



ABSORPTION MACHINE

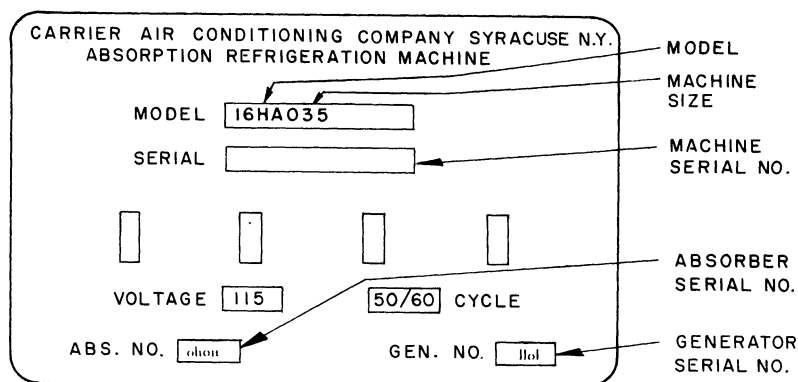
16HA

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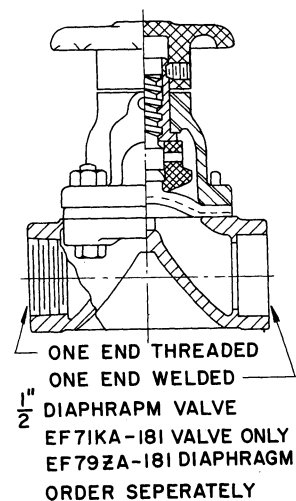
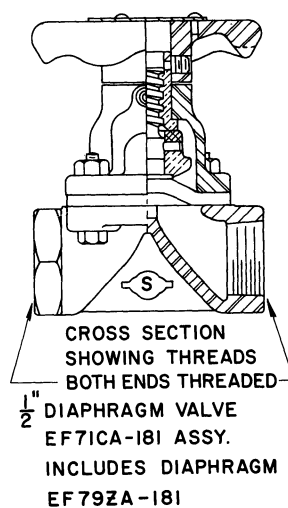
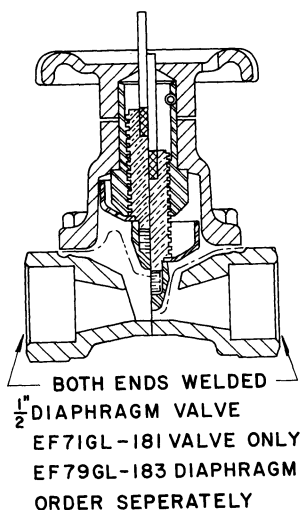
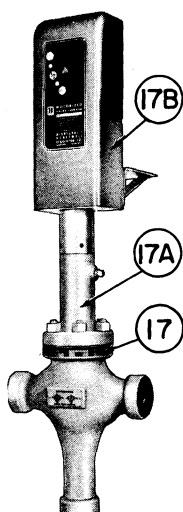
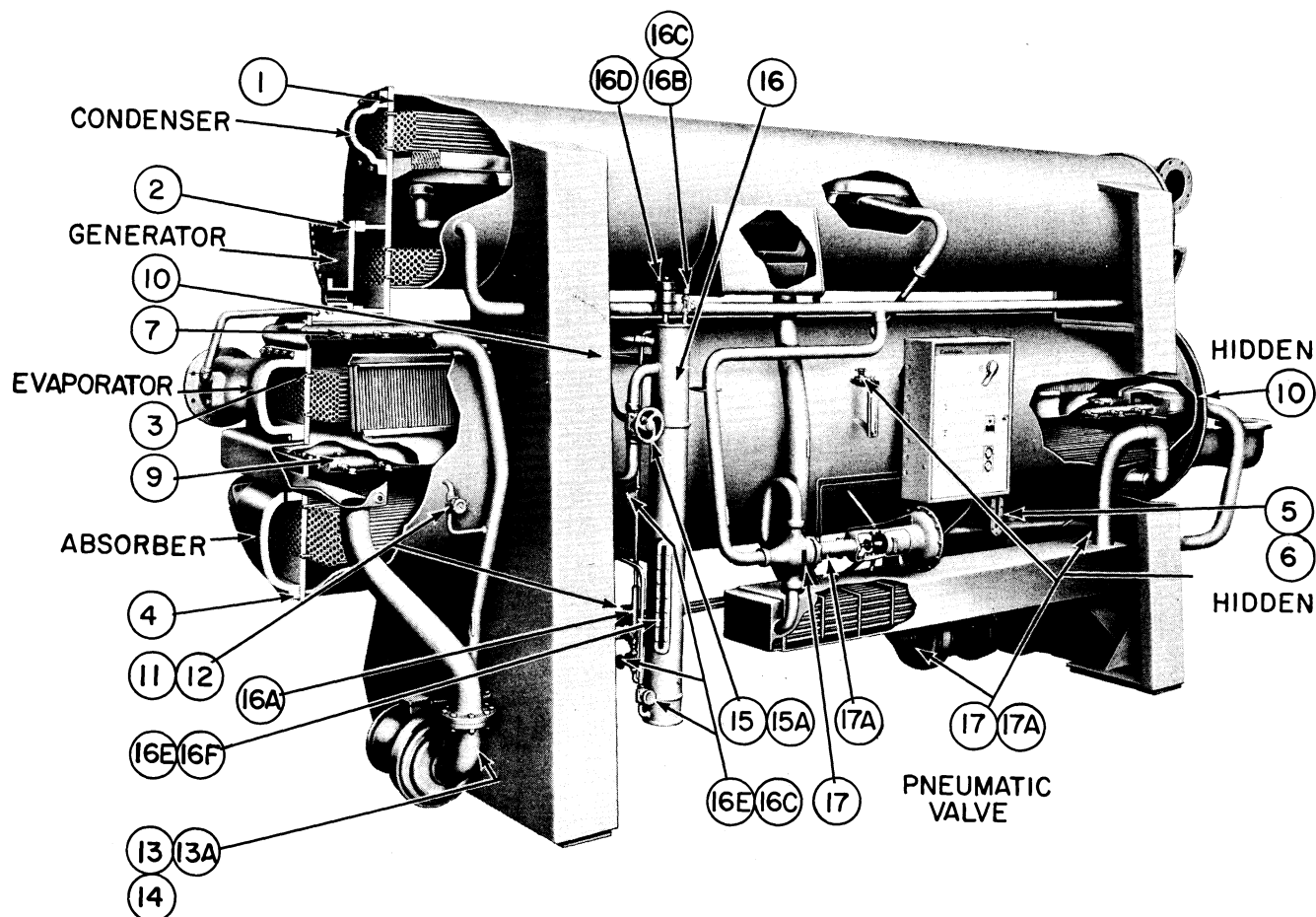
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ABSORPTION MACHINE - DESIGN #1 WITH ABSORBER SERIAL NO. 80255 AND LOWER PRIOR TO NOVEMBER 1964 NO ABSORBER SERIAL NUMBERS WERE ISSUED OR STAMPED ON NAMEPLATE, THEREFORE, ABSORPTION MACHINES IN THIS CATEGORY WILL BE DESIGN #1	4-7
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HOW TO USE THIS CATALOG

1. Identify machine size by referring to model block on the serial identification plate. This information is essential in selecting suitable parts for a machine.



FACSIMILE OF SERIAL IDENTIFICATION PLATE



Design #1
Group A — Heat Exchanger

ABSORPTION MACHINE

16HA

DESIGN #1 HEAT EXCHANGER GROUP "A"

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA											
				005	007	009	011	012	015	020	025	027	032	035	
1	Gasket, Condenser Water Box	AC	16HA005-2123	2	2	2	2	2	2	2					
	Gasket, Condenser Water Box	AC	16HA025-2123								2	2	2	2	
2	Gasket, Generator Water Box	AC	+16E52-1263	2	2	2	2	2	2	2					
	Gasket, Generator Water Box	AC	++16HA005-2653	2	2	2	2	2	2	2					
	Gasket, Generator Water Box	AC	+16E252-1263								2	2	2	2	
	Gasket, Generator Water Box	AC	++16HA025-2653								2	2	2	2	
3	Gasket, Evaporator Water Box	AC	16C4-1323	2	2	2	2	2	2	2					
	Gasket, Evaporator Water Box	AC	16C7X-1673								2	2	2	2	
4	Gasket, Absorber Water Box	AC	16B4-1183	2	2	2	2	2	2	2					
		AC	16HA025-2443								2	2	2	2	
5	Sight Glass	AC	KM36BE-015	1	1	1	1	1	1	1	1	1	1	1	
6	Gasket, Sight Glass	AC	16HA005-1942	2	2	2	2	2	2	2	2	2	2	2	
NI	Gasket, Division Plate	AC	*LF50SP-001	1	1	1	1	1	1	1	1	1	1	1	
7	Nozzle, Evap. Spray Hdr.	AC	LH11HP-018	46	46	46	46	60	60	82	74	74	96	96	
8	Nozzle Sol. Spray Hdr.	AC	LH11HP-018	39	39	39	39	54	54	72	88	88	116	116	
9	Insulator	AC	16HA005-1563	13	13	13	13	18	18	24	22	22	29	29	
10	Valve Gate(Purge Cooling Coil)	AC	ER01CM-181	2	2	2	2	2	2	2	2	2	2	2	
11	Valve Grinnell 1/2"(See Detail)	AC	EF71CA-181	3	3	3	3	3	3	3	3	3	3	3	
12	Diaphragm (For EF71GL-181)	AC	EF79GL-183	3	3	3	3	3	3	3	3	3	3	3	
13	Valve Grinnell 1/2"(See Detail)	AC	EF71CA-181	4	4	4	4	4	4	4	4	4	4	4	
13A	Includes: Diaphragm	AC	△EF79ZA-181	4	4	4	4	4	4	4	4	4	4	4	
13	Valve, Diaphragm 1/2" (See Detail)	AC	EF71KA-181	4	4	4	4	4	4	4	4	4	4	4	
14	Diaphragm (For EF71KA-181)	AC	△EF79ZA-181	4	4	4	4	4	4	4	4	4	4	4	
15	Valve, Diaphragm 1 1/2"	AC	EF71GA-421	1	1	1	1	1	1	1	1	1	1	1	
15A	Includes: Diaphragm	AC	EF79ZA-421	1	1	1	1	1	1	1	1	1	1	1	
16	Vertical Purge Assembly	NA	16HA005-694	1	1	1	1	1	1	1	1	1			
	Includes:														
16A	Metering Labyrinth	AC	16HA012-001	1	1	1	1	1	1	1	1	1	1	1	
16B	Valve Grinnell 1/2"	AC	EF17CA-181	4	4	4	4	4	4	4	4	4	4	4	

+ USED ON MACHINES WITH FABRICATED WATERBOXES AND HOT WATER.

++ USED ON MACHINES WITH CAST IRON WATER BOXES.

* PART NUMBER CONSISTS OF (1) FIVE-POUND ROLL (APPROX. 50 FEET)

△ ADAPTER EM99AA-522 IS NO LONGER INCLUDED WITH THE EF79ZA-181 (1/2") DIAPHRAGM AND IF REQUIRED MUST BE ORDERED SEPARATELY.



ABSORPTION MACHINE

16HA

DESIGN #1 HEAT EXCHANGER GROUP "A" (CONT'D.)

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA							
				041	047	052	059	066	075	090	100
1	Gasket, Condenser Water Box	AC	16HA041-2123	2	2	2	2	2	2		
	Gasket, Condenser Water Box	AC	+16E900-2292							2	2
	Gasket, Condenser Water Box	AC	++16HA041-2123							2	2
2	Gasket, Generator Water Box	AC	+16E414-1263	2	2	2	2	2	2	2	2
	Gasket, Generator Water Box	AC	++16HA041-2653	2	2	2	2	2	2	2	2
3	Gasket, Evaporator Water Box	AC	16HA041-2283	2	2	2	2	2	2	2	2
4	Gasket, Absorber Water Box	AC	16E414-1634	2	2	2	2	2	2	2	2
5	Sight Glass	AC	KM36BE-019	1	1	1	1	1	1	1	1
6	Gasket, Sight Glass	AC	16HA041-1942	2	2	2	2	2	2	2	2
NI	Gasket, Division Plate	AC	*LF50SP-001	1	1	1	1	1	1	1	1
7	Nozzle Evap. Spray Hdr.	AC	LH11HP-018	100	100	100	146	146	146	216	216
8	Nozzle Sol. Spray Hdr.	AC	LH11HP-018	148	148	148	216	216	216	320	320
9	Insulator	AC	16HA005-1563	37	37	37	54	54	54	80	80
10	Valve Gate (Purge Cooling Coil)	AC	ER01CM-181	2	2	2	2	2	2	2	2
11	Valve, Grinnell 1/2" (See Detail)	AC	EF71CA-181	3	3	3	3	3	3	3	3
12	Diaphragm (For EF71GL-181)	AC	EF79GL-183	3	3	3	3	3	3	3	3
13	Valve, Grinnell 1/2" (See Detail)	AC	EF71CA-181	4	4	4	4	4	4	4	4
	Includes:										
13A	Diaphragm	AC	EF79ZA-181	4	4	4	4	4	4	4	4
13	Valve, Diaphragm 1/2" (See Detail)	AC	EF71KA-181	4	4	4	4	4	4	4	4
14	Diaphragm (For EF71KA-181)	AC	EF79ZA-181	4	4	4	4	4	4	4	4
15	Valve Diaphragm 1 1/2"	AC	EF71GA-421	1	1	1	2	2	2	2	2
	Includes:										
15A	Diaphragm	AC	EF79ZA-421	1	1	1	2	2	2	2	2
16	Vertical Purge Assembly	NA	16HA005-694	1	1	1				2	2
	Each Purge Includes:										
16A	Metering Labyrinth	AC	16HA012-001	1	1	1				1	1
16B	Valve, Grinnell 1/2"	AC	EF71CA-181	4	4	4				4	4
16C	Diaphragm 1/2" (For EF71CA-181)	AC	EF79GL-183	4	4	4				4	4
16D	Valve, Ball Check	AC	16HA005-393	1	1	1				1	1
	Includes:										
NI	Valve Seat	AC	16HA005-1872	2	2	2				2	2
NI	Ball	AC	16HA005-1351	1	1	1				1	1

+ USED ON MACHINES WITH FABRICATED WATER BOXES AND HOT WATER.

++ USED ON MACHINES WITH CAST IRON WATER BOXES.

* PART NUMBER CONSISTS OF (1) FIVE-POUND ROLL (APPROX. 50 FEET).

ADAPTER EM99AA-522 IS NO LONGER INCLUDED WITH THE EF79ZA-181 (1/2") DIAPHRAGM AND IF REQUIRED MUST BE ORDERED SEPARATELY.



ABSORPTION MACHINE

16HA

DESIGN #1 HEAT EXCHANGER GROUP "A" (CONT'D.)

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA											
				005	007	009	011	012	015	020	025	027	032	035	
16C	Diaphragm 1/2" (For EF71GL-181)	AC	EF79GL-183	4	4	4	4	4	4	4	4	4			
16D	Valve, Ball Check Includes:	AC	16HA005-393	1	1	1	1	1	1	1	1	1			
NI	Valve Seal	AC	16HA005-1872	2	2	2	2	2	2	2	2	2			
NI	Ball	AC	16HA005-1381	1	1	1	1	1	1	1	1	1			
16E	Sight Glass	AC	KM39BB-032	1	1	1	1	1	1	1	1	1			
16F	Gasket, Sight Glass	AC	16HA005-1411	2	2	2	2	2	2	2	2	2			
16	Vertical Purge Assembly Includes:	NA	16HA032-694										1	1	
16A	Metering Labyrinth	NA	16HA005-012										1	1	
16B	Valve Grinnell 1/2	AC	EF71CA-181										4	4	
16C	Diaphragm 1/2" (For EF71GL-181)	AC	EF79GL-181										4	4	
16D	Valve, Ball Check Includes:	AC	16HA005-393										1	1	
NI	Valve Seat	AC	16HA005-1872										2	2	
NI	Ball	AC	16HA005-1381										1	1	
16E	Sight Glass	AC	KM39BB-032										1	1	
16F	Gasket, Sight Glass	AC	16HA005-1411										2	2	
17	Valve, Electronic 1 1/2" (Solution Control) Includes:	NA	EF07GB-421	1	1	1	1	1	1						
17A	Bellows and Gasket	AC	16E52-015	1	1	1	1	1	1						
17B	Linkage	AC	EP39MA-016	1	1	1	1	1	1						
17	Valve, Electronic 2 1/2" (Solution Control) Includes:	NA	EF07GB-541							1	1	1	1	1	
17A	Bellows and Gasket	AC	16E52-016							1	1	1	1	1	
17B	Linkage	AC	EP39MA-016							1	1	1	1	1	
17	Valve, Pneumatic 1 1/2" (Solution Control) Includes:	NA	EF65GB-422	1	1	1	1	1	1						
17A	Bellows and Gasket	AC	16E52-015	1	1	1	1	1	1						
NI	Spring (Pilot Positioner)	AC	16HA005-022	1	1	1	1	1	1						
NI	Pilot Positioner	AC	EF69ZB-025	1	1	1	1	1	1						
17	Valve, Pneumatic 2 1/2" (Solution Control) Includes:	NA	EF65GB-542							1	1	1	1	1	
17A	Bellows and Gasket	AC	16E52-016							1	1	1	1	1	
NI	Spring (Pilot Positioner)	AC	16HA005-023							1	1	1	1	1	
NI	Pilot Positioner	AC	EF69ZB-025							1	1	1	1	1	
NI	Motor (Electronic Solution Control Valve) Includes:		SEE NOTE	1	1	1	1	1	1	1	1	1	1	1	
NI	Vacuum Tube (12AX7)	AC	HT69AA-111	1	1	1	1	1	1	1	1	1	1	1	
NI	Vacuum Tube (5963)	AC	HT69AA-102	1	1	1	1	1	1	1	1	1	1	1	
NI	Control Point Adjuster	AC	HT24AA-050	1	1	1	1	1	1	1	1	1	1	1	

NOTE: THE TUBE TYPE MOTOR (HF19MA-050) IS NO LONGER AVAILABLE; THE TUBES AND CONTROL POINT ADJUSTER ARE. IF A COMPLETE MOTOR IS REQUIRED, ORDER THE (HF19MA-055) SOLID STATE MOTOR. ALSO, ORDER A NEW CONTROL POINT ADJUSTER HT24AZ-115 AND A NEW TEMPERATURE SENSOR HH19AZ-031.



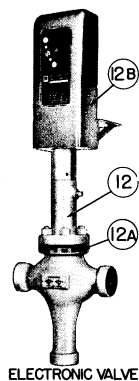
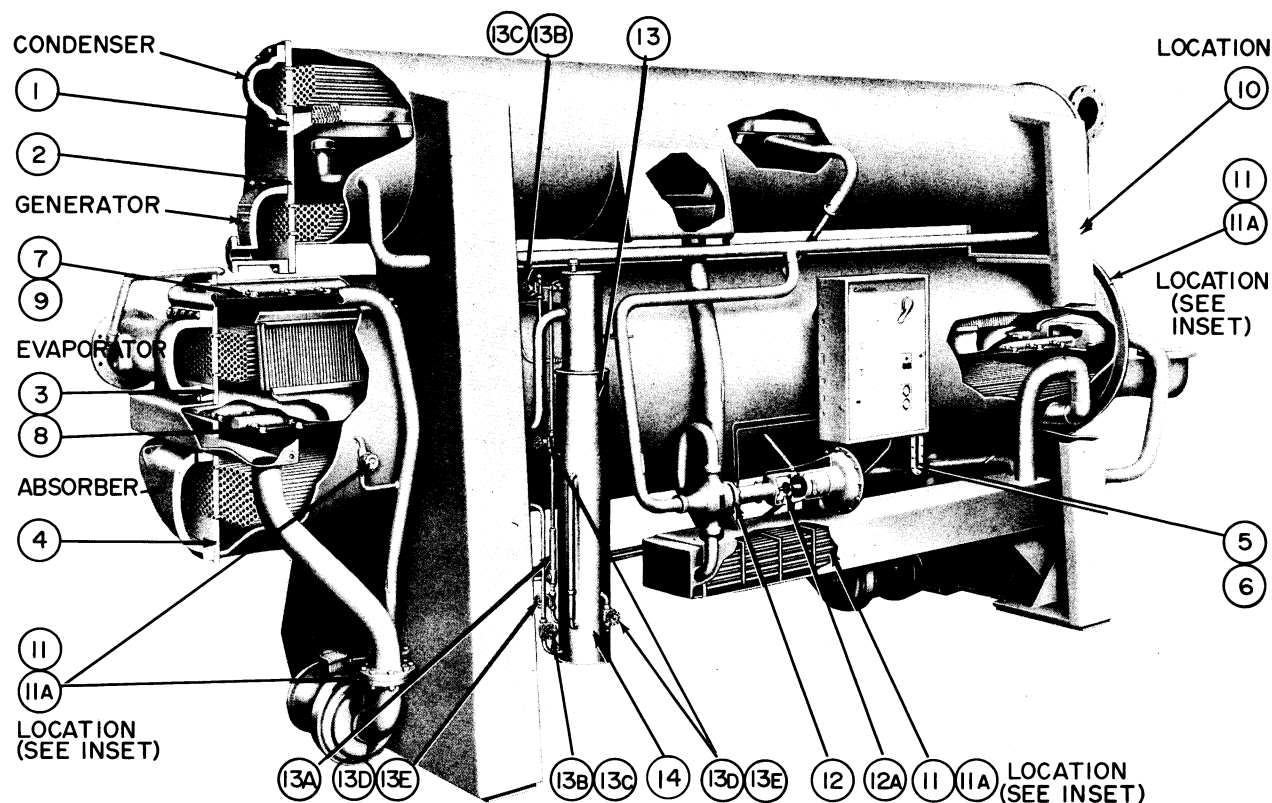
ABSORPTION MACHINE

16HA

DESIGN #1 HEAT EXCHANGER GROUP "A" (CONT'D.)

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA							
				041	047	052	059	066	075	090	100
16E	Sight Glass	AC	KM39BB-032	1	1	1				1	1
16F	Gasket, Sight Glass	AC	16HA005-1411	2	2	2				2	2
16	Vertical Purge Assembly	NA	16HA032-694				2	2	2		
	Each Purge Includes:										
16A	Metering Labyrinth	NA	16HA005-012				1	1	1		
16B	Valve Grinnell 1/2"	AC	EF71CA-181				4	4	4		
16C	Diaphragm 1/2" (For EF71GL-181)	AC	EF79GL-183				4	4	4		
16D	Valve, Ball Check	AC	16HA005-393				1	1	1		
	Includes:										
NI	Valve Seat	AC	16HA005-1872				2	2	2		
NI	Ball	AC	16HA005-1381				1	1	1		
16E	Sight Glass	AC	KM39BB-032				1	1	1		
16F	Gasket, Sight Glass	AC	16HA005-1411				2	2	2		
17	Valve, Electronic 3"	NA	EF07GB-601	1	1	1	1	1	1		
	(Solution Control) Includes:										
17A	Bellows and Gasket	AC	16E52-017	1	1	1	1	1	1		
17B	Linkage	AC	EP39MA-016	1	1	1	1	1	1		
17	Valve, Electronic 4"	NA	EF07GB-711							1	1
	(Solution Control) Includes:										
17A	Bellows and Gasket	AC	16E52-108							1	1
17B	Linkage	AC	EP39MA-016							1	1
17	Valve, Pneumatic 3"	NA	EF65GB-602	1	1	1	1	1	1		
	(Solution Control) Includes:										
17A	Bellows and Gasket	AC	16E52-017	1	1	1	1	1	1		
NI	Spring (Pilot Positioner)	AC	16HA005-023	1	1	1	1	1	1		
NI	Pilot Positioner	AC	EF69ZB-025	1	1	1	1	1	1		
17	Valve, Pneumatic 4"	NA	EF65GB-712							1	1
	(Solution Control) Includes:										
17A	Bellows and Gasket	AC	16E52-018							1	1
NI	Spring (Pilot Positioner)	NA	16HA005-021							1	1
NI	Pilot Positioner	AC	EF69ZB-025							1	1
NI	Motor (Electronic Solution Control Valve)		SEE NOTE							1	1
	Includes:										
NI	Vacuum Tube (12AX7)	AC	HT69AA-111							1	1
NI	Vacuum Tube (5963)	AC	HT69AA-102							1	1
NI	Control Point Adjuster	AC	HT24AA-050								

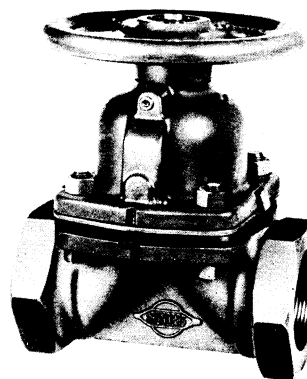
NOTE: THE TUBE TYPE MOTOR (HF19MA-050) IS NO LONGER AVAILABLE; THE TUBES AND CONTROL POINT ADJUSTER ARE. IF A COMPLETE MOTOR IS REQUIRED, ORDER THE (HF19MA-055) SOLID STATE MOTOR. ALSO ORDER A NEW CONTROL POINT ADJUSTER (HT24AZ-115) AND A NEW TEMPERATURE SENSOR HH19AZ-031.



ELECTRONIC VALVE

Design #2
Group B — Heat Exchanger

Used on machines with Absorber Serial No. 80256 and higher



ITEM 11



ABSORPTION MACHINE

16HA

HEAT EXCHANGER

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	UNIT SIZE
NI/1	Heat Exchanger Assembly	AC	16C4-189	005-011
NI/2	Heat Exchanger Assembly	AC	16C5-189	012-015
NI/3	Heat Exchanger Assembly	AC	16C6-189	020
NI/4	Heat Exchanger Assembly	AC	16C7-189	025,027
NI/5	Heat Exchanger Assembly	AC	16C9-189	032,035
NI/6	Heat Exchanger Assembly	AC	16C11-189	041-052
NI/7	Heat Exchanger Assembly	AC	16C13-189	059-075
NI/8	Heat Exchanger Assembly	AC	16E900-339	090,100

*MOTORLESS PURGE ASSEMBLY

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	
NI/1	Motorless Purge Assembly Includes: A - Purge B - Valve 1 1/2" C - Valve 3/4" D - Valve Grinnell 1/2	AC NSS NSS AC AC	16JB660020 16JB680019 16JB680027 EF71CA-241 EF71CA-181	

* THIS MOTORLESS PURGE IS A DIRECT REPLACEMENT FOR ANY VERTICAL PURGE FORMERLY USED ON 16HA MACHINES.



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA												035
				005	007	009	011	012	015	020	025	027	032			

DESIGN #2 HEAT EXCHANGER GROUP "B"

1	Gasket, Condenser Water Box	AC	16HA005-2123	2	2	2	2	2	2	2				
		AC	16HA025-2123								2	2	2	2
2	Gasket, Generator Water Box	AC	+16E52-1263	2	2	2	2	2	2	2				
		AC	++16HA005-2653	2	2	2	2	2	2	2				
		AC	+16E252-1263								2	2	2	2
		AC	++16HA025-2653								2	2	2	2
3	Gasket, Evaporator Water Box	AC	16C4-1323	2	2	2	2	2	2	2				
		AC	16C7X-1673								2	2	2	2
4	Gasket, Absorber Water Box	AC	16B4-1183	2	2	2	2	2	2	2				
		AC	16HA025-2443								2	2	2	2
5	Sight Glass	AC	KM36BE-015	1	1	1	1	1	1	1	1	1	1	1
6	Gasket, Sight Glass	AC	16HA005-1942	2	2	2	2	2	2	2	2	2	2	2
NS	Gasket, Division Plate	AC	*LF50SP-001	1	1	1	1	1	1	1	1	1	1	1
7	Spray Nozzle, Evaporator Spray Header	AC	LH11HP-018	46	46	46	46	60	60	82	74	74	96	96
8	Spray Nozzle, Solution Spray Header	AC	LH11HP-018	39	39	39	39	54	54	72	88	88	116	116
9	Insulator	AC	16HA005-1563	7	7	7	7	10	10	12	12	12	16	16
10	Valve, Gate	AC	ER01CM-181	3	3	3	3	3	3	3	3	3	3	3
11	Valve, Grinnell 1/2"	AC	EF71CA-181	4	4	4	4	4	4	4	4	4	4	4
	Includes:													
11A	Diaphragm	AC	△ EF79ZA-181	4	4	4	4	4	4	4	4	4	4	4

+ USED ON MACHINES WITH FABRICATED WATER BOXES AND HOT WATER.

++ USED ON MACHINES WITH CAST IRON WATER BOXES.

* PART NUMBER CONSISTS OF (1) FIVE-POUND ROLL (APPROX. 50 FEET).

DOLE FLOW CONTROL VALVE EB38CZ-122.

△ ADAPTER EM99AA-522 IS NO LONGER INCLUDED WITH THE EF79ZA-181 (1/2") DIAPHRAGM AND IF REQUIRED MUST BE ORDERED SEPARATELY.



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA							
				041	047	052	059	066	075	090	100

DESIGN #2 HEAT EXCHANGER GROUP "B" (CONT'D.)

1	Gasket, Condenser Water Box	AC	16HA041-2123	2	2	2	2	2	2		
		AC	+16E900-2292							2	2
		AC	++16HA041-2123							2	2
2	Gasket, Generator Water Box	AC	+16E414-1263	2	2	2	2	2	2	2	2
		AC	++16HA041-2653	2	2	2	2	2	2	2	2
3	Gasket, Evaporator Water Box	AC	16HA041-2283	2	2	2	2	2	2	2	2
4	Gasket, Absorber Water Box	AC	16E414-1634	2	2	2	2	2	2	2	2
5	Sight Glass	AC	KM36BE-019	1	1	1	1	1	1	1	1
6	Gasket, Sight Glass	AC	16HA041-1942	2	2	2	2	2	2	2	2
NS	Gasket, Division Plate	AC	*LF50SP-001	1	1	1	1	1	1	1	1
7	Spray Nozzle, Evap. Spray Header	AC	LH11HP-018	100	100	100	146	146	146	216	216
8	Spray Nozzle, Sol. Spray Header	AC	LH11HP-018	148	148	148	216	216	216	320	320
9	Insulator	AC	16HA041-1563	14	14	14	20	20	20	28	28
10	Valve, Gate	AC	ER01CM-181	3	3	3	3	3	3	3	3
11	Valve, Grinnell	AC	EF71CA-181	4	4	4	4	4	4	4	4
	Includes:										
11A	Diaphragm Δ See Note on Page 10	AC	Δ EF79ZA-181	4	4	4	4	4	4	4	4

+ USED ON MACHINES WITH FABRICATED WATER BOXES AND HOT WATER.

++ USED ON MACHINES WITH CAST IRON WATER BOXES.

* PART NUMBER CONSISTS OF (1) FIVE-POUND ROLL (APPROX. 50 FEET).



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA											
				005	007	009	011	012	015	020	025	027	032	035	
DESIGN #2 HEAT EXCHANGER GROUP "B" (CONT'D.)															
12	Valve, 1 1/2" Electronic (Solution Control) Includes:	NA	EF07GB-421	1	1	1	1	1	1						
12A	Bellows and Gaskets	AC	16E52-015	1	1	1	1	1	1						
12B	Linkage	AC	EP39MA-016	1	1	1	1	1	1						
12	Valve, 2 1/2" Electronic (Solution Control) Includes:	NA	EF07GB-541								1	1	1	1	1
12A	Bellows and Gaskets	AC	16E52-016								1	1	1	1	1
12B	Linkage	AC	EP39MA-016								1	1	1	1	1
12	Valve, 1 1/2" Pneumatic (Solution Control) Includes:	NA	EF65GB-422	1	1	1	1	1	1						
12A	Bellows and Gaskets	AC	16E52-015	1	1	1	1	1	1						
NI	Spring (Pilot Positioner)	AC	16HA005-022	1	1	1	1	1	1						
NI	Pilot Positioner	AC	EF69ZB-025	1	1	1	1	1	1						
12	Valve, 2 1/2" Pneumatic (Solution Control) Includes:	NA	EF65GB-542								1	1	1	1	1
12A	Bellows and Gaskets	AC	16E52-016								1	1	1	1	1
NI	Spring (Pilot Positioner)	AC	16HA005-023								1	1	1	1	1
NI	Pilot Positioner	AC	EF69ZB-025								1	1	1	1	1
NI	Motor, Electronic (Solution Control Valve) Includes:		See Note	1	1	1	1	1	1	1	1	1	1	1	1
NI	Vacuum Tube (12AX7)	AC	HT69AA-111	1	1	1	1	1	1	1	1	1	1	1	1
NI	Vacuum Tube (5963)	AC	HT69AA-102	1	1	1	1	1	1	1	1	1	1	1	1
NI	Control Point Adjuster	AC	HT24AA-050	1	1	1	1	1	1	1	1	1	1	1	1
13	Manual Vertical Purge Includes:	NA	16HA005-694	1	1	1	1								
13A	Restrictor Tee Package	NA	16HA005-012	1	1	1	1								
13B	Valve, 3/4" Diaphragm	AC	EF71CA-241	2	2	2	2								
13C	Diaphragm, 3/4"*	AC	EF79ZA-241	2	2	2	2								
13D	Valve, Grinnell 1/2" Includes:	AC	EF71CA-181	3	3	3	3								
13E	Diaphragm, 1/2"	AC	EF79ZA-181	3	3	3	3								
13	Manual Vertical Purge Includes:	NA	16HA012-694					1	1	1	1	1	1		
13A	Restrictor Tee Package	AC	16HA012-001					1	1	1	1	1	1		
13B	Valve, 3/4" Diaphragm	AC	EF71CA-241					2	2	2	2	2	2		
13C	Diaphragm, 3/4"*	AC	EF79ZA-241					2	2	2	2	2	2		
13D	Valve, 1/2" Diaphragm Includes:	AC	EF71CA-181					3	3	3	3	3	3		
13E	Diaphragm, 1/2"	AC	EF79ZA-181					3	3	3	3	3	3		
13	Manual Vertical Purge Includes:	NA	16HA032-694											1	1
13A	Restrictor Tee Package	NA	16HA032-002											1	1
13B	Valve, 3/4" Diaphragm	AC	EF71CA-241											2	2
13C	Diaphragm, 3/4"*	AC	EF79ZA-241											2	2
13D	Valve, 1/2" Diaphragm Includes:	AC	EF71CA-181											3	3
13E	Diaphragm, 1/2"	AC	EF79ZA-181											3	3
14	Float Package	AC	16HA005-011	1	1	1	1	1	1	1	1	1	1	1	1

NOTE: THE TUBE TYPE MOTOR (HF19MA-050) IS NO LONGER AVAILABLE: THE TUBES AND CONTROL POINT ADJUSTER ARE. IF A COMPLETE MOTOR IS REQUIRED ORDER THE (HF19MA-055) SOLID STATE MOTOR. ALSO ORDER A NEW CONTROL POINT ADJUSTER (HT24AZ-115) AND A NEW TEMPERATURE SENSOR (HH19AZ-031).

* ADAPTER IS NOT INCLUDED WITH DIAPHRAGM & MUST ALSO ORDER EM99ZZ240.



ABSORPTION MACHINE

16HA

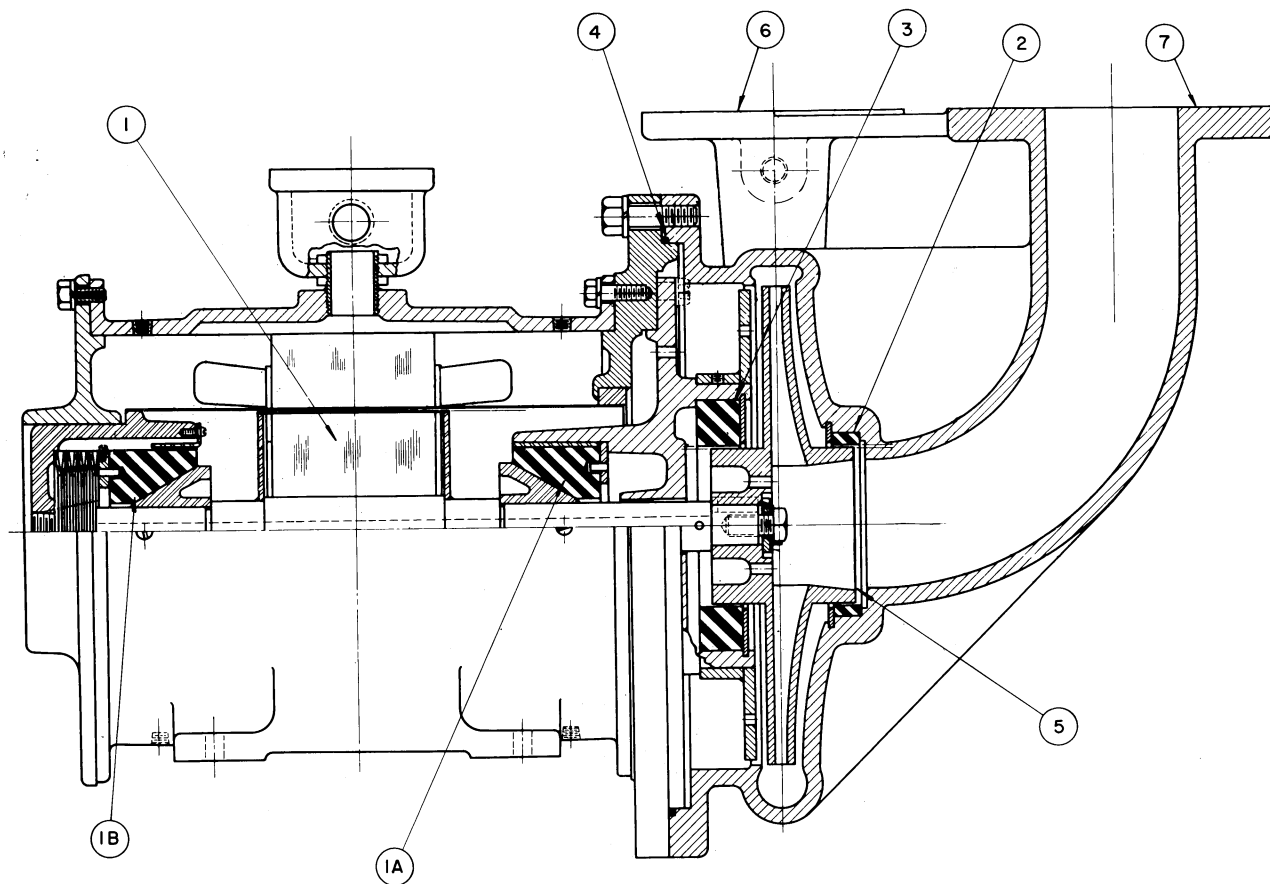
ITEM NO.	DESCRIPTION	LDC	PART NUMBER	USED ON SIZE 16HA							
				041	047	052	059	066	075	090	100

DESIGN #2 HEAT EXCHANGER GROUP "B" (CONT'D.)

12	Valve, 3" Electronic (Solution Control) Includes:	NA	EF07GB-601	1	1	1	1	1	1		
12A	Bellows and Gasket	AC	16E52-017	1	1	1	1	1	1		
12B	Linkage	AC	EP39MA-016	1	1	1	1	1	1		
12	Valve, 4" Electronic (Solution Control) Includes:	NA	EF07GB-711							1	1
12A	Bellows and Gasket	AC	16E52-108							1	1
12B	Linkage	AC	EP39MA-016							1	1
12	Valve, 3" Pneumatic (Solution Control) Includes:	NA	EF65GB-602	1	1	1	1	1	1		
12A	Bellows and Gasket	AC	16E52-017	1	1	1	1	1	1		
NI	Spring (Pilot Positioner)	AC	16HA005-023	1	1	1	1	1	1		
NI	Pilot Positioner	AC	16HA005-024	1	1	1	1	1	1		
12	Valve, 4" Pneumatic (Solution Control) Includes:	NA	EF65GB-712							1	1
12A	Bellows and Gasket	AC	16E52-018							1	1
NI	Spring (Pilot Positioner)	NA	16HA005-021							1	1
NI	Pilot Positioner	AC	16HA005-024							1	1
NI	Motor (Electronic Solution Control Valve) Includes:		SEE NOTE	1	1	1	1	1	1	1	1
NI	Vacuum Tube (12AX7)	AC	HT69AA-111	1	1	1	1	1	1	1	1
NI	Vacuum Tube (5963)	AC	HT69AA-102	1	1	1	1	1	1	1	1
NI	Control Point Adjuster	AC	HT24AA-050								
13	Manual Vertical Purge Each Package Includes:	NA	16HA012-694	1	1	1				2	2
13A	Restrictor Tee Package	AC	16HA012-001	1	1	1				1	1
13B	Valve, 3/4" Diaphragm	AC	EF71CA-241	2	2	2				2	2
13C	Diaphragm, 3/4"*	AC	EF79ZA-241	2	2	2				2	2
13D	Valve, Grinnell 1/2	AC	EF71CA-181	3	3	3				3	3
13E	Diaphragm, 1/2"	AC	EF79ZA-181	3	3	3				3	3
13	Manual Vertical Purge Each Package Includes:	NA	16HA032-694				2	2	2		
13A	Restrictor Tee Package	NA	16HA032-002				1	1	1		
13B	Valve, 3/4" Diaphragm	AC	EF71CA-241				2	2	2		
13C	Diaphragm, 3/4"*	AC	EF79ZA-241				2	2	2		
13D	Valve, Grinnell 1/2	AC	EF71CA-181				3	3	3		
13E	Includes: Diaphragm, 1/2"	AC	EF79ZA-181				3	3	3		
14	Float Package	AC	16HA005-011	1	1	1	1	1	1	1	

NOTE: THE TUBE TYPE MOTOR (HF19MA-050) IS NO LONGER AVAILABLE: THE TUBES AND CONTROL POINT ADJUSTER ARE. IF A COMPLETE MOTOR IS REQUIRED ORDER THE (HF19MA-055) SOLID STATE MOTOR. ALSO ORDER A NEW CONTROL POINT ADJUSTER (HT24AZ-115) AND A NEW TEMPERATURE SENSOR (HH19AZ-031).

* ADAPTER IS NOT INCLUDED WITH DIAPHRAGM & MUST ALSO ORDER EM99ZZ240.



Group C and D — Refrigerant Pump - Hermetic



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	MACHINE SIZE 16HA005-015 16HA025-027	MACHINE SIZE 16HA005-015 16HA025-027	MACHINE SIZE 16HA020 16HA032-052
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REFRIGERANT PUMP GROUP "C"

	PUMP SIZE		2 1/2" x 4" HCCM	2 1/2" x 4" HCCM	2 1/2" x 4" HCCM
	REFRIGERANT PUMP ASSEMBLY		16HA005-1019 Design No. 1	16HA005-1749* Design No. 1	16HA020-1019* Design No. 2
1	Motor (See Note) Includes:	AC	16HA005-002	16HA005-006	16HA005-002
1A	Bearing	AC	16JB680-007	16JB680-009	16JB680-007
1B	Bearing	AC	16JB680-007	16JB680-009	16JB680-007
NI/1C	Rotor	AC	16HA005-030	16HA005-031	16HA005-030
2	Wearing Ring (Casing)	AC	KK09XC-036	KK09XC-036	KK09XC-036
3	Wearing Ring (Motor)	AC	KK09XD-036	KK09XC-036	KK09XD-036
4	Gasket	AC	16HA005-020	16JA010-002	16HA005-020
5	Impeller	AC	KK75XA-556	KK75XA-590	KK75XA-557
5A	Impeller Lockwasher	AC	KT59ZP-210	KT59ZP-021	KT59ZP-021
6	Gasket	AC	CT90YA-451	CT90YA-451	CT90YA-451
7	Gasket	AC	CT90YA-601	CT90YA-601	CT90YA-601

NOTE: WHEN ORDERING A REPLACEMENT MOTOR (ITEM 1), ALSO ORDER A WEARING RING (ITEM 3) AND GASKET (ITEM 4).

* BEFORE ORDERING REPLACEMENT PUMP PARTS, REFER TO THE PUMP NAME PLATE TO DETERMINE THE PUMP PART NUMBER FOR A DESIGN NO. 1 OR DESIGN NO. 2 PUMP.

WHEN A COMPLETE REPLACEMENT PUMP IS REQUIRED, ORDER DESIGN NO. 2 PUMP. DESIGN NO. 1 PUMP IS NOT AVAILABLE.



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	MACHINE SIZE 16HA020 16HA032-052	MACHINE SIZE 16HA059-075	MACHINE SIZE 16HA090-100
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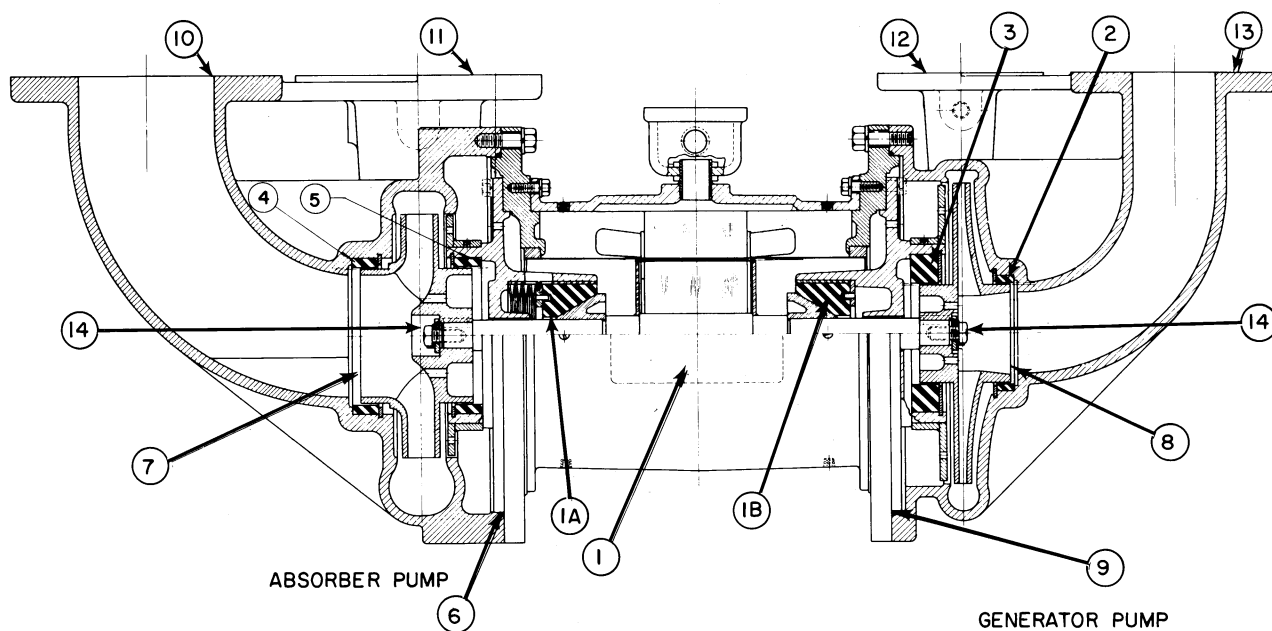
REFRIGERANT PUMP GROUP "D"

	PUMP SIZE		2 1/2" x 4" HCCM	3" x 6 " HCCL	3" x 6" HCCL
	REFRIGERANT PUMP ASSEMBLY		16HA020-1749 Design No. 2	16HA059-1019*	16HA090-1019*
1	Motor (See Note) Includes:	AC	16HA005-006	16HA059-001	16HA059-001
1A	Bearing	AC	16JB680-009	16JB680-008	16JB680-008
1B	Bearing	AC	16JB680-009	16JB680-008	16JB680-008
NI/1C	Rotor	AC	16HA005-031	16HA059-003	16HA059-003
2	Wearing Ring (Casing)	AC	KK09XC-036	KK09XC-065	KK09XC-065
3	Wearing Ring (Motor)	AC	KK09XC-036	KK09XC-065	KK09XC-065
4	Gasket	AC	16JA010-002	16HA005-020	16HA005-020
5	Impeller	AC	KK75XA-591	KK75XA-565	KK75XA-566
5A	Impeller Lockwasher	AC	KT59ZP-021	16JB680-044	16JB680-044
6	Gasket	AC	CT90YA-451	CT90YA-501	CT90YA-501
7	Gasket	AC	CT90YA-601	CT90YA-701	CT90YA-701

NOTE: WHEN ORDERING A REPLACEMENT MOTOR (ITEM 1), ALSO ORDER A WEARING RING (ITEM 3) AND GASKET (ITEM 4).

* BEFORE ORDERING REPLACEMENT PUMP PARTS, REFER TO THE PUMP NAME PLATE TO DETERMINE THE PUMP PART NUMBER FOR A DESIGN NO. 1 OR DESIGN NO. 2 PUMP.

WHEN A COMPLETE REPLACEMENT PUMP IS REQUIRED, ORDER DESIGN NO. 2 PUMP. DESIGN NO. 1 PUMP IS NOT AVAILABLE.



Group E — Double Solution Pump - Hermetic



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	MACHINE SIZE 16HA005-011	MACHINE SIZE 16HA012-015	MACHINE SIZE 16HA020	MACHINE SIZE 16HA025-027
DOUBLE SOLUTION PUMP GROUP "E"						
	PUMP SIZE ABSORBER		3" x 4" HCCS	3" x 4" HCCS	3" x 4" HCCS	2 1/2" x 4"HCCM
	PUMP SIZE GENERATOR		1 1/2" x 2 1/2" HCCL	1 1/2" x 2 1/2" HCCL	1 1/2" x 2 1/2" HCCL	2" x 3" HCCO
	*DOUBLE SOLUTION PUMP ASSEMBLY		16E52-2089	16E125-2089	+16HA020-1029	16E252-2089
1	Motor (See Note) Includes:	AC	16E52-002	16E52-002	16E52-002	16E252-001
1A	Bearing	AC	16JB680-007	16JB680-007	16JB680-007	16JB680-008
1B	Bearing	AC	16JB680-007	16JB680-007	16JB680-007	16JB680-008
NI/1C	Rotor	AC	16E52-008	16E52-008	16E52-008	16E252-002
2	Wearing Ring Generator (Casing Side)	AC	KK09XC-025	KK09XC-025	KK09XC-025	KK09XC-036
3	Wearing Ring Generator (Motor Side)	AC	KK09XD-025	KK09XD-025	KK09XD-025	KK09XD-036
4	Wearing Side Absorber (Casing Side)	AC	KK09XC-036	KK09XC-036	KK09XC-036	KK09XC-036
5	Wearing Ring Absorber (Motor Side)	AC	KK09XD-036	KK09XD-036	KK09XD-036	KK09XD-036
6	Gasket, Absorber	AC	16HA005-020	16HA005-020	16HA005-020	16HA005-020
7	Impeller Absorber	NS	KK75XA-562	#KK75XA-563	16E125-002	KK75XA-560
8	Impeller Generator	AC	KK75XA-550	KK75XA-550	KK75XA-550	KK75XA-552
9	Gasket, Generator	AC	16HA005-020	16HA005-020	16HA005-020	16HA005-020
10	Gasket	AC	CT90YA-601	CT90YA-601	CT90YA-601	CT90YA-601
11	Gasket	AC	CT90YA-501	CT90YA-501	CT90YA-501	CT90YA-451
12	Gasket	AC	CT90YA-351	CT90YA-351	CT90YA-351	CT90YA-401
13	Gasket	AC	CT90YA-451	CT90YA-451	CT90YA-451	CT90YA-501
14	Impeller Lockwasher	AC	16JB680-044	16JB680-044	16JB680-044	16JB680-044

* ASSEMBLY NUMBER SHOWN ON HERMETIC PUMP NAME PLATE.

NOTE: WHEN ORDERING A REPLACEMENT MOTOR (ITEM 1), ALSO ORDER WEARING RINGS (ITEMS 3 & 5) AND GASKETS (ITEMS 6 & 9).

+ SOME 16HA020 SIZE MACHINES USED THE 16E125-2089 PUMP WHEN A REPLACEMENT FOR THIS PUMP IS REQUIRED, ORDER THE 16HA020-1029.

WHEN A REPLACEMENT ABSORBER IMPELLER IS REQUIRED FOR A 16E125-2089 PUMP USED ON A 16HA020 MACHINE, USE PART NUMBER 16E125-002.



ABSORPTION MACHINE

16HA

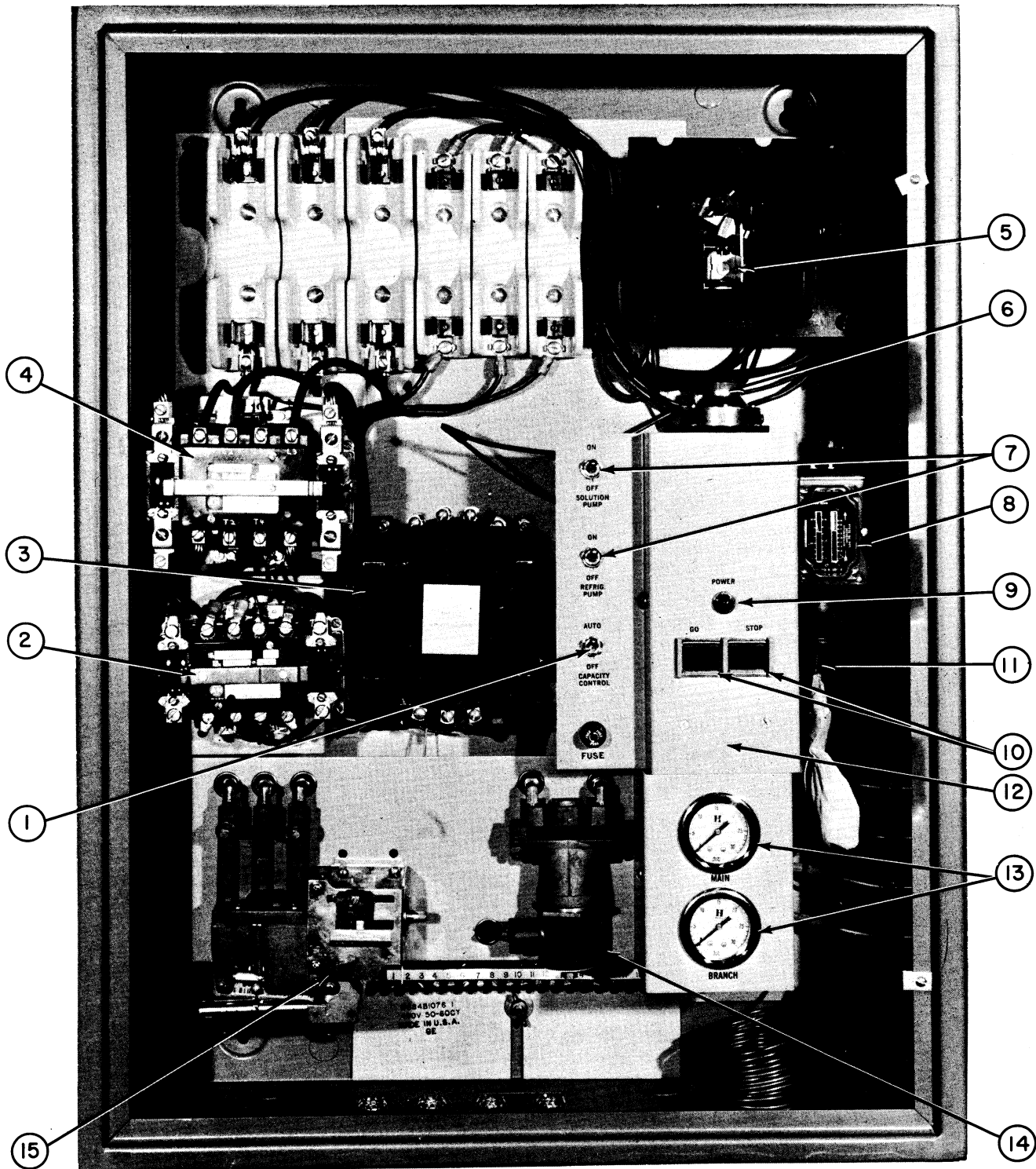
ITEM NO.	DESCRIPTION	LDC	MACHINE SIZE 16HA032-035	MACHINE SIZE 16HA041-052	MACHINE SIZE 16HA059-075	MACHINE SIZE 16HA090-100
DOUBLE SOLUTION PUMP GROUP "E"						
	PUMP SIZE ABSORBER		4" x 5" HCCM	4" x 5" HCCM	5" x 6" HCCS	5" x 6" HCCS
	PUMP SIZE GENERATOR		2" x 3" HCCO	2" x 3" HCCO	3" x 6" HCCL	3" x 6" HCCL
	*PUMP ASSEMBLY		16E232-2089	16HA041-1029 SEE NOTE #1	16HA059-1029	16HA090-1029
1	Motor	AC	16E252-001	16E252-001	16HA059-002	16HA059-002
1A	Includes: Bearing	AC	16JB680-008	16JB680-008	16JB680-008	16JB680-008
1B	Bearing	AC	16JB680-008	16JB680-008	16JB680-008	16JB680-008
NI/1C	Rotor	AC	16E252-002	16E252-002	16HA059-004	16HA059-004
2	Wearing Ring Casing Side (Generator)	AC	KK09XC-036	KK09XC-036	KK09XC-065	KK09XC-065
3	Wearing Ring Motor Side (Generator)	AC	KK09XD-036	KK09XD-036	KK09XC-065	KK09XC-065
4	Wearing Ring Casing Side (Absorber)	AC	KK09XC-050	KK09XC-050	KK09XC-065	KK09XC-065
5	Wearing Ring Motor Side (Absorber)	AC	KK09XC-050	KK09XC-050	KK09XD-040 (SEE NOTE #2)	KK09XD-040 (SEE NOTE #2)
	Wearing Ring(See Note #2)	AC	KK09XC-065			
6	Gasket (Absorber)	AC	16HA005-020	16HA005-020	16HA005-050	16HA005-020
7	Impeller (Absorber)	AC	KK75XA-573	KK75XA-574	*	*
8	Impeller (Generator)	AC NS	KK75XA-553	KK75XA-579	KK75XA-567	KA75XA-568
9	Gasket (Generator)	AC	16HA005-020	16HA005-020	16HA005-020	16HA005-020
10	Gasket	AC	CT90YA-651	CT90YA-651	CT90YA-701	CT90YA-701
11	Gasket	AC	CT90YA-601	CT90YA-601	CT90YA-651	CT90YA-651
12	Gasket	AC	CT90YA-401	CT90YA-401	CT90YA-501	CT90YA-501
13	Gasket	AC	CT90YA-501	CT90YA-501	CT90YA-701	CT90YA-701
14	Impeller Lockwasher	AC	16JB680-044	16JB680-044	16JB680-044	16JB680-044

* ASSEMBLY NUMBER SHOWN ON HERMETIC PUMP NAME PLATE.

NOTE: WHEN ORDERING A REPLACEMENT MOTOR (ITEM 1) ALSO ORDER WEARING RINGS (ITEMS 3 & 5) AND GASKETS (ITEMS 6 & 9).

1. PUMPS WITH SERIAL NO. 245552 TO 245603 REQUIRE SPECIAL ROTOR.
(ROTOR 16E252-002 WILL NOT FIT STANDARD 16HA041-1029 PUMP ASS'Y.)
CONTACT SYRACUSE FOR INFORMATION.

2. KK09XD-040 USED ON PUMPS WITH SERIAL NO. LOWER THAN 245637. ON
PUMPS WITH SERIAL NO. 245637 AND HIGHER, USE KK09XC-065.



Group F — Control Center (Electronic and Pneumatic)



ABSORPTION MACHINE

16HA

ITEM NO.	DESCRIPTION	LDC	PART NUMBER	MACHINE SIZE 16HA005-035	MACHINE SIZE 16HA041-100
CONTROL CENTER (ELECTRONIC & PNEUMATIC) GROUP "F"					
1	Switch SPST	AC	HR53ME-040	1	1
2	Starter 30 AMP (Refrig. Pump)	AC	HN03LC-328	1	1
3	Transformer	AC	16JA010-222	1	1
4	Starter 30 AMP (Solution Pump) Starter 60 AMP (Solution Pump)	AC NA	HN03LC-328 HN03LC-616	1	1
5	Switch, Disconnect	AC	16HA005-005	1	1
6	Relay Time Delay	AC	16HA005-008	1	1
7	Switch, DPDT	AC	HR53MJ-010	2	2
8	Controller, Temp. Act.	AC	19EA660-027	1	1
9	Pilot Light, Green	AC	HY19AD-020	1	1
10	Switch (Micro-Switch Less Actuators)*	AC	HR54MD-001	2	2
11	Relay	AC	HN61DP-060	1	1
12	Transformer		SEE NOTE #1	1	1
13	Pressure Gauge (Pneumatic Only)	AC	KM01AQ-201	2	2
14	Relay E.P. (Pneumatic Only)	AC	HL73DC-009	1	1
15	Thermostat (Pneumatic Only (Design #1)	NA	**HL12MA-111	1	1
15	Thermostat (Pneumatic Only (Design #2)	AC	HL15ME-100	1	1
NI/16	Temperature Sensor	AC	HL15ME-110	1	1
NI/17	Temperature Sensor Well	AC	HL79MZ-100	1	1
NI/18	Rheostat	AC	HT24AA-135	1	1
NI/19	Chilled Water Thermostat (Elec. Only)	AC	HH19AZ-020	1	1
NI/20	Manometer	AC	KM07AY-051	1	1
NI/21	Overload Relay for HN03LC-328	NS	HN68LZ-012	1	1
NI/22	Overload Relay for 60 AMP Starter	NS	HN79ZZ-211	1	1

NOTES:

1. TRANSFORMER PROCURE LOCALLY - M.H. PART NUMBER 10984-28

* MICRO SWITCH INCLUDES (G.E. #327) LIGHT BULB WHICH SHOULD BE PROCURED LOCALLY.

** HL12MA-111 IS NOT AVAILABLE IS REPLACED BY ITEM #15 DESIGN-II-
HL15ME-100 CONTROLLER, ITEM #16 HL15ME-110 SENSOR, ITEM #17
HL79MXZ-100 WELL.



ABSORPTION MACHINE

16HA

MISCELLANEOUS PARTS

DESCRIPTION	LDC	PART NUMBER
Octyle Alcohol (Gallon)	AC	16B4-1551
Tube Cleaning Brush 1/2" O.D. For (Evap) 5/8" O.D. Tru-Fin Tube	AC	KC21AH-151
Tube Cleaning Brush for 3/4" O.D. Tube	AC	KC21AH-105
Tube Cleaning Brush for 5/8" Prime Surface Tube (16HA005 Only)	AC	KC21AH-005
Lithium Bromide (30 Gallon)	AC	PS16CP-030
Lithium Bromide (10 Gallon)	AC	PS20BL-260
Gasket Material (Ethylene Propylene 1/32" Thick x 3' Wide x 5' Long)	AC	QR01-37-3532
Gasket Material (Ethylene Propylene 1/16" Thick x 3' Wide x 5' Long)	AC	QR01-37-3516
Sample Test Bottle	AC	17M32-231
Inhibitor #2 (36 Grams per Bottle) (Package of 12)	AC	PV07CZ-036-012
Inhibitor #2 (180 Grams per Bottle) (Package of 6)	AC	PV07CZ-180-006
Weld Sealer 1 Qt.	AC	PE01LL-021
Spray Paint	AC	PH23GH-017-006
Finish Paint 5 Gallon	AC	19P47-005
Rupture Disc Used on Machines 16HA005-020	AC	EB59LY032
Gasket	AC	CT90YA-401
Rupture Disc Used on Machine 16HA041-100	AC	EB59LY-034
Gasket	AC	CT90YA-601
Rupture Disc Used on Machine 16HA025-035	AC	EB59LY-033
Bracket Purge Exhaust	AC	16HA005-783
Purge Decal	AC	16HA005-3283