

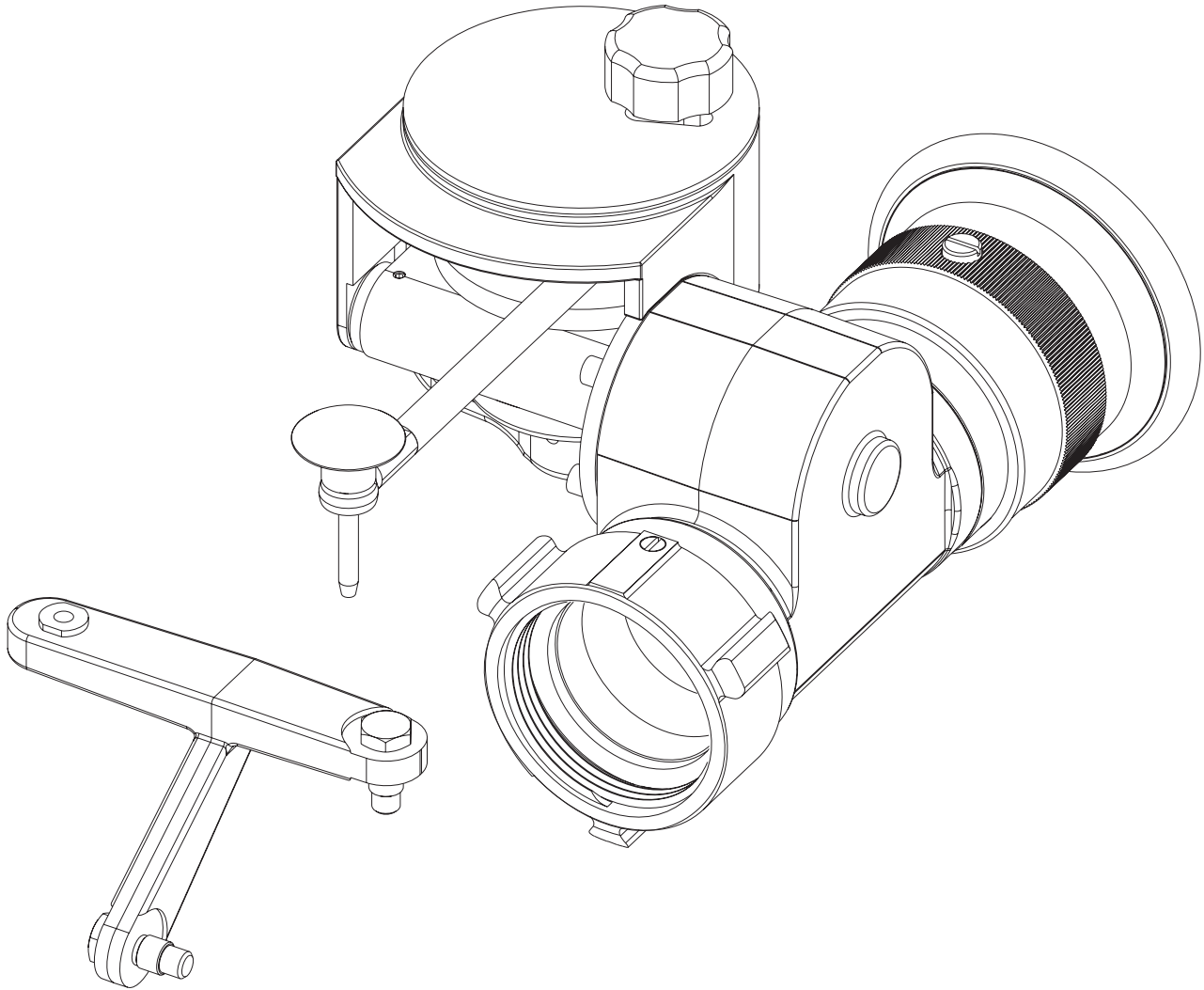


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OSCILLATING R.A.N.

Installation, Operation, and Maintenance Instructions



Automatic Oscillating Nozzle

Catalog Number: 3890

Part Number: 03890001

98310000 REV-B

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I. Product Safety Information



Important: All personnel who may be expected to operate this equipment must be thoroughly trained in its safe and proper use



Important: All personal portable monitors must be secured to a stable fixed base to prevent uncontrolled movement during use – the monitor must be tied down



Important: Before flowing water from this device, make sure that all personnel (fire service and civilian) are out of the stream path. Also, check to make sure that the stream direction will not cause avoidable property damage.



Important: Always fully deploy all four forged legs in their locked position and insure engagement of the carbide ground spikes to the ground before use.



Important: Do not attempt to alter or repair the safety system components. If you feel repair is needed or that the safety system is not operating properly – discontinue use of the device and contact Elkhart Brass for assistance.



Important: Open / Close the water valve supplying this equipment slowly so that flow to the piping and hoses transitions slowly preventing possible water hammer.



Important: Never exceed 150 psi.



Important: Never exceed 500 GPM flow.



Important: Do not attempt to move the monitor while water is flowing and the carry / valve handle is in any position except fully closed and locked.



Important: Always inspect the ground spikes for damage / wear after each use. All other preventative / periodic maintenance and inspection criteria outlined in this manual must be observed.



Important: 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.



Important: The carbide ground spikes are extremely sharp. Take care in transporting the device to insure that the carbide spikes do not cause injury to personnel or damage to property or personal protective clothing.



Important: Personal portable monitors deliver extremely powerful streams of water. Great care must be taken in directing the water flow to avoid injury to personnel and unwanted damage to property.



Important: The oscillator is only intended to be used with the R.A.M. monitor. Do not attempt to attach the oscillator to any monitor except the R.A.M.

II. Product Description

The Oscillating R.A.N. is designed to provide the firefighter the advantage of automatically oscillating the discharge of the R.A.M. monitor in the horizontal direction. The Oscillating R.A.N. can be retrofitted to any R.A.M. monitor in a manner of minutes. The oscillator gives the firefighter the ability to automatically sweep in any desired angle between 25 and 40 degrees. The automatic oscillation can be simply disengaged for manual operation. The Oscillating R.A.N. can be quickly disconnected from the R.A.M. monitor depending on the requirements of the situation. The Oscillating R.A.N. maintains the same 500 GPM flow rating as the standard R.A.N. nozzle.

III. Support Bracket Installation

 **Important:** Follow installation instructions to prevent damage to the monitor.

A. Pivot Bolt Removal

Remove the top and side pivot bolt from the R.A.M. monitor. This can be achieved with the use of a 5/8" wrench. See Figure 1 below for pivot bolt location.

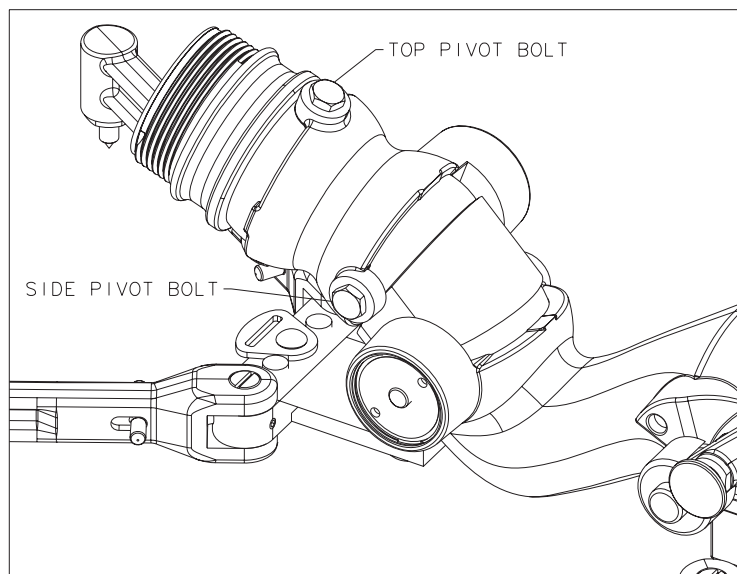


Figure 1: Pivot Bolt Removal

B. Bracket Installation

Install the support bracket with the supplied extended pivot bolts (Figure 2). This can also be achieved with the use of a 5/8" wrench. Use Loctite #242 thread locker or equivalent on the pivot bolt threads. Each bolt should be started before either bolt is completely tightened. **Be sure to line up the blind holes on the discharge ball joint and the double ball joint before tightening the bolts. Failure to do so will result in damage to the monitor.** In order to ensure the bolts are lined up with the blind hole, move the discharge back and forth during the tightening of the pivot bolts. If the discharge will not move left and right or up and down during the installation of the pivot bolts, loosen the pivot bolts and realign the blind holes. See Figure 2 and Figure 3 for support bracket location.

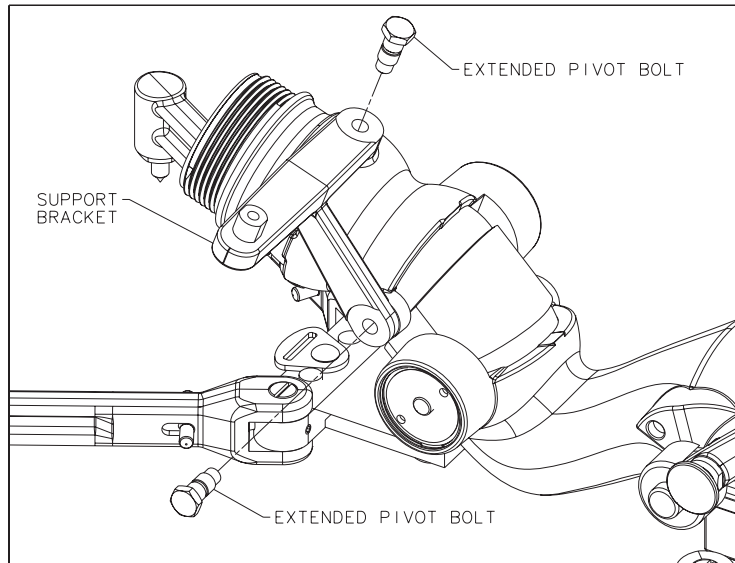


Figure 2: Support Bracket Installation

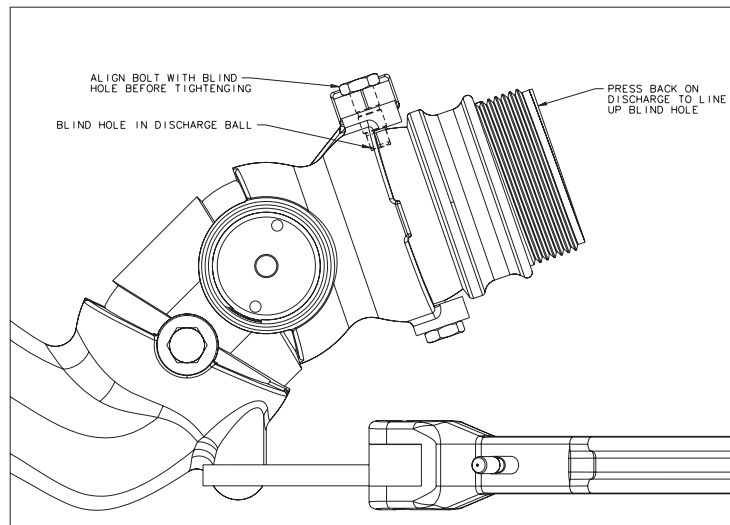


Figure 3: Pivot Bolt Alignment

IV. Oscillating Nozzle Installation

The Oscillating R.A.N. nozzle is attached to the R.A.M. by utilizing a National Hose Thread connection. The oscillator can be fixed to the discharge of the R.A.M. by tightening the swivel with a spanner wrench. **Be sure to align the body of the Oscillating R.A.N. vertically. Failure to do so will cause the oscillator to function incorrectly.** After the swivel connection is tightened, simply push the quick connect pin through the hole on the left side of the support bracket. Removal of the Oscillating R.A.N. nozzle is as simple as pulling the quick release pin out and unthreading the hose connection. See Figure 4 for more detail.

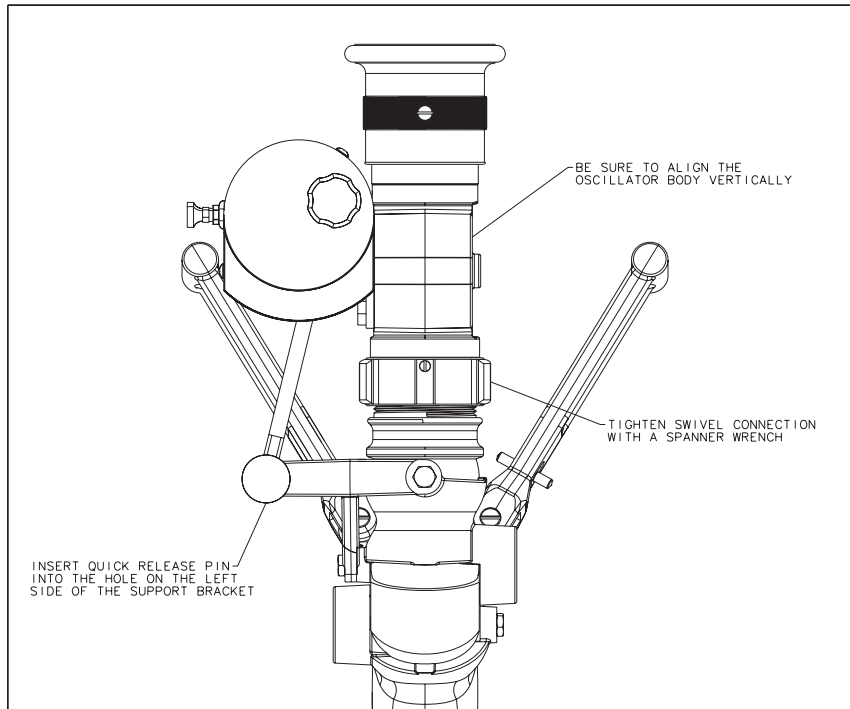


Figure 4: Oscillator Installation

V. Engaging The Automatic Oscillation

Before attempting to engage the automatic oscillation, make sure the threaded connection on the oscillating nozzle is tight and the quick release pin is secured in the support bracket. The engagement of the automatic oscillation is accomplished by pulling the lock knob on the engagement lever and rotating it counterclockwise until it locks in the engaged position. **Do not attempt to manually control the discharge of the monitor when the engagement lever is placed in the engaged position.** In order to disengage the automatic oscillation, simply pull the lock knob and rotate the engagement lever clockwise until it locks in the manual position. Refer to Figure 5 for further instructions.

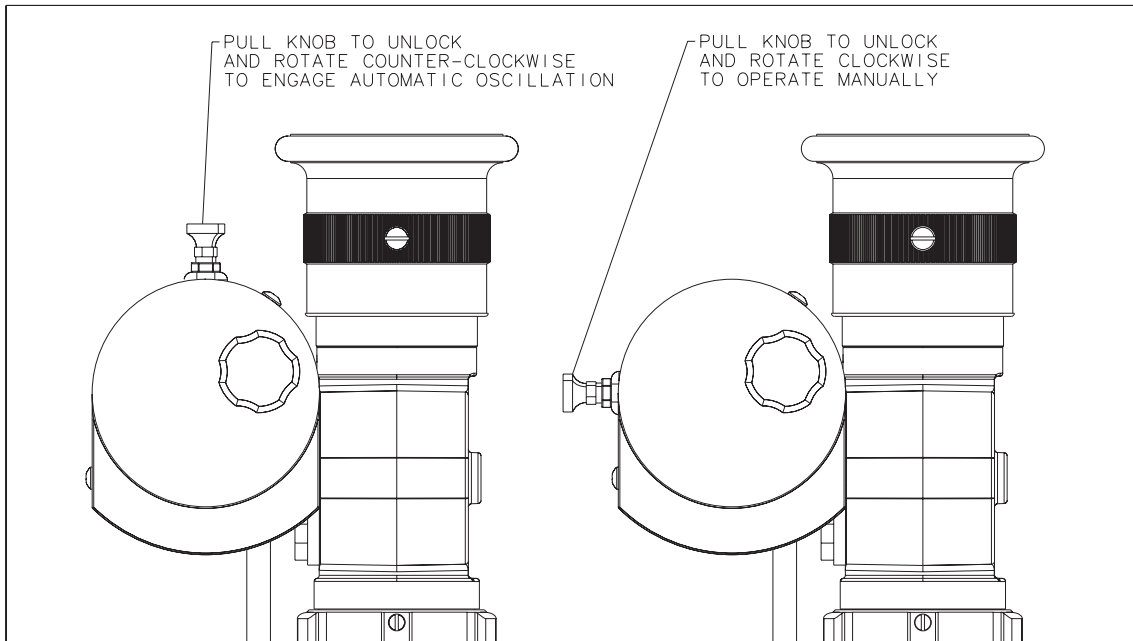


Figure 5: Automatic Oscillation Engagement

VI. Adjusting The Sweep Angle

The automatic sweep angle of the Oscillating R.A.N. can be infinitely adjusted between 25° and 40° total sweep angle. **Do not attempt to adjust the sweep angle while the automatic oscillation is engaged. Move the engagement lever to the manual position before attempting to adjust the sweep angle.** In order to adjust the sweep angle, first loosen the adjustment knob on top of the oscillator. Once the knob is loosened, the positioning of the knob can be adjusted in the slot. Move the knob to the desired position and then tighten the knob to lock it in place. The sweep angle is clearly labeled on the top of the oscillator drive disc. Refer to Figure 6 for further instructions.

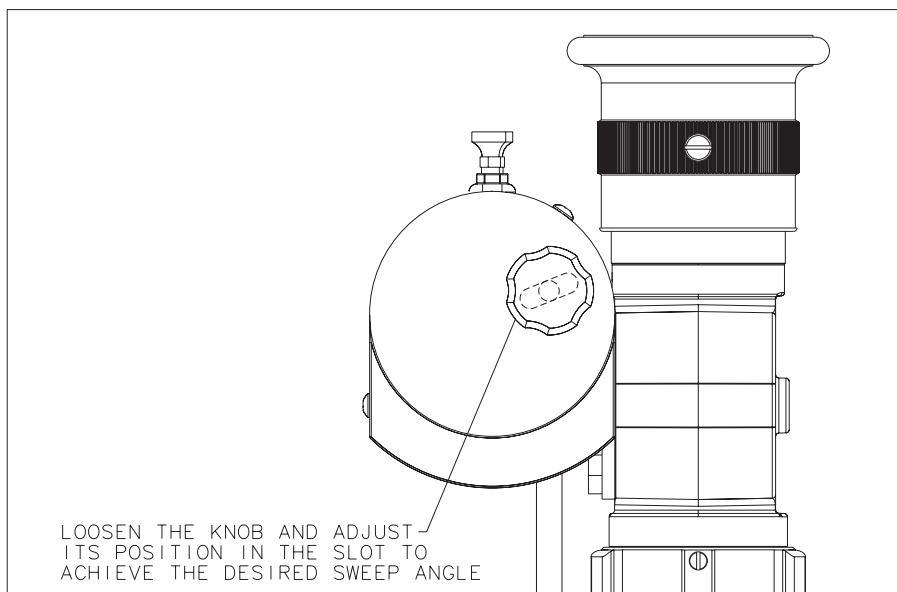


Figure 6: Sweep Adjustment

VII. Stream Pattern Adjustment

The stream pattern on the Oscillating R.A.N. can be adjusted from wide fog to straight stream by rotating the nozzle tip. Rotating the tip to the right will adjust the nozzle into the straight stream position. In order to achieve a wide fog pattern, the nozzle tip will need to be rotated to the left. **Do not attempt to adjust the stream pattern while the automatic oscillation is engaged. Move the engagement lever to the manual position before attempting to adjust the stream pattern.**

VIII. Maintenance

A. Maintenance After Use

The Oscillating R.A.N. has been designed and manufactured to provide years of trouble free service. After each use, the waterway should be flushed and visually inspected for debris. This can be done by flowing a clean water source through the nozzle. If there is any debris in the waterway, it should be removed before the next use to ensure proper performance of the nozzle. The paddle wheel should be rotated by hand to ensure that the nozzle is functioning correctly.

B. Inspections

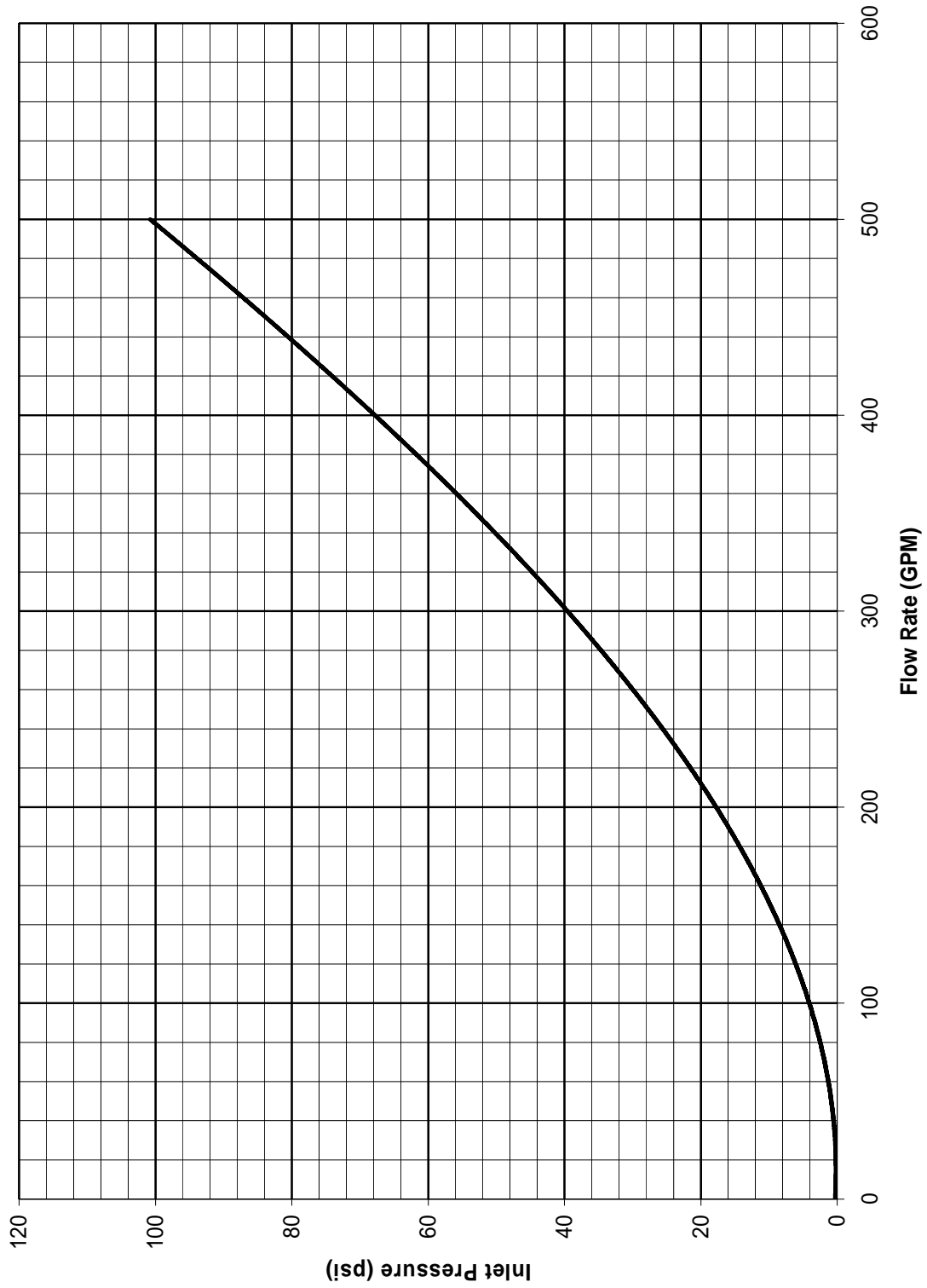
Weekly visual inspections and monthly operational checks will promote proper nozzle function. These inspections should be done daily in busy companies.

C. Storage

To prevent possible freeze damage, be sure the Oscillating R.A.N. is thoroughly drained after use. The nozzle may be stored on the R.A.M. monitor if desired.

IX. Performance Data

8296 R.A.M. Monitor With 3890 Oscillator Flow Curve





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