



## TECHNICAL SERVICE BULLETIN

<b>Subject:</b> NMR-262 changing thermostat from thumbwheel switch to NEW touch pad style	<b>Bulletin No:</b> 061206
	<b>Last Issued:</b> 12/29/2006

### DESCRIPTION

To update the NMR-262 units that contain the K31-53199-10 thermostat and thumbwheel selectors to the new style K31-00871-10 thermostat and touch pad.

### PROCEDURE

1 – Remove the old thermostat.

2 – Relocate the existing jumper wire on the green thermostat holder.  
Remove wire from old location 33 to 36 to new location 37 to 38 (see schematic).

3 - Disconnect wire 11 and insulate the end. This can be done at the terminal block or at the thermostat holder.

(In the original system the circuit breaker CB4 would trip created a warning to show when a system changeover occurred and this function is now included in the new thermostat software. The thermostat led light that created the fault will remain on should a changeover occur).

4 – Install the new thermostat and schematics.

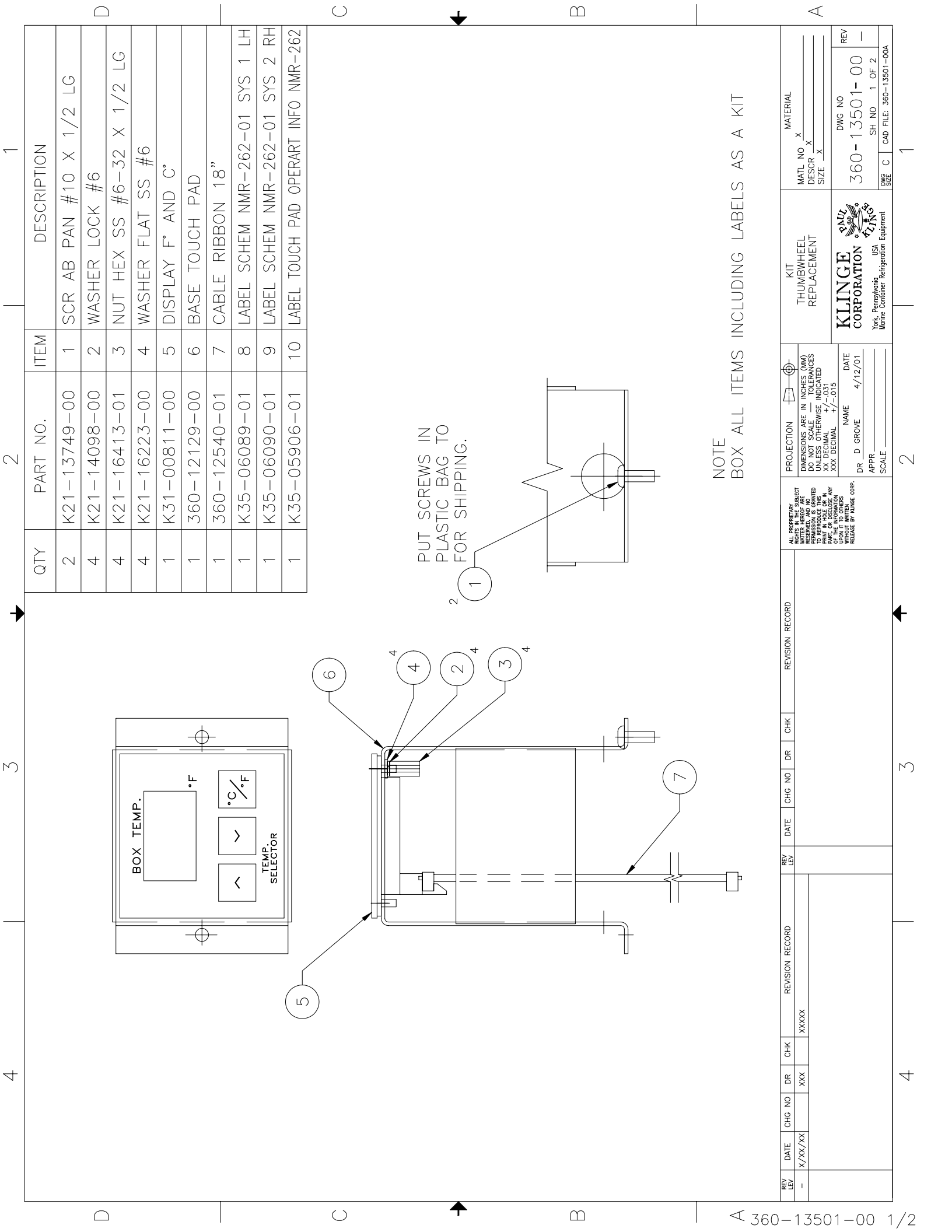
5 – Remove old thumbwheel switch and bracket. Then install the new touch pad and bracket.

Note – Both systems need to be changed for the thermostat functions to work property. Changing the new thermostats on both systems require the quantity of 2.

### CONVERSION PARTS

Item	Part Number	Description	Qty	List Price 2006
1	K31-00871-10	Thermostat	2	\$ 1475 each
2	360-13501-00	Kit touch pad replacement for thumbwheel	2	\$ 502 each

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PUT SCREWS IN PLASTIC BAG TO FOR SHIPPING.

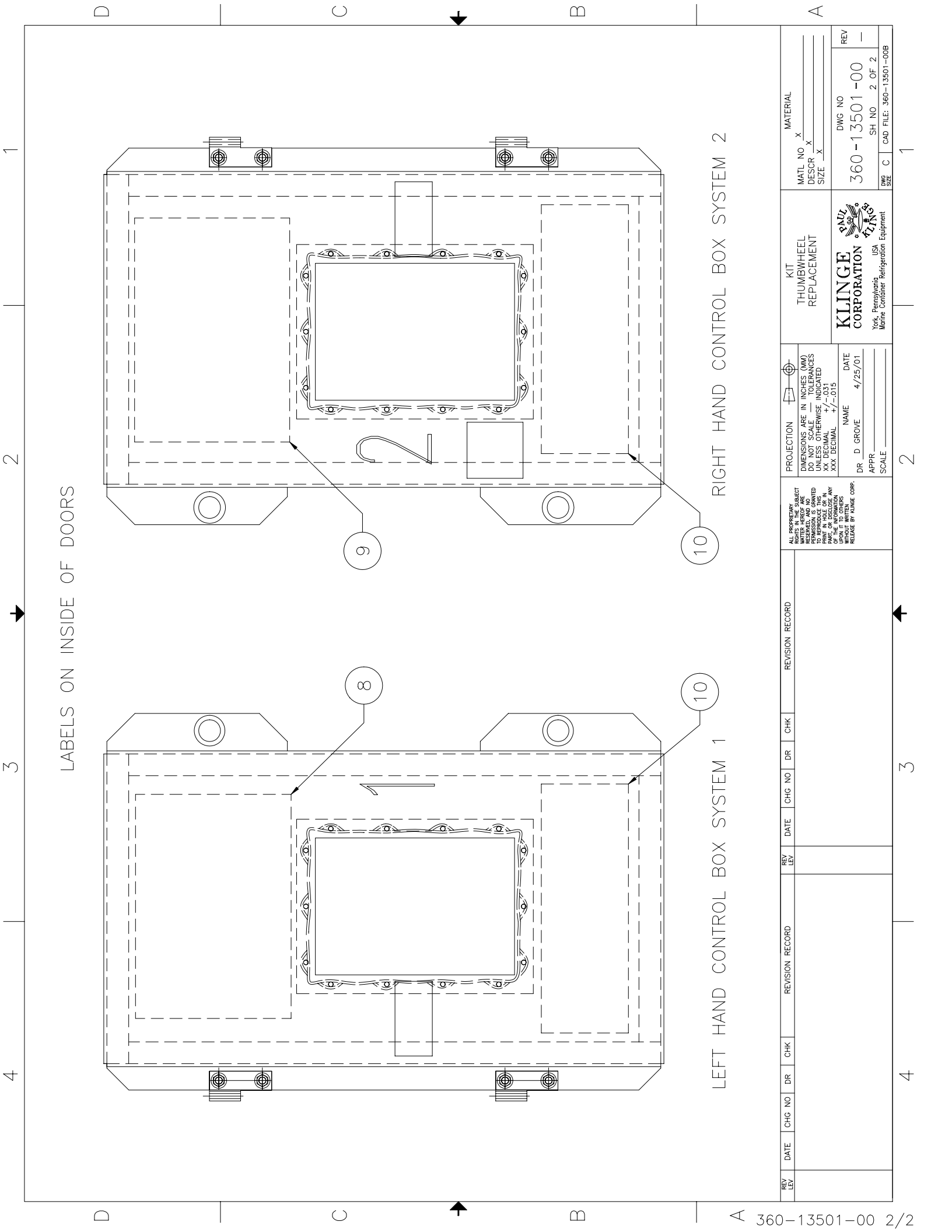
NOTE  
BOX ALL ITEMS INCLUDING LABELS AS A KIT

QTY	PART NO.	ITEM	DESCRIPTION
2	K21-13749-00	1	SCR AB PAN #10 X 1/2 LG
4	K21-14098-00	2	WASHER LOCK #6
4	K21-16413-01	3	NUT HEX SS #6-32 X 1/2 LG
4	K21-16223-00	4	WASHER FLAT SS #6
1	K31-00811-00	5	DISPLAY F° AND C°
1	360-12129-00	6	BASE TOUCH PAD
1	360-12540-01	7	CABLE RIBBON 18"
1	K35-06089-01	8	LABEL SCHEM NMR-262-01 SYS 1 LH
1	K35-06090-01	9	LABEL SCHEM NMR-262-01 SYS 2 RH
1	K35-05906-01	10	LABEL TOUCH PAD OPERART INFO NMR-262

REV	LEV	DATE	CHG NO	DR	CHK	REVISION RECORD	REV	LEV	DATE	CHG NO	DR	CHK	REVISION RECORD
-		X/XX/XX		XXX		XXXXX							

ALL PROPRIETARY RIGHTS IN THE SUBJECT MATTER ARE RESERVED, AND NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION BY KLINGBECK CORP.	DIMENSIONS ARE IN INCHES (MAX) UNLESS OTHERWISE INDICATED TOLERANCES UNLESS OTHERWISE INDICATED XX DECIMAL +/- .031 XXX DECIMAL +/- .015	PROJECTION 	KIT THUMBWHEEL REPLACEMENT	MATERIAL MATL NO X DESCR X SIZE X
DR D GROVE	DATE 4/12/01		<b>KLINGBECK CORPORATION</b> YORK, PENNSYLVANIA, USA Marine Container Refrigeration Equipment	DWG NO <b>360-13501-00</b> SH NO 1 OF 2 CAD FILE: 360-13501-00A
APPR	SCALE			



LABELS ON INSIDE OF DOORS

RIGHT HAND CONTROL BOX SYSTEM 2

LEFT HAND CONTROL BOX SYSTEM 1

REV LEV	DATE	CHG NO	DR	CHK	REVISION RECORD	REV LEV	DATE	CHG NO	DR	CHK	REVISION RECORD

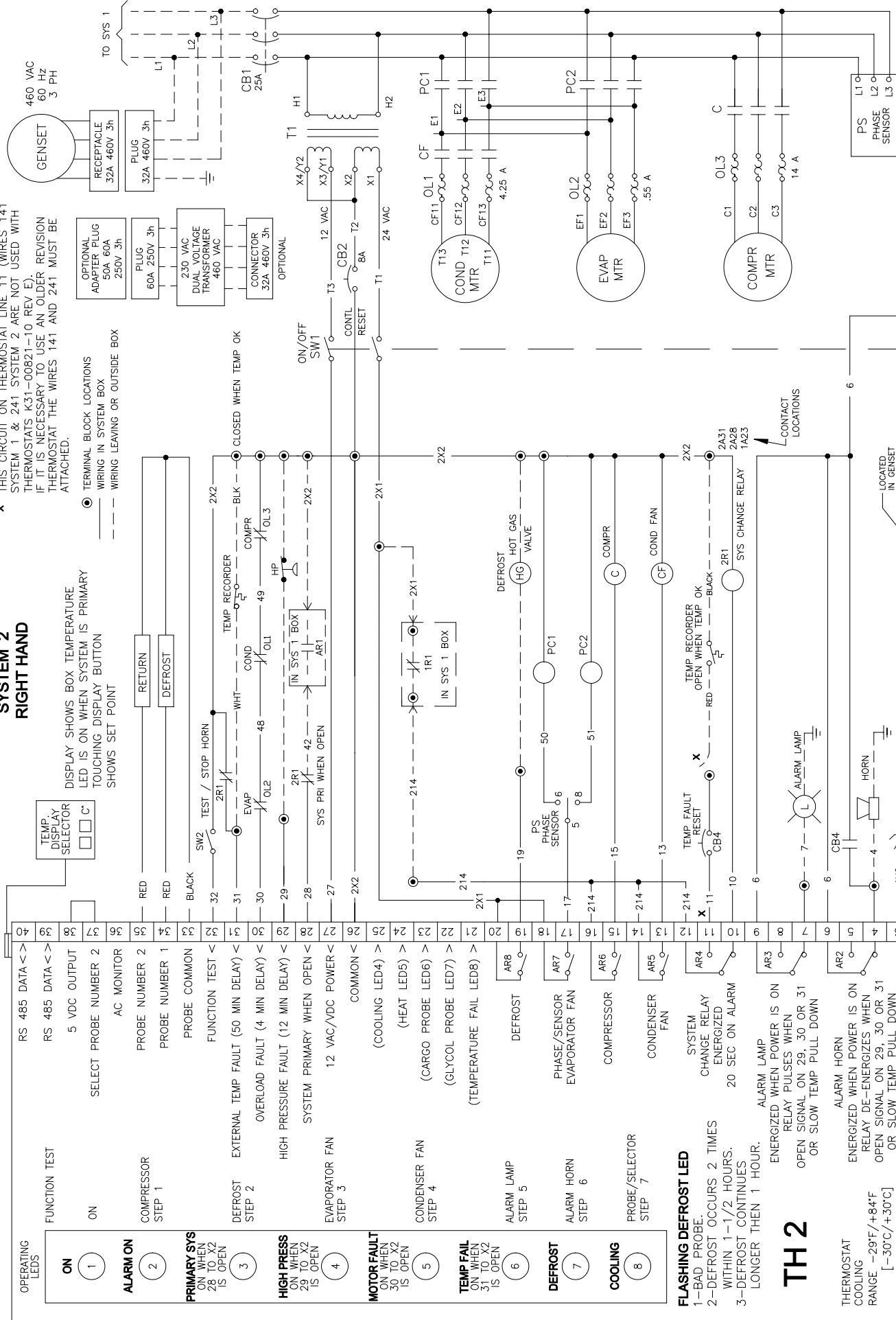
  

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<p>KLINGBEIL CORPORATION            York, Pennsylvania, USA            Marine Container Refrigeration Equipment</p>		<p>NAME            DR D GROVE</p> <p>DATE            4/25/01</p> <p>APPR _____</p> <p>SCALE _____</p>	<p>DWG NO            360-13501-00</p> <p>SH NO            2 OF 2</p> <p>CAD FILE            360-13501-00B</p>	



## SYSTEM 2 RIGHT HAND

- x** THIS CIRCUIT ON THERMOSTAT LINE 11 (WIRES 141 SYSTEM 1 & 241 SYSTEM 2 ARE NOT USED WITH THERMOSTATS K31-00821-10 REV E). IF IT IS NECESSARY TO USE AN OLDER REVISION THERMOSTAT THE WIRES 141 AND 241 MUST BE ATTACHED.



● TERMINAL BLOCK LOCATIONS  
 ○ WIRING IN SYSTEM BOX  
 --- WIRING LEAVING OR OUTSIDE BOX

DISPLAY SHOWS BOX TEMPERATURE LED IS ON WHEN SYSTEM IS PRIMARY TOUCHING DISPLAY BUTTON SHOWS SET POINT

TEMP. DISPLAY SELECTOR  
 □ C°  
 □ F°

RETURN  
 DEFROST

SW2 TEST / STOP HORN  
 EVAP  
 HP  
 COND  
 WHIT  
 COMPR  
 OL3  
 OL2  
 OL1

IN SYS 1 BOX  
 AR1

IN SYS 1 BOX  
 IR1

DEFROST  
 HC  
 VALVE

PS  
 PHASE SENSOR

CONDENSER FAN  
 COND FAN

SYSTEM CHANGE RELAY ENERGIZED  
 20 SEC ON ALARM

ALARM LAMP  
 ENERGIZED WHEN POWER IS ON RELAY PULSES WHEN OPEN SIGNAL ON 29, 30 OR 31 OR SLOW TEMP PULL DOWN

ALARM HORN  
 ENERGIZED WHEN POWER IS ON RELAY DE-ENERGIZES WHEN OPEN SIGNAL ON 29, 30 OR 31 OR SLOW TEMP PULL DOWN

ENERGIZED WHEN DEFROST PULSES ON DEFROST

TO SYS 1  
 LINE 28

TO SYS 1  
 21  
 14  
 15  
 17  
 12 VDC  
 BATTERY CHARGER

FUNCTION TEST	RS 485 DATA <>	RS 485 DATA <>	5 VDC OUTPUT	SELECT PROBE NUMBER 2	AC MONITOR	PROBE NUMBER 2	PROBE NUMBER 1	PROBE COMMON	FUNCTION TEST <	EXTERNAL TEMP FAULT (50 MIN DELAY) <	OVERLOAD FAULT (4 MIN DELAY) <	HIGH PRESSURE FAULT (12 MIN DELAY) <	SYSTEM PRIMARY WHEN OPEN <	12 VAC/VDC POWER <	COMMON <	(COOLING LED4) >	(HEAT LED5) >	(CARGO PROBE LED6) >	(GLYCOL PROBE LED7) >	(TEMPERATURE FAIL LED8) >	DEFROST	PHASE/SENSOR EVAPORATOR FAN	COMPRESSOR	CONDENSER FAN	SYSTEM CHANGE RELAY ENERGIZED	20 SEC ON ALARM	ALARM LAMP	ALARM HORN	PROBE/SELECTOR
ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

**OPERATING LEADS**  
**ON**  
 1  
**ALARM ON**  
 2  
**PRIMARY SYS**  
 ON WHEN 28 TO X2 IS OPEN  
 3  
**HIGH PRESS**  
 ON WHEN 29 TO X2 IS OPEN  
 4  
**MOTOR FAULT**  
 ON WHEN 30 TO X2 IS OPEN  
 5  
**TEMP FAIL**  
 ON WHEN 31 TO X2 IS OPEN  
 6  
**DEFROST**  
 7  
**COOLING**  
 8

**FLASHING DEFROST LED**  
 1-BAD PROBE.  
 2-DEFROST OCCURS 2 TIMES WITHIN 1-1/2 HOURS.  
 3-DEFROST CONTINUES LONGER THEN 1 HOUR.

**TH 2**  
 THERMOSTAT COOLING RANGE -29°F/+84°F [-30°C/+30°C]

**K31-00871-10 REV J**  
 REV F THROUGH H - CAN BE USED BUT DEFROST FUNCTIONS WILL BE DIFFERENT

AR RELAYS ARE SHOWN IN POWER OFF POSITION

CONTACT LOCATIONS

LOCATED IN GENSET CONTROL BOX

TO SYS 1  
 21  
 14  
 15  
 17  
 12 VDC  
 BATTERY CHARGER

TO SYS 1  
 21  
 14  
 15  
 17  
 12 VDC  
 BATTERY CHARGER

## ELECTRICAL SCHEMATIC NMR-262-01 SYS 2 WITH PARTFLOW RECORDER

