



**Millennium™**  
**ROTARY SCREW LIQUID CHILLERS**

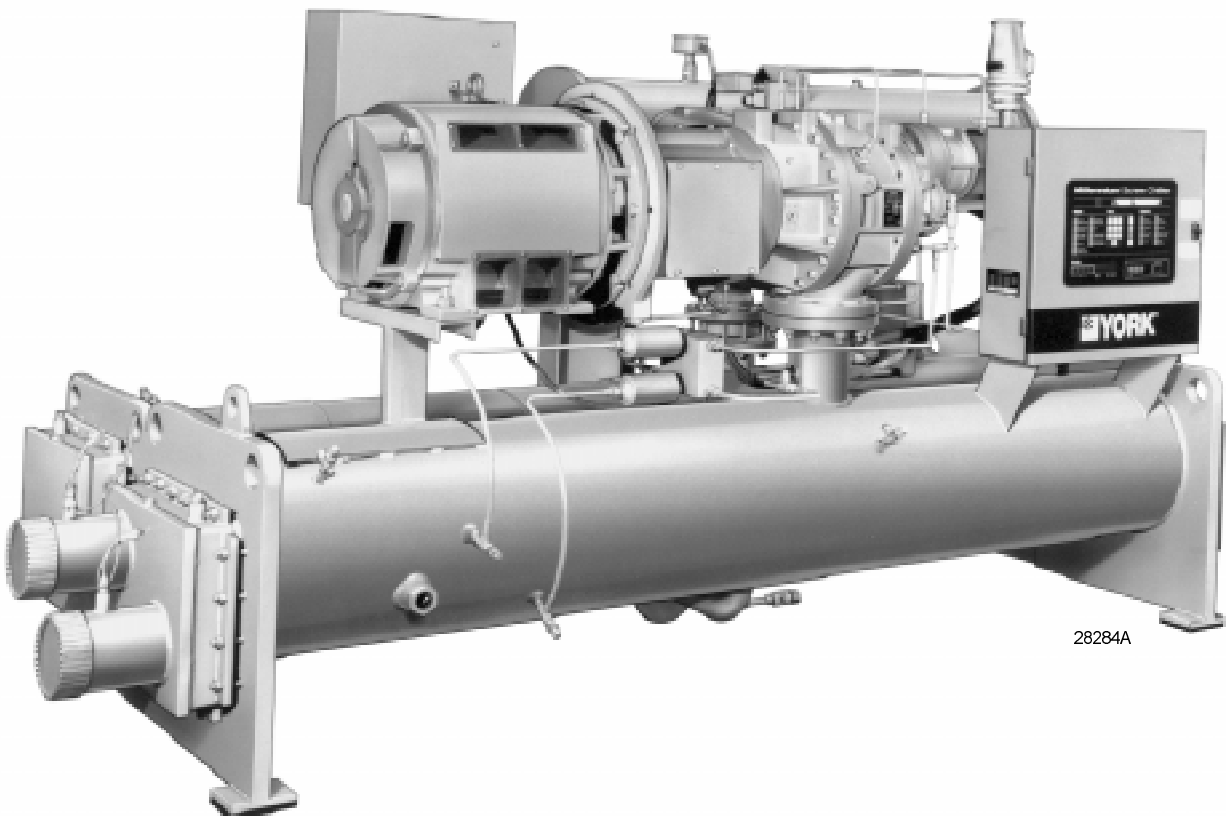
**RENEWAL PARTS**

Supersedes: Nothing

FORM 160.47-RP4 (198)

**UNIT COMPONENTS**

**MODEL YS BA BA S0 THRU YS FC FB S5  
(STYLE C)  
150 THRU 650 TONS**

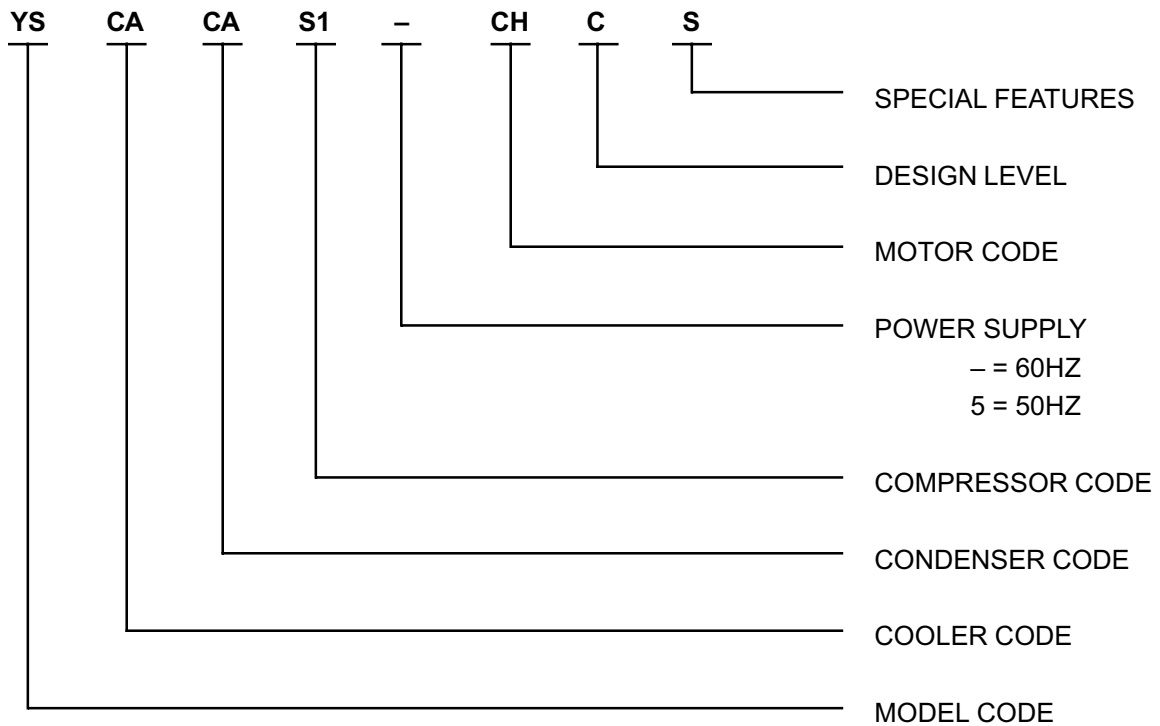


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## NOMENCLATURE



## AVAILABLE COMPRESSOR/SHELL/MOTOR COMBINATIONS

COMPRESSOR CODE	COOLER SHELL CODE	CONDENSER SHELL CODE	MOTOR CODE			
			R-22		R-134a	
			60 HZ	50HZ	60 HZ	50 HZ
S0	BA,BB	BA,BB,CA,CB	CF,CG,CH	5CC,5CD	CF,CG,CH	5CC,5CD
	CA,CB	BA,BB,CA,CB				
S1	BA,BB	BA,BB,CA,CB	CF,CG,CH,CJ,CK	5CC,5CD,5CE,5CF	CF,CG,CH,CJ,CK	5CC,5CD,5CE,5CF
	CA,CB	BA,BB,CA,CB				
S2	CA,CB	CA,CB,DA,DB	CG,CH,CJ,CK,CL,CM	5CC,5CD,5CE,5CF,5CG,5CH	CF,CG,CH,CJ,CK,CL,CM	5CC,5CD,5CE,5CF,5CG,5CH
	DA,DB,DC	CA,CB,DA,DB				
S3	DA,DB,DC	CA,CB,DA,DB	CJ,CK,CL,CM,CN,CP,CR	5CE,5CF,5CG,5CH,5CI,5CJ,5CK	CG,CH,CJ,CK,CL,CM,CN,CP,CR	5CC,5CD,5CE,5CF,5CG,5CH,5CI,5CJ,5CK
S4	EA,EB,EC	EA,EB,FA,FB	CK,CL,CM,CN,CP,CR,CS,CT,CU,CV,CW,CX,CY,CZ	5CF,5CG,5CH,5CI,5CJ,5CK,5CL,5CM,5CN,5CO,5CP,5CQ,5CR,5CS	CJ,CK,CL,CM,CN,CP,CR,CS,CT,CU,CV,CW,CX,CY,CZ	5CE,5CF,5CG,5CH,5CI,5CJ,5CK,5CL,5CM,5CN,5CO,5CP,5CQ,5CR,5CS
	FA,FB,FC	FA,FB				
S5	FA,FB,FC	FA,FB	CK,CL,CM,CN,CP,CR,CS,CT,CU,CV,CW,CX,CY,CZ	5CF,5CG,5CH,5CI,5CJ,5CK,5CL,5CM,5CN,5CO,5CP,5CQ,5CR,5CS	CK,CL,CM,CN,CP,CR,CS,CT,CU,CV,CW,CX,CY,CZ	5CF,5CG,5CH,5CI,5CJ,5CK,5CL,5CM,5CN,5CO,5CP,5CQ,5CR,5CS

## UNIT COMPONENTS

ITEM NUMBER	DESCRIPTION	PART NUMBER	QUANTITY PER UNIT	REFERENCE FIGURE
1	Valve, Butterfly		1	2
	S0, S1 Compressors	022-08874-000		
	S2, S3 Compressors	022-08875-000		
	S4, S5 Compressors	022-08876-000		
2 3 4	Shim, Motor Mounting	066-87439-000	8	5
		066-92388-000	4	
		066-92389-000	4	
5	Gasket, Compressor Suction		1	5
	S0, S1 Compressors	028-13574-000		
	S2, S3 Compressors	028-13574-000		
	S4, S5 Compressors	028-13576-000		
6	Gasket, Compressor Discharge		1	3
	S0, S1 Compressors	028-13573-000		
	S2, S3 Compressors	028-13575-000		
	S4, S5 Compressors	028-13575-000		
7	Gasket, Butterfly Valve		2	2
	S0, S1 Compressors	028-13573-000		
	S2, S3 Compressors	028-13575-000		
	S4, S5 Compressors	028-13575-000		
8	Filter, Suction*	026-32839-000	2	5
9	Cooler, Oil		1	1
	S0, S1 Compressors	026-33613-000		
	S2, S3 Compressors	026-33613-000		
	S4, S5 Compressors	026-32833-000		
10	Filter, Oil (Complete) Includes Items 10A, 10B	026-32830-000	1	6
10A	Element, Oil Filter	026-32831-000	2	6
10B	Replacement "O"-Rings Kit, Oil Filter	026-34428-000	1	6
11	Eductor, Oil		1	4
	S0, S1 Compressors - R-22	375-15231-000		
	R-134A	375-17436-000		
	S2, S3 Compressors - R-22	375-15231-000		
	R-134A	375-17436-000		
	S4, S5 Compressors - R-22	375-16331-000		
R-134A	375-17437-000			
12	Valve, Solenoid			2
	S0, S1 Compressors	025-32916-000	1	
	S2, S3 Compressors	025-32916-000	1	
	S4, S5 Compressors	Not Required	—	
13	Valve, Angle Stop	022-09195-000	1	1
14	Valve, Angle Stop	022-09196-000	4	2, 5, 6
15	Valve, Angle Stop	022-09197-000	3	1, 6, 7
16	Valve, Angle Stop	022-09198-000	4	3
17	Valve, Angle Stop		1	1
	S0, S1 Compressors	022-09198-000		
	S2, S3 Compressors	022-09198-000		
	S4, S5 Compressors	022-09199-000		

\* Special Primore Rotalock Fitting

TABLE CONTINUED ON PAGE 6

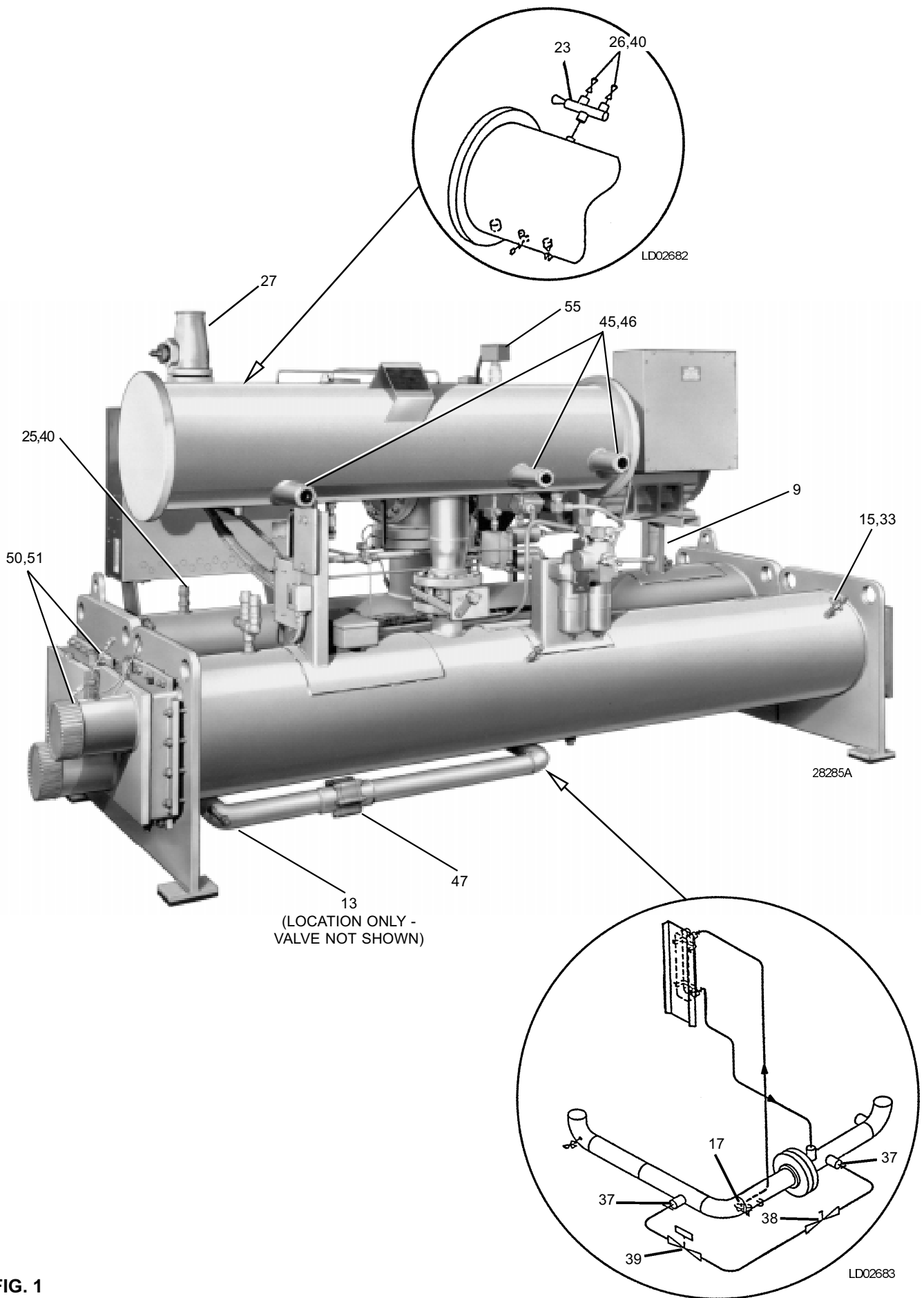


FIG. 1

## UNIT COMPONENTS

ITEM NUMBER	DESCRIPTION	PART NUMBER	QUANTITY PER UNIT	REFERENCE FIGURE
18	Valve, Angle Stop	022-09199-000	4	4, 5, 7
19	Solenoid Valve, Subplate	029-21399-000	1	3
20	Valve, Angle Stop			2
	S0, S1 Compressors	Not Required	—	
	S2, S3 Compressors	022-09198-000	1	
	S4, S5 Compressors	022-09198-000	1	
21	Valve, Angle Stop		2	2, 7
	S0, S1 Compressors	022-09199-000		
	S2, S3 Compressors	022-09199-000		
	S4, S5 Compressors	022-09514-000		
22	Valve, Three-Way Stop	022-09515-000	1	2
23	Valve, Three-Way Stop			1
	S0, S1 Compressors	Not Required	—	
	S2, S3 Compressors	022-09515-000	1	
	S4, S5 Compressors	022-09515-000	1	
24	Valve, Relief		2	2
	S0, S1 Compressors	022-09501-000		
	S2, S3 Compressors	022-09501-000		
	S4, S5 Compressors	022-09505-000		
25	Valve, Relief		1	1
	S0, S1 Compressors	022-09501-000		
	S2 Compressors - "C" Cooler	022-09501-000		
	S2, S3 Compressors - "D" Cooler	022-09505-000		
	S4, S5 Compressors	022-09505-000		
26	Valve, Relief			1
	S0, S1 Compressors	Not Required	—	
	S2, S3 Compressors	022-09501-000	2	
	S4, S5 Compressors	022-09505-000	2	
27	Valve, Relief			1
	S0, S1 Compressors	022-07893-040	1	
	S2, S3 Compressors	022-07893-040	1	
	S4, S5 Compressors	Not Required	—	
28	Valve, Ball	022-08747-000	1	4
29	Valve, Bleed	022-09574-000	2	6
30	Seal, "O"-Ring	028-12961-001	2	6
31	Bottle, Oil	028-10579-000	1	6
32	Filter Drier*	026-32841-000	1	3
33	Seal, Bonnet	023-01026-000	3	1, 6, 7
34	Seal, Bonnet	075-01611-000	1	3
35	Pad, Isolator		2	3
	S0, S1 Compressors	075-01637-000		
	S2, S3 Compressors	075-01637-000		
	S4, S5 Compressors	075-03658-000		
36	Seal, Teflon Fiber	028-12709-000	6	5
37	Seal, "O"-Ring	028-12961-016	2	1

\* Special Primore Rotalock Fitting

TABLE CONTINUED ON PAGE 8

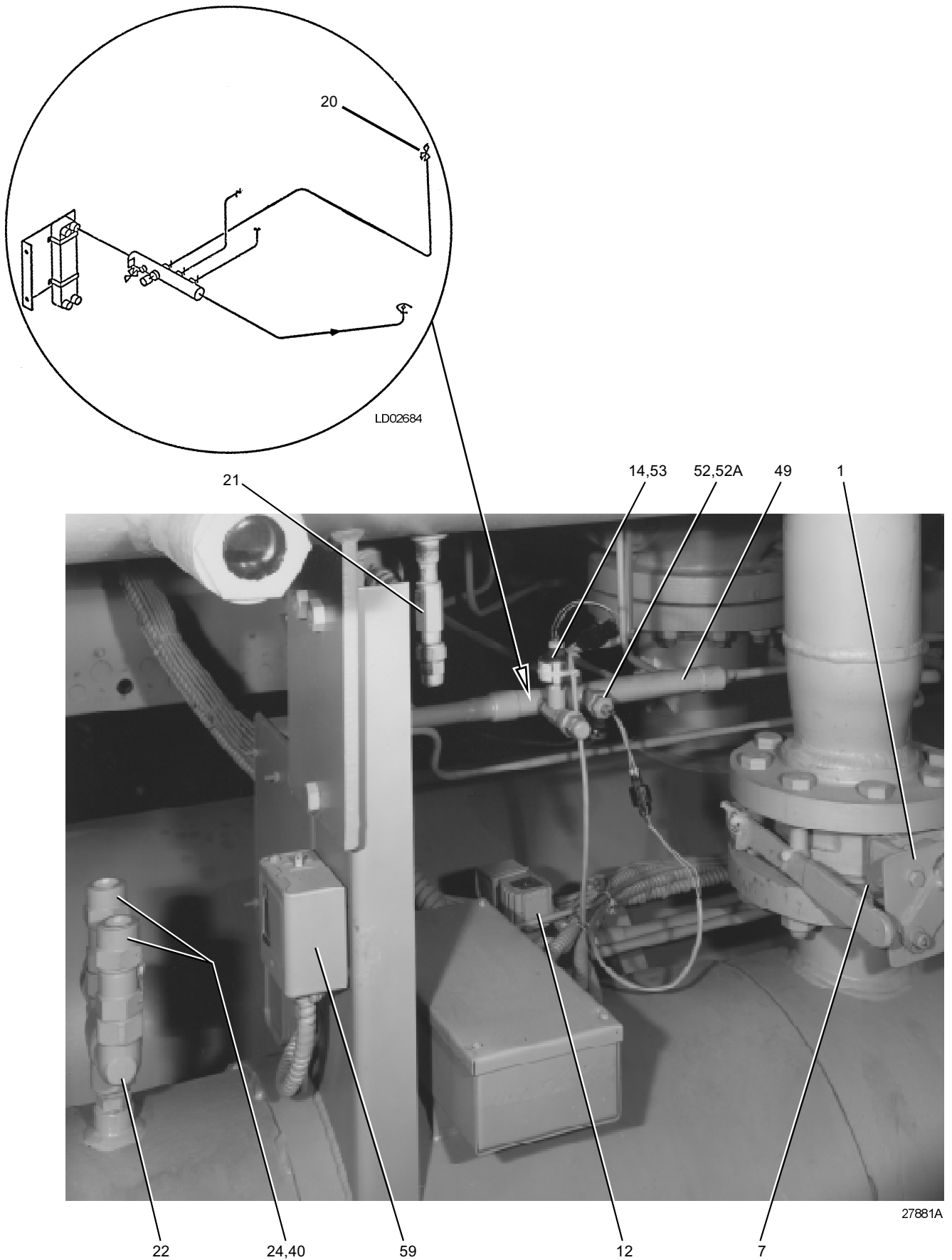


FIG. 2

## UNIT COMPONENTS

ITEM NUMBER	DESCRIPTION	PART NUMBER	QUANTITY PER UNIT	REFERENCE FIGURE
38	Valve, Ball	022-09565-000	1	1
39	Valve, Solenoid	025-32916-000	1	1
40	Seal, "O"-Ring	028-12961-005		1, 2
	S0, S1 Compressors		3	
	S2, S3 Compressors		5	
	S4, S5 Compressors		5	
41	Rupture Disk, 2" S4, S5 Compressors	026-32292-000	1	7, 8
42	Safety head, 2" S4, S5 Compressors	026-32293-000	1	7, 8
43	Gasket, Round, Rupture Disk S4, S5 Compressors	028-10386-028	3	7, 8
44	Valve, Ball	022-09502-000	1	7
45	Sight Glass	023-17197-000	4	1, 5
46	Seal, "O"-Ring	028-12961-009	4	1, 5
47	Valve, Ball	022-08744-000	1	1
48	Gasket, Round, Orifice Plate	028-13572-000	2	7
49	Oil Manifold		1	2
	S0, S1 Compressors	375-28716-001		
	S2, S3 Compressors	375-28716-001		
	S4, S5 Compressors	375-28716-001		

## SYSTEM CONTROL COMPONENTS

ITEM NUMBER	DESCRIPTION	PART NUMBER	QUANTITY PER UNIT	REFERENCE FIGURE
50	Well, Sensor (Clr and Cond Water)	026-32328-000	4	1, 7
51	Sensor, Temperature (Clr and Cond Water)	025-29964-000	4	1, 7
52	Sensor, Temperature	025-31301-000	2	2, 9
52A	Seal, "O"-Ring	028-12961-004	2	2, 9
53	Transducer, Pressure	025-28678-006	3	2, 6
54	Transducer, Pressure R-22	025-28678-007	1	5
	R-134A	025-28678-008	1	
55	Float Switch, Oil Level		1	1
	S0, S1 Compressors	024-30439-001		
	S2, S3 Compressors	024-30439-002		
	S4, S5 Compressors	024-30439-003		
56	Oil Heater (1HTR)	025-29119-000	1	3
57	Well, Thermostat (Oil Heater)	026-32840-000	1	3
58	Thermostat, Oil Heater	024-25509-000	1	3
59	Hi-Pressure Cutout	025-30970-000	1	2
60	Suppressor	031-00808-000		10
	S0, S1 Compressors <sup>1</sup>		4	
	S2, S3 Compressors <sup>1</sup>		4	
	S4, S5 Compressors <sup>2</sup>		3	
61	Valve, 4-Way Solenoid	025-30464-000	1	3

**NOTES:**

1. Used in Oil Line Solenoid Valve (1 SOL), Refrigerant Level Solenoid Valve (2 SOL) and Slide Valve Solenoid (2 Req'd).
2. Used in Refrigerant Level Solenoid Valve (2 SOL) and Slide Valve Solenoid (2 Req'd).

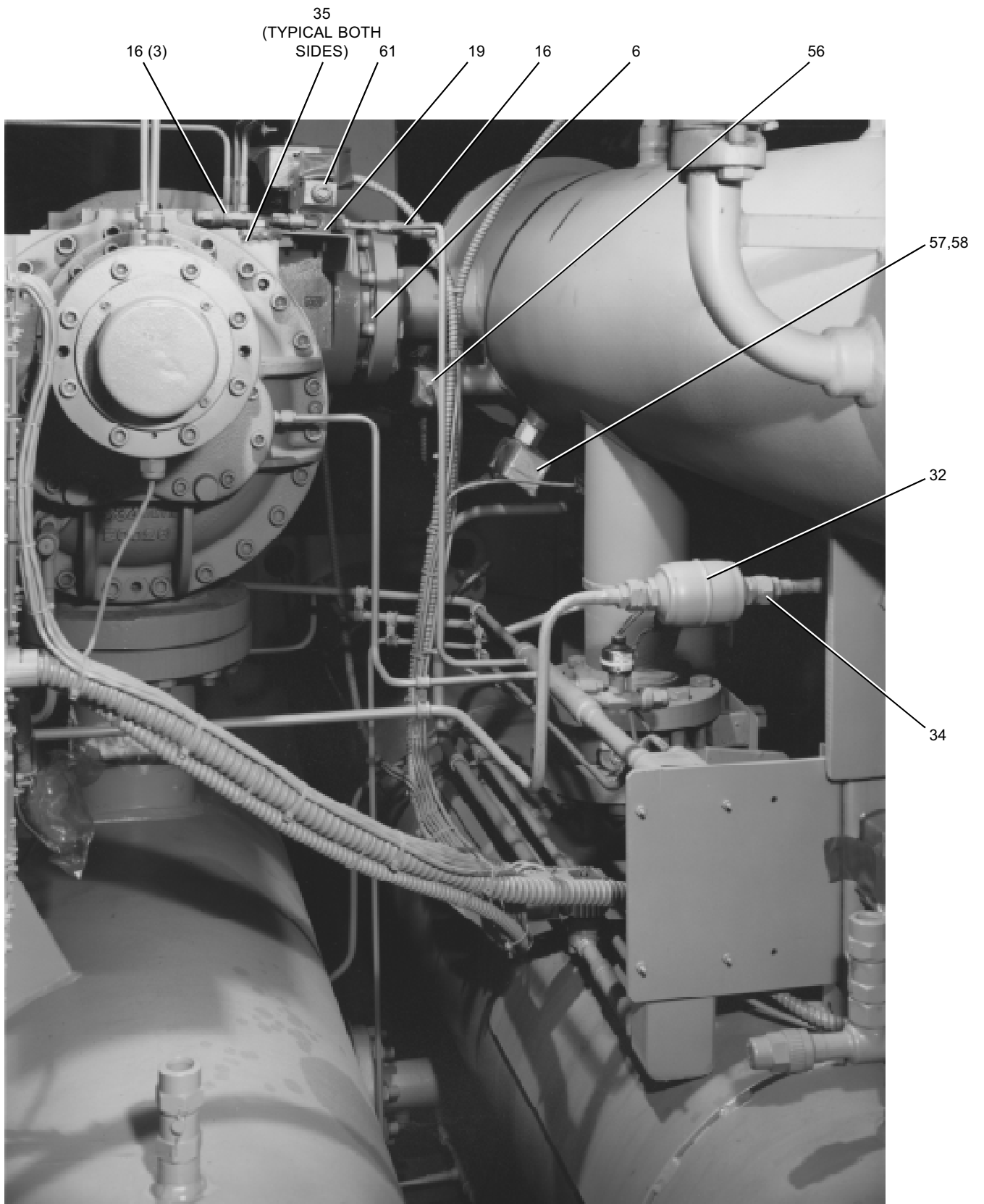


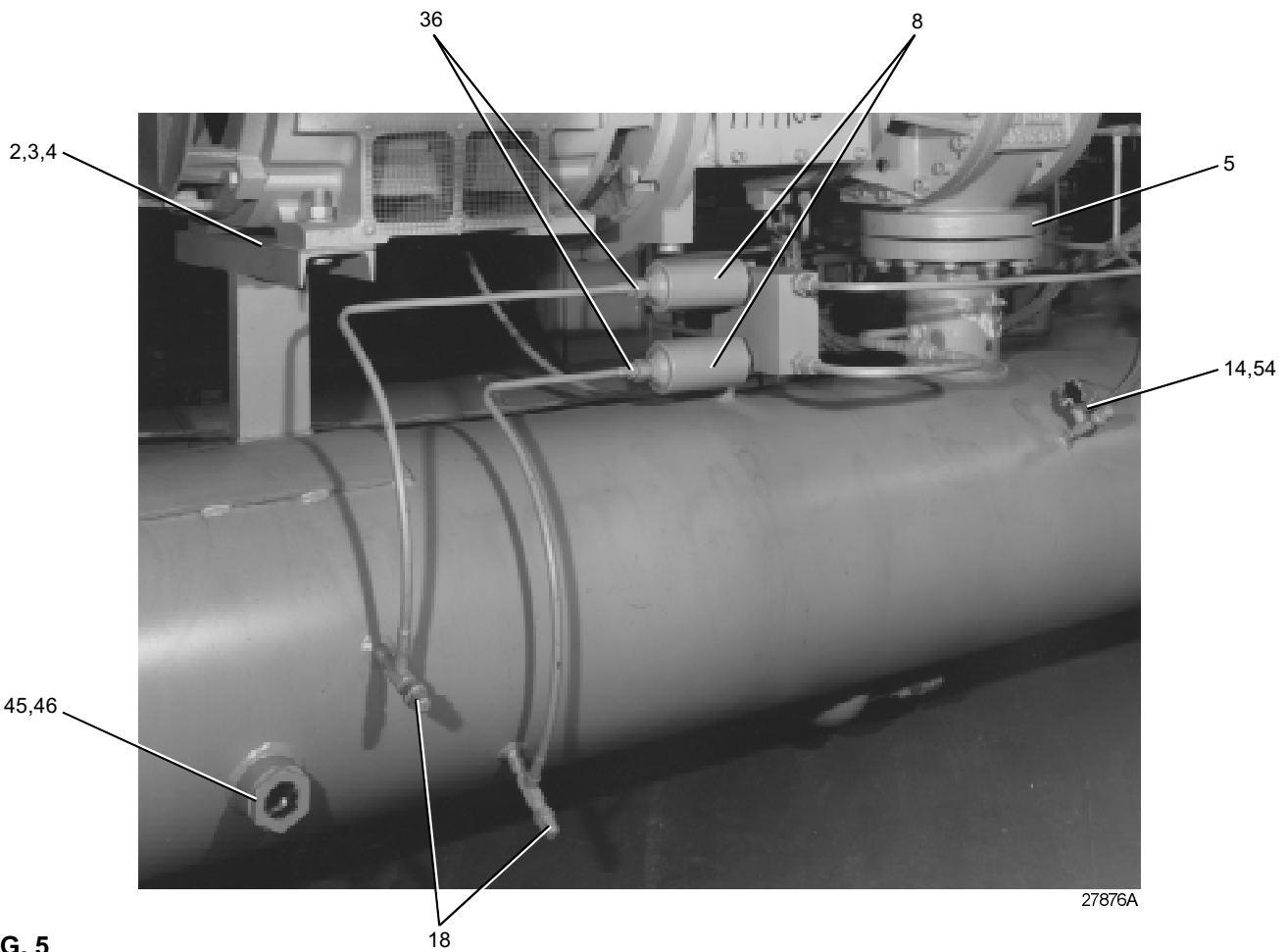
FIG. 3



27877A

\* Angle stop valve in current design

FIG. 4



27876A

FIG. 5

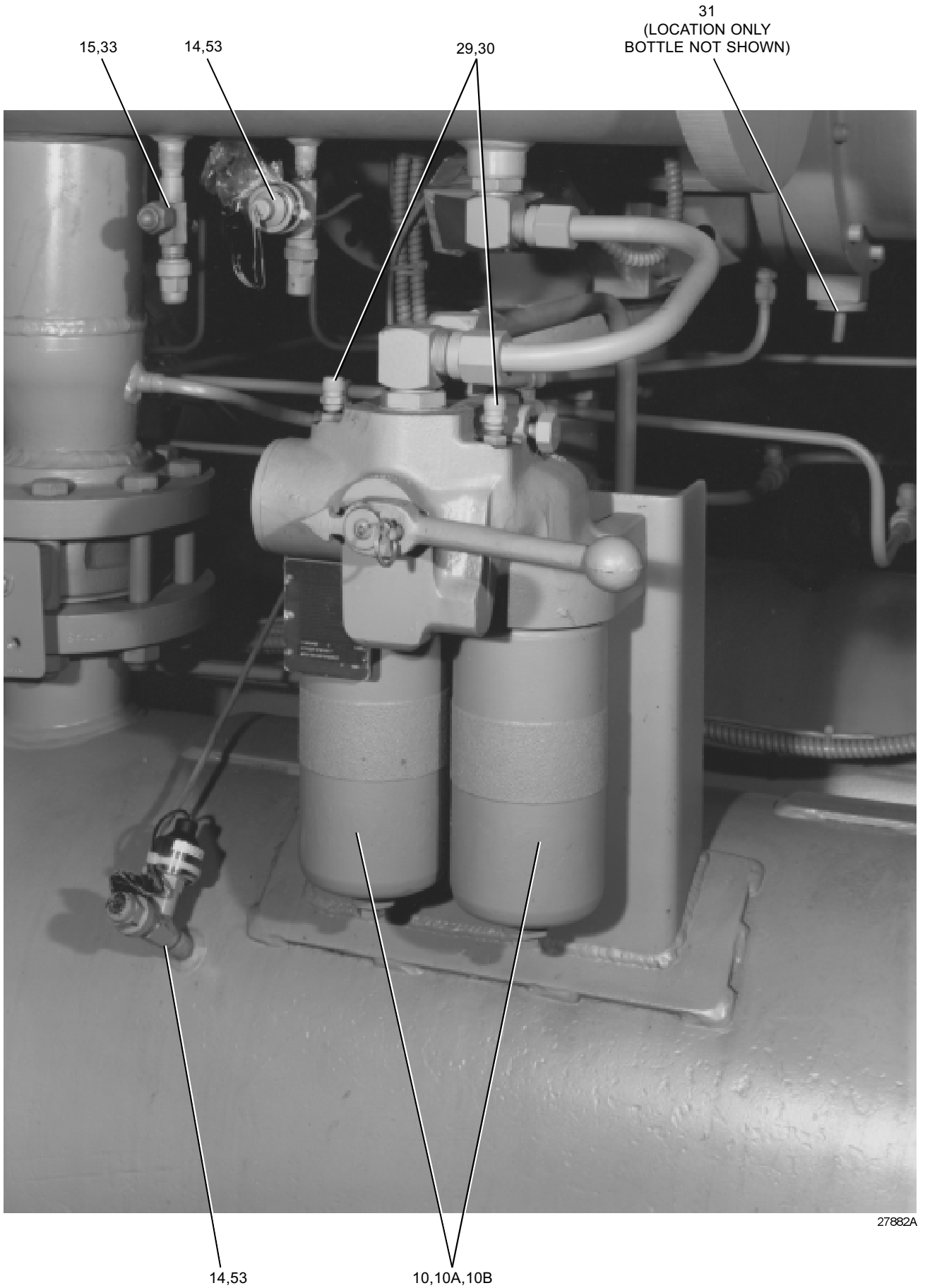


FIG. 6

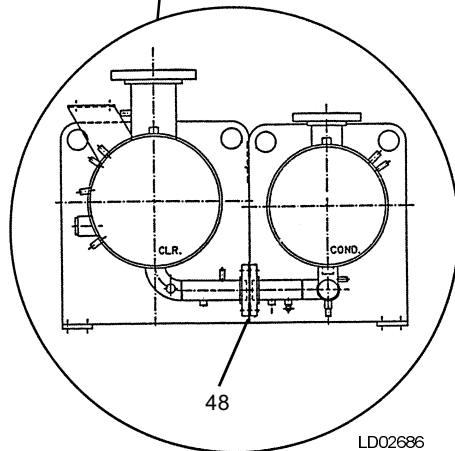
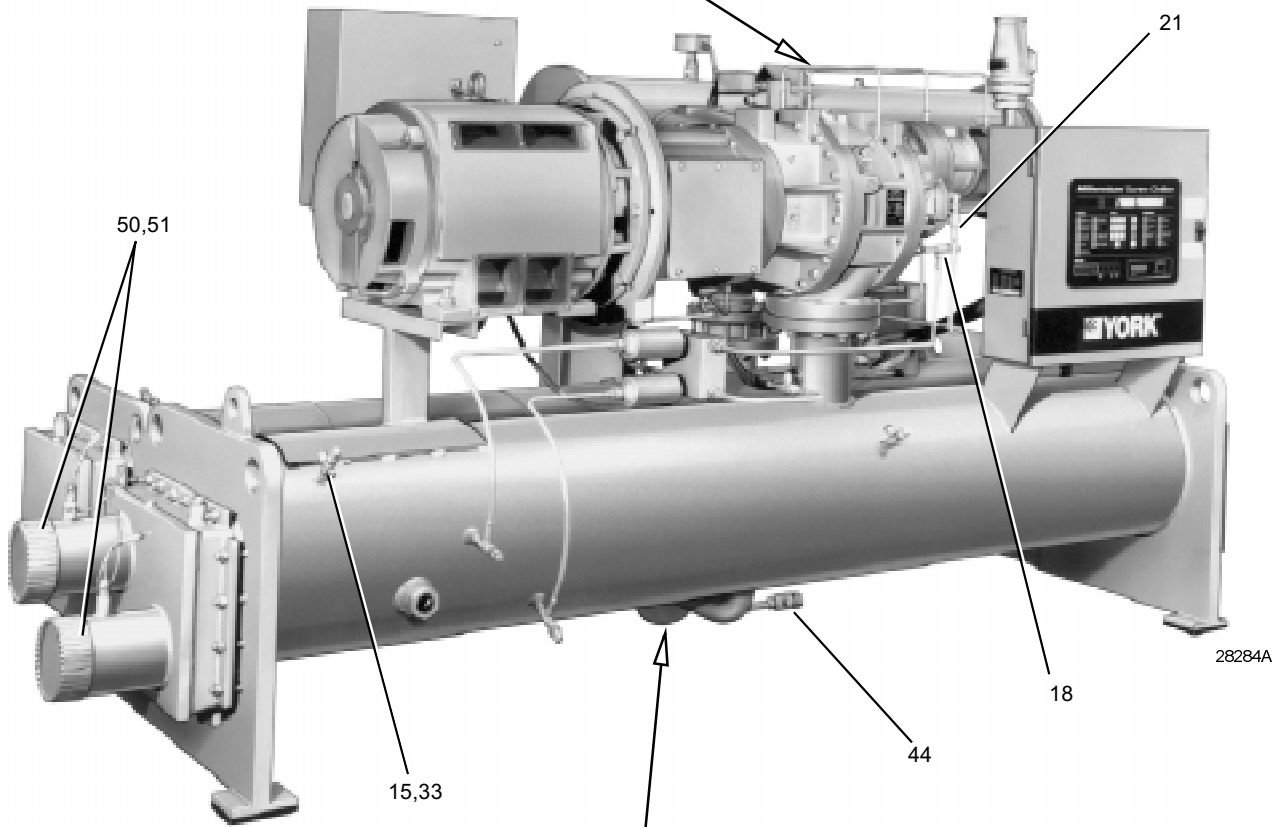
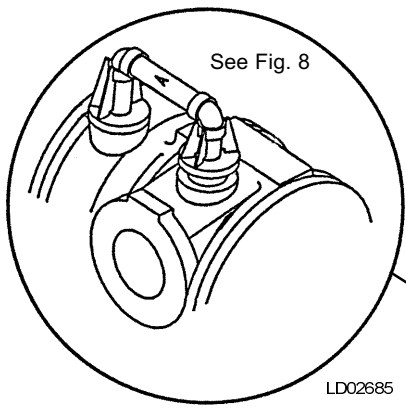
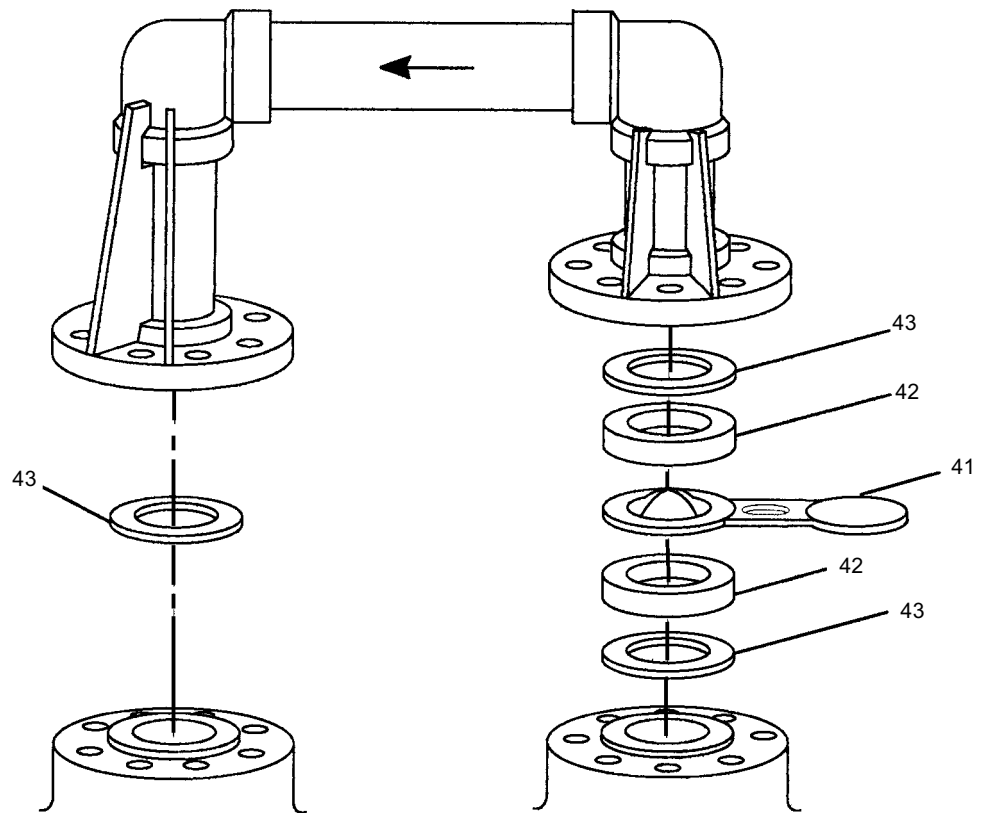


FIG. 7



LD02687

FIG. 8

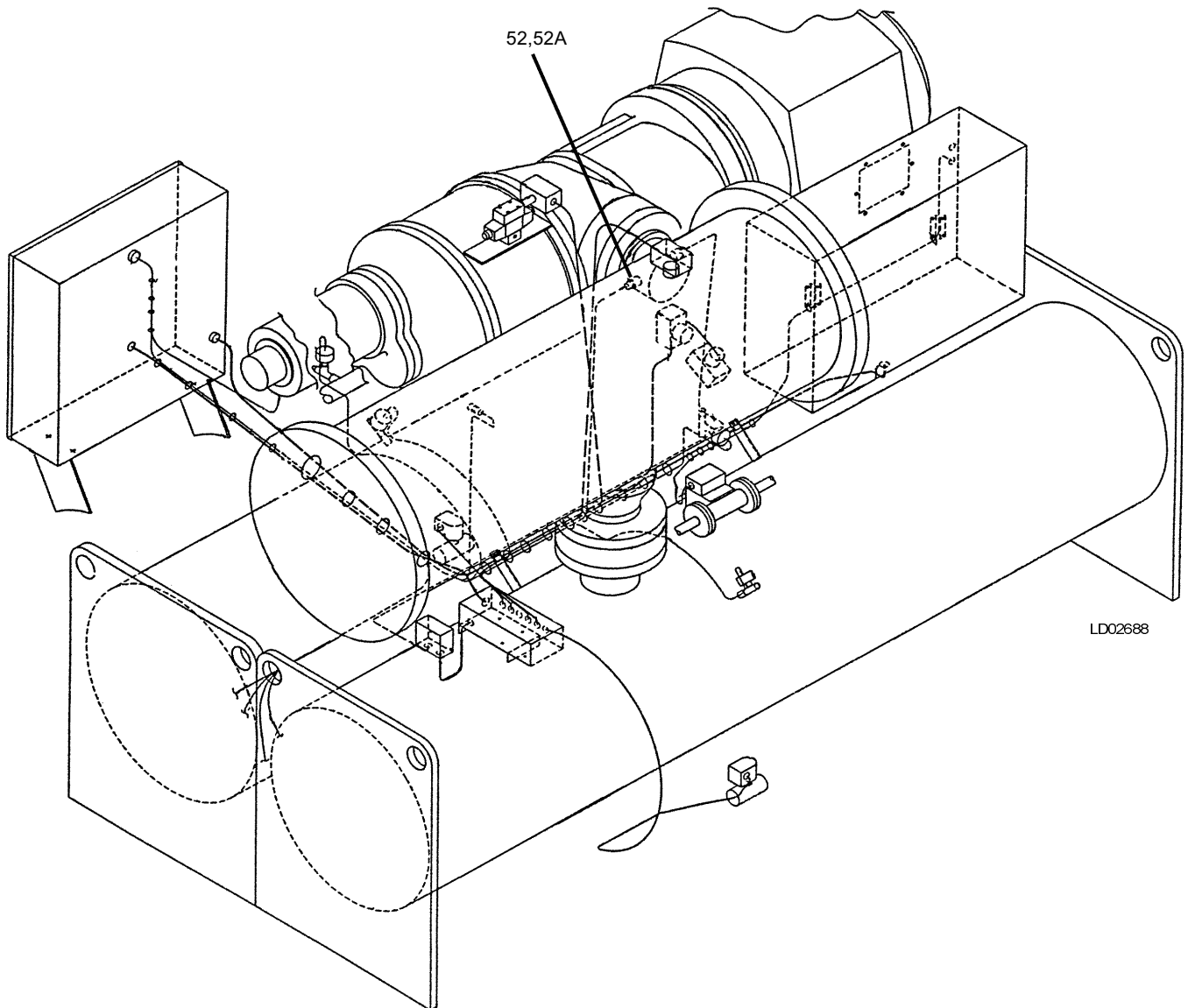


FIG. 9

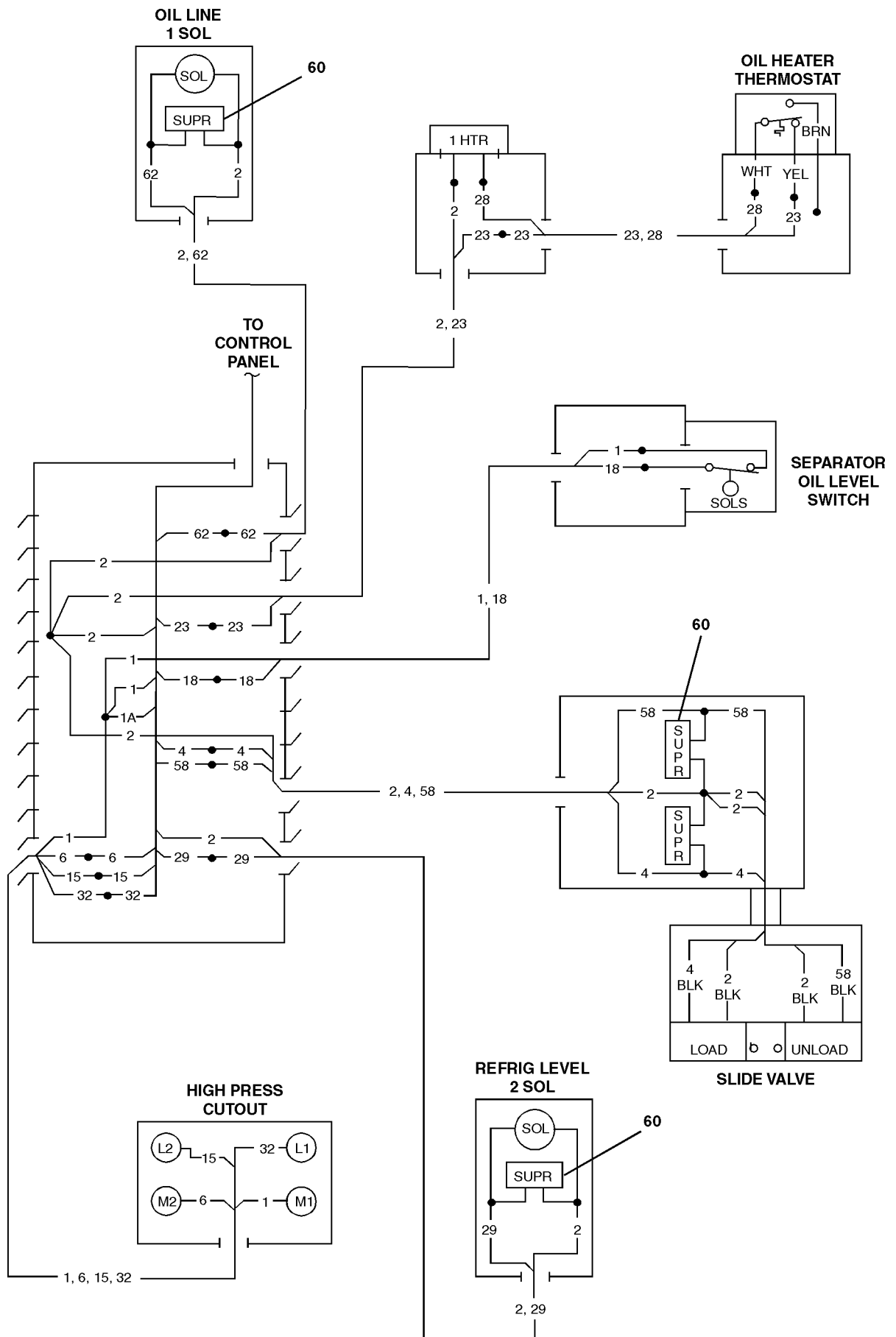


FIG. 10

LD02689

## KIT CURRENT TRANSFORMER

### FIELD INSTALLED ELECTRO-MECHANICAL STARTERS ONLY

MOTOR VOLTAGE	FLA	"CT" RATIO	PART NUMBER
			USE WITH FACTORY-MOUNTED MOTORS ONLY
200/600	65-111	200:1	366-82718-701
	112-224	350:1	366-82718-702
	225-829	700:1	366-82718-703
	830-1790	1400:1	366-82718-704
2300/4160	11-18	200:1	366-82718-705
	19-37	200:1	366-82718-705
	38-123	200:1	366-82718-705
	124-264	350:1	366-82718-706

### TRANSFORMER ONLY

CT RATIO	PART NUMBER
200:1	025-21173-001
350:1	025-21173-002
700:1	025-21173-003
1400:1	025-21173-004

### OIL SEPARATOR

COMPRESSOR SIZE	PART NUMBER
S0	375-15235-000
S1	375-15235-000
S2	375-15236-000
S3	375-15236-000
S4	375-16048-000
S5	375-16048-000

### ORIFICE PLATE

CODE	PART NUMBER	CODE	PART NUMBER
C	075-00748-001	N	075-00748-011
D	075-00748-002	P	075-00748-012
E	075-00748-003	Q	075-00748-013
F	075-00748-004	R	075-00748-014
G	075-00748-005	S	075-00748-015
H	075-00748-006	T	075-00748-016
J	075-00748-007	U	075-00748-017
K	075-00748-008	V	075-00748-018
L	075-00748-009	W	075-00748-019
M	075-00748-010		

## STRAINER, INLET CHILLED WATER (Compact Heads and Marine Water Boxes)

COOLER SHELL CODE	PASS	NOZZLE SIZE	PART NUMBER	
			COMPACT WATER BOX	MARINE WATER BOX
BA,BB	1	8	029-12949-000	029-12949-000
CA,CB	1	8	029-12949-000	—
		10	—	029-12950-000
DA,DB,DC	1	12	029-12951-000	029-12951-000
BA,BB,CA,CB	2	6	029-12948-000	029-12948-000
DA,DB,DC	2	8	029-12949-000	029-12949-000
BA,BB	3	4	029-13286-000	029-13286-000
CA,CB,DA,DB,DC	3	6	029-12948-000	029-12948-000
EA,EB,EC	1	12	029-12951-000	029-12951-000
FA,FB,FC	1	12	—	029-12951-000
		14	029-14727-000	—
EA,EB,EC	2	8	029-12949-000	029-12949-000
FA,FB,FC	2	10	029-12950-000	029-12950-000
EA,EB,EC	3	6	029-12948-000	029-12948-000
FA,FB,FC	3	8	029-12949-000	029-12949-000

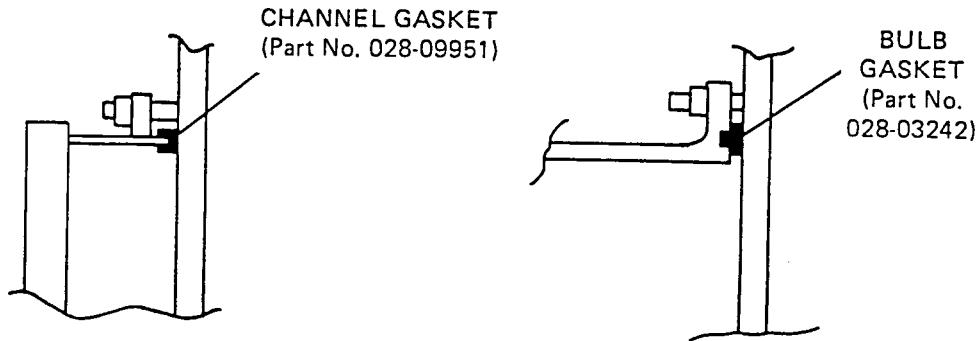
## NEOPRENE VIBRATION ISOLATORS

SYSTEM OPERATING WEIGHT		PART NUMBER Includes Quantity of 4 Pads	PAD SIZE
KILOGRAMS	POUNDS		
Up to 7423	Up to 16365	028-10578-000	4-1/2" x 4-1/2"
7424 to 13107	16366 to 28835	028-10518-000	4-1/2" x 6"
13108 to 24332	28836 to 53530	028-10519-000	6" x 6"

## SPRING ISOLATORS

SYSTEM OPERATING WEIGHT		PART NUMBER Includes Quantity of 4 Pads	QUANTITY
KILOGRAMS	POUNDS		
Up to 4453	Up to 6865	029-18479-001	4
3115 to 4453	6866 to 9818	029-18479-002	4
4454 to 5526	9819 to 12182	029-18479-003	4
5527 to 6927	12183 to 15272	029-18479-004	4
6928 to 8288	15273 to 18272	029-18480-001	4
8289 to 10391	18273 to 22909	029-18480-002	4
10392 to 11813	22910 to 26044	029-18480-003	4
11814 to 13126	26045 to 28938	029-18480-004	4
13127 to 14530	28939 to 32032	029-18480-005	4

## WATER BOX GASKETS



LD02690

### COOLER WITH STANDARD COMPACT WATER BOXES

SHELL CODE	1 PASS		2 PASS		3 PASS	
	GASKET PART NO.	FEET REQ'D	GASKET PART NO.	FEET REQ'D	GASKET PART NO.	FEET REQ'D
<b>BA,BB</b>	028-09951	12.0	028-09951	14.0	028-09951	14.0
<b>CA,CB</b>	028-09951	12.0	028-09951	14.0	028-09951	15.0
<b>DA,DB,DC</b>	028-09951	17.0	028-09951	20.0	028-09951	22.0
<b>EA,EB,EC</b>	028-03242	18.0	028-09951	21.0	028-09951	23.0
<b>FA,FB,FC</b>	028-03242	21.0	028-03242	21.0	028-03242	21.0
			028-09951	4.0	028-09951	3.5

### COOLER WITH MARINE WATER BOXES

SHELL CODE	1 PASS		2 PASS		3 PASS	
	GASKET PART NO.	FEET REQ'D	GASKET PART NO.	FEET REQ'D	GASKET PART NO.	FEET REQ'D
<b>BA,BB</b>	028-03242	13.0	028-03242	13.0	028-03242	13.0
			028-09951	4.0	028-09951	3.0
<b>CA,CB</b>	028-03242	14.0	028-03242	14.0	028-03242	14.0
			028-09951	5.0	028-09951	4.0
<b>DA,DB,DC</b>	028-03242	18.0	028-03242	18.0	028-03242	18.0
			028-09951	6.0	028-09951	5.0
<b>EA,EB,EC</b>	028-03242	36.0	028-03242	24.0	028-03242	36.0
			028-09951	6.0	028-09951	10.0
<b>FA,FB,FC</b>	028-03242	44.0	028-03242	33.0	028-03242	44.0
			028-09951	13.0	028-09951	13.0

## WATER BOX GASKETS

### CONDENSER WITH STANDARD COMPACT WATER BOXES

SHELL CODE	1 PASS		2 PASS	
	GASKET PART NO.	FT. REQ'D	GASKET PART NO.	FT. REQ'D
<b>BA,BB</b>	028-09951	11.0	028-09951	12.0
<b>CA,CB</b>	028-09951	12.0	028-09951	14.0
<b>DA,DB</b>	028-09951	16.0	028-09951	18.0
<b>EA,EB</b>	028-09951	16.0	028-09951	18.0
<b>FA,FB</b>	028-03242	20.0	028-03242 028-09951	20.0 3.0

### CONDENSER WITH MARINE WATER BOXES

SHELL CODE	1 PASS		2 PASS	
	GASKET PART NO.	FT. REQ'D	GASKET PART NO.	FT. REQ'D
<b>BA,BB</b>	028-03242	11.0	028-03242 028-09951	11.0 3.0
<b>CA,CB</b>	028-03242	14.0	028-03242 028-09951	14.0 3.0
<b>DA,DB</b>	028-03242	17.0	028-03242 028-09951	17.0 4.0
<b>EA,EB</b>	028-03242	17.0	028-03242 028-09951	17.0 4.0
<b>FA,FB</b>	028-03242	21.0	028-03242 028-09951	21.0 56.0

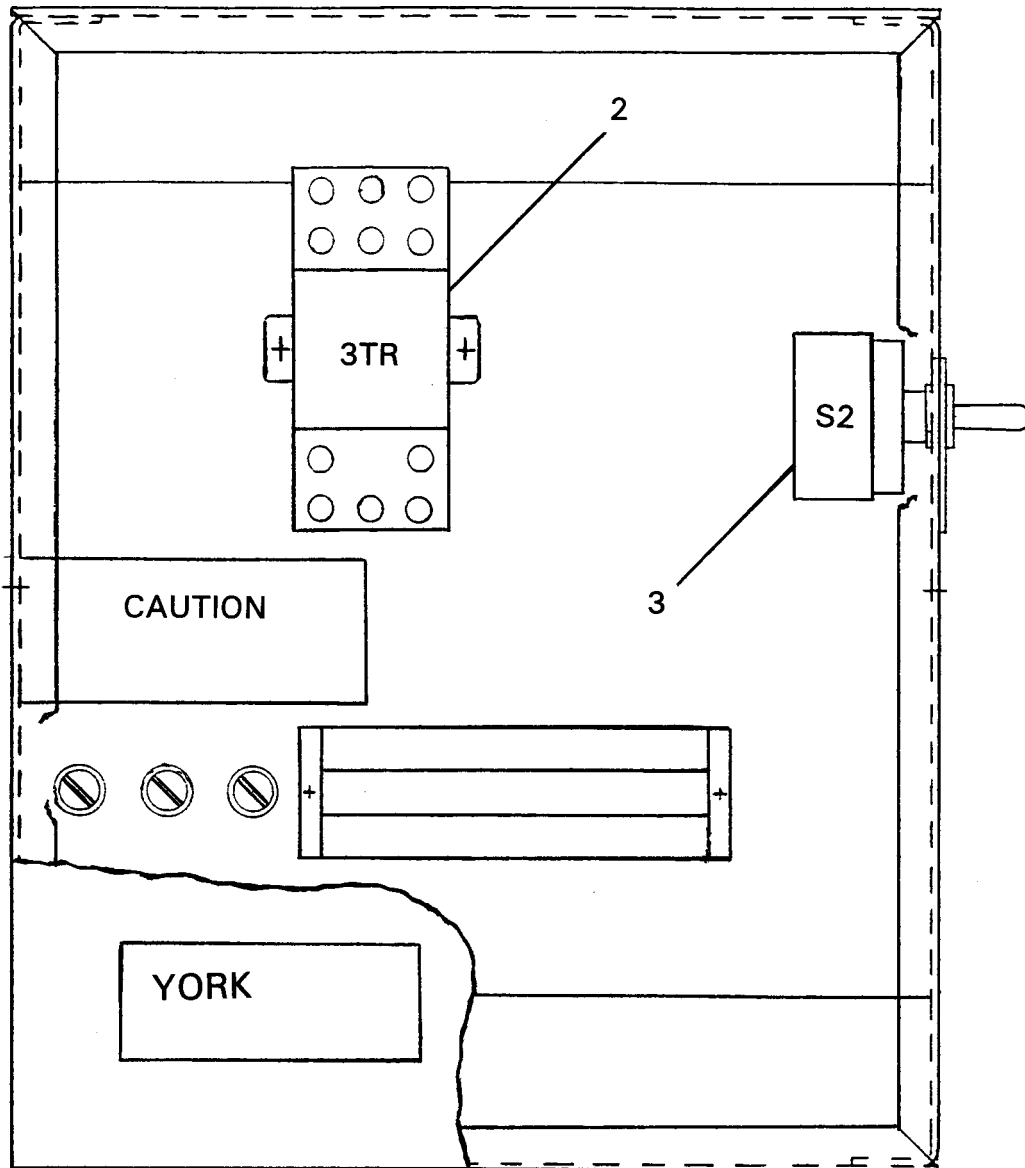
### COOLER TUBES

SHELL CODE	SHELL ID	TUBE QUANTITY
<b>PART NUMBER 007-07872-000</b>		
<b>BA</b>	19	100
<b>BB</b>	19	134
<b>CA</b>	23	174
<b>CB</b>	23	228
<b>DA</b>	29	216
<b>DB</b>	29	307
<b>DC</b>	29	410
<b>PART NUMBER 007-07879-000</b>		
<b>EA</b>	31	217
<b>EB</b>	31	308
<b>EC</b>	31	410
<b>FA</b>	38	410
<b>FB</b>	38	547
<b>FC</b>	38	728

### CONDENSER TUBES

SHELL CODE	SHELL ID	TUBE QUANTITY
<b>PART NUMBER 007-08409-000</b>		
<b>BA</b>	17-1/4	133
<b>BB</b>	17-1/4	169
<b>CA</b>	20-1/2	226
<b>CB</b>	20-1/2	292
<b>DA</b>	25	404
<b>DB</b>	25	528
<b>PART NUMBER 007-08408-000</b>		
<b>EA</b>	25	408
<b>EB</b>	25	532
<b>FA</b>	32-1/2	670
<b>FB</b>	32-1/2	902

## MULTIPLE UNIT SEQUENCE KIT CONTROLS



LD02691

### TWO UNITS

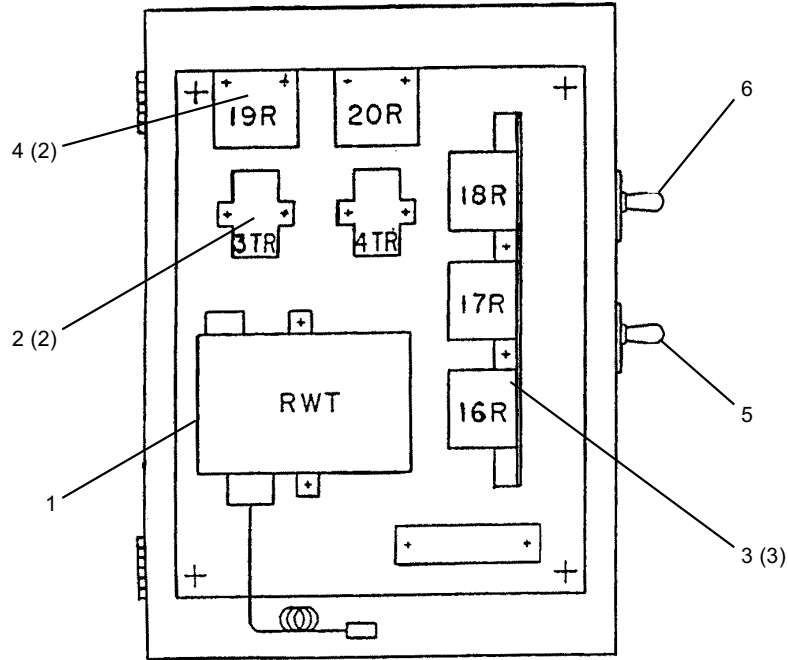
ITEM	DESCRIPTION	QUANTITY	PART NUMBER
1 <sup>1</sup>	Controller, RWT	1	025-15154-000
2	Relay, Time Delay	1	024-13711-000
3	Switch, Toggle	1	024-14057-000

**NOTE:**

1. Not Shown. Remote Mounted.

## MULTIPLE UNIT SEQUENCE KIT CONTROLS

### THREE UNITS

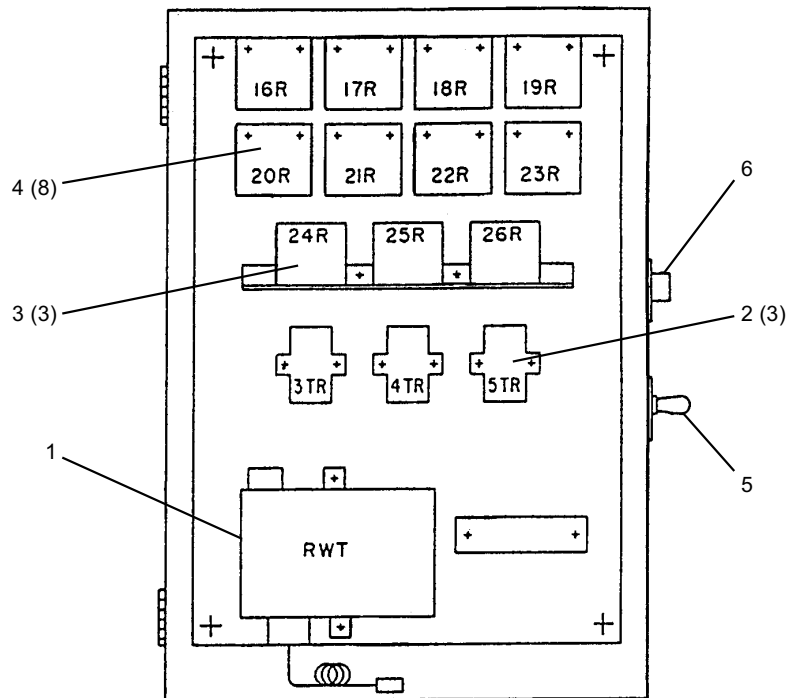


LD02692

ITEM	DESCRIPTION	QUANTITY	PART NUMBER
1	Controller, RWT	1	025-10215-000
2	Relay, Time Delay	2	024-13711-000
3	Relay, Control	3	024-27246-000

ITEM	DESCRIPTION	QUANTITY	PART NUMBER
4	Relay, Control	2	024-14519-000
5	Switch, Toggle	1	024-11736-000
6	Switch, Toggle	1	024-17026-000

### FOUR UNITS



LD02693

ITEM	DESCRIPTION	QUANTITY	PART NUMBER
1	Controller, RWT	1	025-10214-000
2	Relay, Time Delay	3	024-13711-000
3	Relay, Control	3	024-27246-000

ITEM	DESCRIPTION	QUANTITY	PART NUMBER
4	Relay, Control	8	024-14519-000
5	Switch, Toggle	1	024-11736-000
6	Switch, Rotary	1	024-20494-000

## MISCELLANEOUS AND ACCESSORIES

### COMPOUND

DESCRIPTION	PART NUMBER	QUANTITY
Compound, Heat Conductive (For Thermometer Wells)	013-00898-000	4 Oz. Can

### TOUCH-UP PAINTS – SPRAY CANS

DESCRIPTION	PART NUMBER
Caribbean Blue Enamel	013-01835-000
Black (Control Center)	Purchase Locally

### TEMPERATURE RECORDER

DESCRIPTION		PART NUMBER
HZ	NUMBER OF PENS	
60	1	025-09658-000
	2	025-09823-000
50	1	025-12650-000
	2	025-12330-000

### FLOW SWITCH CONTROL

DESCRIPTION	PART NUMBER
150 DWP	024-26116-000
300 DWP	024-12144-000

### DIFFERENTIAL PRESSURE CONTROL

DESCRIPTION	PART NUMBER
Control, Differential Pressure*	025-30919-000

\*300 Psi Maximum Working Pressure

YORK OIL	PART NUMBER (5 Gallon Container)	OIL TYPE
YORK "C"	011-00312-000	MINERAL
YORK "P"	011-00589-000	POE
YORK "H"	011-00549-000	POE

## NOTES



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