

# Argon Beam

**Essentials**

# What is Argon?

- Argon-enhanced coag permits the coagulation of certain tissue in a more controlled manner than with standard electrosurgical coagulation.
- Argon it is biochemically inert, has a low breakdown voltage, and is relatively inexpensive.

# What is Argon?

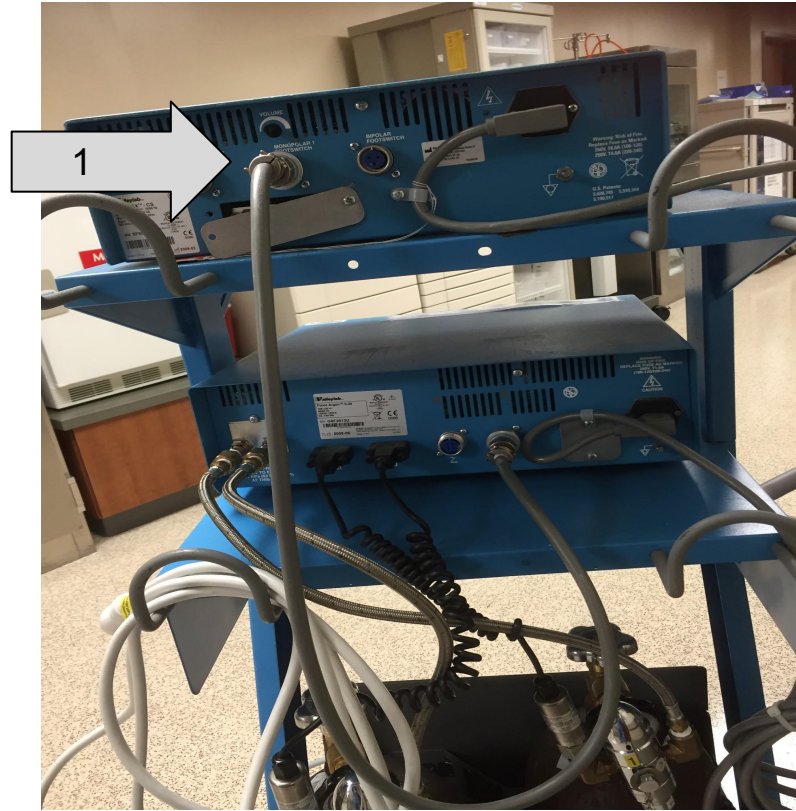
- In argon-enhanced coag, activating the handset creates an argon gas plasma between the electrode and the tissue. The presence of inert gas at the surgical site inhibits combustion with other gases (e.g., oxygen, nitrogen, etc.) and pushes residual smoke, water vapor, or fluids away from the surgical site, thereby improving visibility.

# Advantages of Argon-enhanced Electrosurgery

- Less smoke production
- Improved visibility
- Thinner, more flexible eschar
- Less charring with less tissue damage
- Less tissue sticking
- Less sparking to adjacent tissue
- Less blood loss due to better visibility
- Reduced re-bleeding due to the electrosurgery electrode not directly contacting the tissue, which produces a thinner, more flexible eschar
- Reduced tissue swelling

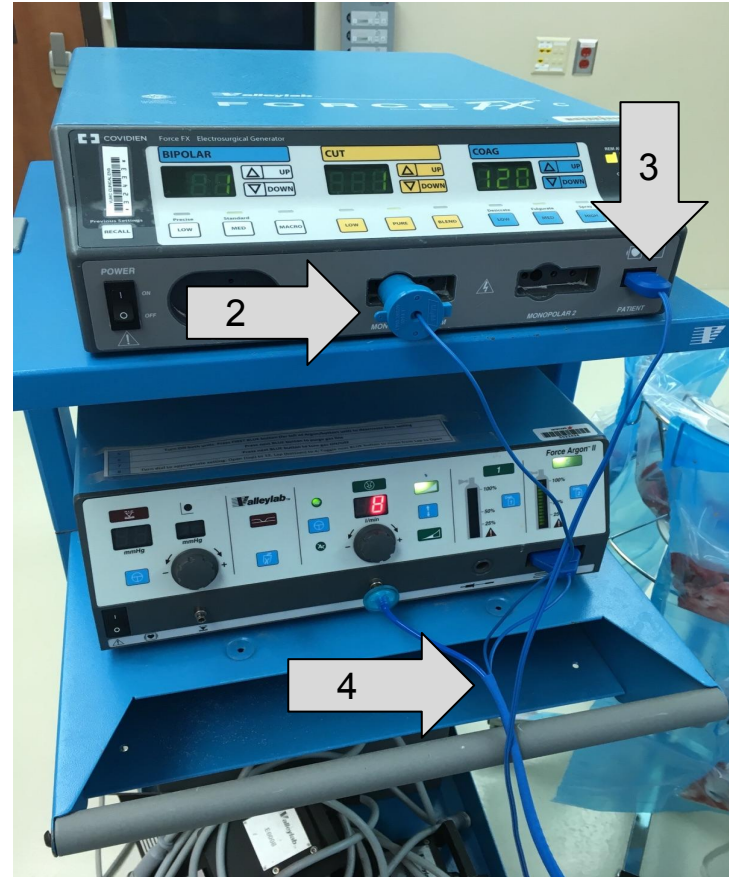
# STEPS IN SET UP

1. Verify that cable from argon machine is connected to Monopolar 1 outlet on the back of the ESU.



# STEPS IN SET UP

2. Plug pigtail adapter into Monopolar 1 accessory port in front of ESU
3. Plug in the ESU pad cord
4. Scrub passes off the three connection ends of the Argon handset



# STEPS IN SET UP

5. Plug the three prong handset cord into the ARGON machine
6. Plug the single pin cord into the pigtail adapter on the ESU
7. Connect the argon gas tubing securely into the argon gas line receptacle



# STEPS IN SET UP

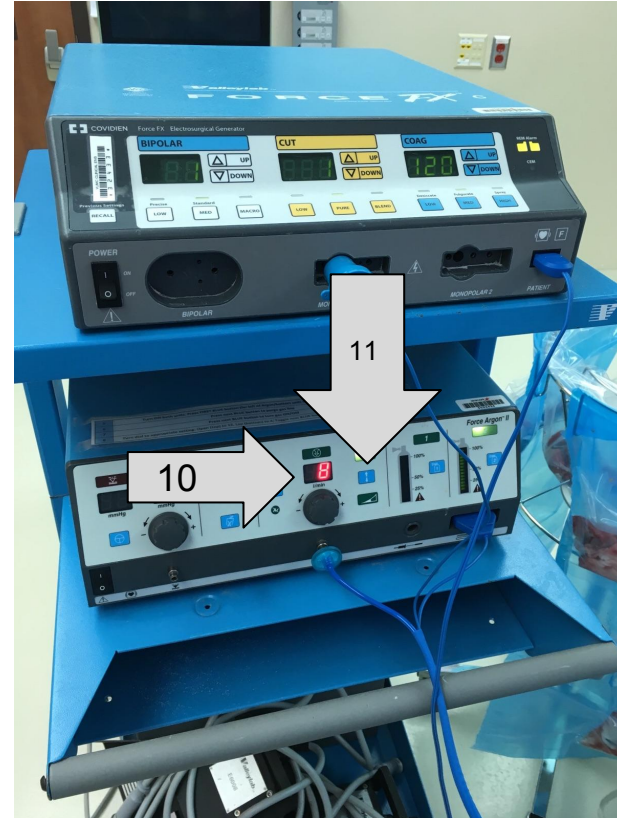
8. Turn on both machines: the Argon unit and the ESU and wait for the self-check process to be completed.
9. Press box “t” on the Argon unit until “Ar” illuminates.





# STEPS IN SET UP

10. Set the desired flow (usually 8-10 l/min for open cases and 0.5-4 for laparoscopic cases). Note the machine is preset for the lowest flow rate.
11. Press the blue box to the left of tank #1 to select open or laparoscopic. The upper indicator is for open cases. The lower indicator is for laparoscopic cases.



# Settings

## SETTINGS ON THE ESU

1. 0 Bipolar
2. 0 cut
3. 120 Coag



# Trouble Shooting

**If the Argon machine is turned on before the gas line is connected properly, an error code 93 will alarm. There are two solutions:**

1. Turn off the unit, make all of the connections, then turn on the machine again.
2. Make all of the connections, then press the purge button.

# Trouble Shooting

**If it states the gas line is obstructed, an obstruction indicator light located above the flow rate box will be illuminated.**

1. Check that the Argon tanks are open
2. Check that the handset switch is in the “on” position
3. Check that there are no kinks in the gas line
4. Press the box directly below the gas line purge button