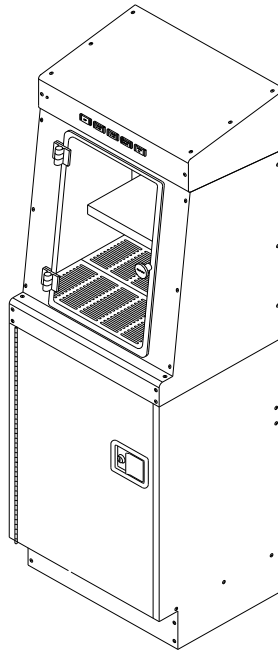


POLAR BEAR

Water Distillers Mfg.Co. Ltd.

Single Automatic Water Dispensing System Operators Manual



This manual applies to:

Model	Series
PBD 2SS	0003
PBD CB-1	0003
PBD CB-2	0003
PBD PK-5	0003



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POLAR BEAR DISPENSER WARRANTY

POLAR BEAR WATER DISTILLERS MFG.CO.LTD. warrants to the original purchaser, their products against defects in materials for a period of one (1) full year on all electrical components, other parts and stainless steel parts and ninety (90) days on labor excluding wearable parts including such items as UV bulbs, ballasts, etc.

If the product is found to have been consumer damaged or abused, the warranty does not obligate POLAR BEAR WATER DISTILLERS MFG.CO.LTD. to bear any transportation charges in connection with the repair or replacement of defective parts.

This warranty is invalid if the damage or defect is caused by accident, act of God, customer abuse, unauthorized alteration or repair, vandalism or misuse.

This warranty is made in lieu of any other express warranty and except for the foregoing warranty which is exclusive, there is no other express warranty being made.

The purchaser is responsible for all shipping charges to and from the service center. The manufacturer, dealer or service center is not responsible for damages incurred during shipping.

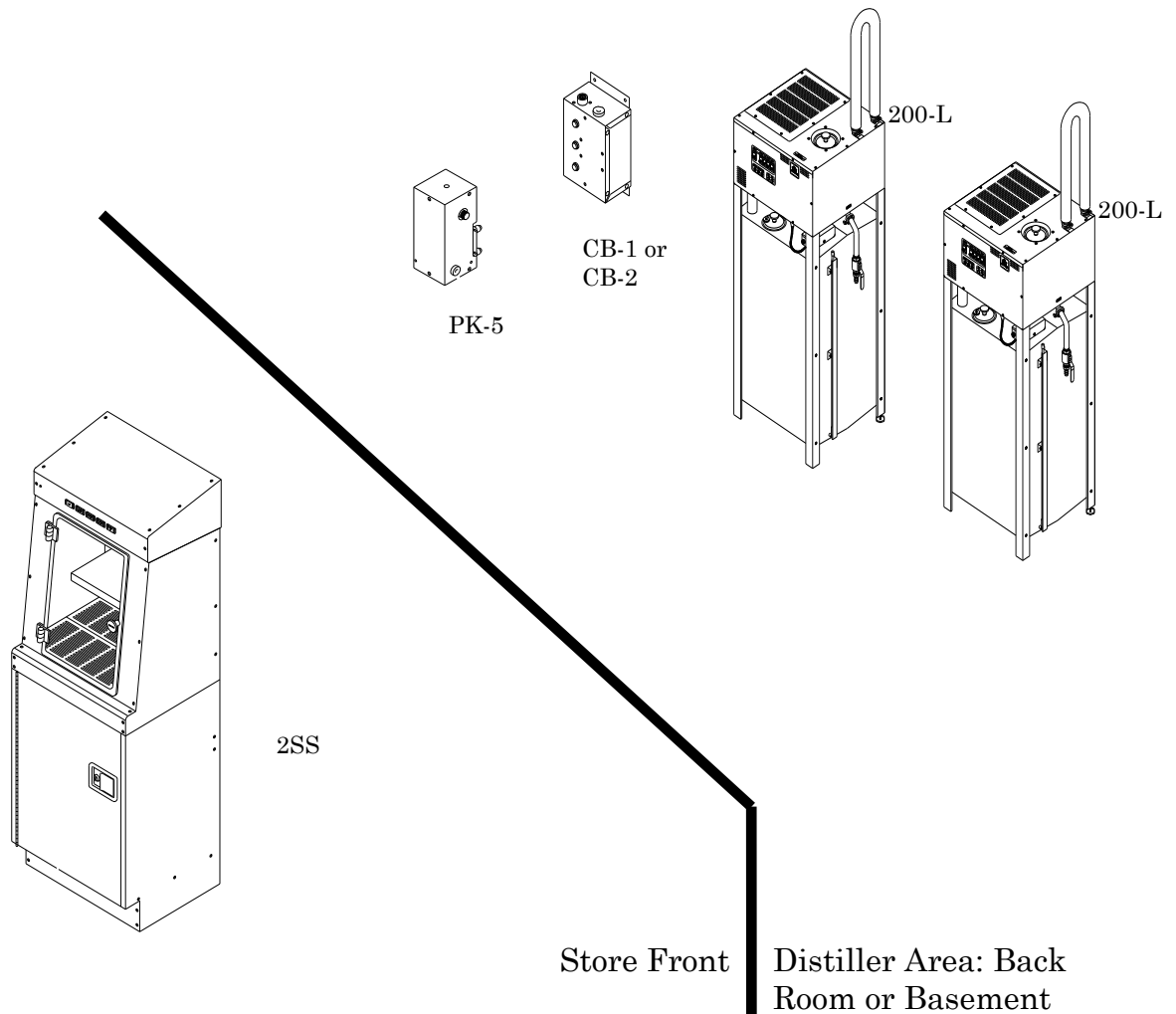
POLAR BEAR WATER DISTILLERS MFG.CO.LTD. believes the information contained in this manual to be accurate. Parts, specifications, and instructions are subject to change without notice.

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System Overview

A commercial dispensing system consists of a store-front Dispenser, one or more water Distillers, two Water Pumps, and a Water Pump Controller.



For information on the connection of the water lines and electrical cables see section on Installation.

Specifying an In-Store Dispensing System

Before a commercial Dispensing system can be installed, you must first determine:

1. Equipment required:
 - Distiller(s)
 - Dispenser(s)
 - Pumps
 - Pump Controller(s)
 - Control Cable(s) Length(s)
 - Water Line Lengths
 - Distiller Hoods and venting supplies (if required)
2. Electrical service available and required.
3. Mechanical Requirements

Then fill out a 'Store Specification Sheet' (provided).

Equipment Requirements

Each Dispenser requires a PK-5 Pump and a Pump Controller to operate. One or more Distillers can be used.

Each Distiller (200-L) can make up to 185 Litres or 49 U.S. gallons per 24 hours, and store 290 Litres or 77 U.S. gallons.

Electrical Requirements

The Dispenser plugs into a standard 110-130 VAC receptacle, which should be dedicated to this application. Total current is about 3 Amps with the pump installed. The Drain Pump also plugs into a standard receptacle, and uses about 1 amp.

Each 200-L Distiller requires a dedicated 30 Amp 208,220, or 240 VAC single phase circuit. This is most often installed specifically for a Dispensing system installation.

Most installation locations do not have an option on the 208,220, or 240 VAC service that can be provided. This voltage must be determined, and then specified when ordering a 200-L Distiller.

All wiring and cable/hose routing must be done to local standards codes, and regulations.

Mechanical Requirements

Water Source

The Distiller(s) must be attached to a cold water supply line, which should be in close proximity (25 ft.). The connection is usually made with a saddle valve – a valve designed to clamp over, and pierce into, standard copper or iron supply pipes. Refer to the 200-L Owner's Guide for more information.

Water Lines

Allowances must be made for running a 1/2" flexible poly water line from the Distiller(s) to the Dispenser. Estimate the required length of this line.

Control Cable

A control cable must be run between the Pump Controller (next to Distiller(s)) and the Dispenser. This cable is about the same length and follows the same route as the water lines.

Distiller Venting and Air Supply

The Distiller(s) use air for cooling steam into water. As a result they expel a significant amount of hot air. This requires that the room in which they are installed can handle the hot air, and provide sufficiently cool air.

Alternatively, a vent can be installed to route hot air out of the room, to either the outside, or even another room to save on heating. Allowances must be made, however, for the removed air volume.

All venting must be done to local standards, code and regulations.

Specification Sheet

The following page can be used for documenting the required information for a Dispensing system installation.

Installation Information

Store: _____

Contact: _____

Address: _____

City/Prov.: _____

Tel/Fax: _____

Hours: _____

Dispenser Location:

Ceiling	Electrical	Floor
☐ Tee Bar Tile	☐ 110-125 VAC	☐ Wood
☐ Dry Wall	☐ Dedicated	☐ Concrete
☐ Open to Trusses	☐ To be Installed	☐ Ceramic
☐ 12" Acoustical		☐ Carpet

Floor to Ceiling Height: _____

Distance from Dispenser to Drain: _____

Distiller Location:

Location	Electrical	Venting
☐ Approx. Room Size:	☐ 208 VAC	☐ To Plenum
_____	☐ 220 VAC	☐ To Wall
_____	☐ 240 VAC	☐ To Roof
	☐ To be Installed	☐ None

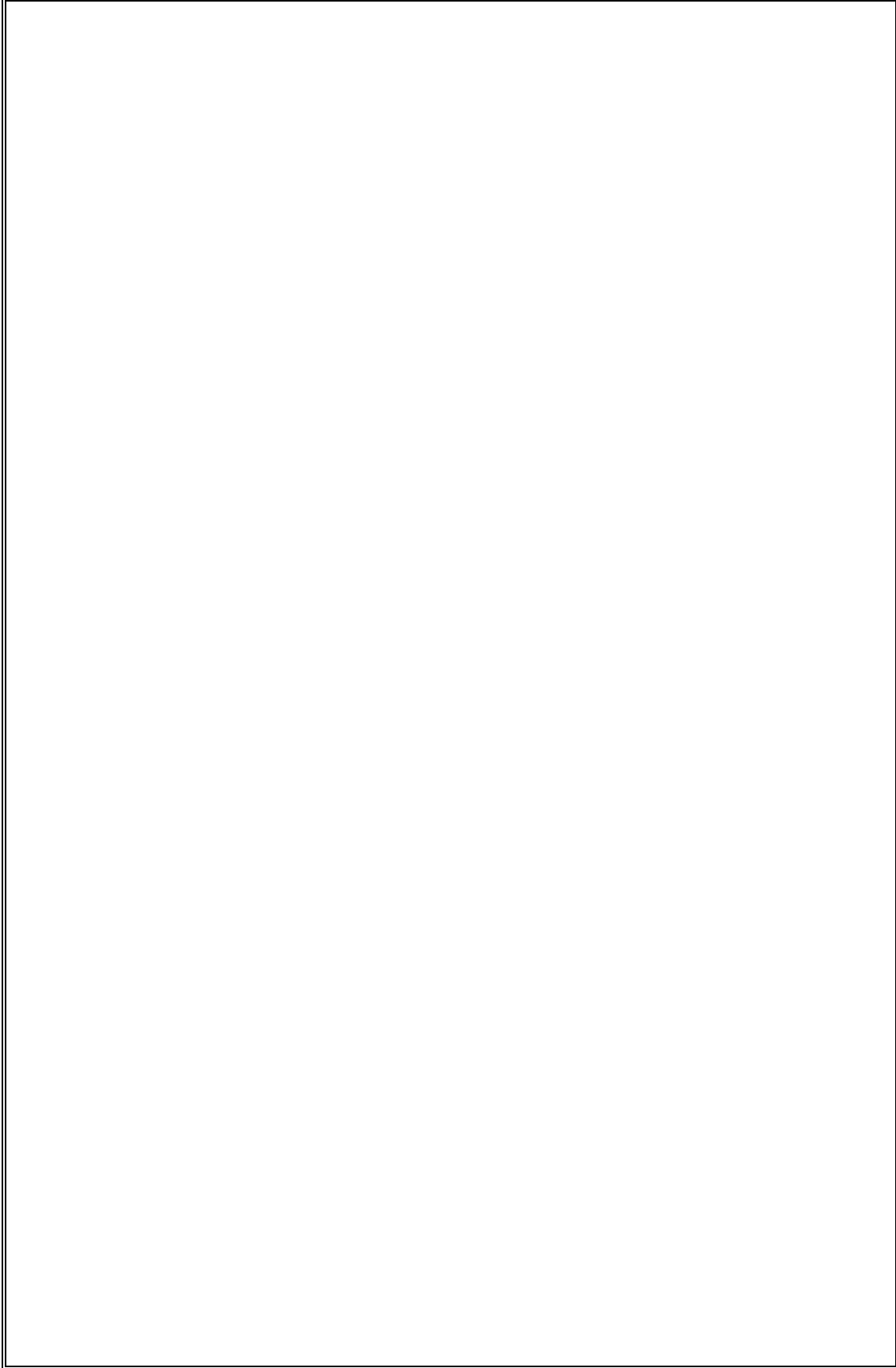
Number of Distillers: _____

Floor to Ceiling Height: _____

Distance to Dispenser (Water Line & Control Cable length): _____

Comments: _____

Sketch Installation on other side.



Installation Checklist

When ordering and installing a dispenser system, ensure you have accounted for the following items:

1. Dispenser(s)	Qty	Model	
2. Distiller(s)	Qty	Voltage	
3. Pump Kits	Qty		
4. Pump Controller(s)	Qty		
5. Water Line (1/2" OD)	Ft. per Pump	X No. of Pumps	Subtotal
6. Water Line (1/2" OD)	Ft. for Drain Pump		Total
7. Pump Controller Cable(s)	Ft. length	Qty	
8. Cable Clamps - 1/2" (water lines)	Qty		
9. Cable Clamps - 3/8" (Control Cables)	Qty		
10. Screws for Cable Clamps	Qty		
11. Additional Elbows to interconnect Distillers	Qty		
12. Additional water line to interconnect Distillers	Ft. length		
13. Distiller Hood(s)	Qty		
14. Booster Fan(s)	Qty		
15. Duct / Venting Supplies			

Installation

The installation of a dispensing system is divided into the following Steps:

1. Install Dispenser.
2. Install Distiller(s).
3. Install Distiller Venting, if required.
4. Install Pumps and Pump Controller.
5. Run water lines and control cable from Distiller to Dispenser.
6. Verify system operation.
7. Sterilize system.
8. Program Dispenser.

Dispenser Installation

The Dispenser has been shipped in one box. While unpacking, save all packing material until Dispenser is in full operation.

Parts Included

- 1- Dispensing Head & Stand
- 1- Instruction Manual and Warranty Card

To Install Dispenser

1. Ensure doors work properly on Dispenser Head and Stand.
2. Check to ensure power receptacle (120 VAC) is close enough for Dispenser and Drain Pump power cords to plug in. **Do not plug in Dispenser or Drain Pump until all other connections are made as described in the following sections.**
3. Dispenser will likely have to remain away from its final position while Control cable and water lines are installed and connected.
4. After Control cable and water lines are installed, move Dispenser into its final desired location against a wall.

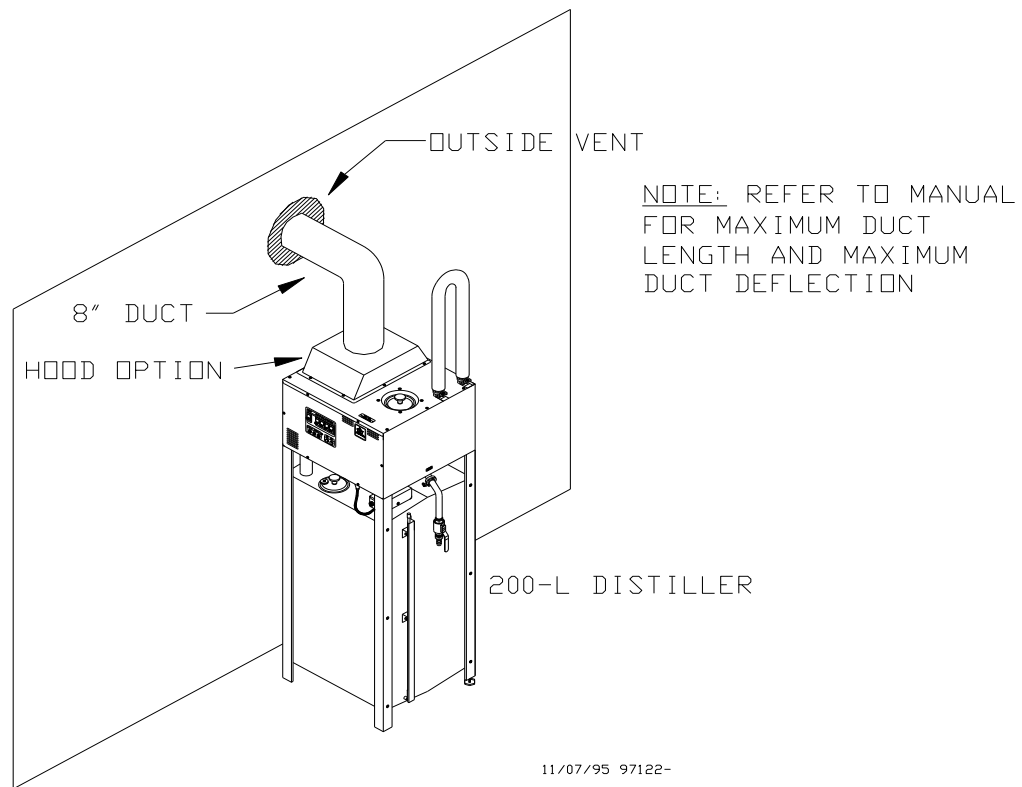
Distiller Installation

1. Refer to the 200-L Owner's Guide for installation of the 200-L.
2. Use the third drain fitting on the bottom of the 200-L Holding Tank to interconnect additional 200-Ls together for increased water production.

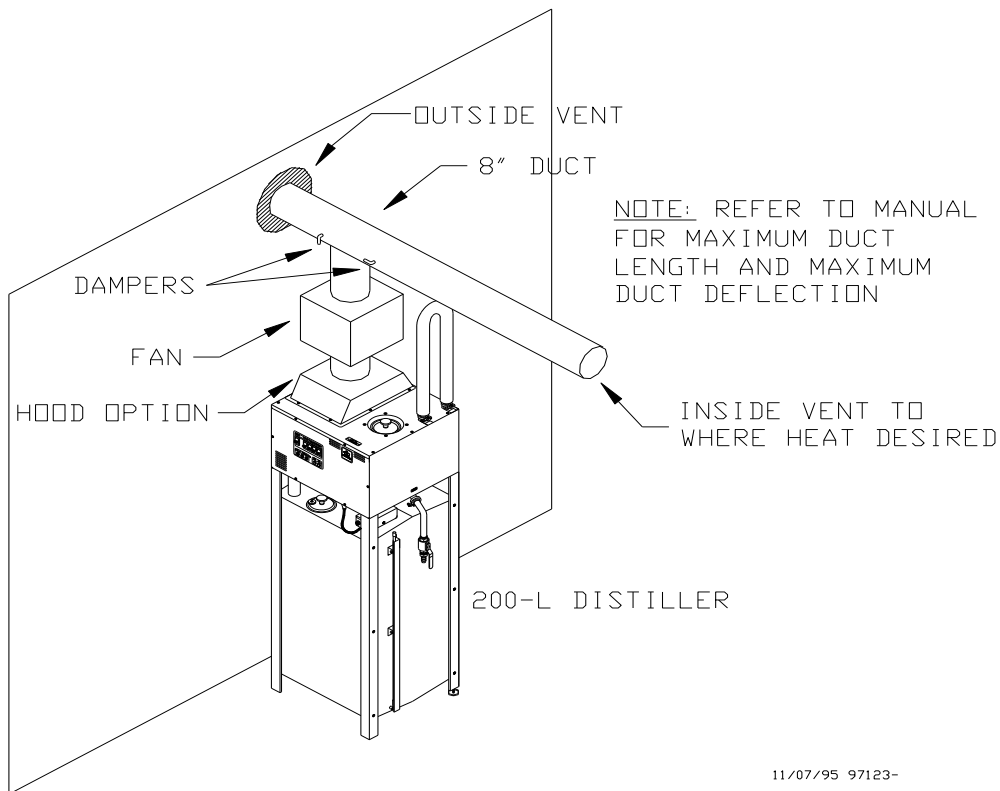
Distiller Venting

To reduce heat in the area in which the Distiller(s) operate, an optional hood can be purchased to attach duct-work that routes hot air to a more desired location.

Venting can be simple and run to another room or outside (via wall or ceiling) as depicted:



Or a duct with 2 or more dampers can be installed to adjust where the hot air travels, depending on outside air temperature.



Depending on the length of duct, and number of elbows, a booster fan may be required.

Consult a qualified heating and cooling technician and ensure local required standards are met.

Typically, an installation where the hot exhaust air must travel more than 12 feet or be deflected more than 180 degrees total, will require a booster fan of approximately 800 CFM. High indoor ambient temperatures may also necessitate a booster fan.

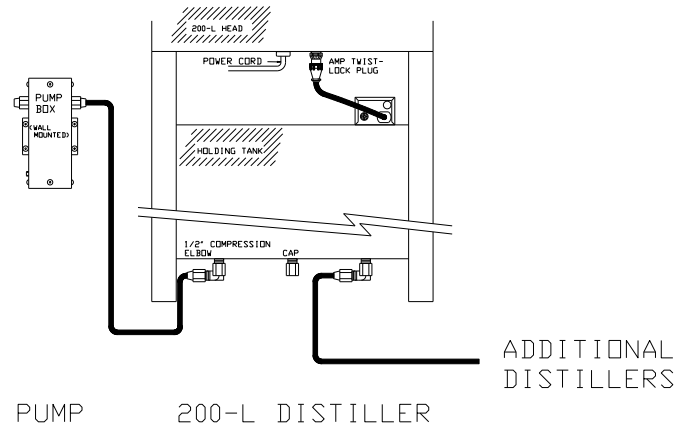
After duct work is installed, the temperature of the Charcoal Filter should be monitored in the hottest (worst case) environment. Cooling is sufficient when the 'Over Temp' indicator on the 200-L is not illuminated and the Charcoal Filter is too hot to touch.

Pump & Pump Controller Installation

Each Dispenser requires the use a PK-5 pump kit, and a CB-1 pump controller.

To Install Pump Kits & Controller

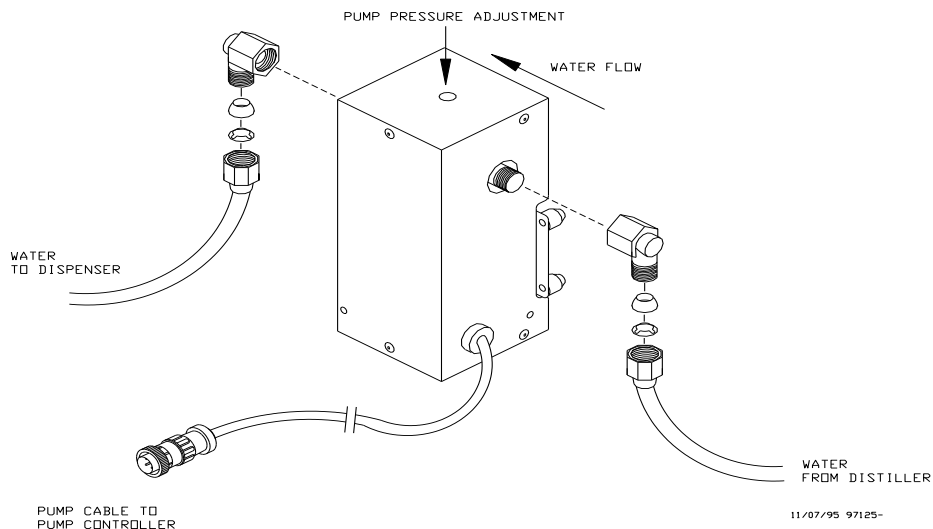
1. For installations with more than one 200-L, determine which Distiller will be the primary Distiller. This Distiller will be connected to the pump, and the Pump Controller. Other 200-L's will act as slaves by providing water to the primary Distiller's Holding Tank.
2. Disconnect 200-L(s) from the power source.
3. Drain water from Distiller's Holding Tank and Boiling Tank, if any.
4. Lift Distiller Heads off Storage Tanks and place aside.
5. Tip over Primary Holding Tank and remove a cap plug from the bottom.
6. If there is more than one Distiller, remove a second cap plug from primary Holding tank and one cap plug from the second Holding Tank.
7. Install 1/2" compression elbows and tighten.
8. Mount the Pump near the primary Distiller using four #10 x 1-3/4" wood screws. It should be mounted within six (6) feet of the Distiller and can be attached to a wall or any other solid surface. Pump should be mounted so that it is no higher than approximately 5 feet from the bottom of the Holding Tank.



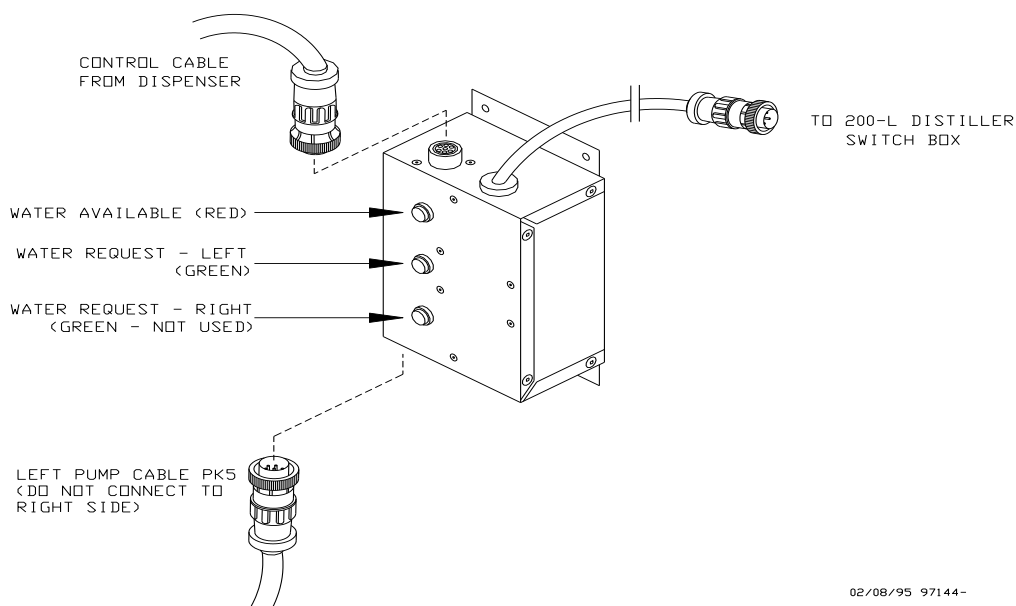
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9. Connect a length of 1/2" line to the primary Holding Tank. Use the 1/2" nut/cone/ring to attach the line to the elbow as shown.
10. Install two compression elbows on each pump.

11. Trim the other end of the line to fit into the pump and use the 1/2" nut/cone/ring to attach the line. Tighten.

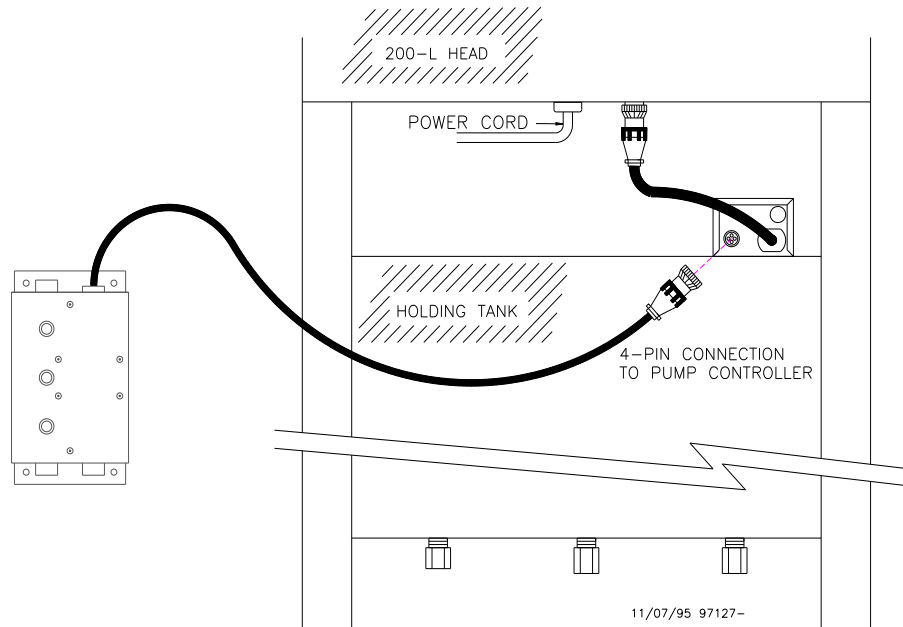


12. Lift Holding tank(s) upright on their feet. Replace the Distiller Heads onto the Holding Tanks and reattach the connections between them.
13. Mount the Pump Controller on wall or other solid surface near the Pump and primary Distiller using four #10 x 1/2" wood screws.



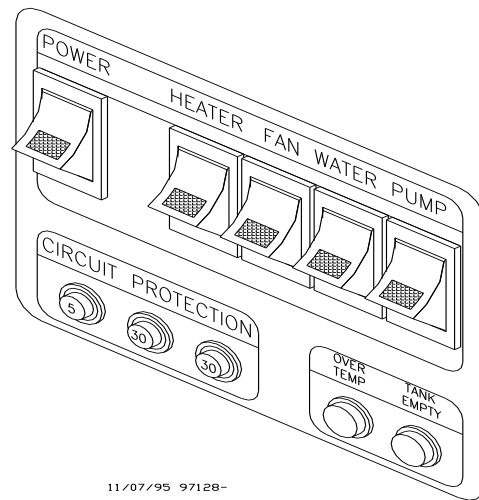
14. Connect Pump Power cord into Pump Controller's LEFT SIDE, taking note of the 'Right' and 'Left' Pump Receptacles.

15. Connect the Pump Controller to the 200-L switch box on the primary



200-L.

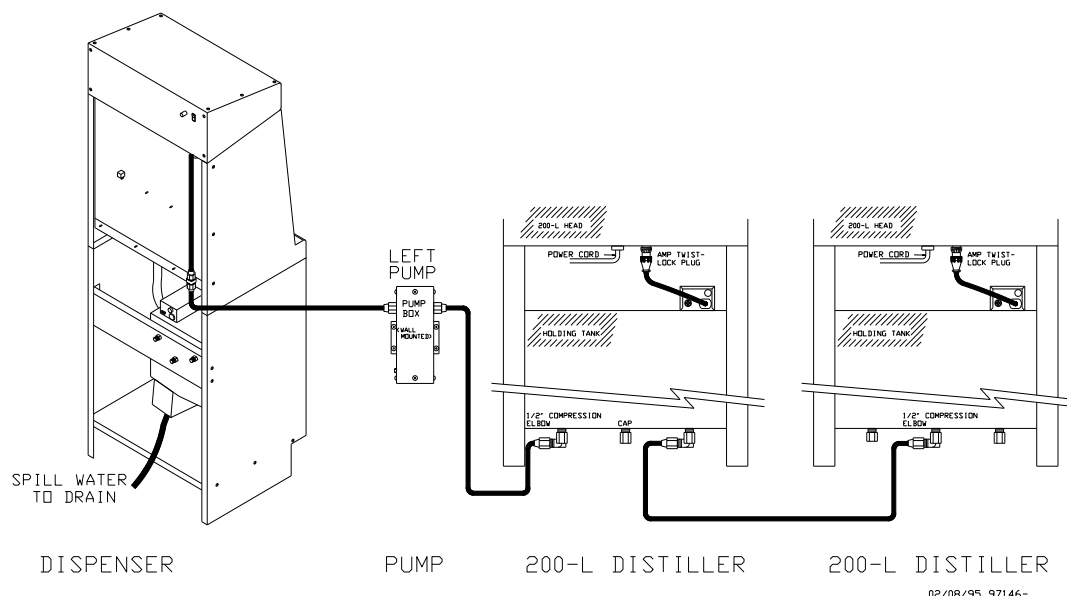
16. Plug the Distiller(s) back into the main power supply. Turn Distiller(s) ON. Also turn pump switch on primary Distiller to the PUMP position.



17. Once the storage tank has approximately 1 or 2 inches of water in it, the red WATER AVAILABLE light on the Pump Controller will illuminate. The red TANK EMPTY lamp on the 200-L should go out at the same time.

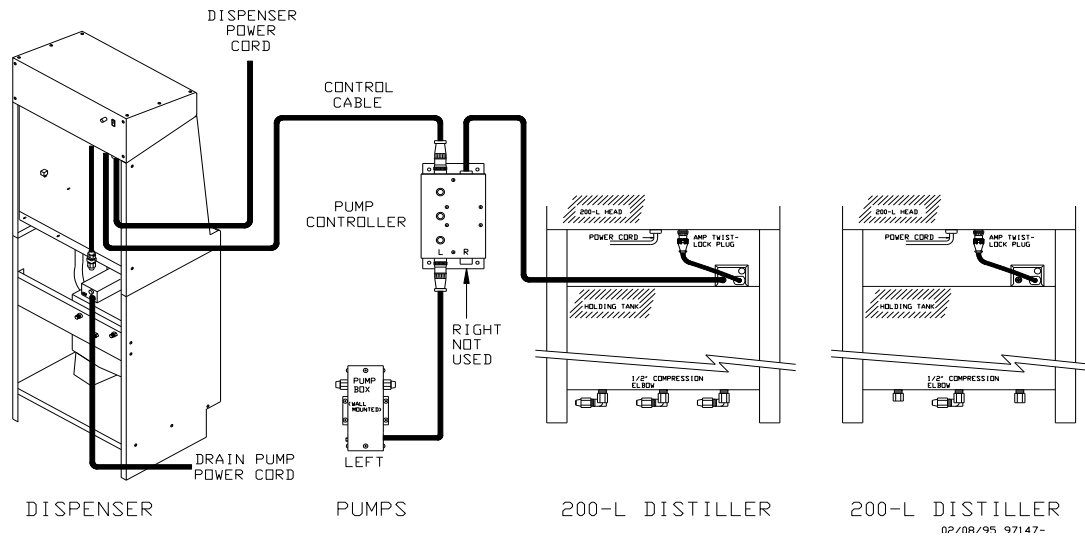
Water Line Connections to Dispenser

1. Determine the best route for water line and Control Cable. Determine route for spill water line.
2. Drill holes in inconspicuous places where required. 1/2" poly water lines require a 5/8" hole, and the Control Cable end requires a 1-1/8" hole. Alternatively, a 2" hole can be used (where structural integrity is not reduced) to accommodate 2 water lines, Control Cable, and spill water line(if used).
3. Run 1/2" poly water line from pump to Dispenser.
4. Run a water line from the Drain Pump output (spill water) back to drain in Distiller's area, or closer, if available.
5. Run Control Cable from Pump Control Box to Dispenser.
6. Connect water line to Pump in the same way as connected between Distiller and Pumps.
7. Remove top cover from Dispenser.
8. Connect water line to Water Intake fitting.
9. Cover should remain off until testing of the dispenser system is complete.
10. When completed, all water lines should be complete and conform to the following configuration:



Electrical Connections to Dispenser

1. Connect Control Cable from Dispenser to Pump Controller.
2. When completed, all electrical connections should be complete and conform to the following configuration:



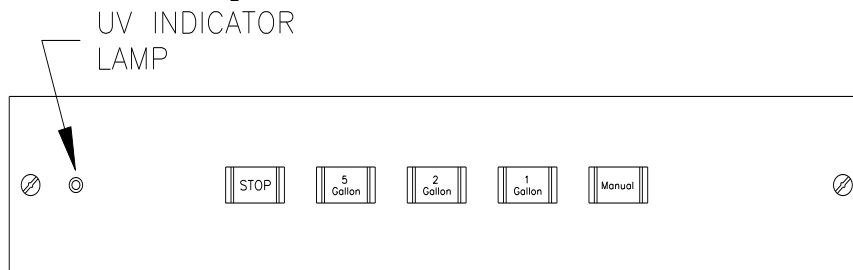
System Verification

Distiller(s) Operation

1. Refer to 200-L Owner's Guide to ensure proper operation of the Distiller(s).
2. Perform Sterilization procedure on 200-L(s) as per 200-L Owner's Guide.
3. Operate Distiller with Pump switch OFF.
4. When water level in Storage Tank(s) is 1" to 2" high, red TANK EMPTY light on 200-L should go out and the red WATER AVAILABLE light on the Pump Controller should illuminate.
5. After Distiller(s) have been running for 2 or more hours, check the temperature of the Charcoal Filter to ensure sufficient cooling (see 200-L owner's guide, and section on Distiller Installation in this manual).
6. Turn ON Pump switch.

Dispenser Operation

1. Plug in and turn on Dispenser. Green lights on either side of Dispenser Head should illuminate – indicating correct operation of the UV sterilization lamps.



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2. Locate UV lamp Replacement Label on inside of Top Cover of Dispenser. Mark date and year of installation:

UV System Annual Lamp Replacement
Remplacement annuel de la lampe de
Système UV
Sistema UV Reemplazo Anual de la Lámpara

Date/Date/Fecha
Month/Mois/Mes Year/Année/Anyo

Installation/
Installation/
Instalación

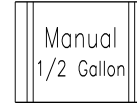
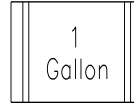
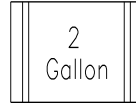
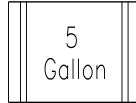
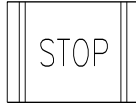
1
2
3
4
5

Lamp Replacement / Remplacement de la lampe /
Reemplazo de la Lámpara

Annual
(12 Month)
Replacement
Records

120108 01

3. Using a helper, briefly depress the MANUAL FILL switch. The green right WATER REQUEST indicator on the Pump Controller should briefly illuminate. The pump should engage at the same time, provided the red WATER AVAILABLE light on the pump controller is illuminated.



Pump Operation

1. Remove Top Cover from Dispenser if necessary.
2. Depress 'Manual Fill' switch until water flows cleanly.
3. Inspect ALL water lines and fittings for leaks.
4. Pumps should run continuously when Dispenser is filling a water container, and never run when Dispenser is not filling.
5. Unplug Dispenser.
6. Replace Top Cover and plug in Dispenser.
7. Turn OFF Pump switch on 200-L. Proceed to section on Operation and allow Distiller(s) time to accumulate distilled water.

Operation

1. Allow Distiller(s) to operate for about 12 hours to accumulate enough water for calibration of the Dispenser. Alternatively, Distilled water from another source may be manually added to the Distiller Storage Tank(s).
2. Turn Pump switch on 200-L ON. Distiller MAIN POWER switch must also be ON.
3. Turn Dispenser ON and ensure green UV indicator lights illuminate.
4. Depress MANUAL FILL switches on Dispenser until water flows smoothly.
5. Follow the Programming procedure to set each fill button to fill the appropriate amount.
6. Dispensing system is now ready for normal operation.

Review section on Maintenance for daily and periodic maintenance issues.

Programming

To program or reprogram the fill buttons on the Dispenser:

1. Make sure Dispenser power is OFF for at least 15 seconds
2. Turn ON power.
3. All lamps will light for 5 seconds - Indicating a lamp test.
4. After the lights have gone out, normal operation is assumed, and customers can use the Dispenser.
5. To enter programming mode, momentarily press the 'STOP' button before the lamps go out (1st. 5 seconds).
6. Programming mode is acknowledged by all lamps going off immediately.
7. With water jug under water outlet, press and hold desired fill button until jug is almost full.
8. Upon release the Dispenser Controller will remember the length of time it took to fill the jug with the same desired fill button.
9. The Controller will then jump back to STEP 3(All lamps on) - from which you can press STOP (in step 5) to program another fill button OR if you are done programming, wait 5 seconds until the lamps go out.
10. Dispenser is now ready for use with programmed times.

Notes:

1. We suggest programming the Dispenser to **under fill** by a couple of inches of water to allow for pressure and other variances. Customers can easily top up each water container with the manual fill button.
2. Dispenser will not forget the programmed times during a power failure.
3. When shipped from the factory, assembled Dispensers are preprogrammed. This is for testing purposes, and times will have to be reset to account for differences within each installation. Factory presets are 22 seconds per gallon, varying accordingly with each different button.

Maintenance

There are a number of items that should be checked daily to maintain the quality of dispensed water:

1. TDS (Total Dissolved Solids).
2. Cleanliness of Dispenser.
3. UV Light Sterilization in Dispenser.
4. Proper operation of Distiller(s) and Distiller Boiling Tank cleanliness.

TDS (Total Dissolved Solids)

The TDS should be checked daily with a TDS meter to ensure that the water being Dispensed is pure.

TDS meters are available from POLAR BEAR

TDS meters provide a very fast, simple, and reliable method of assuring water quality and are also recommended for residential use.

Testing

1. Using a clean small container, or disposable cup, fill a sample of 1-2 inches of water.
2. Place TDS meter into water sample.
3. Take reading from TDS meter. If any reading shows **greater** than **3 ppm**, repeat sample. (Note: Meters provided from POLAR BEAR do not show readings this low. Meter resolution is 10 ppm).
4. If consistent readings of **10 ppm** or higher are obtained, and the TDS meter is working properly, then the dispensed water does NOT meet the required quality level, and the problem must be rectified.
5. Readings between **3 ppm** and **10 ppm** may indicate a problem, and deserve investigation.

Likely sources of problems are high TDS raw water and Distillers requiring cleaning (Boiling Tanks and/or Holding Tanks).

Dispenser

Cleaning

The Dispenser should be kept very clean and neat. Attractiveness is important to the success of a Dispenser installation.

Outside Dispenser, Pamphlet rack, and Bottle Racks:

1. Clean outside areas with a damp cloth, using a suitable cleaner where required. The use of paper cloths is not recommended since they tend to leave lint.
2. Pay particular attention to the areas customers touch most: Door Handles, and dispensing switches.

Inside Dispensing area:

1. Remove any debris such as bottle caps.
2. Clean entire inside with a suitable **food safe** cleaner (follow product instructions). Rinse well.

Sterilization

Sterilization is a process that can be done whenever there is a change of equipment within the Dispensing system, or when contamination of the distilled water is noticed or suspected.

It is important to first remove the source of contamination and remove all contaminated debris before sterilizing.

Solutions

- Solutions can be made from Industrial Chlorine Bleach, which should be diluted to approximately 100-200 PPM.

Industrial bleach of 12% Sodium Hypochlorite should be diluted by adding 2 ml to each litre of water (1-1/2 teaspoons / gallon).

Household bleach, such as Javex, has 6% Sodium Hypochlorite and twice as much should be used: 4 ml per litre or 3 teaspoons per gallon.

Always use Chlorine bleach that does not contain any other ingredients.

- Alternatively, Hydrogen Peroxide solutions may be used.

In either case, it is very important to first drain the Distiller and water lines as much as possible, and after Sterilizing, rinsing **very** well to remove any odor, taste, and/or risk of ingestion.

Sterilizing

1. Drain Distiller(s) and water lines as much as possible.
2. Add 1-2 Litres of Sterilizing solution to Distiller Holding Tank. If desired, spray some of the solution throughout inside of Holding Tank.
3. Run Dispenser to pump all of the Sterilizing solution through water lines and Dispenser. This will require that the lower pump shut-off float be manually raised.
4. Rinse off entire inside of Distiller Holding Tank with at least 4 Litres of distilled water. Run Dispenser as in previous step.
5. Repeat rinse 2-3 times, flushing water through dispenser each time. Be sure to rinse both water lines through pumps.
6. Clean inside of dispensing area on Dispenser.

UV light replacement

- The UV lights inside the Dispenser must be replaced every 12 months or when the green UV indicator lights go out **whichever occurs first**. This will ensure that water disinfection continues at the desired level.
- UV lamps deteriorate continuously with use, and may not emit sufficient ultraviolet radiation even when they seem to be operating.

CAUTION: The light given off by the ultraviolet Lamp/Sleeve can cause serious burns to unprotected eyes and skin. Never look at the Lamp/Sleeve when it is operating. Do not connect the Lamp/Sleeve without first having the Lamp/Sleeve properly secured into the stainless steel reactor chamber. Always unplug Dispenser before servicing.

1. Unplug Dispenser. Remove top cover.
2. Disconnect Lamp Harness, remove Reactor Chamber from Snap Clips.
3. Unthread Sleeve Bolt and Remove with Lamp/Sleeve. Separate Sleeve Bolt from old Lamp/Sleeve (pulls straight out). Discard.
4. Remove new light (Lamp/Sleeve) from the packaging carefully. It is recommended that the new Lamp/Sleeve be cleaned prior to assembly to ensure maximum performance. Clean with methyl or isopropyl alcohol of high purity only. Do not use dilute solutions or solutions with additives. Glass cleaners are NOT recommended.
5. Avoid touching the Lamp/Sleeve glass after cleaning, as skin oils will impair the desired UV radiation. Handle the Lamp/Sleeve by the ends only.
6. Soak a new O-Ring seal in a cup of warm water with 3-4 drops of dish washing soap. This will make installation of the new Lamp/Sleeve easier.
7. Place the new O-Ring seal approximately 2" from the electrical pins of the Lamp/Sleeve.
8. Align the Lamp/Sleeve into black plastic Sleeve Bolt locking position.
9. Insert into reactor chamber.
10. Thread Sleeve Bolt onto reactor chamber until it begins to seat on the O-Ring, then tighten an additional 1/4 to 3/8 turn. Do not over tighten, as over-compression of the O-Ring will not improve sealing.

11. Replace Reactor Chamber into Dispenser and connect lamp Harness.
12. Operate Dispenser. Check for leaks, and ensure green UV indicator lights are illuminated.
13. Fill in UV Lamp Replacement Record Labels on inside of Dispenser Top Cover.

Distiller(s)

To maintain good water quality and long Distiller life, it is essential that the Boiling Tank inside any distiller be checked **regularly** for excessive buildup of mineral contaminants.

Review the 200-L manual for information on checking and cleaning a Boiling Tank.

Troubleshooting

Water is warm when dispensed

- The UV sterilizing lamps warm the water when the Dispenser is not in use, this is normal. Water will cool after Dispensing water for 15-20 seconds.

Green UV indicator lamps not illuminated

- Servicing required. UV Lamps May need replacing. See section on Maintenance.

No water - Lights on control switches do not work

- Ensure fuse by power switch is good and power is ON.

No water - Lights on control switches illuminate

- If Manual Fill dispenses water, Dispenser Control Circuitry is defective.

Manual fill doesn't work, water valve can be heard buzzing

- Check Control Box, is red WATER AVAILABLE light illuminated?
- If Control Box has red WATER AVAILABLE illuminated, and a green WATER REQUEST light illuminated, pump should be running.

Technical Information

200-L Distiller

For technical information on the 200-L water Distiller, refer to the Owner's guide provided with the Distiller.

Specifications: Model 200-L

Height: 89 in. 224 cm.

Power ratings depend on unit ordered:

<u>Voltage</u>	<u>Current</u>	<u>Power</u>
208	24A	5300W
220	24A	5300W
240	24A	5300W

Power required is Single Phase 2 Wire plus Ground.

Check with your local electrical standards or electrician to determine appropriate ratings and connection.

Distills up to 185 Litres (49 U.S. Gallons) in 24 hours.

Storage tank holds approximately 290 Litres (77 U.S. Gallons).

Dispenser

Specifications: 2SS

Height	73"	185 cm
Width	22"	56 cm
Depth	19"	48.3 cm
Weight	100 lbs.	45 kg

Voltage: 120 VAC
Amperage: 1.0 Amp
Frequency: 60 Hz

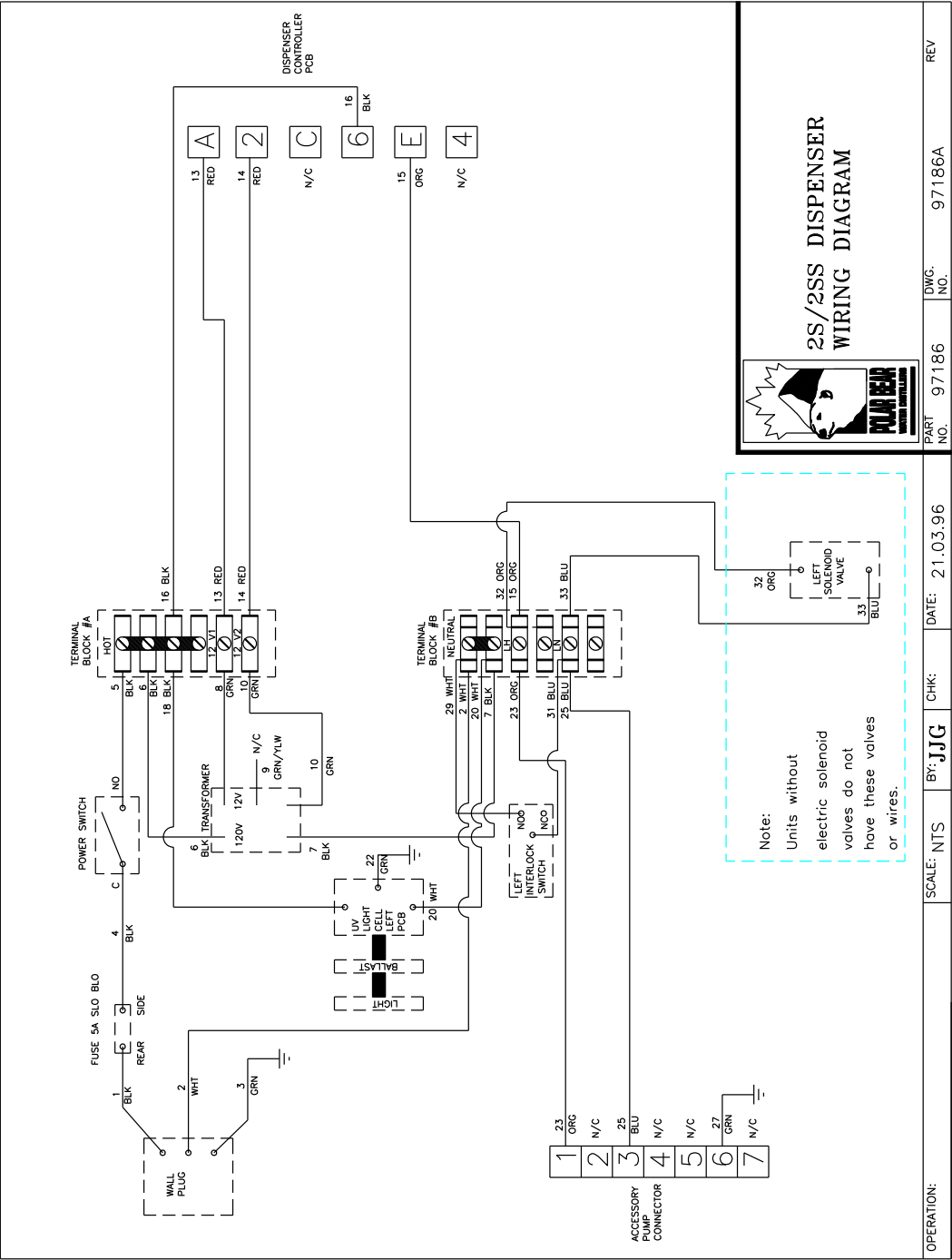
Pump: add 1.5 Amps for PK-5 pump.

Wiring List: 2S/ 2SS

#	Part #	Color	Guage	Length in. mm	From Conn.	To Conn.	From Location	To Location
1.	105129	BLK	16	6.5 165		F250 60001	POWER CORD	FUSE HOLDER - REAR
2.	105129	WHT	16	10.0 254		F250 60001	POWER CORD	TERM BLK #B - NEUTRAL
3.	105129	GRN	16	4.0 102		RING 60002	POWER CORD	CHASSIS
4.	105130	BLK	16	3.0 76	F250 60001	F250 60001	FUSE HOLDER - SIDE	POWER SWITCH #C
5.	105131	BLK	16	11.0 279	F250 60001	F250 60001	POWER SWITCH #NO	TERM BLK #A - HOT
6.	105092	BLK	18	6.0 152		F250 60010	TRANSFORMER INPUT	TERM BLK #A - HOT
7.	105092	BLK	18	8.0 203		F250 60010	TRANSFORMER INPUT	TERM BLK #B - NEUTRAL
8.	105092	GRN	18	4.5 114		F250 60010	TRANSFORMER OUTPUT	TERM BLK #A - 12V1
9.	105092	GRN/ ylw	18	0 0		none	TRANSFORMER OUTPUT CENTER TAP	CUT SHORT
10.	105092	GRN	18	4.5 114		F250 60010	TRANSFORMER OUTPUT	TERM BLK #A - 12V2
11.	N/C							
12.	N/C							
13.	105132	RED	18	19.5 495		F250 60001	CONTROLLER PCB #A	TERM BLK #A - 12V1
14.	105132	RED	18	19.5 495		F250 60001	CONTROLLER PCB #2	TERM BLK #A - 12V2
15.	105132	ORG	18	16.5 419		F250 60001	CONTROLLER PCB #E	TERM BLK #B - LH
16.	105132	BLK	18	21.0 533		F250 60001	CONTROLLER PCB #6	TERM BLK #A - HOT
17.								
18.	105091	BLK	16	8.5 216		F250 60001	LEFT UV PCB P1-2	TERM BLK #A - HOT
19.								
20.	105091	WHT	16	5.5 140		F250 60001	LEFT UV PCB P1-3	TERM BLK #B - NEUTRAL
21.	N/C							
22.	105091	GRN	16	4.5 114		RING 60002	LEFT UV PCB P1-1	CHASSIS
23.	105133	ORG	16	13.0 330	FPIN 60014	F250 60001	ACC PUMP #1	TERM BLK #B - LH
24.	N/C							
25.	105135	BLU	16	14.0 356	FPIN 60014	F250 60001	ACC PUMP #3	TERM BLK #B - LN
26.	N/C							
27.	105137	GRN	16	5.0 127	FPIN 60014	RING 60002	ACC PUMP #6	CHASSIS
28.	N/C							
29.	105139	WHT	16	38.0 965	F250 60001	F187 60011	TERM BLK #B - NEUTRAL	LEFT INTERLOCK #C
30.	N/C							
31.	105141	BLU	16	10.0 254	F187 60011	F250 60001	LEFT INTERLOCK #NO	TERM BLK #B - LN
32.	105142	ORG	16	14.0 256	F250 60001	F250 60001	TERM BLK #B - LH	LEFT WATER VALVE #A
33.	105143	BLU	16	14.0 256	F250 60001	F250 60001	TERM BLK #B - LN	LEFT WATER VALVE #B
34.	N/C							
35.	N/C							

PART #	DESCRIPTION		
60001	Receptacle, F250, 14-16 AWG	60030	Ring, #10, 10-12 AWG
60002	Ring, #10, 14-16 AWG	60031	Receptacle, F250, FLAG, 18-22 AWG
60010	Receptacle, F250, 18-22 AWG	60032	Tab, F250, 14-16 AWG
60011	Receptacle, F187, 14-16 AWG	60033	Ring, 1/4", 14-16 AWG
60012	Spade, #10, 14-16 AWG	60034	Ring, #6, 14-16 AWG
60013	Receptacle, F250, PIGGI, 18-22 AWG	60050	Tab, F250, 18-22 AWG
60014	Pin, Female	60056	Receptacle, F250, 18-22 AWG, large opening
60015	Pin, Male	60057	Receptacle, F250, 10-12 AWG
60016	Receptacle, F250, PIGGI, 14-16 AWG	60058	Receptacle, F187, 14-16 AWG, large opening
60019	Butt Splice, 14-16 AWG	60059	Tab, F250, 18-22 AWG, large opening
60020	Ring, 1/4", 18-22 AWG	60060	Ring, #10, 18-22 AWG
60023	Receptacle, F250, FLAG, 14-16 AWG	60061	Receptacle, F187, 18-22 AWG
60028	Receptacle, F187, 18-22 AWG, large opening	60062	Ring, #6, 18-22 AWG
		60025	Butt Splice, 18-22 AWG

Electrical Wiring Diagram: 2S / 2SS



Parts List - Dispenser Head

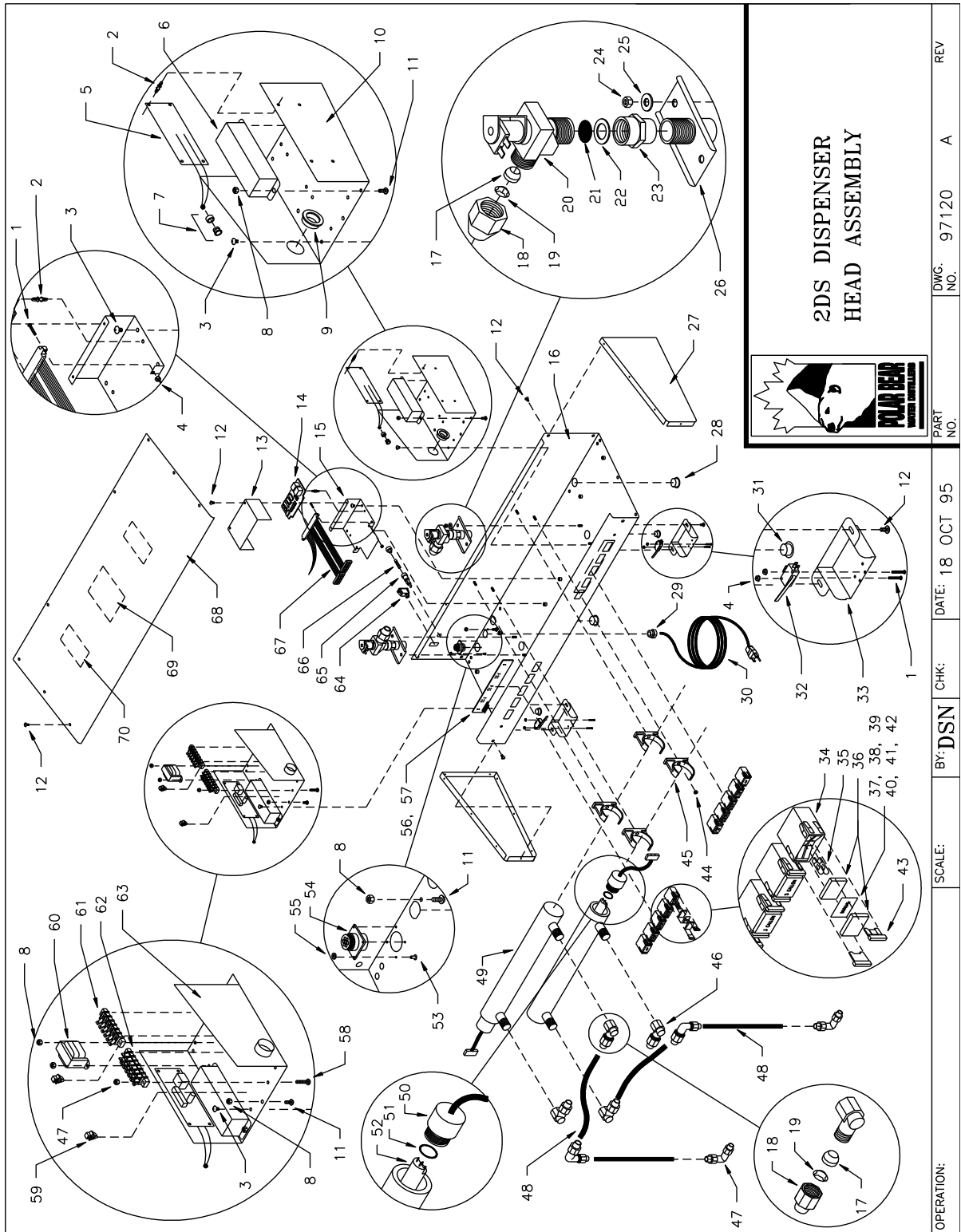
* Note* This list is for a Double Automatic Dispenser. Single Automatic
same components.

Dispensers use the

Line	Qty	Item	Description
1	1	105102	TOP COVER,DISPENSER
2	2 EA	105085	UV 705 PCB,602374 WIRED LED
3	10	45025	SPACER-FASTENER,PC BOARD MNTG.
4	2 EA	105084	UV 705 BALLAST
5	1 EA	100188	SWITCH,ROCKER,ON/OFF , R/B
6	1 EA	100160	FUSE,HOLDER,CHASSIS,15 AMP
7	2	105115	PANEL,ELECTRICAL,2DS RH
8	2 EA	30112	COUPLER,POLY,1½ FPT - BE
9	4 EA	15502	NUT, GALVANIZED, 1/4", HEX
10	2	105186	SPOUT,MOUNT,W.A.
11	4 EA	10007	STUD, S.S. #6-32 X 3/8"
12	18 EA	10109	SCREW,SHTMTL,SS,#10-12x1/2"
13	1	105095	BASE,TOP/BOTTOM,DISPENSER
14	2	105096	END,TOP,DISPENSER
15	12 EA	10009	TAP PAD, S.S. #10-24 X 0.3"
16	4 EA	10002	STUD, S.S. 1/4"-20 X 3/8"
17	2	80199	BUSHING,SNAP,PLASTIC,1"HOLE
18	2	105123	COVER,DOOR SWITCH
19	6 EA	10105	SCREW, MACH,RND,SLOT,#4-40X3/4
20	2 EA	60017	MICROSWITCH,SHORT ARM
21	6 EA	15504	NUT,KEP,#4-40
22	1	105129	CABLE,POWER,DISPENSER
23	1 EA	80061	STRAIN RELIEF 7K2
24	4 EA	105086	UV 705 SUPER CLIPS
25	4 EA	15507	NUT,KEP,#6-32
26	10	105065	SWITCH,PB,MOM,SPDT,LIGHTED
27	20	105067	LIGHT BULB,14V,80ma,T1-3/4
28	2	105196	LABEL,DISPENSER SW,STOP
29	10	105197	SWITCH LENS,CLEAR,DISPENSER
30	20	105066	SWITCH BARRIER
31	2 EA	105083	UV 705 CELL ASSM
32	1	105132	WIREASS,DISPENSER CONTR. HARN.
33	1 EA	100124	CONNECTOR, 7 PIN RECEPTACLE
34	1 EA	105062	CIRCUITBOARD,DISPENSER
35	1	105132	WIREASS,DISPENSER CONTR. HARN.
36	1	105113	COVER,DISPENSER CONTROLLER
37	1	105164	TERM BLK,1x6POS,DBL45,DBL90TAB
38	1 EA	102160	TERM BLOCK,1x6POS,DBL-TAB@45
39	1	105092	TRANSFORMER ASSM,DISPENSER
40	4 EA	10104	SCREW,MACH,PLTD,TRUSS
41	2 EA	100115	BUSHING,WIRE,5/8"
42	14 EA	15503	NUT,KEP,#10-24
43	1	105114	BRACKET,MTG,DISPENSER CONTROLR
44	14	15003	WASHER, FLAT,S.S.,5/16"X11/16"
45	18 EA	10136	SCREW,MACH,PLTD,SKT,#10-24x1/4
46	2 EA	100146	BUSHING,SNAP,NYLON,1.25"HOLE
47	4 EA	80003	RIVET, ALUMINUM, 1/8"x1/8"
48	2	105189	DECAL,UV LAMP REPLACEMENT SCHD
49	1	105187	DECAL,SCHEMATIC,2DS,4UP
50	4	30129	ELBOW,90,POLY,3/4FPTx1/2ID
51	2 FT	45008	TUBING,LDPE NAT,5/8x1/2"ID
52	2 EA	30135	NUT,5/8 OD,QUEST
53	2 EA	30123	RING,5/8"OD
54	2 EA	30120	CONE,5/8"OD
55	0 EA	30119	CONE,1/2"OD
56	0 EA	30122	RING,1/2"OD
57	0 EA	30126	NUT,1/2"OD,QUEST
58	2 EA	30117	ELBOW,90,POLY,1/2ID-3/8ID TUBE

59	2 FT	45007	TUBING,LDPE NAT,1/2"x3/8"ID
60	2 FT	45007	TUBING,LDPE NAT,1/2"x3/8"ID
61	2	105192	LABEL,DISPENSER SW,5 GALLONS
62	1	105193	LABEL,DISPENSER SW,3 GALLONS
63	2	105194	LABEL,DISPENSER SW,2 GALLONS
64	1	105199	LABEL,DISPENSER SW,1 GALLON
65	2	105195	LABEL,DISPENSER SW,MANUAL FILL
66	2 EA	105087	UV 705 BULB, REPLACEMENT
67	2 EA	105128	ORING,UV798 SEAL
68	2 EA	105089	UV 705 LAMP HARNESS, 9"
69	2 EA	30057	COUPLER,SWIVEL,3/4FGH-1/2FPT
70	2 EA	80006	WASHER,BLK NEOPREAN,1"x5/8x1/8
71	2	100419	SCREEN, LEG FILTER, .875,
72	2	105068	VALVE,SOLENOID,DISPENSING
73	1 EA	60084	FUSE,5AMP,SLO BLO
74	1 SET	105072	INDICATOR MTG.CLIP SET,LED
75	1	105294	BOARD, DISPENSER CONTROL HARNESS, LH

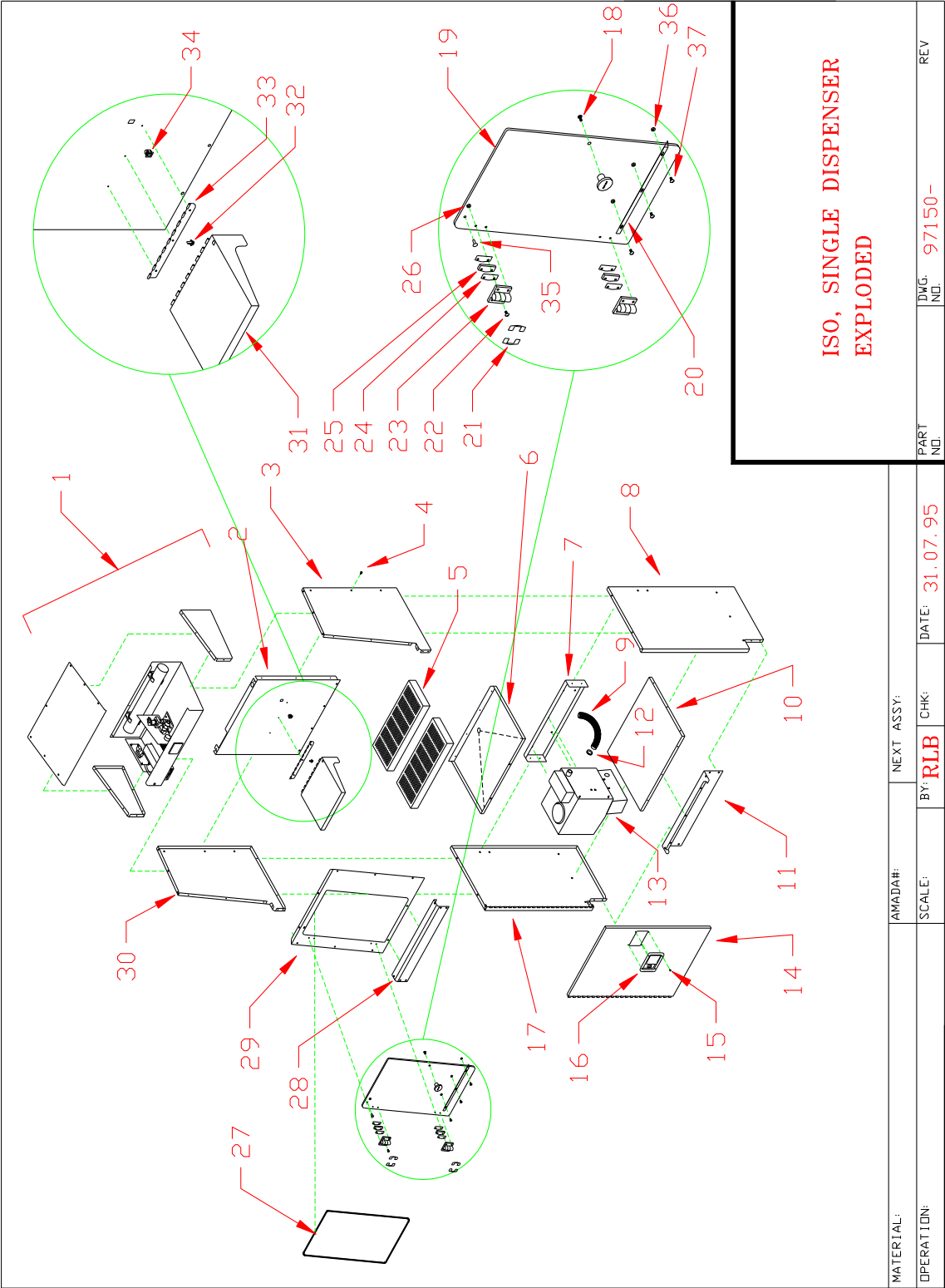
Parts Diagram - Dispenser Head



Parts List - Dispenser Stand

Line	Qty	Item	Description
1	1	105260	HEAD ASSM, 2S
2	1	105180	BACK,TOP SECTION,S DISPENSER
3	1	105093	SIDE LH,TOP STAND,DISPENSER
4	52 EA	10109	SCREW,SHTMTL,SS,#10-12x1/2"
5	2	105208	GRATE,SDISP
6	1	105177	DRIP TRAY,S DISPENSER
7	1	105182	BRACE,STABILIZATION,S DISPENSER
8	1	105185	LH SIDE,LC,S DISPENSER
9	1 FT	45005	TUBING,JAYFLEX TVC,1"x1-1/4"
10	1	105183	LOWER SHELF,STAND,SD
11	1	105184	KICK PLATE,LC,S DISPENSER
12	1 EA	80166	GEAR CLAMP,1-1/16
13	1	105207	DP-1,ASSM,COMPLETE
14	1	105081	DOOR,LOWER CABINET,DISPENSER
15	4 EA	80003	RIVET, ALUMINUM, 1/8"x1/8"
16	1 EA	105078	DOOR LATCH,LOCKING SS
17	1	105178	FRONT COVER,S DISPENSER
18	1 EA	10130	SCREW,MACH,PLTD,RND,SKT
19	1	105107	DOOR,TOP,DISPENSER
20	1	105200	DRIP GUARD,DISPENSER
21	4 ea	105191	HINGE COVER,DISPENSER DOOR
22	8 EA	10138	SCREW,MACH,SS,SKT#10-24x5/8"PH
23	2 EA	105077	HINGE,DOOR POSITIONING
24	4	105122	SPACER,SHIM
25	2	105118	SPACER,HINGE
26	8 EA	15503	NUT,KEP,#10-24
27	5.9 FT	80201	CHANNEL,U,SBR1/32x1/8x5/16"
28	1	105179	FRONT PLATE,TOP,S DISPENSER
29	1	105178	FRONT COVER,S DISPENSER
30	1	105094	SIDE RH,TOP STAND,DISPENSER
31	1	105291	SHELF, DISPENSER W.A.
32	1 EA	105071	STRIKE,DISPENSER,JUG SHELF
33	1	105108	HINGE,SHELF,DISPENSER
34	1 EA	105076	LATCH,DISPENSER,JUG SHELF
35	1 EA	80206	CLIP,NYLON ARROW,1/4x1/4x.630"
36	3 EA	15517	NUT,HEX,SS,#10-24
37	3 EA	10140	SCREW,MACH,SS,TRUS,#10-24x1/2"

Parts Diagram - Dispenser Stand



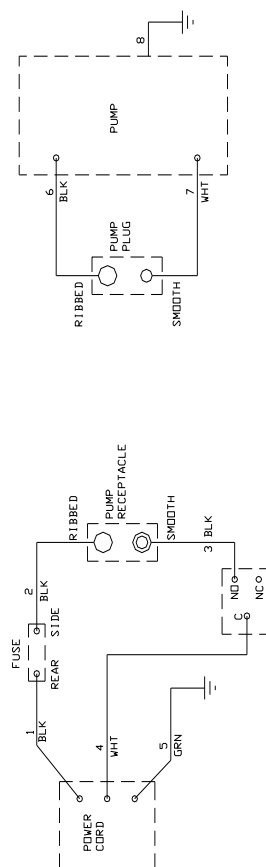
Drain Pump

Wiring List: DP-1

#	Part #	Color	Gauge	Length in. mm	From Conn.	To Conn.	From Location	To Location
1.	10517 3	BLK	16	3.5 90		F250 60001	POWER CORD	FUSE - REAR
2.	10517 4	BLK	18	3.0 76	F250 60010		FUSE – SIDE	PUMP RECPT. RIBBED
3.	10517 4	BLK	18	6.5 165		F187 60061	PUMP RECPT. SMOOTH	PUMP S.O. MSW #NO
4.	10517 3	WHT	16	8.5 216	F187 60011		PUMP S.O. MSW #C	POWER CORD
5.	10517 3	GRN	16	2.0 51		RING 60033	POWER CORD	CHASSIS

<u>PART #</u>	<u>DESCRIPTION</u>		
60001	Receptacle, F250, 14-16 AWG	60030	Ring, #10, 10-12 AWG
60002	Ring, #10, 14-16 AWG	60031	Receptacle, F250, FLAG, 18-22 AWG
60010	Receptacle, F250, 18-22 AWG	60032	Tab, F250, 14-16 AWG
60011	Receptacle, F187, 14-16 AWG	60033	Ring, 1/4", 14-16 AWG
60012	Spade, #10, 14-16 AWG	60034	Ring, #6, 14-16 AWG
60013	Receptacle, F250, PIGGI, 18-22 AWG	60050	Tab, F250, 18-22 AWG
60014	Pin, Female	60056	Receptacle, F250, 18-22 AWG, large opening
60015	Pin, Male	60057	Receptacle, F250, 10-12 AWG
60016	Receptacle, F250, PIGGI, 14-16 AWG	60058	Receptacle, F187, 14-16 AWG, large opening
60019	Butt Splice, 14-16 AWG	60059	Tab, F250, 18-22 AWG, large opening
60020	Ring, 1/4", 18-22 AWG	60060	Ring, #10, 18-22 AWG
60023	Receptacle, F250, FLAG, 14-16 AWG	60061	Receptacle, F187, 18-22 AWG
28	Receptacle, F187, 18-22 AWG, large opening	60062	Ring, #6, 18-22 AWG

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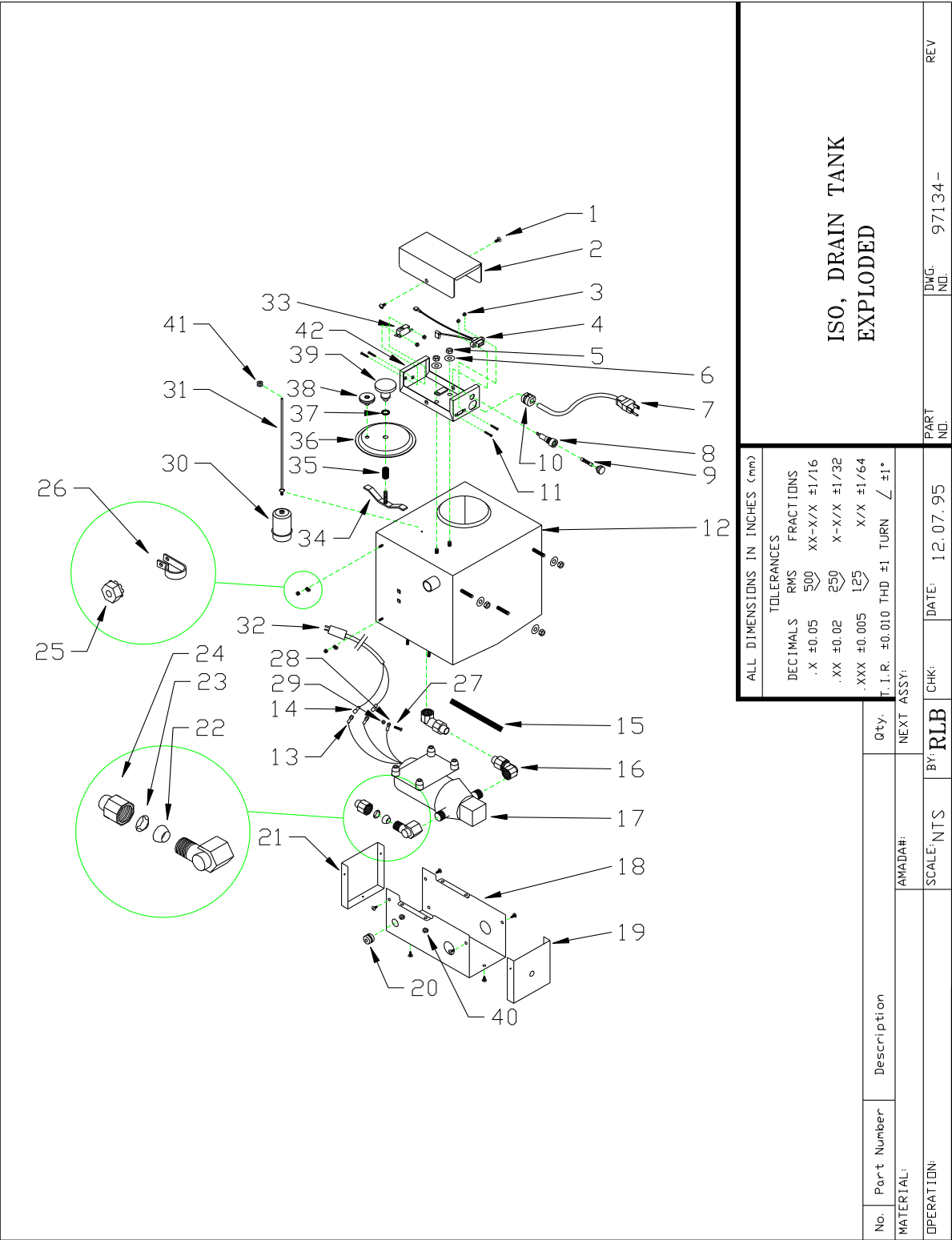


ALL DIMENSIONS IN INCHES (mm)		TOLERANCES	
		DECIMALS	RMS FRACTIONS
.X	±0.05	500	XX-X/X ±1/16
.XX	±0.02	250	X-X/X ±1/32
.XXX	±0.005	125	X/X ±1/64
T. I. R. ±0.010 THD ±1 TURN / ±1°			
No.	Part Number	Qty.	Next Assy.
Description			
MATERIAL:		AMADIAH:	
OPERATION:		SCALE: NTS	BY: RIB
		CHK:	DATE: 13 07 95
		PART	DWG. 105170-REV

Part List: DP-1

Line	Qty	Item	Description
1	8 EA	10109	SCREW,SHTMTL,SS,#10-12x1/2"
2	1	100159	COVER-H.T.-LEVEL CONTROL D8/C8
3	4 EA	15504	NUT,KEP,#4-40
4	1	105174	CABLE ASSM,PUMP RECEPT.,DP-1
5	5 EA	15502	NUT, GALVANIZED, 1/4", HEX
6	5	15003	WASHER, FLAT,S.S.,5/16"X11/16"
7	1	105173	CABLE ASSM,POWER,DP-1
8	1 EA	100160	FUSE,HOLDER,CHASSIS,15 AMP
9	1 EA	100161	FUSE, 1 AMP SLOW BLOW
10	1 EA	80061	STRAIN RELIEF 7K2
11	4 EA	10105	SCREW, MACH,RND,SLOT,#4-40X3/4
12	1	105167	TANK,DRAIN,DISP,W.A.
13	2	60050	TAB,250,18-22AWG,NORMAL
14	2 EA	60010	RECEPTACLE,250,18-22AWG,NORMAL
15	1 FT	45008	TUBING,LDPE NAT,5/8x1/2"ID
16	3 EA	30054	ELBOW,90,1/2"OD TUBE-1/2"FPT
17	1 EA	100179	PUMP, 115V, 60PSI, 1.4GPM
18	1	100168	BOX, 26D PUMP
19	1	100230	SIDE,26D PUMP BOX, HOLE
20	1 EA	80061	STRAIN RELIEF 7K2
21	1	100169	SIDE, 26D PUMP BOX, PLAIN
22	0 EA	30119	CONE,1 2"OD
23	0 EA	30122	RING,1 2"OD
24	0 EA	30126	NUT,1 2"OD,QUEST
25	2 EA	15507	NUT,KEP,#6-32
26	2 EA	80127	CLAMP,CABLE,NYLON,WALL MT.,1/4
27	1 EA	10104	SCREW,MACH,PLTD,TRUSS
28	1 EA	60060	RING,#10,18-22AWG
29	1 EA	15503	NUT,KEP,#10-24
30	1 EA	100162	FLOAT, H.T.,PF-29 1-1/2X2-5/8"
31	1	105172	FLOAT ROD,PSO,DP-1
32	1	100675	POWER CORD SET,PK-2/PK-3
33	1 EA	60017	MICROSWITCH, SHORT ARM
34	1	100302	B.T. T-BAR ASSEM
35	1 EA	100069	SPRING, B.T. LID
36	1	100054	H.T. LID DISC
37	1 EA	100205	ORING,RUBBER,1/2"IDx11/16"OD
38	1 EA	100117	FILTER CANNISTER,2U,PTFE .2uM
39	1 EA	100477	KNOB,LID,PLASTIC UNSTAMPED
40	4 EA	15503	NUT,KEP,#10-24
41	1 EA	100114	PLUG, HOLE, NYLON, 7/16"HOLE
42	1	100158	BOX-H.T.-LEVEL CONTROL D8/C8

Parts Diagram: DP-1



Pump Controller

Wiring List: CB-1

#	Part #	Color	Gauge	Length in. mm	From Conn.	To Conn.	From Location	To Location
1.	105146	GRN	18	2.5 64	RING 60060	MPIN 60015	CHASSIS	200-L CABLE CONN. #4
2.	105146	BLK	18	4.5 114	PIGG 60016	MPIN 60015	RIGHT RELAY #A	200-L CABLE CONN. #2
3.	105146	WHT	18	4.0 102	PIGG 60016	MPIN 60015	RIGHT RELAY #B	200-L CABLE CONN. #3
4.	105147	BLK	16	4.0 102	F250 60001	F250 60001	RIGHT RELAY #A	LEFT RELAY #A
5.	105148	WHT	16	4.0 102	F250 60001	F250 60001	RIGHT RELAY #B	LEFT RELAY #B
6.	105169	RED	20	5.0 127		PIGG 60016	RED INDICATOR	LEFT RELAY #A
7.	105169	BLK	20	5.0 127		PIGG 60016	RED INDICATOR	LEFT RELAY #B
8.	105075	BLK	20	5.0 127		PIGG 60016	GREEN IND. RIGHT	RIGHT RELAY #4
9.	105075	BLK	20	5.0 127		ELCTAP 60086	GREEN IND. RIGHT	ELECTROTAP INTO PUMP RIGHT #3
10.	105075	BLK	20	5.0 127		PIGG 60016	GREEN IND. LEFT	LEFT RELAY #4
11.	105075	BLK	20	5.0 127		ELCTAP 60086	GREEN IND. LEFT	ELECTROTAP INTO PUMP LEFT #3
12.	105155	ORG	16	4.5 114	FPIN 60014	F250 60001	DISPENSER CONN. #2	RIGHT RELAY #4
13.	105156	YLW	16	6.5 165	FPIN 60014	F250 60001	DISPENSER CONN. #1	LEFT RELAY #4
14.	105157	BLU	16	8.5 216	FPIN 60014	FPIN 60014	DISPENSER CONN #5	PUMP RIGHT #3
15.	105158	BRN	16	8.0 203	FPIN 60014	FPIN 60014	DISPENSER CONN #3	PUMP LEFT #3
16.	105159	ORG	16	6.5 165	F250 60001	FPIN 60014	RIGHT RELAY #7	PUMP RIGHT #4
17.	105160	YLW	16	4.0 102	F250 60001	FPIN 60014	LEFT RELAY #7	PUMP LEFT #4
18.	105161	GRN	16	2.5 64	FPIN 60014	RING 60060	PUMP RIGHT #6	CHASSIS
19.	105161	GRN	16	2.5 64	FPIN 60014	RING 60060	PUMP LEFT #6	CHASSIS

<u>PART #</u>	<u>DESCRIPTION</u>		
60001	Receptacle, F250, 14-16 AWG	60030	Ring, #10, 10-12 AWG
60002	Ring, #10, 14-16 AWG	60031	Receptacle, F250, FLAG, 18-22 AWG
60010	Receptacle, F250, 18-22 AWG	60032	Tab, F250, 14-16 AWG
60011	Receptacle, F187, 14-16 AWG	60033	Ring, 1/4", 14-16 AWG
60012	Spade, #10, 14-16 AWG	60034	Ring, #6, 14-16 AWG
60013	Receptacle, F250, PIGGI, 18-22 AWG	60050	Tab, F250, 18-22 AWG
60014	Pin, Female	60056	Receptacle, F250, 18-22 AWG, large opening
60015	Pin, Male	60057	Receptacle, F250, 10-12 AWG
60016	Receptacle, F250, PIGGI, 14-16 AWG	60058	Receptacle, F187, 14-16 AWG, large opening
60019	Butt Splice, 14-16 AWG	60059	Tab, F250, 18-22 AWG, large opening
60020	Ring, 1/4", 18-22 AWG	60060	Ring, #10, 18-22 AWG
60023	Receptacle, F250, FLAG, 14-16 AWG	60061	Receptacle, F187, 18-22 AWG
60028	Receptacle, F187, 18-22 AWG, large opening	60062	Ring, #6, 18-22 AWG

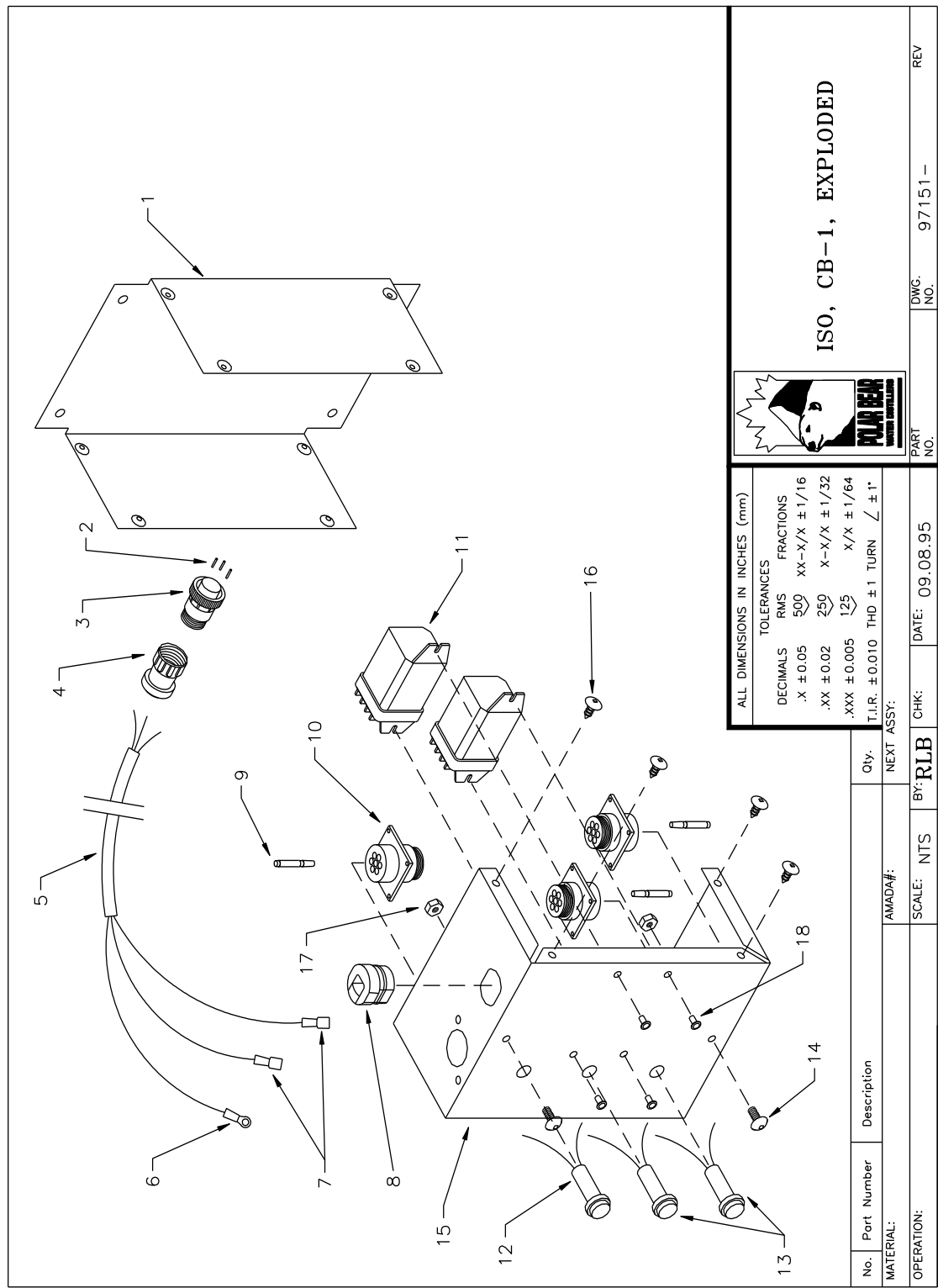
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Parts List: CB-1

Line	Qty	Item	Description
1	1	105116	BACK COVER,PUMP CONTROLLER
2	3 EA	60015	PIN, MALE
3	1 EA	100123	CONNECTOR, 4 PIN RECEPT SHELL
4	1 EA	100125	CONNECTOR, 4 PIN PLUG
5	1 IN	60038	CABLE 18 AWG - 3 COND BLACK
6	1 EA	60060	RING,#10,18-22AWG
7	2	60016	PIGG,250,16-14 AWG,NORMAL
8	1 EA	80061	STRAIN RELIEF 7K2
9	3	80200	PLUG,KEYING INSERT
10	3 EA	100124	CONNECTOR, 7 PIN RECEPTACLE
11	2 EA	100128	RELAY, 220V 15A
12	1	105169	INDICATOR ASSM,RED,CB-1,110V
13	2	105075	INDICATOR,GRN125V,ASSM
14	2 EA	10104	SCREW,MACH,PLTD,TRUSS
15	1	105117	BOX,PUMP CONTROLLER,DISPENSER
16	8 EA	10111	SCREW,SHTMTL,PLTD,#10-12X1/2"
17	2 EA	15503	NUT,KEP,#10-24
18	10 EA	80003	RIVET, ALUMINUM, 1/8"x1/8"

Parts Diagram: CB-1

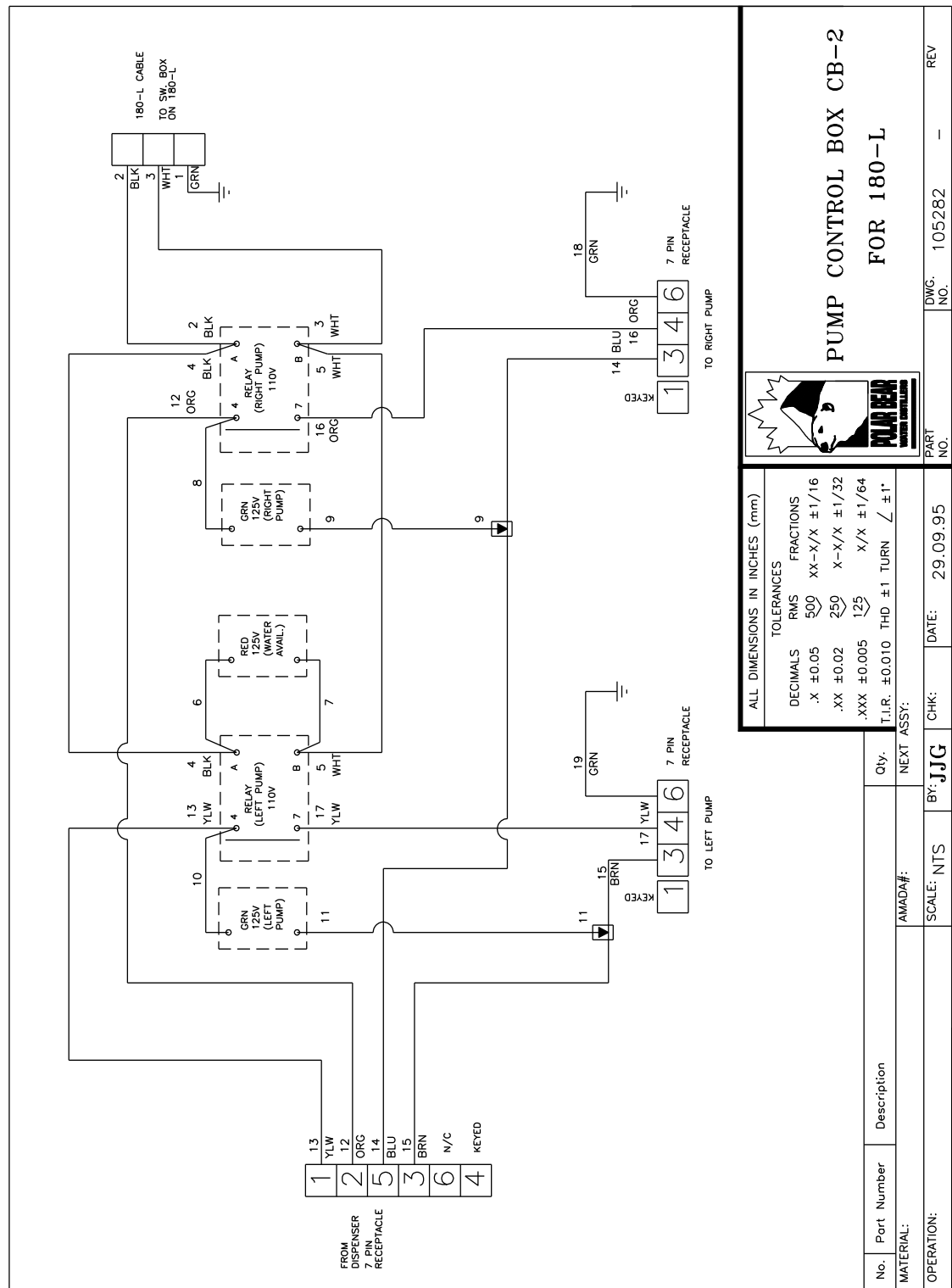


Wiring List: CB-2

#	Part #	Color	Gauge	Length in. mm		From Conn.		To Conn.		From Location	To Location
1.	105283	GRN	18	2.5	64	RING	60060			CHASSIS GND.	CORD
2.	105283	BLK	18	4.5	114	PIGG	60016			RIGHT RELAY #A	CORD
3.	105283	WHT	18	4.0	102	PIGG	60016			RIGHT RELAY #B	CORD
4.	105147	BLK	16	4.0	102	F250	60001	F250	60001	RIGHT RELAY #A	LEFT RELAY #A
5.	105148	WHT	16	4.0	102	F250	60001	F250	60001	RIGHT RELAY #B	LEFT RELAY #B
6.	105285	BLK	20	5.0	127			PIGG	60016	RED INDICATOR	LEFT RELAY #A
7.	105285	BLK	20	5.0	127			PIGG	60016	RED INDICATOR	LEFT RELAY #B
8.	105075	BLK	20	5.0	127			PIGG	60016	GREEN IND. RIGHT	RIGHT RELAY #4
9.	105075	BLK	20	5.0	127			ELCTAP	60086	GREEN IND. RIGHT	ELECTROTAP INTO PUMP RIGHT #3
10.	105075	BLK	20	5.0	127			PIGG	60016	GREEN IND. LEFT	LEFT RELAY #4
11.	105075	BLK	20	5.0	127			ELCTAP	60086	GREEN IND. LEFT	ELECTROTAP INTO PUMP LEFT #3
12.	105155	ORG	16	4.5	114	FPIN	60014	F250	60001	DISPENSER CONN. #2	RIGHT RELAY #4
13.	105156	YLW	16	6.5	165	FPIN	60014	F250	60001	DISPENSER CONN. #1	LEFT RELAY #4
14.	105157	BLU	16	8.5	216	FPIN	60014	FPIN	60014	DISPENSER CONN #5	PUMP RIGHT #3
15.	105158	BRN	16	8.0	203	FPIN	60014	FPIN	60014	DISPENSER CONN #3	PUMP LEFT #3
16.	105159	ORG	16	6.5	165	F250	60001	FPIN	60014	RIGHT RELAY #7	PUMP RIGHT #4
17.	105160	YLW	16	4.0	102	F250	60001	FPIN	60014	LEFT RELAY #7	PUMP LEFT #4
18.	105161	GRN	16	2.5	64	FPIN	60014	RING	60060	PUMP RIGHT #6	CHASSIS
19.	105161	GRN	16	2.5	64	FPIN	60014	RING	60060	PUMP LEFT #6	CHASSIS

<u>PART #</u>	<u>DESCRIPTION</u>		
60001	Receptacle, F250, 14-16 AWG	60030	Ring, #10, 10-12 AWG
60002	Ring, #10, 14-16 AWG	60031	Receptacle, F250, FLAG, 18-22 AWG
60010	Receptacle, F250, 18-22 AWG	60032	Tab, F250, 14-16 AWG
60011	Receptacle, F187, 14-16 AWG	60033	Ring, 1/4", 14-16 AWG
60012	Spade, #10, 14-16 AWG	60034	Ring, #6, 14-16 AWG
60013	Receptacle, F250, PIGGI, 18-22 AWG	60050	Tab, F250, 18-22 AWG
60014	Pin, Female	60056	Receptacle, F250, 18-22 AWG, large opening
60015	Pin, Male	60057	Receptacle, F250, 10-12 AWG
60016	Receptacle, F250, PIGGI, 14-16 AWG	60058	Receptacle, F187, 14-16 AWG, large opening
60019	Butt Splice, 14-16 AWG	60059	Tab, F250, 18-22 AWG, large opening
60020	Ring, 1/4", 18-22 AWG	60060	Ring, #10, 18-22 AWG
60023	Receptacle, F250, FLAG, 14-16 AWG	60061	Receptacle, F187, 18-22 AWG
60028	Receptacle, F187, 18-22 AWG, large opening	60062	Ring, #6, 18-22 AWG

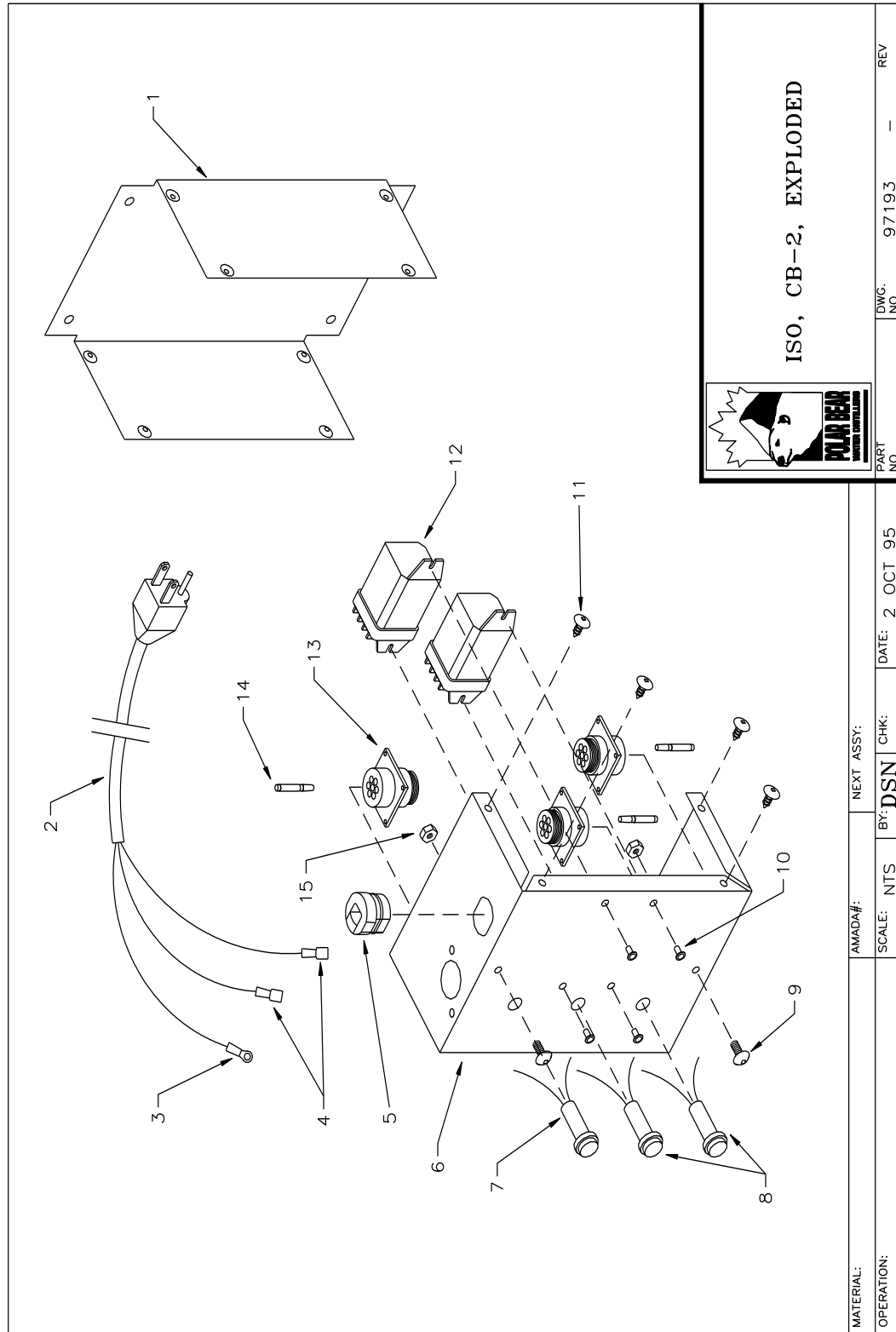
Electrical Wiring Diagram: CB-2



Parts List: CB-2

Line	Qty	Item	Description
1	1	105116	BACK COVER,PUMP CONTROLLER
2	1	105283	POWER CORD ASSEMBLY, CB-2
3	1 EA	60060	RING,#10,18-22AWG
4	2 EA	60016	PIGG,250,16-14 AWG,NORMAL
5	1 EA	80061	STRAIN RELIEF 7K2
6	1	105117	BOX,PUMP CONTROLLER,DISPENSER
7	1	105285	INDICATOR ASSM,RED,CB-2,110V
8	2	105075	INDICATOR,GRN125V,ASSM
9	2 EA	10104	SCREW,MACH,PLTD,TRUSS
10	10 EA	80003	RIVET, ALUMINUM, 1/8"x1/8"
11	8 EA	10111	SCREW,SHTMTL,PLTD,#10-12X1/2"
12	2 EA	100129	RELAY, 120V 15A
13	3 EA	100124	CONNECTOR, 7 PIN RECEPTACLE
14	3 EA	80200	PLUG,KEYING INSERT
15	2 EA	15503	NUT,KEP,#10-24

Parts Diagram: CB-2



PK-5 Pump Kit

PK-5 pumps are rated 115VAC 1.5 Amp, and pumps up to 3.3 gallons per minute.

Power is drawn from the **Dispenser** via the Pump Controller – Dispenser cable and NOT the 200-L.

Wiring List: PK-5

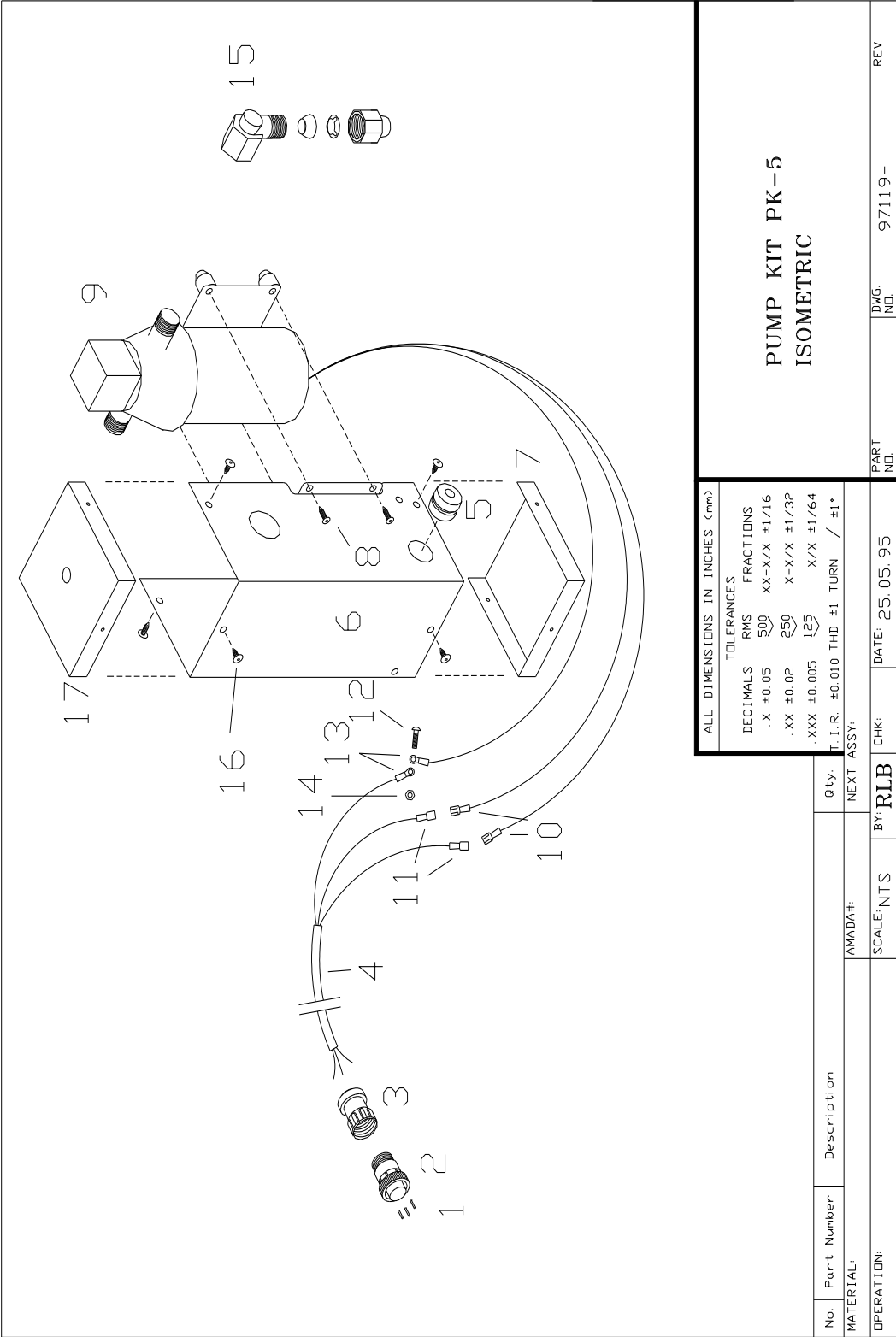
#	Part #	Color	Gauge	Length in. mm	From Conn.	To Conn.	From Location	To Location
1.	105163	BLK	18	2.5 64	MPIN 60015	F250 60010	CONNECTOR #4	PUMP BLK
2.	105163	WHT	18	2.5 64	MPIN 60015	F250 60010	CONNECTOR #3	PUMP WHT
3.	105163	GRN	18	2.5 64	MPIN 60015	RING 60060	CONNECTOR #6	CHASSIS
4.	105127	BLK	16	8.5 216		TAB 60032	PUMP	POWER CABLE BLK
5.	105127	WHT	16	3.5 89		TAB 60032	PUMP	POWER CABLE WHT
6.	105127	GRN	16	3.5 89		RING 60002	PUMP	CHASSIS

PART #	DESCRIPTION	
60001	Receptacle, F250, 14-16 AWG	60030
60002	Ring, #10, 14-16 AWG	60031
60010	Receptacle, F250, 18-22 AWG	60032
60011	Receptacle, F187, 14-16 AWG	60033
60012	Spade, #10, 14-16 AWG	60034
60013	Receptacle, F250, PIGGI, 18-22 AWG	60050
60014	Pin, Female	60056
60015	Pin, Male	60057
60016	Receptacle, F250, PIGGI, 14-16 AWG	60058
60019	Butt Splice, 14-16 AWG	60059
60020	Ring, 1/4", 18-22 AWG	60060
60023	Receptacle, F250, FLAG, 14-16 AWG	60061
60028	Receptacle, F187, 18-22 AWG, large opening	60062
		Ring, #10, 10-12 AWG
		Receptacle, F250, FLAG, 18-22 AWG
		Tab, F250, 14-16 AWG
		Ring, 1/4", 14-16 AWG
		Ring, #6, 14-16 AWG
		Tab, F250, 18-22 AWG
		Receptacle, F250, 18-22 AWG, large opening
		Receptacle, F250, 10-12 AWG
		Receptacle, F187, 14-16 AWG, large opening
		Tab, F250, 18-22 AWG, large opening
		Ring, #10, 18-22 AWG
		Receptacle, F187, 18-22 AWG
		Ring, #6, 18-22 AWG

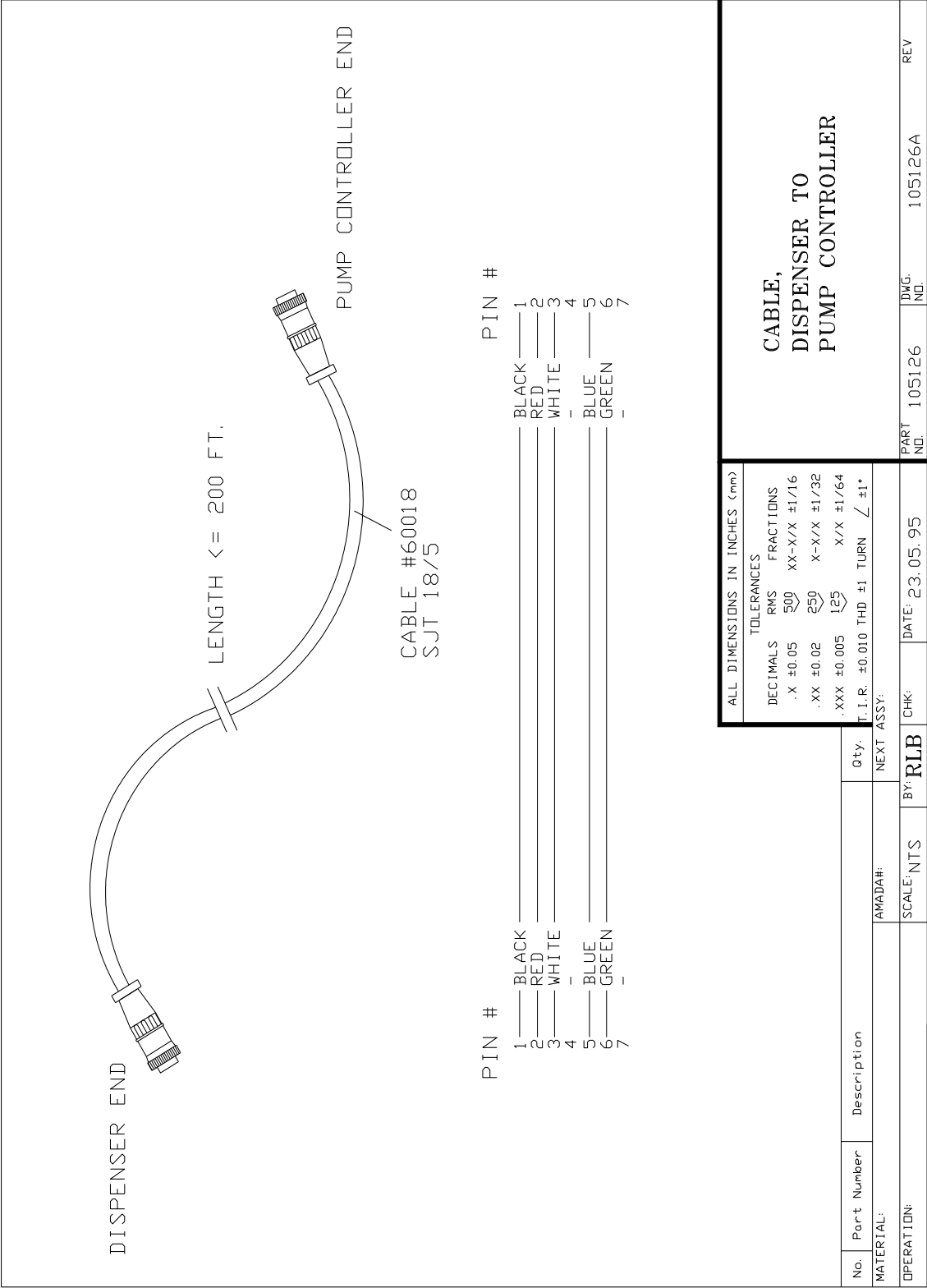
Parts List: PK-5

Line	Qty	Item	Description
1	3 EA	60015	PIN, MALE
2	1 EA	100126	PLUG, 7PIN
3	1 EA	100545	CLAMP, CABLE, 7PIN CONNECTOR
4	48 IN	60038	CABLE IN, 18AWG, 3C, BLK
5	1 EA	80061	STRAIN RELIEF 7K2
6	1	102178	BOX, 200L PUMP
7	1	102180	SIDE, 200L PUMP BOX PLAIN
8	4 EA	10110	SCREW, SHTMTL, PLTD, #10 X 3/4"
9	1	105127	PUMP ASSM, PK-5
10	2	60050	TAB, 250, 18-22AWG, NORMAL
11	2 EA	60010	RECEPTACLE, 250, 18-22AWG, NORMAL
12	1 EA	10104	SCREW, MACH, PLTD, TRUSS
13	2 EA	60060	RING, #10, 18-22AWG
14	1 EA	15503	NUT, KEP, #10-24
15	2 EA	30054	ELBOW, 90, 1/2" OD TUBE-1/2" FPT
16	6 EA	10111	SCREW, SHTMTL, PLTD, #10-12X1/2"
17	1	102179	SIDE, 200L PUMP BOX, HOLE
18	1	100510	DECAL, 'FOR USE ONLY WITH'
19	0 FT	45007	TUBING, LDPE NAT, 1/2"x3/8" ID

Electrical Wiring Diagram: PK-5



Cable - Pump Controller to Dispenser



Dealer Information

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