

MODEL YR SCREW LIQUID CHILLERS

RENEWAL PARTS

Supercedes: 160.81-RP3 (307)

Form 160.81-RP3 (507)

GRAPHIC CONTROL CENTER

371-02772-101, 102

371-02773-101, 102

371-02774-101, 102

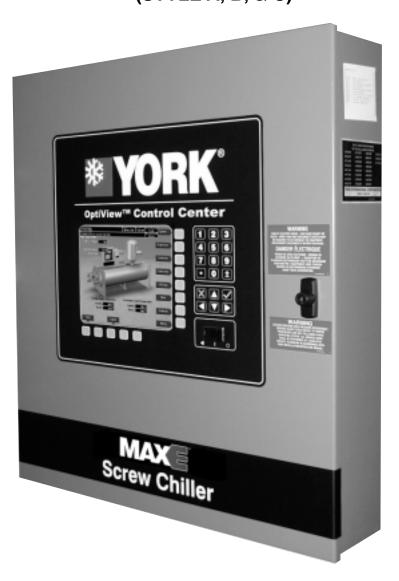
371-04175-101, 102

371-04176-101, 102

371-04177-101, 102

MODEL YR (STYLE A, B, & C)

See 160.81-RP3 (LS02) at end of manual



CE 2	ITEM	DESCRIPTION	FIG. NO.	QTY.	PART NO.
2	1	TERMINAL BLOCK (NEMA 1, 4, 12)	2	1	025-33290-000
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 331-0240-605 (replacement microboards cannot be ordered by the basic board part number of 031-4240-000). 031-01730-000- Supplied in new production chillers until January 2005. Uses BIOS Eprom (tiom 14), BRAM (tiom 28) and Flash Memory Card (tiom 20), Part number 331-02430-605 is supplied as service replacement for this board. 031-02430-000 - supplied in new production chillers and as replacement part 331-02430-605 is supplied as service replacement for this board. 031-02430-000 - supplied in new production chillers and as replacement part 331-02430-605 after january 2005. The board is supplied pre-programmed with the latest version of the "R chiller" Controls" Software and it comes equipped with a flabel on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-605), the basic Microboard part number (031-02430-000) and the version of the "Controls" software (for example, C.PPTLO5,06.303) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-02430-000. 4 POWER SUPPLY 2 2 1 025-3081 6 KEYPAD (NEMA 1) 1 1 024-3099 (NEMA 4712 & CE) 1 1 025-3081 8 FASTENE, PAML, ADJUSTABLE (NEMA 1) 1 1 024-3099 7 FUSE, 54 (FU) 2 1 025-4011 10 DISPLAY (KIT (Note 1) 8 1 1 024-2314 11 COVER, DISPLAY 8 1 031-0177 (NEMA 4712 & CE) 2 1 031-0177 (NEMA 4712 & CE) 2 1 031-0177 (NEMA 4712 & CE) 2 1 031-0179 12 CABLE, RIBBON (NEMA 1) 2 1 031-0179 13 CABLE, RIBBON (NEMA 1) 2 2 1 031-0179 14 EPROM, BIOS (144) 2 2 1 025-34561 15 FUSELOLDER (For term 7, 16 and 19) 2 2 1 031-0179 16 FUSEL, 15A (FU) 2 2 1 025-34561 17 FUSEL SA (FU) 2 2 1 025-34561 18 FASTENDLORER (For term 7, 16 and 19) 2 2 1 025-34561 19 FUSEL SA (FU) 2 2 1 025-34561 10 FUSEL SA (FU) 2 2 1 025-34561 10 FUSEL SA (FU) 2 2 1 025-34561 11 FUSEL SA (FU) 2 2 1 025-3456		(CE)	2		025-34121-000
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 331-0240-000, and unable statements of the Control Center. Regardless of which board is present, order part number 331-02430-000. 331-031-030-000- Supplied in new production chillers until January 2005. Uses BIOS Eprom (item 14). BRAM (item 28) and Flash Memory Card (item 20). Part number 331-02430-000 is supplied as service replacement for this board. 331-02430-000 Supplied in new production chillers and as replacement part 331-02430-000 is supplied in severe production chillers and as replacement that the latest variation of the VR chiller Crotories' Software and it comes equipped with a label on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-000) and the version of the "Control's Software for example, C.OPT-05.06.303) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-02430-000. 4 POWER SUPPLY 2 1 0.25-34111 5 TRANSFORMER 2 1 0.25-34011 5 TRANSFORMER 2 1 0.25-34011 6 KEYPAD (NEMA1) 1 1 0.22-34011 7 FUSE, 5A (1FU) 2 1 1 0.25-34011 8 FASTENER, PAWL, ADJUSTABLE (NEMA 1) 1 1 0.24-39091 9 SWITCH ROCKER (NEMA 1) 1 1 0.24-39091 10 DISPLAY KIT (Note 1) 8 1 1 0.24-3911 11 COVER, DISPLAY (1 10 1) 8 1 0.31-0271 12 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 0.31-01791 13 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 0.31-01791 14 EPROM, BIOS (U49) 2 1 0.32-34000 15 FUSEHOLDER (For Item 7, 16 and 19) 2 2 0.25-34501 16 FUSEHOLDER (For Item 7, 16 and 19) 2 2 0.25-34501 17 FUSEHOLDER (For Item 7, 16 and 19) 2 1 0.35-01791 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 0.31-01791 19 FUSE, 5A (FU) 2 1 0.35-01791 10 In the control Center of the Control Centers, but can be installed in any VPR Optiview Control Centers.	2	INPUT/OUTPUT BOARD	2	1	031-01743-001
depending upon the vintage of the Control Center. Regardless of which board is present, order part number 331-0240-0605 (replacement microboards cannot be ordered by the basic board part number of 031-02430-000). 031-07430-0000 - Supplied in new production chillers until January 2005. Uses BIOS Eprom (Item 14), BRAM (Item 28) and Flash Memory Card (Item 20). Part number 331-02430-0000 - supplied in new production chillers and as replacement part 331-02430-0003 supplied in new Nethology (Item 53). It is shipped with a latest version of the YR chiller 'Controls' Software and it comes equipped with a label on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-060), the basic kincroboard part number (031-02430-000) and the version of the "Controls' software (for example, C.PPT.05.06.303) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-02430-000. 4 POWER SUPPLY 2 1 025-34011 5 TRANSFORMER 2 1 025-34011 5 TRANSFORMER 2 1 024-3099 7 FUSE, 5A (IFU) 2 1 025-34011 1 024-3099 7 FUSE, 5A (IFU) 2 1 025-14011 8 FASTENER, PAWIL, ADJUSTABLE (NEMA 1) 1 1 024-2314 10 DISPLAY KIT (Note 1) 8 1 1 331-0177 11 COVER, DISPLAY 12 CABLE, RIBBON (INEMA 1) 1 1 024-2314 12 CABLE, RIBBON (INEMA 1) 2 1 031-0177 14 EPROM, BIOS (Ju45) Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-0240-000. 15 FUSE, 2A (IFU) 2 1 025-3406 16 FUSE, ISA (ZFU) 2 1 025-3407 17 FUSE, 2A (IFU) 2 1 025-3407 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-0178 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-0179 19 FUSE, 2A (IFU) 2 1 025-3408 10 031-0206 11 Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Centers, but can be installed in any OptiView Control Centers, but can be	3	MICROBOARD	2	1	331-02430-605
BIOS Eprom (Item 14), BRAM (Item 28) and Flash Memory Card (Item 20). Part number 331-02430-000 is supplied in new production chillers and as replacement part 331-02430-000 supplied in new production chillers and as replacement part 331-02430-000 for the YR chiller "Chortotis" Software and it comes equipped with a BRAM (U38) (Item 54) and BIOS Eprom (U37) (Item 53), it is shipped with a label on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-000), the basic Microboard part number (031-02430-000) and the version of the "Controls" software (for example, C.OPT.05.06.303) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-02430-000. 4 POWER SUPPLY 2 1 0.25-34111 5 TRANSFORMER 2 2 1 0.25-34111 5 TRANSFORMER 2 2 1 0.25-34511 6 KEYPAD (INEMA 1) 1 1 0.22-3099; (NEMA 4/12 & CE) 1 0.25-34099; (NEMA 4/12 & CE) 1 1 0.25-3409; (NEMA 4/12 & CE) 1 1 0.25-34511 10 DISPLAY KIT (Note 1) 1 1 1 0.24-2314; (NEMA 4/12 & CE) 2 1 0.31-0177; (NEMA 4/12 & CE) 2 1 0.31-01779; (NEMA 4/12 & CE) 2 1 0.31-0179; (NEMA 4/12 & CE) 2 1 0.31-01		depending upon the vintage of the Control Center. Regardless of which board is present, order part number 331-02430-605 (replacement microboards cannot be ordered by the basic board part number of 031-02430-000).			
331-02430-605 after January 2005. The board is supplied pre-programmed with the latest version of the YR chiller "Controls" Software and it comes equipped with a BRAM (U38) (item 54) and BIOS Eprom (U37) (item 53). It is shipped with a BRAM (U38) (item 54) and BIOS Eprom (U37) (item 53). It is shipped with a label on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-605), the basic Microboard part number (031-02430-000) and the version of the "Controls" software (for example, C.OPT.05.06.303) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-02430-000. 4 POWER SUPPLY 5 TRANSFORMER 2 1 025-3088 (6 KEYPAD (NEMA 1) 1 1 024-3098; (NEMA 412 & CE) 1 1 024-3099; (NEMA 412 & CE) 2 1 031-0177; (NEMA 412 & CE) 2 2 1 031-0177; (NEMA 412 & CE) 2 3 031-0201; (NEMA 412 & CE) 2 3 031-0201; (NEMA 412 & CE) 2 4 031-02179; (NEMA 412 & CE) 2 5 031-0201; (NEMA 412 & CE) 2 6 031-02179; (NEMA 412 & CE) 2 7 031-0179; (NEMA 412 & CE) 3 031-0179; (BIOS Eprom (item 14), BRAM (item 28) and Flash Memory Card (item 20). Part number 331-02430-605 is supplied as service replacement for this board.			
5 TRANSFORMER 2 1 025-30886 6 KEYPAD (NEMA 1) 1 1 024-30993 7 FUSE, SA (1FU) 2 1 025-14018 8 FASTENER, PAWL, ADJUSTABLE (NEMA 1) 1 1 021-1725 9 SWITCH ROCKER (NEMA 1) 1 1 024-2314 10 DISPLAY KIT (Note 1) 8 1 331-0177* 11 COVER, DISPLAY 8 1 071-0226-11 12 CABLE, RIBBON (NEMA 1) 2, 8 1 031-0177-12 12 CABLE, RIBBON (NEMA 1) 2, 8 1 031-0177-12 14 EPROM, BIOS (U45) 2 1 031-0177-12 14 EPROM, BIOS (U45) 2 1 031-0179-12 14 EPROM, BIOS (U45) 2 1 031-0179-12 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-3456-13 16 FUSE, 15A (2FU) 2 1 025-3456-13 17 FUSEHOLDER		331-02430-605 after January 2005. The board is supplied pre-programmed with the latest version of the YR chiller "Controls" Software and it comes equipped with a BRAM (U38) (item 54) and BIOS Eprom (U37) (item 53). It is shipped with a label on the outside of the shipping box that lists the part number of the pre-programmed Microboard (331-02430-605), the basic Microboard part number (031-02430-000) and the version of the "Controls" software (for example, C.OPT.05.06.303) that the board has been programmed with. This board is provided as service replacement for microboards 031-01730-000 and 031-			
5 TRANSFORMER 2 1 025-30886 6 KEYPAD (NEMA 1) 1 1 024-30993 7 FUSE, SA (1FU) 2 1 025-14018 8 FASTENER, PAWL, ADJUSTABLE (NEMA 1) 1 1 021-1725 9 SWITCH ROCKER (NEMA 1) 1 1 024-2314 10 DISPLAY KIT (Note 1) 8 1 331-0177* 11 COVER, DISPLAY 8 1 071-0226-11 12 CABLE, RIBBON (NEMA 1) 2, 8 1 031-0177-12 12 CABLE, RIBBON (NEMA 1) 2, 8 1 031-0177-12 14 EPROM, BIOS (U45) 2 1 031-0177-12 14 EPROM, BIOS (U45) 2 1 031-0179-12 14 EPROM, BIOS (U45) 2 1 031-0179-12 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-3456-13 16 FUSE, 15A (2FU) 2 1 025-3456-13 17 FUSEHOLDER	4	POWER SUPPLY	2	1	025-34111-000
6 KEYPAD (NEMA 1) 1 1 024-30998 (NEMA 4/12 & CE) 1 024-30994 7 FUSE, 5A (1FU) 2 1 025-14016 8 FASTENER, PAWL, ADJUSTABLE (NEMA 1) 1 1 025-14016 9 SWITCH ROCKER (NEMA 1) 1 1 024-2314 10 DISPLAY KIT (Note 1) 8 1 331-0177 11 COVER, DISPLAY 8 1 071-0226 12 CABLE, RIBBON (ISEMA 1) 2, 8 1 031-02016 12 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-02016 13 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-0179 14 EPROM, BIOS (U45) 2 1 031-0179 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-3456 16 FUSE, 15A (2FU) 2 1 031-03179 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-0208 1					025-30889-000
Topic FUSE, 5A (TFU)	6	KEYPAD (NEMA 1)	1	1	024-30993-000
8 FASTENER, PAWL, ADJUSTABLE (NEMA 1) 1 021-17252 9 SWITCH ROCKER (NEMA 1) 1 1 024-23143 10 DISPLAY KIT (Note 1) 8 1 331-0177* 11 COVER, DISPLAY 8 1 071-0226 12 CABLE, RIBBON (NEMA 1) 2, 8 1 031-01775 12 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-02015 13 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01796 14 EPROM, BIOS (U45) 2 1 031-01796 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34561 16 FUSE, 15A (2FU) 2 1 025-14384 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-1399* 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01796* 19 FUSE, 2A (3FU) 2 1 031-01796* 20 FLASH MEMORY CARD, PROGRAMMED (U46). 2 <t< th=""><th></th><th>(NEMA 4/12 & CE)</th><th>1</th><th></th><th>024-30994-000</th></t<>		(NEMA 4/12 & CE)	1		024-30994-000
9 SWITCH ROCKER (NEMA 1) 1 1 024-23143 10 DISPLAY KIT (Note 1) 8 1 331-01777 11 COVER, DISPLAY 8 1 071-02264 12 CABLE, RIBBON (NEMA 1) (NEMA 4/12 & CE) 2, 8 1 031-02177 13 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01776 14 EPROM, BIOS (U45) Used on Microbaard 031-01730-000 only. Not compatible with Microboard 031-02430-000. 2 1 031-01796 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34564 16 FUSE, 15A (2FU) 2 1 025-14364 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-14364 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01799 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-0179 20 FLASH MEMORY CARD, PROGRAMMED (U46). 2 1 031-0179 21 FUSE, 2A (3FU) 2 1 025-33116	7	FUSE, 5A (1FU)	2	1	025-14019-000
10 DISPLAY KIT (Note 1) 8 1 331-01777 11 COVER, DISPLAY 8 1 071-02264 12 CABLE, RIBBON (NEMA 1) 2, 8 1 031-01772 13 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01796 14 EPROM, BIOS (U45) 2 1 031-01796 Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000. 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34566 16 FUSE, 154 (2FU) 2 1 025-14386 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-13997 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01796 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Centers, but can be installed in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Centers, but can be installed in any YR Optiview Control Centers, but can be installed in any YR Optiview Control Centers, but can be installed in any YR Optiview Control Centers, but can be installed in any YR Optiview Control Centers.	8	FASTENER, PAWL, ADJUSTABLE (NEMA 1)	1	1	021-17252-000
11	9	SWITCH ROCKER (NEMA 1)	1	1	024-23143-000
12 CABLE, RIBBON (NEMA 1)	10	DISPLAY KIT (Note 1)	8	1	331-01771-000
CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01796	11	COVER, DISPLAY	8	1	071-02264-346
13 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01779 14 EPROM, BIOS (U45) 2 1 031-01796 15 Used on Microboard 031-02430-000. 2 1 025-34566 16 FUSE, 15A (2FU) 2 1 025-14384 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-13991 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01796 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). 2 1 031-02066 Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nn.nn 031-02066 031-02066 Version C.MLM.nn.nn.nn.nn 031-02066 031-02066 031-02066 031-02066	12	CABLE, RIBBON (NEMA 1)	2, 8	1	031-01772-000
14 EPROM, BIOS (U45) Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000. 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34568 16 FUSE, 15A (2FU) 2 1 025-14384 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-1399 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01798 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nnnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Centers, Wersion C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Centers, but can be installed in any YR Optiview Control Centers.		(NEMA 4/12 & CE)	2, 8		031-02015-000
Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000. 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34568 16 FUSE, 15A (2FU) 2 1 025-14384 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-1399 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01798 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Centers. Version C.MLM.nn.nn.nn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Centers, but can be installed in any YR Optiview Control Centers.	13	CABLE, RIBBON (Electro-Mech. Starter App. Only)		1	031-01779-000
Not compatible with Microboard 031-02430-000. 15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34568 16 FUSE, 15A (2FU) 2 1 025-14384 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-13999 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01799 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nnnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Centers.	14	EPROM, BIOS (U45)	2	1	031-01796-002
15 FUSEHOLDER (For Item 7 and 8) 2 1 025-34568 16 FUSE, 15A (2FU) 2 1 025-14384 17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-13999 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01799 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Centers. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.		•			
16FUSE, 15A (2FU)21025-1438417FUSEHOLDER (For Item 7, 16 and 19)23025-139918CABLE, RIBBON (Electro-Mech. Starter App. Only)21031-017919FUSE, 2A (3FU)21025-3311620FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn21Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center.031-02068Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.031-02068		•			
17 FUSEHOLDER (For Item 7, 16 and 19) 2 3 025-1399 18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 2 1 031-01799 19 FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.	-	,			025-34565-000
18 CABLE, RIBBON (Electro-Mech. Starter App. Only) 19 FUSE, 2A (3FU) 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian. Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.	16				025-14384-000
FUSE, 2A (3FU) 2 1 025-33116 20 FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					025-13991-000
FLASH MEMORY CARD, PROGRAMMED (U46). Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					031-01799-000
Refer to note 5 for version analysis. Used on Microboard 031-01730-000 only. Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.	-				025-33116-000
Not compatible with Microboard 031-02430-000 Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.	20		2	1	
Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					
Allows Display Screens to be displayed in English, Chinese Traditional, Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.		·			024 02000 004
Chinese Simplified, French, Spanish, and Portuguese language. Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					031-02008-001
Supplied in new NEMA 1-4 OptiView Control Centers, but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					
but can be installed in any OptiView Control Center. Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					
Version C.MLM.nn.nn.nnn Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.		•			
Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.		out can be installed in any Ophiview Control Center.			
Allows Display Screens to be displayed in English, French, Italian, German or Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.		Version C MI M nn nn nnn			031-02068-002
Hungarian.Supplied in new CE Optiview Control Centers, but can be installed in any YR Optiview Control Center.					001-02000-002
any YR Optiview Control Center.					
2. J.	21	• •	4	1	024-30931-000
22 CONTACT BLOCK (NEMA 4/12, CE) 4 2 024-30932		· · · · · · · · · · · · · · · · · · ·			024-30932-000
					025-34122-000

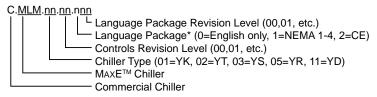
ITEM	DESCRIPTION		FIG. NO.	QTY.	PART NO.
24	SUPPRESSOR (Note 3)			6	031-00808-000
25	,	NT MOD. CM-2 (Electro-Mech. Starter App. Only)	3	1	031-00947-000
26	DIODE BRIDGE (Electro-Mechanical Starter App. Only)		3	1	031-00210-000
27	RESISTOR, VARIABLE (Electro-Mechanical Starter App. Only)		3	2	025-20789-000
27A	RESISTOR ASSEMBLY (includes both resistors configured for installation)		3, 6	1	575-00364-001
28	IC, BRAM-U52		2	1	031-02028-000
	Used on Microboard	•			
	· · · · · · · · · · · · · · · · · · ·	Microboard 031-02430-000			
29A	TRANSDUCERS	CONDENSER, OIL, DISCHARGE			025-28678-006
29B	EVAPORATOR – R134a, WATER & BRINE ALL TRANSDUCERS SUPPLIED WITH "O-RINGS"				025-28678-112
29E	SEAL, O-RING, FOR	ITEMS 29A and 29B			028-12961-002
30A	THERMISTORS	ENTERING CHILLED WATER TEMPERATURE			025-29964-000
					020 2000 : 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		DISCHARGE/OIL TEMPERATURE (Straight threads with "O-Ring")			025-31301-000
30G	SEAL, O-RING FOR	ITEMS 30F			028-12961-004
31	CIRCUIT BREAKER,	POLE, 6A (CE)	7	1	024-30935-000
32	SWITCH, DISCONNE	ECT (CE)	7	1	024-34171-000
33	CIRCUIT BREAKER,	25A (CE)	7	1	024-30956-000
34	CIRCUIT BREAKER	16A (CE)	7	1	024-30947-000
35	CIRCUIT BREAKER	(CE)	7	1	024-30936-000
36	MOUNT, ANTI-VIBRA	ATION	2	4	021-19191-000
37	BACKLIGHT BULB		8	1	See Note 4
38	BACKLIGHT INVERT	ER BOARD	8	1	See Note 4
39	BACKLIGHT INVERT	ER BOARD RIBBON CABLE	8	1	See Note 4
40	DISPLAY INTERFAC	E BOARD	8	1	See Note 4
41	DISPLAY INTERFAC	E BOARD RIBBON CABLE	8	1	031-01769-000
42	STRIP, NEOPRENE		8	2.8 FT	028-07533-000
43	MICROGATEWAY (C	PTIONAL)	2	1	(see YORK Control
					Systems Web Page)
44	WIRING HARNESS,	8 inch, Power Supply to Microboard J1			571-02264-272
	1	2 inch			571-03774-272
45	EVAPORATOR REF	RIGERANT TEMPERATURE SENSOR		1	025-34159-000
46	FUSE, F1 & F2, 5 Am 031-02430-000 Micro	np (Rev. "E" and later 031-01730-000 Microboards and all boards)	9	2	025-34592-000
47	FUSE, 5A (4FU, 6FU)	2	2	025-15759-000
48	FUSE, 4A (5FU)		2	1	025-34566-000
49	RS-485 Driver IC, U5	3, U54, U91	2	3	031-02074-000
	on 031-01730-000 M	icroboard			
	U45, U46, U47				
	on 031-02430-000 M	icroboard (supplied in packages of 4 each)			
50	HOUSING, CONNEC	CTOR P8, 22 position	2	1	025-34117-000

JOHNSON CONTROLS 3

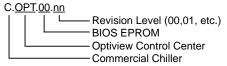
ITEM	DESCRIPTION	FIG. NO.	QTY.	PART NO.
51	HOUSING, CONNECTOR P9, 20 position	2	1	025-34116-000
52	CONTACTS, SOCKETS for P8, P9	2	42	025-28386-000
53	EPROM, BIOS (U37)	2	1	031-02429-001
	Used on Microboard 031-02430-000 only.			
	Not compatible with Microboard 031-01730-000. (refer to note 6 for version analysis)			
54	BRAM (U38)	2	1	031-02431-000
	Used on Microboard 031-02430-000 only.			
	Not compatible with Microboard 031-01730-000			
55	PROGRAM CARD	5	1	031-02489-001
	Used to download YR chiller operating program into 031-02430-000 Microboads.			
	Contains chiller operating program. (refer to note 7 for version analysis)			

NOTES:

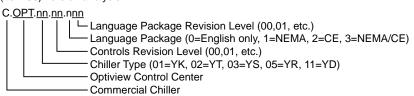
- 1. The replacement Liquid Crystal Display supplied by YORK might not be by the same manufacturer as the original Display. Each Display requires a specific Display Interface Board (Item 40), Backlight Inverter Board (Item 38), and Backlight Inverter Board ribbon cable (Item 39). Therefore, the Liquid 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 Micro Board Program Jumpers. These Program Jumpers must be configured for this Display by a qualified Service Technician following instructions in YORK Service manual 160.81-M1. The contents of the kit are as follows:
 - a. Liquid Crystal Display
 - b. Backlight Bulb (Item 37)
 - c. Appropriate Display Interface Board (Item 41) for Display
 - d. Appropriate Display Interface Board ribbon cable (Item 41) for Item 40.
- e. Appropriate Backlight Inverter Board (Item 38) for Display.
- f. Appropriate Backlight Inverter Board ribbon cable (Item 39) for Item 40.
- g. All mounting hardware.
- h. Installation instructions.
- 2. Return all unused Flash Memory Cards with warranty return microboards.
- 3. Extra suppressors are shipped in cloth bag. They are applied at solenoids and relays located on chiller.
- 4. Refer to label (Fig. 8) 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!
- 5. Flash Memory Card (item 20) version analysis:

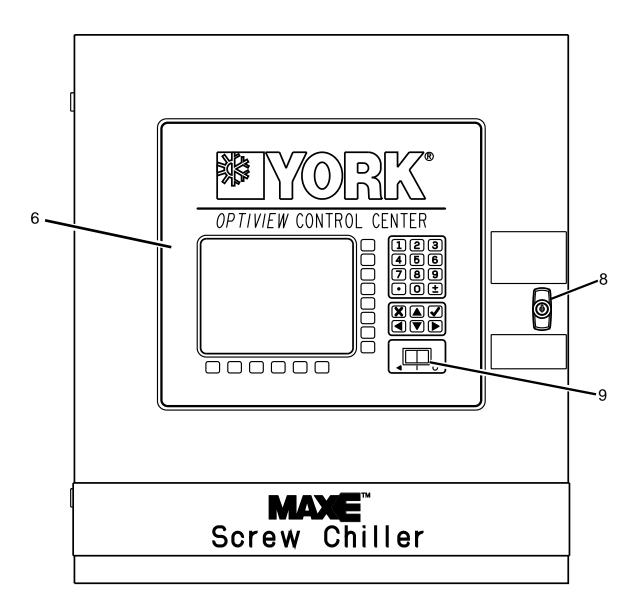


- *1 = Supplied in new NEMA 1-4 OptiView Control Centers but can be installed in any OptiView Control Center.
- 2 = Supplied in new CE (European Community) OptiView Control Centers but can be Installed in any OptiView Control Center. Return all unused Flash memory Cards with Warranty return boards.
- 6. BIOS Eprom (item 53) version analysis:



7. Program Card (item 56) version analysis:





LD10401

5

FIG. 1 – FRONT OF GRAPHIC CONTROL CENTER

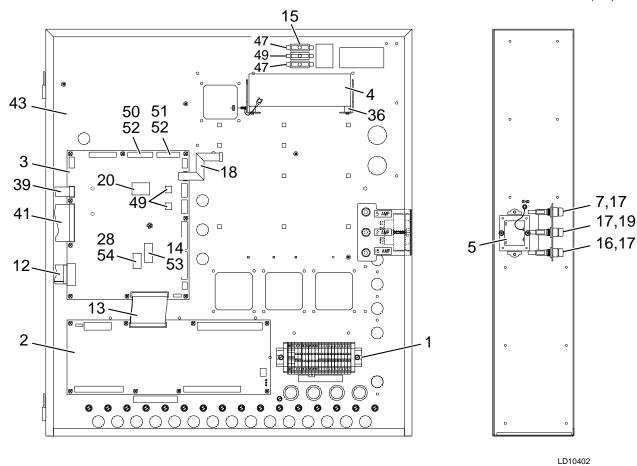


FIG. 2 - INSIDE OF CONTROL CENTER

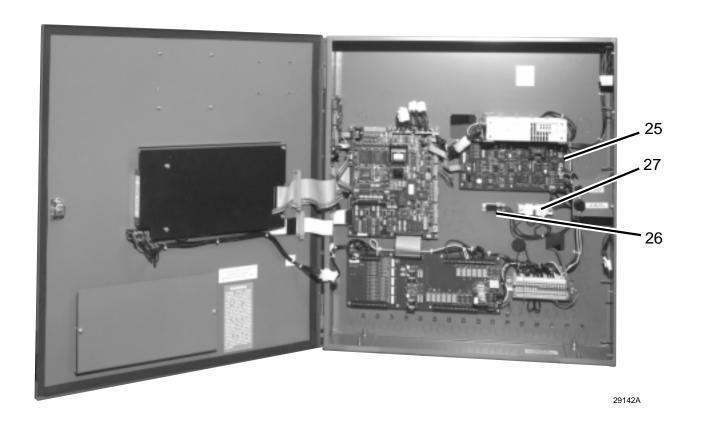


FIG. 3 – EM STARTER

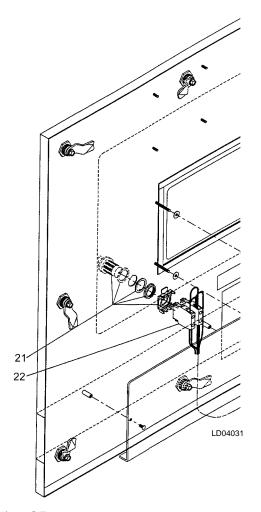


FIG. 4 - INSIDE OF DOOR - NEMA 4/12, CE

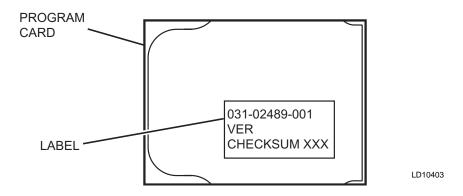
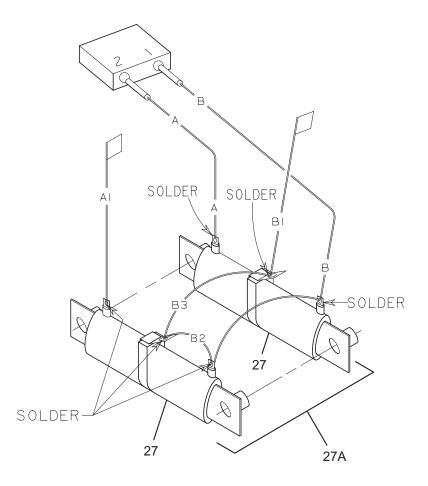


FIG. 5 – PROGRAM CARD (ITEM 55)



LD10329

FIG. 6 – RESISTOR ASSEMBLY (ITEM 27A)

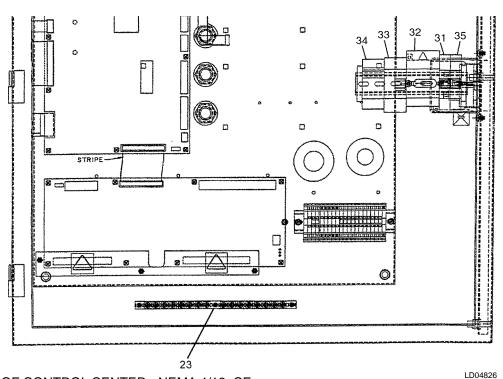


FIG. 7 – INSIDE OF CONTROL CENTER - NEMA 4/12, CE

8

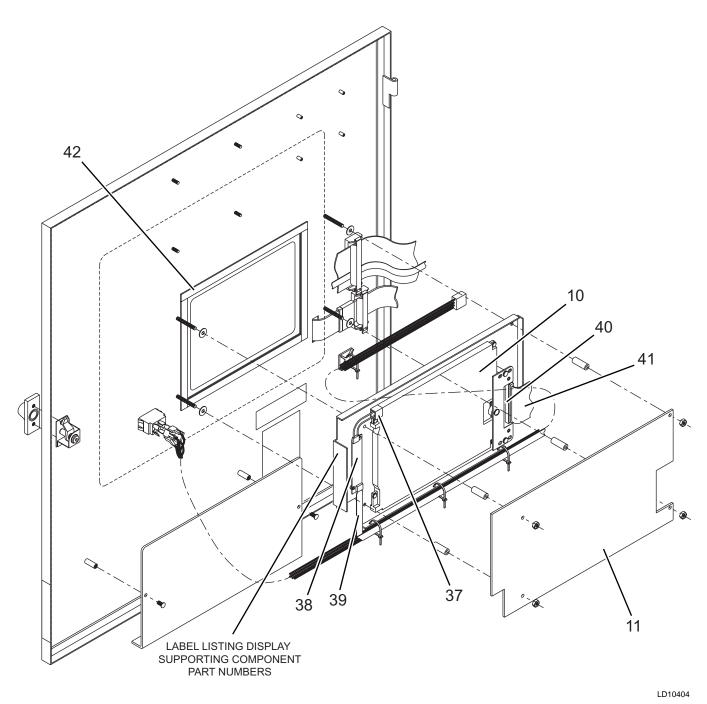
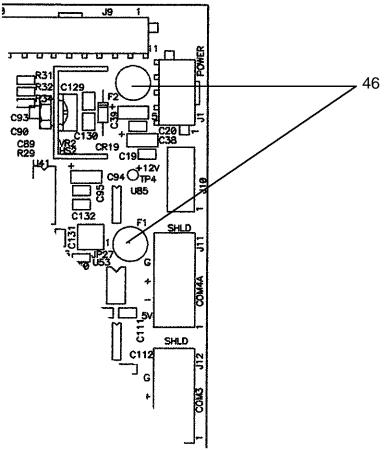


FIG. 8 – DISPLAY COMPONENTS (See Notes 1 & 4, Page 3)



LD06383

FIG. 9 - MICROBOARD FUSES

10 JOHNSON CONTROLS



Form Number: 160.81-RP3 (LS02)

1206

Supersedes: None

LITERATURE SUPPLEMENT

File with: 160.81-RP3 (105), 160.81-M1 (106)

Subject: Replacement MicroBoards - OptiView Control Center

Previously, replacement Microboards for Optiview Control Centers have been supplied as a kit under part number 331-02430-60X that included the Microboard along with the latest version of the applicable Program Card. After installing the Microboard, the Service Technician was required to download the chiller operating software into the Microboard from the Program Card.

Beginning December 2006, replacement Microboards for the below listed Optiview Control Centers will be supplied **pre-programmed** with the latest software version. Therefore, it will NOT be necessary to download the chiller operating software from a Program Card as was the case previously. Since it is no longer required, the Program Card is not provided with the replacement Microboard.

The pre-programmed boards will be supplied with a label on the outside of the shipping box that lists the part number of the programmed Microboard (for example, 331-02430-601), the basic Microboard part number (for example, 031-02430-001) and the version of the pre-programmed software (for example, C.OPT.01.14.306). The presence of this label indicates the box contains a pre-programmed board.

To order a replacement Microboard, order the applicable 331-02430-60X number from the "Order this part number" column for the chiller in which it will be installed. You'll receive a microboard programmed with software applicable to the chiller for which it was ordered. Microboards cannot be ordered by the 031-02430-XXX part number, as they will not be loaded with software.

IMPORTANT! If an incorrect Microboard is ordered and installed, the chiller will not operate. For example, a board programmed for a YT chiller will not operate a YR chiller.

Chiller	Order P/N:	You will receive:
YK	331-02430-601	Microboard 031-02430-001 programmed with latest YK software
YT	331-02430-602	Microboard 031-02430-000 programmed with latest YT software
YS	331-02430-603	Microboard 031-02430-000 programmed with latest YS software
YR	331-02430-605	Microboard 031-02430-000 programmed with latest YR software
YD	331-02430-606	Microboard 031-02430-000 programmed with latest YD software

Due to inventory rollout, you might receive an un-programmed replacement Microboard as previously packaged with the Program Card. If this is the case, download the software from the Program Card as done previously.

As in the past, the Microboard software can still be updated by downloading a program from a Program Card. Program cards will still be available for this purpose.



