



Millennium®
PACKAGED LIQUID CHILLERS
AIR COOLED RECIPROCATING HERMETIC

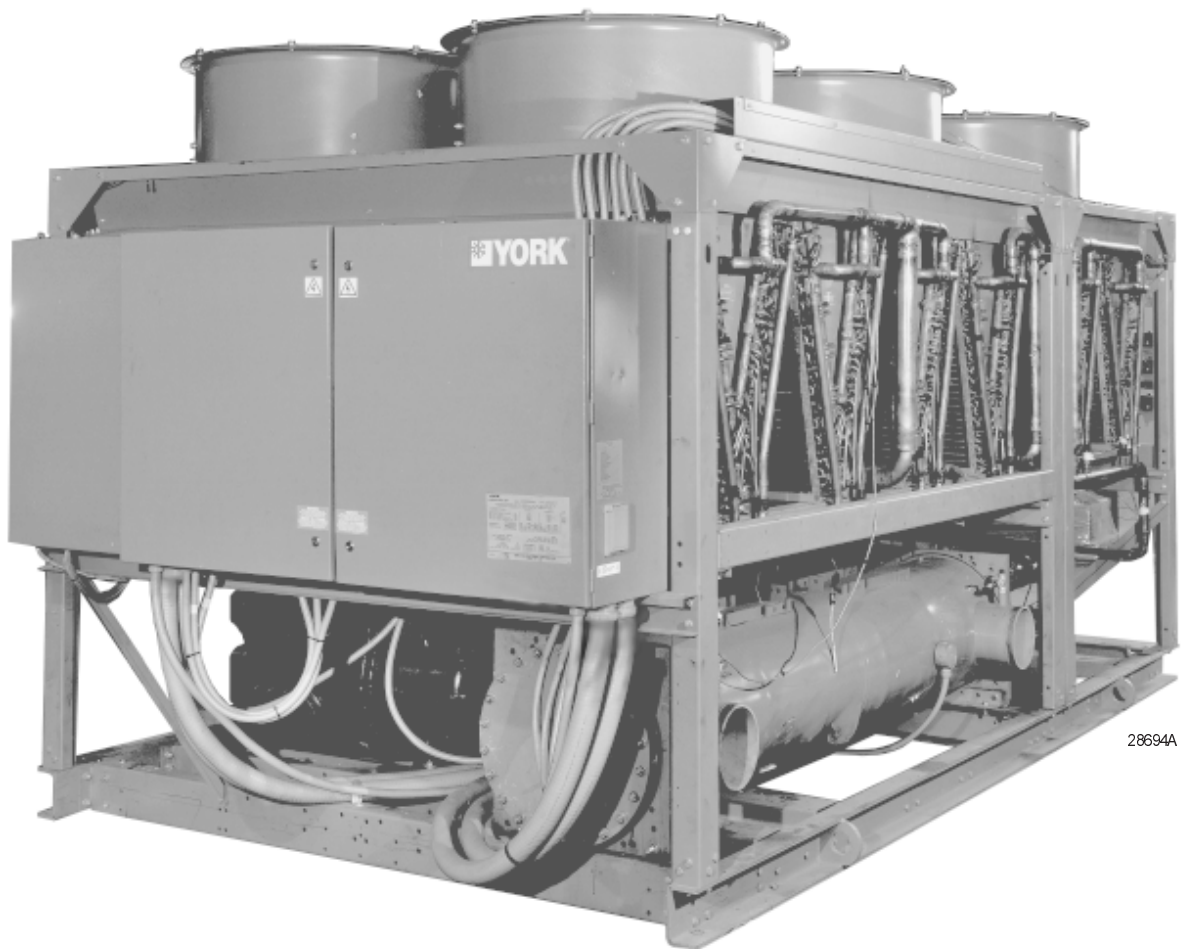
RENEWAL PARTS

Supersedes: Nothing

Form 150.60-RP5 (1198)

YCAJ110, YCAJ120, YCAJ130

STYLE A



28694A



200, 230, 460-3-60

WARNING

HIGH VOLTAGE

is used in the operation of this equipment

DEATH OR SERIOUS INJURY

may result if personnel fail to observe precautions.

Work on electronic equipment should not be undertaken unless the individual(s) have been trained in the proper maintenance of the equipment and is (are) familiar with its potential hazards.

Shut off power supply to equipment before beginning work and follow lockout procedures. When working inside equipment with power off, take special care to discharge every capacitor likely to hold dangerous potential.

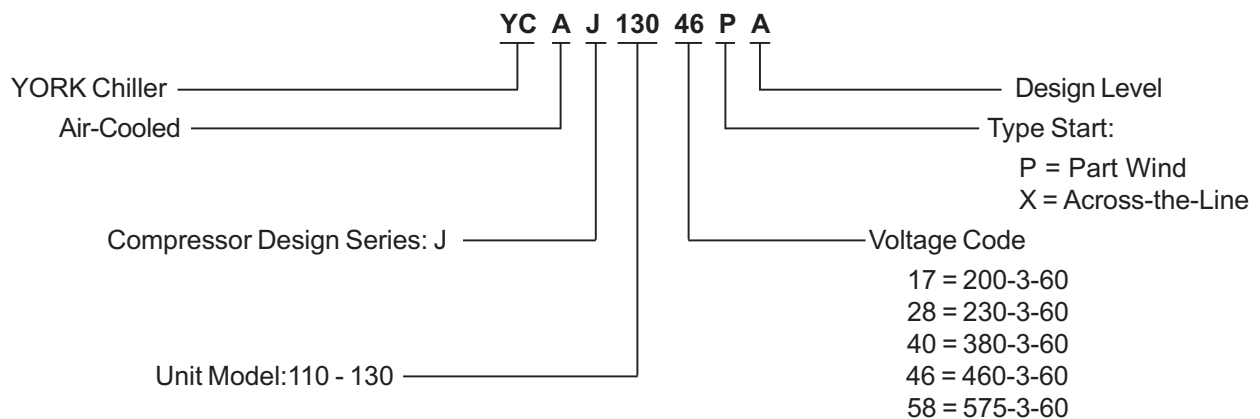
Be careful to not contact high voltage connections when installing or operating this equipment.

LOW VOLTAGE

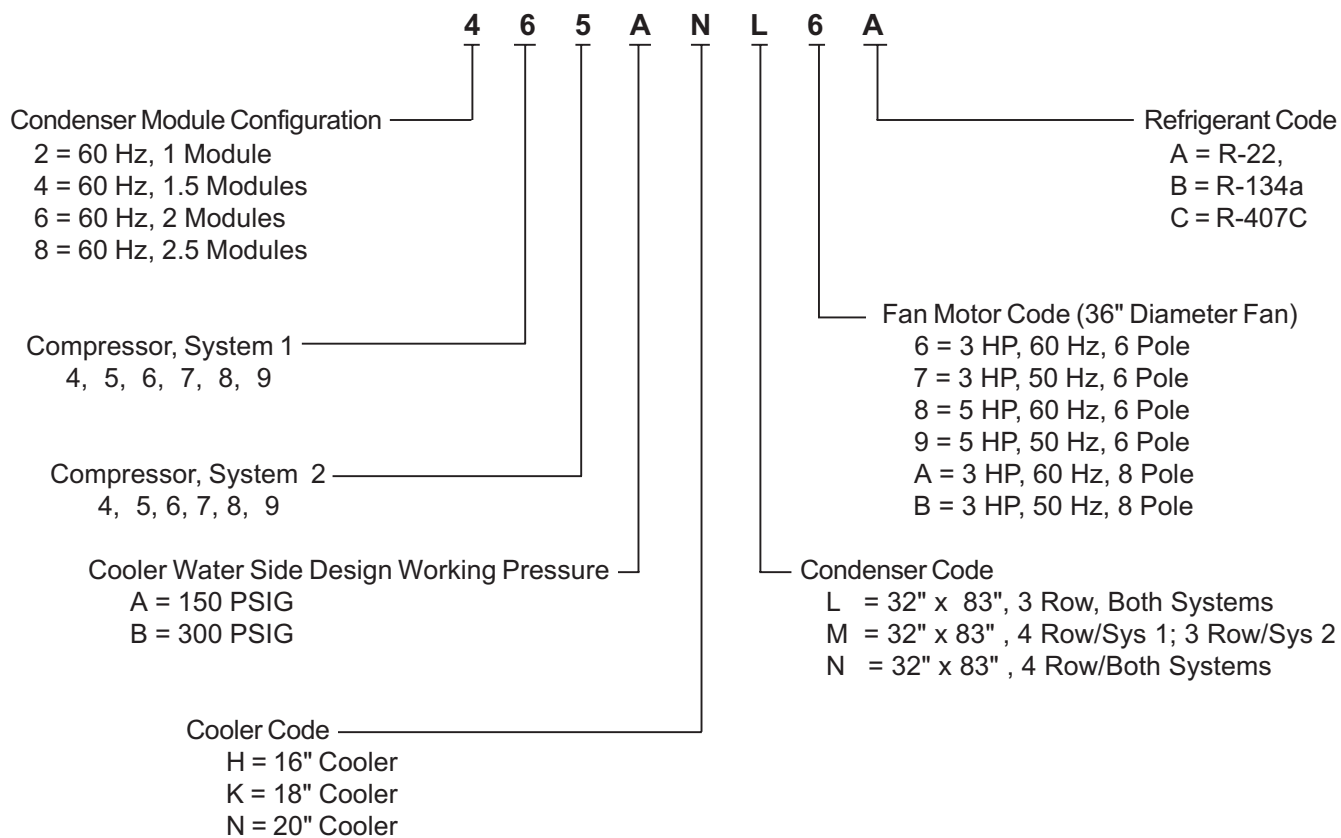
DO NOT be misled by the term "low voltage".
Voltages as low as 50 volts may cause death.

UNIT NOMENCLATURE

The model number denotes the following characteristics of the unit:



ENGINEERING DATA (STAMPED ON UNIT NAMEPLATE)



CONTROL PANEL

Part Number	Item	Qty/ Unit	Description
§031-01095-002	2	1	Control, Micro Board
§031-01348-000	3	1	Control, Power Supply
§031-01093-000	4	2	Control, Relay Board
025-27911-000	5	1	Transformer, Class 2
025-20945-000	6	16	Block, Terminal Base Flat
025-20946-000	7	1	End, Terminal Block
025-30443-000	8	1	Strip, Marker
029-20878-000	9	2	Catch, Magnetic
021-13783-000	10	5	Scr., Tap TH. #8 x 3/8 Lg
021-14661-000	11	30	Nut, Expansion
021-14667-000	12	30	Scr., Tap Pan Hd. #8 x 1-1/4
021-01155-000	13	6	Lock Washer, TH. Int. 3/8
021-00467-000	14	6	Nut, Hex 3/8-16 UNC-2B
021-18024-000	16	15	Nut/washer Assy (KEPS)
025-28383-000	17	5	Hsg., Connr. Plug, Mini-Univ.
025-09389-000	18	1	Connr., Cable, Str. 3/4
021-13789-000	19	17	Scr., Tap, Pan Hd. #10 x 1/2
021-17576-000	20	4	Lock Washer, Hel. Spg. #4
021-10056-000	21	4	Nut, Hex #4-40
024-25517-000	22	1	Switch, Unit ON/OFF
031-01110-000	23	1	Display
031-01109-211	24	1	Ribbon Cable
031-01109-212	25	4	Ribbon Cable
031-01109-213	26	1	Ribbon Cable
025-25156-000	27	3	Clamp, Ribbon Wire
024-25504-000	28	1	Switch, Keypad
021-17575-000	29	4	Spacer, Nylon 7/16 Lg.
571-01226-211	30	1	Harness, Wiring Hinged Panel
571-01307-201	31	1	Harness, Main Wiring
371-01733-231 ¹	32	1	Harness, Sensor - Suct. #1
371-01733-233 ¹	33	1	Harness, Sensor - Liq Pres #1
371-01733-232 ¹	34	1	Harness, Sensor - Suct. #2
371-01733-234 ¹	35	1	Harness, Sensor - Liq Pres #2
371-01733-246 ¹	36	1	Harness, Sensor - LWT
371-01733-247 ¹	37	1	Harness, Sensor - EWT
371-01733-248 ¹	38	1	Harness, Sensor - OAT
025-18167-000	39	2	Strap, Cable
031-01689-000	40	1	Control I/O Expansion Board
035-03908-000	41	1	Label, Caution
§031-01652-001	42	1	EPROM
571-01226-212	43	1	Harness, Wiring, Hinged Panel
571-01307-211	46	1	Harness, Jumper Wiring
025-25155-000	47	1	Mount CA Strap White ADH
371-01733-235 ¹	48	1	Harness, Sensor - Disch Pres #1
371-01733-236 ¹	49	1	Harness, Sensor - Disch Pres #2
025-12282-000	54	1	Connr CA Str
035-11929-000	55	1	Label, Caution
371-01733-221 ¹	57	1	Harness, Sensor - Oil Temp #1
371-01733-222 ¹	58	1	Harness, Sensor - Oil Temp #2
031-01724-211	59	1	Cable, Ribbon
025-11098-000	60	3	Strap, Cable
*031-00808-000	61	3	Suppressor for Options

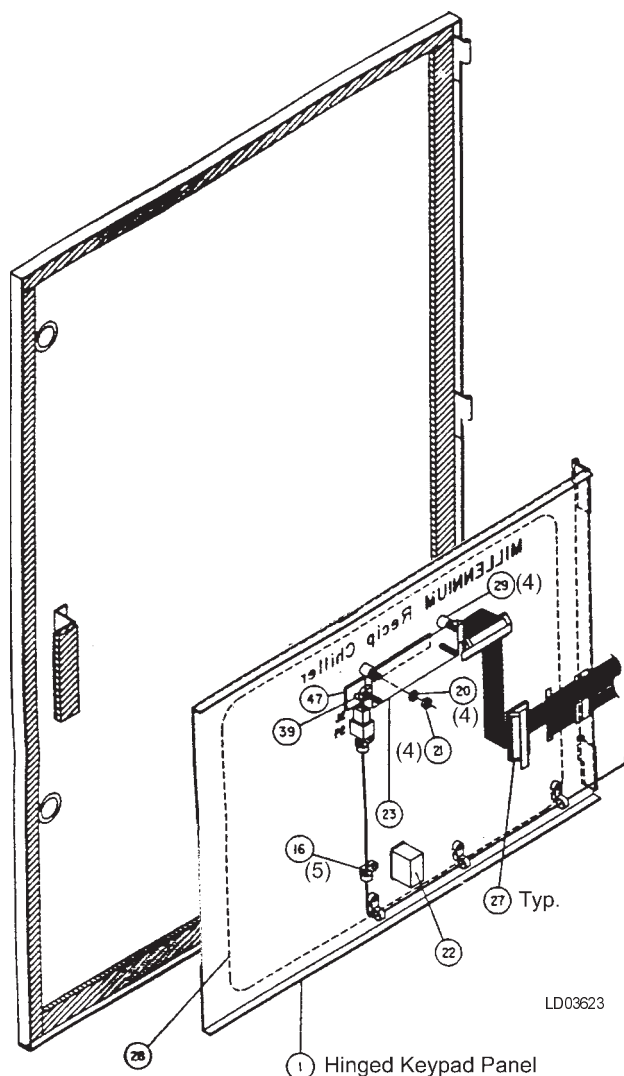


FIG. 1 – CONTROL PANEL COMPONENTS

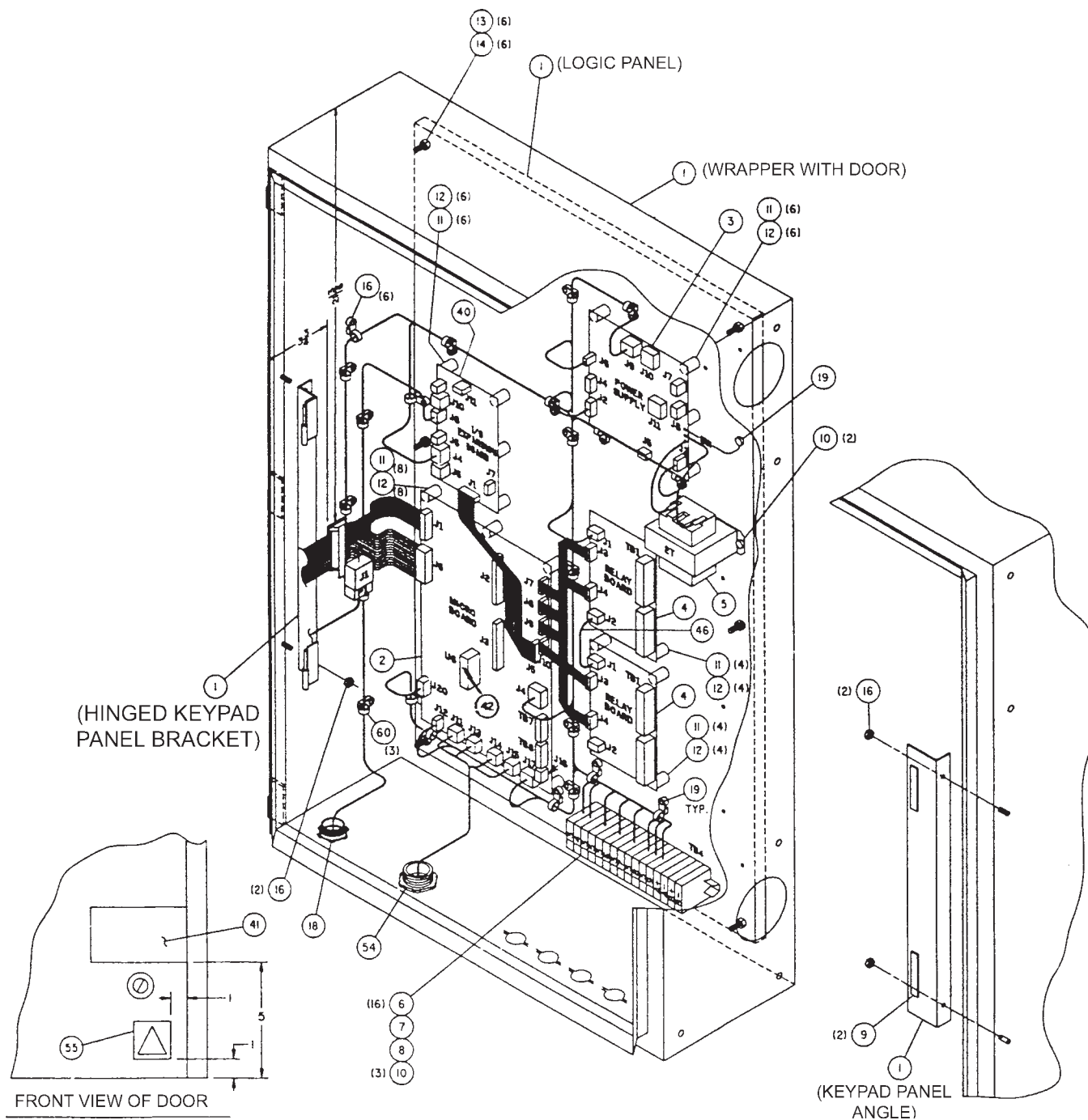
§ Recommended Stock Spare Part

* Not Shown, Shipped Loose for Field use to place across the coil of any relay or contactor connected to the Control Panel or its 115VAC Power Supply, including the application of:

- Alarm Circuit Relays
- Pump Starter (Contactor or Pilot Relay)
- Flow Switch Inputs
- BAS Inputs

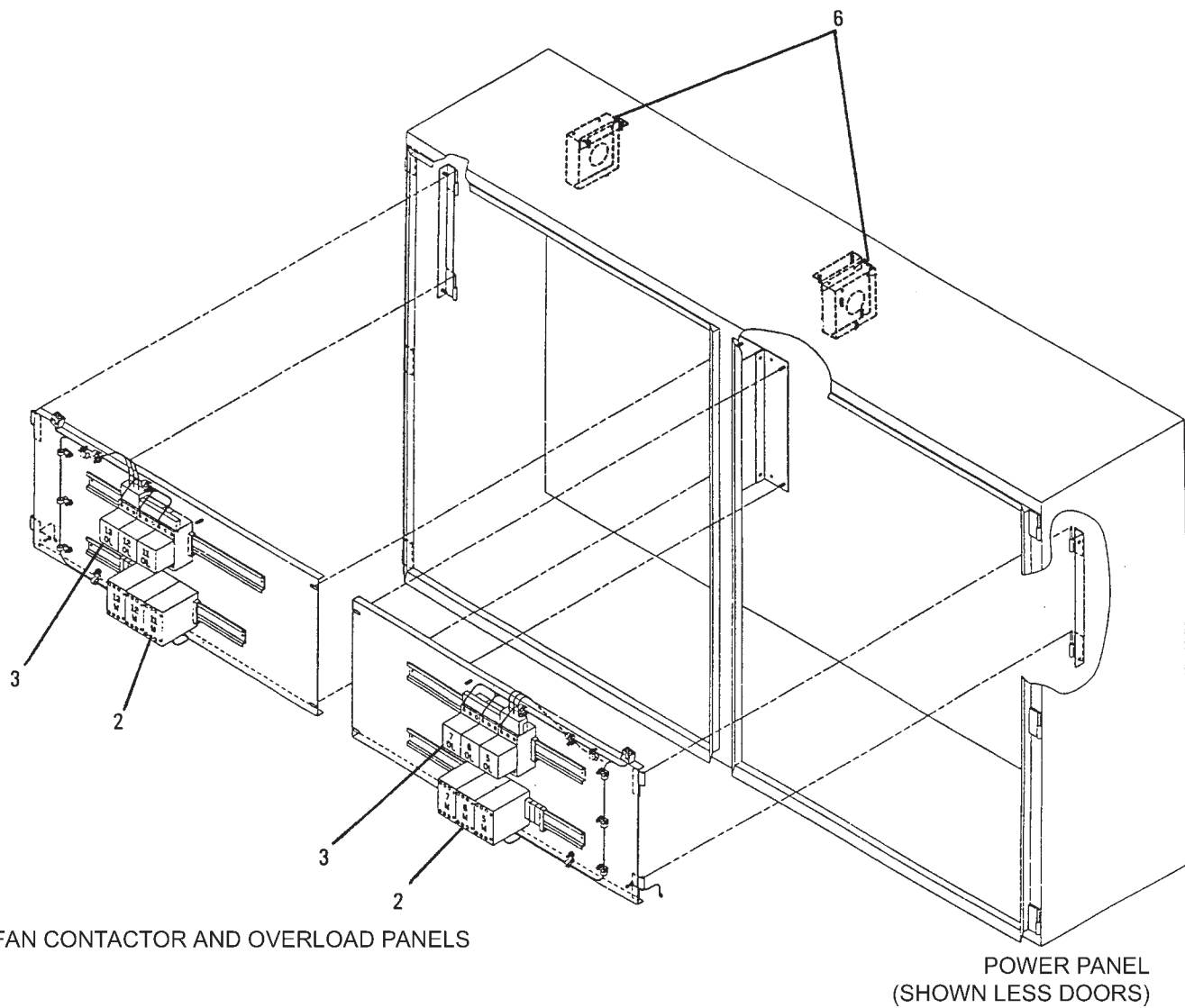
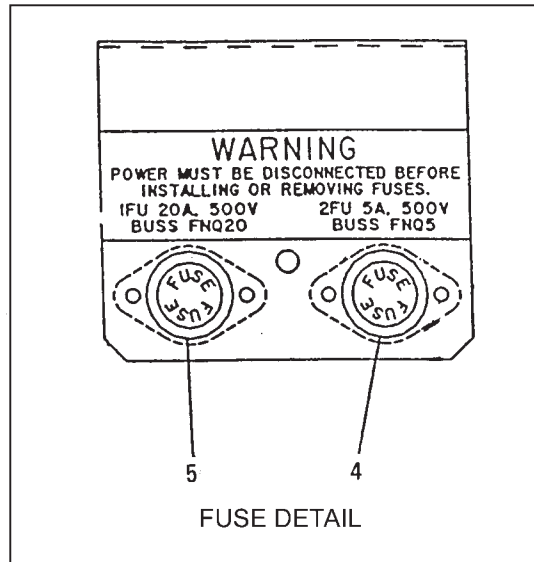
¹ Not Shown - Sensor Harness Without Sensor.

CONTROL PANEL



LD03624

FIG. 2 – CONTROL PANEL



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FIG. 3 – POWER PANEL

POWER PANEL CONTROL COMPONENTS

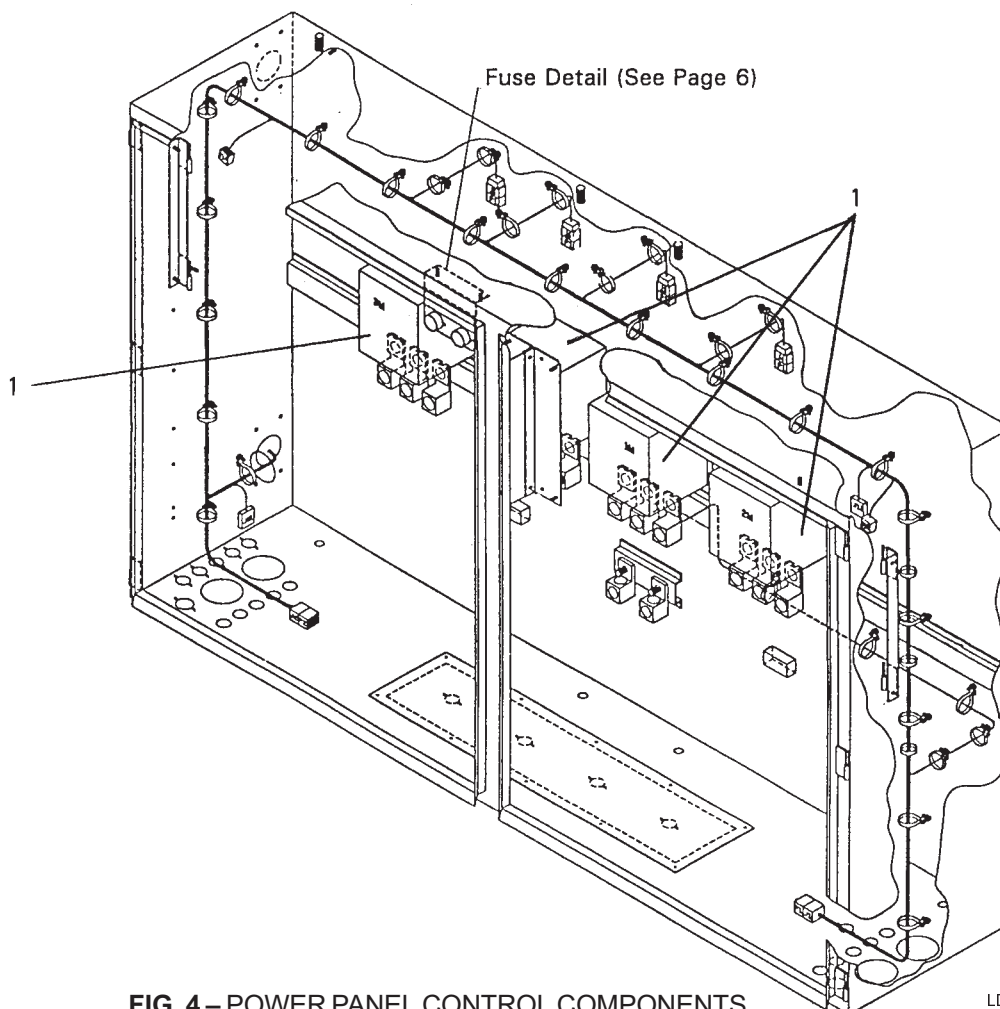


FIG. 4 – POWER PANEL CONTROL COMPONENTS

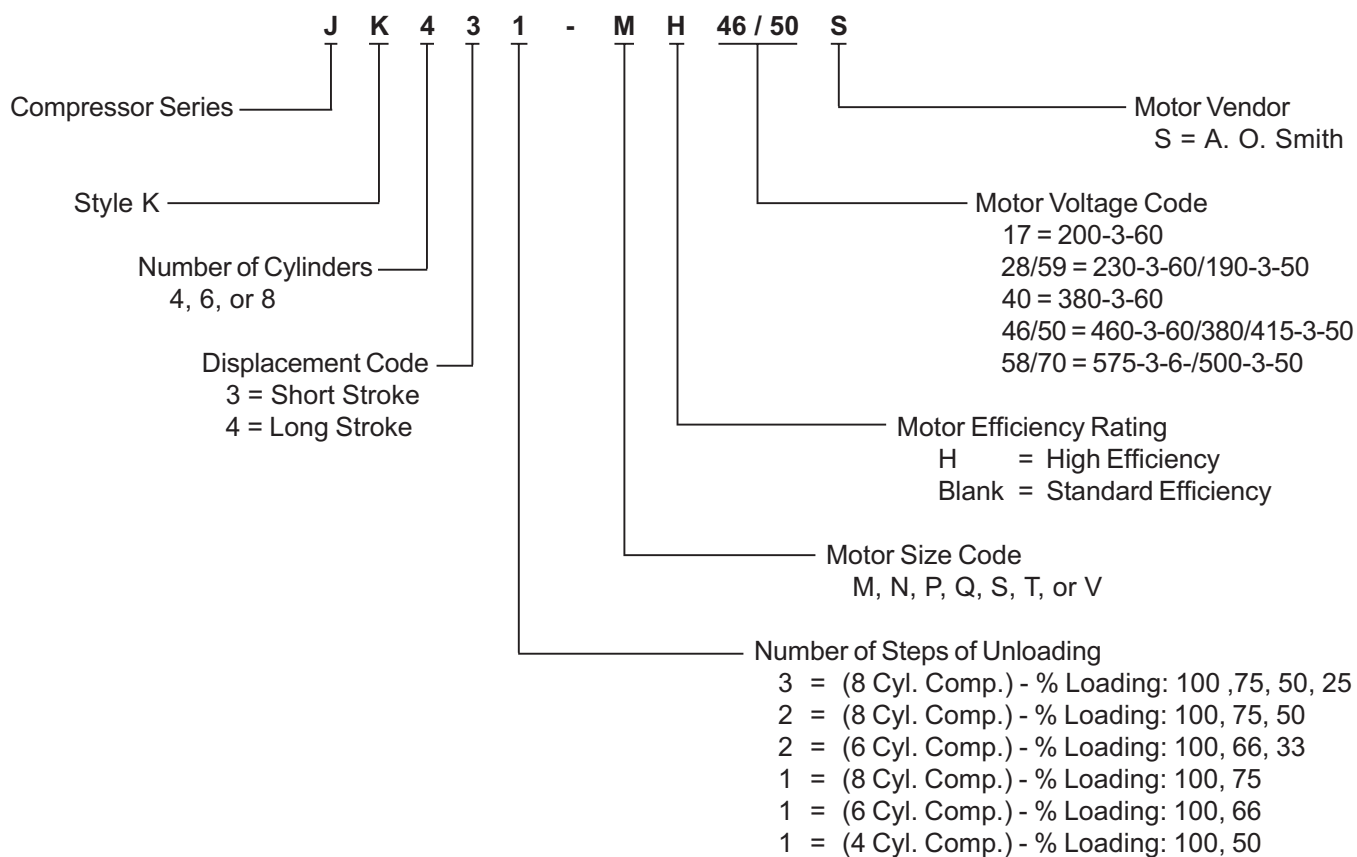
LD03627c

POWER PANEL CONTROL COMPONENTS

ITEM NO.	QUANT. PER UNIT	DESCRIPTION	VOLT. CODE	PART NUMBER ALL MODELS
^s 1	See p.9	Contactor (w/Suppressor), Compressor	ALL	See p. 9
^s 2	6	CONTACTORS Contactor (w/Suppressor), Fan	-17 -28 -40 -46 -58	024-25526-000 024-25526-000 024-25521-000 024-25521-000 024-25521-000
^s 3	6	Overload, Fan 4-6.3 FLA 9-12.5 FLA		024-27267-000 024-27268-000
^s 4	1	FUSES Electronic Power Supply Circuit (5 amp), 2FU	ALL	025-27922-000
^s 5	1	Control Circuit (20 amp), 1FU	ALL	025-28967-000
6	2	Transformer, Current (1CT, 2CT)	ALL	025-27408-000

^s Recommended Stock Spare Part

COMPRESSOR NOMENCLATURE



COMPRESSOR MODEL NUMBERS

UNIT MODEL		YCAJ110	YCAJ120	YCAJ130
Compressor Model	System No. 1	JK431-M	JK441-P	JK441-P
	System No. 2	JK431-M	JK431-M	JK441-P

For replacement compressors and/or parts, refer to Form 180.23-RP5

Remanufactured compressors are available from the Wheeling, Illinois manufacturing facility. Contact the local York International office.

^sCOMPRESSOR MOTOR CONTACTORS

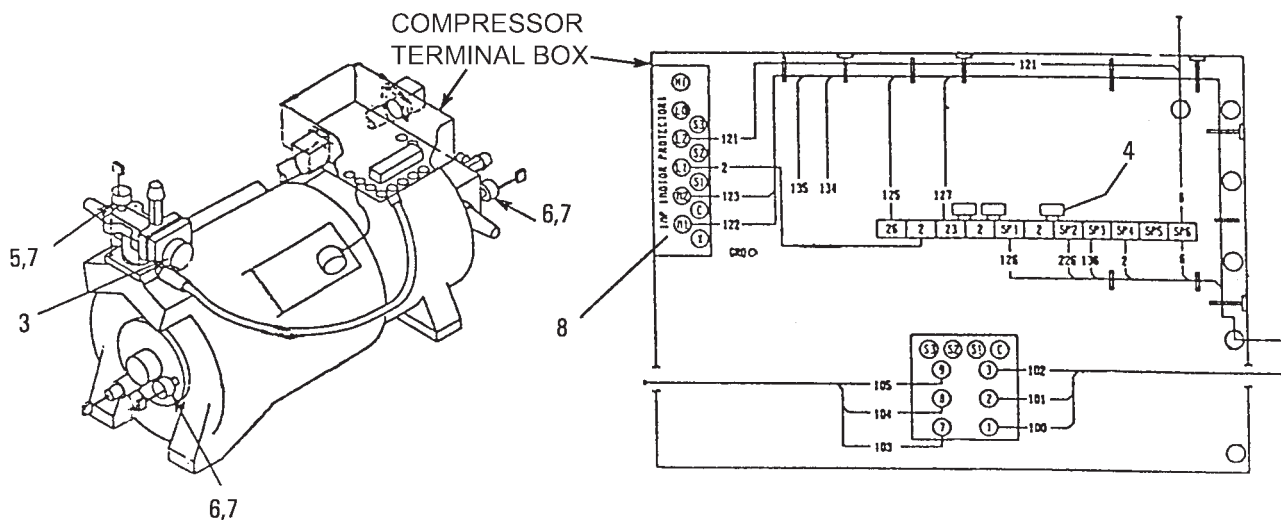
VOLT CODE	TYPE START	SYSTEM	UNIT MODEL		
			YCAJ110	YCAJ210	YCAJ130
-17	P	1M	024-27257	024-27257	024-27257
		2M	024-27265	024-27265	024-27265
		3M	024-27261	024-27261	024-27261
		4M	024-27257	024-27257	024-27257
-28	P	1M	024-27257	024-27257	024-27257
		2M	024-27265	024-27265	024-27265
		3M	024-27261	024-27261	024-27261
		4M	024-27257	024-27257	024-27257
-40	P	1M	024-27256	024-27256	024-27256
		2M	024-27264	024-27264	024-27264
		3M	024-27260	024-27260	024-27260
		4M	024-27256	024-27256	024-27256
-46	P	1M	024-27256	024-27256	024-27256
		2M	024-27264	024-27264	024-27264
		3M	024-27260	024-27260	024-27260
		4M	024-27256	024-27256	024-27256
-58	P	1M	024-27256	024-27256	024-27256
		2M	024-27264	024-27264	024-27264
		3M	024-27260	024-27260	024-27260
		4M	024-27256	024-27256	024-27256

NOTES: ^s = Recommended Stock Spare Parts

P = Part Winding

Part Winding (Start) compressors require two (2) contactors per compressor (system).

Contactors include suppressors.



LD03628c

FIG. 5 – (TYPICAL) 4 CYLINDER “J” COMPRESSOR SYSTEM #1 (WITH 1 STEP UNLOADING WITH OR WITHOUT OPTIONAL HOT GAS BYPASS)

SYSTEM CONTROL COMPONENTS

(Also See Illustration, page 9)

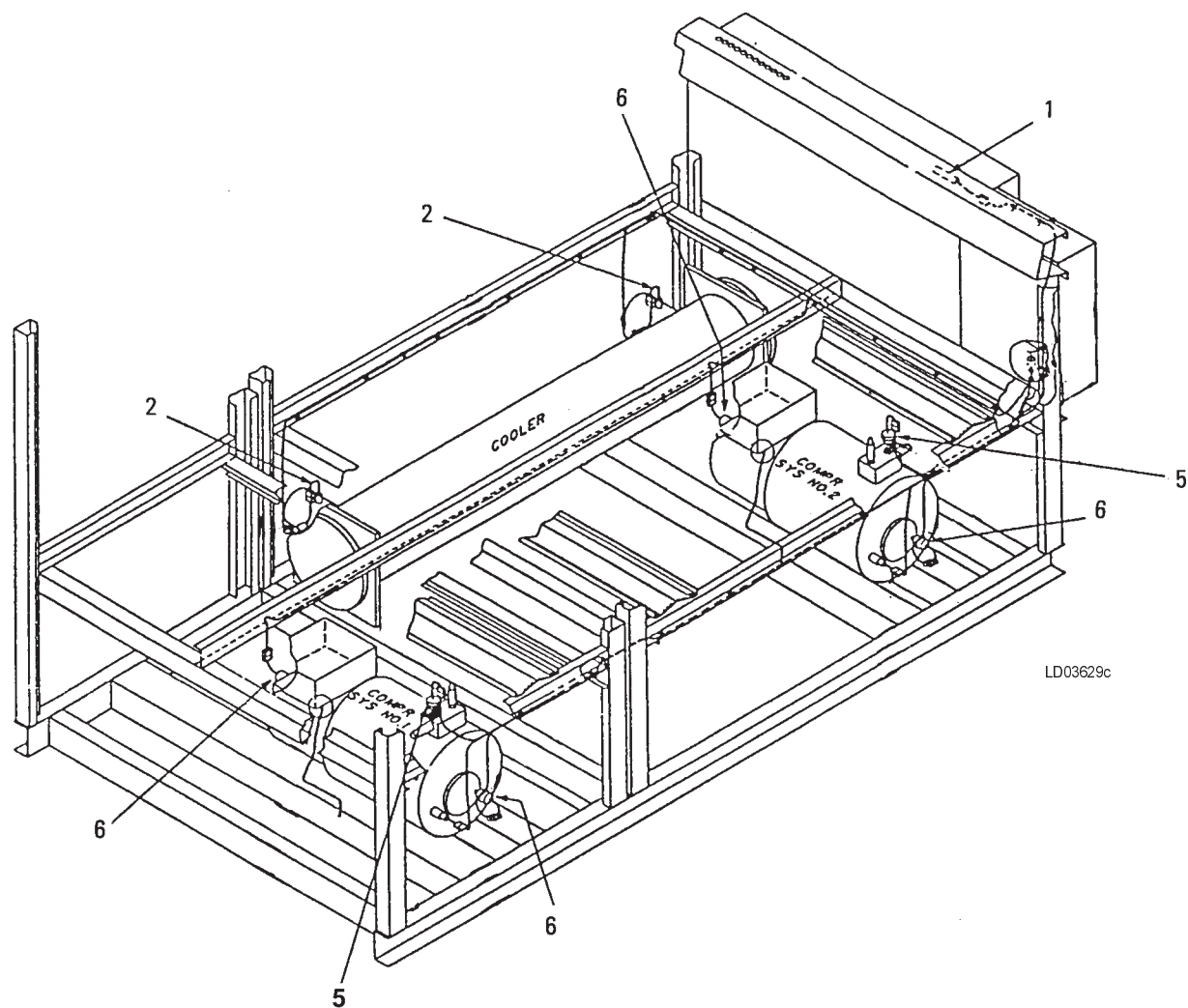


FIG. 6 – SYSTEM CONTROL COMPONENTS

ITEM NO.	QUANT. PER UNIT	DESCRIPTION	VOLT. CODE	PART NUMBER ALL MODELS
^s 1	1	Outside Air Temperature (OAT) Sensor	ALL	025-28663-001
^s 2	2	Water Temperature (LWT, RWT) Sensor	ALL	025-29964-000
^s 3	2	High Pressure Cutout	ALL	025-30480-000
^s 4	4	Suppresor, Compressor Unloading Solenoids and Liquid Line Solenoids	ALL	031-01117-000
^s 5	2	Transducer (Discharge Pressure)	ALL	025-29139-001
^s 6	4	Transducer (Oil and Suction Pressures)	ALL	025-29583-000
7	2	Brass Adaptor (Use with Items 5 and 6)	ALL	023-16272-000
8	4	Module, Motor Protector	ALL	025-32838-000
9	6	Heat Conductive Compound (Use with Item 2)	ALL	013-00898-000

^s Recommended Stock Spare Part

UNIT COMPONENTS

(Standard and Brine Applications)
(Also See Illustrations, Page 13)

ITEM NO.	QUAN. PER UNIT	DESCRIPTION	UNIT MODEL		
			YCAJ110	YCAJ120	YCAJ130
^s 1	2	Valve, Thermal Expansion Standard Unit, Sys. 1,2	025-20069-000	025-20069-000	025-20069-000
	2	Brine Unit, Sys. 1,2	025-32904-000	025-32904-000	025-32904-000
2	2	Dehydrator, Body (Replaceable Core)	026-21055-000	026-21055-000	026-21055-000
^s 3	4	Dehydrator Core (Use With Item 3)	026-18328-000	026-18328-000	026-18328-000
4	2	Valve, Liquid Solenoid	025-33234-000	025-33234-000	025-33234-000
5	2	Moisture Indicator, Body	026-32398-000	026-32398-000	026-32398-000
6	2	Moisture Indicator, Cap Assembly	026-32800-000	026-32800-000	026-32800-000
7	2	Valve, Liquid Stop	022-08739-000	022-08739-000	022-08739-000
8	2	Compressor	See Page 3		
9	8	Pad, Isolator	066-92335-000	066-92335-000	066-92335-000

^s Recommended Stock Spare Part

(Table Continued on Page 12)

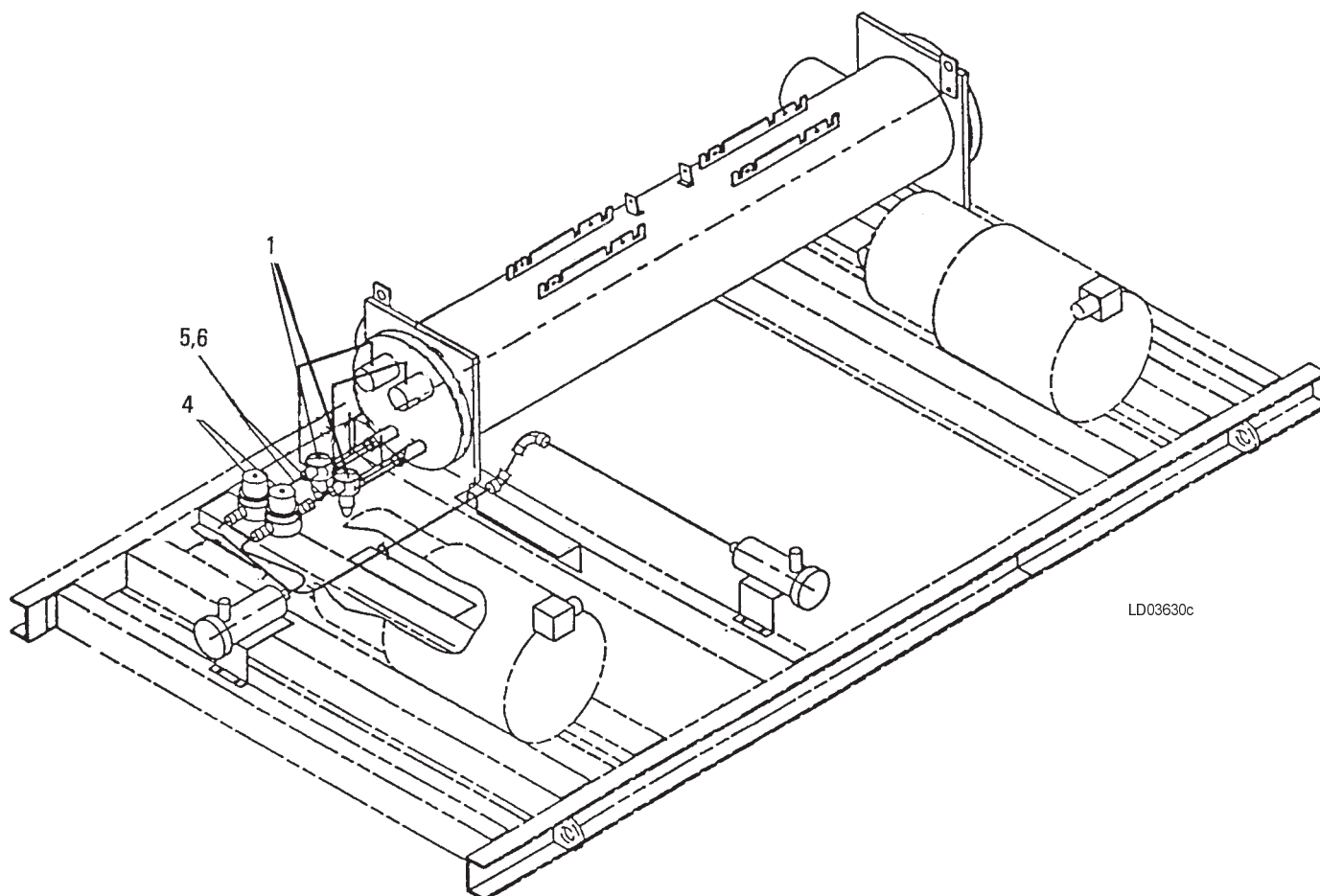


FIG. 7 – UNIT COMPONENTS

UNIT COMPONENTS (Cont'd)

(Standard and Brine Applications)

ITEM NO.	QUAN. PER UNIT	DESCRIPTION	UNIT MODEL		
			YCAJ110	YCAJ120	YCAJ130
ALUMINUM FIN COILS - STANDARD					
11	6	Header, Liquid (RH)	375-23561-000	375-23561-000	375-23561-000
12	6	Header, Liquid (LH)	375-23562-000	375-23562-000	375-23562-000
13	6	Header, Discharge	375-23560-000	375-23560-000	375-23560-000
14	6	Header, Discharge	375-23564-000	375-23564-000	375-23564-000
15	12	Coil, Condenser (3 Rows)	375-23557-000	375-23557-000	375-23557-000
PHENOLIC-COATED COILS - OPTION					
11	6	Header, Liquid (RH)	375-23597-000	375-23597-000	375-23597-000
12	6	Header, Liquid (LH)	375-23598-000	375-23598-000	375-23598-000
13	6	Header, Discharge	375-23595-000	375-23595-000	375-23595-000
14	6	Header, Discharge	375-23596-000	375-23596-000	375-23596-000
15	12	Coil, Condenser (3 Rows)	375-23592-000	375-23592-000	375-23592-000
BLACK-FIN COILS - OPTION					
11	6	Header, Liquid (RH)	375-23561-000	375-23561-000	375-23561-000
12	6	Header, Liquid (LH)	375-23562-000	375-23562-000	375-23562-000
13	6	Header, Discharge	375-23560-000	375-23560-000	375-23560-000
14	6	Header, Discharge	375-23564-000	375-23564-000	375-23564-000
15	12	Coil, Condenser (3 Rows)	375-23591-000	375-23591-000	375-23591-000
COPPER FIN COILS - OPTION					
11	6	Header, Liquid (RH)	375-23561-000	375-23561-000	375-23561-000
12	6	Header, Liquid (LH)	375-23562-000	375-23562-000	375-23562-000
13	6	Header, Discharge	375-23560-000	375-23560-000	375-23560-000
14	6	Header, Discharge	375-23564-000	375-23564-000	375-23564-000
15	12	Coil, Condenser (3 Rows)	375-23590-000	375-23590-000	375-23590-000

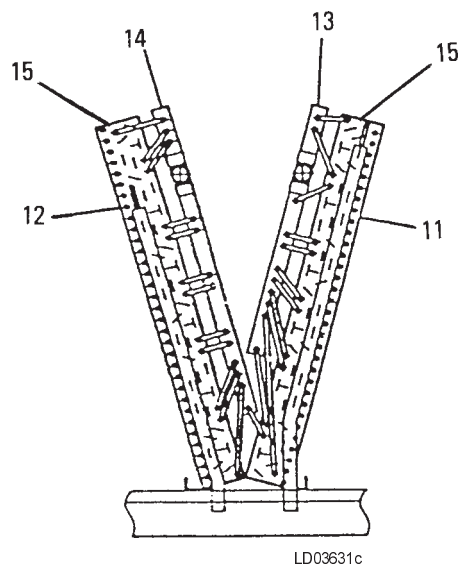
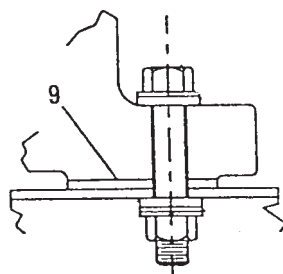
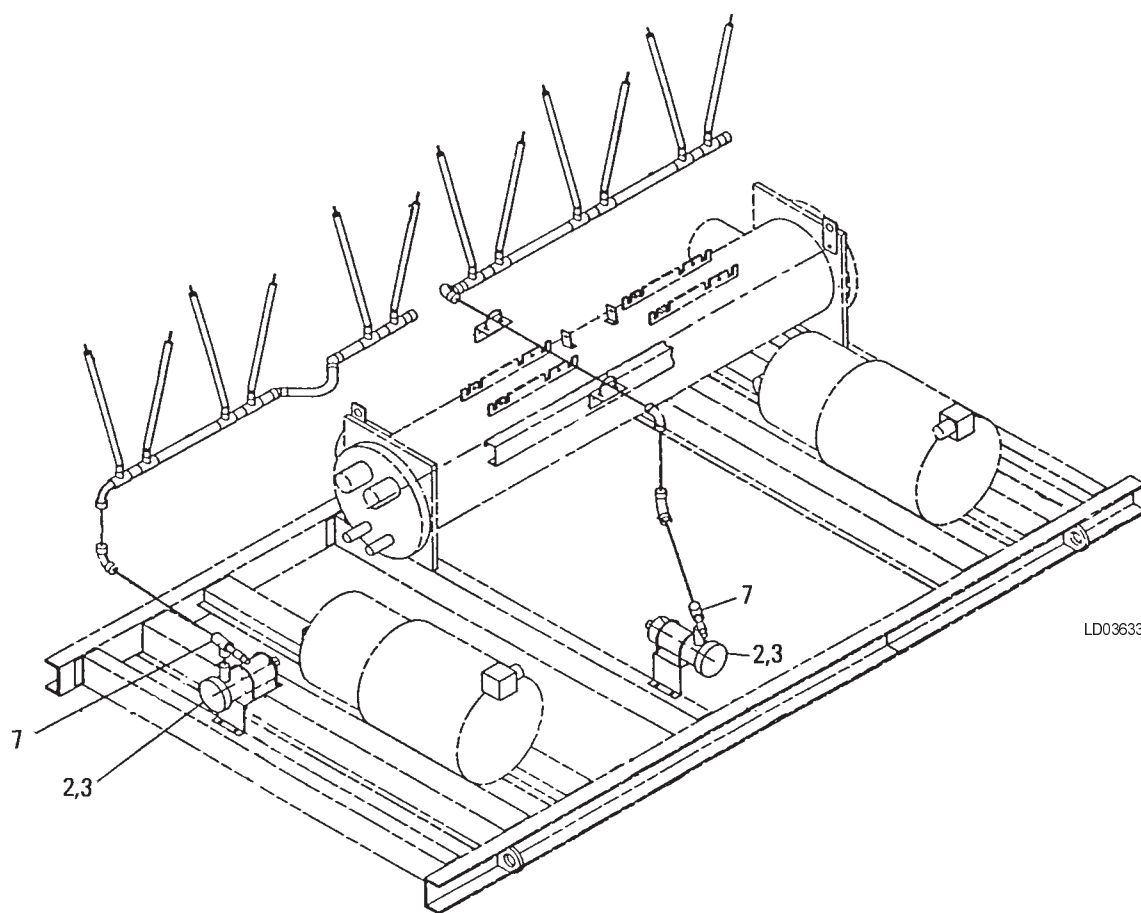


FIG. 8 – UNIT COMPONENTS (CON'T)



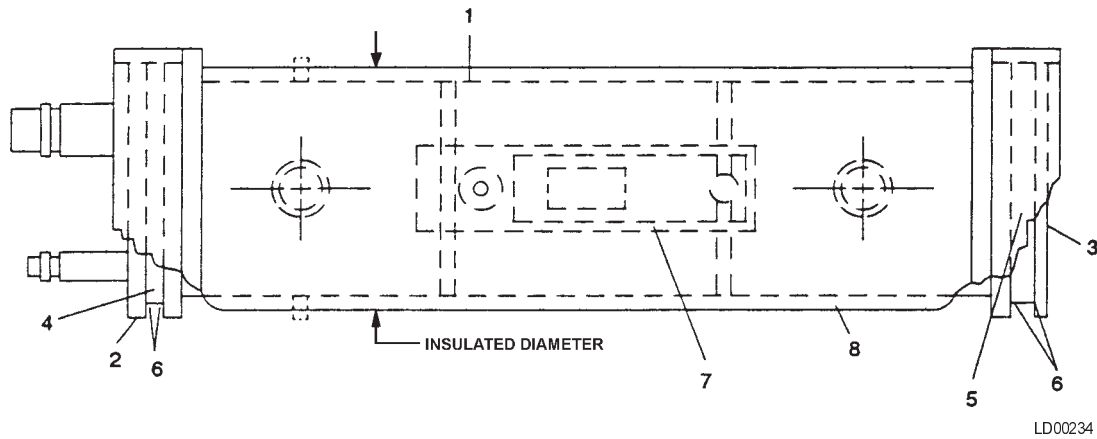
LD03632

FIG. 9 – COMPRESSOR ISOLATOR INSTALLATION DETAIL

LD03633

FIG. 10 – UNIT COMPONENTS

COOLER COMPONENTS



ITEM NO.	QUAN. PER UNIT	DESCRIPTION	RATING DWP	UNIT MODEL		
				YCAJ110	YCAJ120	YCAJ130
1	1	Cooler Less Insulation & Heater (Includes Items 2 thru 6)	150 psi	375-17511	375-17511	375-17511
			300 psi	375-21137	375-21137	375-21137
2	1	Head, Connection End	All are 150 psi and 300 psi	375-18009	375-18009	375-18009
3	1	Head, Back End		375-18008	375-18008	375-18008
4	1	Pass Baffle, Connection End		375-17085	075-17085	075-17085
5	1	Pass Baffle, Back End		375-17084	375-17084	375-17084
^s 6 ⁺	4	Gasket, Pass Baffle and Head		075-17082	075-17082	075-17082
^s 7	1	Heater		025-22690	025-22690	025-22690
	1			025-22691	025-22691	025-22691
8	3	Insulation: 1" - 3/4" x 49" x 65"		010-04198	010-04198	010-04198
	2	1-1/2" - 1-1/2" x 49" x 65"		010-04467	010-04467	010-04467

+ When replacing gasket, Item 6, use:

^s Sealer, Gasket, 013-02827

^s Primer, 013-01753

^s Recommended Stock Spare Part

FIG. 11 – UNIT COMPONENTS

FAN COMPONENTS

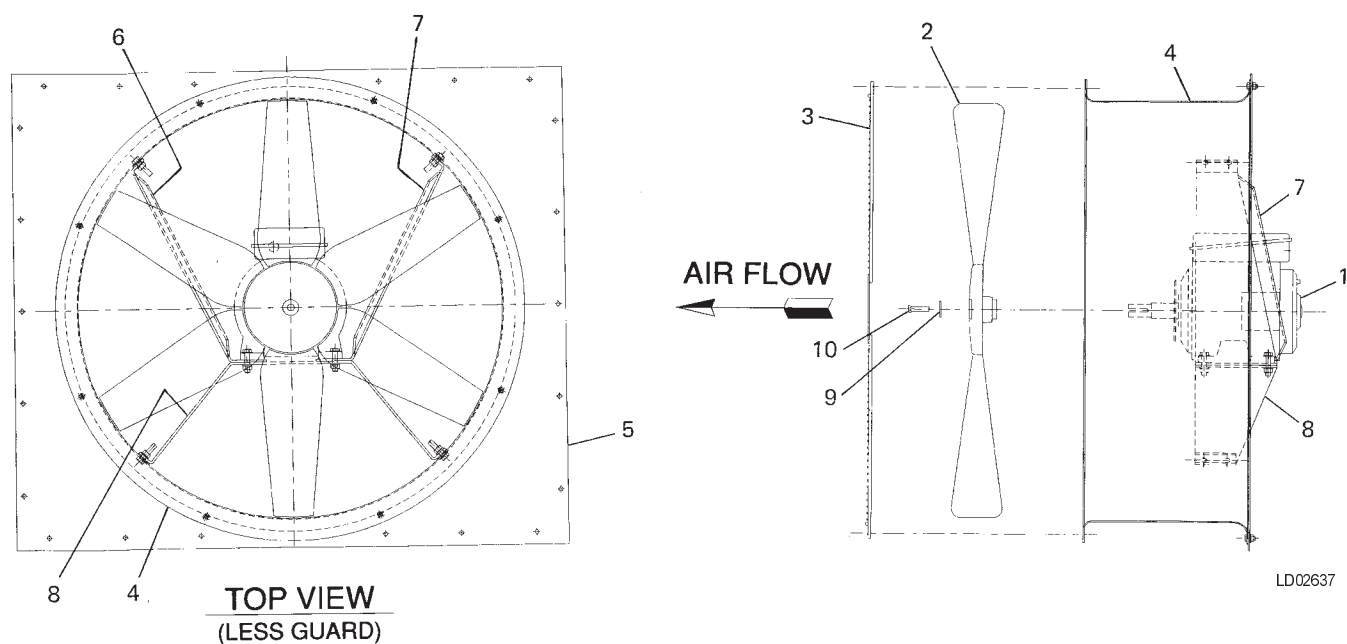


FIG. 12 – FAN (TYPICAL)

ITEM NO.	DESCRIPTION	VOLTAGE CODE	FAN TYPE	
			STANDARD	LOW NOISE (Option)
1	Motor	-17	024-25179-002	024-25247-002
		-28	024-25179-002	024-25247-002
		-40	024-25179-001	024-25247-001
		-46	024-25179-001	024-25247-001
		-58	024-25250-000	024-25252-000
	Motor Shaft Diameter	ALL	1-1/8"	1-3/8"
2	Blade	ALL	026-34433-000	026-34466-000
3	Guard	ALL	026-34431-000	026-34431-000
4	Orifice	ALL	326-34432-000	326-34432-000
5	Orifice Plate	ALL	075-19302-000	075-19302-000
6	Upper Motor Support (RH)	ALL	075-19164-000	075-21651-000
7	Upper Motor Support (LH)	ALL	075-19166-000	075-21652-000
8	Lower Motor Support	ALL	075-19167-000	075-21650-000
9	Washer	ALL	021-05146-000	021-05146-000
10	Screw, Cap	ALL	021-17791-000	021-17791-000

REPLACEMENT COMPONENTS FOR UNIT OPTIONS (Note 1)

Item No.	QTY	DESCRIPTION		Voltage Code	UNIT MODELS			
					YCAJ110	YCAJ120	YCAJ130	
A	1	Power Disconnect Switch (PDS)	Switch, Disconnect		ALL	024-27241		
B	1	Power Disconnect Switch (PDS) With Fuses	Switch, Disconnect		-17	024-27242-000	024-27242-000	024-27242-000
	-28				024-27242-000	024-27242-000	024-27242-000	
	-40				024-27241-000	024-27241-000	024-27241-000	
	-46				024-27241-000	024-27241-000	024-27241-000	
	-58				024-27241-000	024-27241-000	024-27241-000	
	3		Fuse	-17	025-32529-000	025-32529-000	025-32530-000	
				-28	025-32528-000	025-32528-000	025-32529-000	
				-40	025-32524-000	025-32524-000	025-32525-000	
				-46	025-32822-000	025-32822-000	025-32524-000	
				-58	025-32821-000	025-32821-000	025-32523-000	
C	1	Circuit Breakers	Circuit Breaker	System	-17	024-27289-000	024-27229-000	024-27229-000
					2	024-27289-000	024-27289-000	024-27229-000
					1	024-27223-000	024-27228-000	024-27228-000
					2	024-27223-000	024-27245-000	024-27228-000
					1	024-27216-000	024-27221-000	024-27221-000
					2	024-27216-000	024-27216-000	024-27221-000
					1	024-27212-000	024-27216-000	024-27216-000
					2	024-27212-000	024-27212-000	024-27216-000
					1	024-30442-000	024-27212-000	024-27212-000
					2	024-30442-000	024-30442-000	024-27212-000
D	8 4 4 4 4	Power Factor Correction Capacitors	Capacitor		-17	024-30451		
					-28	024-30446		
					-40	024-30447		
					-46	024-30447		
					-58	024-30448		
E	1	Control Transformer (1T)	Transformer		-17	025-29627-001		
					-28	025-29627-002		
					-40	025-29627-003		
					-46	025-29627-002		
					-58	025-29627-004		
F	2		Fuse, Transformer		-17	025-27509-015		
					-28	025-28967-000		
					-40	025-27972-000		
					-46	025-27971-000		
					-58	025-30962-000		
G	4	Current Transformer Kit	Current Transformer		ALL	025-27408-000		
H I	2	Hot Gas Bypass	Valve Regulator, Hot Gas		ALL	025-27647-000		
			Suppressor		ALL	031-01117-000		
J	1	Flow Control Switch	Switch, Flow	150 psi 300 psi	ALL	024-26116-000 024-12144-000		
K L M	1	Remote Control Center	Control, Micro Board		ALL	031-01196-000		
	2		LAN Transient Protection		ALL	031-01586-000		
	1		EPROM, Programmed		ALL	031-01652-005		
N	1	Wall-Mounted Transformer Note 2	Transformer					
			Primary Voltage: 115V (60 Hz) :230 V (50 Hz)		— —	025-29917-001 025-29917-002		
O P Q R	1	Multiple Unit Sequencing Master Kit	Sensor, Temperature		ALL	025-28935-000		
	1		Resistor, 180 Ohm Fixed		ALL	025-29900-000		
	1		EPROM Version		ALL	031-01096-003		
	1	Multiple Unit Seq. Follower Kit	EPROM Version		ALL	031-01096-004		
S	1	BAS Interface	Control, Remote Reset		ALL	031-00814-000		
T	1	Remote Cooler	See Note 3					

NOTES:

- Parts listed on page 16 are for Single Replacement Parts contained in the Option Kits. Part numbers provided DO NOT reflect part numbers for complete Option Kits. See the Installation Operation Manual, Form 150.60-NM5 for complete Option Kit Part Numbers.
- Used with Remote Control Center (if specified).
- All Renewal Parts for this Option are the same as Standard Unit Renewal Parts, including cooler, controls and unit components.

Replacement Component Part Number is the same for all models.



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