DULTMEIER Sales

CAT PUMPS® (7.5 HP) Pump Stations

DU PS1901C-PG & DU PS1901CPG2
DU PS1903C-PG & DU PS1903CPG2

Owner's Manual #0806 120710	
Serial Number:	**Installation Date:**

IMPORTANT

Please read and understand this manual. Store in safe location for future reference.

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.

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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.

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

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

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

IMPORTANT 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.

IMPORTANT

Do Not Allow System or Components to Freeze.
To do so may damage the system and will void the warranty.

WARNING

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.

WARNING

Hazardous voltage can shock, burn or cause death.

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:

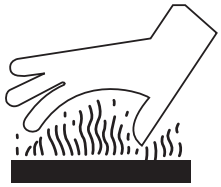
A. Turn off water to the system.
B. Disconnect the power at main electrical service before unplugging the unit.
C. Ground the electrical outlet box.
D. Take extreme care when changing fuses.

IMPORTANT

Check for Proper Rotation

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.

CAUTION



Burn Hazard Do Not Touch An Operating Motor

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

7.5 HP / 1 PH Wash Pump Station Specifications

Model(s) ..... **DU PS1901C-PG** (Single Pump Station)

DU PS1901CPG2 (Double Pump Station)

Style ..... Bench Style Pump Station

Capacity ..... 4.8 GPM

PSI 2300

Maximum Inlet Pressure ..... 60 PSI

Maximum Inlet Temperature ..... 130˚ F

*See Included CAT PUMPS® Service Manual for Higher Temperatures

Motor .....

CE 140120	7.5 HP, 1 PH
Volts:	230
Amps:	33.6

Pump ..... CC 5CP5120

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 PS1901C-PG)

Approx. 44”W x 29”L x 62”H (DU PS1901CPG2)

Shipping Weight ..... Varies by Model, Approx. 400-800 lbs.

System Features & Options

CAT PUMPS® Plunger Pump

7.5 HP, 1 PH, Motor

UL Listed Automatic ON-OFF Electrical Panel with Overload Protection

Timer Shut Down

Blown Circuit Indicator Lights

Multi Voltage Transformer

6000# Glycerin filled Pressure Gauge

Safety Pop Off Valve

Unloader Valve with Switch

Stainless Steel Frame & Supply Tank

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

7.5 HP / 3 PH Wash Pump Station Specifications

Model(s) ..... **DU PS1903C-PG** (Single Pump Station)

DU PS1903CPG2 (Double Pump Station)

Style ..... Bench Style Pump Station

Capacity ..... 4.8 GPM

PSI 2300

Maximum Inlet Pressure ..... 60 PSI

Maximum Inlet Temperature ..... 130˚ F

*See Included CAT PUMPS® Service Manual for Higher Temperatures

Motor .....

CE M3710T	7.5 HP, 3 PH	
Volts:	208 - 230	460
Amps:	21.3 - 19.2	9.6

Pump ..... CC 5CP5120

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 PS1903C-PG)

Approx. 44”W x 29”L x 62”H (DU PS1903CPG2)

Shipping Weight ..... Varies by Model, Approx. 400-800 lbs.

System Features & Options

CAT PUMPS® Plunger Pump

7.5 HP, 3 PH, Motor

UL Listed Automatic ON-OFF Electrical Panel with Overload Protection

Timer Shut Down

Blown Circuit Indicator Lights

Multi Voltage Transformer

6000# Glycerin filled Pressure Gauge

Safety Pop Off Valve

Unloader Valve with Switch

Stainless Steel Frame & Supply Tank

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

Placement

1. Place Pump Station on a level surface, against a wall with a 4" - 6" clearance from the back of the unit, located near electrical supply, water source, and floor drain. Make sure the front of the station is accessible for service.
2. Use the Rubber Mounting Feet provided to level your station. **(Fig. 1)**

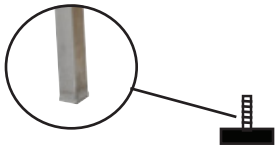


Figure 1

Electrical

IMPORTANT **Low Voltage connections on the Pump Station are Pre-Wired.**

IMPORTANT **Follow all Local Codes for proper Fittings, Conduit, and Wire Sizing.**

1. Electrician to run power from Main Power Line to Disconnect. For single phase units use T1 and T2. For three phase units use T1, T2 and T3. Use knockout directly below Disconnect. **(Fig. 2)**
2. Run a cable from the Coin Meter or Rotary Switch Box to Pump Station Electrical Panel for each bay. Consult the main Electrical Drawing for color scheme and termination. Use Molex Connectors and fittings provided at Coin Meter and open side of Terminal Block in Electrical Panel.
3. Run two wire conductor from secondary systems (Spot Free Rinse, Foam Brush, PreSoak, etc.) to Pump Station Electrical Panel for each bay. Consult individual manuals for these systems for further information.

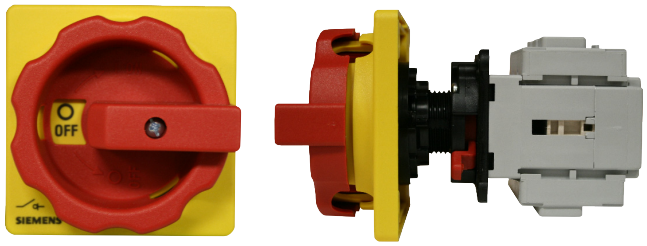


Figure 2

Pump Station is setup for Trigger Gun On-Off operation utilizing the Flow Switch on the Unloader Valve and the Off Delay Timer. Delay is set at factory and should not need adjustment.

Consult your Timer Manual if necessary.

Important !

Plumbing

IMPORTANT **Water Suppy pressure should not exceed 60 PSI. Plumber to supply Pressure Regulator if required.**

IMPORTANT **Water temperature should not exceed 180° F.**

1. Plumber to run soft hot or cold city water pressure line to inlet of solenoid on water supply tank. **(Fig. 3)**
2. Measure hose run lines from Pump Station to bay booms and assemble hoses with reusable fittings.
3. Connect one end of High Pressure run hose in bay and the other end of the run hose to the swivel union on discharge of pump. **(Fig. 4)**

IMPORTANT **Make certain hose is protected from wearing against rough surfaces due to vibrations.**

4. Install booms and trigger gun packages in bays as needed.
5. Install manifolds for secondary systems as needed.

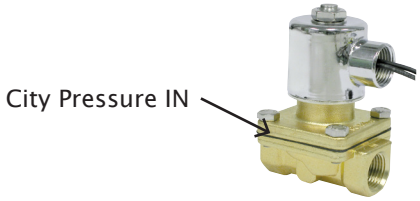
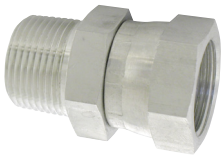


***Figure 3** - Water Inlet Connection on Solenoid*



Connect bay run hose at bay first. Connect other end to this union on discharge of pump.

***Figure 4** - Bay Run Hose Union Swivel*

Chemical Setup (Optional)

1. Set or mount soap tank in place near the Pump Station and run city pressure soft water line to inlet of tank.
2. Select proper mix tip for soap and screw into chemical inlet port on Hydrominder eductor. **(Fig. 5)**

   Consult Hydrominder instructions and chemical product label for further dilution information.
3. Attach chemical pick up tubing to chemical inlet port on eductor and place other end with foot valve strainer and weight into bulk soap container.
4. Repeat steps as needed for additional chemicals.

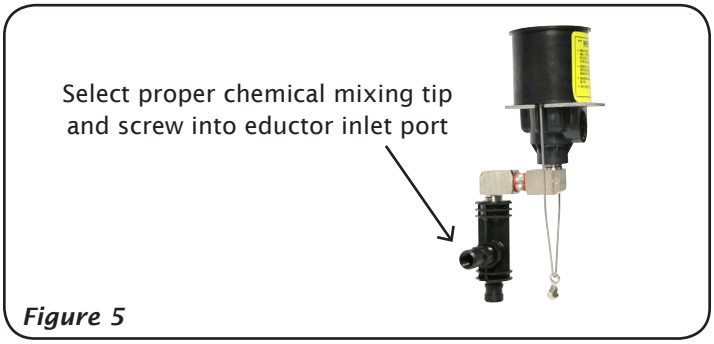


Figure 5

Chemical Testing (Optional)

1. Remove nozzle from gun assembly in bay. Place rotary switch in bay on rinse position. Pull trigger gun to activate system and run for one minute to purge any foreign materials or air from the line. Shut trigger gun, and system should shut down after 10 seconds.

⚠ WARNING **Hazardous Pressure.**
Do NOT discharge toward body.

2. Replace nozzle and restart system. Pressure is set at factory. Make adjustments at handle on regulating unloader valve if needed. **(Fig. 6)**

   Consult Unloader Valve Owner's Manual for further information.
3. Place bay switch on soap position. Pump suction for soap and wax is set at factory with inlet line gate valve. Inlet flow to pump is restricted with gate valve to create .5" of vacuum at the pump. There should be no need to change this setting. **(Fig. 7)**
4. Adjust metering screw on soap solenoid until desired strength of soap appears in bay. With screw fully open chemical draw is 25oz. per minute. You may have to experiment with concentration in soap pre-mix tank. **(Fig. 8)**
5. Repeat these steps as needed for additional chemicals.
6. Test secondary systems as necessary. Consult Owner's Manual supplied with each system for further information.

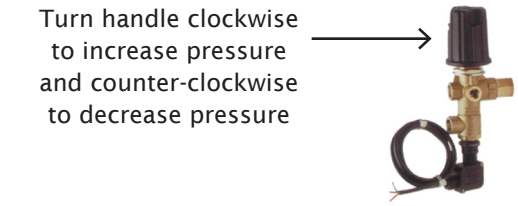


Figure 6

***Figure 7** - Gate Valve*

***Figure 8** - Soap & Wax Solenoids*

Maintenance & Storage

1. Change the oil after intial 50 hours. Use Cat Oil, part number **CC 6100-1** for 21 oz. bottles or **CC 6105-1** for 2.5 gallon jug. **(Fig. 9)**

   IMPORTANT **This pump takes 17 oz.**

2. The oil should be changed every 500 hours. If other than Cat Pumps special custom blend multi-viscosity ISO68 hydraulic oil is used, change the oil every 300 hours.

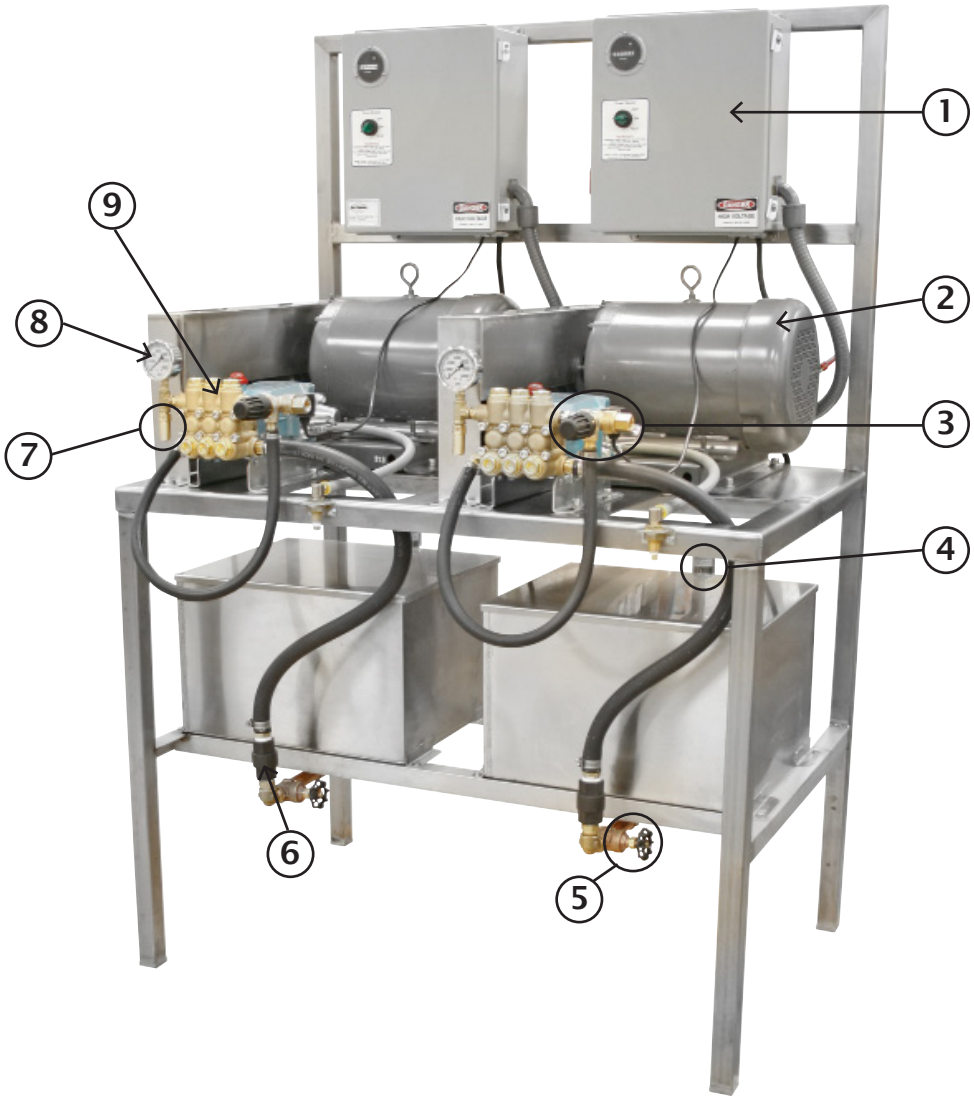
3. Regulating Unloader Valve should be serviced or replaced when leaks occur or if not functioning properly.

4. For extended storage or between use in cold climates, drain all pumped liquids from pump and flush with antifreeze to prevent freezing and damage to the pump. When running antifreeze through system, open and close trigger gun so entire system is protected.

Figure 9

Please refer to the included CAT PUMPS® reference materials for additional information on the Maintenance & Storage of your CAT PUMPS® Pump Station.

Parts Breakdown: DU PS1903CPG2



Item	Part Number	Description
1	DU EP50A-73	Electrical Panel with Delay Shutoff
2	CE M3710T	7.5HP / 3PH Baldor Motor
3	IP YVB8KMS	Unloader Valve with Switch
4	GC S203-24	Brass Solenoid, 1/2”
5	TW GV-3/4	Bronze Gate Valve, 3/4”
6	SM 687-12E	EPDM Check Valve, 3/4”
7	GU 22568	Safety Pop Off Valve, 1/4”
8	AH 2750-5	6000# Glycerin Filled Pressure Gauge
9	CC 5CP5120	CAT PUMPS® Plunger Pump
	HH 1404-66SS	*Stainless Steel Swivel (Not Shown)*
	GA BX40	*V-Belts (Not Visible, Located inside Belt Guards)*
	RB PF5	*Poly Float for 3/4” Valve (Not Visible, Located inside Tank)*
	RB R400-3/4	*Float Valve, 3/4” (Not Visible, Located inside Tank)*
	RB R450-6	*Brass Float Rod, 6” (Not Visible, Located inside Tank)*

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.

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 ☐ Soap
OK NA Solenoids ☐ Soap ☐ Wax ☐ Hot Water ☐ 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.

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