

# **Pre-Treatment Machine**

# **USER MANUAL**

**Original Instructions** 



Revision 1.2

#### **SYSTEM OVERVIEW**

**WARNING!!!** The ViperONE is designed for applying pre-treatment fluid to apparel that will be decorated with a direct-to-garment printer. The User assumes all risks associated with the use of this machine and the fluids run through the ViperONE.

**WARNING!!!** Before servicing the ViperONE, press the E-Stop button to release system pressure. Then disconnect the ViperONE from air supply source and relieve any pressure in the pressure container to reduce potential for injury.

#### **SYSTEM SPECIFICATIONS**

#### **Air Compressor Minimum Requirements**

Minimum requirements for ViperONE Compatibility:

Horsepower: .5 HP

Flow Rate: 1.4 CFM

Tank Size: 1 Gallon (3.78 liter)

#### **Shipping Information**

Packaged shipping dimensions: 30"L x 22"W x 23H"

77cm x 56cm x 59cm

Packaged shipping weight: 70 lbs. (32 kg)

### **Unit Specifications and Features**

Dimensions: 19"W x 27"L x 21"H (48cm W x 69cm L x 54cm H)

Weight: 47 lbs. (21 kg)

Air Compressor Required (see Air Compressor Minimum Requirements)

Max. Canister Pressure: 43 psi / 2.96 bar / Max. Air Pressure from air source: 75 psi / 5.17 bar

Fully pneumatic - no electricity required

Single spray nozzle

Spray cycle time: ~ 2 seconds (depending on fluid laydown setting)

Maximum pretreatment area: 15"W x 18"L

Adjustable spray length: 3" to 18"

Adjustable pre-treatment fluid application: 35g to 11g (for 14x16" area)

Completely enclosed spray chamber – no misting Body made from corrosion-proof high grade plastic

External pressurized containers for pre-treatment/cleaning solutions

## **LABELS**



Always unplug the air supply line to the pressure container and release the pressure in the container prior to removing either the AIR IN (yellow) or FLUID IN (blue) lines above.

 Bevor die LUFT EIN (gelb) oder FLÜSSIGKEIT EIN (blau) Leitungen entfernt werden, immer erst die Luftzufuhrleitung vom

Druckkessel abschließen und den Druck vom Kessel herauslassen.

Débrancher toujours la conduite d'alimentation d'air à la cuve sous pression et relâcher la pression dans la cuve avant de déconnecter les conduites d'ARRIVÉE D'AIR (jaune) ou d'ARRIVÉE DE FLUIDE (bleue) ci-dessus.

Desconecte siempre la línea de suministro de aire al contenedor de presión y libere la presión en el contenedor antes de quitar ya sea las líneas de ENTRADA DE AIRE (amarilla) o de ENTRADA DE FLUIDO (azul) superiores.

**CAUTION:** This label warns to disconnect the air compressor supply line from the pressure container and to release the pressure inside the pressure container by releasing/opening the AIR RELEASE VALVE.



**CAUTION:** This label is the Emergency Stop label. Pressing the red button will stop all motion and release pressure inside the ViperONE system.



**CAUTION:** Keep all bodily parts and items away from and out of these areas.



# ACHTUNG AVERTISSEMENT ADVERTENCIA

- Use caution when handling this container as it may be under pressure and cause bodily injury.
- Vorsicht beim Umgang mit diesem Behälter, da er unter Druck stehen kann und Verletzungen verursachen kann.
- Faire preuve de prudence lors de la manipulation de ce conteneur. Il peut être pressurisé et causer des blessures corporelles.
- Tenga precaución al manipular este contenedor ya que es posible que esté bajo presión y puede provocar lesiones corporales.
- 1. Disconnect line from air compressor.
- 1. Trennen Sie die Leitung vom Kompressor.
- 1. Débrancher la conduite d'air du compresseur.
- 1. Desconecte la línea del compresor de aire.
- 2. Release pressure with Air Release Valve. 2. Relâcher la pression avec la vanne
- 2. Die Luft am Ablassventil herauslassen.
- 2. Relâcher la pression avec la vanne d'échappement d'air.
- 2. Libere presión con la válvula de liberación de aire.
- 3. Remove remaining air and liquid lines.
- 3. Die restlichen Luft- und Flüssigkeitsleitungen entfernen.
- 3. Purger les conduites d'air et de fluide.
- 3. Quite las líneas de líquido y aire restantes.
- 4. Container can now be opened.
- 4. Der Behälter kann jetzt geöffnet werden.
- 4. Le conteneur peut maintenant être ouvert.
- 4. Ahora se puede abrir el contenedor.

# DAILY MAINTENANCE TÄGLICHE PFLEGE ENTRETIEN QUOTIDIEN MANTENIMIENTO DIARIO

- Empty the pressure container of any fluid and flush the container with water. Wipe dry.
- Entleeren Sie den Druckbehälter von Flüssigkeiten und waschen Sie ihn mit Wasser aus. Trocken wischen.
- Vider le conteneur sous pression de tout fluide et rincer le conteneur avec de l'eau. Essuyer pour sécher.
- Vacíe todo el fluido del contenedor de presión y enjuáguelo con agua. Séquelo con un paño.

**WARNING:** This label warns to handle the pressure container with caution while pressurized. Before opening or performing any function on the container user must disconnect from the air supply source and release any residual pressure inside the container by opening the Air Release Valve.

### **PACKING & MOVING THE ViperONE**

**CAUTION:** The ViperONE is heavy and requires at least two people to lift the ViperONE from the box when moving the unit. Use proper lifting techniques. Always carry from the bottom of the device. Never lift utilizing the drawer handle.

- Before moving disconnect from the air source, relieve the pressure container, and disconnect all fluid and air lines.
- Remove the clear acrylic windows and store safely.
- Secure the sliding drawer in the closed position.
- Securely store the ViperONE in the original box before moving.

### **INCLUDED WITH THE ViperONE**



ViperONE Pretreatment
Machine



2 Two Quart Pressure Container



Accessory Pack:
Includes (2) Air & Fluid Lines with Filter,
Drain tube, Purge Bottle, nozzle soaking
container and toothbrush

# **SETTING UP THE ViperONE**

1. Connect the included RED Drain Tube with barb to the fitting located on the back right corner of the ViperONE. Place the end of the RED tube with the filter into a pre-treatment waste container. Cut to length so the bottom of the drain tube is not submerged in any waste fluid. Failure to do so will not allow the ViperONE to drain properly.



Connect the included BLUE Tubing to the FLUID OUTPUT PORT on the pressure container. Connect the other end of the BLUE Tube to the FLUID IN on the rear of the ViperONE.

Connect the included YELLOW Tubing to the AIR IN quick connect on the rear of the Viper and to the AIR LINE OUTPUT PORT on the pressure container. See Figure 1.

Make sure all the tubes are firmly seated into their respective quick connects.

Fill container with solution before connecting to an air supply. DO NOT FILL TO TOP; leave at least 1"-2" of air space. Screw top onto pressure container.

The pressure container has an Air Release Valve. The opening of the Air Release Valve allows for air pressure to escape the pressure container. Make sure this valve is closed before connecting to the air compressor. Once air pressure is applied to the pressure container, do not attempt to open or remove the FLUID IN and AIR

IN lines from the ViperONE unit or the pressure container. Once the air is disconnected and the Air Release Valve is opened on the pressure container, the container can easily be opened and/or lines disconnected.

Use a 1/4" quick connect for the air in source. The output pressure on the air compressor should be set to a maximum of 75 psi output. The pressure gauge on the 2 quart container should read 40 psi. Adjust as necessary.

At this point there should be no air leaking from the pressure container or inside the ViperONE. If there is an air leak check that all supply tubes are firmly seated and that the lid of the pressure container is securely tightened.

### **OPERATING THE ViperONE**

#### WHAT IS ON THE CONTROL PANEL?

- Start Button: Pressing the button will initiate the ViperONE to spray the shirt. Quickly press and release the Start button. DO NOT HOLD IN.
- E-Stop Button: Depressing this will exhaust all the pressure in the ViperONE causing all functionality to stop.
- Spray Adjustment Knob: The knob is a multi-turn knob. Rotating fully clockwise will completely shut air off to the system and the unit will not run or spray. Turning the knob counter clockwise will increase the speed of the spray head, resulting in less fluid applied to the shirt. See the GRAMS OF LAYDOWN PER NUMBER OF TURNS chart in Figure 3 to select the desired amount.



Figure 1

#### **Adjusting the Spray Length**

There is a slot on the right side of the ViperONE with an adjusting knob. This knob can be loosened and moved, then re-tightened. DO NOT COMPLETELY REMOVE. Use the ruler on the side of the unit to set spray length.

#### **Loading the Shirt**

The shirt collar needs to be located closest to the operator on the platen. It is easiest if you hold the shirt up so that the bottom hem of the shirt drops into the gap between the back of the platen and the front of the ViperONE. You can then pull the garment out and position the collar to a desired location.

Make sure that the shirt is completely smooth and the edges are tucked under the platen before closing the slide drawer. The shirt will help create a seal that keeps the airborne mist and over spray inside the spray chamber.



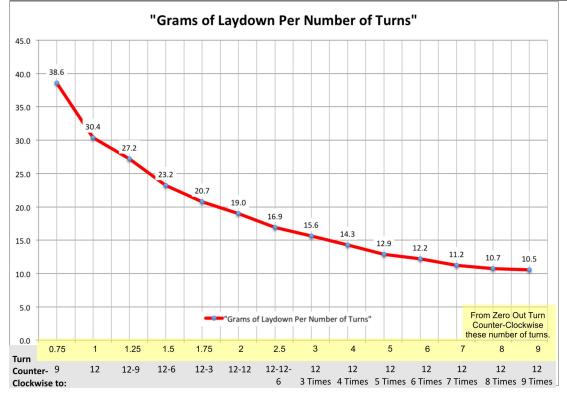
FIGURE 2

**TIP:** For loading thicker garments such as sweatshirts, remove the black half-round bar on the front of the platen to allow for more room for the garment to go into the ViperONE spray chamber without catching.

#### **Spraying the Shirt**

Firmly close the drawer once the shirt is in position. Press the green START button. **DO NOT HOLD IN START BUTTON.** After spraying, carefully remove the garment and cure the pre-treatment according to manufacturer's specifications.

# FLUID APPLICATION SPECIFICATION



The ViperONE applies fluid to the garment based on how fast the spray head moves. This is a result of how many turns "open" the SPRAY ADJUSTMENT knob is rotated counter-clockwise. Fully closing the knob (by rotating it clockwise until slight resistance is met) will not allow any spray to be applied. This is called Zeroing Out the Spray Adjustment. Rotating the knob counter-clockwise will allow air to flow into the cylinder and move the spray head. The slower the spray head moves, the more fluid is applied to the garment. DO **NOT OVER TURN OR TIGHTEN** WHEN IN FULLY CLOSED POSITION.

FIGURE 3

These spray values are

approximate and will depend on the actual air pressure you have running through your pressure container. However, at the recommended setting of 40 psi for FLUID settings and a 75 psi output from the air source, the chart is approximate and will help you achieve your end application values. **ALWAYS TEST YOUR SETTINGS PRIOR TO SELLING A FINISHED GARMENT.** 

The values listed in this chart are based on a 14"x16" area.

### **ViperONE CLEANING INSTRUCTIONS**

**OUTSIDE BODY:** The outside of the ViperONE can be cleaned with Viper Anti-Venom Spray-N-Wipe. Wipe away any residue.

**SPRAY CHAMBER:** The inside of the Viper can be cleaned with warm water. Gently wipe down the inside walls, inside of windows and the gutter collection system with a lint free cloth.

**PLATEN AND DRAWER SLIDE:** The platen and drawer slide of the ViperONE can be wiped down with Viper Anti-Venom Spray-N-Wipe. Wipe away any pre-treatment build up.

# **MAINTENANCE OF ViperONE AND PRESSURE CONTAINER**

#### **DAILY:**

- 1. Disconnect the pressure container from the air supply line coming from the air compressor.
- 2. Release the air pressure in the pressure container using the air release valve.
- 3. Remove pre-treatment from the pressure container and save for use again.
- 4. Wash out pressure container with water.
- 5. Use second pressure container and fill with water.
- 6. Reconnect the pressure container with water to the system and pressurize.
- 7. Place a water bottle or cup under the spray nozzle.
- 8. Press the PURGE button on the back of the ViperONE spray cabinet. Press the PURGE button and hold for 10 seconds.
- 9. Disconnect the pressure container from the air supply line coming from the air compressor.
- 10. Release the air pressure in the pressure container using the air release valve.
- 11. Remove water from the pressure container.

12. Wipe inside of pressure container dry.

#### **BI-WEEKLY:**

- 1. Disconnect the pressure container from the air supply line coming from the air compressor.
- 2. Release the air pressure in the pressure container using the air release valve.
- 3. Remove pre-treatment from the pressure container and save for use again.
- 4. Wash out pressure container with water.
- 5. Fill the second pressure container with Anti-Venom Maintenance Solution.
- 6. Reconnect the entire system and pressurize.
- 7. Place a water bottle or cup under the spray nozzle.
- 8. Press the PURGE button on the back of the ViperONE spray cabinet. Press the PURGE button and hold for 10 seconds.
- 9. Disconnect the pressure container from the air supply line coming from the air compressor.
- 10. Release the air pressure in the pressure container using the air release valve.
- 11. Remove Anti-Venom from the pressure container.
- 12. Wash out pressure container with water thoroughly to ensure all Anti-Venom is removed.
- 13. Fill pressure container with water.
- 14. Reconnect the entire system and pressurize.
- 15. Place a water bottle or cup under the spray nozzle.
- 16. Press the PURGE button on the back of the ViperONE spray cabinet. Press the PURGE button and hold for 5 seconds. Repeat 3-5 times. This will clean the Anti-Venom from the system and make it ready to use again.
- 17. Disconnect the pressure container from the air supply line coming from the air compressor.
- 18. Release the air pressure in the pressure container using the air release valve.
- 19. Remove water from the pressure container.
- 20. Wipe inside of pressure container dry.









Purchase Anti-Venom Solutions from your Viper Dealer

For more detailed information, videos, and troubleshooting, visit our website at

# WWW.VIPERXPT.COM