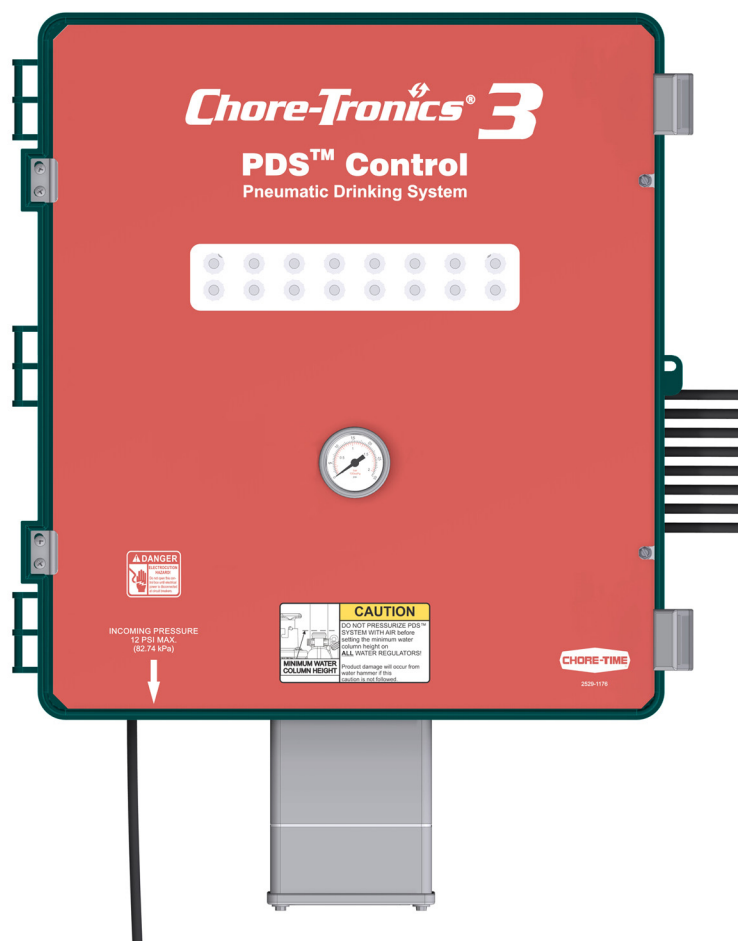




Poultry Production Systems

Chore-Tronics® 3 Auto Adjust PDS™ 4, 8, & 16 Station Pneumatic Drinking System



Installation and Operators Manual

Installation and Operators Manual

Limited Warranty

Chore-Time Group, a division of CTB, Inc. (“Chore-Time”) warrants new CHORE-TIME Cage and Cage Components manufactured by Chore-Time to be free from defects in material or workmanship under normal usage and conditions, for One (1) year from the date of installation by the original purchaser (“Warranty”). If such a defect is determined by Chore-Time to exist within the applicable period, Chore-Time will, at its option, (a) repair the Product or Component Part free of charge, F.O.B. the factory of manufacture or (b) replace the Product or Component Part free of charge, F.O.B. the factory of manufacture. This Warranty is not transferable, and applies only to the original purchaser of the Product.

CONDITIONS AND LIMITATIONS

THIS WARRANTY CONSTITUTES CHORE-TIME’S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES. CHORE-TIME shall not be liable for any direct, indirect, incidental, consequential or special damages which any purchaser may suffer or claim to suffer as a result of any defect in the Product. Consequential or Special Damages as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs, and operational inefficiencies. *Some jurisdictions prohibit limitations on implied warranties and/or the exclusion or limitation of such damages, so these limitations and exclusions may not apply to you. This warranty gives the original purchaser specific legal rights. You may also have other rights based upon your specific jurisdiction.*

Compliance with federal, state and local rules which apply to the location, installation and use of the Product are the responsibility of the original purchaser, and CHORE-TIME shall not be liable for any damages which may result from non-compliance with such rules.

The following circumstances shall render this Warranty void:

- Modifications made to the Product not specifically delineated in the Product manual.
- Product not installed and/or operated in accordance with the instructions published by the CHORE-TIME.
- All components of the Product are not original equipment supplied by CHORE-TIME.
- Product was not purchased from and/or installed by a CHORE-TIME authorized distributor or certified representative.
- Product experienced malfunction or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity.
- Product experienced corrosion, material deterioration and/or equipment malfunction caused by or consistent with the application of chemicals, minerals, sediments or other foreign elements.
- Product was used for any purpose other than for the care of poultry and livestock.

The Warranty and Extended Warranty may only be modified in writing by an officer of CHORE-TIME. CHORE-TIME shall have no obligation or responsibility for any representations or warranties made by or on behalf of any distributor, dealer, agent or certified representative.

Effective: **April, 2014**

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About This Manual

The intent of this manual is to help you in two ways. One is to follow step-by-step in the order of assembly of your product. The other way is for easy reference if you have questions in a particular area.

Important: Read ALL instructions carefully before starting construction.

Important: Pay particular attention to all SAFETY information.

- *Metric measurements are shown in millimeters and in brackets, unless otherwise specified. “ ” equals inches and “ ’ ” equals feet in English measurements.*

Examples:

1" [25.4]

4' [1.219]

- Optional equipment contains necessary instructions for assembly or operation.
- Very small numbers near an illustration (*i.e.*, 1257-48) are identification of the graphic, not a part number.

Note: The original, authoritative version of this manual is the English version produced by CTB, Inc. or any of its subsidiaries or divisions, (hereafter collectively referred to as "CTB"). Subsequent changes to any manual made by any third party have not been reviewed nor authenticated by CTB. Such changes may include, but are not limited to, translation into languages other than English, and additions to or deletions from the original content. CTB disclaims responsibility for any and all damages, injuries, warranty claims and/or any other claims associated with such changes, inasmuch as such changes result in content that is different from the authoritative CTB-published English version of the manual. For current product installation and operation information, please contact the customer service and/or technical service departments of the appropriate CTB subsidiary or division. Should you observe any questionable content in any manual, please notify CTB immediately in writing to: CTB Legal Department, P.O. Box 2000, Milford, IN 46542-2000 USA.

Safety Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety decals immediately.

Using the equipment for purposes other than specified in this manual may cause personal injury and/or damage to the equipment.

Safety–Alert Symbol



This is a safety–alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury. This equipment is designed to be installed and operated as safely as possible...however, hazards do exist.

Understanding Signal Words

Signal words are used in conjunction with the safety–alert symbol to identify the severity of the warning.



DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



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



CAUTION indicates a hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

Safety Instructions

Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Electrical Hazard

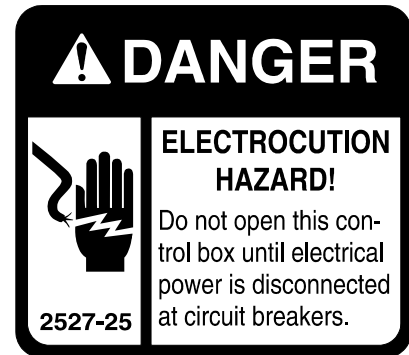
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.



General

Support Information

The Chore-Tronics 3 Auto Adjust 4, 8, and 16 Station Pneumatic Drinking System (PDS™) Controls are designed to control water line regulators in a Chore-Time Nipple Watering System. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury.

This manual is designed to provide comprehensive planning and installation information. The Table of Contents provides a convenient overview of the information in this manual.

Installation Information

Please read the installation instructions in this manual prior to beginning the installation. This manual provides the necessary information on the installation, operation and maintenance of the Chore-Time equipment you have purchased.

The Auto Adjust PDS™ Control is available in 4, 8, or 16. Each station is capable of controlling up to two (2) individual Chore-Time water regulators. For example a 4 station control can regulate and flush up to 8 individual water regulators.

Compressed air must be available and regulated between 6 and 12 psi [41.37 and 82.74 kPa]. Each PDS™ control consumes a low volume of air when in operation. Therefore, one centrally located air compressor with a holding tank can easily supply enough air for multiple PDS™ controls. See “Adjust Air supplied to the PDS Control” on page 8 of this manual for recommended air compressor specifications.

The System Layout

Below are examples of the Chore-Time Nipple Watering system layouts. These are to be used to show different methods for installing the PDS™ system. Refer to Parts List Section, **page 20** for item part numbers.

Broiler System Layout

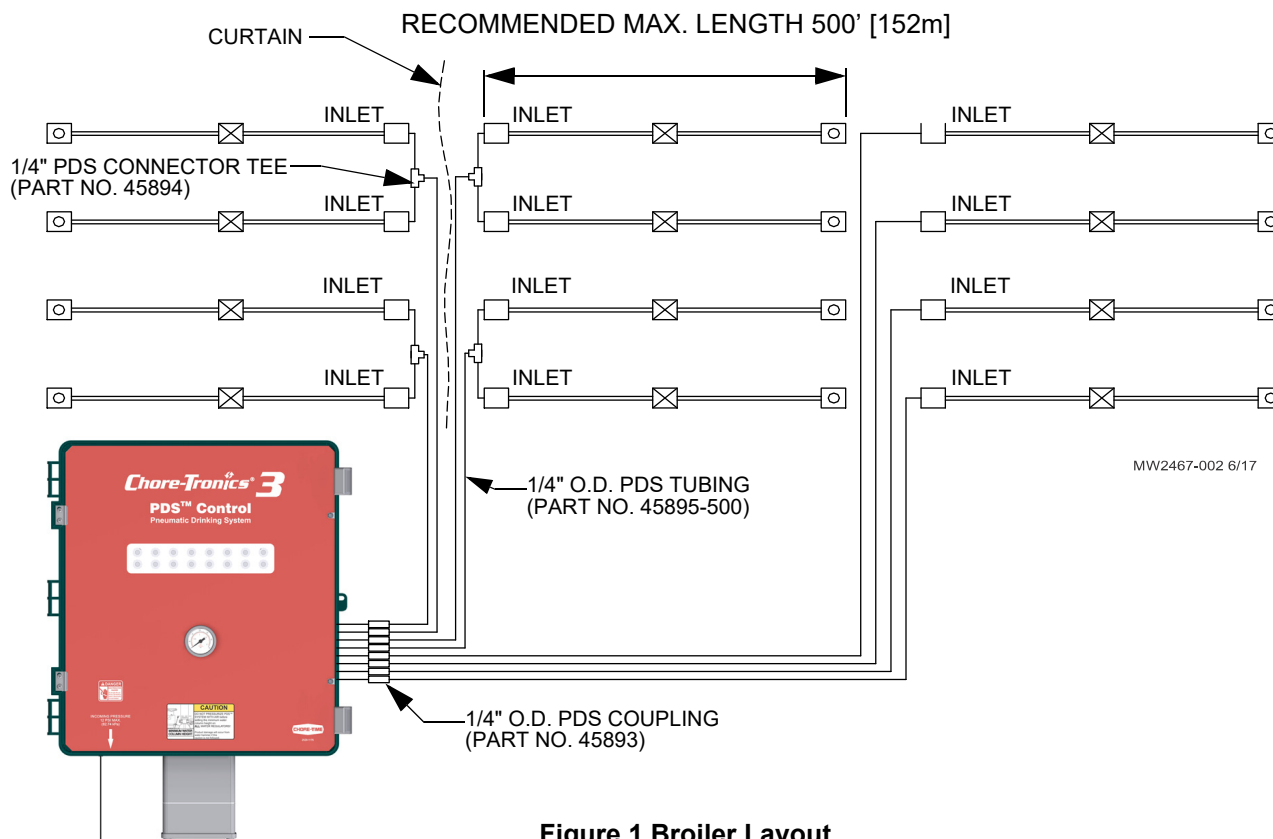


Figure 1. Broiler Layout

Multiple House Layout

Air can be run from a central location to supply multiple houses. Air lines can consist of Chore-Time tubing (Part number 45895-500), which will supply a sufficient air supply, or PVC plumbing.

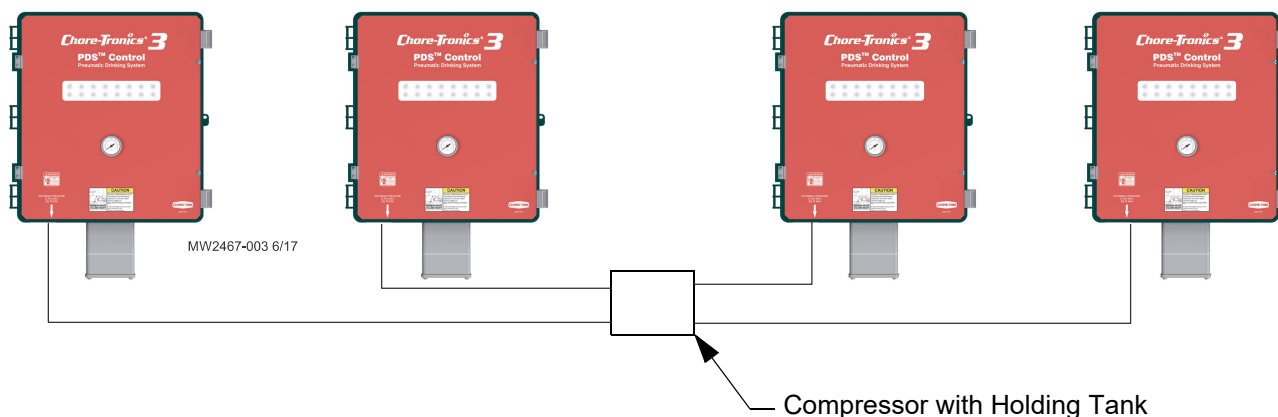


Figure 2. (4 House Layout)

Pressure Sensor location

The Pressure Sensor should be installed somewhere in the first half of Drinker Line in the brood area.

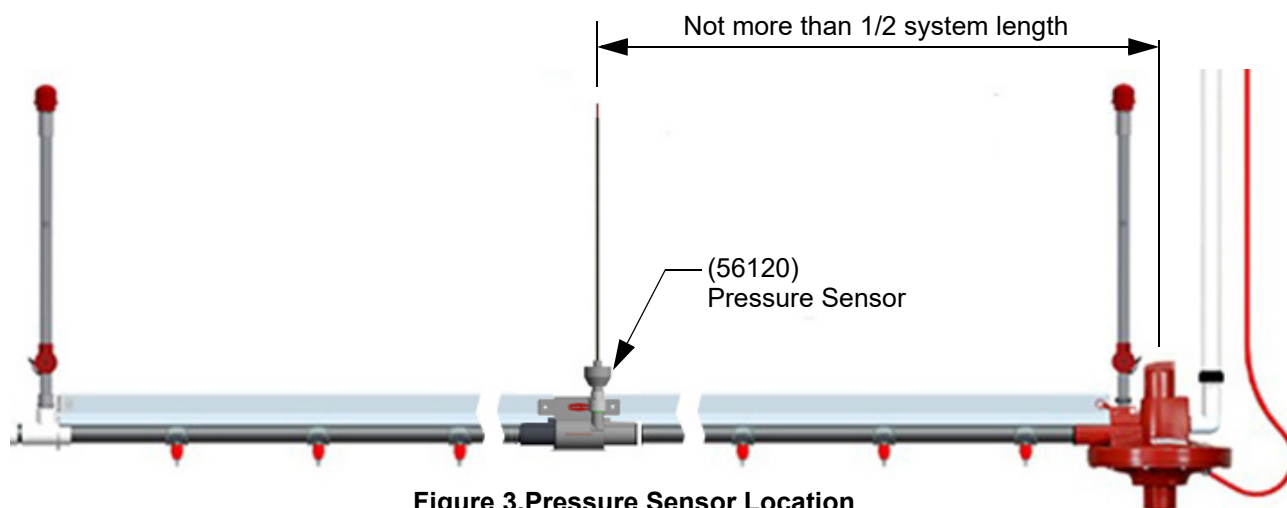


Figure 3. Pressure Sensor Location

Installation

Locate the control in a convenient location where it can easily be seen and adjusted.

Fasten the control to the wall through the four holes in the corners (mounting hardware not supplied)

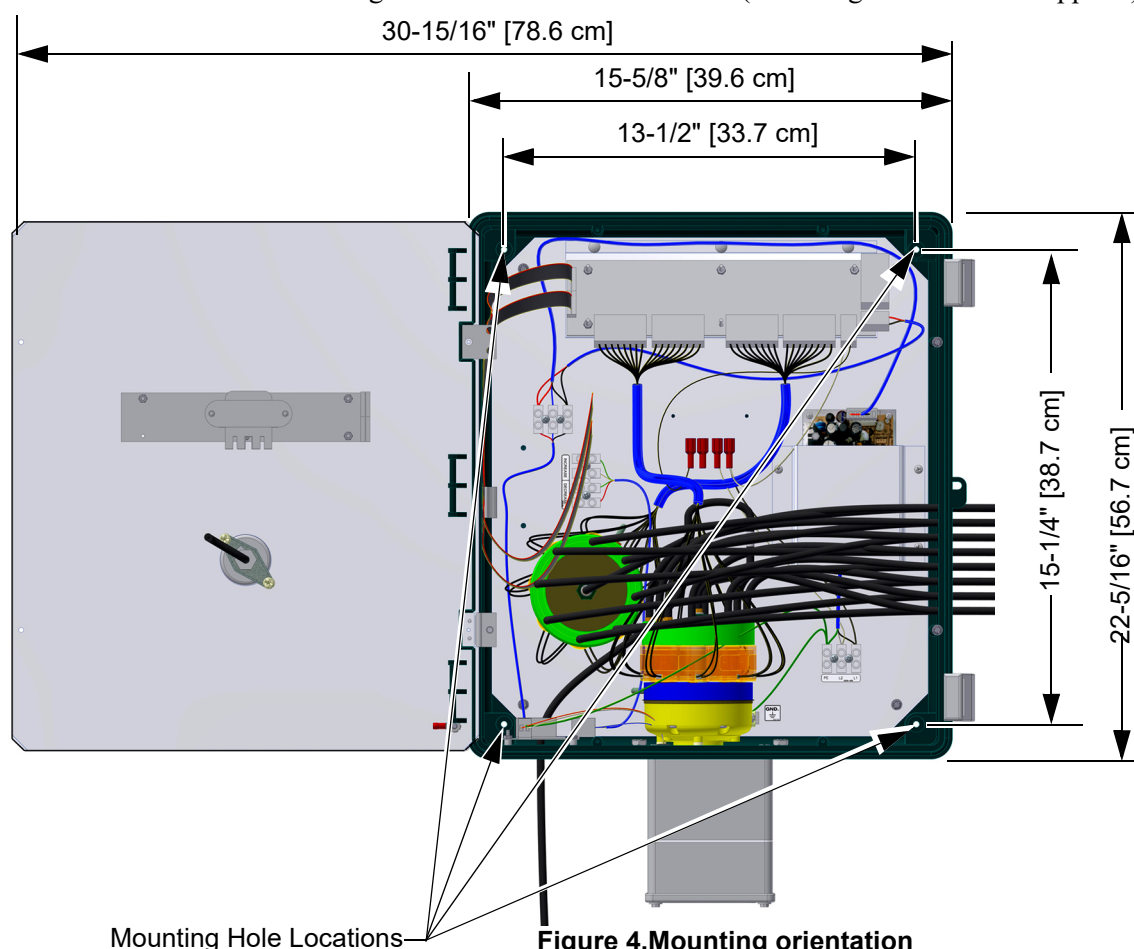


Figure 4. Mounting orientation

Tubing

Route the regulator tubing so any condensation in the air lines will not run into the control. Allow slack in the regulator tube leads so that they can be pinched for maintenance and diagnostic purposes, **see figure 5.**

Connect the regulator tubing to the control tube leads using tube couplings. Warming the end of the tubing will aid in installation.



Caution: Over-Heating of tube end can cause distortion and leaking.

Adjust Air supplied to the PDS Control



Caution: DO NOT FLUSH DRINKER

LINES WITH PDS™ CONTROL unless drinker lines are pressurized with water! Damage may occur if this caution is not followed.

BEFORE connecting the compressed air supply to the control, the compressed air supplied to the PDS™ control, must be regulated between 6 and 12 psi [41.37 and 82.74 kPa]. Failure to do this will result in damage to the gauges and possibly other components. After the air supplied from the compressor is confirmed to be between 6 and 12 psi [41.37 and 82.74 kPa], connect the air supply to the incoming pressure line on the PDS control.

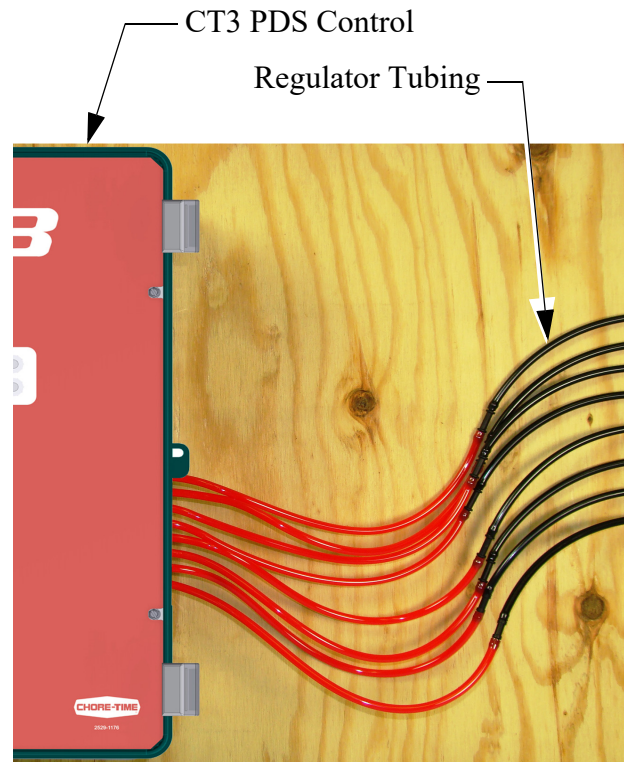


Figure 5. Regulator Tube Leads

Air Pressure Gauge

The PDS Control has an Air Pressure Gauge (see figure 6.) to monitor the incoming air pressure. Under normal operating conditions, this gauge should show between 6 and 12 psi [41.37 and 82.74 kPa] of air pressure.

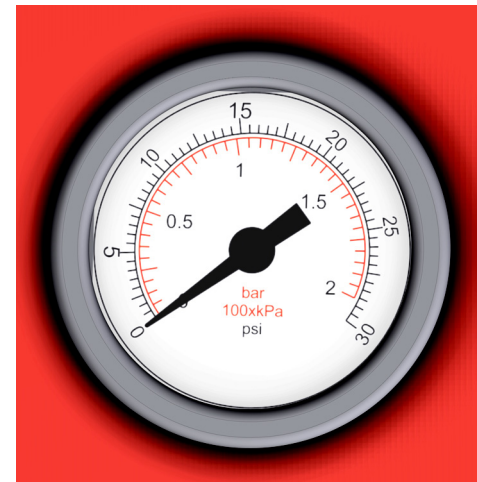


Figure 6. Air Pressure Gauge

Regulator Minimum Water Column Provision

In the event of air pressure loss to the PDS Control an internal spring in the Regulator will maintain a minimum water column height until the air supply can be restored. This minimum water pressure will be in the 4" to 6" [10.2cm to 15.2cm] range and will vary with the incoming water supply pressure. The PDS Control cannot adjust the water column height below this minimum.

Start Up

Step 1: Charging the Lines

! Caution: DO NOT FLUSH DRINKER LINES WITH PDS™ CONTROL unless drinker lines are filled with water! Damage may occur if this caution is not followed.

Lines may be flushed at any time using the manual flush feature built into the Regulator.

Once all the tubing has been ran from the Control and connected to the Regulators and before compressed air is connected to the PDS Control, the drinker lines should be charged with water. This can be done by turning the selector knob on each Regulator to the "ON" position. It is recommended to charge two lines at a time.

Step 2: Connecting the compressed air supply

Air compressor (not supplied) guidelines to operate the system.

- All air compressors must have a minimum rating to run 4 times per hour for 5 minutes each run.
- One (1) PDS™ Control - 2 gallon minimum recommended air supply tank.
- Two (2) - four (4) PDS™ Controls - 5 gallon minimum recommended air supply tank.
- Five (5) - six (6) PDS™ Controls - 10 gallon minimum recommended air supply tank.
- Air regulator with 1/4" fitting.
- Approved air regulators:
 - Grainger Industrial Supply Part number 4ZMO8
 - Grainger Industrial Supply Part number 4ZMO6
 - NAPA Part number 90-725

Note: The PDS Control operates between 6 & 12 psi [41.37 kPa & 82.74 kPa]. Most air Regulators supplied with air compressors will not effectively regulate air pressure at this low pressure. Chore-Time recommends using one of the approved air regulators listed above.

! Caution: DO NOT FLUSH DRINKER LINES WITH PDS™ CONTROL unless drinker lines are pressurized with water! Damage may occur if this caution is not followed.

Lines may be flushed at any time using the manual flush mode feature built into the Regulator

Each regulator tubing lead may be used to supply air to two nipple line regulator inlets. This will assure enough flush water volume per line to move air and sediment down the nipple lines and out.

Run each air supply tube across the ceiling to a 1/4" tee to split the line and then follow the Regulator water supply line down to the Regulator and attach it using the air supply connection. **see figure 7.**

Step 3: Air Leak Test

Check each control and house for air leaks with the water column gauge at 8 inches [20.32 cm]. To check for air leaks in the control or the house pinch the incoming air supply tube to shut off the incoming air pressure. Watch the air pressure gauge on the control, the gauge should not drop any more than 2 psi [13.79 kPa] in 1 minute. If the air pressure does drop faster than 2 psi [13.79 kPa] in 1 minute, refer to the **"TroubleShooting"** on page 18. Repeat this procedure for every PDS control.

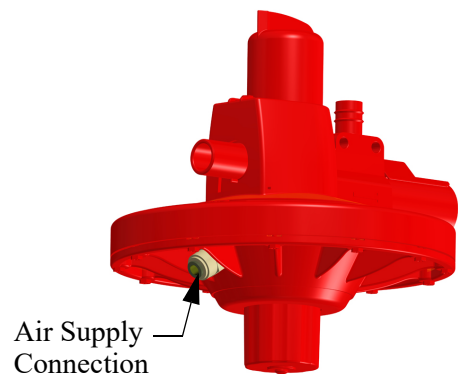
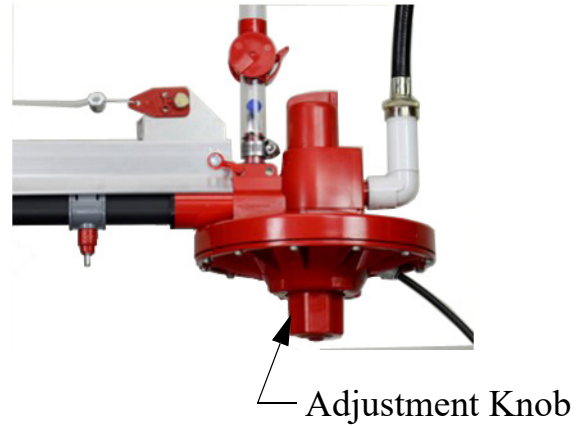


Figure 7. Air Supply to Regulator

Step 4: Setting the Regulators Drinker Line Minimum Water Column

1. Disconnect the Main Air Hose from the air compressor.
2. Turn on the water to the drinker lines.
3. Go to each Line Regulator and adjust the water column to the minimum you want with no air in the system.
4. Connect the Main Air Line to an air compressor.
5. Refer to “Test Flush” on page 12 to test the PDS system.

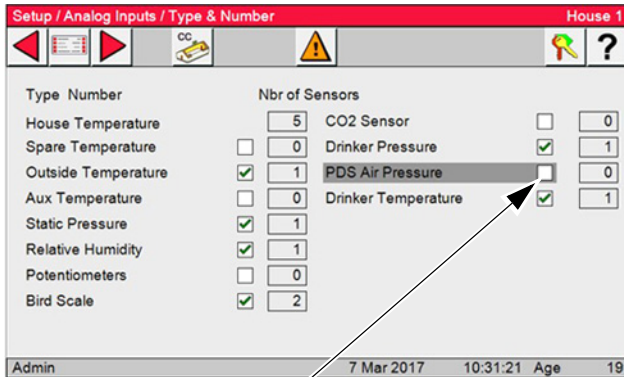


Note: Do Not move Relay Switches to "Manual" or "Auto" for the PDS Regulator Increase/Decrease until you have checked all the PDS Settings.

CT3 PDS Setup Screens

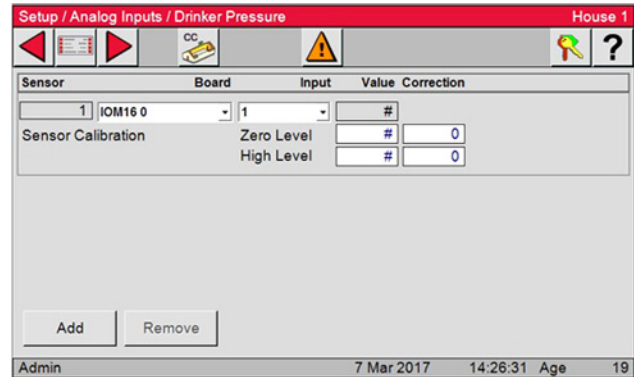
Attention! Refer to the *Chore-Tronics 3 Manual MT2398* to learn about how to navigate screens of the *Chore-Tronics 3 Control*.

Analog Inputs Setup Screens



Type	Number	Nbr of Sensors		
House Temperature		5	CO2 Sensor	<input type="checkbox"/> 0
Spare Temperature	<input type="checkbox"/>	0	Drinker Pressure	<input checked="" type="checkbox"/> 1
Outside Temperature	<input checked="" type="checkbox"/>	1	PDS Air Pressure	<input type="checkbox"/> 0
Aux Temperature	<input type="checkbox"/>	0	Drinker Temperature	<input checked="" type="checkbox"/> 1
Static Pressure	<input checked="" type="checkbox"/>	1		
Relative Humidity	<input checked="" type="checkbox"/>	1		
Potentiometers	<input type="checkbox"/>	0		
Bird Scale	<input checked="" type="checkbox"/>	2		

Admin 7 Mar 2017 10:31:21 Age 19

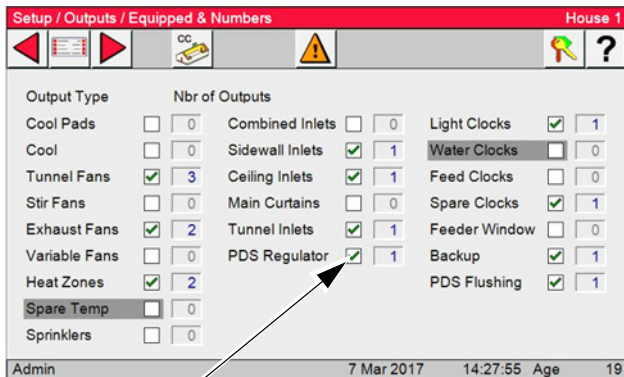
Sensor	Board	Input	Value	Correction
1 JOM16 0		1	#	
Sensor Calibration		Zero Level	#	0
		High Level	#	0

Add Remove

Admin 7 Mar 2017 14:26:31 Age 19

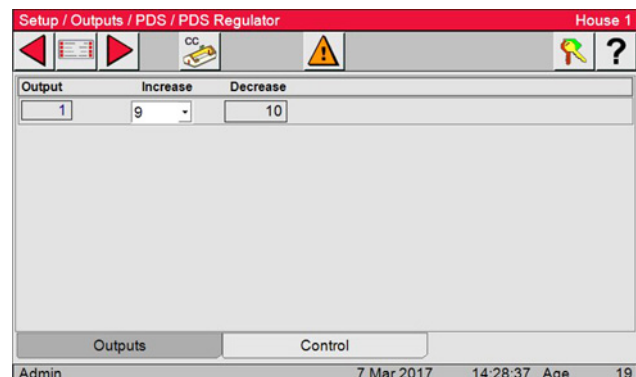
Drinker Pressure Sensor Setup

PDS Regulator Setup Screen



Output Type	Nbr of Outputs		
Cool Pads	<input type="checkbox"/> 0	Combined Inlets	<input type="checkbox"/> 0
Cool	<input type="checkbox"/> 0	Sidewall Inlets	<input checked="" type="checkbox"/> 1
Tunnel Fans	<input checked="" type="checkbox"/> 3	Ceiling Inlets	<input checked="" type="checkbox"/> 1
Stir Fans	<input type="checkbox"/> 0	Main Curtains	<input type="checkbox"/> 0
Exhaust Fans	<input checked="" type="checkbox"/> 2	Tunnel Inlets	<input checked="" type="checkbox"/> 1
Variable Fans	<input type="checkbox"/> 0	PDS Regulator	<input checked="" type="checkbox"/> 1
Heat Zones	<input checked="" type="checkbox"/> 2		
Spare Temp	<input type="checkbox"/> 0		
Sprinklers	<input type="checkbox"/> 0		

Admin 7 Mar 2017 14:27:55 Age 19

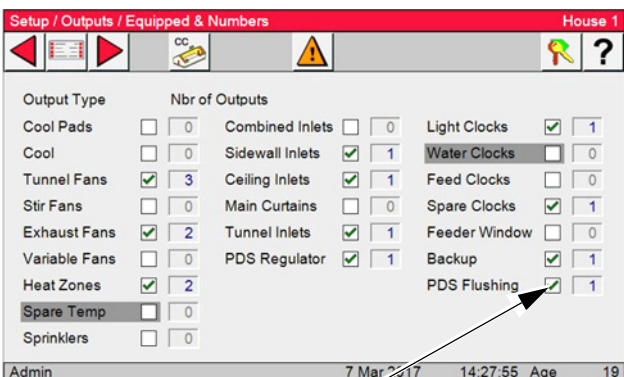
Output	Increase	Decrease
1	9	10

Outputs Control

Admin 7 Mar 2017 14:28:37 Age 19

Assigning PDS Regulator Adjustment Relays

PDS Flushing Setup Screen



Output Type	Nbr of Outputs		
Cool Pads	<input type="checkbox"/> 0	Combined Inlets	<input type="checkbox"/> 0
Cool	<input type="checkbox"/> 0	Sidewall Inlets	<input checked="" type="checkbox"/> 1
Tunnel Fans	<input checked="" type="checkbox"/> 3	Ceiling Inlets	<input checked="" type="checkbox"/> 1
Stir Fans	<input type="checkbox"/> 0	Main Curtains	<input type="checkbox"/> 0
Exhaust Fans	<input checked="" type="checkbox"/> 2	Tunnel Inlets	<input checked="" type="checkbox"/> 1
Variable Fans	<input type="checkbox"/> 0	PDS Regulator	<input checked="" type="checkbox"/> 1
Heat Zones	<input checked="" type="checkbox"/> 2		
Spare Temp	<input type="checkbox"/> 0		
Sprinklers	<input type="checkbox"/> 0		

Admin 7 Mar 2017 14:27:55 Age 19



Test Flush

1. Number of Stations
2. Enter the time of Flush
3. Run Time per Station

Setup / Outputs / Clock / PDS Flushing House 1

Number of Stations: 32 Start: 1 End: 32

Admin 7 Mar 2017 14:29:43 Age 19

Clocks / PDS Flush Clock House 1

ON-at: 14:40 OFF-at: 16:01:20 Run Station: 0:05:00 Run Total: 1:21:20 Run Enabled: 16 of 32

Admin 7 Mar 2017 14:39:02 Age 19

Testing Regulator Set Point

Outputs and Temperatures House 1

On	Off	Output	T-Avg	Timer
73.1	72.1	Tunnel Fan 1	68.7	
73.1	69.1	Tunnel ALLOWED	68.9	
71.1	70.1	Second Static Pressure	68.7	
66.1	67.1	Use Attic Air	68.7	
65.1	64.1	Exhaust Fans 2	68.7	MIN VENT
65.1	64.1	Exhaust Fans 1	68.7	MIN VENT
64.1		Set Temperature	68.7	
63.1	64.1	Heater 2	68.7	

Admin 7 Mar 2017 14:40:06 Age 19

Drinker House 1

Flushing Set Temperature: 72.0 68.7 °F Scheduled Flush

Regulator Set Point: 5 554 In

Admin 7 Mar 2017 14:41:19 Age 19

Edit the Regulator Set Point.
The increase or Decrease Relay will turn on and off until the setting is reached. (+ or - 1 inch).

Automatic Water Column Height

Curves House 1

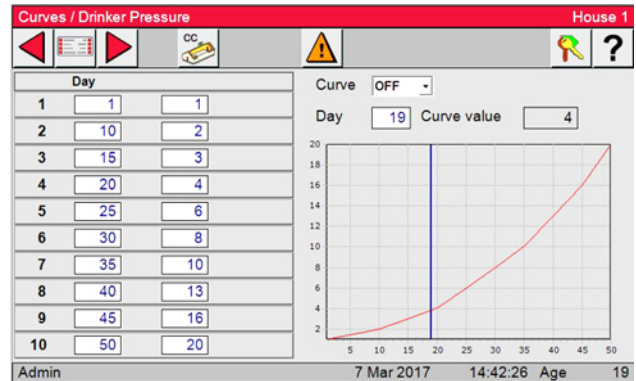
Set Temp RunFor Clock

Min. Ventil. Feeder Wind

Light Clock Drinker Pressure

Curves.MainS Waterflow

Admin 12 Jul 2017 16:32:24 Age 58



If you want to change water column height automatically with bird age you can set that up in this screen.

Flushing The System



Caution: DO NOT FLUSH DRINKER LINES WITH PDS™ CONTROL unless drinker lines are fully charged with water! Damage may occur if this caution is not followed.

Minutes to Flush and Total Line Capacity

		Water Line Length in feet							
Gallons per Minute Flow Rate		100'	200'	300'	400'	500'	600'	700'	800'
	1	3.4	6.8	10.2	13.6	17.0	20.4	23.8	27.2
	2	1.7	3.4	5.1	6.8	8.5	10.2	11.9	13.6
	3	1.1	2.3	3.4	4.5	5.7	6.8	7.9	9.1
	4	0.9	1.7	2.6	3.4	4.3	5.1	6.0	6.8
	5	0.7	1.4	2.0	2.7	3.4	4.1	4.8	5.4
	6	0.6	1.1	1.7	2.3	2.8	3.4	4.0	4.5
	7	0.5	1.0	1.5	1.9	2.4	2.9	3.4	3.9
	8	0.4	0.9	1.3	1.7	2.1	2.6	3.0	3.4
		Estimated Flush Time in Minutes							
	Total Line Capacity 3.4 Gallons	Total Line Capacity 6.8 Gallons	Total Line Capacity 10.2 Gallons	Total Line Capacity 13.6 Gallons	Total Line Capacity 17.0 Gallons	Total Line Capacity 20.4 Gallons	Total Line Capacity 23.8 Gallons	Total Line Capacity 27.2 Gallons	

Gallons of water in one foot of 3/4" Chore-Time water pipe=.034

		Water Line Length in Meters							
		30m	60m	90m	120m	150m	180m	210m	240m
Liters Per Minute Flow Rate	4	3.2	6.3	9.5	12.7	15.8	19.0	22.2	25.3
	6	2.1	4.2	6.3	8.4	10.6	12.7	14.8	16.9
	8	1.6	3.2	4.7	6.3	7.9	9.5	11.1	12.7
	10	1.3	2.5	3.8	5.1	6.3	7.6	8.9	10.1
	12	1.1	2.1	3.2	4.2	5.3	6.3	7.4	8.4
	14	0.9	1.8	2.7	3.6	4.5	5.4	6.3	7.2
	16	0.8	1.6	2.4	3.2	4.0	4.7	5.5	6.3
	18	0.7	1.4	2.1	2.8	3.5	4.2	4.9	5.6
	20	0.6	1.3	1.9	2.5	3.2	3.8	4.4	5.1
	22	0.6	1.2	1.7	2.3	2.9	3.5	4.0	4.6
	24	0.5	1.1	1.6	2.1	2.6	3.2	3.7	4.2
	26	0.5	1.0	1.5	1.9	2.4	2.9	3.4	3.9
	28	0.5	0.9	1.4	1.8	2.3	2.7	3.2	3.6
	30	0.4	0.8	1.3	1.7	2.1	2.5	3.0	3.4
			Estimated Flush Time in Minutes						
		Total Line Capacity 12.7 Liters	Total Line Capacity 25.3 Liters	Total Line Capacity 38.0 Liters	Total Line Capacity 50.6 Liters	Total Line Capacity 63.3 Liters	Total Line Capacity 76.0 Liters	Total Line Capacity 88.6 Liters	Total Line Capacity 101.3 Liters

Liters of water in one meter of 3/4" (1.90 cm) Chore-Time water pipe=.422

Flushing Recommendations

Multiple House Application:

Well capacity typically limits the number of water lines that can be flushed at one time. Flushing should be staggered so 2 lines per well supply are flushed at the same time.

When to flush the system

Single stations or all stations may be manually flushed at any time.

Flushing for Sediment, Air Locks, and Cleaning

Start by flushing several times per flock. Watch the water coming out of the ends of the water lines. If the water is clean with little or no air you can flush less often. If the water is discolored and has sediment, you should ensure a proper filtration treatment is in place and that the filters are replaced regularly. The sediments could react with medications, vaccines, and electrolytes. They will also hamper the effects of disinfectants and cleaners.

Flushing After Introduction of Water Treatment or Bird Health Products

After running any type of medication, disinfectant, electrolyte, vitamin, or vaccine the lines must be thoroughly flushed. See “**Flushing The System**” on page 13. for estimated flush times. Some products or treatments may require longer flushing time to be completely removed from the water lines.

Flush to Stimulate Birds to Drink

1. In periods of hot weather flushing will provide cool, fresh water.
2. As birds mature, additional flushing can stimulate the birds to drink more water.

Maintenance

Keep the control box lid closed. The control is not capable of operating in a dusty environment. The loading regulator vents into the control box. When the control box is sealed the positive internal air pressure keeps dust out. Clean inside and outside of the water line stand tubes at least once a week.

Wiring

Chore-Tronics® 3 to PDS Wiring

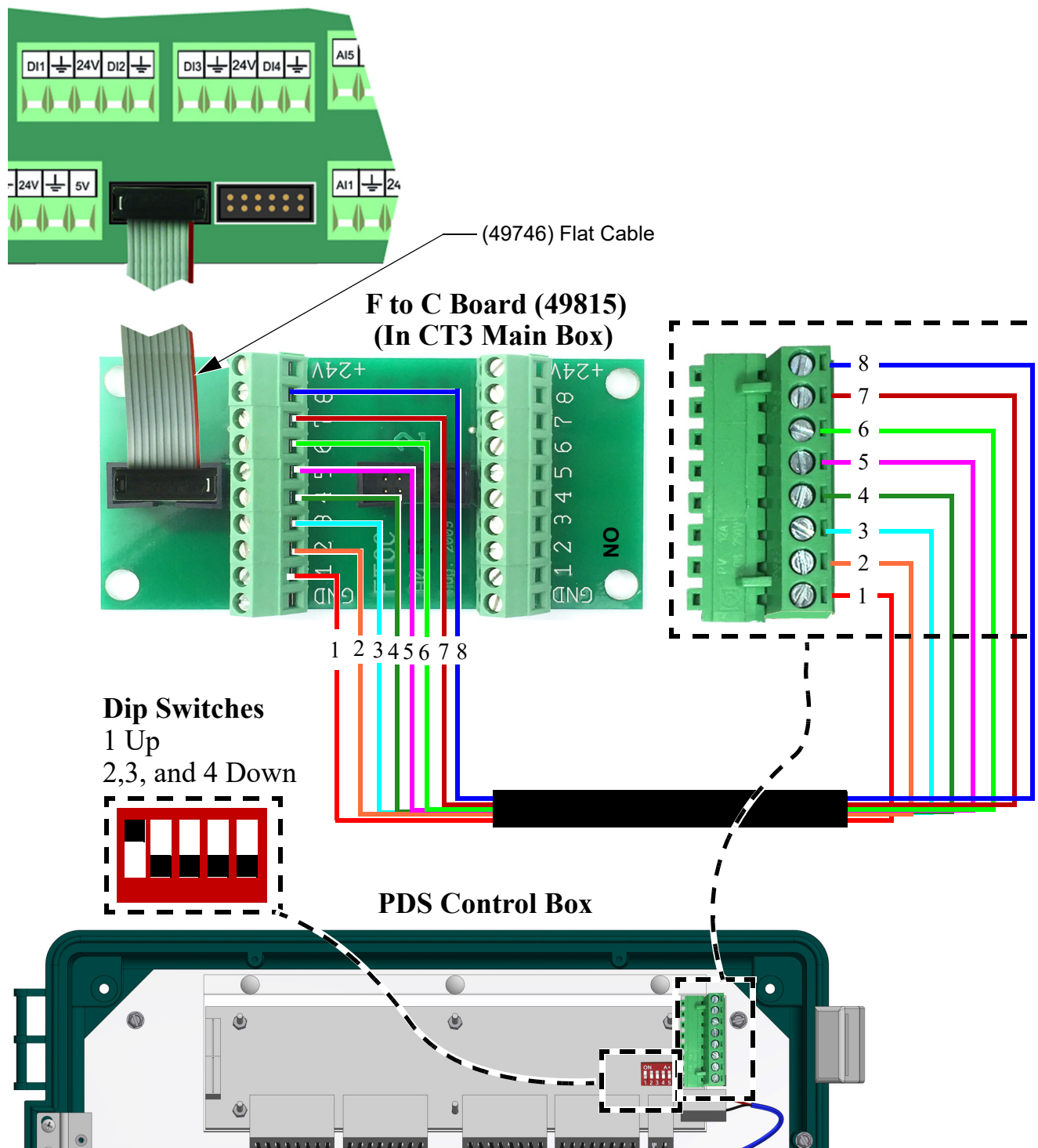


Caution: Be sure power to the Control is still disconnected!

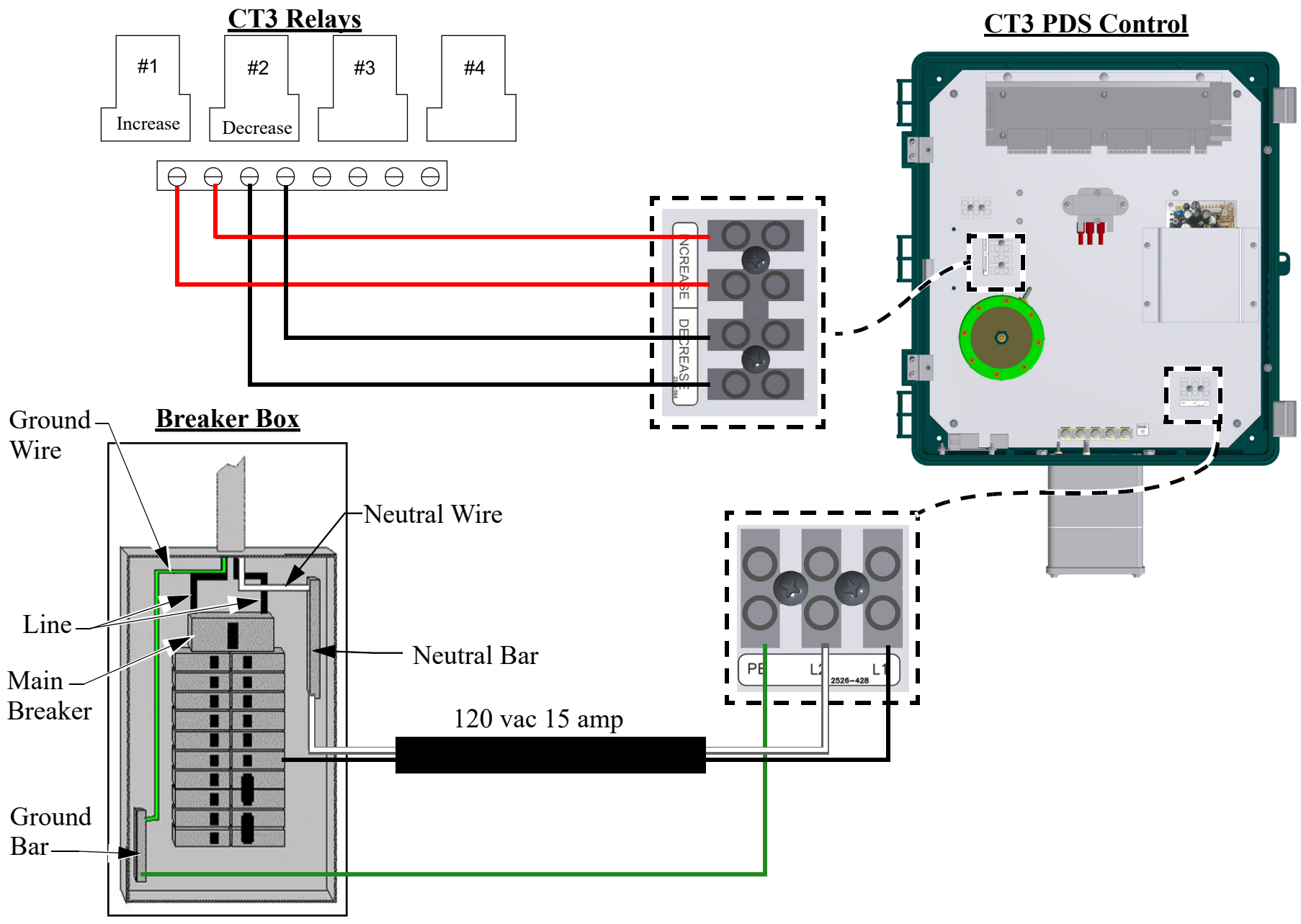
All wiring must be done by a qualified electrician in accordance with local and national codes.

Note: No backup battery needed! All timer settings are stored indefinitely in memory

Chore-tronics® 3 I/O Board

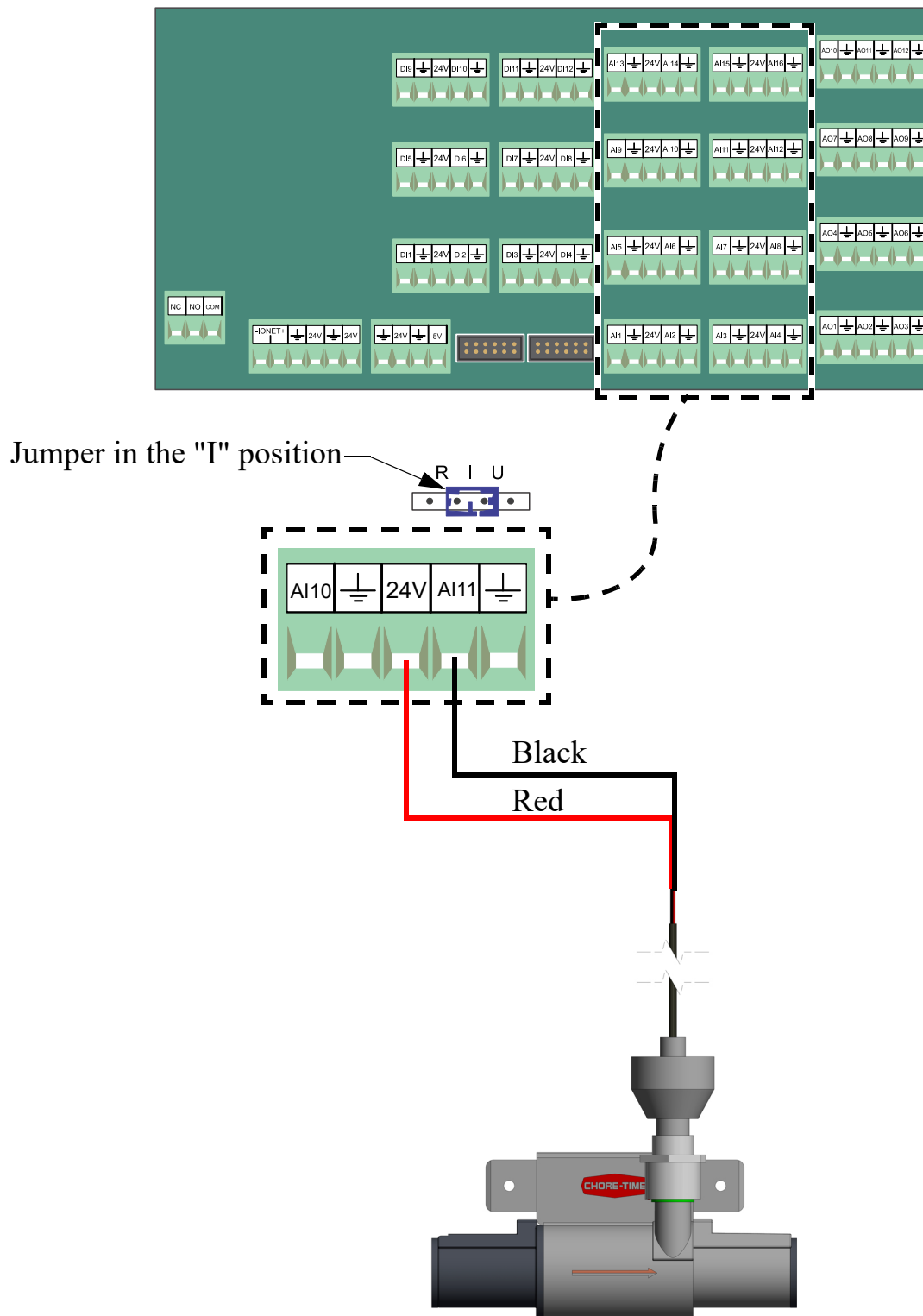


16 PDS Outputs (Regulator) Wiring



Pressure Sensor Wiring

The Pressure Sensor can be connected to any one of the Analog Inputs on the CT3 I/O Board.



TroubleShooting

Problem	Correction
No water in Regulator Stand Tube.	<ol style="list-style-type: none"> 1. Water Off. 2. Defective or plugged Regulator. 3. Regulator plumbed backwards. 4. Stand Tube Cap plugged (not venting).
Water Column does not change on a Regulator.	<ol style="list-style-type: none"> 1. Stand Tube Cap plugged (not venting). 2. Air line to Regulator pinched.
Water Column to top of Stand Tube.	<ol style="list-style-type: none"> 1. Regulator seat worn or foreign object in seat area. 2. Stand Tube Cap plugged (not venting). 3. Air Loading Unit putting out too high pressure (defective solenoid).
Compressor suddenly runs more often than normal.	<ol style="list-style-type: none"> 1. Shut off or pinch off all lines going to the individual controls to find which house is the problem. 2. Open one line at a time until you find one that causes the compressor tank to lose air more quickly. 3. See correction for house leak below.
House seems to leak or lose compressed air too quickly.	<ol style="list-style-type: none"> 1. Shut off the incoming air line to the control and watch the small INCOMING PRESSURE GAUGE. If the control holds pressure, the leak is between the air source and that house. 2. With the incoming air off and the gauge indicates that there is a 2 PSI drop or more within 1 minute, the problem is in the control, lines, or regulators. 3. Shut off or pinch off all lines going out to the regulators and the incoming line. If the control loses pressure, the problem is inside the control. See control unit leak below. 4. If the unit holds pressure, release one line at a time to isolate the cause of the leak. 5. Test line connections and regulator for leaks.
Control unit leaks compressed air.	<ol style="list-style-type: none"> 1. Check the vent hole in the red cover of the Air Loading Unit, see figure 9. Put soapy water over the hole. A small amount of air coming out is normal (bubble should grow slowly over several seconds). 2. Put soapy water on all internal hose connections to find leak.

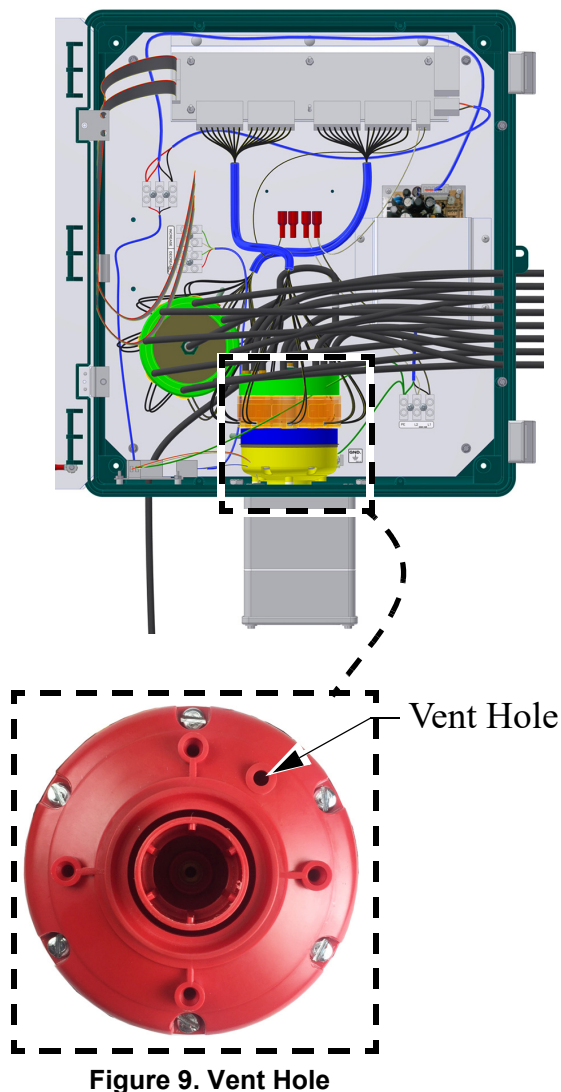
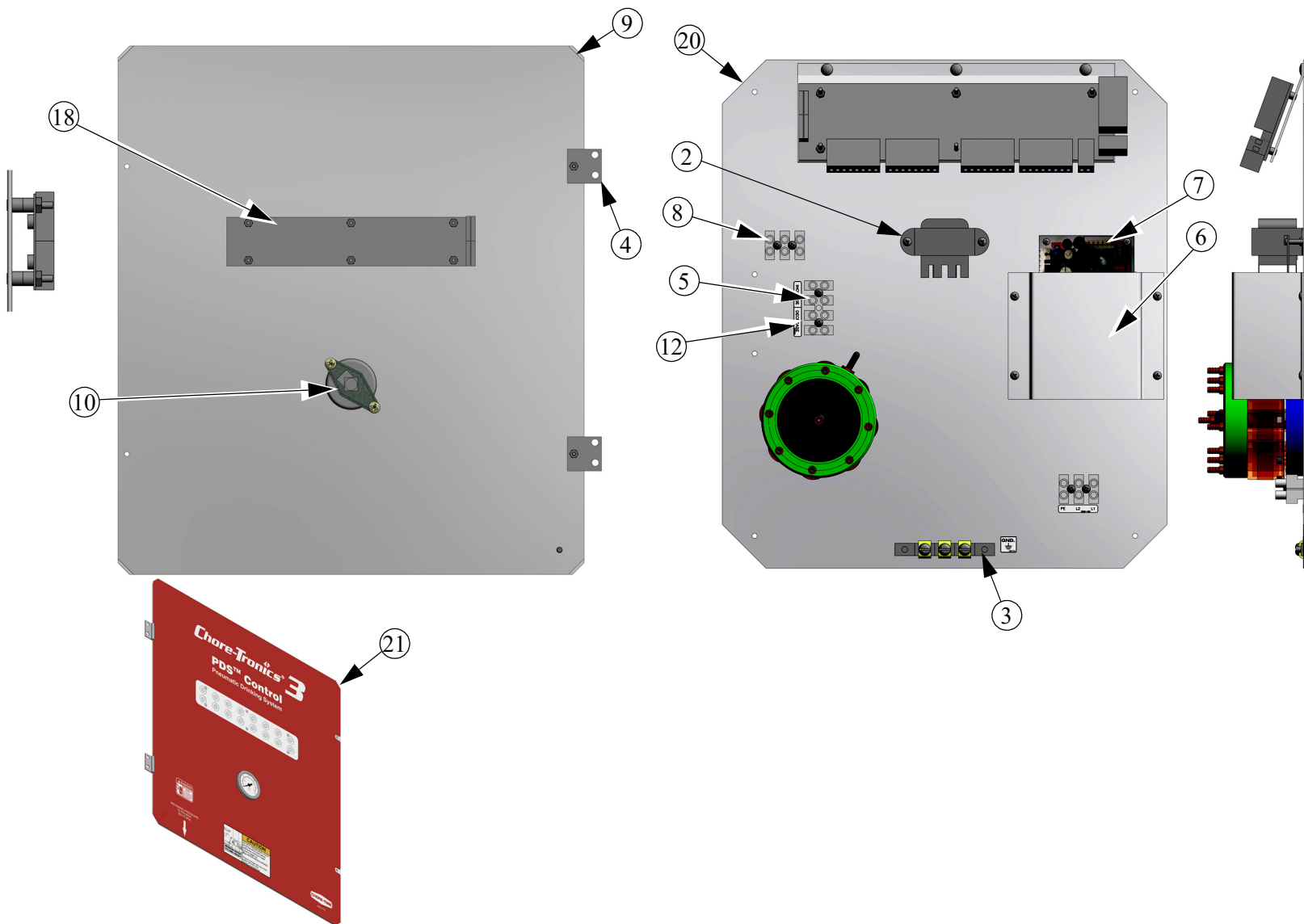


Figure 9. Vent Hole

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Item Numbers

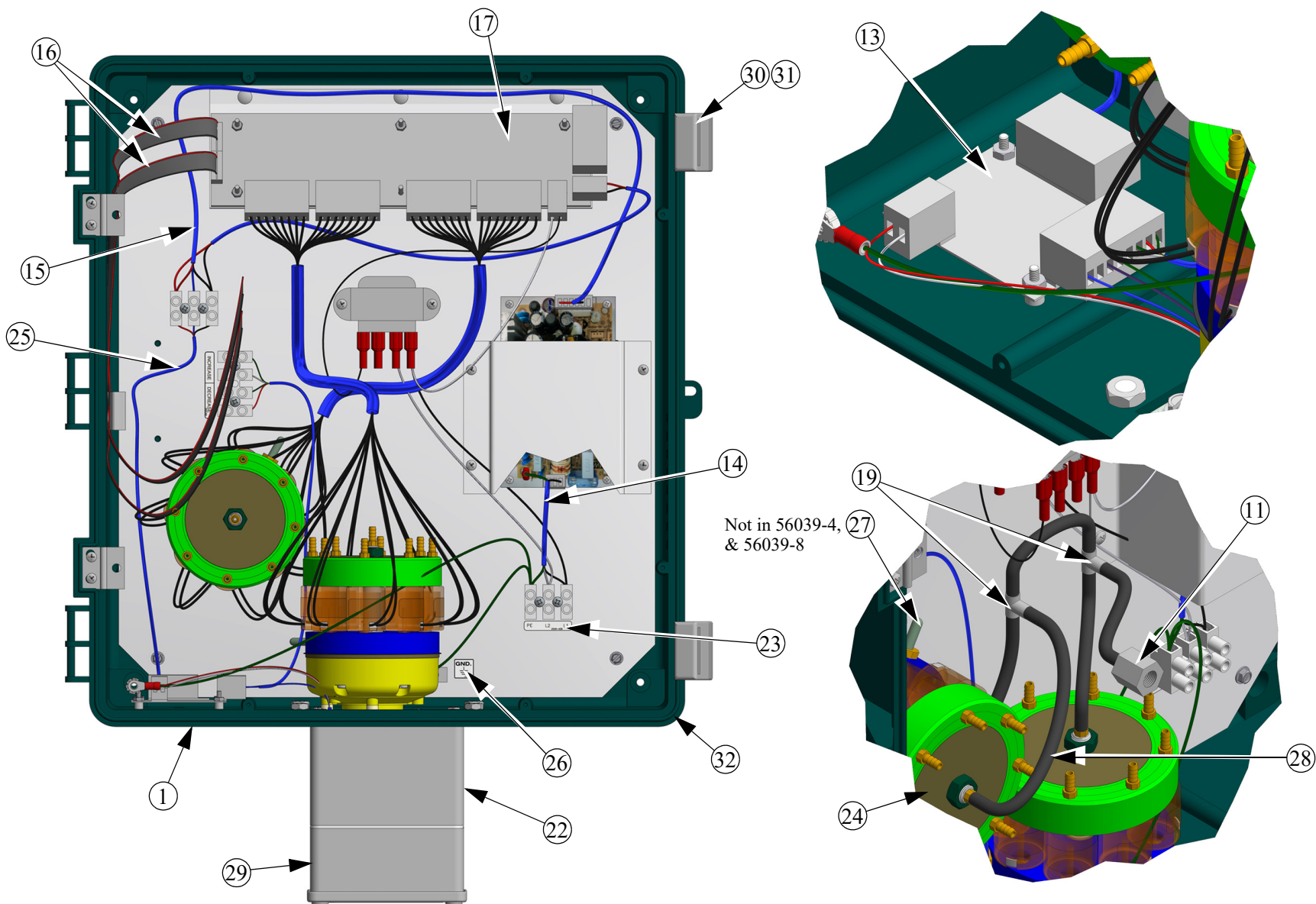
4 (56039-4), 8(56039-8), and 16 (56039-16) Station CT3 PDS Control



Parts List

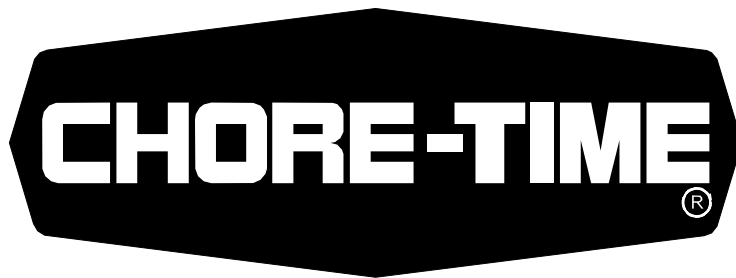
Item	Description	56039-4	56039-8	56039-16
		Part No		
2	24 Volt 12 AC Transformer	56045	56045	56045
3	3.15 Grounding Rail	43384-2	43384-2	43384-2
4	1x1 Aluminum Hinge	49482	49482	49482
5	4 Pole 1.71 Terminal Strip	34925-4	34925-4	34925-4
6	Power Supply Cover	56111	56111	56111
7	Power Supply (65W)	49649	49649	49649
8	3 Pole Terminal Strip	34925-3	34925-3	34925-3
9	CT3 PDS Top Plate	55743	55743	55743
10	Pressure Gauge	56095	56095	56095
12	PDS Direction Decal	2526-564	2526-564	2526-564
18	CT3 PDS Flush LED Board	56049	56049	56049
20	CT3 PDS Bottom Plate Assy.	55744	55744	55744
21	CT3 PDS Decal	2529-1176	2529-1176	2529-1176

Item Numbers



Parts List

Item	Description	56039-4	56039-8	56039-16
		Part No		
1	CT3 PDS Electric Box	56043	56043	56043
11	1/8 Female Pipe Adapter	48586	48586	48586
13	Motor Control	56048	56048	56048
14	Incoming Power Cable	53333-1	53333-1	53333-1
15	Power Cable	53293-1	53293-1	53293-1
16	Cable Ribbon Assembly	56044	56044	56044
17	CT3 PDS Flush Relay Board	56047	56047	56047
19	1/4" PDS Connector Tee	45894	45894	45894
22	Motorized 8 Station Airloader	56056-4	56056-8	56056-8
23	Input Power Decal	2526-428	2526-428	2526-428
24	8 Station Airloader	--	--	44452
25	CT3 PDS 4 Station Wiring Harness	56039-4W	56039-4W	56039-4W
26	Ground Symbol Decal	2527-63	2527-63	2527-63
27	1/8" Rubber Plug	--	--	56060
28	1/4" OD x 1/8" ID Flex. Tubing	48574	48574	48574
29	14 x 16 Electric Box Lid	42683	42683	42683
30	Control Box Latch	30862	30862	30862
31	Control Box Pivot	30863	30863	30863
32	Neoprene Seal	34767	34767	34767
33	Pressure Sensor (Not Shown)	56120	56120	56120
34	Midline Air Remover (Not Shown)	52273-5	52273-5	52273-5



MADE TO WORK.

BUILT TO LAST.®

Revisions to this Manual

Page No.	Description of Change
Various	New Manual

Contact your nearby Chore-Time distributor or representative for additional parts and information.

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