# 4. Troubleshooting

## 4-1 Error Code Numbering Rule

1. ERROR CODE NUMBERING RULE is applied to a microwave oven and an oven.(CMO, OTR, Grill, Convection, Commercial etc.)
2. All sensors and devices have their own number. ex) Gas Sensor = 1, Temp. Sensor = 2, ...
3. Of each device, No.1 and No.2 refer to “Open Error” (not sensed) and “Short Error”, respectively.
4. This numbering rule has been applied to models to have been developed since January, 1, 2005. (But, GE or Customize model are excluded.)

| E | - | 1 | 1 |
|---|---|---|---|

| DEVICE | ERROR CASE |
|---|---|
| 0- Others | 1- Open |
| 1- Gas Sensor | 2- Short |
| 2- Temp. Sensor | • |
| 3- Weight Sensor | • |
| 4- Easy/PH Sensor | • |
| 5- EEPROM | |
| • | |
| • | |
| • | |

## 4-2 Error Code List

Gas Sensor

| Error Code | Gas Sensor Error Case (E-1X) | Solution | Page |
|---|---|---|---|
| E-11 | Open | Check Sensor part ,connection of sensor housing and PCB’s connector. | 19 Page |
| E-12 | Short | | 20 Page |
| E-13 | T1 Max Time Error | | 21 Page |
| E-14 | Dry Up / No Load | Insert food and restart. | |

Temp Sensor

| Error Code | Temp. Sensor Error Case (E-2X) | Solution | Page |
|---|---|---|---|
| E-21 | Open | Check sensor part and connection of sensor housing and PCB’s connector. | 19 Page |
| E-22 | Short | | 20 Page |
| E-23 | T1 Max Time Error (Preheating not completed) | Check heater. | 30 Page |
| E-24 | Over temperature error | | 32 Page |
| E-25 | In case abnormal temperature is sensed at Micro Cook | Cool down set and restart. | 33 Page |
| E-26 | In case the temperature is not over the fixed AD in first 3 minutes after cooking by heater starts. | Check sensor and heater. | 30 Page |

Eeprom Error

| Error Code | EEPROM Error Case (E-5X) | Solution | Page |
|---|---|---|---|
| E-51 | Open (Sense Failure) | Replace EEPROM and restart. | 26 Page |
| E-53 | Read/Write Error | | |
| E-54 | Zero not to be set | | |

# 4. Troubleshooting

## Weight Sensor

| Error Code | Gas Sensor Error Case (E-1X) | Solution | Page |
|---|---|---|---|
| E-31 | Open (When value of HEX is above “FF” for 5 seconds) | Check Sensor. | 19 Page |
| E-32 | Short | | 20 Page |
| E-33 | In case the initial value of HEX is under “14” for 30 seconds while a weight sensor in operation. | | 23 Page |
| E-34 | In case the initial value of K calculated by a weight sensor is above and under “±28” as value of HEX. | | |
| E-35 | In case the value of A is “-” as a weight sensor calculates. | | |
| E-36 | In case the door opens during sensor cooking. | Cancel the present mode and restart from the begining. | 24 Page |

## Easy/Ph Sensor

| Error Code | Easy/PH Sensor Error Case (E4) | Solution | Page |
|---|---|---|---|
| E-41 | Open | Check Sensor. | 19 Page |
| E-42 | Short | | 20 Page |
| E-43 | T1 Max Time Error | | 21 Page |
| E-44 | Dry Up | Insert food and restart. | 21 Page |
| E-45 | Cooling Error (3minutes) | Remove moisture from sensor and restart. | 25 Page |
| E-46 | Primary Open Error(3minutes) | Check Sensor. | 19 Page |
| E-47 | The door opens during cooking | Cancel the present mode and restart from the begining. | 24 Page |

## Humidity Sensor

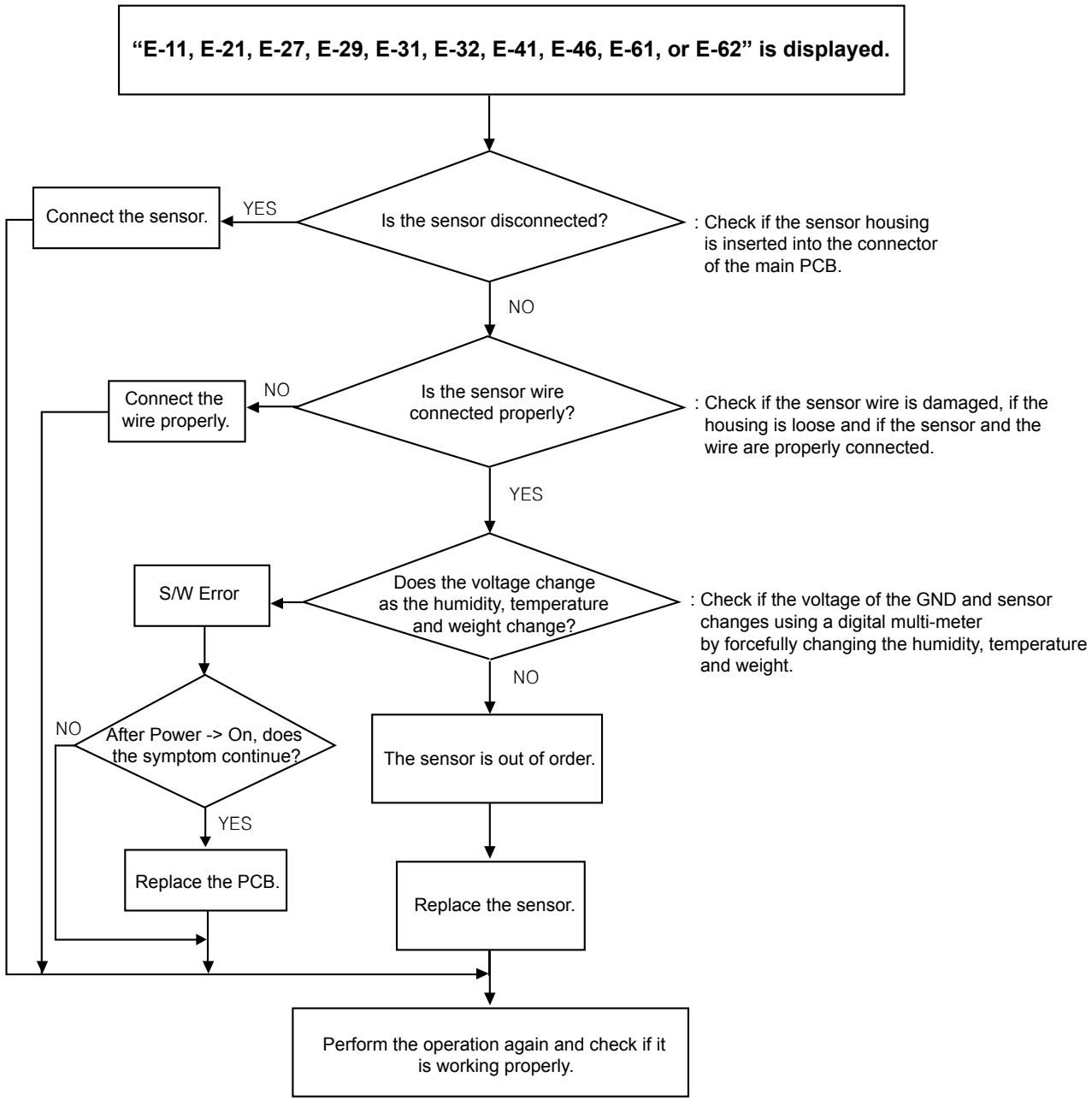
| Error Code | Humidity Sensor Error Case (E-6X) | Solution | Page |
|---|---|---|---|
| E-61 | Open | Check Sensor. | 19 Page |
| E-62 | Short | | 20 Page |
| E-63 | T1 Max Time Error | | 21 Page |

## Others

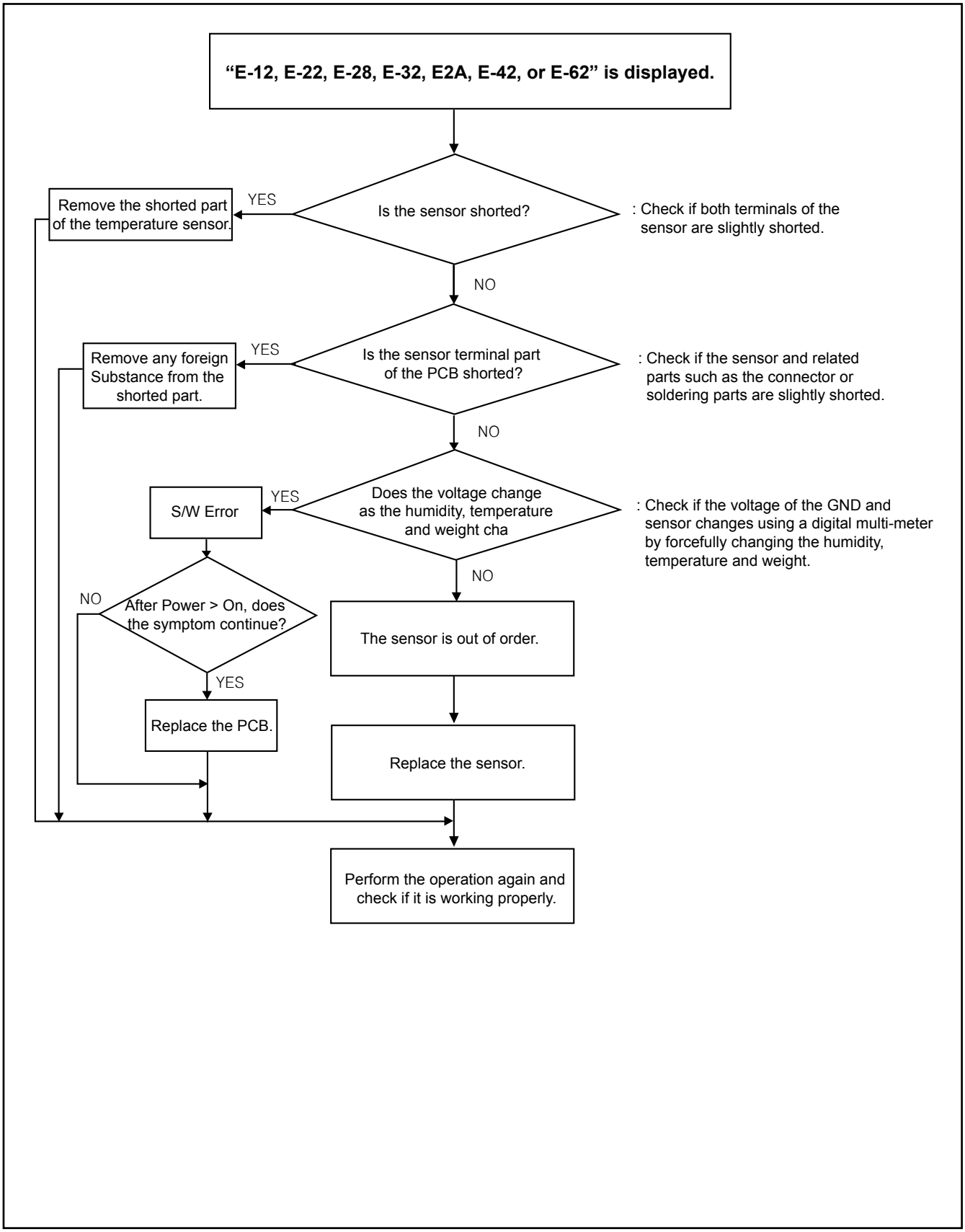
| Error Code | Others (E-0X, Letter) | Solution | Page |
|---|---|---|---|
| -SE- | Key Short Error (10 seconds) | Turn off set and restart. | 22 Page |
| E-02 | Cooking Time Setting Over Error (MWO) | Check each mode’s setting time. | 31 Page |
| E-03 | Cooking Time Setting Over Error (Grill) | | |
| E-04 | Cooking Time Setting Over Error (Convection) | | |
| E-05 | Cooking Time Setting Over Error (Combination) | | |
| E-06 | It fails to sense that the swing heater has stopped for 20 seconds during cooking. | Check Swing heater’s motor and connector. | 34 Page |
| E-08 | In case function of MWO starts with spit inserted into cavity inside. | Restart after remove spit. | 30 Page |
| E-09 | In case the damper is not set to be positioned for 2 minutes. | Check damper and connector. | 32 Page |

## 4-3 Electrical Malfunction

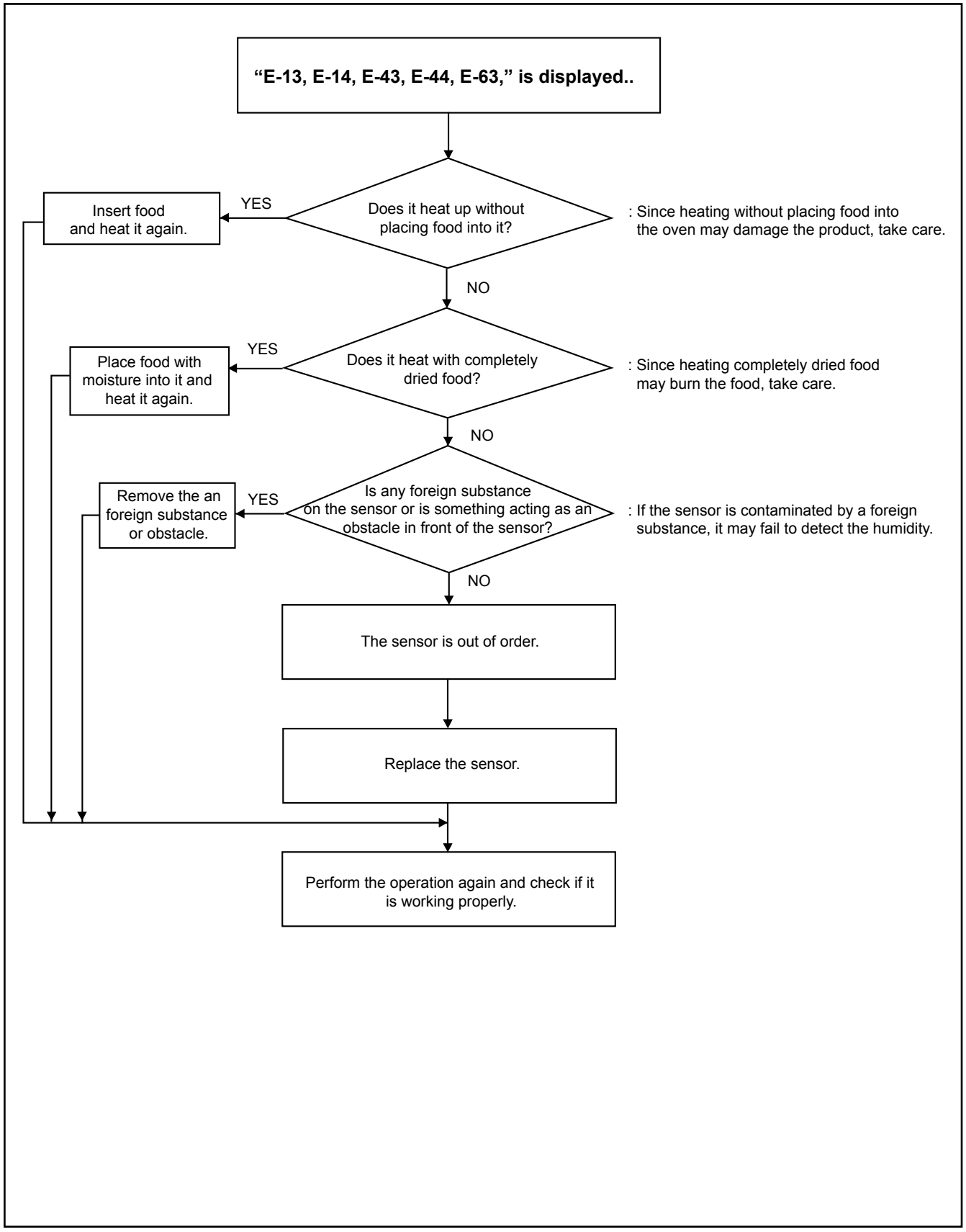
### 4-3-1 Sensor Open Error



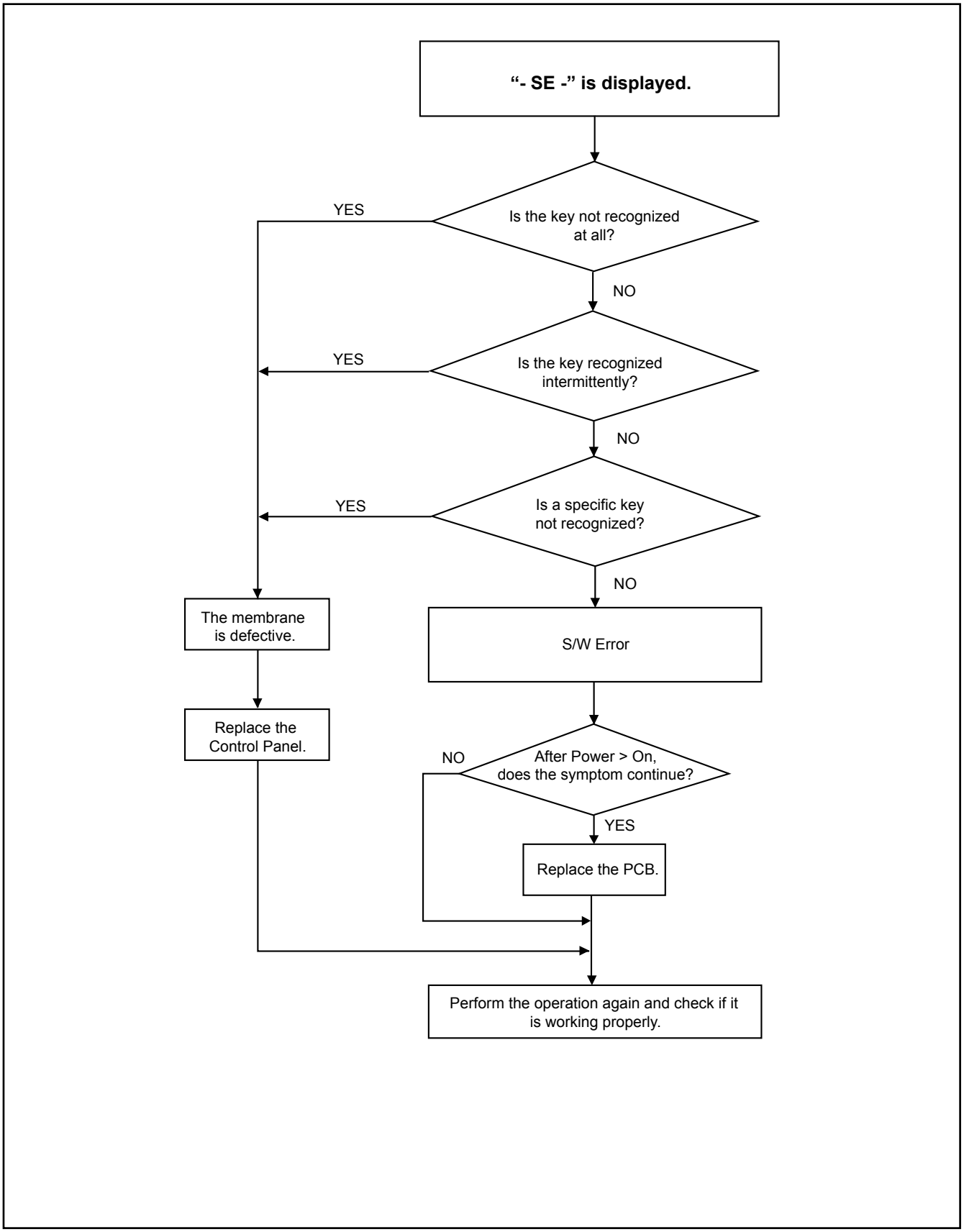
## 4-3-2 Sensor Short Error



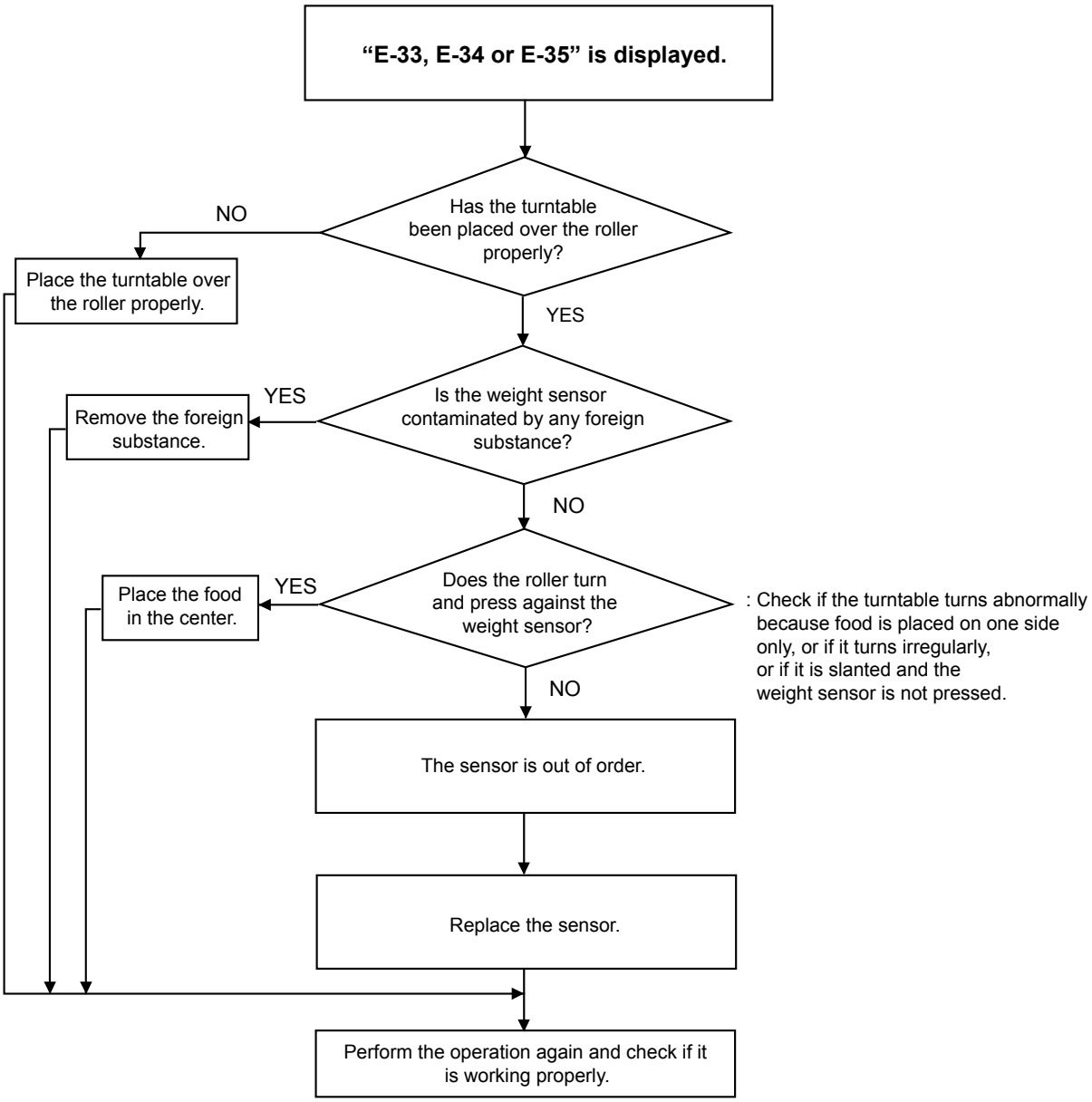
## 4-3-3 Sensor Max Time Error



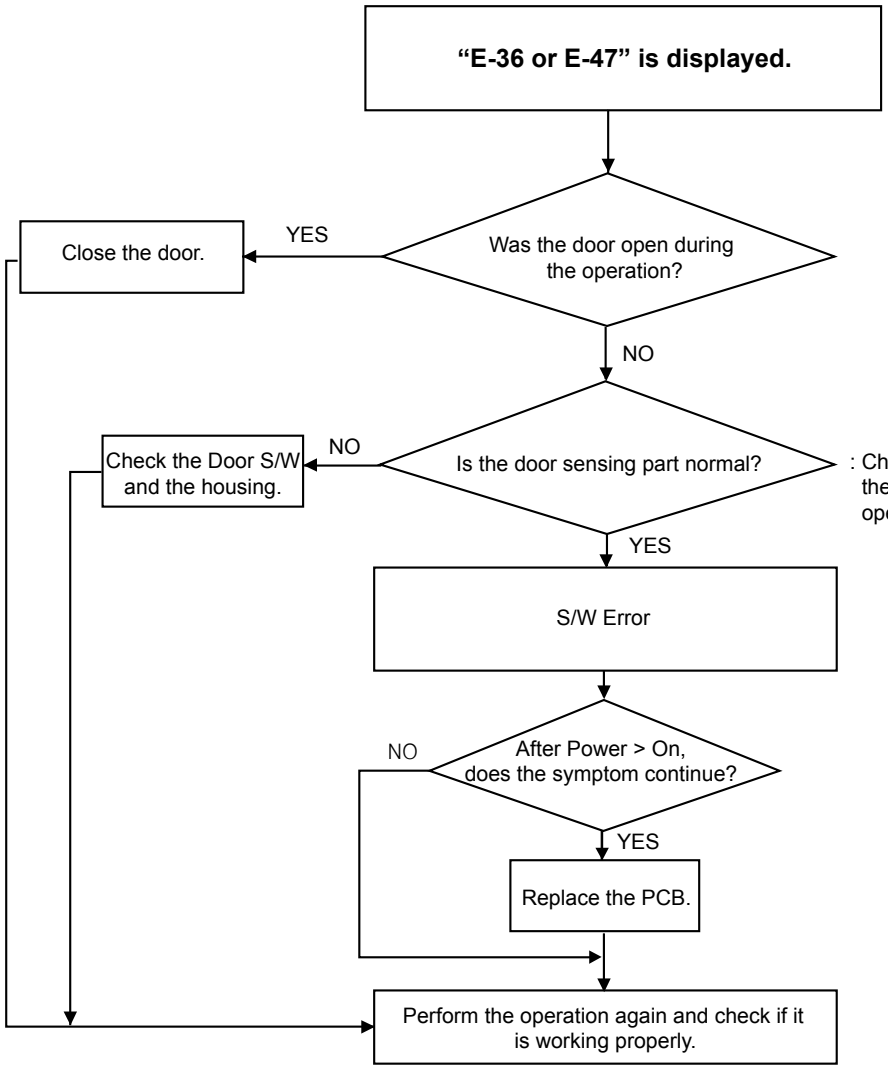
## 4-3-4 Key Short Error



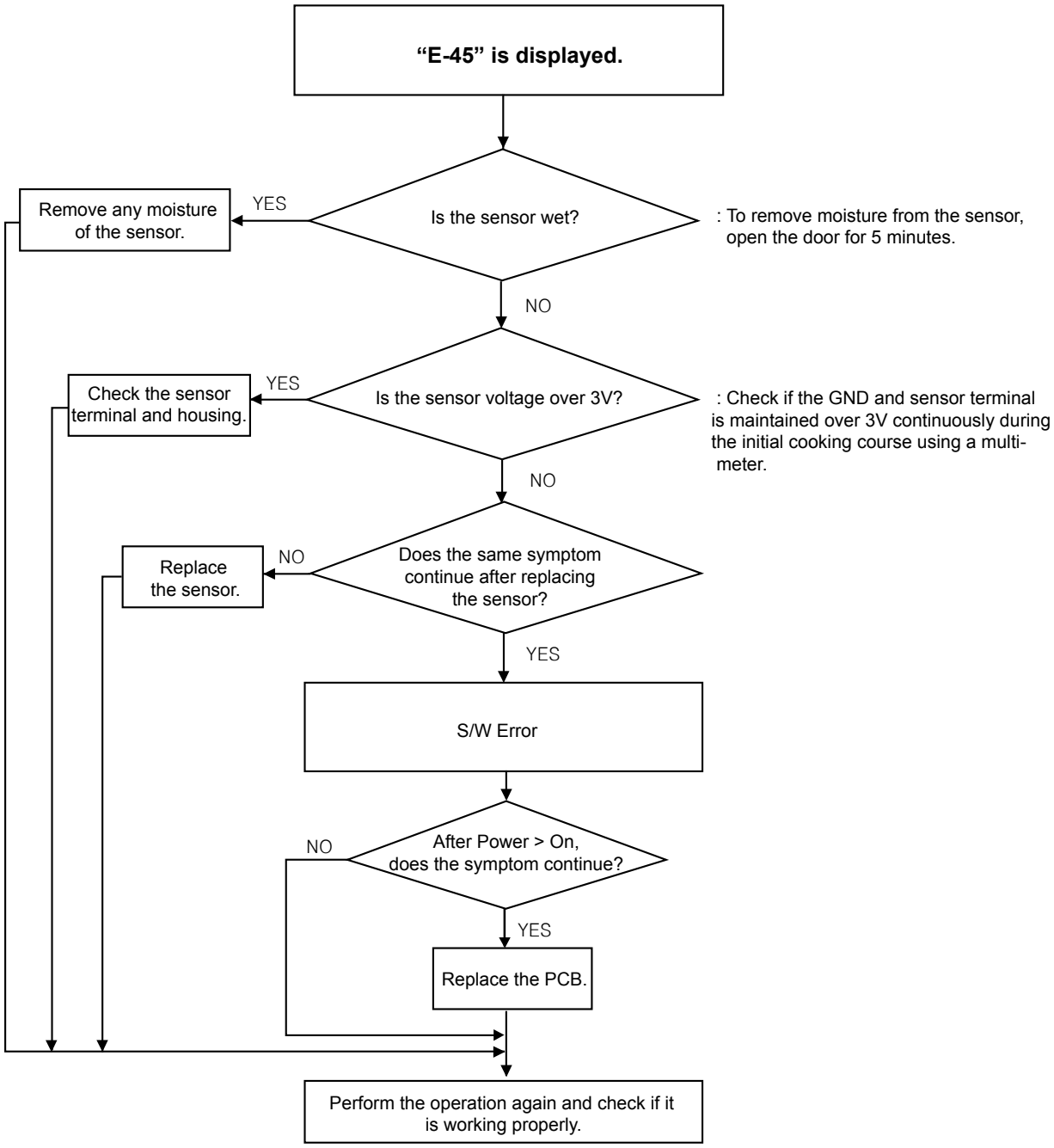
## 4-3-5 Weight Sensor Error



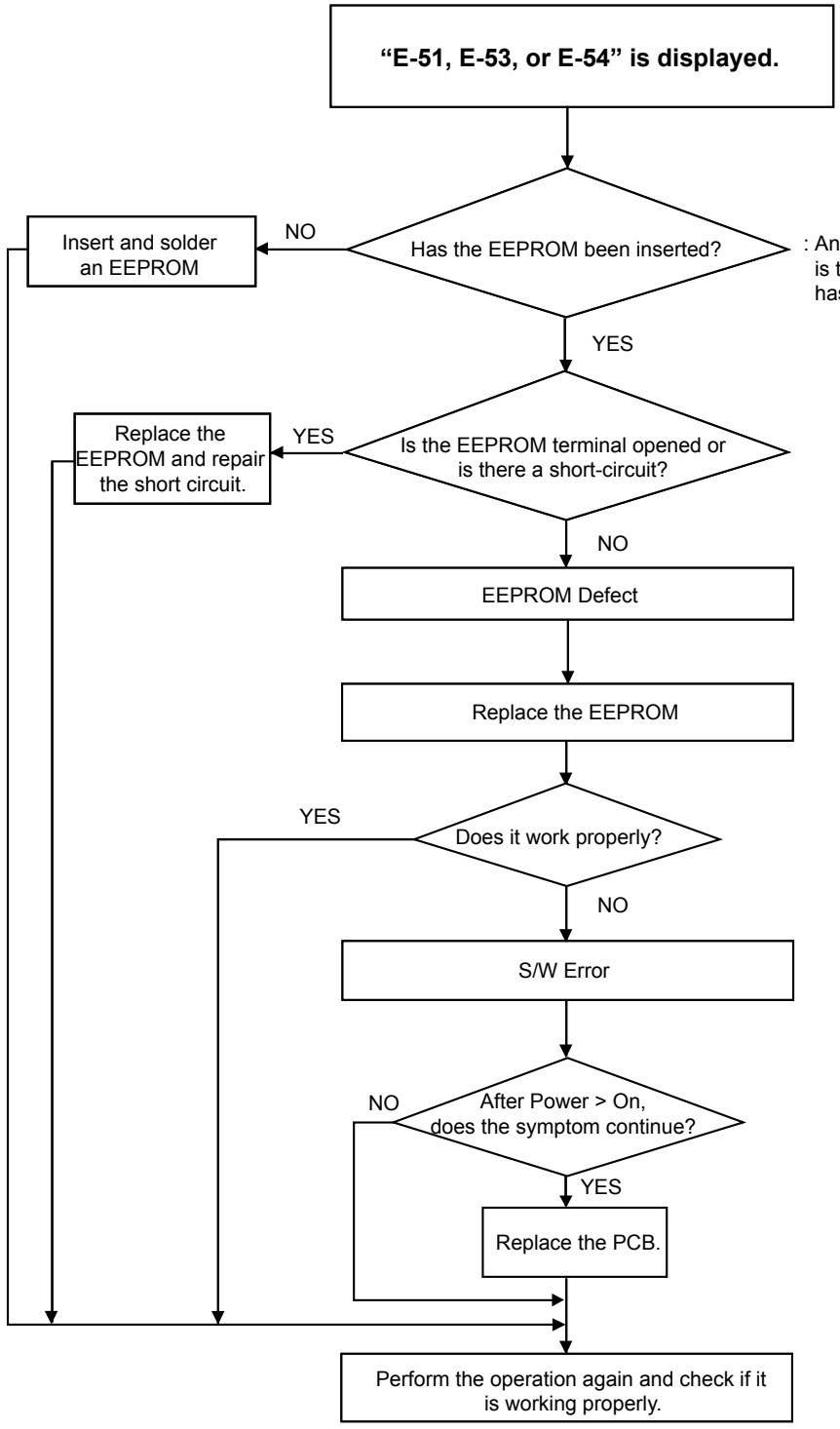
## 4-3-6 Weight Sensor Error



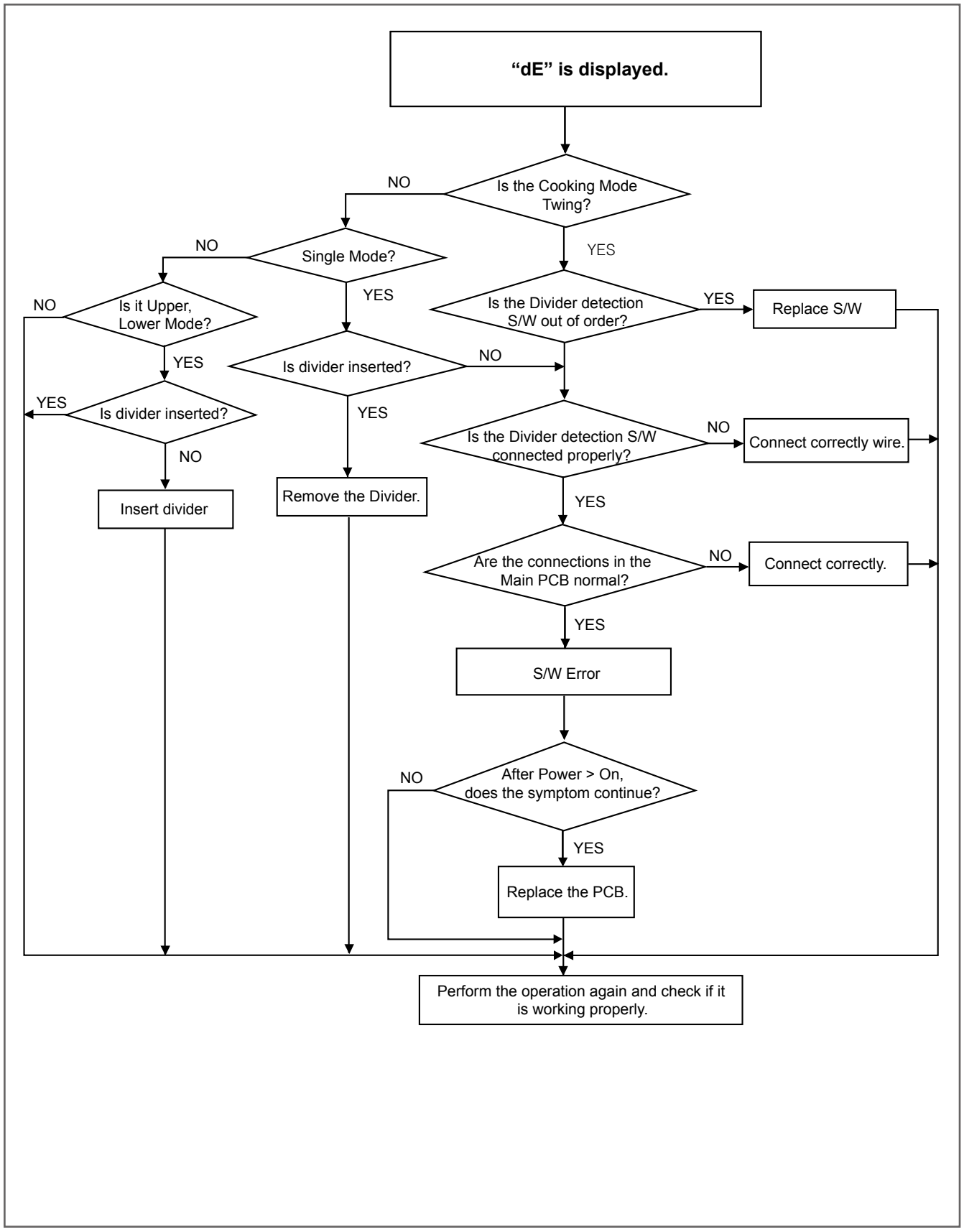
## 4-3-7 Cooling Error



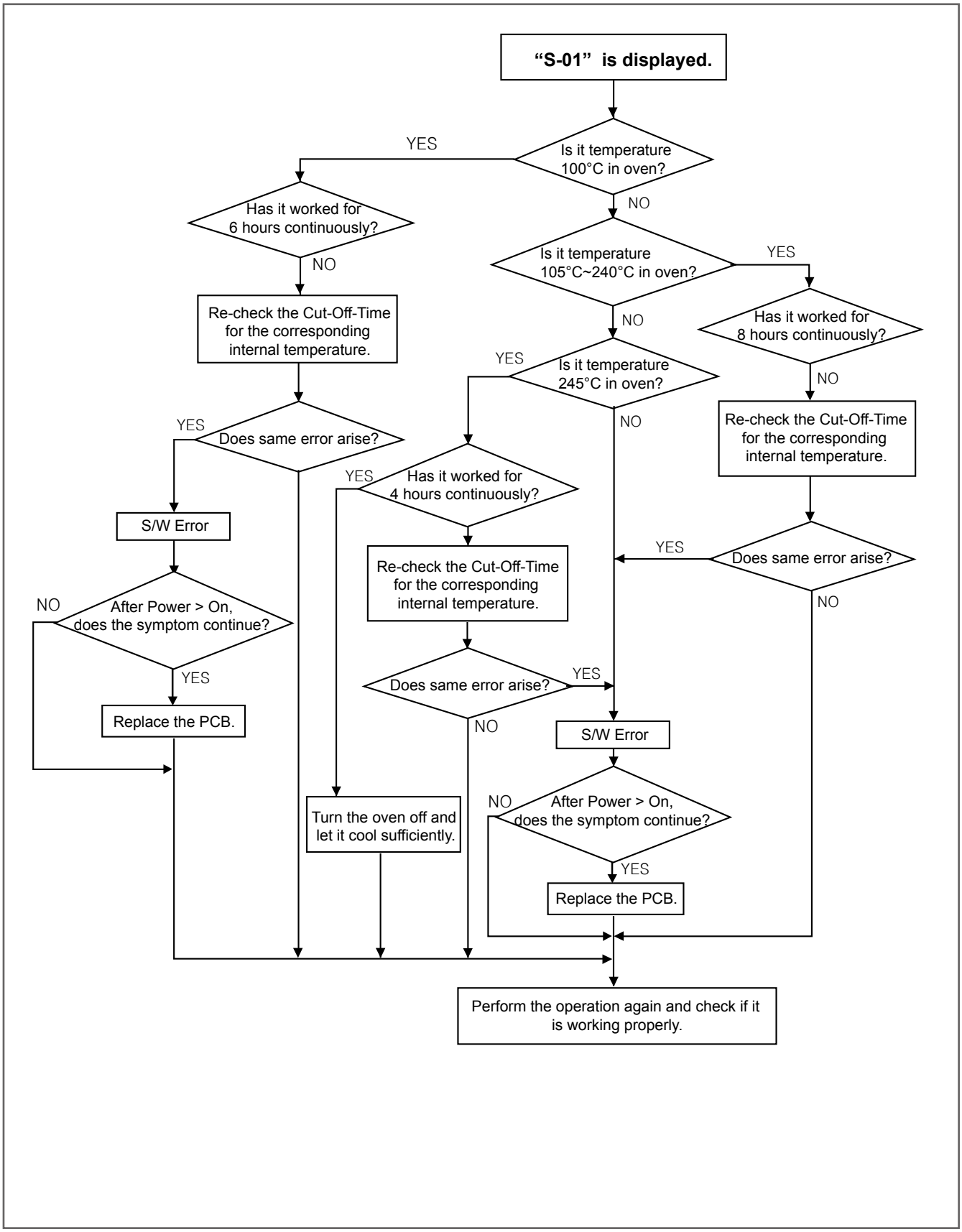
## 4-3-8 EEPROM Error



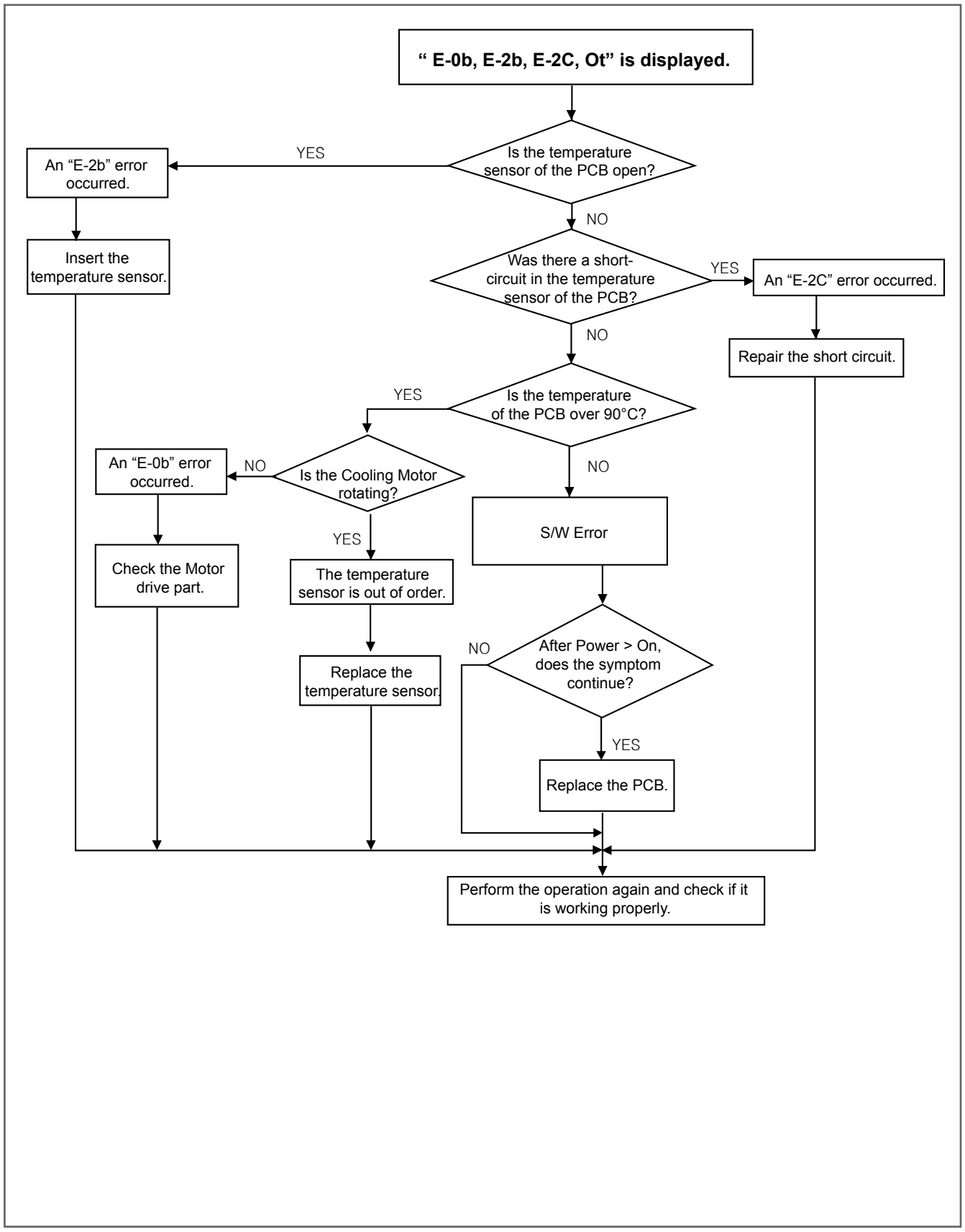
## 4-3-9 Divider Missing Error



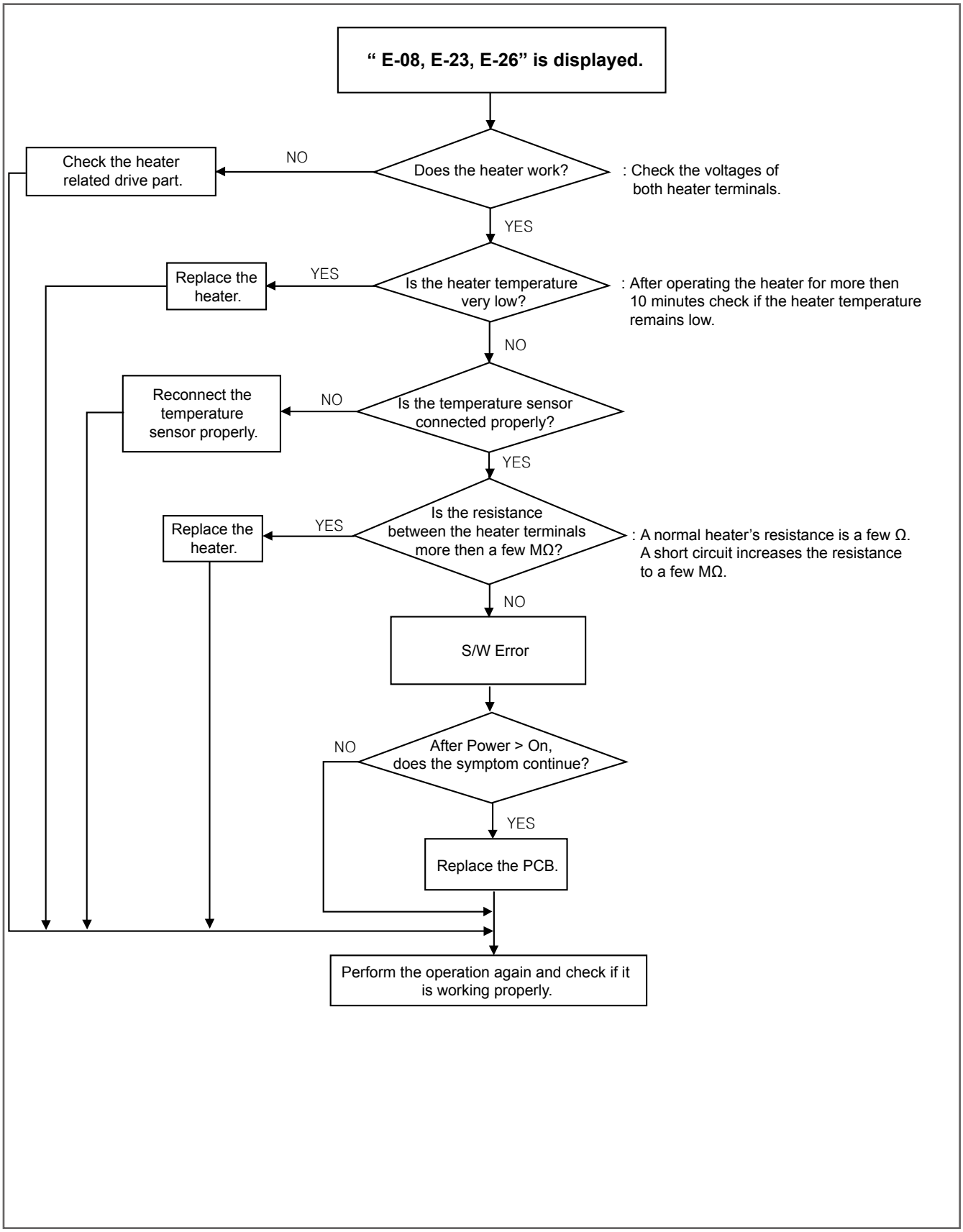
## 4-3-10 Over Time Error



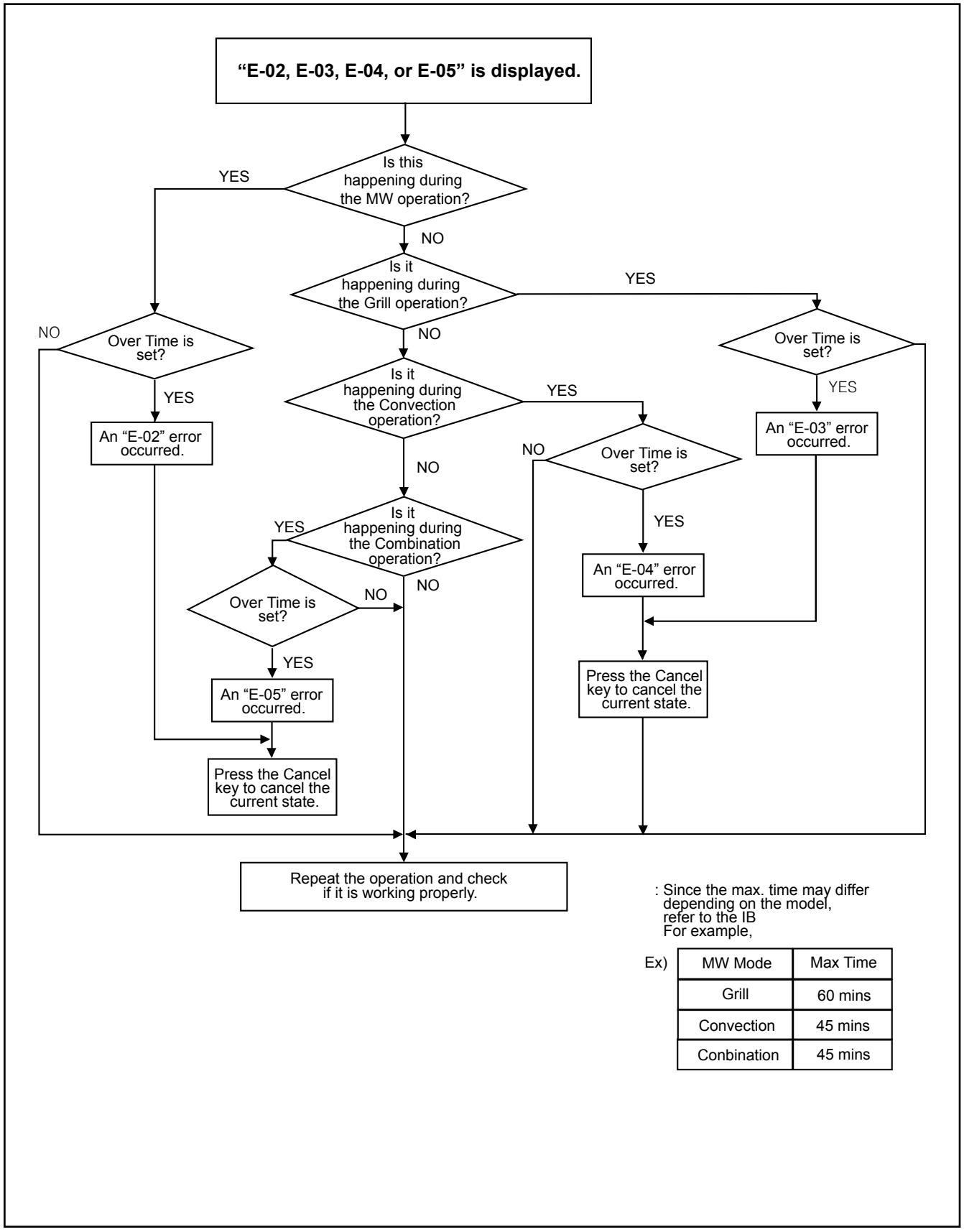
## 4-3-11 Over Time Error



## 4-3-12 Preheating Error



## 4-3-13 Cooking Time Over Selection Error

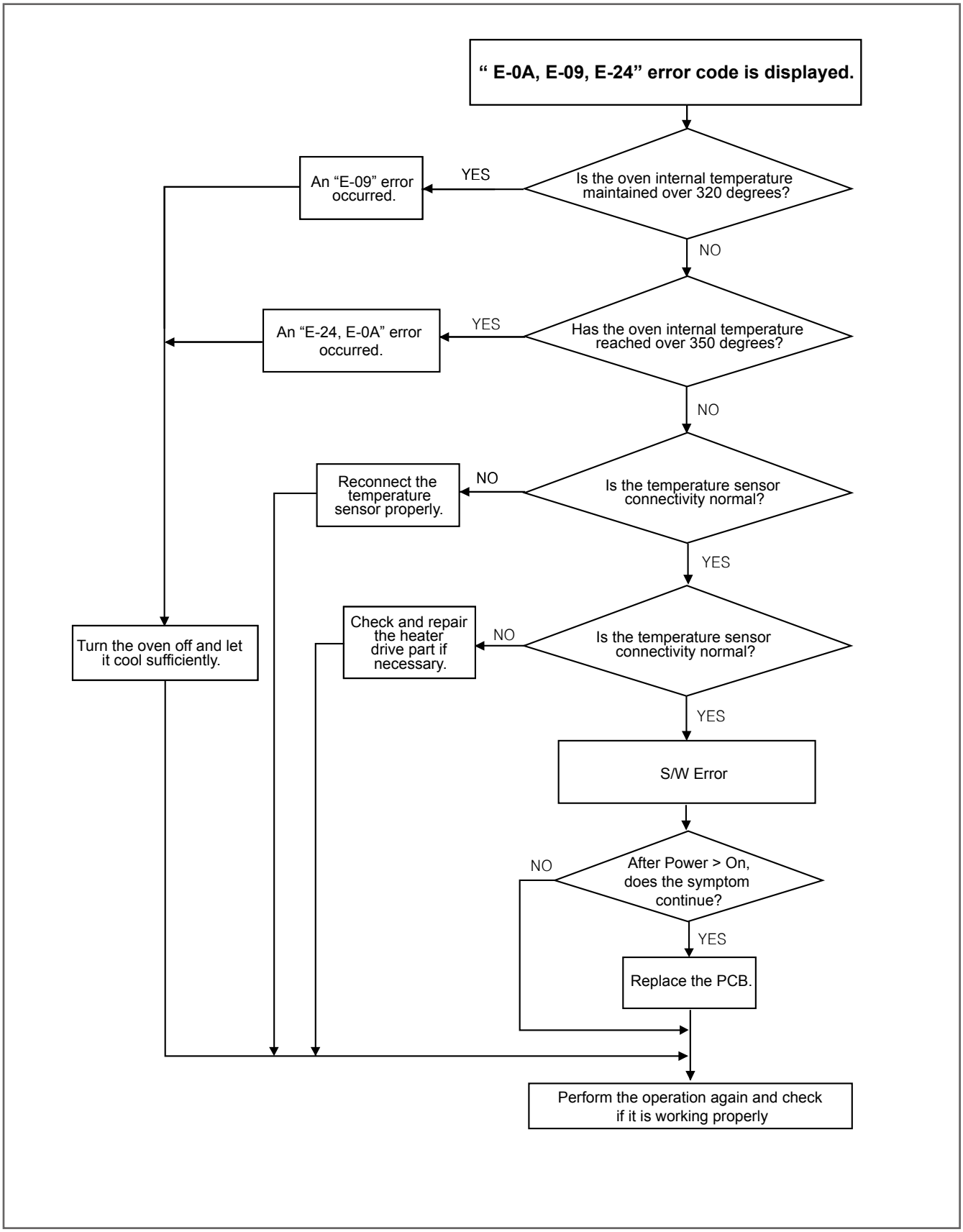



: Since the max. time may differ depending on the model, refer to the IB
For example,

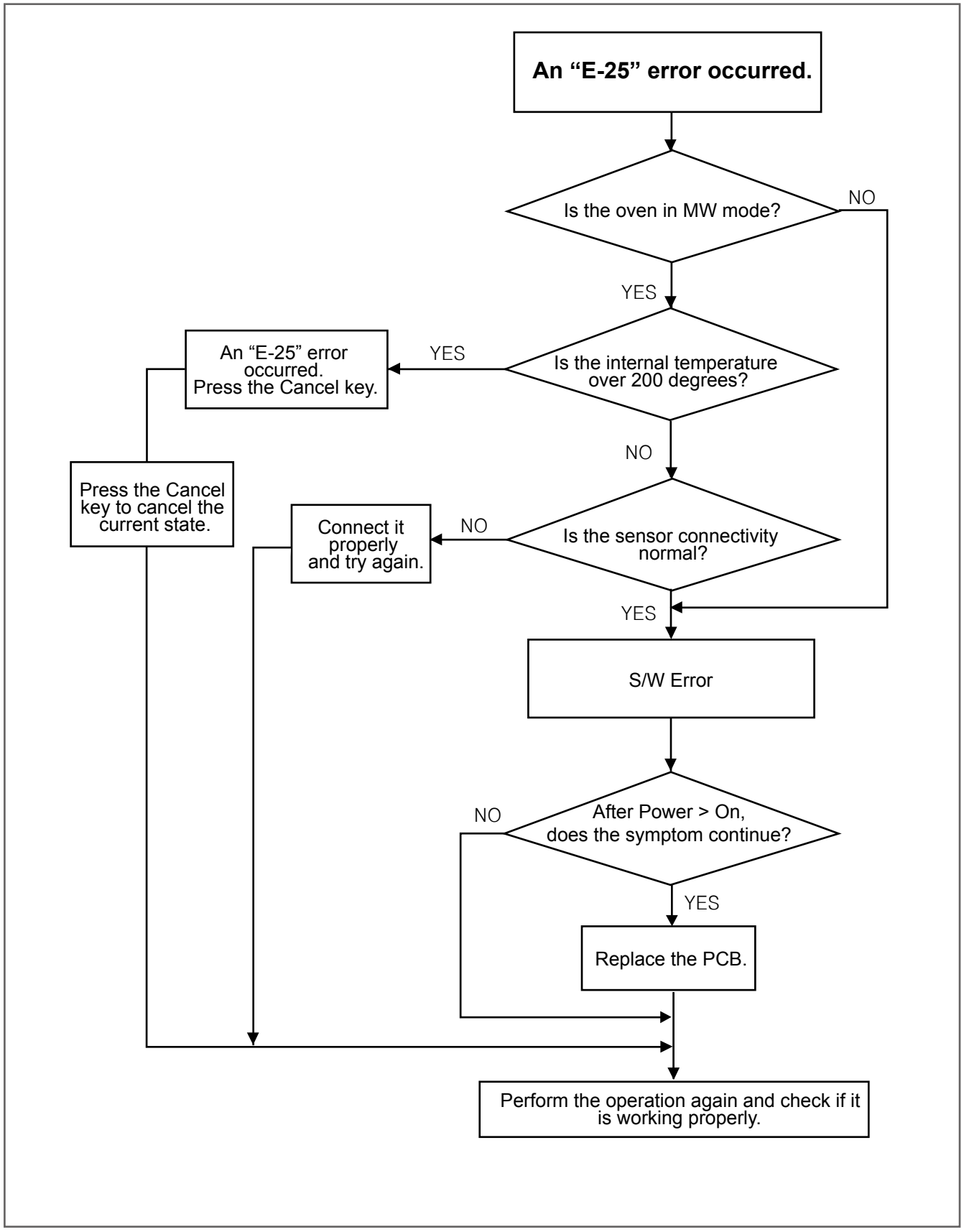
Ex)

| MW Mode | Max Time |
|---|---|
| Grill | 60 mins |
| Convection | 45 mins |
| Conbination | 45 mins |

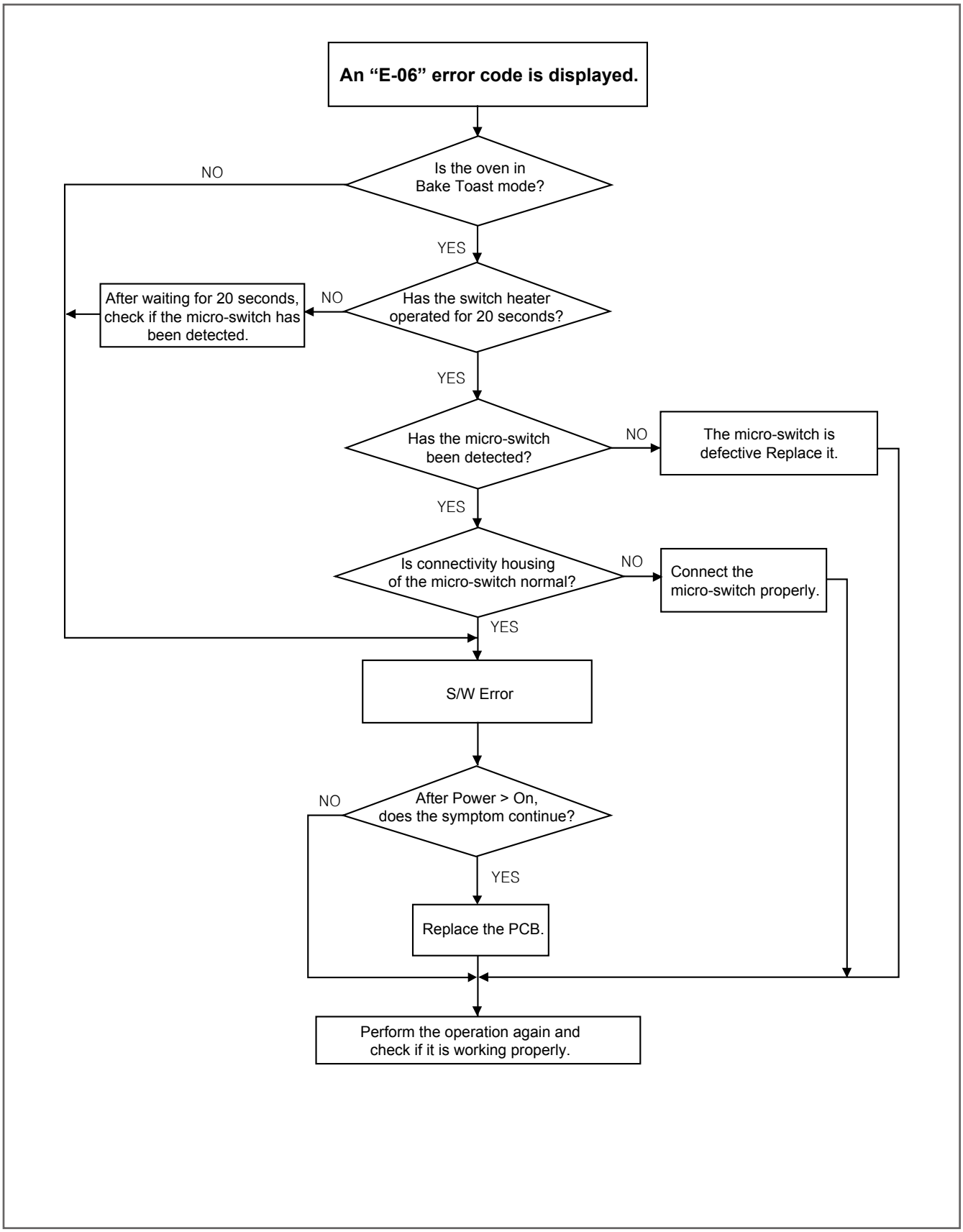
## 4-3-14 Internal Oven Temperature Abnormal Error



## 4-3-15 Swing Heater Detection Error



## 4-3-16 Swing Heater Detection Error



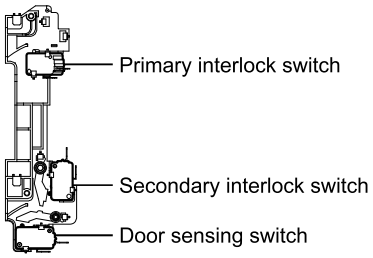
## 4-3-17 If oven malfunction

**Oven does not operate.**

***Inspection method**

**Caution**
1. Be careful of high voltage circuits.
2. Discharge high voltage capacitor.

**Is Fuse OK?**
- NO → Is Primary interlock switch normal?
  - NO → Make sure to inspect the power relay after replacing primary interlock switch, secondary interlock switch and door sensing switch.

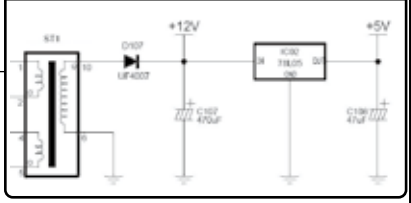



< Latch switch assembly >

  - YES → Is Power Relay normal?
    - NO → Replace Relay
- YES

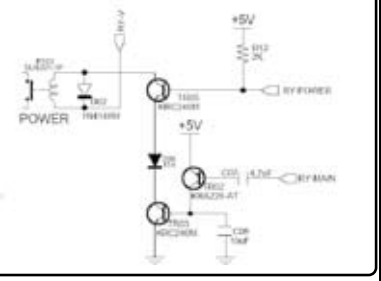
**Is the magnetron temperature switch normal?**
- NO → Replace switch
  - NO → Check a fan motor after replacing switch
- YES

**Is SMPS power supply cirduit normal?**
- NO → Do check power supply circuit
  - NO → Power supply circuit check point




- YES

**Is the IC01 output of PCB normal?**
- NO → Do check Relay control circuit
  - NO → Relay control circuit check point




- YES

**Checking high voltagecircuts**

Is high voltage dioed normal?
- NO → Is high voltage dioed normal?
  - NO → In case any of high voltage parts is damaged, check all parts related to high votlage.
  - YES → Is high voltage capacitor normal?
    - NO → In case any of high voltage parts is damaged, check all parts related to high votlage.
    - YES → Is magnetron normal?
      - NO → In case any of high voltage parts is damaged, check all parts related to high votlage.

## 4-3-18 If button malfunction

**Buttons of the control panel do not work.**

***Inspection method**

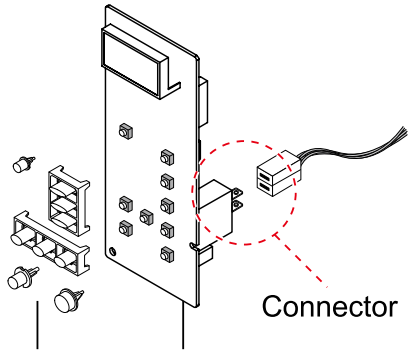
Are button pressed in the correct order?

NO → Refer to User Manual

YES

Is the connector of the control panel normal?

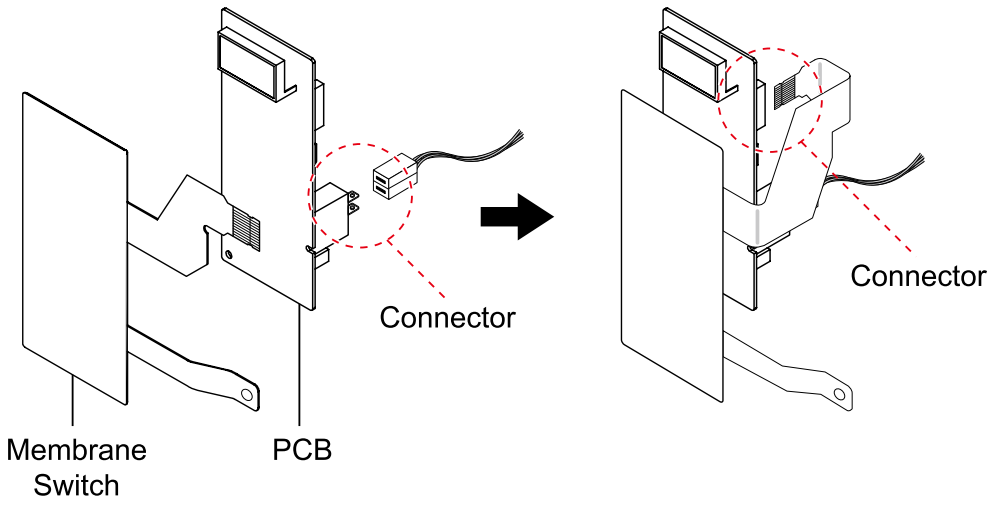
NO → Tact type




YES

Replace PCB.

Menbrane type



## 4-3-19 If food is not heated even though an oven works

**Food is not heated even though an oven works.**

***Inspection method**

Is the latch switch operating normally?

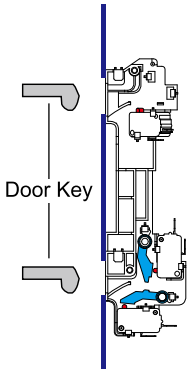
NO → Method to control latch switch

YES

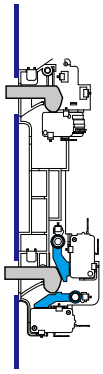
Checking high voltage circuits

**Refer to "Checking high voltage circuits" on the previous page.**

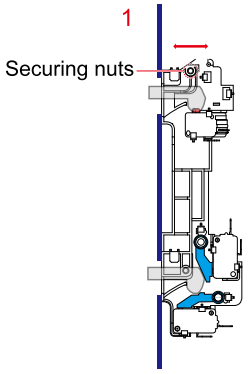
*Door open



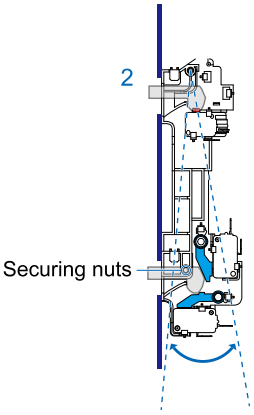

*Door closed



Method to control latch switch




1. Loosely tighten the nuts to check whether the primary interlock switch works by slightly moving latches to right and left.
Then firmly tighten nuts.




2. Loosely tighten the nuts to check whether the secondary interlock switch and door sensing switch works by slightly moving latches to right and left.
Then firmly tighten nuts.