

ELKHART BRASS


Fire Fighting Equipment

8287 Three-Inlet Portable Monitor Operation and Maintenance Instructions



98010000 REV. A

PRODUCT SAFETY

 **Important:** Before installing and operating this equipment, read & study this manual thoroughly. Proper installation is essential to safe operation. In addition, the following points should be adhered to in order to ensure the safety of equipment and personnel:

- All personnel who may be expected to operate this equipment must be thoroughly trained in its safe and proper use.
- Before flowing water from this device, check that all personnel (fire service and civilian) are clear of the stream path. Also confirm stream direction will not cause avoidable property damage.
- Become thoroughly familiar with the hydraulic characteristics of this equipment, and the pumping system used to supply it. To produce effective fire streams, operating personnel must be properly trained.
- Always open and close valves supplying this equipment slowly, so that the piping fills with water slowly, thus preventing the possible occurrence of water hammer.
- After each use, and on a scheduled basis, inspect equipment per instructions in the maintenance section.
- Keep fingers and hands clear of moving parts

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*PARTS DRAWING – Please visit our website at www.elkhartbrass.com for the most current parts drawings.

I OPERATING INSTRUCTIONS

A. Portable Mode

1. Whenever monitor is operated in portable mode, the unit must be anchored with the safety chain provided. The chain should be hooked to the eye bolt at the front of the monitor and looped around a rigid stationary object such as a stake, parking meter, fence post, etc. located in front of the monitor. Attach snap hook to a chain link.
2. Be sure ground spikes are sharp and adjusted so that all spikes contact the ground surface.
3. The Elkhart portables are designed to have the supply hose lines attached with the manifold inlets to the rear of the monitor discharge. Do not position the inlet manifold to attach the supply hoses from the front of the unit, as such practice will increase the possibility of the monitor sliding on smooth surfaces. To minimize the possibility of charged hose lines moving the monitor, supply hoses should be kept straight in line with their respective inlet ports for a distance of 10 feet behind the inlet manifold.
4. The model 8287 monitor has safety stops to prevent vertical stream travel below 25° in order to insure monitor stability when used in portable mode. These safety stops can be released to allow operation below 25°, but should be released only when monitor is secured in appropriate truck mount bracket (see section B).
5. The horizontal travel should not exceed 45° to either side of the straight-ahead stream position in order to minimize the possibility of the monitor sliding sideways.
6. Inadvertent horizontal stream movement is prevented by the use of a locking device. The 8287 has a plunger type lock acting on the horizontal drive pinion. This device should be kept in the locked position except when horizontal stream position is being changed.
7. The maximum safe operating pressure for the 8287 unit is 150 PSI (10 BAR). The maximum allowable flow rate for the model 8287 is 1250 GPM (4732 LPM).

B. Truck Mounted Mode

1. Fixtures are available to allow for storage and operation of the Elkhart portable monitors in a truck mounted mode. Use mounting fixture #8290 for the #8287 monitor. The mounting fixture should be located on the apparatus to allow effective direction of the stream without interfering with other apparatus mounted equipment such as flood lights, booster reels, etc.
2. The fixture must be securely attached to a rigid structure capable of safely withstanding a nozzle reaction force of 700 lbs.
3. The #8287 monitor is attached to the #8290 fixture by placing the five ground spikes on the rubber pads of the top plate. The center port of the inlet manifold must extend between the two closely spaced clamping posts. The monitor should be positioned so that the two hook-type clamps can be swung over the lateral support legs. Swing the rear clamp bar over the center portion of the inlet manifold and place hook end of clamp bar around the clamping post and under knob. Securely tighten knob.
4. a. When operated in the truck mount fixture, the primary horizontal positioning of the stream must be accomplished before water is flowing by rotating fixture top plate. To rotate top plate, pull up on locking device knob and turn plate to desired position. Next, further rotate plate so locking device pin drops into closest lock hole.

b. Minor changes (20° max. either direction) in horizontal stream position can be made with water flowing by rotating monitor turret.

II MAINTENANCE

1. The ground spikes are essential to safe operation in the portable mode. They are made of hardened tool steel and should remain sharp through prolonged usage. Periodic inspection of these spikes is recommended to insure that the spikes do not become excessively dull. Spikes can be sharpened using a file or bench grinder, but the original point angle should be maintained.
2. Check elevation stop mechanism to be sure that stream cannot be lowered below 25° without releasing lock.
3. Check that horizontal lock mechanism functions effectively.
4. Apply grease annually to monitor vertical swivel joints using grease fittings provided. Use lithium base multi-purpose grease.
5. a. When monitor is carried, in truck mounting fixture, frequently check that locking clamps are tight. Always tighten clamping devices prior to placing monitor in operation in truck fixture.

b. If nozzle and discharge tube are stored on monitor mounted in truck fixture, it is recommended that a support be provided for nozzle and tube in order to prevent premature gear wear on the monitor caused by road shock.

If repairs or repair parts become necessary, contact the Elkhart Brass Customer Service Department at 574-295-8330 or info@elkhartbrass.com.

III PERFORMANCE DOCUMENTS

A. Pressure Loss Chart

