

FLAMEOUT DESIGN & FABRICATION LLC.

Houston, Texas

OM-1250
FLAMESWEEPER
OSCILLATING MONITOR



OPERATIONS MANUAL

FLAMEOUT DESIGN & FABRICATION LLC.

Houston, Texas

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1.0 LIMITED WARRANTY

The information contained in this manual is applicable only to the following equipment:

OM-1250

Do not use this manual as a source of information for any other equipment.

The owners manual and warning labels attached to the equipment are to serve as guidelines for hazard-free installation, operation and maintenance.

FLAMEOUT DESIGN & FABRICATION LLC. warrants its products against defects in material and workmanship for one year from the date of delivery. To make a claim under this warranty, the product must be returned prepaid, directly to FLAMEOUT DESIGN & FABRICATION LLC. 1211G Upland, Houston, Texas 77043. The following information must accompany the product: The delivery receipt, the description of claimed defect and a complete explanation of the circumstances involved. If the product is found to be defective, it will be repaired or replaced (at Flameout's option) free of charge.

This warranty does not cover any damage due to accident, misuse, abuse, negligence or lack of maintenance. Any unauthorized alteration(s), repair(s) or modification(s) of the product outside the FLAMEOUT DESIGN & FABRICATION LLC. factory shall void this warranty.

WARNING

DO NOT use damaged or malfunctioning equipment. Place an "**OUT OF ORDER**" sign on **ANY** remote control panels or valves. Alert the proper personnel immediately of all non-functioning fire fighting and safety equipment.

DO NOT operate the monitor until the sign is removed by a qualified maintenance person who has completely corrected the problem.

Inspect the monitor and controls to detect signs of damage or poor operation before the damage renders the monitor inoperable or hazardous.

DO NOT operate equipment using improper operating pressures.

ALWAYS return the direction and aim of the monitor to a safe area for emergency startup discharge of fire water.

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NEVER leave foreign objects on or around the monitor which may inhibit operation of the monitor or deflection of the water stream.

2.0 SAFETY CONSIDERATIONS

CAUTION!!! PLEASE NOTE:

- High pressure and other forces exist within the monitor while it is in operation. Because of these forces, mishandling of the equipment could result in personal injury.
- Please read this thoroughly to acquaint yourself with proper operation and maintenance of the OM-1250 monitor.
- DO NOT operate the monitor without full view of the monitor. Install a warning light near the monitor to indicate a remote activation of the monitor and to stay clear of the water stream and powered elements of the monitor.
- Observe all safety labels, decals and signs on the equipment.
- Only trained personnel, who have read the operator's manual(s) and are familiar with this type of equipment should operate, service or maintain the equipment.
- These precautions do not address all safety hazards that may exist in the plant or with this equipment. Safety requires everyone's attention when around any equipment.
- Always keep the operating area clear in and around the monitor.
- For additional information contact FLAMEOUT DESIGN & FABRICATION LLC.

3.0 INSTALLATION

INSTALLING THE MONITOR

1. The OM-1250 monitor is bolted to the shipping pallet and supported to maintain the monitor in a upright position. When removing the monitor from the pallet, provide adequate support to keep the monitor on its mounting flange. Always protect the mounting flange face from damage resulting from contact with other surfaces. Place plywood or other dunnage under the flange to protect the flange sealing surfaces.
2. After unpacking, thoroughly examine the monitor for signs of any damage which may have occurred during shipment. Record any damage found and promptly report the damage to the carriers claim department.
3. Use only the lift points provided on the monitor. Lifting from other points may cause misalignment of drive components or permanent damage to the equipment. Personal injury may also result by lifting the monitor improperly. Verify all power

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cabling is secured to the monitor and away from potential damage while installing and handling the monitor.

4. Before placement, inspect the mounting flange face and remove any debris adhering to the mating surface of the flange. The surface should be free of scratches, dents etc., which could inhibit proper sealing of the joint.
5. Use only quality cadmium plated ASTM A193 GRADE B7 studs and A194 GRADE 2H nuts for mounting of the monitor (not included). Studs should be of a sufficient length to extend a minimum of two (2) threads beyond both nuts. Standard non asbestos fiber gaskets rated for 175 PSI working pressure are sufficient for most installations.
6. Verify the direction of the monitor prior to lifting and final placement of the monitor. Normally, the direction of the monitor can be considered as the center of the potential hazard field. In cases where the extent of the field view exceeds 315 degrees (as viewed from the monitor location), careful attention must be given to the actual orientation of the customers mounting flange with respect to the monitor traversing range and the hazard field. Concurrently, the distance from the hazard field with respect to the elevation of the monitor must also be considered in locating the monitor.

LOCATION, DIRECTION, PREVAILING WINDS, HAZARD LOCATIONS AND TYPES, NOZZLE TYPES ETC., ARE ONLY A FEW OF THE FACTORS WHICH MUST BE CONSIDERED IN THE DETERMINATION OF A STRATEGIC LOCATION FOR THIS TYPE OF EQUIPMENT AND IS BEYOND THE SCOPE OF THIS MANUAL.

Contact FLAMEOUT DESIGN & FABRICATION LLC. for more information regarding the locating of fire fighting monitors.

7. The arrow on the monitor indicates the center of the monitors traversing field. Align the mounting flange bolt holes which results in the arrow pointing closest to the center of the hazard field.
8. Tighten the flange bolts evenly to insure proper sealing of the flange joint.

4.0 GENERAL MAINTENANCE

The OM-1250 monitor has been designed with ease of maintenance in mind and requires only semi-annual inspection and lubrication. The OM-1250 will provide many years of service when maintained in accordance with the following instructions. General maintenance should be performed during times considered low risk outages. Always notify safety and response personnel of fire fighting equipment maintenance scheduling.

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FREQUENCY OF MAINTENANCE

- EVERY SIX (6) MONTHS OR
- AFTER EMERGENCY USE OR
- AFTER INCLEMENT WEATHER CONDITIONS (OUTSIDE LOCATIONS)

FIRST! SHUT OFF THE INCOMING WATER SUPPLY BY CLOSING ISOLATION VALVE. INSTALL A PADLOCK ON THE VALVE TO PREVENT UNAUTHORIZED ACTIVATION OF THE MONITOR WHILE UNDERGOING INSPECTION AND MAINTENANCE.

1. Perform a visual inspection of all exposed parts for signs of worn or damaged components. If any worn or damaged parts are found, the parts should be replaced immediately.
2. Wipe down all equipment with an oily rag leaving a light film of oil on the surface to protect against rust and corrosion. If the coating system has been severely damaged contact FLAMEOUT for specific instruction on the preparation and repair of the coating system.
3. Operate the monitor manually through the entire operating range of the traversing actuator, nozzle elevation actuator and the nozzle stream adjustment instructions found in Section 6 - Equipment Data of this manual).
4. Remove gear box covers and inspect gear box making sure that it is at least 1/4 full with a premium gear lubricant. The crank arm holes should be coated completely with a film of NLGI (EP2) grease. If the holes are not completely coated, apply additional grease using a bristle brush. NEVER APPLY THE GREASE DIRECTLY WITH YOUR HANDS.
5. Lubricate each swivel until seepage can be seen between the swivel housing. If water is present in the seepage, continue to lubricate the swivel until all water has been evacuated. Wipe off the excess grease from the housing.
6. Replace the gear cover box and proceed with maintenance instructions.
7. Make sure the riser pipe is completely drained to prevent freezing and rust build up inside the riser.
8. Verify all labels and signs on and around are readable and the operating area is clean. Never leave items on or around the monitor which may inhibit operation.
9. Open the main water supply operate the monitor through the entire traversing, elevating and nozzle ranges to verify all controls and components. Observe the monitor for any signs of irregular motion or unusual noises. If any problems exist, consult the applicable trouble shooting guide and repair as required.

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10. After servicing the monitor, return the monitor to HOME position.

Note: The following should be read in its entirety before engaging in training, operation or testing of the controls for the OM-1250.

5.0 OPERATION

The standard OM-1250 monitor is shipped complete with the exception of the nozzle which can be provided separately or by the client. - rotation of the monitor providing a 360 degree traversing field and elevation control of the nozzle from 45 degrees below horizontal to 85 degrees above horizontal. Optionally, nozzle stream shape control can also be provided for selected nozzle types and foam cannons.

The control features for the OM-1250 consist of the oscillation degree control knob, and the "LOCK ON TARGET" traversing control knob operator.

NOTE: THE FOLLOWING SHOULD BE PERFORMED WITH ACTUAL FLOW OF FIREWATER. FULL FLOW OPERATION/TESTING SHOULD BE CONDUCTED ONLY WITH ADVANCED NOTICE AND PERMISSION OF IN-PLANT OPERATION, SAFETY, AND EMERGENCY RESPONSE PERSONNEL.

Because the OM-1250 is a truly 360 degree range of motion oscillating monitor direction of monitor throw can be easily achieved. By simply loosening the traversing control knob (Fig. 5.1) the monitor can be aimed at exactly any point in a 360 degree field. The monitor comes preset with the gear box crank arm to zero degrees. While loosening this knob point nozzle directly at main risk and tighten knob back hand tight. **DO NOT USE A WRENCH OR ANY OTHER DEVICE TO TIGHTEN THIS KNOB. EXCESSIVE TORQUE COULD DAMAGE THE MONITOR.**



Fig. 5.1

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The degree of arc desired is simply achieved by loosening the oscillation arc control knob and moving it to the desired position. The further away from the gearbox output shaft the greater degree of oscillation occurs. The control arm is stamped to show where degrees of arc are achieved. By moving the knob along the slot and stopping it at the appropriate degree automatically sets the oscillation arc. The range is from 0 to 160 degrees with .5 degree increments. (See Fig. 5.2)



Fig 5.2

After positioning of the monitor, the nozzle should be set for the appropriate throw. This element will vary depending on what type nozzle or foam cannon are being used. Also, this should be done in full flow condition to make sure that the risk is completely covered.

Elevation is achieved by loosening the elevation knob (see Fig. 5.3) and adjusting the nozzle orientation to that desired for the risk being protected. Once again this should be done under full flow conditions to achieve the best preset coverage.

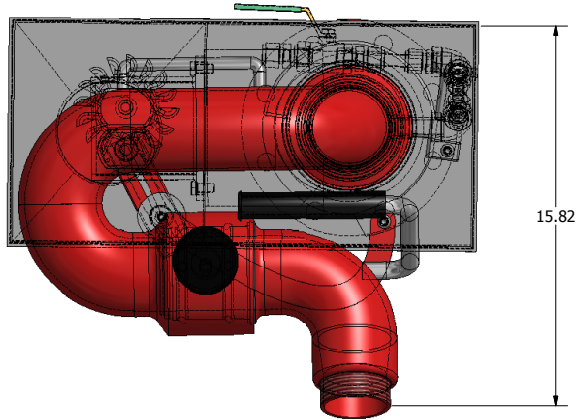


Fig. 5.3

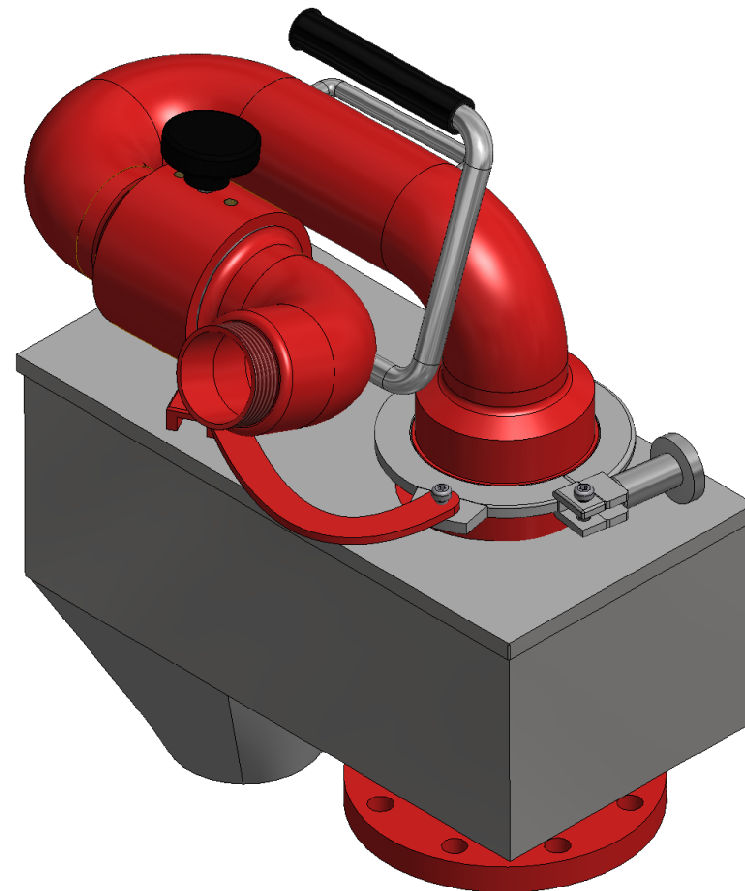
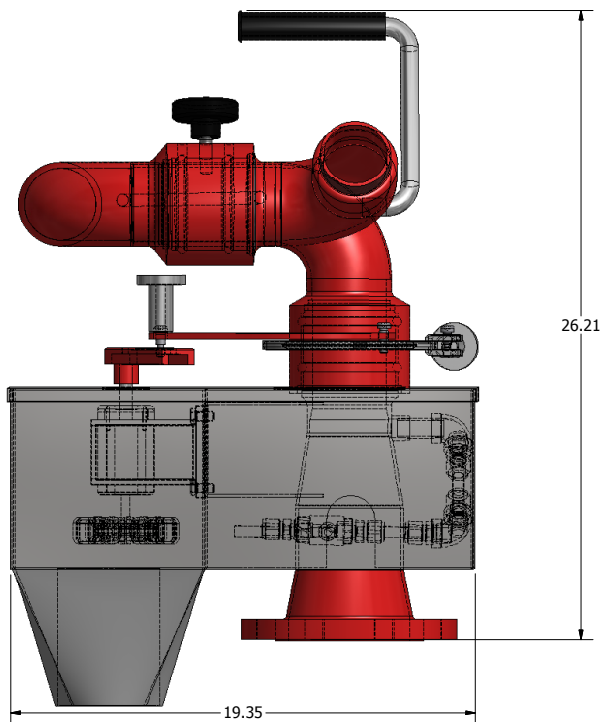
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The monitor may also be operated manually by turning off the speed control valve on the side of the monitor and loosening the traversing brake ring control knob.



VIEW11
SCALE 1 / 4



1250 GPM monitor @ 100 PSI
175 PSI MAWP
4" 150 LB Flanged inlet
2.5" NH threaded outlet
160 deg. arc at 360 deg. range

DRAWN MOORE	10-15-2001	FLAMEOUT DESIGN & FABRICATION HOUSTON, TEXAS WWW.FDFENG.COM		
CHECKED T. MOORE	12-15-2009	TITLE		
QA		OM-1250 FLAMESWEEPER		
MFG FLAMEOUT	12-15-2014	SIZE C	DWG NO monitor assembly	REV 5
APPROVED MOORE	12-21-2014	NONE	SHEET 1 OF 1	