ECMO Circuit Checklist: Assessed at shift change with oncoming/offgoing nurse; with primary nurse and perfusion; and when patient has transported/mobilized outside room

PERFUSION: 615-418-0418

- ❑ Trace circuit from drainage cannula through pump components and back to return cannula to ensure no kinks present
- ❑ Circuit tubing lines secured (attached with clamps to sheets under patient in bed, chair, etc..)
- ❑ Cannula(e) secure (either with tegaderm or immobilizing device)
- ❑ Insertion site clean/dry/intact; CHG dressing current/dated/occlusive (changed per your unit's CVC protocol frequency)
- ❑ Visually inspect with flashlight for clots in circuit and oxygenator
- ❑ Connections tie-banded (**See fig. C attached**)
- ❑ Confirm proper blood flow range
- ❑ Confirm proper sweep and FdO2
- ❑ Battery charging **(See fig. B attached**)
- ❑ Both ECMO pump and heater plugged into RED outlets. *During generator checks the heater will shut off and not automatically restart – notify perfusion to come re-start*
- ❑ Hand crank available and able to freely rotate
- ❑ 3 sets of clamps available (**See fig. E attached**)
- ❑ Back up primed circuit and pump available
- ❑ Oxygen tank available as back up and full (2000 psi)
- ❑ No free-flow IV tubing connected to patient; infusions run via IV pump to minimize risk of air entrainment
- ❑ **Heater on and set appropriately** for patient; vigilant temperature monitoring (core temp preferred; alarm parameters set on Phillips monitor or Q1H oral temps when core measurement not available)
- ❑ Confirm oxygen source (**See fig. A attached**)
  - ❑ If patient is mobile/transporting (outside of ICU room): → green filter tubing (**see fig. D attached**) connecting O2 tank to oxygenator; no kinks no kinks in tubing; O2 tank full (2000psi); Sweep ON and positive color change
  - ❑ If patient is stationary in ICU (inside of ICU room): → green filter tubing (**see fig. D attached**) connecting blender to oxygenator; no kinks in tubing; green and yellow gas lines attached to wall outlets; Sweep ON and positive color change

ECMO Operations, 2019

Perfusion-Specific ECMO Circuit Checklist: Assessed at shift change with bedside RN and before departure and upon arrival of mobility/transports outside patient room. Nurse will document and perfusion co-sign in EPIC.

- ❑ ECMO Alarm Module for Bubble Detector Activated
- ❑ ECMO Alarm Module for Bubble Detector Audible
- ❑ ACMO Alarm Module for ERC Activated
- ❑ ERC positioned on post-ox circuitry
- ❑ Low flow alarm parameter appropriately set for patient
- ❑ High flow alarm parameter appropriately set for patient

Fig. A
Confirm oxygen source

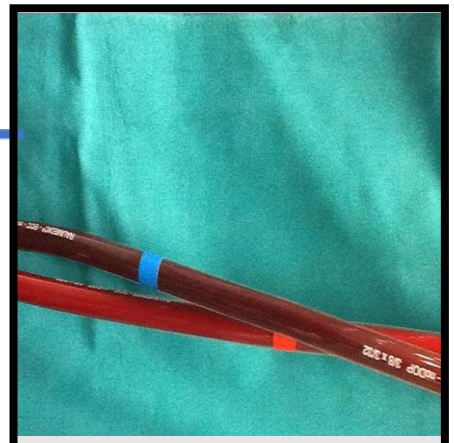
Mobile/transporting (outside ICU room)

O2 tank full (2000psi)

+

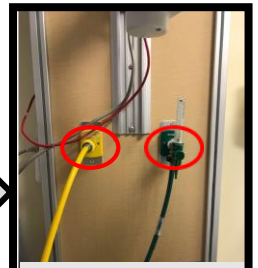
Green filter tubing connects O2 tank to oxygenator and sweep ON

+



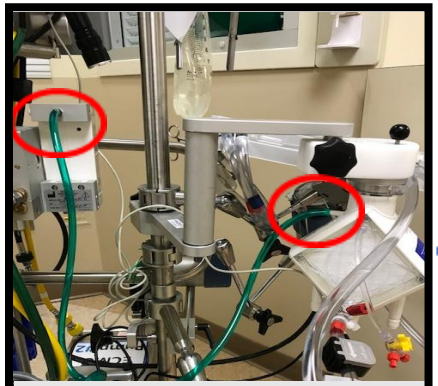
Positive color change

Stationary (inside ICU room)



Green and yellow gas lines attached to wall outlet

+



Green filter tubing connects blender to oxygenator and sweep ON

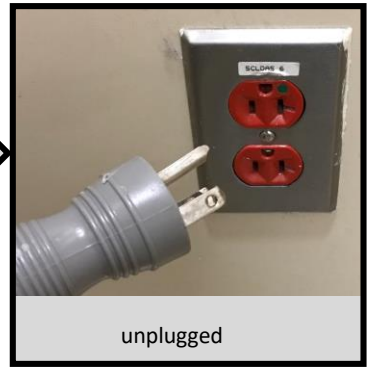
+

Positive color change

ECMO Operations, 2019

Fig. B
Confirm power source

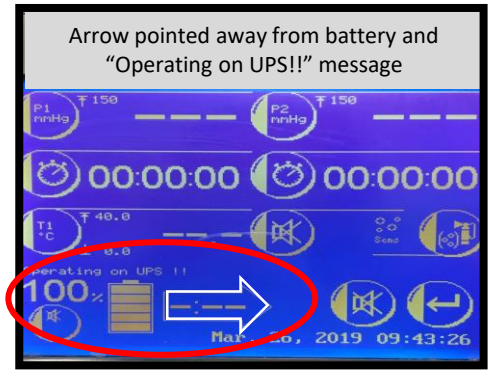
Battery Power



unplugged

+

Arrow pointed away from battery and "Operating on UPS!!" message

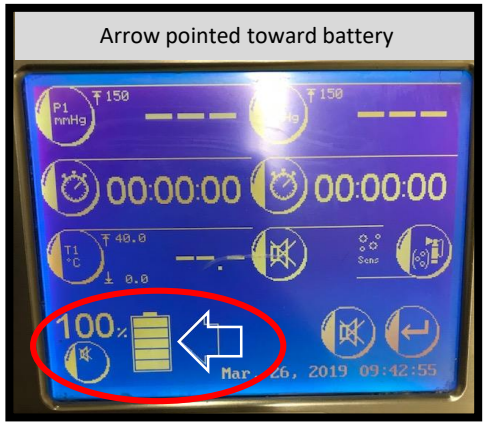


Wall Power and battery charging

Plugged into red outlet

+

Arrow pointed toward battery



ECMO Operations, 2019

Fig. C
Connections tie-banded (anywhere 2 pieces of circuit are attached)

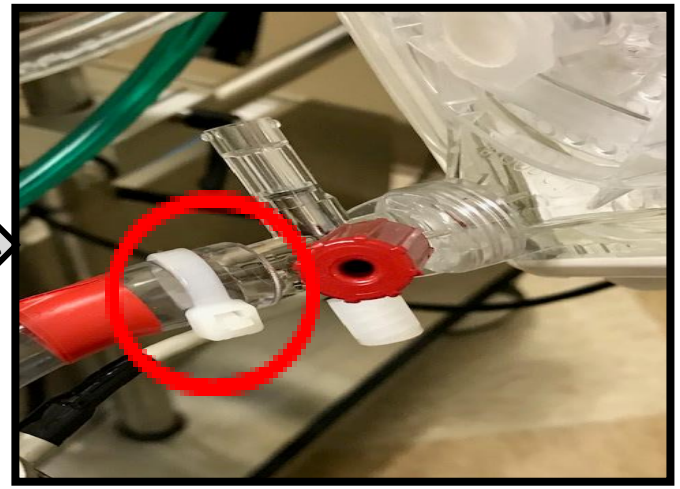


Fig. D
Green filter tubing

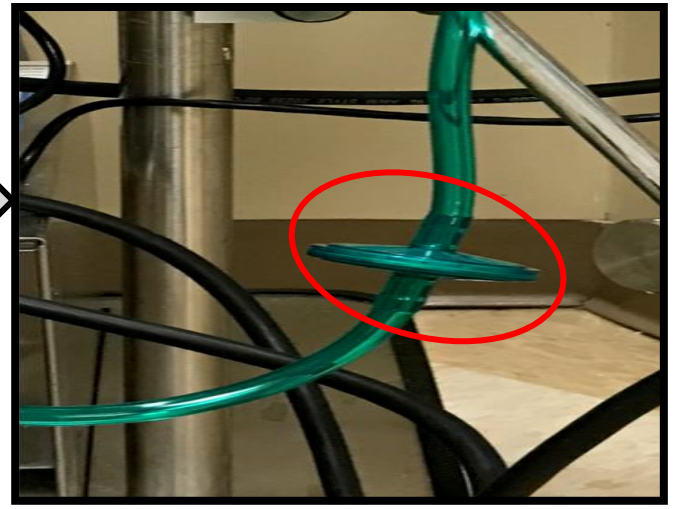


Fig. E
3 sets of clamps

ECMO Operations, 2019