VeloPump 7.5 Polyurea Pump Manual

Compelling Features

~ One- or two-man operation
~ Easy to maneuver and use, compact, lightweight
~ Custom 7.5 gal tanks, 1 gal mark at tank angle
~ Custom colors available (see pink machine below)
~ Lowest mounted tanks for easy filling
~ Custom frame, tight tolerances, threaded mounts
~ Low-cost gear pumps with only 2 bolt mounts
~ Lightweight handle, full control with one hand
~ Arm strap for comfort, or to attach hose to frame
~ Flip handle for shipping or use by one or two people
~ Coarse thread manifold – same size as cartridge nuts
~ Platform for generator or "Velo Power Box"

Optimal Specifications

~ Compact dimensions: 22"W x 23"L x 38"H
~ Lightweight easy to lift: 170 lbs.
~ 7.5 gallon custom tanks – able to see fluid levels
~ Bottom angle of tanks is the one gallon mark
~ Heavy duty chain drive for more torque
~ Runs off 110, a generator or the Velo Power Box
~ 1:1 ratio, variable speed drive
~ Gravity feed, able to pump heavy viscosities

Velo Power Box

Compelling Features and Specifications

~ Rechargeable LiFePO4 deep cell battery
~ Charger, inverter and battery meter
~ Lightweight 38.24 lbs.
~ Compact: 21"W x 14"D x 12"H
~ Portable, take home to charge overnight
~ Over one day run time on one charge
~ Power small tools, recharge phones and batteries
~ Meter indicates power level and battery life
~ 100A circuit breaker with manual reset

VeloBond.com (909) 360-4977

Directions:

1. This pump is designed to pump polyurea joint fillers.
2. Condition material to 70°F or above. Pre-mix the polyol side per manufacturer's instructions.
3. Remove lid to tank that is to be filled and leave the other lid on the other tank. Fill the marked tanks with the correct sides of joint filler (ISO and POLYOL). Never cross contaminate or products will harden within the manifold, pumps and supply lines.
4. Plug the machine into the Velo Power Box, an outlet, or a generator. Open ball valves on wand over waste container leaving nut and night cap in place. Turn the speed control down to lowest setting, turn on master green ON button, toggle on the thumb power switch, slowly increase speed. Dispense oil or product until clean iso and polyol are flowing. Close ball valves, remove nut and night cap, attach nozzle and run until clean mixed product is visible. Begin work. Note: Never run pumps dry for more than a few seconds or you may damage them.
5. There is one gallon left in the 7.5 gallon tanks where they taper inwards. This is the best time to add another 5-gallon bucket of material.
6. When taking breaks, turn the power off at the handle, and then turn off the master red OFF switch. Secure lids tightly and hang wand downwards leaving nozzle attached. Do not point the nozzle upwards or you risk material flowing back into the manifold and lines causing cross contamination.
7. When done for the day, empty tanks using ball valves or seal product in tanks with plastic sheeting or compressed nitrogen. Remove nozzle, grease all ports of the manifold, wipe grease to manifold threads, secure night cap and coarse thread manifold nut. Note: Coarse thread nut is the same size as all cartridge nuts in case it becomes lost.
8. Long term storage requires cleaning of the pump and lines with xylene (or a pump flush designed for joint fill pumps) then flush and store with any inexpensive oil or hydraulic fluid. Always leave some visible oil in the bottom of the tanks and within the lines and pumps. Do this same procedure when changing chemicals or colors. Grease per #7 above.
9. Periodically lube the chain and test for tightness.
10. Gear pump removal: Empty tanks until fluid is visible at the bottom of the tank. Remove plumbing connections being careful to keep fluids from dripping below. Loosen idler sprocket, remove chain from gear pump sprocket, remove 2 mount bolts and remove the pumps.

Specifications:

Power: DC parallel gearmotor ½ HP DC Motor with 200+ IN LB of torque

Transmission: Heavy duty chain drive for added torque

Frame & Dimensions: Powder coated custom fabricated steel frame, with tight tolerances and threaded mounts for components. 22”W x 23”L x 38”H

Weight (dry): 170 lbs.

Tanks: Custom 7.5 gallon square semi-transparent plastic tanks to maximize space and see fluid levels. Inward taper near the bottom of the tank is the one-gallon level mark. 34” top height of tanks for easy filling. Twist hold down tabs hold lids down tight. Rubber bands hold lids to frame while working. Heavy duty screens with handles and marked Iso and Poly.

Ratio: 1:1

Pumps: Highly efficient inexpensive aluminum gear pumps, 2 bolt mount with Viton seals available from VeloBond.

Mobility: Non marring casters, lightweight and compact frame design for super easy maneuvering, straight handle across frame with 2 upright grips. Handle flips over for use with 2 people and best transportation.

Handle: Extra lightweight with forearm brace and hook to hang on frame. One handed on/off switch and speed control. Coarse thread manifold threading so any standard cartridge nut will fit if needed. Heavy duty grease fittings and back flow valves on the manifold for cleaning, airtight sealing, and ratio checks. Rubber band holds wand down when cycling xylene or pump flush.

Hoses: Nylon wrapped/braided stainless steel hoses, coupled with control wiring, encased with a heavy-duty protective cord management wrap.

Warranty: VeloBond solely and expressly warrants that its polyurea pump shall be free from defects in materials and workmanship for six (6) months from the date of purchase. Unless authorized in writing by an officer of VeloBond, no other representations or statements made by VeloBond or it representatives, in writing or orally, shall alter this warranty. VeloBond makes no warranties, implied or otherwise, as to the merchantability or fitness for ordinary or particular purposes of its pumps and excludes the same. If the pump fails to conform with this warranty, VeloBond will replace or repair the product at no cost to Buyer. Replacement and/or repair of the pump shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within six (6) months from the date of the claim breach. VeloBond does not authorize anyone on its behalf to make any written or oral statements which in any way alter VeloBond’s operation information or instructions on its pump literature or on its packaging labels. Any operation or modification of VeloBond’s pump which fails to conform with such product information or instructions shall void this warranty. Product demonstrations if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of VeloBond’s pumps for the Buyer’s intended purposes.

Grips/Handles PN#VPGRIP-1

Reversible Handle PN#VPHANDLE
Flips over for one or two person operation

Lids PN#VPTANKSQL

7.5 Gallon Tanks PN#VPTANKSQ75

Grips/Handles PN#VPGRIP-1

Protective Sleeve (supply lines inside)
PN#VPHOSEWRAP-1

ON/OFF Master Switch PN#VPONOFFM

Tank Mounts (8)

One-gallon level at inward angle of tanks

Rear Cover/Shelf for Power Box/Generator

Storage Compartment PN#VPSTOBX

Optional Power Box PN#POWERBOX

Cover/platform for Generator or Power Box PN#VPPLCOVER

100A circuit breaker with manual reset located under charge outlet PN#VPBRKR

Speed control (w/index finger for one hand operation) PN#VPKNOBDIAL-1

Thumb control ON/OFF Switch PN#VPONOFFT Green is On

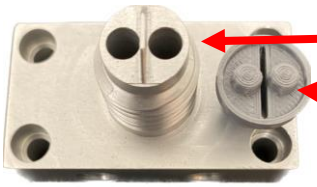
Marked sides of Iso and Polyol hose lines inside tube

Nipples (inside tube) PN#VPMANNIP-1

Heavy duty grease fittings PN#VPZIRCS-1

Ball valves PN#VPBALL18-1 (underside of manifold)

Complete Manifold Assembly for VeloPump 7.5 includes: manifold, night cap, nut, ball valves, grease fittings PN#VPMANASSYMM



Manifold PN#VPMANMXR-1

Night cap with nodules PN#VPNTCAP-1

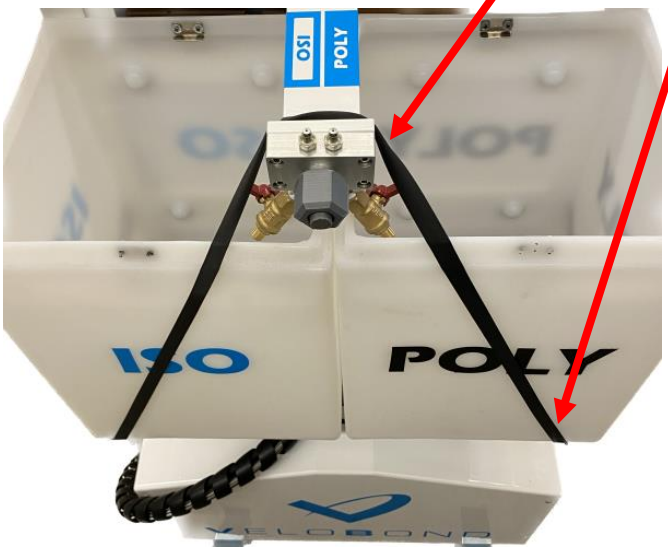
Coarse thread manifold nut (same as any cartridge retaining nut) PN#VPMANNUTC

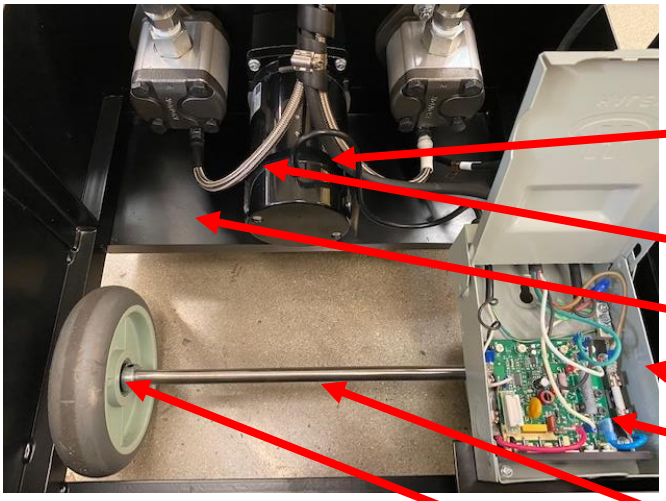
Waste bucket hooks also holds large band

Arm Strap PN#VPSTRAP
Movable for any comfortable position
Also holds hoses to frame

Large band PN#VPBAND
Properly wrapped under tanks, up over wand to secure while cleaning

Band holds lids to tanks when in use and attaches to waste bucket holder





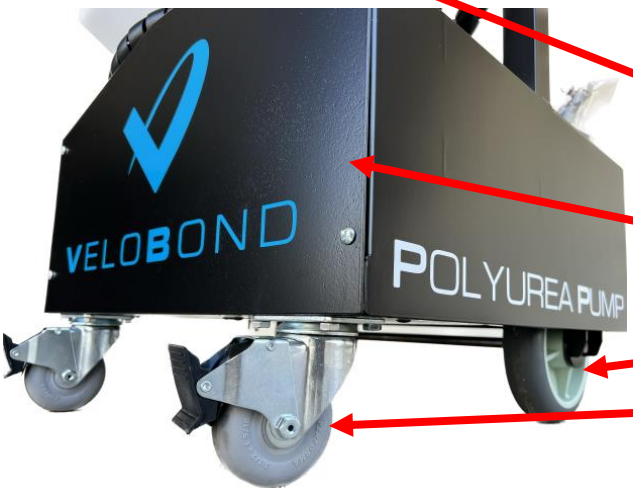
Motor PN#VPMOTOR-1

Supply Lines PN#VPHOSE11FT-1

Drip Pan (part of frame)

Electrical Box PN#VPBOXSCR-1

SCR Drive (In Box) PN#VPSCRDRIVE-1



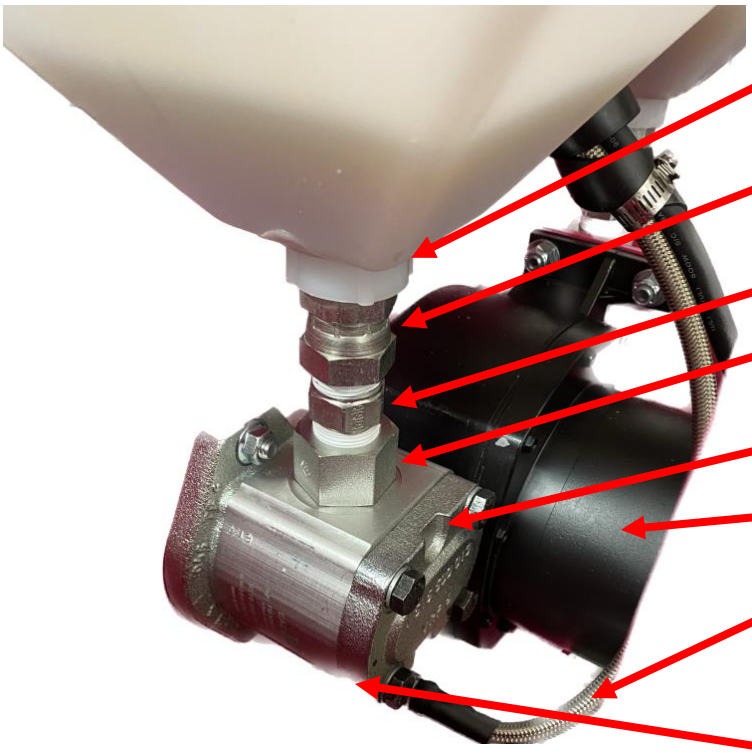
Axle PN#VPAXLE

Axle Collar PN#VPAXLECOL
Flange Bearing (other side) PN#VPFLBEAR

Drive Cover (Chain and Sprockets)

Rigid Casters PN#VPCAST8

Swivel Casters w/brakes PN#VPCAST3S



Tank with threaded connection
PN#VPTANKSQ75

Swivel Adapter PN#VPSWIVEL

Hex Nipple PN#VPNIP34HX

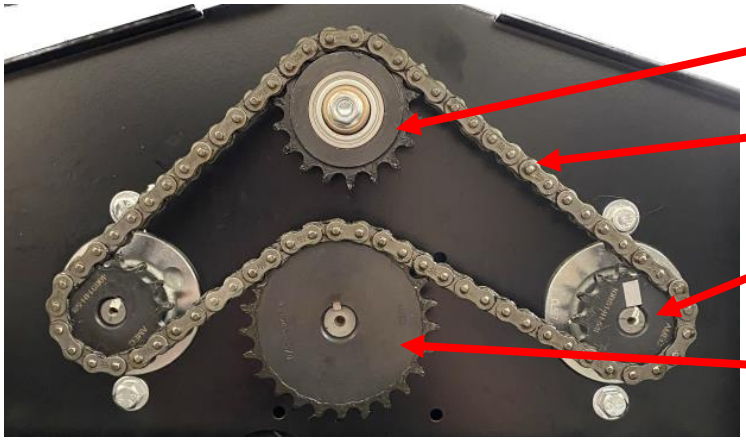
Top Pump Nipple PN#VPTOPNIP341

Gear Pump PN#VPPUMPV-1

Motor PN#VPMOTOR-1

Supply Line PN#VPHOSE11FT-1

Bottom Nipple (under gear pump)
PN#VPBOTNIP1
Under gear pump

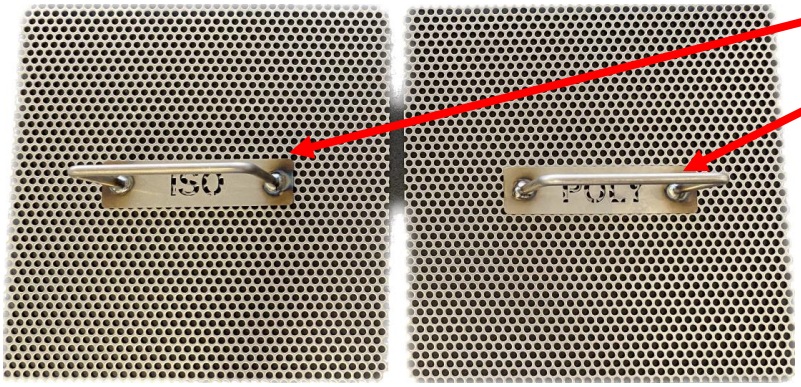


Idler Sprocket PN#VPIDLER-1

Chain PN#VPCHAIN-1
(Chain Link PN#VPCL-1)

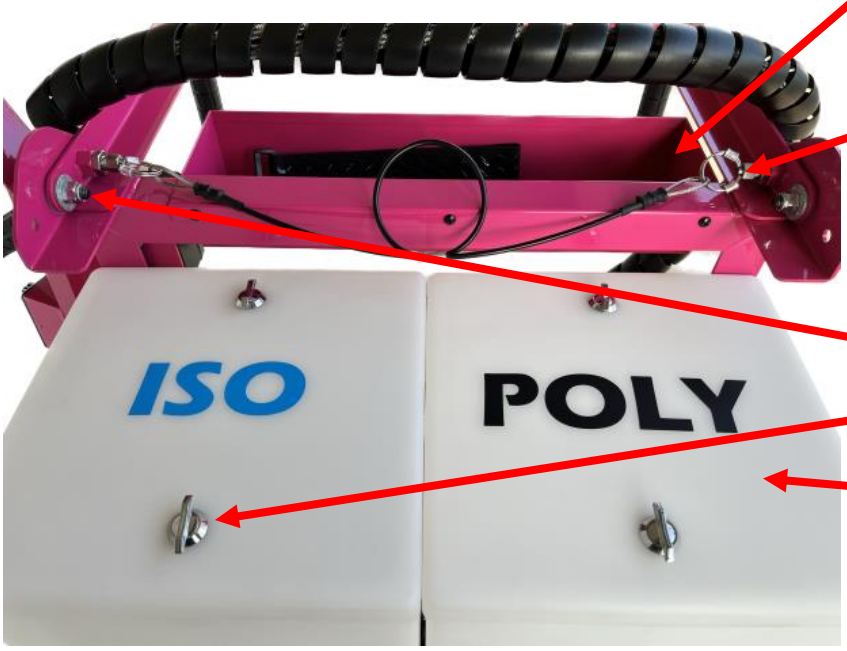
Pump Sprocket PN#VPSPRKT401434

Motor Sprocket PN#VPSPRKT402534



PN#VPSCRNISO

PN#VPSCRNPOLY
Labeled so as not to cross sides & they rest on one-gallon mark of tanks



Storage Compartment PN#VPSTOBX

Spring Plunger/Rope PN#VPSPROPE

Shoulder Bolt PN#VPBOLTSH

PN#VPLIDCLMP

Lids PN#VPTANKSQL
Labeled Iso & Poly

SCR Drive Locations and Adjustments

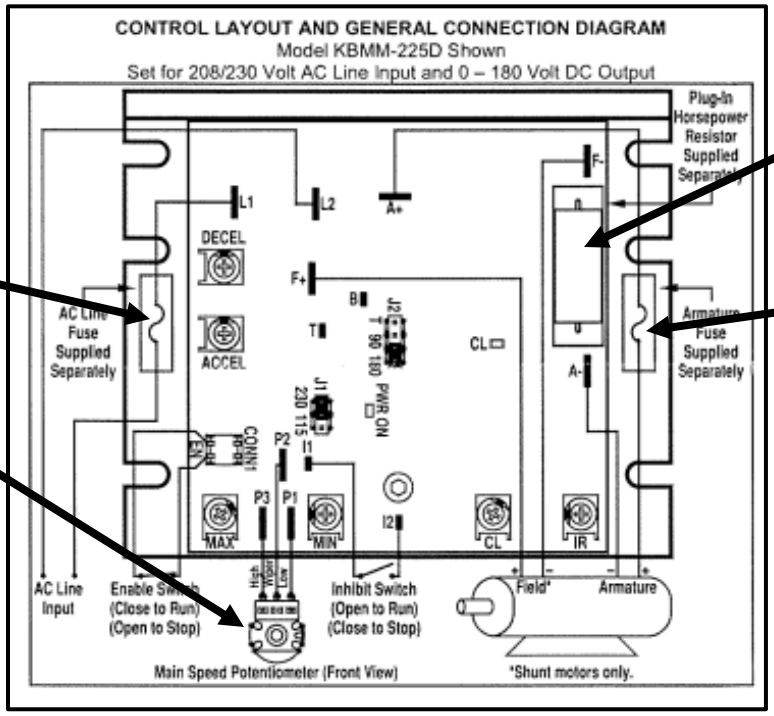
PN#VPSCRDRIVE-1

12 Amp Fuse
PN#VPFUSE12-1

Pot Kit/Speed Control
PN#VPPOT-1

Resistor
PN#VPRES-1

8 Amp Fuse
PN#VPFUSE8-1



7 – ADJUSTABLE TRIMPOTS

The control contains trimpots which have been factory set for most applications. Some applications may require readjustment of the trimpots in order to tailor the control for a specific requirement.

Read Safety Warning.

Note: *In order for the IR Compensation and Current Limit settings to be correct, the proper Plug-In Horsepower Resistor® must be installed for the particular motor and input voltage being used.*

ACCELERATION (ACCEL): Allows for a smooth start over an adjustable time period each time the AC power is applied or the Main Speed Potentiometer is adjusted to a higher speed. The ACCEL Trimpot sets the time it will take for the motor to accelerate from zero speed to full speed.
Units: Seconds

DECELERATION (DECEL): Sets the ramp-down time when the Main Speed Potentiometer is adjusted to a lower speed.
Units: Seconds

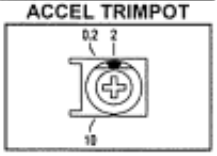
MINIMUM SPEED (MIN): Sets the minimum speed of the motor when the Main Speed Potentiometer is set fully counterclockwise. **Units:** % Base Speed

MAXIMUM SPEED (MAX): Sets the maximum speed of the motor when the Main Speed Potentiometer is set fully clockwise. **Units:** % Base Speed

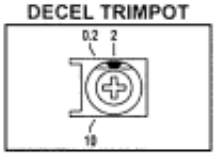
CURRENT LIMIT (CL): Sets the current limit (overload), which limits the maximum current (torque) to the motor. The CL also limits the AC line inrush current to a safe level during startup. **Do not exceed 2 times motor current rating (maximum clockwise position). Units:** % Full Load

IR COMPENSATION (IR): Sets the compensating voltage required to keep the motor speed constant under changing loads. If the load does not vary substantially, the IR Trimpot may be set to a minimum level (approximately 1/4 of full clockwise rotation). **Units:** Volts DC

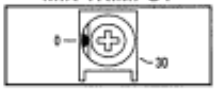
ACCEL TRIMPOT



DECEL TRIMPOT

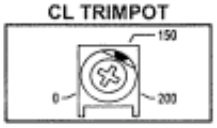


MIN TRIMPOT



MAX TRIMPOT

CL TRIMPOT



IR TRIMPOT