

Replacing the cylinder of the H2 generator cell in the SRI H2-50 and H2-40

SRI part# 8670-0357

H2 Generator cylinder replacement kit

Includes:

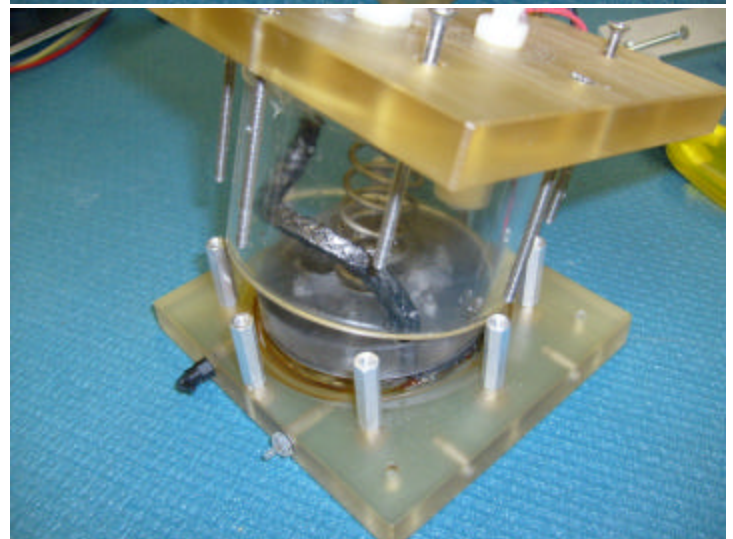
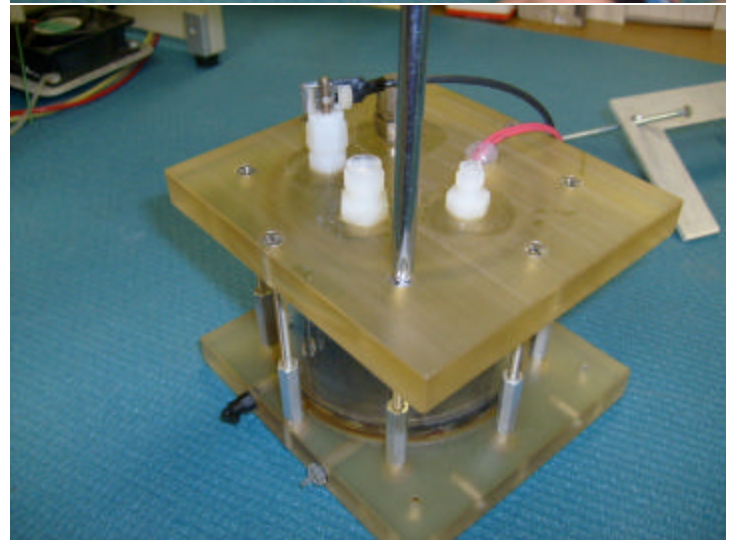
New glass cylinder, Nafion membrane and silicone glue



Remove the cell from the chassis.
The photos show the H2-40 chassis.
The H2-50 chassis is similar.

To avoid stressing the glass cylinder:
Gradually remove the 8 screws which clamp the top and bottom plates together.
Loosen each screw just a little as you work your way around the cell in a circular pattern. Do not completely remove one screw then the next. Instead, loosen each screw just a little bit then go on to the next. Once all the screws have been loosened two full turns you can unscrew them all the way.

The spring will push the top and bottom plates apart.

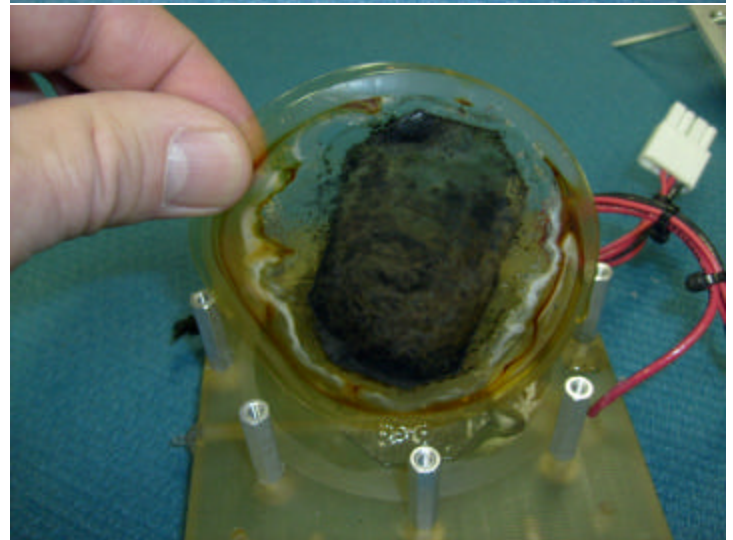


Replacing the cylinder of the H₂ generator cell in the SRI H2-50 and H2-40

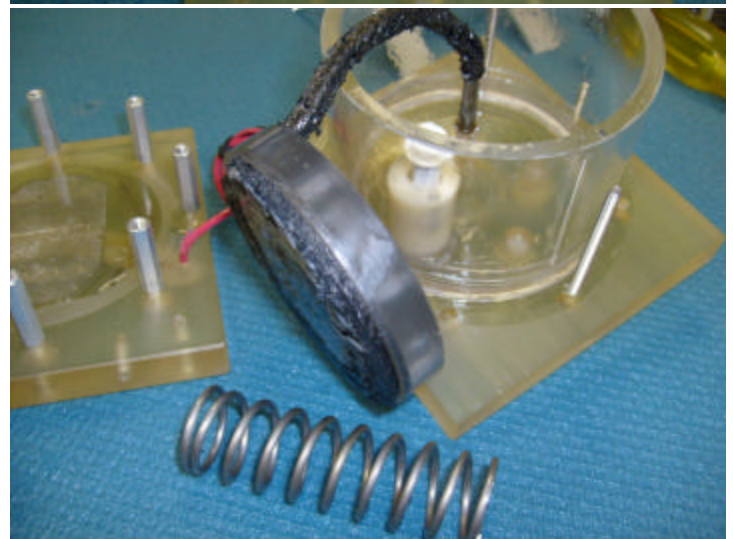
The top and bottom plates will remain connected by the wires



Remove the Nafion membrane



Remove the spring



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Use a paper towel or some sandpaper to remove any deposits on the graphite rope.

If the graphite rope unravels, just wind it back up in the original coil pattern.



Secure the top and cylinder in a vise and cover the glass cylinder with a plastic bag. Carefully break the glass off by tapping with a hammer.

Be sure to wear safety glasses and gloves.

Break the glass off into the trash and carefully dispose of the broken glass fragments.



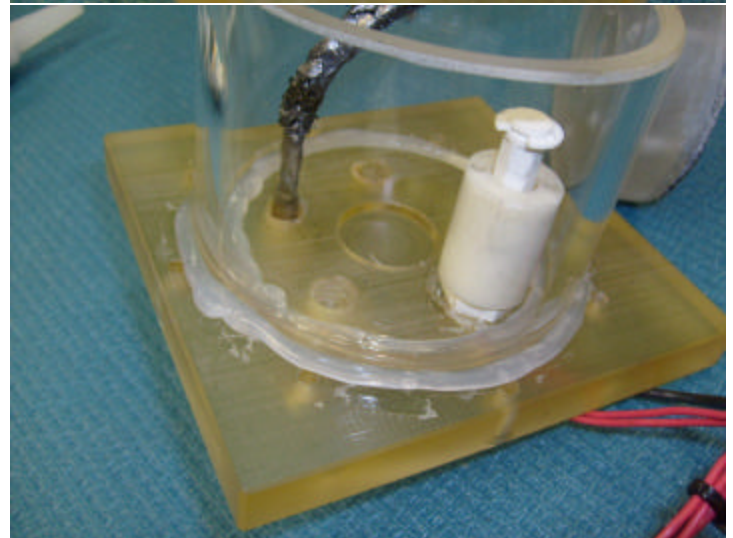
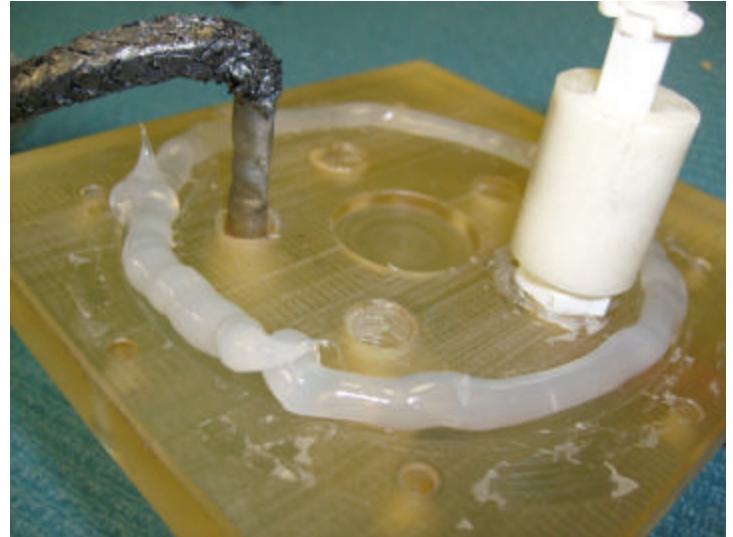
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Use a small screwdriver or razor blade to chip or scrape the old glue off the top plate. Clean out the groove completely so there are no bumps, glass or glue remaining in the groove.



Use the silicone glue as shown.

Squeeze a bead of the glue into the groove and then embed the new glass cylinder into the glue so it sits squarely in the groove. Wipe off any excess on the outside being careful not to plug the 8 screw-holes which are close to the outside of the cylinder. You can leave the bead of glue on the inside undisturbed.

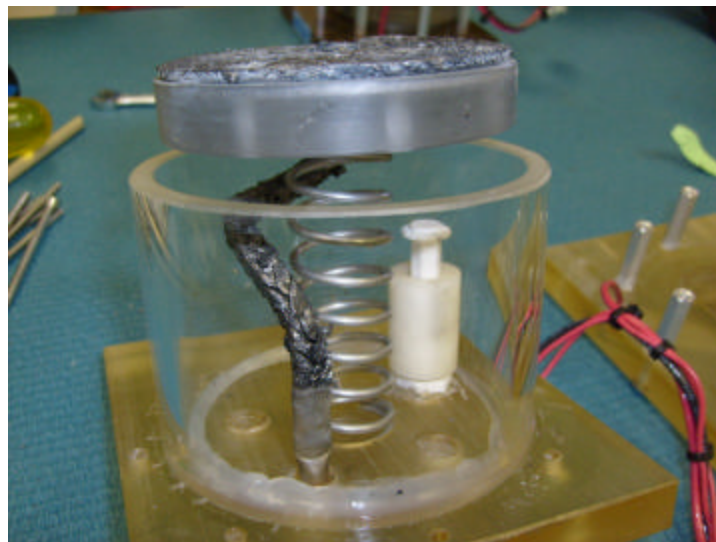
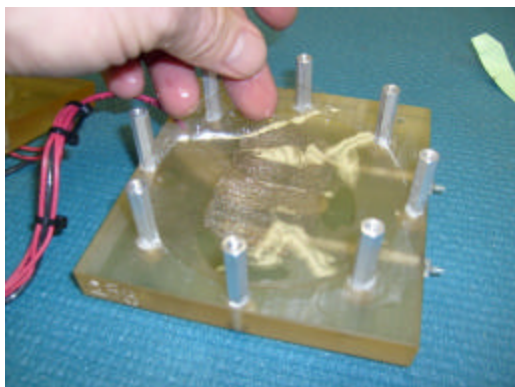


Replacing the cylinder of the H2 generator cell in the SRI H2-50 and H2-40

Assemble the spring and graphite rope/disk as shown. Be sure the graphite rope is twisted so it does not touch the spring.

Slide the metal screen over the cylinder. If your cell did not already have the metal screen installed contact SRI for an update kit.

Soak a new Nafion membrane in clean water and then lay the wet membrane on the bottom plate.



Replacing the cylinder of the H2 generator cell in the SRI H2-50 and H2-40

Position the cylinder so that the graphite rope disk is centered and the Nafion membrane is also centered. Push down from the top and engage two of the screws just until the threads catch.

Then engage the rest of the 8 screws. Tighten them evenly (working your way around the circle of screws) until you feel the cylinder squishing down against the membrane.

Torque each screw to the same tightness to avoid putting any unnecessary stress on the glass.

We use a torque measuring screwdriver at the factory set to 10 ft/lbs (1 Newton/Meter).

You can always tighten the screws a little more if the cell leaks when you re-install it in the chassis, so use less rather than more torque for your initial setting.

