Pyure MVP48[™] System

Air and Surface Purification System

Installation Guide





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3. Scope of this Guide

This manual describes the operation and functionality of the ODOROX[®] MVP48[™] industrial air processing unit. It is specifically written for personnel responsible for ensuring safe and proper operation of the equipment.

NOTE: This manual is NOT a maintenance guide and shall not be used to perform preventative, routine or emergency maintenance on the MVP48[™] System. Only MVP[™] certified service technicians are authorized to perform maintenance tasks on this equipment. Please refer to section 8.1 for additional information regarding maintenance and sustainment of the MVP48[™] System.

Pyure Technical Services can be reached by calling The Pyure Company's main office in Boynton Beach, Florida, at 877-735-3701.

4. Important Safety Guidelines

Throughout this manual, special references are made when conditions warrant increased attention and are paramount to personnel and equipment safety. All warnings, cautions, and notes must be thoroughly reviewed and understood prior to any attempts to operate, service, troubleshoot or repair any part of this equipment. A WARNING, CAUTION, or NOTE found in this manual will be illustrated using the following identifiers and definitions:

SIGNIFICANCE	IDENTIFIER	DEFINITION
WARNING		Used to indicate a procedure or operation which, if not executed properly, could result in serious injury or loss of life.
CAUTION		Used to indicate a procedure or operation which, if not executed properly could result in damage to the equipment.
NOTE	<i>NOTE: The word note and associated text will be in bold and italicized font.</i>	Used to indicate information deemed essential to emphasize.

Table 1: Installation guide warnings

5. About the Manufacturer

The Pyure Company Inc.® is a United States corporation (formerly HGI Industries Inc.), whose cutting-edge atmospheric hydroxyl radical generating technology has been at the forefront of high-volume air and surface decontamination for the past 20 years. Company headquarters' research, development, and custom fabrication are located in Boynton Beach, Florida, USA.

6. MVP48[™] Hydroxyl Generator System Description

6.1 System Overview

The ODOROX® MVP48[™] system is designed to neutralize heavy concentrations of chemical and biological odors (VOC's), bacteria, virus, and fungal species. This patented process is equally effective on hard and soft surfaces. Neutralization occurs in the air stream as well as on surfaces within medium and large-scale operations. The MVP48[™] system accomplishes this by producing Odorox® atmospheric hydroxyls. Atmospheric hydroxyls are a naturally occurring molecule that cleans the earth's atmosphere. Odorox® technology introduces atmospheric hydroxyls into the targeted treatment area.

6.2 Major System Components

The MVP48[™] cabinet houses three major subsystems which are delineated by three access panels on the front of the unit.

6.2.1 Internal Blower Subsystem (optional)

Houses the blower assembly used to propel hydroxyls into the area being treated.

Contains an exterior Fault/Service Light indicator mast (see Section 6.2 for a detailed description of indicator lights)

6.2.2 Control Subsystem

Houses the programmable logic controller (PLC) and digital communication nodes for remote sensors and controllers.

Includes a Human-Machine-Interface (HMI) touchscreen.

6.2.3 Optics Subsystem

Houses 48 patented Odorox® optics (six rows/banks of eight Odorox® optics each) in a reaction chamber used to produce hydroxyls

Contains an exterior Fault/Service Light indicator mast (see Section 6.2 for a detailed description of indicator lights)



Figure 1: Major System Components

6.3 Specifications

6.3.1 00819355021611 MVP48™ Hydroxyl Generator System [MVP4831] 008193550222472 MVP48™ Unit Blower Enclosure Assembly [MVP4827]

Dimensions (WxLxH):	39" x 31" x 84.5"
	(991 x 787 x 2146 mm)
Weight:	673.0 lbs (305.3 kg)
Voltage:	208-240VAC Single
	phase @50/60Hz
Power:	4,992 Watts (nominal)
Control:	PLC/Touchscreen
	Control, Auto Mode w/
	VOC Sensor
Fan Rating:	1,250-2,500 CFM (with
	standard fan option)
Air Flow:	Variable
Filter:	17.25"x39"x1"
	(438 x 991 x 25 mm)
	washable
Certification:	CE, Contact Pyure for
	certification
	requirements

6.3.2 00819355021314 MVP™ Remote 'DR' Sensor [MVPXX47]

Dimensions (LxWxD): 14.7" x 7.9" x 16.0" (372 x 200 x 407mm) Weight: 12.0 lbs (5.4 kg) Voltage: 24VDC

6.3.3 00819355022533 Pyure 'AQ' 900 Oxidant Sensor

Dimensions (H x Dia):	2.5"x 5.1" (64 x 130mm)
Weight:	0.4 lbs (0.2 kg)
Voltage:	12VDC

6.3.4 00819355021185

MVP[™] Sensor Conversion Interface [MVPXX56]

Dimensions (LxWxD):	9.5" x 7.5" x 4.7"
	(242 x 191 x 119mm)
Weight:	4.3 lbs (2.0 kg)
Voltage:	24VDC

6.4 Safety

6.4.1 General Precautions

Pyure Technology[™] produces the same concentrations of hydroxyls and organic oxidants that are naturally present in our outdoor environment. Following Pyure's operating guidelines ensures safe application of the system. Operating personnel should be aware of equipment safety items and procedures while servicing equipment.

▲ CAUTION: Maintenance is performed by Pyure qualified technicians.

NOTE: Any damage to equipment resulting from unauthorized maintenance practices or actions taken by personnel that have NOT been qualified by The Pyure Company may nullify and void existing manufacturer warranties. NOTE: Pyure engineers routinely customize the MVP48[™] hardware and software configurations in order to meet the customer's air purification requirements. Accessing internal components by unauthorized personnel could result in a diminished operating capacity.

Qualified technicians performing maintenance on the MVP48[™] system must observe all safety and personal protective equipment [PPE] rules for the particular site they are working in. All operating, maintenance, and repair personnel must read and follow local operation procedures to ensure personal safety and prevent unintended equipment damage.

All personnel operating and servicing the MVP48[™] systems shall become thoroughly familiar with and frequently review the general, electrical and UV safety precautions. These precautions are in addition to the specific warnings and cautions noted throughout this manual and maintenance procedures.

6.4.2 Electrical Safety

WARNING: Service on electrical components must be conducted by a verifiably trained and certified electrician and standard Lockout/Tagout [LOTO] procedures must be followed.

The MVP48[™] system operates on a 208-240 Volt, single phase 50/60 cycle, 30 Amp circuit. Control voltage between the controller and the MVP48[™] system is 24 Volt DC. The 24V DC control circuit is backed up by an integrated uninterruptible power supply (UPS). The UPS only supplies power to the PLC and control circuits in the event of a main power interruption. The user interface screen will be disabled, and control of the software must be done remotely. Depending on the UPS, backup power should be available for approximately 30 to 60 minutes.

MVP48™ controllers have no operatorserviceable parts. Operators should, however, be

aware of any potential electrical hazards such as loose wiring or other electrical systems in the vicinity of the unit.

6.4.3 Ultraviolet (UV) Radiation Safety

The MVP48[™] system has no operatorserviceable parts and has been specifically designed to ensure 100% containment of all UV energy. The cabinet, intake plenum, and blower assembly have been engineered to prevent accidental exposure to UV radiation. Operators should be aware of any UV light escaping from inside the MVP[™] units. The precautions in this section are provided for when UV light is known to be escaping from within the enclosure or when operator personnel may be assisting servicing personnel.

- WARNING: Damaged seals around access doors or panels, impacts to the cabinet, or misalignment of the intake plenum or blower assembly could result in the inadvertent seepage of UV energy into the immediate vicinity of the unit.
- WARNING: Direct UV energy is known to cause serious burns to exposed skin and eyes.
- ▲ WARNING: Technicians or operators engaged in inspecting or servicing the MPV48[™] system should wear UV-rated safety glasses rated for 254 nm (UV-C).
- WARNING: Exposed skin must be protected when working with direct UV energy. All personnel working in the vicinity of exposed UV energy must wear long sleeves and face shields that protect against UVC energy.

If direct UV energy is escaping, immediate action should be taken to block or shield the UV energy from direct view. Covering the escaping light with an opaque item such as a towel or cardboard can be done as a temporary safety measure. The unit should also be cordoned off and clearly marked as a potential UV hazard to prevent exposure to other personnel. Your qualified servicing organization or Pyure Technical Services¹ should be contacted to resolve the problem as soon as practical.

KEEP OUT OF THE REACH OF CHILDREN.

WARNING – UV radiation emitted from this device. Unintended use of the device, or damage to the housing, may result in exposure to ultraviolet radiation.

Ultraviolet radiation may cause eye and skin irritation. Avoid exposing eyes and skin to ultraviolet radiation.

The use of this device is a supplement to and not a substitute for standard infection control practices to control transmission of infections; users must continue to follow all current infection control practices, including those practices related to cleaning and disinfection of environmental surfaces.

¹Pyure Technical Services can be reached by calling The Pyure Company's main office in Boynton Beach, Florida, at 877-735-3701.

7. Theory of Operation

Nature's Process Outdoors

Sunlight Produces Hydroxyls & Organic Oxidants

- Airborne hydroxyls are ideal sanitizing agents.
- Atmospheric hydroxyls are continuously produced by the action of the sun's ultraviolet energy on oxygen and water in our atmosphere.
- Hydroxyls react with a broader range of chemicals and are a million times more reactive than ozone.
- Hydroxyls react so fast that they are consumed within a few milliseconds and never accumulate.
- Hydroxyls react with volatile organic compounds (VOC) and produce organic oxidants, which also sanitize but are not as reactive, so they exist longer than hydroxyls.
- Hydroxyls and organic oxidants keep the air outside safe to breathe by decomposing natural and man-made pollutants and pathogens.

Indoors with Pyure Dynamic Protection

Pyure produces the same concentrations of hydroxyls & organic oxidants as the sun generates outdoors

- By replicating the levels found outdoors, Pyure ensures safety and efficacy.
- Hydroxyls are a natural oxidant and the most important cleansing agent in our outdoor environment.
- Hydroxyls do not exist naturally indoors

 they are consumed within milliseconds when produced by sunlight.



8. General Installation Information

8.1 Discussion

The MVP48[™] systems have been designed and installed based on a specific application. For fixed installations, the foundation, clearances, environmental conditions, and operating parameters have been determined and are part of the license to operate the system. Any changes in the operating environment, including, but not limited to, chemical usage, volume of treated area, air flow changes, product types, operating profile, etc., need to be reevaluated with respect to the system design.

The MVP48[™] system is essentially a self-contained unit comprised of an Optics Subsystem, Control Subsystem, and optional Internal Blower Assembly. Depending on the intended application, ducting may be used to direct Odorox[®] hydroxyl radicals into locations where treatment is being applied.

Additionally, the MVP48[™] system can be connected to an array of sensors which provide atmospheric readings to the Control Subsystem to determine the optimal operation of the optics in the reaction chamber. See Section 8.3 for more information about the sensors. Qualified personnel: Please refer to all related electrical schematics. (Appendix A)

8.2 MVP48[™] System Footprint

Sufficient clearance around MVP48[™] units must be provided for proper operation and servicing. Service technicians must be able to safely and conveniently open all access panels and use test equipment inside the compartments to safely service the units.

Care must also be taken so as not to restrict airflow into or out of the units. Areas in and around the units must remain free of obstructions.

The following general guidelines on MVP48™ system clearances are provided:

Top: Access to blower discharge ducting (perhaps an additional 36").

Front: Minimum of 84" clearance to allow the reaction chamber drawer to be pulled out and serviced, and to allow proper air intake to the plenum.

Sides: Main cabinet should keep 36" for cooling fan airflow and filter access.

Reaction chamber drawer sides for access to ballast assemblies should be 36" from the drawer sides outward on both sides.

Rear: Needs 4" of clearance.

Bottom: Clearance should be based on the height of the factory-installed mounting feet.

8.3 Sensors

8.3.1 Sensor Description

The sensor(s) used with the MVP[™] system are very sensitive. Care must be taken to ensure that the sensor tubing inlet is not obstructed or exposed to substances that would impact its effectiveness. Care must also be taken to ensure that materials are not placed near the sensor tubing in such a way that the free flow of air around the tubing inlet is obstructed.

The placement of substances that off-gas or emit oxidants in the vicinity of the sensor tubing inlet, or in upstream air flows can cause the sensor to read higher levels of oxidants, which will result in lower volumes of atmospheric hydroxyls to be injected into the treated space.

8.3.2 Sensor Inspections

Inspecting the sensors should be an integral step in the overarching preventative maintenance and cleaning schedule. At a minimum, sensor inspections should include:

Visual inspection of sensor cables:

Check for signs of damage to the cable. Check mounting/routing hardware. Any other protection mechanisms designed to safeguard the cables.

Visual inspection of the physical sensor location:

Look for signs of impeded airflow around the sensor tubing. Look for potential contamination sources capable of impacting sensor readings.

8.4 Typical Sensor Installation

The MVP48[™] System requires a minimum of one Sensor and can accept up to four Sensors per unit (the number of Sensors and placement of sensor elements is determined by Pyure's technical team and a Pyure qualified technician prior to installation).

8.4.1 00819355021314 MVP[™] Remote 'DR' Sensor

The Sensor consists of a main enclosure, one remote sensor factory cable (up to 98ft. (30m) length) and one remote sensor housing complete with sensor element. The main sensor enclosure should be installed in an easily accessible location and wired to the MVP48[™] unit. The remote sensor housing with sensor element is installed as per Pyure's qualified technicians direction and the remote sensor factory cable connects it back to the main sensor enclosure (installed to local electrical code requirements).

Parts included for installation:





MVP[™] Remote 'DR' Sensor Enclosure 00819355021314

Sensor Cable (x1) S

Sensor Element Storage Container



Sensor Element

Sensor Housing (x1)



Mounting Brackets (x4)

2



'DR' Sensor Enclosure Panel 00819355021314

Mounting the Sensor Enclosure:

Use the included hardware from each enclosure for a vertical installation. First, secure the brackets to the back of the Sensor enclosure, then secure to a firm structure capable of sustaining the weight.

Installing the Sensor Panel:

Important -

Ensure that you feed the small end of the sensor cable from the inside of the enclosure first. Push and pull the entire length through the cable gland, leaving enough length for a service loop.





1. Fit the cable grommet around sensor cable and loosely secure the cable gland.





2. On both sensor connectors, ensure that the curved tab inside the housings locate exactly into the corresponding aperture.



3. Introduce a service loop in the sensor cable which will also provide extra strain relief. Next, firmly secure cable gland.



4. Once the sensor bracket has been secured to an upright sturdy structure, angle the base of the sensor downwards to the back of the bracket and push down until there is a click and positive alignment.

To remove the sensor, push down on the front tab and pull upwards.





5. Ensure that you align the tab on the cable connector with the sensor housing connection groove. Gently screw into place (do not over tighten).

8.4.2 00819355022533 Pyure 'AQ' 900 Oxidant Sensor & 00819355021185 MVP[™] Sensor Conversion Interface [MVPXX56]

The Pyure 'AQ' 900 Oxidant Sensor consists of a sensor base complete with a sensor element and requires an MVP[™] Sensor Conversion Interface. The Sensor Conversion Interface enclosure should be installed in an easily accessible location and wired to the MVP48[™] unit. The 'AQ' 900 Oxidant Sensor base with sensor element is installed as per Pyure's qualified technicians direction and the user supplied cable connects it back to the Sensor Conversion Interface enclosure (installed to local electrical code requirements).

Parts included for installation:



Sensor Conversion Interface

'AQ' 900 Oxidant Sensor

Mounting the MVP[™] Sensor Conversion Interface Enclosure: Mount Sensor Conversion Interface enclosure on wall or support structure using the four 5/16" holes, keeping clearance around sides for wiring/conduit connections to be made.

The interface enclosure does not have predrilled or pre-punched holes for conduit. When drilling or punching conduit holes be sure to protect internals from machine damage and debris.

Mounting the Pyure 'AQ' 900 Oxidant Sensor:

Mount AQ sensor flush to the wall using the keyhole slots on the back of the sensor, keeping in mind wiring connections will come into the sensor via the cut-out section of the base.



'AQ' 900 Oxidant Sensor rear view



'AQ' 900 Oxidant Sensor front view without sensor element

8.5 Electrical Supply (see Appendix A: 11.8)

Each MVP48[™] Unit requires a dedicated electrical supply:

MVP48[™] Hydroxyl Generator Unit: 00819355021611: 208-240V Single Phase @50/60Hz (4,992 Watts), L1, L2, Ground

8.6 Sensor Wiring

8.6.1 MVP48[™] unit to MVP[™] Sensor Conversion Interface & Pyure 'AQ' 900 Oxidant Sensor

To Conversion Interface:	6 Conductors + Ground (24VDC, 50 Watts) 18 AWG minimum
To 'AQ" 900 Oxidant Sensor:	User supplied cable (4 conductor + Ground)

8.6.2 Remote 'DR' Sensor to Remote Sensor Housing with Sensor Element

One factory-terminated low voltage cable (supplied with the MVP[™] Remote 'DR' Sensor) needs to be installed between the Sensor Enclosure and the Remote Sensor Housing. The 'large' connector end needs to remain inside the Sensor Enclosure while the 'small' connector end needs to be routed through the large strain-relief connector in the bottom of the Sensor Enclosure. The 'large' connector plugs into the Sensor Display Module inside the Sensor Enclosure. **Caution is required as the pins in the connector base are easily damaged/bent if installed incorrectly.** The connector plugs into the Display Module in one direction only.

9. General Cleaning

This section provides procedural guidance on how to clean the MVP48[™]'s exterior cabinet, filter, and optics in the reaction chamber. It also covers how to visually inspect the drainage tubes connected to the two air conditioning units located in the Controller Subsystem. These procedures are intended to be performed on a recurring basis to ensure proper operation of the MVP48[™] equipment. The periodicity of these procedures will be dictated by the environmental conditions where the unit resides, and minimum recurrence intervals should be determined during the Custom/Approved Factory Solution process.

NOTE: Recurrence intervals may be modified over time based on operating conditions and experience gained utilizing the system.

▲ CAUTION: Due to the sensitive nature of the equipment housed inside the MVP48[™] system, the following procedures should be followed precisely and with extreme care.

9.1 Exterior

The exterior of the MVP48[™] system may be cleaned using a non-abrasive soap and water. In severe fats, oils, and grease environments, a suitable degreaser may be applied first and then removed with soap and water.

CAUTION: Under no circumstances shall the unit be hosed down with high-pressure water or steam at any pressure.

9.2 00819355022489 MVP48[™] Intake Filter Assembly [MVP4812] (optional)

The MVP48[™] internal filter is housed in a compartment located on the lower-front of the unit.



- Visually inspect the intake side of the filter for obvious dust/debris build-up.
- Remove the filter from the intake plenum and clean or replace it as needed.
- Re-install the filter and verify that the unit is still functioning properly by observing the GREEN status light on the Fault/Service light mast atop the unit.
- Document actions using locally established service records

Figure 2: Filter assembly

9.3 Cleaning the Reaction Chamber and Optics

- ▲ WARNING: Accessing the reaction chamber involves sliding the optic's rack drawer forward and out of the main body of the MVP48[™]. Before proceeding with the following procedure, the technician shall ensure the MVP48[™] has been securely fastened to the floor or adjacent wall to prevent the unit from tipping forward when the optic's drawer is manoeuvred.
- ▲ CAUTION: The optics and optic sleeves are very fragile. Extreme care must be used when working on the MVP48[™] while the optics are exposed
- CAUTION: The approved cleansing solution for cleaning interior components of the Optics Subsystem is: 90% distilled water + 10% isopropyl alcohol. The solution shall be applied using lint-free wipes while wearing latex gloves.

The steps listed below are used to access and clean the reaction chamber and optics.

 De-energize the MVP48[™] Optic and Blower Subsystems

User must log in using either MAINTENANCE or SUPERVISOR login type.

From the MAIN screen, select the MAIN ON icon (this deactivates the Optic and Blower Subsystems and turns the icon on the HMI screen red). Open the main disconnect switch by rotating the physical "MAIN POWER" switch to the OFF position.

NOTE: When the main disconnect has been opened, power is no longer available to any of the unit's subsystems. Provided the internal uninterruptible power supply (UPS) is fully charged, backup power will be supplied to the sensors for 30-60 minutes.

- 2. Remove the intake plenum assembly.
- 3. Use the access key to unlock the four corner locks on the reaction chamber access door.
- 4. Pull out the reaction chamber access door to gain access to the hold-down fasteners and the optic rack cable connections.
- 5. Remove optic rack cable connections and optic rack hold-down fasteners.
- Pull the optic racks out of the reaction chamber in order and place them in a stable location.
 NOTE: Ensure the racks are labeled prior to removal so they can be reassembled into the same location. Failure to do so could alter the physical configuration of the optics with the programmable logic in the Controller Subsystem.
- 7. Clean the reaction chamber surfaces using the approved cleansing solution, lint-free wipes, and latex gloves.

- Clean the optic racks using the approved cleansing solution, lint-free wipes, and latex gloves.
 NOTE: In some situations, there may be a need to degrease the optic sleeves as well. Use only approved degreasers and avoid contact with the actual optics.
- Visually inspect the optics, optic sleeves, and isolation grommets. If there are any indications of cracks or pitting of the sleeves, or missing, deteriorated, or broken grommets, renew the optic rack.
- 10. Carefully reinstall the optic racks into their original locations.
- 11. Reinstall the hold-down fasteners and install the cable connections.
- Visually inspect the ballast assemblies on both sides of the reaction chamber drawer for any obvious discrepancies. Report any discrepancies to HGI Technical Services.
- 13. Retract the reaction chamber drawer and lock the four corner locking mechanisms.
 - ▲ WARNING: The following steps will restore power to the MVP48[™] and return the system to normal operation. Since the optics subsystem has been accessed, the following precautions should be followed to ensure the reaction chamber has been securely fastened, no UV radiation is escaping, and overall personnel safety:

Cordon off the immediate vicinity in accordance with UV protection standards.

Don personal protective equipment (PPE): UVrated eye protection, face shield, gloves, and garments capable of covering all exposed skin.

- 14. Reinstall the intake plenum.
- 15. Remove LOTO markers and close the main feeder breaker.
- 16. Rotate the MVP48[™] MAIN POWER switch to the ON position.
- 17. Log into the Controller Subsystem using the MAINTENANCE or SUPERVISOR login type.
- Using the HMI touch screen, press the MAIN OFF icon (restores power to Blower and Optics Subsystems and icon changes to green and reads MAIN ON).
- From the MAIN screen, select the OPTICS CURRENT icon and verify that optics are energized (Set number should be bright green and Current (A) should be registering amps being drawn by energized optics).
- 20. Return to the MAIN screen and ensure the following:

The MAIN ON icon is green.

No alarms are displayed relative to the Optics Subsystem.

The green light atop the machine is illuminated. The VOC Sensor PPM reading is updating. There are no LINE STATE indications that would prevent the optics from functioning properly.

- 21. Document actions using locally established service records.
 - ***END OF PROCEDURE***

9.4 A/C Drain Inspection

Two small A/C units have been installed in the Controller Subsystem section of the MVP48[™] to control operating temperatures surrounding sensitive electronics. Figures 8 and 9 show what the A/C looks like and their positioning inside the controller section of the unit.

NOTE: Anytime the Controller Subsystem access panels are open, the A/C drains should be visually inspected to ensure there are no clogs preventing drainage. For periodic/recurring inspections, ensure the inspection is documented using locally established service records.

A/C Unit LEFT

A/C Unit Drain Hose LEFT





Figure 4: A/C Drain RIGHT



10. Scheduled Maintenance

▲ CAUTION: Only certified technicians¹ are authorized to remove access panels to perform component-level maintenance on the MVP48[™] system.

NOTE: Any damage to equipment resulting from unauthorized maintenance practices or by actions taken by personnel that have NOT been certified by HGI may nullify and void existing manufacturer warranties.

NOTE: Pyure engineers routinely customize the MVP48[™] system hardware and software configurations to meet the customer's specific air purification requirements. Accessing internal components by unauthorized personnel could result in diminished operating capacity.

Operators are not authorized to perform any periodic or annual maintenance on the MVP[™] units or controllers. Only MVP[™] series certified service technicians are authorized to perform maintenance tasks on these units.

Periodic maintenance tasks may be weekly, monthly, quarterly, or some other interval. The periodicity of these tasks depends on the operating environment and will be initiated at the time the system is specified and commissioned. As operating experience is gained, the periodicity may be adjusted based on system performance and operating conditions.

¹Pyure Technical Services can be reached by calling The Pyure Company's main office in Boynton Beach, Florida, at 877-735-3701.

11. Appendix A: Technical Documents

11.1 Appendix A: 00819355021611 Pyure MVP48™ Hydroxyl Generator System [MVP4831]



11.2 Appendix A: 008193550222472 MVP48™ Unit Blower Enclosure Assembly [MVP4827]



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11.3 Appendix A: 00819355022489 MVP48[™] Intake Filter Assembly [MVP4812] (optional)



11.4 Appendix A: 00819355021314 MVP™ Remote 'DR' Sensor [MVPXX47]

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3	E DESCRIPTION	REMOTE SENSOR BASE ASSEMBLY DELETED	DRAGER SENSOR OZONE - 68 14 005	DELETED	DELETED WASHER, SPLIT LOCK: #8, 18-8 SST	WASHER, FLAT, #8, 18-8 SST	GLAND, STRAIGHT THRU, 1" NPT, NYLON, GRAY	LOCKNUT, NYLON, 1"NPT, GRAY		PLUG, LOUKING, HOLE UR, 262, PANEL MAX IHK 1/8 , NTLON PLUG, WITH CABLE, 30 M/98' FOR REMOTE SENSOR	WVP SERIES REMOTE SENSOR BASE STATION	CABEL, FLOKE DI VANIUC FROTECIION	LOCKNUT, NYLON, 1/2 NPT, GRAY, STR. NPS THREAD	DELETED	DRAGER WITH SUPPORTING PLATE ASSEMBLY	DELETED	SCREW, SOCKET CAP, HEX, #8-32 X 1/2' LG, 316 SST		WIRE, HOUR-UP, 22 AWG, //32 SIRANU, 600V, BLUE	WIRE, HOOK-UP, 22 AWG, 7/30 PRE-BOND, BLUE/WHITE			MILTINGTON MARK DATE COMPANY PARTICULATION DATE COMPANY PARTICULATION DATES		References remetionwerker a 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
-	A PART NUMBER NOT	ESN-XX-259	ESN-XX-359	ESN-XX-256	HFS-PH-130 HFW-SL-141	HFW-FL-142	CON-NX-587	CON-NX-588	HBH-XX-UI9	ESN-XX-450 ESN-XX-260	ESN-XX-357	CON-NX-583	CON-NX-584	MVPXXLL22A	MVPXXMA02A	HFW-FL-105	HFS-SC-006	HFW-SL-106	WIK-XX-429	WIR-XX-476			DU KSM JAC UNLESS OTHERY D/22 6/30/22 6/30/22 6/30/22 6/30/22 6/30/22 6/30/22 6/30/22 6/30/22 6/30/22 6/30/24 20 20 MM KSM PREPARATION OF CONTRITIONAL 20 5/22 5/06/22 5/06/22 5/06/22 2008/22 2008/22 2008/22 2008/22	DU SDJ KSM DONOTISAUE RAWING 3/22 4/12/22 4/12/22 4/12/22 4/12/22 0U SDJ KSM RECEMPTION AND CONTRIBUTION AND CONTROL 0U SDJ MM RECEMPTION AND CONTROL 0U SDJ MM RECEMPTION AND CONTROL	IN THE DAME ANY BANK
4	ITEM QTY. UON NO.	2 1 EA	3 1 EA	4 1 EA	5 1 EA	7 2 EA	8 1 EA	9 1 EA		12 1 EA	13 1 EA	15 1 EA	16 1 EA	17 1 EA	18 1 EA	19 1 EA	20 2 EA	21 EA	N 04 7.7	23 40 IN				DELETED ITEM 17. 3/22 TEM 20 WAS HIS-BH-211. 9/2	PION PRINT.
5				6	4				6	Ū				5	R								H CHANGED PER ECO XXXXXX H CHANGED PER ECO XXXXXX I FIEM 1 WAS INVPXXMA455. C CHANGED PER ECO 0006. G FIEM 1 WAS INVPXXMA455. HISSCC04. ADDED ITENX 22.	F CHANGED PER ECO 00004. F ITEM 1 WAS MVPXXMA4SE. D CHANGED PER ECO 00035. E ITEM 1 WAS MVPXXMA4SD, I ADDED ITEM 21.	FOR OLD REVISION, SEE PREV REV DESCR
9								H							2_	0		×	X	À					9
8								K	III D										Ŷ					<u>AOTE:</u> 1. REFER TO MVPXXED47 FOR WIRING.	
					2				-1				0						4		۵	1	<		

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11.4 Appendix A: 00819355021314 MVP[™] Remote 'DR' Sensor [MVPXX47] (cont)



11.5 Appendix A: 00819355022533 Pyure 'AQ' 900 Oxidant Sensor Base



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11.6 Appendix A: 00819355022540 Pyure 'AQ' 900 Oxidant Sensor Element



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11.7 Appendix A: 00819355021185 MVP[™] Sensor Conversion Interface [MVPXX56]



11.7 Appendix A: 00819355021185 MVP[™] Sensor Conversion Interface [MVPXX56] (cont)



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12. Appendix B – Limited Warranty

Limited Warranty

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