



## **DBA Nordic Beer Systems of Idaho**

Power Pack Install/Operation Manual  
Power Pack Models 403-S/D/T, 101-S/D/T/Q  
208-230V, Single thru Quad Pump Units

## Removal From Packing

- Carefully remove pumptop from packaging
- Carefully lift unit from packaging
- Always keep unit upright - should unit be on sides or back, allow the unit to be upright for a minimum of 1 week prior to operating

## Install Location

- Powerpacks are intended for indoor use only - do not install outside
- Do not install on top of a walk in cooler  
(unless that is the ideal placement for the location - see table below)
- Optimal ambient operating temperature range is 50-90° F
- Powerpacks to be plugged into 20A, 115V outlet per UL guidelines
- See table below for minimum install clearances

Unit Location	Minimum space required for proper air flow
Top of Unit	10"
Left Side of Unit	6"
Right Side of Unit	10"
Back of Unit	6"

## **Install Directions**

- Remove pump top from unit
- Inspect glycol bath for debris
- Fill bath with 50/50 blend of 100% pure propylene glycol/water to top of copper coils within bath
- Re-attach pumps and motors if removed from pump top - place on top leaving access to glycol bath
- Attach glycol lines to pump on pump top with proper oetiker clamps . Insulate any exposed glycol lines
- Plug pump motors into designated outlets on unit
- Turn on power for designated breaker
- As glycol fills lines add blended glycol/water mixture to keep glycol level at top of copper coils
- Inspect for any leaks
- Place pumptop and top cover onto unit, attaching with provided screws
- Glycol temperature will slowly reach 25° F

## **General Maintenance**

- Check glycol level monthly to ensure glycol reaches the top of copper coils
- If glycol is low add 50/50 blend of 100% pure propylene glycol/water until it reaches the top of copper coils
- Should there be any evidence of ice build up in the unit, melt any ice and replace entire glycol blend with new glycol blend
- Glycol blend should be replaced every 6 months
- Check and clean any dust buildup on and around unit
- Check glycol line insulation, replace if needed
- Check electrical cords for any cuts or fraying
- Clean compressor and radiator monthly
- Power packs are to be cleaned/serviced monthly (at minimum) but more often if need be for warranty to remain valid.

## **Temperature Control**

- Temp Control Setpoint @ 25° F with a 5° F differential
- For proper operation do not adjust control

## **Replacement of Pump and Motor**

- We advise replacing the pump and motor at the same time, if replacing only pump or motor ensure pump/motor not being replaced is in proper working conditions. Replacement of one without the other could result in damage to the new part.
- Unplug powerpack from wall outlet prior to work being done
- Cut pump lines
- Loosen and remove clamp holding pump to motor
- Remove pump from pump top
- Remove clamps from motor mount to remove motor (if replacement is identical motor)
- Remove mounting bolts from pump top for motor (if replacement is not identical)
- Attach new motor and pump to pump top
- Attach pump lines using stainless steel clamps
- Ensure pump top is mounted and attached properly to top of powerpack
- Plug unit into wall outlet
- Check for leaks and replace any damaged insulation on glycol lines

## Troubleshooting

### Excess Foam

- Verify walk in cooler is 36° F - 38° F
- Check keg pressures, adjust if needed for a proper flow rate of whatever meets the retailer's needs
- Check all equipment from keg to faucet
- Check product temperature

### Compressor Does Not Start

- Check voltage, voltage must not drop below 90% of rated value
- Replace compressor relay or capacitor
- Replace compressor

### Compressor Does Not Stop Running

- Replace thermostat/temperature control
- Possible freon leak; repair leak and recharge

### Compressor Does Not Run But Hums

- Check voltage, voltage must not drop below 90% of rated value
- Replace starting relay, be sure to use proper relay. Improper relay will cause failure
- Replace compressor

### Warm Beer

- Clean the condenser
- Check pump and motor, verify liquid flow, replace pump and motor if needed
- Trunk lines too close to heatsource and warming product
- Check for flooded chase, remove fluid from chase and repair/replace any trunkline as needed
- Check trunk line insulation for damage, repair or replace as needed
- Check thermostat settings, adjust for cooler temperature if too high
- Check condensing unit fan, replace fan motor if needed
- Possible freon leak, repair leak and recharge

