



## Wash Prep Systems featuring CAT PUMPS®

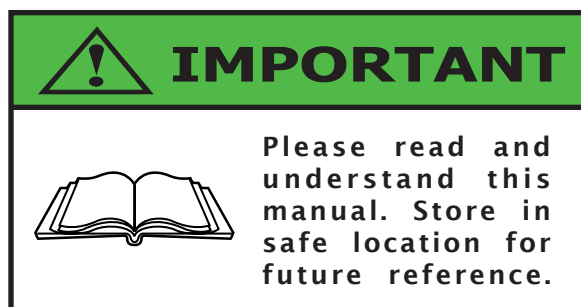
DUPM623  
DUPM820 / DUPM820-TS  
DUPM820D / DUPM820D-TS  
DUPM1010



Owner's Manual #0779 072415

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.*

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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:*

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



Do not run the unit with discharge shut off, as hose may burst or damage may occur.



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

## DUPM623 Wash Prep System Specifications

Model .....	<b>DUPM623</b>
Style .....	High Pressure Piston Pump
Capacity .....	6 GPM
PSI .....	1200
Maximum Inlet Pressure .....	40 PSI
Maximum Inlet Temperature .....	130° F

\*See Included CAT PUMPS® Service Manual for Higher Temperatures

Motor .....	CE131464	5 HP, 3 PH	
	Volts:	208 - 230	460
	Amps:	13.7 - 12.6	6.3

Pump .....	CC623
Crankcase Capacity .....	40 oz.
Pump Drive .....	Belt
Pump Inlet .....	1"
Pump Discharge .....	3/4" (3 qty.)
Dimensions .....	Approx. 34"L x 22"W x 16"H
Shipping Weight .....	Approx. ____ lbs.

## System Features

CAT PUMPS® Piston Pump belt driven by Leeson Motor  
 Heavy Duty Stainless Steel Baseplate & Belt Guard  
 Adjustable Motor Baseplate  
 Adjustable Balanced Relief Valve  
 Safety Pop Off Valve  
 2300# Glycerin Filled Pressure Gauge  
 Units are Pre-Plumbed and Tested Prior to Shipment

## PM820 Wash Prep System Specifications

### DUPM820

PSI ..... 1000 ..... Style ..... Prep Wash Unit  
 Capacity ..... 10 GPM ..... Dimension ..... Approx. 39"L x 24"W x 21"H  
 Pump ..... CC 820 ..... Weight ..... Approx. 313 lbs.

### DUPM820-TS

PSI ..... 1000 ..... Style ..... Single Gun Prep Wash Unit on Stand with Tank  
 Capacity ..... 10 GPM ..... Dimension ..... Approx. 45"L x 27"W x 70"H  
 Pump ..... CC 820 ..... Weight ..... Approx. 400 lbs.

### DUPM820D

PSI ..... 1000 ..... Style ..... Double Gun Prep Wash Unit  
 Capacity ..... 10 GPM ..... Dimension ..... Approx. 39"L x 24"W x 21"H  
 Pump ..... CC 820 ..... Weight ..... Approx. 313 lbs.

### DUPM820D-TS

PSI ..... 1000 ..... Style ..... Double Gun Prep Wash Unit on Stand with Tank  
 Capacity ..... 10 GPM ..... Dimension ..... Approx. 45"L x 27"W x 70"H  
 Pump ..... CC 820 ..... Weight ..... Approx. 400 lbs.

### DUPM1010

PSI ..... 700 ..... Style ..... Prep Wash Unit  
 Capacity ..... 13 GPM ..... Dimension ..... Approx. 41"L x 18"W x 19"H  
 Pump ..... CC 1010 ..... Weight ..... Approx. 320 lbs.

## Common Specifications

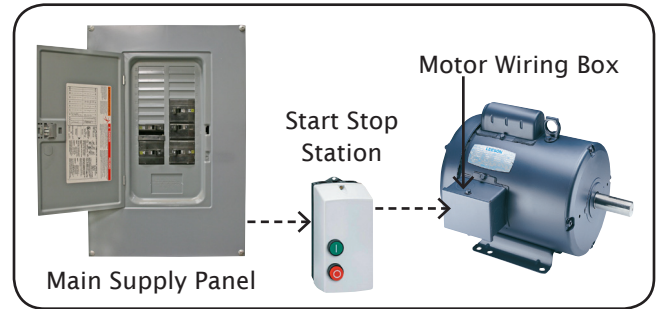
Motor .....	CEEM3710T	Volts:		230	460
Maximum Inlet Pressure.....	40 PSI	Amps:		18.8	9.4
Maximum Inlet Temperature .....	130° F *See Included CAT PUMPS® Service Manual for Higher Temperatures				
Crankcase Capacity .....	40 oz.				
Pump Drive .....	Belt				
Pump Inlet .....	1”				
Pump Discharge.....	3/4” (3 qty.)				
Features.....	Adjustable Pressure Unloader Valve, Chemical Injector, Pressure Gauge, Safety Pop Off Valve, 50’ High Pressure Hose, Trigger Style Spray Gun with: Insulated Extension, Gun Swivel, and Spray Nozzle; and Heavy Duty Stainless Steel Base Plate. All units are Pre-Assembled and tested prior to shipping.				

## Installation

1. Select a location for your new unit. Place near floor drain, and electrical and water sources. Floor surface must be level.
2. Electrician to run power from main supply panel to motor starter or stop start station, and then to motor wiring box. Check motor wiring schematic to ensure wired for proper voltage. (Fig. 1)



**Follow all local codes for proper fittings, conduit, and wire sizing.**



*figure 1*

3. Loosely fit clamps on low pressure hoses.
4. Install low pressure hose from supply (tank) to inlet of pump. (Fig. 2)

*If you purchased a complete unit (PM820-TS or PM820D-TS) run low pressure hose from supply to inlet of tank.*

5. Attach bypass line from regulator to tank. (see fig. 2) (See fig. 2A for PM1010)
6. Run high pressure line(s) from pump outlet to wash bay(s).

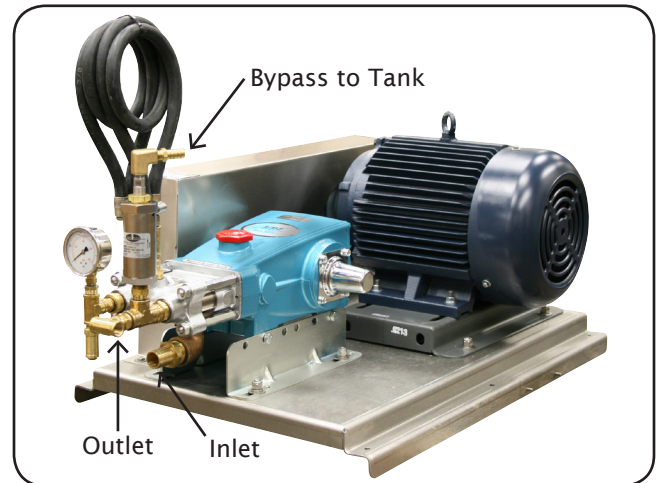


**Hazardous Pressure.**  
**Do not discharge toward animals or humans.**

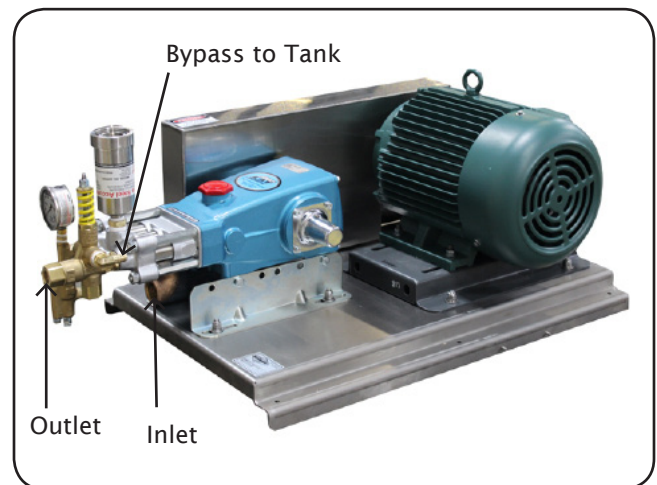


**Hazardous Pressure.**  
**Do not exceed pressure rating of pump.**

7. Tighten all clamps and fittings.



*figure 2*



*figure 2A*

## Operation

1. Check pump for proper oil level. The pump should be filled to or slightly above the red dot on the bubble gauge, located on the back of the pump. (Fig. 3)
2. Turn on water to the system and allow air to purge.
3. While holding the trigger gun open, start system.

*(All units are tested at production and pressure should come up to specifications.)*

When the trigger gun is closed, the balanced relief valve will bypass flow back to inlet of pump, or to tank. Pressure may fluctuate by 100 PSI when in bypass mode. Ensure that pressure is balanced with one or two guns.



**Leaving the pump in bypass mode for more than a few minutes can damage pump due to friction heat buildup.**

4. Pressure can be adjusted by turning the nut on the balanced relief valve. (Fig. 4, 4A)

**Clockwise..... More Pressure**  
**Counter-Clockwise..... Less Pressure**



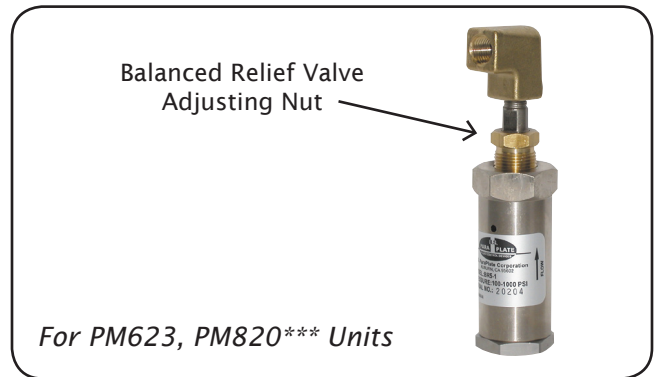
**Pump oil must be changed per manufacturer's recommendations.**



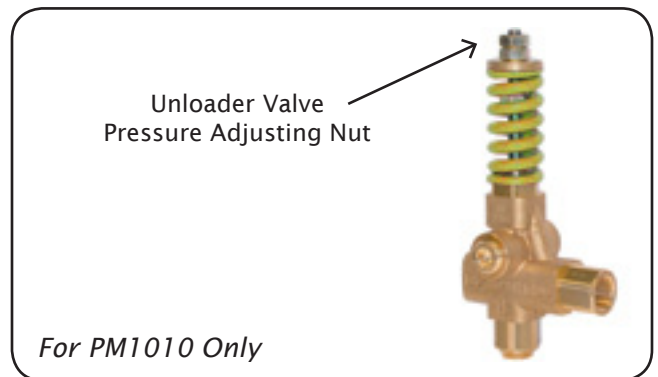
**Do not run pump with frozen liquid.**



**figure 3**



**figure 4**



**figure 4A**

## Maintenance & Storage

1. Change the oil after initial 50 hours. Use CAT PUMPS® Oil, part number **CC6100-1** for 21 oz. bottles or **CC6105-1** for 2.5 gallon jug. (Fig. 5)



**This pump takes 40 oz.**

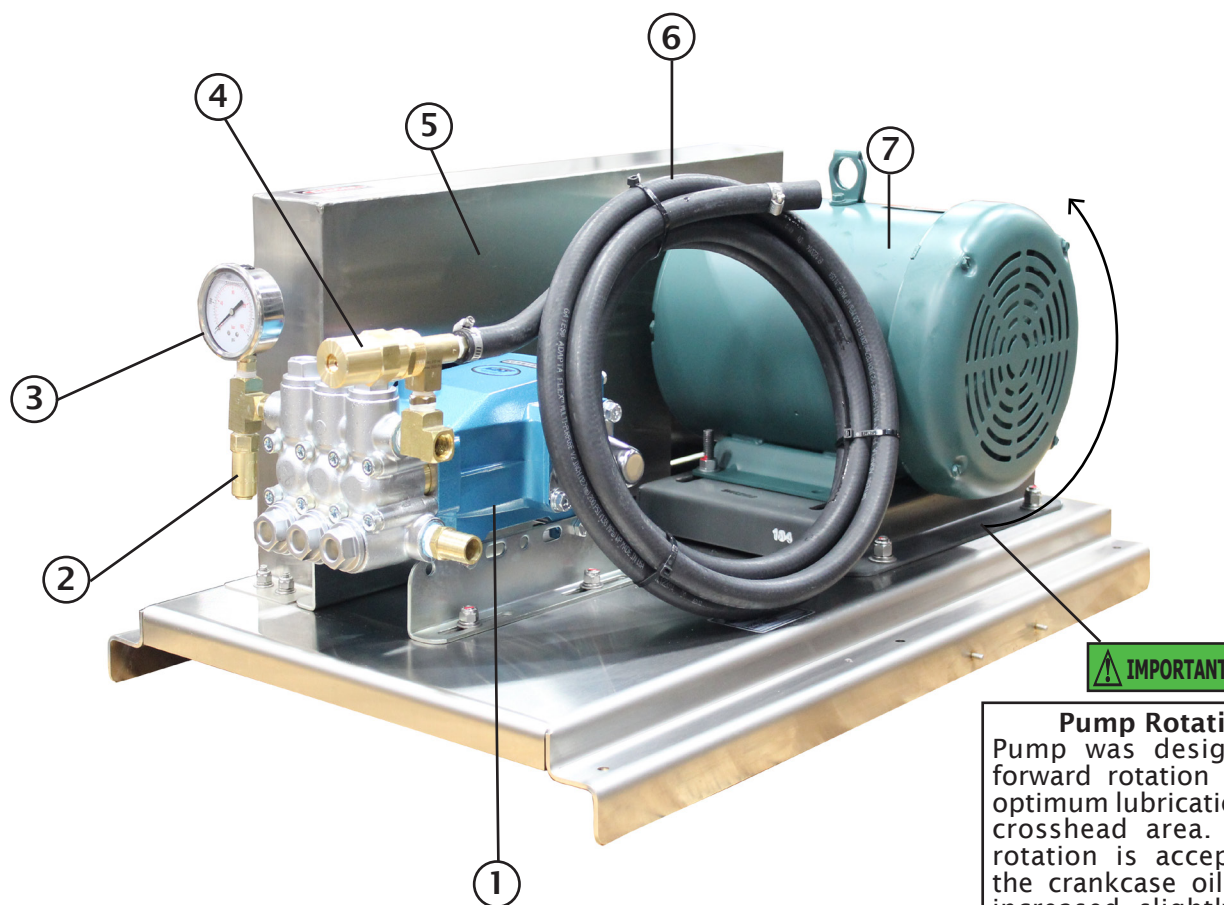
2. The oil should be changed every 500 hours. If other than CAT PUMPS® special custom blend multi-viscosity ISO68 hydraulic oil is used, change the oil every 300 hours.
3. Regulating Unloader Valve should be serviced or replaced when leaks occur or if not functioning properly.
4. For extended storage 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 5*

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

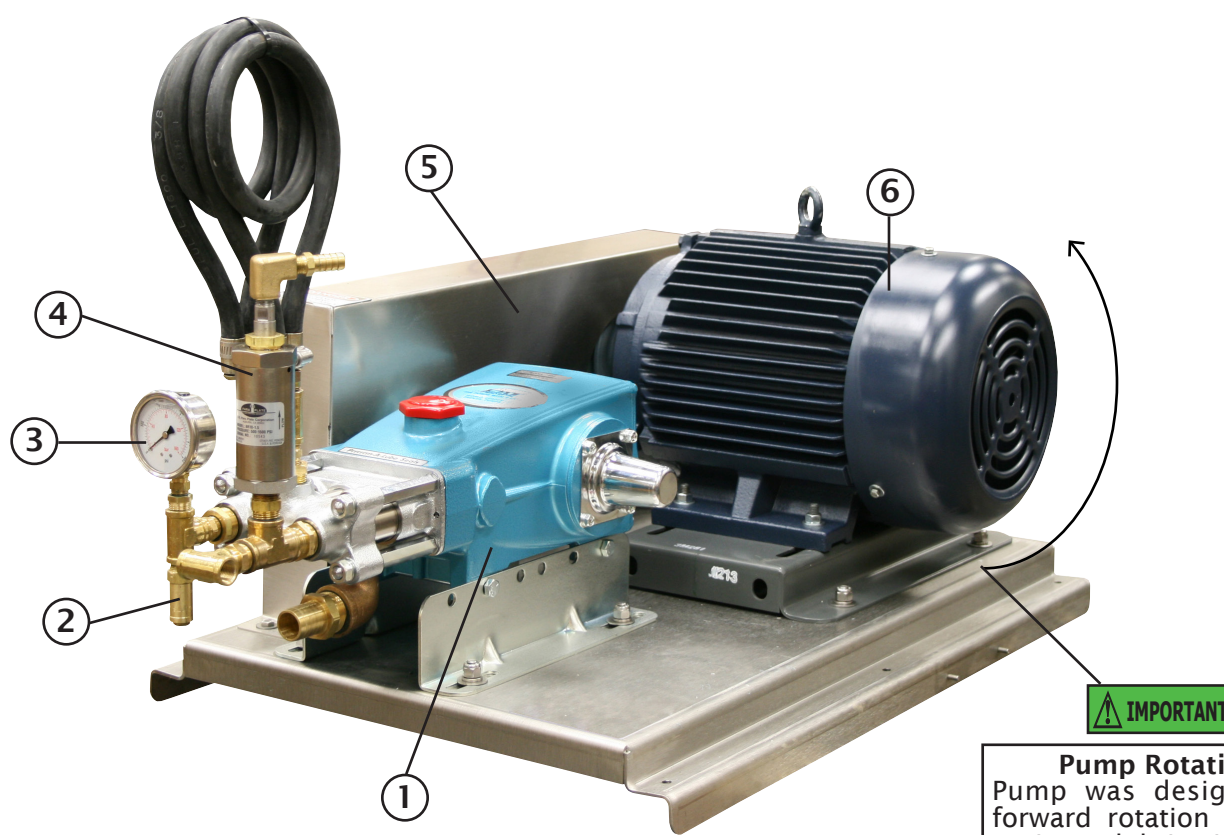
## Parts Breakdown: Model DUPM623



**Pump 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.

Item	Part Number	Description
1	CC5CP6120	Cat Plunger Pump
2	GU22568	Safety Pop Off Valve, 1/4" Blue
3	AH2750-3	2300# Liquid Filled Pressure Gauge
4	NPST230	Balanced Relief Valve
5	GABX47	V-Belt, 47" (2 qty. - Not Visible)
6	GA3204-1425	10' of 3/4" bypass hose
7	CE131464	Leeson Motor, 5 HP, 3 PH

## Parts Breakdown: Model DUPM820, DUPM820D



**IMPORTANT**

### Pump 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.

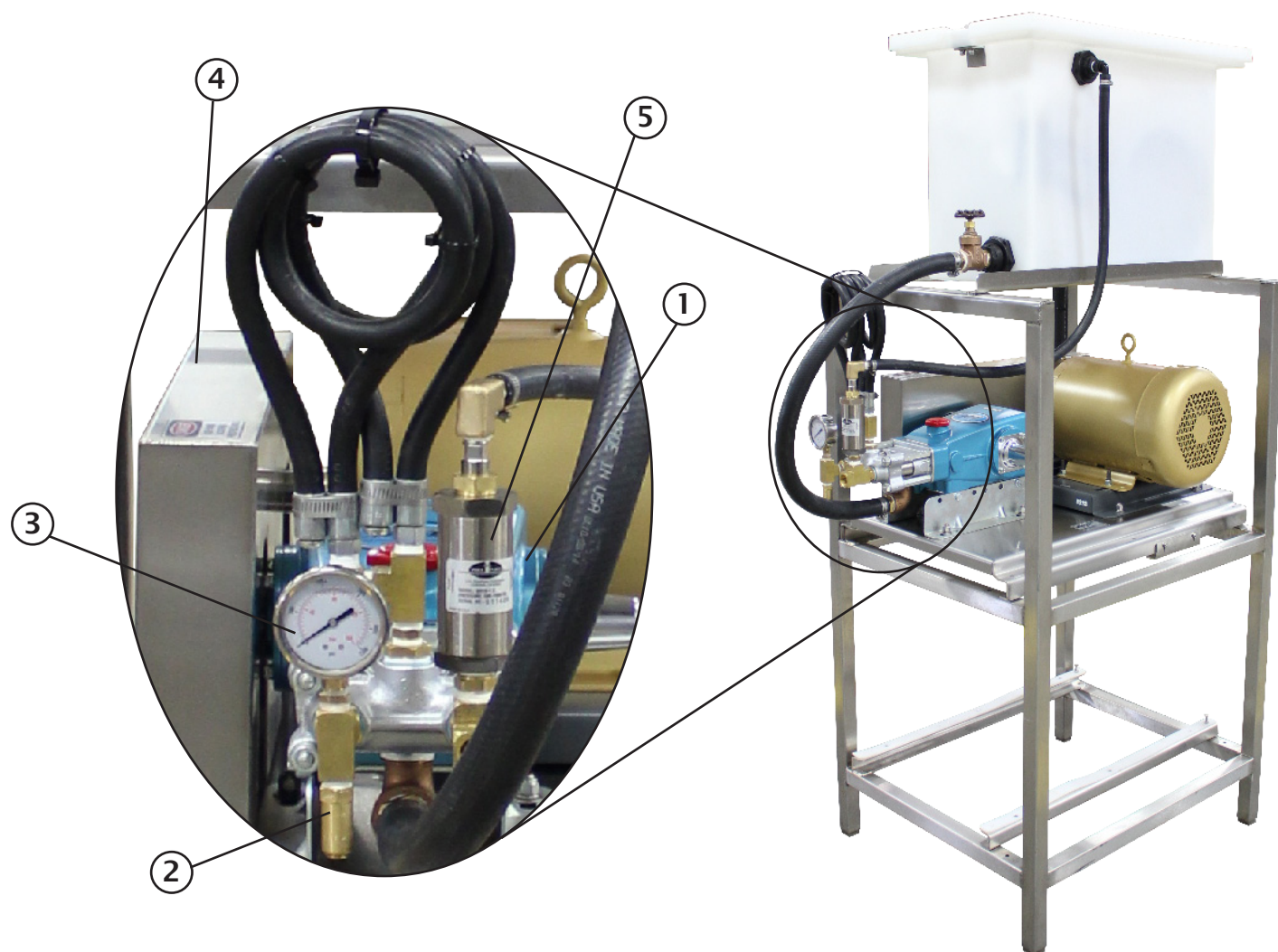
Item	Part Number	Description
1	CC820	Cat Piston Pump
2	GU22531A	Safety Pop Off Valve
3	AH2750-3	2300# Liquid Filled Pressure Gauge
4	UPBR10-1.5	Balanced Relief Valve
5	GABX47	V-Belt, 47" (2 qty. - Not Visible)
6	CEEM3710T	Baldor Motor, 7.5 HP, 3 PH

### Also may be included but not shown:

GA6HR25*	25' Black Wash Hose
NPST004-D42*	Nozzle Protector
NPST007-24*	23" Wand Extension w/ Grip
NPST1500*	Spray Wand
NPST300*	Swivel, 3/8" Brass
SS1/8MEG2510*	Washjet Nozzle
HR561*	Hydrominder

\*Double quantity on DUPM820D

## Parts Breakdown: Model DUPM820-TS, DUPM820D-TS



Item	Part Number	Description
1	CC820	Cat Piston Pump
2	GU22531A	Safety Pop Off Valve
3	AH2750-3	2300# Liquid Filled Pressure Gauge
4	GABX47	V-Belt, 47" (2 qty. - Not Visible)
5	UPBR10-1.5	Balanced Relief Valve
6	CEEM3710T	Baldor Motor, 7.5 HP, 3 PH

### Also may be included but not shown:

GA6HR25*	25' Black Wash Hose
NPST004-D42*	Nozzle Protector
NPST007-24*	23" Wand Extension w/ Grip
NPST1500*	Spray Wand
NPST300*	Swivel, 3/8" Brass
SS1/8MEG2510*	Washjet Nozzle
HR561*	Hydrominder

\*Double quantity on DUPM820D-TS



## 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

<input type="checkbox"/> OK <input type="checkbox"/> NA Oil Level	<input type="checkbox"/> OK <input type="checkbox"/> NA Pop-Off Valve Set _____ PSI
<input type="checkbox"/> OK <input type="checkbox"/> NA Clamps Tight	<input type="checkbox"/> OK <input type="checkbox"/> NA Unloader Valve Locked
<input type="checkbox"/> OK <input type="checkbox"/> NA Bolts Tight & Anti-Seized	<input type="checkbox"/> OK <input type="checkbox"/> NA PSI _____
<input type="checkbox"/> OK <input type="checkbox"/> NA Belts Tight	<input type="checkbox"/> OK <input type="checkbox"/> NA Pump RPM _____
<input type="checkbox"/> OK <input type="checkbox"/> NA Pulleys Aligned & Torqued to Specifications	<input type="checkbox"/> OK <input type="checkbox"/> NA Motor Amps _____
<input type="checkbox"/> OK <input type="checkbox"/> NA Fittings Straight	<input type="checkbox"/> OK <input type="checkbox"/> NA Motor Wired For _____
<input type="checkbox"/> OK <input type="checkbox"/> NA Tested	<b>Accessories</b>
<input type="checkbox"/> OK <input type="checkbox"/> NA Winterized	<input type="checkbox"/> OK <input type="checkbox"/> NA Safety Pop Off Valve
<input type="checkbox"/> OK <input type="checkbox"/> NA _____	<input type="checkbox"/> OK <input type="checkbox"/> NA Trigger Gun 1 2
<input type="checkbox"/> OK <input type="checkbox"/> NA _____	<input type="checkbox"/> OK <input type="checkbox"/> NA High Pressure Hose
<input type="checkbox"/> OK <input type="checkbox"/> NA _____	<input type="checkbox"/> OK <input type="checkbox"/> NA Injector / Injector Hose
<input type="checkbox"/> OK <input type="checkbox"/> NA _____	<input type="checkbox"/> OK <input type="checkbox"/> NA Gauge
<input type="checkbox"/> OK <input type="checkbox"/> NA _____	<input type="checkbox"/> OK <input type="checkbox"/> NA _____

Built By \_\_\_\_\_

Checked By \_\_\_\_\_

## Customer Checklist

<input type="checkbox"/> OK <input type="checkbox"/> NA Oil Level To Manufacturer's Specifications
<input type="checkbox"/> OK <input type="checkbox"/> NA Accessories Included
<input type="checkbox"/> OK <input type="checkbox"/> NA Shipping Container Was In Good Shape
<input type="checkbox"/> OK <input type="checkbox"/> NA Overall Condition

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