



ROTARY SCREW LIQUID CHILLERS

RENEWAL PARTS

Supersedes: 160.47-RP3 (292)

Form 160.47-RP3 (599)

MICROCOMPUTER CONTROL CENTER

**MODELS YS BA BA SO THRU YS FA FB S5 (STYLE A THRU D)
100 - 675 TONS**

ELECTRO-MECHANICAL STARTER, SOLID STATE STARTER APPLICATIONS



25166A



26878A

PART NUMBERS

Style A	English Display	371-01200-001
Style C	English Display	371-01200-003
Style C	English & Simplified Chinese	371-01200-006
Style C	English & Traditional Chinese	371-01200-013
Style D	English Display	371-01200-019
Style D	English & Simplified Chinese	371-01200-020
Style D	English & Traditional Chinese	371-01200-021

ITEM	DESCRIPTION	FIG. NO.	QTY.	PART NUMBER
1	RELAY	1	1	024-23962-000
2	TRANSFORMER	1	1	025-27911-000
3	FUSE, 5 AMP	1	1	025-14019-000
4	FUSE, 15 AMP	1	1	025-14384-000
5	FUSE HOLDER	1	2	025-13991-000
6	CONTROL, MICRO BOARD	1	1	TABLE 1
7	CONTROL, POWER SUPPLY	1	1	031-01080-000
8	CONTROL, DIGITAL INPUT	1	1	031-00935-000
9	CONTROL, RELAY BOARD	1	1	031-00932-002
10	FASTENER, PAWL ADJ.	2	1	021-17252-000
11	KEYPAD (STANDARD)	2	1	024-25258-000
	(Simplified Chinese Language)	5	1	024-27239-000
	(Traditional Chinese Language)	5	1	024-27240-000
12	DISPLAY			
	CONTROL CENTER 371-01112-001	3, 4	1	031-00775-000 ⁽¹⁾
	CONTROL CENTER 371-01200-003	3, 4	1	031-00775-001 ⁽²⁾
13	SWITCH, ROCKER	2	1	024-23143-000
14	SUPPRESSOR	1	1	031-00808-000
15	NOT USED	—	—	—
16	NOT USED	—	—	—
17	NOT USED	—	—	—
18	CONTROL, CURRENT MODULE CM-2 (Electro-Mechanical Starter Application Only)	3	1	031-00947-000
19	DIODE BRIDGE (Electro-Mechanical Starter Application Only)	3	1	031-00210-000
20	RESISTOR, VARIABLE (Electro-Mechanical Starter Application Only)	3	2	025-20789-000
21	CONTROL, LOGIC - 7L (Solid State Starter Application Only)	4	1	031-00936-002
22	CONTROL, LOGIC - 14L (Solid State Starter Application Only)	4	1	031-00936-003
23	CONTROL, LOGIC - 26L (Solid State Starter Application Only)	4	1	031-00936-004
24	CONTROL, LOGIC - 33L (Solid State Starter Application Only)	4	1	031-00936-005
25	CONTROL, REMOTE RESET (Customer Option)	1	—	031-00814-000 ⁽³⁾
26	CARD FILE (Customer Option)	1	1	031-00827-000
27	IC, REAL TIME CLOCK - U16	1	1	031-00955-000
28	EPROM - U17	1	1	TABLE 2
29	SENSOR, WATER TEMP - 3K OHM	—	2	025-29964-000
30	SENSOR, OIL & DISCHARGE TEMP - 50K OHM	—	2	025-32328-000
31	PRESSURE TRANSDUCERS	—	—	TABLE 3
32	CABLE, RIBBON - MICRO BOARD J4	1	1	031-00950-000
33	CABLE, RIBBON - RELAY BOARD J1	1	1	031-00951-000
34	CABLE, RIBBON - DISPLAY	1	1	031-00952-000
35	CABLE, RIBBON - DIGITAL INPUT BOARD J1	1	1	031-00953-000
36	CABLE, RIBBON - MICRO BOARD J2	1	1	031-00985-000
37	VOLTAGE TRANSIENT PROTECTION Module* for Micro Board RS-485 Serial Port (only used in units equipped with ISN FAX-4500 BAS connected to RS-485 Serial Port TB-7) * If this module is being installed for the first time, order kit #371-01477-000. Kit includes module and Installation Instructions.	1	1	031-01586-000
	KIT, RETROFIT - SIMPLIFIED (Chinese Language Display) (also see Fig. 5)	—	—	371-01708-002
	KIT, RETROFIT - TRADITIONAL (Chinese Language Display) (also see Fig. 5)	—	—	371-01708-005

For Notes, refer to page 3.

NOTES:

1. BABCOCK VF-140-04. If not available, Kit 331-00775-600 will be supplied. Kit consists of Display 031-00775-001, Display Reset Board 031-01305-000 and Installation Instructions.
2. BABCOCK VF-140-02 or IEE 33383-01.
3. If it is desired to remotely reset both chilled water setpoint and current limit setpoint, two each are required. If it desired to remotely reset only one of these setpoints, one each are required.
4. If Control Center is equipped with Micro Board 031-00940-001, transducer 025-28678-002 / -007 is used for both water and brine R22 applications and 025-28678-005 / -008 is not applicable.
5. Style "C" and later chillers use straight cut threads.

Replacement Micro Boards are supplied without EPROMs. In some circumstances it will be necessary to remove the EPROM from the defective board and use it in the replacement board. In other circumstances, the available replacement board will not be compatible with the existing EPROM and therefore, both board and EPROM would have to be ordered.

Therefore, to select a replacement Micro Board that will provide proper operation, it is essential that the part number of the defective board and the part number of the EPROM installed in that board are known prior to placing an order. The board part number is printed on the front surface of the board. The EPROM is component U17 on the Micro Board. Its part number is printed on a label attached to the top surface of the EPROM.

Refer to Table 1 and order a replacement Micro Board as follows:

1. In the left hand column of Table 1, locate the part number of the defective Micro Board and the part number of the EPROM installed in that board. In some cases, no EPROM part number is listed because the EPROM will be removed from the defective board and used in the replacement board.
2. Place an order for selection in right hand column. If an EPROM part number is listed in the right hand column, both the Micro Board part number and the EPROM part number must be ordered. In other cases it is necessary to order only the Micro Board.

TABLE 1 –

IF EQUIPPED WITH MICRO BOARD / EPROM	SELECTION	REPLACE WITH MICRO BOARD / EPROM
031-00940-001 / 031-01051-001		031-01065-002 / 031-01102-001 / NOTE 2
031-00940-001 / 031-01051-002	(1)	031-00940-001 / NOTE 1
031-01065-000, -001, -002	(1)	031-01065-002 / NOTE 1

NOTES:

1. Servicemen, in the field, must remove the EPROM from the defective Micro Board and re-use in the replacement board.
2. If brine cooling application, transducer 025-28678-003 / -009 must also be ordered to replace existing 025-28678-002 transducer.

TABLE 2 –

EPROM		APPLICATION	APPLICABLE MICRO BOARD
PART NO.	VERSION		
031-01051-001	4.E	STANDARD CHILLER	031-00940-001
031-01051-002	4.EF	YORK FAX-4000	031-00940-001
031-01102-002	S.01F.17	YORK FAX-4500 AND STANDARD	031-01065-000; -001; -002

TABLE 3 –

PRESSURE TRANSDUCERS	PART NUMBER THREAD TYPE	
	NPTF	STRAIGHT CUT ⁽⁵⁾
CONDENSER, OIL, FILTER OIL & SEAL OIL	025-28678-001	025-28678-006
EVAPORATOR - R22, WATER	025-28678-002 ⁽⁴⁾	025-28678-007 ⁽⁴⁾
R22, BRINE	025-28678-003	025-28678-009
R134a, WATER & BRINE	025-28678-005	025-28678-008

(4), (5) Refer to notes above.

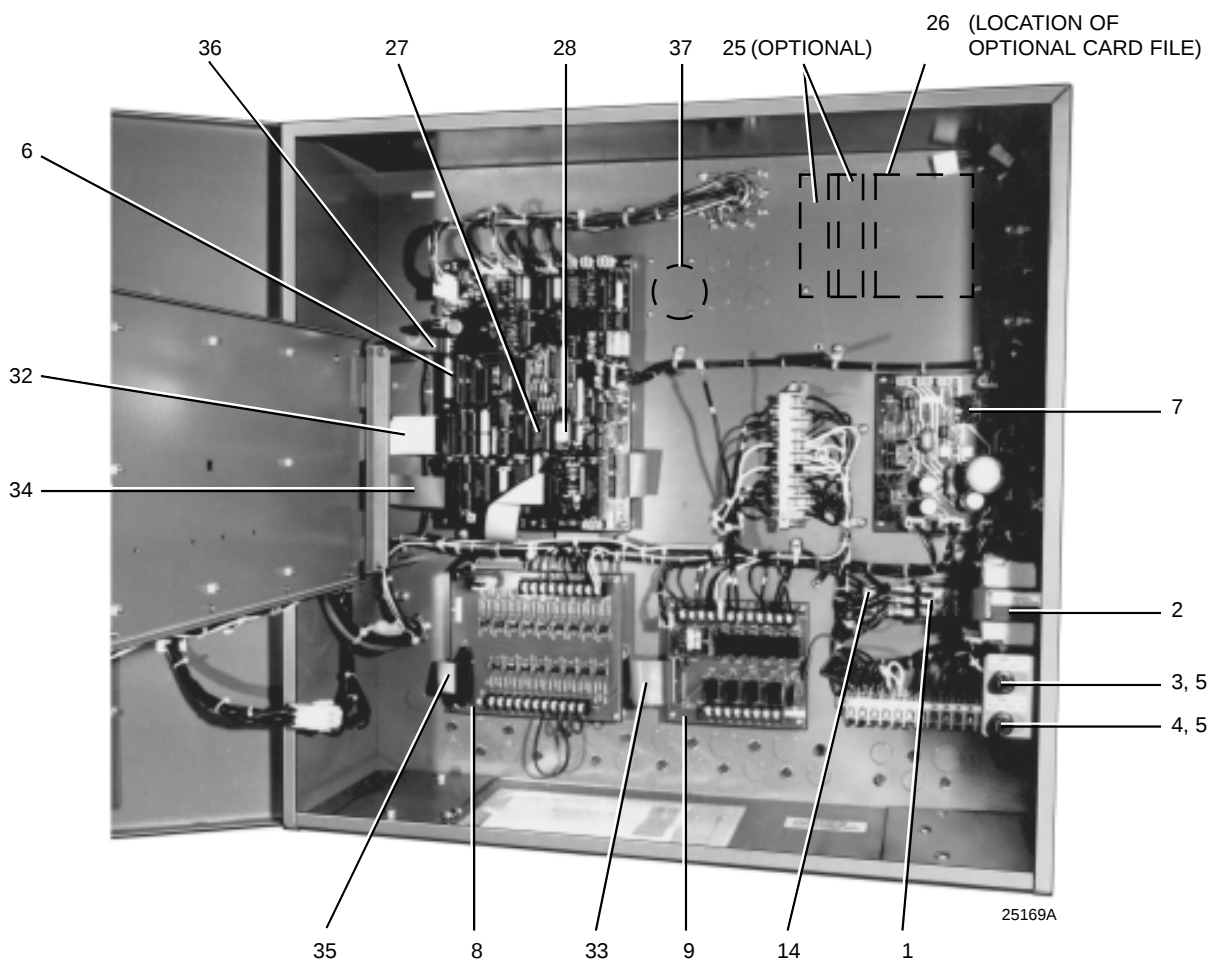


FIG. 1 – MICROCOMPUTER CONTROL CENTER – DOOR AND HINGED PANEL OPEN

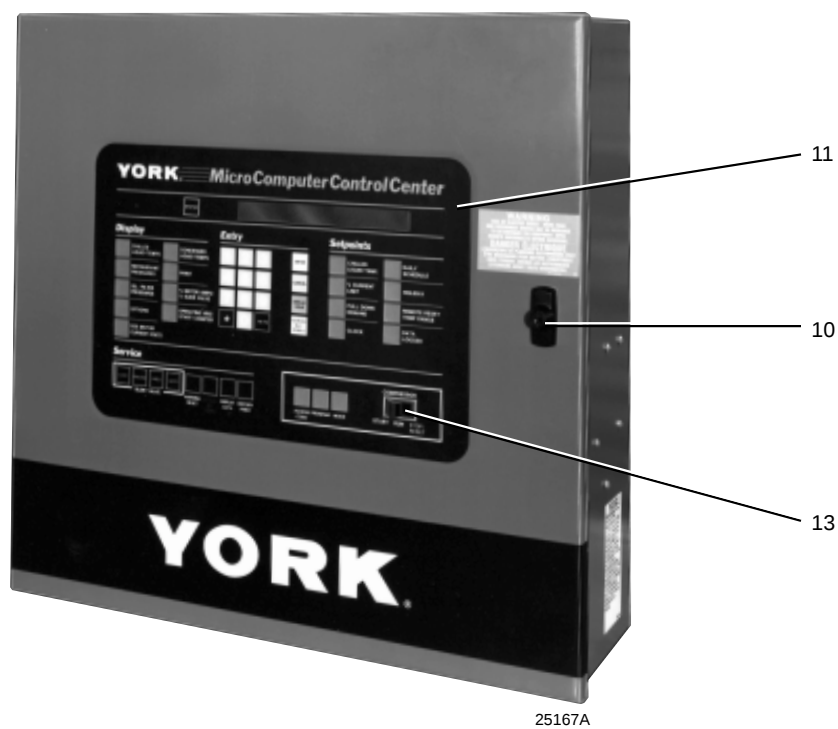
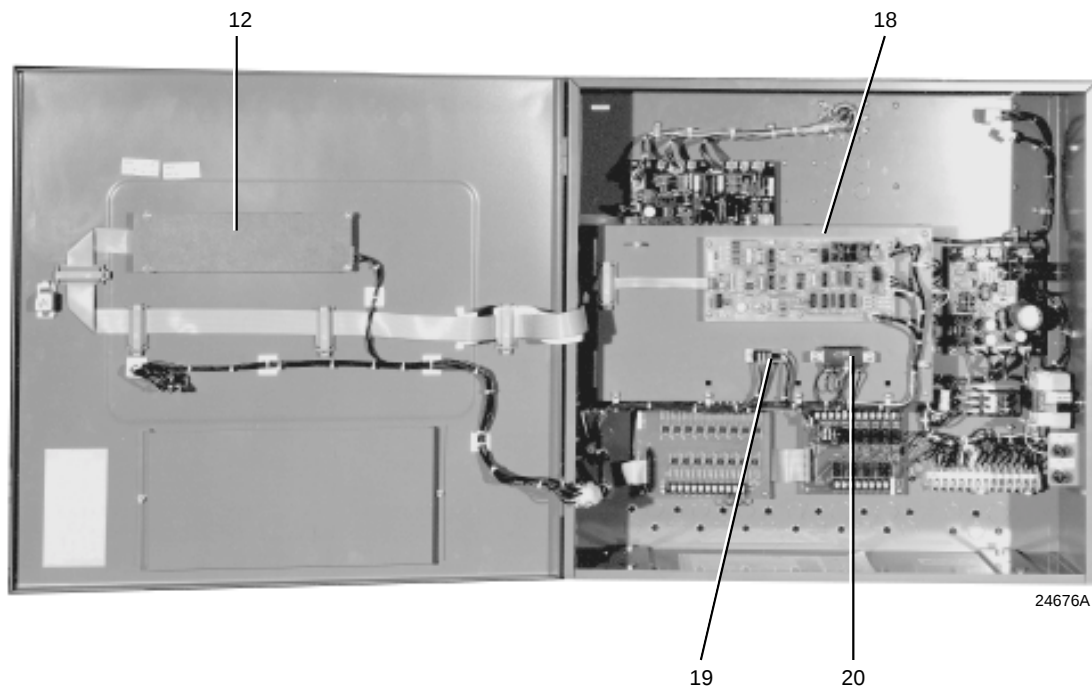
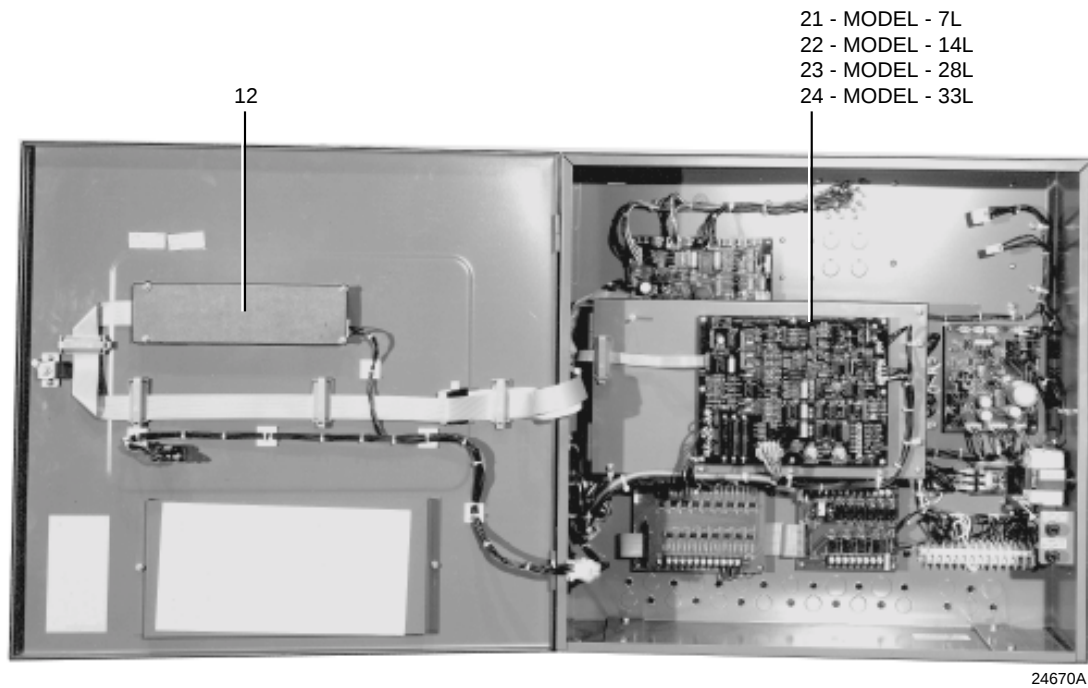


FIG. 2 – MICROCOMPUTER CONTROL CENTER EXTERIOR



**FIG. 3 – MICROCOMPUTER CONTROL CENTER – DOOR OPEN
ELECTRO-MECHANICAL STARTER APPLICATIONS**



**FIG. 4 – MICROCOMPUTER CONTROL CENTER – DOOR OPEN
ELECTRO-SOLID STATE STARTER APPLICATIONS**



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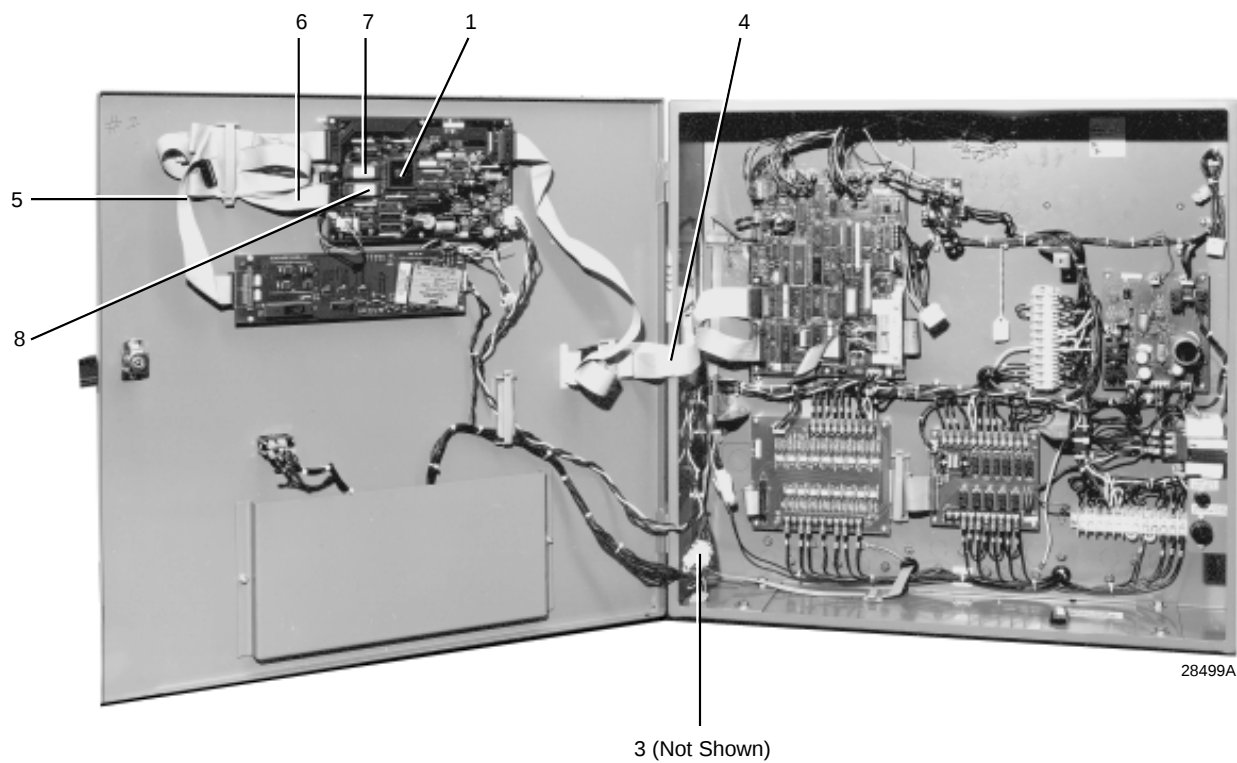


FIG. 5 – CHINESE LANGUAGE DISPLAY COMPONENTS

ITEM	DESCRIPTION	PART NO.
1	PC BOARD, CHINESE LANGUAGE DISPLAY	031-01616-000
2	DISPLAY, CHINESE LANGUAGE LCD GRAPHIC	031-01653-000
3	TRANSFORMER, CHINESE LANGUAGE DISPLAY 115VAC / 24VAC	025-27911-000
4	CABLE, RIBBON – MICRO BOARD TO CHINESE LANGUAGE DISPLAY	031-01647-000
5	CABLE, RIBBON – CHINESE DISPLAY BOARD TO VACUUM FLUORESCENT DISPLAY	031-01646-000
6	CABLE, RIBBON – CHINESE DISPLAY BOARD TO CHINESE LANGUAGE LCD DISPLAY	031-01645-000
7	EPROM – CS.01F.00 (IC-U13) YS – SIMPLIFIED CHINESE LANGUAGE	031-01639-001*
8	EPROM – CS.01F.00 (IC-U14) YS – TRADITIONAL CHINESE LANGUAGE	031-01639-002*

* See Notes below.

NOTES FOR FIGURE 5

Beginning on / about April 1997, Chinese language displays will be supplied with either: two Simplified translation EPROMs or two Traditional translation EPROMs. If Simplified translation is desired, both of the Simplified EPROMs below are required. If Traditional translation is desired, both of the Traditional EPROMs below are required. The EPROM part numbers and on-board socket locations are as follows:

EPROM	TRANSLATION	SOCKET LOCATION
031-01699-001	Simplified	U13
031-01699-002	Simplified	U14
031-01699-003	Traditional	U13
031-01699-004	Traditional	U14

Chinese Language displays contained one EPROM (031-01639-001) (socket location U13) that translated to Simplified Chinese and one EPROM (031-01639-002) (socket location U14) that translated to Traditional Chinese. The desired translation was then selected by Program Jumper PT0, located on the Chinese language display board. Due to the addition of messages, two EPROMs are now required for each translation as described above. When equipped with these new EPROMs, Program Jumper PT0 can no longer be used to select between Simplified or Traditional translation. If one of these earlier version EPROMs listed in Fig. 5 fails, it must be replaced with two EPROMs as follows:

IF THIS EPROM FAILS:			REPLACE WITH:	
PART NO.	LOCATION	TRANSLATION	PART NO.	LOCATION
031-01639-001	U13	SIMPLIFIED	031-01699-001	U13
			- and - 031-01699-002	U14
031-01639-002	U14	TRADITIONAL	031-01699-003	U13
			- and - 031-01699-004	U14



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