Veriflo CNG Filtration Panel
User Guide
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Definition of symbols used in this guide:

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION**, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

**NOTICE** addresses practices not related to personal injury.

Acronyms and abbreviations that may be used in this guide:

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHJ</td>
<td>Authority Having Jurisdiction</td>
</tr>
<tr>
<td>AISI</td>
<td>American Iron and Steel Institute</td>
</tr>
<tr>
<td>ANSI</td>
<td>American National Standards Institute</td>
</tr>
<tr>
<td>ASME</td>
<td>American Society for Mechanical Engineers</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
</tr>
<tr>
<td>AWG</td>
<td>American Wire Gauge</td>
</tr>
<tr>
<td>CEC</td>
<td>Canadian Electrical Code</td>
</tr>
<tr>
<td>CDA</td>
<td>Controllable Drive Actuator</td>
</tr>
<tr>
<td>CNG</td>
<td>Compressed Natural Gas</td>
</tr>
<tr>
<td>CPU</td>
<td>Central Processing Unit</td>
</tr>
<tr>
<td>CSA</td>
<td>Canadian Standards Association</td>
</tr>
<tr>
<td>ESD</td>
<td>Emergency Shut-down Device</td>
</tr>
<tr>
<td>EYA</td>
<td>Hazardous site fitting as defined by UL 886</td>
</tr>
<tr>
<td>LCD</td>
<td>Liquid Crystal Display</td>
</tr>
<tr>
<td>LED</td>
<td>Light Emitting Diode</td>
</tr>
<tr>
<td>MSHA</td>
<td>Mine Safety and Health Administration</td>
</tr>
<tr>
<td>NEC</td>
<td>National Electrical Code</td>
</tr>
<tr>
<td>NEMA</td>
<td>National Electrical Manufacturers Association</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association</td>
</tr>
<tr>
<td>NGV</td>
<td>Natural Gas Vehicle</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>NPT</td>
<td>National Pipe Thread</td>
</tr>
<tr>
<td>NTEP</td>
<td>National Type Evaluation Program</td>
</tr>
<tr>
<td>PPE</td>
<td>Personal Protection Equipment</td>
</tr>
<tr>
<td>PTFE</td>
<td>Polytetrafluoroethylene</td>
</tr>
<tr>
<td>POS</td>
<td>Point of Sale</td>
</tr>
</tbody>
</table>
USER GUIDE FOR VERIFLO DIVISION CNG FILTRATION PANEL

This product is designed to carry flammable gas at high pressure (Natural Gas at 3,600 psig service pressure). Before using any Veriflo CNG (Compressed Natural Gas) Filtration Panel assembly or related accessories, it is important that you read, understand, and comply with the following instructions.

**WARNING**

Failure or improper selection or improper use of a CNG Filtration Panel or related accessories can cause death, personal injury, and property damage. Possible consequences of failure or improper selection or improper use of a CNG Filtration Panel or related accessory include but are not limited to:

- Parts thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Contact with suddenly moving or falling objects that are to be held in position or moved by the conveyed fluid.
- Dangerously whipping hose.

- Contact with conveyed fluids that may be hot, cold, toxic, or otherwise injurious.
- Injection by high-pressure fluid discharge.
- Asphyxiation by accumulation of vapors in a confined space.

To ensure safe operation, only trained and qualified professionals with certifications in accordance with the applicable codes shall perform installation, maintenance, repair, removal, or replacement of this high pressure Natural Gas product.

Attempting to operate a CNG fuel system without proper training is dangerous. Only properly trained personnel should operate this device in the field. Please take the time to train field personnel in the correct procedures for using this product.

User Responsibility Statement: This document provides product or system options for further investigation by users having technical expertise. Before you select or use any product or system, it is your responsibility to analyze all aspects of your application and review the information concerning the product in the current product catalog. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, safety and warning requirements of the application are met.
1. GENERAL INSTRUCTIONS

1.1. Scope

This user guide is designed to cover general guidelines on the installation, operation, and maintenance of the Veriflo Division CNG Filtration Panel ("product"). This user guide supplements and is to be used with the Safety Guide for Selecting and Using Veriflo Division Products and Related Accessories, P/N 25000194. For copies of Safety Guide, call 1-800-CPARKER, or go to www.parker.com/veriflo, and search keyword “safety” in Literature.

1.2. Fail Safe

Veriflo CNG products can and do fail without warning for many reasons. Design all systems and equipment in a fail-safe mode, so that failure of Veriflo CNG products will not endanger persons or property.

1.3. Distribution

Provide a copy of this user guide to each person that is responsible for selection, installation, operation, maintenance or service of a Veriflo CNG Filtration Panel. Do not select or use a Veriflo CNG Filtration Panel without thoroughly reading and understanding this user guide.

1.4. User Responsibility

Due to the wide variety of operating conditions and applications for Veriflo CNG Filtration Panels, Parker and its distributors do not represent or warrant that this particular Veriflo CNG product is suitable for any specific end use system. This user guide does not analyze all technical parameters that must be considered in product selection. The user, through its own analysis and testing, is solely responsible for:

- Making the final selection of the Veriflo CNG product;
- Assuring that all user’s performance, endurance, maintenance, safety, and warning requirements are met and that the application presents no health or safety hazards;
- Complying with all existing warning labels and / or providing all appropriate health and safety warnings on the equipment on which the Veriflo products are used;
- Assuring compliance with all applicable government and/or industry codes, laws, regulations, or standards;
- Wearing appropriate personal protection equipment.

1.5. Safety Devices

Safety devices should not be removed, or defeated.

1.6. Warning Labels

Warning labels should not be removed, painted over or otherwise obscured.
2. PRODUCT SELECTION INSTRUCTIONS

2.1. Working Pressure

The installer/user is responsible for assuring that the pressures applied to the product will never exceed the maximum allowable working pressure (MAWP) of the product, the MAWP of any options and accessories connected to the product, and the MAWP of any other system component. Consult product labeling for maximum allowable working pressures. Additional operating pressure considerations: CNG Filtration Panel selection must be made so that the published rated pressure of the product is equal to or greater than the maximum system pressure. Surge pressures in the system higher than the MAWP of the Filtration Panel will shorten the product life or result in unpredictable failure.

![WARNING]

Do not confuse burst pressure or other pressure values with maximum allowable working pressure and do not use burst pressure or other pressure values for this purpose.

Veriflo CNG Filtration Panels are for use with P36 (3600 psig service pressure) or lower pressure systems. Refer to NFPA 52 Compressed Natural Gas (CNG) Vehicular Fuel Systems, or CAN/CSA-B108, NGV Fuelling Stations Installation Code, as applicable, for pressure definitions.

2.2. Fluid Compatibility

Veriflo CNG Filtration Panels are for use with Compressed Natural Gas for motor vehicle use only.

2.3. Temperature Rating

Never exceed the temperature ratings of a product. Excessive heat or cold can shorten the life expectancy of a product, cause improper function, and product rupture. Veriflo CNG Filtration Panels are rated for use between -30 °F and +150 °F. The installer is responsible for assuring that fluid and ambient temperatures, both steady and transient, do not exceed these limitations. Use caution along with proper Personal Protective Equipment (PPE) when connecting or disconnecting couplings that are heated or cooled by the media they are conducting or by their environment.

2.4. Leakage

Leakage can create hazardous situations due to exposure to the process fluid, accumulation of vapors in a confined space, unintended chemical reactions, loss of system pressure, or unexpected transfer of fluids and pressures within the system. Veriflo CNG Filtration Panels are specified to be “bubble tight” at the maximum allowable working pressure (MAWP). Bubble tight means that a certified leak detecting solution does not form bubbles when applied to fittings.
2.5. **Severe Leakage**

The user must address in their system design, product selection, and product usage any hazards that may result from severe leakage due to product or system failure. Good system design requires consideration of the possibility of severe internal and external leakage and may require safety pressure relief devices and secondary fluid containment. Severe leakage can create hazardous situations due to exposure to the process fluid, accumulation of vapors in a confined space, unintended chemical reactions, loss of system pressure, or unexpected transfer of fluids and pressures within the system.

2.6. **Environment**

Many environmental conditions can affect the integrity and suitability of a product for a given application. Care must be taken to ensure that CNG products are either compatible with or protected from the environment (that is, surrounding conditions) to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation and premature failure.

2.7. **Intended Use**

This product is intended for use with CNG for motor vehicle use only.

2.8. **Flow Capacity**

Normal flow capacity of this filtration panel is 2200 to 2800 SCFM for dry natural gas. Pressure drop indicated by the Differential Pressure Gauge should be less than 2 psid using fresh filters with dry natural gas. If initial pressure drop is greater than 2 psid with new filters and steady flow of dry natural gas, flow demand may be greater than system capacity and flow demand should be reduced accordingly. Compressor pump oil with viscosity over 20 wt. may also cause abnormally high pressure drop. These filters are designed for nominal operation with 10-20 wt. oil.
3. PRODUCT INSTALLATION & OPERATING INSTRUCTIONS

3.1. Pre-Installation Product Inspection

Prior to assembly or installation, a careful examination of the product must be performed. All products must be checked for correct style, size, model number, and damage. DO NOT use any product that displays any signs of nonconformance or damage.

3.2. Installation and Operating Considerations

- Installation shall conform with the requirements of the authorities having jurisdiction or, in the absence of requirements, with the Standards NFPA 52, Compressed Natural Gas (CNG) Vehicular Fuel Systems, or CAN/CSA-B108, NGV Fueling Stations Installation Code, as applicable.
- Installation, operation, removal, and servicing of these products shall be performed by qualified professionals with certifications in accordance with the applicable codes who have been trained and equipped for the handling, use and servicing of pressurized fluids and systems.
- The installer must identify the inlet and outlet ports on the product to ensure proper connection.
- Attach CNG Filtration Panel to a foundation with anchoring systems design to comply with the requirements of the adapted building code for the appropriate seismic and wind conditions. Parker recommends that a Civil Professional Engineer (PE) review site installation design to ensure compliance.
- Ensure electrical bond to ground lug provided. Reference NFPA 77 and/or API RP 2003.
- Site installation shall also provide grounding to fluid-carrying tubing runs.
- After installation and servicing, the product must be tested for proper function and leakage. Leak test methods should be appropriate for the system leak integrity requirements (bubble tight).
- Do not use a product or operate a system if there is evidence of contamination (e.g. debris, particles, oils, lubricants, grease, etc.).
- Do not interchange products, components, and accessories with those that have been used in other types of gas service.
- Prior to installation, the employer must create procedure(s) and provide training to lockout and tagout methods for this system and equipment. Follow all government, state and local safety and servicing practices including, but not limited, to all OSHA Lockout Tagout procedures (OSHA Standard – 29 CFR, Part 1910.147, Appendix A, The Control of Hazardous Energy – Lockout / Tagout).
- Always wear appropriate personal protection equipment such as approved safety glasses, face shield, apron, gloves, etc. during installation and/or operation of this product.
- Prior to pressurization or operation, the user should be familiar with the location and proper operation of all applicable safety equipment on site which may include, but not be limited to fire

3.3. Fitting Installation

Fittings are Parker A-LOK (compression), for 3/4 inch tubing. Normal fitting make up is 1 and 1/4 turns from finger tight. Refer to Parker catalog 4290 for further information regarding tube fabricating tools and gauges.
3.4. Leak Test

There shall be no open ports before applying pressure to this product.

After proper installation, the product should be tested for leaks. The pressures to be tested should be 100 psig followed by 3600 psig.

3.5. Functional Test

With user’s upstream system pressure regulation controls, apply pressure to the product starting at a low pressure and gradually increase to maximum operating pressure. Check for possible malfunctions and leaks. Personnel must avoid potential hazardous areas while testing and using the system. Refer to next section, Operating Instructions, for normal valve positions.

3.6. Operating Instructions

There shall be no open ports before applying pressure to this product and the system should have already passed a leak test performed by installation or maintenance personnel.

An Emergency Shut Down (ESD) button should be available at all US-based CNG filling locations in accordance with NFPA 52. Operating personnel should locate the ESD prior to using CNG filling systems.
3.6.1 Normal Operation

The CNG Filtration Panel is configured with valves to allow continuous gas delivery while servicing filters. The valve positions for normal operation are listed in the Table 3.1 as either C (closed), or O (open). Valves are labeled in the piping and instrumentation diagram (P&ID) shown below.

A lockout-tagout (LOTO) is provided on the bypass valve as a convenience for the user to lock the bypass valve closed to prevent unauthorized bypass of the filtration network.

Table 3.1. Valve states for normal operation.

<table>
<thead>
<tr>
<th>Normal Operation</th>
<th>valve</th>
<th>state</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>bypass</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>inlet</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>outlet</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>upper drain A</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>upper drain B</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>lower drain A</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>lower drain B</td>
<td>C</td>
</tr>
</tbody>
</table>

C - Closed  
O - Open

Piping and Instrumentation Diagram for CNG Filtration Panel
3.6.2 Draining condensate from filter bowls

Draining condensate from filter bowls is recommended daily and may be accomplished while filtered gas is continuously delivered. Valves must be closed and opened in the 5-step sequence as shown in Table 3.2. At Step 3, condensate must be collected and disposed of properly in accordance with all regulations.

Table 3.2. Five steps for draining condensate.

<table>
<thead>
<tr>
<th>Step</th>
<th>bypass</th>
<th>inlet</th>
<th>outlet</th>
<th>upper drain A</th>
<th>upper drain B</th>
<th>lower drain A</th>
<th>lower drain B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

Collect condensate

Detailed 5-step process for draining filter bowls:

1. Confirm normal operation valve states.
2. Close both upper drain valves.
3. Prepare to collect condensate in a container and SLOWLY open each lower valve to drain condensate into a suitable container.
4. When condensate is finished draining, close both lower drain valves.
5. Open both upper drain valves to return to normal operation.
6. Repeat steps 1 through 5 until all condensate is removed.

Dispose of collected condensate in accordance with all regulations.

3.6.3 Replacing filter elements

Filter element replacement is recommended when pressure drop exceeds 6 psid as indicated by the differential pressure gauge. If pressure drop reaches 10 psid, discontinue operation and replace filter elements. Pressure drop readings are only valid when flow demand is within the normal flow range of the filters 2200 to 2800 SCFM.

If initial pressure drop is more than 2 psid with new filters and steady flow of dry natural gas, flow demand is greater than filtration system capacity. Demand should be reduced accordingly so as not to exceed filtration capacity.

Under normal system conditions, filter elements will operate for 6 to 12 months before reaching maximum differential pressure. It is recommended that both elements be changed at the same time.

Replacing filter elements may be performed with or without the use of the bypass valve. Opening the bypass valve permits the continued gas delivery of unfiltered gas. If unfiltered gas delivery is undesirable, the bypass valve may remain closed at all times such that a filter exchange will then require stopping gas delivery.

To exchange filter elements, valves must be opened and closed in the 9-step sequence as shown in Table 3.3. At Step 6, follow the referenced instructions for removing and refitting filter elements.
### Table 3.3. Sequence for exchanging filter elements.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
<th>Step 6</th>
<th>Step 7</th>
<th>Step 8</th>
<th>Step 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>bypass</td>
<td>C</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>C</td>
</tr>
<tr>
<td>inlet</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>outlet</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>upper drain A</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>upper drain B</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>lower drain A</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>lower drain B</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>O</td>
<td>O</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

Remove and refit filter elements.

**Detailed 9-step process for exchanging filter elements:**

1. Confirm normal operation valve states.
2. For uninterrupted gas delivery, open the bypass valve. But, if unfiltered gas delivery is undesirable, the bypass valve may remain closed with the consequence of stopping gas flow.

   **WARNING**
   Follow lockout and tagout procedures to prevent inadvertent opening of inlet and outlet valves.

3. Close the inlet, outlet, and both upper drain valves. Lockout tagout the inlet and outlet valves.
4. Prepare to collect condensate in a container and slowly open each lower valve to drain condensate into a suitable container.
5. Slowly open both upper drain valves to bleed trapped pressure and liquid from the system. When system is drained completely as indicated by no flow exiting the drain, verify system pressure has been drained at the filters and all valves are in the indicated positions per step 5 in Table 3.3, proceed to next step. System pressure can be verified by checking the system pressure gauge if the option is on your system.
6. Follow instructions included with Veriflo filter replacement kits (AFILT-FE04C0B, AFILT-FE10C0B, or AFILT-FILTKIT) to remove used filter elements and refit with new replacements.

   **CAUTION**
   While removing the filter cap, there should be no indication of a gas leak coming from the filter and the filter cap should be able to be unscrewed with minimal force. Stop and re-evaluate for system pressure if either condition is present. Verify that upper & lower drain valves are open; inlet & outlet valves are closed.

7. Close both lower drain valves.
8. Open inlet and outlet valves.
9. Close the bypass valve.

Dispose of collected condensate in accordance with all regulations.

**CAUTION**
During Step 5 above, if gas flow does not cease, either or both the inlet and outlet valves are not completely closed or have internal leakage. Valves exhibiting bypass leakage shall be repaired immediately. Shut down the system and contact an authorized service representative for repair.
4. PRODUCT MAINTENANCE INSTRUCTIONS

Veriflo Division products must pass rigid acceptance tests before leaving the factory. All repairs and servicing of this product must only be performed by factory certified personnel and tested for operation and leakage. Veriflo Division cannot assume responsibility for the performance or safety of a customer repaired or serviced product or for any damages resulting from failure of a customer repaired or serviced product or otherwise altered product.

4.1. Maintenance

Even with proper selection and installation, product service life may be significantly reduced without a continuing maintenance program. A maintenance program must be established and followed by the user and, at minimum, must include instructions 4.2 through 4.6. Maintenance, inspection, service, and replacement intervals are the sole responsibility of the user and need to be established so that products are replaced before any failure occurs. Important considerations when establishing the frequency of maintenance, inspection, service, and replacement of Veriflo Division CNG products:

- Previous performance experiences including known failures in the application or similar applications.
- Government and/or industrial standards.
- When failures could result in unacceptable down time, equipment damage or personal injury risk.
- The user is solely responsible for determining the frequency of maintenance based on the application, that the recommended checks can be safely performed, and that the recommended checks are adequate to ensure proper and safe operation of the user’s system.

4.2. Inspection

A Veriflo Division CNG product that does not comply with the user-recommended checks or malfunctions in any manner must be immediately removed from service. Do not attempt repair. Any of the following conditions requires immediate system shut down and replacement of worn or damaged components.

Never approach a product or system exhibiting these or other abnormal conditions until the system has been shut down and depressurized.
• Escaping fluid and abnormal pressure readings: Escaping fluid and abnormal pressure readings may indicate severe leakage or product or system failure.
• Damaged or degraded components: Any visible signs of abnormal wear or component degradation.
• Corrosion: If any component is corroded, determine whether replacement and/or servicing is necessary.
• Kinked, crushed, or damaged hoses and plumbing: Kinked plumbing can result in restricted fluid flow and lead to unpredictable system behavior.
• Any observed improper system or component function: Immediately shut down the system and correct the malfunction.
• Excessive dirt build-up: Dirt and clutter can mask potentially hazardous situations.

4.3. Routine Maintenance

• Periodically inspect for leakage, wear, abuse, or damage.
• Periodically perform a leak test on entire system.
• Periodically test electrical bonding of ground lug. Reference NFPA 77 and/or API RP 2003
• Remove excessive dirt, grime and clutter from work areas.
• Make sure all required guards and shields are in place. Warnings and specifications on the product should not be covered or painted over. If masking is not possible, contact your local representative for replacement labels.
• Parker CNG Filtration Panels should be tested after installation and before use.

![WARNING]

Matches, candles, open flame or other sources of ignition shall not be used for hose inspection. Leak check solutions should be rinsed off after use.

4.4. Removal

To avoid unpredictable system behavior that can cause death, personal injury and property damage, before attempting to remove a product from service, follow these important product removal considerations:
• Removal of these products shall be performed by qualified professionals with certifications in accordance with the applicable codes who have been trained and equipped for the handling, use and servicing of pressurized fluids and systems.
• Follow employer lockout and tagout (LOTO) procedures for the system.
• Isolate the product from all pressure sources upstream and downstream of the product by closing and locking out the appropriate valves.
• Safely depressurize the product and system, venting all pressure, both upstream and downstream.
• Properly purge hazardous fluids from the product and system.
• Ensure all pressure is removed from the product by following Section 3.6.3, steps 1 through 5.
• Always wear appropriate personal protection equipment such as approved safety glasses, face shield, apron, gloves, etc.
• After device removal, cap all connections to maintain cleanliness within the system.
4.5. Servicing

Besides filter element exchange, the CNG Filtration Panel does not have any user serviceable parts. Therefore, any issues with the product shall be addressed only by the authorized service representative.

4.6. Putting Serviced Product Back into Operation

Follow the guidelines above for product installation and operating instructions, Section 3 above.

4.7. Replacement Intervals

It is the responsibility of the end user to establish an appropriate maintenance program.

5. LIMITATIONS

5.1. Liability

Parker Hannifin Corporation and its member companies accepts no liability of any kind to any party, and no responsibility for damages or loss suffered by any party, as a result of decisions made, or not made, or actions taken, or not taken, based on this document.

5.2. Versions

It should be noted that the version date of this document supersedes any prior version.