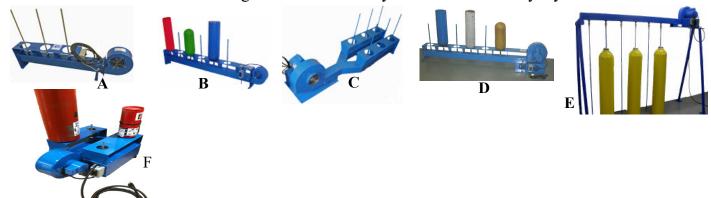
### **INSTRUCTIONAL MANUAL**

# CYLINDER FORCED HOT AIR DRYERS

This Manual Is For The Following Forced Hot Air Dryers Manufactured By Hydro-Test Products:



Style	Model No.	Туре	Voltage	Amp Draw
A	530-013	Light Duty for Portable Size Cylinders (3 outlets)	115-V-1Phase-60Hz	12
В	530-003	Light Duty for Portable Size Cylinders	115V-1Phase-60Hz	12
C	530-020-Y	Heavy Duty for Portable Size Cylinders	115V-1Phase-60Hz	20
C	530-021-Y	Heavy Duty for Portable Size Cylinders	220V-1Phase-60Hz	11
C	530-019-Y	Heavy Duty for Portable Size Cylinders	220V-1Phase-50Hz	9
D	530-020	Heavy Duty for Portable Size Cylinders	115V-1Phase-60Hz	20
D	530-021	Heavy Duty for Portable Size Cylinders	220V-1Phase-60Hz	11
D	530-019	Heavy Duty for Portable Size Cylinders	220V-1Phase-50Hz	9
E	530-022	Heavy Duty for Full Size Cylinders	115V-1Phase-60Hz	20
E	530-023	Heavy Duty for Full Size Cylinders	220V-1Phase-60Hz	11
E	530-024	Heavy Duty for Full Size Cylinders	220V-1Phase-50Hz	9
F	530-010	4 Station Light Duty for Portable Size Cylinders	115-V-1Phase-60Hz	12

Cylinder dryers are designed to dry cylinders after the hydrostatic test has been completed. Warm air is forced into the cylinders through a drying tube that is inside the cylinder.

### SET UP

Remove the Cylinder Dryer from its shipping container and inspect it for any damage. Report any damage found within five days of receipt with the delivering carrier.

### Set Up Of Dryers For Portable Size Cylinders ( styles A,B,C and D )

- 1. Find a suitable area in your shop to place the dryer.
- 2. Install the drying tubes into the dryer frame 1 revolution past hand tight
- 3. Have the on/off electric switch facing the operator
- 4. Confirm that electrical box switch is in the OFF position
- 5. Plug in the electrical cord from the dryer electrical box into proper receptacle
- 6. Turn the electrical switch to the ON position
- 7. Within 90 seconds warm air should be coming out of the tubes

Note: the 220V dryers are supplied without a plug at the end of the power cord. Due to wide variety of outlet plug configurations for 220 volt service. You will have to supply your own electrical plug or have an electrician hard wire the dryer.

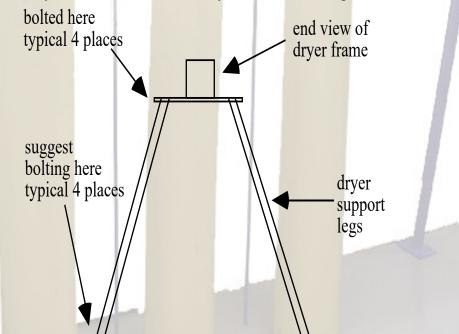
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#### **SET UP** continued

### Set Up Of Dryers For Full Size Cylinders (style E)

- 1. Find a suitable area in your shop to place the dryer.
- 2. Locate the 4 frame legs
- 3. Starting at the motor/blower end, assemble 2 legs to frame with supplied nuts, bolts, washers (see pic below)
- 4. With assistance elevate other end and assemble those 2 legs to frame
- 5. It is suggested that the support legs be anchored into a concrete floor for stability
- 6. Install the drying tubes into the dryer frame via quick disconnect nipples and couplers. The coupler is on the tube and the nipple is on the frame
- 7. Have the on/off electric switch facing the operator
- 8. Confirm that electrical box switch is in the OFF position
- 9. Plug in the electrical cord from the dryer electrical box into proper receptacle
- 10. Turn the electrical switch to the ON position
- 11. Within 90 seconds warm air should be coming out of the tubes

Note: the 220V dryers are supplied without a plug at the end of the power cord. Due to wide variety of outlet plug configurations for 220 volt service. You will have to supply your own electrical plug or have your electrician wire the dryer into the building.





# Hydro-Test Products Inc.

85 Hudson Road Stow, Massachusetts, USA 01775
Tel: 800-225-9488 / 978-897-4647 Fax: 978-897-1942
www.hydro-test.com



### **Basic Operation**

Once dryer has been assembled and electrical verified, too dry cylinders after hydrostatic test:

- 1. After test invert cylinder to remove test water
- 2. For Portable Size Cylinder Dryer:
  - Bring cylinder over to dryer
  - With cylinder in the inverted position place over drying tube
- 3. For Full Size Cylinder Dryer:
  - Roll cylinder over to dryer
  - Take dryer tube and place inside cylinder
  - Roll cylinder and tube underneath frame of dryer centered under quick disconnect nipple
  - Quick couple tube to nipple
- 4. Drying time is predicated upon these factors;
  - Size of cylinder (small inverted cylinders dry quicker than upright full size cylinders)
  - Material of cylinder (thin wall steel 4B specification dry quicker than 3AA specification)
  - Ambient room temperature
  - Ability to drain as much water out of cylinder prior to putting on dryer

#### Typical drying times are:

Thin wall steel portable cylinders:
 Aluminum 3AL spec portable cylinder:
 Steel 3AA spec portable cylinder:
 Steel 3AA spec full size cylinder:
 60 minutes each
 60 minutes each

#### Warnings:

- Never operate the dryer when the floor or surroundings are wet.
- Do not block off any of the dryer tubes this will shorten the heating element's life
- Turn off the dryer when not in use.
- Do not substitute the dryer tubes with other material.
- Do not try to increase drying temperature.
- Do not remove any of the guards on the blower/motor.
- Always disconnect the power before working on the dryer.

### Maintenance

- Replace any damaged dryer tubes promptly for best performance.
- Lubricate motor, every 200 hours if oil cups are provided (located at motor ends)
- Replace heating element with original equipment parts when damaged.



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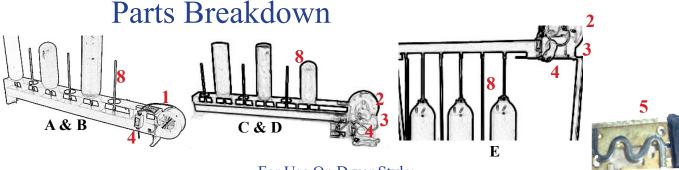
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### Maintenance continued

#### Replacing the heating element

- 1. Unplug the cylinder dryer from your power supply.
- 2. Remove the cover from the on/off switch.
- 3. Disconnect the wires that go over to the heating element, inside the switch. (mark wires before disconnecting them so you can reconnect them properly).
- 4. Remove the screws holding the blower/motor assembly to the dryer frame(or dryer base plate depending on type of dryer).
- 5. Remove the blower/motor assembly from the dryer frame.
- 6. Inside the 4" square tube you will see the heating element. Loosen the wire strain relief on the 4" square tube and pull the wire through to the heating element.
- 7. Slide the heating element out of the square tube.
- 8. Remove the wire from the old heating element, if it's not damaged, and reinstall it onto the new heating element.
- 9. To help the wire connectors withstand the heat we recommend coating them with clear silicone or similar compound that is capable of withstanding 200 degrees. Be careful not to get any of the silicone on the element coils. Allow the silicone to cure before reinstallation.
- 10. To reinstall simply reverse the procedure for removal.



For Use On D	ryer Style
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For Use On Dryer Style:									
			A &B	Cé	&D	E		F	
Item	Part No.	Description	115V	115V	220V	115V	220V	115V	6 (((((5)))))
1	210-097	Motor/Blower Assy	X					X	
2	210-096	Blower Assembly		X	X	X	X		
3	170-013	1/2HP Motor		X	X	X	X		
4	170-026	Electrical Box	X	X	X	X	X	X	
5	170-044	Thermal Unit	X	X		X		X	
5	170-052	Thermal Unit			X		X		- 6 B B B
6	210-093	Fan Guard	X	X	X	X	X	X	
7	170-130	Heating Element		X		X			
7	170-131	Heating Element	X		X		X	X	
8	210-250	Drying Tube, 18"	X	X	X				
8	210-251	Drying Tube, 60"				X	X		9
8	210-049	Drying Tube, 6"							
9	230-015	Optional Internal Drying Blow Gun Assembly - Assist in removing water droplets from cylinder before drying							
10	530-012	Adapter plate for small size cylinders						X	10