



Millennium[®]
GAS-ENGINE-DRIVE CHILLERS

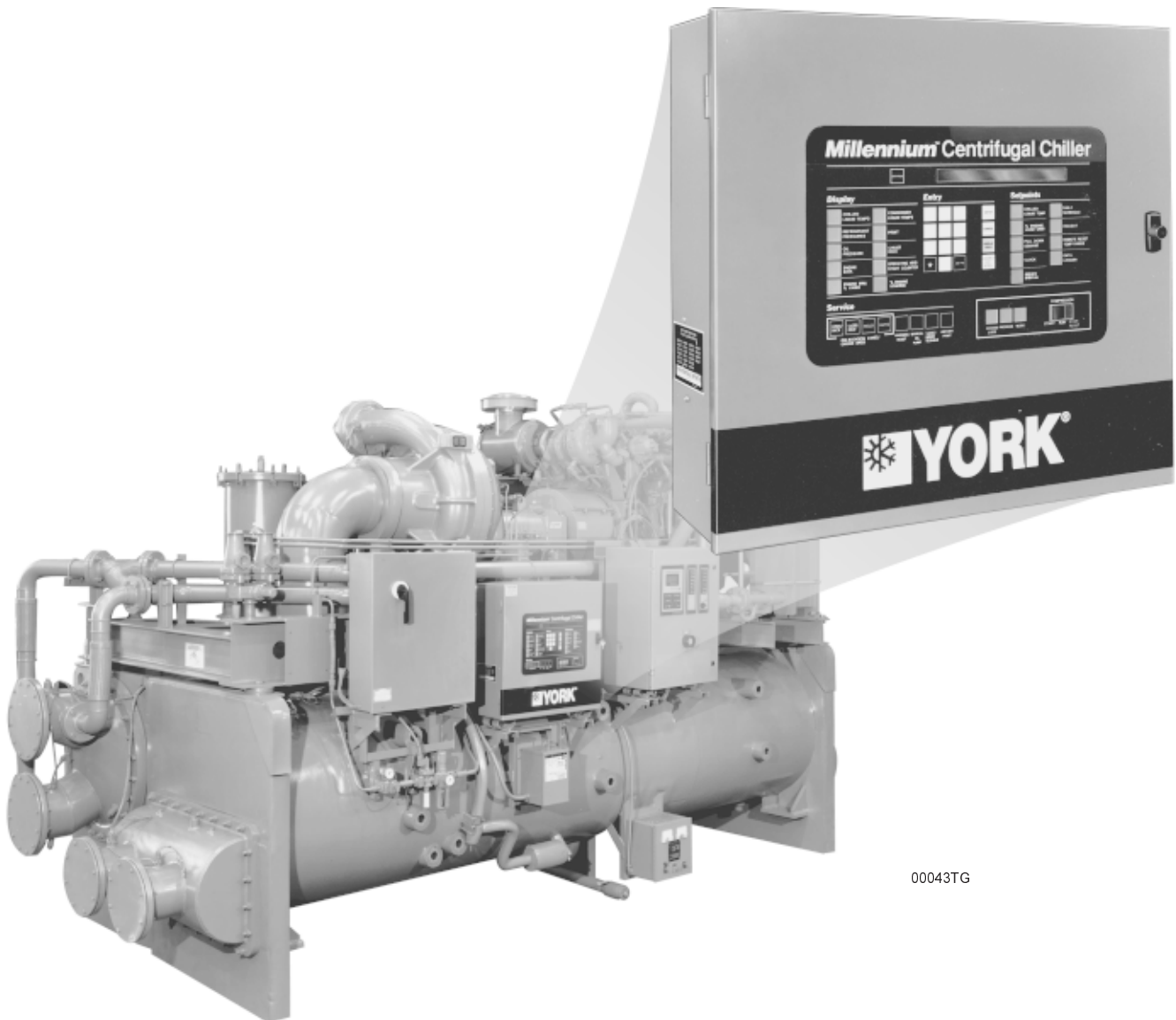
RENEWAL PARTS & PARTS LOCATION

Supersedes: See Back Cover

Form 160.66-RP2 (698)

**MICROCOMPUTER CONTROL CENTER
PART NO. 371-01469-000**

**MODEL YB
(DESIGN LEVEL A)**



00043TG

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HOW TO ORDER PARTS

Contact the local YORK District Service Office nearest to you to order the parts in the manual. Use the YORK Part Number when ordering your parts. For those parts in this manual which do not have YORK Part Numbers, order them by the description as described in this manual. (Give the form number and page number when ordering these parts.)

YORK MICRO PANEL

(See Figs. 1 thru 5)

ITEM	DESCRIPTION	QTY.	FIG. NO.	PAGE NO.	PART NO.
1	Relay (1R)	1	1	4	024-23962-000
2	Transformer (1T)	1	1	4	025-27911-000
3	Fuse (1FU), 5A	1	1	4	025-14109-000
4	Control, I/O Expansion Board (Note 3)	1	1	4	031-01580-001
5	Control, Power Supply	1	1	4	031-01080-000
6	Control, Digital Input	1	1	4	031-00935-000
7	Fastener, Pawl Adjustable	1	3	4	021-17252-000
8	Display	1	2	4	031-00775-001
9	Switch, Rocker	1	3	4	024-23143-000
10	Suppressor	1	1	4	031-00808-000
11	Control Micro Board (Note 2)	1	1	4	031-01065-001
12	Keypad	1	3	4	024-26915-000
13	EPROM, Programmed	1	4	5	031-01629-000
14	Control, Relay Board	1	1	4	031-01581-000
15	Fuse Holder (1FU)	1	1	4	025-13991-000
16	Control, Remote Reset (Cust. Option)	Note 1	1	4	031-00814-000
17	Card File (Customer Option)	1	1	4	031-00827-000
18	IC, Real Time Clock – U16	1	4	5	031-00955-000
19	Cable, Ribbon – I/O Ex. Board, J9, J10	2	1	4	031-01322-000
20	Cable, Ribbon – Relay Board J3	1	1	4	031-01323-000
21	Cable, Ribbon – Keypad	1	1	4	031-00950-000
22	Cable, Ribbon – Relay Board J1	1	1	4	031-00951-000
23	Cable, Ribbon – Display	1	2	4	031-00952-000
24	Cable, Ribbon – Digital Input Board, J1	1	1	4	031-00953-000
25	Cable, Ribbon – Micro Board, J2	1	1	4	031-01321-000
26	Transducers For YORK Panel:	—	—		—
	Cond. High Oil (R-134a Water or Brine)	1	5	6	025-28678-001
	Evaporator (R-134a Water or Brine)	1	5	6	025-28678-005
	Low Oil (R-134a Water or Brine)	1	5	6	025-28678-001
27	Fuse (2FU), 20A	1	1	4	025-28967-000
28	Fuse Holder (2FU)	1	1	4	025-17407-000
29	PRV Feedback Pot (Kit)	1	5	6	375-17779-000
30	Prox. Sensor	1	5	6	025-30472-000
31	Vane Motor	1	5	6	Refer to Mech. Chiller P.T.'s List
32	High Press. Cutout	1	5	6	025-29165-000
33	1 LEP (Brine Only)	1	—		—
34	Flow Switch (150 Lb.)	1	—		024-15793-000
35	Flow Switch (300 Lb.)	1	—		024-12144-000

NOTES:

1. If is desired to remotely reset both the leaving water temp. setpoint and the load limit setpoint, 2 each remote reset boards are required. Otherwise, only 1 each is required.
2. Replacement Micro Boards are supplied without EPROM. Remove EPROM from defective board and use in replacement board.
3. Use ONLY 031-01580-001 I/O Expansion Board P.C.B. Part Number when ordering for use in the "YB" units. This part number is for the addition of a 4-20mA input at J6 for the vibration sensor used on the "YB" units.

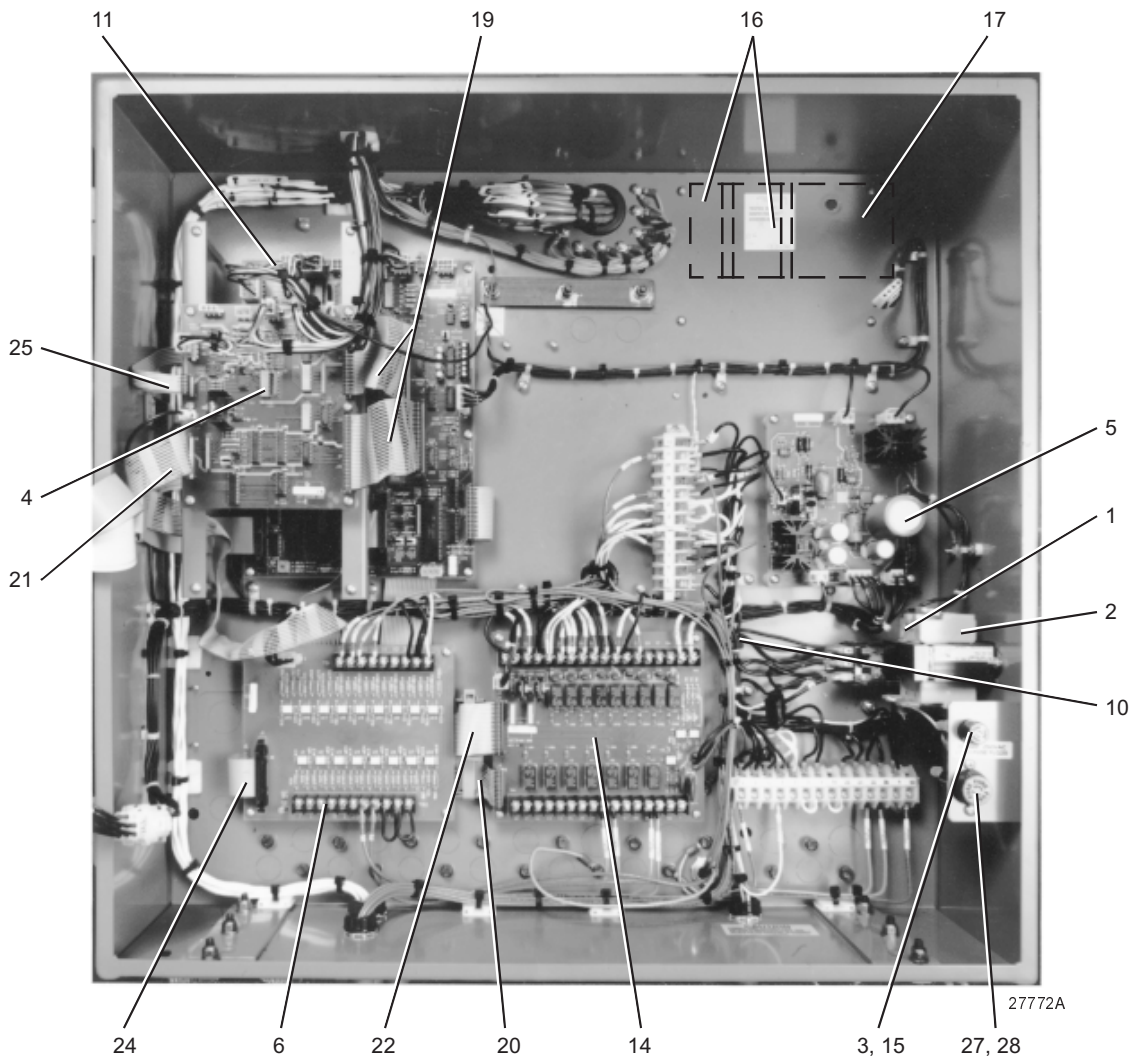


FIG. 1 – YORK MICRO PANEL CONTROL CENTER (INSIDE)



FIG. 2 – YORK MICRO PANEL CONTROL CENTER (DOOR OPENED)

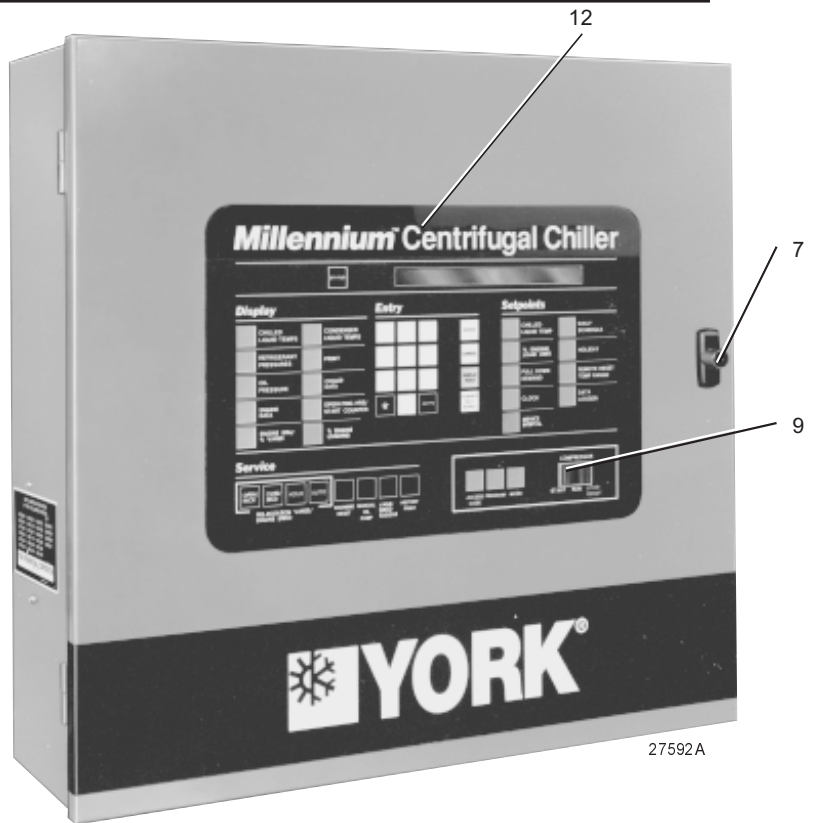


FIG. 3 – YORK MICRO PANEL CONTROL CENTER

LEGEND

- RT1 LEAVING CHILLED WATER SENSOR
- RT2 DISCHARGE TEMP. SENSOR
- RT3 OIL TEMP SENSOR
- RT4 LEAVING CONDENSER WATER SENSOR
- RT5 ENTERING CONDENSER WATER SENSOR
- RT9 ENTERING CHILLED WATER SENSOR
- RT10 AFTER-COOLER GLYCOL TEMP.
- T1 TRANSFORMER
- LLS LIQUID LEVEL SENSOR
- HOP HIGH OIL PRESS. TRANSDUCER
- LOP LOW OIL PRESS. TRANSDUCER
- CP CONDENSER PRESS. TRANSDUCER
- EP EVAPORATOR PRESS. TRANSDUCER
- 1-SOL OIL RETURN SOLENOID VALVE
- 2-SOL LIQUID LINE SOLENOID VALVE
- 3-SOL* VENT LINE SOLENOID VALVE
- 4-SOL HIGH SPEED THRUST SOLENOID VALVE
- 1 HTR OIL RESERVOIR HEATER (115VAC)
- 2 HTR OIL RESERVOIR HEATER (OIL PUMP VOLTAGE)
- PRV PRE-ROTATION VANE MOTOR
- OVA ORIFICE VALVE ACTUATOR
- VMP EXTERNAL MOTOR VANE POT.
- VTS VIBRATION TRANSMITTER SENSOR
- (CES) CLUTCH ENGAGED SOLENOID
- (CEPS) CLUTCH ENGAGED PRESSURE SWITCH
- (LGOP) LOW GEAR OIL PRESSURE
- (HGOTS) HIGH GEAR OIL TEMP.
- (ILGOTS) LOW GEAR OIL TEMP.
- (IMPT) INLET MANIFOLD PRESSURE TRANSDUCER
- (OPT) OIL PRESSURE TRANSDUCER
- PRV FEEDBACK POT (29)
- PROX SENSOR (30)
- HIGH PRESS CUTOUT (32)

* Units built after June 1997 will not have the vent line solenoid installed.

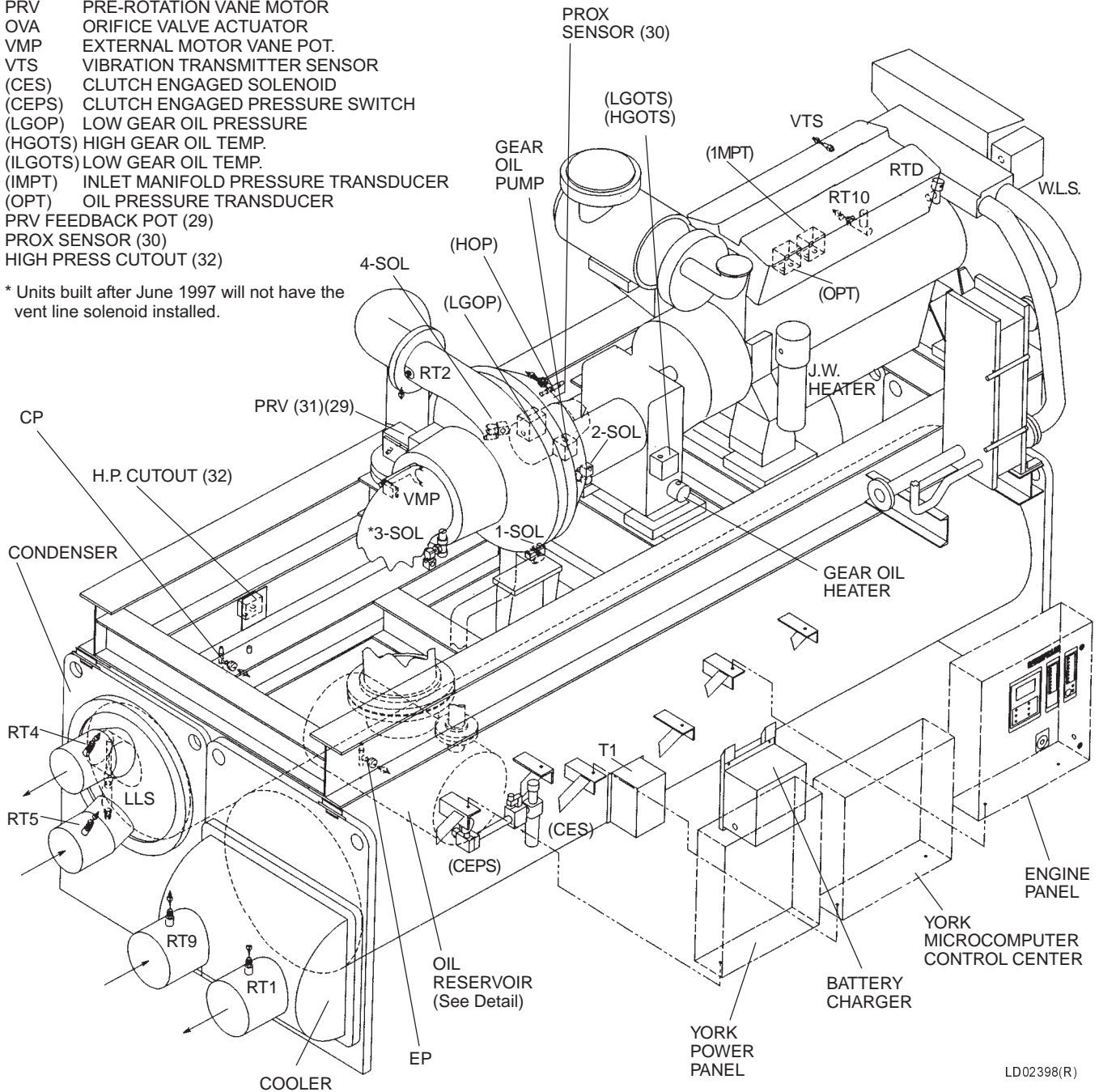
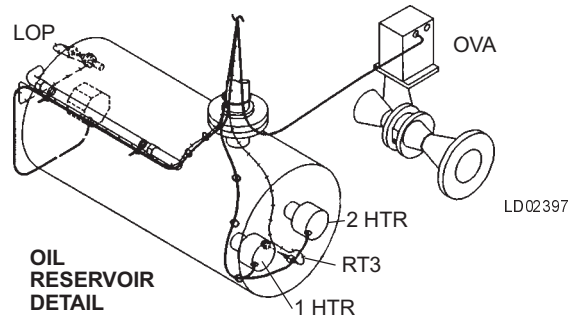
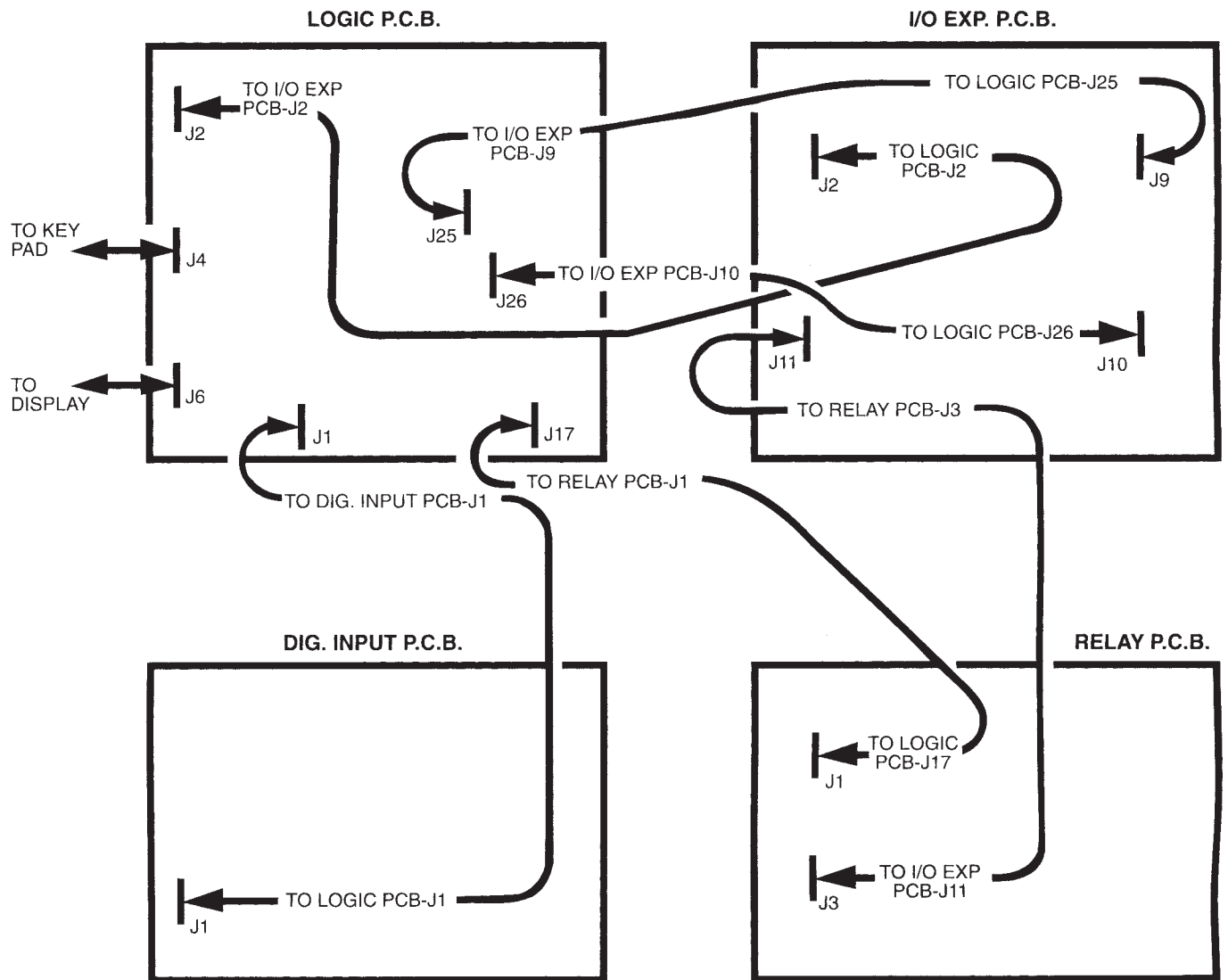


FIG. 5 – YORK MICRO PANEL THERMISTORS AND TRANSDUCERS (Model YB Chillers)



LD02454

FIG. 6 – RIBBON CABLE TERMINATIONS

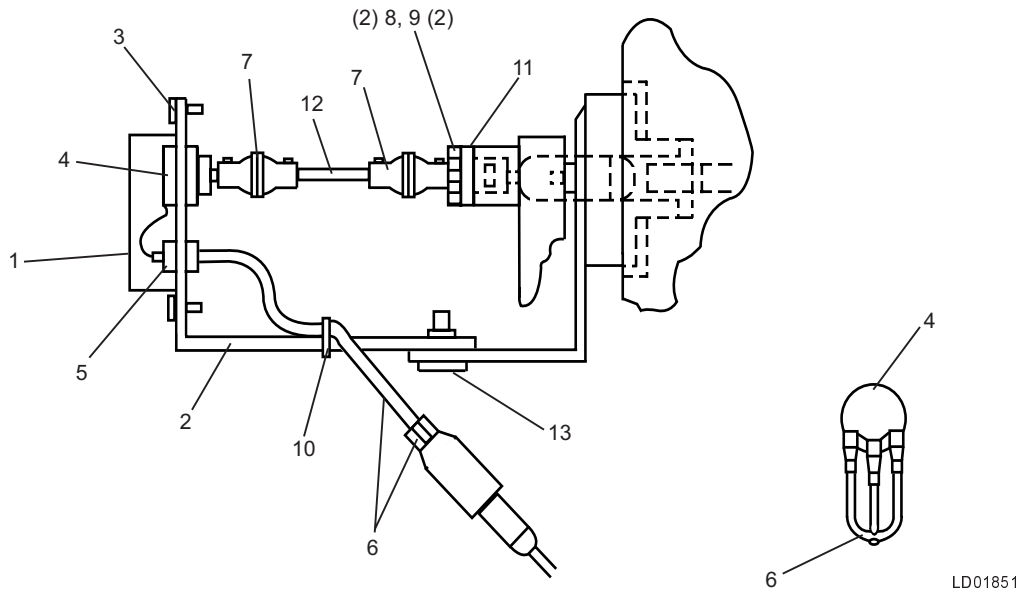
PLUG AND PIN PART NO'S FOR YB MICRO PANELS

MICRO P.C.B	PLUG NO.	PIN NO.
J3	025-19667-000	025-19674-000
J4	025-28382-000	025-28386-000
J8	025-21138-000	025-19674-000
J10	025-21137-000	025-19674-000
J17	025-28385-000	025-28386-000
J19	025-28384-000	025-28386-000
J21	025-28383-000	025-28386-000
J22	025-28382-000	025-28386-000
J23	025-28959-000	025-28386-000
LEVEL CONTROL P.C.B.		
J1	025-29130-000	025-28386-000
J2	025-29185-000	025-28386-000
J3	025-28959-000	025-28386-000
RELAY OUTPUT P.C.B.		
J2	025-19667-000	025-19674-000
DIGITAL INPUT P.C.B.		
J2	025-21137-000	025-19674-000
POWER SUPPLY P.C.B.		
J1	025-21137-000	025-32506-000
J2	025-21138-000	025-19674-000
J3	025-21136-000	025-32506-000
J4	025-21137-000	025-19674-000
J5	025-21136-000	025-19674-000
J6	025-19667-000	025-19674-000
START/STOP RESET		
J11	571-01199-201	571-01791-201
CM-2 (ON HINGED PANEL)		
J1	025-19667-000	025-22214-000
J2	025-21417-000	025-22214-000
J3	025-19667-000	025-22214-000
1/0 EXP P.C.B.		
J3	025-29130-000	025-28386-000
J4	025-28382-000	025-28386-000
1/0 EXP P.C.B.		
J5	025-28959-000	025-28386-000
J6	025-29185-000	025-28386-000
J7	025-29130-000	025-28386-000
J8	025-28383-000	025-28386-000

YORK PART NUMBERS FOR THE RT SENSORS ON YB MICROPANELS/CHILLERS

025-29964-000	RT-1 = LVG. CHILLED WATER SENSOR
	RT-4 = OIL TEMP. SENSOR
	RT-5 = ENTERING COND. WATER SENSOR
	RT-9 = ENTERING CHILLED WATER SENSOR
	RT-10 = AFTERCOOLER WATER SENSOR
025-28936-000	RT-2 = DISCHARGE TEMPERATURE SENSOR
025-28936-000	RT-3 = OIL TEMPERATURE SENSOR

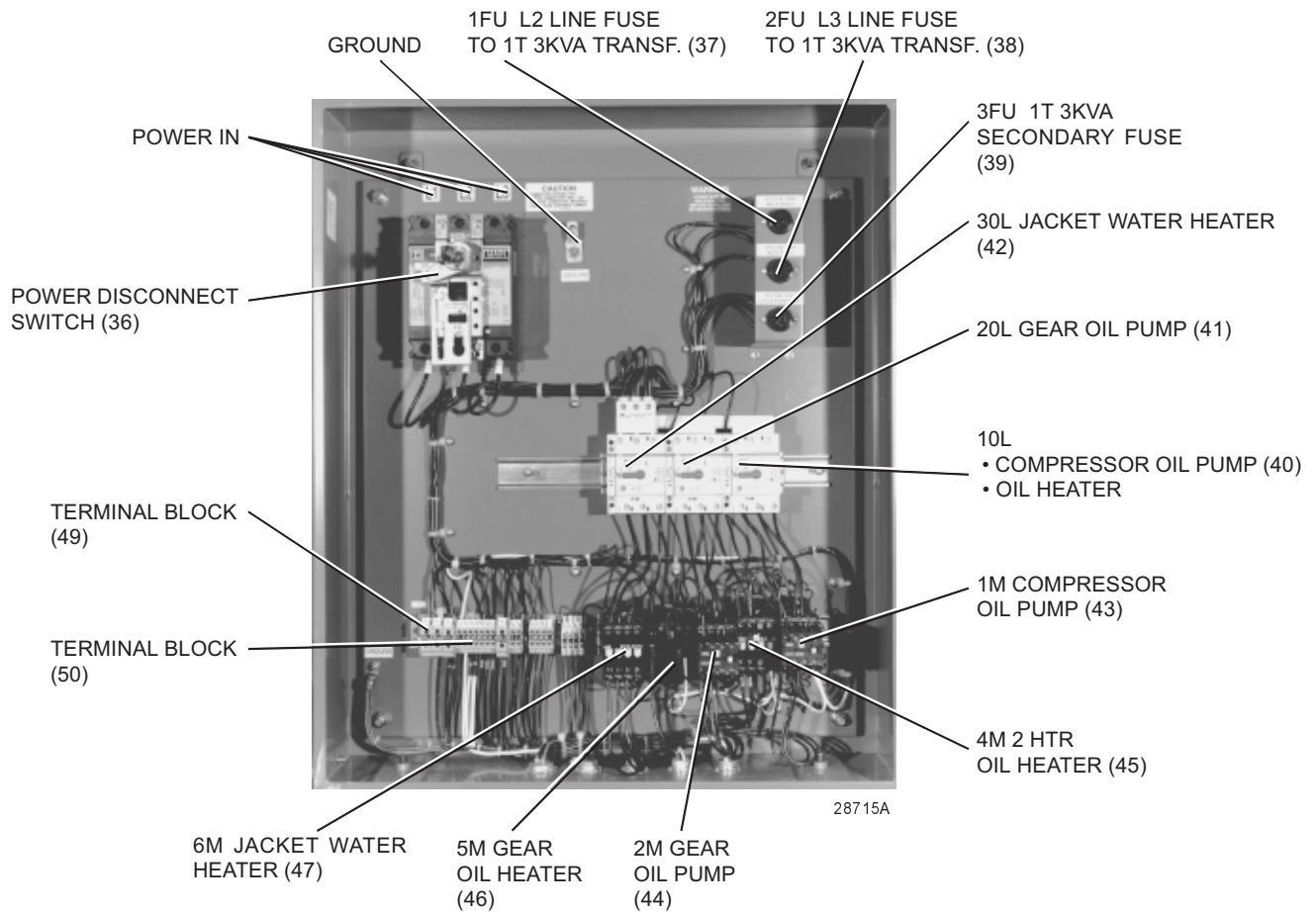
ITEM	DESCRIPTION	QTY.	PART NO.
—	M.O.V. ASSY (FOR VANE MOTOR)	1 (ASSY)	366-87030-000
—	LEVEL CONTROL P.C.B.	1	031-01655-000
—	LAMINATED OVERALL DWG.	1	160.60-LS1
—	REFRIGERANT LEVEL CONTROL SENSOR	1	025-31712-000
—	GOVERNOR ADJUSTING TOOL	1	4C4029



PART NO.	ITEM	QUANTITY PER UNIT	DESCRIPTION
071-02012-002	1	1	COVER
371-02012-009	2	1	BRACKET, SUPPORT
021-13757-000	3	2	SCREW, TAP THD FORM #6 X 1/4 LG.
025-32570-000	4	1	POT, 2500 OHMS, 2 WATT
025-09080-000	5	1	STRAIN RELIEF
571-02012-005	6	1	CABLE ASSEMBLY
029-21795-000	7	2	COUPLING
021-18674-000	8	2	SCREW, CAP HEX SOC. HD. 10-24 X 5/8
021-08292-000	9	2	LOCKWASHER, HEL. SPR. #10
025-18167-000	10	1	STRAP, CABLE
071-02012-006	11	1	CAP
071-02012-007	12	1	SHAFT, COUPLING
021-18487-000	13	2	SCR./WASH. ASSEM. (SEMS) 1/4-20 X 1/2

371-02012-001

DIRECT DRIVE VANE FEEDBACK POT (371-02012-001)



ITEM	DESCRIPTION	QTY.	PART NO.
36	Power Disconnect Switch	1	024-30460-000
37	1FU (L2 Line Fuse –15A)	1	025-25584-000
38	2FU (L3 Line Fuse – 15A)	1	025-25584-000
39	3FU (3KVA Fuse – 30A)	1	025-27699-000
40	10L Compr. Oil Pump / Oil Heater	1	024-27280-000
41	20L Gear Oil Pump	1	024-27280-000
42	30L Jacket Water Heater	1	024-27268-000
43	1M Compr. Oil Pump Contactor	1	024-25522-000
44	2M Gear Oil Pump Contactor	1	024-30462-000
45	4M Htr Oil Heater Contactor	1	024-25522-000
46	5M Relay	1	024-30461-000
47	6M Jacket Water Htr Contactor	1	024-30462-000
48	Kit-Door Mounting Assy. (For Item 35)	1	026-35000-000
49	Terminal Block (Large)	4	025-31476-000
50	Terminal Block (Small)	17	025-31442-000
—	Fuseholders for 1-2-3 FU	3	025-17407-000
—	Diode Assy. (Used at 2M & 6M)	2	371-02089-221
—	Jumper Term. Block (Lg) (Used in Item 48)	—	025-31475-000
—	Jumper Term. Block (Sm) (Used in Item 49)	—	025-31474-000

FIG. 7 – YORK POWER PANEL

The following photographs will help you locate some of the components on the “YB” chiller, both electrically and mechanically. The photographs consist of the following:

- Overall view of the chiller showing all electrical panels and their components (YORK Power Panel, YORK Micro Panel, Caterpillar Control Panel).
- Battery charger
- Sensors and transducers
- Vane motor and vane feedback pot
- Engine Panel Components
- Power Panel Components
- YORK Micro Panel Components

Also refer to Fig. 5 for the mechanical drawing of the unit.

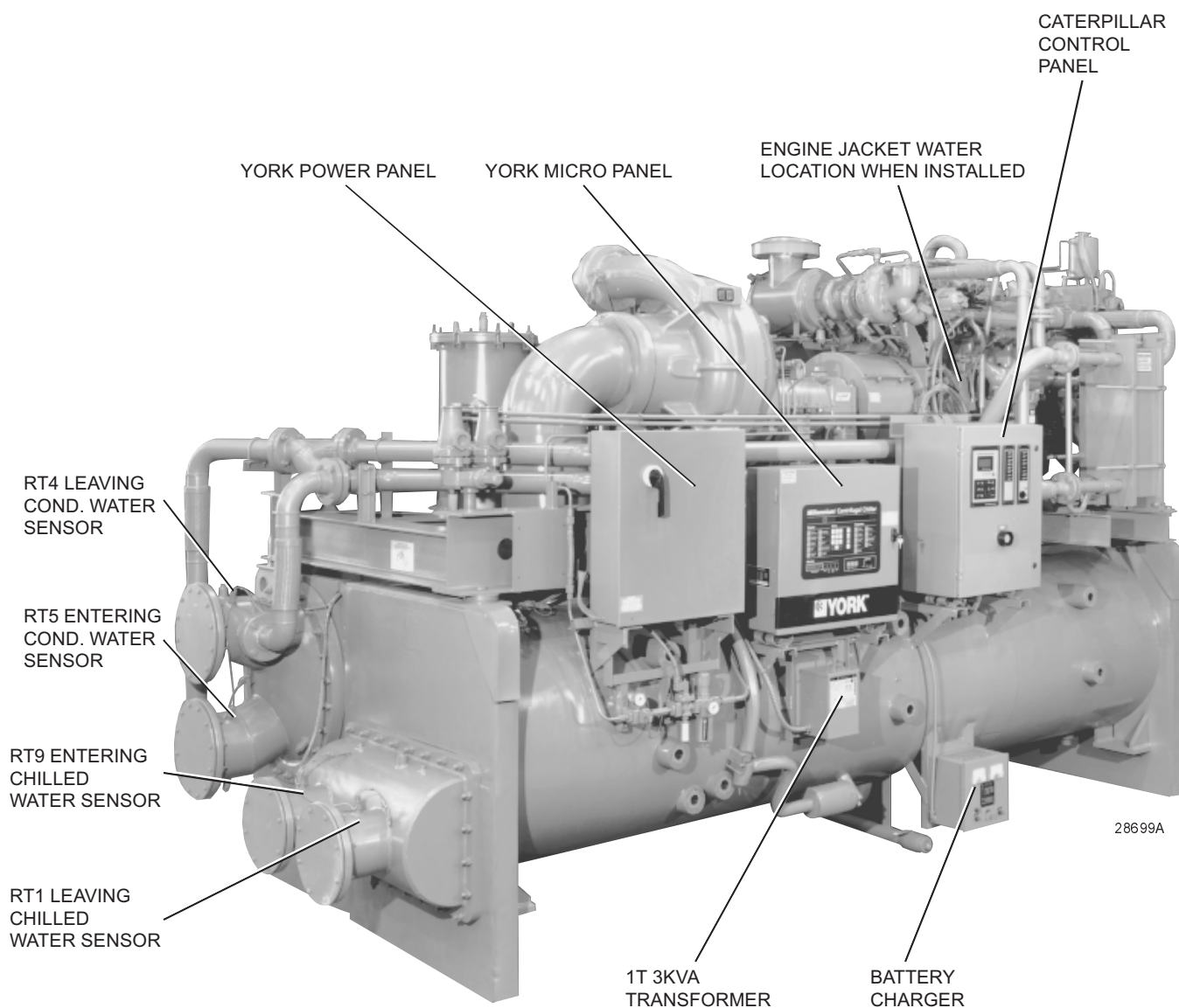
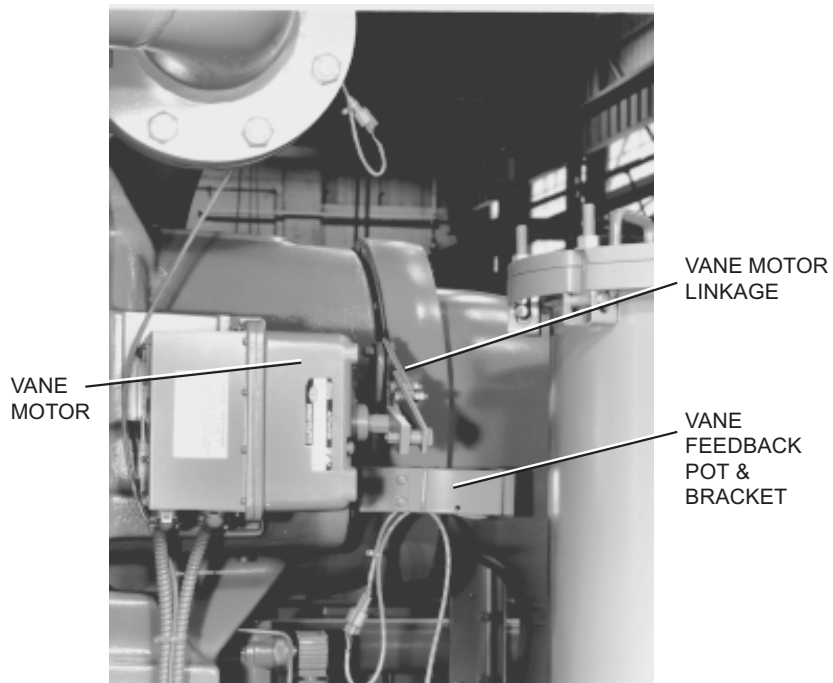


FIG. 8 – OVERVIEW OF UNIT AND PANELS



28712A

FIG. 9 – BATTERY CHARGER



VANE
MOTOR

VANE MOTOR
LINKAGE

VANE
FEEDBACK
POT &
BRACKET

28709A

FIG. 10 – VANE MOTOR AND FEEDBACK POT

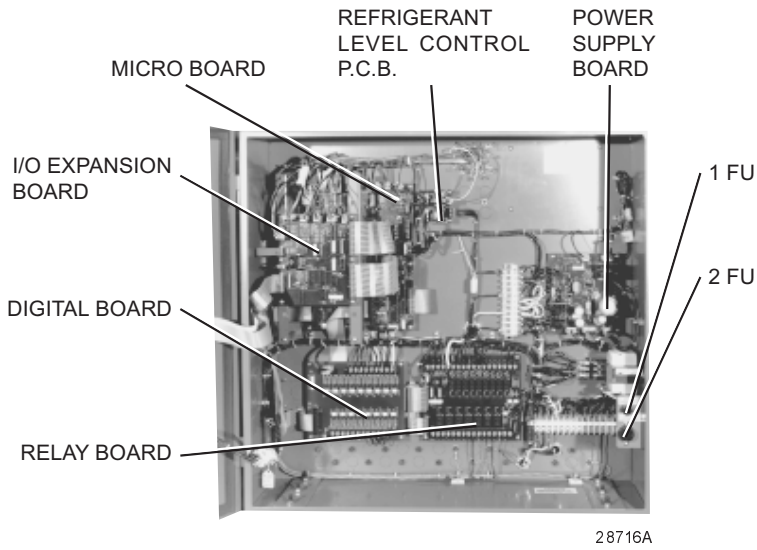


FIG. 11 – YORK MICRO PANEL

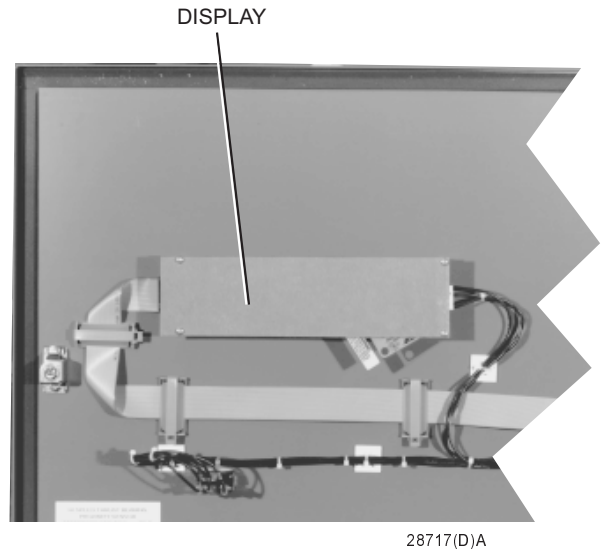


FIG. 12 – YORK MICRO PANEL (INSIDE OF DOOR)

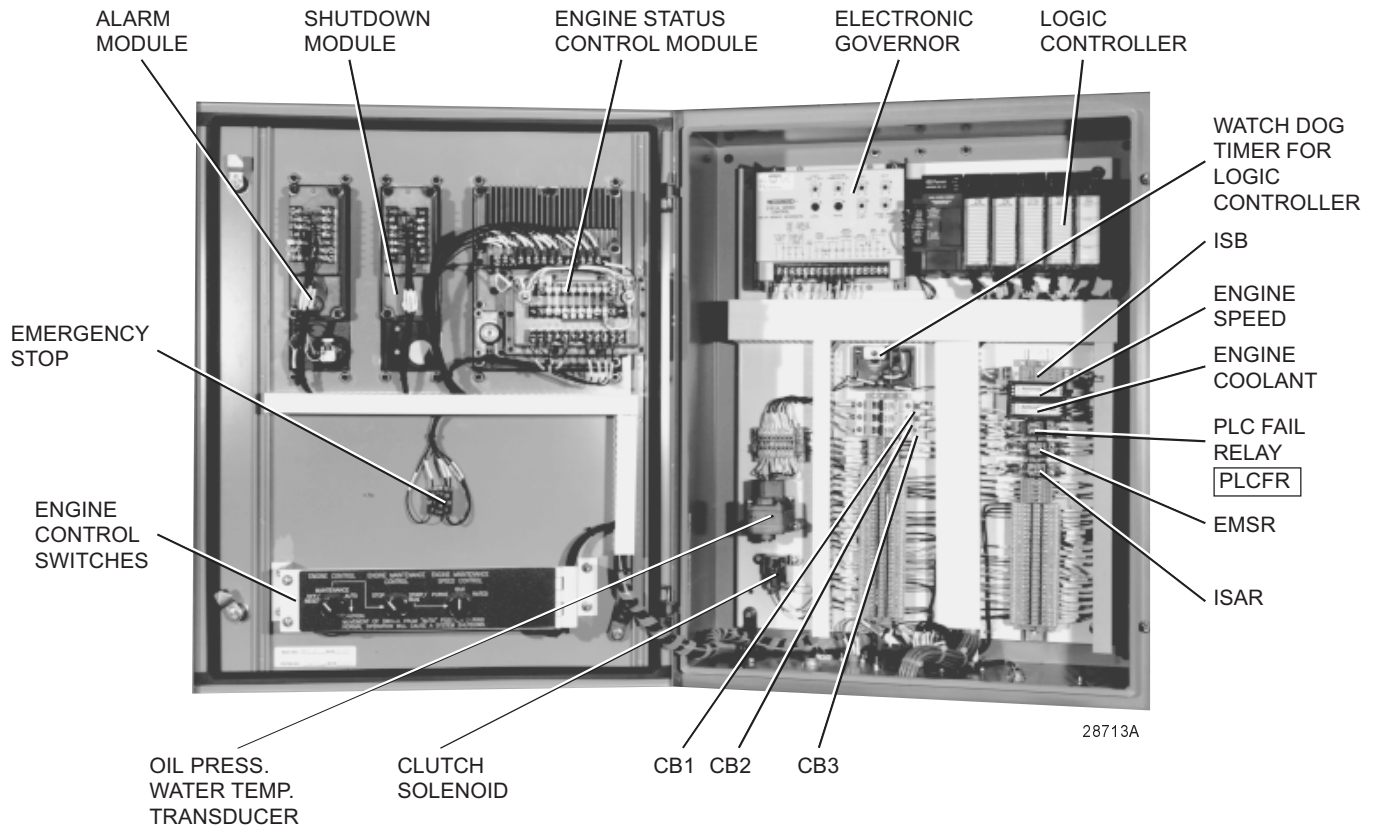


FIG. 13 – CATERPILLAR CONTROL PANEL

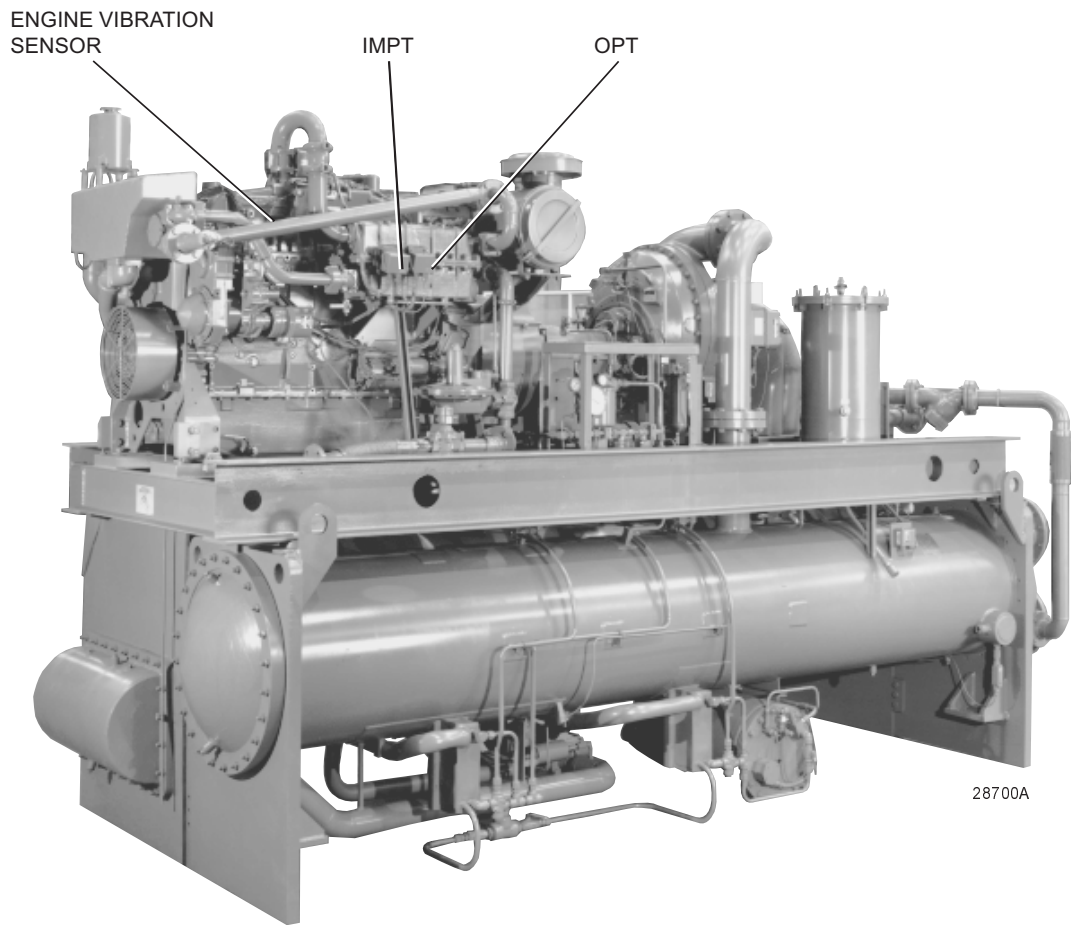


FIG. 14 – ENGINE SENSOR LOCATIONS

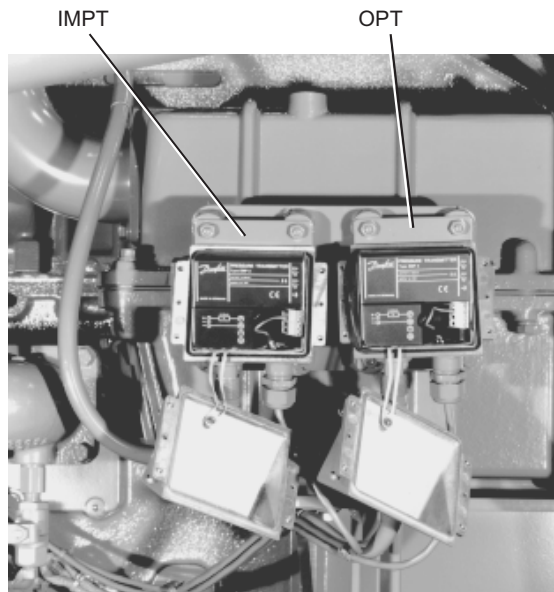


FIG. 15 – PRESSURE TRANSMITTERS LOCATION



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