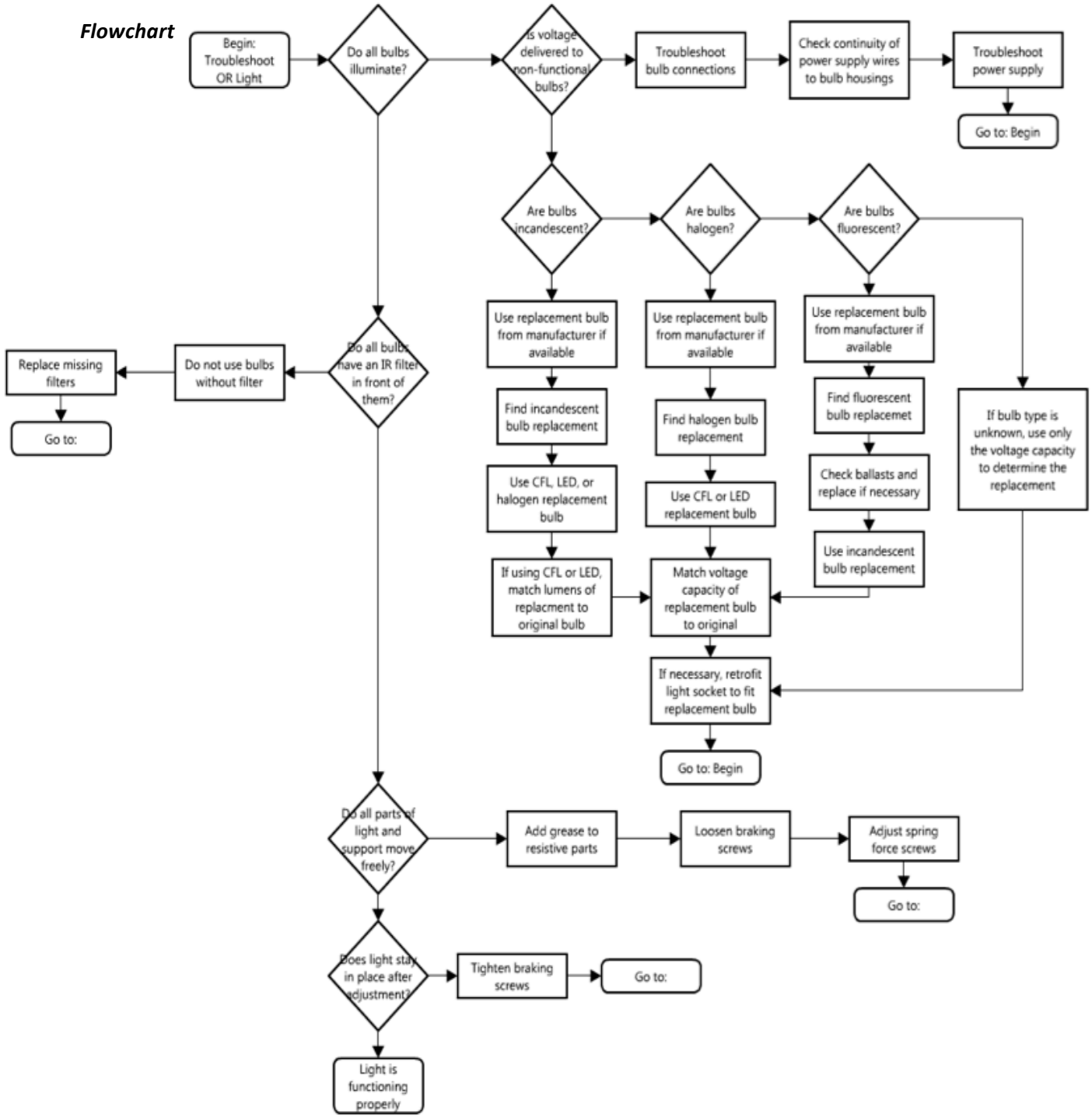


# OR LIGHT

## Flowchart



**Description**

#	Text box	Explanation or Comment
1	Begin: Troubleshoot OR Light	Start the diagnostic process for a work order on an OR Light.
2	Do all bulbs illuminate?	Provide the light with power and observe whether or not all of the bulbs produce light.
3	Is voltage delivered to non-functional bulbs?	If some of the bulbs do not illuminate, it could be due to issues with the bulb or the power supply. Use a multimeter to check that appropriate voltage is being delivered to the bulb housings. See BTA skills on Electrical Lighting/Indicators.
4	Troubleshoot bulb connections	If bulbs do not illuminate and are not receiving power, then there may be something wrong with the connections from the bulb housing to the bulb itself. Inspect the housing, clean any residue on connections and mend poor connections.
5	Check continuity of power supply wires to bulb housings	Ensure that the bulb housings are connected to the power supply. Use a multimeter to check the continuity of the wires running from the power supply to the bulbs.
6	Troubleshoot power supply	If the device is connected to power but does not turn on, there is a problem with the power supply. This could be a problem with the wiring or connections within the device. See BTA skills on Power Supply.
7	Are bulbs incandescent?	Incandescent light bulbs use a tungsten filament encased inside a glass housing.
8	Are bulbs halogen?	Halogen bulbs have a tungsten filament encased inside a quartz housing. The housing is much closer to the filament than in incandescent light bulbs.
9	Are bulbs fluorescent?	Fluorescent bulbs have a sealed glass tube filled with mercury and an inert gas.
10	If bulb type is unknown, use only the voltage capacity to determine the replacement	Reference BTA skills: Unit: Lighting/Indicators, Skill: Fixtures.
11	Use replacement bulb from manufacturer if available	Acquire the bulb designed for the OR lamp unit by the same manufacturer as the unit. Use this replacement bulb to replace any

		broken bulbs in the lamp.
12	Find incandescent bulb replacement	Match the voltage capacity and wattage of replacement bulb to original.
13	Use CFL, LED, or halogen replacement bulb	If a CFL or LED bulb can be found that matches the voltage of the original incandescent bulb, then it may be used to replace the original bulb.
14	If using CFL or LED, match lumens of replacement to original bulb	If using a CFL or LED as a replacement, ensure that the lumens value of the replacement bulb matches that of the original.
15	Find halogen bulb replacement	Match the voltage capacity and wattage of replacement bulb to original.
16	Use CFL or LED replacement bulb	If a CFL or LED bulb can be found that matches the voltage of the original incandescent bulb, then it may be used to replace the original bulb.
17	Check ballasts and replace if necessary	Reference instruction document.
18	Find fluorescent bulb replacement	Match the voltage capacity and wattage of replacement bulb to original.
19	Check ballasts and replace if necessary	Reference instruction document.
20	Use incandescent bulb replacement	If an incandescent bulb can be found that matches the voltage of the original incandescent bulb, then it may be used to replace the original bulb.
21	Match voltage capacity of replacement bulb to original	If the bulb type of the original is unknown, then the voltage capacity alone may be used to find a replacement. Match this value of the replacement bulb to that of the original.
22	If necessary retrofit light socket to fit replacement bulb	Reference BTA skills: Unit: Lighting/Indicators, Skill: Fixtures.
23	Go to: Begin	Go back to step 1 to restart the troubleshooting process.
24	Do all bulb have an IR filter in front of them?	Check that all of the functional bulbs have infrared filters between the bulb and the operating field. This filter usually looks like a plastic sheet

		sitting in front of the bulb in its housing.
25	Do not use bulbs without filter	DO NOT use the lamp if any illuminating bulbs do not have a filter. This filter is necessary to ensure the safety of patients.
26	Replace missing filters	Insert infrared filters wherever missing. These filters can be taken from bulb housings containing non-functional bulbs or from other OR lamp units.  DO NOT handle filters with bare hands.
27	Go to:	
28	Do all parts of light and support move freely?	Manipulate the lamp to ensure that all moving parts can be easily adjusted.
29	Add grease to resistive parts	If any moving parts of the lamp resist adjustment, lubricate these parts using grease or oil.
30	Loosen braking screws	Locate the braking screws on the lamp unit. Loosen these screws to allow for more fluid movement.
31	Adjust spring force screws	Locate and adjust the tightness of spring force screws on the lamp unit to change the amount of tension in the lamp supports.
32	Go to:	
33	Does light stay in place after adjustment?	Ensure that the lamp stays in place after it has been adjusted. Try several manipulations of the lamp and let lamp stand in each for a few minutes. Observe any deviations from the original adjustment.
34	Tighten braking screws	If lamp moves after adjustment, tighten the braking screws to prevent this movement.
35	Go to:	
36	Light is functioning properly	