

ELECTRIC BC ROASTERS-HEAT ELEMENTS TEST & REPAIR

IN THE EVENT YOUR BC ELECTRIC ROASTER SHORTS OUT AND CIRCUIT BREAKER TRIPS OFF HERE ARE TESTS YOU CAN PERFORM TO DETERMINE WHERE SHORT IS AND HOW TO FIX.

1. IF CIRCUIT BREAKER TRIPS OFF AS SOON AS PLUGGED INTO POWER **WITH THE ROASTER OFF** MOST LIKELY THE SHORT IS IN YOUR BURNERS OR WIRING TO BURNERS. IF SO GO TO POINT #2 (IF BREAKER STAYS ON WHEN MACHINE IS PLUGGED IN BUT SHORTS WHEN YOU TURN ON THE POWER BUTTON THEN ISSUE IS LIKELY NOT THE BURNERS BUT INSTEAD ONE OF THE MOTORS ON MACHINE OR A SHORT IN LAMP AND CAN BE DETERMINED BY SKIPPING THIS SECTION AND GOING TO THE SECTION CALL MOTOR SHORTS) ALSO IF BREAKER TRIPS OFF EVEN WITH ALL MOTORS OFF AND BURNERS DISCONNECTED THEN ISSUE COULD BE WITH A DEFECTIVE CIRCUIT BREAKER

2. **UNPLUG ROASTER FROM ALL POWER**

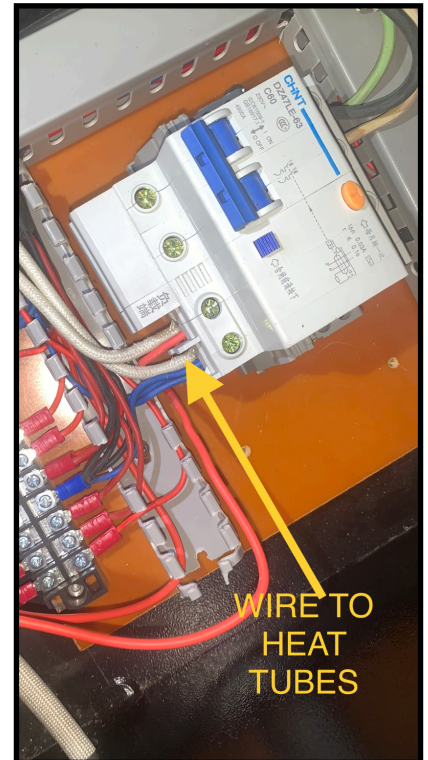
3. REMOVE HOUSING FROM BC-3, 3.5 & 5 SO YOU CAN EASILY GET TO PARTS. (SEE PICTURE)

3. LOCATE THE **WHITE INSULATED WIRE** THAT GOES TO THE HEAT ELEMENTS FROM CIRCUIT BREAKER. CAP OR TAPE END OF WIRE SO BARE WIRE DOES NOT TOUCH YOU OR METAL ON ROASTER. TO REMOVE WIRE LOOSEN THE SCREW ABOVE THE CONNECTION AND REMOVE ONLY THE WHITE WIRE. MAKE SURE ALL OTHER WIRES REMAIN IN BREAKER THEN RETIGHTEN SCREW.

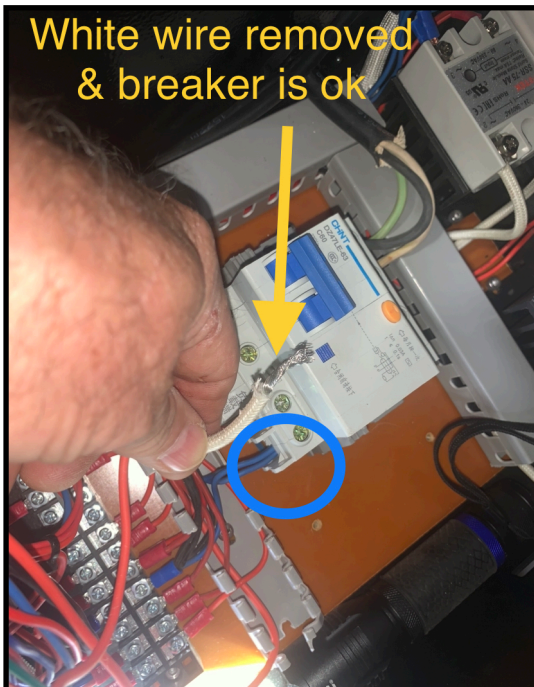
4. ONCE WIRE IS OUT OF BREAKER AND SECURED YOU CAN TURN BREAKER BACK ON ROASTER & THEN PLUG POWER BACK ON ROASTER.

5. IF BREAKER DOES NOT TRIP OFF WHEN POWER IS TURNED ON THEN LIKELY ISSUE IS A DEFECTIVE ELECTRIC HEAT ELEMENT. (SEE LEFT PICTURE BELOW)

6. AT THIS POINT JUST TO BE SURE YOU CAN TURN ON THE POWER TO EACH MOTOR SEPARATELY ONE BY ONE. IF POWER STAYS ON WHEN EACH MOTOR (CHAFF FAN, MIXING MOTOR, COOLING FAN MOTOR & DRUM MOTOR THEN YOU KNOW ISSUE IS NOT WITH THEM.) **NOTE:** DRUM MOTOR CAN BE TURNED ON/OFF WITH BUTTON BELOW DRUM SPEED CONTROL. ALSO YOU CAN TURN LAMP AT COOLING TRAY ON/OFF TO TEST IT



STOP! ALWAYS UNPLUG & REMOVE POWER FROM ROASTER WHEN MOVING WIRES



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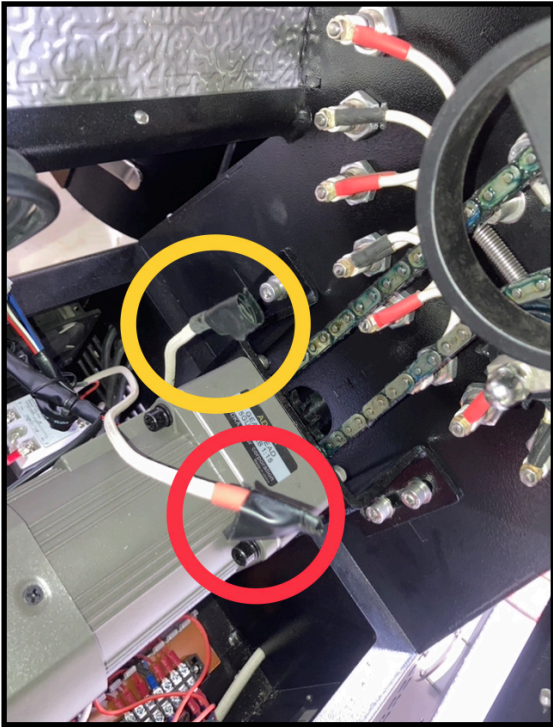


IF ISSUE APPEARS TO BE WITH HEAT ELEMENTS:

7. TURN OFF ROASTER & UNPLUG: WHILE UNPLUGGED PUT THE WHITE INSULATED WIRE BACK INTO THE CIRCUIT BREAKER AS SEEN IN ORIGINAL PICTURE ABOVE.
8. NOW WHILE STILL UNPLUGGED REMOVE THE 2 MAIN POWER WIRES GOING TO THE HEAT ELEMENTS AS SEE IN PICTURE ON LEFT. THEN TAPE EACH WITH ELECTRICAL TAPE TO PREVENT THEM FROM SHORTING (REMEMBER THEIR ORDER AS SEEN MARKED 1 & 2 IN PICTURE)

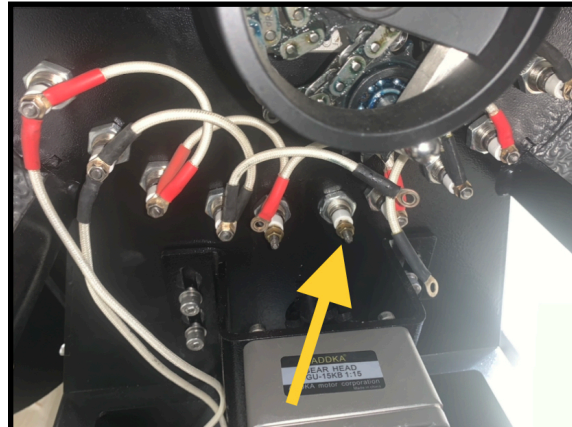
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**BOTH POWER WIRES
REMOVED AND TAPED**



**STOP! ALWAYS UNPLUG & REMOVE POWER
FROM ROASTER WHEN MOVING WIRES**

9. BY REMOVING THESE WIRES WE CAN CHECK AND BE SURE ISSUE IS WITH THE HEAT ELEMENTS. ONCE THESE WIRES ARE REMOVED AND TAPED YOU CAN PLUG ROASTER BACK IN AND IF BREAKER DOES NOT TRIP OFF THEN OUR NEXT STEP WILL BE TO FIND WHICH HEAT ELEMENT IS SHORTED AND DEFECTIVE.



**If wires look good
remove one at a time
to find bad heat tube**

10. STARTING WITH THE FIRST ELEMENT ON LEFT REMOVE ONE WIRE AT A TIME FROM AN ELEMENT AND THEN REATTACH THE 2 WHITE INSULATED WIRES BACK TO THE FIRST ELEMENT AND THEN PLUG IN THE ROASTER TO SEE IF IT TRIPS BREAKER. IF IT DOES YOU NOW KNOW THAT THE FIRST OF THE 5 HEAT TUBES (HEAT ELEMENTS) IS NOT BAD. **NOTE: EACH HEAT TUBE OR ELEMENT HAS TWO CONNECTIONS BUT YOU ONLY NEED TO REMOVE POWER FROM ONE OF THE CONNECTIONS TO TEST EACH ELEMENT.**

8. CONTINUE FOLLOWING THIS PROCEDURE ONE AT A TIME UNTIL YOU FIND THE DEFECTIVE HEAT ELEMENT. ONCE YOU DETERMINE WHICH ELEMENT IS DEFECTIVE YOU WILL NEED TO REMOVE IT AND REPLACE IT.



ONCE YOU FIND DEFECTIVE ELEMENT:

YOU WILL NEED TO REMOVE BOTH NUTS AND WASHERS FROM IT AND THEN USING A WRENCH YOU WILL NEED TO UNSCREW THEM AND REMOVE OLD HEAT TUBE AND REPLACE WITH A NEW HEAT TUBE.

(IF ROASTER IS 3-4 YEARS OLD YOU MAY DECIDE TO REPLACE ALL ELEMENTS AT A TIME TO AVOID EXTRA LABOR WHEN NEXT HEAT ELEMENT GOES BAD)

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REPLACING HEAT TUBES:

IF YOUR ELECTRIC ROASTER IS OVER 2 YEARS OLD WE RECOMMEND YOU STOCK A SET OF HEAT TUBES TO AVOID DOWN TIME WITH YOUR ROASTER. BOTH THE BC-3.5 & 5 USE 5 HEAT TUBES (BC-3.5 USE 750-800W TUBES AND THE BC-5 USE 1000W HEAT TUBE)

YOU CAN ORDER THESE AND ALL OTHER PARTS AT:

PARTS@BUCKEYECOFFEE.COM

MOTOR SHORTS:

IF YOU FIND ISSUE IS NOT WITH THE BURNERS:

IF AFTER PERFORMING THE ABOVE TEST YOU FIND ISSUE IS NOT WITH BURNERS PLEASE SEE THE INFORMATION BELOW TO HELP YOU DETERMINE WHAT IS TRIPPING OFF BREAKER:

HEAT STOPPED WORKING: (ENTIRE ROASTER POWER WENT OFF)
CHECK TO SEE IF THE ROASTERS INTERNAL CIRCUIT BREAKER WENT OFF:

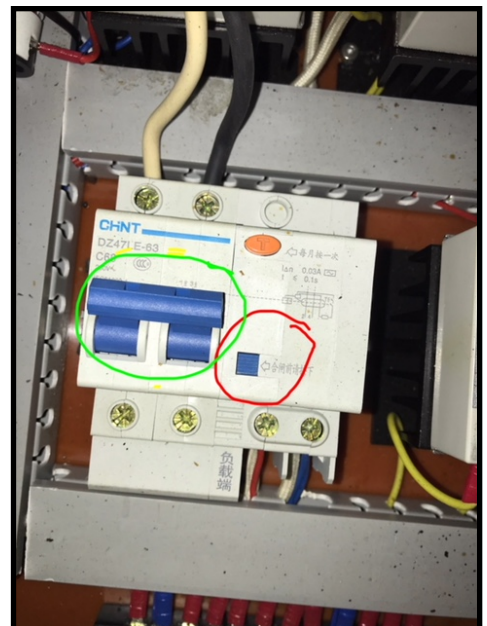
CHECK CIRCUIT BREAKER:

IF YOU HAVE NOT DONE SO ALREADY FIRST UNPLUG MACHINE TO AVOID SHOCK:

HAVE YOU ATTEMPTED TO TURN THE CIRCUIT BREAKER IN MACHINE BACK ON? IF IT FLIPS OFF YOU CAN PRESS THE BLUE BUTTON IF IT HAS POPPED OUT ON TOP OF SWITCH AND **TURN CIRCUIT BREAKER BACK ON THIS RESETTING IT.**

BUILDING CIRCUIT BREAKER TRIPS OFF:

IF CIRCUIT BREAKER IN BUILDING SHUT OFF: PLEASE TURN BUILDING



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IF THERE IS A SHORT IN ONE OF THE COMPONENTS:

IF ISSUE IS THE CIRCUIT BREAKER ON MACHINE KEEPS TRIPPING OFF BUT POWER IN BUILDING STAYS ON THEN WE NEED TO FIND CAUSE FOR BREAKER TO TRIP OFF.

1. LOOK CLOSELY AT **BREAKER AND WIRING** TO SEE IF IT APPEARS ANY WIRES COULD BE LOOSE OR ACTUAL BREAKER COULD BE GOING BAD.

IF BREAKER WILL STAY ON WHEN ALL BUTTONS ARE OFF ON CONTROL PANEL YOU CAN CHECK EACH MOTOR SEPARATELY.

CHECK EACH MOTOR SEPARATELY:

MAKE SURE ALL BUTTONS ON CONTROL PANEL ARE OFF. THEN POWER ON CIRCUIT BREAKER. IF IT STAYS ON TAKE EACH MOTOR ONE AT A TIME TURNING ON THEN OFF TO SEE WHICH MAY

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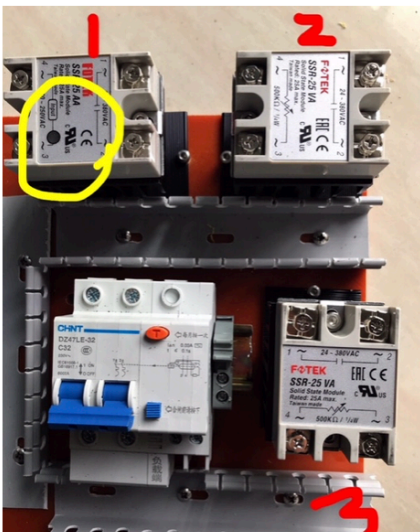
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ELECTRIC MODELS ONLY:

IF YOUR ELECTRIC ROASTER POWERS ON AND ALL COMPONENTS WORK BUT THE HEAT ELEMENTS DO NOT HEAT UP THEN CHECK THESE COMPONENTS:

A. WHEN YOU TURN ON THE HEAT (BURNER OR BAKE BUTTON) BUTTON ON CONTROL PANEL DOES IT LIGHT UP?



1. PLEASE LOOK AT THE RELAY SSR 40 AA (MAY BE A HIGHER AMPERAGE ONE SUCH AS 60 OR 75A) WITH HEATING POWER KNOB OFF PLEASE LOOK AT THE SMALL LED LIGHT ON THE RELAY AND TURN ON THE HEAT BUTTON ON FRONT OF CONTROL PANEL AND SEE IF THE LITTLE LIGHT COMES ON:

(STOCK PICTURE OF ELECTRIC BOARD) SEE #1 RELAY LITTLE LIGHT WILL COME ON WHEN HEAT BUTTON IS ON.



IF YOU HAVE TESTED ALL THE ABOVE AND NEED HELP PLEASE EMAIL: TECH@BUCKEYECOFFEE.COM: PROVIDE FULL DETAILS AND RESULT OF TESTS IN EMAIL ALONG WITH ROASTER TYPE, SIZE & ACCOUNT NUMBER