



# AIR-COOLED SCREW LIQUID CHILLERS

RENEWAL PARTS

New Release

Form: 201.21-RP1 (505)

**MODELS YCAV0157, 0177, 0187, 0197, 0207, 0227,  
0247 and YCAV0267**

**STYLE "A"**

**LATITUDE™**



Unit-7a



ALLY

150 - 260 TON  
527 - 914Kw  
R-134a  
60Hz



200-3-60  
230-3-60  
315-3-60  
460-3-60  
575-3-60  
MODELS ONLY

## CHANGEABILITY OF THIS DOCUMENT

In complying with YORK's policy for continuous improvement, the information contained in this document is subjected to change without notice. While YORK makes no commitment to update or provide current information automatically to the manual user, that information, if applicable, can be obtained by contacting the nearest YORK Engineered Systems Service office.

It is the responsibility of operating/service personnel as to the applicability of these documents to the equipment in question. If there is any question in the mind of operating/ service personnel as to the applicability of these documents, then, prior to working on the equipment, they should verify with the owner, whether the equipment has been modified and if the current literature is available.

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### **WARNING**

#### **HIGH VOLTAGE**

**Is used in the operation of this equipment.**

#### **DEATH OR SERIOUS INJURY**

**may result if personnel fail to observe safety precautions.**

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

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

Be careful not to 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.

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# UNIT NOMENCLATURE NAMEPLATE ENGINEERING DATA

## BASIC PART NUMBER

# YCAV0207EA40VAA

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
BASE PRODUCT TYPE				NOMINAL CAPACITY				UNIT DESIGNATOR	REFRIGERANT	VOLTAGE/STARTER			DESIGN/DEVELOPMENT LEVEL	
Y	C	A	V	#	#	#	#	S	A	1	7		A	
: YORK : Chiller : Air Cooled V : Screw				Tons/Kw 0157-0513 0177-0563 0187-0633 0197-0673 0207-0703 0227-0733 0247-0813 0267-0883				Standard Standard Optimized High Efficiency High Efficiency Optimized	:R-134a	:200/3/60 :230/3/60 :380/3/60 :460/3/60 :380-415/3/50 :575/3/60 V :Variable Speed Drive			:Design Series A : :Engineering Change or PIN Level	

## PART NUMBER – LETTER CODES

16 17 18 19	20 21 22 23 24 25 26 27 28	29 30 31 32 33 34 35 36 37
POWER FIELD	CONTROLS FIELD	COMPRESSOR / PIPING FIELD
S X B X S S C S	X T C B M S F G I P N L N Q O	# T S C S B
: SP TB : SP CB : SP TB w/ Ind. Sys. NF Disc. Sw. : SP CB w/ Ind. Sys. NF Disc. Sw.	: No Ambient Kit : Temp. Reset / Offset : Current Reset / Offset : Temp. and Current Reset / Offset : ISN Microgateway : Spanish LCD & Keypad Display : French LCD & Keypad Display : German LCD & Keypad Display : Italian LCD & Keypad Display : Portuguese LCD & Keypad Display : Silent Night : N. American Safety Code (c.U.L./c.ETL) : No Listing (typically 50 HZ non-CE, non-U.L.) : : Pump Control : OptiView Remote Panel S : Sequence Control & Automatic Lead Transfer	: Low Temp. Brine (LBrT) : Thermal Storage : Chicago Relief Code : Service Isolation Valve : Both Chicago Relief Code & Isolation Valve H : Service Isolation Valve

**MP** = Multiple Point  
**SP** = Single Point  
**NF** = Non-Fused  
**TB** = Terminal Block  
**Ser.** = Service  
**Ind. Sys. Brkr. & L. Ext. Handles** = Individual System Breaker & Lockable External Handle

38 39 40 41 42 43 44	45 46 47	48 49 50 51 52 53 54	55	56	57	61
EVAP. FIELD	CONDENSER FIELD	CABINET FIELD	EXTENDED FIELD WARRANTY	REFRIGERANT WARRANTY	REFRIGERANT WARRANTY	PLANT OF MANUFACTURE
X 3 D W V S D A R	X C B P H X	1 3 5 7 P B D L H	X B C D E F G H	X 1 2 5	A C B	R
:150# PSI DWP :300# PSI DWP :Double Thick Insulation :Weld Flange :Victaulic Flange :Flow Switch :Diff. Press. Switch :ASME Pressure Vessel and Associated Codes :Remote Cooler	: Aluminum : Copper : Black Fin : Phenolic : Heat Recovery X : TEAO Fan Motors	: Wire (Full Unit) Enc. Panels (factory) : Wire/Louvered Enc. Panels (factory) : Louvered (Cond. Only) Enc. Panels (factory) : Louvered (Full Unit) Enc. Panels (factory) : Perimeter Sound Blanket : Acoustic Sound Blanket : Both Perimeter & Acoustic Sound Blanket : Low Sound Fans : High Static Fans : 1" Deflection : Seismic : Neoprene Pads	: 1st Year Parts Only : 1st Year Parts & Labor : 2nd Year Parts Only : 2nd Year Parts & Labor : 5 Year Compressor Parts Only : 5 Year Compressor Parts & Labor Only : 5 Year Units Parts Only : 5 Year Unit Parts & Labor	: No Refrigerant Warranty 1 : 1 Year Refrigerant 2 : 2 Year Refrigerant 5 : 5 Year Refrigerant	: Buy American Act Compliance : Container Shipping Kit : Buy American Act Compliance & Container Shipping Kit	: Monterrey

**NOTES:**  
 1. Q :DENOTES SPECIAL / S.Q.  
 2. # :DENOTES STANDARD  
 3. X :w/in OPTIONS FIELD, DENOTES NO OPTION SELECTED  
 4. Agency Files (i.e. U.L. / ETL; CE; ARI; ETC.) will contain info. based on the first 14 characters only.  
 5. Plant of manufacture to include PIN 61 upon entering the chiller order.

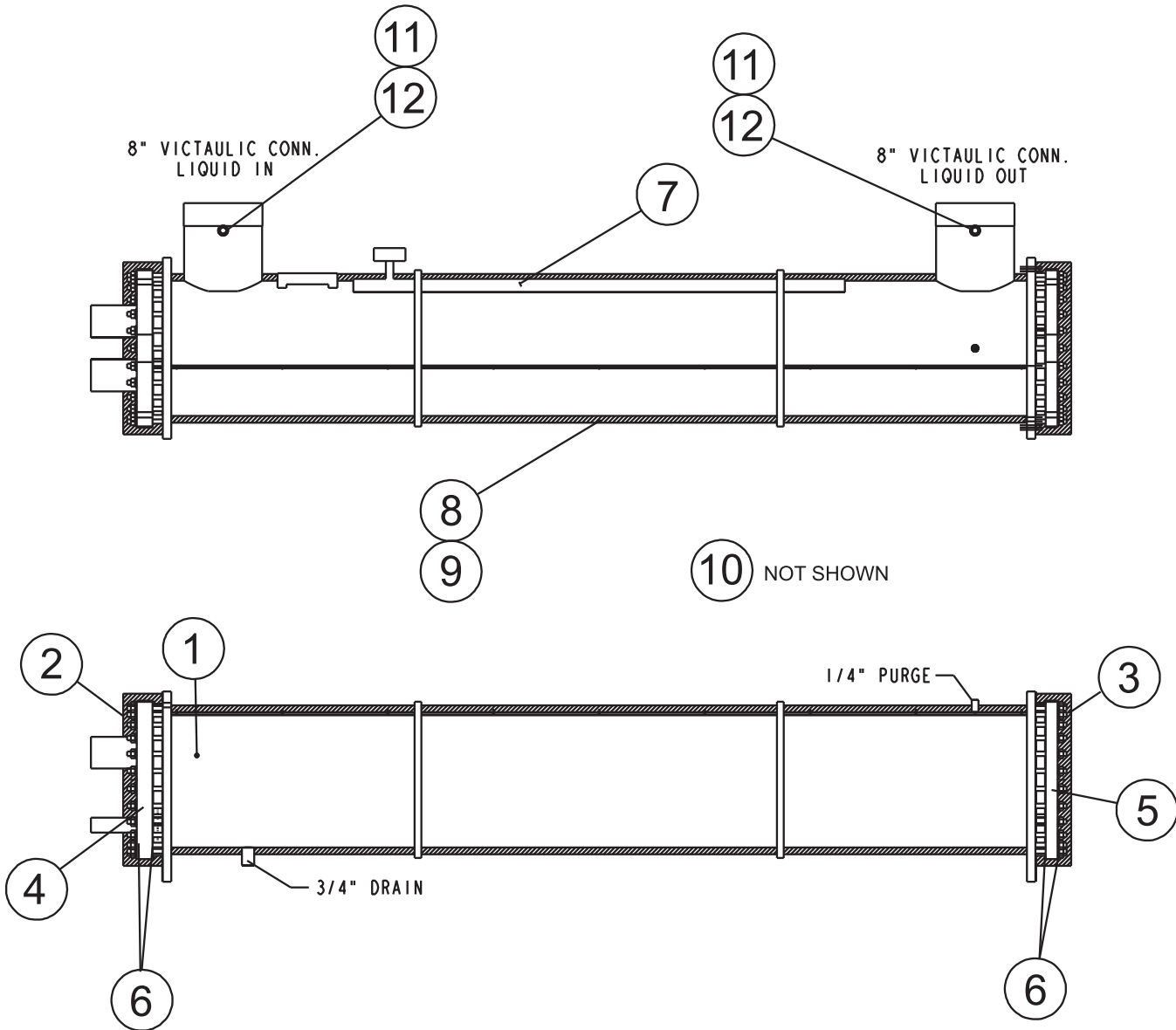
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# EVAPORATOR COMPONENTS

**Service Note:**

Pin location 38 in Model Number will be "X" for 150# DWP Cooler.

Pin location 38 in Model Number will be "3" for 300# DWP Cooler.



**Service Note:**

Standard 150# DWP Cooler Flow Switch - 024-26116-000

Optional 300# DWP Cooler Flow Switch - 024-12144-000

Differential Pressure Switch - 025-30919-000

**FIG. 1 – EVAPORATOR COMPONENTS (REF. TABLES 1 AND 1A, PAGES 7 AND 8)**

## EVAPORATOR COMPONENTS (CONT'D)

**TABLE 1 – EVAPORATOR COMPONENTS - 150 PSIG (SEE FIG. 1, PAGE 6)**

ITEM NUMBER	QTY PER UNIT	DESCRIPTION	DWP	UNIT MODEL YCAV0157	UNIT MODELS YCAV0177 THRU YCAV0187
				375-54509-001	375-54480-001
1	1	Evaporator, less Heater & Insulation	ALL	375-54510-000	375-54481-000
2	1	Head, Connection End	ALL	075-54517-000	075-54488-000
3	1	Head, Back End	ALL	075-54515-000	075-54486-000
4	1	Baffle, Connection End	ALL	075-54519-000	075-54490-000
5	1	Baffle, Back End	ALL	075-54514-000	075-54485-000
6	4	Gasket, Baffle and Head	ALL	075-54520-000	075-54491-000
7	2	Heater, Cooler 280 Watt	ALL	025-22691-000	025-22691-000
8	-	Insulation (3/4"x49"x65")	ALL	010-05997-000	010-05997-000
9	-	Insulation (1 1/2"x49"x65")		010-05998-000	010-05998-000
10	1 qt.	Adhesive (Use with #6)	ALL	013-03311-000	
11	2	Sensor, Water Temperature	ALL	025-40334-000	025-40334-000
12	2	Well, Thermo	ALL	026-33627-000	026-33427-000

ITEM NUMBER	QTY PER UNIT	DESCRIPTION	DWP	UNIT MODELS YCAV0197 THRU YCAV0227	UNIT MODELS YCAV0247 AND YCAV0267
				375-53791-001	375-54105-001
1	1	Evaporator, less Heater & Insulation	ALL	375-53784-000	375-54104-000
2	1	Head, Connection End	ALL	075-53794-000	075-53210-000
3	1	Head, Back End	ALL	075-53796-000	075-53206-000
4	1	Baffle, Connection End	ALL	075-53790-000	075-53209-000
5	1	Baffle, Back End	ALL	075-53792-000	075-53207-000
6	4	Gasket, Baffle and Head	ALL	075-53797-000	075-54103-000
7	2	Heater, Cooler 280 Watt	ALL	025-22691-000	025-22691-000
8	-	Insulation (3/4"x49"x65")	ALL	010-05997-000	010-05997-000
9	-	Insulation (1 1/2"x49"x65")		010-05998-000	010-05998-000
10	1 qt.	Adhesive (Use with #6)	ALL	013-03311-000	
11	2	Sensor, Water Temperature	ALL	025-40334-000	025-40334-000
12	2	Well, Thermo	ALL	026-33627-000	026-33627-000

# EVAPORATOR COMPONENTS (CONT'D)

**TABLE 1A – EVAPORATOR COMPONENTS - 300 PSIG (SEE FIG. 1, PAGE 6)**

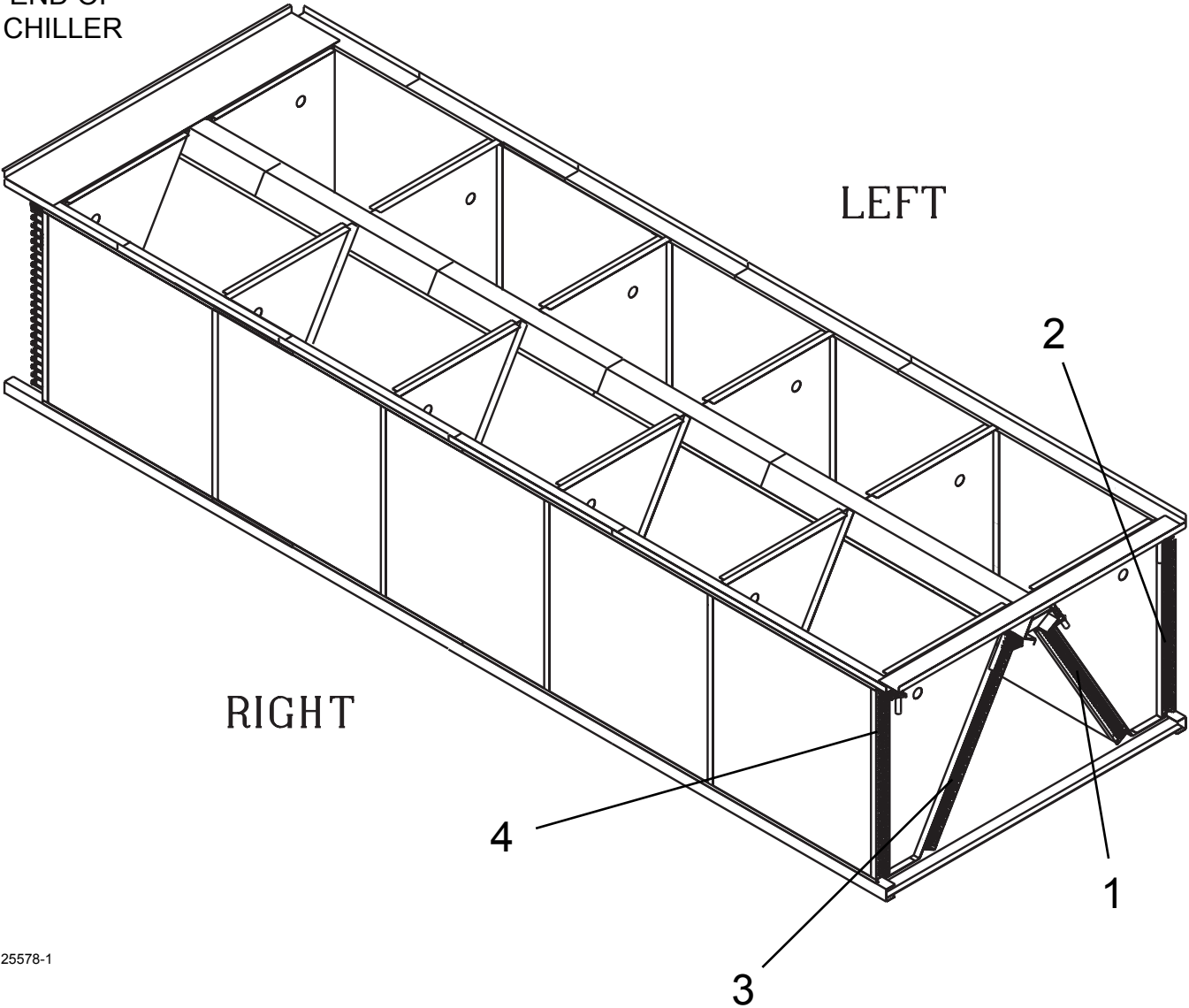
ITEM NUMBER	QTY PER UNIT	DESCRIPTION	DWP	UNIT MODEL	UNIT MODELS
				YCAV0157 375-58441-001	YCAV0177 AND YCAV0187 375-58440-001
1	1	Evaporator, less Heater & Insulation	ALL	375-58448-000	375-58447-000
2	1	Head, Connection End	ALL	075-58473-000	075-58457-000
3	1	Head, Back End	ALL	075-58474-000	075-58458-000
4	1	Baffle, Connection End	ALL	075-54519-000	075-54490-000
5	1	Baffle, Back End	ALL	075-54514-000	075-54485-000
6	4	Gasket, Baffle and Head	ALL	075-54520-000	075-54491-000
7	2	Heater, Cooler 280 Watt		025-22691-000	025-22691-000
8	-	Insulation (3/4"x49"x65")	ALL	010-05997-000	010-05997-000
9	-	Insulation (1 1/2"x49"x65")		010-05998-000	010-05998-000
10	1 qt.	Adhesive (Use with #6)	ALL	013-03311-000	
11	2	Sensor, Water Temperature	ALL	025-40334-000	025-40334-000
12	2	Well, Thermo	ALL	026-33627-000	026-33427-000

ITEM NUMBER	QTY PER UNIT	DESCRIPTION	DWP	UNIT MODELS	UNIT MODELS
				YCAV0197 THRU YCAV0227 375-58439-001	YCAV0247 THRU YCAV0267 375-58438-001
1	1	Evaporator, less Heater & Insulation	ALL	375-58446-000	375-58445-000
2	1	Head, Connection End	ALL	075-58575-000	075-58450-000
3	1	Head, Back End	ALL	075-58576-000	075-58453-000
4	1	Baffle, Connection End	ALL	075-53790-000	075-53209-000
5	1	Baffle, Back End	ALL	075-53792-000	075-53207-000
6	4	Gasket, Baffle and Head	ALL	075-53797-000	075-54103-000
7	2	Heater, Cooler 280 Watt	ALL	025-22691-000	025-22691-000
8	-	Insulation (3/4"x49"x65")	ALL	010-05997-000	010-05997-000
9	-	Insulation (1 1/2"x49"x65")		010-05998-000	010-05998-000
10	1 qt.	Adhesive (Use with #6)	ALL	013-03311-000	
11	2	Sensor, Water Temperature	ALL	025-40334-000	025-40334-000
12	2	Well, Thermo	ALL	026-33627-000	026-33627-000

# CONDENSER COIL COMPONENTS

Condenser

POWER  
PANEL  
END OF  
CHILLER



25578-1

**FIG. 2 – CONDENSER COIL COMPONENTS**  
(REF. TABLES 2 AND 2A, PAGES 10, 11, 12 AND 13)

## CONDENSER COIL COMPONENTS (CONT'D)

**TABLE 2 – CONDENSER COIL COMPONENTS - STANDARD 'PIN 9 = S OR P'**  
(SEE FIG. 2, PAGE 9)

ITEM NUMBER	DESCRIPTION	POSITION	QTY	MODELS YCAV0157 AND YCAV0177	MODELS YCAV0187 AND YCAV0207	MODEL YCAV0227
<b>ALUMINUM COILS</b>						
1	Coil Assembly*	RH	1	375-55356-001	375-55350-001	375-55350-001
2		LH	1	375-55356-002	375-55350-002	375-55350-002
3			1	375-55356-003	375-55356-003	375-55350-003
4		RH	1	375-55356-004	375-55356-004	375-55350-004
<b>COPPER COILS</b>						
1	Coil Assembly*	RH	1	375-55356-005	375-55350-005	375-55350-005
2		LH	1	375-55356-006	375-55350-006	375-55350-006
3			1	375-55356-007	375-55356-007	375-55350-007
4		RH	1	375-55356-008	375-55355-008	375-55350-008
<b>BLACK FIN COILS</b>						
1	Coil Assembly*	RH	1	375-55356-009	375-55350-009	375-55350-009
2		LH	1	375-55356-010	375-55350-010	375-55350-010
3			1	375-55356-011	375-55356-011	375-55350-011
4		RH	1	375-55356-012	375-55356-012	375-55350-012
<b>PHENOLIC COILS</b>						
1	Coil Assembly*	RH	1	375-58328-001	375-58328-005	375-58328-005
2		LH	1	375-58328-002	375-58328-006	375-58328-006
3			1	375-58328-003	375-58328-003	375-58328-007
4		RH	1	375-58328-004	375-58328-004	375-58328-008

\*Note: Coil Assembly includes coil and headers.

\*Note: Coils for each circuit are denoted left and right as viewed from the power panel end of chiller.

## CONDENSER COIL COMPONENTS (CONT'D)

**TABLE 2 (CONT'D) – CONDENSER COIL COMPONENTS - STANDARD 'PIN 9 = S OR P'**  
(SEE FIG. 2, PAGE 9)

ITEM NUMBER	DESCRIPTION	POSITION	QTY	MODEL YCAV0247	MODEL YCAV0267
<b>ALUMINUM FIN COILS</b>					
1	Coil Assembly*	RH	1	375-54395-001	375-54395-001
2		LH	1	375-54395-002	375-54395-002
3			1	375-55350-003	375-54395-003
4		RH	1	375-55350-004	375-54395-004
<b>BLACK FIN COILS</b>					
1	Coil Assembly*	RH	1	375-54395-005	375-54395-005
2		LH	1	375-54395-006	375-54395-006
3			1	375-55350-007	375-54395-007
4		RH	1	375-55350-008	375-54395-008
<b>PHENOLIC COILS</b>					
1	Coil Assembly*	RH	1	375-54395-009	375-54395-009
2		LH	1	375-54395-010	375-54395-010
3			1	375-55350-011	375-54395-011
4		RH	1	375-55350-012	375-54395-012
<b>COPPER COILS</b>					
1	Coil Assembly*	RH	1	375-58328-009	375-58328-009
2		LH	1	375-58328-010	375-58328-010
3			1	375-58328-007	375-58328-011
4		RH	1	375-58328-008	375-58328-012

**\*Note:** Coil Assembly includes coil and headers.

**\*Note:** Coils for each circuit are denoted left and right as viewed from the power panel end of chiller.

## CONDENSER COIL COMPONENTS (CONT'D)

**TABLE 2A – CONDENSER COIL COMPONENTS - HIGH EFFICIENCY 'PIN 9 = E OR V'**  
(SEE FIG. 2, PAGE 9)

ITEM NUMBER	DESCRIPTION	POSITION	QTY	MODEL YCAV0157	MODEL YCAV0177	MODELS YCAV0187 AND YCAV0197
<b>ALUMINUM COILS</b>						
1	Coil Assembly*	RH	1	375-55356-001	375-55350-001	375-55350-001
2		LH	1	375-55356-002	375-55350-002	375-55350-002
3			1	375-55356-003	375-55356-003	375-55350-003
4		RH	1	375-55356-004	375-55356-004	375-55350-004
<b>COPPER COILS</b>						
1	Coil Assembly*	RH	1	375-55356-005	375-55350-005	375-55350-005
2		LH	1	375-55356-006	375-55350-006	375-55350-006
3			1	375-55356-007	375-55356-007	375-55350-007
4		RH	1	375-55356-008	375-55355-008	375-55350-008
<b>BLACK FIN COILS</b>						
1	Coil Assembly*	RH	1	375-55356-009	375-55350-009	375-55350-009
2		LH	1	375-55356-010	375-55350-010	375-55350-010
3			1	375-55356-011	375-55356-011	375-55350-011
4		RH	1	375-55356-012	375-55356-012	375-55350-012
<b>PHENOLIC COILS</b>						
1	Coil Assembly*	RH	1	375-58328-001	375-58328-005	375-58328-005
2		LH	1	375-58328-002	375-58328-006	375-58328-006
3			1	375-58328-003	375-58328-003	375-58328-007
4		RH	1	375-58328-004	375-58328-004	375-58328-008

**\*Note:** Coil Assembly includes coil and headers.

**\*Note:** Coils for each circuit are denoted left and right as viewed from the power panel end of chiller.

## CONDENSER COIL COMPONENTS (CONT'D)

**TABLE 2A (CONT'D) – CONDENSER COIL COMPONENTS - HIGH EFFICIENCY 'PIN 9 = E OR V' (SEE FIG. 2, PAGE 9)**

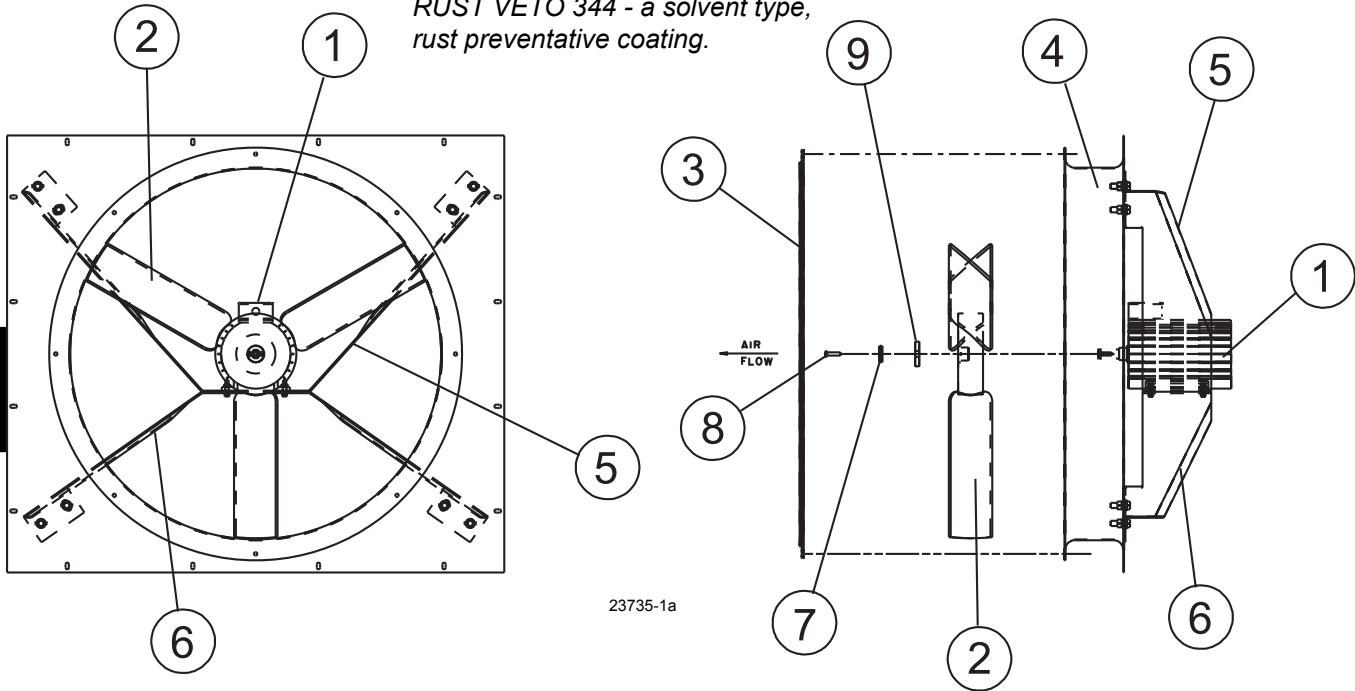
ITEM NUMBER	DESCRIPTION	POSITION	QTY	MODEL YCAV0207	MODELS YCAV0227 AND YCAV0247
<b>ALUMINUM FIN COILS</b>					
1	Coil Assembly*	RH	1	375-54395-001	375-54395-001
2		LH	1	375-54395-002	375-54395-002
3			1	375-55350-003	375-54395-003
4		RH	1	375-55350-004	375-54395-004
<b>BLACK FIN COILS</b>					
1	Coil Assembly*	RH	1	375-54395-005	375-54395-005
2		LH	1	375-54395-006	375-54395-006
3			1	375-55350-007	375-54395-007
4		RH	1	375-55350-008	375-54395-008
<b>PHENOLIC COILS</b>					
1	Coil Assembly*	RH	1	375-54395-009	375-54395-009
2		LH	1	375-54395-010	375-54395-010
3			1	375-55350-011	375-54395-011
4		RH	1	375-55350-012	375-54395-012
<b>COPPER COILS</b>					
1	Coil Assembly*	RH	1	375-58328-009	375-58328-009
2		LH	1	375-58328-010	375-58328-010
3			1	375-58328-007	375-58328-011
4		RH	1	375-58328-008	375-58328-012

**\*Note:** Coil Assembly includes coil and headers.

**\*Note:** Coils for each circuit are denoted left and right as viewed from the power panel end of chiller.

# FAN COMPONENTS

**Service Note:**  
 Fan Hub to Shaft Joint should be sealed with protective coating - use RUST VETO 344 - a solvent type, rust preventative coating.



**Service Note:** Pin Location 52 in Model Number will be "X" for Standard Fan, or "L" for Low Noise Fan. See page 4.

**FIG. 3 – FAN COMPONENTS**

**TABLE 3 – FAN COMPONENTS**

ITEM NUMBER	DESCRIPTION	VOLTAGE CODE	FAN TYPE	
			STANDARD 7/8", 1160 RPM	ULTRA QUIET 7/8", 850 RPM
1 <sup>s</sup>	Motor, Fan 2 HP (YCAV0157-YCAV0267)	-17	024-27322-007	024-34980-001
		-28		
		-40		
		-46		
		-58		
2 <sup>s</sup>	Blade	All	026-41594-000	026-41942-000
3	Guard	All	026-35605-000	
4	Orifice	All	026-41609-000	
5	Support	All	026-41937-000	026-41938-000
6	Support Ring	All	026-36367-000	
7	Spacer (.375 I.D.)	All	075-29007-000	
8	Screw, Cap (M8x125)	All	021-18494-000	
9	Spacer (1.406 I.D.)	All	075-40484-000	

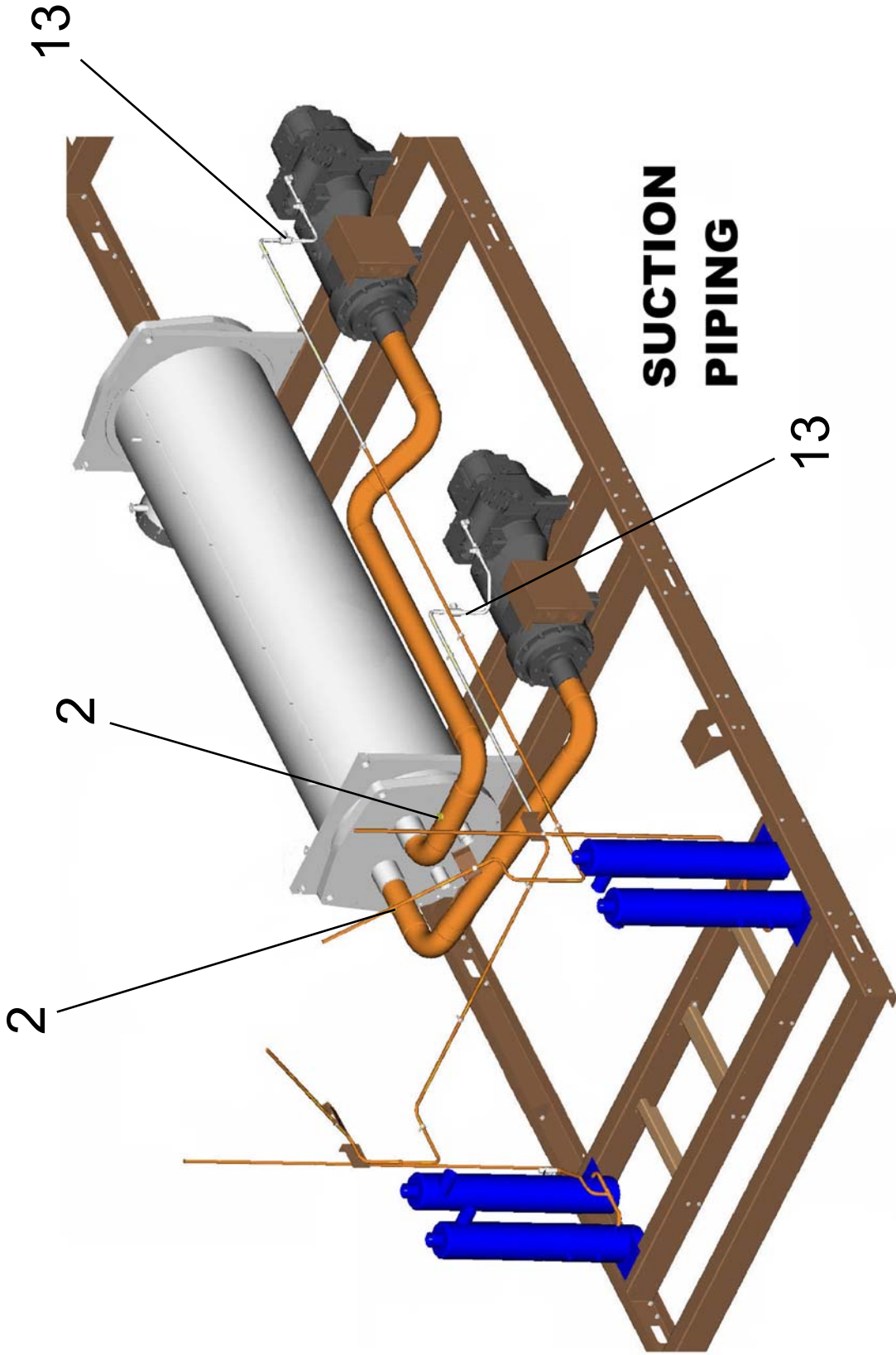
<sup>s</sup> = Recommended Spare Parts

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# REFRIGERANT PIPING COMPONENTS (CONT'D)

## CHILLER MODEL YCAV



55609-5

**FIG. 4A** – SUCTION PIPING COMPONENTS - MODEL YCAV0267 SHOWN  
(REF. TABLE 4, PAGES 20, 21 AND 22)

Piping

# REFRIGERANT PIPING COMPONENTS (CONT'D)

## CHILLER MODEL YCAV

Piping

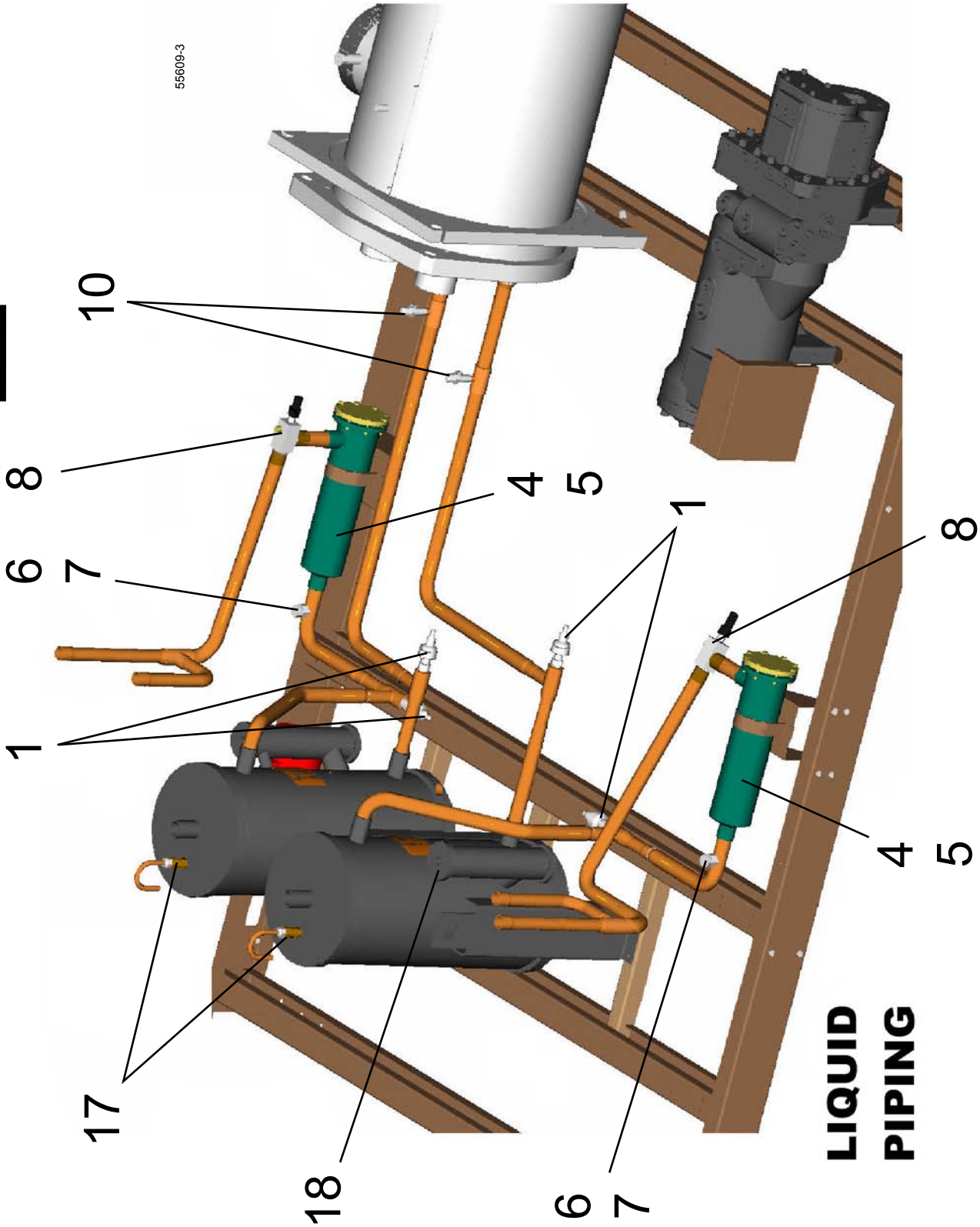


FIG. 4B – LIQUID PIPING COMPONENTS - MODEL YCAV0267 SHOWN (REF. TABLE 4, PAGES 20, 21 AND 22)

# REFRIGERANT PIPING COMPONENTS (CONT'D)

## CHILLER MODEL YCAV

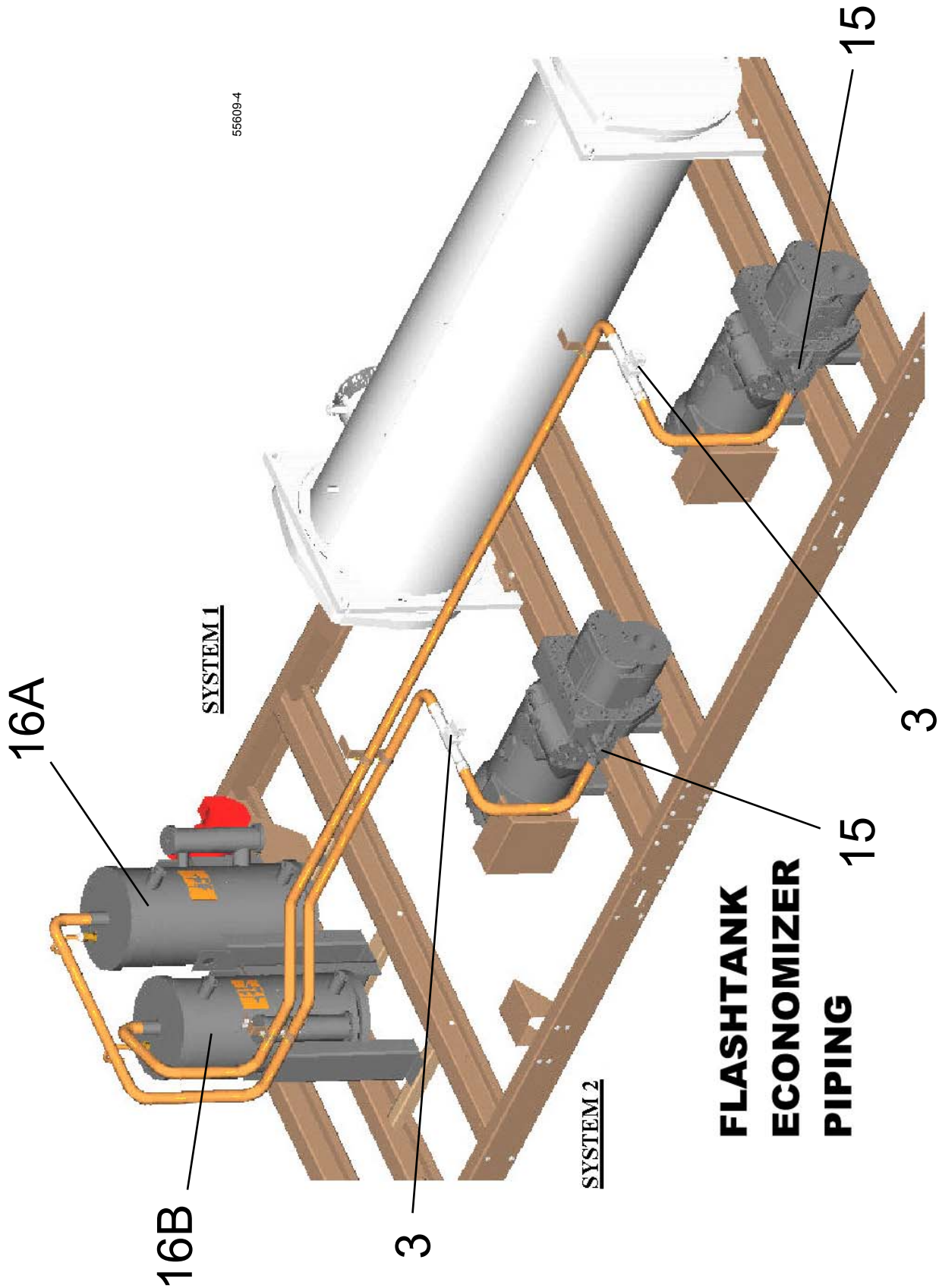


FIG. 4C – LIQUID PIPING COMPONENTS - MODEL YCAV0267 SHOWN (REF. TABLE 4, PAGES 20, 21 AND 22)

## REFRIGERANT PIPING COMPONENTS (CONT'D)

### CHILLER MODEL YCAV

**TABLE 4 – REFRIGERANT PIPING COMPONENTS**  
(SEE FIGS. 4, 4A, 4B AND 4C, PAGES 16, 17, 18 AND 19)

ITEM NO.	QTY PER UNIT	DESCRIPTION	YCAV00157	YCAV0177	YCAV0187
<b>1<sup>S</sup></b>	4	Valve, Drain or Feed	025-39688-000	025-39688-000	025-39688-000
<b>2</b>	2	Valve, Relief	022-11312-000	022-11312-000	022-11312-000
<b>3</b>	2	Valve, Solenoid	025-40330-000	025-40330-000	025-40330-000
<b>4</b>	2	Dehydrator, Body (Replacable Core)	026-16960-000	026-16960-000	026-16960-000
<b>5<sup>S</sup></b>	6	Core, Dehydrator	026-37540-000	026-37540-000	026-37540-000
<b>6</b>	2	Moisture Indicator, Body	026-32399-000	026-32399-000	026-32399-000
<b>7</b>	2	Moisture Indicator, Sight Glass Cap	026-32800-000	026-32800-000	026-32800-000
<b>8</b>	2	Valve, Liquid Stop	022-09779-000	022-09779-000	022-09779-000
<b>9</b>	2	Compressor	See page 25		
<b>10</b>	4	Valve, Charging	022-09754-000	022-09754-000	022-09754-000
<b>11</b>	2	Muffler	375-55738-000	375-55738-000	375-55738-000
<b>12A</b>	2	Oil Separator (Left)	075-56108-002		
<b>12B</b>	2	Oil Separator (Right)	075-56108-001		
<b>13</b>	2	Valve, Ball (Oil Line)	022-09172-000	022-09172-000	022-09172-000
<b>14A</b>	1	Ball Valve, Discharge (System 1)	022-11326-000	022-11325-000	022-11325-000
<b>14B</b>	1	Ball Valve, Discharge (System 2)	022-11326-000	022-11326-000	022-11326-000
<b>15</b>	2	Flange	022-11358-000	022-11358-000	022-11358-000
	2	1 1/2" Gasket	028-13972-000	028-13972-000	028-13972-000
<b>16A</b>	1	Flash Tank	375-55873-000	375-55873-000	375-55873-000
<b>16B</b>	1		375-54434-000	375-54434-000	375-54434-000
<b>17</b>	2	Valve, Relief	022-08870-000	022-08870-000	022-08870-000
<b>18<sup>S</sup></b>	2	Sensor, Refrig Level	025-39675-002	025-39675-002	025-39675-002

<sup>S</sup> = Recommended Spare Parts

## REFRIGERANT PIPING COMPONENTS (CONT'D)

### CHILLER MODEL YCAV

**TABLE 4 (CONT'D) – REFRIGERANT PIPING COMPONENTS**  
(SEE FIGS. 4, 4A, 4B AND 4C, PAGES 16, 17, 18 AND 19)

ITEM NO.	QTY PER UNIT	DESCRIPTION	YCAV00197 N/A	YCAV0207	YCAV0227
<b>1<sup>S</sup></b>	4	Valve, Drain or Feed	N/A	025-39688-000	025-39688-000
<b>2</b>	2	Valve, Relief	N/A	022-11312-000	022-11312-000
<b>3</b>	2	Valve, Solenoid	N/A	025-40330-000	025-40330-000
<b>4</b>	2	Dehydrator, Body (Replacable Core)	N/A	026-16960-000	026-16960-000
<b>5<sup>S</sup></b>	6	Core, Dehydrator	N/A	026-37540-000	026-37540-000
<b>6</b>	2	Moisture Indicator, Body	N/A	026-32399-000	026-32399-000
<b>7</b>	2	Moisture Indicator, Sight Glass Cap	N/A	026-32800-000	026-32800-000
<b>8</b>	2	Valve, Liquid Stop	N/A	022-09779-000	022-09779-000
<b>9</b>	2	Compressor	See page 25		
<b>10</b>	4	Valve, Charging	N/A	022-09754-000	022-09754-000
<b>11</b>	2	Muffler	N/A	375-53202-000	375-53202-000
<b>12A</b>	2	Oil Separator (Left)	075-56108-002		
<b>12B</b>	2	Oil Separator (Right)	075-56108-001		
<b>13</b>	2	Valve, Ball (Oil Line)	N/A	022-09172-000	022-09172-000
<b>14A</b>	1	Ball Valve, Discharge (System 1)	N/A	022-11325-000	022-11325-000
<b>14B</b>	1	Ball Valve, Discharge (System 2)	N/A	022-11325-000	022-11326-000
<b>15</b>	2	Flange	N/A	022-11358-000	022-11358-000
	2	1 1/2" Gasket	N/A	028-13972-000	028-13972-000
<b>16A</b>	1	Flash Tank	N/A	375-55873-000	375-55873-000
<b>16B</b>	1		N/A	375-54434-000	375-54434-000
<b>17</b>	2	Valve, Relief	N/A	022-08870-000	022-08870-000
<b>18<sup>S</sup></b>	2	Sensor, Refrig Level	N/A	025-39675-002	025-39675-002

<sup>S</sup> = Recommended Spare Parts

# REFRIGERANT PIPING COMPONENTS (CONT'D)

## CHILLER MODEL YCAV

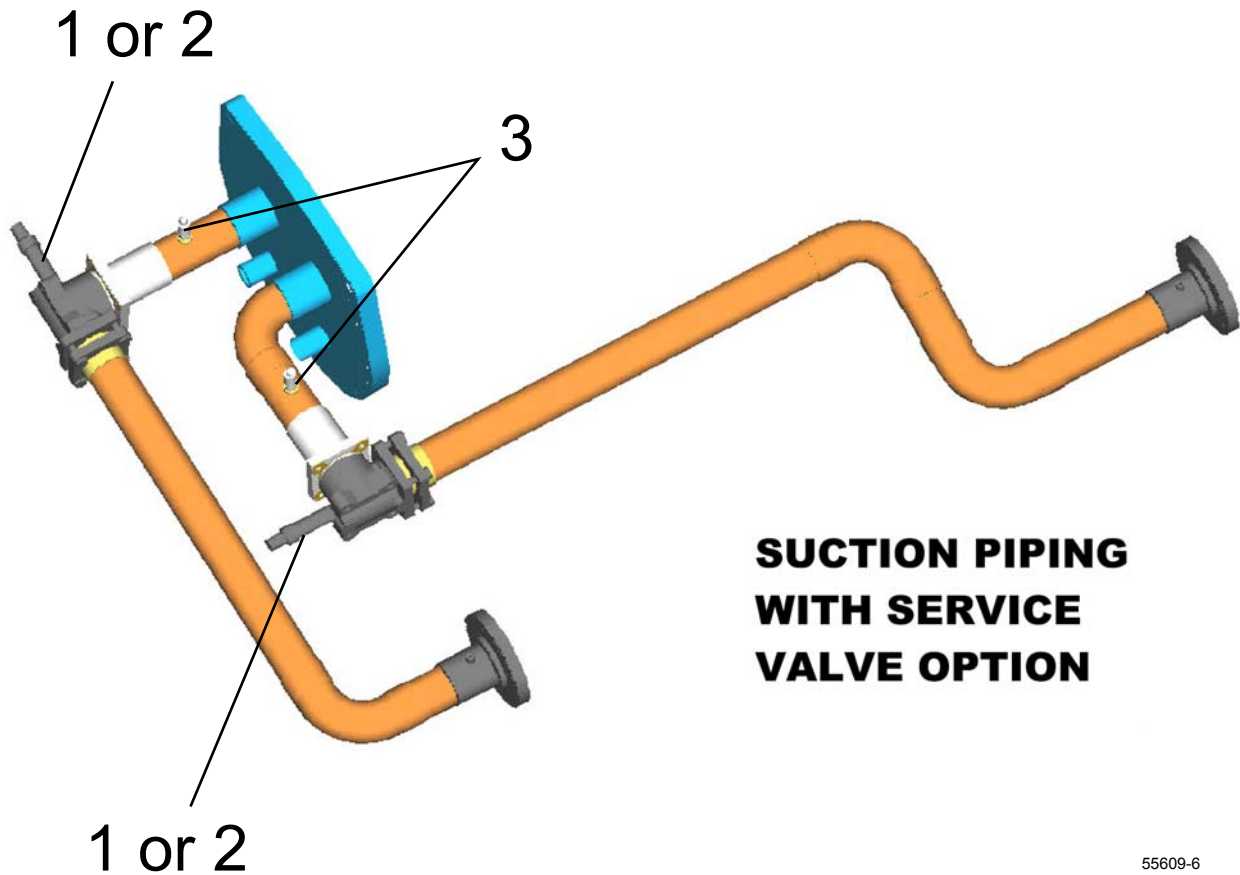
**TABLE 4 (CONT'D) – REFRIGERANT PIPING COMPONENTS**  
(SEE FIGS. 4, 4A, 4B AND 4C, PAGES 16, 17, 18 AND 19)

ITEM NO.	QTY PER UNIT	DESCRIPTION	YCAV00247	YCAV0267
<b>1<sup>S</sup></b>	4	Valve, Drain or Feed	025-39688-000	025-39688-000
<b>2</b>	2	Valve, Relief	022-11312-000	022-11312-000
<b>3</b>	2	Valve, Solenoid	025-40330-000	025-40330-000
<b>4</b>	2	Dehydrator, Body (Replacable Core)	026-16960-000	026-16960-000
<b>5<sup>S</sup></b>	6	Core, Dehydrator	026-37540-000	026-37540-000
<b>6</b>	2	Moisture Indicator, Body	026-32399-000	026-32399-000
<b>7</b>	2	Moisture Indicator, Sight Glass Cap	026-32800-000	026-32800-000
<b>8</b>	2	Valve, Liquid Stop	022-09779-000	022-09779-000
<b>9</b>	2	Compressor	See page 25	
<b>10</b>	4	Valve, Charging	022-09754-000	022-09754-000
<b>11</b>	2	Muffler	375-53202-000	375-53202-000
<b>12A</b>	2	Oil Separator (Left)	075-56108-002	
<b>12B</b>	2	Oil Separator (Right)	075-56108-001	
<b>13</b>	2	Valve, Ball (Oil Line)	022-09172-000	022-09172-000
<b>14A</b>	1	Ball Valve, Discharge (System 1)	022-11325-000	022-11325-000
<b>14B</b>	1	Ball Valve, Discharge (System 2)	022-11325-000	022-11325-000
<b>15</b>	2	Flange	022-11358-000	022-11358-000
	2	1 1/2" Gasket	028-13972-000	028-13972-000
<b>16A</b>	1	Flash Tank	375-55873-000	375-55873-000
<b>16B</b>	1		375-54434-000	375-54434-000
<b>17</b>	2	Valve, Relief	022-08870-000	022-08870-000
<b>18<sup>S</sup></b>	2	Sensor, Refrig Level	025-39675-002	025-39675-002

<sup>S</sup> = Recommended Spare Parts

## REFRIGERANT PIPING COMPONENTS (CONT'D)

### CHILLER MODEL YCAV



Piping

55609-6

**FIG. 4D** – SUCTION PIPING WITH SERVICE VALVE OPTION COMPONENTS (REF. TABLE 4A)

**TABLE 4A** – SUCTION PIPING WITH SERVICE VALVE OPTION COMPONENTS (SEE FIG. 4D)

ITEM NO.	DESCRIPTION	PART NUMBER
1	Valve, Stop (3 5/8")	022-02845-001
	Gasket	028-13974-000
2	Valve, Stop (4 1/8")	022-11340-000
	Gasket	028-15304-000
3	Valve, Relief	022-11312-000

# GLYCOL LOOP COMPONENTS

## CHILLER MODEL YCAV

Piping

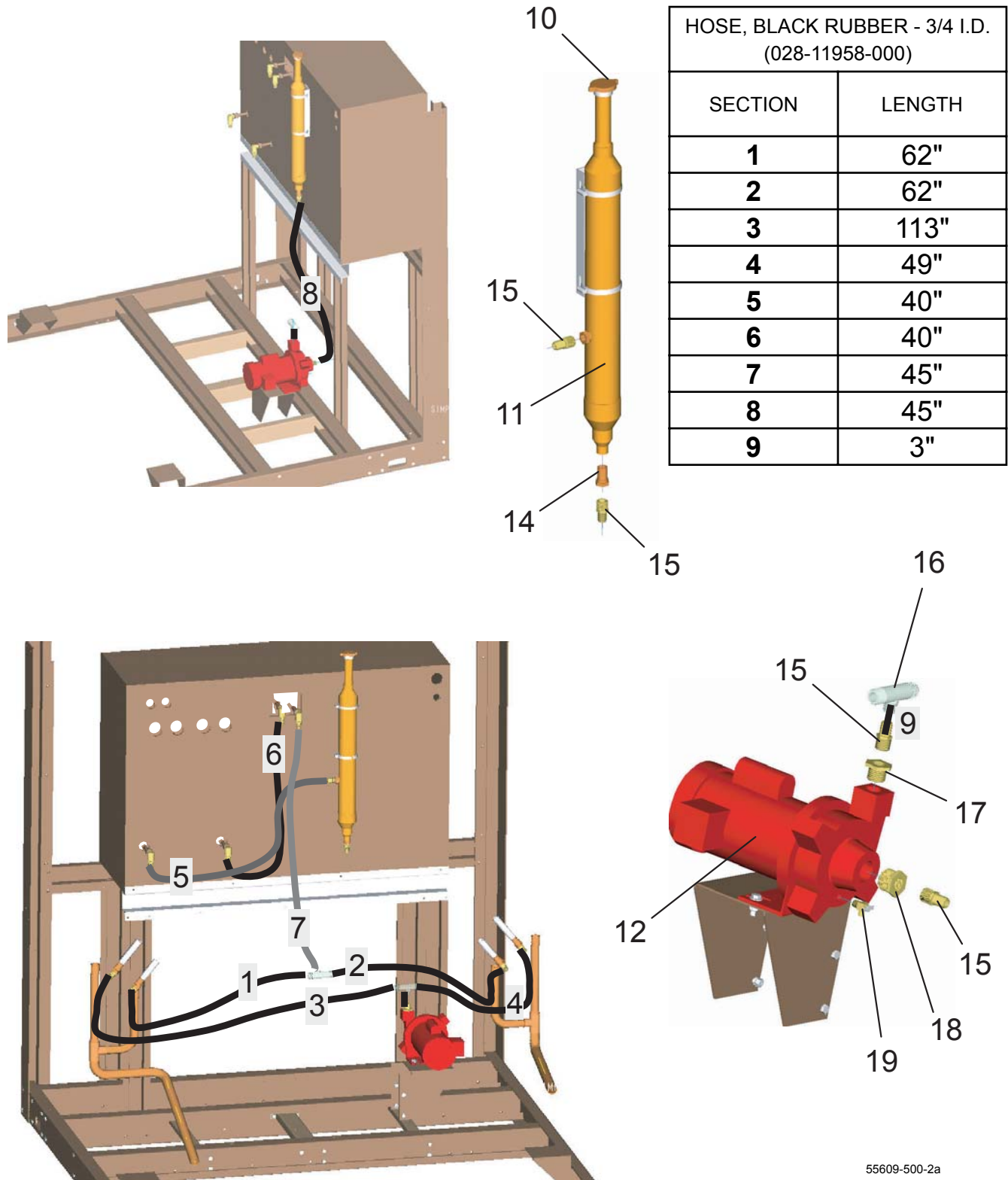


FIG. 4E – GLYCOL LOOP COMPONENTS (REF. TABLE 4B, PAGE 25)

## GLYCOL LOOP COMPONENTS (CONT'D)

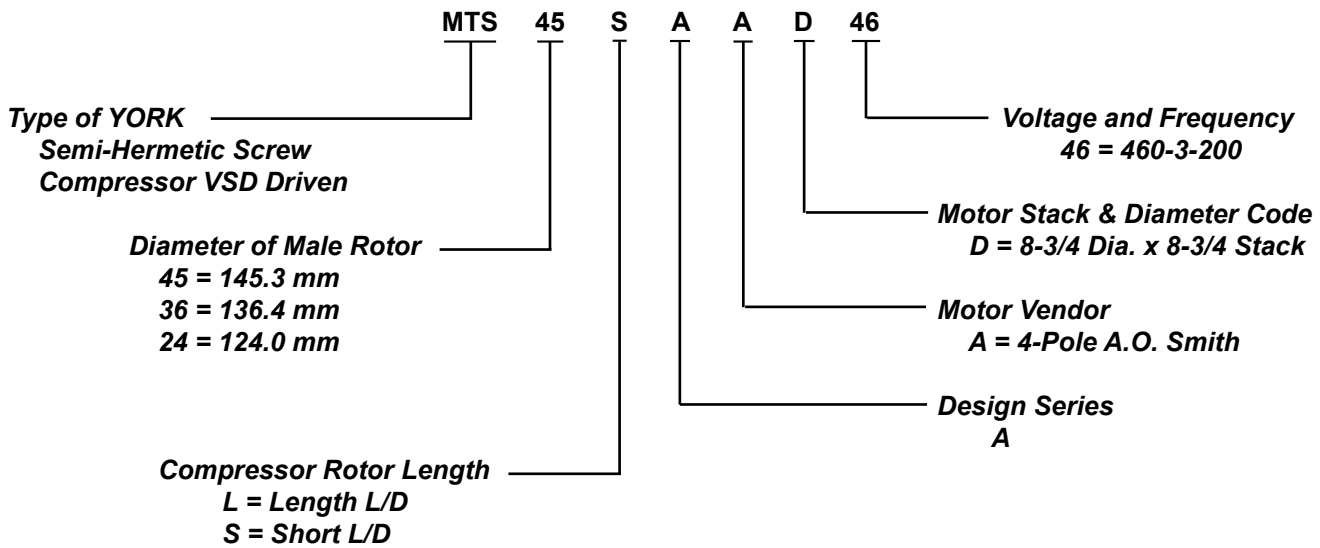
### CHILLER MODEL YCAV

**TABLE 4B (CONT'D) – GLYCOL LOOP COMPONENTS (SEE FIG. 4E, PAGE 24)**

ITEM NO.	QTY PER UNIT	DESCRIPTION	PART NUMBER
<b>10<sup>S</sup></b>	1	CAP, RADIATOR	023-21927-000
<b>11</b>	1	TUBE, GLYCOL	075-55649-000
<b>12</b>	1	PUMP, SINGLE STAGE	026-41611-000
<b>13<sup>S</sup></b>	5 gal	COOLANT, PROPYLENE GLYCOL	013-03344-000
<b>14</b>	1	REDUCER	023-21941-000
<b>15</b>	4	FITTING, HOSE BARB	023-21929-000
<b>16</b>	1	TEE	023-22526-000
<b>17</b>	1	BUSHING	023-21934-000
<b>18</b>	1	BUSHING	023-21935-000
<b>19</b>	1	VALVE, DRAIN	023-21874-000

<sup>S</sup> = Recommended Spare Parts

# COMPRESSOR MODEL NOMENCLATURE



Compressor

COMPRESSOR WEIGHTS		
MM SIZE	WEIGHT (LBS.)*	WEIGHT (Kg.)
145	1310	594
136	1250	567
124	1175	533

\*Note: Less Service Valves.

ITEM	REF.	DESCRIPTION	5 GALLON
OIL <sup>s</sup>	R-134A	Oil, Type 'L' (Synthetic)	011-00591-000

<sup>s</sup> = Recommended Spare Parts

# COMPRESSOR

**TABLE 6 – COMPRESSOR PART NUMBERS**

MODEL	VOLTAGE CODE	SYSTEM #1 COMPRESSOR				SYSTEM #2 COMPRESSOR			
		PART #	MODEL #	MM	QTY	PART #	MODEL #	MM	QTY
YCAV0157	-17	364-50820-000	MTS24SA	124	1	364-50820-000	MTS24SA	124	1
	-28								
	-40								
	-46								
	-58								
YCAV0177	-17	364-50821-000	MTS36SA	136	1	364-50820-000	MTS24SA	124	1
	-28								
	-40								
	-46								
	-58								
YCAV0187	-17	364-50821-000	MTS36SA	136	1	364-50820-000	MTS24SA	124	1
	-28								
	-40								
	-46								
	-58								
YCAV0197	-17	364-50821-000	MTS36SA	136	1	364-50821-000	MTS36SA	136	1
	-28								
	-40								
	-46								
	-58								
YCAV0207	-17	364-50821-000	MTS36SA	136	1	364-50821-000	MTS36SA	136	1
	-28								
	-40								
	-46								
	-58								
YCAV0227	-17	364-50821-000	MTS36SA	136	1	364-50821-000	MTS36SA	136	1
	-28								
	-40								
	-46								
	-58								
YCAV0247	-17	364-50822-000	MTS45SA	145	1	364-50822-000	MTS45SA	145	1
	-28								
	-40								
	-46								
	-58								
YCAV0267	-17	364-50822-000	MTS45SA	145	1	364-50822-000	MTS45SA	145	1
	-28								
	-40								
	-46								
	-58								

**Compressor**

## CONTROL AND VSD PANEL CONFIGURATIONS

Power panels and option panels are offered in several different configurations using three (3) major components:

1. TERMINAL BLOCKS
2. CIRCUIT BREAKERS
3. NON-FUSED DISCONNECT SWITCHES

The most basic chiller power wiring configuration uses TERMINAL BLOCKS in the power panels, and an options panel with no power wire termination hardware. See figures on previous page. The model pin number locations 16 and 17 would be X and X to reflect this basic combination. Identify model pin number locations 16 and 17 to identify the chiller power wiring connections and hardware listed below.

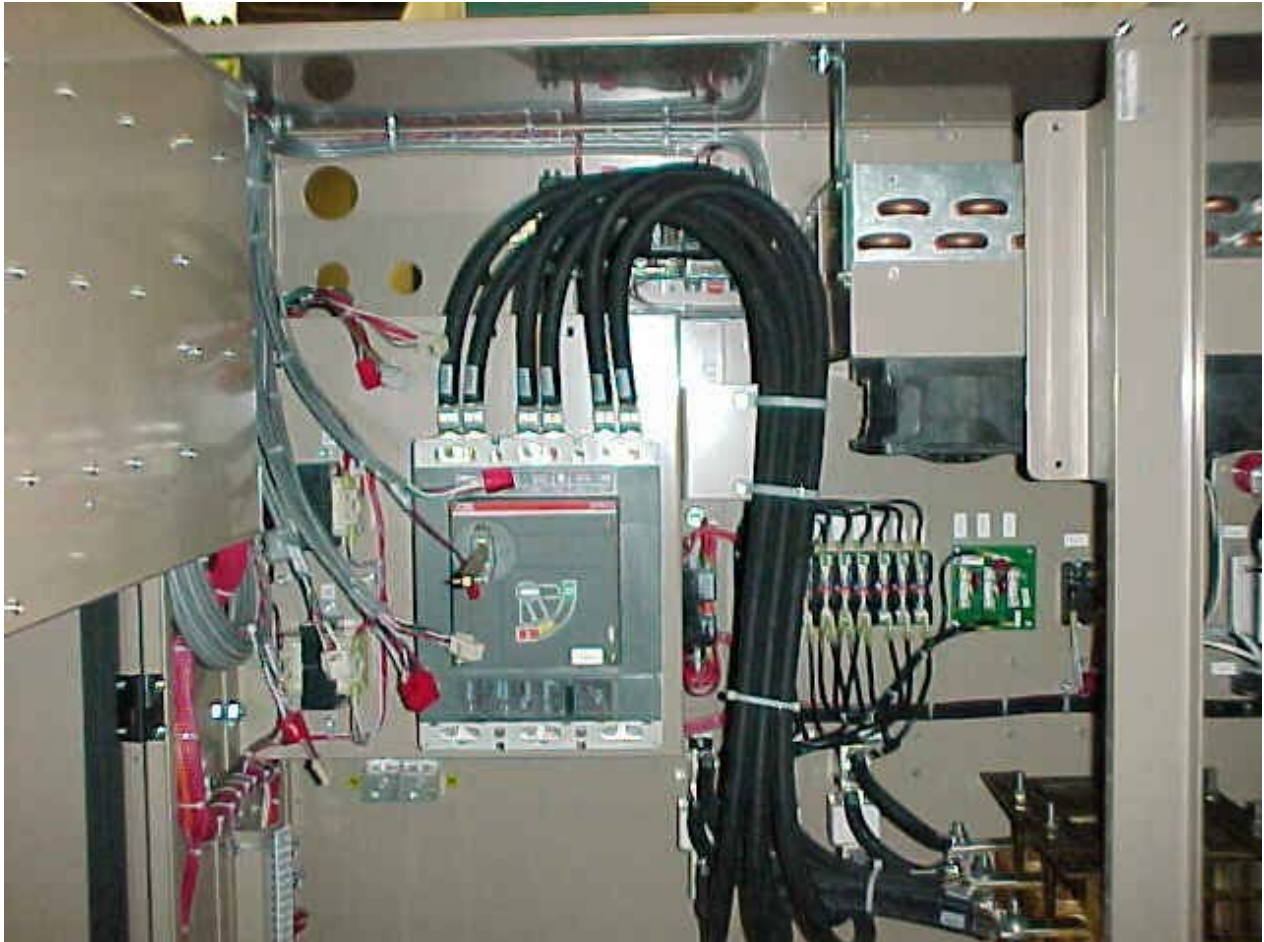
PIN 16 & 17 LETTER CODE IDENTIFIERS		OPTION PANEL AND POWER PANEL CONFIGURATIONS
S	X	Single Point Supply Terminal Block
B	X	Single Point Supply Circuit Breaker
S	S	Single Point Supply Terminal Block w/ Separate System Non-Fused Disconnect Switch
C	S	Single Point Supply Circuit Breaker w/ Separate System Non-Fused Disconnect Switch



Variable Speed Drive

**FIG. 7 – CONTROL, OPTIONS AND POWER PANELS LAYOUT**

## CONTROL AND VSD PANEL CONFIGURATIONS (CONT'D)

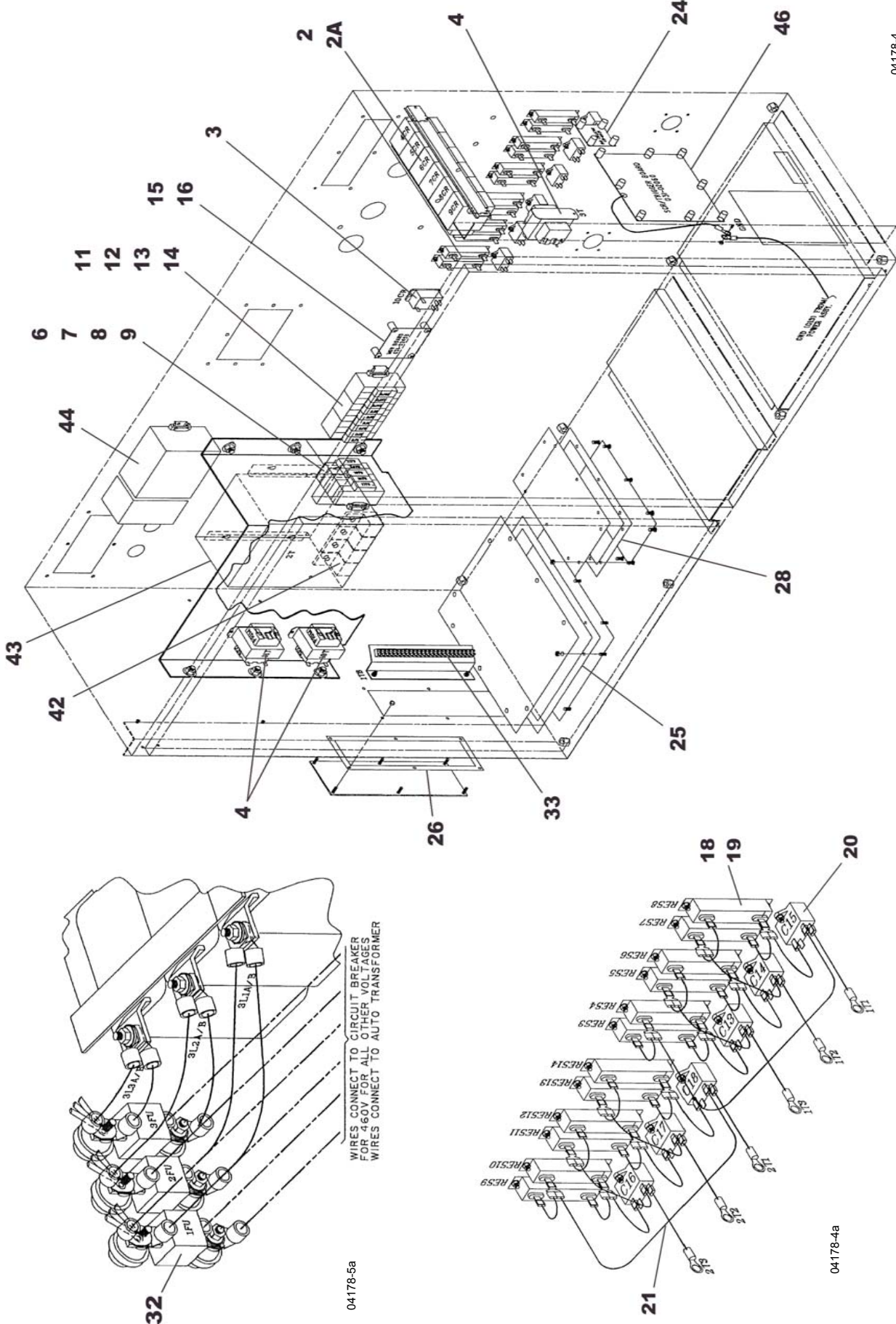


**\*Note:** *On units with Single Point Terminal Blocks, the terminal blocks are located in the same space as the Single Point Circuit Breaker shown in Fig. 7A.*

Variable Speed Drive

**FIG. 7A** – EXAMPLES OF POWER WIRING CONFIGURATIONS (2-COMPRESSOR UNITS)

# VARIABLE SPEED DRIVE PANEL COMPONENTS

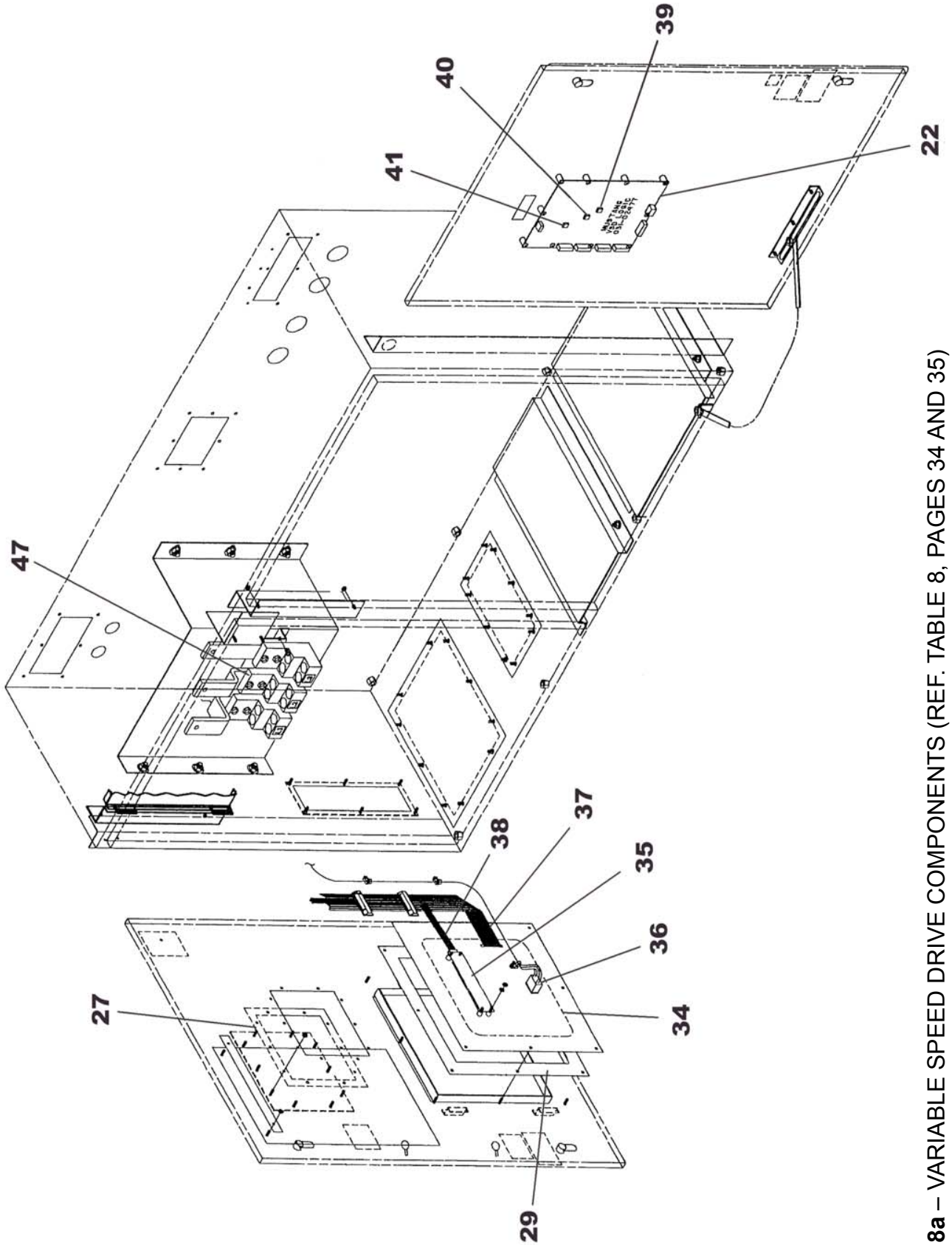


04178-4

**FIG. 8 – VARIABLE SPEED DRIVE COMPONENTS (REF. TABLE 8, PAGES 34 AND 35)**

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# VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)

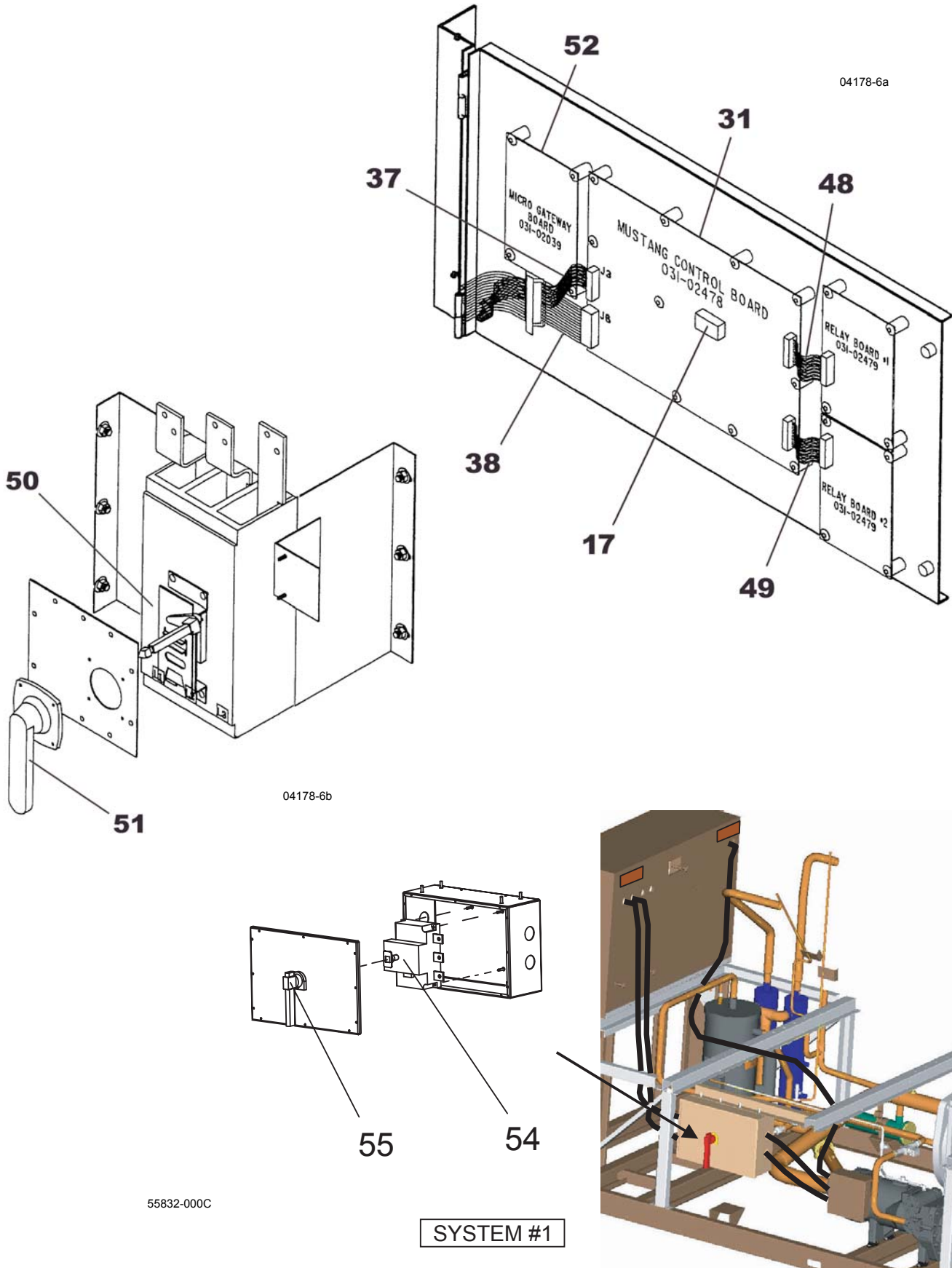


04178-6

**FIG. 8a** – VARIABLE SPEED DRIVE COMPONENTS (REF. TABLE 8, PAGES 34 AND 35)

**Variable Speed Drive**

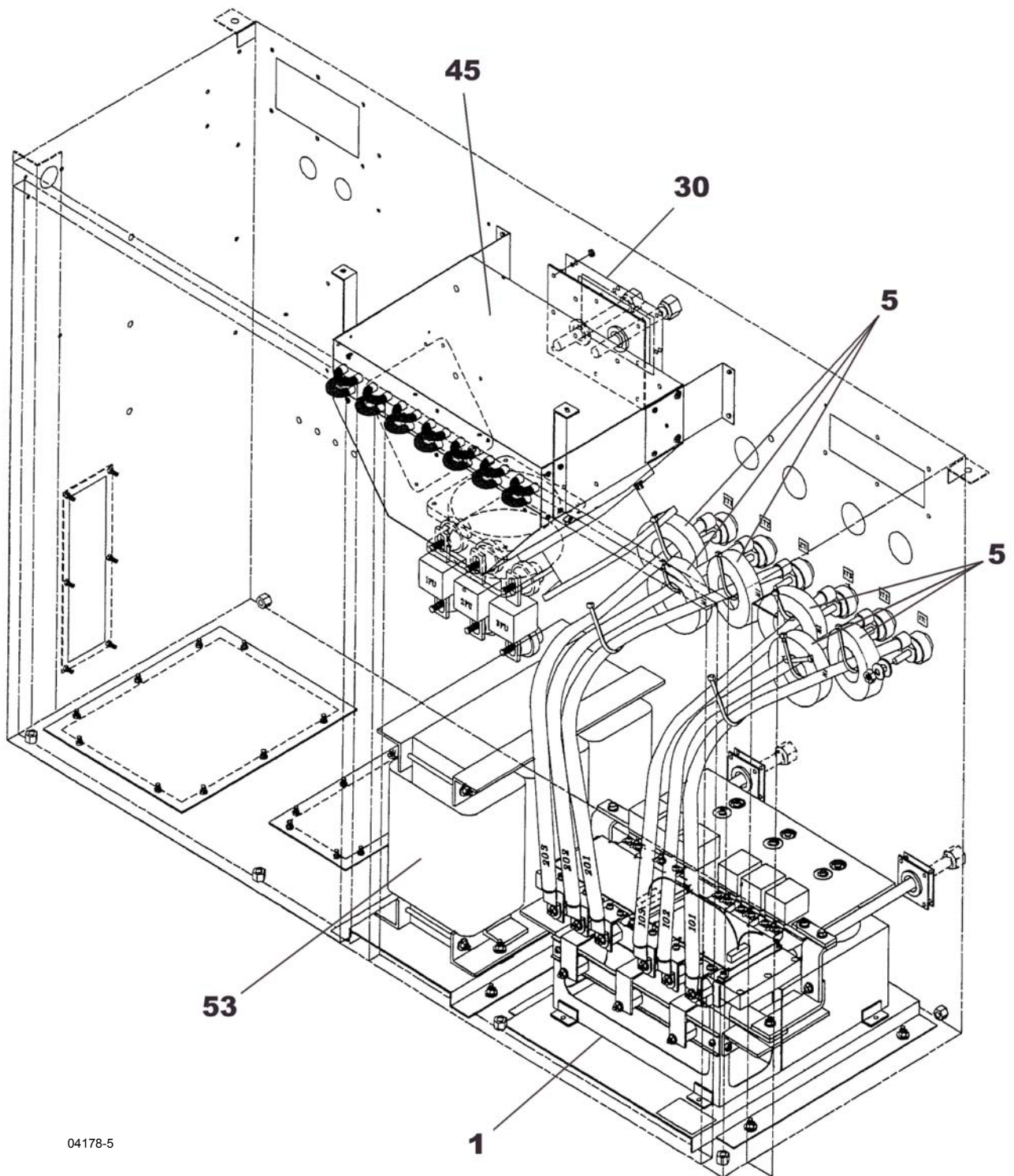
# VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)



Variable Speed Drive

FIG. 8b – VARIABLE SPEED DRIVE COMPONENTS (REF. TABLE 8, PAGES 34 AND 35)

# VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)



04178-5

Variable Speed Drive

**FIG. 8c** – VARIABLE SPEED DRIVE COMPONENTS (REF. TABLE 8, PAGES 34 AND 35)

# VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)

**TABLE 8 – VARIABLE SPEED DRIVE COMPONENTS (SEE. FIGS. 8-8D, PAGES 30-33)**

ITEM NUMBER	QUANTITY PER UNIT	DESCRIPTION	YORK PART NUMBER
1	1	POWER ASS'Y, VSD	SEE PAGE 36
2	6	CONTACTOR, 3 POLE FAN	024-34916-000
2A	1	HARNESS, FAN CONTACTOR	571-04178-231
3	1	RELAY, PUMP / FAN	024-30441-000
4	3	TRANSFORMER, 75VA	025-27911-000
5	6	TRANSFORMER, CURRENT	025-38805-000
6	5	FUSE HOLDER, 1 POLE - 30A	025-39951-000
7	1	FUSE, 15A	025-34141-000
8	1	FUSE, 20A	025-35908-000
9	2	FUSE, 6A	025-35902-000
11	3	FUSE HOLDER, 3 POLE - 30A	025-39952-000
12	6	FUSE, 30A	025-39683-000
13	3	FUSE, 10A	025-35905-000
14	1	FUSE, 1/4A	025-39684-000
15	1	VOLTAGE SUPPRESSION BOARD	031-02453-000
16	2	FUSES	025-38523-000
17	1	EPROM, CONTROL BOARD (STANDARD)	031-02476-001
		EPROM, CONTROL BOARD (OPTIMIZED)	031-02476-002
18	12	RESISTOR	025-35953-000
19	12	PAD, THERMAL	028-15299-000
20	6	CAPACITOR	025-39806-000
21	1	WIRING KIT, DVDT	571-04178-211
22 <sup>S</sup>	1	VSD LOGIC BOARD	031-02477-000
23	2	RELAY BOARD	031-02479-002
24	1	BUS ISOLATION BOARD	031-01624-000
25	1	GASKET, FIELD POWER	028-15246-000
26	1	GASKET, CUSTOMER CONNECTIONS	028-15247-000
27	1	GASKET, CIRCUIT BREAKER	028-15248-000
28	1	GASKET, AUTO TRANSFORMER	028-15249-000
29	1	GASKET, KEYPAD / DISPLAY	028-15250-000
30	1	GASKET, COIL	028-15251-000
31 <sup>S</sup>	1	CONTROL BOARD	031-02478-002
32	3	FUSE	025-39681-000
33	1	TERMINAL BLOCK ASSEMBLY	371-04178-356
34	1	KEYPAD, LATITUDE	024-34930-000
35	1	DISPLAY, LATITUDE	031-02508-000

## VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)

**TABLE 8 (CONT'D) – VARIABLE SPEED DRIVE COMPONENTS**  
(SEE FIGS. 8-8D, PAGES 30-33)

ITEM NUMBER	QUANTITY PER UNIT	DESCRIPTION	YORK PART NUMBER
36	1	SWITCH, ON / OFF	024-34951-000
37	1	CABLE, RIBBON (DISPLAY)	071-04178-261
38	1	CABLE, RIBBON (KEYPAD)	071-04178-262
39 <sup>S</sup>	1	EPROM, LOGIC BOARD U36	031-02521-001
40	1	PROM, FPGA U41	031-02523-001
41 <sup>S</sup>	1	EPROM, LOGIC BOARD U39	031-02522-001
42	4	GROUND LUGS (-17 & -28)	025-32835-000
	3	GROUND LUGS (-40 & -50)	
	2	GROUND LUGS (-46 & -58)	
43	1	TRANSFORMER, CONTROL (60 Hz)	025-40114-001
		TRANSFORMER, CONTROL (50 Hz)	025-40114-002
44	1	CONTROLLER, VALVE	031-02510-000
45	1	PANEL COOLING FAN ASSEMBLY	SEE PAGE 38
46	1	SCR TRIGGER BOARD (60 Hz)	031-02060-001
		SCR TRIGGER BOARD (50 Hz)	031-02060-002
47	1	SP TERMINAL BLOCK KIT (-17 & -28)	371-04460-003
		SP TERMINAL BLOCK KIT (-40 & -50)	371-04460-002
		SP TERMINAL BLOCK KIT (-46 & -58)	371-04460-001
48	1	CABLE, RIBBON (RELAY BOARD #1)	071-04178-263
49	1	CABLE, RIBBON (RELAY BOARD #2)	071-04178-264
50	1	SP CIRCUIT BREAKER KIT (-17 & -28)	371-04459-104
		SP CIRCUIT BREAKER KIT (-40 & -50)	371-04459-102
		SP CIRCUIT BREAKER KIT (-46)	371-04459-101
		SP CIRCUIT BREAKER KIT (-58)	371-04459-105
51	1	OPERATOR KIT (SHAFT & HANDLE)	024-34922-000
52	1	MICRO-GATEWAY BOARD	371-03609-005
53	1	INDUCTOR	025-39677-000
54	2	SWITCH, DISCONNECT 400A	024-34976-001
55	2	HANDLE, DISCONNECT SWITCH	024-34976-002

# VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)



AUTOTRANSFORMER

**TABLE 8a – AUTOTRANSFORMER**

VOLTAGE CODE	QUANTITY PER UNIT	YORK PART NUMBER
17	1	371-55898-001
28	1	371-55898-002
40	1	371-55898-003
46	1	Not Required
50	1	371-55898-004
58	1	371-55898-005

# VARIABLE SPEED DRIVE PANEL COMPONENTS (CONT'D)

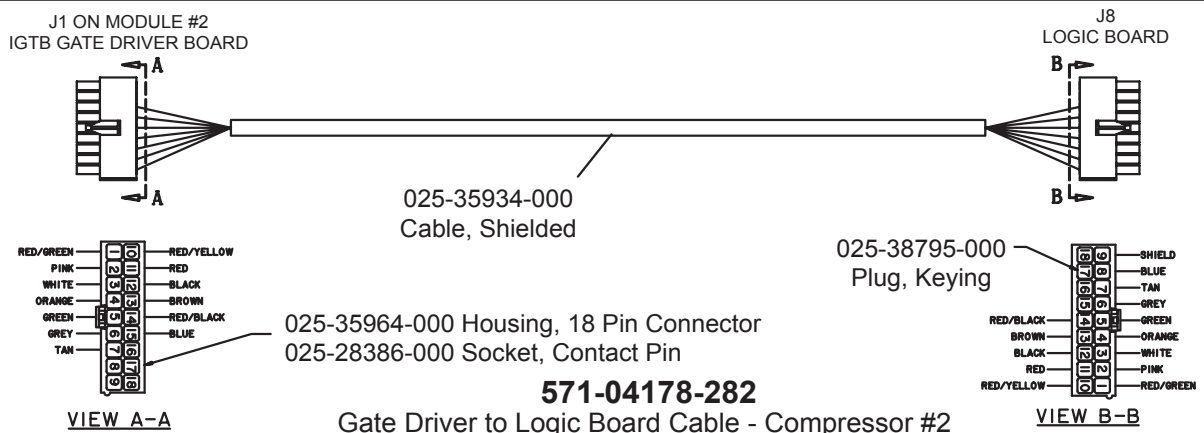
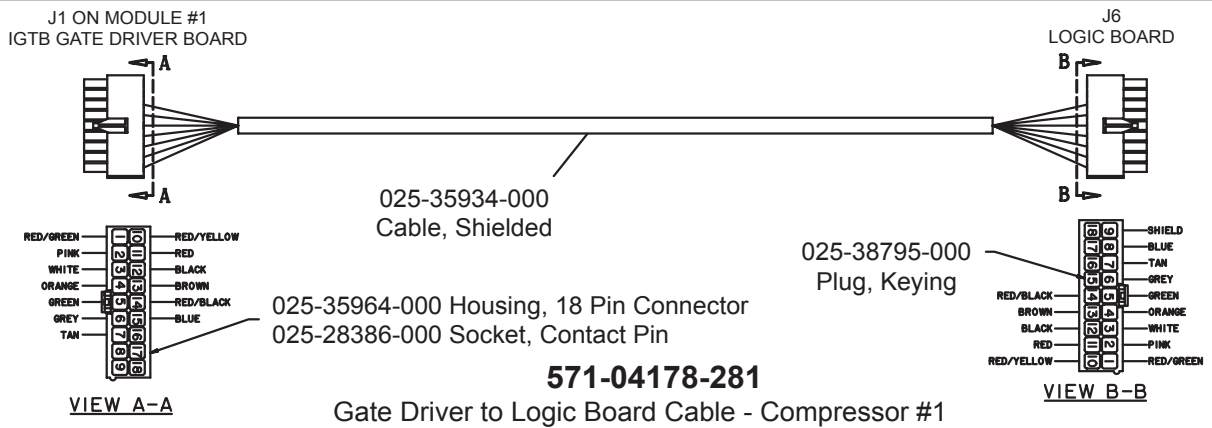
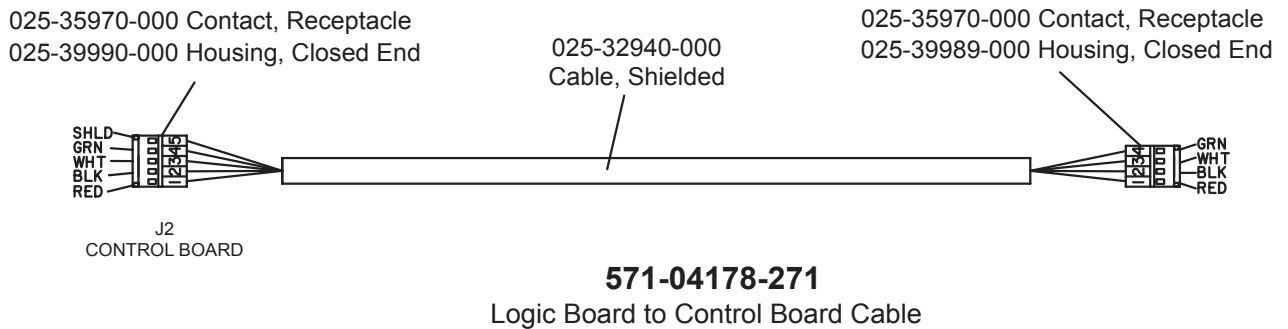
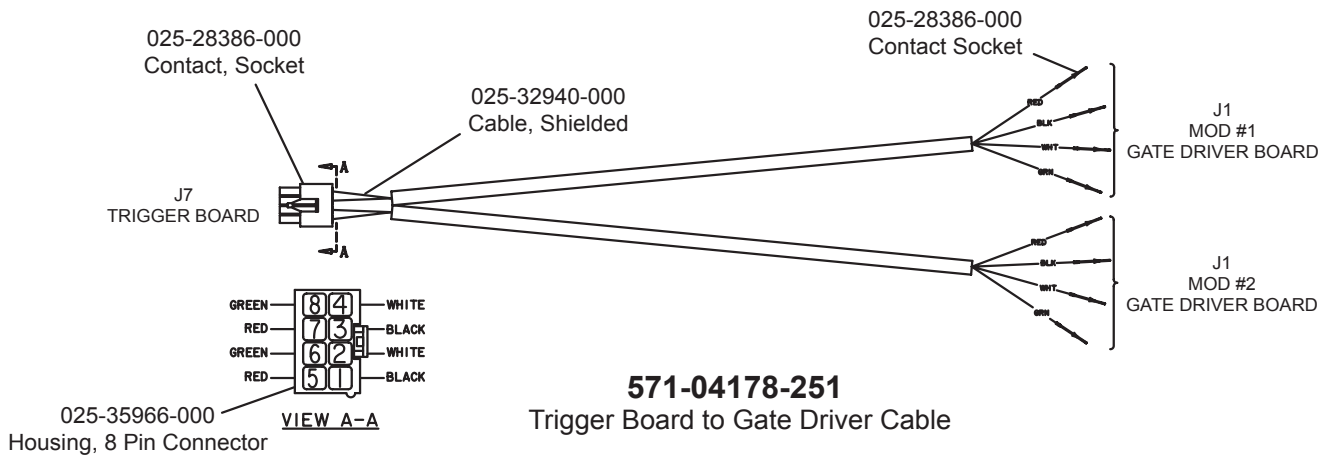
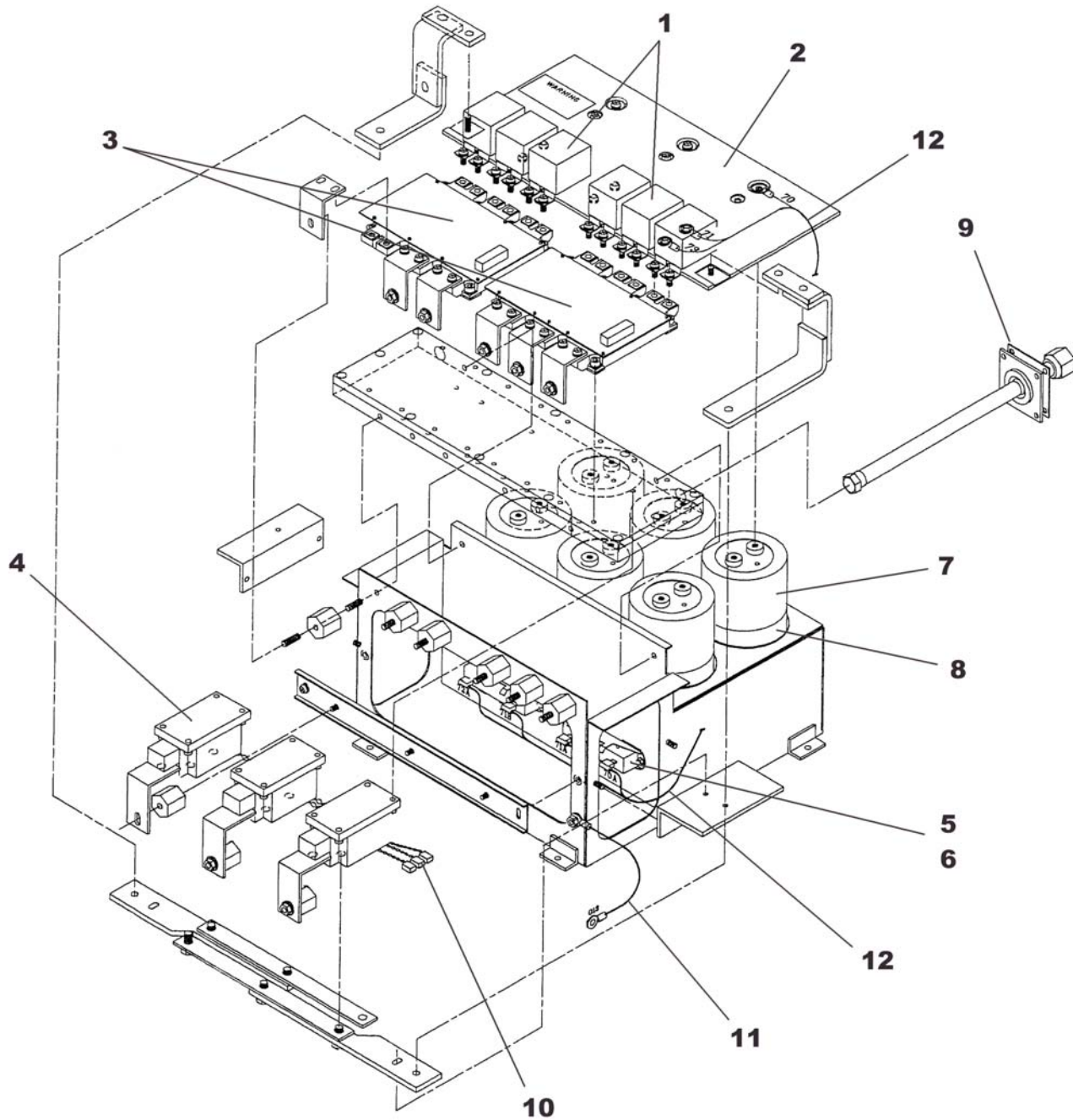


FIG. 8E – CABLE PART NUMBERS

Variable Speed Drive

# VARIABLE SPEED DRIVE POWER ASSEMBLY COMPONENTS



Variable Speed Drive

**FIG. 9 – VARIABLE SPEED DRIVE POWER ASSEMBLY COMPONENTS**  
(REF. TABLE 9, PAGE 39)

## VARIABLE SPEED DRIVE POWER ASSEMBLY COMPONENTS (CONT'D)

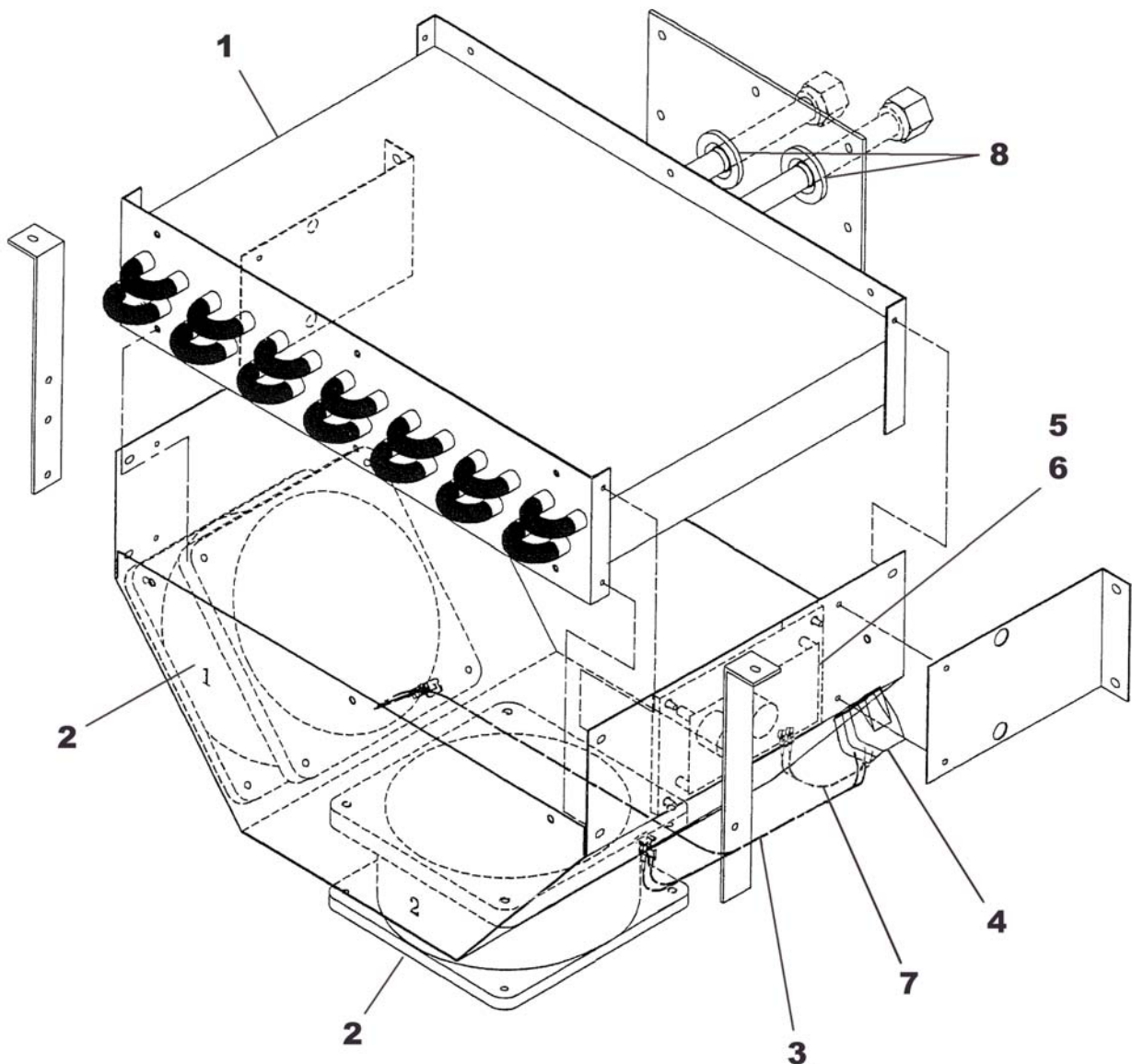
**TABLE 9 – VARIABLE SPEED DRIVE POWER ASSEMBLY COMPONENTS**  
(SEE FIG. 9, PAGE 38)

ITEM NUMBER	QUANTITY PER UNIT	DESCRIPTION	YORK PART NUMBER
1	6	CAPACITOR	025-35972-000
2	1	BUSS PLATE KIT	371-04477-001
3	2	IGBT ASSEMBLY KIT	371-04479-000
4	3	DIODE MODULE KIT	371-04478-000
5	2	RESISTOR	025-35157-000
6	2	THERMAL PAD	028-15299-000
7	6	CAPACITOR	025-40105-000
8	6	INSULATOR, CAPACITOR	071-02769-319
9	2	GASKET	028-15113-000
10	1	HARNESS, SCR TO TRIGGER BD.	571-04181-221
11	1	HARNESS, GROUND	571-04181-242
12	1	HARNESS, EQUALIZER	571-04181-241

# VARIABLE SPEED DRIVE FAN ASSEMBLY COMPONENTS

TABLE 10 – VARIABLE SPEED DRIVE FAN ASSEMBLY COMPONENTS (SEE FIG. 10)

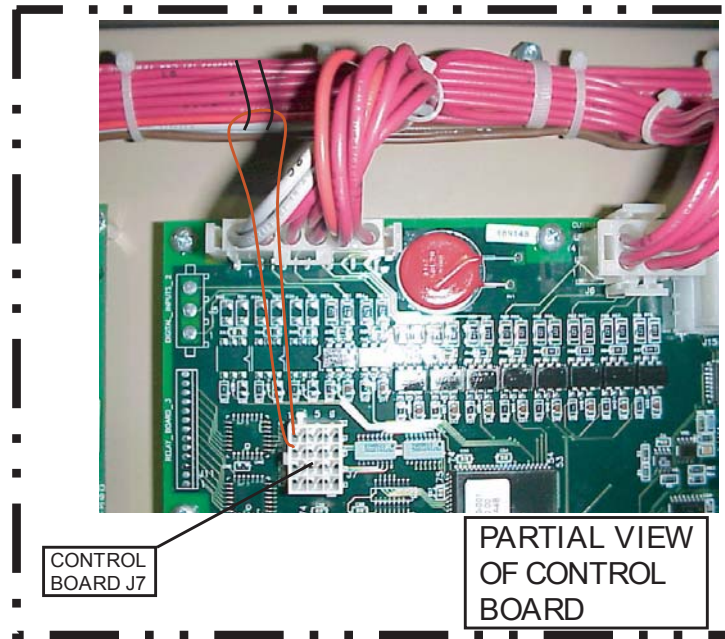
ITEM NUMBER	QUANTITY PER UNIT	DESCRIPTION	YORK PART NUMBER
1	1	COIL, GLYCOL COOLING	026-41590-000
2	2	FAN, COOLING 115V	025-40105-000
3	1	HARNESS, FAN ASSEMBLY	571-04179-242
4	2	TERMINAL BLOCK	025-20944-000
5	1	INVERTER (50HZ ONLY)	031-02533-000
6	AR	COMPOUND, HEAT CONDUCTIVE (USE WITH ITEM #5)	013-02997-000
7	1	HARNESS, INVERTER (50HZ ONLY)	571-04179-243
8	2	GROMMET	028-04873-000



04179-5a

FIG. 10 – VARIABLE SPEED DRIVE FAN ASSEMBLY COMPONENTS (REF. TABLE 10)

# PLUG / JUMPER ARRANGEMENT



**FIG. 11 – PLUG / JUMPER ARRANGEMENT (REF. TABLE 11)**

**TABLE 11 – PLUG / JUMPER ARRANGEMENT (SEE FIG. 11)**

PLUG/JUMPER ARRANGEMENT			
PLUG B/M	JUMPER DETAIL	MODELS 60 Hz	MAX VSD FREQUENCY
371-04484-101		YCAV0177SA/PA YCAV0197EA/VA YCAV0269EA/VA	182
371-04484-102		YCAV0157EA/VA YCAV0207SA/PA	186
371-04484-103		YCAV0187EA/VA YCAV0207EA/VA	192
371-04484-104		YCAV0157SA/PA YCAV0177EA/VA YCAV0187SA/PA YCAV0227SA/PA YCAV0227EA/VA YCAV0247SA/PA YCAV0247EA/VA YCAV0267SA/PA	200

Variable Speed Drive

# SENSOR HARNESSSES

55632-000D

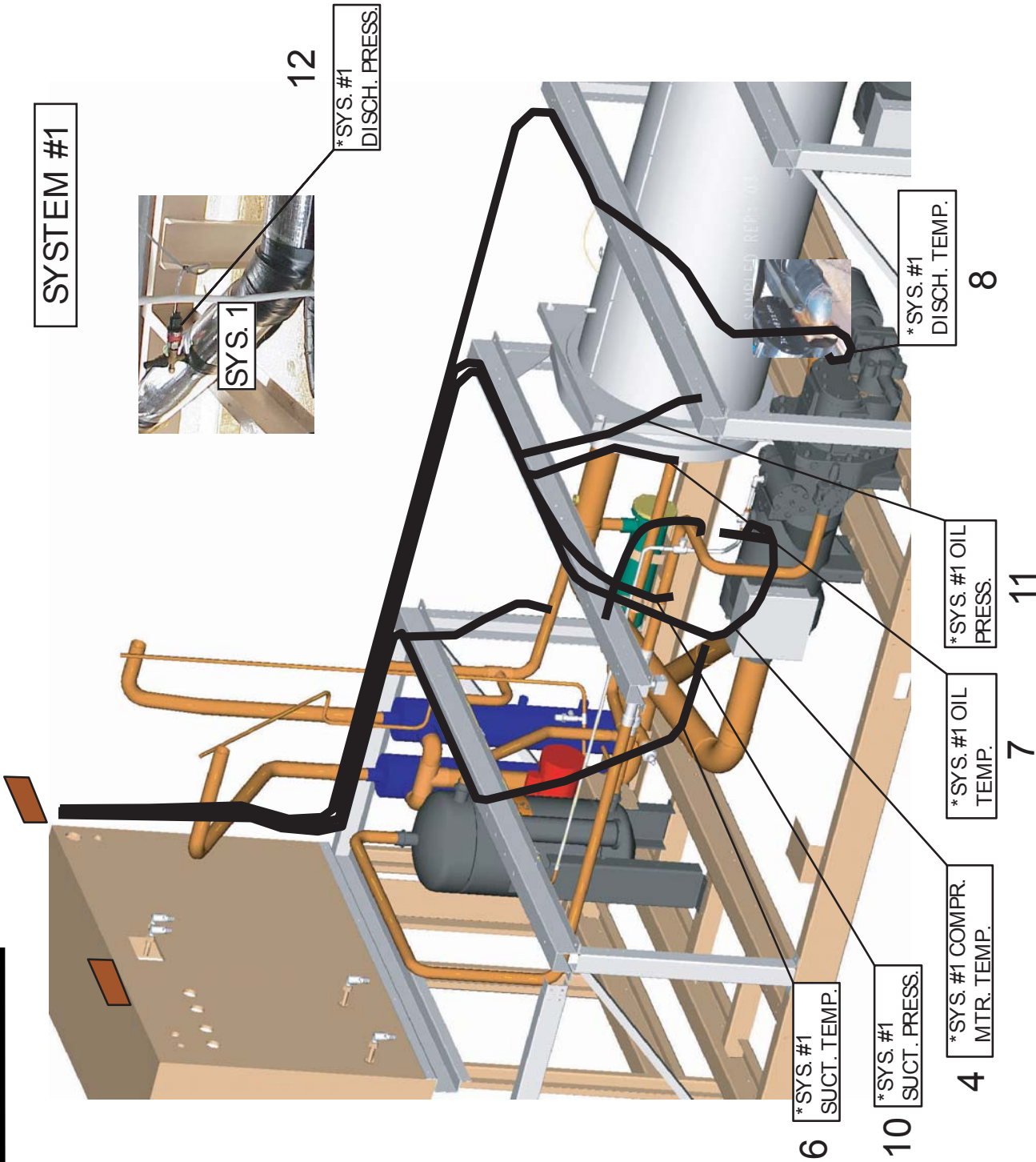
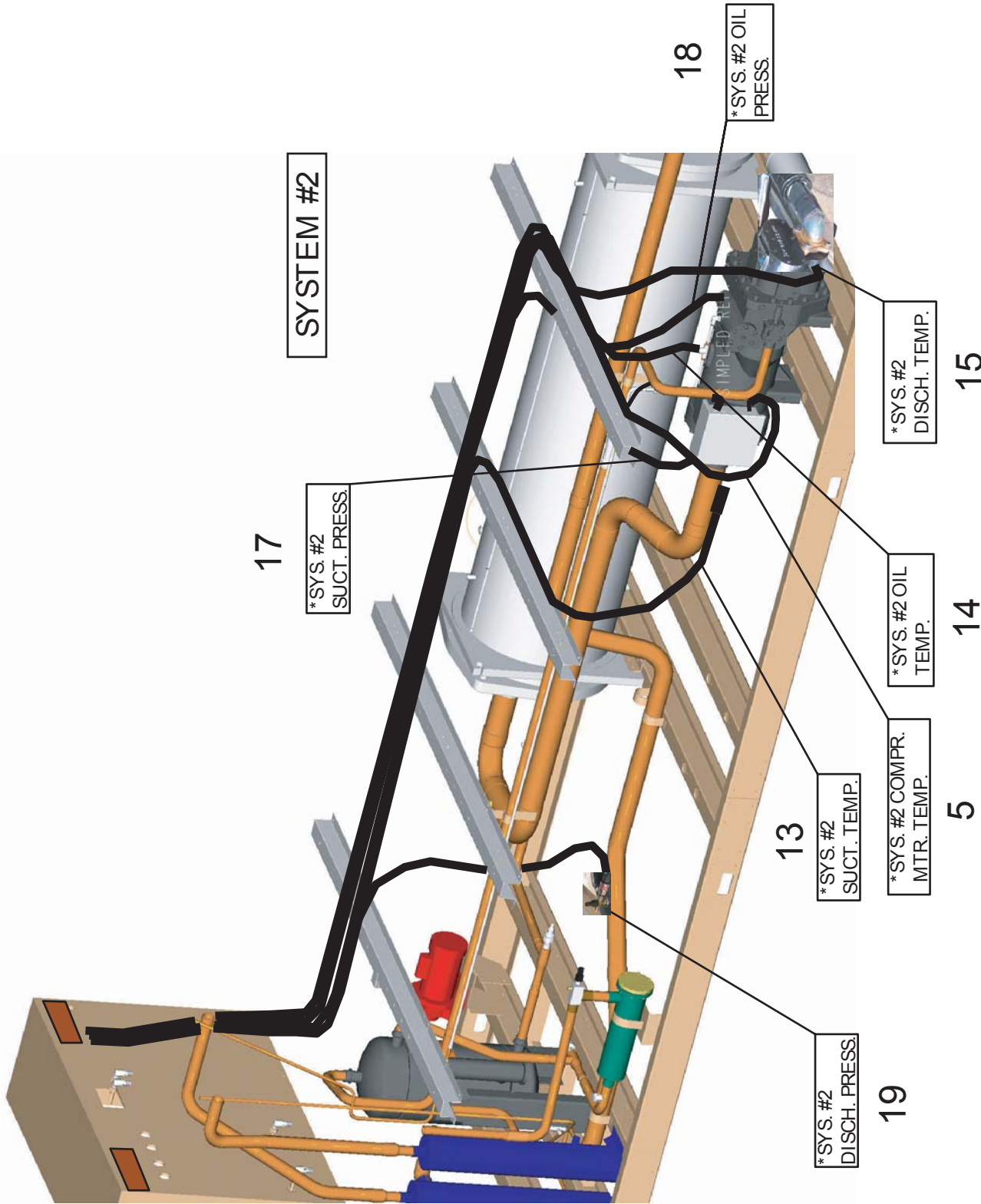


FIG. 12 – HARNESS LAYOUT (REF. TABLE 12, PAGES 46, 47 AND 48)

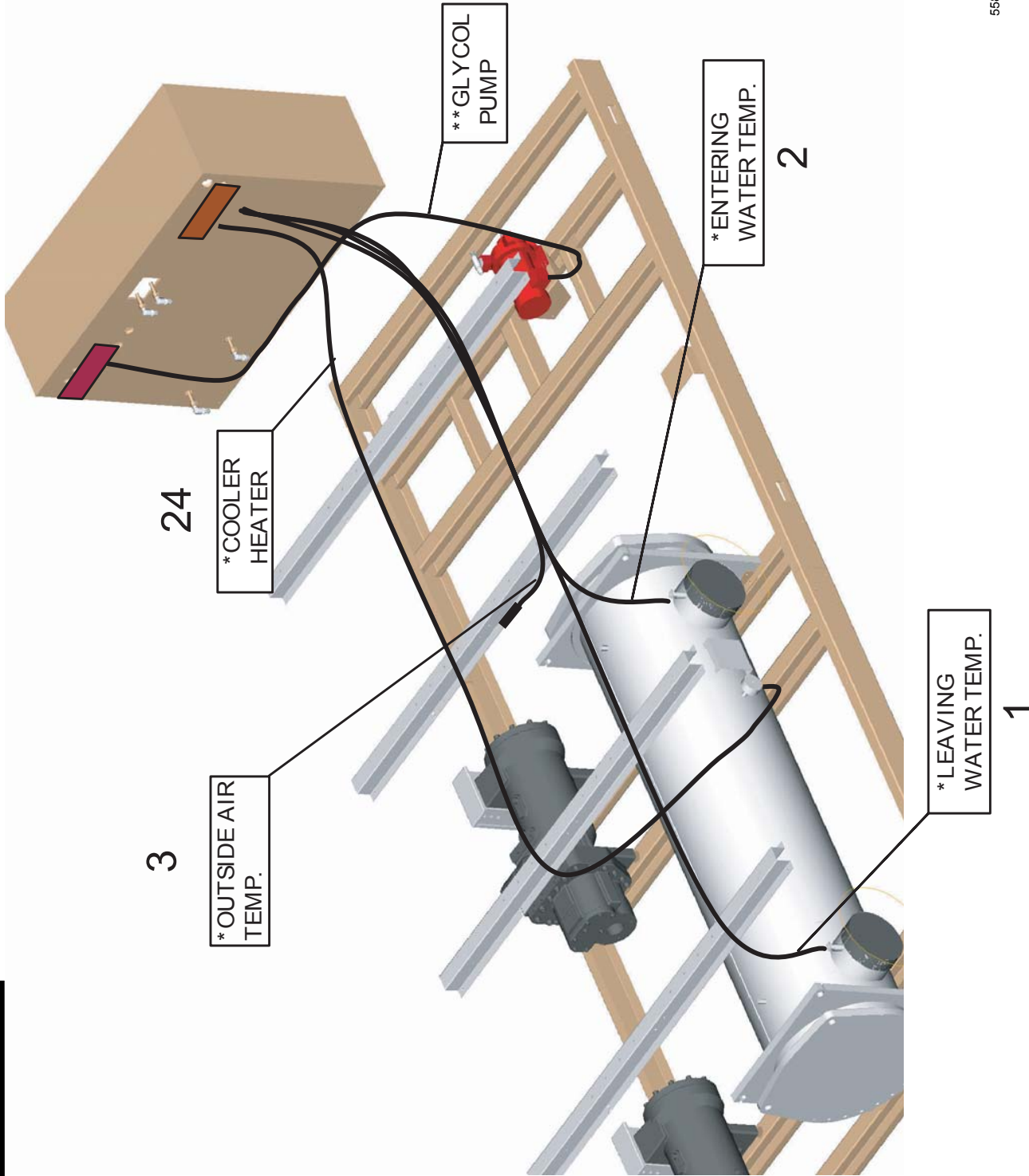
# SENSOR HARNESSSES (CONT'D)

55832-000G



43 FIG. 12A – HARNESS LAYOUT (REF. TABLE 12, PAGES 46, 47 AND 48)

# SENSOR HARNESSES (CONT'D)



55832-000A

**FIG. 12B** – HARNESS LAYOUT (REF. TABLE 12, PAGES 46, 47 AND 48)

# SENSOR HARNESSSES (CONT'D)

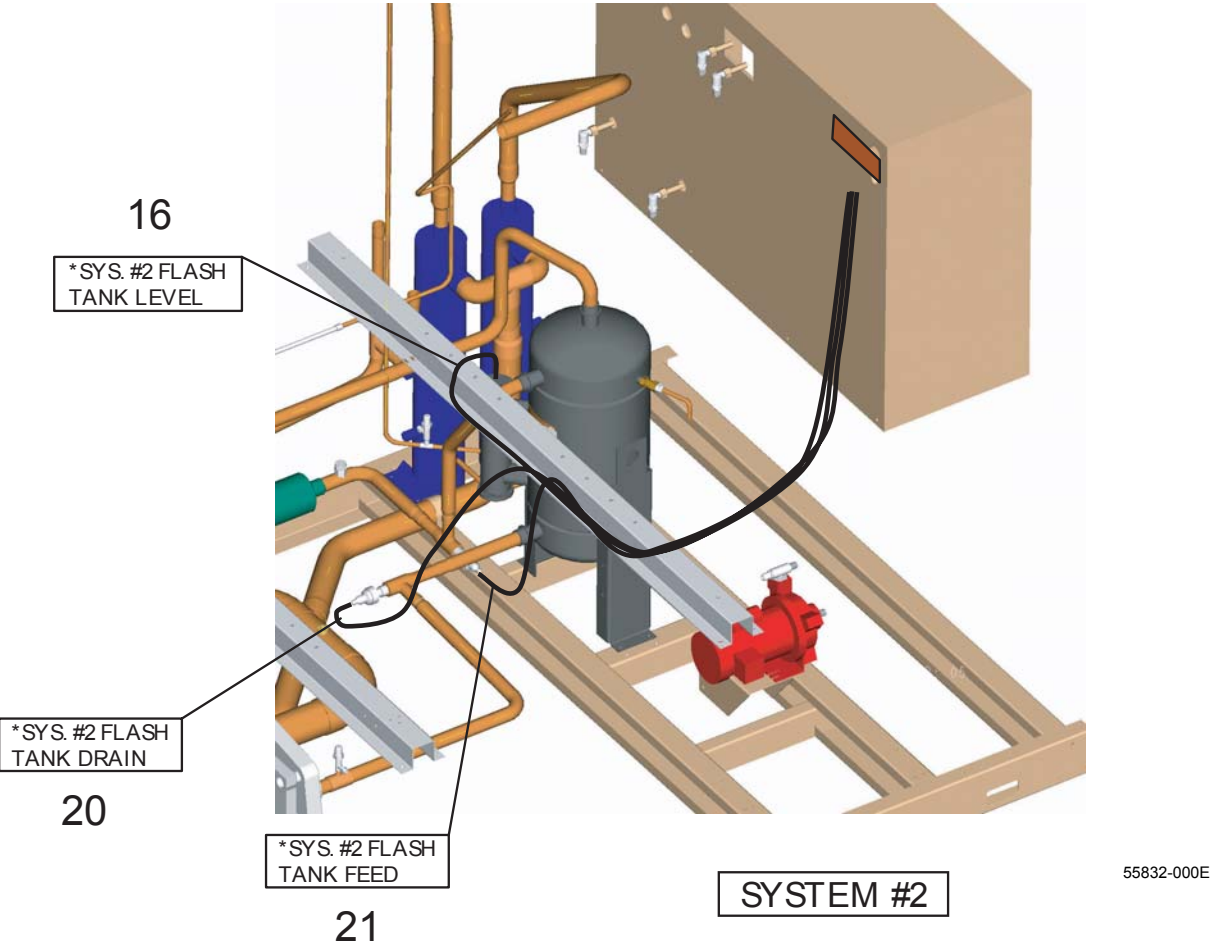
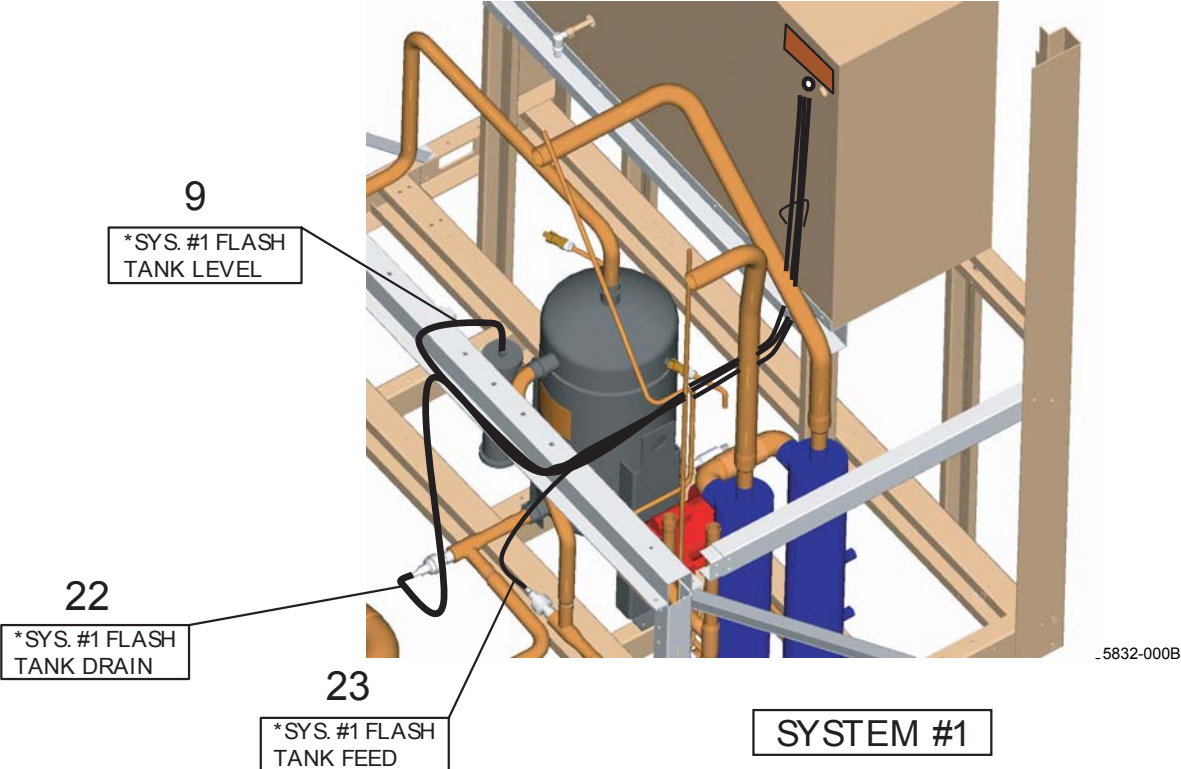

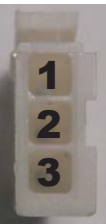

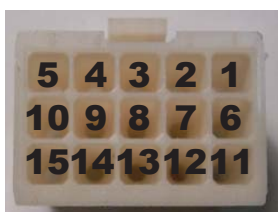


FIG. 12C – HARNESS LAYOUT (REF. TABLE 12, PAGES 46, 47 AND 48)




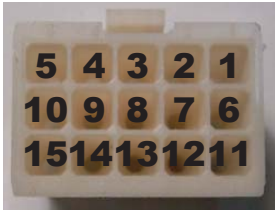
## SENSOR HARNESSSES (CONT'D)

**TABLE 12 – SENSOR HARNESS WIRING (SEE FIGS. 12, 12A, 12B AND 12C, PAGES 42, 43, 44 AND 45)**

SYSTEM #1 SENSOR WIRING													
Plug Detail	Plug and Pin P/N	Plug "P" No.	Plug Pin No.	Wire Color	Cable #	Function	Harness Assembly Part Number						
	Plug = 025-28383-000  Pin = 025-28386-000	P26	1	Green	4	System #1 Compressor Motor Temperature	575-54455-317						
			2	Red									
			3	Black									
			4	White									
						5	Drain	9	System #1 Flash Tank Level	575-54455-315			
						6	White						
						7	Red						
						8	Black						
						9	Drain						
	Plug = 025-29185-000  Pin = 025-28386-000	P27	1	Black	6	System #1 Suction Temperature	575-54455-308						
			2	Red									
			3	Drain									
	Plug = 025-28384-000  Pin = 025-28386-000	P28	1	Black	8	System #1 Discharge Temperature	575-54455-310						
			2	Red									
			3	Drain									
						5	Green	22	System #1 Flash Tank Drain	575-54455-319			
						6	Red						
						7	Black						
						8	White						
						9	Green						
						10	Red	23	System #1 Flash Tank Feed	575-54455-320			
						11	Black						
						12	White						
				Plug = 025-28385-000  Pin = 025-28386-000	P29	1	White	10	System #1 Suction Pressure	575-54455-302			
2	Red												
3	Black												
4	Drain												
						6	White	11	System #1 Oil Pressure	575-54455-304			
						7	Red						
						8	Black						
						9	Drain						
						11	White						
						12	Red	12	System #1 Discharge Pressure	575-54455-306			
						13	Black						
						14	Drain						
						5	Black				7	System #1 Oil Temperature	575-54455-300
						10	Red						
15	Drain												


## SENSOR HARNESSSES (CONT'D)


**TABLE 12 (CONT'D) – SENSOR HARNESS WIRING (SEE FIGS. 12, 12A, 12B AND 12C, PAGES 42, 42, 44 AND 45)**

SYSTEM #2 SENSOR WIRING							
Plug Detail	Plug and Pin P/N	Plug "P" No.	Plug Pin No.	Wire Color	Cable #	Function	Harness Assembly Part Number
	Plug = 025-28383-001  Pin = 025-28386-000	P30	1	Green	5	System #2 Compressor Motor Temperature	575-54455-318
			2	Red			
			3	Black			
			4	White			
			5	Drain			
			6	White	16	System #2 Flash Tank Level	
			7	Red			
			8	Black			
			9	Drain			
	Plug = 025-29185-001  Pin = 025-28386-000	P31	1	Black	13	System #2 Suction Temperature	575-54455-309
			2	Red			
			3	Drain			
	Plug = 025-28384-001  Pin = 025-28386-000	P32	1	Black	15	System #2 Discharge Temperature	575-54455-311
			2	Red			
			3	Drain			
			4		20	System #2 Flash Tank Drain	
			5	Green			
			6	Red			
			7	Black			
			8	White	21	System #2 Flash Tank Feed	
			9	Green			
			10	Red			
			11	Black			
			12	White			
	Plug = 025-28385-001  Pin = 025-28386-000	P33	1	White	17	System #2 Suction Pressure	575-54455-303
			2	Red			
			3	Black			
			4	Drain			
			6	White	18	System #2 Oil Pressure	
			7	Red			
			8	Black			
			9	Drain			
			11	White	19	System #2 Discharge Pressure	
			12	Red			
			13	Black			
			14	Drain			
			5	Black	14	System #2 Oil Temperature	
			10	Red			
			15	Drain			

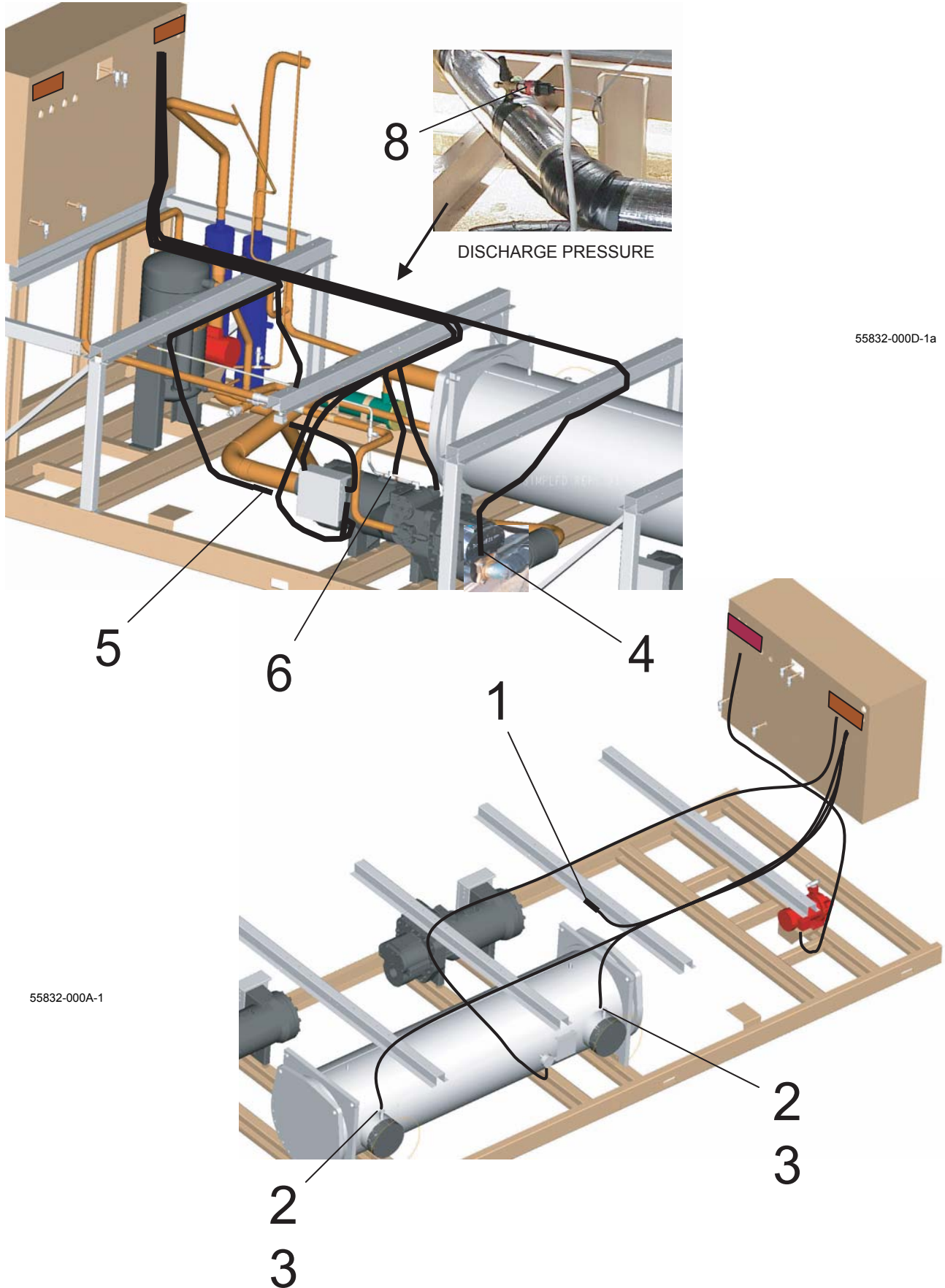
## SENSOR HARNESSES (CONT'D)

**TABLE 12 (CONT'D) – SENSOR HARNESS WIRING (SEE FIGS. 12, 12A, 12B AND 12C, PAGES 42, 43, 44 AND 45)**

UNIT SENSOR WIRING										
Plug Detail	Plug and Pin P/N	Plug "P" No.	Plug Pin No.	Wire Color	Cable #	Function	Harness Assembly Part Number			
	Plug = 025-21192-000  Pin = 025-19673-000	P25	1	Black	1	Leaving Water Temperature	575-54455-312			
			2	Red						
			3	Drain						
						4	Black	2	Entering Water Temperature	575-54455-313
						5	Red			
						6	Drain			
						7	Black	3	Outside Air Temperature	575-54455-314
						8	Red			
						9	Drain			

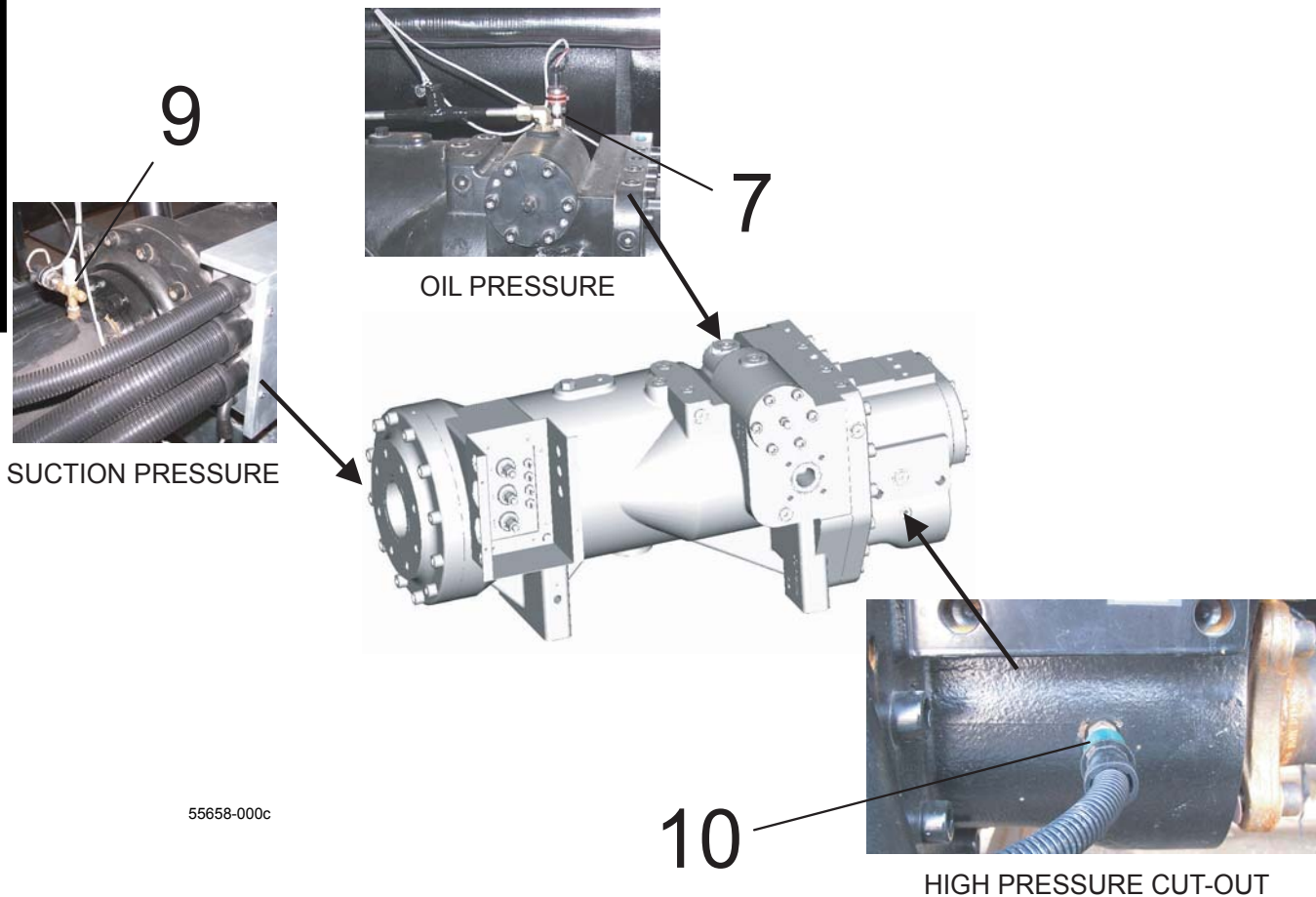
UNIT CONTROL WIRING							
Plug Detail	Plug and Pin P/N	Plug "P" No.	Plug Pin No.	Wire Number	Cable #	Function	Harness Assembly Part Number
	Plug = 025-31315-000  Pin = 025-20919-000	P36	1	2	24	Cooler Heater	575-54455-204
			2	29			
			3	Ground			

# TRANSDUCERS AND TEMP SENSORS



**FIG. 13 – TRANSDUCERS AND TEMP SENSORS (REF. TABLE 13, PAGE 50)**

# TRANSDUCERS AND TEMP SENSORS (CONT'D)



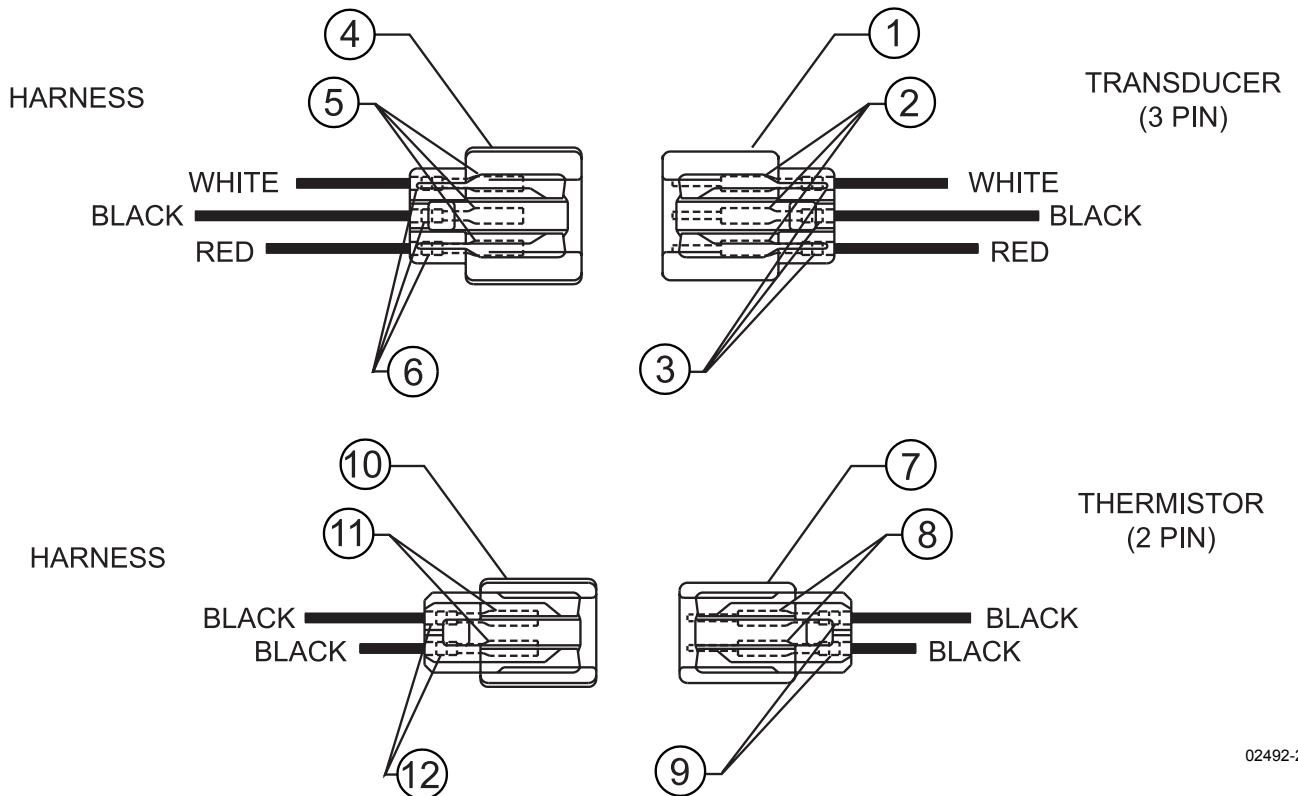
**FIG. 13A – TRANSDUCERS AND HIGH PRESSURE CUT-OUT (REF. TABLE 13, PAGE 50)**

**TABLE 13 – TRANSDUCERS, TEMP SENSORS AND HIGH PRESSURE CUT-OUT SWITCH (SEE FIGS. 13 AND 13A, PAGES 49 AND 50)**

Item #	Quantity	Description	Volt-age Code	Part Number
1 <sup>s</sup>	1	Sensor, Outside Air Temperature	All	025-28663-001
2 <sup>s</sup>	2	Sensor, Water Temp. (EWT, LWT)	All	025-40334-000
3	-	Compound, Heat Conductive	All	013-00898-000
4 <sup>s</sup>	2 per system	Sensor, Discharge Temperature	All	025-32924-000
5 <sup>s</sup>	2 per system	Sensor, Suction Temperature	All	025-28935-000
6 <sup>s</sup>	2 per system	Sensor, Oil Temperature	All	025-30440-000
7 <sup>s</sup>	1 per system	Transducer, Oil Pressure (0-275psi)	All	025-29139-003
8 <sup>s</sup>	1 per system	Transducer, Discharge Pressure (0-275psi)	All	025-29139-003
9 <sup>s</sup>	1 per system	Transducer, Suction Pressure (0-125psi)	All	025-29583-001
10	1 per system	High Pressure Cut Out Switch	All	025-39956-000

<sup>s</sup> Recommended Spare Part

## TRANSDUCER AND THERMISTOR WIRE HARNESS CONNECTORS - FIELD REPLACEMENT PART NUMBERS



02492-2b

**FIG. 14 – TRANSDUCER AND THERMISTOR WIRE HARNESS CONNECTORS - FIELD REPLACEMENT PART NUMBERS (REF. TABLE 14)**

**TABLE 14 – TRANSDUCER AND THERMISTOR WIRE HARNESS CONNECTORS - FIELD REPLACEMENT PART NUMBERS (SEE FIG. 14)**

Item No.	Location	Description	Pins	Part Number
1	Transducer	Plug Connector	3 Pin End	025-28953-000
2		Contact Pins		025-28949-000
3		Rubber Collar		025-28950-000
4	Wire Harness	Plug Connector	3 Pin End	025-28954-000
5		Contact Pins		025-28952-000
6		Rubber Collar		025-28950-000
7	Temperature Sensor	Plug Connector	2 Pin End	025-28948-000
8		Contact Pins		025-28949-000
9		Rubber Collar		025-28950-000
10	Wire Harness	Plug Connector	2 Pin End	025-28951-000
11		Contact Pins		025-28952-000
12		Rubber Collar		025-28950-000

<sup>s</sup> Recommended Spare Part

# VIBRATION ISOLATORS

**TABLE 15 – VIBRATION ISOLATORS PART NUMBERS**

<b>ONE INCH DEFLECTION SPRING ISOLATOR CROSS REFERENCE</b>				
FOR UNITS WITH <b>ALL</b> POINT LOADS LESS THAN 1404 LBS. (637 KG.)				
<b>WEIGHT RANGE (lbs.)</b>	<b>WEIGHT RANGE (kg.)</b>	<b>VENDOR PART NUMBER</b>	<b>COLOR</b>	<b>YORK PART NUMBER</b>
239 to 384 lbs.	108 to 174 kg.	CIP-B-450	RED	029-24583-002
384 to 639 lbs.	174 to 290 kg.	CIP-B-750	WHITE	029-24583-003
639 to 851 lbs.	290 to 386 kg.	CIP-B-1000	BLUE	029-24583-004
851 to 1064 lbs.	386 to 483 kg.	CIP-B-1250	GRAY	029-24583-005
1064 to 1404 lbs.	483 to 637 kg.	CIP-B-1650	BLACK	029-24583-006
FOR UNITS WITH <b>ANY</b> POINT LOAD ABOVE 1404 LBS. (637 KG.)				
<b>WEIGHT RANGE (lbs.)</b>	<b>WEIGHT RANGE (kg.)</b>	<b>VENDOR PART NUMBER</b>	<b>COLOR</b>	<b>YORK PART NUMBER</b>
Up to 851 lbs.	Up to 386 kg.	CIP-B-1000	BLACK	029-24583-007
851 to 1149 lbs.	386 to 521 kg.	CIP-B-1350	YELLOW	029-24583-008
1149 to 1489 lbs.	521 to 675 kg.	CIP-B-1750	BLACK	029-24583-009
1489 to 1786 lbs.	675 to 910 kg.	CIP-B-2100	YELLOW W/ RED	029-24583-010
1786 to 2028 lbs.	910 to 920 kg.	CIP-B-2385	YELLOW W/ GREEN	029-24583-011
2028 to 2254 lbs.	920 to 1022 kg.	CIP-B-2650	RED W/ RED	029-24583-012
2254 to 2936 lbs.	1022 to 1332 kg.	CIP-B-2935	RED W/ GREEN	029-24583-013

<b>NEOPRENE ISOLATOR CROSS REFERENCE</b>				
<b>WEIGHT RANGE (lbs.)</b>	<b>WEIGHT RANGE (kg.)</b>	<b>VENDOR PART NUMBER</b>	<b>COLOR</b>	<b>YORK PART NUMBER</b>
Up to 751 lbs.	Up to 341 kg.	ND-C	YELLOW	029-24584-001
751 to 1651 lbs.	341 to 749 kg.	ND-D	YELLOW	029-24584-002
1651 to 3226 lbs.	749 to 1463 kg.	ND-DS	YELLOW	029-24584-004

<b>TWO INCH DEFLECTION, SEISMIC SPRING ISOLATOR CROSS REFERENCE</b>				
<b>WEIGHT RANGE (lbs.)</b>	<b>WEIGHT RANGE (kg.)</b>	<b>VENDOR PART NUMBER</b>	<b>COLOR</b>	<b>YORK PART NUMBER</b>
Up to 358 lbs.	Up to 162 kg.	SLRS-2-C2-420	RED	029-24585-006
358 to 443 lbs.	162 to 201 kg.	SLRS-2-C2-520	WHITE	029-24585-007
443 to 582 lbs.	201 to 264 kg.	SLRS-2-C2-660	BLACK	029-24585-008
582 to 783 lbs.	264 to 335 kg.	SLRS-2-C2-920	BLUE	029-24585-009
783 to 1038 lbs.	335 to 471 kg.	SLRS-2-C2-1220	GREEN	029-24585-010
1038 to 1497 lbs.	471 to 679 kg.	SLRS-2-C2-1760	GRAY	029-24585-011
1497 to 2058 lbs.	679 to 933 kg.	SLRS-2-C2-2420	SILVER	029-24585-012
2058 to 2619 lbs.	933 to 1188 kg.	SLRS-2-C2-3080	GRAY W/ RED	029-24585-013
2619 to 3180 lbs.	1188 to 1442 kg.	SLRS-2-C2-3740	SILVER W/ RED	029-24585-014

## YCAV CHILLER OPTIONS

**TABLE 16 – FIELD INSTALLED OPTIONS PART NUMBERS**

MODEL NUMBER YCAV	STANDARD 150# FLOW SWITCH	OPTIONAL 300# FLOW SWITCH	CHICAGO RELIEF VALVE	WELD FLANGE KIT	VICTAULIC FLANGE KIT	DIFFERENTIAL PRESSURE SWITCH
<b>MODEL #</b>	024-26116	024-12144	375-56090	023-02366	023-	025-30919
<b>0157</b>	-000	-000	-001	-000	19046-000	-000
<b>0177</b>					19201-000	
<b>0187</b>						
<b>0197</b>						
<b>0207</b>			N/A			
<b>0227</b>			-002			
<b>0247</b>			-003			
<b>0267</b>						

## ENCLOSURE KIT OPTIONS

**TABLE 17 – ENCLOSURE KIT OPTIONS - FULL KIT PART NUMBERS**

<b>FULL ENCLOSURE KIT PART NUMBERS</b>				
<b>MODEL NUMBER YCAV-</b>	<b>WIRE ENCLOSURE</b>		<b>LOUVERED ENCLOSURE</b>	
	STANDARD EFFICIENCY	HIGH EFFICIENCY	STANDARD EFFICIENCY	HIGH EFFICIENCY
<b>0157</b>	475-57105-008	475-57106-008	475-57098-008	475-57098-008
<b>0177</b>	475-57105-008	475-57106-009	475-57098-008	475-57098-009
<b>0187</b>	475-57105-009	475-57106-010	475-57098-009	475-57098-010
<b>0197</b>	N/A	475-57106-010	N/A	475-57098-010
<b>0207</b>	475-57105-009	475-57106-011	475-57098-009	475-57098-011
<b>0227</b>	475-57105-010	475-57106-012	475-57098-010	475-57098-012
<b>0247</b>	475-57105-011	475-57106-012	475-57098-011	475-57098-012
<b>0267</b>	475-57105-012	N/A	475-57098-012	N/A

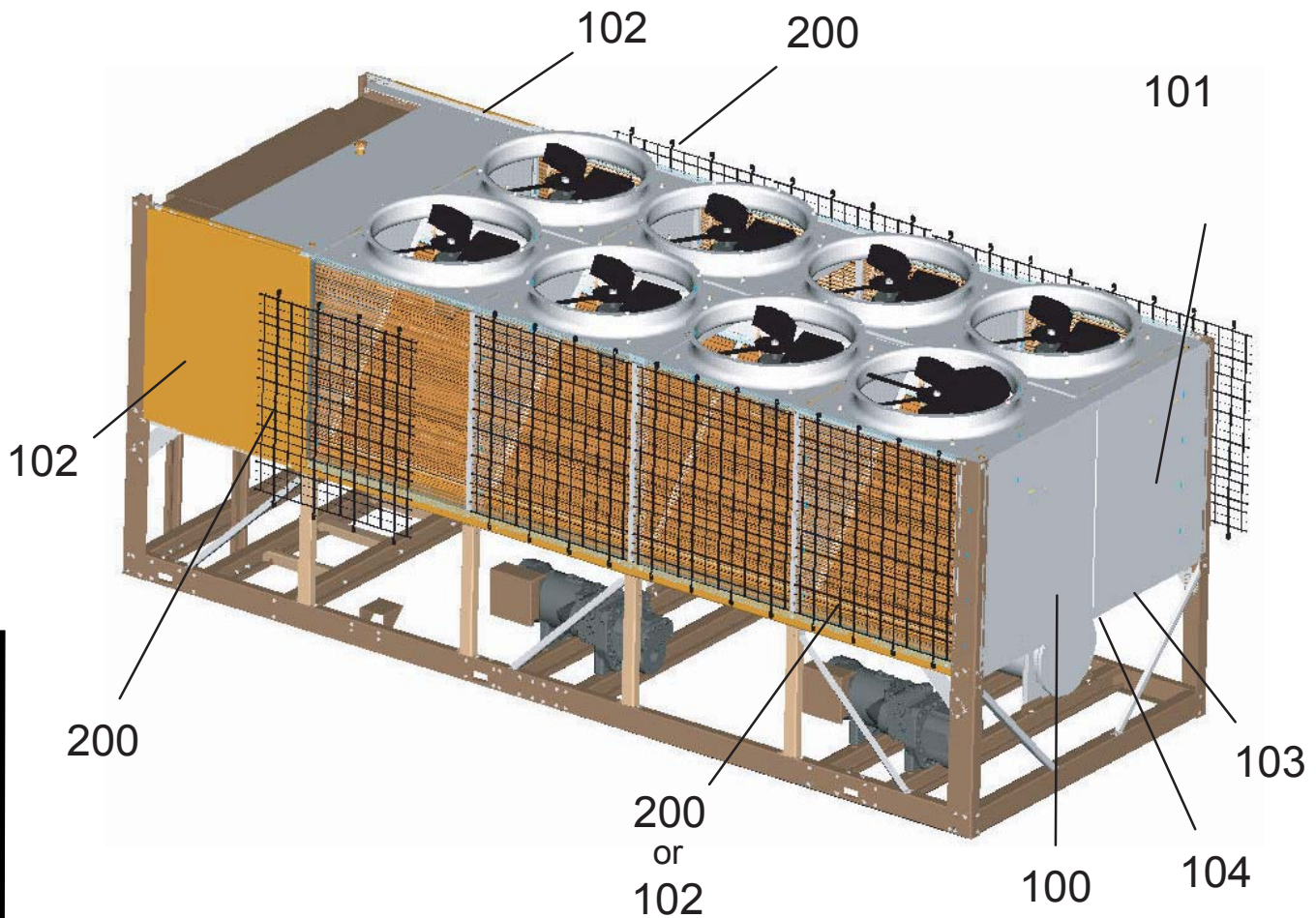
<b>FULL ENCLOSURE KIT PART NUMBERS</b>				
<b>MODEL NUMBER YCAV-</b>	<b>WIRE/LOUVERED ENCLOSURE</b>		<b>LOUVERED ENCLOSURE (COND. ONLY)</b>	
	STANDARD EFFICIENCY	HIGH EFFICIENCY	STANDARD EFFICIENCY	HIGH EFFICIENCY
<b>0157</b>	475-57108-008	475-57108-008	475-57097-080	475-57097-080
<b>0177</b>	475-57108-008	475-57108-009	475-57097-080	475-57097-100
<b>0187</b>	475-57108-009	475-57108-010	475-57097-100	475-57097-100
<b>0197</b>	N/A	475-57108-010	N/A	475-57097-100
<b>0207</b>	475-57108-009	475-57108-011	475-57097-100	475-57097-120
<b>0227</b>	475-57108-010	475-57108-012	475-57097-100	475-57097-120
<b>0247</b>	475-57108-011	475-57108-012	475-57097-120	475-57097-120
<b>0267</b>	475-57108-012	N/A	475-57097-120	N/A

## ENCLOSURE KIT OPTIONS (CONT'D)

**TABLE 17A – ENCLOSURE KIT OPTIONS - TOP AND BOTTOM SECTIONS**  
(SEE FIGS. 15-18, PAGES 56-61)

FULL KIT NUMBER	TOP OR BOTTOM	PART NUMBER
<b>WIRE ENCLOSURES</b>		
475-57106-008	(Top)	375-57105-080
	(Bottom)	375-57106-081
475-57106-009	(Top)	375-57105-090
	(Bottom)	375-57106-101
475-57106-010	(Top)	375-57105-100
	(Bottom)	375-57106-101
475-57106-011	(Top)	375-57105-110
	(Bottom)	375-57106-121
475-57106-012	(Top)	375-57105-120
	(Bottom)	375-57106-121
<b>LOUVERED ENCLOSURE</b>		
475-57098-008	(Top)	375-57097-080
	(Bottom)	375-57098-081
475-57098-010	(Top)	375-57097-100
	(Bottom)	375-57098-101
475-57098-012	(Top)	375-57097-120
	(Bottom)	375-57098-121
<b>WIRE/LOUVERED ENCLOSURE</b>		
475-57108-008	(Top)	375-57097-080
	(Bottom)	375-57106-081
475-57108-009	(Top)	375-57097-100
	(Bottom)	375-57106-101
475-57108-010	(Top)	375-57097-100
	(Bottom)	375-57106-101
475-57108-011	(Top)	375-57097-120
	(Bottom)	375-57106-121
475-57108-012	(Top)	375-57097-120
	(Bottom)	375-57106-121
<b>LOUVERED ENCLOSURE (COND. ONLY)</b>		
475-57097-008	(Top)	375-57097-080
	(Bottom)	N/A
475-57097-010	(Top)	375-57097-100
	(Bottom)	N/A
475-57097-012	(Top)	375-57097-120
	(Bottom)	N/A

## ENCLOSURE KIT OPTIONS (CONT'D)



\* Use item 102 on units with an odd number of fans.

57105-000

**FIG. 15 – WIRE ENCLOSURE (TOP SECTIONS) - 375-57105-080 SHOWN (REF. TABLE 18)**

**TABLE 18 – WIRE ENCLOSURE (TOP SECTIONS) - (SEE FIG. 15)**

WIRE ENCLOSURE TOP SECTIONS KIT COMPONENTS			
ITEM #	DESCRIPTION	PART NUMBER	QTY
100	END PANEL - LH	075-57085-000	1
101	END PANEL - RH	075-57086-000	1
102	PANEL	075-56977-000	2*
103	CHANNEL	075-57082-000	1
104	PLATE	075-57138-000	1
200	WIRE GRILL CONDENSER	026-41776-000	8**

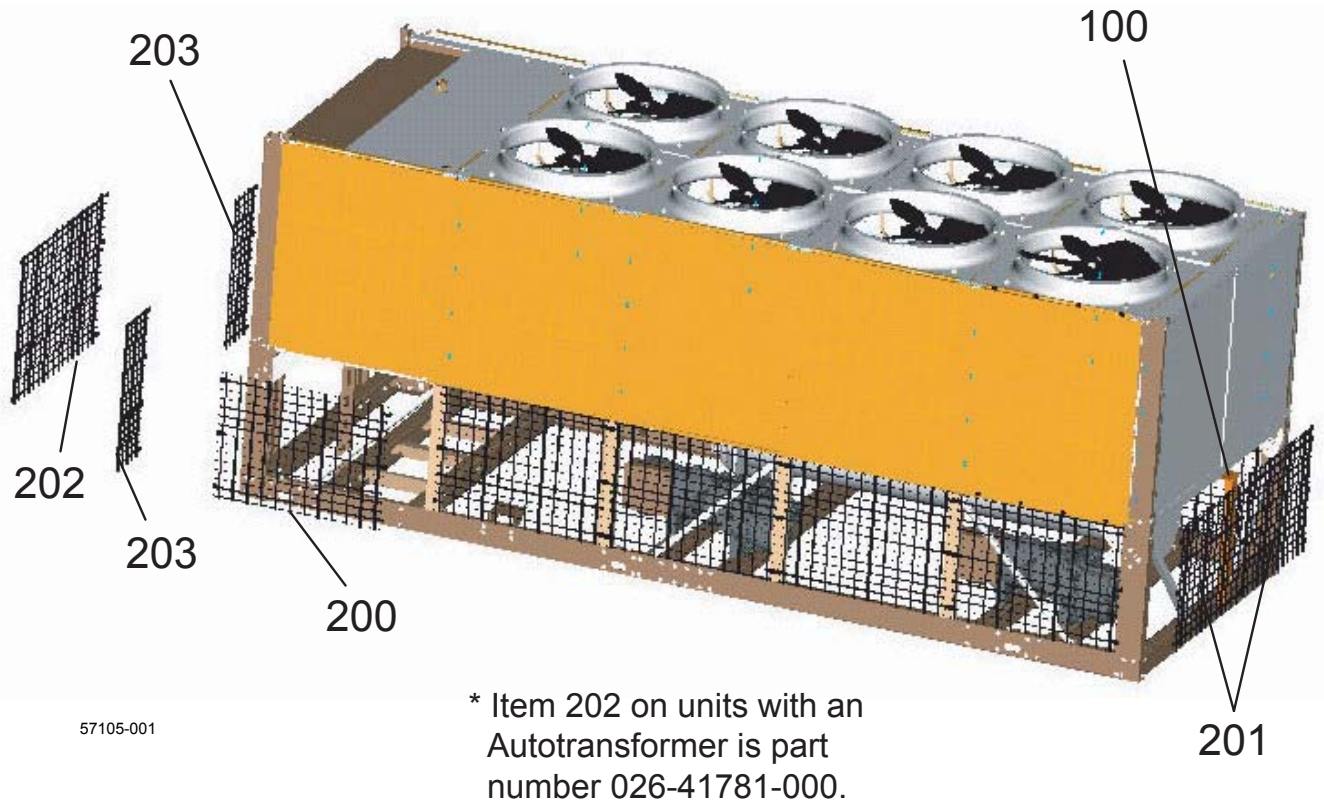
\*\* Refer to page 55, Quantity for 375-57105-090 = 9

\*\* Refer to page 55, Quantity for 375-57105-100 = 10

\*\* Refer to page 55, Quantity for 375-57105-110 = 11

\*\* Refer to page 55, Quantity for 375-57105-120 = 12

## ENCLOSURE KIT OPTIONS (CONT'D)



Enclosure Options

**FIG. 16 – WIRE ENCLOSURE (BOTTOM SECTIONS) - 375-57106-081 SHOWN (REF. TABLE 19)**

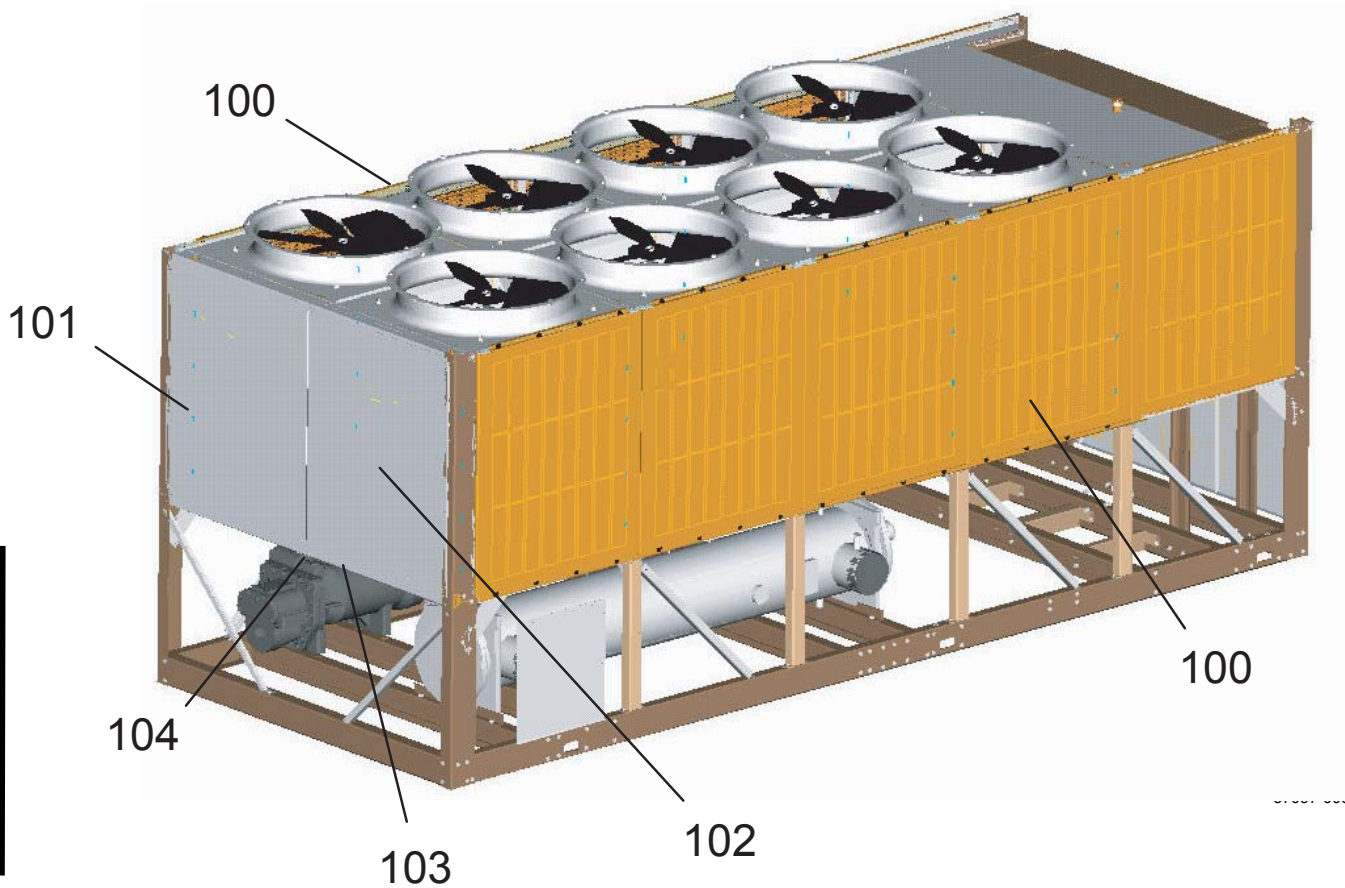
**TABLE 19 – WIRE ENCLOSURE (BOTTOM SECTIONS) - (SEE FIG. 16)**

WIRE ENCLOSURE BOTTOM SECTIONS KIT COMPONENTS			
ITEM #	DESCRIPTION	PART NUMBER	QTY
100	REAR SUPPORT	075-56979-000	1
200	WIRE GRILL	026-41777-000	10**
201	WIRE GRILL - REAR	026-41778-000	2
202	WIRE GRILL	026-41779-000	1
203	WIRE GRILL	026-41780-000	2

\*\* Refer to page 55, Quantity for 375-57106-101 = 12

\*\* Refer to page 55, Quantity for 375-57106-201 = 14

## ENCLOSURE KIT OPTIONS (CONT'D)



**FIG. 17 – LOUVERED ENCLOSURE (TOP SECTIONS) - 375-57097-080 SHOWN (REF. TABLE 20)**

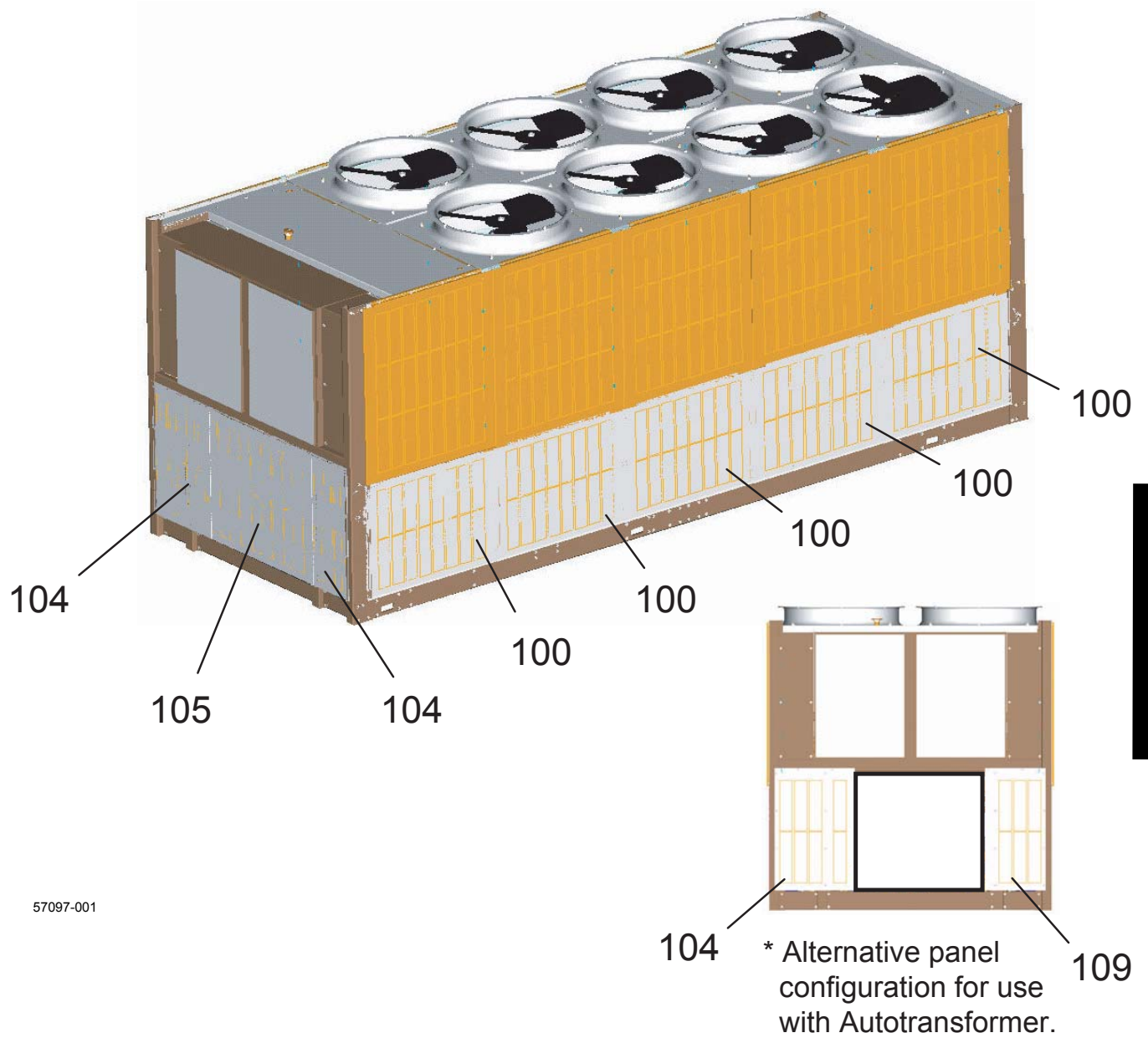
**TABLE 20 – LOUVERED ENCLOSURE (TOP SECTIONS) - (SEE FIG. 17)**

LOUVERED ENCLOSURE TOP SECTIONS KIT COMPONENTS			
ITEM #	DESCRIPTION	PART NUMBER	QTY
100	LOUVER PANEL	075-56976-000	10**
101	REAR PANEL - LH	075-57085-000	1
102	REAR PANEL - RH	075-57086-000	1
103	CHANNEL	075-57082-000	1
104	REAR SUPPORT	075-57133-000	1

\*\* Refer to page 55, Quantity for 375-57097-100 = 12

\*\* Refer to page 55, Quantity for 375-57097-200 = 14

# ENCLOSURE KIT OPTIONS (CONT'D)

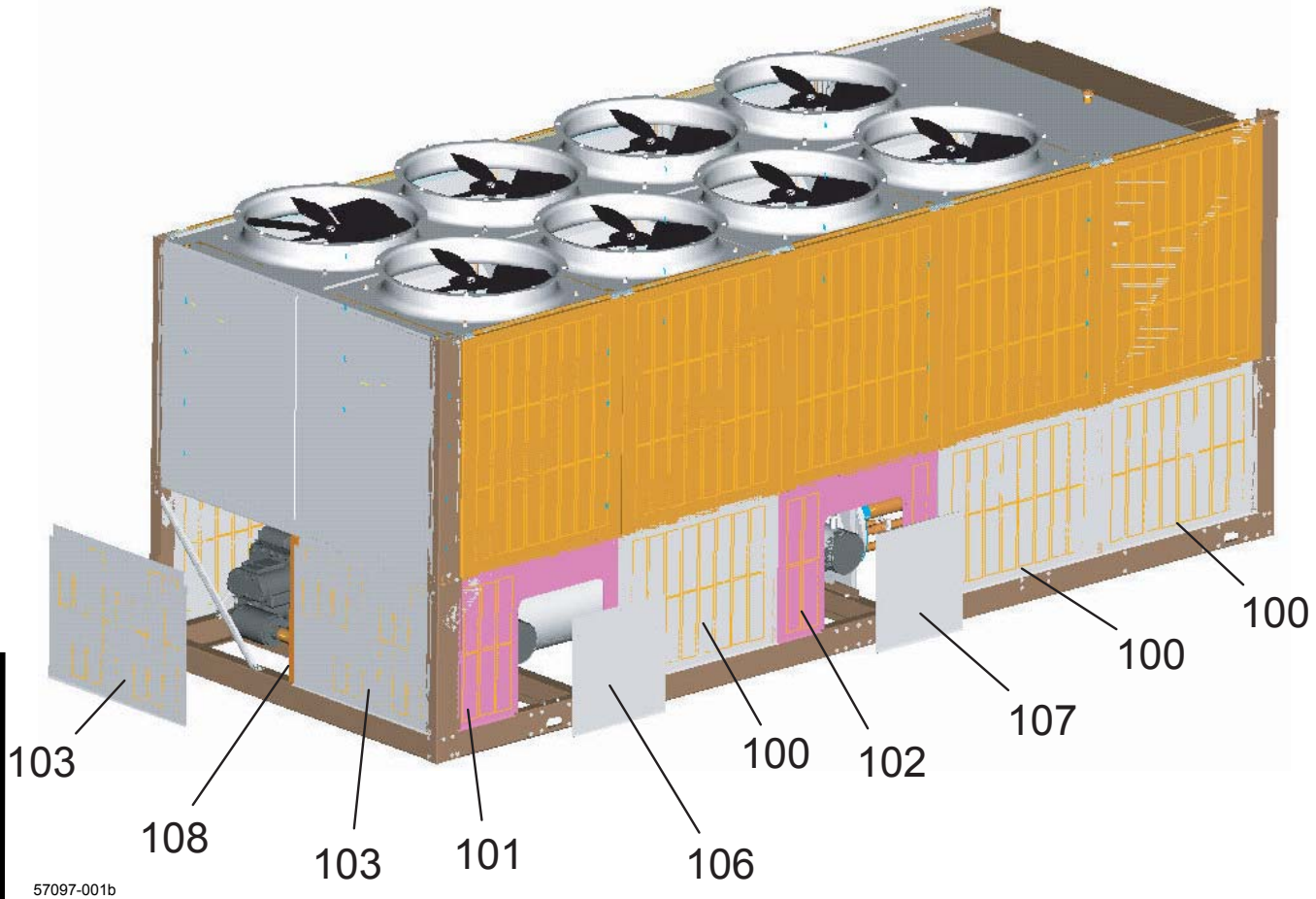


57097-001

Enclosure Options

**FIG. 18 – LOUVERED ENCLOSURE (BOTTOM SECTIONS)**  
 375-57097-081 SHOWN (REF. TABLE 21, PAGE 60)

## ENCLOSURE KIT OPTIONS (CONT'D)



**FIG. 18A – LOUVERED ENCLOSURE (BOTTOM SECTIONS)**  
375-57098-081 SHOWN (REF. TABLE 21)

**TABLE 21 – LOUVERED ENCLOSURE (BOTTOM SECTIONS)**  
(SEE FIGS. 18 AND 18A)

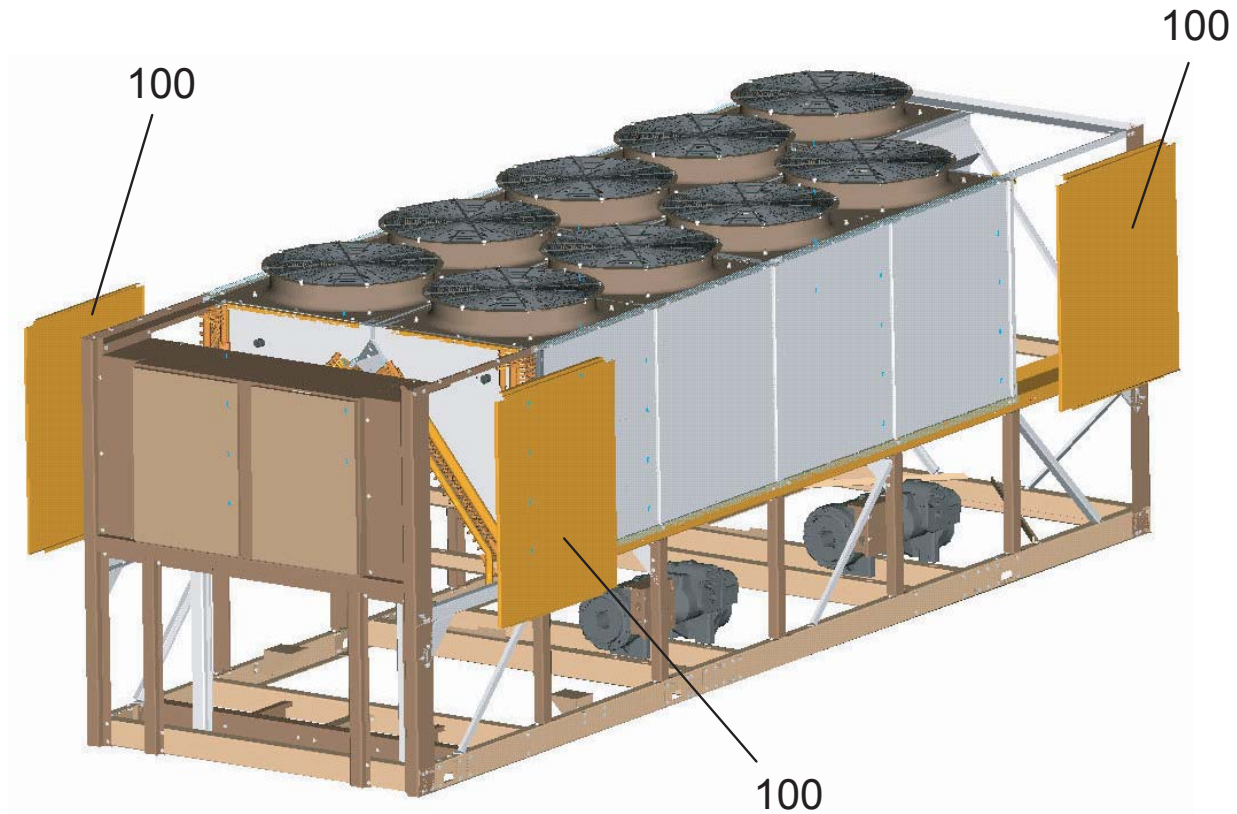
LOUVERED ENCLOSURE BOTTOM SECTIONS KIT COMPONENTS			
ITEM #	DESCRIPTION	PART NUMBER	QTY
100	LOUVER PANEL	075-56978-000	8**
101	LOUVER PANEL	075-57111-000	1
102	LOUVER PANEL	075-57113-000	1
103	LOUVER PANEL	075-56981-000	2
104	LOUVER PANEL	075-57101-000	2*
105	LOUVER PANEL	075-57102-000	1*
106	COVER PANEL	075-57112-000	1
107	COVER PANEL	075-57115-000	1
108	REAR SUPPORT	075-56979-000	1
109	LOUVER PANEL - FRONT	075-57104-000	1*

\*\* Refer to page 55, Quantity for 375-57098-101 = 12

\*\* Refer to page 55, Quantity for 375-57098-201 = 14

# PANEL KIT COMPONENTS

\* Required on units with an odd number of fans.



57097-001b

**FIG. 19** – LOUVERED ENCLOSURE (TOP SECTIONS)  
375-57099-002 SHOWN (REF. TABLE 22)

Enclosure Options

**TABLE 22** – LOUVERED ENCLOSURE (TOP SECTIONS)  
(SEE FIG. 19)

LOUVERED ENCLOSURE BOTTOM SECTIONS KIT COMPONENTS			
ITEM #	DESCRIPTION	PART NUMBER	QTY
100	PANEL	075-56977-000	2**

# RECOMMENDED SPARE PARTS

York Model YCAV Style A Air Cooled Screw Chillers  
Suggested Spare Parts List for Critical Duty Applications

**TABLE 26 – RECOMMENDED SPARE PARTS - YCAV0157-YCAV0267 CHILLERS**

PAGE REF. & ITEM NUMBER	DESCRIPTION	MODEL NUMBER YCAV	PART NUMBER
Pages 14 & 15, Item 1	Fan Motor (Standard)	-17	024-27322-000
		-28	
		-40	
		-46	
		-50	
		-58	
Pages 14 & 15, Item 1	Fan Motor (Low Noise)	-17	024-34980-001
		-28	
		-40	
		-46	
		-50	
		-58	
Pages 14 & 15, Item 2	Fan Blade (Standard)	All	026-35604-000
	Fan Blade (Low Noise)	All	026-36532-000
Pages 20, 21 and 22, Item 1	Valve, Control (Feed or Drain)	See Table 4	025-39688-000
Page 20, 21 and 22, Item 5	Core, Dehydrator	All	026-37540-000
Page 20, 21 and 22, Item 18	Sensor, Refrig Level	All	025-39675-002
Page 25, Item 10	Cap, Radiator	All	023-21927-000
Page 25, Item 13	Coolant Propylene Glycol (5 gallon)	All	013-03344-000
Page 26, Item OIL	Oil, Compressor (Type 'L')	R-134A	011-00592-000
Page 34, Item 22	VSD Logic Board	All	031-02477-000
Page 34, Item 31	Control Board	All	031-02478-002
Page 35, Item 39	EPROM - U36	All	031-02521-001
Page 35, Item 41	EPROM - U39	All	031-02522-001
Page 35, Item 44	Controller, Valve	All	031-02510-000
Page 50, Item 1	Sensor, Outside Air Temperature	All	025-28663-001
Page 50, Item 2	Sensor, Water Temp. (EWT, LWT)	All	025-40334-000
Page 50, Item 4	Sensor, Discharge Temperature	All	025-32924-000
Page 50, Item 5	Sensor, Suction Temperature	All	025-28935-000
Page 50, Item 6	Sensor, Oil Temperature	All	025-30440-000
Page 50, Item 7 and 8	Transducer, Discharge & Oil Pressure (0-275psi)	All	025-29139-003
Page 50, Item 9	Transducer, Suction Pressure (0-275psi)	All	025-29583-001

All parts should be purchased from your local YORK Sales and Service Center.

# NOTES

