the extension pipe assembly, connect the assembly to the tripod and tighten the compression fitting nut.

Use same tightening process as in step #7, use one wrench to tighten and a second wrench to provide counter rotation to the nut.

The assembled vent tubes will be attached to the tripod assembly.

**CAUTION**

Do not over-tighten.

10. Measure an unobstructed radius of 15ft around the placement of the vent stack, and place all six safety cones around the perimeter.
11. Connect the vent hose leading from the Venting Manifold Assembly to the vent stack by pushing the vent hose stem connector into the vent stack body connector. A click will be heard when the two connectors are locked together.
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12. Locate the grounding cable, and connect one end of the grounding cable to the vent stack.

   The other end of the grounding cable will connect to the approved ground.

   **CAUTION**

   Do not vent Hydrogen until the Portable Vent Stack is correctly grounded.

13. As needed, before or after any Hydrogen venting session, drain the system of any water condensation by opening the valve at the bottom of the vent stack tube.

   Pull down the yellow lever to open the valve and drain the water.
Vent Placement Diagram:

No flammable materials or overhangs within 15ft of the top of the vent stack.

Defueling Hose

Top of Vent Stack 15 feet from ground level

Classified Area

Approved Ground

Grounding Cable

15 feet Clearance From Center

CrossMember