kV Unbalancing Error: 165

the possible sources are enumerated below:

1) *kV feedback is measured on MCU.*

   in this case set fluoroscopy manually to 40kV, place a voltmeter on high voltage tank and verify that your kV feedback is balanced as per following procedure WITHOUT REMOVING THE HIGH VOLTAGE CABLES:
   in case you see High Voltage Balanced but still you've the error 165 maybe the problem is in MCU - Feedback read circuit.

2) *kV error is a Real High Voltage unbalance, this means one of the two pole is shorted to ground.*

   in this case the origin of the fault can be:
   - High Voltage Transformer: the rectifying diode inside the transformer are in short circuit
   - One high voltage cable shorted to shield
   in case of effective high voltage unbalancing follow the procedure WITOUT HIGH VOLTAGE CABLE

   **BE EXTREMELY CAREFUL!!!**

PROCEDURE TO TEST HIGH VOLTAGE BALANCE

Remove the High Voltage Cables from High Voltage Transformer (better is to fill the head with 1 cm of dielectric oil)

Connect a voltmeter on kV feedback as per picture, first time on + side
NEGATIVE to GREY arrow
POSITIVE to RED ARROW
final measure with POSITIVE on BLUE ARROW

Switch On the generator

In Navigator switch ON the Continuous Fluoroscopy on WS4 (Direct)

Select WS4

In navigator, Operating Window, select FLUORO TAB

in Fluoro tab selcte Fluoroscopy Calibration

leave the value as proposed and press ok & send
Navigator will start a new fluoroscopy calibration

Closing GTB118 to GTB119 you can start making fluoroscopy calibration @ 50 kV.

The feedback on +kV, as connected in picture, is around 1.3 Vdc

switch off fluoroscopy

connect to -kV feedback as per picture
switch ON fluoroscopy: ALSO HERE THE VOLTAGE SHOULD BE AROUND 1.3Vdc for 50kV.

IN THIS EXAMPLE HIGH VOLTAGE TRANSFORMER IS BALANCED AND PROBABLY THE PROBLEM IS IN THE CABLE