



BULLETIN # B-100-2002

From: Parts and Service Division
To: All Authorized Service Agencies

Date: November 12, 2002

SUBJECT: BJ Thermostat Control Bypass Adjustment / Calibration Instructions

Models Affected: All Garland & US Range units using 'BJ" type controls for ovens and griddles

There is a lot of confusion / miss-information as to the proper way to adjust / set bypass settings and calibrations on the 'BJ" type controls.

The attached pages show the proper way to set the bypass flame, calibrate and identifies when a control should be replaced rather than attempt to calibrate.

The attached instructions will prove a useful tool to the service technician and should accompany the technician when on service calls.

SERVICE INSTRUCTIONS FOR 'BJ' CONTROLS

Ovens & Griddles

TO ADJUST BY-PASS

MINIMUM (BURNER) FLAME SETTING

When the oven / griddle reaches the temperature at which the dial is set, the control cuts down the flow of gas to the amount required to keep the appliance at that temperature. The control must by-pass enough gas to keep the entire burner lit. To maintain this minimum blue stable flame, the by-pass must be set carefully and accordingly, as follows.

1. Light the burner, then turn dial to "FULL ON".
2. After 5 minutes, turn dial clockwise to point slightly beyond first mark on dial.
3. Remove dial and bezel.
4. With a screwdriver, turn by-pass key – counter-clockwise to increase the flame, clockwise to decrease it, until there is a minimum blue stable flame over the entire ported area of the burner.
5. Replace bezel and dial, turning the dial clockwise, until it locks in the "OFF" position

NOTE: NEW REPLACEMENT THERMOSTAT WILL COME WITH THE BY-PASS IN THE CLOSED POSITION

TO RE-CALIBRATE CONTROL

This control is a precision component, it is carefully calibrated at the factory.

Re-calibration should not be undertaken **until the by-pass flame has been adjusted**. And the operating gas pressure has been confirmed.

To check temperature when re-calibrating, use an appropriate temperature reading meter. Position of instrument / thermocouple: Oven geometric center, griddle use disc type thermocouple placed in center of each zone. **NO PRODUCT IN OVEN OR ON GRIDDLE**

If the dial has a removable metal insert, proceed as follows:

1. Remove the dial and push out the metal insert.
2. Replace dial, turn to 350°F mark.
3. After burner has been on about 15 minutes check temperature.
4. Continue to check temperature at 5 minute intervals until two successive readings are within 5°F of each other.

The control should be re-calibrated if your reading is not within + or - 20°F of the dial setting (350°F). If re-calibration is required, the additional steps need to be taken are as follows

5. Hold dial firmly, insert screwdriver through the center of the dial and push the calibration stem. **DO NOT TURN THIS STEM.**
6. While holding calibration stem firmly with screwdriver, turn dial until it is set at the actual temperature as shown on your meter. Release pressure on calibration stem. Replace dial insert.
7. Set dial at 400°F mark. Check temperature again as indicated in step 3 & 4 above. If the temperature is not within + or - 20°F of the dial setting (400°F), the control should be replaced.

If the dial does not have a removable insert or if the dial has a “D” type stem, use the following procedure to recalibrate.

1. Set dial to 350°F mark.
2. After the burner has been on about 15 minutes, check temperature.
3. Continue to check temperature at 5-minute intervals until 2 successive readings are within 5°F of each other.

The control should be re-calibrated if your reading is not within + or -20°F of the dial setting (350°F). If re-calibration is required, the additional steps need to be taken are as follows

4. Remove dial assembly or the complete “D” type stem.
5. Push calibration stem inward with a screw driver, while holding calibration stem firmly in turn stem clockwise to obtain a lower temperature or counter-clockwise for a higher temperature. Each mark on the retainer represents 25°F. Replace dial assembly or “D” type stem with dial.
6. Set dial at 400°F mark. Check temperature again as indicated in step 3 & 4 above. If the temperature is not within + or - 20°F of the dial setting (400°F), the control should be replaced

