

**LVC
75 & 120 GALLON
LAVATORY CART
PRODUCT MANUAL**



***** Important *****
Read User's Manual Completely Prior to Operating, Towing, or Servicing Cart

Par-Kan Company
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Silver Lake, IN 46982



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Model: LVC 75
Model: LVC120

Model: _____

Customer: _____

Serial #: _____

Manufacturing Date: _____



LVC 75 & 120 Manual

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Note: This manual supersedes any other information supplied by Par-Kan Company before this date, and is good only for serial numbers listed in the manual.



LVC 75 & 120 Manual Introduction

This manual incorporates information for Par-Kan Company's (Ground Support Equipment Division) lavatory model LVC 75 & 120 and includes general information, operation, maintenance, overhaul and illustrated parts lists. This manual replaces all Par-Kan Company's LVC 75 & 120 manuals previously issued in their entirety.

This manual is a compilation of the best information available at the time of writing. If errors or misinformation are found, change requests should be submitted in writing to the manufacturer.

If you have any questions about this product or would like further information about Par-Kan Company's ground support equipment please contact the manufacturer.

Manufacturer is:

Par-Kan Company
Ground Support Equipment Division
P.O. Box 219
2915 West 900 South
Silver Lake, IN 46982
(260) 352-2141 (260) 352-0701 Fax



Par-Kan Company – Ground Support Equipment
LVC 75 & 120 Warranty

Par-Kan Company's Ground Support Equipment is warranted to the original purchaser to be free from defects in material and workmanship for a period of one year from the date of purchase as dated on Par-Kan's original invoice.

Par-Kan will replace during the warranty period, subject to an examination by an authorized representative of Par-Kan, any warranted part which proves defective in material and/or workmanship under normal installation, use, and service. Parts must be returned, and transportation charges prepaid to our factory. Any changes to Par-Kan equipment as a result of modifications, misuse, abuse, neglect, accident, vandalism, fire, flood, other acts of God, or improper installation will void this warranty.

If Par-Kan receives notice of such defects during the warranty period, Par-Kan will either, at its option, repair or replace products which prove to be defective. Other manufacturer's warranties may apply for parts purchased by Par-Kan. Par-Kan Company makes no other warranty, either expressed or implied, with respect to this product. Any special, incidental, or consequential damages arising from any breach of warranty are specifically excluded hereunder.



LVC 75 & 120 General Information

Steering:	Ball Bearing Turntable Steering
Rear Wheels:	5 Bolt hub assembly with bearings (1,750 lb. load capacity each) Removable Spindles: 1-3/4" diameter
Tires:	5.70 x 8.00 Pneumatic (Rear Tires)
Front Wheel:	6" Bolted Rim Tire: 4.80 x 8.00
Parking Brakes:	Tow bar activated friction brake
Tow Bar:	2-1/2" I.D. tow bar lunette ring 5 Ton capacity
Finish:	Powder Coated White
Reflectors:	3" Diameter (Amber / Red) D.O.T. approved
Location:	Front, Rear, and Sides
Cart Design:	Main Frame: 2" x 2" x 3/16" Tube steel Shell: 14ga steel
Tank Design:	Poly Tanks
Meter:	Nickel Plated– Manual Reset
Options:	Closed Dump System 12V Reversible Pump Stainless Steel Shell Dump Hoses



LVC 75-120 Specifications and Capabilities

Dimensions:

Length:
Open Dump 127"
Closed Dump 105"
Width: 46"
Height: 41-1/2"

Empty Weight: (Approx.) 853 lbs.

Tank Capacity:

LVC 75		
Water		25 U.S. Gallons
Waste		50 U.S. Gallons
LVC 120		
Water:		30 U.S. Gallons
Waste:		90 U.S. Gallons

Flow Rate:

12V Electric Pump	7.5 g.p.m.
12V Reversible Pump	4 g.p.m.

Speed Limit:

Towing speed should not exceed 15 mph.



LVC 75 & 120 Safety Precautions

TOWING:

The LVC cart is designed for aircraft ramp use only; it is not intended for highway or off-road use. Towing speed should not exceed 15mph. When traveling over rough surfaces or making sharp turns, speeds should be reduced to ensure safety.

PARKING:

When the unit is parked the tow bar should be latched in the upright, vertical, position to engage the parking brake. If unit is not connected to the tow vehicle the parking brake must be set to prevent the unit from rolling.

OPERATING:

When moving the unit by hand use caution, especially in wet conditions. Do not leave the cart unattended without it being connected to a tow vehicle, or ensuring that the parking brake is properly set. Do not exceed the carts capacity, (listed in the specifications).



LVC 75 & 120 Operating Instructions

1. Prior to moving the unit, check to ensure that all hoses are secure, access doors, hatches are closed and the unit unplugged from the power source
2. Release the Parking Brake by:
 - Push the tow bar back towards the unit
 - Lift up the brake latch with your foot
 - The brake will release as the tow bar is lowered into a horizontal position.
 - **Do not drop the tow bar**
3. With the tow bar in a horizontal position, pin the tow bar to the towing vehicle. The tongue should be securely attached to the vehicle using all safety devices to ensure that the unit does not disconnect from the tow vehicle.
4. Tow the unit to the desired location (**Do not exceed 15mph**) Turn the tow vehicle engine off and set the parking brake.
5. Remove the cap from the filler coupler by grasping the cap in your left hand and by grasping the coupler in your right hand and turning each in opposite directions. (**Make sure to point the coupler away from your body when removing the cap in case the hose is under pressure**)
6. Connect the filler hose to the aircraft and open the ball valve on filler hose.
7. Turn the power switch to on and hold in on the ON position. Now dispense the desired amount of water.
8. When transfer of water is complete release the power switch.
9. Close the ball valve on the filler hose and remove the hose from the aircraft.
10. Place the cap back on the filler coupling and store filler hose in rear compartment.
11. Check the unit to ensure that all hoses are secure, access doors, hatches are closed before towing the unit to the designated parking area.
12. Once the cart is parked in the designated parking area you will need to set the parking brake.
13. Activate the parking brake by:
 - Push the tow bar towards the unit until the brake latches.
14. When the tow bar is in the vertical position the parking brake is set. (**If the tire air pressure is inadequate the brake may not set properly and should be taken out of service**)
15. Plug the unit back into the power source and check indicator light on right rear of unit to ensure power is being received. (**During cold weather the unit MUST be plugged in**)



LVC 75 & 120 Maintenance / Overhaul

Servicing:

Proper maintenance is an essential part of a long life for the LVC 75 & 120. As with any equipment the cart needs inspections, lubrications and adjustments to keep it in good condition while providing maximum protection for the equipment.

WARNING: Before removing or installing any components, be sure the trailer is on level ground with the wheels securely blocked.

Wheels and Tires:

FRONT:

Check tightness of bolt and lubricate regularly.

REAR:

Check the tire pressure weekly. The proper pressure is labeled on the tire. Check and adjust the wheel bearings during the first few days of operation.

To tighten wheel bearings:

Remove dust cap

Remove cotter pin from the castle nut and tighten the nut until there is a slight drag on the bearing while turning the wheel.

Loosen the nut one slot and reinsert the cotter pin.

Following this adjustment there should be a slight amount of drag on the bearing.

Replace the dust cap.

Wheel Bearing Lubrication:

Pack wheel bearings every 6 months or as needed with S.A.E. multi-purpose grease.

Brake Adjustment:

Proper tire pressure and tire wear can affect brake adjustment. Check weekly.

Battery

Check the battery water level monthly, the water level should be near the top, refill with distilled water.

FIFTH WHEEL STEERING

Check the steering assembly daily; ensure that the tow bar pin assembly and nut are securely fastened to the lower fifth wheel box.

WARNING: FAILURE TO ENSURE THAT PIN IS SECURED COULD LEAD TO LOSS OF STEERING AND CONTROL OF THE UNIT



LVC 75 & 120 Troubleshooting

1. If the brake does not engage or disengage?
 - Check the air pressure in the tire
 - Check the condition of the break
2. If the steering on the unit will not turn?
 - Check to ensure the 5th wheel is lubricated
 - Check the condition of the 5th Wheel box
3. If the unit pulls one way?
 - Check the tire pressure and bearings
4. If the parking brake tongue will not stay up?
 - Check the tow bar latch and latch bar for excessive wear
 - Check the parking brake adjustment
5. If the pump will not run?
 - Check the inline fuse and then ensure that all battery connections are secure
6. If the meter does not work properly?
 - Check to ensure fluid is being pumped
 - If fluid is flowing, stop pumping, and reset meter

For any addition questions, Please contact:

Customer Service

Phone: 1-800-291-5487

Phone: 260-352-2141

Fax: 260-352-0701

E-mail: GSESales@par-kan.com



LVC 75 & 120 Illustrated Parts Listing

The illustrated parts list contains a breakdown of the LVC 75 & 120. All parts contained in the lavatory carts that can be disassembled, repaired, manufactured, replaced or reassembled are listed.

Each sketched assembly is followed immediately by its detailed parts list.

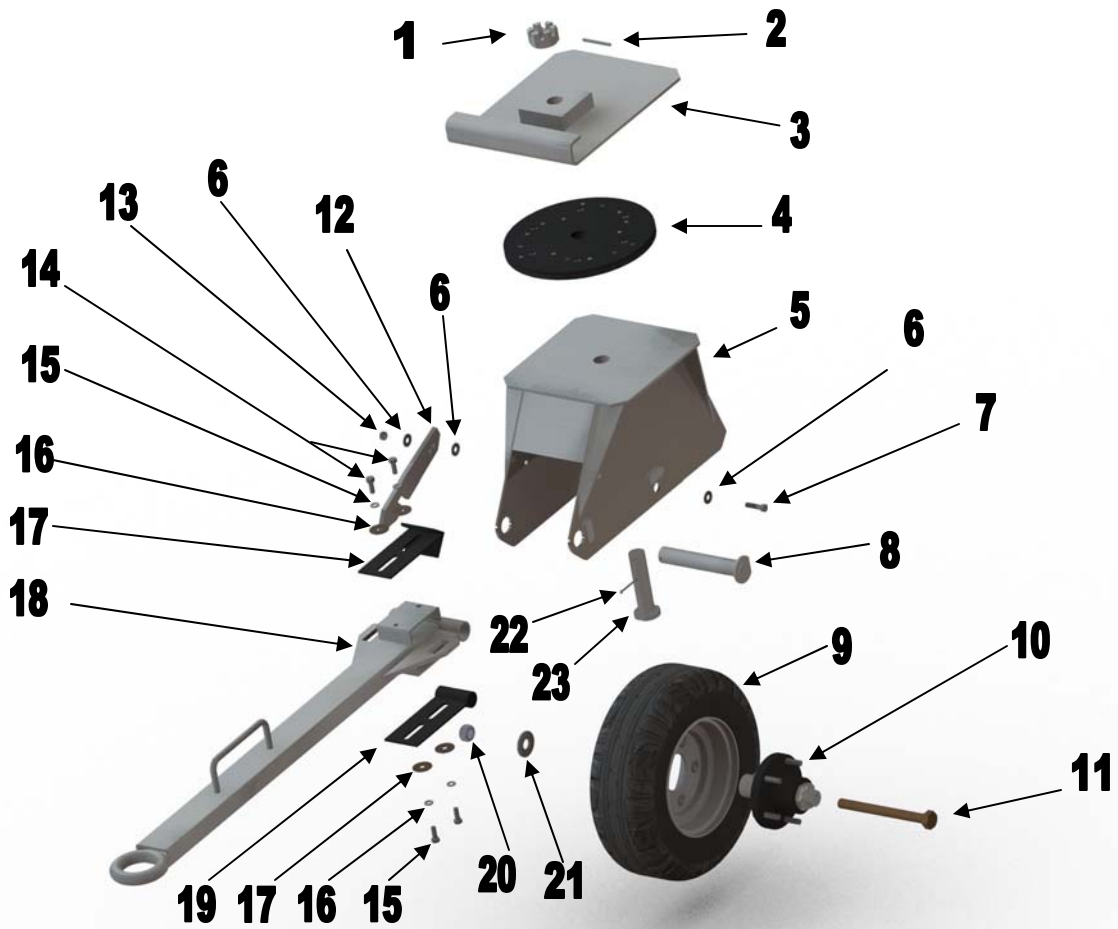
Item Number Column: The figure and index numbers key the detailed parts list to the applicable illustration.

Part Number Column: This column contains the manufacturer's and vendor's part numbers.

All parts listed on the following pages are available through Par-Kan Company. Any standard parts that are provided directly from vendors will be stated on the supplier list following the illustrated parts list.



LWC 75 & 120 5th Wheel Assembly



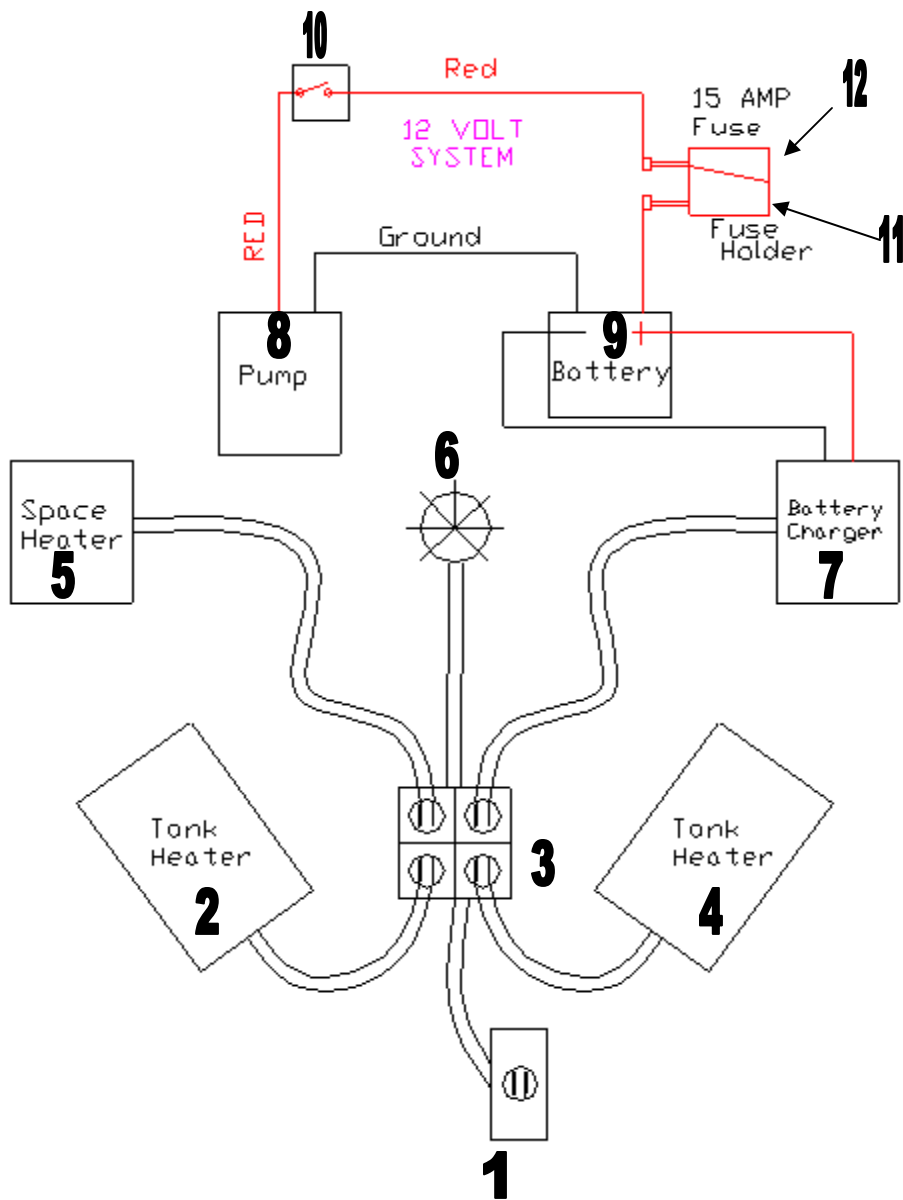


LVC 75 & 120 5th Wheel Parts Listing

Key #	Part Number	Description
1	216220	Nut, 1 1/4"-12 Slotted Hex—Plain
2	210104	Roll Pin, 3/8" X 2 1/2" (Spring Pin)
3	BSC-2W035	Front Wheel Top Weldment
4	241195	Turntable, 11 1/2" Laminated w/3/4" Chrome Balls
5	BSC-2W015	Lower 5th Wheel Box Weldment
6	217003	WASHER, 3/8" USS FLAT ZINC
7	211061	HHCS, 3/8"-16 X 1-1/2" GR5 ZINC
8	BSC-2W044	TOW BAR PIN WELDMENT
9	241051	TIRE & RIM ASSY, 4.8 X 8.00 Pneumatic
10	BSC-2A050	HUB ASSY., "TORSION" 5 BOLT 4-1/2" GSE
11	214161	HHCS, 3/4"-10 X 8" GR8 ZINC
12	CBC510-2P501	LATCH, TOW BAR
13	216507	LOCKNUT, 3/8"-16 HEX 2-WAY ZINC
14	211058	HHCS, 3/8"-16 X 1" GR5 ZINC
15	217359	WASHER 3/8 SPLIT LOCK ZINC
16	217210	3/8" FENDER WASHER
17	BCS-2W043	UPPER BRAKE PAD STOP
18	BSC-2W041	TOW BAR WELDMENT
19	BSC-2W042	LOWER BRAKE STOP
20	216518	NUT, 3/4" - 10 GR8 HEX 2-WAY—ZINC
21	217058	WASHER, 3/4" USS FLAT, PLAIN
22	210155	COTTER PIN, 3/16" X 2" ZINC
23	241195	TURNTABLE, LAMINATED W/3/4" CHROME BALLS



LVC 75 & 120 Electrical Diagram
115/120 Volt System





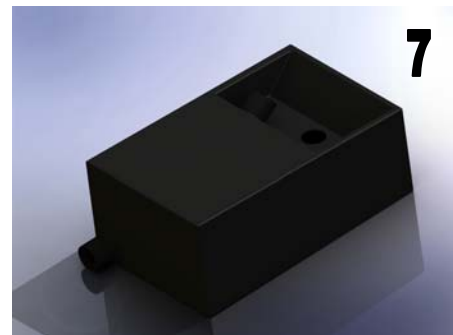
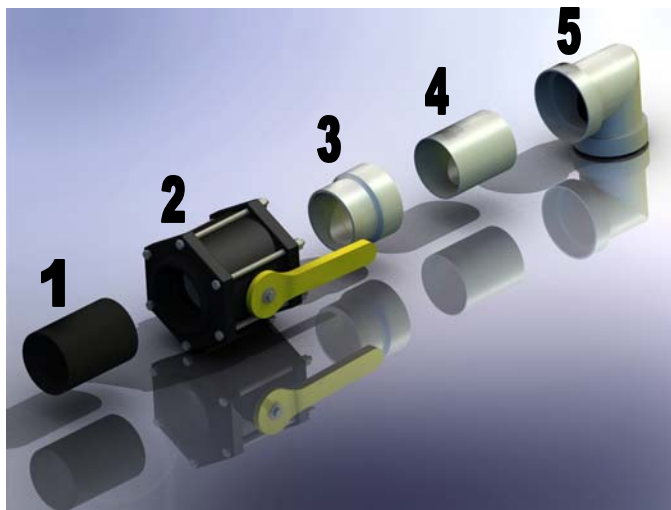
LVC 75 & 120 Electric Diagram Parts Listing
115/120 Volt System

Key #	Part Number	Description
1	640050	Outlet, Duplex 15A/125V Grounded
2	640229	Holding Tank Heater (Large Tank)
3	630504	Receptacle, GFCI White 120 V. 20A. FD
4	640228	Holding Tank Heater (Small Tank)
5	640224	Heater, Electric Space 12 Volt
6	640030	Indicator Light (Red)
7	640251	Battery Charger, Auto 12 Volt / 1.5 Amp
8	220561	Pump, Water 12Volt W/press SW. (Flo-Jet)
9	640226	Battery, 12 Volt Deep-Cell GR24 GSE
10	640057	Switch, Weatherproof Momentary
11	670014	Fuse holder, weatherproof ATO/ATC Type
12	670031	Fuse, ATC-15

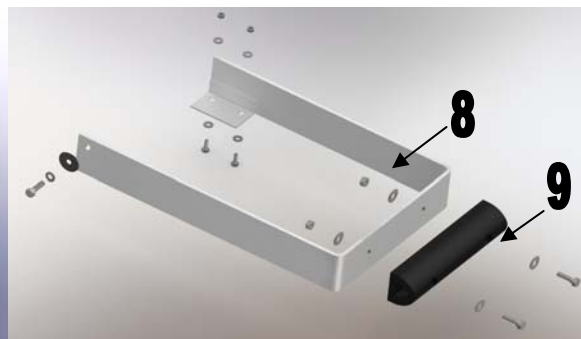
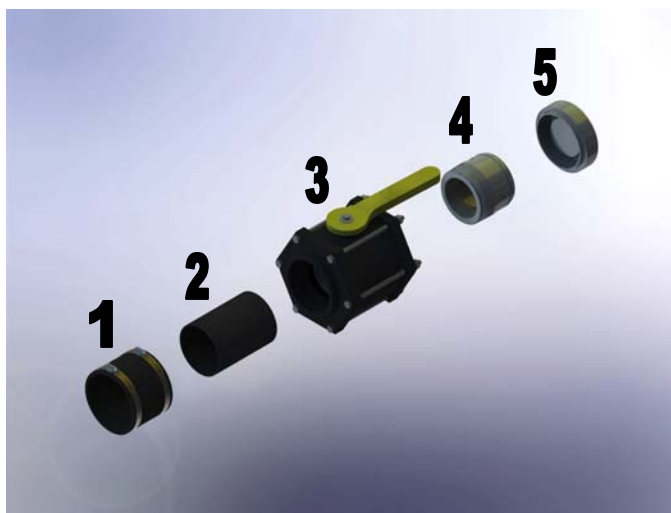


LVC75 & 120 Dump System

Open Dump System



Closed Dump System





LVC75 & 120 Dump System Parts Listing

Open Dump System

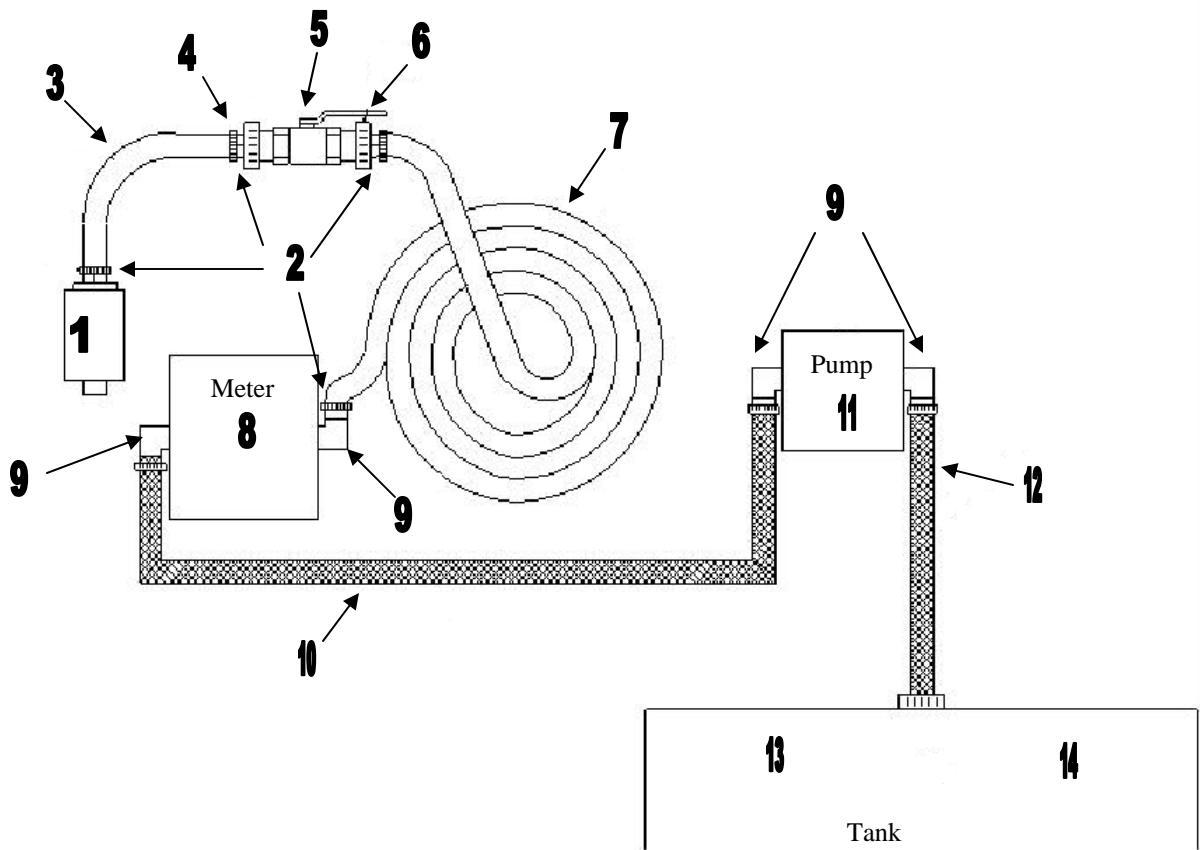
Key #	Part Number	Description
#1	222100	4" Nipple x 18" long
#2	220227	Bango Ball Valve
#3	223159	Adaptor, 4" Male to Female
#4	L280LP-8P600	4" PVC Schedule 40
#5	223285	4" Elbow

Closed Dump System

Key #	Part Number	Description
#1	220384	Coupling, 4" Fernco / Rubber
#2	222100	4" Nipple x 18" long
#3	220227	Bango Ball Valve
#4	220261	Lav Dump Adapter Nipple 4 MIP
#5	220255	Cap, Lavatory Drain 1/4 Turn
#6	L75-8W000	LVC 75 Dump Tank
#7	220754	LVC 120 Dump Tank
#8	L120-6W000	Bumper Weldment
#9	201105	Bumper, Rubber



LVC 75 & 120 Blue Juice Plumbing Diagram





LVC 75 & 120 Blue Juice Plumbing Parts Listing

Key #	Part Number	Description
#1	220657	Coupling, Lav. Water Serv.!” Ext Collar
#2	220353	Hose Clamp, 3/4” SS **6812**
#3	220302	Hose, 1” ID Reinforced PVC Clear 6”
#4	224024	Adapter, 3/4” NPT X 1” Barb-Poly
#5	220203	Valve, 3/4” Ball/Brass
#6	224021	Adaptor, 3/4” NPT X 3/4” Barb Nylon
#7	220301	Hose 3/4” ID Reinforced PVC (Clear) 144”
#8	220612	Meter, Nickel Plt. Ports, LAV / PWC Meter
#9	225035	Elbow, 1” NPT X 3/4” Bango 90 degree
#10	220301	Hose 3/4” ID Reinforced PVC (Clear) 18”
#11	220561	Pump, Water 12 V. W/Press. SW. (Flow jet)
#12	220301	Hose 3/4” ID Reinforced PVC (Clear) 8”
#13	L75-8W001	25 Gallon Blue Water Tank
#14	220753	30 Gallon Blue Water Tank



LVC75 & 120 Decal Package

1 **FILL HOSE COMPARTMENT**
250042

OPEN FILL VALVE BEFORE USE
CLOSE FILL VALVE AFTER USE
250044
2

INSTALL FILL CAP
AFTER USE
250038
3

LAVATORY SERVICE
4

CHARGER HEATER
250040
5



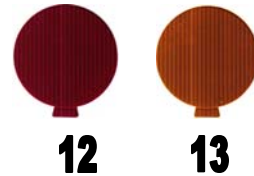
FLUSH WATER FILL PORT
7

← REFILL LEVEL
250021
8



SET BRAKE →
10
250025

DO NOT **11**
RUN PUMP DRY
250022



MAX. TOW SPEED
14 15 M.P.H.
250024

⚠ CAUTION
• Personal injury or property damage may occur from improper use.
• Read and understand operators manual before using this equipment.
• Phone 800 291-5487 for replacement manual. Part No. 250002

METER **16**
BATTERY/CHARGER COMPARTMENT

15

NO **17**
STANDING ON TANK





LVC75 & 120 Decal Parts Listing

Key #	Part Number	Description
1	250042	Decal, Fill Hose Compartment
2	250044	Decal, Open Before / Close After Use
3	250038	Decal, Install Fill Cap After Use
4	250041	Decal, Lavatory Service
5	250040	Decal, Charger / Heater
6	250069	Decal, Par-Kan Company
7	250052	Decal, Flush Water Fill Port
8	250021	Decal, Refill Level
9	250250	Decal, Made in the U.S.A
10	250026	Decal, Set Brake
11	250022	Decal, Do Not Run Pump Dry
12	250029	Reflector, 3" Round Red
13	250030	Reflector, 3" Round Amber
14	250024	Decal, Max To Speed 15 mph
15	250063	Decal, Caution – Operators Manual
16	250037	Decal, Meter / Battery / Charger Compartment
17	250035	Decal, No Standing On Tank
18	250020	Decal, Grease Here