

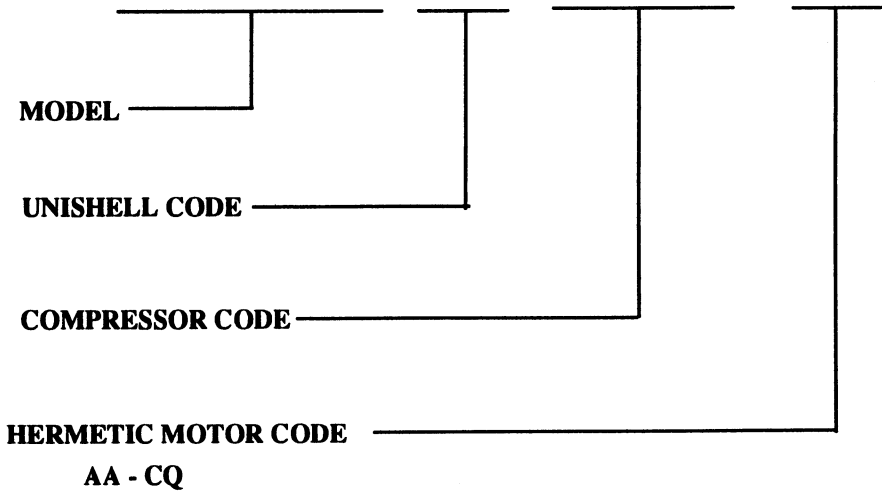


**HERMETIC CENTRIFUGAL CHILLER  
WITH/WITHOUT MICRO-PROCESSOR**

**19 DM**

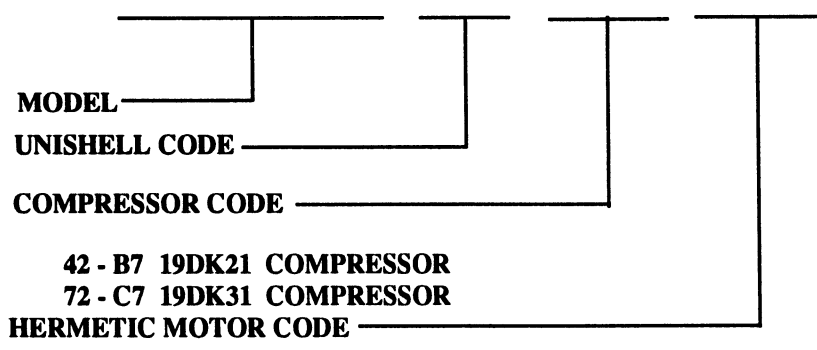
**CURRENT MODEL NUMBER SIGNIFICANCE CHART**

1	2	3	4	5	6	7	8	9	10	11
1	9	D	M							



**EARLIER MODEL NUMBER SIGNIFICANCE CHART**

1	2	3	4	5	6	7	8	9	10
1	9	D	M						





# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICRO-PROCESSOR

# 19 DM

## HOW TO USE THIS CATALOG

THIS CATALOG PRESENTS THE MOST COMMONLY USED SPECIFIED PARTS FOR THE STANDARD 19DM CENTRIFUGAL REFRIGERATION MACHINE AND IS NOT APPLICABLE TO ANY SPECIAL ORDER MACHINES.

1. TO LOCATE PARTS YOU REQUIRE REFER TO THE UNIT ILLUSTRATIONS IN THE FIRST PART OF THIS CATALOG TO OBTAIN THE ITEM NUMBER THEN REFER TO THE PARTS LISTING FOR THE DESCRIPTION, QUANTITY AND UNIT SIZE PART IS USED ON.
2. OCCASIONALLY DUE TO THE LIMITATIONS OF ILLUSTRATIONS USED, A PART MAY NOT BE SHOWN ON AN ILLUSTRATION, THESE PARTS ARE IDENTIFIED BY "N" OR "NI" IN THE COLUMN NEXT TO THE ITEM NUMBER. IDENTIFY A SERIAL NUMBER CHANGE BY "PSN" FOR PRIOR SERIAL NUMBER OR "SSN" FOR START SERIAL NUMBER.

3. IF YOU HAVE A MACHINE THAT USES HCFC - 123 AS THE REFRIGERANT DO NOT USE THIS PARTS CATALOG.

TO SELECT SERVICE PARTS, CONTACT YOUR CARRIER REPRESENTATIVE FOR THE PART NUMBERS FOR YOUR APPLICATION.

4. THE FOLLOWING PARTS ARE NOT LISTED IN THIS CATALOG.

IMPELLER  
COMPRESSOR MOTOR ( ROTOR & STATOR )  
EVAPORATOR TUBES  
CONDENSER TUBES

IF ANY OF THESE PARTS ARE REQUIRED, CONTACT YOUR CARRIER REPRESENTATIVE WITH THE MODEL AND SERIAL NUMBER OF YOUR MACHINE.

5. POSITIVE IDENTIFICATION OF YOUR UNIT SIZE TO PROPERLY SELECT PARTS MAY BE DONE BY REFERRING TO THE NAME PLATE ON THE MACHINE.

<u>CFC - 11 REFRIGERANT CHARGE</u>			<u>OIL CHARGE</u>			<u>TUBE QUANTITIES</u>		
UNISHELL SIZE	LBS	( KG )	COMPR SIZE	GALS	( L )	UNISHELL SIZE	EVAPORATOR	CONDENSER
42	450	(204.1)	21	15	56.8	42	76	80
44	450	(204.1)				44	84	90
46	475	(215.5)	31	21	79.5	46	98	102
50	575	(260.8)				50	110	114
51	575	(260.8)				51	120	124
53	600	(272.2)				53	136	142
55	625	(283.5)				55	148	156
57	625	(283.5)				57	170	178
61	775	(351.5)				61	190	200
63	810	(367.4)				63	212	222
65	850	(385.6)				65	242	254
71	975	(442.3)				71	256	265
72	985	(446.8)	72	270	286			
73	1010	(458.1)	73	298	310			
76	1100	(499)	76	328	346			
77	1150	(521.6)	77	370	388			
78	1200	(544.3)	78	410	431			

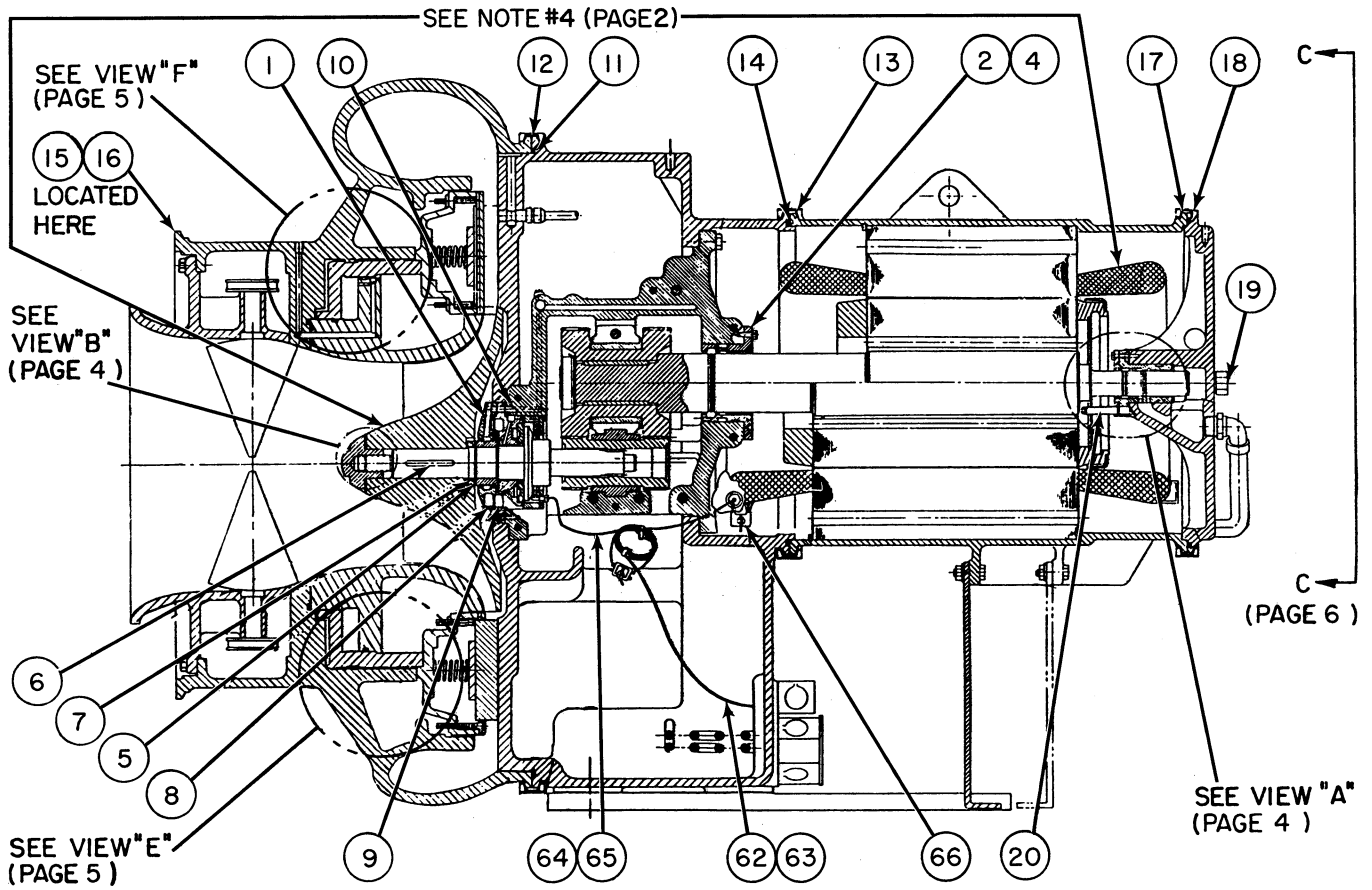
Catalog No.: 19.019 ( 05 - 93 )

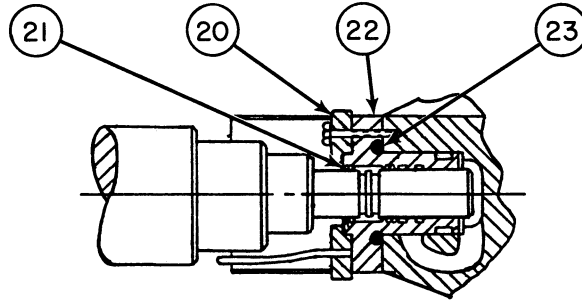
Page : 2

Supersedes: 19.016 ( 07 - 86 ) , 19.013 ( 06 - 85 )

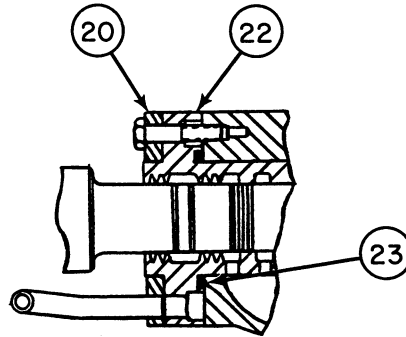
Note: See "Catalog Notes " on last page for explanation of symbolism.

Litho in U.S.A.

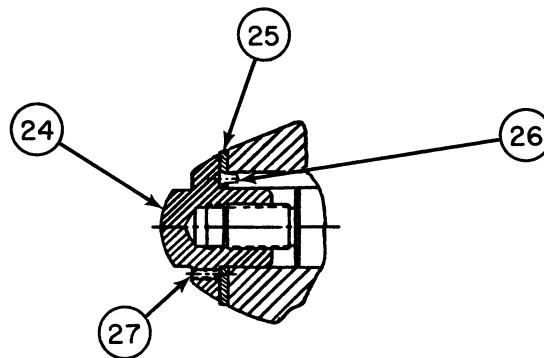




VIEW "A"  
HIGH VOLTAGE

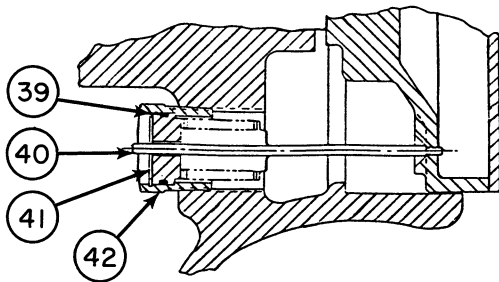
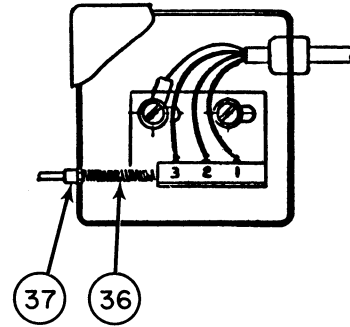
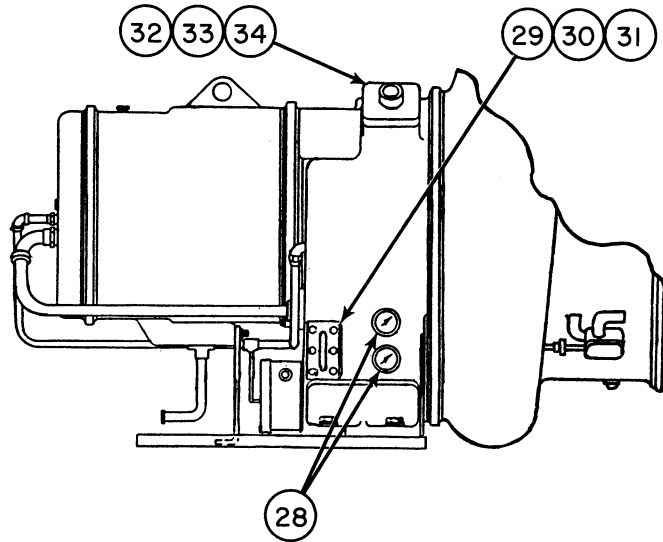


VIEW "A"  
LOW VOLTAGE

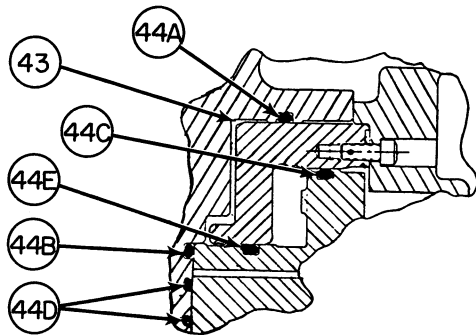


VIEW "B"

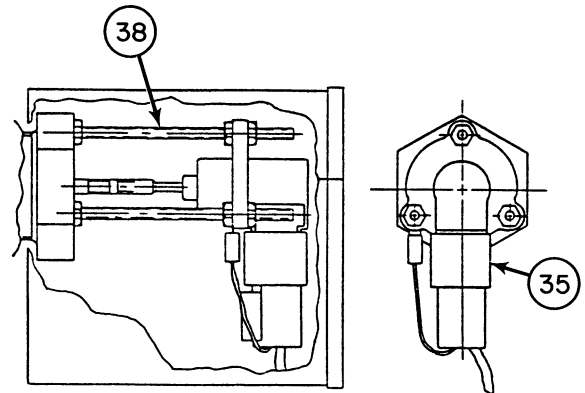
**COMPRESSOR ASSEMBLY**



VIEW "E"



VIEW "F"



**COMPRESSOR ASSEMBLY**

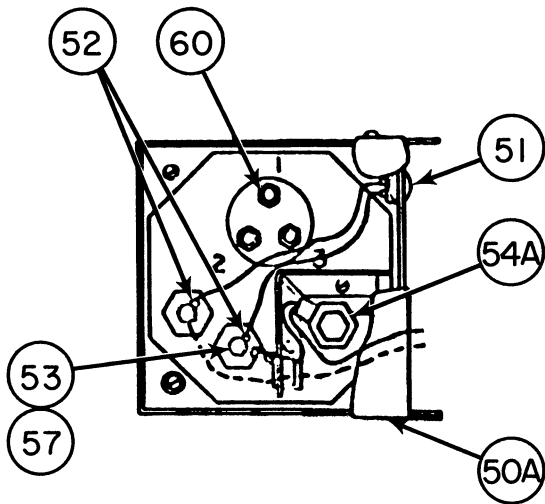
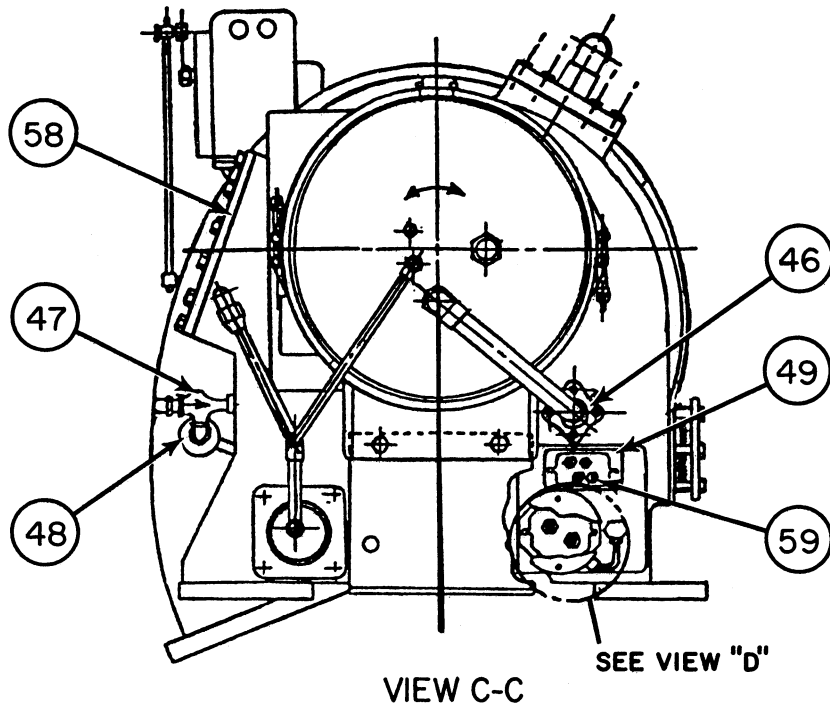
Catalog No.: 19 . 019 ( 05 - 93 )

Page : 5

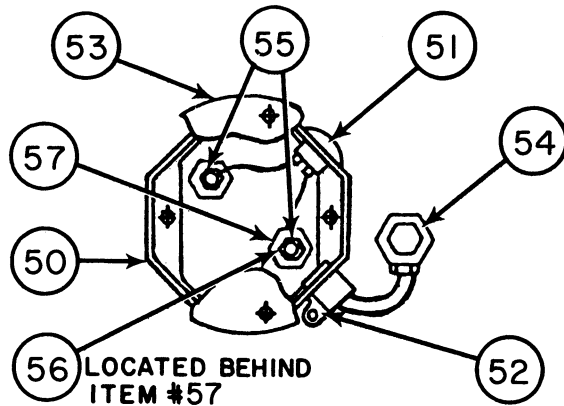
Supersedes: 19.016 ( 07-86 ), 19.013 ( 06-85 )

Note: See "Catalog Notes " on last page for explanation of symbolism.

Litho in U.S.A.



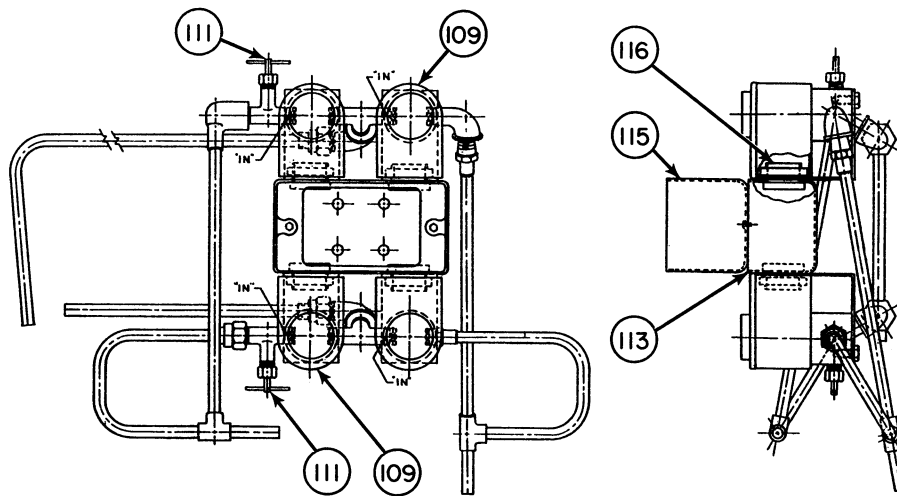
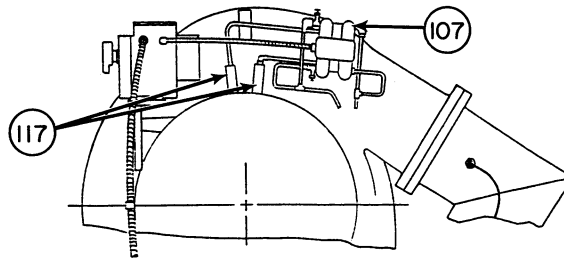
**32SM**



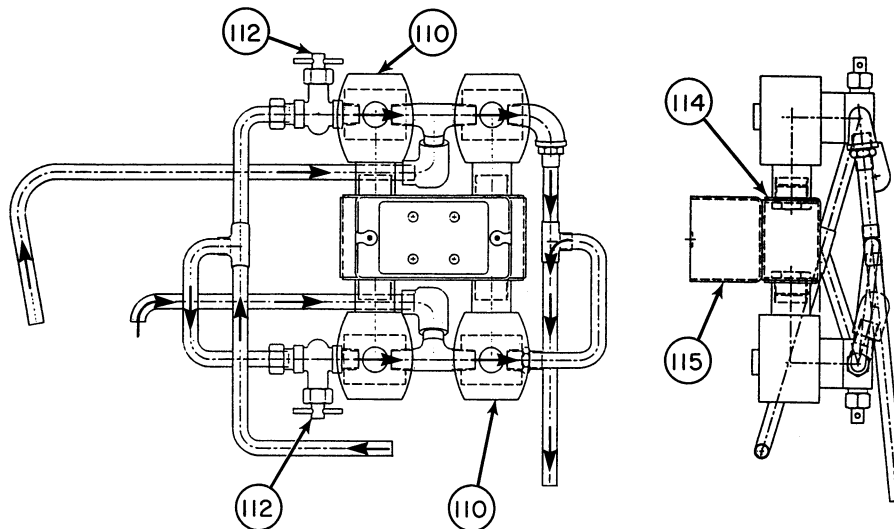
**VIEW D (32MP)**

**32MP**

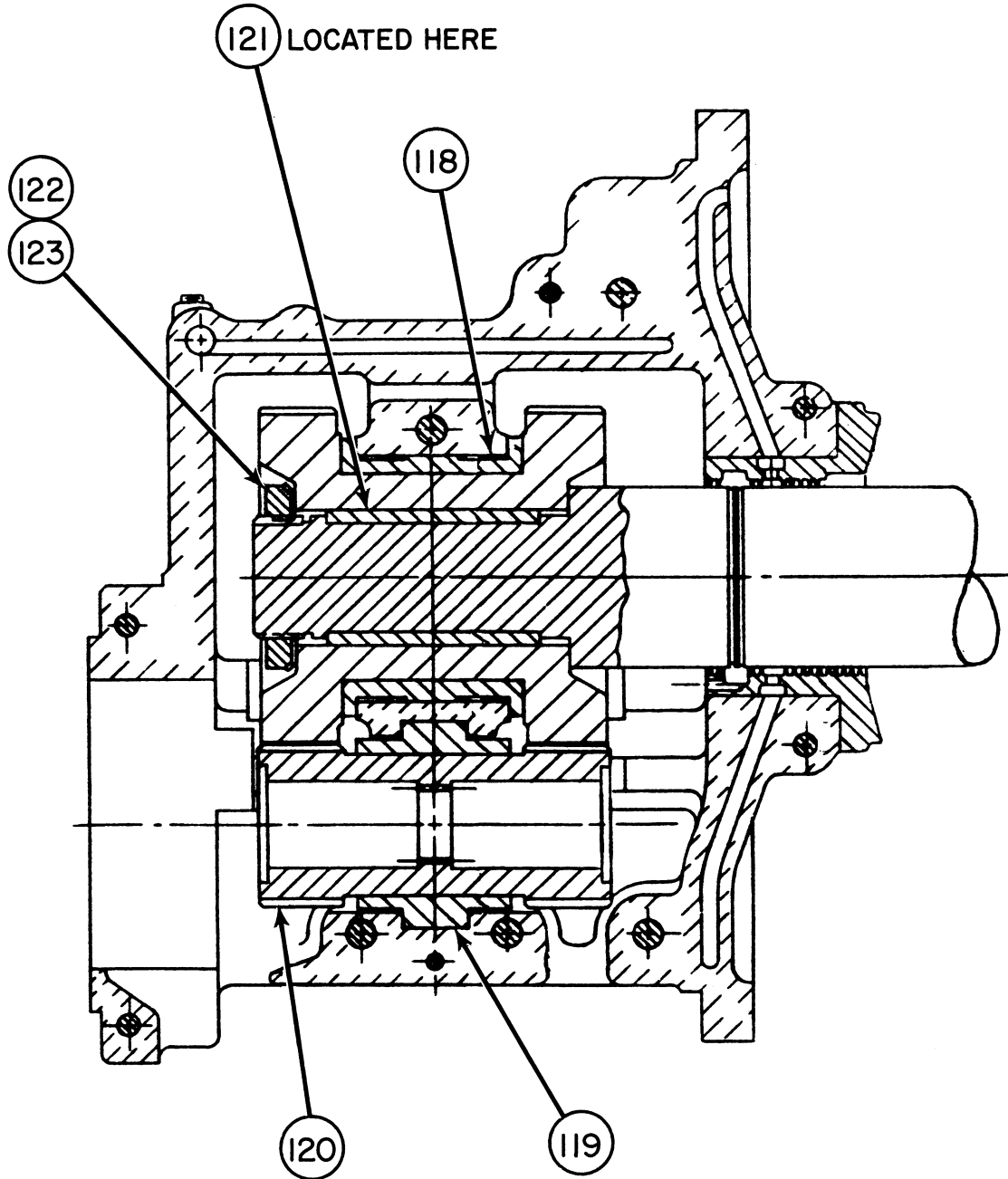
**COMPRESSOR ASSEMBLY**



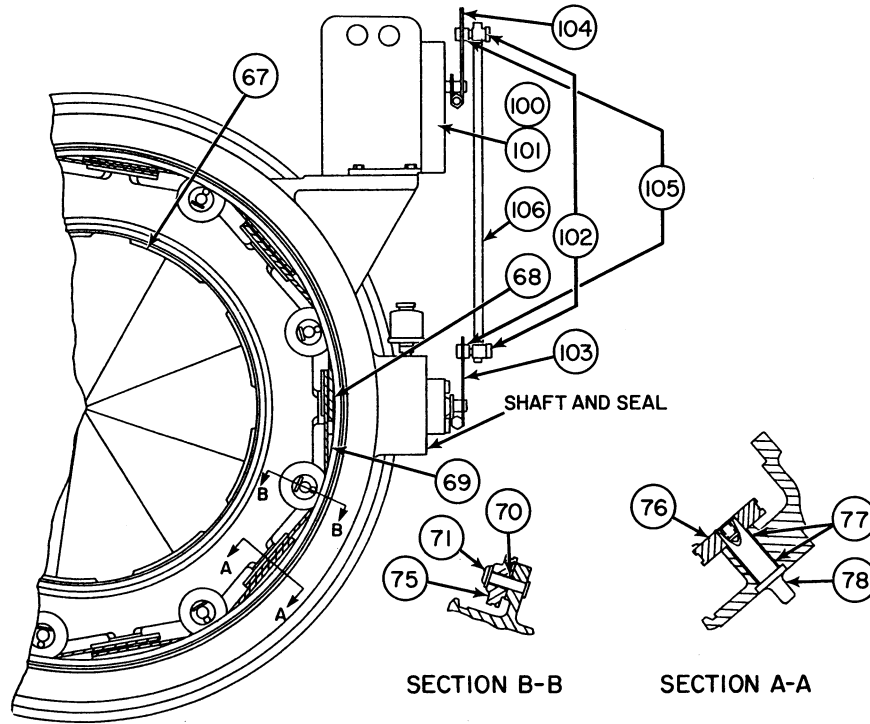
**#107 - SOLENOID VALVE ASSEMBLY**



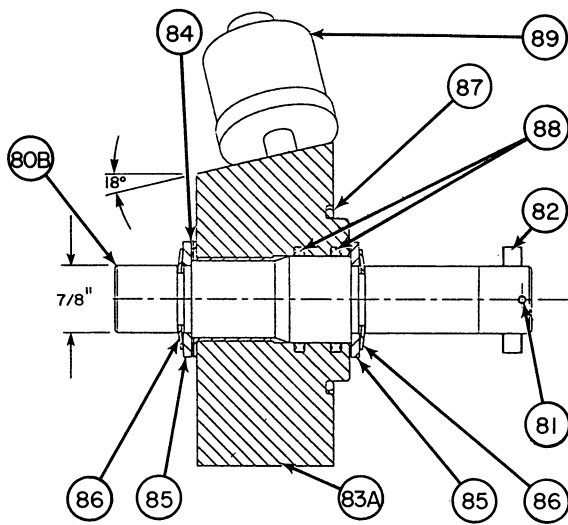
**#108 - SOLENOID VALVE ASSEMBLY**



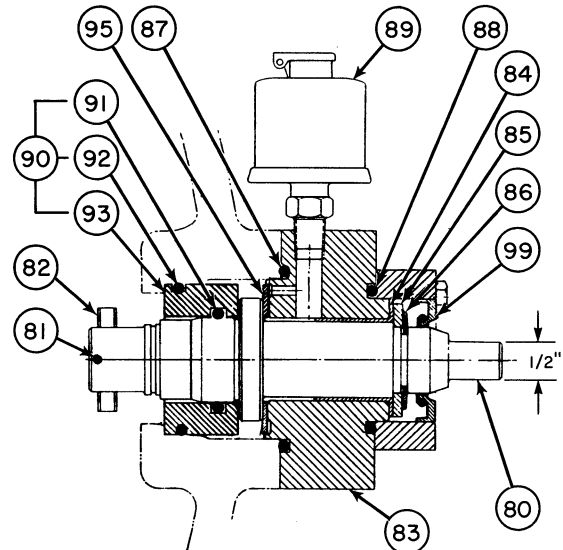
COMPRESSOR TRANSMISSION ASSEMBLY



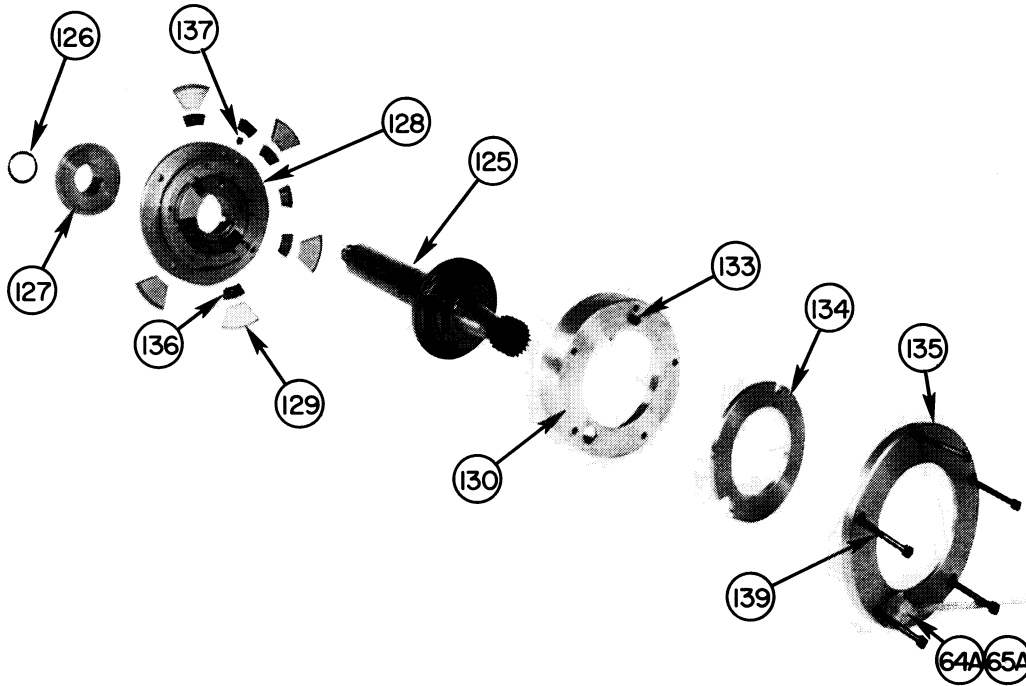
**GUIDE VANE & BLADE RING**



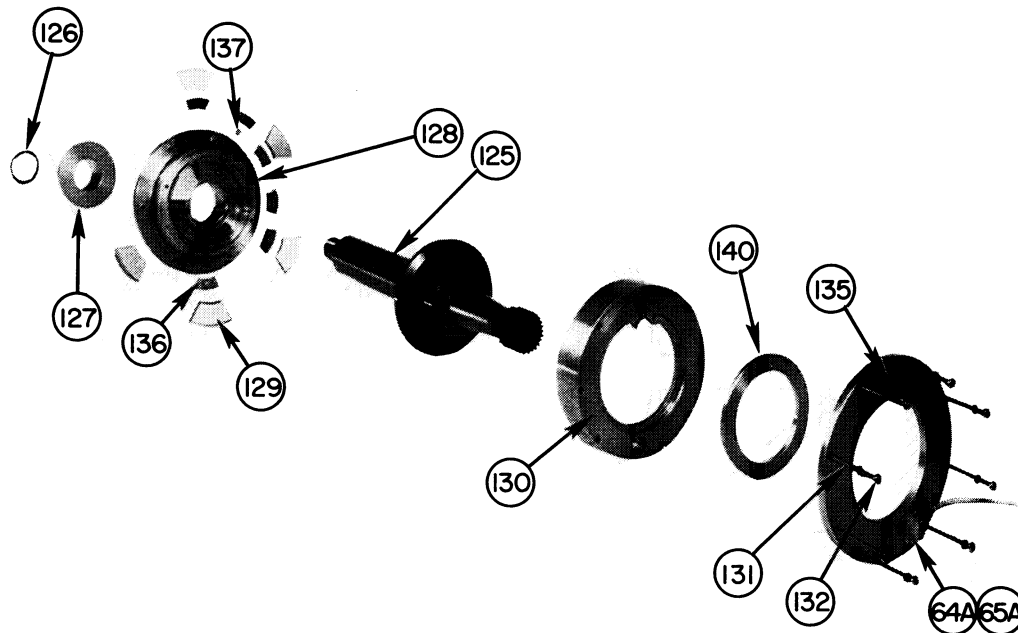
**#79B - SHAFT & SEAL ASSEMBLY**



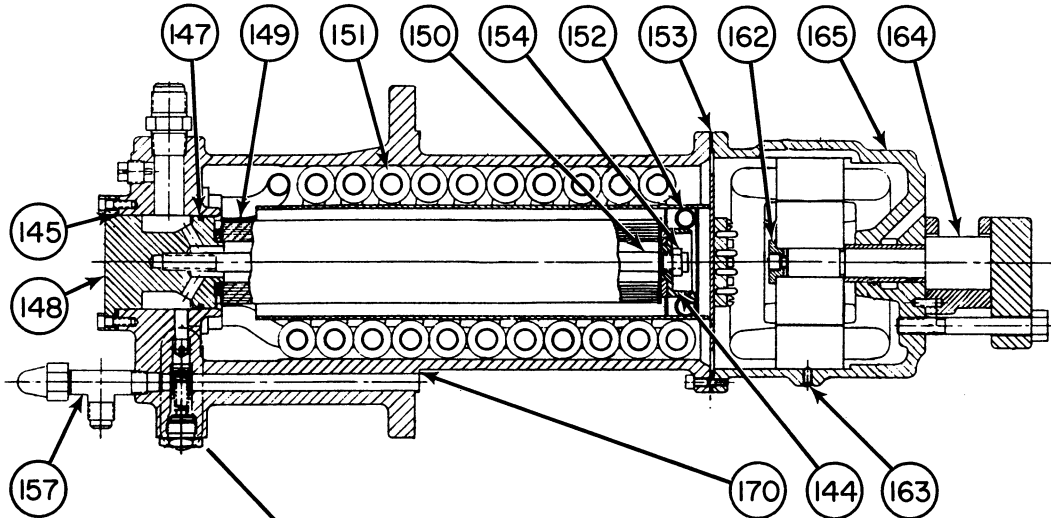
**#79 - SHAFT & SEAL ASSEMBLY**



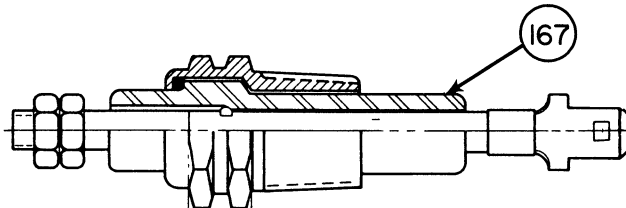
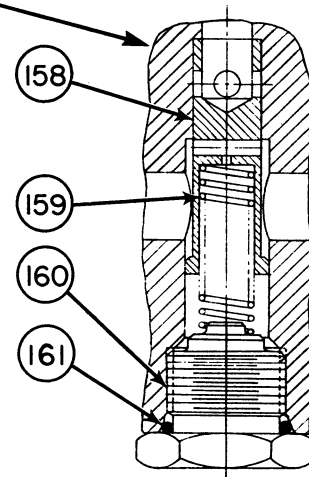
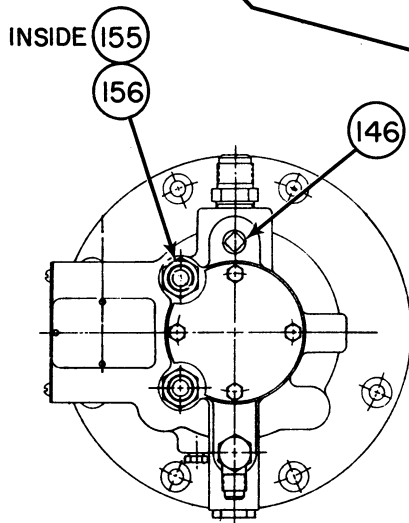
**THRUST BEARING & SHAFT  
21/212 COMPRESSOR**



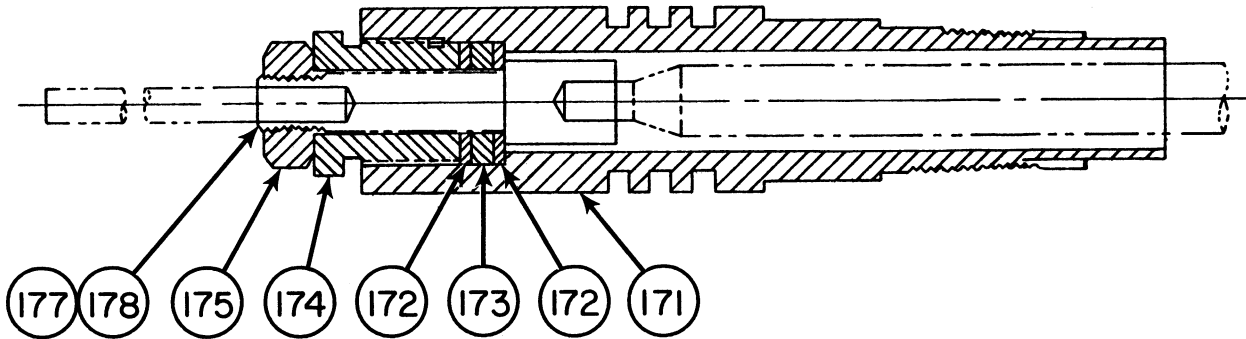
**THRUST BEARING & SHAFT  
31/312 COMPRESSOR**



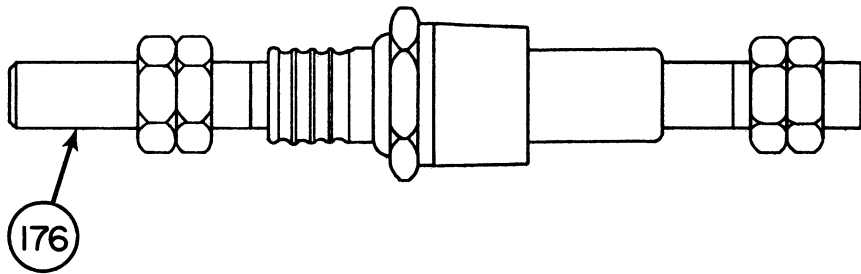
**#143 - OIL PUMP ASSEMBLY**



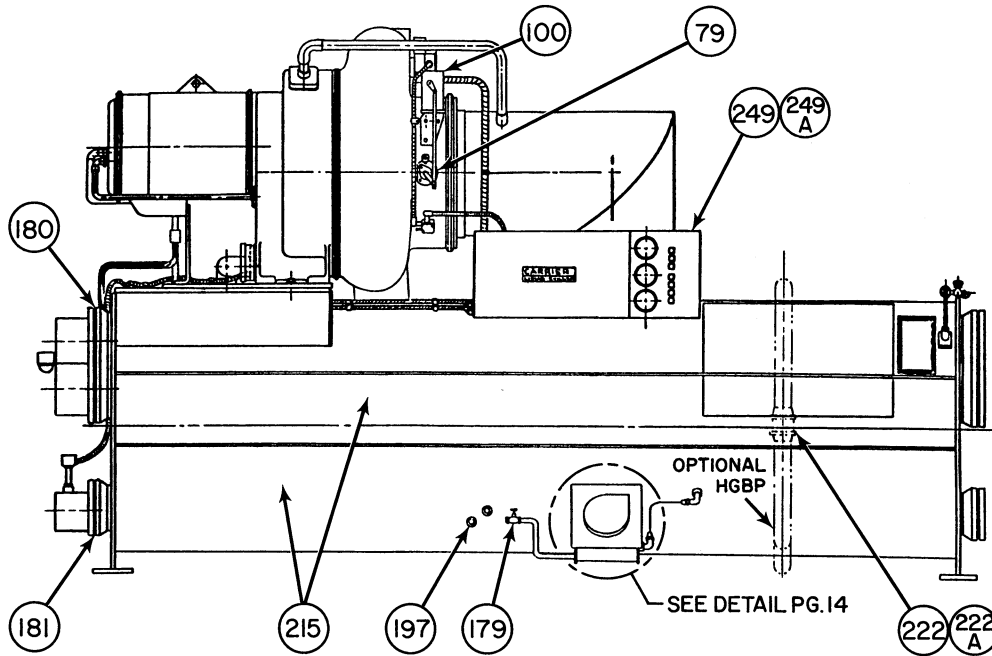
**LUBRICATION PACKAGE  
(OIL PUMP ASSEMBLY)**



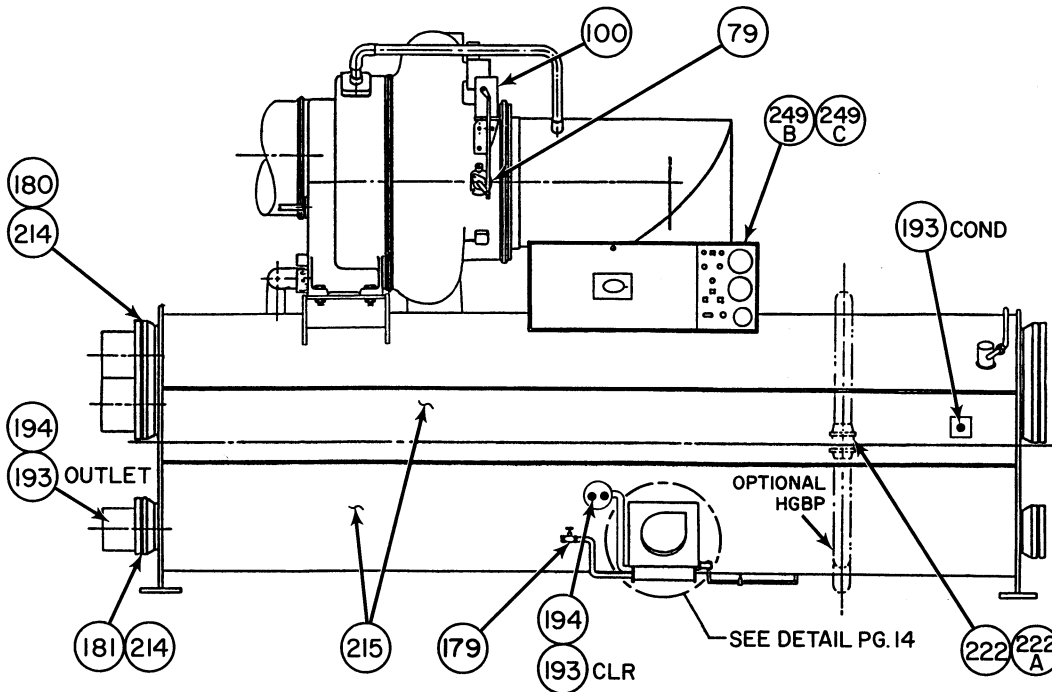
HI-VOLTAGE TERMINAL  
(3 REQ. PER MACHINE)



LO-VOLTAGE TERMINAL PART NUMBER 19DA11-1502  
(6 REQ. PER MACHINE)



**32SM**



**32MP**

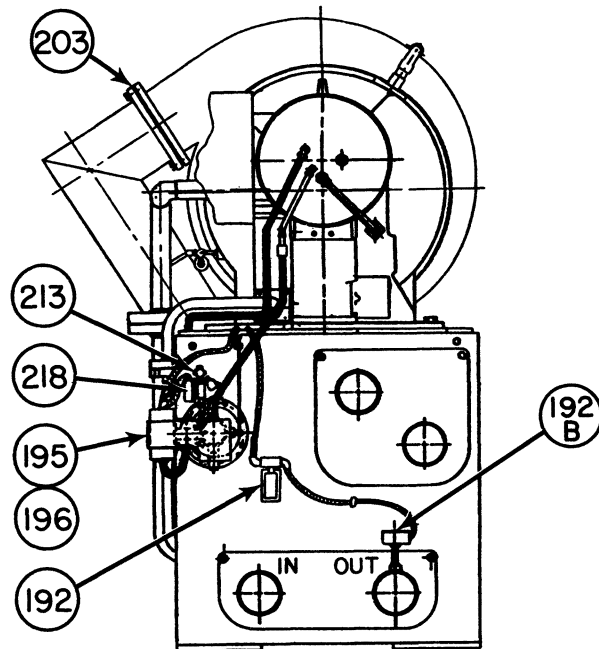
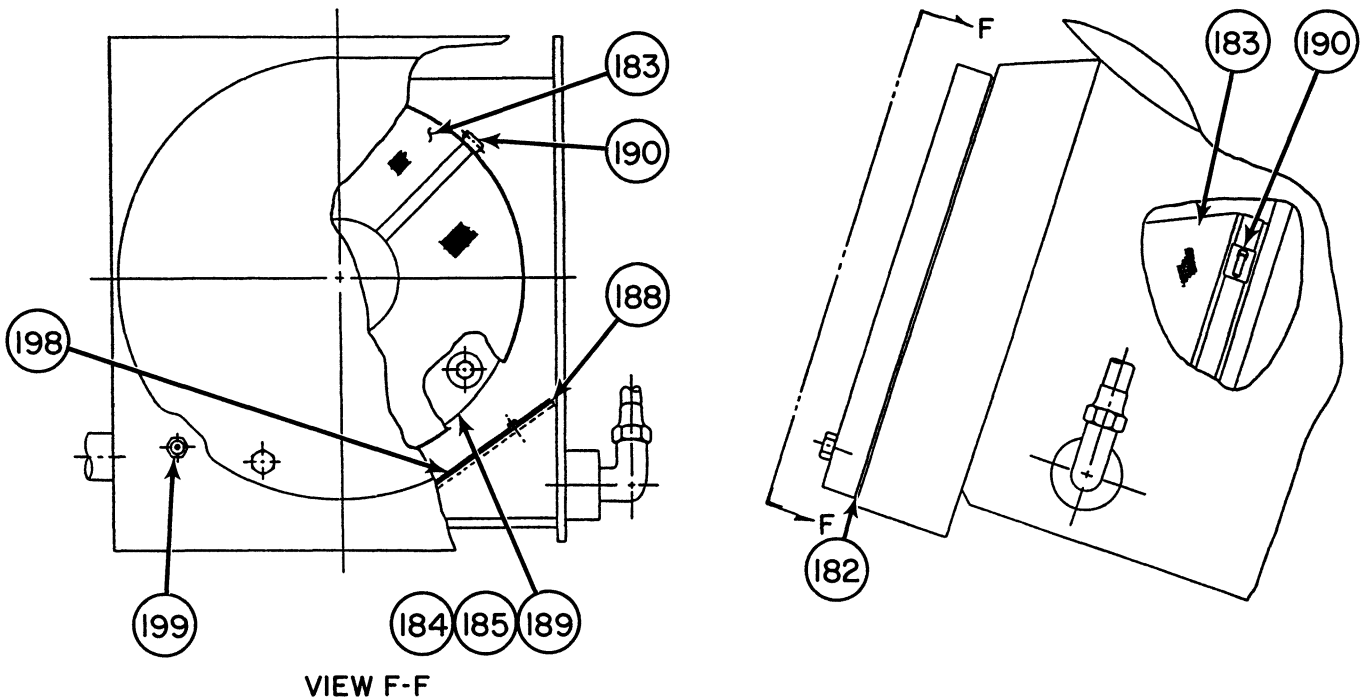
Catalog No.: 19.019 (05-93)

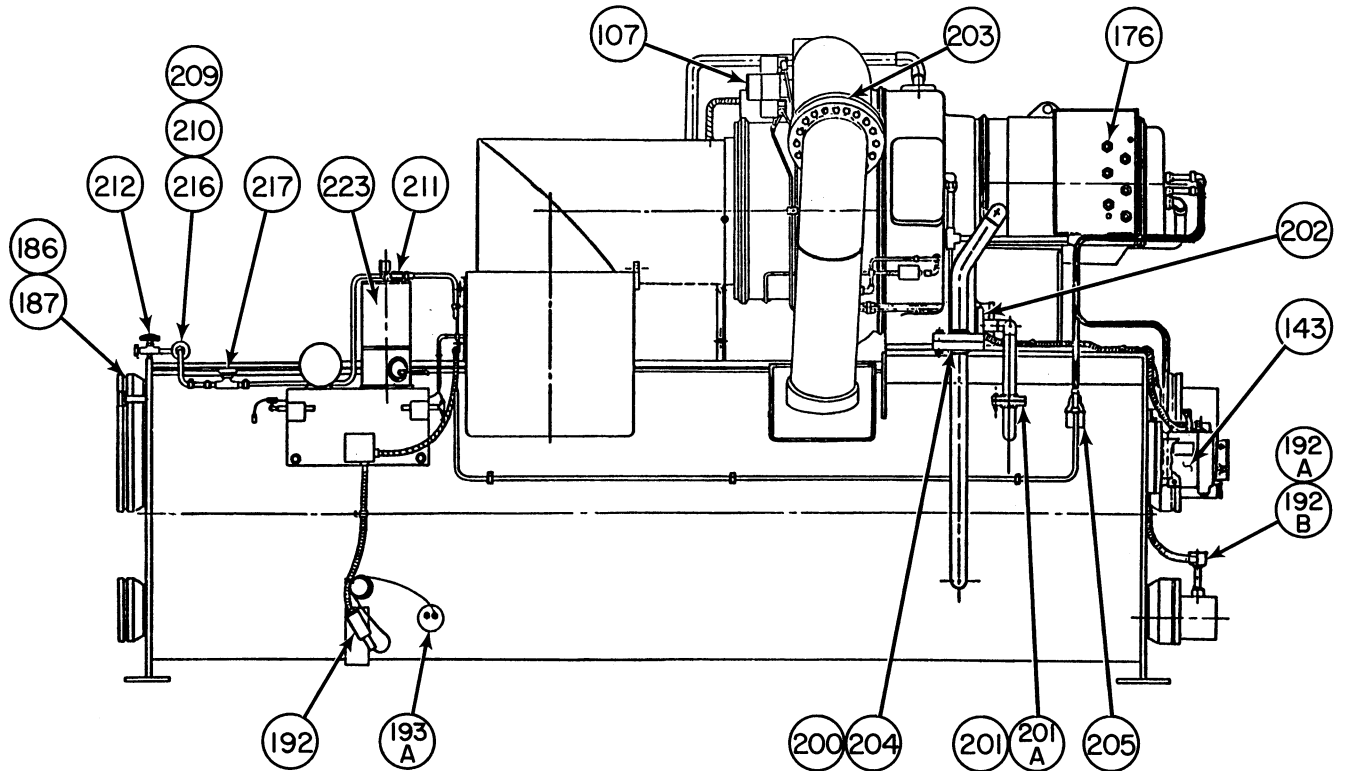
Page : 13

Supersedes: 19.016 (07-86), 19.013 (06-85)

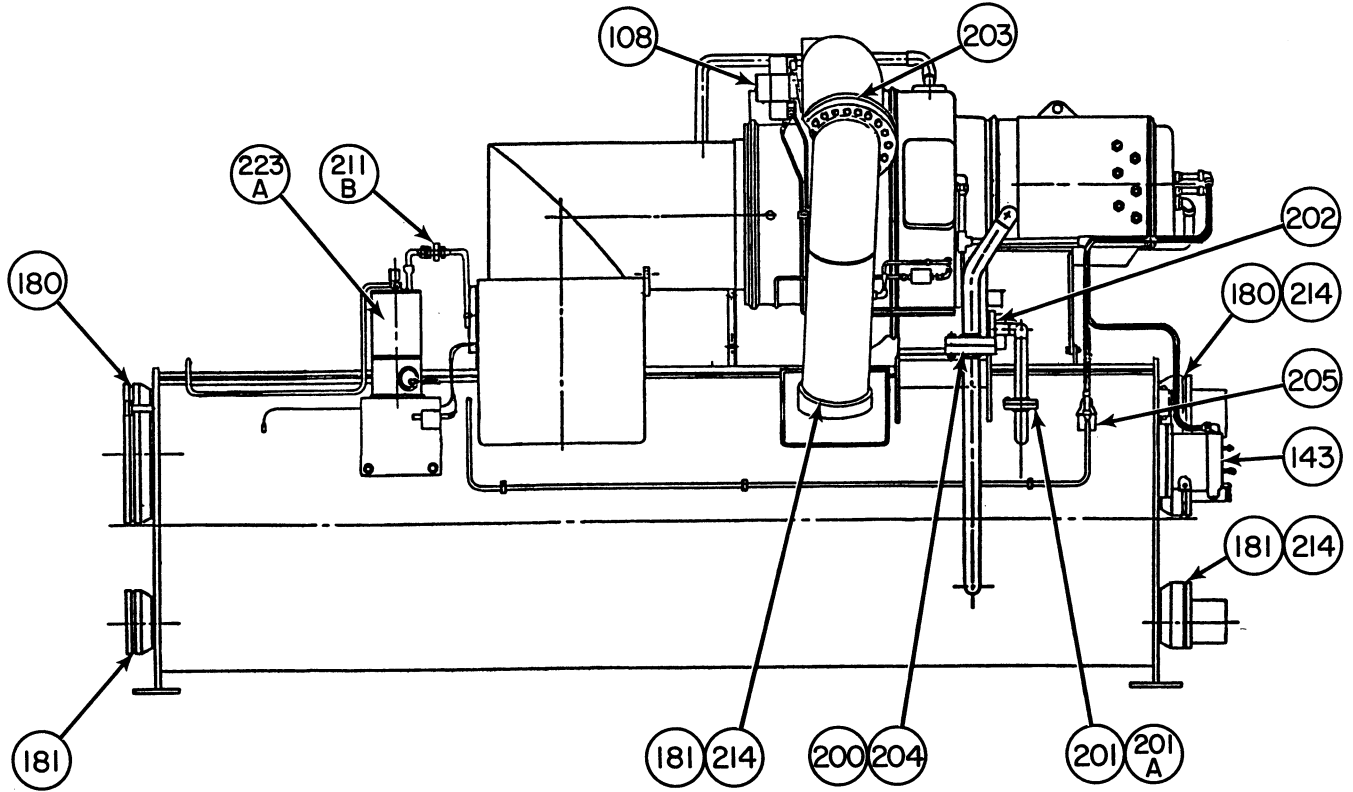
Note: See "Catalog Notes" on last page for explanation of symbolism.

Litho in U.S.A.

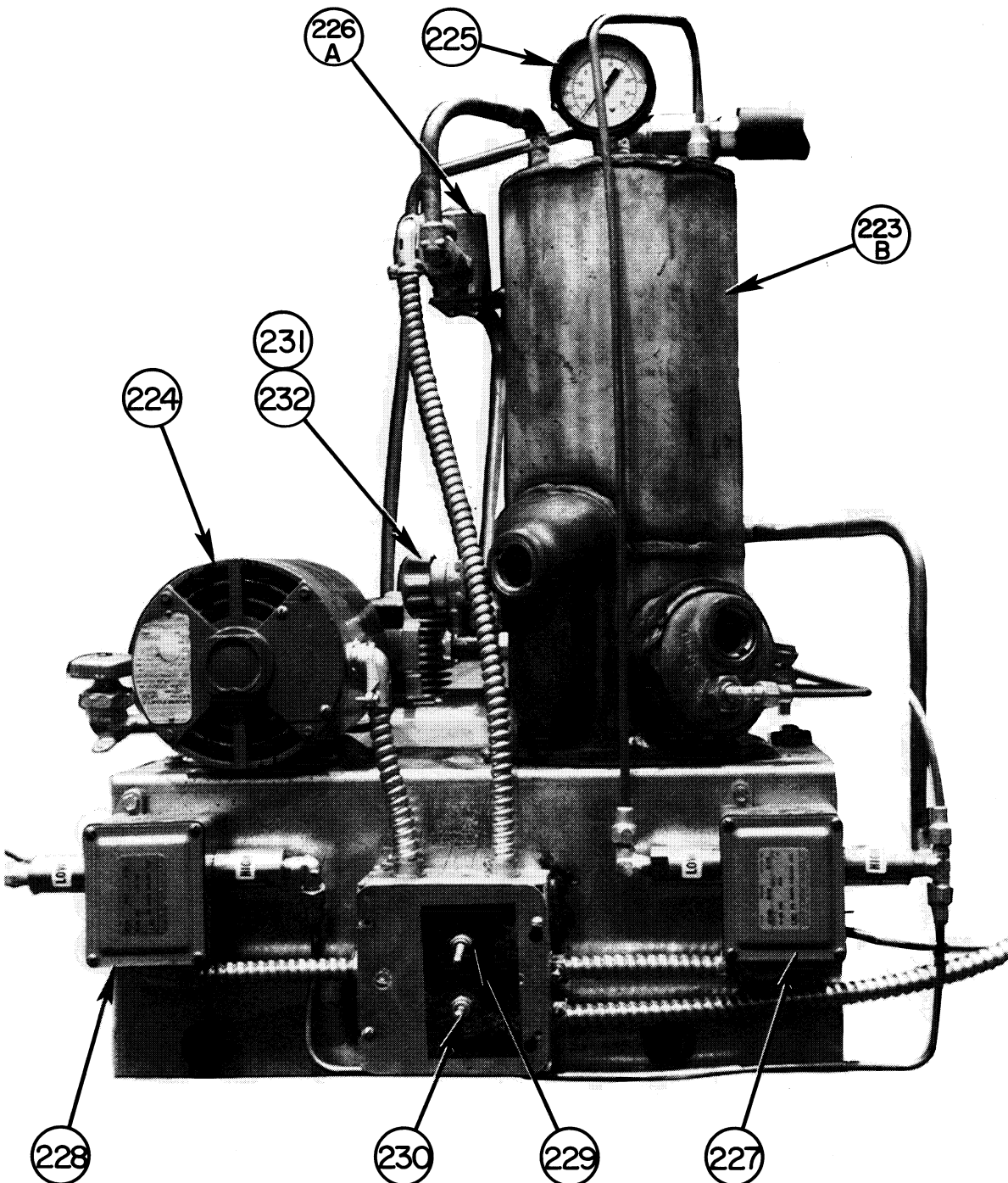




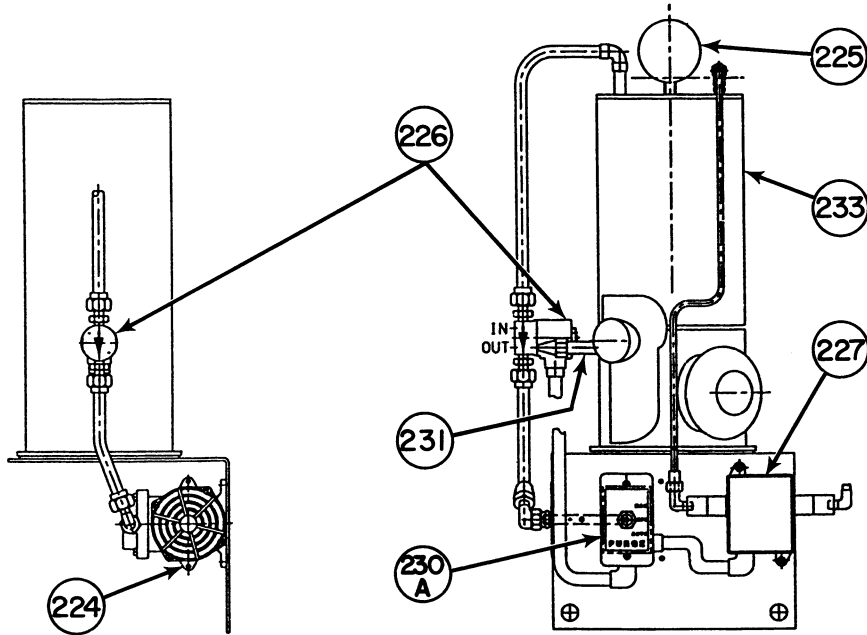
32SM



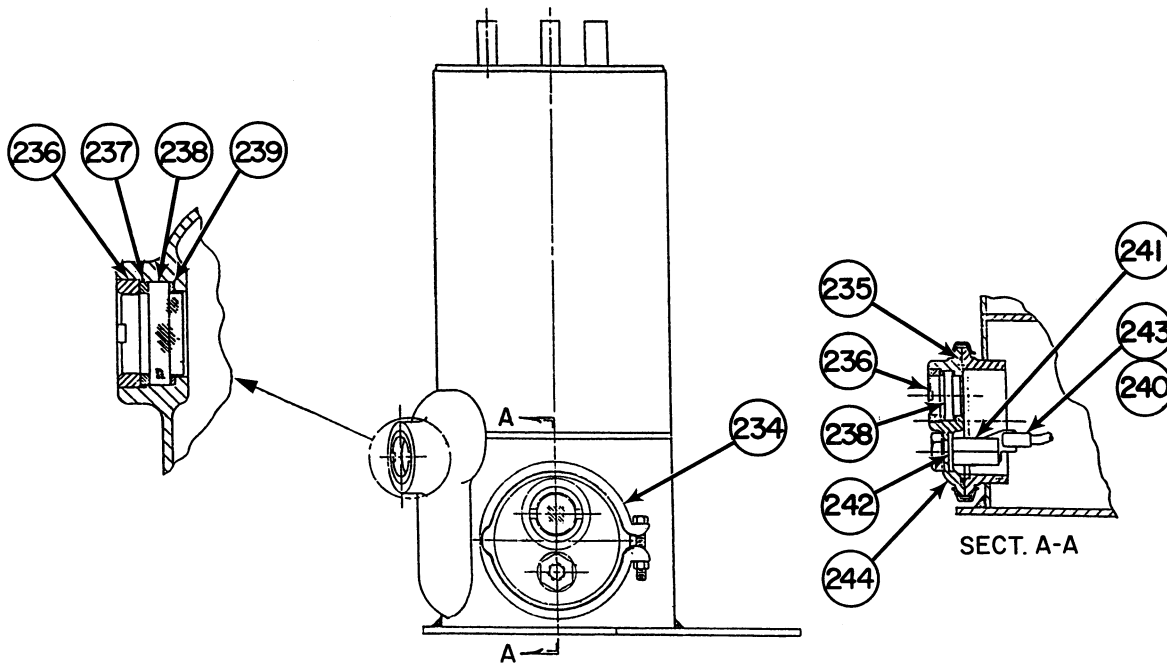
**32MP**



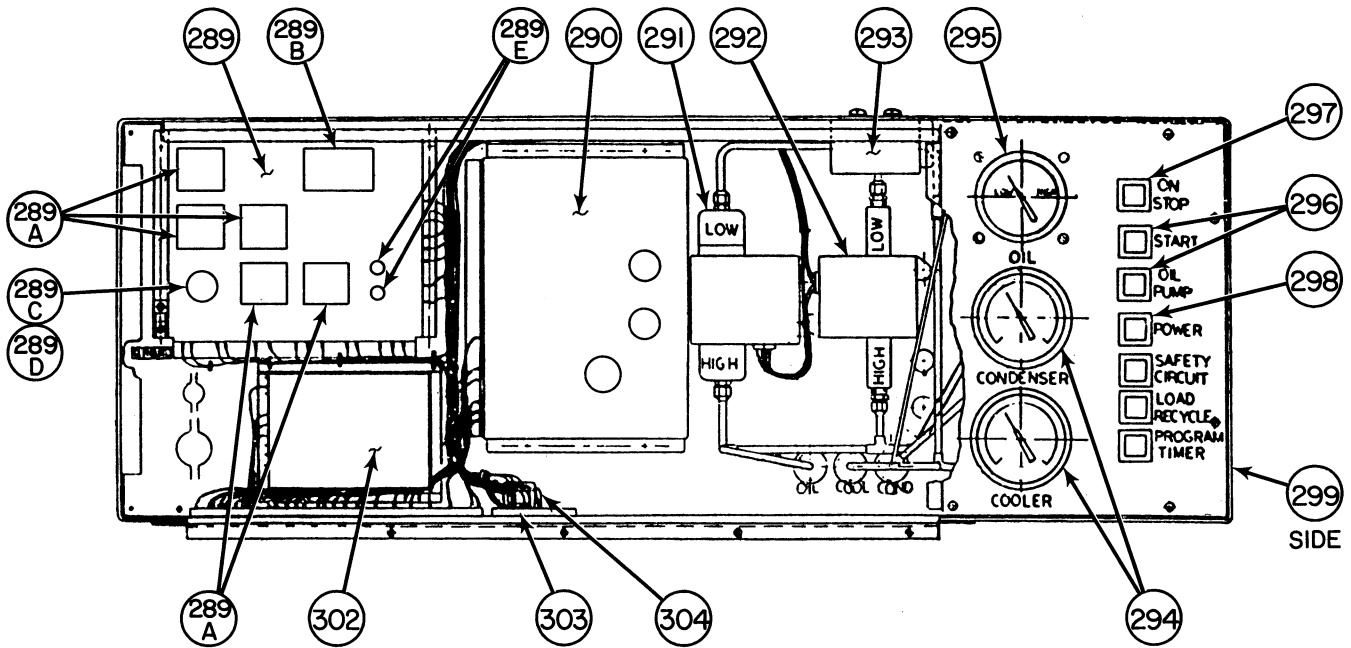
#223A - PURGE ASSEMBLY



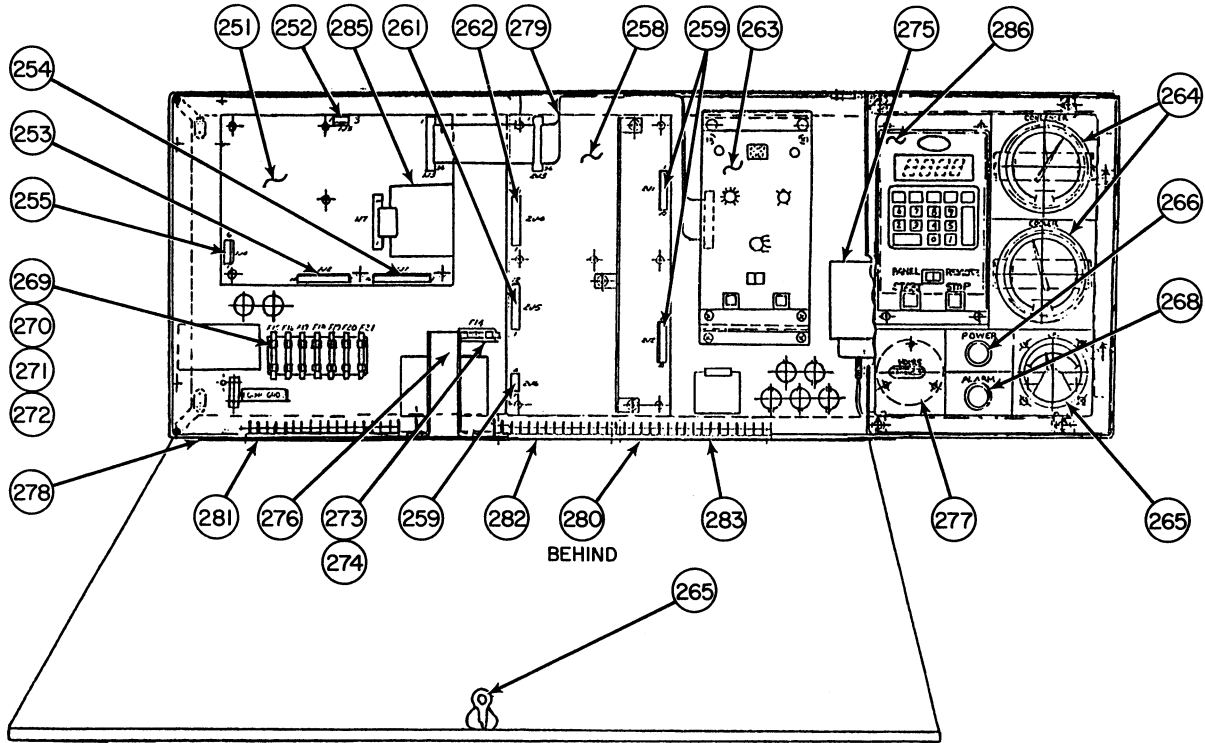
**#223 - PURGE ASSEMBLY**



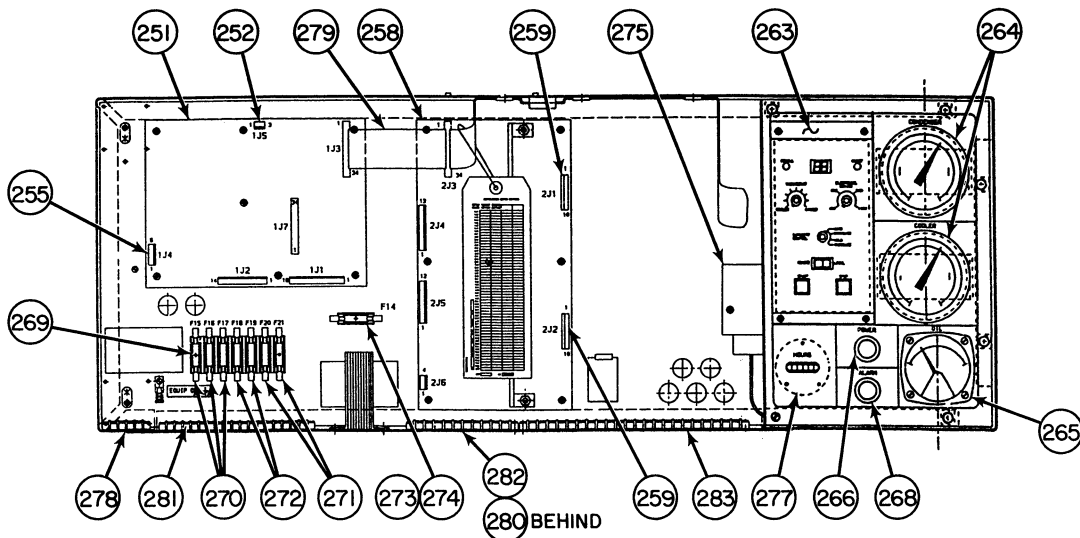
**#233 - PURGE CONDENSER**



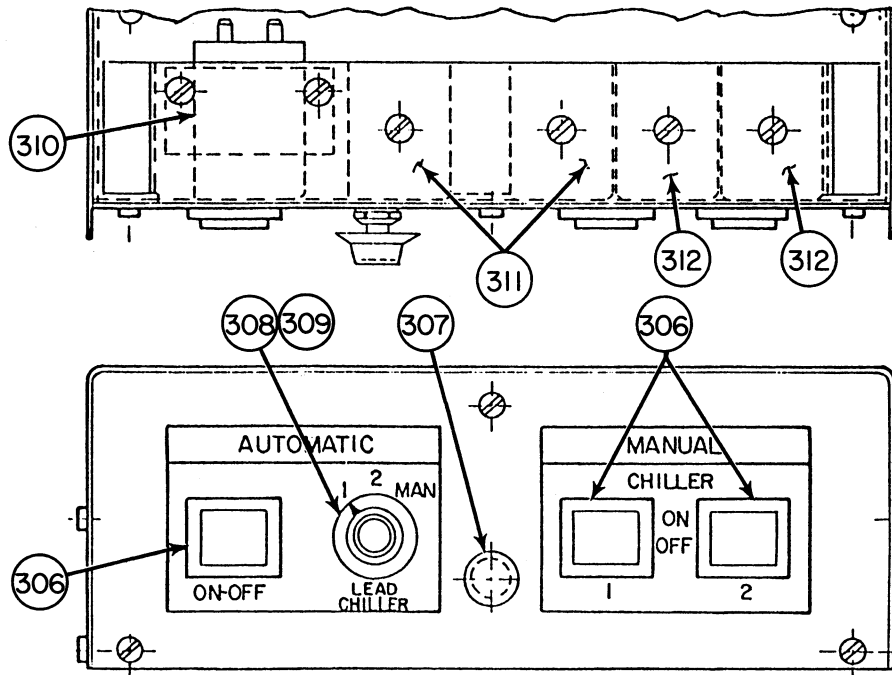
**#287 - CONTROL PANEL ASSEMBLY (32SM)**



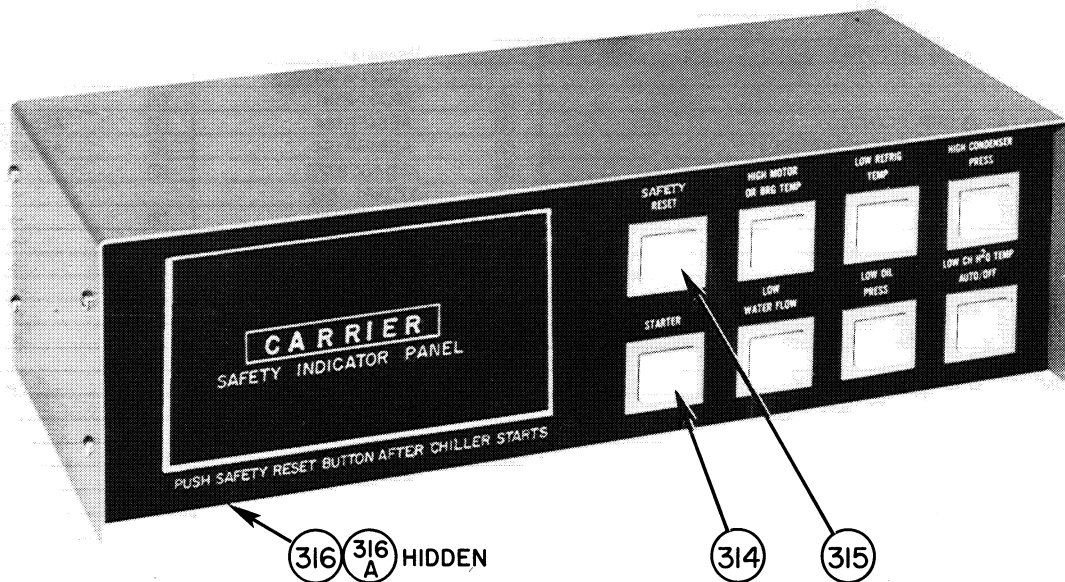
**#249 - BASIC MICROPROCESSOR  
CONTROL PANEL ASSY W/ EXPANDED SERVICE PANEL**



**#249B - BASIC MICROPROCESSOR CONTROL PANEL**



**#305 - LEAD-LAG CONTROL ASSEMBLY**



**#313 - SAFETY INDICATOR PANEL**



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	19DM 21 / 212	19DM 31 / 312
<b>COMPRESSOR GROUP</b>			
1	LABYRINTH ASSEMBLY	19DH21-102	19DH31-102
2A	LABYRINTH ASSEMBLY (SEE NOTE 21,31 SIZES)	19DM660007	19DM660008
2B	LABYRINTH ASSEMBLY (31 HI VOLTAGE ONLY)	X	19DM660009
NOTE: THE 1/4" NPT CONNECTIONS IN LABYRINTH ARE USED ONLY ON RELIANCE MOTOR JOBS. THESE CONNS NEED NOT BE PLUGGED IF YOU HAVE AN IDEAL MOTOR IN COMPRESSOR.			
4	"O" RING	KK71PR046	KK71PR047
5	SPACER, IMPELLER	19D21-1301	19D31-1301
6	KEY, IMPELLER	(3) 19DH212-1032	(3) 19DH312-1032
7	SHIM, IMPELLER	19D21-1551	19D31-1551
8	SEAL, STATIC	(4) KK73GV025	(6) ->
9	"O" RING (LABYRINTH)	KK71PR050	KK71PR055
10	"O" RING (LABY PASSAGE)	KK71PR004	KK71PR005
11	COUPLING, "V" BAND	CT28MM313	CT28MM368
12	"O" RING (COMPR BASE / VOLUTE)	KK71ER293	KK71ER371
13	COUPLING, "V" BAND	CT28MM204	->
14	"O" RING (COMPR BASE / MOTOR HSG)	KK71GX193	->
15	COUPLING, "V" BAND	CT28MM241	CT28MM278
16	"O" RING (VOLUTE / G.V. HSG)	KK71GX225	KK71GX263
17	COUPLING "V" BAND (21 A6)	CT28MM165	X
17A	COUPLING, "V" BAND (21 CB - CL,31)	CT28MM204	->
18	"O" RING (21 A6)	KK71GX155	X
18A	"O" RING (21 CB - CL,31)	KK71GX193	->
19	GLASS, SIGHT	KM36BZ002	->
20	FLANGE & NOZZLE ASSEMBLY (21 A6)	19DH11-112	X
20A	FLANGE & NOZZLE ASSEMBLY (21 C2 - C6; 31 C4 - C7)	19DH21-112	->
20B	FLANGE & NOZZLE ASSEMBLY (31 C8 - C10)	X	19DG212-112
20C	SPRAY HEADER (21,HC1 - HC6; 31,HC4 - HC10)	19DH15-143	->
21	RING, FELT (HI VOLTAGE ONLY)	19DH21-1092	->
22	BEARING, REAR MOTOR	19DH11-1104	->
23	"O" RING (REAR BEARING)	KK71PR025	->
24	NOSE PIECE (1/4 - 28 TAPPING)	19D21-2282	19DH31-1002
24A	NOSE PIECE (5/16 - 24 TAPPING)	19DK212-1032	19DK312-1032
25	LOCKWASHER	19D21-2181	19D31-2181
26	PIN, LOCKING	(3) 19D31-2191	(3) ->
27	SCREW, SET (1/4 - 28 CUP POINT)	(2) AE54FR164	(2) AE54FR167
27A	SCREW, SET (5/16 - 24 CUP POINT KNURL)	(2) AE54BR194	(2) AE54BR197
28	GAUGE, TEMPERATURE	(2) KM14BC222P	(2) ->
29	COVER, SIGHT GLASS	17DA81-1822	->
30	GASKET, SIGHT GLASS	(2) KM39BT041	(2) ->
31	GLASS, SIGHT	KM39BT031	->
32	ASSY, DEMISTOR	19DK112-103	->
33	GASKET, DEMISTOR	19DK119-1053	->
34	COVER, DEMISTOR ASSEMBLY	19DH11-196	->
35	POTENT. KIT, DIFFUSER WALL FEEDBACK	19DM660006	->
	INCLUDES: ITEM 35A		
35A	POTENTIOMETER & CABLE ASSEMBLY	19DM116-364	->
36	SPRING, POTENTIOMETER (OLDER TYPE)	19DM232-1202	->
37	END CAP, POTENTIOMETER (OLDER TYPE)	19DM221-1022	->
38	ROD, THREADED	(3) 19DM221-1102	(3) ->
39	"O" RING	KK71GX013	->
40	BELLOWS ASSEMBLY (8.04" ROD LENGTH) (21)	19DM232-134	X
40A	BELLOWS ASSEMBLY (7.08" ROD LENGTH) (212)	19DM232-534	X
40B	BELLOWS ASSEMBLY (10.50" ROD LENGTH) (31)	X	19DM332-134
40C	BELLOWS ASSEMBLY (8.34" ROD LENGTH) (312)	X	19DM332-534
41	SNAP RING	AU47AA571	->
42	FITTING, SNAP RING (6 TAPPED HOLES)	19DM232-1133	->
43	PISTON (TEFLON COATED) 21 COMPR (SEE NOTE#1 NEXT PAGE)	19DM232-1033	X
43A	PISTON (TEFLON COATED) 31 COMPR (SEE NOTE #1)	X	19DM332-1033
43B	PISTON (TEFLON COATED) 212 COMPR (SEE NOTE#2 NEXT PAGE)	19DM232-1073	X



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	19DM 21 / 212	19DM 31 / 312
COMPRESSOR GROUP (CONT'D)			
43C	NI PISTON (TEFLON COATED) 312 COMPR (SEE NOTE #2)	X	19DM332-1073
NOTE #1 THESE PISTONS WERE USED ON EARLY UNITS WITH A 10 DIGIT I. D. CODE THAT HAD A 2 DIGIT COMPR CODE IN THE 7 TH & 8 TH DIGITS (SEE EARLIER MODEL NO. SIGNIFICANCE CHART ON PAGE #2.) THESE PISTONS ARE NOT INTERCHANGABLE WITH THOSE IN NOTE #2.			
NOTE #2 THESE PISTONS WERE USED ON UNITS WITH AN 11 DIGIT I. D. CODE THAT HAD A 3 DIGIT COMPR CODE IN THE 7,8 & 9 TH DIGITS. (SEE CURRENT MODEL NO. SIGNIFICANCE CHART ON PAGE #2) THESE PISTONS ARE NOT INTERCHANGABLE WITH THOSE IN NOTE #1			
44	NI VOLUTE "O" RING PACKAGE	19DM660001	19DM660002
	INCLUDES: ITEMS 44A - 44F		
44A	QUAD - BON RING (VOLUTE)	KK74ZW196	KK74ZW246
44B	"O" RING (CHAMBER)	19DM212-1003	19DM222-1003
44C	QUAD - BON RING (SHROUD)	KK74ZW170	KK74ZW215
44D	NI "O" RING (SUPPLY) (7/8" O.D.)	KK71GX008	->
44E	QUAD - BON RING (PISTON)	KK74ZW136	KK74ZW170
44F	"O" RING	19DM212-1272	19DM312-1272
45	NI PIN, ANTI - ROTATION	19DM232-1172	19DM332-1172
46	GASKET, SEAL LEAK RETURN	DK37GA001	->
47	EJECTOR	17EA013-1572	->
48	STRAINER	KH11NG070	->
49	BOX, CONDUIT (32MP)	HX22FS036	->
50	BOX, CONDUIT (32MP)	19DK101-152	->
50A	BOX, OIL HEATER CONDUIT (32SM)	HX22FB052	->
51	LIGHT, PILOT (WHITE) (105 - 125 VDC)	HY19AD024	->
52	CONNECTOR 3/8" - 90	NSS	->
53	COVER, TERMINAL BOX	NSS	->
54	SWITCH, TEMPERATURE (32MP)	HH16NA020	->
54A	SWITCH, TEMPERATURE (32SM)	HH16NA019	->
55	TERMINAL, RING	(2) HY94TW330	(2) ->
56	TERMINAL, RING	HY94TW475	->
57	HEATER, OIL	HT32ZZ122	->
58	GASKET, ACCESS OPENING	19DK119-1062	19DK139-1062
59	TERMINAL, HERMETIC (32MP)	(4) HY85FP065	(4) ->
60	TERMINAL, HERMETIC (32SM)	(4) HY85FP041	(4) ->
62	WIRING ASSEMBLY (THRUST SENSOR) (32MP)	19DK660004	->
	INCLUDES: ITEMS 62A - 62C		
62A	NI WIRING ASSEMBLY	NSS	->
	NOTE: BOTH 62A & 63A USE 19DK119 -1102 BUSHING		
62B	NI RING, SNAP	AU49AR210	->
62C	NI RETAINER, GROMMET	19DK212-1052	->
63	WIRING ASSEMBLY (THRUST SENSOR) (32SM)	19DA660008	->
	INCLUDES: ITEMS 63A - 63C		
63A	NI WIRING ASSEMBLY (SEE NOTE ON ITEM # 62A)	NSS	->
63B	NI RING, SNAP	AU49AR201	->
63C	NI RETAINER, GROMMET	19DK212-1052	->
64	NI THERMOSTAT WIRE ASSEMBLY (32SM) (THRUST)	19DA11-112	->
	INCLUDES: ITEM 64A		
64A	THERMOSTAT	19DA11-1402	->
65	NI THERMISTOR WIRE ASSEMBLY (THRUST) (32MP)	19DK116-202	->
	INCLUDES: ITEM 65A		
65A	NI SENSOR	HN79NZ045	->
66	SENSOR, TEMPERATURE (MOTOR WINDINGS) (32SM)	HH12HA105	->
66A	NI SENSOR, TEMPERATURE (MOTOR WINDINGS) (32MP)	32MP500354	->
GUIDE VANE & BLADE RING ASSEMBLY			
67	BLADE RING ASSEMBLY	19DM232-104	19DM332-104
	INCLUDES: ITEMS 68 - 78		
68	PULLEY, DRIVE	19D21-2063	->
69	CABLE ASSEMBLY	19D21-192	19D31-192
70	BUSHING (IDLER PULLEY)	(9) KT53XL055	(9) ->
71	PIN PACKAGE	19DA21-001	->
	INCLUDES: ITEMS 72 - 74		
72	NI PIN	(9) NSS	(9) ->
73	NI WASHER	(18) NSS	(18) ->



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	19DM 21 / 212	19DM 31 / 312
GUIDE VANE & BLADE RING ASSEMBLY (CONT'D)			
74	NI COTTER PIN	(18) AX01AA046	(18) ->
75	PULLEY, IDLER	(9) 19D21-1252	(9) ->
76	PULLEY, BLADE	(8) 19D21-1242	(8) ->
77	BUSHING (FOR ITEM #78)	(18) KT53XL093	(18) ->
78	BLADE, PRE WHIRL	(9) 19D21-1044	(9) 19D31-1044
79	SHAFT & SEAL ASSY 1/2" (VERT. OILCUP)	19D21-113	->
79A	NI SHAFT & SEAL ASSY 1/2" (SMALL OILCAP)	19DM212-213	->
79B	SHAFT & SEAL ASSY 7/8" (ANGLE OILCUP)	19DM222-253	->
	INCLUDES: ITEMS 80 - 99		
80	SHAFT (1/2" DIA. CRANK END) (FOR #79)	19D21-1063	->
80A	NI SHAFT (1/2" DIA. CRANK END) (FOR #79A)	19DM212-1103	->
80B	SHAFT (7/8" DIA. CRANK END) (FOR #79B)	19DM212-1123	->
81	ROLL PIN	AX14CA042	->
82	KEY	19D21-1391	->
83	HOUSING, BEARING (FOR #79)	19D21-1073	->
83A	HOUSING, BEARING (FOR #79A,79B)	19DM222-1093	->
84	FLANGED NYLINER	KT58BZ082	->
85	WASHER, OUTER THRUST	(2) 19DM212-1282	(2) ->
86	RING, BOWED RETAINER	(2) AU45AR187	(2) ->
87	"O" RING (2 3/8" O.D.)	KK71PR020	->
88	"O" RING (1 3/8" O.D.)	(2) KK71PR015	(2) ->
89	OIL CUP (SNAP CAP) (PRESS IN) (FOR 79A)	CW51ZZ001	->
89A	OILER, RESERVOIR 1/8" NPT (FOR 79,79B)	CW51EG603	->
90	SHAFT SEAL PACKAGE	19C35-014	->
	INCLUDES: ITEMS 91 - 93		
91	QUAD - RING	KK74ZW181	->
92	QUAD-RING	KK74ZW112	->
93	SEAL, MECHANICAL	NSS	->
95	WASHER, THRUST (INNER)	KT59WL160	->
97	"O" RING	KK71GZ018	->
99	SEAL,OIL	KT90UL087	->
100	MOTOR, ACTUATOR	HF26BB061	->
	INCLUDES: ITEMS 101		
101	NI FEEDBACK POT	HT24AV120	->
102	CONNECTOR, LINKAGE	(2) HF91BB125	(2) ->
103	CRANK ARM (LOWER) (CST) (1/2" BORE)	19D23-2152	->
103A	CRANK ARM (LOWER) (STL) (7/8" BORE)	19DM212-1322	->
104	CRANK ARM (UPPER) (CST) (1/2" BORE)	19EB412-1032	->
104A	CRANK ARM (UPPER) (STL) (7/8" BORE)	19DM212-1312	->
105	LOCKWASHER, SPRING 1/4"	(2) NSS	(2) ->
106	PUSH ROD	19DG112-1002	->
107	SOLENOID VALVE ASSEMBLY (1/8" VALVES)	19DM232-154	->
108	SOLENOID VALVE ASSEMBLY (1/4" VALVES)	19DM232-744	->
	INCLUDES: 109 - 116		
109	VALVE, SOLENOID (1/8")	(4) EF13CU032	(4) ->
110	VALVE, SOLENOID (1/4")	(4) EF13CU063	(4) ->
111	VALVE, NEEDLE (1/8")	(2) ER40EA031	(2) ->
112	VALVE, NEEDLE (1/4")	(2) ER40FA061	(2) ->
113	BOX, JUNCTION (FOR 1/8" VALVE ASSEMBLY)	HX07FB048	->
114	BOX, JUNCTION (FOR 1/4" VALVE ASSEMBLY)	19DM232-1452	->
115	RING, EXTENSION (OUTTER BOX)	HX22FS036	->
116	NIPPLE, INSULATED CHASE (VALVE/BOX)	(4) HW13FA001	(4) ->
117	STRAINER ASSEMBLY (1/8" VALVE UNITS ONLY)	(2) 19DM232-102	(2) ->
COMPRESSOR TRANSMISSION ASSEMBLY			
118	BEARING ASSEMBLY (BULL GEAR)	19D21-244	19D31-244
119	BEARING ASSEMBLY 50 HZ	19D21-464	19D31-464
119A	BEARING ASSEMBLY 60 HZ	19D21-234	19D31-234
120	PINION PACKAGE 50 HZ	19DA21-181	19DA31-181
120A	PINION PACKAGE 60 HZ	19D21-841	19D31-841
121	KEY, PINION	(2) 19D21-1411	(2) 19D31-1411

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Note: See "Catalog Notes" on last page for explanation of symbolism.

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# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	19DM 21 / 212	19DM 31 / 312
COMPRESSOR TRANSMISSION ASSEMBLY (CONT'D)			
122	LOCK NUT, BULL GEAR	KT89ZZ390	KT89ZZ420
123	LOCKWASHER, MULTI TANG	AU46AA601	AU46AA721
THRUST BEARING & SHAFT ASSEMBLY			
124	THRUST BEARING & SHAFT ASSY (32MP)	19DK212-104	19DK312-104
124A	THRUST BEARING & SHAFT ASSY (32SM)	19DH23-161	19DH33-161
NOTE: SELECT ASSEMBLY OR PARTS PER YOUR CONTROL SYSTEM TYPE. USE PARTS IDENTIFIED WITH THE CONTROL SYSTEM YOU HAVE, EITHER SENSOR MODULE (SM) OR MICRO PROCESSOR (MP).			
125	SHAFT, IMPELLER	19DH21-1003	19DH31-1004
126	RETAINING RING, EXTERNAL	AU49AR143	AU49AR181
127	SLINGER	19D21-1292	19D31-1292
128	BEARING ASSEMBLY (INC DOWEL PINS)	19DA21-171	19DH31-171
129	THRUST SHOE ASSY (SET OF 6)	19DA23-203	19DA33-203
130	RING, SPACER (32MP)	19DK212-1034	19DK312-1034
130A	RING, SPACER (32SM)	19DA23-1014	19DA33-1014
131	LOCKWASHER #8	X	(8) AU11AR101
132	SCREW, PAN HEAD #8 - 32 X 1 3/4" LG	X	(8) AC41AA110
133	CAPSCREW, SOCKET HEAD #8 - 32 X 1/4" LG.	NSS	X
134	RING, SEAL (32MP)	19DK212-1022	X
134A	RING, SEAL (32SM)	19DA23-1272	X
135	RING, RETAINING (32MP)	19DK212-1013	19DK312-1012
135A	RING, RETAINING (32SM)	19DA23-1013	19DA33-1012
136	PAD, LEVELING	(12) 19D21-0052	(12) 19D32-0052
137	PAD PACKAGE, ADJUSTING	19D23-841	->
139	CAPSCREW, SOCKET HEAD #8 - 32 X 1 1/2" LG	(5) AA44AA109	X
140	SEAL RING & PIN ASSEMBLY	X	19DA33-472
141 NI	NOSE PIECE (32SM)	19D21-2282-1	19D31-2282-1
142 NI	KEY, IMPELLER (32SM)	(3) 19DH212-1032	(3) 19DH312-1032
LUBRICATION PACKAGE			
143	OIL PUMP ASSEMBLY (200 - 240V ; 3 - 60HZ)	19DK111-444	->
143A NI	OIL PUMP ASSEMBLY (380 - 600V ; 3 - 60HZ)	19DK311-444	->
143B NI	OIL PUMP ASSEMBLY (310 - 440V ; 3 - 50HZ)	19DK311-454	->
INCLUDES: ITEMS 144 - 169			
144	RING (FILTER)	19D31-2382	->
145	"O" RING	KK71PR035	->
146	PLUG, MAGNETIC 3/8"	CA99RA101	->
147	"O" RING	KK71PR030	->
148	PLUG, FILTER	19D31-2134	->
149	FILTER	KH09AZ002	->
150	ROD, CLAMPING (FILTER)	19D31-2372	->
151	COIL ASSY, COOLING	19D31-723	->
152	SPRING	19D21-1071	->
153	GASKET	19DK119-1023	->
154	LOCKNUT 5/16 - 18	AT55BA201	->
155	GASKET (WATER COIL)	(2) 19DK119-1032	(2) ->
156	WASHER (WATER COIL)	(2) 19D21-1061	(2) ->
157	VALVE, ANGLE	EP23LA155	->
158	PISTON, VALVE	19D21-1002	->
159	SPRING	19D31-1591	->
160	SPRING RETAINER	19D31-1012	->
161	"O" RING	KK71PR010	->
162	RING, CLAMPING (ROTOR)	19D21-1011	->
163	SCREW, SET (STATOR SPOT DRILLED)	(2) AE17AR166	(2) ->
164	VANE, PUMP (60 HZ)	(4) 19D31-1021	(4) ->
164A NI	VANE, PUMP (50 HZ)	(4) 17CA61-1181	(4) ->
165	PUMP & MOTOR PACKAGE (200 - 480 V; 60 HZ)	19D32-841	->
165A NI	PUMP & MOTOR PACKAGE (220 - 415 V; 50 HZ)	19D36-841	->
165B NI	PUMP & MOTOR PACKAGE (550 - 660 V; 60 HZ)	19D37-841	->
166 NI	TERMINAL PACKAGE	19DA660003	->
INCLUDES: ITEMS 167 - 169			
167	HERMETIC TERMINAL	(3) HY85FP060	(3) ->

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# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	19DM 21 / 212		19DM 31 / 312	
LUBRICATION PACKAGE ( CONT'D )					
168	NI BUSHING,RED. 1/4" MPT X 1/8" FPT	(3)	CA53AA052	(3)	->
169	NI CONNECTOR, Q / C	(3)	HY61AM084	(3)	->
170	GASKET,OIL PUMP		19DK119-1022		->
MOTOR TERMINAL ARRANGEMENT GROUP					
171	INSULATOR, TERMINAL 1 1/4" NPT ( HI - VOLTAGE )	(3)	19FA502-1504	(3)	->
172	RETAINER, TERMINAL ( HI - VOLTAGE )	(6)	19FA502-1242	(6)	->
173	RING, PACKING ( HI - VOLTAGE )	(3)	19FA502-1232	(3)	->
174	NUT, PACKING ( HI - VOLTAGE )	(3)	19FA502-1222	(3)	->
175	NUT, JAM 9/16 - 18 ( HI - VOLTAGE )	(3)	AT14QA311	(3)	->
176	TERMINAL, LOW VOLTAGE 1" NPT	(6)	19DA11-1502	(6)	->
177	ADAPTER, TERMINAL (.811 DIA. CABLE)	(6)	19EA41-004	(6)	->
178	ADAPTER, TERMINAL (.789 DIA. CABLE)	(6)	19EA41-005	(6)	->



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	REPLACEMENT PART NUMBER
<b>UNISHELL &amp; INTERCONNECTING PIPING</b>		
179	VALVE, GLOBE 3/4" NPT (50 - 78)	ER39BE090
NOTE: THE 3 PASS VESSELS ( NOZZLE ON EACH END) USE SAME GASKET ON BOTH ENDS . ON A 2 OR 4 PASS VESSEL (INLET / OUTLET SAME END) WITH MARINE W/ B'S, THE PLAIN END (NO NOZZLE END) USES SAME GASKET AS A NOZZLE IN HEAD TYPE OF SAME SIZE.		
180	GASKET, CONDENSER W/ B (NIH) (50 - 57) (1 - 2 PASS)	(2) 19DK214-1003
180A NI	GASKET, CONDENSER W/ B (NIH) (61 - 73)	(2) 19DK314-1003
180B NI	GASKET, CONDENSER W/ B (NIH) (71 - 73) (2 - 4 PASS)	(2) 19DK414-1003
180C NI	GASKET, CONDENSER W/ B (NIH) (76 - 78)	(2) 19DK464-1014
180D NI	GASKET, CONDENSER W/ B (MAR) (50 - 57) (2 PASS)	19DK114-1034
180E NI	GASKET, CONDENSER W/ B (MAR) (50 - 57) (3 PASS)	(2) 19DK114-1034
180F NI	GASKET, CONDENSER W/ B (MAR) (61 - 65) (2 - 4 PASS)	19DK314-1034
180G NI	GASKET, CONDENSER W/ B (MAR) (61 - 65) (3 PASS)	(2) 19DK314-1034
180H NI	GASKET, CONDENSER W/ B (MAR) (71 - 73) (2 / 4 PASS)	19DK414-1034
180J NI	GASKET, CONDENSER W/ B (MAR) (71 - 73) (3 PASS)	(2) 19DK414-1034
180K NI	GASKET, CONDENSER W/ B (MAR) (76 - 78) (2 / 4 PASS)	19DK464-1034
181	GASKET, COOLER W/ B (NIH) (50 - 57)	(2) 19DG213-1123
181A NI	GASKET, COOLER W/ B (NIH) (61 - 65)	(2) 19DG313-1164
181B NI	GASKET, COOLER W/ B (NIH) (71 - 73)	(2) 19DG413-1164
181C NI	GASKET, COOLER W/ B (NIH) (76 - 78)	(2) 19EA463-1103
181D NI	GASKET, COOLER W/ B (MAR) (50 - 57) (2 PASS)	19DK103-1004
181E NI	GASKET, COOLER W/ B (MAR) (50 - 57) (3 PASS)	(2) 19DK103-1004
181F NI	GASKET, COOLER W/ B (MAR) (61 - 65) (2 / 4 PASS)	19DK303-1004
181G NI	GASKET, COOLER W/ B (MAR) (61 - 65) (3 PASS)	(2) 19DK303-1004
181H NI	GASKET, COOLER W/ B (MAR) (71 - 78) (2 / 4 PASS)	19DK403-1004
181J NI	GASKET, COOLER W/ B (MAR) (71 - 78) (3 PASS)	(2) 19DK403-1004
182	GASKET, SUMP	19DG117-1532
183	SCREEN, VALVE (INTERNAL) (50 - 57)	19DG117-214
183A	SCREEN, VALVE (INTERNAL) (61 - 78)	19DG317-214
184	VALVE ASSY, POPPET (I. D. 321)	19DR501-444
184A NI	VALVE ASSY, POPPET (I. D. 322)	19DR511-444
184B NI	VALVE ASSY, POPPET (I. D. 323) (REPL 117)	19DR521-444
184C NI	VALVE ASSY, POPPET (I. D. 324) (REPL 217)	19DR531-444
184D NI	VALVE ASSY, POPPET (I. D. 325)	19DR541-444
184E NI	VALVE ASSY, POPPET (I. D. 326) (REPL 237)	19DR551-444
184F NI	VALVE ASSY, POPPET (I. D. 327)	19DR561-444
184G NI	VALVE ASSY, POPPET (I. D. 328) (REPL 317)	19DR571-444
184H NI	VALVE ASSY, POPPET (I. D. 329) (REPL 417)	19DR601-444
184J NI	VALVE ASSY, POPPET (I. D. 330)	19DR611-444
185	SHIM, POPPET VALVE (INTERNAL) (50 - 78)	19DG117-1112
NOTE: THE 2" RUPTURE DISC ( ITEM# 186) WAS USED ON ALL MACHINE SIZES START WEEK 8551.		
186	DISC, RUPTURE 2" (50 - 57)	19DG11-6132
186A NI	DISC, RUPTURE 3" (61 - 78)	19CB511-1532
187	GASKET, RUPTURE DISC ( FOR 186)	(2) CR90SZ001
187A NI	GASKET, RUPTURE DISC ( FOR 186A)	(2) CR90SZ002
188	SCREEN, MOTOR COOLING (50 - 78)	19DG117-1502
189	SPRING, COMPRESSION ( POPPET )	19DG117-1012
190	CLAMP (FOR ITEM# 188)	KA69KM300
192	SWITCH ASSY, TEMPERATURE (32SM)	(4) HH24ZB034
192A NI	CHILLED WATER TEMPERATURE PROBE PKG. (32SM)	32SM500234
INCLUDES: ITEM 192B		
192B	PROBE	32SM680001
193	SENSOR, TEMPERATURE (32MP)	(4) HH79NZ024
193A	THERMOWELL (FOR IT # 192) (32SM)	HL79MZ006
194	CONNECTOR, MALE (32MP)	(4) DC90RA015
195	STARTER, OIL PUMP, CUTTLER - HAMMER, ( WITHOUT HEATER)	HN03AC800
NOTE: THE G/ E STARTER IS NO LONGER AVAILABLE. REPLACE WITH ITEM # 195 AND HEATER ITEM # 196 OF YOUR REQUIRED VOLTAGE.		
196	HEATER, ELEMENT (C - H) (200 - 240 / 60 HZ)	HN71AZ850
196A NI	HEATER, ELEMENT (C - H) (380 - 480 / 60 HZ)	HN71AZ846
196B NI	HEATER, ELEMENT (C - H) (550 - 600 / 60 HZ)	HN71AZ843
196C NI	HEATER, ELEMENT (C - H) (220 - 240 / 50 HZ)	HN71AZ852



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	REPLACEMENT PART NUMBER
<b>UNISHELL &amp; INTERCONNECTING PIPING (CONT'D)</b>		
196D	NI HEATER, ELEMENT (C-H) (380-440 / 50 HZ)	HN71AZ846
197	GLASS, SIGHT (PRE 10/86 ONLY) (50-78)	(2) KM36BQ199
198	PLATE, MOTOR COOLING RETAINING (50-78)	19DG117-1512
199	THERMOWELL, SUMP (50-78)	19DG117-102
200	GASKET, REFRIG. DRAIN 2" (50-78)	19DK119-1132
201	GASKET, OIL DRAIN 2" (50-57)	19DK119-1132
201A	GASKET, OIL DRAIN 3" (61-78)	CT99ZX501
202	GASKET, OIL DRAIN (SQ) (COMPR END) (50-78)	19DK119-1103
203	GASKET, DISCHARGE 8" (21-212)	19DK129-1043
203A	NI GASKET, DISCHARGE 10" (31-312)	19DK139-1043
204	VALVE, BACK PRESSURE (50-78)	19D11-1962
205	FILTER ASSEMBLY (50-78)	KH11YZ141
INCLUDES: ITEMS 206 - 208		
206	NI CARTRIDGE, FILTER	KH19YZ140
207	NI SEAL, BOLT	AU52NA301
208	NI "O" RING	KK71PR044
209	STRAINER (PRE 4/87 MACH'S) (50-78)	KH11NG070
210	ORIFICE (.062) 3/8 MFL (2 1/4" LG.) (50-78)	19DG11-5466
210A	ORIFICE (.062) 3/8 MFL (1 1/2" LG.) (50-78)	19DK111-1012
211	ORIFICE (.125) 5/8 FFL X 1/2 MFL (2 5/8" LG.)	19DG12-5466
211A	ORIFICE (.125) 5/8 FFL X 1/2 MFL (1 3/4" LG.)	19DK111-1002
211B	ORIFICE (.125) 3/8 FFL X 1/2 MFL (1 3/8" LG.)	19DK111-1112
212	VALVE, SERVICE 3/8 ODS X 3/8 M.FL.	EP10UZ121
213	VALVE, PLUG 1/2" FPT (50-78)	EV01AM041
214	NI GASKET, DIVISION PLATE (20' LONG CUT TO SUIT)	16JB680043
215	TUBES, COOLER / CONDENSER (SEE NOTE & PG.#2)	SEE NOTE
NOTE: FOR COOLER & CONDENSER TUBE NUMBERS AND QUANTITIES REQUIRED CONTACT YOUR CARRIER OFFICE. YOU MUST PROVIDE MACHINE SERIAL NUMBER.		
216	VALVE, ANGLE 1/4 NPT X 1/4 FL (50-78)	EP23LC090
217	VALVE, PACKLESS DIAPHRAGM 3/8" ODS	EP10BA130
218	VALVE, SOLENOID 1/2" FPT (50-78)	EF11CM182
<b>HOT GAS BYPASS</b>		
220	NI VALVE, HOT GAS BYPASS, 2" SOCKET WELD (21 COMPR)	17FA111-1313
221	NI ACTUATOR (FOR ITEM # 220)	17FA101-1333
222	VALVE & ACTUATOR ASSEMBLY 3" (31 COMPR)	19DH117-1004
222A	GASKET, 3" RING (FOR ITEM # 222)	(2) CT99ZX501
222B	NI SWITCH, HGBP TEMPERATURE (WITH WELL) (SET 44 F)	17FA101-1323
<b>PURGE ASSEMBLY</b>		
223	PURGE ASSEMBLY (32MP)	19DK111-434
223A	PURGE ASSEMBLY (32SM)	19DG660010
INCLUDES: ITEMS 223B - 244		
223B	PURGE ASSEMBLY	19DG12-908
224	PUMP & MOTOR (115-1-50/60) (32MP)	KK82ZX002
224A	PUMP & MOTOR (115-1-50/60) (32SM)	KK81AX031
225	GAUGE, PRESSURE (32SM/MP)	KM03AC250
226	VALVE, SOLENOID (32SM)	EF11CQ070
226A	VALVE, SOLENOID (32MP)	EF13CQ062
227	SWITCH, PURGE OPERATING (32SM/MP)	HK06ZC030
228	SWITCH, PURGE SAFETY (32SM)	HK06ZC026
229	SWITCH, TOGGLE (2 WAY) (32SM)	HR53VB019
230	SWITCH, TOGGLE (3 WAY, 2 POLE) (32SM)	HR53VK120
230A	SWITCH, TOGGLE (3 WAY, 1 POLE) (32MP)	HR53ED011
231	VALVE, ANGLE (1/4 NPT X 1/4 FL)	EP23LC090
232	VALVE, CHECK (1/4 FPT)	19DG660002
233	PURGE CONDENSER ASSEMBLY	19DK111-233
INCLUDES: ITEMS 234 - 244		
234	COUPLING, "V" BAND	CT28MP035
235	"O" RING	KK74ZW325
236	GLAND	(2) TS-380
237	GASKET, OUTER SIGHT GLASS	(2) 5F20-1631

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# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION		REPLACEMENT PART NUMBER
<b>PURGE ASSEMBLY ( CONT ' D )</b>			
238		GLASS, SIGHT	(2) 19C35-6151
239		GASKET, INNER SIGHT GLASS	(2) 5F20-1011
240		BALL, FLOAT	EC28QZ030
241		VALVE	19DA11-551
242		GASKET, RING ( VALVE )	19DK119-1042
243		ARM, FLOAT	19DA11-501
244		COVER	19DA11-5043
NOTE : CURRENT PUMPS MAY BE LABLED " PNEUMOTIVE DIV., ITT CORP." USE SAME REPAIR PKGS. LISTED BELOW FOR B / G .			
245	NI	PISTON REPAIR PACKAGE ( BELL & GOSSETT BLVGH ONLY )	19DG660001
		INCLUDES: ITEMS 245A - 245C	
245A	NI	RING SET, TEFLON PISTON	NSS
245B	NI	SPRING SET	NSS
245C	NI	SKIRT, TEFLON TAPE	NSS
246	NI	VALVE REPAIR PACKAGE ( BELL & GOSSETT BLVGH ONLY )	19P47-002
		INCLUDES: ITEMS 246A - 246C	
246A	NI	GASKET	(2) NSS
246B	NI	VALVE	NSS
246C	NI	VALVE	NSS
247	NI	PISTON REPAIR PACKAGE (BELL & GOSSETT LGH-2V ONLY)	19P47-003
		INCLUDES: ITEMS 247A - 247B	
247A	NI	RING SET	NSS
247B	NI	SPRING SET	NSS
248	NI	VALVE REPAIR KIT ( BELL & GOSSETT LGH - 2V ONLY )	19DA660006
		INCLUDES: ITEMS 248A - 248E	
248A	NI	GASKET,CYLINDER SLEEVE	NSS
248B	NI	GASKET,CYLINDER HEAD	NSS
248C	NI	REED, VALVE	(2) NSS
248D	NI	PLATE, VALVE	NSS
248E	NI	"O" RING & SPRING	NSS
<b>BASIC MICROPROCESSOR CONTROL PANEL</b>			
249		32MP CONTROL PANEL ( NO ESP ) 60 HZ	19DR660012
249A		32MP CONTROL PANEL ( NO ESP ) 50 HZ	19DR660013
249B		32MP CONTROL PANEL ( WITH ESP ) 60 HZ	19DR660014
249C		32MP CONTROL PANEL ( WITH ESP ) 50 HZ	19DR660015
NOTE: IF YOU DO NOT HAVE ESP AND WOULD LIKE TO ADD IT ORDER 32MP900941 FROM FINISHED GOODS. THIS PACKAGE CONTAINS ALL PARTS FOR A MACHINE MOUNTED ESP INTALLATION. FOR A DESK OR SURFACE MOUNT ESP ORDER 32MP900921. FOR FLUSH MOUNT ORDER 32MP900901. ITEM # 250 IS THE WIRING PACKAGE TO INSTALL A SEPERATE PURCHASED ESP BOARD ( 32MP400424 ) THIS HARNESS IS ALSO PART OF THE 32MP900941 PACKAGE LISTED PREVIOUSLY.			
250	NI	WIRING PACKAGE ( TO INSTALLL ESP ON BASIC )	32MP400272
251		PROCESSOR BOARD ASSEMBLY ( PCB1 )	32MP400974
NOTE: A TERMINAL HOUSING & PIN PACKAGE. ( 32MP660015 ) CONTAINS ITEMS 252 - 255, 257, 259 - 262			
252		HOUSING ( 3 POSITON ) ( 1J5 )	(2) NSS
253		HOUSING ( 14 POSITION ) ( 1J2 )	NSS
254		HOUSING ( 16 POSITION ) ( 1J1 )	NSS
255		HOUSING ( 6 POSITION ) ( 1J4 )	NSS
256	NI	PLUG, KEYING	(9) HY07MQ004
257	NI	PIN, TERMINAL	NSS
258		INPUT / OUTPUT BOARD ASSEMBLY ( PCB2 )	HK35EZ002
259		HOUSING ( 4 POSITION ) ( 2J6 )	(2) NSS
260		HOUSING ( 10 POSITION ) ( 2J1,2J2 )	(2) NSS
261		HOUSING ( 12 POSITION ) ( 2J5 )	NSS
262		HOUSING ( 13 POSITION ) ( 2J4 )	NSS
263		BASIC SET POINT & DISPLAY BOARD ( PCB3 )	HK35EZ003
264		GAUGE, PRESSURE ( COOL ER & CONDENSER ) 30 " - 0 - 30	(2) KM03AF303
NOTE: GAUGE ( ITEM # 264 ) HAS A CENTER BACK CONNECTION THIS IS THE ONLY GAUGE AVAILABLE. THE PREVIOUS GAUGE WITH CONNECTION 1.06 " BELOW CENTER IS NO LONGER AVAILABLE. YOU MUST MODIFY TUBING TO FIT THE AVAILABLE GAUGE. THERE IS NO TUBING PKG TO DO THIS.			
265		GAUGE & SWITCH, OIL DIFF. PRESSURE ( 0 - 50 PSID )	KM05BW222
266		LIGHT, AMBER ( POWER )	HY19UC019
267		CAM LOCK ( W / 2 KEYS )	KA19NL010



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	REPLACEMENT PART NUMBER
BASIC MICROPROCESSOR CONTROL PANEL (CONT'D)		
268	LIGHT (RED) (ALARM)	HY19UC014
269	BLOCK, FUSE (7 POSITION)	HY11UM007
270	FUSE (F15,16,17)	(3) MGB 1/8
271	FUSE (F20, 21)	(2) MDL2 1/2
272	FUSE (F18,19)	(2) MDL 3/4
273	BLOCK, FUSE (1 POSITION)	S-8202-01
274	FUSE (F14)	MDL1
275	SWITCH, HIGH CONDENSER CUTOFF	HK01CA015
276	TRANSFORMER	HT01BE115
277	INDICATOR, ELAPSED TIME (60 HZ)	HK28DG115
277A NI	INDICATOR, ELAPSED TIME (50 HZ)	HK28DG116
278	BLOCK, TERMINAL (4 POS) (CCN ONLY)	HY84EF002
279	CABLE ASSEMBLY, RIBBON	HY20HS005
280	ASSEMBLY, CAPACITOR (.22 MFD / 400 V DC)	19EB516-222
281	BLOCK, TERMINAL (17 POSITION)	HY84EF018
282	BLOCK, TERMINAL (10 POSITION)	HY84EF010
283	BLOCK, TERMINAL (22 POSITION)	HY84EF022
284 NI	RELAY (PURGE)	HN61KP012
EXPANDED SERVICE CONTROL PANEL (ESP)		
285	BOARD, MEMORY EXPANSION (PCB 5)	32MP400954
286	PANEL, EXPANDED SERVICE (ESP II)	32MP400934
SENSOR MODULE CONTROL GROUP		
287	CONTROL PANEL ASSEMBLY (32SM)	19DM106-104
	INCLUDES: ITEMS 288	
288	RELAY MODULE ASSEMBLY (PSN 25280)	32SM660004
	NOTE: ITEM # 288 CONTAINS ITEMS # 289, 297 & WIRING ASSEMBLIES, WIRE & CONNECTORS WITH INSTRUCTION HOW TO INSTALL.	
289	RELAY MODULE ASSEMBLY (SSN 25280)	32SM400694
	INCLUDES: ITEMS 289A - 289D	
289A	RELAY	(5) HN61KL616
289B	TIMER, PROGRAM	HK25ZD030
289C	HOLDER, FUSE	HTB-84I
289D	FUSE	AGC3
289E	LIGHT, INDICATOR	(2) 32SM400702
290	AMPLIFIER MODULE ASSEMBLY	32SM500704
291	SWITCH, LOW OIL PRESSURE	HK06CA401
292	SWITCH, VANE CLOSE OIL PRESSURE	HK06ZC025
293	SWITCH, HIGH CONDENSER CUT - OUT	HK01CA015
294	GAUGE, PRESSURE (COOLER / CONDENSER)	(2) KM03AF301
295	GAUGE, OIL PRESSURE DIFF.	KM05BW220
296	SWITCH, PUSH BUTTON	(2) HR54ZA020
297	SWITCH, PUSH BUTTON	HR52ZD040
298	LIGHT, INDICATING	(4) HY19MM020
299	COUNTER, START	HK28ZZ115
300 NI	INDICATOR, ELAPSED TIME (60 HZ)	HK28DG115
300A NI	INDICATOR, ELAPSED TIME (50 HZ)	HK28DG116
301 NI	LOCK & KEY	KA19NL010
302	MODULE, DIFFUSER WALL CONTROL	19DM106-1044
303	BLOCK, TERMINAL	HY84EG002
304	TRANSFORMER, POWER STEP - DOWN	19DM106-1054
305	LEAD - LAG CONTROL ASSEMBLY (32SM)	32SM900001
	INCLUDES: ITEMS 306 - 312	
306	SWITCH	(3) HR52ZD040
307	POTENTIOMETER	32SM500623
308	SWITCH	32SM500843
309	KNOB	KA21RB156
310	RELAY, TIME DELAY (K24)	HN67SK007



# HERMETIC CENTRIFUGAL CHILLER WITH/WITHOUT MICROPROCESSOR

# 19 DM

ITEM	PART DESCRIPTION	REPLACEMENT PART NUMBER	
<b>SENSOR MODULE CONTROL GROUP (CONT'D)</b>			
311	RELAY (K20 - 21)	(2)	HN61KL616
312	RELAY (K22 - 23)	(2)	HN61KL615
313	SAFETY INDICATOR PANEL (32SM)		32GA900001
	INCLUDES: ITEMS 314 - 316A		
314	SWITCH, PUSH BUTTON / LIGHT	(7)	HR54ZA020
315	SWITCH, PUSH BUTTON		HR54ZA040
316	RELAY, PILOT DUTY (K101 - 103, 105 - 111)	(10)	HN61KL615
316A	RELAY (K104)		HN61KL616
316B	N  MICROPROCESSOR RETROFIT KIT		32MP660006B
<b>MISCELLANEOUS GROUP</b>			
317	N  PAINT (16 OZ SPRAY) (HORIZON GREEN)		PH23GH017
318	N  INSULATION, SHEET (3/4" THK X 48 X 64)		QR0948 486434
319	TAPE, INSULATION		19DA660002
320	N  BRUSH, TUBE CLEANING (3/4" I.D.)		KC21AH105
321	N  OIL, COMPRESSOR (5 GAL / 18.9 L CAN)		PP23BB006
322	N  COMPRESSOR TABLE		19DK-DM-T100
	<b>NOTE: THE FOLLOWING LISTED KITS, EXCEPT ITEMS # 331-337 ARE USED ONLY ON MACHINES WITH 32SM CONTROLS.</b>		
323	N  32SM LOW TEMPERATURE PROBE		19DA21-114-1
	NOTE: REPLACES STANDARD 32SM PROBE ON BRINE JOBS WHEN CONTROL BELOW 32 F / 0 C IS REQUIRED.		
324	N  RELAY MODULE PRINTED CIRCUIT BOARD		32SM400004
	NOTE: USE WHEN EXISTING BOARD IS CRACKED OR DAMAGED. INCLUDES RELAY SOCKETS AND TERMINAL STRIPS.		
325	N  INNER PROBE / 32SM CHILLED WATER SENSOR		32SM680001
	NOTE: TO REPLACE A DEFECTIVE PROBE WITHOUT REPLACING ENTIRE ASSEMBLY.		
326	N  NEW RELAY MODULE		32SM400694
	NOTE: SERVICE REPLACEMENT FOR MACHINES WITH NEW CONTROL SCHEME (4 - CAM PROGRAM TIMER, INDICATOR LIGHTS IN PLACE OF CB1 & CB2.)		
327	N  RELAY MODULE CONVERSION KIT		32SM660004
	NOTE: TO CONVERT MACHINES FROM OLD SCHEME (W / 32SM400494 MODULE) TO NEW SCHEME UTILIZING ITEM # 326.		
328	N  ANTI - RECYCLE TIMER KIT		19EA660001
	NOTE: FOR USE ON JOBS WHERE 15 MINUTES DOWN (RECYCLE) TIME CANNOT BE TOLERATED. ALLOWS ONE RESTART WITHIN 2 MINUTES, BUT 20 MINUTES BEFORE NEXT START. <b>TO BE USED "ONLY" WHEN REAL NEED EXISTS.</b>		
329	N  TWO MINUTE PROGRAM TIMER		19EA41-003
	NOTE: SPECIAL TIMER INCLUDED WITH ITEM # 328. NOT TO BE USED SEPERATELY. WILL SOON BE AVAILABLE IN 4 - CAM CONFIGURATION FOR COMPATIBILITY WITH NEW (AND OLD) CONTROL SCHEMES.		
330	N  STATOR INSULATION KIT		19DA11-001
	NOTE: MATERIAL REQUIRED TO REINSULATE A STATOR SHELL.		
331	N  CLEAN UP KIT (BURNOUT / WET)		19CB660006
	NOTE: CONTAINS ALL NECESSARY PARTS AND PIPING FOR CLEANUP AFTER MOTOR BURNOUT OR FOR CLEANING A WET MACHINE		
332	N  EXTERNAL OIL FILTER KIT		19DK660016
	NOTE: CONTAINS A DUPLEX FILTER SO THAT MACHINE CAN CONTINUE TO RUN WHILE CHANGING OIL FILTERS.		
	NOTE: CHECK MACHINE SERIAL NUMBER BEFORE ORDERING RUPTURE DISC / RELIEF VALVE PKG. BEFORE 1985, WEEK 51, USE 19DK660011. DURING OR AFTER 1985, WEEK 51 USE 19DK660015.		
334	N  RUPTURE DISC / RELIEF VALVE CONVERSION PKG. 2" (HX 42 - 57) (61 - 78)		19DK660015
	INCLUDES: ITEM 335		
335	N  DISC, NON - FRAGMENTING (15 PSIG)		EB59LX014
336	N  RUPTURE DISC / RELIEF VALVE CONVERSION PKG. 3" (HX 61 - 78) (SEE NOTE)		19DK660011
	INCLUDES: ITEM 337		
337	N  DISC, NON - FRAGMENTING (15 PSIG)		EB59LX014
	NOTE: ITEMS # 333 & 334 CONTAIN REPLACEMENT ASSEMBLY FOR CARBON RUPTURE DISC.		





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## ORDERING INSTRUCTIONS

1. All orders should include the complete model and serial number of the unit on which the parts are to be used, and the part number and description of each part.
2. Dealers should forward orders to their Carrier distributor.

## GENERAL NOTES

1. This catalog contains those items most commonly required for replacement purposes. If parts other than those cataloged are required, please provide the model number and serial number of the unit on which the parts are to be used and a complete description including references to items which are cataloged.
2. Casing parts and panels are not normally stocked, but are available upon request while in production. Requests for casing parts and panels for units no longer in production must be cleared for availability prior to submitting an order.
3. Complete "Accessory Packages" of "F.I.O.P.'s" (Factory-Installed Option Plan) are not normally stocked or supplied by the Replacement Components Division. (Refer to Master Price Pages and order from your normal source for finished goods.)  
Accessory packages and F.I.O.P.'s are listed in this catalog only for reference and to assist in the selection and ordering of replacement components.
4. The replacement parts listed in this catalog are RCD "Factory-Authorized Parts" and, as a result of "standardization," may not be identical to the original part furnished on the equipment.

## CATALOG NOTES

1. The part number in the model column indicates the part number required for that model, size and/or voltage.
2. An arrow → in the model column indicates that the model, size, and/or voltage uses the same part number as the part number shown to the left.
3. An X in the model column indicates that the part is not used on that model, size and/or voltage.
4. A number in parenthesis before the part number indicates the quantity required for that model, size, and/or voltage. Part number only in the column indicates a quantity of one.
5. The notation "NI" following the item number indicates that the item is not illustrated in the catalog.



