



Challenger 2 Parts Manual 60 Hz Rev. 5/83

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Precision Environmental
Control for Computer Rooms

Parts Manual

60 Hertz

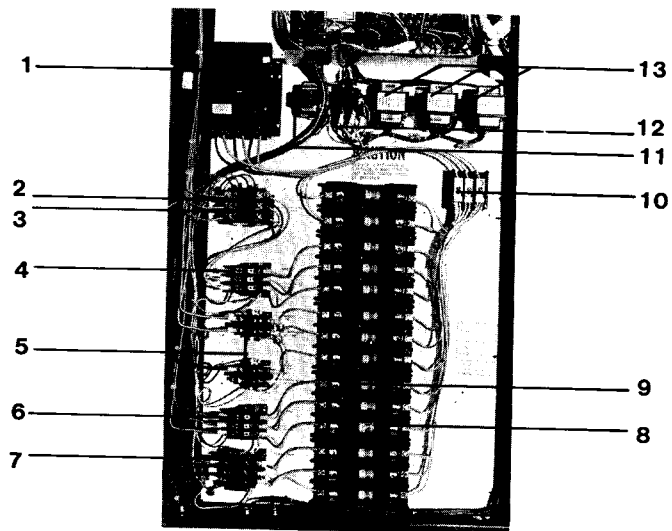
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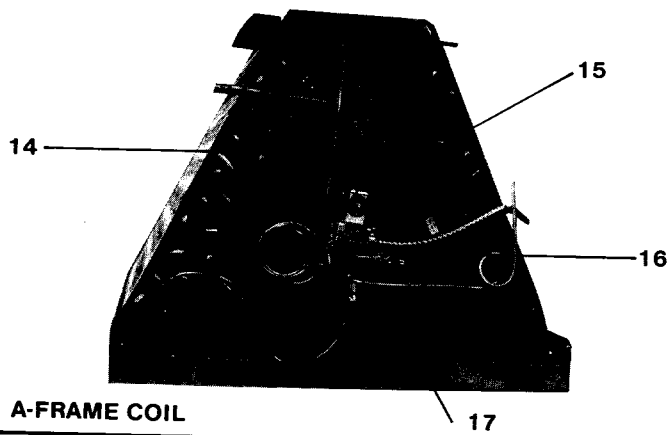
USING THIS PARTS BOOK

- FIND NO.** The first digit represents the page number of the photo reference. The next number is the item number which calls out the part.
- PART NO.** Find the part number in the appropriate column. In some cases, the part number is the same for multiple voltages.
- R.S.P.** Recommended Spare Parts. One part (one set of parts) should be kept on hand for every five units.

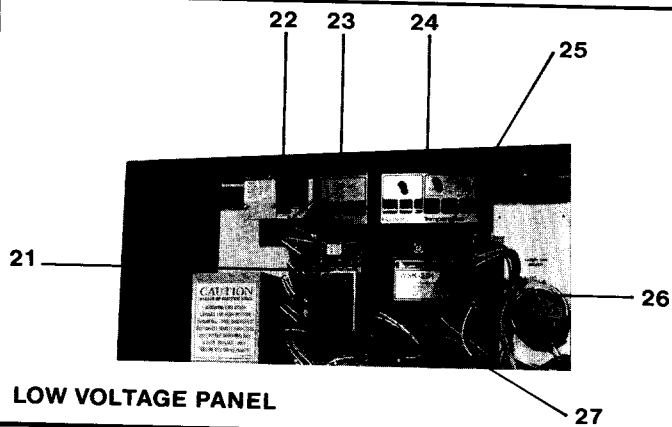
FIND NO.	REHEAT SECTION	208 V	230 V	460 V	575 V	R.S.P.
5-18	SAFETY SWITCH (120° F)	R13-0090				X
5-19	HEATER ELEMENT	R13-0010	R13-0020	R13-0030	R13-0040	X
3-5	CONTACTOR	E-013A				X
3-8	FUSE BLOCK	E-1040	E-1020	E-1050	E-1050	X
3-9	FUSE	E-1200	E-2090	E-2410	E-2410	X



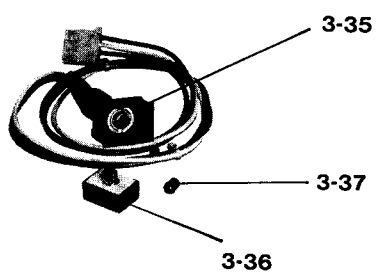
HIGH VOLTAGE PANEL



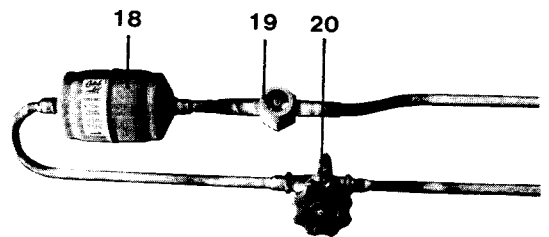
A-FRAME COIL



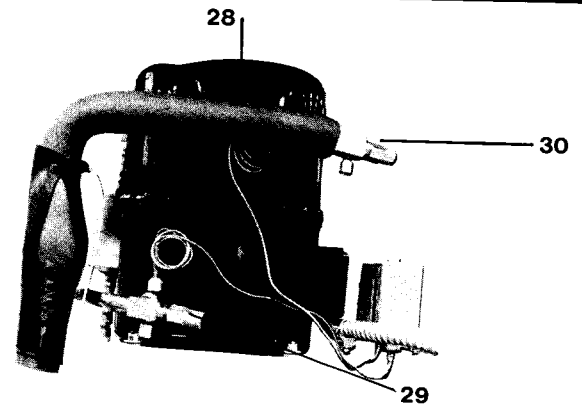
LOW VOLTAGE PANEL



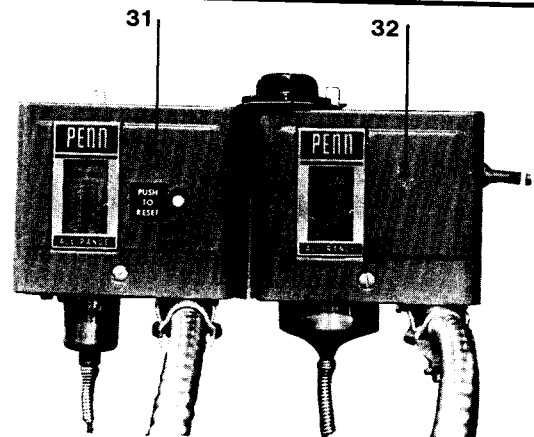
MAIN FAN SWITCH



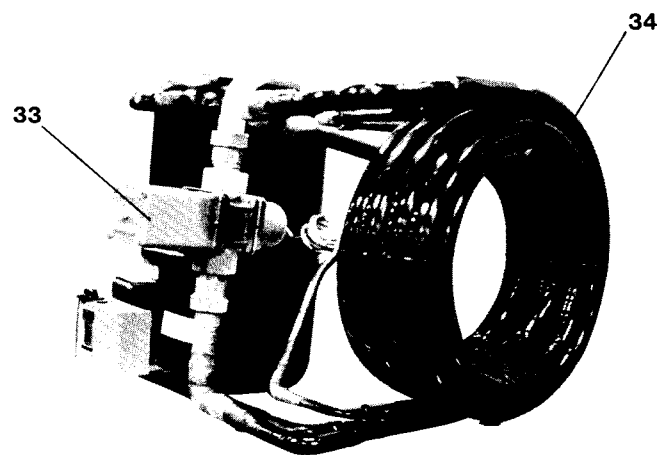
LIQUID LINE



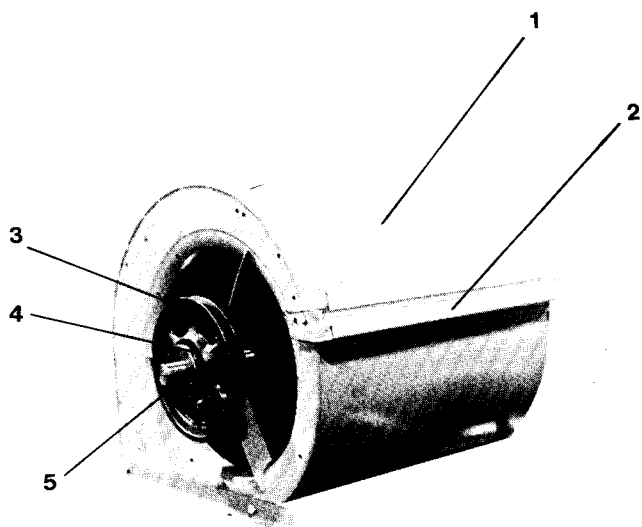
HERMETIC COMPRESSOR



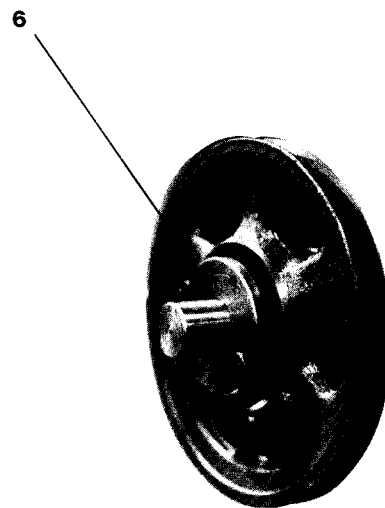
PRESSURE SWITCHES



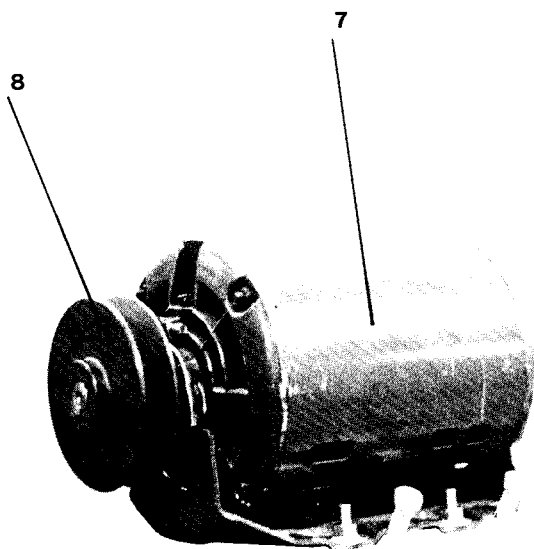
COMPRESSOR SECTION



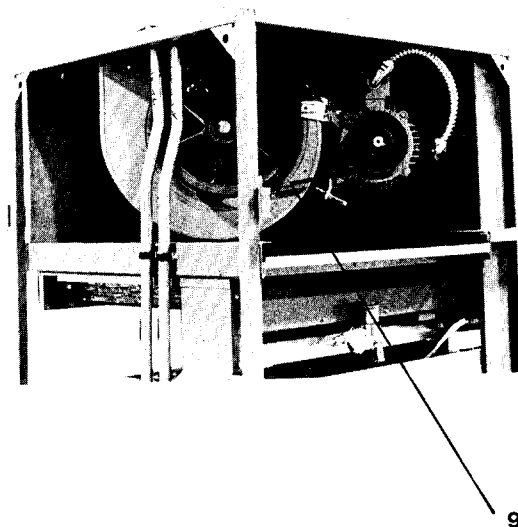
BLOWER



PULLEY

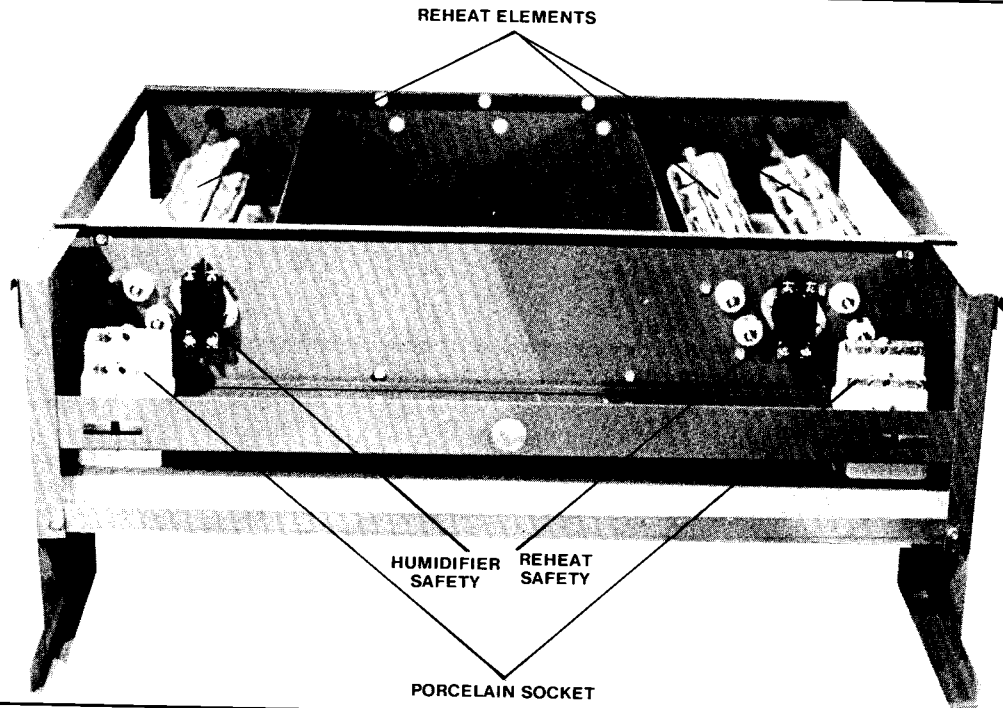


MOTOR & SHEAVE

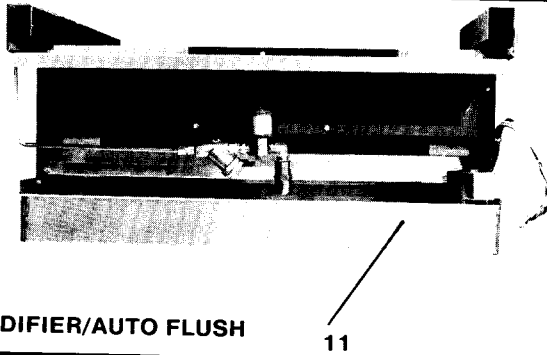


BLOWER ASSEMBLY

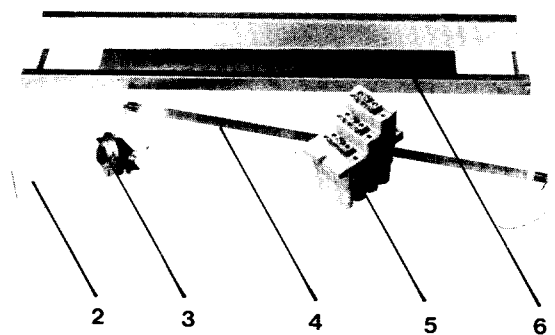
**REHEAT/
HUMIDIFIER
ASSEMBLY**



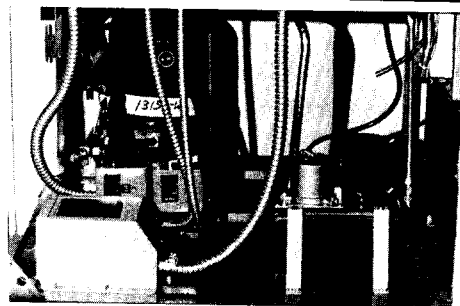
HUMIDIFIER/AUTO FLUSH



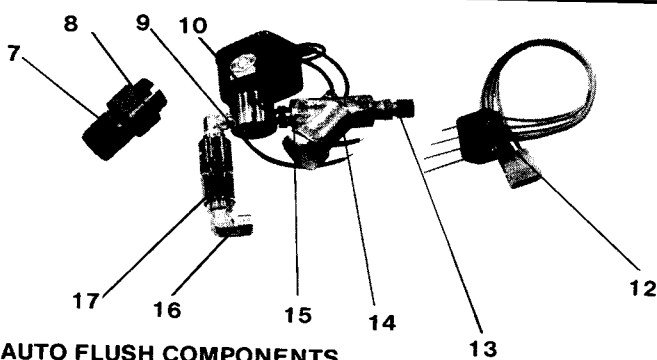
HUMIDIFIER COMPONENTS



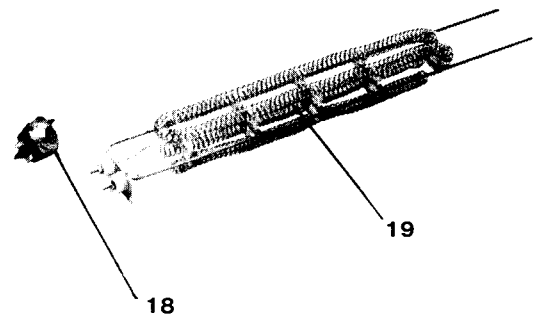
CONDENSATE PUMP

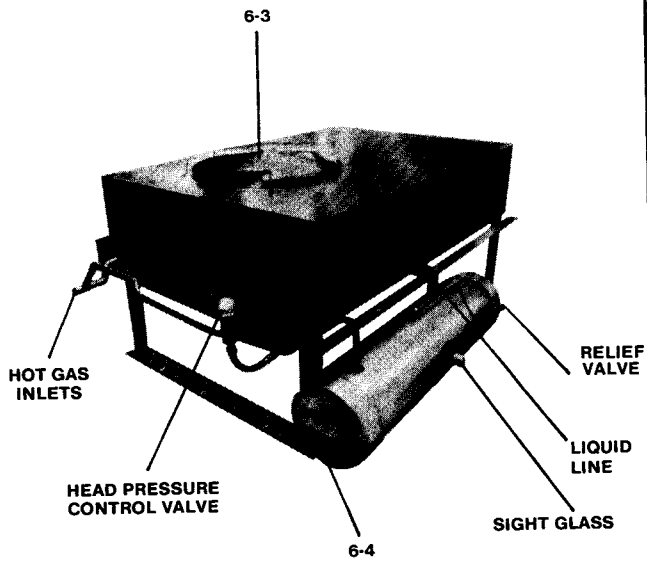


AUTO FLUSH COMPONENTS

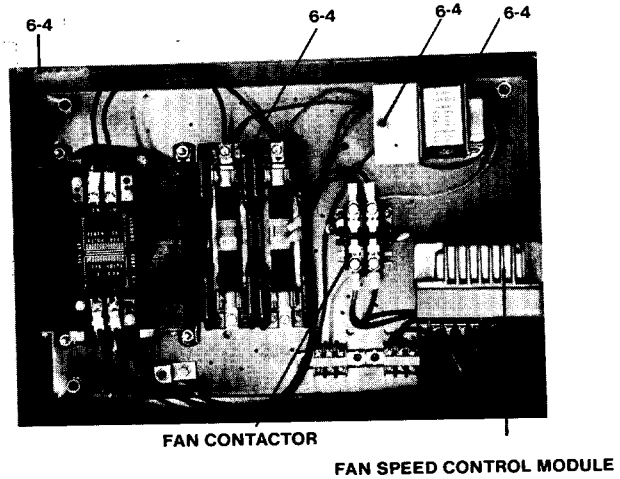


REHEAT ELEMENTS





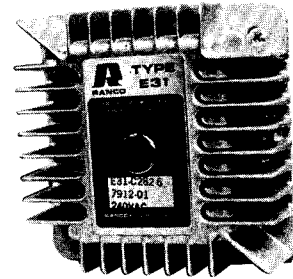
CONDENSER



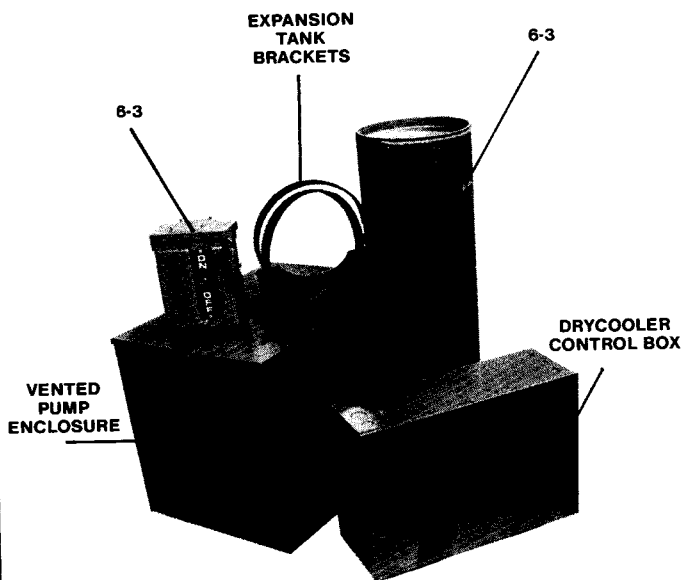
FAN SPEED CONTROL BOX



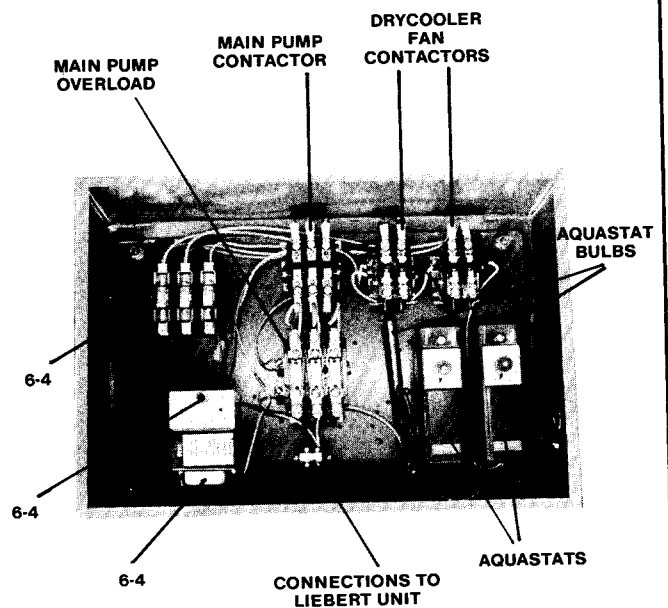
SENSOR SHOE



FAN SPEED CONTROL MODULE



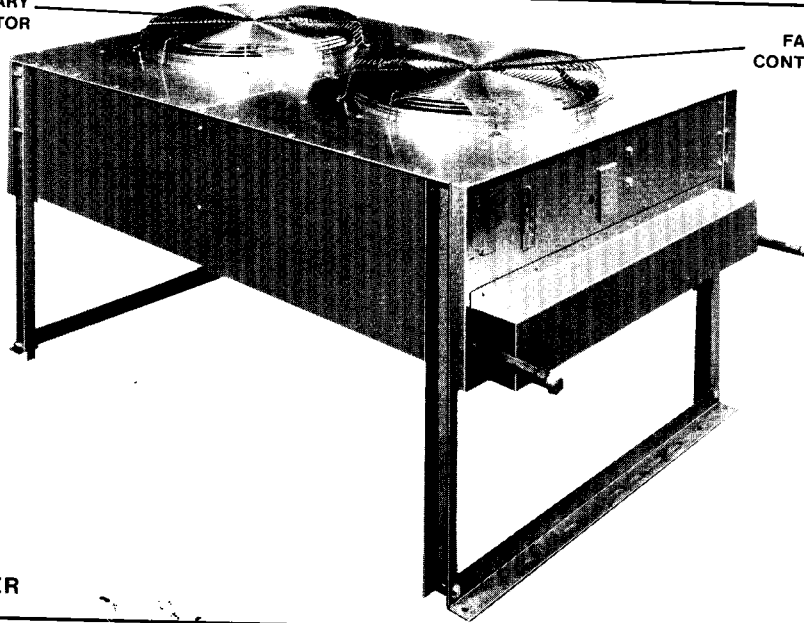
TYPICAL GLYCOL PUMP PACKAGE



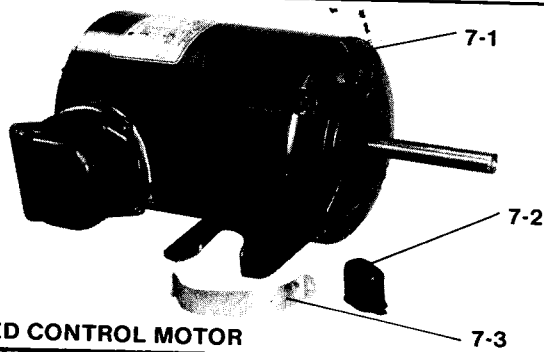
TYPICAL DRYCOOLER CONTROL BOX

AUXILLIARY
FAN MOTOR

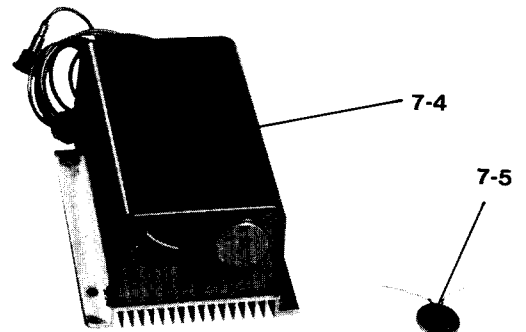
FAN SPEED
CONTROL MOTOR



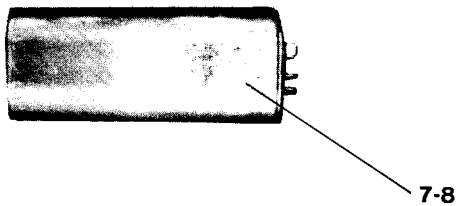
FAN SPEED CONTROL
CONDENSOR/DRY COOLER



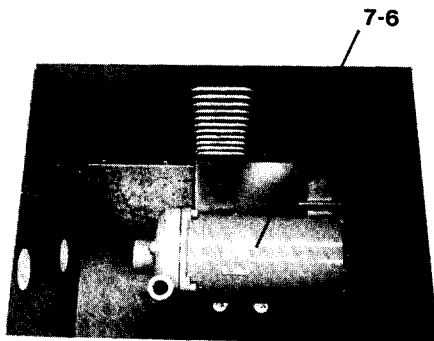
FAN SPEED CONTROL MOTOR



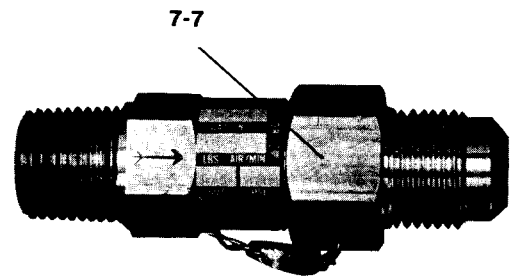
PRESSURE TYPE
FAN SPEED CONTROL MODULE



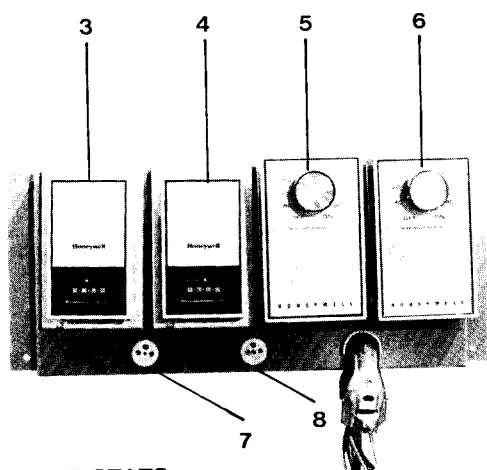
CAPACITOR



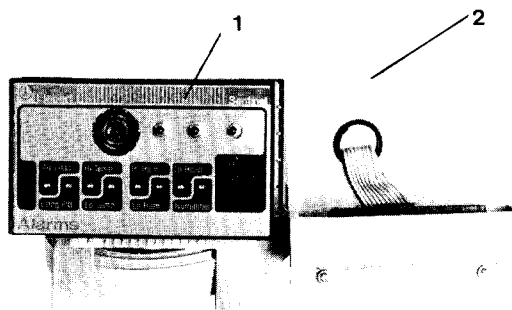
GLYCOL PUMP (IN ENCLOSURE)



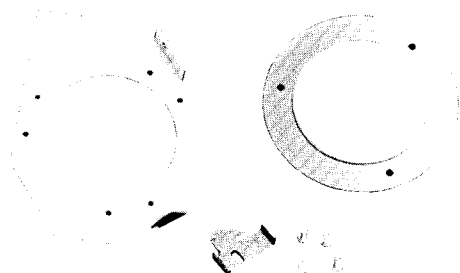
FAN SPEED CONTROL
PRESSURE RELIEF VALVE



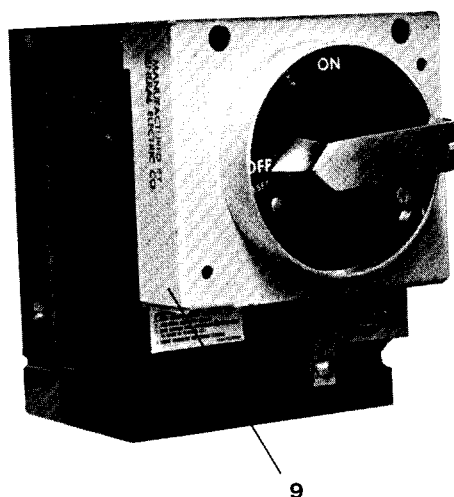
MODE ALERT STATS



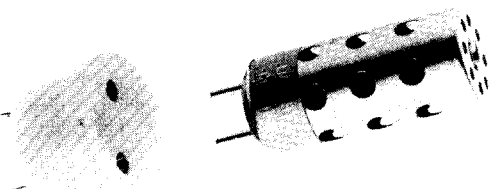
REMOTE SENTINEL WITH CABLE



LOCKING DISCONNECT LATCH

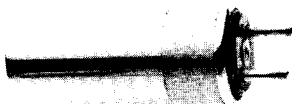


LOCKING DISCONNECT SWITCH

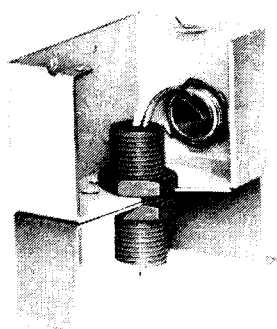


MATCHING
SOCKET

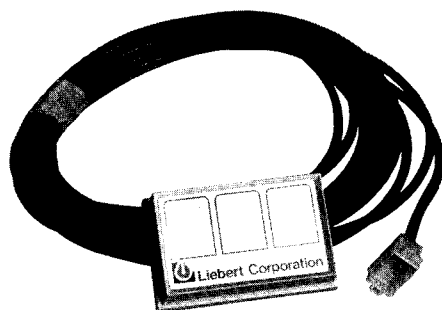
ROOM SENSOR



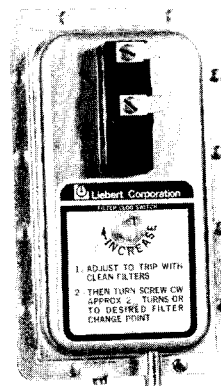
UNIT SENSOR



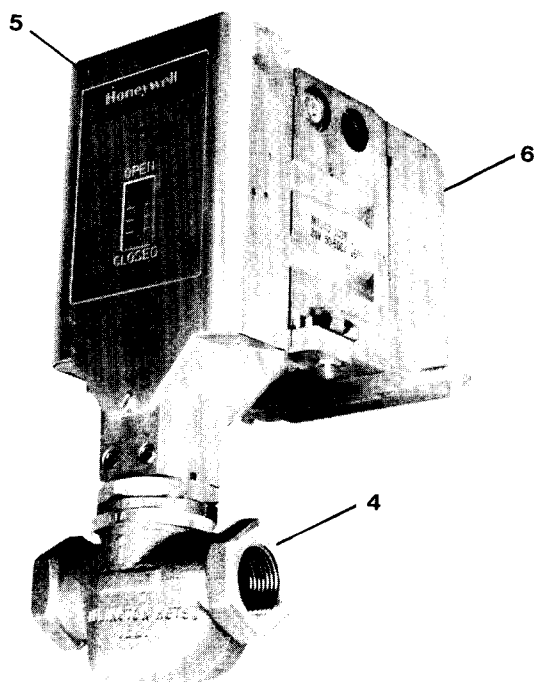
LIQUI-TECT SENSOR



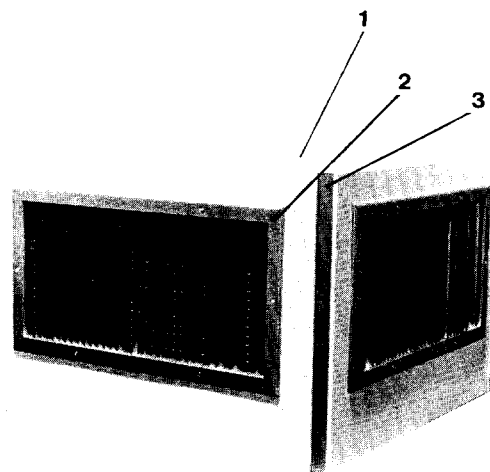
REMOTE TEMP/HUMID SENSOR



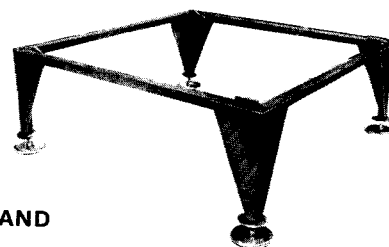
FILTER CLOG SWITCH



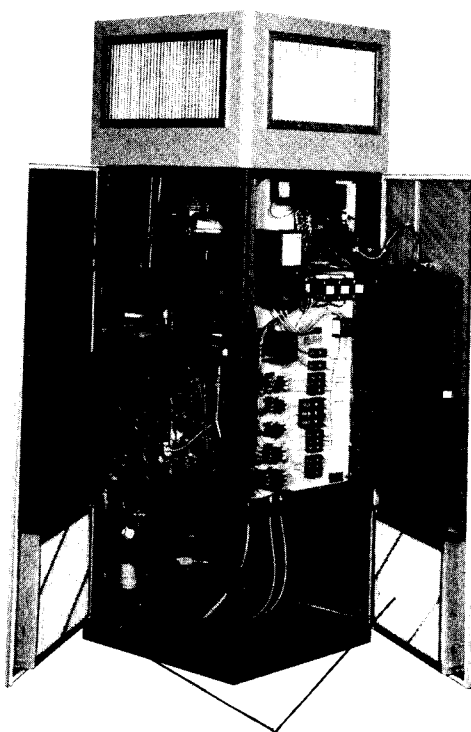
MODULATING MOTOR



PLENUM

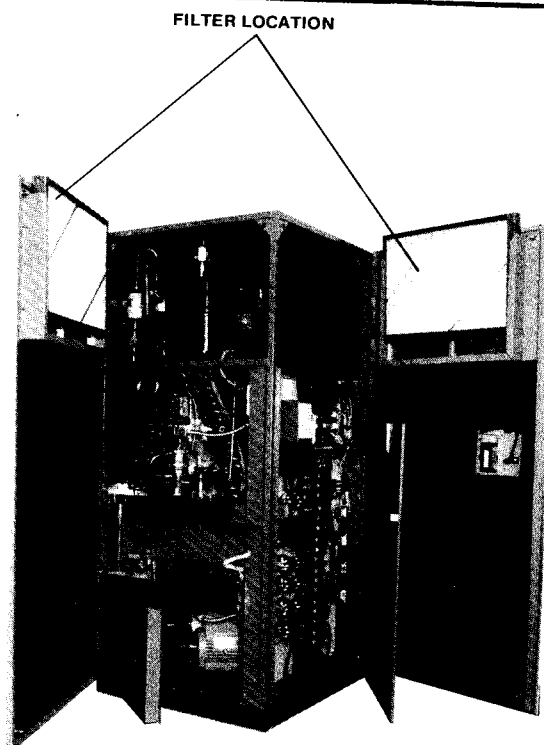


FLOOR STAND



FILTER LOCATION

UPFLOW MODEL



FILTER LOCATION

DOWNFLOW MODEL

3 TON SECTION

CF/CU 43 A
CF/CU 41 G
CF/CU 47 W

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	MAIN FAN SECTION					
4-1	BLOWER WHEEL & HOUSING	B06-0010				X
N.S.	BEARING (2 REQUIRED)	B-0040				X
4-5	SHAFT	B-1150				X
4-7	MAIN FAN (¾ HP)	B13-0260	B13-0270	B13-0270	B13-0280	X
4-7	MAIN FAN (1 HP)	B13-0290	B13-0300	B13-0300	B13-0310	X
4-3	FAN PULLEY (¾ HP DOWN FLOW)	B13-0150				X
4-3	FAN PULLEY (¾ HP VERTICAL)	B13-0160				X
4-8	SHEAVE (¾ HP DOWN FLOW)	B13-0080				X
4-8	SHEAVE (¾ HP VERTICAL)	B13-0080				X
4-9	BELT (¾ HP DOWN FLOW)	B13-0200				X
4-9	BELT (¾ HP VERTICAL)	B13-0190				X
4-3	FAN PULLEY (1 HP DOWN FLOW)	B13-0140				X
4-3	FAN PULLEY (1 HP VERTICAL)	B13-0150				X
4-8	SHEAVE (1 HP DOWN FLOW)	B13-0090				X
4-8	SHEAVE (1 HP VERTICAL)	B13-0090				X
4-9	BELT (1 HP DOWN FLOW)	B13-0190				X
4-9	BELT (1 HP VERTICAL)	B13-0200				X
4-4	BUSHING, PULLEY	B-0080				X
3-26	AIR SAIL SWITCH	B02-0190				X
3-7	CONTACTOR	E-0110				X
3-3	HEATER (¾ HP)	E-2660	E-0880	E-0850	E-0830	X
3-3	HEATER (1 HP)	E-0910	E-2660	E-2650	E-0830	X
3-8	FUSEBLOCK	E-1020	E-1020	E-1050	E-1050	X
3-9	FUSE	E-2070	E-2070	E-2410	E-2410	X
3-2	TRI BLOCK OVERLOAD	E-009B				X
	COMPRESSOR SECTION					
3-28	COMPRESSOR	C13-0010	C13-0010	C13-0020	C13-0030	X
3-7	CONTACTOR	E-009F				
3-8	FUSE BLOCK	E-1020	E-1020	E-1050	E-1050	X
3-9	FUSE	E-1230	E-1230	E-2410	E-2410	
3-32	PRESSURE SWITCH (LOW)	P-3070				X
	(COMPRESSOR SECTION CONTINUED ON NEXT PAGE)					

N.S. - NOT SHOWN

FIND NO.	DESCRIPTION	PART NUMBER				RSP
PG. NO.	COMPRESSOR SECTION - CONTINUED	208 V	230 V	460 V	575 V	
3-31	PRESSURE SWITCH (HI)	P02-0160				X
3-30	ROTO LOCK VALVE $\frac{7}{8}$ (SUCTION)	C-0480				X
3-29	ROTO LOCK VALVE $\frac{5}{8}$ (DISCHARGE)	C-0470				X
N.S.	MOUNTING SPRING KIT	C03-0020				
	SPUD COMPRESSOR	P13-0090				
	REHEAT SECTION					
5-18	SAFETY SWITCH (120° F)	R13-0090				X
5-19	HEATER ELEMENT	R13-0010	R13-0020	R13-0030	R13-0040	X
3-5	CONTACTOR	E-011A				X
3-8	FUSE BLOCK	E-1040	E-1020	E-1050	E-1050	X
3-9	FUSE	E-1200	E-2090	E-2410	E-2410	X
	HUMIDIFIER SECTION					
	REHEAT-HUMIDIFIER ENCLOSURE	F13-0080				
5-11	PAN	F13-0100				X
5-6	REFLECTOR	F-600C				X
5-5	PORCELAIN SOCKET	H-014A				
5-17	FLOW REGULATOR VALVE	H-0440				
5-10	SOLENOID VALVE	H-0380				X
5-14	"Y" STRAINER	H-0390				
5-4	QUARTZ LAMP (3 REQ.)	H-002A	H-0020	H13-0010	H-002A	X
3-8	FUSE BLOCK	E-1020	E-1020	E-1050	E-1060	X
3-9	FUSE	E-1230	E-2070	E-2410	E-2410	X
3-6	CONTACTOR	E-0110	E-0110	E-0110	E-011B	X
3-23	AUTO FLUSH CONTROL	020-0124 (CH0050A)				
5-7	STAND PIPE 2-5/16"	H13-0020				
5-8	ADJUSTING RING	H-0410				
5-12	AUTO FLUSH PROBE ASSEMBLY	020-0122 (T2220)				X
PG. NO.	REFRIGERATION SECTION	208 V	230 V	460 V	575 V	
3-16	EXPANSION VALVE	P02-0180				X
3-15	SOLENOID VALVE	P-0070				X
3-19	LIQUID INDICATOR	P-0050				X
3-18	FILTER DRIER	P-0020				X
3-14	DX COIL	006-0013 (X13-0010)				X
3-17	COIL DRAIN PAN	F13-0110				X
	GLYCOL AND WATER COOLED SECTION					
3-34	TUB & TUBE CONDENSER	J13-0010				
	GLYCOL SECTION CONTINUED ON NEXT PAGE					

N.S. - NOT SHOWN

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	GLYCOL AND WATER COOLED SECTION - CONTINUED					
3-33	WATER REGULATING VALVE 3 WAY HI PRESSURE			P-311B		
3-33	2 WAY HI PRESSURE			P-026A		
3-33	2 WAY-STANDARD PRESSURE			P-0260		
3-33	3 WAY STANDARD PRESSURE			P-0330		
N.S.	RELIEF VALVE 400-PSI			P-2830		
N.S.	SHCRAEDER VALVE 1/4"			P-3910		
N.S.	RECEIVER			W13-0030		
	GLYCOL SECTION					
6-3	EXPANSION TANK			P-2840		
	EXPANSION TANK BRACKET			W-0310		
6-4	CONTACTOR 2 POLE			E-011A		X
6	THERMOSTAT			E02-0100		X
6-4	CIRCUIT BREAKER 3.2 AMP			E-276C		X
6-4	FUSE	E-2070	E-2070	E-2410	E-2410	X
6-4	FUSE BLOCK	E-1030	E-1030	E-1060	E-1060	X
6-4	75 VA TRANSFORMER	E-007A	E-007A	E-007B	E-007C	X
6-4	1.5 KVA TRANSFORMER	-	-	E-0010	E-0020	X
6-3	DISCONNECT SWITCH	E13-0010	E13-0010	E13-0020	E13-0010	
6-3	3/4 HP PUMP (1 FAN)			P13-0030		X
N.S.	DRYCOOLER MOTOR 3/4 HP			B-095C		X
N.S.	FAN SPEED CONTROL (RANCO)			E-325A		X
N.S.	FAN SPEED CONTROL SENSOR			E-325B		X
7-4	FAN SPEED CONTROL (PENN)			E-3250		
N.S.	THERMAL COMPOUND			S-2910		X
N.S.	VARISTOR			G-200B		X
N.S.	DRY COOLER 1 FAN			D13-0010	(PFG 8)	
N.S.	DRY COOLER 1 FAN			D13-0040	(PFG5)	
N.S.	DRY COOLER 2 FAN			D13-0020	(PFG12)	
N.S.	DRY COOLER 2 FAN			D13-0030	(PFG16)	
	AIR COOLED CONDENSER - LEE TEMP					
	95° AMBIENT TO 5000 FT			D-0180	(FCA 5)	
	100° AMBIENT TO 5000 FT.*			D-0180	(FCA 5)	
	105° AMBIENT TO 5000 FT.**			D-0170	(FCA 8)	
	CONDENSER FAN MOTOR 1/2 HP			D-0680		
	CONDENSER FAN BLADE 24", 1/2" BORE			D-016B	(FCA 5)	
	AIR COOLED CONDENSER-LEE TEMP CONT'D ON NEXT PG					

N.S. - NOT SHOWN

*ALSO 95° AMBIENT OVER 5000 FT.

**ALSO 100° AMBIENT OVER 5000 FT.

FIND NO.		DESCRIPTION		PART NUMBER				RSP
PG. NO.	AIR COOLED CONDENSER-LEE TEMP - CONTINUED	208 V	230 V	460 V	575 V			
	CONDENSER FAN BLADE 26", 1/2" BORE			D-016C	(FCA 8)			
7	CONDENSER FAN GUARD			D-016G				
	RECEIVER			W-0040				
	ROTO LOCK VALVE			W-0100				X
	VALVE ADAPTER			W-0110				X
	LIQUID INDICATOR			W-0140				X
	HEATER PAD 115 VOLT			W-015R				X
	HEATER PAD 220 VOLT			W-016R				X
	HEAD PRESSURE CONTROL VALVE			W-0340				X
	RELIEF VALVE			W-0170				X
	FUSE BLOCK	E-1030	E-1030	E-1060	E-1060			X
	FUSE	E-2070	E-2070	E-2410	E-2410			X
	TRANSFORMER 75 VA	E-007A	E-007A	E-007B	E-007C			X
	TRANSFORMER 1.5 KVA	-	-	E-0010	E-0020			X
	CIRCUIT BREAKER			E-276C				X
	CONTACTOR 2 POLE			E-011A				X
PG. NO.	AIR COOLED CONDENSER CONTROL - FAN SPEED	208 V	230 V	460 V	575 V			
	95° AMBIENT TO 5000 FT.			D-0430	(FCA 5)			
	100° AMBIENT TO 5000 FT.*			D-0430	(FCA 5)			
	105° AMBIENT TO 5000 FT.**			D-0440	(FCA 8)			
7-1	CONDENSER FAN MOTOR 3/4 HP			D-095C				X
7-8	CAPACITOR			B-095B				X
7-2	BOOT			B-1450				X
7-3	STRAP			B-1460				X
	CONDENSER FAN BLADE 24", 5/8" BORE (FSC)			D-016E	(FCA 5)			
	CONDENSER FAN BLADE 26", 5/8" BORE (FSC)			D-016D	(FCA 8)			X
	CONDENSER FAN GUARD			D-016G				
7-7	RELIEF VALVE			W-0170				X
	FUSE BLOCK	E-1030	E-1030	E-1060	E-1060			X
	FUSE	E-2070	E-2070	E-2410	E-2410			X
	TRANSFORMER (75 VA)	E-007A	E-007A	E-007B	E-007C			X
	TRANSFORMER 1.5 KVA	-	-	E-0010	E-0020			X
	CIRCUIT BREAKER			E-276C				X
7-4	FAN SPEED CONTROL (PENN)			E-3250				X
	2 POLE CONTACTOR			E-011A				X
	AIR COOLED CONDENSER CONTROL-FAN SPEED-CONT'D							

N.S. - NOT SHOWN

*ALSO 95° AMBIENT OVER 5000 FT.

**ALSO 100° AMBIENT OVER 5000 FT.

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	AIR COOLED CONDENSER CONTROL-FAN SPEED-CONT'D					
7-5	VARISTOR		G-200B			X
	THERMAL COMPOUND		S-2910			X
	DRYCOOLER FAN MOTOR ½ HP		D-0680			X
	FAN BLADE)PFG 5) 24" ½ BORE		D-016B			X
	FAN BLADE 24" ⅝ BORE (FSC)		D-016E			X
	FAN BLADE (PFG 8, 12, 16) 26" ½" BORE		D-016C			X
	FAN BLADE (PFG 8, 12, 16) 26" ⅝" BORE		D-016D			X
	FAN GUARD		D-016G			
	RECEIVER		W13-0030			

5 TON SECTION

CF/CU 66 A
CF/CU 60 G
CF/CU 69 W
CF/CU 91 C

FIND NO.	DESCRIPTION	PART NUMBER				RSP
PG. NO.	MAIN FAN SECTION	208 V	230 V	460 V	575 V	
4-1	BLOWER WHEEL & HOUSING	B06-0010				X
N.S.	BEARING (2 REQUIRED)	B-0040				X
4-5	SHAFT	B-1150				X
4-7	MAIN FAN 1 HP	B13-0290	B13-0300	B13-0300	B13-0310	X
4-7	MAIN FAN 1.5 HP	B13-0320	B13-0330	B13-0330	B13-0340	X
4-3	FAN PULLEY (1 HP VERTICAL & DOWN FLOW)	B13-0160				X
4-8	SHEAVE (1 HP VERTICAL & DOWN FLOW)	B13-0090				
4-9	BELT (1 HP VERTICAL & DOWN FLOW)	B13-0210				X
4-3	FAN PULLEY (1.5 HP VERTICAL & DOWN FLOW)	B13-0150				X
4-8	SHEAVE (1.5 HP VERTICAL & DOWN FLOW)	B13-0120				X
4-9	BELT (1.5 HP VERTICAL & DOWN FLOW)	B13-0210				X
4-4	BUSHING (PULLEY)	B-0080				X
3-26	AIR SAIL SWITCH	B02-0190				X
3-4	CONTACTOR	E-0110				X
3-3	HEATER (1 HP)	E-0910	E-2660	E-2650	E-0830	X
3-3	HEATER (1.5 HP)	E-0940	E-0930	E-1860	E-0860	X
3-8	FUSE BLOCK	E-1020	E-1020	E-1050	E-1050	X
3-9	FUSE	E-2070	E-2070	E-2410	E-2410	X
3-2	TRI BLOCK OVER LOAD	E-009B				X
	COMPRESSOR SECTION					
3-28	COMPRESSOR	C13-0040	C13-0040	C13-0050	C13-0060	X
3-7	CONTACTOR		E-009F			X
3-8	FUSE BLOCK	E-1040	E-1040	E-1050	E-1050	X
3-9	FUSE	E-1200	E-1200	E-2020	E-2410	X
3-32	PRESSURE SWITCH (LOW)	P-3070				X
3-31	PRESSURE SWITCH (HI)	P02-0160				X
	RELAY	E13-0070				
3-30	ROTO LOCK VALVE - 7/8 (SUCTION)	C-0480				
3-29	ROTO LOCK VALVE - 7/8 (DISCHARGE)	C-0460				
	SPUD	P13-0090				
N.S.	MOUNTING SPRING KIT	C-0490				
	REHEAT SECTION CONTINUED ON NEXT PAGE					

FIND NO.	DESCRIPTION	PART NUMBER				RSP
PG. NO.	REHEAT SECTION	208 V	230 V	460 V	575 V	
5-18	SAFETY SWITCH 120° F	R13-0090				X
5-19	HEATER ELEMENT	R13-0050	R13-0060	R13-0070	R13-0080	X
3-5	CONTACTOR	E-011C	E-009A	E-011A	E-011A	X
3-8	FUSE BLOCK	E-1040	E-1040	E-1050	E-1050	X
3-9	FUSE	E-1160	E-3060	E-3050	E-2020	X
	HUMIDIFIER SECTION					
	REHEAT-HUMIDIFIER ENCLOSURE	F13-0080				
5-11	PAN	F13-0100				X
5-6	REFLECTOR	F-600C				X
5-17	FLOW REGULATOR VALVE	H-0440				X
5-10	SOLENOID VALVE	H-0380				X
5-14	"Y" STRAINER	H-0390				X
5-4	QUARTZ LAMP (3 REQUIRED)	H-002A	H-0020	H13-0010	H-002A	X
3-8	FUSE BLOCK	E-1020	E-1020	E-1050	E-1060	X
3-9	FUSE	E-1230	E-2070	E-2410	E-2410	X
3-6	CONTACTOR	E-0110	E-0110	E-0110	E-011B	X
3-23	AUTO FLUSH CONTROL	020-0124 (CH0050A)				X
5-5	PORCELAIN SOCKET	H-014A				X
5-7	STAND PIPE 2-5/16"	H13-0020				
5-8	ADJUSTING RING	H-0410				
5-12	AUTO FLUSH PROBE ASSEMBLY	020-0122 (T2220)				X
	REFRIGERATION SECTION					
3-16	EXPANSION VALVE	P02-0170				X
3-15	SOLENOID VALVE	P-0070				X
3-19	LIQUID INDICATOR	P-0050				X
3-18	FILTER DRIER	P-0020				X
3-14	DX COIL	006-0014 (X13-0020)				X
3-17	COIL DRAIN PAN	F13-0110				X
PG. NO.	GLYCOL & WATER COOLED SECTION	208 V	230 V	460 V	575 V	
3-34	TUBE & TUBE CONDENSER	J13-0020				
3-33	WATER REGULATING VALVE 3 WAY HI-PRESSURE	P-311B				
	2 WAY - HI PRESSURE	P-311A				
	2 WAY - STANDARD PRESSURE	P-3110				
	3 WAY - STANDARD PRESSURE	P-0340				
N.S.	RELIEF VALVE 400 PST	P-2830				
N.S.	SCHRAEDER VALVE ¼"	P-3910				
N.S.	RECEIVER	W13-0030				

N.S. - NOT SHOWN

FIND NO.	DESCRIPTION	PART NUMBER				RSP
PG. NO.	GLYCOL SECTION	208 V	230 V	460 V	575 V	
6-7	CONTACTOR 2 POLE	E-011A				X
6-7	THERMOSTAT	E02-0100				X
6-7	CIRCUIT BREAKER 3.2 AMP	E-276C				X
6-4	FUSE	E-2070	E-2070	E-2410	E-2410	X
6-4	FUSE BLOCK	E-1030	E-1030	E-1060	E-1060	X
6-4	75 VA TRANSFORMER	E-007A	E-007A	E-007B	E-007C	X
6-4	1.5 KVA TRANSFORMER	-	-	E-0010	E-0020	X
6-3	DISCONNECT SWITCH	E13-0010	E13-0010	E13-0020	E13-0020	X
6-3	¾ HP PUMP	P13-0030				
N.S.	DRY COOLER MOTOR ¾ HP	B-095C				X
	FAN SPEED CONTROL (RANCO)	E-325A				X
	FAN SPEED CONTROL SENSOR	E-325B				X
7-4	FAN SPEED CONTROL (PENN)	E-3250				
	THERMAL COMPOUND	S-2910				X
	VARISTOR	G-200B				X
	EXPANSION TANK	P-2840				X
	EXPANSION TANK BRACKET	W-0310				
	DRY COOLER 1 FAN	D13-0040				
	DRY COOLER 1 FAN	D13-0010 (PFG 5)				
	DRY COOLER 2 FAN	D13-0020 (PFG 8)				
	DRY COOLER 2 FAN	D13-0030 (PFG 12)				
	DRY COOLER FAN MOTOR ½ HP	D-0680 (PFG 16)				X
	FAN BLADE 24" ½ BORE	D-016B (PFG 5)				X
	FAN BLADE 24" ½ BORE (FSC)	D-016E (PFG 5)				X
	FAN BLADE 26" ½ BORE	D-016C				X
	FAN BLADE 26" ¾ BORE (FSC)	D-016D				X
	FAN GUARD	D-016G				X
	RECEIVER	W13-0030				
	AIR COOLED CONDENSER - LEE TEMP					
	95° AMBIENT TO 5000 FT.	D-0170 (FCA 8)				
	100° AMBIENT TO 5000 FT.*	D-0170 (FCA 8)				
	105° AMBIENT TO 5000 FT.*	D-0010 (FCA 12)				
	CONDENSER FAN MOTOR	D-0680				X
	CONDENSER FAN BLADE 26" ½ BORE	D-0160 (FCA 8, 12)				X
7	CONDENSER FAN GUARD	D-016G				X
	RECEIVER	W-0040				
	AIR COOLED CONDENSER-LEE TEMP-CONT'D NEXT PAGE					

N.S. - NOT SHOWN

*ALSO 95° AMBIENT OVER 5000 FT.

**ALSO 100° AMBIENT OVER 5000 FT.

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	AIR COOLED CONDENSER - LEE TEMP - CONTINUED					
	ROTO LOCK VALVE			W-0100		X
	VALVE ADAPTER			W-0110		X
	LIQUID INDICATOR			W-0140		X
	HEATER PAD 115 VOLT			W-015R		X
	HEATER PAD 220 VOLT			W-016R		X
	HEAD PRESSURE CONTROL VALVE			W-0340		X
	RELIEF VALVE			W-0170		X
	FUSE BLOCK	E-1030	E-1030	E-1060	E-1060	X
	FUSE	E-2070	E-2070	E-2410	E-2410	X
	TRANSFORMER 75 VA	E-007A	E-007A	E-007B	E-007C	X
	TRANSFORMER 1.5 KVA	-	-	E-0010	E-0020	X
	CIRCUIT BREAKER 3.2 AMP			E-276C		X
	CONTACTOR 2 POLE			E-011A		
PG. NO.	AIR COOLED CONDENSER CONTROL - FAN SPEED	208 V	230 V	460 V	575 V	
	95° AMBIENT TO 5000 FT.			D-0440	(FCA 8)	
	100° AMBIENT TO 5000 FT.*			D-0440	(FCA 8)	
	105° AMBIENT TO 5000 FT.**			D-0460	(FCA 12)	
7-1	CONDENSER FAN MOTOR ¾ HP			B-095C		X
7-8	CAPACITOR			B-095B		X
7-2	BOOT			B-1450		X
7-3	STRAP			B-1460		X
	CONDENSER FAN BLADE 26" ⅝ (FSC)			D-016D	(FCA 8, 12)	X
	CONDENSER FAN GUARD					
7-7	RELIEF VALVE			W-0170		X
	FUSE BLOCK	E-1030	E-1030	E-1060	E-1060	X
	FUSE	E-2070	E-2070	E-2410	E-2410	X
	TRANSFORMER 75 VA	E-007A	E-007A	E-007B	E-007C	X
	CIRCUIT BREAKER 3.2 AMP			E-276C		X
7-4	FAN SPEED CONTROL (PENN)			E-3250		
	2 POLE CONTACTOR			E-011A		X
7-5	VARISTOR			G-200B		X
	THERMAL COMPOUND			S-2910		X
PG. NO.	CHILLED WATER SECTION (5 TON ONLY)	208 V	230 V	460 V	575 V	
	CHILLED WATER COIL	006-0022			(L13-0010)	
	CHILLED WATER SECTION CONTINUED ON NEXT PAGE					

N.S. - NOT SHOWN

*ALSO 95° AMBIENT OVER 5000 FT.

**ALSO 100° AMBIENT OVER 5000 FT.

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	CHILLED WATER SECTION (5 TON ONLY)					
N.S.	COIL DRAIN PAN			F13-0110		
9-6	MODULATING MOTOR			M-001A		
N.S.	PRINTED CIRCUIT BOARD	020-0010		(G109-A)		
9-5	VALVE LINKAGE			M-0050		
9-4	CHILLED WATER VALVE					
	2 WAY 1" 150# (STD)			P-0290		
9-4	CHILLED WATER VALVE					
	2 WAY 1" 250#			P-4311		
	3 WAY 1" 150# (STD)			P-0300		
	3 WAY 1" 250#			P-030A		

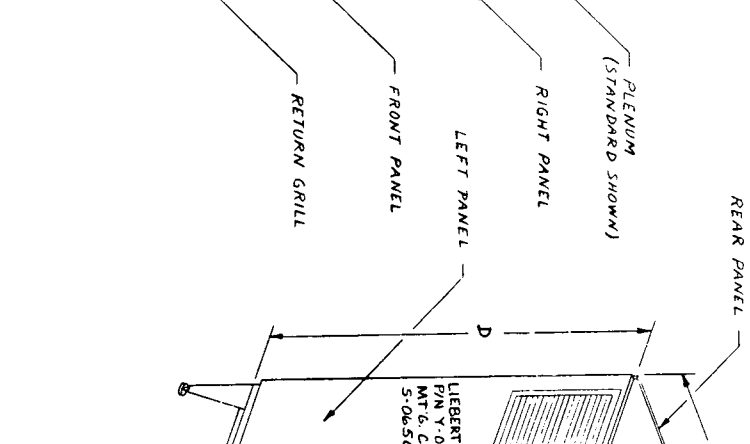
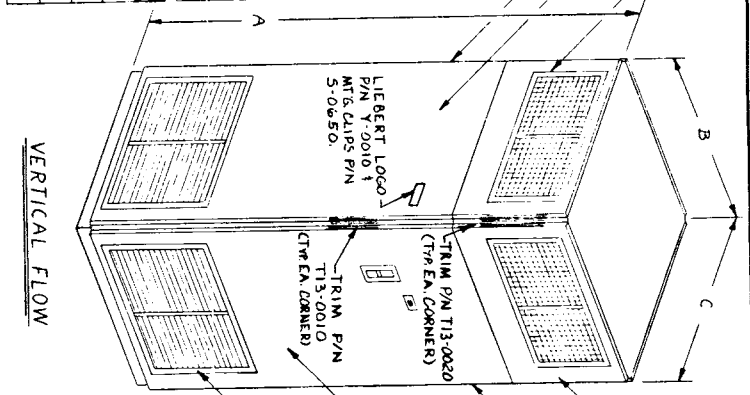
N.S. - NOT SHOWN

UNIT	STON MODEL	STON MODEL DIM A	DIM B	DIM C	DIM D
DOWN FLOW	CF 43A	CF 64A	33	33	72
	CF 47W	CF 69W	—	—	—
	CF 41G	CF 60G	—	—	—
	CF 91C	CF 91C	—	—	—
VERTICAL FLOW	CU 43A	CU 64A	94	33	—
	CU 47W	CU 69W	—	—	—
	CU 41G	CU 60G	—	—	—
	CU 91C	CU 91C	—	—	—

SIZE	RETURN GRILL DIM.	P/N
3 TON	24" x 18"	Q13-0010
5 TON	24" x 18"	Q13-0010

SIZE	RETURN GRILL DIM.	P/N	DISCHARGE GRILL DIM.	P/N
3 TON	24" x 18"	Q13-0010	24" x 12"	Q-0170
5 TON	24" x 18"	Q13-0010	24" x 12"	Q-0170

PLENUM - STD F13-0410
(1) TOP PLATE, F13-041C
(2) SIDE PANEL W/O OPENING, F13-041B
(2) SIDE PANEL W/O OPENING, F13-041A
(4) TRIM PART, T13-0020
PLENUM - 3RD SIDE AIR ENTRY
(1) TOP PLATE, F13-041C
(3) SIDE PANEL W/O OPENING, F13-041B
(1) SIDE PANEL W/O OPENING, F13-041A
(4) TRIM PART, T13-0020
PLENUM - TOP DISCHARGE F13-0750
(2) DUCT COLLAR WRAPPERS, F13-075A
(4) SIDE PANEL W/O OPENING, F13-041A
(4) PLENUM GUSSETS, F13-075B
(4) TRIM PART, T13-0020



UNIT	FRONT PANEL DWG	LEFT PANEL DWG	RIGHT PANEL DWG	REAR PANEL DWG
DOWN FLOW	NO DISCONNECT	F13-0200	F13-0120	F13-0140
	STD DISCONNECT	F13-0200	F13-0130	F13-0620
	CALIF. DISCONNECT	F13-0090	F13-0620	F13-0140
VERTICAL FLOW	NO DISCONNECT	F13-0170	F13-0130	F13-0140
	STD DISCONNECT	F13-0150	F13-0120	F13-0620
	CALIF. DISCONNECT	F13-0160	F13-0120	F13-0140

NOTE: FLOORSTAND HEIGHT VARIES PER JOB

REV	ECN	DESCRIPTION	DATE	CHK	APPRO	DATE
A	SM-199	RETURN GRILL P/N CHANGED TO Q13-0010	4.3.80			
B	SM-284	DOWN FLOW FROM DISCONNECT WAS F13-0090, WAS F13-0090				
ECH SM-104 SCALE NONE FOR ALL CHALLENGER II MODELS SIZE C DRAWING NUMBER F13-0006 REV. A						

**FILTERS
MISCELLANEOUS
EXTERIOR PANELS
PCR ASSEMBLY
OPTIONAL**

FIND NO.	DESCRIPTION	PART NUMBER				RSP
PG. NO.	MISCELLANEOUS EQUIPMENT	208 V	230 V	460 V	575 V	
	PANEL WRENCH	S-0320				X
	FLOOR STAND VIBRATION PADS	S02-2640				
	TOUCH UP PAINT (ALL COLORS)					
	PINT BOTTLE	S-1100				
	SPRAYER POWER UNIT	S-1090				
	QUART CAN	S-203A				
	GALLON CAN	S-203B				
	PINT CAN	S-203C				
	FILTER SECTION 3 & 5 TON					
	18x24x2 40%	A-0340 (2 Required)				X
PG. NO.	PCR ASSEMBLY	208 V	230 V	460 V	575 V	
	TEMPERATURE & HUMIDITY CONTROL					
	H 11 T/M 12	020-0112	(CH0060A)			X
3-24	TEMPERATURE SENSOR	020-0150	(TS002)			X
	REMOTE-TEMPERATURE SENSOR	020-0005	(TS003)			X
	LOW RANGE-HUMIDITY SENSOR (33-44% RH)	020-0161	(HS005)			X
	NORMAL RANGE & HUMIDITY (43-55% RH)	020-0162	(HS006)			X
	HIGH RANGE & HUMIDITY SENSOR (58-72%)	020-0163	(HS007)			X
3-27	MOTHER BOARD	020-0149	(CH1200A)			
	START/STOP RELAY	G-1360				X
3-21	CIRCUIT BREAKER MODULE	020-0091	(T2070)			X
	CIRCUIT BREAKER 3.2 AMP	E-276C				X
	CIRCUIT BREAKER 1.0 AMP	E-276B				X
3-11	TRANSFORMER 25VA	E007P				X
3-13	TRANSFORMER 75 VA	E-007A	E-007A	E-007B	E-007C	X
3-12	CONTROL VOLTAGE RELAY 2 POLE	E-013A				
PG. NO.	EXTERIOR PANELS					
	FRONT PANEL-DOWN FLOW-NON LOCKING DISCONNECT	F13-0880				
	FRONT PANEL-DOWN FLOW-LOCKING DISCONNECT	F13-0890				
	FRONT PANEL-DOWN FLOW-NO DISCONNECT	F13-0200				
	(EXTERIOR PANELS CONTINUED ON NEXT PAGE)					

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	EXTERIOR PANELS - CONTINUED					
	RIGHT SIDE PANEL (NO OPENING)		F13-0620			
	END PANEL		F02-1000			
	REAR PANEL		F13-0140			
	LEFT & RIGHT SIDE 3 & 4 REMOVABLE PANEL (D) W/OPENING		F13-0120			
	RIGHT & LEFT SIDE 3 & 4 REMOVABLE PANEL (V) W/OPENING		F13-0130			
	FRONT PANEL-VERTICAL-LOCKING DISCONNECT		F13-0160			
	FRONT PANEL-VERTICAL-NO DISCONNECT		F13-0170			
	FRONT PANEL-VERTICAL-NON LOCKING DISCONNECT		F13-0150			
	ALUMINUM TRIM		T13-0010			
	RETURN AIR GRILL		Q13-0010			
	DISCHARGE GRILL		Q-0170			
	DISCONNECT BEZEL		Y-032A			
3-35	MAIN FAN PILOT SWITCH		E-2200			X
3-37	LAMP		E-2210			X
3-36	CAP		E-2220			X
	OPTIONAL EQUIPMENT					
	ENCASED 7 DAY 110 V RECORDER		031-0002			
	7 DAY 110 V RECORDER		K-0010			
	RECORDER MOTOR 7 DAY 110 V		K-0070			
	RECORDER CHARTS 7 DAY %F		K-0030			X
	RECORDER CHARTS 7 DAY %C		K-003A			X
	ENCASED 24 HR. 110 V RECORDER		K-0020			
	RECORDER MOTOR, 24 HR. 110 V		K-0080			
	RECORDER CHARTS 24 HR. %F		K-003B			X
	RECORDER CHARTS 24 HR. %C		K-003C			X
	RECORDER INK-BLUE		K-0040			
	RECORDER INK-RED		K-0050			
	RECORDER 7 DAY (HONEYWELL)		K-0140			
	SENSOR		K-0160			
	RECORDER CHART		K-0170			
	RECORDER MOTOR		K-0180			
	RED INK		K-0200			
	PURPLE INK		K-0210			
8	DISCONNECT SWITCH-LOCKING					
	250 VOLT 100 AMP		E-2890			
	(OPTIONAL EQUIPMENT CONTINUED ON NEXT PAGE)					

FIND NO.	DESCRIPTION	PART NUMBER				RSP
		208 V	230 V	460 V	575 V	
PG. NO.	OPTIONAL EQUIPMENT - CONTINUED					
	460 VOLT 100 AMP			E-2880		
	600 VOLT 100 AMP			E-2910		
9	AUTO-CHANGE OVER			031-0090		
8	FLOOR STAND*					
8	REMOTE SENTINAL MODULE W/30' CABLE			KIT-0030		X
3-25	WINTER START MODULE	020-0094		(T2050)		X
8	REMOTE TEMPERATURE & HUMIDITY SENSOR (30' CABLE)	020-0146		(E0026)		X
8	LIQUI TECT SENSOR	020-0108		(T4000)		X
	FIRE STAT			E-2350		
	HOT GAS BY PASS			025-0001		
5	CONDENSATE PUMP ASSY. (230 V)			035-0026		
	(460 V)			035-0032		
	(575 V)			035-0034		
N.S.	CONDENSATE PUMP			X-015A		X
	LOCK IN MODULE	020-0092		(TLOKMOD)		
8-3	SENTINAL THERMOSTAT HI TEMP.			E-0230		X
8-7	LO TEMP.			E-0240		X
8-5	SENTINAL HUMIDSTAT HI HUMIDITY			E-0330		X
8-6	LO HUMIDITY			E-0340		X
3-31	HI HEAD PRESSURE STATE			P-312A		X

N.S. - NOT SHOWN

*Consult Factory



Specifications subject to change
without notice.

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