



STYLE 3580 U2 RENEGADE™ INSTALLATION, OPERATING, AND MAINTENANCE INSTRUCTIONS

The following is intended to provide the basic instructions for installation, operation and maintenance of the Renegade electric monitor, and to assist in attaining the best possible performance from the unit. Read and understand these operating instructions before use.

TOOLS REQUIRED

- Utility Knife
- Medium flat screwdriver
- Small flat screwdriver
- Small Phillips screwdriver
- 1/2 inch hex head wrench
- Electrician's pliers (multipurpose, stripping and crimping)

PRODUCT RATINGS

Maximum Motor Current Draw:

- | | |
|------------------|---|
| 12 volt versions | 4 amps each for elevation and rotation motors |
| | 4 amps for nozzle pattern motor |

Normal Operating Current: (Depending on operating conditions—pressure, flow, etc.)

- | | |
|------------------|---|
| 12 volt versions | 2 to 3 amps each for elevation and rotation |
| | 2 to 3 amps for nozzle pattern motor |

Minimum Voltage: **(Truck engine must be operating for proper voltage requirement.)**

All 12 volt motors: 11.5 volts while operating

Mass: 150 lbs. (68 kg)

Maximum Flow: 5000 gpm (19000 lpm)

Maximum Pressure: 150 psi (14 bar)

PRODUCT WARNINGS

- ⚠ WARNING:** Charge the unit slowly. Rapid charging may cause a pressure surge that has the potential to cause an injury, or damage the monitor.
- ⚠ WARNING:** DO NOT stow or deploy the Renegade monitor while flowing. Pressing the stow or deploy buttons causes the nozzle to move automatically and the water stream may cause damage to equipment or injury to personnel.
- ⚠ WARNING:** Aim the unit in a safe direction before pumping water through it. (i.e. Away from power lines)
- ⚠ WARNING:** Although the circuit board includes a water-resistant coating, it is important to keep water out of the control box and logic box. Prolonged exposure to water will cause damage.
- ⚠ WARNING:** When the cover of the control box or logic box is removed, check that the O-ring under the cover is intact and free of dirt and debris.
- ⚠ WARNING:** The Renegade monitor uses current limiting for both the monitor and nozzle. Use only appropriate Akron Brass Company nozzles.
- ⚠ WARNING:** Do not use the electric controls when the override cranks are being used or are in position for use.
- ⚠ WARNING:** Make the connection of the vehicle and auxiliary battery the final step.
- ⚠ WARNING:** Replace the identification tags if they should become worn or damaged.
- ⚠ WARNING:** DO NOT exceed the maximum pressure or flow ratings of the monitor. Exceeding these ratings may lead to an injury or may cause damage to the monitor.

- ⚠ WARNING:** DO NOT install shutoffs on the outlet of the monitor. Shutoffs increase the potential for pressure surges due to water hammer, which have the potential to cause an injury or damage to the monitor.
- ⚠ WARNING:** The Renegade monitor, nozzle, logic box, control box, tether controller, and field adjustable stops are made for optimal performance. Do not alter in any manner.
- ⚠ WARNING:** The Renegade monitor was designed for use with the Akron nozzle. Use of any other nozzle could affect the speed or operation of the unit and should be tested before being put into service.
- ⚠ WARNING:** The Renegade monitor contains moving parts. Keep hand, finger and objects away from pinch points.
- ⚠ WARNING:** Disconnect power and disable flow before maintenance.
- ⚠ WARNING:** Keep all personnel out of the Danger Zone, in front of the outlet of the monitor when the water source is attached. Dangerous flow velocities can cause serious injury.
- ⚠ WARNING:** Not designed for explosive environments.



GENERAL INSTRUCTIONS

- Review the instructions, wiring diagram, component layout and rotational stops diagram before installing this unit. This unit operates on 12 or 24 volt DC. All electrical current flows through the wires. The monitor does not act as a ground. The wires from the control boxes can be cut to the length for the application. Do not extend the wires from the logic box to the monitor.
- The optional auxiliary battery is used to ensure that the proper voltage and current are maintained at the logic box when using a smaller gauge wire (12 Awg) for the power leads (vehicle battery). If the optional auxiliary battery is used, do not extend the auxiliary battery wires. This will ensure that the proper voltage and current are maintained at the monitor for it to operate properly. The optional battery is automatically recharged by the truck electrical system through the positive (auxiliary battery) and ground connections on the circuit board. The vehicle battery connections must have power turned on whenever the truck is running so that the battery can be recharged properly. If possible, connect the positive (vehicle battery) wire directly to the main vehicle battery or main master switch. A diode in the logic box will prevent the optional auxiliary battery from feeding current back into the main truck system.
- Not recommended for use in salt water applications.
- For firefighting by trained firefighters only.
- For use with water or standard fire fighting foams only. After use with foam, flush with fresh water.
- Do not use the Renegade nozzle as a forcible entry tool.
- Drain the Renegade monitor and nozzle after use to prevent “freeze damage”.
- Ensure that the thread in the nozzle swivel matches the thread on the Renegade outlet. Do not overtighten the nozzle onto the Renegade.

MECHANICAL MONITOR ATTACHMENT

The Monitor is to be mounted on the waterway with eight $\frac{3}{4}$ inch bolts and nuts of grade five minimum and suitable washers with a minimum of six threads engagement. The bolts must be tightened in a criss cross pattern progressively increasing tightening torque to a maximum of 100 foot pound dry. The front of the monitor will have a dimple on the inlet flange (Figure 4).

NOTE: Not recommended to mount on a raised flange or have a butterfly valve between the flanges. This may cause damage to the monitor's flange when tightening the bolts.

MAINTENANCE INSTRUCTIONS

Your Renegade monitor and nozzle should be inspected prior to and after each use to ensure it is in good operating condition. Periodically, an unanticipated incident occurs where the unit is misused in a manner that is inconsistent with standard operating practices. A partial list of potential misuses includes:

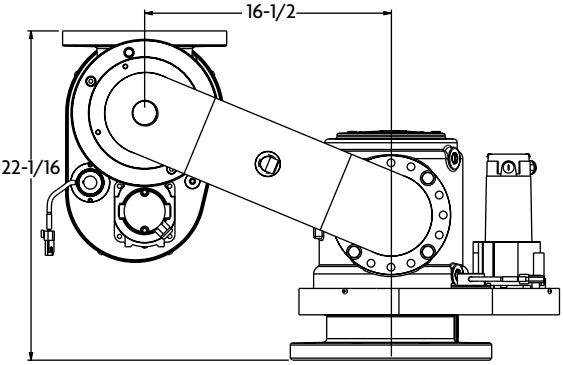
- Operating above the maximum rated pressure or flow.
- Prolonged exposure to temperatures above 130°F, or below -25°F.
- Operating in a corrosive environment.
- Having the Renegade nozzle hit a fixed object during operation or transportation.
- Any other misuse that might be unique to your specific environment.

Also, there are many “tell tale” signs that indicate repair is in order, such as:

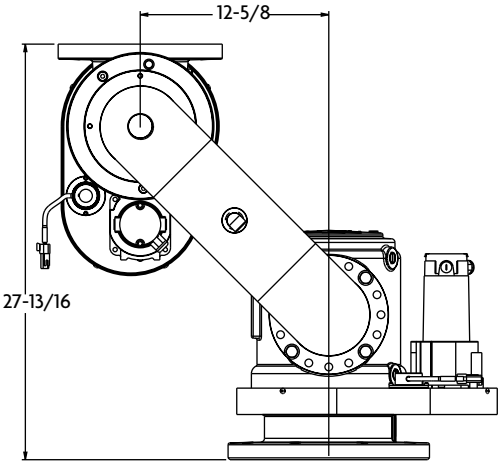
- Controls that are either inoperable or difficult to operate.
- Poor discharge performance.
- Excessive wear.
- Water leaks.

If any of the above situations are encountered, the Renegade monitor should be taken out of service, repaired, and tested by a qualified technician before placing back in service.

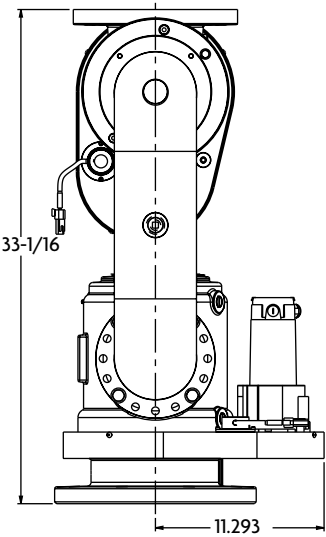
Figure 1



22.5° Orientation



45° Orientation



90° Orientation

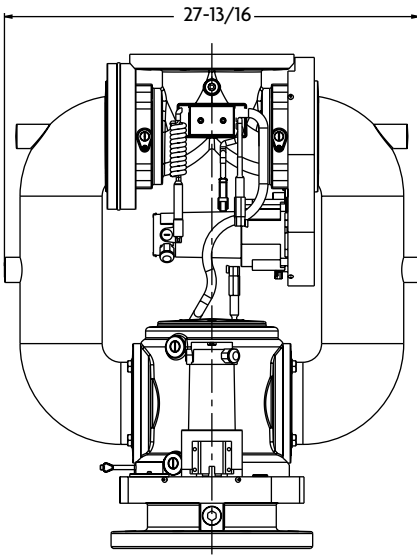


Figure 2

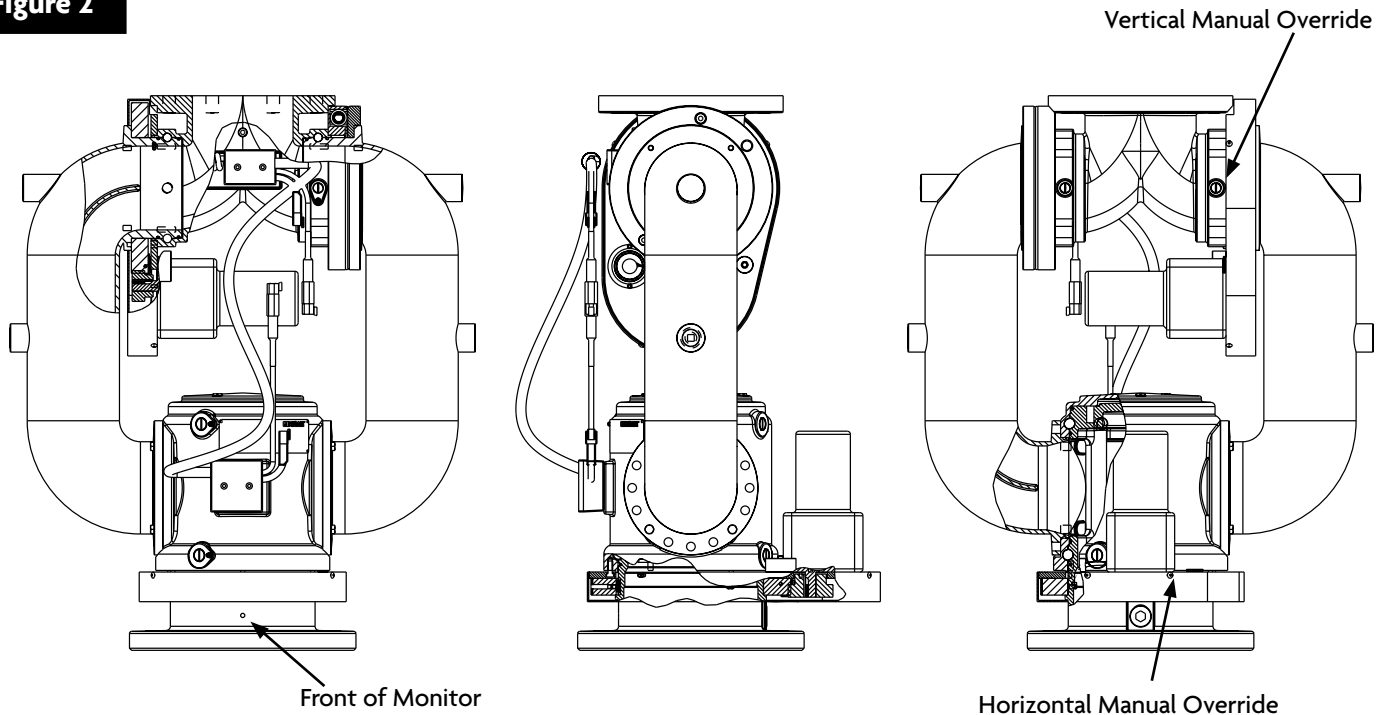


Figure 2a

