



**MODEL YS (STYLE E)  
SCREW LIQUID CHILLERS**

**RENEWAL PARTS**

Supersedes: 160.80-RP3 (105)

Form 160.80-RP3 (307)

**OPTIVIEW™ CONTROL CENTER**

**371-02459-101**

**371-02579-101**

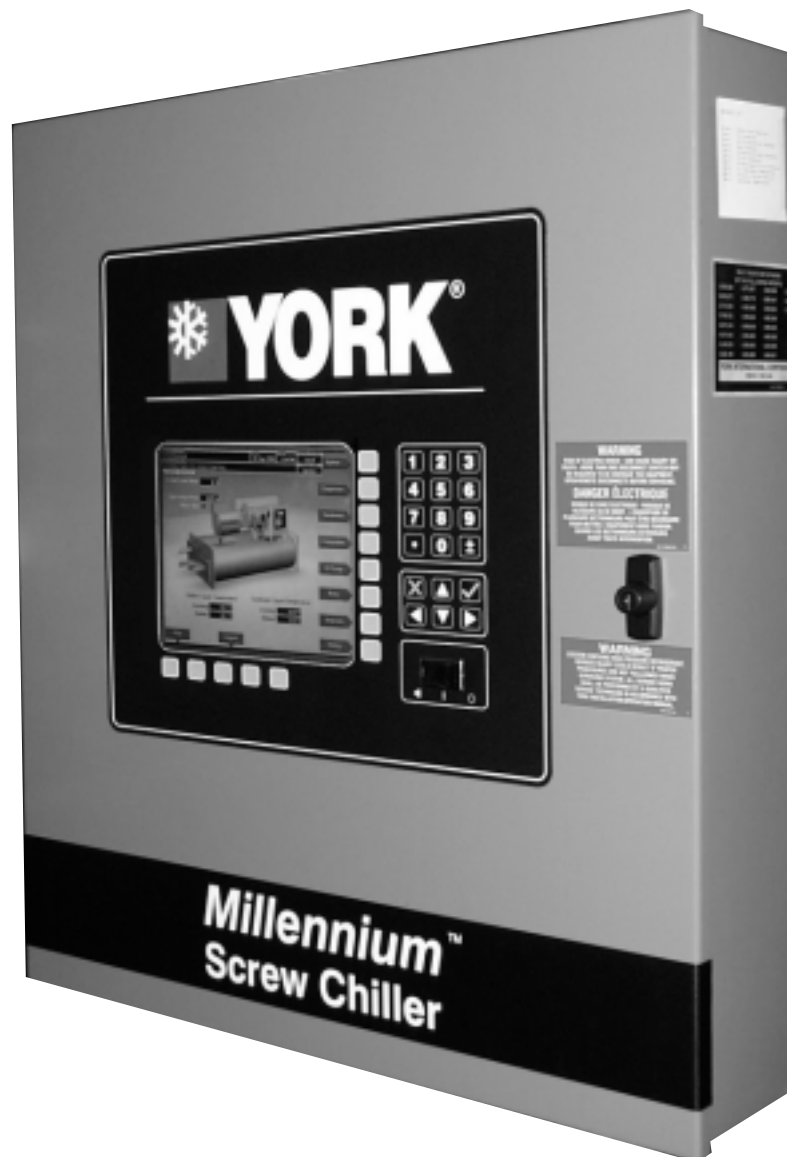
**371-02578-101**

**371-02459-102**

**371-02579-102**

**371-02578-102**

**MODEL YS  
(STYLE E)**



ITEM	DESCRIPTION	FIG. NO.	QTY.	PART NO.
1	TERMINAL BLOCK (NEMA 1, 4, 12) (CE)	2	1	025-33290-000
		2		025-34121-000
2	INPUT/OUTPUT BOARD	2	1	031-01743-001
3	MICROBOARD The Control Center could be equipped with one of the following microboards, depending upon the vintage of the Control Center. Regardless of which board is present, order part number 331-02430-603 (replacement microboards cannot be ordered by the basic board part number of 031-02430-000).  031-1730-000 - supplied in new production chillers until March 2004. Uses BIOS Eprom (item 14), BRAM (item 28), and Flash Memory Card (item 20). Part number 331-02430-603 is supplied as service replacement for this board.  031-02430-000 - supplied in new production chillers and as replacement part 331-02430-603 after March 2004. The board is supplied pre-programmed with the latest version of the YS chiller "Controls" Software and it comes equipped with a BRAM (U38) (item 55) and BIOS Eprom (U37) (item 54). It is shipped with a label on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-603), the basic Microboard part number (031-02430-000) and the version of the "Controls" software (for example, C.OPT.03.04.301) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-02430-000.	2	1	331-02430-603
4	POWER SUPPLY	2	1	025-34111-000
5	NOT USED			
6	KEYPAD (NEMA 1) (NEMA 4/12 & CE)	1	1	024-30993-000
		1		024-30994-000
7	FUSE, 5A (1FU)	2	1	025-14019-000
8	FASTENER, PAWL, ADJUSTABLE (NEMA 1)	1	1	021-17252-000
9	SWITCH ROCKER (NEMA 1)	1	1	024-23143-000
10	DISPLAY KIT (Note 1)	9	1	331-01771-000
11	COVER, DISPLAY	9	1	071-02264-346
12	CABLE, RIBBON (NEMA 1) (NEMA 4/12 & CE)	2,8	1	031-01772-000
		2,8		031-02015-000
13	CABLE, RIBBON	2	1	031-01779-000
14	EPROM, BIOS (U45) (Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000)  <b>*IMPORTANT!</b> Flash Memory Card version C.MLM.03.00 <b>CANNOT</b> be used with this Eprom. The chiller will not run with this combination. The Flash Memory Card must be upgraded to version C.MLM.03.01 or later (ie; .02, .03, etc.). (Refer to Item 20)	2	1	031-01796-002
15	FUSEHOLDER (For Item 16)	2	1	025-13991-000
16	FUSE, 15A (2FU)	2	1	025-14384-000
17	FUSEHOLDER (For Items 7 and 19)	2	1	025-13991-000
18	CABLE, RIBBON [EM START & S.S.S. (MOD. A) ONLY]	3	1	031-01799-000
19	FUSE, 2A (3FU)	2	1	025-33116-000

ITEM	DESCRIPTION	FIG. NO.	QTY.	PART NO.
20	FLASH MEMORY CARD, PROGRAMMED (U46) (Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000.) Refer to Note 5 for version analysis. VERSION C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, or Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers.  VERSION C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian language. Supplied in new CE OptiView Control centers.	2	1	031-02005-001  031-02005-002
21	SWITCH, KNOB SELECTOR (NEMA 4/12, CE)	5	1	024-30931-000
22	CONTACT BLOCK (NEMA 4/12, CE)	5	2	024-30932-000
23	BUSS BAR (GROUND) (NEMA 4/12, CE)	8	1	025-34122-000
24	SUPPRESSOR (See Note 3)		6	031-00808-000
25	CONTROL, CURRENT MOD. CM-2 (Electro-Mech. Starter App. Only)	3	1	031-00947-000
26	DIODE BRIDGE (Electro-Mechanical Starter App. Only)	3	1	031-00210-000
27	RESISTOR (Electro-Mechanical Starter App. Only)	3	2	025-20789-000
27A	RESISTOR, ASSEMBLY (Includes both resistors configured for installation)	3	1	575-00364-001
28	IC, BRAM-U52 (Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000)	2	1	031-02028-000
29	TRANSDUCERS			
29A	CONDENSER, OIL, FILTER OIL, SEAL OIL			025-28678-006
29B	EVAPORATOR – R134a, WATER & BRINE			025-28678-112
29C	– R22 WATER			025-28678-113
29D	– R22 BRINE			025-28678-114
	(ALL TRANSDUCERS SUPPLIED WITH O-RINGS)			
29E	SEAL, O-RING, FOR ITEMS 29A thru 29D			028-12961-002
30	THERMISTORS			
30A	ENTERING CHILLED WATER TEMPERATURE			025-29964-000
30B	LEAVING CHILLED WATER TEMPERATURE			025-29964-000
30C	SENSOR WELL WITH THREADED TOP			026-32328-000
30D	ENTERING CONDENSER WATER TEMPERATURE			025-28935-000
30E	LEAVING CONDENSER WATER TEMPERATURE			025-28935-000
30F	OIL TEMPERATURE (Straight threads with O-Ring)			025-31301-000
30G	DISCHARGE TEMP. (Straight threads with O-Ring)			025-31301-000
30H	SEAL, O-RING (FOR ITEMS 30F & 30G)			028-12961-004
31	CIRCUIT BREAKER, POLE, 6A (CE)	8	1	024-30935-000
32	SWITCH, DISCONNECT (CE)	8	1	024-34171-000

ITEM	DESCRIPTION	FIG. NO.	QTY.	PART NO.
33	CIRCUIT BREAKER, 25A (CE)	8	1	024-30956-000
34	CIRCUIT BREAKER 16A (CE)	8	1	024-30947-000
35	CIRCUIT BREAKER (CE)	8	1	024-30936-000
36	MOUNT, ANTI-VIBRATION	2	4	021-19191-000
37	BACKLIGHT BULB	9	1	See Note 4
38	BACKLIGHT INVERTER BOARD	9	1	See Note 4
39	BACKLIGHT INVERTER BOARD RIBBON CABLE	9	1	See Note 4
40	DISPLAY INTERFACE BOARD	9	1	See Note 4
41	DISPLAY INTERFACE BOARD RIBBON CABLE	9	1	031-01769-000
42	STRIP, NEOPRENE	9	2.8 FT	028-07533-000
43	MICROGATEWAY (OPTIONAL)	2	1	(See YORK Control Systems Web Page)
44	WIRING HARNESS, 8 inch, Power Supply to Microboard J1 12 inch	2 2	1 1	571-02264-272 571-03774-272
45	EVAPORATOR REFRIGERANT TEMPERATURE SENSOR		1	025-34159-000
46	FUSE, F1 & F2, 5 AMP (Rev "E" and later 031-01730-000 Microboards and all 031-02430-000 Microboards)			025-34592-000
47	FUSE, 5A (4FU, 6FU)	2	2	025-15759-000
48	FUSE, 4A (5FU)	2	1	025-34566-000
49	FUSEHOLDER, (For Items 47 & 48)	2	1	025-34565-000
50	RS-485 DRIVER IC, U53, U54, U91 on 031-01730-000 Microboard U45, U46, U47 on 031-02430-000 Microboard (supplied in packages of 4 each)	2	3	031-02074-000
51	HOUSING, CONNECTOR P8, 22 position	2	1	025-34117-000
52	HOUSING, CONNECTOR P9, 20 position	2	1	024-34116-000
53	CONTACTS, SOCKETS P8, P9	2	42	025-28386-000
54	EPROM, BIOS(U37) Used on Microboard 031-02430-000 only. Not compatible with Microboard 031-01730-000. (Refer to Note 6 for version analysis)	2	1	031-02429-001
55	BRAM (U38) Used on Microboard 031-02430-000 only. Not compatible with Microboard 031-01730-000.	2	1	031-02431-000
56	PROGRAM CARD Used to download YS chiller operating program into 031-02430-000 Microboards. Contains the YS chiller operating program. (Refer to Note 7 for version analysis)	6	1	031-02488-001
57	CONTROL LOGIC - 7LK (MOD A Solid State Starter Retrofit App. only)	10	1	031-00936-002
58	CONTROL LOGIC - 14LK (MOD A Solid State Starter Retrofit App. only)	10	1	031-00936-003
59	CONTROL LOGIC - 26LK (MOD A Solid State Starter Retrofit App. only)	10	1	031-00936-004
60	CONTROL LOGIC - 33LK (MOD A Solid State Starter Retrofit App. only)	10	1	031-00936-005

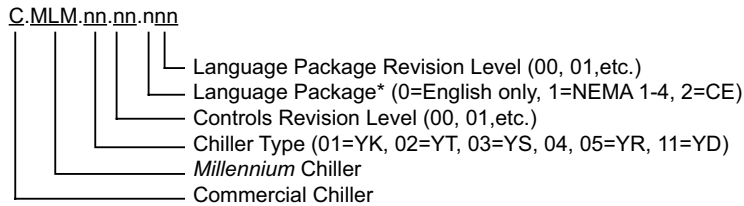
**NOTES:**

- The replacement Liquid Crystal Display supplied by YORK might not be by the same manufacturer as the original Display. Each Display requires a specific Display Interface Board (Item 40), Backlight Inverter Board (Item 38), and Backlight Inverter Board ribbon cable (Item 39). Therefore, the Liquid Crystal Display is not available separately. **Service replacement Displays or supporting components must not be arbitrarily selected! Non-compatibility of components will result in incorrect operation!** To assure compatible supporting components, the Display is supplied as a kit (331-01771-000), which contains a replacement Display and all compatible supporting components on a mounting plate. For future reference, a label attached to the side of the mounting plate (Fig. 9) lists the YORK part numbers of these compatible components and the required configuration of the Microboard Program Jumpers. These Program Jumpers must be configured for this Display by a qualified Service Technician following instructions in YORK Service manual 160.80-M1. The contents of the kit are as follows:
  - Liquid Crystal Display
  - Backlight Bulb (Item 37)
  - Appropriate Display Interface Board (Item 41) for Display
  - Appropriate Display Interface Board ribbon cable (Item 41) for Item 40.
  - Appropriate Backlight Inverter Board (Item 38) for Display.
  - Appropriate Backlight Inverter Board ribbon cable (Item 39) for Item 40.
  - All mounting hardware.
  - Installation instructions.

- IMPORTANT!** Revision "E" (and later) boards require BIOS Eprom 031-01796-002 (supplied with revision "E" and later boards). If Flash Memory Card 031-02005-001 is used, it **MUST** be version C.MLM.03.01 or later (ie; .02, .03, etc.). The latest version of this Memory Card is supplied with the replacement board. The chiller will not run with C.MLM.03.00 in a revision "E" board.

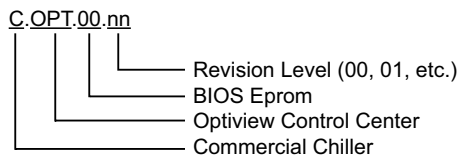
Return all unused Flash Memory Cards with Warranty return boards.

- Extra Suppressors are shipped in cloth bag. They are applied at solenoids and relays located on chiller.
- Refer to label (Fig. 9) on Display mounting plate for YORK part number of applicable replacement part. **Service replacement Display supporting components must not be arbitrarily selected! Non-compatibility of components will result in incorrect operation!**
- Flash Memory Card (item 20) version analysis:

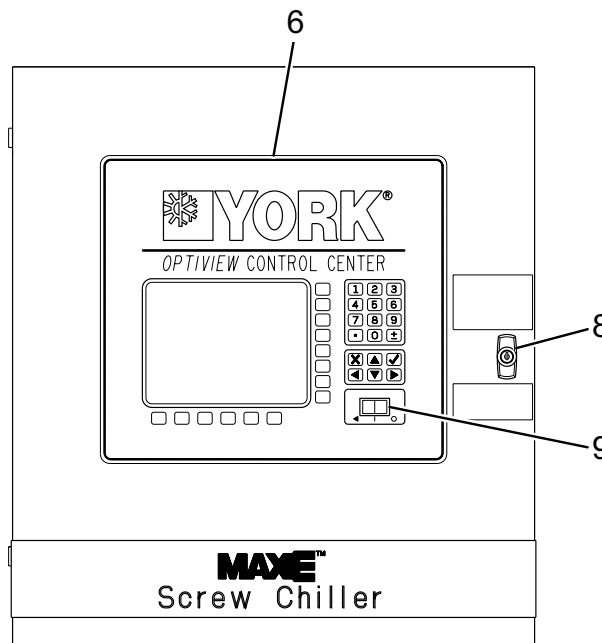
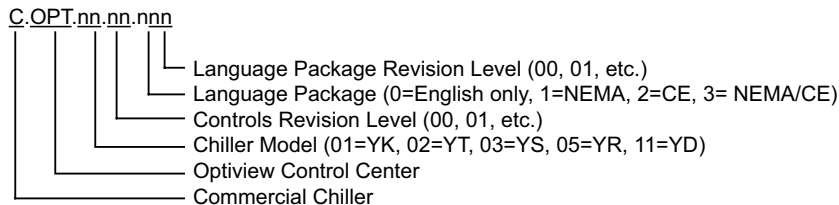


\*1 = Supplied in new NEMA 1-4 OptiView Control Center.  
 2 = Supplied in new CE (European Community) OptiView Control Centers.

- BIOS Eprom (item 54) version analysis:



- Program Card (item 56) version analysis:



**FIG. 1 – FRONT OF OPTIVIEW CONTROL CENTER**

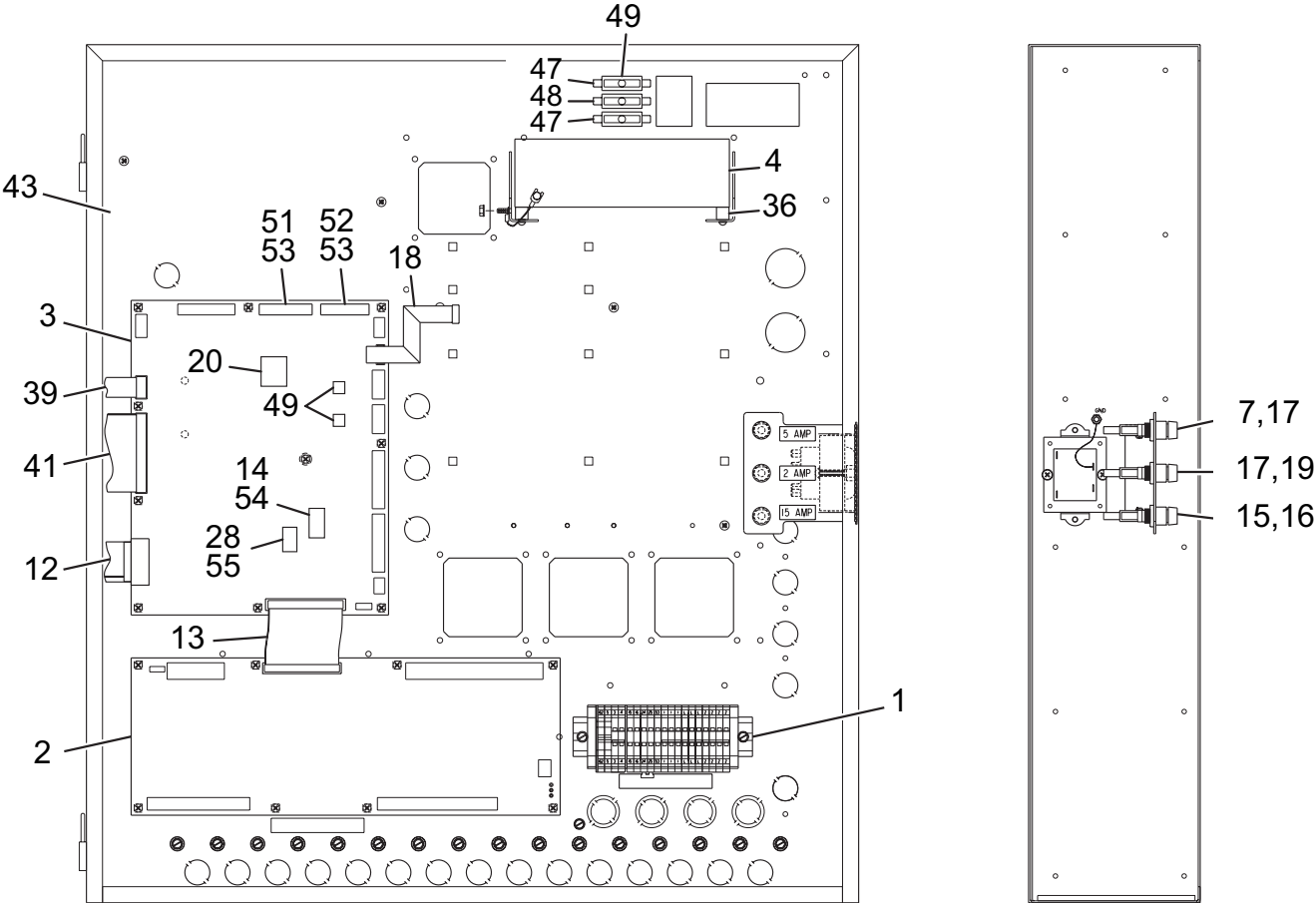


FIG. 2 – INSIDE OF CONTROL CENTER

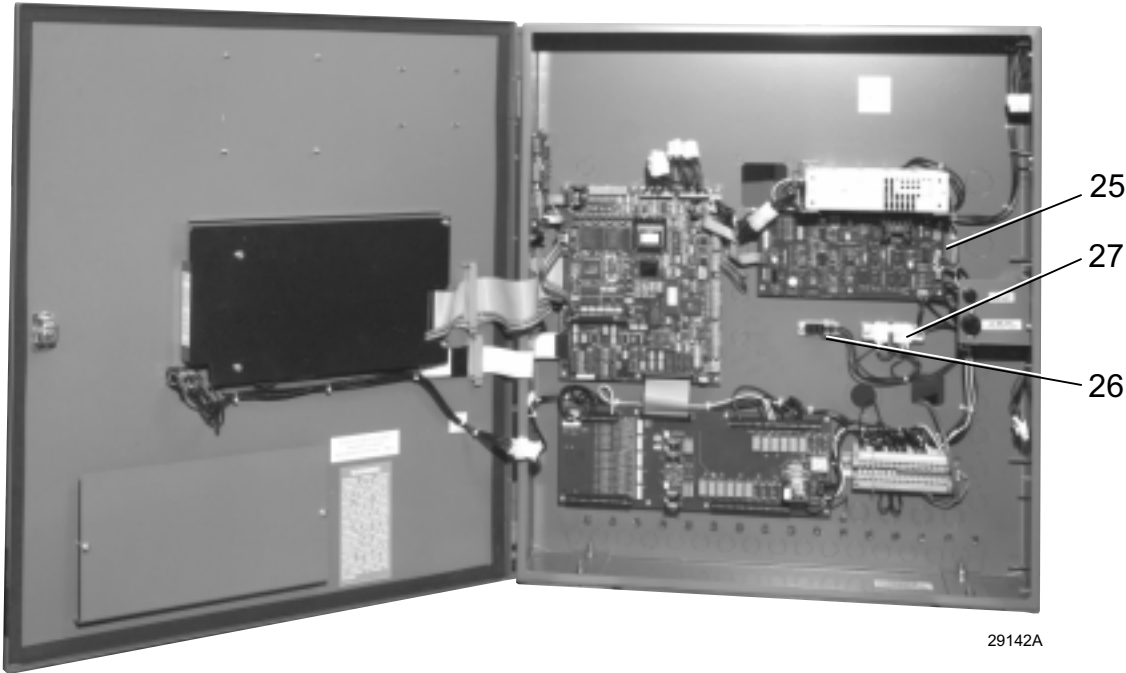


FIG. 3 – EM STARTER

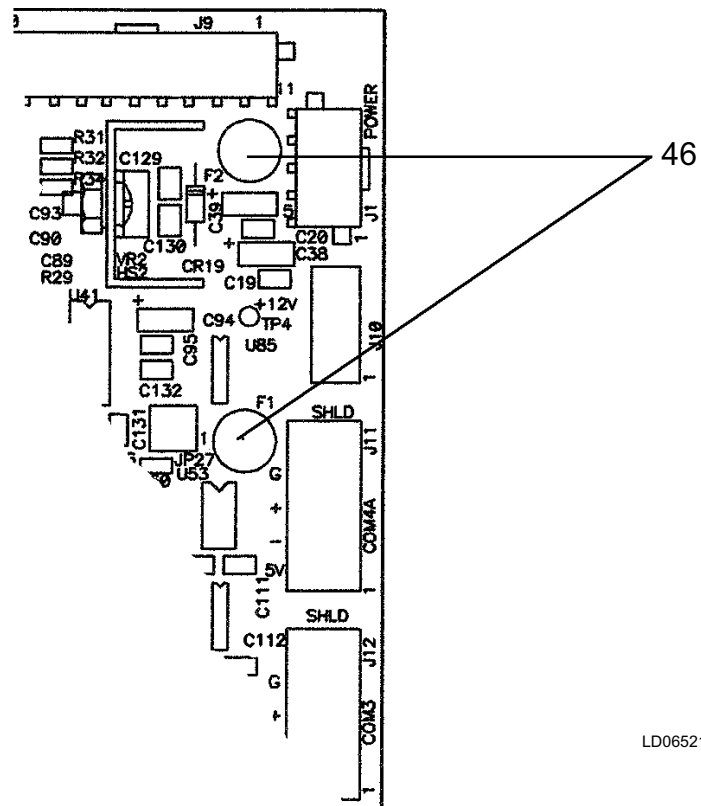


FIG. 4 – MICROBOARD FUSES

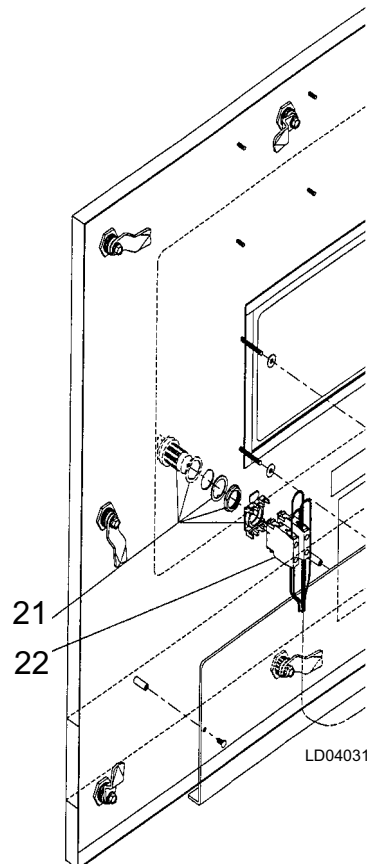
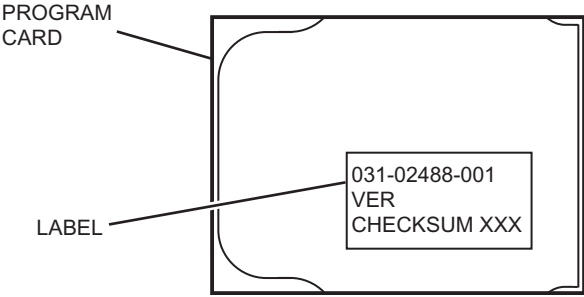
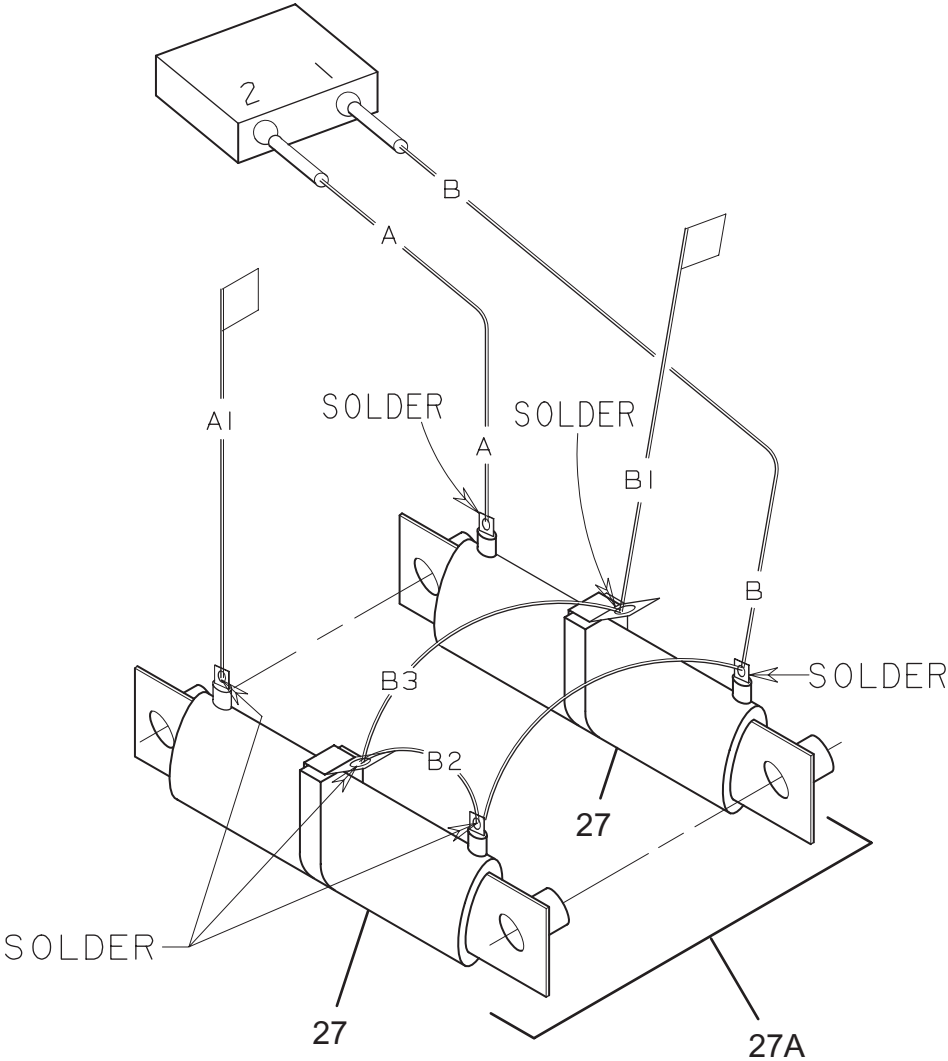


FIG. 5 – INSIDE OF DOOR - NEMA 4/12, CE



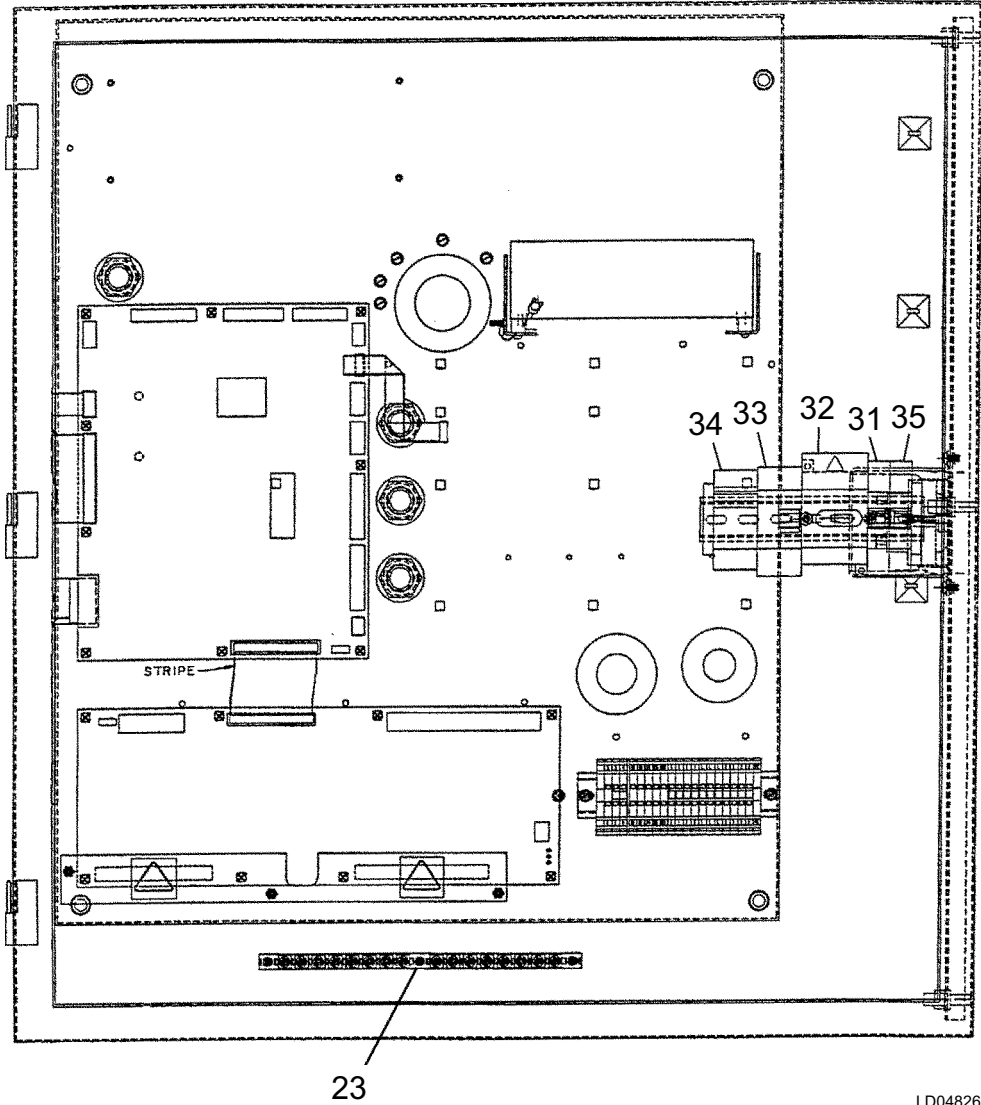
LD10403

FIG. 6 – PROGRAM CARD (ITEM 56)



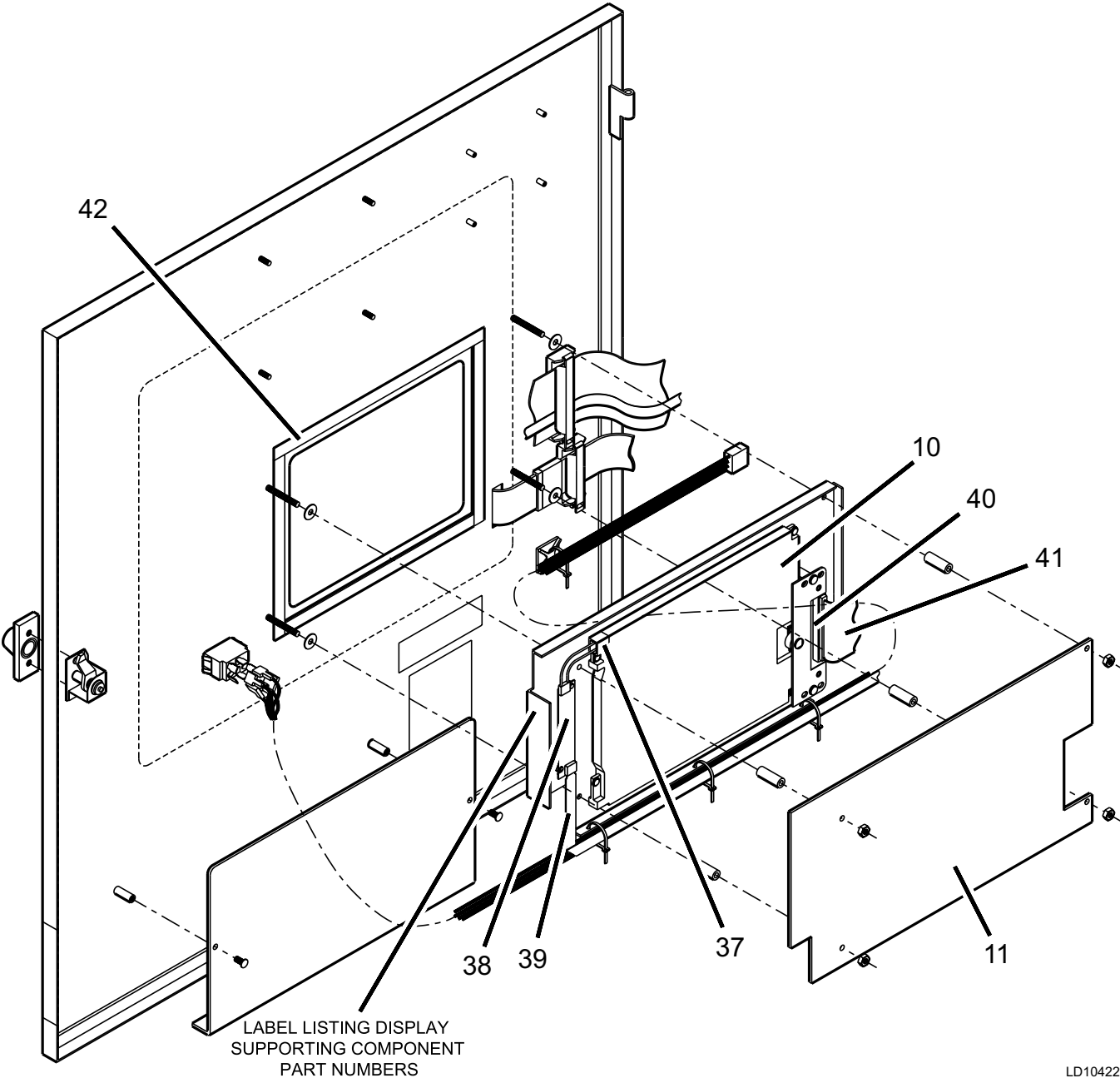
LD10329

FIG. 7 – RESISTOR ASSEMBLY



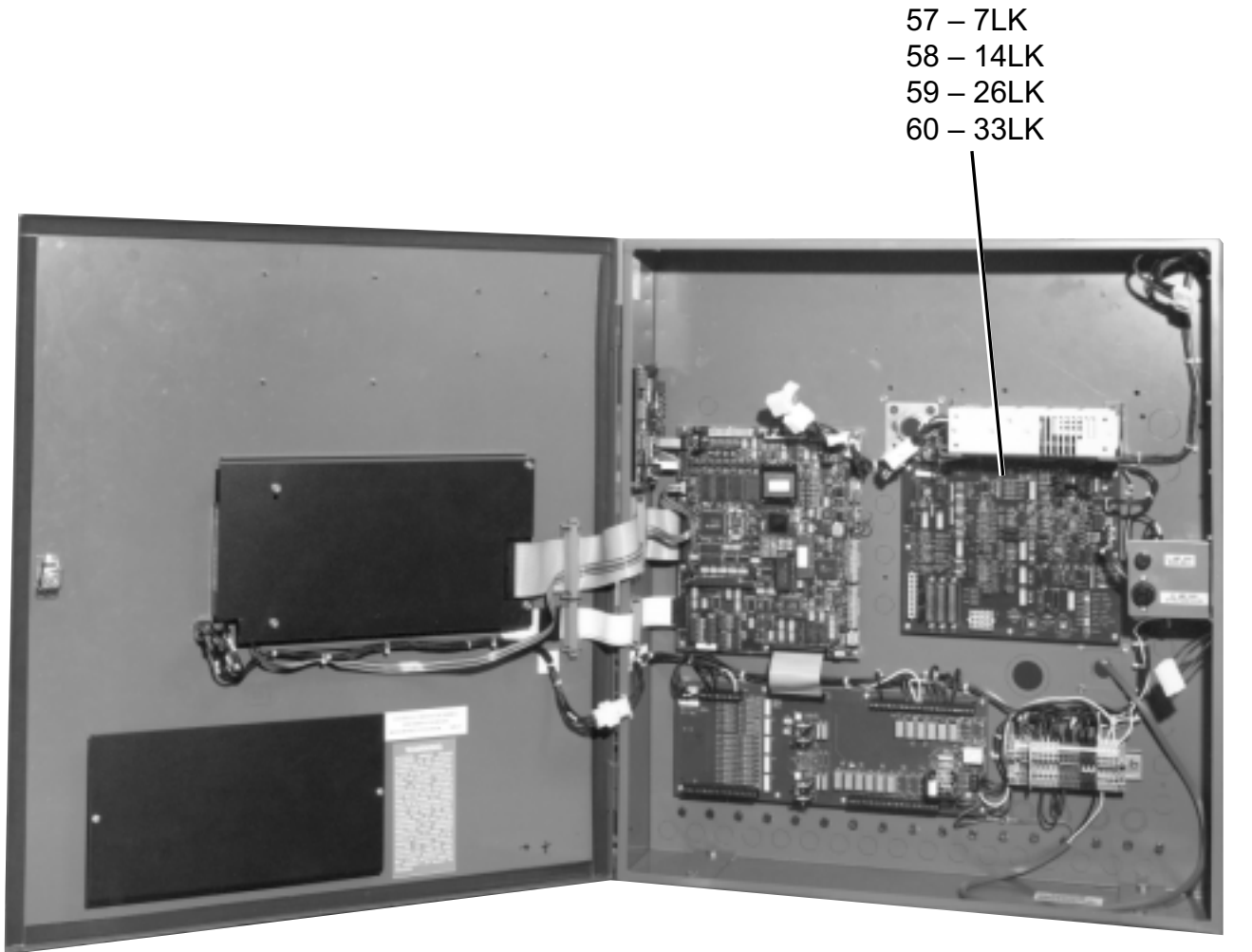
LD04826

FIG. 8 – INSIDE OF CONTROL CENTER - NEMA 4/12, CE



LD10422

FIG. 9 – DISPLAY COMPONENTS (See Notes 1 & 4, Pages 3 & 4)



29139A

**FIG. 10 – MOD A SOLID STATE STARTER (RETROFIT APPLICATION ONLY)**



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