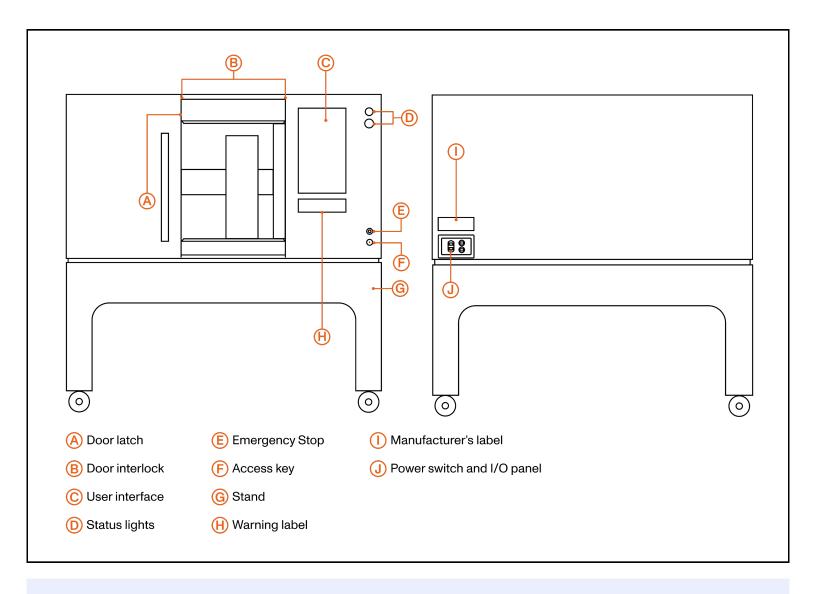
# Neptune CT Scanner



# Interlock and Indicator Functional Tests



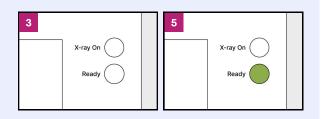
### Interlock test setup

These are the common steps that precede interlock functional tests.

- 1. Verify that the machine is plugged in and the main power switch is on
- 2. Close the scanner door
- 3. Insert the X-ray key switch and switch to "On" position
- 4. Twist the Emergency Stop button clockwise to reset to the "Run" state
- 5. Unlock the scanner control software

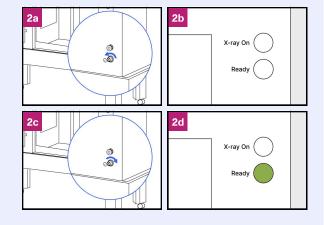
#### **Door lock test**

- 1. Complete the Interlock Test Setup
- 2. Unlatch and open the door
- 3. Verify that the green X-ray Ready status light turns off
- 4. Close the door
- 5. Verify that the green X-ray Ready status light turns on



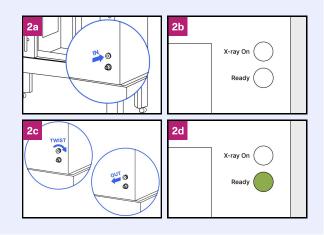
## Key switch test

- 1. Complete the Interlock Test Setup
- 2. With the door closed:
  - a. Turn the key to the "off" position
  - b. Verify that the green X-ray Ready status light turns off
  - c. Turn the key to the "ON" position
  - d. Verify that the green X-ray Ready status light turns on



### **Emergency stop button test**

- 1. Complete the Interlock Test Setup
- 2. With the door closed:
  - a. Press the emergency stop button all the way until it clicks
  - b. Verify that the green X-ray Ready status light turns off
  - c. Rotate the emergency stop button clockwise until it pops out
  - d. Verify that the green X-ray Ready status light turns on



## X-ray control and status light test

- 1. Complete the Interlock Test Setup
- 2. With the door closed:
  - a. Turn X-rays on in the scanner control software
  - b. Verify that the green X-ray Ready status light turns off
  - c. Verify that the Red X-ray On status light turns on
  - d. Turn X-rays off in the scanner control software
  - e. Verify that the Red X-ray On status light turns off
  - f. Verify that the green X-ray Ready status light turns on
- 3. Unlatch and open the scanner door
  - a. Verify that the scanner control software says "Cannot turn on X-rays (disconnected)".

