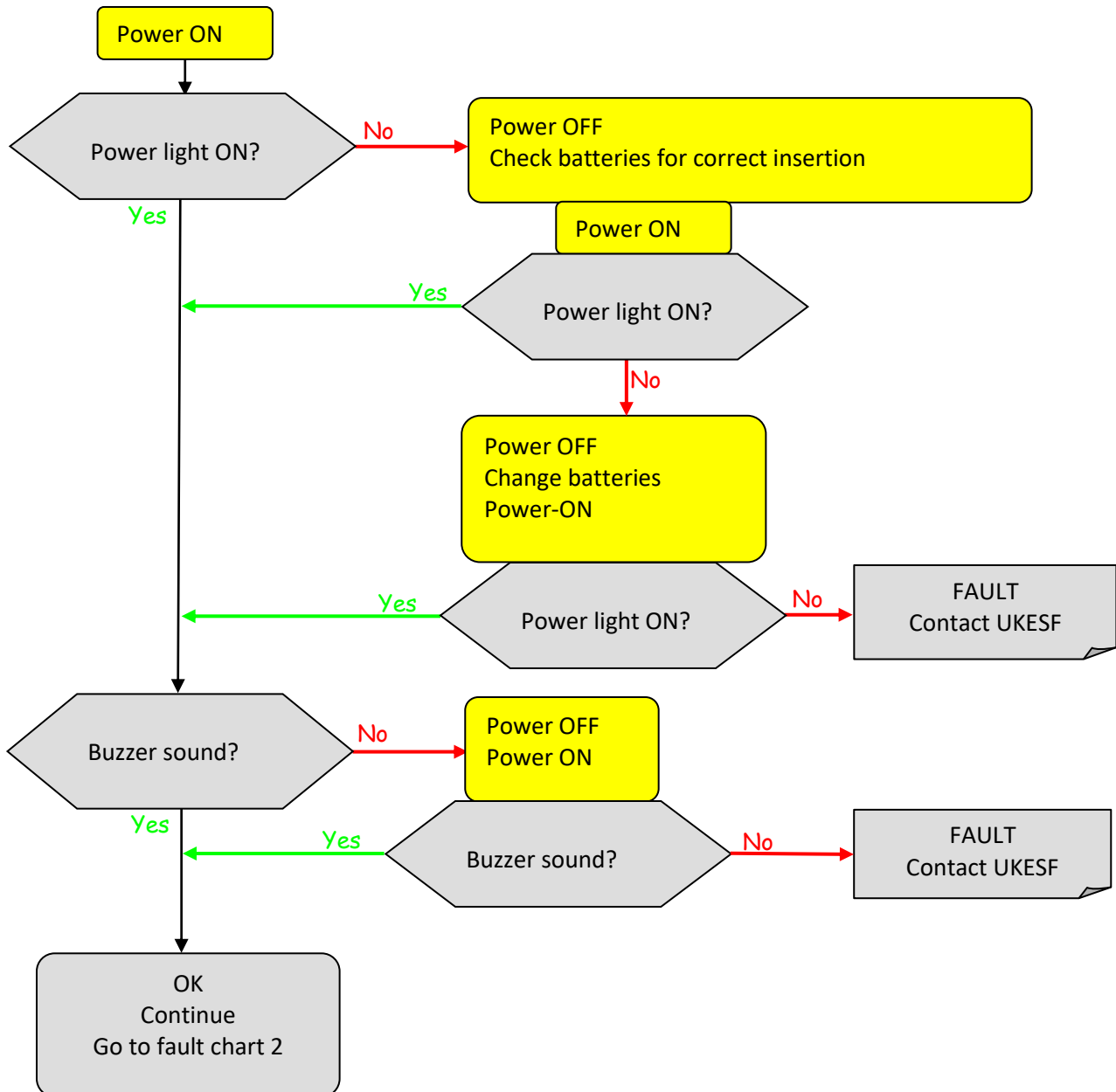


Activity 1 – Test Chart 1

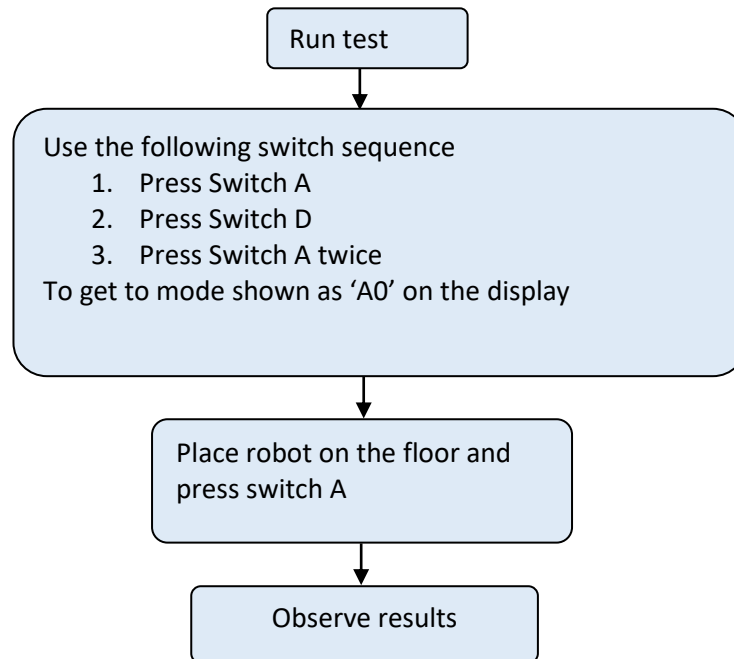


Disconnect switch controller and do the following:



Activity 1 – Test Chart 2

If you have reached this point then Robokid has been successfully powered on. The next task is to run a small test and observe the effects.



The following table gives a list of all the possible results:

Case	Effect observed	Fault	Fixes for fault
1	Robot drives forward	No	No fault, robot is correctly wired.
2	Robot drives backward	Yes	For each motor, black and red wires need to be swapped. BLACK should go to connector 1 and RED wire should go to connector 2
3	Robot spins sharply to the LEFT	Yes	Wiring for RIGHT motor is correct. Rewire LEFT motor making sure that black wire is in connector 1 and red wire is in connector 2.
4	Robot spins sharply to the RIGHT	Yes	Wiring for LEFT motor is correct. Rewire RIGHT motor, making sure that black wire is in connector 1 and red wire is in connector 2.
5	Spins to LEFT but with LEFT wheel not moving	Yes	Wiring for RIGHT motor is correct. Rewire LEFT motor, making sure that black wire is in connector 1 and red wire is in connector 2.
6	Spins to RIGHT but with RIGHT wheel not moving	Yes	Wiring for LEFT motor is correct. Rewire RIGHT motor, making sure that black wire is in connector 1 and red wire is in connector 2.
7	Robot does not move	Yes	Redo wiring for both motors, making sure that black wire is in connector 1 and red wire is in connector 2.