

DURR TWO-TOWER REGENERATIVE THERMAL OXIDIZER

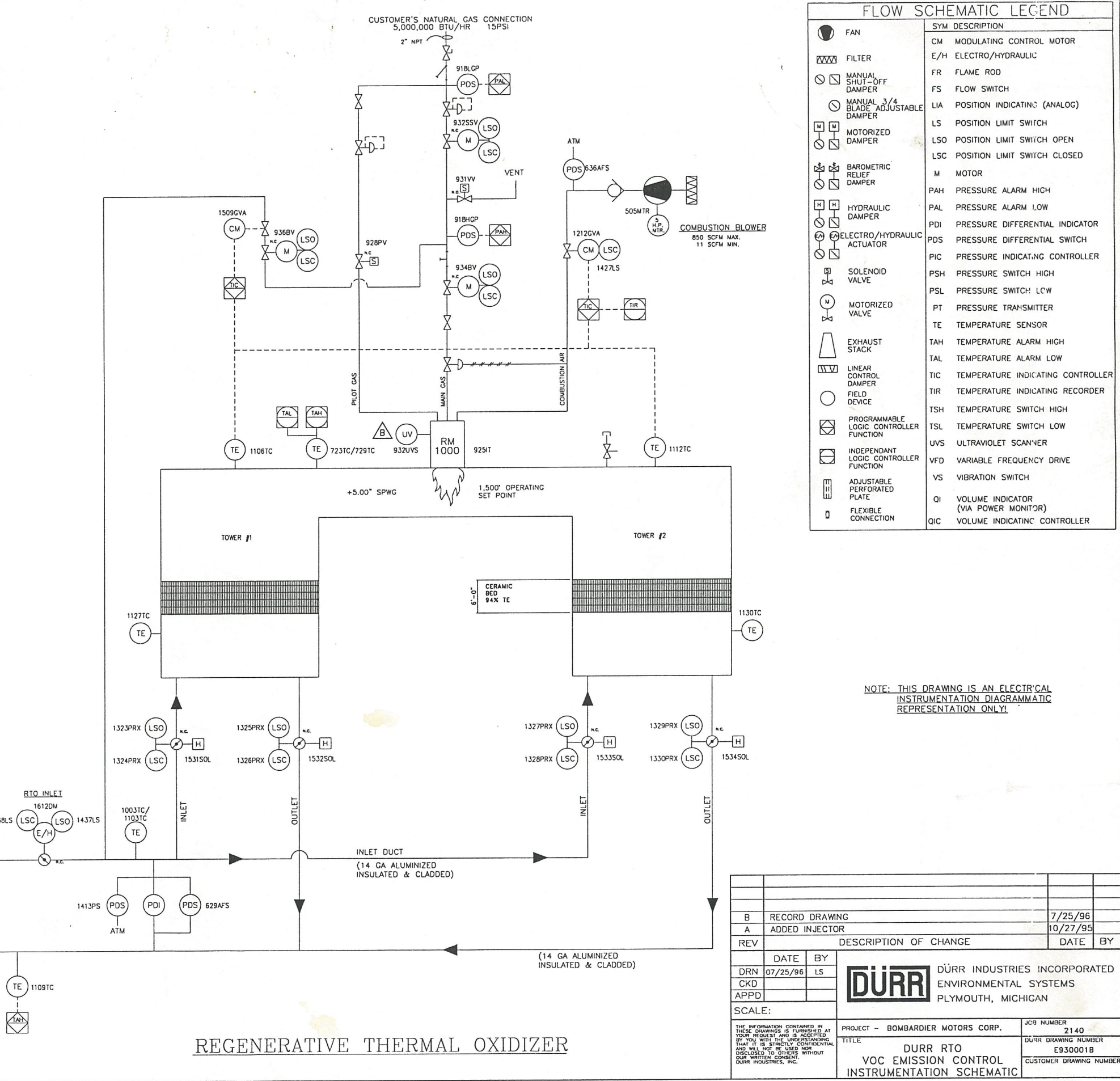
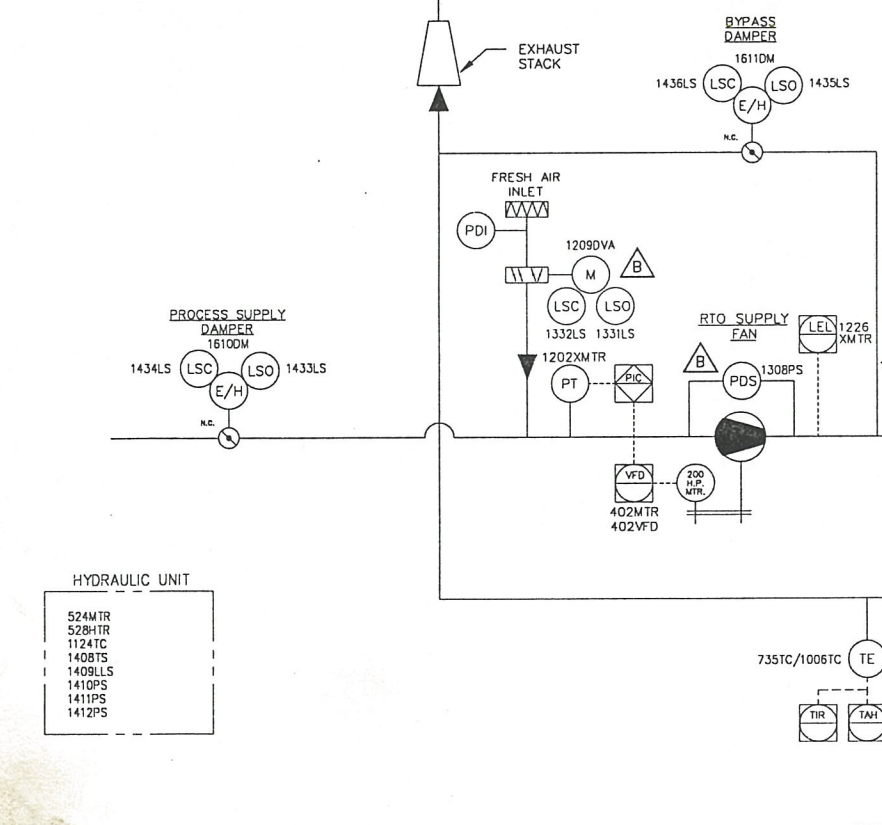
DURR DWG. No.	DRAWING TITLE
E930000	ELECTRICAL DRAWING LIST
E930001	INSTRUMENTATION SCHEMATIC
E930002	ONE-LINE DIAGRAM
E930003	PLC CONFIGURATION
E930004	480 VOLT POWER SCHEMATIC
E930005	480 VOLT POWER SCHEMATIC
E930006	CONTROL SCHEMATIC
E930007	CONTROL SCHEMATIC
E930008	SPARE SHEET
E930009	CONTROL SCHEMATIC
E930010	CONTROL SCHEMATIC
E930011	PLC I/O SCHEMATIC, SLOT 1 & 2
E930012	PLC I/O SCHEMATIC, SLOT 3 & 4
E930013	PLC I/O SCHEMATIC, SLOT 5 & 6
E930014	PLC I/O SCHEMATIC, SLOT 7 & 8
E930015	PLC I/O SCHEMATIC, SLOT 9 & 10
E930016	PLC I/O SCHEMATIC, SLOT 11 & 12
E930017	PLC I/O SCHEMATIC, SLOT 13 & 14
E930018	PLC I/O SCHEMATIC, SLOT 15 & 16
E930019	SPARE SHEET
E930020	MASTER CONTROL PANEL DOOR LAYOUT
E930021	MASTER CONTROL PANEL SUBPLATE LAYOUT
E930022	DEVICE LOCATION DIAGRAM
E930023	FIELD INTERCONNECT DIAGRAM
E930024	FIELD INTERCONNECT DIAGRAM
E930025	LIGHTING INTERCONNECT DIAGRAM
E930026	CONTROL ROOM LAYOUT
E930027	BILL OF EQUIPMENT

A		RECORD DRAWING	7/25/96
REV	DESCRIPTION OF CHANGE		DATE BY
DRN	DATE	BY	
CKD	08/01/96	LS	
APPD			
SCALE:			
THE INFORMATION CONTAINED IN THESE DRAWINGS IS FURNISHED AT YOUR REQUEST AND IS ACCEPTED BY YOU WITH THE UNDERSTANDING THAT IT IS STRICTLY CONFIDENTIAL AND WILL NOT BE USED NOR DISCLOSED TO OTHERS WITHOUT OUR WRITTEN CONSENT. DURR INDUSTRIES, INC.		DURR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN	
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE DURR RTO VOC EMISSION CONTROL ELECTRICAL DRAWING LIST		DURR DRAWING NUMBER E930000A CUSTOMER DRAWING NUMBER	

CREATED BY: LS PLOT PART NAME: R:\ENV\2140\930\E930000A.DWG

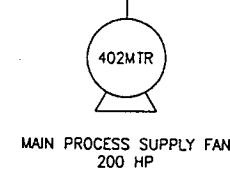
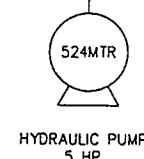
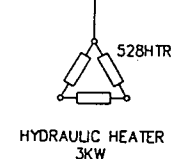
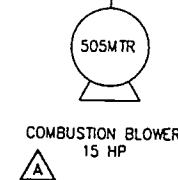
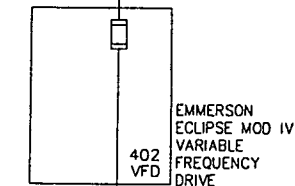
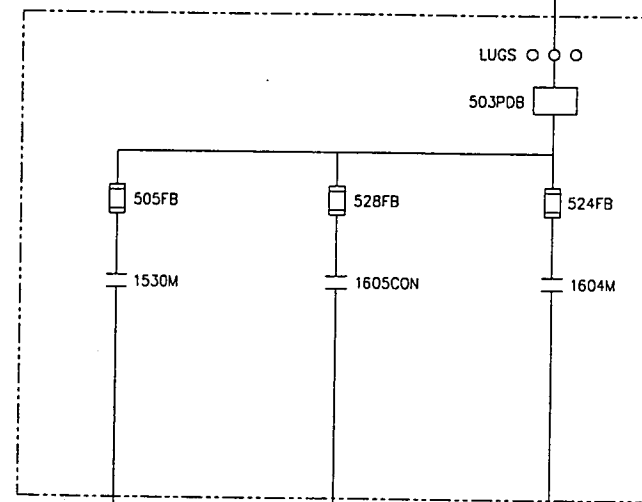
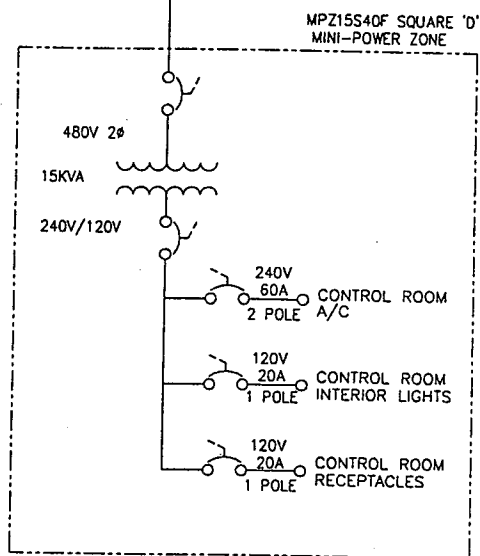
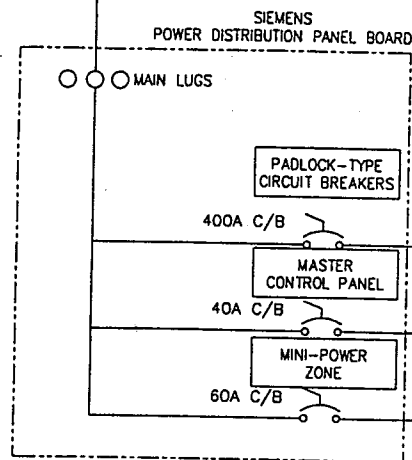
RTO ABATEMENT SYSTEM COMPONENTS												
RTO COMPONENTS												
	RTO SUPPLY FAN	RTO BYPASS DAMPER	RTO MAIN INLET DAMPER	PROCESS SUPPLY DAMPER	FRESH AIR DAMPER	RTO HYD. PUMP	TOWER DAMPERS	COMB. BLOWER	MAIN BURNER	GAS INJECTION VALVE	SYSTEM FAULT	SYSTEM WARNING
SYSTEM PURGING	ON	CLOSED	OPEN	CLOSED	OPEN	ON	SEQ.	ON	OFF	CLOSED	NO	NO
SYSTEM WARMUP	ON	CLOSED	OPEN	CLOSED	OPEN	ON	SEQ.	ON	ON (H. FIRE)	CLOSED	NO	NO
NORMAL OPERATING CONDITION	ON	CLOSED	OPEN	OPEN	CLOSED	ON	SEQ.	ON	OFF	OPEN (LOW GAS)	NO	NO
HIGH VOC CONCENTRATION	ON	CLOSED	OPEN	OPEN	OPEN	ON	SEQ.	ON	OFF	OPEN (LOW GAS)	NO	YES
SYSTEM COOLDOWN	ON	CLOSED	OPEN	CLOSED	OPEN	ON	SEQ.	ON	OFF	CLOSED	NO	NO
SYSTEM SHUTDOWN	OFF	CLOSED	CLOSED	CLOSED	CLOSED	OFF	CLOSED	OFF	OFF	CLOSED	NO	NO
BURNER FAILURE	ON	OPEN	CLOSED	OPEN	CLOSED	ON	SEQ.	ON	OFF	CLOSED	YES	NO
SUPPLY FAN FAILURE	OFF	OPEN	OPEN	CLOSED	OPEN	ON	SEQ.	ON	OFF	CLOSED	YES	NO
TOWER DAMPER FAILURE	ON	OPEN	CLOSED	OPEN	CLOSED	ON	CLOSED	OFF	OFF	CLOSED	YES	NO
HYDRAULIC FAILURE	ON	OPEN	CLOSED	OPEN	CLOSED	OFF	CLOSED	OFF	OFF	CLOSED	YES	NO
HI-TEMPERATURE WARNING	ON	OPEN	CLOSED	OPEN	OPEN	ON	SEQ.	ON	OFF	OPEN (LOW GAS)	NO	YES
HI-TEMPERATURE FAULT	ON	OPEN	CLOSED	OPEN	CLOSED	ON	SEQ.	ON	ON	CLOSED	YES	NO

DEVICE	FUNCTION	DEVICE	FUNCTION
402MTR	MAIN PROCESS SUPPLY FAN MOTOR	1323PRX	TOWER #1 INLET DAMPER OPEN
402VFD	MAIN PROCESS SUPPLY FAN VARIABLE FREQUENCY DRIVE	1324PRX	TOWER #1 INLET DAMPER CLOSED
505MTR	COMBUSTION BLOWER MOTOR	1325PRX	TOWER #1 EXHAUST DAMPER OPEN
524MTR	HYDRAULIC PUMP MOTOR	1326PRX	TOWER #1 EXHAUST DAMPER CLOSED
528MTR	HYDRAULIC TANK HEATER	1327PRX	TOWER #2 INLET DAMPER OPEN
629AFS	RTO AIR FLOW PROVEN	1328PRX	TOWER #2 INLET DAMPER CLOSED
636AFS	COMBUSTION BLOWER AIR FLOW PROVEN	1329PRX	TOWER #2 EXHAUST DAMPER OPEN
723TC/729TC	OXIDIZER COMBUSTION CHAMBER HIGH TEMP	1330PRX	TOWER #2 EXHAUST DAMPER CLOSED
735TC/1006TC	OXIDIZER EXHAUST DUCT HIGH TEMP	1331LS	FRESH AIR DAMPER OPEN
918BGP	MAIN BURNER HIGH GAS PRESSURE	1332LS	FRESH AIR DAMPER CLOSED
918LGP	MAIN BURNER LOW GAS PRESSURE	1408TS	HYDRAULIC TANK TEMP NORMAL
925IT	MAIN BURNER IGNITION TRANSFORMER	1409LLS	HYDRAULIC TANK LOW LEVEL
929PV	MAIN BURNER PILOT VALVE	1410PS	HYDRAULIC RETURN FILTER CLEAN
931VV	GAS TRAIN VENT VALVE	1411PS	HYDRAULIC PRESSURE FILTER CLEAN
932SSV	GAS TRAIN SAFETY SHUT-OFF VALVE	1412PS	DISCHARGE PRESSURE SUFFICIENT
932UVS	MAIN BURNER UV SCANNER	1413PS	PRESSURE NOT EXCESSIVE
934BV	MAIN BURNER BLOCKING VALVE	1427LS	MAIN BURNER LOW FIRE
936BV	INJECTOR BLOCKING VALVE	1433LS	PROCESS SUPPLY DAMPER OPEN
1003TC/1103TC	RTO INLET DUCT TEMP	1434LS	PROCESS SUPPLY DAMPER CLOSED
1106TC	RTO TOWER #1 COMBUSTION CHAMBER TEMP	1435LS	BYPASS DAMPER OPEN
1109TC	RTO EXHAUST DUCT TEMP	1436LS	BYPASS DAMPER CLOSED
1112TC	RTO TOWER #2 COMBUSTION CHAMBER TEMP	1437LS	RTO INLET DAMPER OPEN
1124TC	HYDRAULIC TANK TEMP	1438LS	RTO INLET DAMPER CLOSED
1127TC	RTO TOWER #1 TEMP	1509GVA	INJECTOR GAS VALVE ACTUATOR
1130TC	RTO TOWER #2 TEMP	1531SOL	TOWER #1 OPEN INLET DAMPER
1202XMTR	PROCESS SUPPLY PRESSURE TRANSMITTER	1532SOL	TOWER #1 OPEN EXHAUST DAMPER
1209GVA	FRESH AIR VALVE ACTUATOR	1533SOL	TOWER #2 OPEN INLET DAMPER
	PROPORTIONAL CONTROL	1534SOL	TOWER #2 OPEN EXHAUST DAMPER
1212GVA	MAIN BURNER GAS VALVE ACTUATOR	1610DM	OPEN PROCESS SUPPLY DAMPER
	PROPORTIONAL CONTROL	1611DM	OPEN BYPASS DAMPER
1226XMTR	PROCESS AIR L.E.L. MONITOR	1612DM	OPEN RTO INLET DAMPER
1308PS	PROCESS SUPPLY FAN AIR FLOW PROVEN		



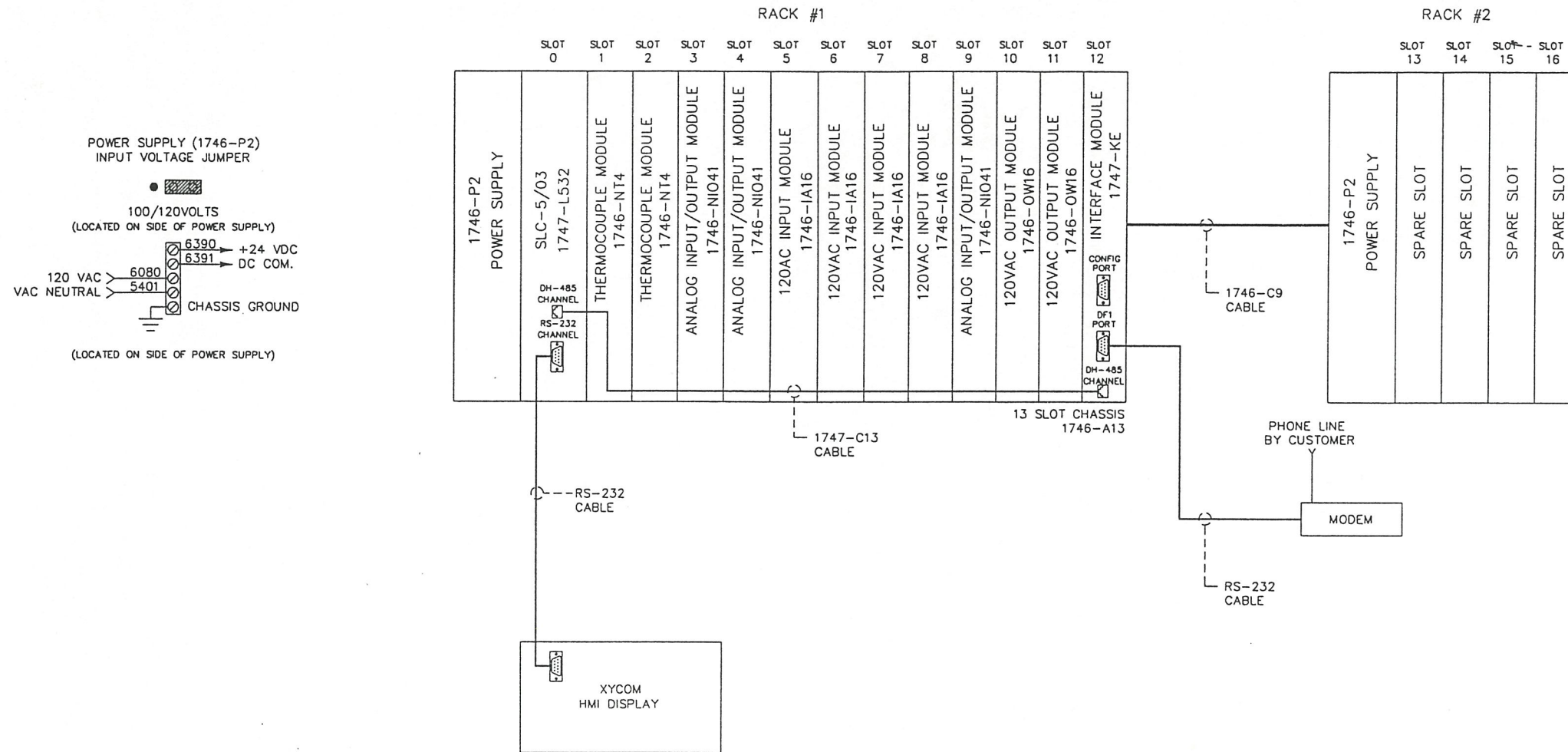
FLOW SCHEMATIC LEGEND			
	FAN		SYM DESCRIPTION
	CM		MODULATING CONTROL MOTOR
	E/H		ELECTRO/HYDRAULIC
	FR		FLAME ROD
	FS		FLOW SWITCH
	LIA		POSITION INDICATING (ANALOG)
	LS		POSITION LIMIT SWITCH
	LSC		POSITION LIMIT SWITCH OPEN
	M		POSITION LIMIT SWITCH CLOSED
	M		MOTOR
	M		BAROMETRIC RELIEF DAMPER
	BAROMETRIC RELIEF DAMPER		HYDRAULIC DAMPER
	HYDRAULIC DAMPER		ELECTRO/HYDRAULIC ACTUATOR
	ELECTRO/HYDRAULIC ACTUATOR		SOLENOID VALVE
	SOLENOID VALVE		MOTORIZED VALVE
	MOTORIZED VALVE		EXHAUST STACK
	EXHAUST STACK		LINEAR CONTROL DAMPER
	LINEAR CONTROL DAMPER		FIELD DEVICE
	FIELD DEVICE		PROGRAMMABLE LOGIC CONTROLLER FUNCTION
	PROGRAMMABLE LOGIC CONTROLLER FUNCTION		INDEPENDANT LOGIC CONTROLLER FUNCTION
	INDEPENDANT LOGIC CONTROLLER FUNCTION		ADJUSTABLE PERFORATED PLATE
	ADJUSTABLE PERFORATED PLATE		FLEXIBLE CONNECTION
	FLEXIBLE CONNECTION		MODULATING CONTROL MOTOR
	ELECTRO/HYDRAULIC		FLAME ROD
	FLOW SWITCH		POSITION INDICATING (ANALOG)
	POSITION LIMIT SWITCH		POSITION LIMIT SWITCH OPEN
	POSITION LIMIT SWITCH CLOSED		MOTOR
	BAROMETRIC RELIEF DAMPER		HYDRAULIC DAMPER
	ELECTRO/HYDRAULIC ACTUATOR		SOLENOID VALVE
	MOTORIZED VALVE		EXHAUST STACK
	LINEAR CONTROL DAMPER		FIELD DEVICE
	PROGRAMMABLE LOGIC CONTROLLER FUNCTION		INDEPENDANT LOGIC CONTROLLER FUNCTION
	ADJUSTABLE PERFORATED PLATE		FLEXIBLE CONNECTION
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	FLAME ROD		FLOW SWITCH
	POSITION INDICATING (ANALOG)		POSITION LIMIT SWITCH
	POSITION LIMIT SWITCH OPEN		POSITION LIMIT SWITCH CLOSED
	MOTOR		BAROMETRIC RELIEF DAMPER
	HYDRAULIC DAMPER		ELECTRO/HYDRAULIC ACTUATOR
	SOLENOID VALVE		MOTORIZED VALVE
	EXHAUST STACK		LINEAR CONTROL DAMPER
	FIELD DEVICE		PROGRAMMABLE LOGIC CONTROLLER FUNCTION
	INDEPENDANT LOGIC CONTROLLER FUNCTION		ADJUSTABLE PERFORATED PLATE
	FLEXIBLE CONNECTION		MODULATING CONTROL MOTOR
	ELECTRO/HYDRAULIC		FLAME ROD
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	FLEXIBLE CONNECTION		MODULATING CONTROL MOTOR
	ELECTRO/HYDRAULIC		FLAME ROD
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	POSITION LIMIT SWITCH CLOSED		MOTOR
	BAROMETRIC RELIEF DAMPER		HYDRAULIC DAMPER
	ELECTRO/HYDRAULIC ACTUATOR		SOLENOID VALVE
	MOTORIZED VALVE		EXHAUST STACK
	LINEAR CONTROL DAMPER		FIELD DEVICE
	PROGRAMMABLE LOGIC CONTROLLER FUNCTION		INDEPENDANT LOGIC CONTROLLER FUNCTION
	ADJUSTABLE PERFORATED PLATE		FLEXIBLE CONNECTION
	MODULATING CONTROL MOTOR		ELECTRO/HYDRAULIC
	FLAME ROD		FLOW SWITCH
	POSITION INDICATING (ANALOG)		POSITION LIMIT SWITCH
	POSITION LIMIT SWITCH OPEN		POSITION LIMIT SWITCH CLOSED
	MOTOR		BAROMETRIC RELIEF DAMPER
	HYDRAULIC DAMPER		ELECTRO/HYDRAULIC ACTUATOR
	SOLENOID VALVE		MOTORIZED VALVE
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	FIELD DEVICE		PROGRAMMABLE LOGIC CONTROLLER FUNCTION
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	FLEXIBLE CONNECTION		MODULATING CONTROL MOTOR
	ELECTRO/HYDRAULIC		FLAME ROD
	FLOW SWITCH		POSITION INDICATING (ANALOG)
	POSITION LIMIT SWITCH		POSITION LIMIT SWITCH OPEN
	POSITION LIMIT SWITCH CLOSED		MOTOR
	BAROMETRIC RELIEF DAMPER		HYDRAULIC DAMPER
	ELECTRO/HYDRAULIC ACTUATOR		SOLENOID VALVE
	MOTORIZED VALVE		EXHAUST STACK
	LINEAR CONTROL DAMPER		

480VAC 3PH 60HZ

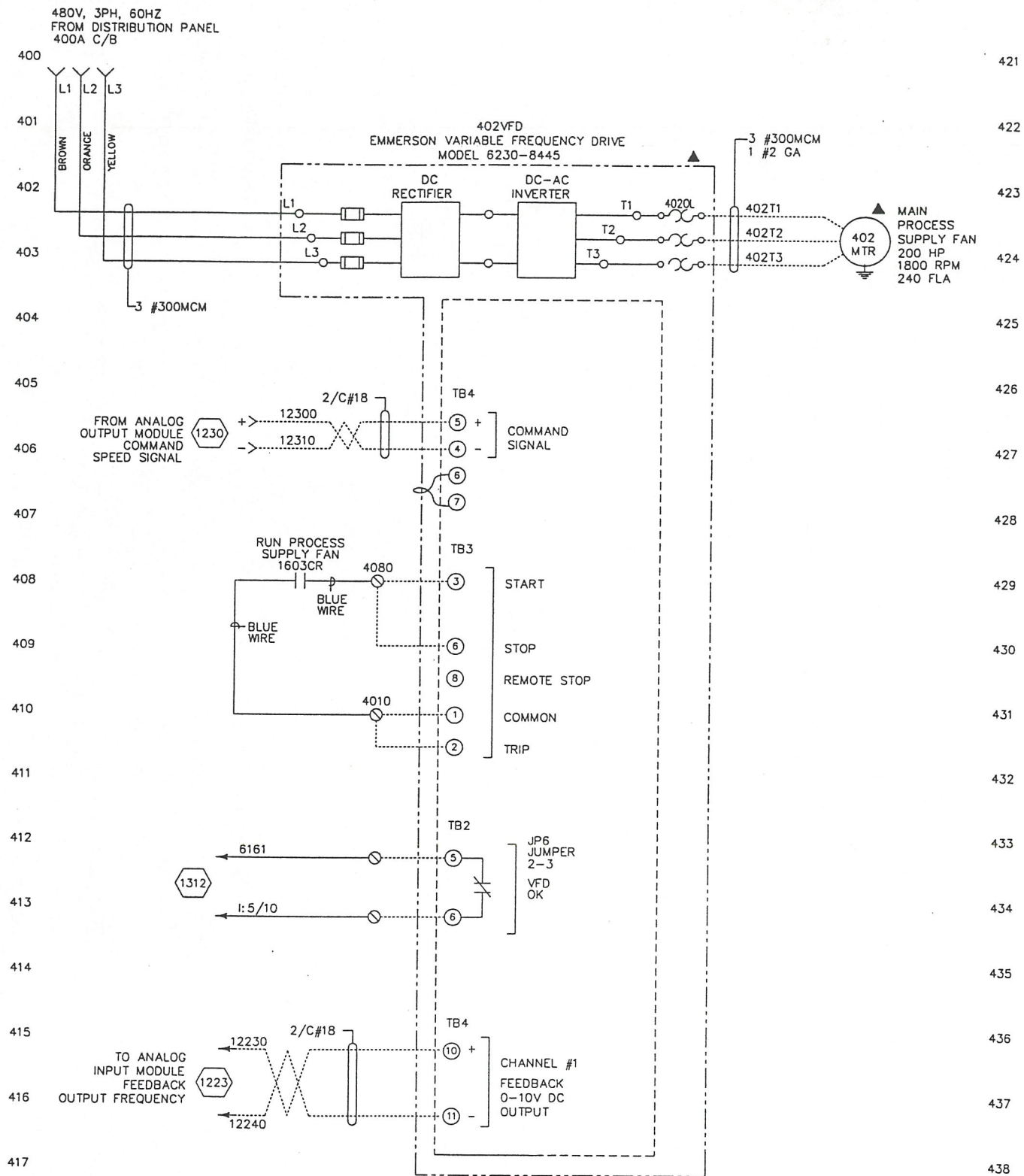


A	RECORD DRAWING		7/25/96
REV	DESCRIPTION OF CHANGE	DATE	BY
DRN	07/26/96	LS	
CKD			
APPD			
SCALE:			
DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN			
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE DURR RTO VOC EMISSION CONTROL ONE-LINE DIAGRAM		DURR DRAWING NUMBER E930002A	
		CUSTOMER DRAWING NUMBER	

PLC CONFIGURATION



REV	DESCRIPTION OF CHANGE	DATE	BY
B	RECORD DRAWING	7/25/96	
A	ADDED RACK #2	10/27/95	
DRN	07/26/96	LS	
CKD			
APPD			
SCALE:			
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE DURR RTO VOC EMISSION CONTROL PLC CONFIGURATION		DURR DRAWING NUMBER E930003B CUSTOMER DRAWING NUMBER	



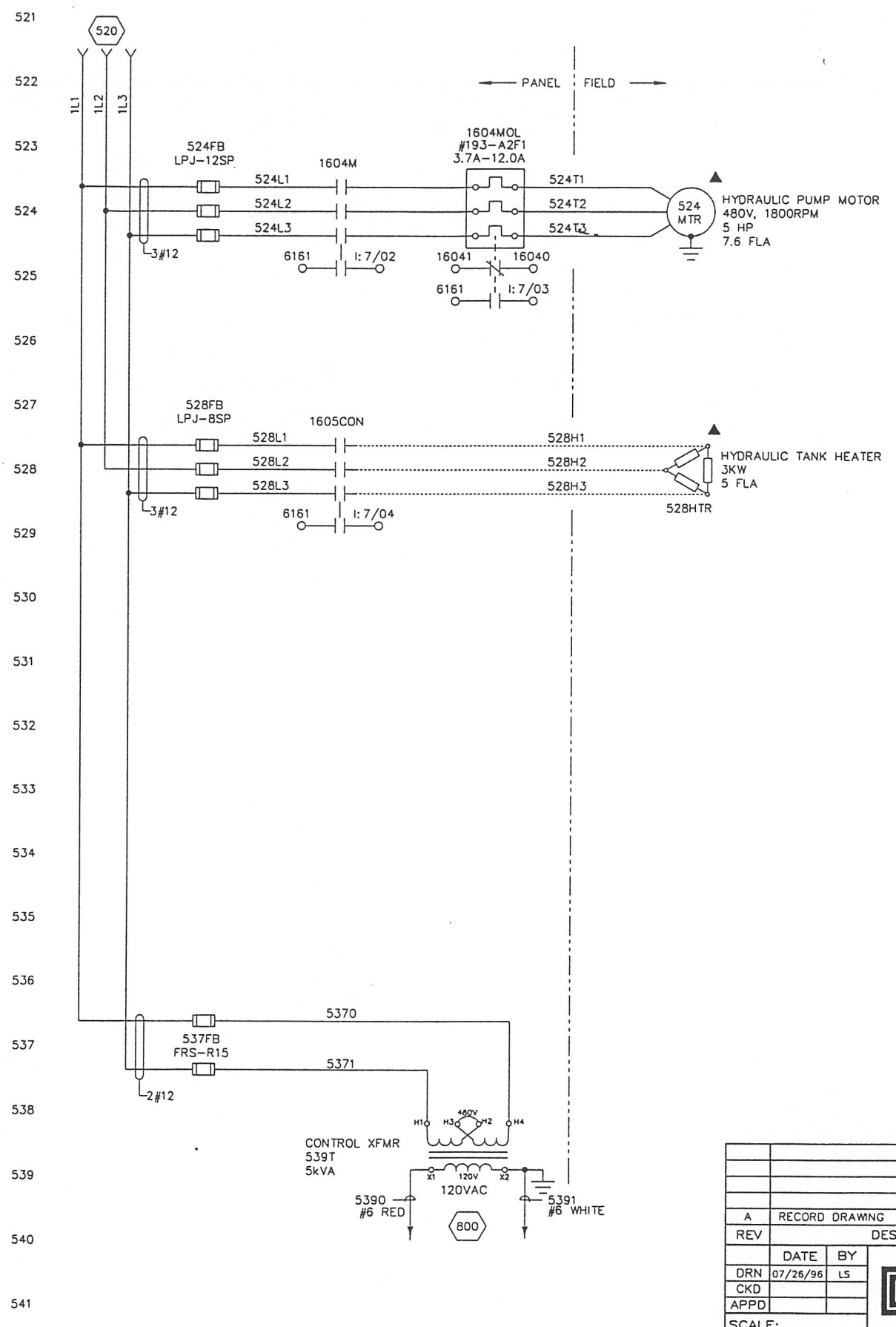
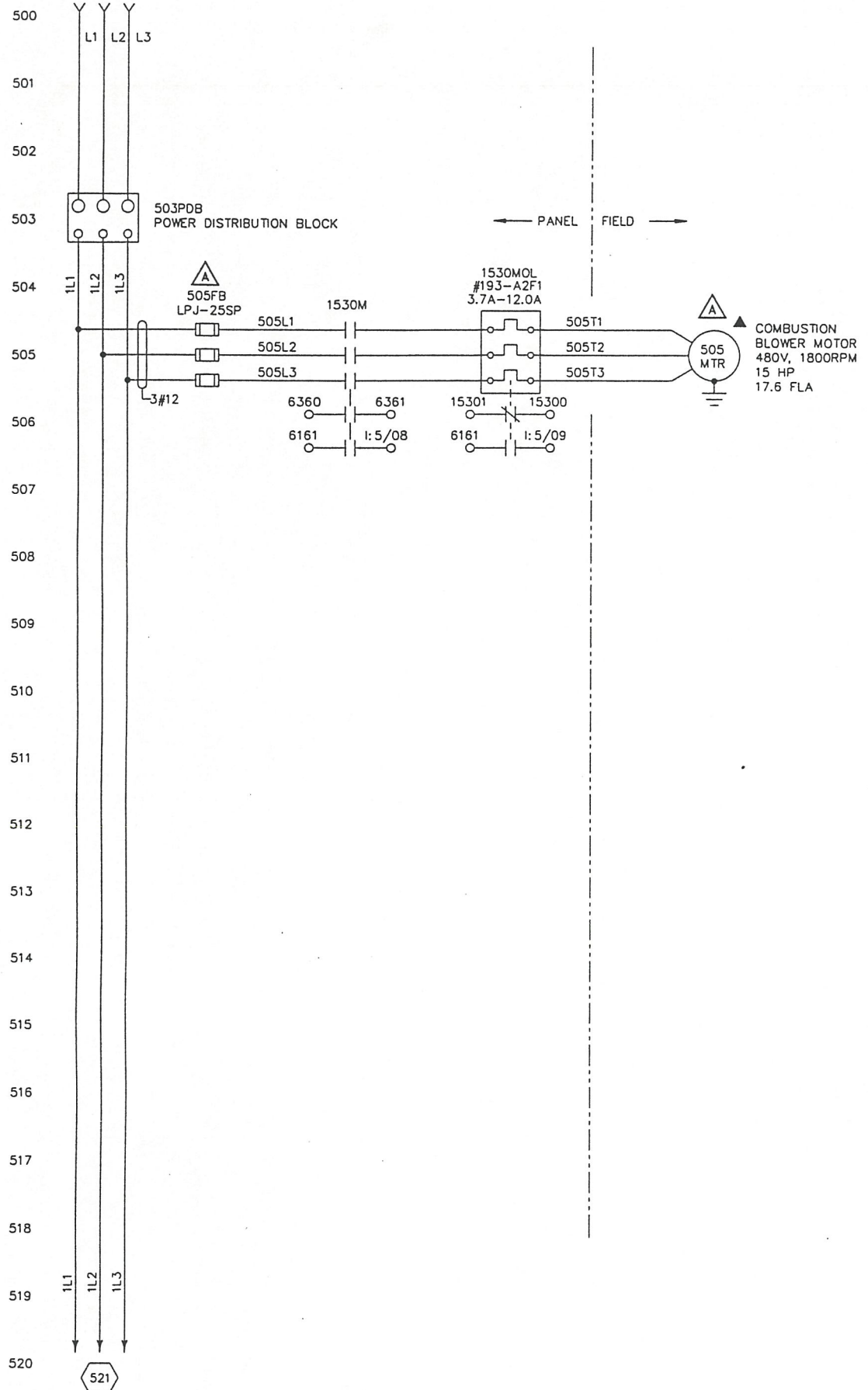
- NOTES**
1. THIS DRAWING IS A DIAGRAMMATIC REPRESENTATION; IT IS NOT INTENDED TO SHOW ACTUAL CONDUIT ROUTING, LOCATION OR FILL.
 2. ANALOG CONTROL SHALL BE RUN SEPARATE, DISCRETE CONTROL (120VAC) SHALL BE RUN SEPARATE, AND POWER SHALL BE RUN SEPARATE. NONE OF THE THREE TYPES SHALL BE RUN IN THE SAME CONDUIT, WREWAY, ETC.
 3. SPARE WIRES SHALL CONFORM TO CUSTOMER STANDARDS. CONDUIT FILLS SHALL MEET NEC REQUIREMENTS.
 4. ALL COLOR CODING OF WIRE SHALL MEET CUSTOMER STANDARDS.
 5. ALL CONDUIT SHALL BE ROUTED A MINIMUM OF 12" FROM ANY HEAT PRODUCING SOURCE.
 6. UNLESS NOTED OTHERWISE, ALL SHIELDED CABLE SHALL BE 18 GAUGE (BELDEN CAT. #8760 & #8770 OR EQUAL). AVOID ANY EXTRA TERMINATIONS. GROUND SHIELD AT CONTROL PANEL ONLY.
 7. ALL THERMOCOUPLE WIRES SHALL BE 24 GAUGE, TEFLON INSULATED SOLID WIRE, RATED FOR 500F AND SUITABLE FOR TYPE "K" THERMOCOUPLE (OMEGA CAT. #TT-K-24 OR EQUAL).

- LEGEND**
- TERMINAL LOCATED IN MASTER CONTROL PANEL
 - ⊙ TERMINAL LOCATED IN GAS TRAIN TERMINAL BOX
 - DEVICE LOCATED ON GAS TRAIN ASSEMBLY
 - ▲ DEVICE LOCATED IN FIELD
 - FIELD/INTERLOCK WIRING
- UNMARKED DEVICES ARE LOCATED IN PANEL INDICATED BY TITLE OF DRAWING

A RECORD DRAWING		7/25/96
REV	DESCRIPTION OF CHANGE	DATE BY
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SCALE:		
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140
TITLE Durr RTO VOC EMISSION CONTROL 480 VOLT POWER SCHEMATIC		Durr DRAWING NUMBER E930004A
THE INFORMATION CONTAINED IN THESE DRAWINGS IS FURNISHED AT YOUR REQUEST AND IS ACCEPTED BY YOU WITH THE UNDERSTANDING THAT IT IS STRICTLY CONFIDENTIAL AND WILL NOT BE USED NOR DISCLOSED TO OTHERS WITHOUT OUR WRITTEN CONSENT. Durr INDUSTRIES, INC.		CUSTOMER DRAWING NUMBER

CREATED BY: LS

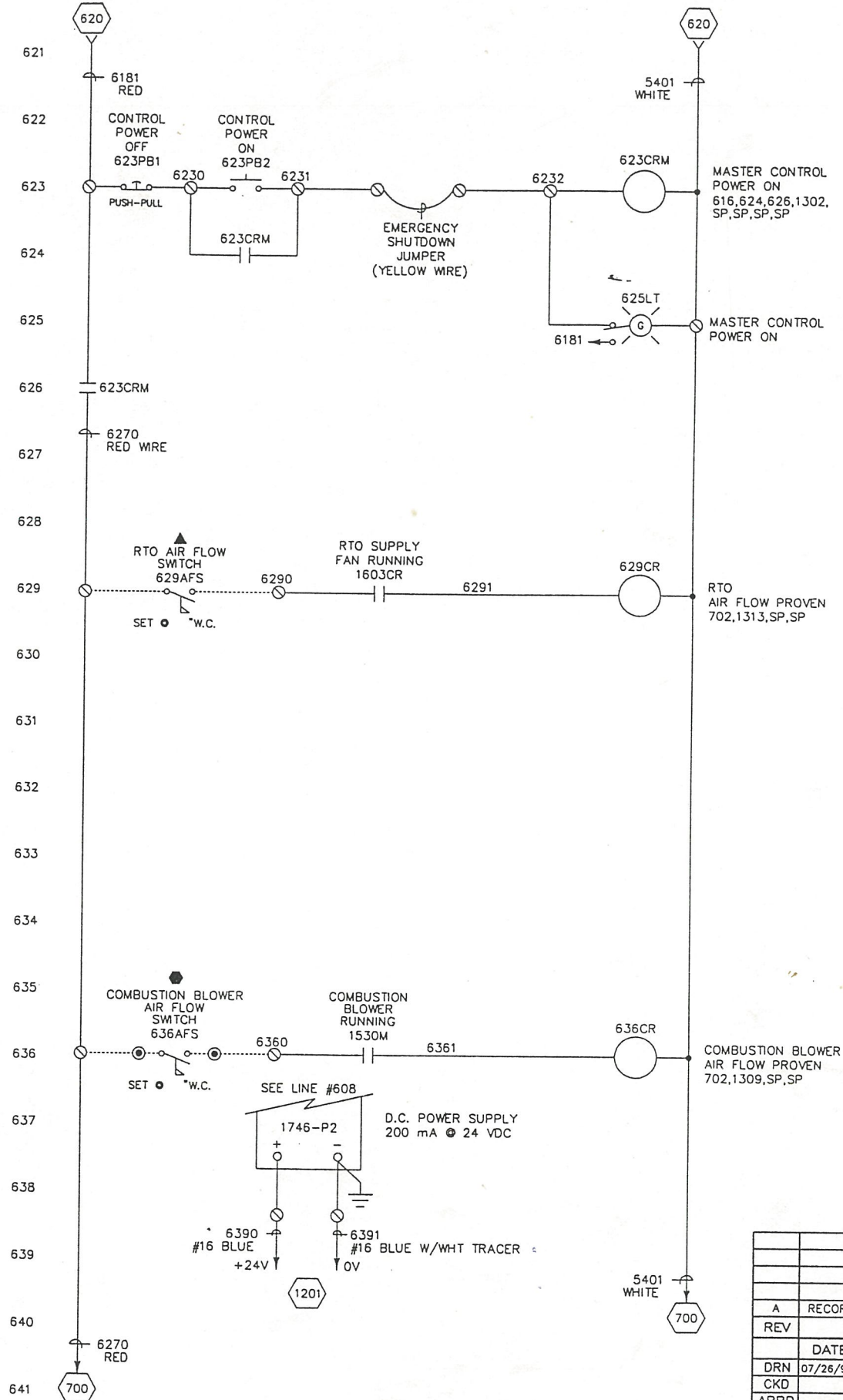
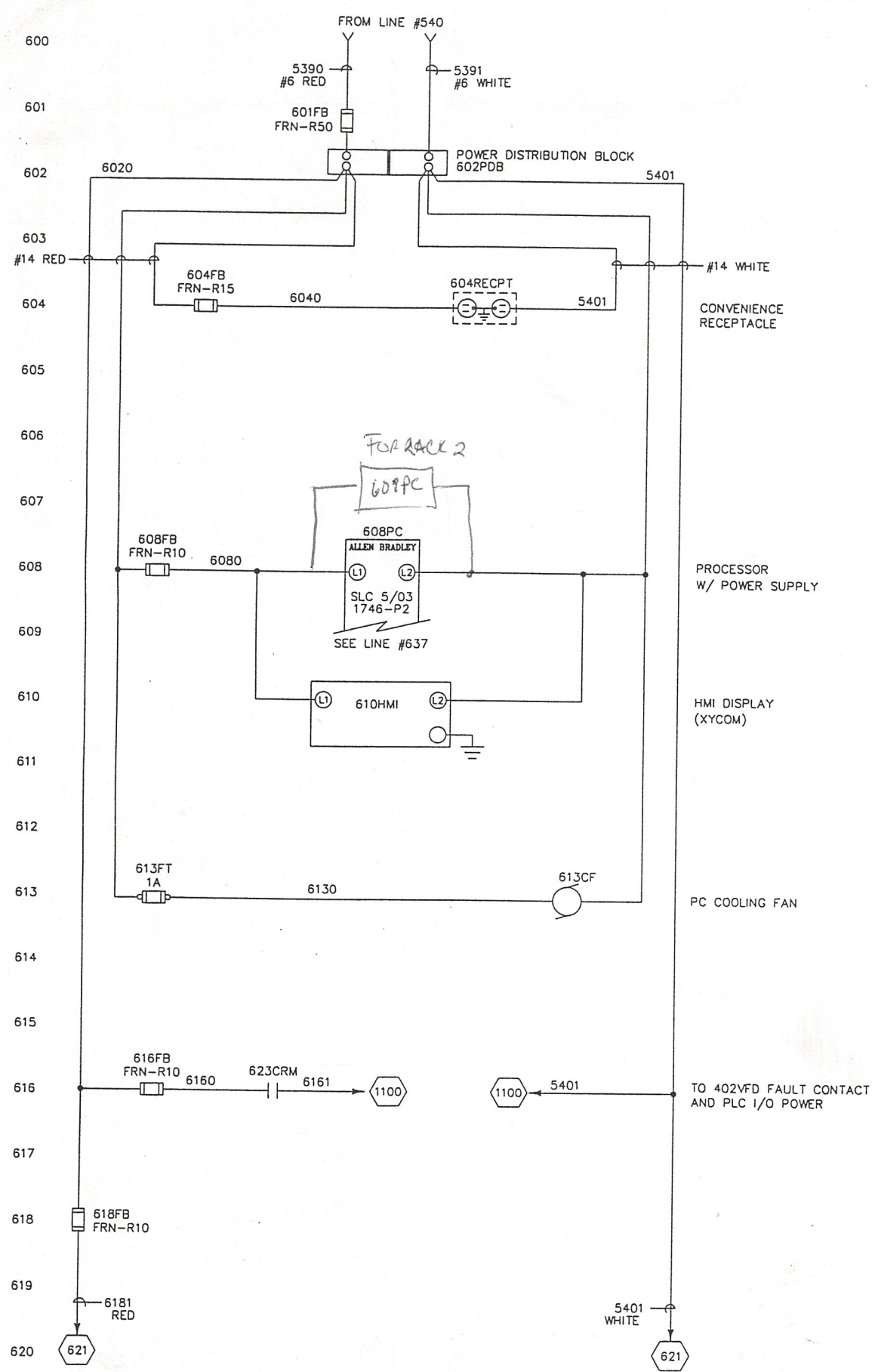
480V, 3PH, 60HZ
FROM DISTRIBUTION PANEL
80A C/B



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 2. ANALOG CONTROL SHALL BE RUN SEPARATE, DISCRETE CONTROL (120VAC) SHALL BE RUN SEPARATE, AND POWER SHALL BE RUN SEPARATE. NONE OF THE THREE TYPES SHALL BE RUN IN THE SAME CONDUIT, WIREWAY, ETC.
 3. SPARE WIRES SHALL CONFORM TO CUSTOMER STANDARDS. CONDUIT FILLS SHALL MEET NEC REQUIREMENTS.
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- LEGEND**
- TERMINAL LOCATED IN MASTER CONTROL PANEL
 - TERMINAL LOCATED IN GAS TRAIN TERMINAL BOX
 - ◆ DEVICE LOCATED ON GAS TRAIN ASSEMBLY
 - ▲ DEVICE LOCATED IN FIELD
 - FIELD/INTERLOCK WIRING
- UNMARKED DEVICES ARE LOCATED IN PANEL INDICATED BY TITLE OF DRAWING

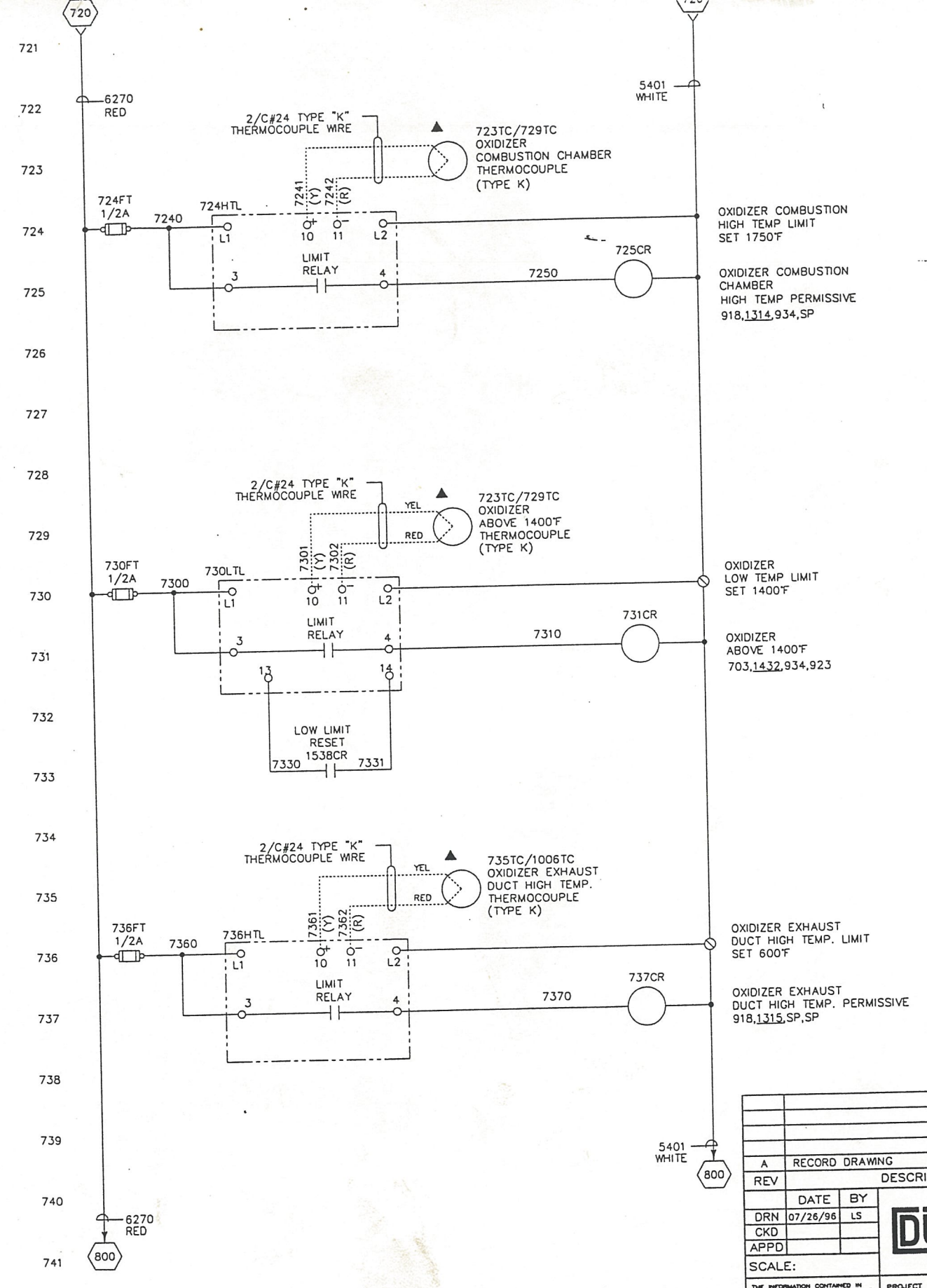
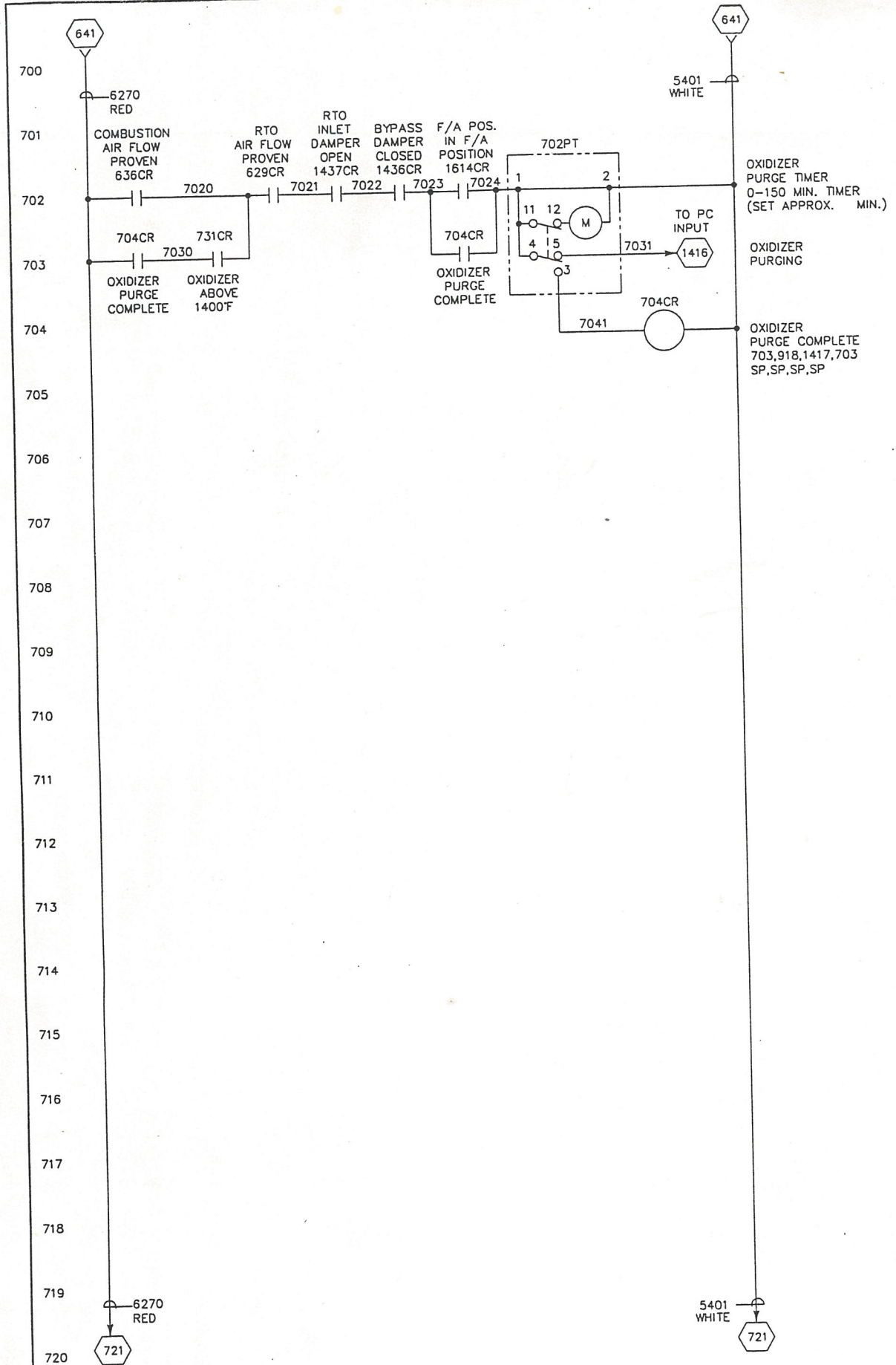
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PROJECT - BOMBARDIER MOTORS CORP.		TITLE DÜRR RTO VOC EMISSION CONTROL 480 VOLT POWER SCHEMATIC	

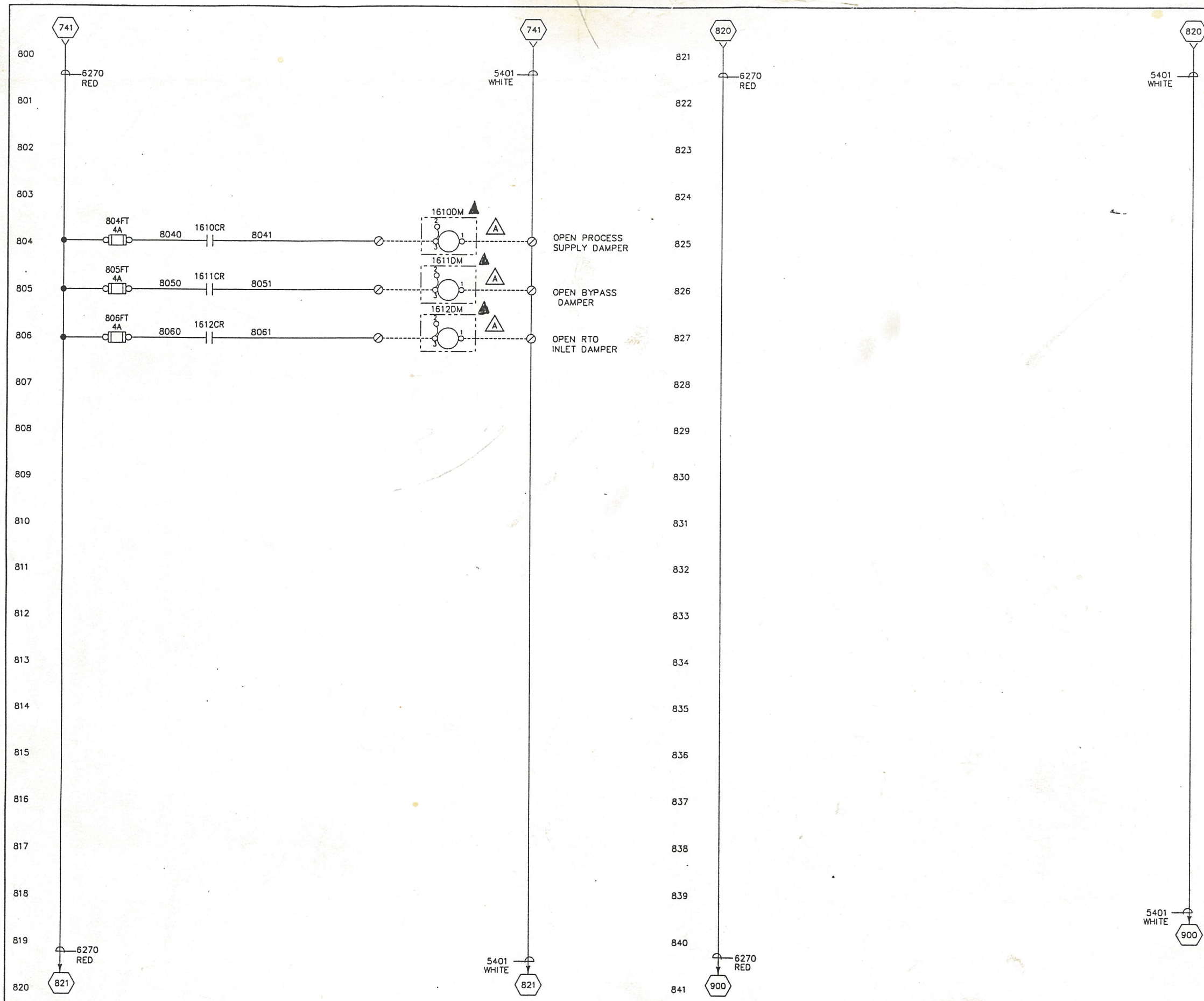


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 3. SPARE WIRES SHALL CONFORM TO CUSTOMER STANDARDS. CONDUIT FILLS SHALL MEET NEC REQUIREMENTS.
 4. ALL COLOR CODING OF WIRE SHALL MEET CUSTOMER STANDARDS.
 5. ALL CONDUIT SHALL BE ROUTED A MINIMUM OF 12" FROM ANY HEAT PRODUCING SOURCE.
 6. UNLESS NOTED OTHERWISE, ALL SHIELDED CABLE SHALL BE 18 GAUGE (BELDEN CAT. #8760 & #8770 OR EQUAL). AVOID ANY EXTRA TERMINATIONS. GROUND SHIELD AT CONTROL PANEL ONLY.
 7. ALL THERMOCOUPLE WIRES SHALL BE 24 GAUGE, TEFLON INSULATED SOLID WIRE, RATED FOR 500F AND SUITABLE FOR TYPE 'K' THERMOCOUPLE (OMEGA CAT. #TT-K-24 OR EQUAL).

- LEGEND**
- TERMINAL LOCATED IN MASTER CONTROL PANEL
 - ⊙ TERMINAL LOCATED IN GAS TRAIN TERMINAL BOX
 - DEVICE LOCATED ON GAS TRAIN ASSEMBLY
 - ▲ DEVICE LOCATED IN FIELD
 - FIELD/INTERLOCK WIRING
- UNMARKED DEVICES ARE LOCATED IN PANEL INDICATED BY TITLE OF DRAWING

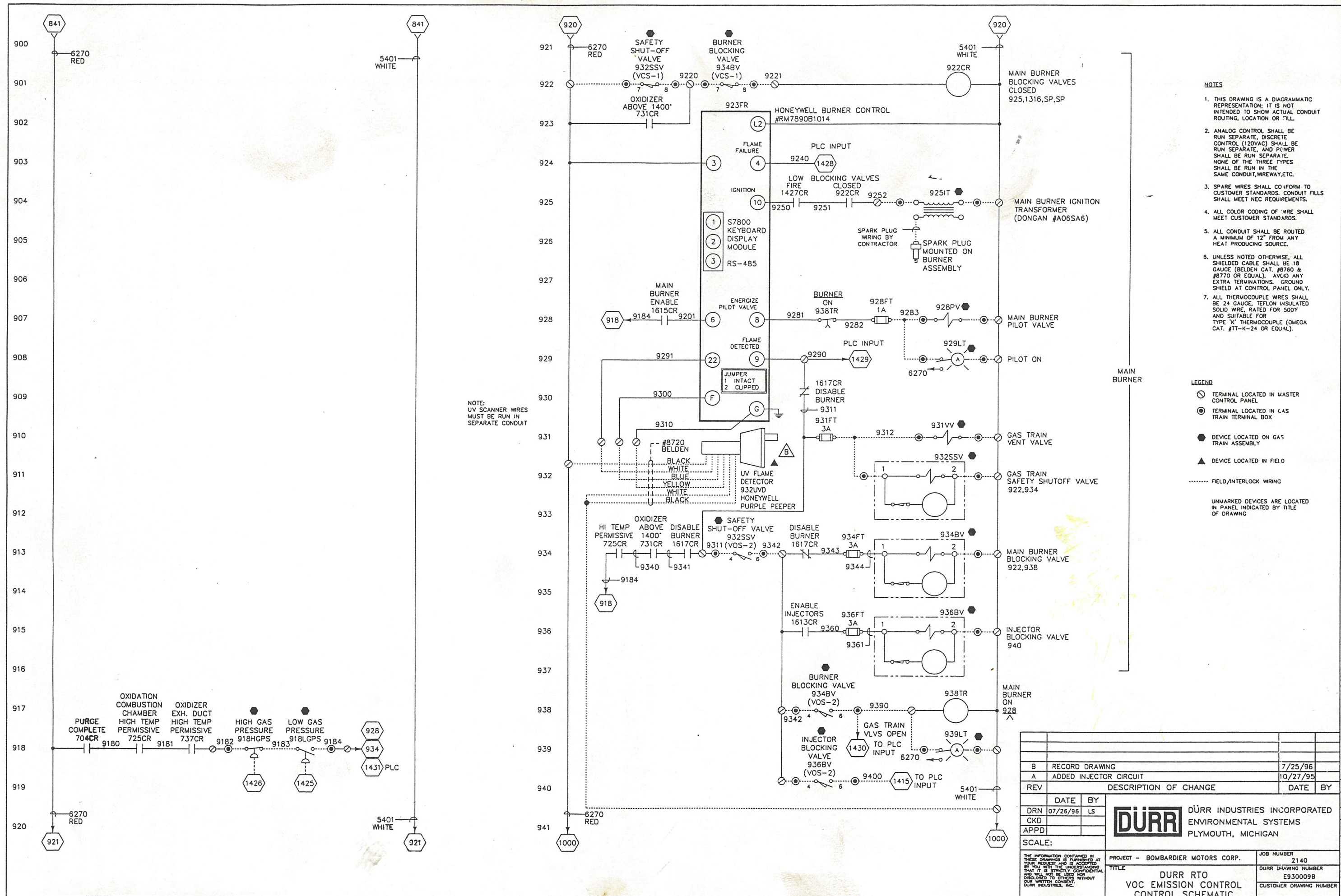
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REV	DESCRIPTION OF CHANGE			DATE BY
DRN	07/26/96	LS		
CKD				
APPD				
SCALE:				
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140		
TITLE		DURR ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN		
DURR RTO VOC EMISSION CONTROL CONTROL SCHEMATIC		DURR DRAWING NUMBER E930006A		
		CUSTOMER DRAWING NUMBER		





A		RECORD DRAWING		7/25/96	
REV	DATE	BY	DESCRIPTION OF CHANGE	DATE	BY
DRN	07/26/96	LS			
CKD					
APPD					
SCALE:					
<small>THE INFORMATION CONTAINED IN THESE DRAWINGS IS FURNISHED AT YOUR REQUEST AND IS ACCEPTED BY YOU WITH THE UNDERSTANDING THAT IT IS STRICTLY CONFIDENTIAL AND WILL NOT BE USED OR DISCLOSED TO OTHERS WITHOUT OUR WRITTEN CONSENT. DÜRR INDUSTRIES, INC.</small>			DÜRR DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN		PROJECT - BOMBARDIER MOTORS CORP. JOB NUMBER 2140
			TITLE DÜRR RTO VOC EMISSION CONTROL CONTROL SCHEMATIC		DÜRR DRAWING NUMBER E930008A CUSTOMER DRAWING NUMBER

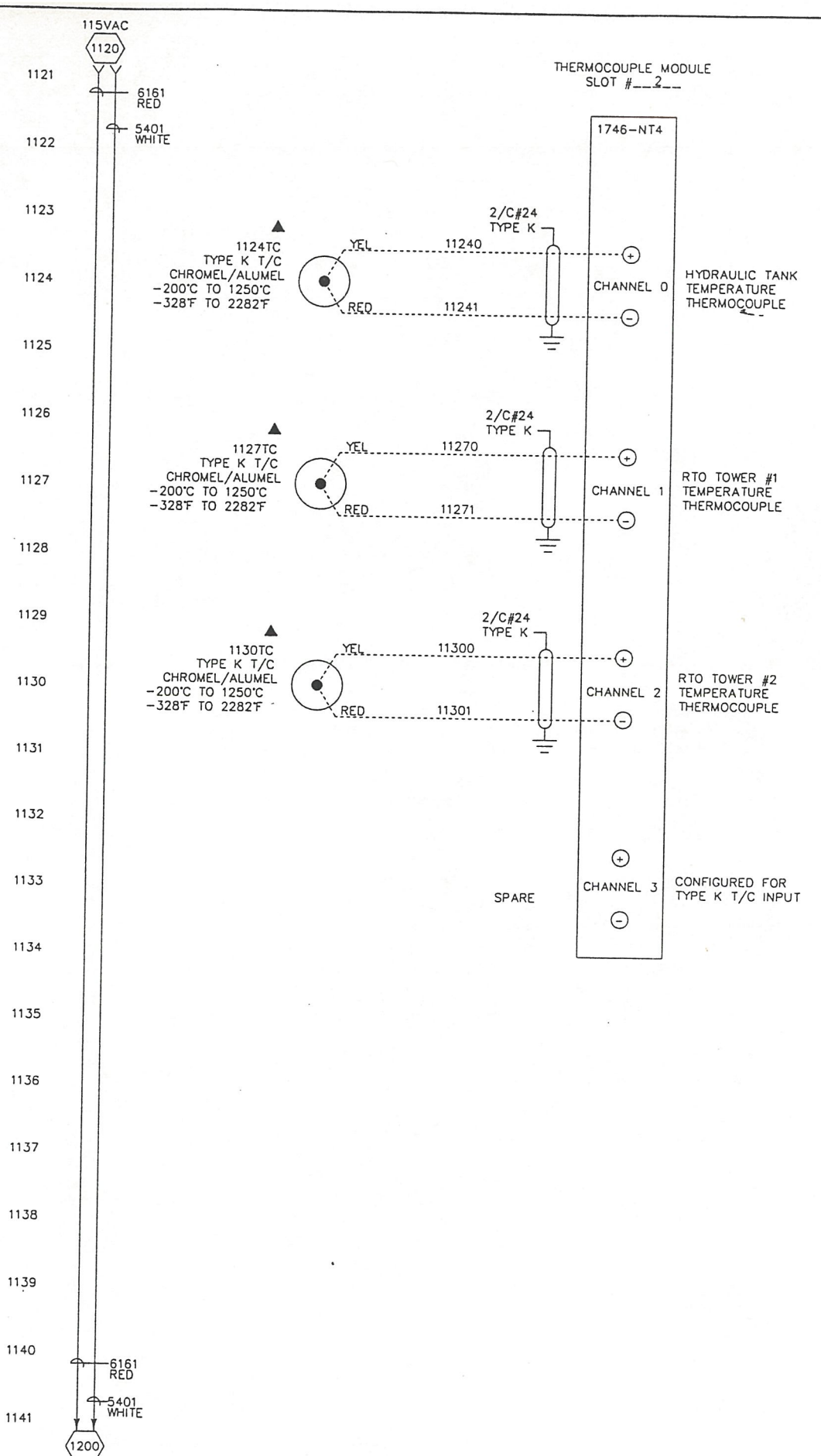
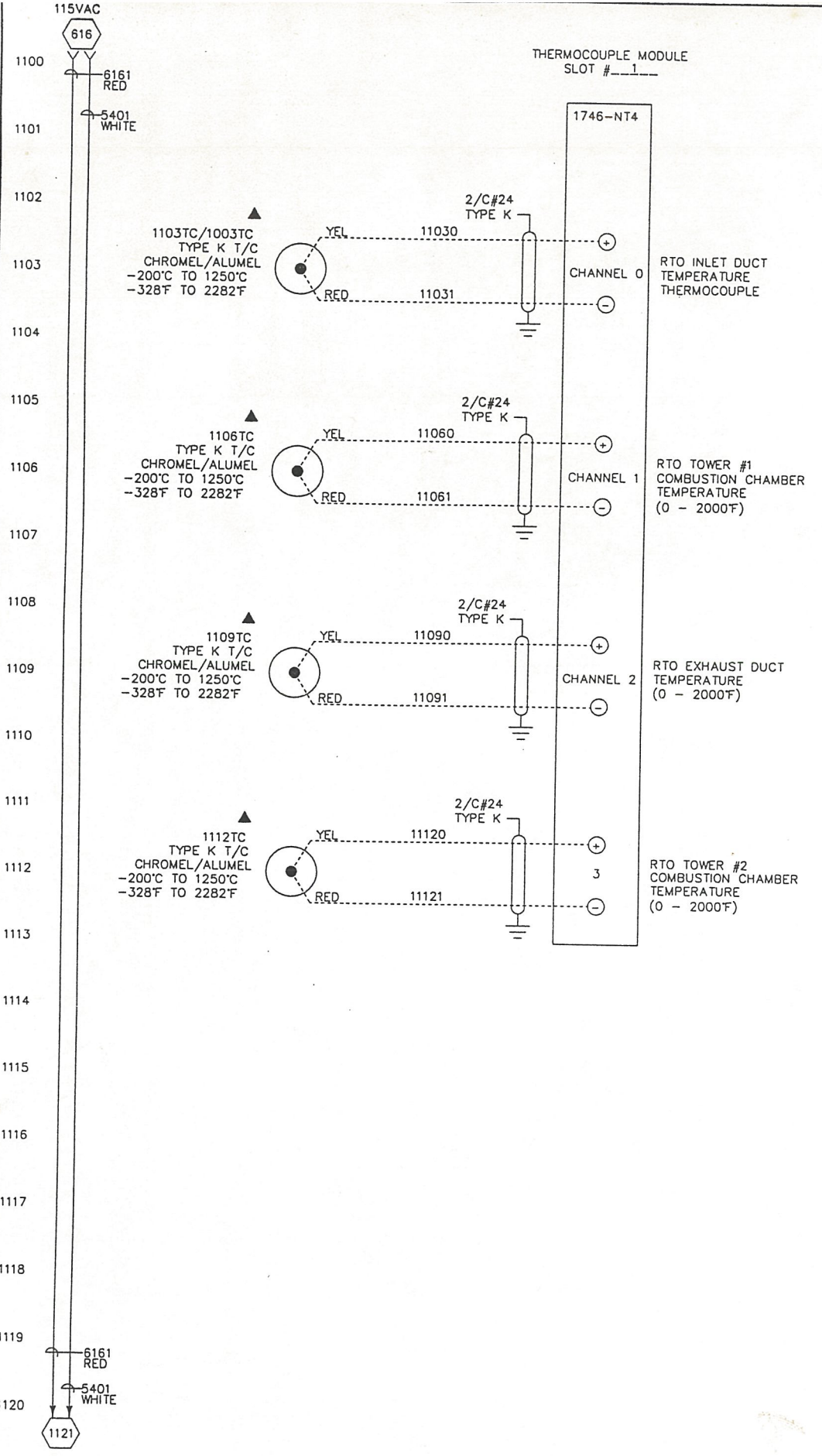
CREATED BY: LS



REV	DATE	BY	DESCRIPTION OF CHANGE	DATE	BY
B	07/25/96	LS	RECORD DRAWING	7/25/96	
A	10/27/95		ADDED INJECTOR CIRCUIT	10/27/95	

DÜRR		DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN	
PROJECT -	BOMBARDIER MOTORS CORP.	JOB NUMBER	2140
TITLE	DURR RTO VOC EMISSION CONTROL CONTROL SCHEMATIC	DURR DRAWING NUMBER	E930009B
		CUSTOMER DRAWING NUMBER	

CREATED BY: LS



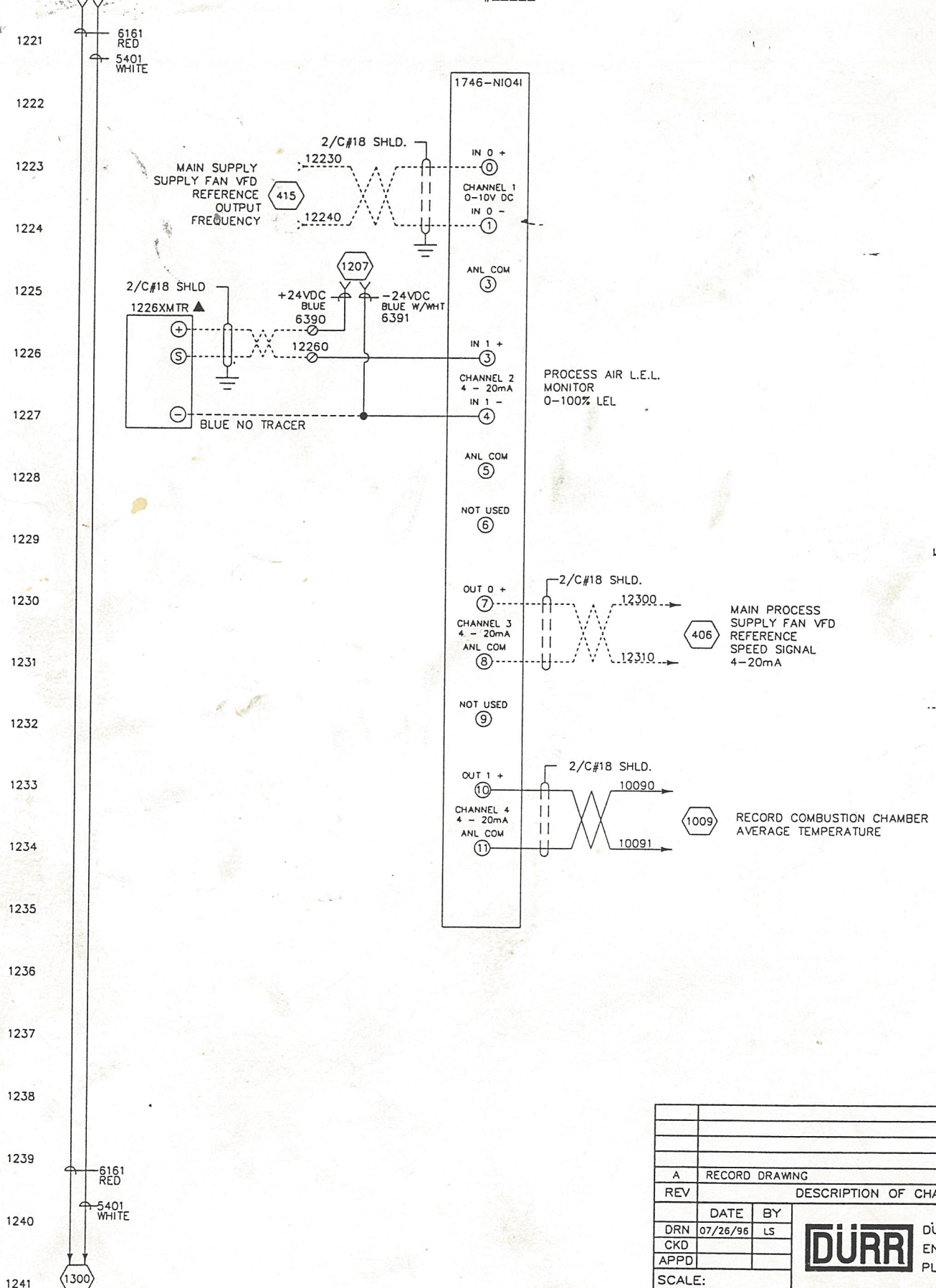
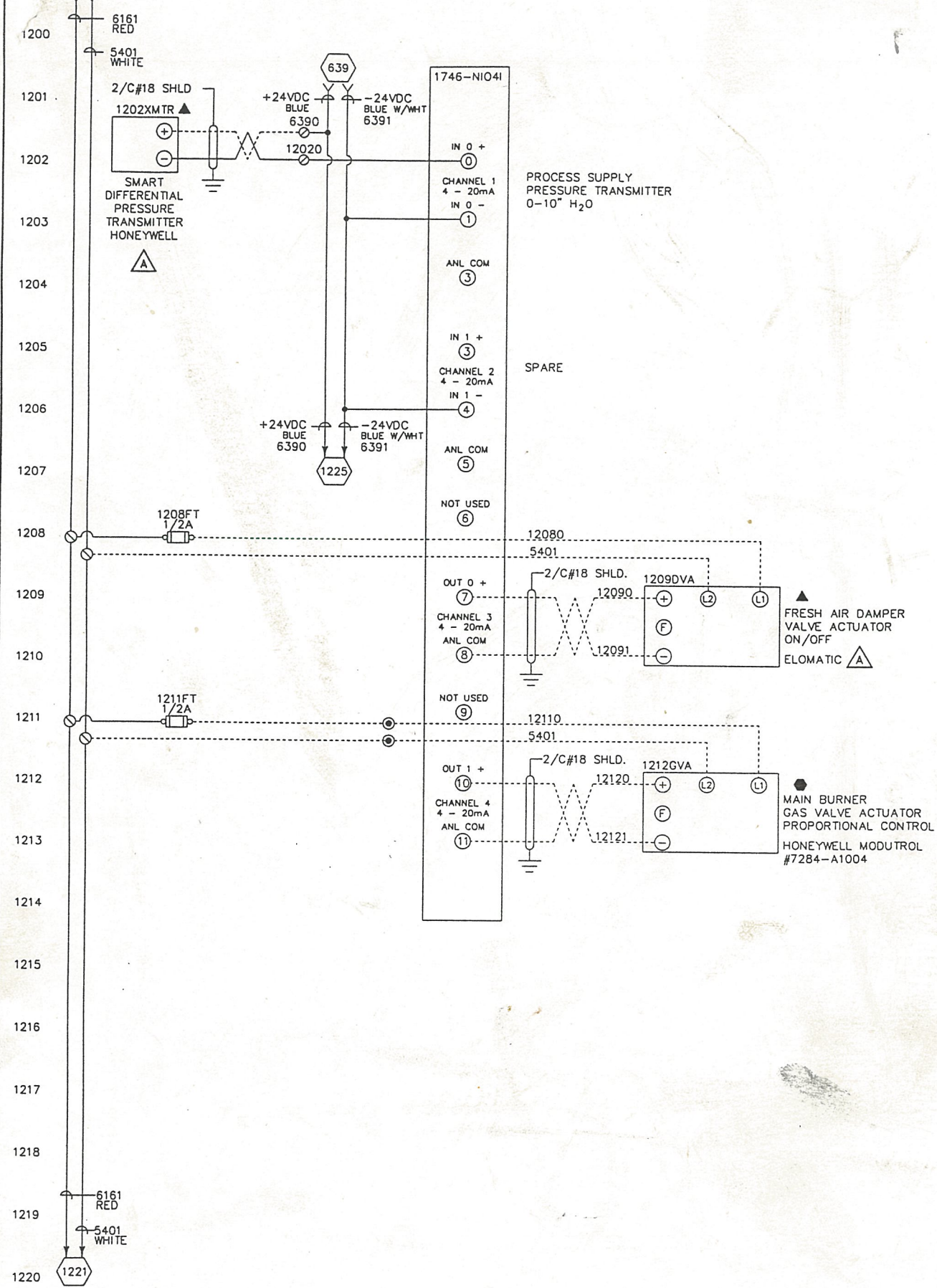
- NOTES**
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 - ⊙ TERMINAL LOCATED IN GAS TRAIN TERMINAL BOX
 - DEVICE LOCATED ON GAS TRAIN ASSEMBLY
 - ▲ DEVICE LOCATED IN FIELD
 - FIELD/INTERLOCK WIRING
- UNMARKED DEVICES ARE LOCATED IN PANEL INDICATED BY TITLE OF DRAWING

A		RECORD DRAWING	7/25/96
REV	DESCRIPTION OF CHANGE		DATE BY
DRN	07/26/96	LS	
CKD			
APPD			
SCALE:			
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE		DURR DRAWING NUMBER E930011A	
DURR RTO VOC EMISSION CONTROL PLC I/O SCHEM SLOTS 1&2		CUSTOMER DRAWING NUMBER	

ANALOG INPUT/OUTPUT MODULE
SLOT # 3

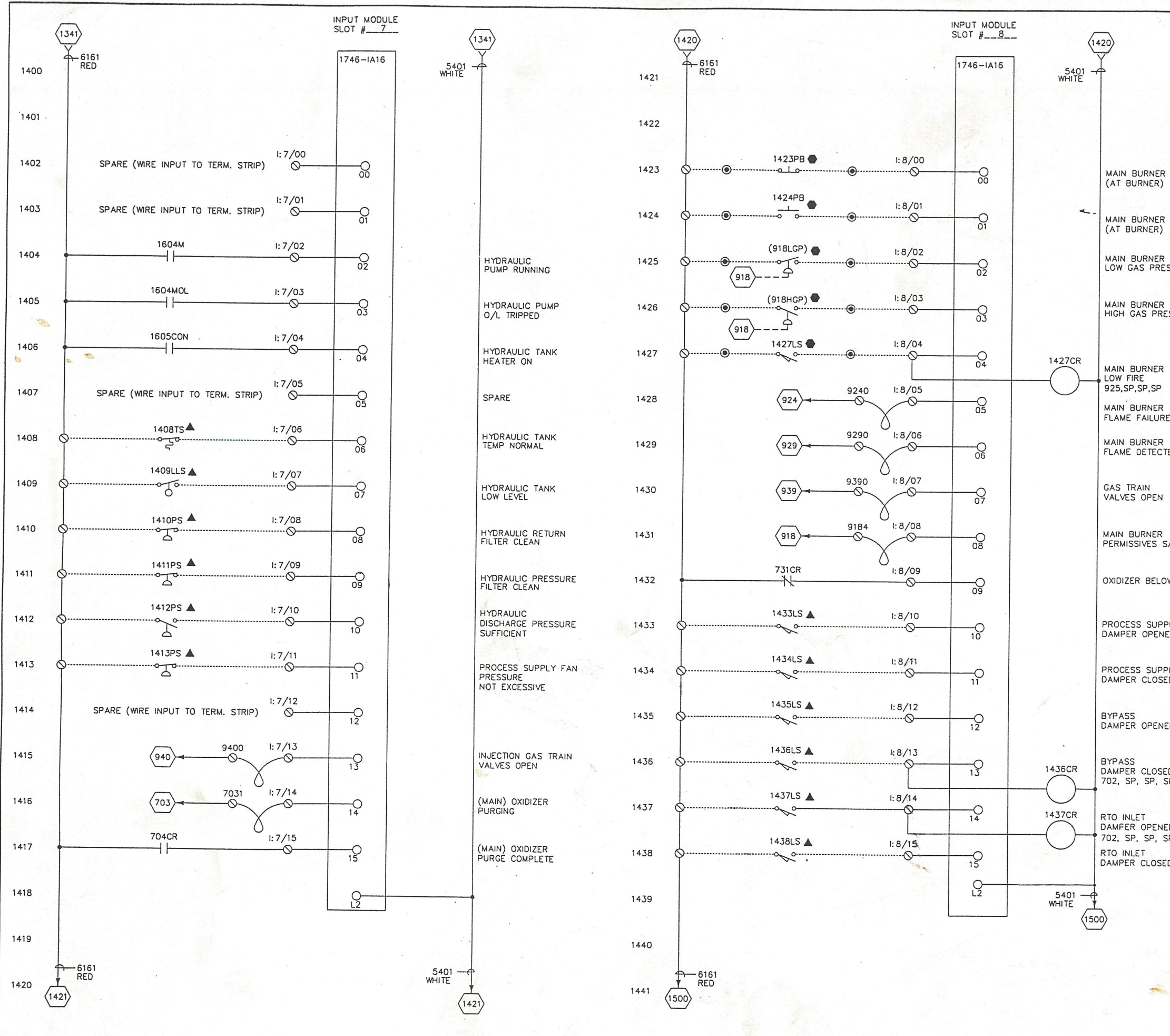
ANALOG INPUT/OUTPUT MODULE
SLOT # 4



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 - DEVICE LOCATED ON GAS TRAIN ASSEMBLY
 - ▲ DEVICE LOCATED IN FIELD
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A		RECORD DRAWING	7/25/96
REV	DATE	DESCRIPTION OF CHANGE	DATE BY
DRN	07/26/96	LS	
CKD			
APPD			
SCALE:		PROJECT - BOMBARDIER MOTORS CORP. JOB NUMBER 2140	
TITLE		DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN	
DÜRR RTO VOC EMISSION CONTROL PLC I/O SCHEM SLOTS 3&4		DÜRR DRAWING NUMBER E930012A CUSTOMER DRAWING NUMBER	

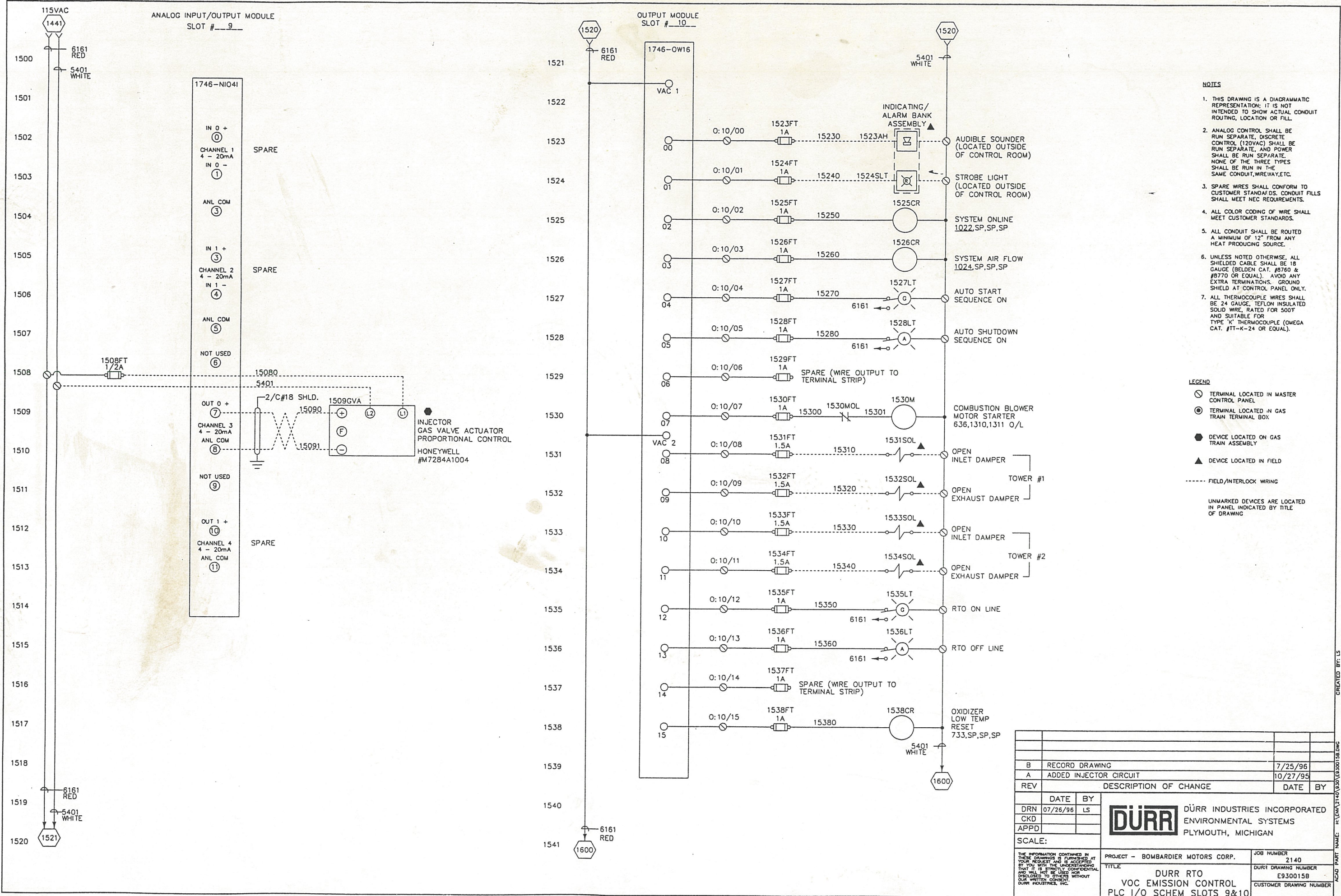


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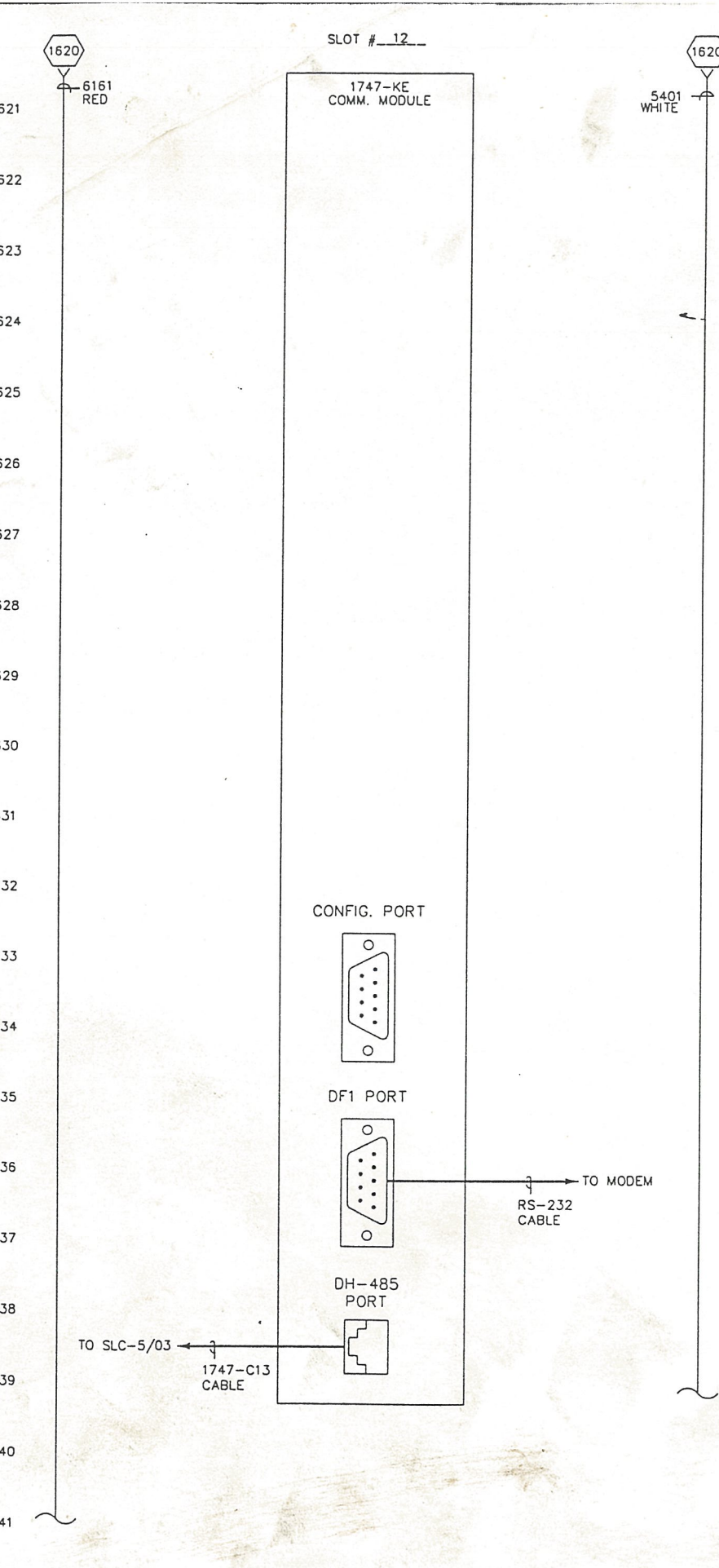
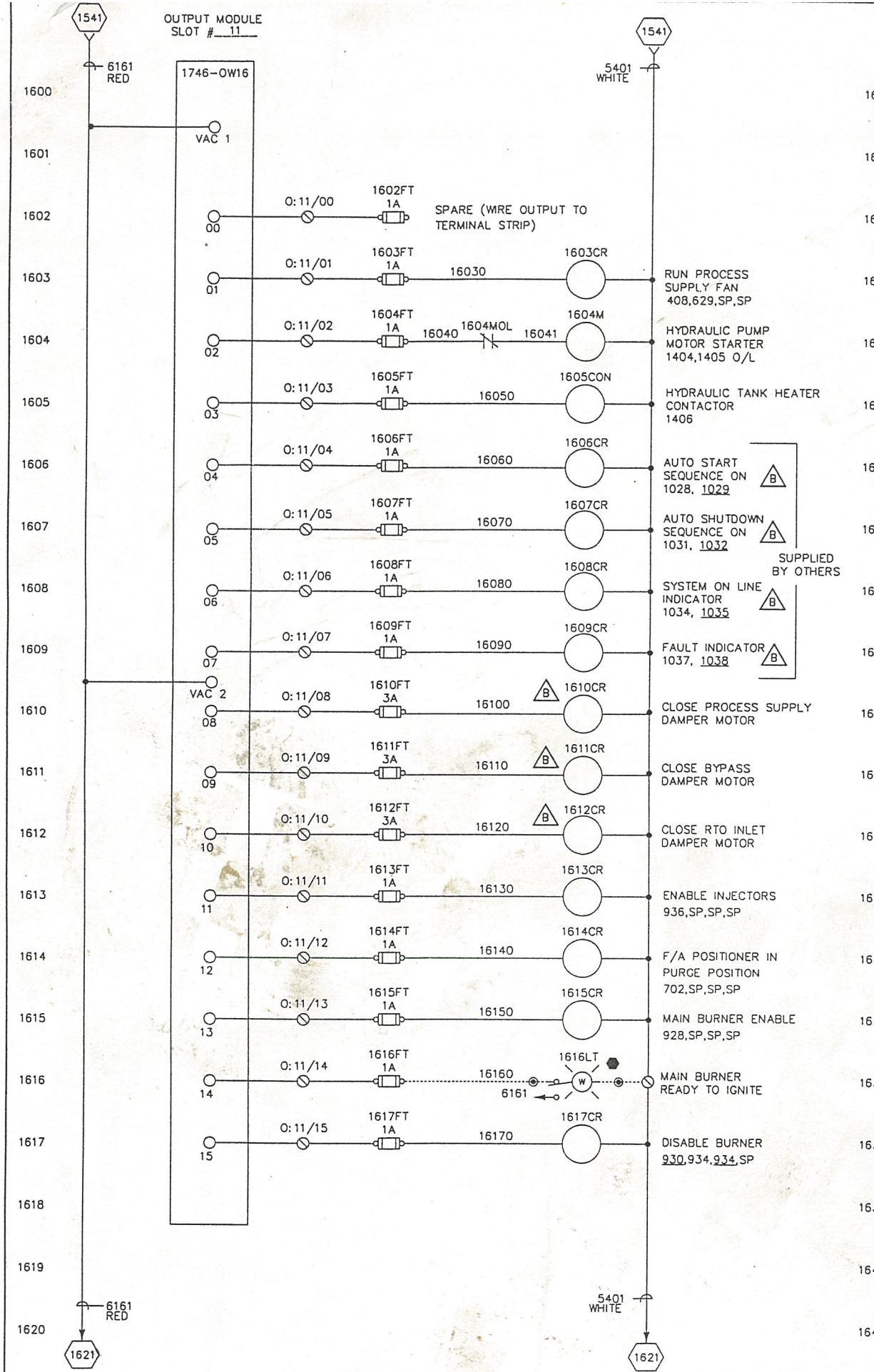
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A	ADDED INJECTOR CIRCUIT	10/27/95	
REV	DESCRIPTION OF CHANGE	DATE	BY
DRN	07/26/96 LS		
CKD			
APPD			
SCALE:			
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE DURR RTO VOC EMISSION CONTROL PLC I/O SCHEM SLOTS 7&8		DURR DRAWING NUMBER E930014B CUSTOMER DRAWING NUMBER	

CREATED BY: LS



REV	DESCRIPTION OF CHANGE	DATE	BY				
B	RECORD DRAWING	7/25/96	LS				
A	ADDED INJECTOR CIRCUIT	10/27/95	CKD				
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DATE	BY						
07/26/96	LS						
<p>DÜRR DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN</p>							
<p>PROJECT - BOMBARDIER MOTORS CORP.</p>		<p>JOB NUMBER 2140</p>					
<p>TITLE DÜRR RTO VOC EMISSION CONTROL PLC I/O SCHEM SLOTS 9&10</p>		<p>DÜRR DRAWING NUMBER E930015B</p>					
<p>SCALE:</p>		<p>CUSTOMER DRAWING NUMBER</p>					

CREATED BY: LS



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B	RECORD DRAWING	7/25/96	
A	ADDED INJECTOR CIRCUIT	10/27/95	
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PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE DÜRR RTO VOC EMISSION CONTROL PLC I/O SCHEM SLOTS 11&12		DÜRR DRAWING NUMBER E930016B CUSTOMER DRAWING NUMBER	

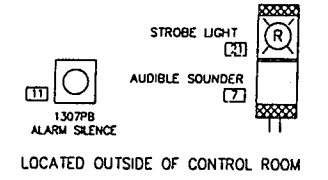
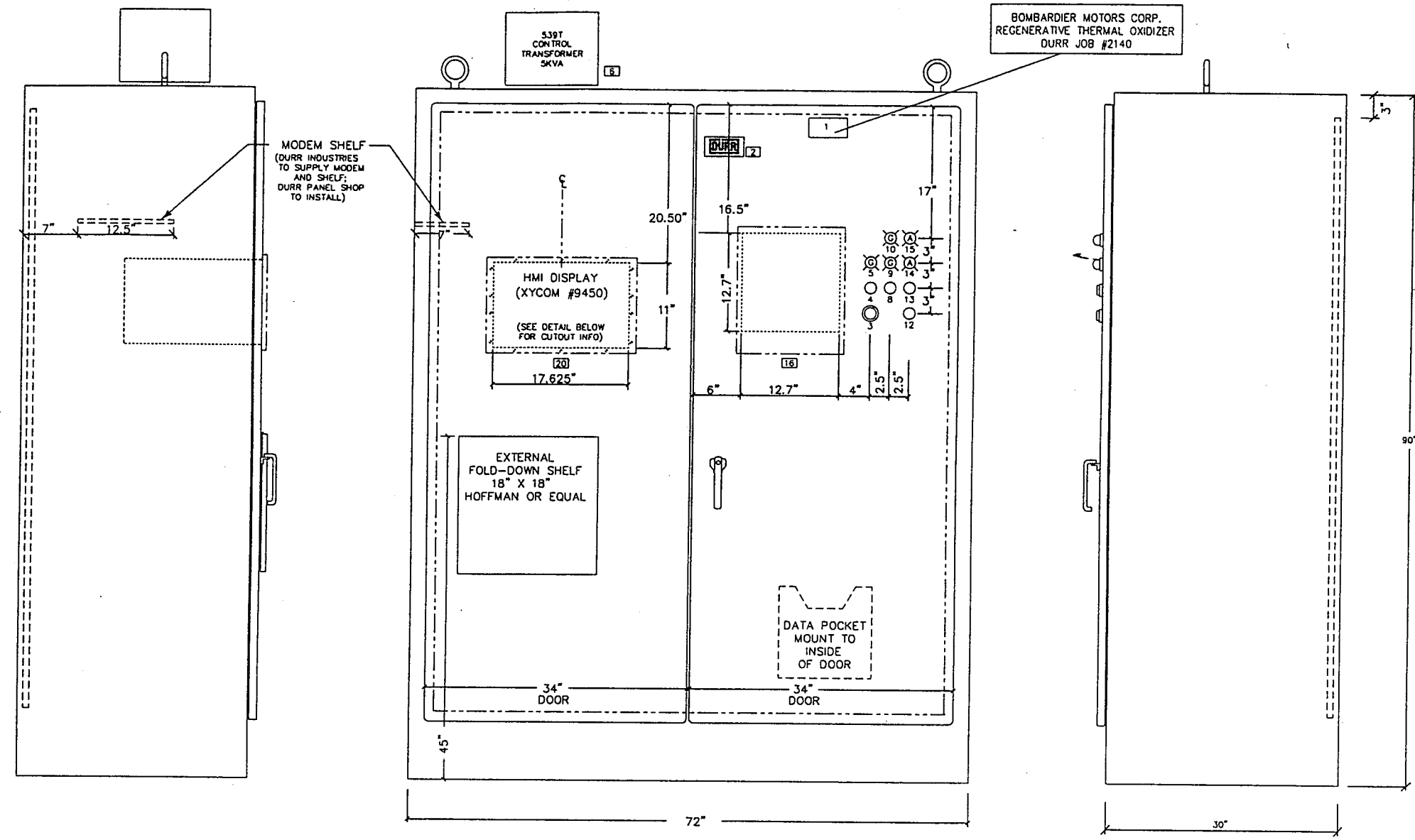
CREATED BY: LS

FUSE REQUIREMENTS			
505FB	LPJ-25SP	25A	BUSSMAN
524FB	LPJ-12SP	12A	BUSSMAN
528FB	LPJ-8SP	8A	BUSSMAN
537FB	FRS-R15	15A	BUSSMAN
601FB	FRN-R50	50A	BUSSMAN
604FB	FRN-R15	15A	BUSSMAN
608FB	FRN-R10	10A	BUSSMAN
616FB	FRN-R10	10A	BUSSMAN
618FB	FRN-R10	10A	BUSSMAN
613FT	FNA-1	1A	BUSSMAN
724FT	FNA-1/2	1/2A	BUSSMAN
730FT	FNA-1/2	1/2A	BUSSMAN
736FT	FNA-1/2	1/2A	BUSSMAN
928FT	FNA-1	1A	BUSSMAN
931FT	FNA-3	3A	BUSSMAN
934FT	FNA-3	3A	BUSSMAN
938FT	FNA-3	3A	BUSSMAN
1208FT	FNA-1/2	1/2A	BUSSMAN
1211FT	FNA-1/2	1/2A	BUSSMAN
1508FT	FNA-1/2	1/2A	BUSSMAN
1523FT	FNA-1	1A	BUSSMAN
1524FT	FNA-1	1A	BUSSMAN
1525FT	FNA-1	1A	BUSSMAN
1528FT	FNA-1	1A	BUSSMAN
1527FT	FNA-1	1A	BUSSMAN
1528FT	FNA-1	1A	BUSSMAN
1529FT	FNA-1	1A	BUSSMAN
1530FT	FNA-1	1A	BUSSMAN
1531FT	FNA-1 1/2	1 1/2A	BUSSMAN
1532FT	FNA-1 1/2	1 1/2A	BUSSMAN
1533FT	FNA-1 1/2	1 1/2A	BUSSMAN
1534FT	FNA-1 1/2	1 1/2A	BUSSMAN
1535FT	FNA-1	1A	BUSSMAN
1538FT	FNA-1	1A	BUSSMAN
1537FT	FNA-1	1A	BUSSMAN
1538FT	FNA-1	1A	BUSSMAN
1602FT	FNA-1	1A	BUSSMAN
1603FT	FNA-1	1A	BUSSMAN
1604FT	FNA-1	1A	BUSSMAN
1605FT	FNA-1	1A	BUSSMAN
1606FT	FNA-1	1A	BUSSMAN
1607FT	FNA-1	1A	BUSSMAN
1608FT	FNA-1	1A	BUSSMAN
1609FT	FNA-1	1A	BUSSMAN
1610FT	FNA-3	3A	BUSSMAN
1611FT	FNA-3	3A	BUSSMAN
1612FT	FNA-3	3A	BUSSMAN
1613FT	FNA-1	1A	BUSSMAN
1614FT	FNA-1	1A	BUSSMAN
1615FT	FNA-1	1A	BUSSMAN
1618FT	FNA-1	1A	BUSSMAN
1617FT	FNA-1	1A	BUSSMAN

MANUFACTURER SUPPLIED FUSE TAGGING (LOCATED INSIDE ENCLOSURE)

OVERLOAD REQUIREMENTS			
1530MOL	193-A2F1	3.7A-12.0A	ALLEN-BRADLEY
1604MOL	193-A2F1	3.7A-12.0A	ALLEN-BRADLEY

MANUFACTURER SUPPLIED OVERLOAD TAGGING (LOCATED INSIDE ENCLOSURE)



CONSTRUCTION MATERIALS

ENCLOSURE: 10 GAUGE STEEL, NEMA 12
90"H X 72"W X 30"D

SUBPLATE: 10 GAUGE STEEL
78"H X 66"W

OVERLAPPING DOORS: 10 GAUGE STEEL
CONTINUOUS HINGE ON DOORS

SUBPLATE MOUNTED ON COLLAR STUDS

HEAVY DUTY LIFTING EYES MOUNTED ON REINFORCED TOP

ALL SEAMS CONTINUOUSLY WELDED

PAINT SPECIFICATIONS

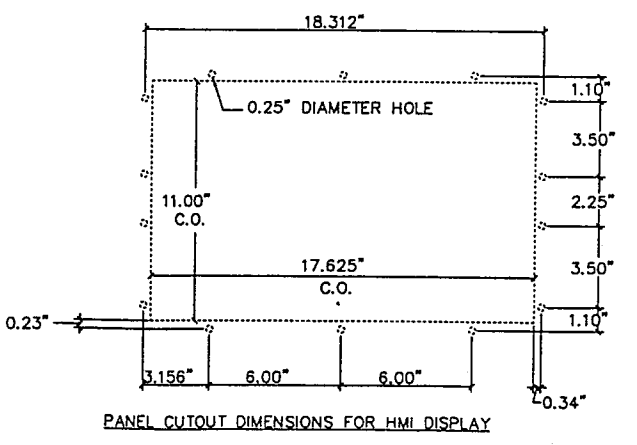
PRIMER: ONE COAT PRIMER

EXTERIOR: TWO COATS SLATE GREY /SW 4026 SHERWIN-MILLIAMS

INTERIOR: TWO COATS WHITE ENAMEL

NAMEPLATE LEGEND

ITEM No.	DEVICE No.	INSCRIPTION	ITEM No.	DEVICE No.	INSCRIPTION
1	2" x 4" TAG	BOMBARDIER MOTORS CORP. REGENERATIVE THERMAL OXIDIZER DURR JOB #2140	16	1001REC	RTO TEMPERATURE CHART RECORDER
2	STANDARD TAG	DURR INDUSTRIES	17		
3	623PB1	CONTROL POWER OFF	18		
4	623PB2	CONTROL POWER ON	19		
5	625LT	CONTROL POWER ON	20	610HMI	HMI DISPLAY
6	539T	CONTROL TRANSFORMER	21	1524SLT	STROBE LIGHT
7	1523AH	AUDIBLE SOUNDER	22		FUSE REQUIREMENTS (MOUNTED INSIDE ENCLOSURE)
8	1304PB	AUTO SEQUENCE START	23		OVERLOAD REQUIREMENTS (MOUNTED INSIDE ENCLOSURE)
9	1527LT	AUTO START SEQUENCE ON			
10	1535LT	RTO ON-LINE			
11	1307PB	ALARM SILENCE			
12	1306PB	RESET FAULT			
13	1305PB	AUTO SEQUENCE STOP			
14	1528LT	AUTO SHUTDOWN SEQUENCE ON			
15	1536LT	RTO OFF-LINE			



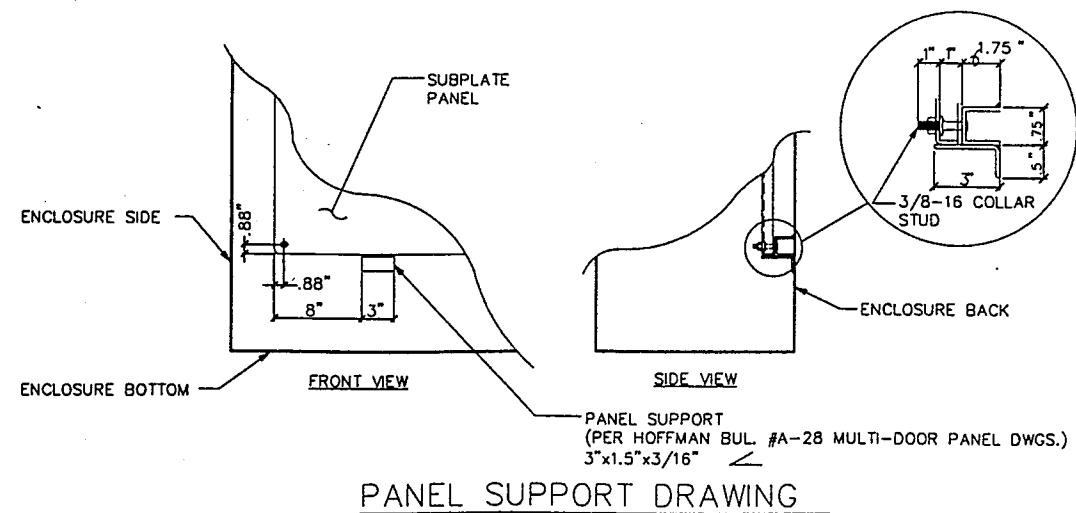
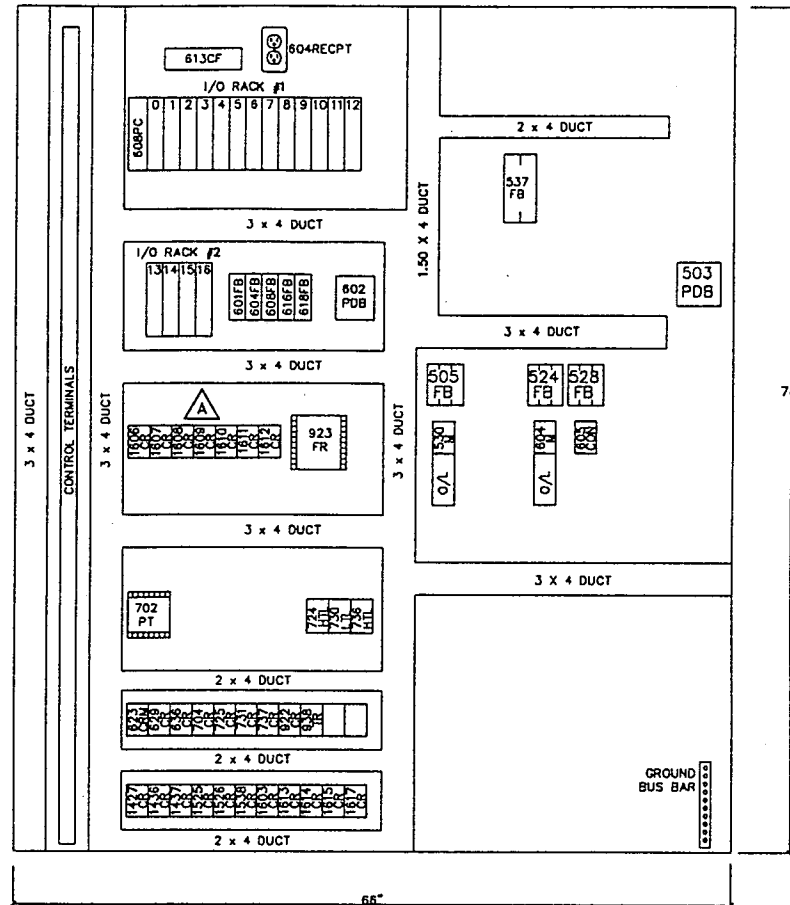
REV	DESCRIPTION OF CHANGE	DATE	BY
A	RECORD DRAWING	7/25/96	

DRN	07/26/96	LS	
CKD			
APPD			

SCALE:

PROJECT - BOMBARDIER MOTORS CORP.	JOB NUMBER 2140
TITLE Durr RTO VOC EMISSION CONTROL MCP DOOR LAYOUT	DURR DRAWING NUMBER E930020A
	CUSTOMER DRAWING NUMBER

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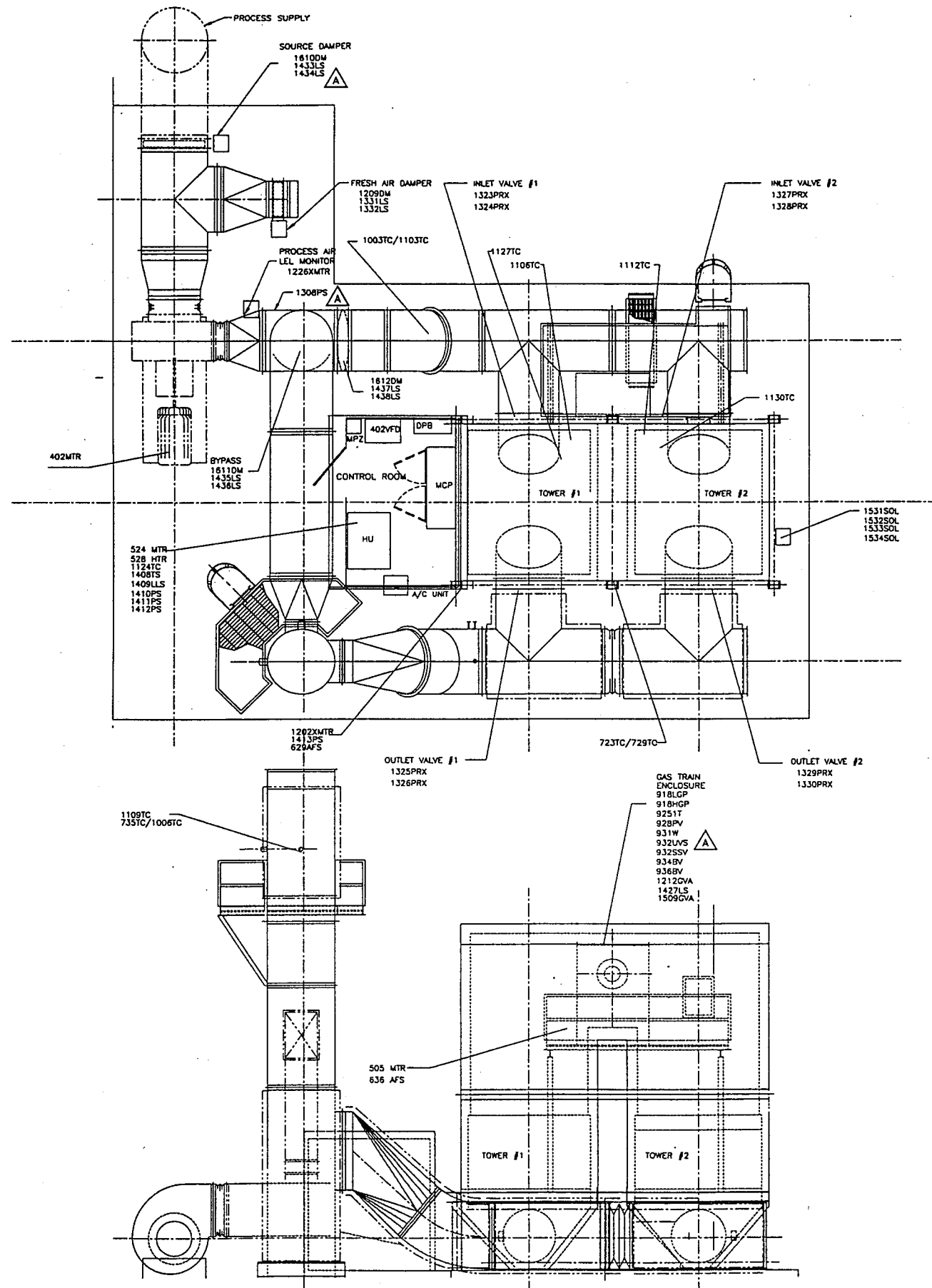


PANEL SUPPORT DRAWING

A	RECORD DRAWING			7/25/96
REV	DESCRIPTION OF CHANGE			DATE BY
DRN	07/26/96	LS		
CKD				
APPD				
SCALE:				
PROJECT - BOMBARDIER MOTORS CORP.				JOB NUMBER 2140
TITLE	DÜRR RTO			DÜRR DRAWING NUMBER E930021A
	VOC EMISSION CONTROL			CUSTOMER DRAWING NUMBER
	SUBPLATE LAYOUT			

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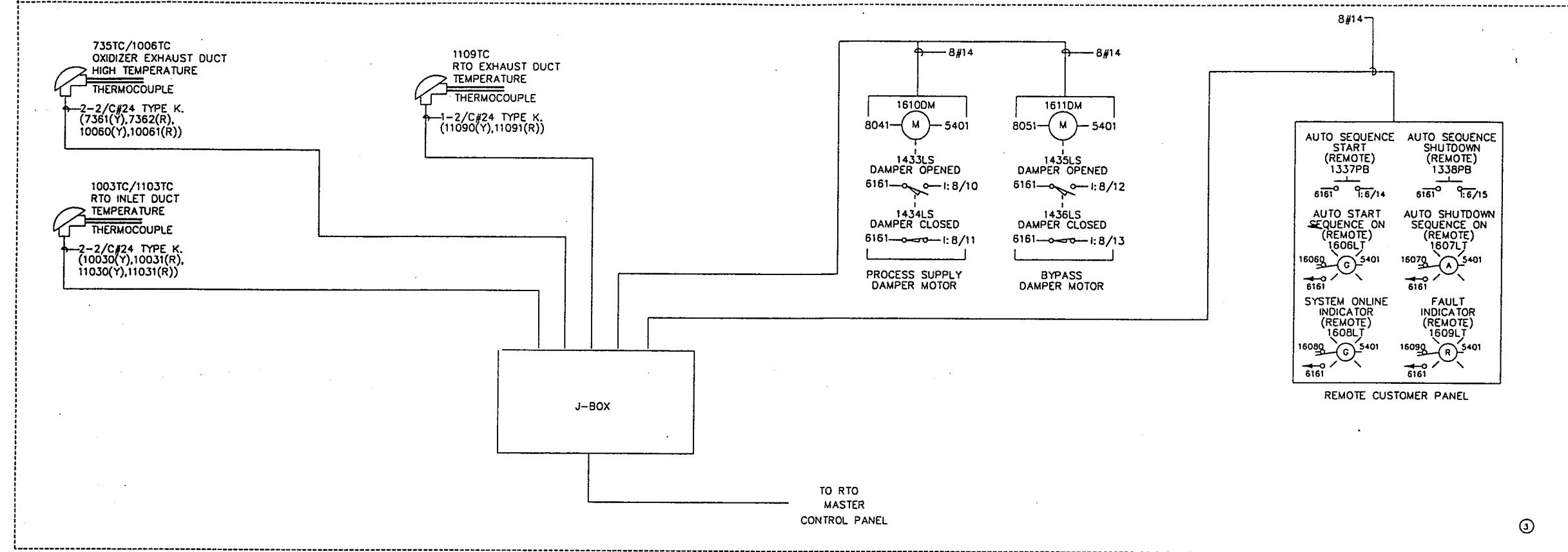
DÜRR DÜRR INDUSTRIES INCORPORATED
ENVIRONMENTAL SYSTEMS
PLYMOUTH, MICHIGAN



DEVICE	FUNCTION	DEVICE	FUNCTION
402MTR	MAIN PROCESS SUPPLY FAN MOTOR	1323PRX	TOWER #1 INLET DAMPER OPEN
402VFD	MAIN PROCESS SUPPLY FAN VARIABLE FREQUENCY DRIVE	1324PRX	TOWER #1 INLET DAMPER CLOSED
505MTR	COMBUSTION BLOWER MOTOR	1325PRX	TOWER #1 EXHAUST DAMPER OPEN
524MTR	HYDRAULIC PUMP MOTOR	1326PRX	TOWER #1 EXHAUST DAMPER CLOSED
528MTR	HYDRAULIC TANK HEATER	1327PRX	TOWER #2 INLET DAMPER OPEN
629AFS	RTO AIR FLOW PROVEN	1328PRX	TOWER #2 INLET DAMPER CLOSED
636AFS	COMBUSTION BLOWER AIR FLOW PROVEN	1329PRX	TOWER #2 EXHAUST DAMPER OPEN
723TC/729TC	OXIDIZER COMBUSTION CHAMBER HIGH TEMP	1330PRX	TOWER #2 EXHAUST DAMPER CLOSED
735TC/1006TC	OXIDIZER EXHAUST DUCT HIGH TEMP	1331LS	FRESH AIR DAMPER OPEN
918HGP	MAIN BURNER HIGH GAS PRESSURE	1332LS	FRESH AIR DAMPER CLOSED
918LGP	MAIN BURNER LOW GAS PRESSURE	1408TS	HYDRAULIC TANK TEMP NORMAL
925IT	MAIN BURNER IGNITION TRANSFORMER	1409LLS	HYDRAULIC TANK LOW LEVEL
929PV	MAIN BURNER PILOT VALVE	1410PS	HYDRAULIC RETURN FILTER CLEAN
931VW	GAS TRAIN VENT VALVE	1411PS	HYDRAULIC PRESSURE FILTER CLEAN
932SSV	GAS TRAIN SAFETY SHUT-OFF VALVE	1412PS	DISCHARGE PRESSURE SUFFICIENT
932UVS	MAIN BURNER UV SCANNER	1413PS	PROCESS SUPPLY FAN PRESSURE NOT EXCESSIVE
934BV	MAIN BURNER BLOCKING VALVE	1427LS	MAIN BURNER LOW FIRE
936BV	INJECTOR BLOCKING VALVE	1433LS	PROCESS SUPPLY DAMPER OPEN
1003TC/1103TC	RTO INLET DUCT TEMP	1434LS	PROCESS SUPPLY DAMPER CLOSED
1106TC	RTO TOWER #1 COMBUSTION CHAMBER TEMP	1435LS	BYPASS DAMPER OPEN
1109TC	RTO EXHAUST DUCT TEMP	1436LS	BYPASS DAMPER CLOSED
1112TC	RTO TOWER #2 COMBUSTION CHAMBER TEMP	1437LS	RTO INLET DAMPER OPEN
1124TC	HYDRAULIC TANK TEMP	1438LS	RTO INLET DAMPER CLOSED
1127TC	RTO TOWER #1 TEMP	1509GVA	INJECTOR GAS VALVE ACTUATOR
1130TC	RTO TOWER #2 TEMP	1531SOL	TOWER #1 OPEN INLET DAMPER
1202MTR	PROCESS SUPPLY PRESSURE TRANSMITTER	1532SOL	TOWER #1 OPEN EXHAUST DAMPER
1209DVA	FRESH AIR VALVE ACTUATOR PROPORTIONAL CONTROL	1533SOL	TOWER #2 OPEN INLET DAMPER
1212DVA	MAIN BURNER GAS VALVE ACTUATOR PROPORTIONAL CONTROL	1534SOL	TOWER #2 OPEN EXHAUST DAMPER
1226MTR	PROCESS AIR L.E.L. MONITOR	1610DM	OPEN PROCESS SUPPLY DAMPER
1308PS	PROCESS SUPPLY FAN AIR FLOW PROVEN	1611DM	OPEN BYPASS DAMPER
		1612DM	OPEN RTO INLET DAMPER

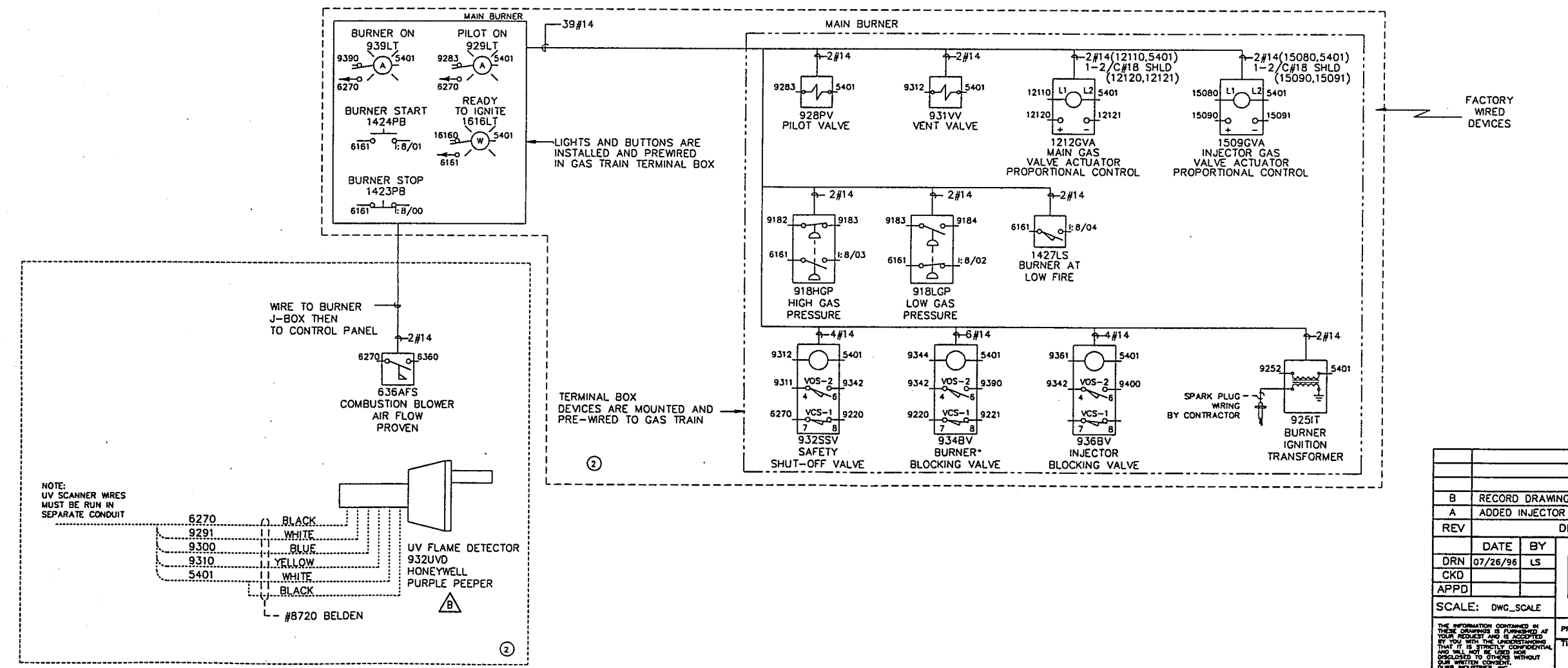
REV	DATE	BY	DESCRIPTION OF CHANGE	DATE	BY
A			RECORD DRAWING	7/25/96	
DRN	07/26/96	LS			
CKD					
APPD					

		DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN	
PROJECT - BOMBARDIER MOTORS CORP.	JOB NUMBER	2140	
TITLE		DURR RTO	DURR DRAWING NUMBER
VOC EMISSION CONTROL		E930022A	CUSTOMER DRAWING NUMBER
DEVICE LOCATION DIAGRAM			

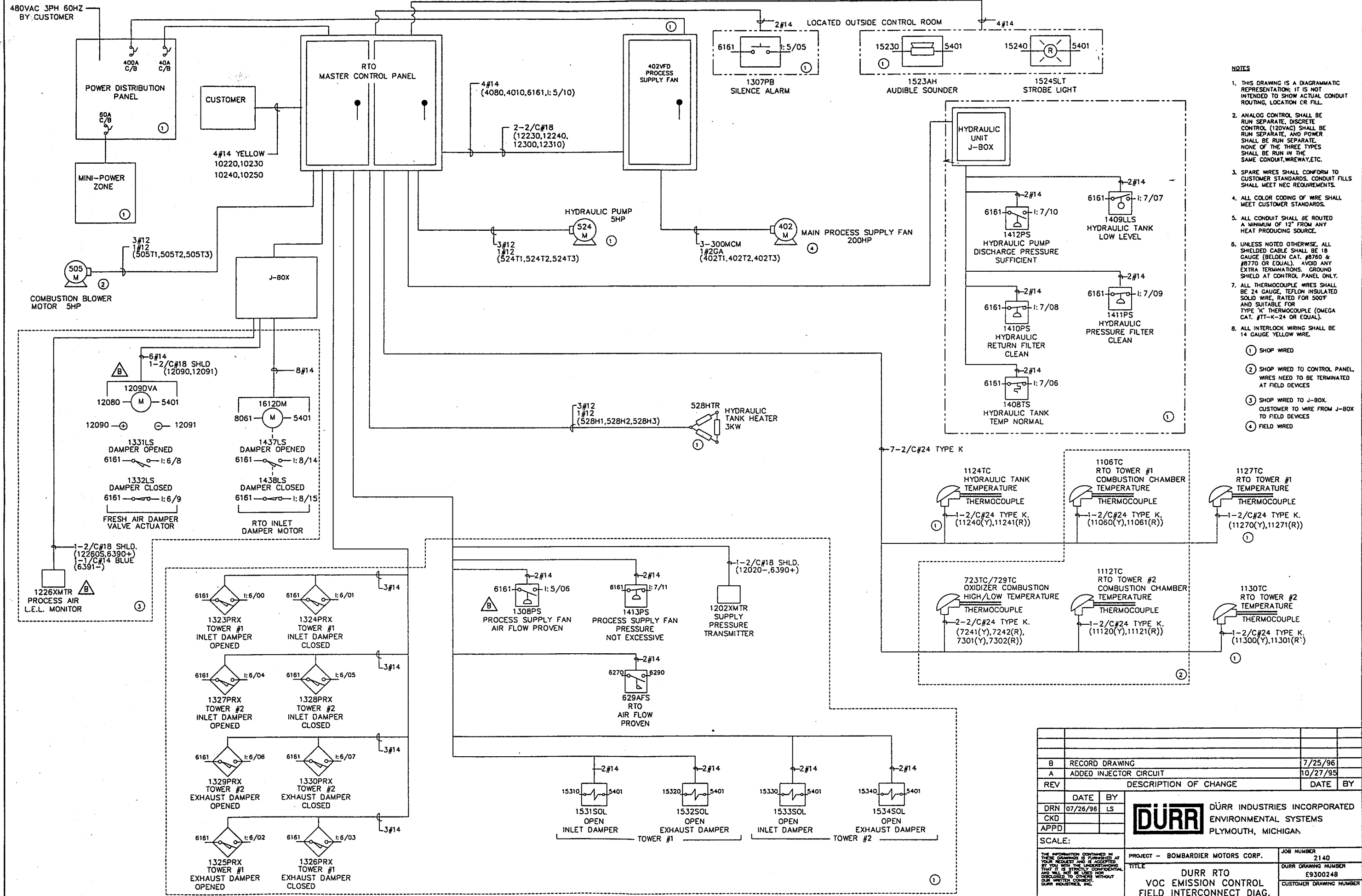


- NOTES**
- THIS DRAWING IS A DIAGRAMMATIC REPRESENTATION; IT IS NOT INTENDED TO SHOW ACTUAL CONDUIT ROUTING, LOCATION OR FILL.
 - ANALOG CONTROL SHALL BE RUN SEPARATE, DISCRETE CONTROL (120VAC) SHALL BE RUN SEPARATE, AND POWER SHALL BE RUN SEPARATE. NONE OF THE THREE TYPES SHALL BE RUN IN THE SAME CONDUIT, WIREWAY, ETC.
 - SPARE WIRES SHALL CONFORM TO CUSTOMER STANDARDS. CONDUIT FILLS SHALL MEET NEC REQUIREMENTS.
 - ALL COLOR CODING OF WIRE SHALL MEET CUSTOMER STANDARDS.
 - ALL CONDUIT SHALL BE ROUTED A MINIMUM OF 12" FROM ANY HEAT PRODUCING SOURCE.
 - UNLESS NOTED OTHERWISE, ALL SHIELDED CABLE SHALL BE 18 GAUGE (BELDEN CAT. #8760 & #8770 OR EQUAL). AVOID ANY EXTRA TERMINATIONS. GROUND SHIELD AT CONTROL PANEL ONLY.
 - ALL THERMOCOUPLE WIRES SHALL BE 24 GAUGE, TEFLON INSULATED SOLID WIRE, RATED FOR 500F AND SUITABLE FOR TYPE 'K' THERMOCOUPLE (OMEGA CAT. #TT-K-24 OR EQUAL).
 - ALL INTERLOCK WIRING SHALL BE 14 GAUGE YELLOW WIRE.

- SHOP WIRED
- SHOP WIRED TO CONTROL PANEL. WIRES NEED TO BE TERMINATED AT FIELD DEVICES
- SHOP WIRED TO J-BOX. CUSTOMER TO WIRE FROM J-BOX TO FIELD DEVICES
- FIELD WIRED



B	RECORD DRAWING	7/25/96	
A	ADDED INJECTOR CIRCUIT	10/27/95	
REV	DESCRIPTION OF CHANGE	DATE	BY
DRN	07/26/96	LS	
CKD			
APPD			
SCALE: DWG_SCALE			
PROJECT - BOMBARDIER MOTORS CORP.		JOB NUMBER 2140	
TITLE Durr RTO VOC EMISSION CONTROL FIELD INTERCONNECT DIAG.		Durr DRAWING NUMBER E930023B	
		CUSTOMER DRAWING NUMBER	



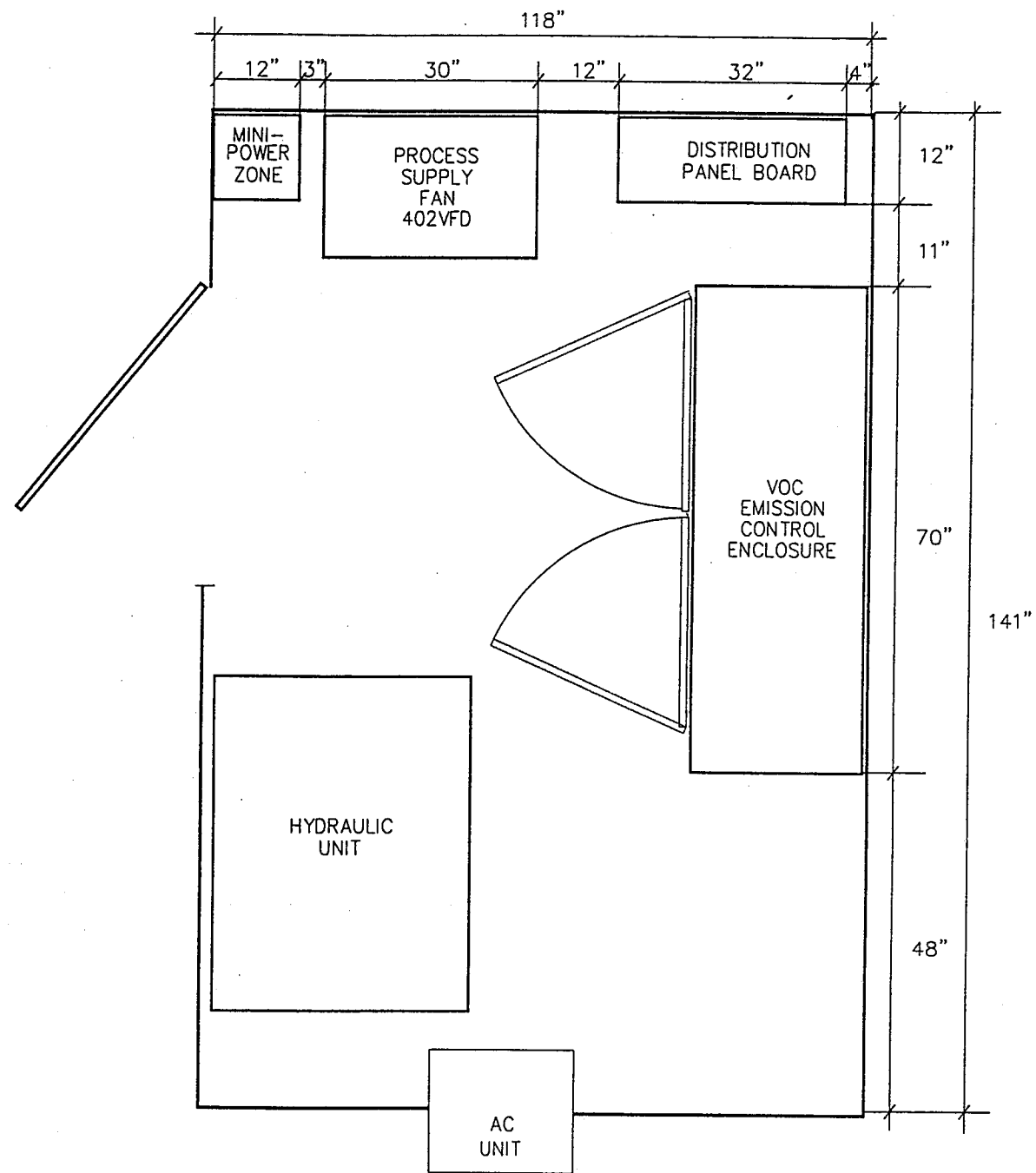
- NOTES**
1. THIS DRAWING IS A DIAGRAMMATIC REPRESENTATION; IT IS NOT INTENDED TO SHOW ACTUAL CONDUIT ROUTING, LOCATION OR FILL.
 2. ANALOG CONTROL SHALL BE RUN SEPARATE, DISCRETE CONTROL (120VAC) SHALL BE RUN SEPARATE, AND POWER SHALL BE RUN SEPARATE. NONE OF THE THREE TYPES SHALL BE RUN IN THE SAME CONDUIT, WREWAY, ETC.
 3. SPARE WRES SHALL CONFORM TO CUSTOMER STANDARDS. CONDUIT FILLS SHALL MEET NEC REQUIREMENTS.
 4. ALL COLOR CODING OF WRE SHALL MEET CUSTOMER STANDARDS.
 5. ALL CONDUIT SHALL BE ROUTED A MINIMUM OF 12" FROM ANY HEAT PRODUCING SOURCE.
 6. UNLESS NOTED OTHERWISE, ALL SHIELDED CABLE SHALL BE 18 GAUGE (BELDEN CAT. #8780 & #8770 OR EQUAL). AVOID ANY EXTRA TERMINATIONS. GROUND SHIELD AT CONTROL PANEL ONLY.
 7. ALL THERMOCOUPLE WRES SHALL BE 24 GAUGE, TEFLON INSULATED SOLID WIRE, RATED FOR 500F AND SUITABLE FOR TYPE 'K' THERMOCOUPLE (OMEGA CAT. #TT-K-24 OR EQUAL).
 8. ALL INTERLOCK WIRING SHALL BE 14 GAUGE YELLOW WRE.
- ① SHOP WRED
 ② SHOP WRED TO CONTROL PANEL WRES NEED TO BE TERMINATED AT FIELD DEVICES
 ③ SHOP WRED TO J-BOX. CUSTOMER TO WRE FROM J-BOX TO FIELD DEVICES
 ④ FIELD WRED

RECORD DRAWING	7/25/96		
ADDED INJECTOR CIRCUIT	10/27/95		
REV	DESCRIPTION OF CHANGE	DATE	BY
DRN	07/26/96	LS	
CKD			
APPD			
SCALE:		PROJECT - BOMBARDIER MOTORS CORP.	
JOB NUMBER		2140	
DURR DRAWING NUMBER		E9300248	
CUSTOMER DRAWING NUMBER			

DURR DÜRR INDUSTRIES INCORPORATED
 ENVIRONMENTAL SYSTEMS
 PLYMOUTH, MICHIGAN

TITLE: DURR RTO VOC EMISSION CONTROL FIELD INTERCONNECT DIAG.


THE INFORMATION CONTAINED IN THIS DRAWING IS FURNISHED AT YOUR REQUEST AND IS ACCEPTED BY YOU WITH THE UNDERSTANDING THAT IT IS STRICTLY CONFIDENTIAL AND WILL NOT BE USED NOR DISCLOSED TO OTHERS WITHOUT OUR WRITTEN CONSENT. DÜRR INDUSTRIES, INC.



A		RECORD DRAWING	7/25/96	
REV	DESCRIPTION OF CHANGE			DATE BY
	DATE	BY		
DRN	07/26/96	LS		
CKD				
APPD				
SCALE:				
<small>THE INFORMATION CONTAINED IN THIS DRAWING IS FURNISHED AT YOUR REQUEST AND IS ACCEPTED BY YOU WITH THE UNDERSTANDING AND WILL NOT BE USED FOR ANY OTHER PURPOSES WITHOUT OUR WRITTEN CONSENT. DURR INDUSTRIES, INC.</small>		DÜRR DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN	PROJECT - BOMBARDIER MOTORS CORP. TITLE DÜRR RTO VOC EMISSION CONTROL CONTROL ROOM LAYOUT	JOB NUMBER 2140 DÜRR DRAWING NUMBER E930026A CUSTOMER DRAWING NUMBER

ITEM NO.	SYMBOL	QTY	DESCRIPTION	CAT.#	MANUFAC.
1		1	NEMA 12 ENCLOSURE 2-DOOR, W/INTERNAL FOLD-DOWN SHELF 90"H X 72"W X 30"D		FAB
2		1	SUBPLATE 78"H X 66"W		FAB
3	503PDB	1	POWER DISTRIBUTION BLOCK (LINE:2/0-14, LOAD:4-14) 3 POLE	1433555	MARATHON
4	602PDB	1	POWER DISTRIBUTION BLOCK (LINE:2/0-14, LOAD:4-14) 2 POLE	1432555	MARATHON
5					
6					
7					
8					
9					
10	1530M,1604M,1605CON	3	IEC CONTACTOR (9A RATING)	100-A09ND3	ALLEN-BRADLEY
11	1530MOL,1604MOL	2	OVERLOAD RELAY, CLASS 20, 3.7A-12.0A ADJ'MT RANGE	193-A2F1	ALLEN-BRADLEY
12	1530M,1604M,1605CON	3	IEC SIDE MOUNT AUXILIARY CONTACT, 1NO	195-BA10	ALLEN-BRADLEY
13					
14	505FB,524FB,528FB	3	FUSEBLOCK 600V 30A 3POLE, J-TYPE, PYRAMID	JP60030-3COR	BUSSMAN
15	537FB	1	FUSEBLOCK 600V 30A 2POLE, CLASS R	R600030-2	BUSSMAN
16	601FB	1	FUSEBLOCK 250V 60A 1POLE, CLASS R	R25060-1CR	BUSSMAN
17	604FB,608FB,616FB,618FB	4	FUSEBLOCK 250V 30A 1POLE, CLASS R	R30A1SP	MARATHON
18					
19	505FB	3	FUSE 600V 25AMP	LPJ-25SP	BUSSMAN
20	524FB	3	FUSE 600V 12AMP	LPJ-12SP	BUSSMAN
21	537FB	2	FUSE 600V 15AMP	FRS-R15	BUSSMAN
22	528FB	3	FUSE 600V 8AMP	LPJ-8SP	BUSSMAN
23	601FB	1	FUSE 250V 50AMP, CLASS R	FRN-R50	BUSSMAN
24	604FB	1	FUSE 250V 15AMP, CLASS R	FRN-R15	BUSSMAN
25	608FB,616FB,618FB	3	FUSE 250V 10AMP, CLASS R	FRN-R10	BUSSMAN
26	539T	1	ENCLOSED TRANSFORMER, 5KVA, 480PRI/120SEC	TF-5000-EK	DAYKIN
27	1617CR	1	IEC ADDER DECK 1NO,1NC	195-FA11	ALLEN-BRADLEY
28					
29	623CRM,704CR	2	IEC AUXILIARY CONTACT ADDER DECK, 4 N.O.	195-FA40	ALLEN-BRADLEY
30	623CRM,629CR,636CR,704CR,725CR,731CR,737CR,922CR,938TR,1427CR,1436CR,1437CR,1525CR,1526CR,1538CR,1603CR,1613CR,1614CR,1625CR,1617CR	20	IEC RELAY, 120VAC COIL, 3 N.O., 1 N.C.	700-F310A1	ALLEN-BRADLEY
31	938TR	1	IEC PNEUMATIC TIMING ATTACHMENT ON DELAY, 0.1-180 SECONDS	196-FTA	ALLEN-BRADLEY
32		A/R	TERMINALS	1492-CA1	ALLEN-BRADLEY
33		A/R	JUMPERS	1492-N3	ALLEN-BRADLEY
34		A/R	TERMINAL MOUNTING RAIL	1492-N22	ALLEN-BRADLEY
35		A/R	RETAINING CLIP (FOR CA-1's)	1492-N2	ALLEN-BRADLEY
36		A/R	END BARRIER (FOR CA-1's)	1492-N16	ALLEN-BRADLEY
37		A/R	FUSED TERMINAL	1492-CE6	ALLEN-BRADLEY
38		A/R	FUSE PULLER	1492-N12	ALLEN-BRADLEY
39		A/R	END BARRIER (FOR FUSED TERM.)	1492-N17	ALLEN-BRADLEY
40		A/R	END ANCHOR (FOR FUSED TERM.)	1492-N23	ALLEN-BRADLEY
41					
42	931FT,934FT,936FT,1610FT,1611FT,1612FT	6	FUSE, 125V, 3AMP	FNA-3	BUSSMAN
43	1531FT,1532FT,1533FT,1534FT	4	FUSE, 125V, 1 1/2AMP	FNA-1 1/2	BUSSMAN
44	613FT,928FT,1523-1530FT,1535-1538FT,1602-1609FT,1613-1617FT,724FT,730FT,736FT,1208FT,1211FT,1508FT	27	FUSE, 125V, 1AMP	FNA-1	BUSSMAN
45		6	FUSE, 125V, 1/2AMP	FNA-1/2	BUSSMAN

ITEM NO.	SYMBOL	QTY	DESCRIPTION	CAT.#	MANUFAC.
46	702PT	1	PURGE TIMER, HP5 SERIES, 120VAC, 0-30MIN	HP55-A6-07	EAGLE
47	702PT	1	SURFACE MOUNTING BASE (FOR TIMER)	HP50-133	EAGLE
48	923FR	1	FLAME RELAY 120VAC, 60HZ	RM7890B1014	HONEYWELL
		1	UNIVERSAL WIRING SUB-BASE (FOR RELAY & ANNUN.)	Q7800A1005	HONEYWELL
		1	PLUG-IN FLAME SIGNAL AMPLIFIER	R7847B1031	HONEYWELL
		1	KEYBOARD DISPLAY MODULE FOR FLAME RELAY	S7800A1001	HONEYWELL
		1	PLUG-IN PURGE TIMER (SEC)		HONEYWELL
49					
50	724HTL,736HTL	2	TEMPERATURE CONTROLLER WITH 1 ALARM, HIGH TEMP	92A3-1DK1-0000	WATLOW
51	730LTL	1	TEMPERATURE CONTROLLER WITH 1 ALARM, LOW TEMP	92A3-2DK1-0000	WATLOW
52	1001REC	1	CHART RECORDER, 4500 TRULINE CIRCULAR, 7 DAY, 115VAC, W/4 CHANNELS	DR45AT-1110-00-000-0-100-P00	HONEYWELL
53	1001REC	1	BOX OF 100 BLANK CIRCULAR CHART PAPER, 12" DIA		
			PLAIN THERMAL SENSITIVE PAPER	30755317	HONEYWELL
54	608PC	1	SLC-5/03 PROGRAMMABLE LOGIC CONTROLLER W/SERIAL PORT	1747-L532	ALLEN-BRADLEY
55		2	POWER SUPPLY	1746-P2	ALLEN-BRADLEY
56		1	I/O CHASSIS-13 SLOT	1746-A13	ALLEN-BRADLEY
57		1	I/O CHASSIS-4 SLOT	1746-A4	ALLEN-BRADLEY
58		2	4-PT THERMOCOUPLE INPUT MODULE	1746-NT4	ALLEN-BRADLEY
59		3	4-PT COMBINATION ANALOG INPUT/OUTPUT MODULE	1746-NIO4I	ALLEN-BRADLEY
60		4	16-PT INPUT MODULE, 120VAC	1746-IA16	ALLEN-BRADLEY
61		2	16-PT OUTPUT MODULE, 120VAC	1746-OW16	ALLEN-BRADLEY
62		1	PROCESSOR TO HMI CABLE	2706-NC13	ALLEN-BRADLEY
63					
64	610HMI	1	XYCOM TERMINAL	9540	XYCOM
65		1	ASYNCHRONOUS INTERFACE MODULE	1747-KE	ALLEN-BRADLEY
66					
67					
68	623PB1	1	PUSH-PULL PUSHBUTTON, RED MUSHROOM HEAD, 1 N.O./1 N.C.	800T-FX6D4	ALLEN-BRADLEY
69	623PB2,1304PB,1306PB,1307PB	4	MOMENTARY CONTACT PUSHBUTTON, BLACK, FLUSH HEAD, 1 N.O./1 N.C.	800T-A2A	ALLEN-BRADLEY
70	1305PB	1	MOMENTARY CONTACT PUSHBUTTON, RED, EXTENDED HEAD, 1 N.O./1 N.C.	800T-B6A	ALLEN-BRADLEY
71	625LT,1527LT,1535LT	3	PUSH-TO-TEST PILOTLIGHT, GREEN LENS	800T-PT16G	ALLEN-BRADLEY
72	1528LT,1536LT	2	PUSH-TO-TEST PILOTLIGHT, AMBER LENS	800T-PT16A	ALLEN-BRADLEY
73	1307PB	1	SINGLE UNIT PB ENCLOSURE	E-1PBX	HOFFMAN
74	1524SLT	1	STROBE LIGHT, RED	XVA C74B120	SQUARE 'D'
75	1523AH	1	AUDIBLE SOUNDER ASSEMBLY, 110V, CONTINUOUS TONE	XVA C94	SQUARE 'D'
76		1	BASE AND COVER	XVA C211	SQUARE 'D'
77		1	4" TUBE	XVA C02	SQUARE 'D'
78		1	TUBE SUPPORT AND FIXING PLATE, METAL	XVA C11	SQUARE 'D'
79		1	GASKET KIT FOR TUBE SUPPORT AND FIXING PLATE	XVA C06	SQUARE 'D'
80					
81	604RECPT	1	DUPLEX RECEPTACLE 120VAC, 15A	5262	HUBBELL
82	604RECPT	1	HANDY BOX, 1/2	5835	HUBBELL
83	604RECPT	1	HANDY BOX COVER	58C7	HUBBELL
84	613CF	1	6" COMPACT COOLING FAN, 115VAC	A-6AXFN	HOFFMAN
85	613CF	1	COOLING FAN MOUNTING BRACKET	A-BRKT6	HOFFMAN
86	613CF	1	COOLING FAN FINGER GUARD	A-GARD6	HOFFMAN
87	402VFD	1	VARIABLE FREQUENCY DRIVE, 200HP	6230-8445	ECLIPSE
88		1	POWER DISTRIBUTION PANEL BOARD		SIEMENS
89		1	MINI-POWER ZONE	MPZ15S40F	SQUARE 'D'
90	1610CR, 1611CR, 1612CR	3	CONTROL RELAY 1NO/1NC		
91					

A	RECORD DRAWING	7/25/96
REV	DESCRIPTION OF CHANGE	DATE BY
DRN	07/26/96	LS
CKD		
APPD		
SCALE:		
 DÜRR INDUSTRIES INCORPORATED ENVIRONMENTAL SYSTEMS PLYMOUTH, MICHIGAN		PROJECT - BOMBARDIER MOTORS CORP. JOB NUMBER 2140 DÜRR DRAWING NUMBER E930027A CUSTOMER DRAWING NUMBER

CREATED BY: LS