



Bacharach® Combustion Testing Kits continue to offer you the most economical means of testing for oil burner efficiency during installation or servicing. Each kit is designed with the service technician in mind and contains the instruments listed in the ordering chart.

## Oil Burner Combustion Testing Kits

### Components

1. **Fyrite® CO<sub>2</sub> Indicator** – The Fyrite Carbon Dioxide Indicator measures the percent CO<sub>2</sub> in a flue gas sample.
2. **True Spot® Smoke Tester and Oil Burner Smoke Scale** – With the True Spot Smoke Tester and Smoke Scale, you can get an accurate indication of smoke content in flue gas.
3. **Fire Efficiency Finder/Stack Loss Slide Rule** – The Fire Efficiency Slide Rule is a quick and easy way of determining combustion efficiency and stack loss from the results of the CO<sub>2</sub> and stack temperature tests.
4. **Tempoint® Dial Thermometer** – High stack temperatures are cause for special concern and may indicate a serious condition.
5. **Model MZF Draft Gauge** – The intensity of draft determines the rate at which combustion gases pass through the boiler or furnace. With the MZF Draft Gauge, you can determine if draft is excessive or insufficient.
6. **Drafrite® Draft Gauge** – In some Oil Burner Combustion Testing Kits, the hand-held Drafrite replaces the Model MZF Draft Gauge for measuring overfire and draft.
7. **Carrying Case** – Instruments for Bacharach Oil Burner combustion Testing Kits come in a rugged, plastic carrying case.



### Components

1. **Fyrite® Indicators; CO<sub>2</sub> and O<sub>2</sub>** – The Fyrite Indicators are utilized in conjunction with the Tempoint Dial thermometer to determine efficiency calculation with the Fire Efficiency Slide Rule.
2. **Monoxor® CO Indicator** – The Monoxor Indicator quickly and easily tests CO concentrations in flue gas samples.
3. **Fire Efficiency Finder/Stack Loss Slide Rule** – The Fire Efficiency Slide Rule provides a rapid and uncomplicated means of determining combustion efficiency and stack loss from the results of the CO<sub>2</sub> and stack temperature tests.
4. **Drafrite® Draft Gauge** – The hand-held Drafrite pinpoints draft problems and determines chimney defects.
5. **Tempoint® Dial Thermometer** – With the Tempoint Dial Thermometer, you can obtain an accurate stack temperature of gas designed equipment.
6. **Gas Service Calculator** – The Gas Service Calculator determines the orifice size needed for fuel gas of any specific gravity and BTU value.
7. **Gas Pressure Manometer** – The Gas Pressure Manometer determines if gas input and gas pressure adjustments are within recommended limits.
8. **Monoxor® Carbon Monoxide Detector** – In some Testing Kits, the Monoxor Carbon Monoxide Detector replaces the Monoxor CO Indicator.
9. **Carrying Case** – Testing kit comes in a rugged, plastic carrying case.

**OIL BURNER COMBUSTION TESTING KIT ORDERING INFORMATION**

| ITEM NO. | KIT CONTENTS                        | STANDARD KIT |         |         |         |         | EXPORT KIT* |         |         |         |
|----------|-------------------------------------|--------------|---------|---------|---------|---------|-------------|---------|---------|---------|
|          |                                     | 10-5014      | 10-5002 | 10-5022 | 10-5036 | 10-5050 | 10-5150     | 10-5023 | 10-5037 | 10-5051 |
| 10-5064  | Fire Efficiency Finder              | ■            | ■       | ■       | ■       | ■       | ■           |         |         |         |
| 10-0100  | Carrying Case (large)               | ■            |         | ■       | ■       | ■       | ■           | ■       | ■       | ■       |
| 11-0121  | Moisture Absorb. Material           | ■            | ■       | ■       | ■       | ■       | ■           | ■       | ■       | ■       |
| 11-7029  | Sampling Hose Assembly              | ■            | ■       | ■       | ■       | ■       | ■           | ■       | ■       | ■       |
| 11-7032  | Fyrite CO <sub>2</sub> 20%-Filled   | ■            | ■       | ■       | ■       | ■       |             |         |         |         |
| 12-7014  | Tempoint Therm. 1000° (6" Stem)     | ■            | ■       | ■       | ■       |         | ■           |         |         |         |
| 13-7019  | MZF Draft, +.05 to -.25"W           | ■            |         | ■       |         |         | ■           |         |         |         |
| 10-0099  | Carrying Case (small)               |              | ■       |         |         |         |             |         |         |         |
| 13-3000  | Drafrite, +.10 to -.14"W            |              | ■       |         | ■       |         |             |         |         |         |
| 21-7006  | True Spot Smoke Tester              |              |         | ■       | ■       | ■       | ■           | ■       | ■       | ■       |
| 12-7018  | Tempoint Therm. 1000° (12" Stem)    |              |         |         |         | ■       |             |         |         |         |
| 13-7021  | MZF Draft, +.05 to -1.0"W           |              |         |         |         | ■       |             |         |         |         |
| 10-5175  | Stack Loss Calculator               |              |         |         |         |         |             | ■       | ■       | ■       |
| 11-7031  | Fyrite CO <sub>2</sub> 20%-Unfilled |              |         |         |         |         | ■           | ■       | ■       | ■       |
| 12-7015  | Tempoint Therm. 540°C (6" Stem)     |              |         |         |         |         |             | ■       | ■       |         |
| 13-7020  | MZF Draft, +1.0 to -2.5mmW          |              |         |         |         |         |             | ■       |         | ■       |
| 13-7018  | MZF Draft, +1.0 to -5mmW            |              |         |         |         |         |             |         | ■       |         |
| 12-7017  | Tempoint Therm. 540°C (12" Stem)    |              |         |         |         |         |             |         |         | ■       |

\* Export Kits are similar to standard kits except Fyrite Indicators are shipped without fluid installed. Drafrite, MZF Draft Gauge, Manometer and Tempoint are supplied metric in most instances. Fluid for export kits must be purchased separately in three bottle cartons.

**GAS BURNER COMBUSTION TESTING KIT ORDERING INFORMATION**

| ITEM NO. | KIT CONTENTS                          | STANDARD KIT |         |         | EXPORT KIT* |         |         |
|----------|---------------------------------------|--------------|---------|---------|-------------|---------|---------|
|          |                                       | 10-5030      | 10-5035 | 10-5217 | 10-8008     | 10-5047 | 10-5224 |
| 10-0070  | GAS SERVICE CALCULATOR                | ■            | ■       | ■       |             |         | ■       |
| 10-5064  | FIRE EFFICIENCY FINDER                | ■            | ■       | ■       |             |         | ■       |
| 10-5067  | HIGH EFFICIENCY FINDER                | ■            | ■       | ■       |             |         |         |
| 10-0100  | CARRYING CASE                         | ■            | ■       | ■       | ■           | ■       | ■       |
| 11-0121  | MOISTURE ABSORB. MATERIAL             | ■            | ■       | ■       | ■           | ■       | ■       |
| 11-7029  | SAMPLING HOSE ASSEMBLY                | ■            | ■       |         |             | ■       | ■       |
| 11-7045  | EXTENDED SAMPLING HOSE ASSEMBLY (10') |              |         |         | ■           |         |         |
| 11-7032  | FYRITE CO <sub>2</sub> , 20% FILLED   | ■            | ■       | ■       |             |         |         |
| 11-7036  | FYRITE O <sub>2</sub> , 21% FILLED    | ■            |         | ■       |             |         |         |
| 12-7014  | TEMPOINT THERMOMETER 1000°F (6"STEM)  | ■            | ■       | ■       |             |         | ■       |
| 13-3000  | DRAFRITE +.10 TO .14"W                | ■            | ■       | ■       |             |         | ■       |
| 17-7002  | MANOMETER 15"W 8.5OZ/IN 2             | ■            | ■       | ■       |             |         | ■       |
| 19-0003  | SAMPLING TUBE ATTACHMENT              | ■            |         | ■       |             | ■       |         |
| 19-7021  | CO DETECTOR KIT                       | ■            |         |         |             | ■       |         |
| 11-7045  | SAMPLING TUBE ASSEMBLY                |              |         | ■       | ■           |         | ■       |
| 19-0001  | SPARE TUBE TIPS (6)                   | ■            |         | ■       | ■           |         | ■       |
| 19-0243  | MONOXOR INDICATOR .2%                 |              |         | ■       | ■           |         | ■       |
| 19-5015  | CARTON OF 12 CO TUBES                 |              |         | ■       | ■           |         | ■       |
| 10-5175  | STACK LOSS CALCULATOR                 |              |         |         | ■           | ■       |         |
| 11-7031  | FYRITE O <sub>2</sub> , 20% UNFILLED  |              |         |         | ■           | ■       | ■       |
| 11-7035  | FYRITE O <sub>2</sub> , 21% UNFILLED  |              |         |         | ■           | ■       | ■       |
| 19-0242  | MONOXOR INDICATOR .2%                 |              |         |         |             |         |         |
| 19-5010  | CARTON OF 12 CO TUBES                 |              |         |         |             |         |         |
| 12-7015  | TEMPOINT THERMOMETER 540°C (6"STEM)   |              |         |         | ■           | ■       |         |
| 13-3002  | DRAFRITE +2.5 TO -3.5MM W             |              |         |         |             | ■       |         |
| 17-7000  | MANOMETER 15"W, 38CMW                 |              |         |         | ■           | ■       |         |
| 13-3003  | DRAFRITE -6.5MM TO 1.5MM              |              |         |         | ■           |         |         |
| 19-7019  | MONOXOR PUMP                          | ■            |         |         |             |         |         |
| 19-5002  | MONOXOR CO TUBES                      | ■            |         |         |             |         |         |

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