

## Dual Vacset Product No. 92080-200

The #92080-200 all metal Dual Vacset is used to combine a second Cressington coater with the #92080 (or the #92081) vacuum pump and one the following Cressington desk top coaters:

- #6002 or #6006 Cressington 108 manual sputter coater
- #7002 or #7006 Cressington 108 auto sputter coater
- #7008 or #7008-220 Cressington 108 auto/SE sputter coater
- #9602 or #9602-220 Cressington 108 Carbon auto carbon coater
- #9603 or #9603-220 Cressington 108 Carbon/SE auto carbon coater.

The usual set-up is to connect a Cressington 108 auto sputter coater and a 108 Carbon auto carbon coater to one #92080 vacuum pump. One of the coaters has to be connected or supplied with the #92080-108 all metal connection kit.

The #92080-200 Dual Vacset contains the following parts (see Figure 1):

- 1 ea Prod No. 92399-16 NW16 PELCO 3-way ball valve
- 1 ea Prod No. 92340-1620 NW16 20" metal flexible hose
- 3 ea Prod No. 92210-16 NW16 Clamps
- 3 ea Prod No. 92220-16 NW16 Centering O-rings
- 1 ea Prod No. 92080-10 Adapter cord, IEC/NEMA 5-15P

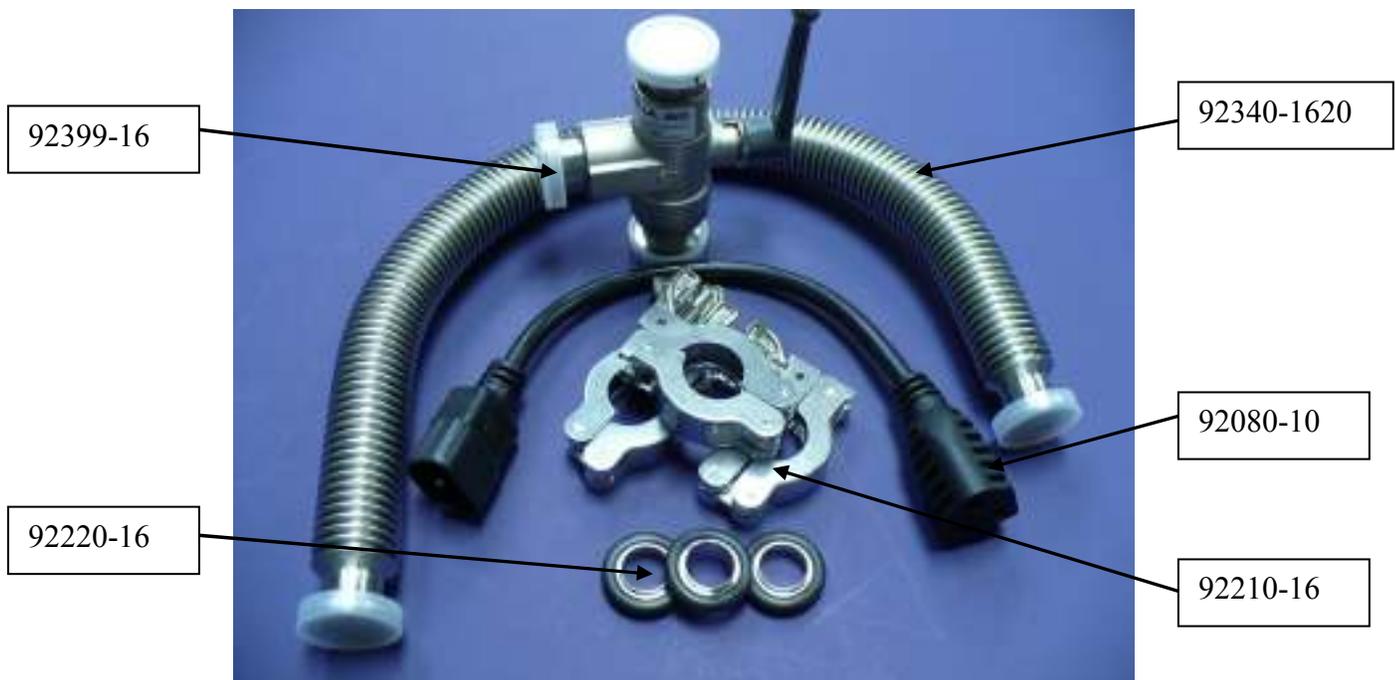


Figure 1

Before installing any of the vacuum parts, please remove the plastic protection caps. Make sure that all vacuum connections and O-rings are clean and free of any debris. Do not grease the O-rings. Be careful not to damage the sealing surfaces on the NW vacuum connections.

**New installation with 108auto, 108Carbon/auto, 92080 pump, 92080-200 kit and 92080-108 kit.**

- 1 - Unpack the coaters and place these side by side on the bench with about 1" clearance between the two coaters.
- 2 - Unpack the 92080 pump and check the oil level. The pump is shipped with the oil in it and both the NW25 intake and exhaust flange closed off with a blanking plates and NW25 clamping rings. Position the pump directly behind the coaters.
- 3 - Identify the pump exhaust and remove the NW 25 clamp and blanking cap. Leave the NW25 centering O-ring in place. Place the NW25 to ½"NPT adapter on the NW25 centering O-ring and use the NW25 clamp to attach the adapter to the pump exhaust. The centering O-ring is clamped between the flanges as shown in Figure 2. Screw the exhaust filter in the adapter with the ½" NPT thread.

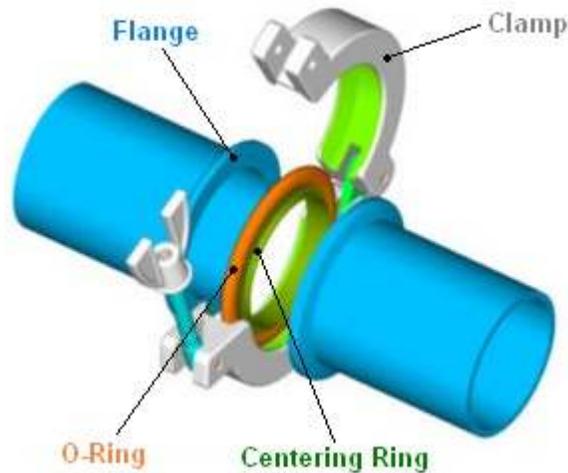


Figure 2

- 4 - Remove the plastic protection cap of the NW16 flange on the back of the coaters and remove any protective tubing from the vent and gas input of the coaters. Remove the NW25 blanking plate from the pump intake and mount the conical adapter by utilizing the NW25 centering O-ring and NW25 clamp which were used to blank off the intake port.
- 4 - Mount the 3-way ball valve on the conical adapter using a NW16 centering O-ring and a NW16 clamp. Position the ball in-line with the pump so that the gray handle points in the direction of the coater which will be pumped.
- 5 - Connect one coater to the left of the 3-way ball valve by using the NW16 flexible hose and the supplied NW16 centering O-rings and NW16 clamps.
- 6 - Connect the second coater to the right of the 3-way ball valve by using the NW16 flexible hose and the supplied NW16 centering O-rings and NW16 clamps. It might be necessary to reposition the pump to align the intake port on the pump with the vacuum connection on the coater.

Make sure that all NW25 and NW16 clamps are tightened.

7 - The 92080 is normally supplied with a standard US style 115V plug. In order connect the pump to the coater (the pump is switched on through the coater) the IEC/NEMA AC adapter cord must be connected to the AC power cord of the pump and then inserted in the IEC power outlet on the back of the sputter coater. Make sure that the on/off switch on the pump is in the “**on**” position.

8- Use the IEC/NEMA AC adapter cord supplied with the dual vacset to connect the AC power cord for the sputter coater to the IEC power outlet on the carbon coater.

9 - Connect the carbon coater to a standard 115V 16 Amp power outlet. Switch the **sputter coater** on with the power switch on the front of the coater and leave this switch **on**.

The sputter coater and the pump receive power from the outlet on the sputter coater. See Figure 3.

In order to use one of the systems, turn the handle on the 3-way ball valve towards the coater which is going to be used. The vacuum gauge on the coater shows when the system is pumped down. Refer to the manual of the coater for operation of the coater.

### **Adding a second coater to an existing system with the #92080 and #92080-108**

*These instructions assume that the existing system is a Cressington 108auto sputter coater pump with the #92080 vacuum pump and that a 108Carbon/auto carbon coater is added with the #92080-200 dual vacset. Switch off the sputter coater and disconnect from mains.*

1 - Unpack the carbon coater and place this to the right of the existing sputter coater in such a way that the coater sit side by side with about **1”** clearance between the two coaters.

2 - Disconnect the NW16 flexible hose from the vacuum pump.

3 - Mount the 3-way ball valve on the conical adapter using a NW16 centering O-ring and a NW16 clamp. The centering O-ring is clamped between the flanges as shown in Figure 2. Position the ball in-line with the pump so that the gray handle point in the direction of the coater which will be pumped.

4 - Now re-connect the sputter coater to the left of the 3-way ball valve by using the NW16 flexible hose and the supplied NW16 centering O-rings and NW16 clamps.

5 - Remove the plastic protection cap of the NW16 flange on the back of the carbon coater and remove any protective tubing from the vent. Connect the carbon coater to the right of the 3-way ball valve by using the NW16 flexible hose and the supplied NW16 centering O-rings and NW16 clamps. It might be necessary to reposition the pump to accommodate both coaters.

Make sure that all NW25 and NW16 clamps are tightened.

6 - Use the IEC/NEMA AC adapter cord supplied with the dual vacset to connect the NEMA AC power cord for the sputter coater to the IEC power outlet on the carbon coater.

7 - Connect the carbon coater to a standard 115V 16 Amp power outlet. Switch the **sputter coater** on with the power switch on the front of the coater and leave this switch **on**.

The Carbon coater is plugged into the AC wall outlet. The Sputter coater is plugged into the back of the Carbon coater using the IEC/NEMA AC jumper cord and a NEMA AC power cord. The Vacuum pump is plugged into the back of the sputter coater using a second IEC/NEMA AC jumper cord. See Figure 3.

In order to use one of the coaters, turn the handle on the 3-way ball valve towards the coater which is going to be used. The vacuum gauge on the coater shows when the system is pumped down. Refer to the manual of the coater for operation of the coater.

Tips:

- 1 – Change the oil in the rotary pump at least once a year.
- 2 – Replace the exhaust filter every 3 to 6 months.

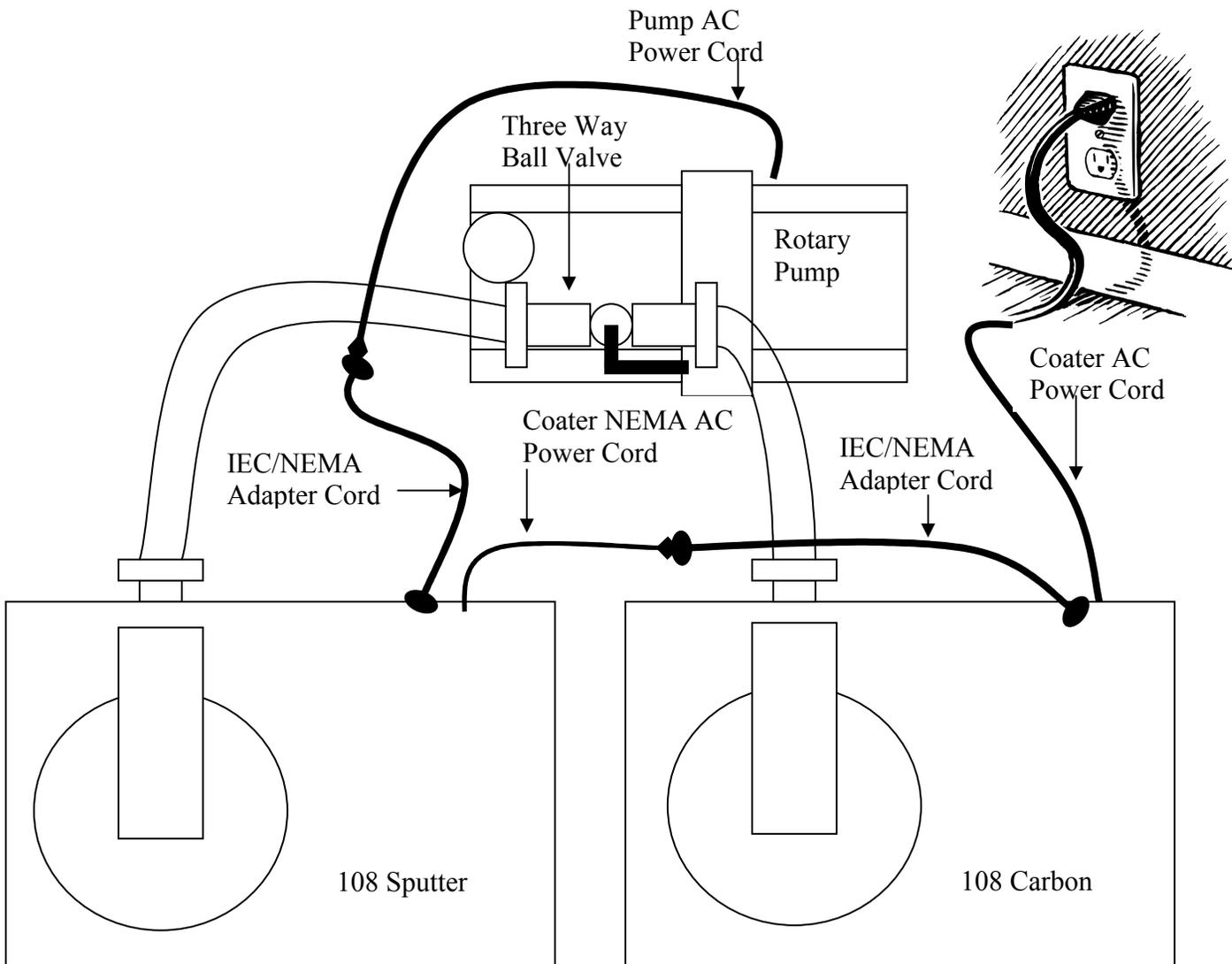


Figure 3