



# H6.500 DUST SUPPRESSION CANNON OPERATOR MANUAL



Please read this manual before using the H6.500

All Errors & Omissions Excused – Specification May Change Without Notice – Please Refer To www.v-tuf.co.uk For the Latest Version



#### 1. Safety Guidelines



### WARNING- READ AND FOLLOW ALL INSTRUCTIONS

· Failure to follow all instructions in this manual may result in severe personal injury or death. This unit must only be mounted to a load bearing structural object such as a stud, rafter, or floor which can support the combined weight of reel and hose and can withstand pulling forces on hose when in use



- ALWAYS point spray gun in safe direction and squeeze trigger, to release high pressure, every time you stop cleaning.
- MAKE SURE hose and fittings are tightened and in good condition. Never hold onto the hose or fittings during operation.
- NEVER attach or remove hose fittings while system is pressurized.
- ONLY USE a hose that is rated for pressure higher than the reel's p.s.i.
- NEVER connect high pressure hose to nozzle extension.

#### **DANGER - RISK OF EYE INJURY**

- ALWAYS wear safety goggles when using this equipment
- NEVER substitute safety glasses for safety goggles.

## **DANGER - RISK OF EXPLOSION OR FIRE**

NEVER spray flammable liquids

#### WARNING -RISK OF ELECTRICAL SHOCK

- NEVER spray near power source.
- DO NOT touch the plug with wet hands.

#### **DANGER - RISK OF MOVING PARTS**

- BE AWARE that the recoil spring is under max tension without the hose installed when shipping.
- BE CAREFUL not to accidentally disengage locking pawl as the drum will spin with uncontrolled speed.



## /!\ DANGER - RISK OF CHEMICAL BURN

- DO NOT use acids, gasoline, kerosene, or any other flammable materials. Use only household detergents, cleaners and degreasers recommended for pressure washers.
- · WEAR protective clothing to protect eyes and skin from contact with sprayed materials.
- · DO NOT use chlorine bleach or any other corrosive compound















#### 2. Products Specifications

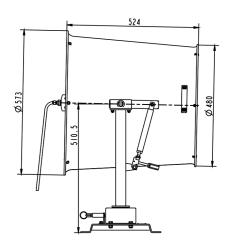
#### Motorless High Pressure Water Jetting High Speed Rotating Wind Blowing Fog Cannon

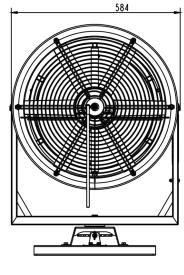
Motorless Wind Blowing Fog Cannon is comprised of an air duct, support, fan blade, rotating shaft, spray rod assy, air spring assy, base assy.

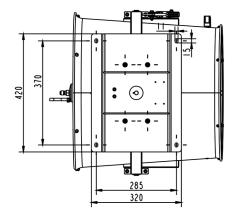
Driven by high-pressure water jetting, the blades rotate at high speed to deliver the fog a greater distance. The high pressure water jet is used to power the fan blade to rotate at high speed without the motor to save energy. The electric swing mechanism (DC12V or 24V), remote swing start and stop controller are optional. It can be used for dust suppression, sanitation, cooling, misting, disinfection and chemical spray etc.

Description	H6.500	H6.501
Suitable pressure range:	15-30Mpa 15-	15-30Mpa 15-
Suitable for Flow range:	30L/min	30L/min
Effective injection distance:	15-30M	15-30M
Wind leaf speed:	500-2500Rpm/min	500-2500Rpm/min
Adjustable base:	360 degrees adjustable with locking.	
Pitch angle:	The pitch angle is up to 60 degrees and the elevated angle is 4 degrees.	

#### 3. Overall Dimensions







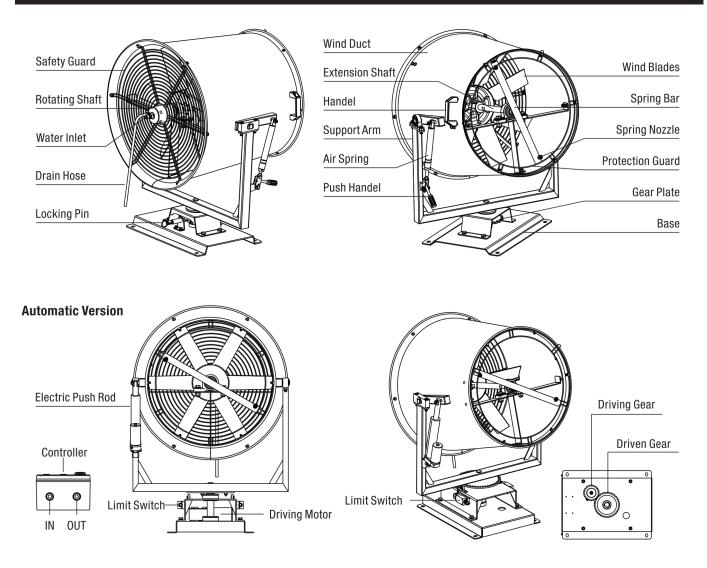
Side View

**Back View** 

**Bottom View** 



#### 4. Parts Identification

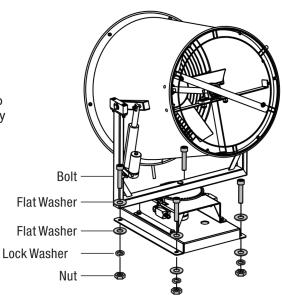


#### 5. Base Installation

 Place the Dust Supression Cannon on a flat and solid surface.
 To mount to a solid structure, use 4 pieces of M10x20 or 25 bolts, 8 flat washers, 4 lock washers and nuts.
 Mounting hardware is NOT provided.

3. The mounting base of the Fog Cannon has 4 holes sized 11x15mm.

4. Loosely fit two pieces of mounting hardware so that the Fog Cannon can be slid into position. Fit the Fog Cannon. Install two pieces of hardware at the other end of the Fog Cannon. Securely fasten all bolts and nuts.





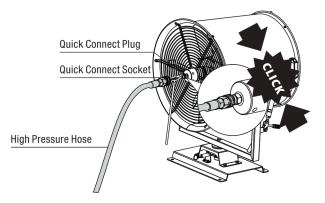
#### 6. Attaching Inlet Hose

1. Pull the slip ring on the Quick Disconnect Socket of high pressure hose back.

2. Put onto the Quick Disconnect Plug of the water inlet of the fog cannon.

3. Release the slip ring on the Quick Disconnect Socket and twist. Listen for click to ensure both Quick Disconnects are coupled.

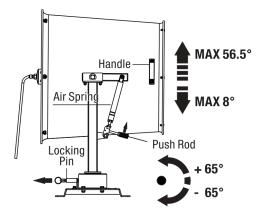
4. Pull high pressure hose to ensure they do not separate.



#### 7. Wind Duct Angle Adjusting

1. Pull the Push Rod up and hold the handle to adjust the wind duct from the maximum elevation angle of 56.5° to the maximum depression angle of 8°. Release the Push Rod and stop the Wind Duct at any angle in between.

2. Pull the Locking Pin out and turn it 90° to put it into the glove. The Wind Duct can turn 360° against the base to the left or right. Pull out the Locking Pin and turn it 90° and release it back into the hole to lock down at the desired angle.



#### 8. Connect Wire For The Controller

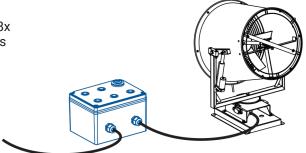
#### 7,2 Mounting Of Reel On Solid Structure

1. Pull out hose until reel latches.

2. To mount reel to a solid structure use 4pcs M8x20 bolts, 8x flat washers, 8x lock washers and nuts. Mounting hardware is not provided.

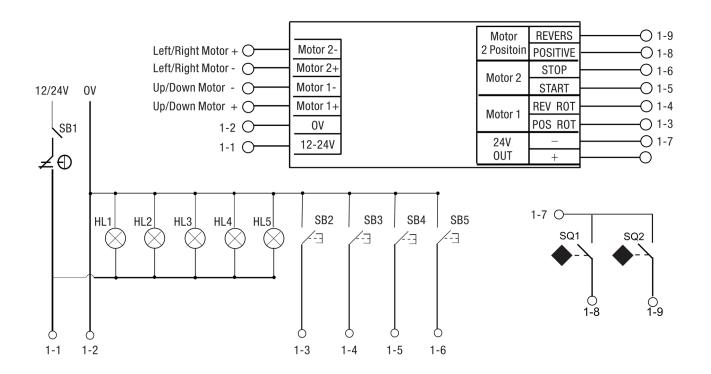
3. The mounting base of the reel has 4x 13mm holes. 4. Loosely fit two pieces of mounting hardware that reel can be slid into position. Fit reel. Install two pieces of hardware in other end of reel.

Securely fasten all bolts and nuts.



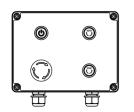


#### 9. Circuit Diagram



#### 10. Automatic Controller

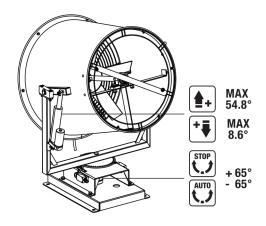
- 1. Press () to turn on the power supply of controller.
- 2. To start AUTO swing press (1) it will swing from left to right at MAX 65°, Press (3) to stop at any angle in between.
- 3. For automatic version Press (1) to adjust the angle of wind duct from the MAX elevation angle of 54.8° to the MAX depression angle of 8.6°.
- 4.  $\bigcirc$  is for emergency stop.



Controller for AUTO model



Controller for SEMI-AUTO model



#### 11. OPERATION

#### **11.1 START SPRAYING**

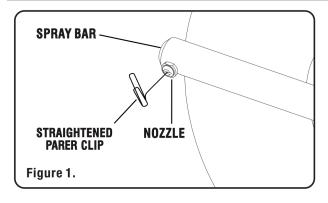
- 1. Connect the high pressure hose socket onto the inlet quick-connect plug of the fog cannon.
- 2. Adjust the wind duct angle for the manual adjusting version, and lock into place.
- 3. Follow the start instructions to start the pressure washer.
- 4. Adjust the pressure rating of the pressure washer to alter the blowing power.
- 5. Switch ON the controller and press button to start AUTO swing or adjusting the angle.

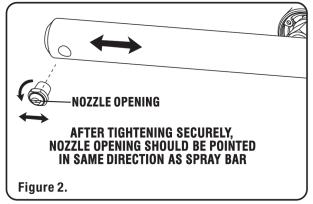
#### **11.2 STOP SPRING**

- 1. Stop the pressure washer.
- 2. Disconnect the pressure washer hose.
- 3. Switch OFF the controller.



#### 12. Nozzle Cleaning and Maintenance





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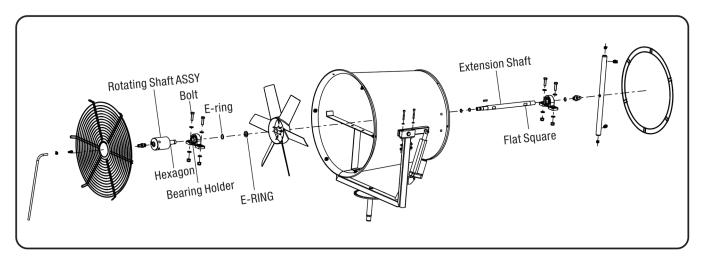
A clogged or dirty nozzle will result in excessive pump pressure and slow rotation or vibration.

- 1. Turn off the pressure washer and the water supply.
- 2. Disconnect the high pressure hose from the unit.
- 3. Using a wrench (not provided) remove the nozzle from the spray bar.
- 4. Using a straightened paper clip, free any foreign material clogging or restricting the nozzle. (Figure 1)

5. Flush any debris out of the nozzle. Direct the flow of water through the nozzle backwards from the outside to the inside.

6. Reinstall the nozzle to the spray bar and tighten securely. Align the nozzle opening. **(Figure 2)** 

7. If your spray pattern begins to change, it could mean that the nozzles are worn and they will need to be replaced.



A worn Rotating Shaft ASSY will result in 1) Leaking, 2) Slow rotating or vibration. The Rotating Shaft ASSY can be replaced or maintained.

1. Remove the back Safety Guard and loosen the bolt and nut of the Bearing Holder.

2. Use a 22 sized wrench to hold on the Flat Square of Extension Shaft, meanwhile to use a 19 sized wrench

to hold on the Hexagon of Rotating Shaft ASSY, turn anti-clockwise to loose and remove.

3. Remove the E-ring on the Bearing holder and remove the rotating shaft ASSY. 4.

Inspect and replace any worn parts and reinstall.



## 14. Troubleshooting

PROBLEM	CAUSE	SOLUTION
Inadequate jetting power	<ol> <li>Not enough PSI from pressure washer.</li> <li>Inadequate water supply. 3. Engine RPM on pressure washer is too low.</li> <li>Nozzle obstructed or worn. 5. Incorrect nozzle orifice size.</li> </ol>	<ol> <li>Ensure unit produces a minimum 2000 PSI. Most effective cleaning range is 2500-4000 PSI.</li> <li>Turn water supply completely "ON" and/or clean water filter on pressure washer.</li> <li>Ensure unit produces a minium of 3.4GPM.</li> <li>Increase throttle. 4. Clean or replace as necessary. 5. Insert correct nozzle.</li> </ol>
Rotating bar will not rotate	1. Seal has drag. 2. Snap ring dislodged. 3. Seal malfunction. 4. Bearing failure. 5. Nozzle clogged.	1. Allow for break-in period. 2. Do not use! Contact your Customer Service. 3. Do not use! Contact your Customer Service. 4. Do not use! Contact your Customer Service. 5. Clean or replace.
Excessive vibration	<ol> <li>Nozzle clogged. 2. Rotating bar, bolts or fittings loose.</li> <li>Rotating bar or swivel rotor bent.</li> </ol>	1. Clean or replace. 2. Tighten. 3. Replace.
Water weeping from swivel	1. Small amount of seepage is normal.	1. No modification is necessary.
Water shooting from swivel	1. Seal malfunction.	1. Replace.



## NOTES

