

P24AL Series Parts List

Note: The P24AL low-side ammonia machine was introduced in 1972. The original control panel utilized Allen-Bradley NEMA components, and in mid-1993 changed to include Cutler-Hammer components. The control panel was changed to Allen Bradley I.E.C. components in mid-1999

Control Panel Components (Allen-Bradley prior to 1993)

| Part Number | Req'd | Description |
|--------------------|--------------|--|
| 12A2590G12 | 1 | GAGE, 4 1/2" DIAMETER, 30"-150# 1/4" BC, AMMONIA Suction Pressure Gage (Optional) |
| 12A2590G13 | 1 | GAGE, 4 1/2" DIAMETER, 30"-300# 1/4" BC, AMMONIA Discharge Pressure Gage (Optional) |
| 12A2117D01 | 1 | HI/LOW PRESSURE SWITCH (Optional, Replaces Mercoid Controls) |
| 12A7500E1 | 1 | A/B SELECTOR SWITCH 800T WITH-HAND-AUTO |
| 12A7500E15 | 1 | C/H PUSH-BUTTON SWITCH (RED) W/STOP NAMEPLATE (Replaces A/B 800T) |
| 12A7500E17 | 1 | C/H PUSH-BUTTON SWITCH (GREEN) W/START NAMEPLATE (Replaces A/B 800T) |
| 12A7503E22 | 1 | THAW TIMER, 8 PIN PLUG-IN, 100-240V., 50/60HZ Replaces all other timers (base needed for replacement) |
| 12A7503E2201 | 1 | TIMER BASE #0T08-PC, EIGHT PIN PLUG-IN |
| 12A7503E04 | 1 | TIMER, 0-60MIN EAGLE SIGNAL #HP56B601, 240V.,60HZ Primary Freezing Timer (Standard-Optional Timers Below) |
| 12A7503E03 | 1 | TIMER, 0-30MIN EAGLE SIGNAL #HP55B601, 240V.,60HZ |
| 12A7503E2 | 1 | TIMER, 0-15MIN EAGLE SIGNAL #HP518B601, 240V.,60HZ |
| 12A7503E05 | 1 | TIMER, 0-10MIN EAGLE SIGNAL #HP54B601, 240V.,60HZ |
| 12A7503E3 | 1 | TIMER, DIGITAL EAGLE SIGNAL #CX202B6, 208/240V.,60HZ. |
| 12A7503E06 | 1 | TIMER, 0-60MIN EAGLE SIGNAL #HP56A601, 120V.,60HZ |
| 12A7503E02 | 1 | TIMER, 0-30MIN EAGLE SIGNAL #HP55A601, 120V.,60HZ |
| 12A7503E4 | 1 | TIMER, DIGITAL EAGLE SIGNAL #CX202A6, 110/120V.,60HZ. |
| 12A7503E15 | 1 | CAM TIMER, ATC#324C06E2AR1B01K W/4-CUT CAMS 240V-60 |
| 12A7503E16 | 1 | CAM TIMER ATC #324C06E2AR1A01K, 120V-60 |
| 12B7503E18 | 1 | ELAPSED TIME INDICATOR, 230V, 60HZ PANEL MOUNT |
| 12B7503E17 | 1 | ELAPSED TIME INDICATOR, 220V, 50HZ PANEL MOUNT |
| 12A7517E02 | 3 | RELAY 700N200A2 240-60/220-50 "CR" Relay |
| 12A7518E01 | | CONTACT CARTRIDGE 700-C1 FOR A/B N-TYPE RELAYS |
| 12A7503E07 | | TIMER 700-NT PNEUMATIC FOR N TYPE RELAY |
| 12A7520E02 | 1 | PILOT LIGHT LENS "RED" DIALCO (9/16" MOUNT LIGHT) |
| 12A7520E03 | 1 | PILOT LIGHT LENS "AMBER" DIALCO (9/16" MOUNT LIGHT) |
| 12A7520E07 | 1 | PILOT LIGHT LENS "WHITE" DIALCO (9/16" MOUNT LIGHT) |
| 12A7520E06 | 3 | PILOT LIGHT RECEPTACLE DIALCO (9/16" MOUNTING HOLE) Front Mounted Receptacle |
| 12A7520E08 | 3 | LAMP,NEON, DIALCO #B2A, 115V/6 (Also used in the rear mounted receptacles) |
| 12A7520E09 | 1 | PILOT LIGHT,RED,250V OSLO (SQ w/RECT. MOUNT HOLE) |
| 12A7520E1 | 1 | PILOT LIGHT,AMBER,250V OSLO (SQ w/RECT. MOUNT HOLE) |
| 12A7520E11 | 1 | PILOT LIGHT ,CLEAR ,250V OSLO (SQ w/RECT. MOUNT HOLE) Note: Square Lights with rectangular hole used 1989-93 |

P24AL Series Parts List

Control Panel Components (Allen-Bradley prior to 1993) (Con'd)

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|--|
| 12A7519E03 | 1 | CONTROL CIRCUIT TRANSFORMER, 460V-230V, 1KVA |
| 12A7530E05 | 2 | A/B STARTER 509-AOA 240V SIZE 0 3-POLE <i>Water Pump or Cutter Motor Starter</i> <i>Requires 3-W Heaters, Replaces A/B 709 Series Starters</i> |
| 12A7504E01 | 2 | FUSE,FNM 10,10 AMP,250VAC FUST <i>Control Circuit Fuse</i> |
| 12A7504E06 | | FUSE FRS-15 600V.,15AMP. |
| 12A7504E03 | | FUSE, FRS-20 600V., 20AMP |
| 12A7519E03 | | CONTROL CIRCUIT TRANSFORMER, 460V-230V, 1KVA |
| 12A7508E03 | | HEATER,ALLEN-BRADLEY W-35, FLA 1.96 |
| 12A7508E04 | | HEATER,ALLEN-BRADLEY W-36, FLA 2.16 |
| 12A7508E05 | | HEATER,ALLEN-BRADLEY W-37, FLA 2.36 |
| 12A7508E24 | | HEATER,ALLEN-BRADLEY W-38, FLA 2.60 |
| 12A7508E06 | | HEATER,ALLEN-BRADLEY W-41, FLA 3.48 |
| 12A7508E07 | | HEATER,ALLEN-BRADLEY W-42, FLA 3.86 |
| 12A7508E08 | | HEATER,ALLEN-BRADLEY W-43, FLA 4.23 |
| 12A7508E09 | | HEATER,ALLEN-BRADLEY W-44, FLA 4.68 |
| 12A7508E1 | | HEATER,ALLEN-BRADLEY W-45, FLA 5.18 |
| 12A7508E11 | | HEATER,ALLEN-BRADLEY W-48, FLA 6.94 |
| 12A7508E22 | | HEATER,ALLEN-BRADLEY W-50, FLA 8.45 |
| 12A7508E12 | | HEATER,ALLEN-BRADLEY W-51, FLA 9.29 |
| 12A7508E29 | | HEATER,ALLEN-BRADLEY W-52, FLA 10.3 |
| 12A7508E25 | | HEATER,ALLEN-BRADLEY W-57, FLA 16.3 |
| 12A7508E13 | | HEATER,ALLEN-BRADLEY W-59, FLA 18.3 |
| 12A7508E14 | | HEATER,ALLEN-BRADLEY W-60, FLA 20.9 |
| 12A7508E3 | | HEATER,ALLEN-BRADLEY W-63, FLA 27.6 |
| 12A7508E15 | | HEATER,ALLEN-BRADLEY W-66, FLA 40.0 |
| 12A7508E26 | | HEATER,ALLEN-BRADLEY W-68, FLA 46.0 |
| 12A7508E27 | | HEATER,ALLEN-BRADLEY W-70, FLA 53.0 |
| 12A7508E28 | | HEATER,ALLEN-BRADLEY W-71, FLA 59.0 |
| 12A7508E16 | | HEATER,ALLEN-BRADLEY W-72, FLA 63.0 |
| 12A7508E17 | | HEATER,ALLEN-BRADLEY W-73, FLA 67.0 |

P24AL Series Parts List

Control Panel Components (Cutler-Hammer)

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 12A2590G12 | 1 | GAGE, 4 1/2" DIAMETER, 30"-150# 1/4" BC, AMMONIA Suction Pressure Gage (Optional) |
| 12A2590G13 | 1 | GAGE, 4 1/2" DIAMETER, 30"-300# 1/4" BC, AMMONIA Discharge Pressure Gage (Optional) |
| 12A2117D01 | 1 | HI/LOW PRESSURE SWITCH (Optional) |
| 12A7500E42 | 1 | C/H SELECTOR SWITCH 2-POSITION "1SS" Hand/Auto Switch |
| 12A7500E57 | 1 | A/B PUSH BUTTON SWITCH (RED) "1PB" Stop Push-Button Switch |
| 12A7500E56 | 1 | A/B PUSH BUTTON SWITCH (GREEN) "2PB" Start Push-Button Switch |
| 12A7500E58 | 1 | A/B PUSH BUTTON SWITCH (WHITE) "3PB" Manual Harvest Switch |
| 12A7503E22 | 2 | THAW TIMER, 8 PIN PLUG-IN, 100-240V., 50/60HZ "2TR" |
| 12A7503E2201 | 2 | TIMER BASE #0T08-PC, EIGHT PIN PLUG-IN |
| 12A7503E3 | 1 | TIMER, DIGITAL EAGLE SIGNAL #CX202B6, 208/240V.,60HZ. Primary Freezing Timer |
| 12B7503E18 | 1 | ELAPSED TIME INDICATOR, 230V, 60HZ PANEL MOUNT |
| 12B7503E17 | 1 | ELAPSED TIME INDICATOR, 220V, 50HZ PANEL MOUNT |
| 12A7520E24 | | PILOT LIGHT ASSEMBLY C/H #1025 AMBER "1LT" Freezing |
| 12A7520E25 | | PILOT LIGHT ASSEMBLY C/H #1025 CLEAR "2LT" Liquid Feed |
| 12A7520E26 | | PILOT LIGHT ASSEMBLY C/H #1025 RED "3LT" Thawing |
| 12A7515E09 | 1 | CIRCUIT BREAKER, 30 AMP. WESTINGHOUSE "CB2" |
| 12A7515E08 | 1 | CIRCUIT BREAKER, 15 AMP. WESTINGHOUSE "CB3" |
| 12A7517E2 | 2 | C/H RELAY #D15CRY3 (W/ 3-N/O, 1-N/C) "CR" Relay |
| 12A7503E36 | 1 | TIMER PNEUMATIC CUTLER HAMMER Time Delay for Cutter Motor on "1CR" Relay |
| 12A7530E11 | | C/H STARTER #AE16BNY, 3-POLE "3M" Cutter Motor |

P24AL Series Parts List

Control Panel Components (Cutler-Hammer) (Con'd)

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|--|
| 12A7530E2 | 1 | STARTER CUTLER/HAMMER #AE16FNO "2M" Water Pump |
| 12A7508H2008 | 1 | C/H HEATER PACK #H2008B 3.23-5.23 AMP Water Pump on 400/460V or Cutter Motor on 200/230V |
| 12A7508H201 | 1 | C/H HEATER PACK #H2010B 6.75-11.0 AMP Water Pump on 200/230V |
| 12A7508H2006 | | C/H HEATER PACK #H2006B 1.79-2.90 AMP Cutter Motor on 400/460V |
| 12A7519E03 | | CONTROL CIRCUIT TRANSFORMER, 460V-230V, 1KVA |
| 12A7515E16 | 1 | CIRCUIT BREAKER CUTLER HAMMER 6AMP, 2-POLE "CB4" Control Circuit |

Control Panel Components (Allen-Bradley since 1999)

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 12A2590G12 | 1 | GAGE, 4 1/2" DIAMETER, 30"-150# 1/4" BC, AMMONIA Suction Pressure Gage (Optional) |
| 12A2590G13 | 1 | GAGE, 4 1/2" DIAMETER, 30"-300# 1/4" BC, AMMONIA Discharge Pressure Gage (Optional) |
| 12A2117D01 | 1 | HI/LOW PRESSURE SWITCH (Optional) |
| 12A7500E60 | 1 | A/B SELECTOR SWITCH, 2 POSITION "1SS" Hand/Auto Switch |
| 12A7500E74 | 1 | CONTACT BLOCK/MOUNTING LATCH, 1-NO, 1-NC Used with 12A7500E60 |
| 12A7500E57 | 1 | A/B PUSH BUTTON SWITCH (RED) "1PB" Stop Push-Button Switch |
| 12A7500E56 | 1 | A/B PUSH BUTTON SWITCH (GREEN) "2PB" Start Push-Button Switch |
| 12A7500E58 | 1 | A/B PUSH BUTTON SWITCH (WHITE) "3PB" Manual Harvest Switch |
| 12A7503E22 | 2 | THAW TIMER, 8 PIN PLUG-IN, 100-240V., 50/60HZ "2TR" or "DT" (Compressor Unloader) |
| 12A7503E2201 | 2 | TIMER BASE #0T08-PC, EIGHT PIN PLUG-IN |
| 12A7503E3 | 1 | TIMER, DIGITAL EAGLE SIGNAL #CX202B6, 208/240V., 60HZ. Primary Freezing Timer |

P24AL Series Parts List

Control Panel Components (Allen-Bradley since 1999) (Con'd)

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|--|
| 12B7503E21 | 1 | ELAPSED TIME INDICATOR, 220V, 60HZ, DIN RAIL MOUNT |
| 12B7503E20 | 1 | ELAPSED TIME INDICATOR, 220V, 50HZ, DIN RAIL MOUNT |
| 12A7500E62 | 1 | A/B PILOT LIGHT OPERATOR, BLUE (7/8" NOTCHED HOLE) "1LT" Freezing |
| 12A7500E63 | 1 | A/B PILOT LIGHT OPERATOR, CLEAR (7/8" NOTCHED HOLE) "2LT" Liquid Feed |
| 12A7500E64 | 1 | A/B PILOT LIGHT OPERATOR, RED (7/8" NOTCHED HOLE) "3LT" Thawing |
| 12A7500E78 | 3 | INCANDESCENT LIGHT MODULE FOR PILOT LIGHT |
| 12A7520E35 | 3 | BULB #755, A/B 2TL5/2TL7 PILOT LIGHT, 6.3V |
| 12A7517E28 | 2 | A/B RELAY, 10A, 3-NO/1-NC, 208/240 "CR" Relay |
| 12A7503E38 | 1 | A/B TIMER, PNEUMATIC, ON-DELAY Time Delay for Cutter Motor on "1CR" Relay |
| 12A7516E23 | 1 | A/B CONTACTOR, 9-AMP, 3-POLE, 208/240V W/1-NO AUX "2M" Water Pump or "3M" Cutter Motor (9-amp Max) |
| 12A7516E24 | 1 | A/B CONTACTOR, 12-AMP, 3 POLE, 208/240V W/1-NO AUX "2M" Water Pump or "3M" Cutter Motor (12-amp Max) |
| 12A7516E25 | 1 | A/B CONTACTOR, 16-AMP, 3-POLE, 208/240V W/1-NO AUX "2M" Water Pump or "3M" Cutter Motor (16-amp Max) |
| 12A7530E54 | 1 | MANUAL MOTOR STARTER, 1.6-2.5 AMP OVERLOAD |
| 12A7530E55 | 1 | MANUAL MOTOR STARTER, 2.5-4.0 AMP OVERLOAD |
| 12A7530E56 | 1 | MANUAL MOTOR STARTER, 4.0-6.3 AMP OVERLOAD |
| 12A7530E57 | 1 | MANUAL MOTOR STARTER, 6.3-10.0 AMP OVERLOAD |
| 12A7530E58 | 1 | MANUAL MOTOR STARTER, 10.0-16.0 AMP OVERLOAD |
| 12A7518E33 | 2 | A/B AUX. CONTACT, 6A, 1 NO, SIDE MOUNT Auxiliary for Water Pump and Cutter Motor Starter |
| 12A7519E03 | | CONTROL CIRCUIT TRANSFORMER, 460V-230V, 1KVA |
| 12A7515E22 | 1 | A/B CIRCUIT BREAKER, 6A, 2 POLE "CB4" Control Circuit |

P24AL Series Parts List

Freezer Components

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|--|
| 12A2600G08 | 1 | FREEZER COVER GASKET 27" x 22" x 3/16" |
| 12B2145C04 | 1 | P24 POLYCARBONATE FREEZER COVER W/VENT HOLE <i>(Requires the Foot Valve & Bulkhead Fitting below)</i> |
| 12A4200B1007 | 1 | VALVES, FOOT (PLASTIC), 1-1/2" MPT |
| 12A2450B13 | 1 | BULKHEAD FITTING, (PVC) 1 1/2" |
| 19T4001S0915 | 4 | P24 FREEZER COVER RETAINING RINGS |
| 12A2240H4109 | 12 | NUT, WING, BRASS, 3/8"-16NC |
| 12A2250A12 | 12 | WASHER, CUT 3/8" x 1" O.D. SS |
| 12B2185V12 | 264 | 1" VENT TUBE WATER DISTRIBUTOR, 16GA WHITE |
| 12B2185V22 | 198 | 1-1/4" VENT TUBE WATER DISTRIBUTOR, 16GA WHITE |
| 12B2185V32 | 144 | 1-1/2" VENT TUBE WATER DISTRIBUTOR, 16GA WHITE |
| 12B2185V42 | 102 | 1-3/4" VENT TUBE WATER DISTRIBUTOR, 16GA WHITE |
| 12A2055B02 | | BRUSH, STAINLESS STEEL #GTC210 FOR 1" TUBES |
| 12A2055B04 | | BRUSH, STAINLESS STEEL #GTC210 FOR 1 1/4" TUBES |
| 12A2055B03 | | BRUSH, STAINLESS STEEL FOR 1-1/2" TUBE |
| 12A4009R01 | | PLUG, RUBBER 7/8" OD X 2" LG FOR 1" TUBES <i>Requires 1/4" Nuts & Bolts</i> |
| 12A2220F1117 | 1 | MACH BOLT, 1/4"-20NC X 2 1/2" LONG |
| 12A2240A1107 | 1 | NUT, HEX 1/4"-20NC S.S. |
| 12A2250A107 | 2 | WASHER, CUT 1/4" SS |
| 12A4009R02 | | PLUG, RUBBER 1"OD X 2 1/2"LG FOR 1-1/4" TUBES <i>Requires 3/8" Nuts & Bolts</i> |
| 12A4009R03 | | PLUG, RUBBER 1 1/4"OD X 2 1/2" FOR 1-1/2" TUBES <i>Requires 3/8" Nuts & Bolts</i> |
| 12A2215H1119 | 1 | CAP SCREW, 3/8"-16NC X 3" LONG |
| 12A2240A1109 | 1 | NUT, HEX 3/8"-16NC S.S. |
| 12A2250A109 | 2 | WASHER, CUT 3/8" x 7/8" O.D. SS |
| 12A7500E22 | 1 | FLOAT SWITCH, HANSON #HLL (DIFFERENTIAL SET @ 1/2") <i>Replaces Alco FS1A or RS Type LL</i> |
| 12A7500E24 | 1 | SWITCH ASSEMBLY #HLL-SW FOR HANSON <i>Also can be used on RS Type LL</i> |
| 12A2600F01 | 2 | FLANGE GASKET FOR 3/4" & 1" 2-BOLT FLANGE |
| 12A2625G03 | 1 | GAGE GLASS 1/2" X 28-1/8" LONG <i>For Use with Hand Wheel Gage Cock Valves</i> |
| 12A2625G11 | 1 | GAGE GLASS, 1/2" X 28 3/8" LONG <i>For Use with Service Wrench Gage Cock Valves</i> |
| 12A2625G05 | 1 | GAGE GLASS 1/2" X 29" LONG <i>For Custom Application (Cut to Fit)</i> |
| 19T2635G06 | 1 | GAGE GLASS GUARD SET, 27 1/4" <i>For Use with Service Wrench Gage Cock Valves</i> |

P24AL Series Parts List

Freezer Components (Con'd)

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 12A2635G06 | 1 | GAGE GLASS GUARD 60" LENGTH <i>For Custom Application (Cut to Fit)</i> |
| 12A4199V26 | 2 | GAGE GLASS PACKING O-RING FOR 1/2" DIAMETER |
| 12A4200J0405W | 1 | UPPER GAGE COCK VALVE, WESTERMAYER PLATED <i>Replaced Hand Wheel Valve 12A4200J0401 - May 1999</i> |
| 12A4200J0406W | 1 | LOWER GAGE COCK VALVE, WESTERMAYER PLATED <i>Replaced Hand Wheel Valve 12A4200J0402 - May 1999</i> |
| 12A3050C0301 | 2 | PIPE NIPPLE, 1/2" X 1-1/2" LONG |

Note: Serial number of unit required for purchase of relief valves. Relief valve setting must not exceed the design pressure of the vessel.

| | | |
|--------------|---|--|
| 12A4200L0603 | 2 | RELIEF VALVE #5602, SET @ 275, 3/4" FPT x 1" FPT |
| 12A4200M0601 | 1 | 3-WAY VALVE #8022A, 3/4" |

Cutter Drive

Note: The cutters on the original P24 units were nickel plated carbon steel driven by a belt and pulley system off the bottom of a galvanized water tank. In 1977, the design was changed to the current direct drive setup and at the same time, the entire water tank and cutter was changed to stainless steel. Reliance one piece gearmotors were used until a design change in 1998 to the separate Grove reducer and U.S. Motor. Note: Grove and Reliance reducers require different mounting configuration and are not interchangeable.

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 12A2900M0701 | 1 | GEARMOTOR, RELIANCE R56WG21A ,1HP 230/460V-3P-60HZ <i>For Belt-Driven Cutters Prior to 1977</i> |
| 12A2900M0702 | 1 | GEARMOTOR, RELIANCE, 1HP 230/380/460V-3P-50/60HZ <i>Direct Drive Units with Stainless Steel Tanks Until 1998</i> |
| 12A4080S1 | 1 | SEAL, KIT #07901938AC FOR RELIANCE 1HP GEARMOTOR |
| 12A2900M0704 | 1 | GEARMOTOR, GROVE 15:1, 1-1/2HP, 230-460V-3P-50/60HZ <i>Direct Drive Units Built Since 1998</i> |
| 12A2900M0705 | 1 | MOTOR, 1 1/2 HP, FOR GROVE GEARMOTOR 12A2900M0704/06 |
| 12A4030R1 | 1 | REDUCER, GROVE 10:1 FOR GEARMOTOR 12A2900M0704 |
| 12B2615D03 | 1 | P24 DRIVE GEAR , ALUMINUM / BRONZE 9-1/4" PD, 72 TEETH <i>Replaces Cast Iron Gear</i> |
| 12B2060B01 | 1 | DRIVE GEAR HUB, STAINLESS STEEL 1-1/8" BORE <i>For use with Grove gearmotor</i> |
| 12B2060B04 | 1 | DRIVE GEAR HUB, 7/8" BORE STAINLESS STEEL <i>For Aluminum Bronze Gear (Will not work with Cast Gear)</i> |
| 19T2615R03 | 1 | P24 FINISHED RING GEAR |
| 12A3040S02 | 6 | CUTTER BEARING ROLL PIN 3/16" X 1/2" <i>(This pin used to secure ring gear to cutter)</i> |
| 126087 | 1 | BELT 630XH200 DIAMOND FOR P24 BOTTOM DRIVE CUTTER |

P24AL Series Parts List

Cutter Internals

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 19T2035B01 | 2 | CUTTER BLADE, P24, 10" LONG |
| 19T2010A11 | 2 | P24 CUTTER ADAPTER PLATE |
| 19T4130T04 | 8 | ADAPTOR PLATE SPACER, 5/8" O.D. S.S. TUBING x 7/8" LG. |
| 12A2226H1117 | 8 | MACHINE SCREW, FLAT HEAD SS, 3/8"-16NC x 2-1/2" LG <i>For Adaptor Plates</i> |
| 12A2240A1309 | 8 | NUT, HEX 3/8"-16NC S.S. |
| 19T2025B0105 | 1 | BEARING BRACKET ASSEMBLY FOR P24 |
| 19T2163D0302 | 1 | TINES DISC, P24 CYLINDER ICE |
| 19T4090S03 | 1 | P24/34 CUTTER SHAFT |
| 12A2020M02 | 3 | P24/34 CUTTER BEARING |
| 12A4080S02 | 2 | SEAL, 9043LPD OR 9043LUP, 3"O.D. X 2" I.D. X 1/2" W. |
| 12A2210E01 | 1 | UPPER EXCLUDER, 1.625" ID x 3.5" OD |
| 12A2210E04 | 1 | LOWER EXCLUDER, 3.5" ID x 5.625" OD |
| 19T4130C01 | 1 | P24/34 UPPER BEARING SPACER |
| 19T4130C02 | 1 | P24/34 TINES DISC HUB SPACER |
| 19T4130C03 | 1 | P24/34 SEAL SPACER |
| 19T4130C04 | 1 | P24/34 LOWER BEARING SPACER |
| 19T4065R01 | 1 | P24/34 CUTTER RETAINING SPACER |
| 12A2600R02 | 1 | RETAINING GASKET 1 3/4" OD x 7/16" ID x 1/8" RED RUBBER |
| 12A2240E1216 | 1 | P24/34 TINES DISC SLOTTED NUT, 1"-14NF,S.S. |
| 12A3040S06 | 1 | COTTER PIN, 3/16 x 1-1/2" S.S. |
| 12A4138S01 | 1 | DISC SPRING #SAM502520 |
| 12A2785S01 | 1 | KEY, 3/8" x 5/16" x 3/4" LONG |

P24AL Series Parts List

Water Tank/Circulating Water

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 19T2165C03 | 1 | S.S. CUTTER/TANK ASSEMBLY FOR P24 <i>Includes complete cutter assembly and drive train, water tank tines disc, & bearing support. Does not include water pump or internal water piping (specify tube size when ordering)</i> |
| 12A2600G09 | 1 | WATER TANK GASKET 30" x 27" x 3/16" |
| 12A4200H0601 | 1 | FLOAT VALVE, 3/4" MPT ROBERTS #R700L, 3/4" MPT Current Valve since 1994 (Requires 21" Water Box Width) |
| 12A4200HP01 | 1 | STEM FOR ROBERTS FLOAT, 10" LG x 1/4-20 THREAD BRASS |
| 12A4200HP02 | 1 | FLOAT FOR ROBERTS, 4" CYL x 6" LG W/1/4-20 THREAD |
| 12A4200H0801 | 1 | FLOAT VALVE, HUDSON 1" FPT |
| 127668R | 1 | FLOAT VALVE ASSY, ROBERTS #R400-3/4" W/STEM & FLOAT |
| 127668 | 1 | FLOAT VALVE MCDONNELL & MILLER 27W, 3/4" FPT |
| 12A4200A0607 | 1 | VALVES, SOLENOID, 3/4" FPT SPORLAN WATER Water Tank Flush Valve (Replaces JE #GP607) |
| 126223 | 1 | COIL FOR SPORLAN SOLENOID, 230V/60HZ |
| 12A2105C06 | 1 | COIL FOR SPORLAN SOLENOID, 120 VOLT, 50/60 HZ |
| 12A2105C17 | 1 | COIL, J/E #G-23, 208/230V., 50/60HZ FOR GP607 |
| 12A4170T01 | 1 | THERMOMETER, WEKSLER 2T04B, 2" |
| 12A4205G0601 | 1 | BRASS WATER VALVE 3/4" FPT NO 75 NIBCO |
| 12A4181T09 | 16 | TUBING, PLASTIC, CLEAR, 2" ID x 3/16" THK Circulating Water (Priced per ft.) |
| 12A4181T06 | 12 | TUBING, TYGON B-44-3, 1-1/2" OD x 1-1/4" ID Overflow (Prior to 1994) (Priced per ft.) |
| 12A4181T09 | 12 | TUBING, PLASTIC, CLEAR, 2" ID x 3/16" THK Overflow (After 1994) (Priced per ft.) |
| 12A4020S02 | 1 | PUMP, 1 1/2HP SCOT #AVF51 230/380/460V-3P-50/60HZ Cast Iron Housing, Sidewall Mount |
| 12A2600G03 | 1 | PUMP SUCTION GASKET, 7 1/2" x 4 1/2" x 3/16" |
| 12A4020G16 | 1 | PUMP, GOULD SSH, 2HP 208-230/460V-3P-50/60HZ Stainless Steel Housing, Bottom Flange Mount |

P24AL Series Parts List

Liquid Line

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|--|
| 12A4200C0604 | 1 | EXPANSION VALVE, HANSEN 3/4" SOCKET WELD |
| 12A4200A06 | 1 | VALVES, SOLENOID, HANSEN #HS7, 3/4" PORT Replaces Alco M511 & Hansen HS8 |
| 12A4140S05 | 1 | STRAINER, HANSEN #ST100D, 3/4" |
| 12A2538S0106 | 1 | FLANGE SET, 3/4" FPT, HANSEN 2-BOLT |
| 12A2600F01 | | FLANGE GASKET FOR 3/4" & 1" 2-BOLT FLANGE |
| 12A4200B0602 | 1 | CHECK VALVE, HANSEN, 1-1/4" PORT WITH ADAPTOR RING |
| 126229 | 1 | COIL, HANSEN #70-1063,208/240V-50/60HZ W/JUNCTION BOX |
| 12A2105C08 | 1 | COIL, HANSEN #70-1057, 115V-50/60HZ (1/2" FITTING) |
| 12A4199V52 | 1 | REPAIR KIT #70-1018 FOR HANSEN HS7 |
| 12A7500E22 | 1 | FLOAT SWITCH, HANSON #HLL (DIFFERENTIAL SET @ 1/2") Replaces Alco FS1A or RS Type LL |
| 12A7500E24 | 1 | SWITCH ASSEMBLY #HLL-SW FOR HANSON Also can be used on RS Type LL |
| 12A2600F01 | 2 | FLANGE GASKET FOR 3/4" & 1" 2-BOLT FLANGE |

Thawing Gas Line

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|--|
| 12A4200D1402 | 1 | REGULATOR, HANSEN HA4A0S 2" 240V COIL Replaces Hubbell PHS, Alco FA5-18 & RS #A40AS |
| 19T2535H0200 | 1 | ADAPTOR RING, HUBBELL TO HANSEN-2" |
| 12A4199V34H | 1 | REPAIR KIT FOR HANSEN HA4A0S 2" REGULATOR |
| 126229 | 1 | COIL, HANSEN #70-1063,208/240V-50/60HZ W/JUNCTION BOX |
| 12A2105C08 | 1 | COIL, HANSEN #70-1057, 115V-50/60HZ (1/2" FITTING) |
| 12A2105C03 | 1 | COIL, HUBBELL #S-123, 240V.,60HZ FOR 2" REGULATOR |
| 12A2105C02 | 1 | COIL, HUBBELL #S-123, 230V.,50HZ FOR 2" REGULATOR |
| 12A4199V34 | 1 | REPAIR KIT #RKPHS FOR HUBBELL 2" REGULATOR |
| 126246 | 1 | COIL, RS #201402 (240/60HZ) FOR S4AE & S7A |
| 126247 | 1 | COIL, RS #201406, A3M PKGD, (230/50HZ) FOR S4AE & S7A |
| 12A4140S18 | 1 | STRAINER, HANSEN ST200 2" |
| 12A4200B1403 | 1 | CHECK VALVE, HANSEN 2" (9-7/8" LONG, FEMALE FLGS) Note: Henry & Hubbell check valves both obsolete |

P24AL Series Parts List

Valves-Flanges-Gaskets

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|--------------------|--------------|---|
| 12A4200G0202 | | ANGLE VALVE, 1/4" MPT x 1/4" FPT |
| 12A4200G0402 | | ANGLE VALVE, 1/2" MPT x 1/2" FPT |
| 12A4200G0403 | | ANGLE VALVE, 1/2" FPT x 1/2" FPT |
| 12A4200G0603 | | ANGLE VALVE, 3/4" FPT x 3/4" FPT |
| 12A4200G1403 | | ANGLE VALVE, 2" FLANGED HENRY |
| 12A4200G1404 | | GLOBE VALVE, 2" FLANGED HENRY |
| 12A4200G1601 | | GLOBE VALVE, 2 1/2" FLANGED HENRY |
| 12A4200G1802 | | ANGLE VALVE, 3" FLANGED HENRY |
| 12A4200G1801 | | GLOBE VALVE, 3" FLANGED, HENRY |
| 12A4200G1803 | | ANGLE VALVE, 3" FLANGED VILTER |
| 12A4200G2101 | | ANGLE VALVE, 4" FLANGED HENRY |
| 12A4200G21 | | GLOBE VALVE, 4" FLANGED HENRY |
| 12A4200G2102 | | GLOBE VALVE, 4" FLANGED VILTER |
| 12A4200D1601 | | 3" DUAL PRESS REG. HANSEN HA4AD W/STRAINER-230V |
| 12A4200D1701 | | 4" DUAL PRESS REG. HANSEN HA4AD W/STRAINER-230V |
| 12A2538S0106 | | FLANGE SET, 3/4" FPT, HANSEN 2-BOLT |
| 12A2538S0107 | | FLANGE SET, 1" FPT, HANSEN 2-BOLT |
| 12A2530G0206 | | FLANGE, 2" HENRY GROOVE SOCKET WELD |
| 12A2530T0206 | | FLANGE, 2" HENRY TONGUE SOCKET WELD |
| 12A2535T0106 | | FLANGE ADAPTOR, 2" MALE TO MALE |
| 12A2530G0208 | | FLANGE, 2-1/2" HENRY GROOVE SOCKET WELD |
| 12A2530T0208 | | FLANGE, 2-1/2" HENRY TONGUE SOCKET WELD |
| 12A2530G021 | | FLANGE, 3" HENRY GROOVE SOCKET WELD |
| 12A2530T021 | | FLANGE, 3" HENRY TONGUE SOCKET WELD |
| 12A2530G0212 | | FLANGE, 4" HENRY GROOVE SOCKET WELD |
| 12A2530T0212 | | FLANGE, 4" HENRY TONGUE SOCKET WELD |
| 12A2600F01 | | FLANGE GASKET FOR 3/4" & 1" 2-BOLT FLANGE |
| 12A2600F04 | | GASKET, 2" HENRY |
| 12A2600F05 | | GASKET, 2-1/2" HENRY |
| 12A2600F06 | | GASKET, 3" HENRY |
| 12A2600F08 | | GASKET, 4" HENRY |

P24AL Series Parts List

Pressure Line & Fittings

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|---------------------------|---------------------|--|
| 12A4182S03 | | TUBING, 1/4" OD TYPE 304 STAINLESS (PRICED PER FT) |
| 12A2452M02 | | CONNECTOR, MALE, 1/4" MPT x 1/4" TUBING |
| 12A2452M01 | | CONNECTOR, MALE 1/8" MPT x 1/4" TUBING |
| 12A2452F01 | | CONNECTOR, FEMALE 1/4" FPT x 1/4" TUBING |
| 12A2452T01 | | TEE, UNION, 1/4" x 1/4" x 1/4" TUBING |
| 12A2452T02 | | TEE, 1/4" TUBING x 1/4" TUBING x 1/4" MPT |
| 12A2100C0303 | | CLAMPS, 1/4" OD TUBING |

Goldenrod Water Treatment

| <u>Part Number</u> | <u>Req'd</u> | <u>Description</u> |
|---------------------------|---------------------|--|
| 12A2195W0901 | 1 | GOLDENROD WATER TREATMENT, 9" - 25 GPM - NSF |
| 12A2195I01 | 2 | INSULATOR, DELRON FOR 5", 9", OR 12" GOLDENROD |
| 12A2195W0504 | 1 | DELRON THREADED PLUG FOR GOLDENROD |