



PREST-O-LITE®

AIR-PROPANE HALIDE LEAK DETECTOR

60F35/60F37

These INSTRUCTIONS are for experienced operators. If you are not fully familiar with the principles of operation and safe practices for air-fuel gas equipment, we urge you to read our booklet "Precautions and Safe Practices," Form 2035. Do NOT permit untrained persons to operate this equipment. Do NOT attempt to operate this equipment until you have read and fully understand these Instructions. If you do not fully understand these Instructions, contact your supplier for further information.

The PREST-O-LITE Air-Propane Halide Leak Detector is designed for locating leaks of non-combustible halide refrigerant gases (sold under the brand names "Freon", "Ucon", etc.) used in refrigerating and air-conditioning systems.

TO ASSEMBLE DETECTOR UNIT TO PROPANE CYLINDER:

1. Read Safety Precautions on page 3.
2. Make sure valve on detector unit is closed tightly by turning clockwise.
3. Assemble detector unit onto top of cylinder. Turn unit clockwise (cylinder counterclockwise) until valve body is seated hand tight on cylinder outlet. **DO NOT USE WRENCH OR ANY OTHER TOOL TO TIGHTEN.**
4. Attach search hose securely onto tube projecting from the side of the unit.

TO LIGHT DETECTOR:

1. Slowly open control valve until only a LOW HISS of escaping gas can be heard. Ignite gas at the opening of the detector shield at once.
2. After igniting flame, operate control valve to adjust flame size. The tip of the blue flame should be about 3/8-in. above the reaction plate. (If flame is too high, it is possible to destroy reaction plate.) Unit is ready for use when reaction plate has been heated to dull cherry red color.

Explore for leaks by moving the end of search hose around all points where a leak might be suspected. Do not pinch or kink hose.

Watch for color changes in the flame. The color of the flame which passes through the reaction plate will change to yellow or green when search tube draws in very small leaks of halide gases. Large leaks will be indicated when flame color changes to a vivid purplish-blue. When search hose has passed the leak, flame will clear again to almost colorless pale-blue.

Note: If flame burns yellow steadily, insufficient air is being drawn in or else reaction plate is dirty. Insufficient air may be caused by:

1. Obstructed or partially collapsed search hose or suction tube.
2. Dirt or foreign substances in burner tube.
3. Dirty or partially clogged orifice.

Blowing air through the suction tube and back through the detector will usually clean dirt or foreign matter. If yellow flame is caused by dirty reaction plate, allow flame to burn for several minutes. This will usually burn the plate clean. If an oxide film appears on reaction plate from continued use, it will reduce the sensitivity of the detector. This may be remedied by removing the plate and scraping the surface gently with a knife.

TO REPLACE REACTION PLATE:

1. Loosen screw and then pull out the reaction plate from the detector shield.
2. Loosen screw in new reaction plate assembly. Insert the new plate seating the screw completely in slot of the shield. Tighten screw, making sure the reaction plate opening is properly centered over hole in burner.

TO REPLACE ORIFICE:

If flame secured is insufficient, or unit refuses to light, a possible cause is clogging of the minute orifice. It is impracticable to clean the orifice. Instead, install a new orifice as follows:

1. Make sure valve on unit is closed.
2. Unscrew mixer assembly from valve assembly, using a wrench.
3. Unscrew orifice from inside the mixer assembly using a 1/8-in. Allen type socket wrench .
4. Install new orifice into the mixer assembly.
5. Screw mixer assembly onto valve assembly and tighten with a wrench.

If performance of torch after replacement of orifice is satisfactory, be sure to discard the old orifice.

SAFETY PRECAUTIONS

1. Read and follow precautions on cylinder label.
2. Always disconnect detector unit from cylinder when not in use for extended periods of time. Be sure to close the detector valve whenever the unit is not in actual use, to avoid accidental fires.
3. If you do not succeed in lighting unit within two or three seconds after you've opened the tank valve, shut off the valve and wait several seconds before trying again. Otherwise expansion of the propane through the orifice may cause a 'freeze-up' of the minute orifice.
4. Operate unit only in well-ventilated areas. Always bear in mind that propane is extremely flammable when mixed with air. If you have any reason to suspect that any of the joints in the equipment are leaking, light the unit and then (using a brush) apply soapy water around the valve-to-tank connection, at the stem-to-valve connection, and at the stem-to-burner connection. If leakage is indicated, by bubbling at any of those points, shut off the torch and tighten the connections. Relight and retest. Do not continue to use leaky equipment.
5. Never store propane cylinders in car trunks, drawers, or other confined spaces, or in any location where the temperature may exceed 120-deg. F, or where sparks or flames may be present.
6. Keep cylinder and appliances out of the reach of children.
7. Do not use lighted detector unit in any place where flammable and explosive gases, liquid, or other material may be accidentally ignited.
8. When the propane cylinder is exhausted, always discard it in a safe place. Do not puncture or incinerate. NEVER attempt to refill it with propane or any other gas.
9. Do not alter equipment. Use only recommended replacement parts listed and illustrated on page 4.