



Kennel Wash Pump Stations

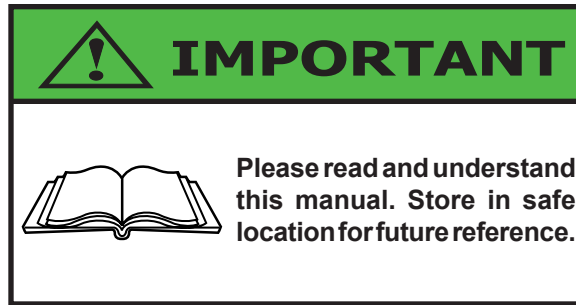
DU KL1503CPG / DU KL1503CPG2



Owner's Manual #0813 042211

Serial Number:

Installation Date:



Everyone who operates this unit should understand basic operations and safety precautions!
The time you take to fully understand the proper installation, maintenance and use of the machine will prolong its service life, and assure you of trouble free operation.

When unpacking, check to make sure all the parts shown on the Parts Breakdown near the end of this manual are included. If any parts are missing or broken, please call Dultmeier Sales as soon as possible.

Consumers should notice that this manual may differ slightly from the actual product as more improvements are made to our products. Some of the pictures in this manual may differ slightly from the actual product as well. Dultmeier Sales reserves the right to update designs and / or change the specifications at any time without incurring any obligation to install them on units previously sold.

If you have any questions or suggestions about this manual, please contact us at:

800-228-9666
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www.dultmeier.com

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To avoid serious or fatal personal injury or major property damage, read and follow all safety and operation instructions in the manual.



This is a **Safety Alert Symbol** -

When you see this symbol in the manual, look for the following signal words & be alert to the potential for personal injury or property damage.



Warns of potential hazards that **WILL** cause serious personal injury, death or property damage.



Warns of potential hazards that **CAN** cause serious personal injury, death or property damage.



Warns of potential hazards that **WILL** or **CAN** cause minor personal injury, death or property damage.



Indicates special instructions that **MUST** be followed but not related to hazards.

**This manual is intended to assist in the installation and operation of this unit.
Do not attempt to operate this unit without reading and understanding this manual.**

General Safety

To avoid the risk of serious bodily injury and property damage, read safety instructions carefully before installing this system. Follow all local and/or national plumbing and electrical codes when installing.



Do Not Allow System or Components to Freeze.

To do so may damage the system and will void the warranty.



Never Run the System Dry.

Running the unit dry (without fluid) can damage internal parts, overheat pump (which can cause burns to people handling or servicing the pump), and will void the warranty.



Risk of Electric Shock.

Keep the unit dry at all times -

Do not wash the motor or electrical panel or allow the unit to sit in standing water.



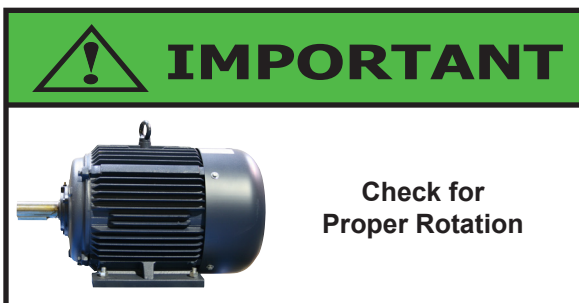
Use only Ground Fault Circuit Interrupter (GFCI) protected grounded outlet for the cord plug.

If you must use an extension cord, use only UL approved indoor/outdoor, 3-wire, grounding type cords.

The cord must be rated to support amp draw. Do not allow any part of cord or receptacle ends to sit in water.

To avoid fatal shocks, proceed as follows if service is needed:

- A. Turn off water to the system.
- B. Disconnect the power at main electrical service before unplugging the unit.
- C. Ground the electrical outlet box.
- D. Take extreme care when changing fuses.



Pump was designed for forward rotation to allow optimum lubrication of the crosshead area. Reverse rotation is acceptable if the crankcase oil level is increased slightly above center dot to assure adequate lubrication.



Modern motors can operate at high temperatures. To avoid burns when servicing pump, allow it to cool for 20 minutes after shutdown before handling.

Model(s)	DU KL1503CPG (Single Pump Station)											
	DU KL1503CPG2 (Double Pump Station)											
Style.....	Bench Style Pump Station											
Capacity.....	4.0 GPM											
PSI.....	1800											
Maximum Inlet Pressure.....	60 PSI											
Maximum Inlet Temperature	130° F											
	*See Included CAT PUMPS® Service Manual for Higher Temperatures											
Motor	<table><tr><td>CE EM3615T</td><td colspan="2">5 HP, 3 PH</td></tr><tr><td>Volts:</td><td>208 - 230</td><td>460</td></tr><tr><td>Amps:</td><td>14.8 - 13.6</td><td>6.8</td></tr></table>			CE EM3615T	5 HP, 3 PH		Volts:	208 - 230	460	Amps:	14.8 - 13.6	6.8
CE EM3615T	5 HP, 3 PH											
Volts:	208 - 230	460										
Amps:	14.8 - 13.6	6.8										
Pump	CC 5CP2120W											
Crankcase Capacity	17 oz.											
Pump Drive.....	Belt											
Pump Inlet	1/2"											
Pump Discharge	3/8"											
Dimensions	Approx. 22"W x 29"L x 62"H (DU KL1503CPG)											
	Approx. 44"W x 29"L x 62"H (DU KL1503CPG2)											
Shipping Weight	Varies by Model, Approx. 400-800 lbs.											

CAT PUMPS® Plunger Pump

5 HP, 3 PH, TEFC Motor

Stainless Steel Float Tank

High Flow Inlet Solenoid

Unloading Valve with Micro Switch

Pressure Gauge

Safety Pop Off Valve

Inlet Strainer

UL Listed Electrical Panel with: Disconnect, Motor Starter, Transformer, Low Voltage Fuse, Hour Meter, & Terminal Strip

All Units are Pre-Plumbed, Pre-Wired, and Tested prior to shipment

Pre-Installation Equipment Room Specifications and Requirements

For a successful installation read and understand these requirements before proceeding.

1. Electrician is responsible for code requirements, labor performed, and the following:

- Check incoming phase and voltage. This unit comes standard with a 5HP 3PH 208-240V motor.***
- Materials to fit from Main Electrical Panel to Pump Station Control Panel
- Materials to fit from Pump Station Control Panel to EP1 Selector Switch**
- A Disconnect from Main Panel to Pump Station Control Panel if Main Panel is located in adjacent room.

2. A water softener is highly recommended. They provide the following benefits:

- Longevity of wet end parts
- Less debris buildup
- Better chemical performance
- Less chemical use

• Plumber is responsible for code requirements, labor performed, and the following:

- Material to fit from Hard Water Supply to Water Softener.
- Material to fit from Water Softeners to Heaters.
- Material to fit from Water Softeners to Chemical Tanks.
- Thermal Relief Valve(s) per Heater.
- Service Ball Valve(s) per Heater on inlet side.
- Material to fit Gas Line to Heater(s).
- Material to fit High Pressure Line from Bay to Wash Station.
- Service Ball Valve(s) per Chemical Tank.
- Pipes, Fittings, and Valves, size approximately (4GPM x ___ Bays)
- Pressure Regulator

3. Typically, Instantaneous Water Heaters are located above, or in close proximity to, Pumping Station.

4. Run Line Recommendations For Equipment Room to Wash Bay(s)

- Do not oversize pipe I.D.*
- Use a minimum of 2000 PSI rated pipe.
- Use Stainless Steel pipes, fittings, and valves.
- Weld each joint.
- Thread pipe on each drop end (For Ball Valve Service).

5. Wash Bay Requirements

- Use a 1/4 turn Stainless Steel Ball Valve on drop end.
- Fit Ball Valve with a female Quick Detach Coupler.**
- Fit hose end with a male Quick Detach Coupler.**
- Use of a High Pressure hose reel for lengths over 25'.**
- Zero Leak Trigger Guns.
- High/Low Adjustable Nozzle.

* Oversized pipe creates a longer lag time between functions, prolonging the time it would take to clean bay(s).

** Supplied by Dultmeier when optional package was purchased. See breakdown for individual parts.

*** Other motors are available on request. Check motor nameplate for proper phase, voltage, hp, and amps.

Placement & Plumbing

1. Select a location for your Kennel Wash Pump Station. Locate near water and electrical sources, and floor drain. Surface must be level. Use **(Fig. 1)** as an example of a typical pump room layout.
2. Set Pump Station in place leaving adequate room to work around. (Approx. 24" from the wall.) When installation is complete, you will push the unit back into its final resting place and then add the (provided) rubber leveling feet.

When running wire and hose leave some slack to ensure free movement of Pump Station



Helpful Hint !

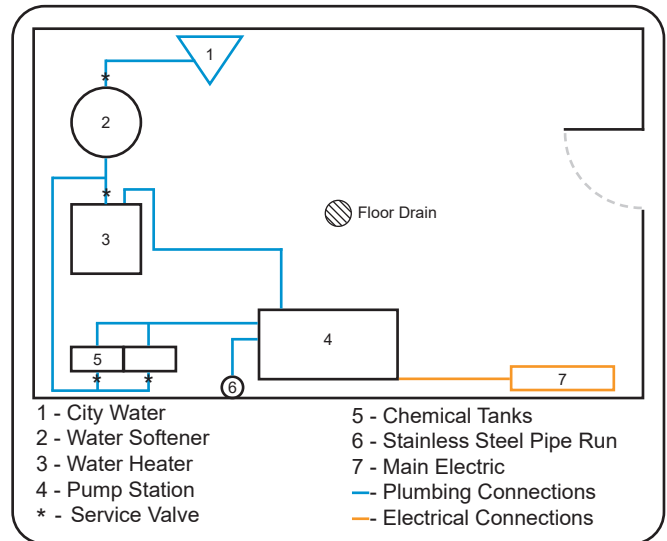


figure 1



All Plumbing connections should be made by a qualified trades person and done according to local codes.



It is recommended that soft water is used when available.



Water supply should not exceed 60 PSI. Plumber to supply pressure regulator if required.

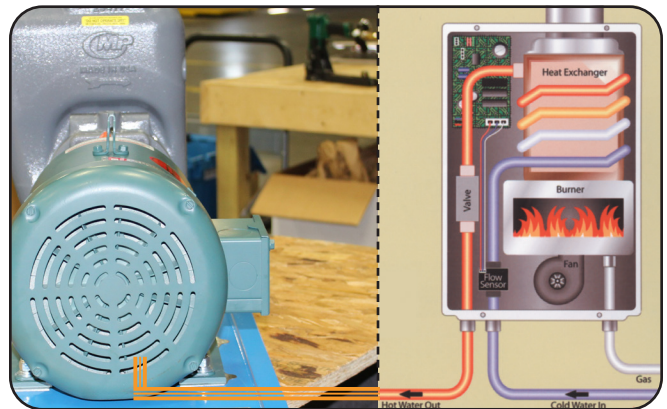


figure 2

3. Hard plumb line from city water source to (recommended) water softener system inlet, and then from the water softener outlet to the (optional) water heater. It is recommended to hard plumb a separate service valve for each component. **(Fig. 1)**
4. Loosely fit clamps on hoses.
5. Run a 3/4" hose from the water heater outlet to the Pump Station inlet solenoid. **(Fig. 2)**
6. Run a 1/2" hose from the chemical tank service valve to the hydrominder. **(Fig. 10)**
7. Run 1/4" chemical suction tube from (optional) chemical tank to chemical injector. Fit 1/4" tube with weights and strainers, then insert into chemical tank. **(Fig. 3-1 & Fig. 3-10)**
8. Tighten all clamps.
9. Install high pressure hose from chemical injector outlet to stainless steel pipe run. **(Fig. 3-2)**
10. Slowly turn on water and check for leaks.

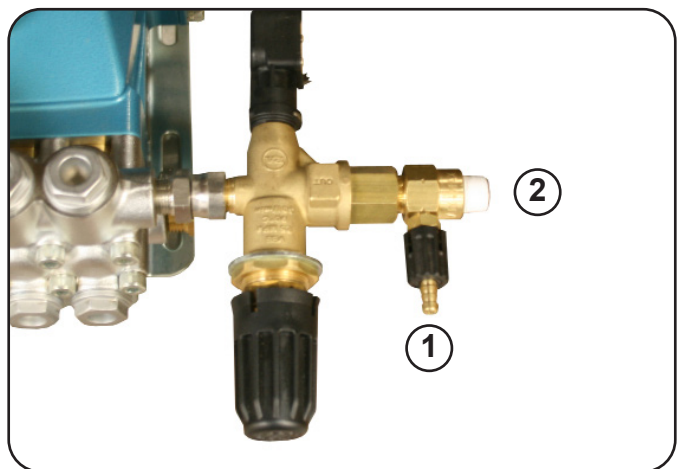


figure 3

Electrical



All Electrical connections should be made by a qualified trades person and done according to local codes.



Disconnect, lockout, & tag power before proceeding to the next steps.

1. Run power from Main Electrical Panel to the bottom side of the Disconnect in the control panel. Use T1, T2, & T3 for three phase or T1 & T2 for single phase. (Fig. 4-1)



For branch service protection & to size wire see decal on control panel door.

2. If unit was purchased without the (optional) selector switch, a blue jumper wire will be installed on the bottom side of the terminal blocks between the cold water and the motor start terminals. No additional wiring is necessary, skip ahead to step 6.

If unit was purchased with the (optional) selector switch, run control cable* from control panel to the optional selector switch or coin meter box. (Fig. 4-2)

** 18/15 multi color wire is highly recommended between the control panel and selector switch or coin meter box. This will allow you to isolate each function and will match up to factory color schemes. To Order Use Part Number: UT 18-15*

3. Terminate control cable to bottom side of terminal blocks in control panel. Match all color schemes. Use ground bar for all 24V common. (Fig. 4-3)



For terminal block identification see decal on control panel door.

4. Use molex connectors & fittings (provided) on selector switch. This will allow you to simply unplug the units from the wall if service is required. (Fig. 5)



It is recommended you use a molex crimp tool. This will give a tight even crimp around the molex pin.

To Order Use Part Numbers:

RV T-18	Deluxe Crimper
UT GCE12464	Crimper
UT MOL11030006	Extract Tool

5. This unit was factory wired and tested for 240 volts. Check to assure your incoming voltage. Check ID label on door labeled **"This unit was wired for _____"**. If your incoming voltage is other than that listed, locate the black wire on bottom side of the red terminal blocks and move wire to proper terminal. (Fig. 6)
6. Now that all steps are complete push unit back into its final resting place, and install the rubber leveling feet.
7. With disconnect in OFF position, turn on main power to the control panel.

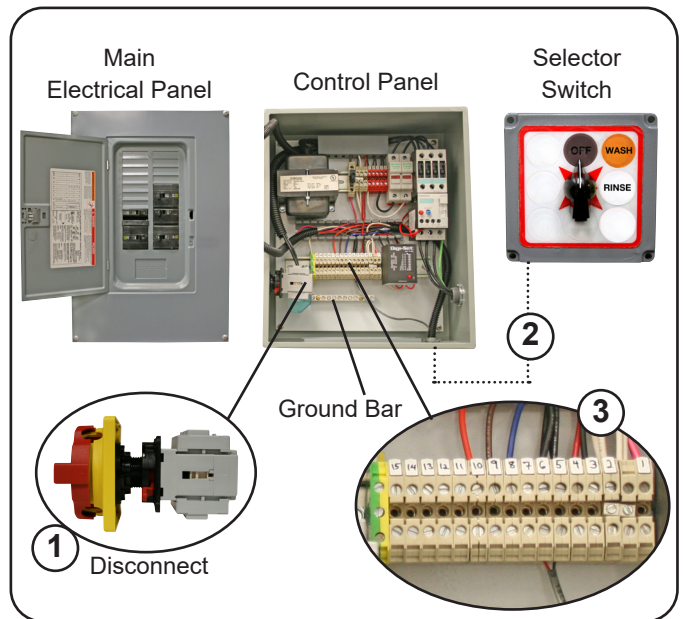


figure 4

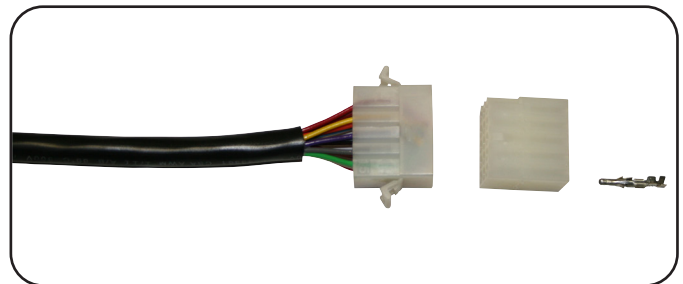


figure 5

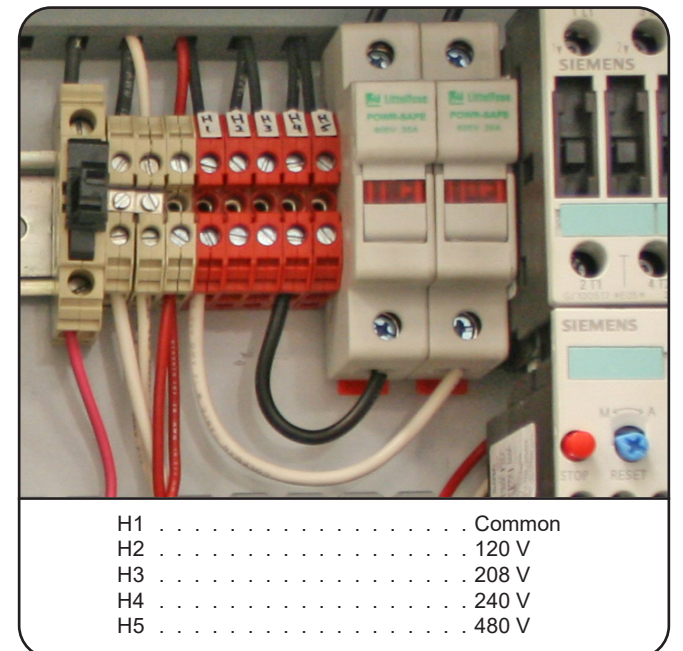


figure 6

Testing & Operation



WARNING When the disconnect power is turned to the ON position the Pump Station will start immediately.

1. Manually fill storage tank with clean water. (Fig. 2)
2. While holding trigger gun open, start system. All units are tested at production and pressure should come up to specifications. Opening and closing of the trigger gun may be required to bleed out any trapped air. Keep trigger gun open until the pressure stabilizes (Gauge no longer fluctuates). When gun is closed unloader will bypass flow back to inlet of pump. Gauge should read 0 PSI when in bypass mode.



IMPORTANT The Kennel Wash Pump Station is equipped with a Delay Timer that will turn unit off after a set amount of time. (Factory set for 10 seconds.)



CAUTION Never run the system dry. Running the pump dry (without fluid) can overheat the pump, damage internal parts, and will void the manufacturer's warranty.



CAUTION Leaving pump in bypass mode for an extended period of time can damage pump due to friction heat buildup.

3. Regulating unloader valve is set and locked for Max. PSI listed under unit specifications. Pressure can be adjusted by turning the handle on regulating unloader valve. (Fig. 8-1)
4. The chemical feed design utilizes a Downstream Injection System. This allows you to apply chemical with low pressure only. A high/low twisting device at the end of the trigger gun (Fig. 9) drops pressure across injector and chemical will draw. Twist the High/Low Nozzle counterclockwise to apply chemical.
5. Meter chemical draw by turning knob on injector. (Fig. 8-2) When chemical has been applied, turn high/low nozzle clockwise to high pressure and wash.

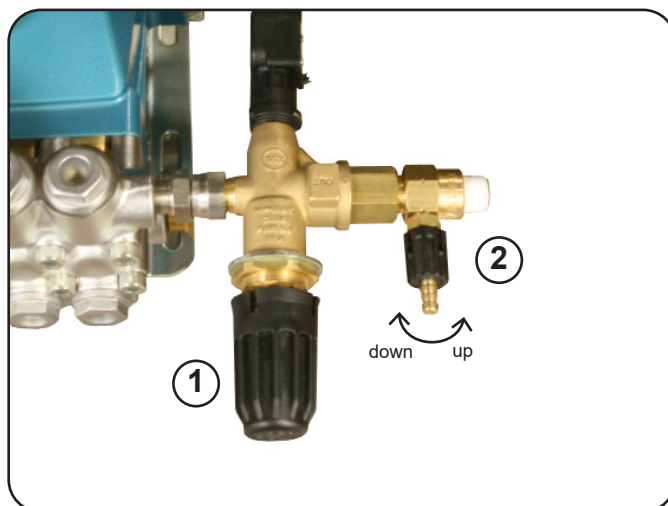


figure 8

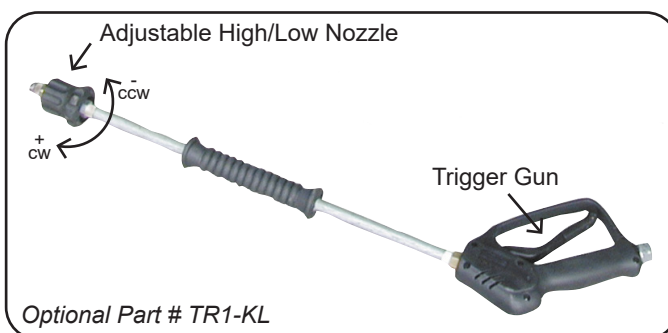
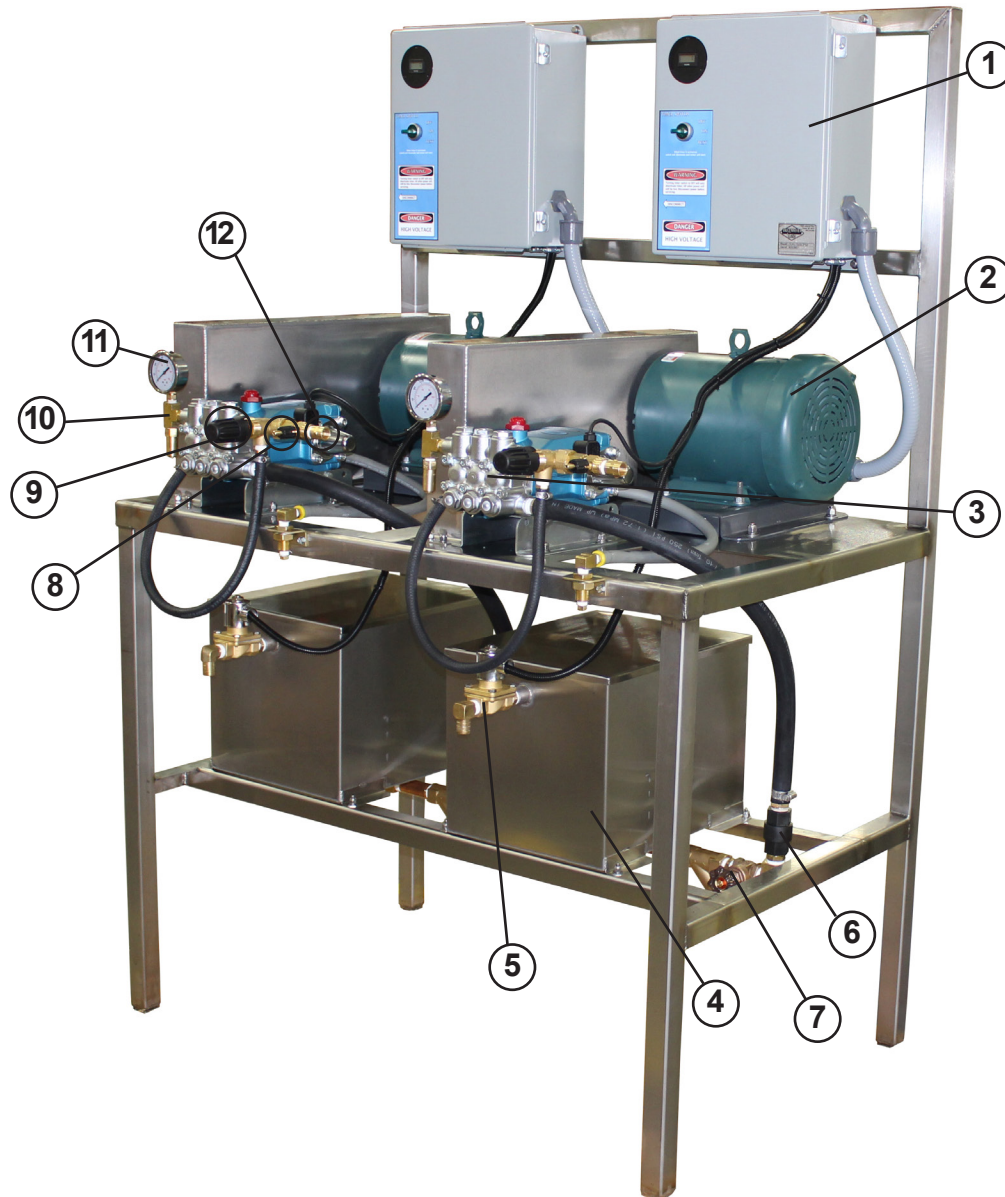


figure 9

Parts Breakdown: DU KL1503CPG2



Item	Part Number	Description
1	DU EP50A-53KL	Electrical Panel 5 HP, 3 PH
2	CE EM3615T	Motor 5 HP, 3 PH
3	CC 5CP2120W	CAT PUMPS® Plunger Pump
4	DU WT4B	Stainless Steel Supply Tank with Lid
5	IP Y221	Chemical Injector
6	SM 687-12E	EPDM Check Valve
7	TW GV-3/4	Gate Valve
8	GU 22568	Safety Popoff Valve
9	IP YVB8KMS	Unloader Valve with Switch
10	GC S203-24	Brass Solenoid, 24v
11	AH 2750-4	3500# Liquid Filled Pressure Gauge
12	HH 1404-66SS	Stainless Steel Swivel
	HR 113	Ceramic Weight (Not Visible, Located Inside Tank)
	RB PF5	Poly Float (Not Visible, Located Inside Tank)
	RB R400-1/2	Float Valve (Not Visible, Located Inside Tank)
	RB 450-6	Brass Float Rod, 6" (Not Visible, Located Inside Tank)
	GA BX45	Cog Belts (Not Visible, Located Inside Belt Guard)



Notice Regarding Manufacturer's Limited Warranty

Dultmeier Sales Limited Liability Company (hereinafter Dultmeier), notifies you that component part(s) carry a manufacturer's limited warranty provided by the manufacturer of said component part(s). These warranties do not pertain to normal wear of component part(s) that may occur within any specified period. While Dultmeier is not the manufacturer of any of the component part(s), Dultmeier will assist you in processing any and all manufacturer's warranty claim if applicable and available. Any and all manufacturer's claims must be submitted in writing to the manufacturer within the warranty periods provided by the manufacturer.

Defective component part(s) that are to be considered for manufacturer's limited warranty must be returned to the manufacturer by prepaid shipment with the applicable manufacturer's limited warranty period. If the component part(s) are deemed to be defective under the manufacturer's warranty, Dultmeier will assist in obtaining a replacement or repair of the component part(s). Said component part(s) will be returned F.O.B. Omaha, Nebraska. Replacement or repair shall be the exclusive remedy for any breach of warranty. Labor for installation, either with respect to original or replacement part or components, is not covered under the manufacturer's limited warranty.

Neither the manufacturer nor Dultmeier warrants loss of income or consequential damages for injury or commercial loss resulting from any breach of warranty or warranties stated above.

The manufacturer's limited warranty as stated does not apply to component part(s) which have been improperly installed, misused, altered, neglected, abused or not installed, adjusted, maintained, or used in accordance with applicable codes and ordinances and in accordance with the manufacturer's specifications as to such factors.

Notwithstanding Dultmeier's willingness to assist in the processing of the manufacturer's limited warranty, Dultmeier makes no warranty against infringement of the like, makes no warranty of merchantability, makes no warranty of fitness for a particular purpose, and makes no other warranty, express or implied, including implied warranty arising from the course of dealing or usage of trade.

Compliance with all local, state and federal codes regarding the installation and operation of said equipment, parts and components shall be the responsibility of the purchaser. The rights and obligations of the parties shall be governed by the laws of the State of Nebraska.

Dultmeier Sales • 1-800-228-9666 Omaha, NE • 1-800-553-6975 Davenport, IA

Production Checklist

☐ OK ☐ NA Oil Level
☐ OK ☐ NA Clamps Tight
☐ OK ☐ NA Bolts Tight & Anti-Seized
☐ OK ☐ NA Belts Tight
☐ OK ☐ NA Pulleys Aligned & Torqued to Specifications
☐ OK ☐ NA Fittings Straight

☐ OK ☐ NA Check Valves ☐ Weep
☐ OK ☐ NA Solenoids ☐ Soap
☐ OK ☐ NA ☐ Wax
☐ OK ☐ NA ☐ Hot Water
☐ OK ☐ NA ☐ Cold Water

☐ OK ☐ NA Tested
☐ OK ☐ NA Winterized
☐ OK ☐ NA _____
☐ OK ☐ NA _____
☐ OK ☐ NA _____
☐ OK ☐ NA _____

☐ OK ☐ NA Pop-Off Valve Set _____ PSI
☐ OK ☐ NA Unloader Valve Locked
☐ OK ☐ NA PSI _____
☐ OK ☐ NA Pump RPM _____
☐ OK ☐ NA Motor Amps _____
☐ OK ☐ NA Motor Wired For _____

Accessories

☐ OK ☐ NA Electrical Drawing
☐ OK ☐ NA UL Inspected & Tagged
☐ OK ☐ NA EP1 Selector Switch
☐ OK ☐ NA TF 1 Chemical Hose
☐ OK ☐ NA Weights & Strainers
☐ OK ☐ NA Trigger Gun 1 2
☐ OK ☐ NA Leveling Bolts

Additional Parts Shipped in Container

☐ OK ☐ NA _____
☐ OK ☐ NA _____
☐ OK ☐ NA _____

Built By _____

Checked By _____

Customer Checklist

☐ OK ☐ NA Oil Level To Manufacturer's Specifications
☐ OK ☐ NA Accessories Included
☐ OK ☐ NA Shipping Container Was In Good Shape
☐ OK ☐ NA Overall Condition

If you have any questions or concerns about condition of this unit, please contact us before operating.