



FILE INFORMATION  
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PRODUCTS  
PRODUCT TAB - RECIPROCATING COMPRESSOR-  
CONDENSING UNITS  
MODEL TAB - HERMETIC E-F  
LITERATURE ITEM - Unit Parts

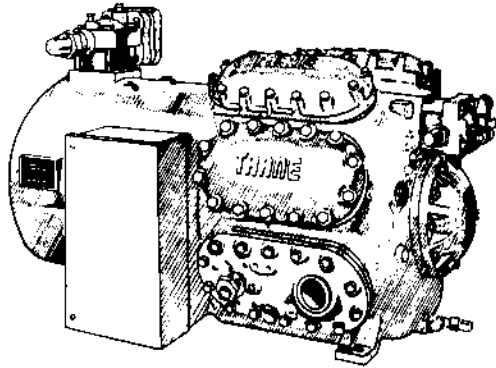
LITERATURE FILE NO.

**HCOM-UP-49**

**UNIT PARTS**

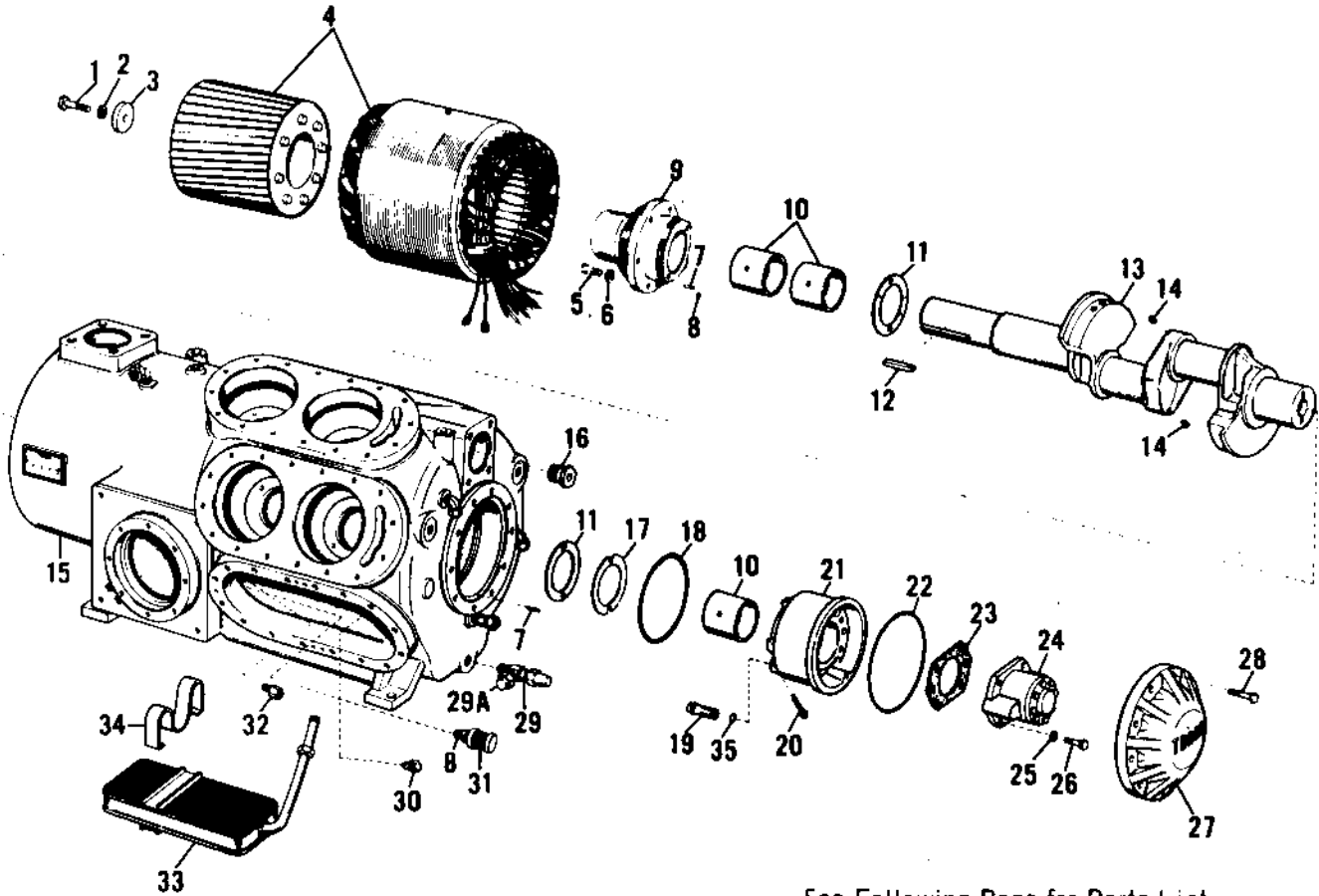
Since the Trane Company has a policy of continuous product improvement, it reserves the right to change specifications and design without notice. The installation and servicing of the equipment referred to in this booklet should be done by qualified, experienced technicians.

AUGUST, 1981  
Supersedes HCOM-UP-49  
Dated NOVEMBER, 1979



# HERMETIC RECIPROCATING COMPRESSOR

MODEL F, 4 CYLINDER  
DESIGN SEQUENCE C AND D



See Following Page for Parts List

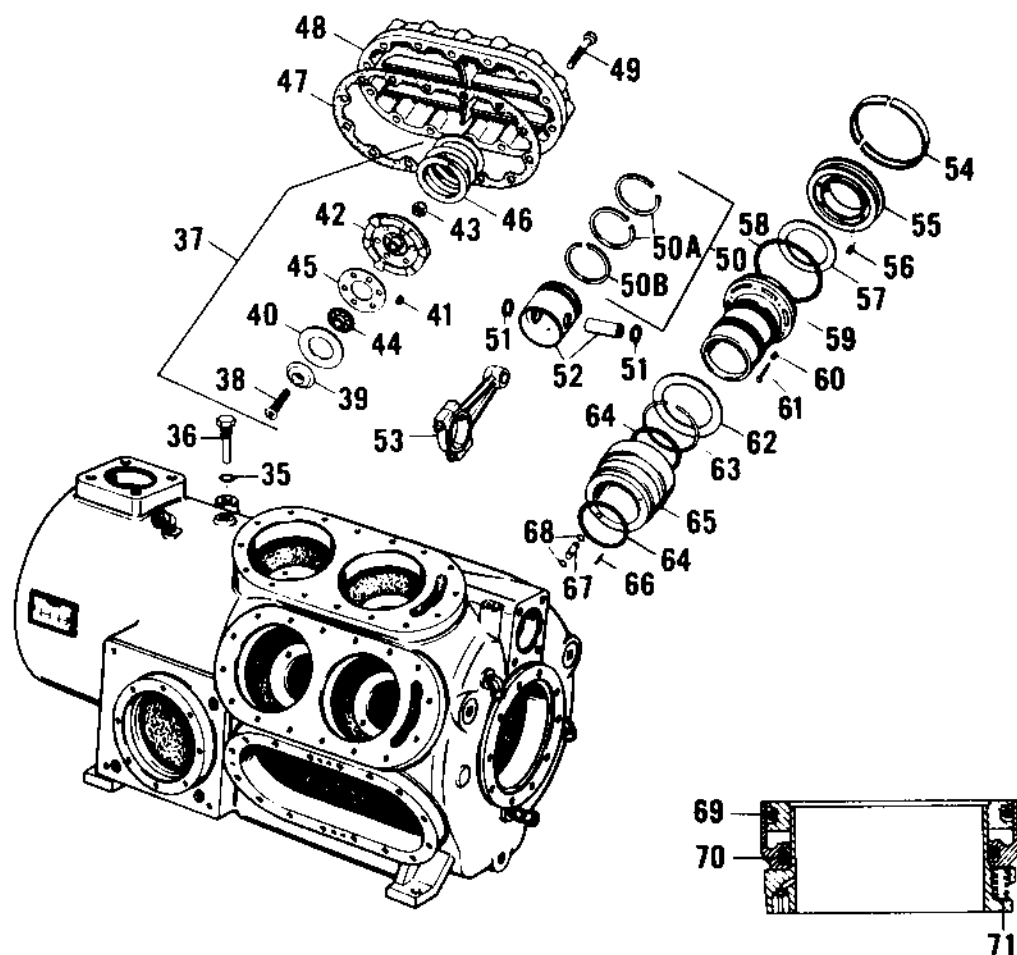
## ILLUSTRATION PRECEDES THIS LIST

REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
1	Screw - Cap, Hex Socket Head, 5/8-18 x 2 (Use on 12-1/2 Ton Units Only) -----	SCR-302	1
1	Screw - Cap, Hex Socket Head, 5/8-18 x 3 -----	SCR-352	1
2	Lockwasher, 5/8 -----	WAS-2	1
3	Washer - Retaining -----	WAS-98	1
4	Motor - Hermetic -----	**	1
5	Screw - Cap, 12 Pt. Hd., 3/8-24 x 1-1/2 -----	SCR-40	6
6	Lockwasher, 3/8 -----	WAS-13	6
7	Pin Roll, 1/8" x 1/2" -----	PIN-26	2
8	"O" Ring -----	RNG-79	3
9	Bearing Head, Motor End, Including 2 Each Ref. No. 10 -----	BRG-147	1
10	Bearing Insert -----	BRG-65	3
11	Bearing - Thrust -----	BRG-62	2
12	Key - Crankshaft -----	KEY-43	1
13	Crankshaft, Including Magnetic Plugs -----	CSF-36	1
14	Plug - Magnetic -----	PLU-10	2
15	Housing -----	HUS-299	1
16	Valve - Relief, 385 PSI -----	VAL-193	1
17	Shim - Bearing Head, .005" -----	SHM-34	*
17	Shim - Bearing Head, .010" -----	SHM-26	*
17	Shim - Bearing Head, .020" -----	SHM-25	*
18	"O" Ring - Bearing Head to Housing -----	RNG-127	1
19	Valve - Oil Relief -----	VAL-138	1
20	Pin - Cotter, 3/16" x 1-1/4" Lg. -----	PIN-27	1
21	Bearing Head, Pump End, Including 1 Ea. Ref No's. 10, 19, 20, 35 -----	BRG-78	1
22	"O" Ring, Oil Pump Cover to Housing -----	RNG-128	1
23	Gasket - Oil Pump -----	GKT-251	1
24	Pump - Oil -----	PMP-14	1
25	Lockwasher, 5/16 -----	WAS-14	4
26	Screw - Cap, 12 Pt. Hd., 5/16-24 x 3/4 -----	SCR-167	4
27	Cover - Oil Pump -----	COV-172	1
28	Screw - Cap, Hex Hd., 7/16-14 x 1-1/2 -----	SCR-160	10
29	Valve - Angle, 3/8" Flare x 3/8" N.P.T. -----	VAL-31	1
29A	Nut - Cap, 3/8" Flare -----	NUT-16	1
30	Valve - Oil Check -----	VAL-60	1
31	Breaker - Foam -----	BKR-34	2
32	Valve - Oil Check -----	VAL-55	2
33	Strainer - Oil -----	SRA-31	1
34	Spring - Retaining -----	SPG-30	1

\* As Required.

\*\* Provide Complete Compressor Nameplate Data When Ordering.

Select Part Number From Service Bulletin HCOM-SB-7A



REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
35	"O" Ring -----	RNG-69	2
36	Screw - Motor Mounting -----	SCR-348	1
37	Discharge Valve Assembly -----	VAL-1610	4
	Consisting Of:		
38	Bolt - Valve Cage -----	BLT-64	4
39	Seat - Discharge Valve -----	SET-7	4
40	Valve - Discharge -----	VAL-195	4
41	Spring - Discharge Valve -----	SPG-4	24
42	Cage - Valve -----	CAG-34	4
43	Nut - Valve Cage Bolt -----	NUT-72	4
44*	Retainer - Cushion -----	RTR-9	4
45*	Cushion - Valve -----	CUS-10	4
46	Spring - Cylinder -----	SPG-39	4
47	Gasket - Cylinder Head -----	GKT-252	2
48	Head - Cylinder -----	HD-19	2
49	Screw - Cap, Hex Hd., 7/16-14 x 2-1/2 -----	SCR-44	28
50	Piston Ring Kit -----	RNG-78	4
	Consisting Of: 50A (2), 50B (1)		
50A	Ring - Compression -----	RNG-95	8
50B	Ring - Oil -----	RNG-96	4

PARTS LIST CONTINUED

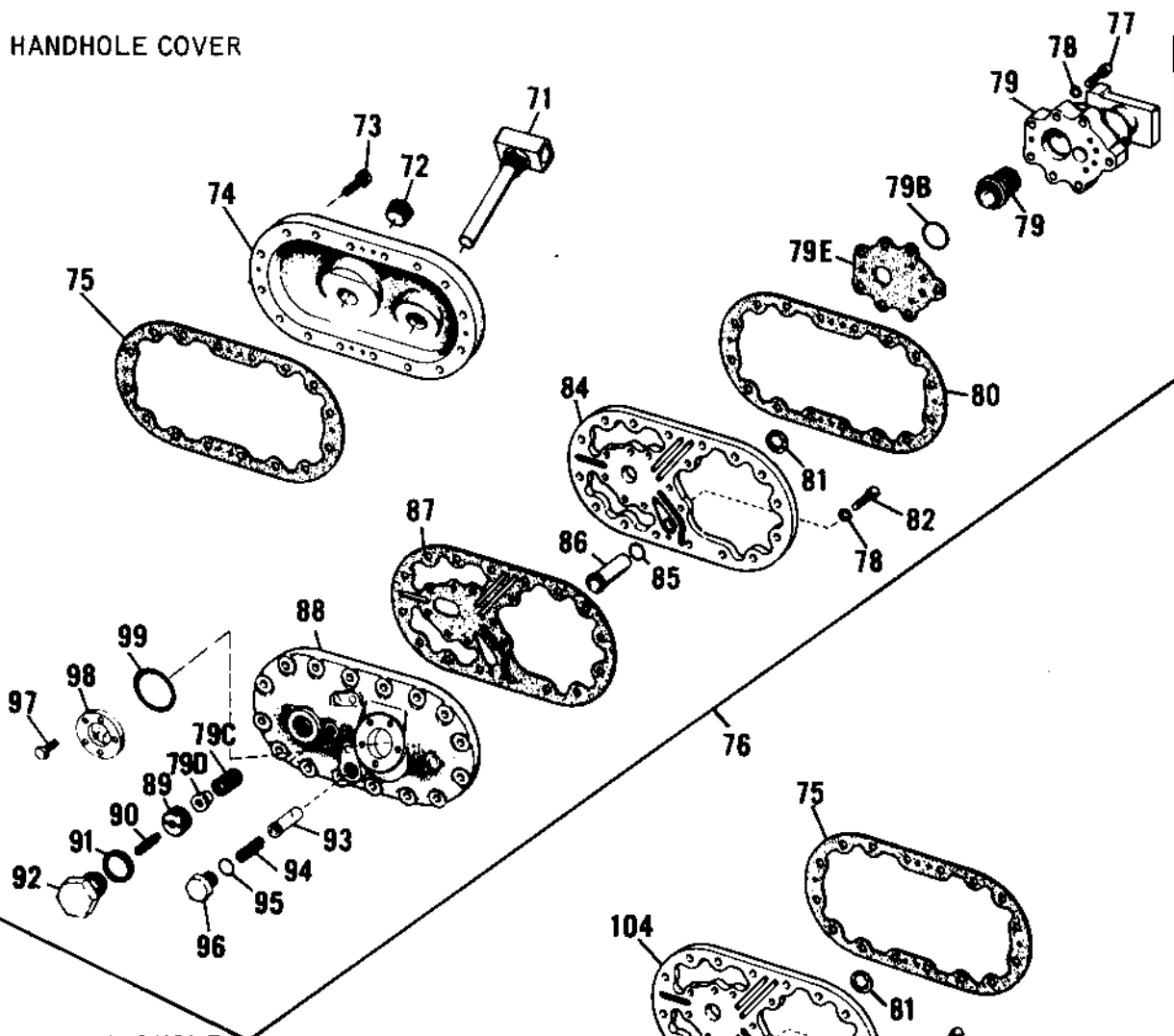
## ILLUSTRATION PRECEDES THIS LIST

REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
51	Ring - Retaining -----	RNG-97	8
52	Piston - Including Pin and Retaining Rings -----	PST-20	4
53	Rod - Connecting -----	ROD-37	4
54	Ring - Retaining -----	RNG-98	12
55	Plate - Valve (Standard Lift Valves) -----	PLT-107	4
55	Plate - Valve (Low Lift Valves) -----	PLT-126	4
56	Spring - Valve (Standard Lift Valves) -----	SPG-37	24
56	Spring - Valve (Low Lift Valves) -----	SPG-37	12
57	Valve - Suction -----	VAL-194	4
58	"O" Ring - Suction Valve Plate -----	RNG-99	4
59	Liner - Cylinder -----	LNR-20	4
60	Spring - Lift Pin -----	SPG-38	18
61	Pin - Lift -----	PIN-24	18
62	Ring - Take-Up -----	RNG-100	3
63	Ring - Retaining -----	RNG-101	3
64	"O" Ring - Cylinder Liner to Unloader -----	RNG-102	6
65	Unloader Assembly -----	UNL-4	3
66	Pin - Roll, 3/16" x 1" -----	PIN-4	3
67	Connector - Oil -----	CON-1	3
68	"O" Ring - Oil Connector -----	RNG-10	6
69	"O" Ring - Unloader Seal Ring -----	RNG-103	3
70	"O" Ring - Unloader Piston -----	RNG-53	3
71	Spring - Unloader Piston -----	SPG-23	42
*	Kit - Cylinder "O" Ring -----	KIT-40	4
	Consisting of:		
	"O" Ring - Suction Valve Plate (1 Ea. Ref. No. 57) -----	RNG-99	
	"O" Ring - Unloader Seal Ring (1 Ea. Ref. No. 68) -----	RNG-103	
	"O" Ring - Unloader Piston (1 Ea. Ref. No. 69) -----	RNG-53	
	"O" Ring - Cylinder Liner (2 Ea. Ref. No. 63) -----	RNG-102	
	"O" Ring - Oil Connector (2 Ea. Ref. No. 67) -----	RNG-10	
*	Kit - Compressor Gasket and "O" Ring -----	KIT-230	1+

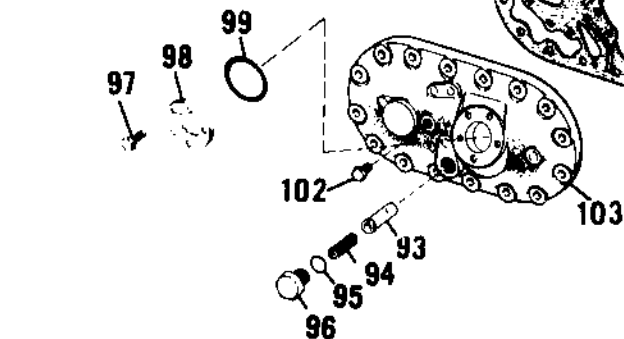
\* Not Illustrated.

+ Consists of 1 Ea. RNG-127, RNG-128, GKT-251, GKT-254, RNG-34, GKT-29, RNG-207, GKT-24, RNG-52, RNG-61, GKT-281, RNG-91, RNG-163, GKT-15, GKT-12; 2 Ea. RNG-69, GKT-252, GKT-253; 3 Ea. RNG-79, SHM-34, SHM-26, SHM-25; 9 Ea. RNG-38, RNG-37. One KIT-230 and Four KIT-40 Are Required For Complete Compressor Overhaul.

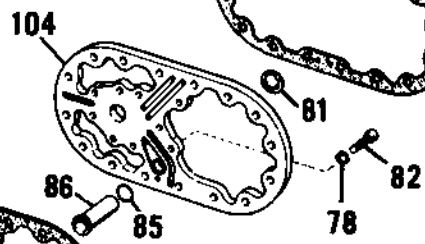
BACK HANDHOLE COVER



CONTROL HANDHOLE COVER SUCTION CONTROL

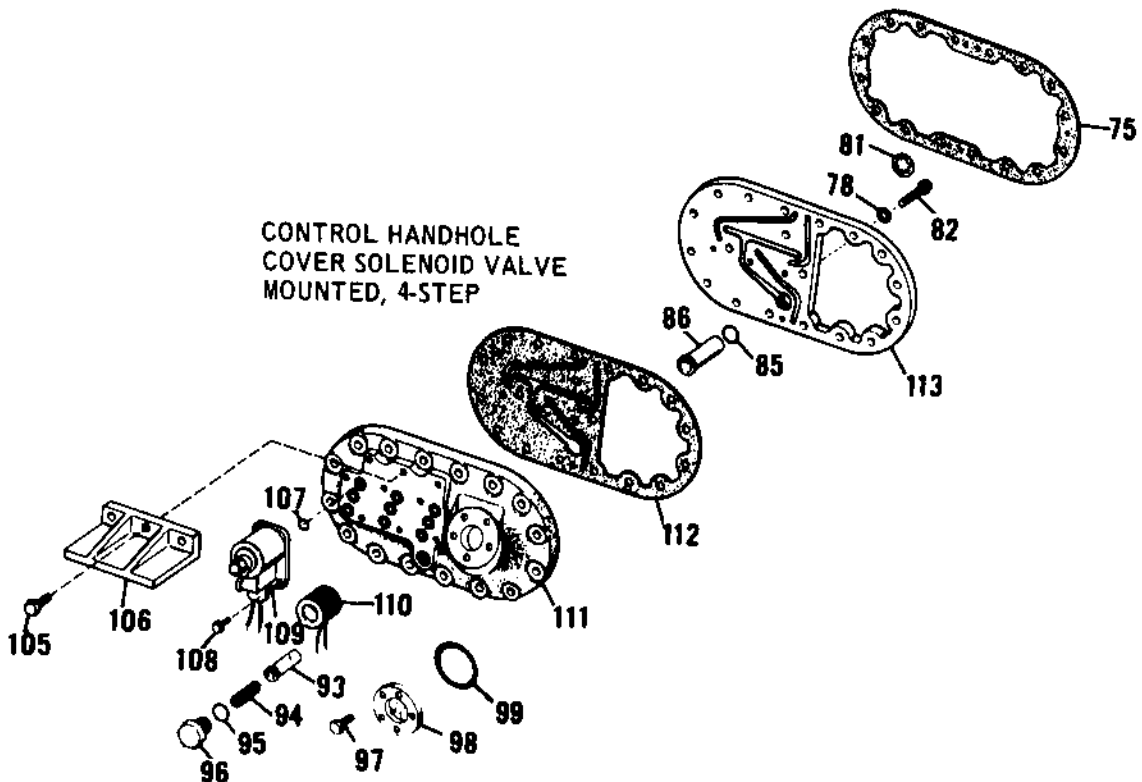


CONTROL HANDHOLE COVER SOLENOID VALVE REMOTE, 2-STEP\*



\* REMOTE SOLENOID VALVE NOT ILLUSTRATED SEE PARTS LIST, PAGE 7

SEE FOLLOWING PAGE FOR PARTS LIST

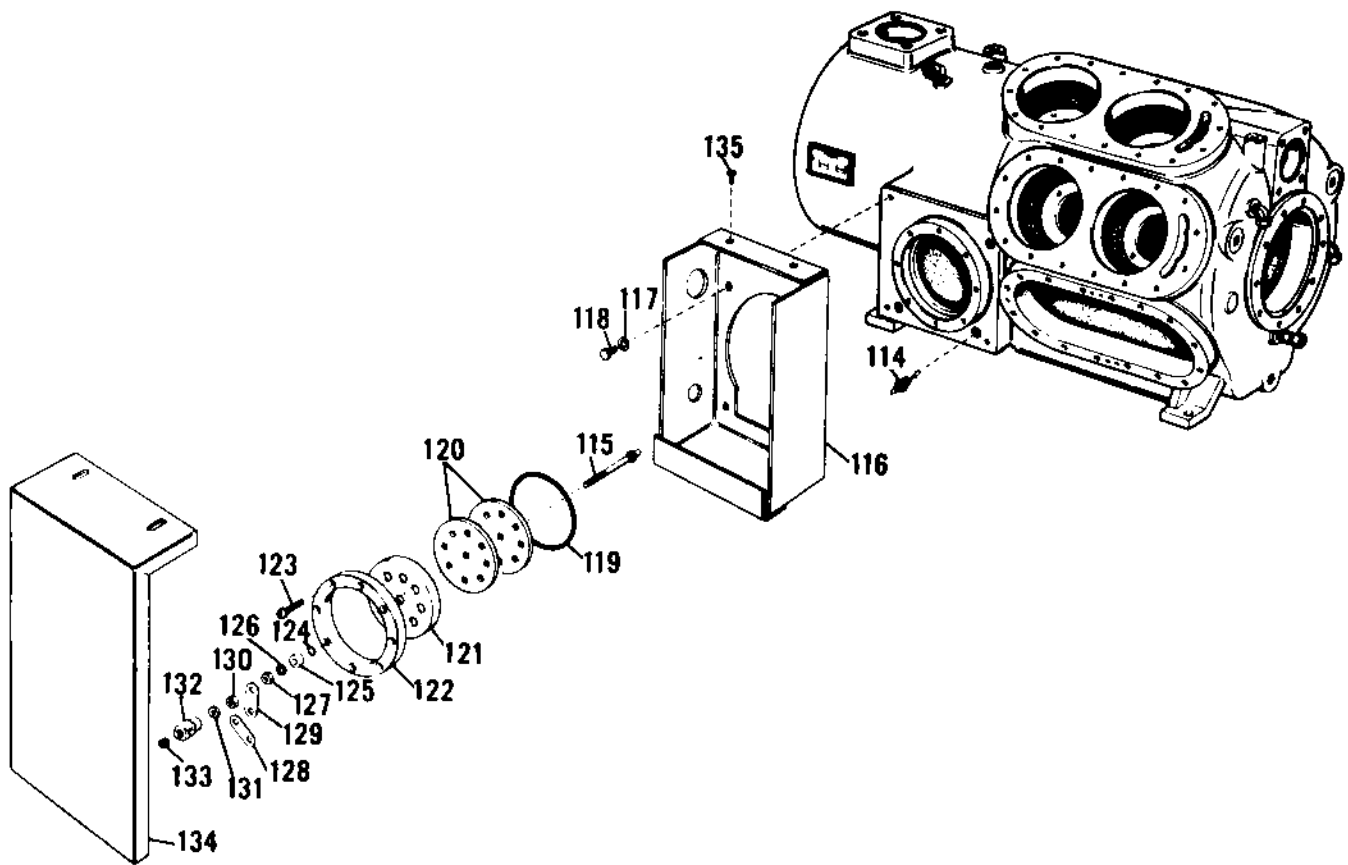


REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
71A	Heater - Crankcase -----	HTR-210	1
72	Plug - Socket Head, 3/4 N.P.T. -----	PLU-48	1
73	Screw - Cap, Hex Hd., 7/16-14 x 1-3/4 -----	SCR-67	14
74	Cover - Handhole -----	COV-151	1
75	Gasket - Handhole Cover -----	GKT-253	2
76	Cover - Handhole Assembly, Complete -----	COV-559	1
	Consisting of:		
77	Screw - Cap, 12 Pt. Hd., 3/8-24 x 1-3/4-----	SCR-46	7
78	Lockwasher, 3/8-----	WAS-17	7
79	Capacity Control Assembly, Complete -----	CNT-4	1
	Consisting of:		
79A	Bellows Assembly, Including Bellows Stop Sleeve-----	BEL-2	1
79B	"O" Ring - Capacity Control -----	RNG-61	1
79C	Spring - Bellows, Green (Used on R-22 Units)-----	SPG-42	1
79C	Spring - Bellows, Black (Used on R-12 Units)-----	SPG-43	1
79D	Seat - Spring -----	SET-9	1
79E	Gasket - Capacity Control -----	GKT-24	1
80	Gasket - Handhole Cover -----	GKT-253	1
81	Ring - Retaining-----	RNG-93	1
82	Screw - Cap, 12 Pt. Hd., 3/8-24x1-----	SCR-168	1
83	Lockwasher, 3/8 -----	WAS-17	1
84	Plate - Distributor -----	PLT-109	1
85	"O" Ring - Strainer Screwn Cover-----	RNG-52	1
86	Cover - Strainer Screen -----	COV-4	1
87	Gasket - Distributor-----	GKT-254	1
88	Cover - Control Handhole -----	COV-315	1
89	Screw -----	SCR-210	1
90	Screw - Bellows Adjusting-----	SCR-47	1
91	Gasket - Bellows Adjusting Screw -----	GKT-29	1
92	Plug - Bellows Adjusting Screw -----	PLU-13	1
93	Screen - Strainer -----	SRN-2	1
94	Spring - Strainer Screen -----	SPG-6	1

REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
95	"O" Ring - Strainer Screen -----	RNG-34	1
96	Plug - Strainer Screen -----	PLU-12	1
97	Screw - Cap, Hex Hd., 1/4-20 x 3/4-----	SCR-30	5
98	Sight Glass -----	GLS-34	1
99	"O" Ring - Sight Glass -----	RNG-207	1
102	Plug - Pipe, Hex Hd., 1/8 -----	PLU-20	4
103	Cover - Control Handhole -----	COV-316	1
104	Plate - Distributor -----	PLT-112	1
105	Screw - Cap, Hex Hd., 5/16-18 x 7/8 -----	SCR-31	3
106	Guard Plate -----	GRD-39	1
107	"O" Ring - Solenoid Valve Mounting -----	RNG-38	9
108	Screw, 1/4-20 x 5/8 -----	SCR-202	6
109	Valve - Solenoid, 3-Way, 230 Volt, 50-60 Cycle, Asco No. 831551	VAL-669	3
109	Valve - Solenoid, 3-Way, 115 Volt, 50-60 Cycle, Asco No. 831551	VAL-670	3
110	Coil - Solenoid Valve, Asco No. 64-982-5, 230 Volt, 50-60 Cycle	COL-65	3
110	Coil - Solenoid Valve, Asco No. 64-982-4, 115 Volt, 50-60 Cycle	COL-70	3
111	Cover - Control Handhole -----	COV-317	1
112	Gasket - Distributor -----	GKT-281	1
113	Plate - Distributor -----	PLT-130	1
*	Valve - Remote Solenoid, Asco 3-Way, 230 Volt, 60 Cycle -----	VAL-543	1
*	Coil - Remote Solenoid Valve, Asco No. 27-462-2, 230 Volt, 60 Cycle -----	C-38	1

\* Not Illustrated.

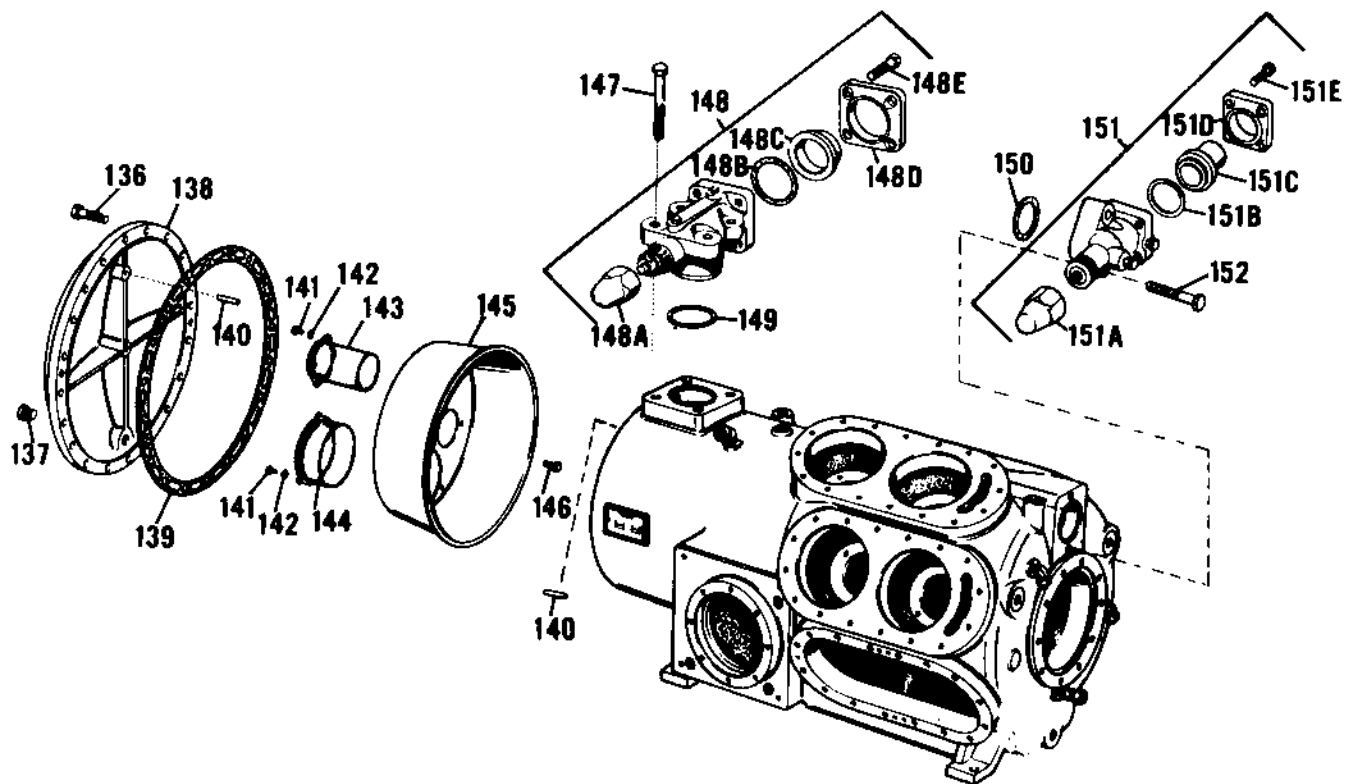
\*\* As Required.



REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
114	Terminal - Hermetic -----	TER-8	3
115	Terminal Stud -----	STU-27	*
116	Box - Junction -----	BOX-79	1
117	Lockwasher, 5/16 -----	WAS-110	8
118	Screw - Cap, Hex Hd., 5/16-18 x 5/8 -----	SCR-162	4
119	"O" Ring, Terminal Plate To Housing -----	RNG-91	1
120	Plate - Locating -----	PLT-129	2
121	Plate - Terminal, 6 Holes (Single Voltage Units) -----	PLT-225	1
121	Plate - Terminal, 9 Holes (Dual Voltage Units) -----	PLT-128	1
122	Ring - Retaining -----	RNG-126	1
123	Screw - Cap, 12 Pt. Hd., 1/4-28 x 7/8 -----	SCR-200	8
124	"O" Ring, Terminal Stud to Terminal Plate -----	RNG-37	*
125	Spacer - Sealing -----	SPC-8	*
126	Washer -----	WAS-97	*
127	Nut - Hex, 1/4-20 -----	NUT-9	*
128	Buss Bar -----	BAR-3	1
129	Buss Bar -----	BAR-2	**
130	Nut - Hex, 1/4-20 -----	NUT-9	*
131	Nut - Jam, 1/4-20 -----	NUT-77	6
132	Lug - Terminal -----	LUG-9	6
133	Screw - Set, Hex Soc. Hd., 5/16-18 x 3/8 -----	SCR-353	6
134	Cover - Junction Box -----	COV-179	1
135	Screw - Cap, Hex Hd., 5/16-18 x 1/2 -----	SCR-97	4

\* Single Voltage Units Use 6, Dual Voltage Units Use 9.  
 \*\* Single Voltage Units Use 2, Dual Voltage Units Use 4.





REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
136	Screw - Cap, Hex Hd., 7/16-14 x 1-1/4 -----	SCR-233	12
137	Plug - Pipe, Hex Hd., 1/4" N.P.T. -----	PLU-37	1
138	Cover - Suction -----	COV-311	1
139	"O" Ring - Suction Cover -----	RNG-163	1
140	Pin Roll, 3/16" x 3/4" -----	PIN-7	2
141	Screw - Round Hd., No. 10-32 x 3/8 -----	SCR-64	7
142	Lockwasher, No. 10 -----	WAS-18	7
143	Strainer - Suction Gas -----	SRA-29	2
144	Filter - Oil -----	FLR-45	1
145	Pan - Suction Strainer -----	PAN-148	1
146	Screw - Cap, Hex Soc. Hd., 1/4-28 x 1/2 -----	SCR-177	1
147	Screw - Cap, Hex Hd., 5/8-11 x 4 -----	SCR-317	4
148	Valve - Suction Service, 2-1/8" O.D.S. -----	VAL-9	1
	Consisting of: 148A, 148B, 148C, 148D, 148E		
148A	Cap -----	CAP-4+	1
148B	Gasket -----	GKT-830+	1
148C	Adapter -----	VAL-9	1
148D	Flange -----	FLG-3+	1
148E	Screw -----	SCR-49+	4
149	Gasket - Suction Service Valve -----	GKT-15	1
150	Gasket - Discharge Service Valve -----	GKT-12	1

+ Specify Valve - Manufacturer - M.B. (Mueller Brass Co.),  
H.V. (Henry Valve Co.), Metrix.

PARTS LIST CONTINUED

REF. NO.	PART NAME AND DESCRIPTION	PART NO.	NO. REQ.
151	Valve - Discharge Service, 1-3/8" O.D.S. ----- Consisting of: 151A, 151B, 151C, 151D, 151E	VAL-76	1
151A	Cap -----	CAP-17+	1
151B	Gasket -----	GKT-246+	1
151C	Adapter -----	ADP-15+	1
151D	Flange -----	FLG-11+	1
151E	Screw -----	SCR-80+	4
152	Screw - Cap, Hex Hd., 1/2-13 x 2 -----	SCR-11	2

+ Specify Valve - Manufacturer - M.B. (Mueller Brass Co.),  
H.V. (Henry Valve Co.), Metrix.

## RECOMMENDED SPARE PARTS LIST

REF. NO.	PART NAME AND DESCRIPTION	PART NUMBER	QUANTITY	
			1 UNIT	10 UNITS
8	"O" Ring -----	RNG-79	3	9
9	Motor End Bearing Head, Including Inserts ----	BRG-147	1	2
10	Bearing Insert -----	BRG-65	1	4
11	Thrust Bearing -----	BRG-62	2	4
13	Crankshaft, Including Magnetic Plugs -----	CSF-36	-	1
16	Relief Valve -----	VAL-193	1	1
19	Oil Relief Valve -----	VAL-138	1	2
21	Pump End Bearing Head, Including 1 Ea. Ref. No's. 10, 19, 20, 35 -----	BRG-78	1	2
24	Oil Pump -----	PMP-14	1	2
31	Foam Breaker -----	BKR-34	1	2
35	"O" Ring -----	RNG-69	1	2
40	Discharge Valve -----	VAL-195	1	3
41	Discharge Valve Springs -----	SPG-4	1 Set	3 Sets
45	Valve Cushion -----	CUS-10	1	3
50	Piston Ring Kit -----	RNG-78	1 Set	2 Sets
52	Piston, Including Pin and Retaining Rings ----	PST-20	-	1 Set
53	Connecting Rod -----	ROD-37	1 Set	1 Set
54	Retaining Rings -----	RNG-98	1 Set	1 Set
55	Valve Plate (Standard Lift Valves) -----	PLT-107	1	1
55	Valve Plate (Low Lift Valves) -----	PLT-126	1	1
56	Valve Springs -----	SPG-37	1 Set	3 Sets
57	Suction Valve -----	VAL-194	1	3
59	Cylinder Liner -----	LNR-20	1	1
65	Unloader Assembly -----	UNL-4	1	1
77	Sight Glass -----	GLS-34	1	2
78	Sight Glass "O" Ring -----	RNG-207	1	2
100	Capacity Control Assembly -----	CNT-4	1	2
114	Terminal - Hermetic -----	TER-8	3	6
115	Terminal Stud -----	STU-27	1 Set	2 Sets

## RECOMMENDED SPARE PARTS (CON'T.)

REF. NO.	PART NAME AND DESCRIPTION	PART NUMBER	QUANTITY	
			1 UNIT	10 UNITS
119	"O" Ring -----	RNG-91	1	2
120	Plate - Locating -----	PLT-129	2	4
121	Plate - Terminal, 6 Holes (Single Voltage Units	PLT-225	1	2
121	Plate - Terminal, 9 Holes (Dual Voltage Units)	PLT-128	1	2
122	Ring - Retaining -----	RNG-126	1	2
123	Screw -----	SCR-200	8	16
124	"O" Ring -----	RNG-37	1 Set	2 Sets
125	Spacer - Sealing -----	SPC-8	1 Set	2 Sets
126	Washer -----	WAS-97	1 Set	2 Sets
127	Nut - Hex, 1/4-20 -----	NUT-9	1 Set	2 Sets
128	Buss Bar -----	BAR-3	1	2
129	Buss Bar -----	BAR-2	1 Set	2 Sets
130	Nut - Hex, 1/4-20 -----	NUT-9	1 Set	2 Sets
131	Nut - Jam, 1/4-20 -----	NUT-77	6	12
132	Terminal Lug -----	LUG-9	6	12
133	Screw - Set, Hex Soc. Hd., 5/16-18 x 3/8 -----	SCR-353	6	12
144	Oil Filter -----	FLR-45	1	4
*	Cylinder "O" Ring Kit -----	KIT-40	1 Set	3 Sets
*	Compressor Gasket and "O" Ring Kit -----	KIT-230	1 Set	3 Sets

\* Not Illustrated.