

GRAPHIC CONTROL CENTER INSTALLATION INSTRUCTIONS

ELECTRO MECHANICAL STARTER (EM) APPLICATIONS

375-38308-102

1. REMOVE THE FOLLOWING FROM THE OLD CONTROL CENTER FOR REUSE IN THE NEW GRAPHIC CONTROL CENTER:  
 A.) CM-2 BOARD (031-00947-000) AND BOARD MOUNTING HARDWARE  
 B.) CM-2 BOARD P5 RIBBON CABLE  
 C.) DIODE BRIDGE, RESISTORS AND P1 PLUG AND ASSOCIATED WIRING
2. DISCONNECT ALL WIRING FROM THE EXISTING CONTROL CENTER BY DISCONNECTING THE PLUGS AND REMOVE FROM CONTROL CENTER.
3. REMOVE EXISTING CONTROL CENTER.
4. MOUNT NEW GRAPHIC CONTROL CENTER, ITEM 1, ONTO THE EXISTING BRACKETS USING ITEMS 24, 25 AND 26 PER DETAIL E ON DRAWING 075-38308-001. DRILL THE BRACKETS AS REQUIRED TO MOUNT THE CONTROL CENTER.
5. INSTALL THE CM-2 BOARD, DIODE BRIDGE, RESISTORS AND WIRING, REMOVED FROM THE OLD PANEL IN STEP 2, IN NEW GRAPHIC PANEL. INSTALL MOUNTING HARDWARE IN HOLES PROVIDED IN NEW PANEL.  
 A.) CONNECT RIBBON CABLE FROM CM-2 BOARD J5 TO MICRO BOARD J10.  
 B.) CONNECT P3 IN NEW PANEL TO CM-2 BOARD J3.  
 C.) CONNECT P2 IN NEW PANEL TO CM-2 BOARD J2  
 D.) CONNECT EXISTING CABLES FROM P34 TO THE DIODE BRIDGE AND J1 TO THE CM-2 BOARD
6. REPLACE THE EVAPORATOR PRESSURE TRANSDUCER WITH THE NEW SUPPLIED TRANSDUCER, ITEM 4, 5 OR 6, PER CHART. USE ITEM 7 (NPTF THREAD TO SAE STRAIGHT THREAD ADAPTER) WHERE NECESSARY.
7. IF IT IS NOT NECESSARY TO INSTALL NEW SHIELDED CABLES. USE THE EXISTING SHIELDED CABLES AND CONNECT THEM TO THE NEW MICRO BOARD J8 AND J9 USING CONNECTOR ADAPTER HARNESS, ITEM 2, PER NEXT STEP. HOWEVER, IF THE EXISTING SHIELDED CABLES ARE NOT LONG ENOUGH, INSTALL ALL NEW SHIELDED CABLES, ITEM 3, AND CONNECT TO TRANSDUCERS AND THERMISTORS PER DRAWING 075-38308-001 AND TERMINATE PER DETAIL "X". USE ITEMS 8 AND 9 AT THE CHILLED LIQUID SENSOR LOCATIONS FOR CABLE AND STRAIN RELIEF.
8. ROUTE SHIELDED CABLES THROUGH MICRO PANEL HOLE "A" AND CONNECT TO MICRO BOARD J8 AND J9 PER DRAWING 075-38308-005. IF EXISTING SHIELDED CABLES ARE BEING USED, SECURE CABLES TO CONTROL CENTER WITH ADAPTER PLATE (071-02447-000) AND 1" STRAIGHT CONNECTOR (025-12282-000) FROM SUPPLIED SHIELDED CABLE ASSEMBLIES AND USE CONNECTOR ADAPTER, ITEM 2, TO CONNECT THESE CABLES TO THE MICRO BOARD.
9. CONNECT THE CT WIRING TO P34.
10. CONNECT REMAINDER OF SYSTEM WIRING USING CONNECTORS J30 THRU J33.
11. VERIFY THE SETTINGS ON THE TWO RESISTORS CONNECTED TO THE DIODE BRIDGE AND CONFIRM THE ADJUSTMENT ON THE LRA/FLA RATIO POT ON THE CM-2 BOARD. THE CALIBRATION ON THE CM-2 BOARD SHOULD NOT HAVE TO BE RE-CALIBRATED. HOWEVER, IT SHOULD BE CHECKED FOLLOWING INSTRUCTIONS IN "SYSTEM CALIBRATION, SERVICE SETPOINTS AND RESET PROCEDURES" SECTION OF YS GRAPHIC CONTROL CENTER SERVICE MANUAL 160.80-M1.
12. ATTACH THE FIELD WIRING LABEL, ITEM 18, TO THE DRAWING POCKET LOCATED ON THE INSIDE OF THE CONTROL CENTER DOOR. ATTACH WARNING LABEL, ITEM 19, TO THE OUTSIDE OF THE OIL PUMP STARTER ENCLOSURE AND THE SURFACE OF THE MOTOR TERMINAL BOX.
13. FOLLOW "SYSTEM COMMISSIONING CHECKLIST" IN YS GRAPHIC CONTROL CENTER SERVICE MANUAL 160.80-M1 TO PROGRAM THE SETPOINTS AND CONFIGURE PROGRAM JUMPERS/SWITCHES IN THE NEW CONTROL CENTER.

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	371-02459-101	GRAPHIC DISPLAY CONTROL PANEL
2	1	571-02459-231	HARNESS, CONNR ADAPTER
3	1	575-38308-421	HARNESS, SHIELDED CABLE ASSY.
4	1	025-28678-113	TRANSDUCER, EVAPORATOR PRESSURE
5	1	025-28678-114	TRANSDUCER, EVAPORATOR PRESSURE
6	1	025-28678-112	TRANSDUCER, EVAPORATOR PRESSURE
7	1	023-19090-000	ADAPTER, M X F
8	10	025-09607-000	STRAP, CABLE
9	32	025-18167-000	STRAP, CABLE
10	30	025-28952-000	CONTACT, RECEPTACLE
11	30	025-28950-000	COLLAR RUBBER, BLACK
12	6	025-28951-000	CONNECTOR PLUG HSG, 2 PD
13	5	025-28954-000	CONNECTOR PLUG HSG, 3 PD
14	5	025-28386-000	CONTACT, SOCKET
15	3	035-17155-000	INSTR. OPERATING AND MAINTENANCE
16			
17	1	029-22962-000	APPLICATOR, AMP HAND TOOL
18	1	035-17142-000	LABEL, FIELD WIRING
19	1	035-03908-000	LABEL, WARNING
20	1	075-38308-001	DWG-KIT, FIELD INSTALLATION
21	1	075-38308-005	DIAGRAM, CONNECTION
22	1	075-38308-006	DIAGRAM, CONNECTION
23	1	075-38308-007	DWG-KIT, RETROFIT
24	4	021-13204-000	SCREW CAP HEX 1/4-20 UNC-2A
25	8	021-01148-000	LKWASH TH INT 1/4
26	4	021-00451-000	NUT HEX 1/4-20 UNC-2B

EVAPORATOR PRESSURE TRANSDUCER (ITEMS 4, 5 & 6)

REFRIGERANT	LIQUID	TRANSDUCER P/N
R22	WATER	025-28678-113
R22	BRINE	025-28678-114
R134a	ALL	025-28678-112

MOD D ELECTRO MECHANICAL STARTER

**YORK INTERNATIONAL CORPORATION**

YORK, PA. 17405

REV. LEV.	DATE	REVISION RECORD	CHG. NO.	DR.	CK.	REV. LEV.	DATE	REVISION RECORD	CHG. NO.	DR.	CK.	DIMENSIONS ARE IN INCHES DO NOT SCALE TOLERANCES PER ENG. STD. M-282 WELDING PER ENG. STD. M-30 REF. DWG.		DWG-KIT, RETROFIT SPECTRUM GRAPHIC CONTROL CENTER YS		MATERIAL TYPE _____ ENG. STD. _____ PART NO. _____ CUT SIZE _____	
-		NEW	0799 3055									NAME DATE DR. C.S. HUCKENBERRY 10-05-99 APPR. R.A. TIFFANY 12-03-99 SCALE: N.T.S.	SIZE <b>C</b>	CAGE NO 66935	DRAWING NUMBER 075-38308-007		
A	10-24-01	REV. NOTES 3 AND 4: ADDED ITEMS 24, 25 AND 26 IN 375-38308-102.	0801 3350	CSH	ARD											WT. =	LBS.

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