

Robertshaw
Heavy Duty

MODEL FDO is a heavy duty, high capacity gas thermostat which provides accurate snap acting low temperature control and throttling quick action for higher temperatures.

FLAME MASTER Oven Control with LO-TEMP setting

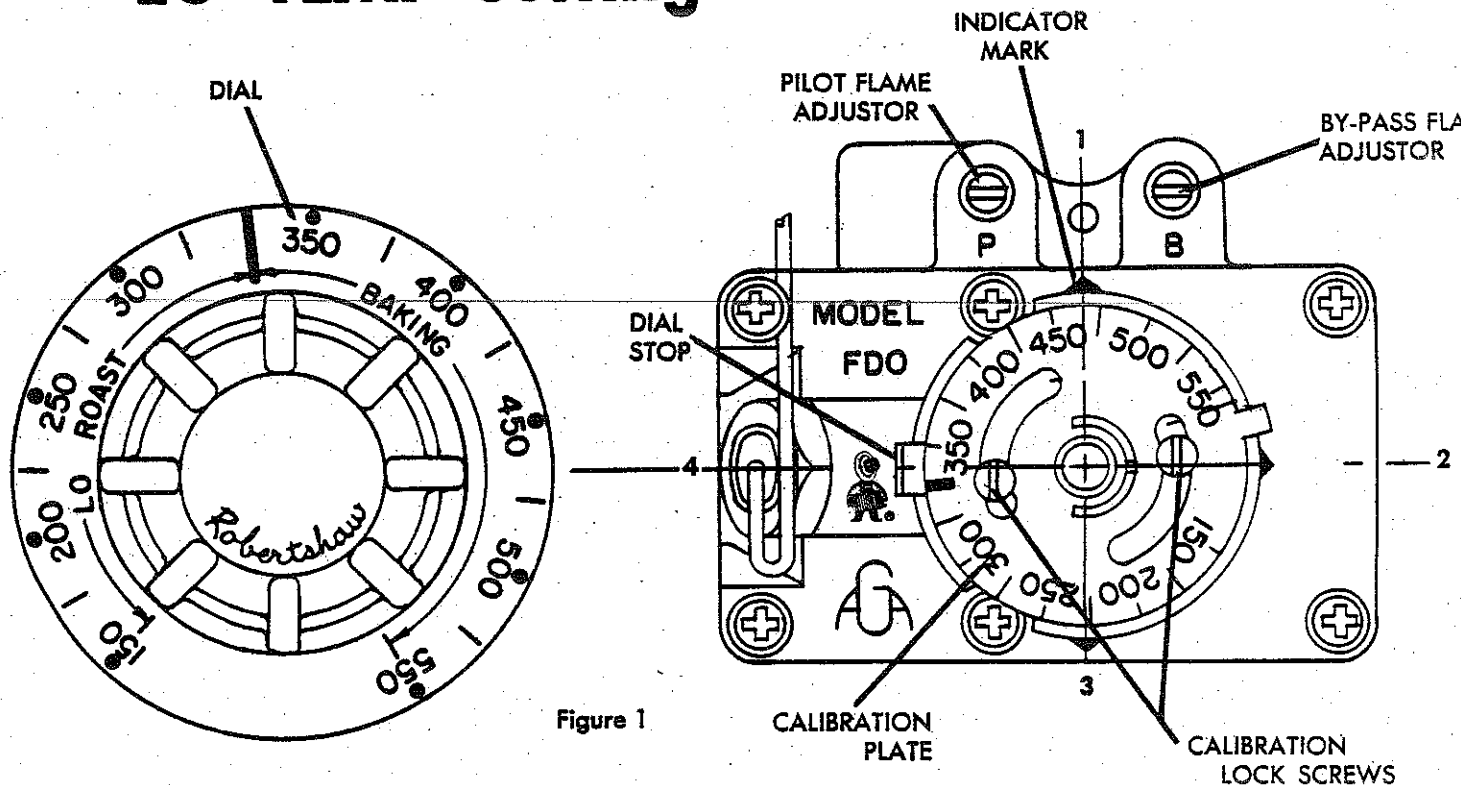


Figure 1

INSTRUCTIONS FOR ROBERTSHAW MODEL FDO HEAVY DUTY FLAME MASTER OVEN CONTROL

This model FDO is a precision made instrument, carefully set at the factory to accurately control oven temperatures from 550 degrees down to 150 degrees F. All adjustments are accessible from front of appliance after removing dial. To remove dial, grasp knob portion and pull straight out.

OVEN BURNER PILOT FLAME (If **FLAME MASTER** is not equipped with **PILOT FLAME ADJUSTOR**—disregard). It is a small flame located near the main oven burner. It lights with the oven burner and is extinguished when the main burner gas cock is turned off. To adjust this flame:

1. Turn "on" gas to appliance and light pilot or main burner.
2. With a screwdriver turn "pilot flame adjustor" screw (figure 1) counterclockwise to increase the flame, clockwise decrease it until the flame is approximately $\frac{3}{4}$ " high.

BY-PASS (MINIMUM BURNER FLAME) (Refer to figure 1)

This adjustment must be made at the time the appliance is installed. To adjust this flame: (Be sure oven burner pilot flame is ignited).

1. With oven cold, turn dial counterclockwise slowly from "LOW STOP," until by-pass seat just snaps on.

2. Remove dial.

3. With a screwdriver, turn "bypass flame adjustor" screw counterclockwise to increase the by-pass flame or clockwise to decrease the entire burner to a minimum stable flame.

4. Replace dial. **Caution:** While making this adjustment, if the oven should become heated while the dial is set at a low range (below 350), the by-pass flame will shut off completely. If this occurs, turn dial counterclockwise slowly until by-pass gas snaps on. Then check by-pass adjustment as stated above.

MODELS FDL & FDO and controls with SPECIAL DIAL MARKINGS

RECALIBRATION

Field recalibration is seldom necessary, and should not be resorted to unless experience with cooking results, definitely proves that the control is not maintaining the temperature to which the dial is set. To check oven temperatures when recalibrating use a Robertshaw Test Instrument or a reliable mercury oven thermometer.

1. Place the thermocouple of test instrument or thermometer in the middle of the oven, or medium to be tested.
2. Light the main burner. Observe which indicator mark aligns with the low stop position of the dial. Use this indicator mark for all dial settings.
3. Turn dial so 400 lines up with the "low stop" indicator mark. If control is not for a standard oven use the chart below to determine the temperature to set the dial.
4. Allow the oven, or appliance, to heat until flame cuts down to by-pass. After sufficient time, check temperature. If the temperature does not read within 15 degrees of the dial setting, recalibrate as follows:
5. Pull dial straight off without turning.

RECALIBRATION CHART		
Dial Range	°F Between Letters	Calibration Mark
100 to 200	18°	160
200 to 400	25°	375
300 to 400	28°	375
300 to 700	50°	500
200 to 550	50°	400

6. Hold calibration plate and loosen the two calibration lock screws until the plate can be moved independently of the control.

7. Turn calibration plate so that the instrument or thermometer reading is in line with the indicator mark. Hold plate and tighten screws firmly. On controls where the plate has no temperature markings use the chart to determine the temperature degrees between letters. Turn the calibration plate counterclockwise if the test reading is higher than the dial setting, or clockwise if the reading is lower than the dial setting.

8. Replace dial.

9. **NOTE:**—If the above adjustment is prevented by the two loosened calibration lock screws being in contact with the ends of the screw clearance slots in the calibration plate, remove the screws and after turning the calibration plate to the proper location, reassemble screws in the other tapped holes designed for them.

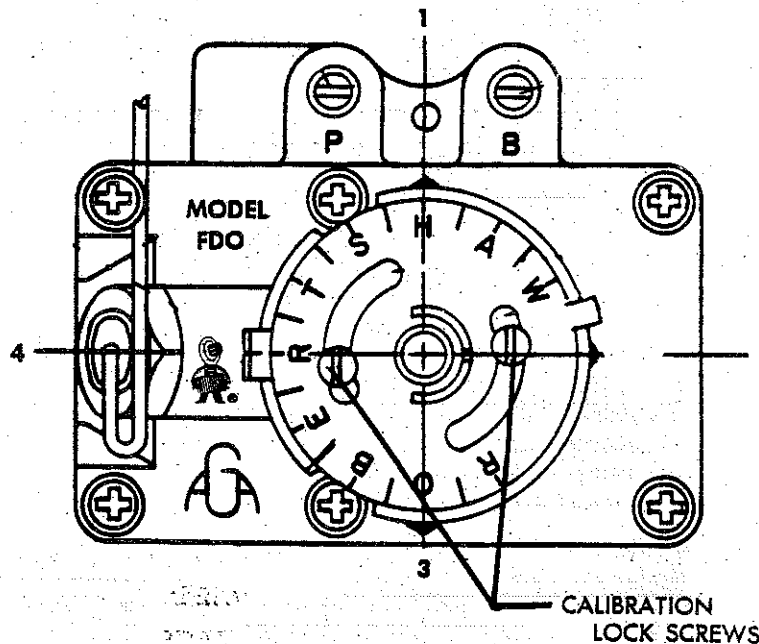


Figure 2