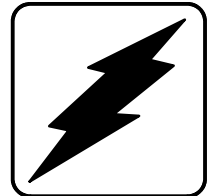


# Wiring Diagrams

## Fast-Response™ II Industrial Generator Sets



Models:

**20-200ROZJ**  
**20-100REOZJ**  
**40-180ROZJA**

Controllers:

Decision-Maker™ 340  
Decision-Maker™ 3+  
Decision-Maker™ 3  
Decision-Maker™ 1

Manual

Engine Gauge Box for Paralleling Switchgear



**KOHLER®**

POWER SYSTEMS

TP-5718 1/00b

This manual provides wiring diagrams for the 20-200ROZJ, 20-100REOZJ, and 40-180 ROZJA John Deere engine-powered generator sets equipped with one of the following controllers:

- Decision-Maker™ 340
- Decision-Maker™ 3+
- Decision-Maker™ 3
- Decision-Maker™ 1
- Manual
- Engine Gauge Box for Paralleling Switchgear

At the time of print this manual applied to the model numbers and specification (spec) numbers shown in the Wiring Diagram Cross-Reference chart. On occasion this manual may apply to specs not listed in the Wiring Diagram Cross-Reference chart.

Information in this publication represents data available at the time of print. Kohler Co. reserves the right to change this publication and the products represented without notice and without any obligation or liability whatsoever.

xin:001:002

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## Service Assistance

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### Service Information

Please contact a local authorized distributor/dealer for sales, service, or other information about Kohler Generator Division products.

#### To locate a local authorized distributor/dealer inside the U.S.A. and Canada

- Look on the product or in the information included with the product
- Consult the Yellow Pages under the heading Generators— Electric
- Visit the Kohler Generator Division web site at [www.kohlergenerators.com](http://www.kohlergenerators.com)
- Call 1-800-544-2444

#### To locate a local authorized distributor/dealer outside the U.S.A. and Canada

- Look on the product or in the information included with the product
- Consult the telephone directory under the heading Generators—Electric
- Visit the Kohler Generator Division web site at [www.kohlergenerators.com](http://www.kohlergenerators.com)
- Contact the nearest regional office

#### Africa, Europe, Middle East

London Regional Office  
Langley, Slough, England  
Phone: (44) 1753-580-771  
Fax: (44) 1753-580-036

#### Australia

Australia Regional Office  
Queensland, Australia  
Phone: (617) 3893-0061  
Fax: (617) 3893-0072

#### China

China Regional Office  
Shanghai, People's Republic of China  
Phone: (86) 21-6482 1252  
Fax: (86) 21-6482 1255

#### India, Bangladesh, Sri Lanka

India Regional Office  
Bangalore, India  
Phone: (91) 80-2284270  
(91) 80-2284279  
Fax: (91) 80-2284286

#### Japan

Japan Regional Office  
Tokyo, Japan  
Phone: (813) 3440-4515  
Fax: (813) 3440-2727

#### Latin America

Latin America Regional Office  
Lakeland, Florida, U.S.A.  
Phone: (941) 619-7568  
Fax: (941) 701-7131

#### South East Asia

Singapore Regional Office  
Singapore, Republic of Singapore  
Phone: (65) 264-6422  
Fax: (65) 264-6455



# Wiring Diagrams

Use the Wiring Diagram Cross-Reference chart to determine the wiring diagram version number for a given model number and spec number. Then find that version number and the controller type on the Controller

Wiring Diagrams Reference chart to determine the wiring diagram numbers for your unit. Refer to the generator set operation manual for controller type identification if necessary.

xin:003:002

## Wiring Diagram Cross-Reference

Generator Set Model No.	Hz	Generator Set Spec No.	Wiring Diagram Version No.
20ROZJ	50/60	PA-189001-	(1, 2)*
30ROZJ	50/60	PA-189101-	(1, 2)*
40ROZJ	50/60	PA-189201-	(1, 2)*
50ROZJ	50/60	PA-189301-	(1, 2)*
60ROZJ	50/60	PA-189401-	(1, 2)*
80ROZJ	50/60	PA-189501-	(1, 2)*
100ROZJ	50/60	PA-189601-	(1, 2)*
125ROZJ	50/60	PA-189701-189719	(1, 2)*
125ROZJ	50/60	PA-189732, 189737	†
135ROZJ	50/60	PA-189721, 189722, PA-189724-189731, PA-189733-	2
135ROZJ	50/60	PA-189735-	†
150ROZJ	50/60	PA-189801-189826	(1, 2)*
150ROZJ	50/60	PA-189828-189831, PA-189833-189840, PA-189843-	2
150ROZJ	50/60	PA-189841, 189842, PA-189847, 189848-	†
180ROZJ	50/60	PA-189901-189937	(1, 2)*
180ROZJ	50/60	PA-189939-189942, PA-189944-	2
200ROZJ	50/60	PA-189980-	2
20REOZJ	50/60	PA-189029-	2
30REOZJ	50/60	PA-189133-	2
40REOZJ	50/60	PA-189229-	2
50REOZJ	50/60	PA-189325-	2
60REOZJ	50/60	PA-189423-	2
80REOZJ	50/60	PA-189539-	2
100REOZJ	50/60	PA-189641-	2
40ROZJA	50/60	PA-189228-	2 ‡
60ROZJA	50/60	PA-189421-	2 ‡
80ROZJA	50/60	PA-189537-	2 ‡
100ROZJA	50/60	PA-189636-	2 ‡
125ROZJA	50/60	PA-189720, 189723	2 ‡
125ROZJA	50/60	PA-189737-	2 §
150ROZJA	50/60	PA-189827, 189832	2 ‡
150ROZJA	50/60	PA-189857-	2 §
180ROZJA	50/60	PA-189938, 189943	2 ‡
180ROZJA	50/60	PA-189970-	2 §

\* Use version 1 for serial no. below 363369. Use version 2 for serial no. 363369 and above.

† See Wiring Diagram Manual TP-5807.

‡ All ROZJA models use the Decision-Maker™ 1 controller with engine gauges and AC meters (12-lead alternator).

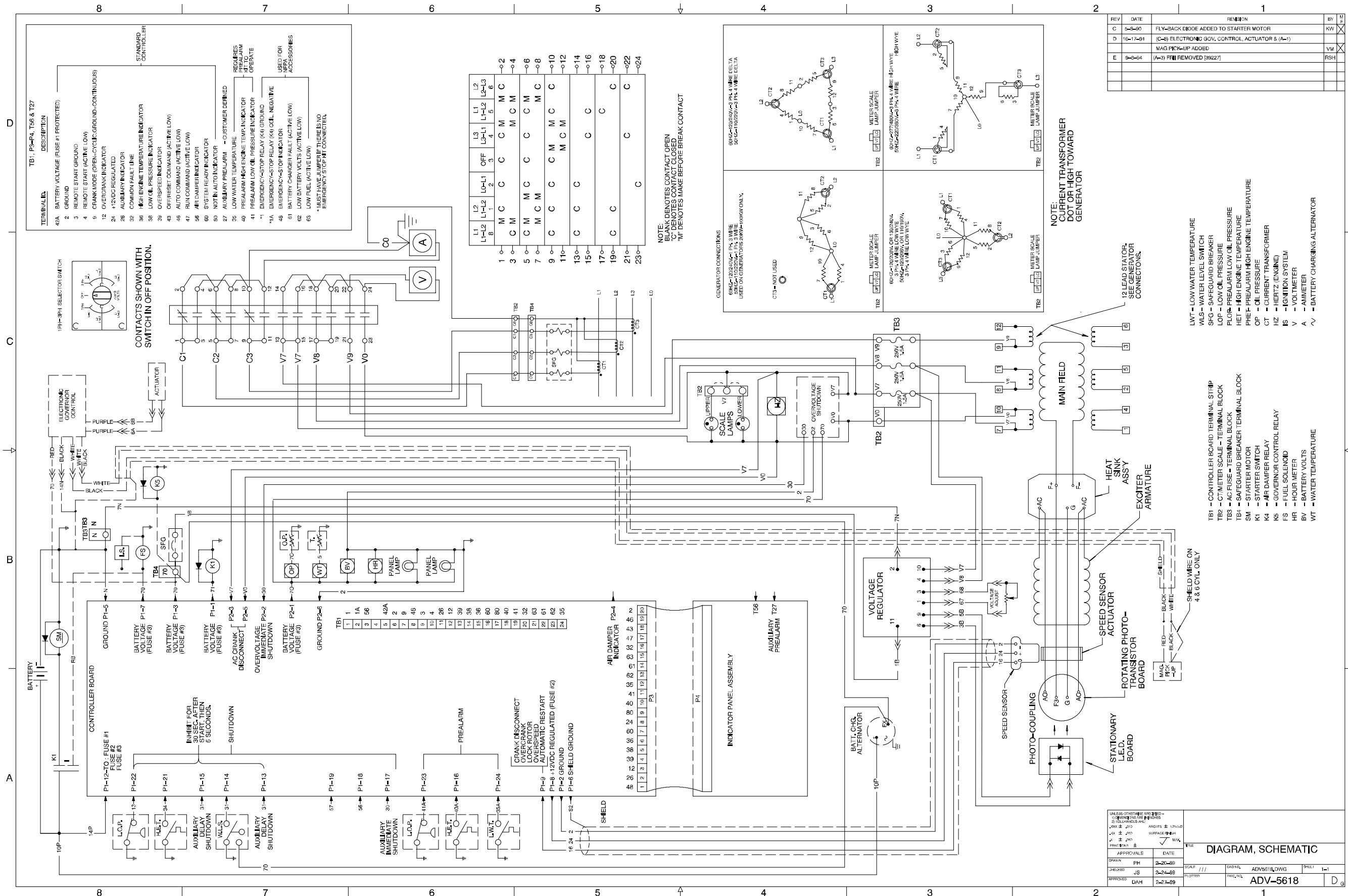
§ All ROZJA models use the Decision-Maker™ 1 controller with engine gauges and AC meters (4-lead alternator).

## Controller Wiring Diagrams Reference

Controller Description	Version 1	P.	Version 2	P.
<b>Decision-Maker™ 340 (12-Volt or 24-Volt Engine Electrical Systems)*</b>				
Point-to-Point Wiring Diagram				
Sheet 1	—		347941A-J	26
Sheet 2	—		347941B-J	27
Schematic Diagram				
Sheet 1	—		ADV-6130A-J	10
Sheet 2	—		ADV-6130B-J	11
Accessory Connections				
Accessories	—		354246A-D	28
Remote Annunciator Kit	—		354246B-D	29
<b>Decision-Maker™ 3+ and Decision-Maker™ 3 (12-Volt or 24-Volt Engine Electrical Systems)*</b>				
Point-to-Point Wiring Diagram				
Sheet 1	327097-B	16	327153-L	20
Sheet 2	327098-B	17	—	
Schematic Diagram				
Sheet 1	ADV-5618-E	1	ADV-6002-E	7
Sheet 2	ADV-5619-J	3	—	
Accessory Connections				
Accessories	255828A-N	13	328912A-F	21
Remote Annunciator Kit, Sheet 1	255828B-N	14	328912B-F	22
Remote Annunciator Kit, Sheet 2	255828C-N	15	—	
<b>Decision-Maker™ 1 Controller (12-Volt Engine Electrical Systems only)*</b>				
Point-to-Point Wiring Diagram				
Standard and Standard with Engine Gauges	—		347327-F	25
Expanded with Engine Gauges and AC Meters (12 Lead)	—		347058-J	24
Expanded with Engine Gauges and AC Meters (4 Lead)	—		360196-A	30
Schematic Diagram				
Standard and Standard with Engine Gauges	—		ADV-6010-E	9
Expanded with Engine Gauges and AC Meters (12 Lead)	—		ADV-6008-G	8
Expanded with Engine Gauges and AC Meters (4 Lead)	—		ADV-6340-	12
<b>Manual Controller (12-Volt Engine Electrical Systems only)*</b>				
Point-to-Point Wiring Diagram				
Sheet 1	327099-G	18	327099-H	19
Schematic Diagram				
Sheet 1	ADV-5664-E	4	ADV-5664-F	5
Sheet 2	ADV-5665-G	6	—	
<b>Engine Gauge Box for Paralleling Switchgear (12-Volt Engine Electrical Systems only)*</b>				
Point-to-Point Wiring Diagram				
Sheet 1	—		342425-E	23
Schematic Diagram				
Sheet 1	—		ADV-5618-F	2

\* Use generator set nameplate for engine electrical system voltage identification.

**NOTE:** Version 1 uses the Microprocessor Decision-Maker™ 3 controller.  
Version 2 uses the Microprocessor Decision-Maker™ 3+ controller.



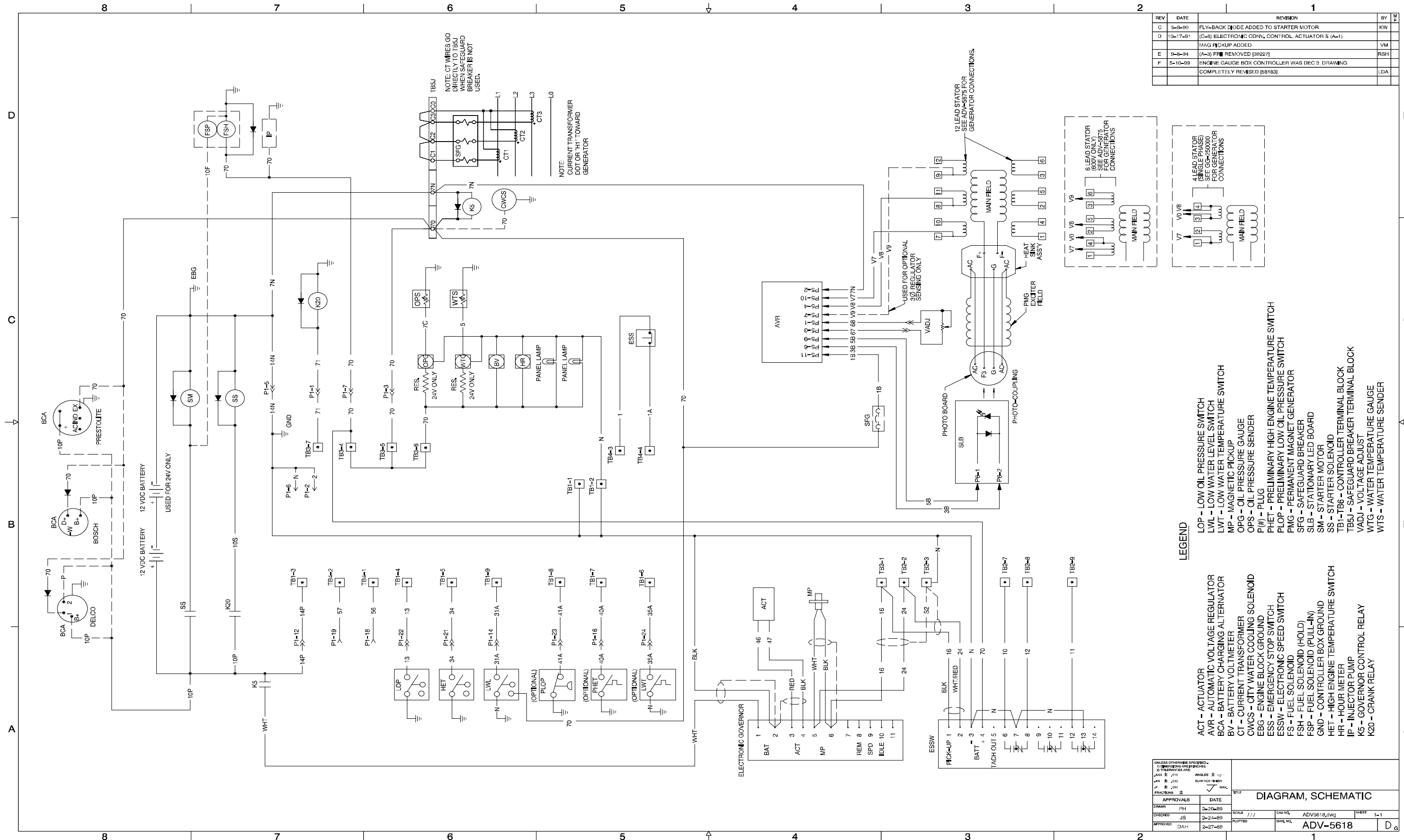
REV	DATE	REVISION	BY	CHK
C	5-8-80	FLY-BACK DIODE ADDED TO STARTER MOTOR	KW	X
D	10-17-81	(C-8) ELECTRONIC GOV. CONTROL, ACTUATOR S. (A-1)	VM	X
E	9-8-84	MAG PICK-UP ADDED	FSH	
		(A-3) FFI REMOVED (39227)		

APPROVALS	DATE	SCALE	SHEET	TOTAL SHEETS
DAH	2-2-89	1/1	1	1

**DIAGRAM, SCHEMATIC**

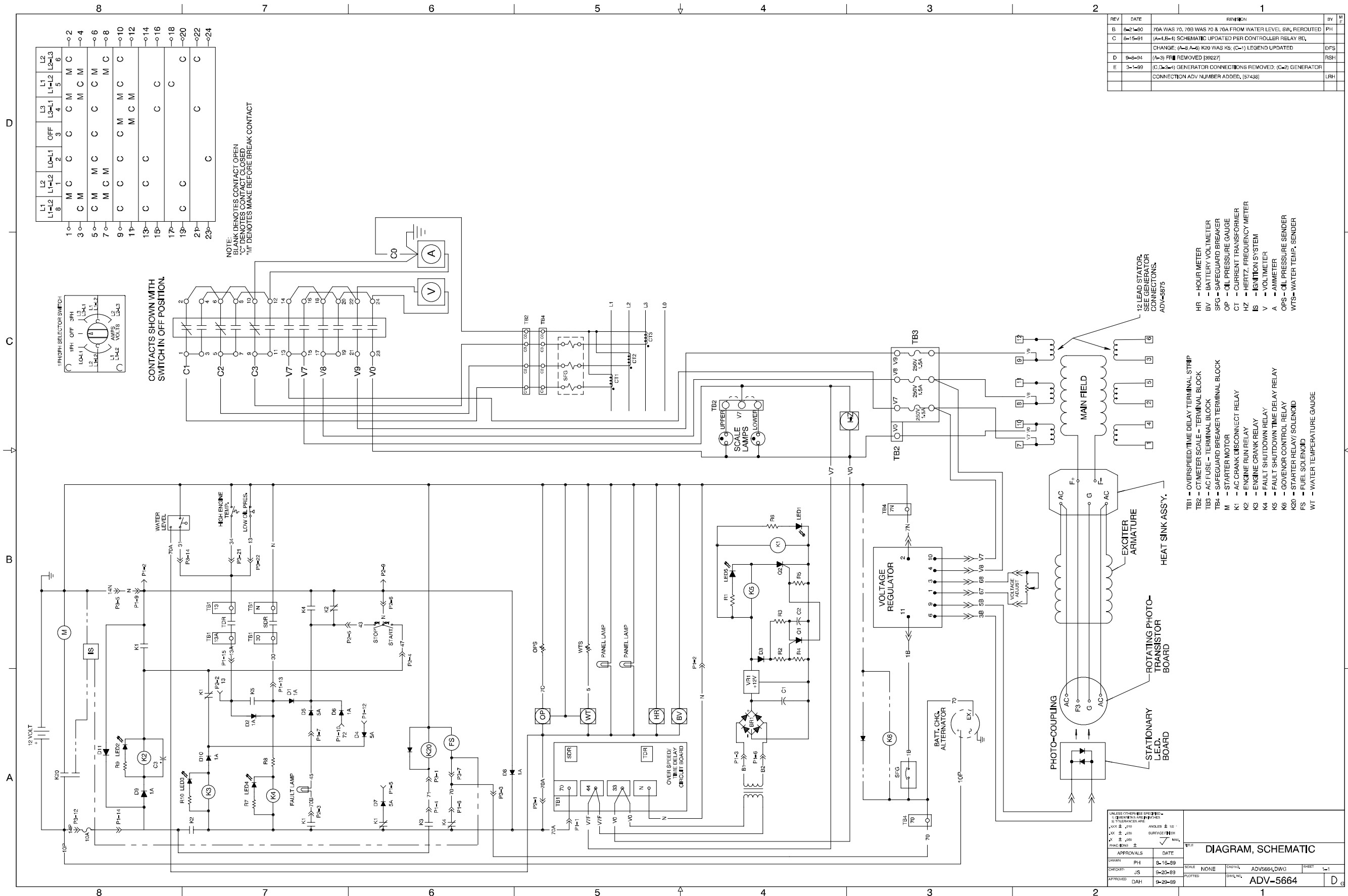
ADV-5618

Decision-Maker™ 3+ and Decision-Maker™ 3 Controllers, Schematic Diagram, Sheet 1, ADV-5618-E



Engine Gauge Box for Paralleling Switchgear, Schematic Diagram, ADV-5618-F

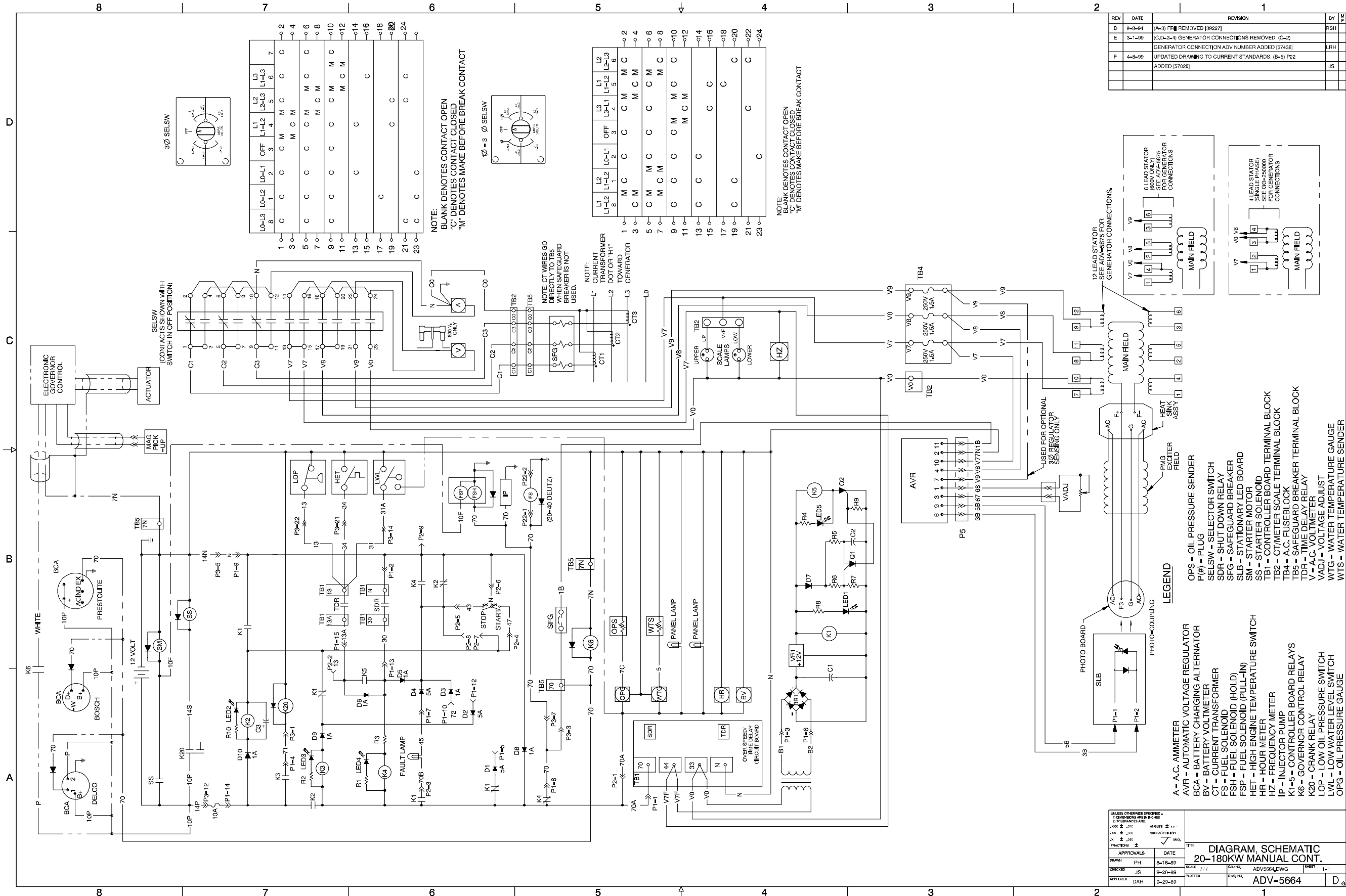




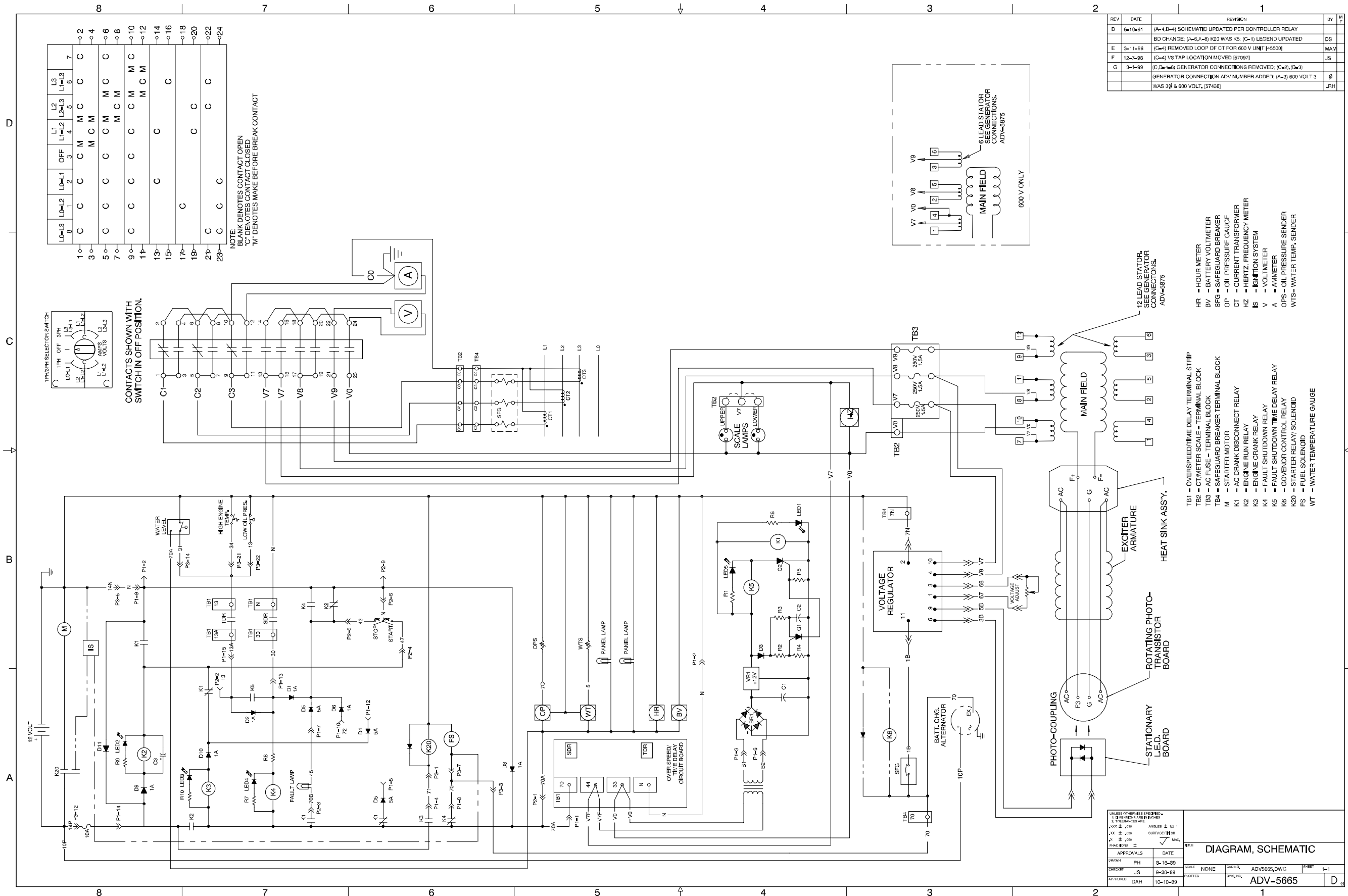
REV	DATE	REVISION	BY	CHK
B	8-2-80	70A WAS 70, 70B WAS 70 & 70A FROM WATER LEVEL SW, REROUTED	PH	
C	8-15-81	(A-1, B-1) SCHEMATIC UPDATED PER CONTROLLER RELAY BD, CHANGE: (A-8, A-6) K20 WAS K5, (C-1) LEGEND UPDATED	DFS	
D	9-8-84	(A-3) FFB REMOVED [38227]	RSH	
E	3-1-89	(C, D, 2-1) GENERATOR CONNECTIONS REMOVED, (C-2) GENERATOR CONNECTION ADV NUMBER ADDED, [57438]	LRH	

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS ARE IN MILLIMETERS		TYPICAL	
APPROVALS		DATE	
DRAWN: PH	DATE: 8-15-89	SCALE: NONE	SHEET: 1-1
CHECKED: JS	DATE: 8-20-89	DRAWING NO.: ADV5664, DWG3	
APPROVED: DAH	DATE: 8-20-89	TITLE: <b>DIAGRAM, SCHEMATIC</b>	
		PLOTTED: <b>ADV-5664</b>	

Manual Controller, Schematic Diagram, Sheet 1, ADV-5664-E



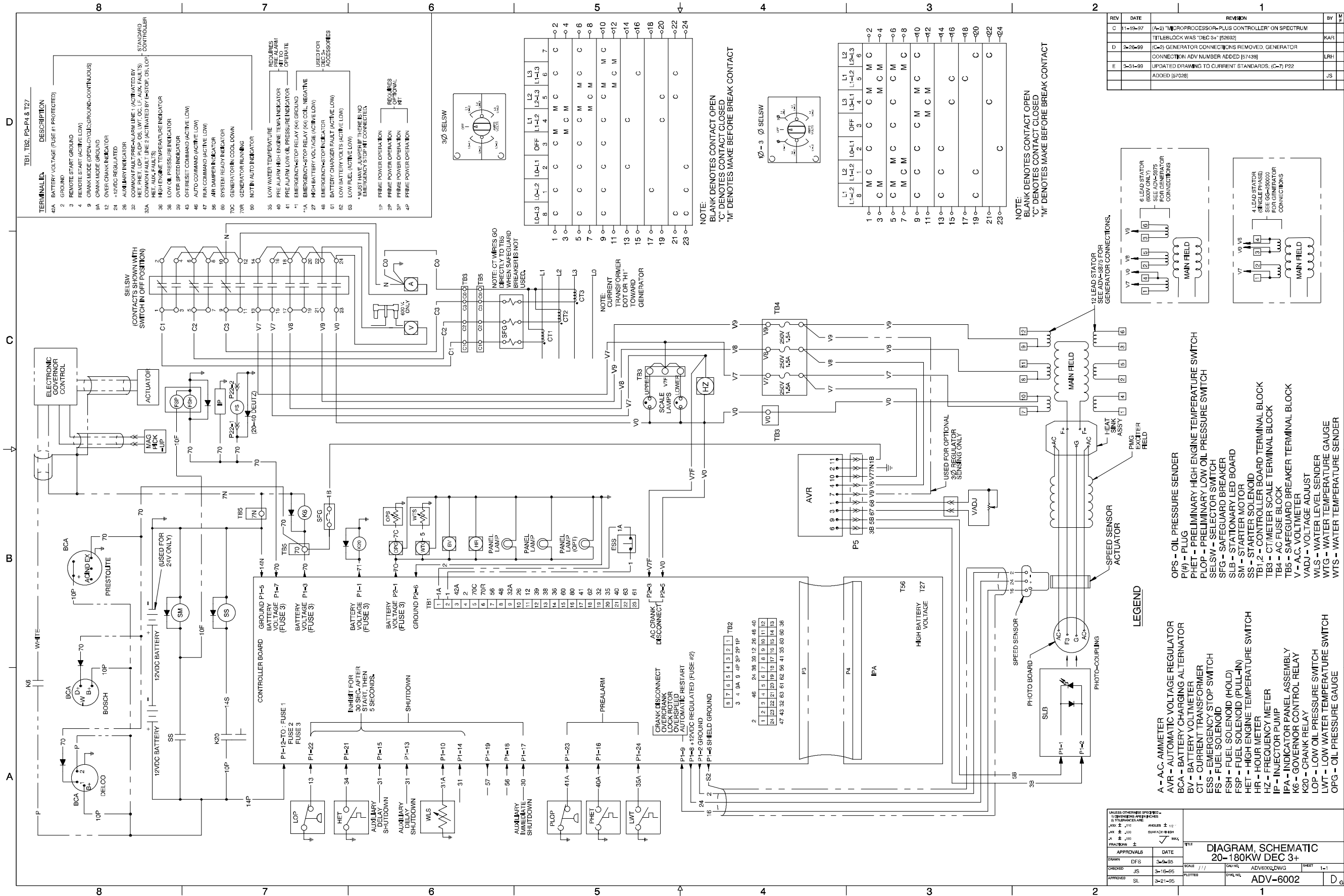
Manual Controller, Schematic Diagram, ADV-5664-F



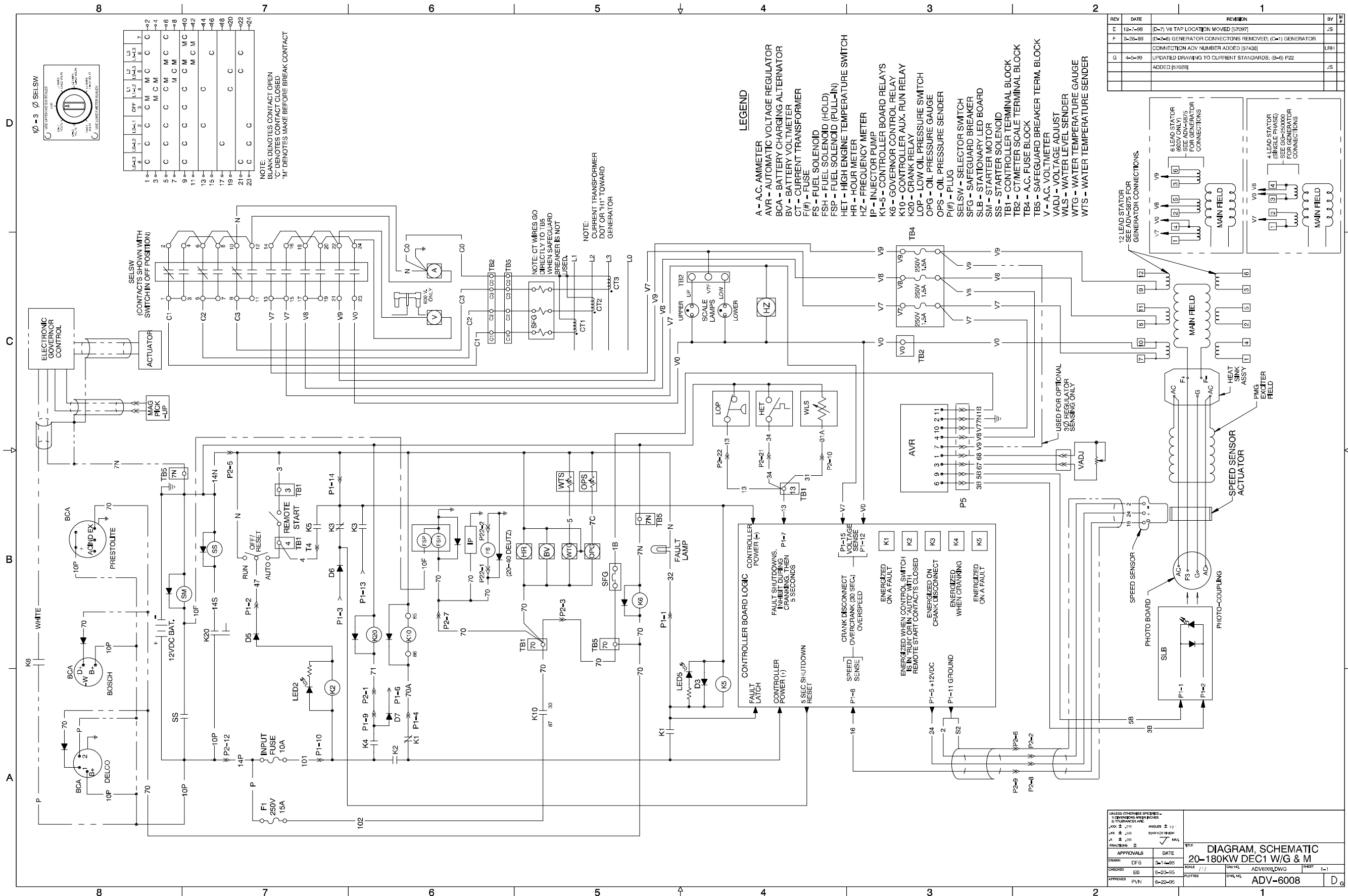
REV	DATE	REVISION	BY	CHK
D	5-10-91	(A-4,B-4) SCHEMATIC UPDATED PER CONTROLLER RELAY	DS	
E	3-11-96	BD CHANGE, (A-5,A-8) KSD WAS KS, (C-1) LEGEND UPDATED	MAN	
F	12-7-98	(C-4) REMOVED LOOP OF CT FOR 600 V UNIT (45500)	MAN	
G	3-1-99	(C-2) V/S TAP LOCATION MOVED (57097)	JS	
		GENERATOR CONNECTION ADV NUMBER ADDED; (C-2),(D-3)		
		WAS 3Ø & 600 VOLT, (57438)		

UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN INCHES AND DECIMALS THEREOF ARE IN THIRDS. DIMENSIONS ARE TO SURFACE UNLESS INDICATED OTHERWISE. HOLE DIMENSIONS ARE TO CENTER UNLESS INDICATED OTHERWISE.		SCALE NONE		DATE 3-16-89
DRAWN PH		CHECKED JS		DATE 5-20-89
APPROVED DAH		DATE 10-10-89		DATE 10-10-89
TITLE		SCALE		DATE
DIAGRAM, SCHEMATIC		NONE		3-16-89
DRAWN		CHECKED		DATE
PH		JS		3-16-89
APPROVED		DATE		DATE
DAH		10-10-89		10-10-89
TITLE		SCALE		DATE
DIAGRAM, SCHEMATIC		NONE		3-16-89
DRAWN		CHECKED		DATE
PH		JS		3-16-89
APPROVED		DATE		DATE
DAH		10-10-89		10-10-89

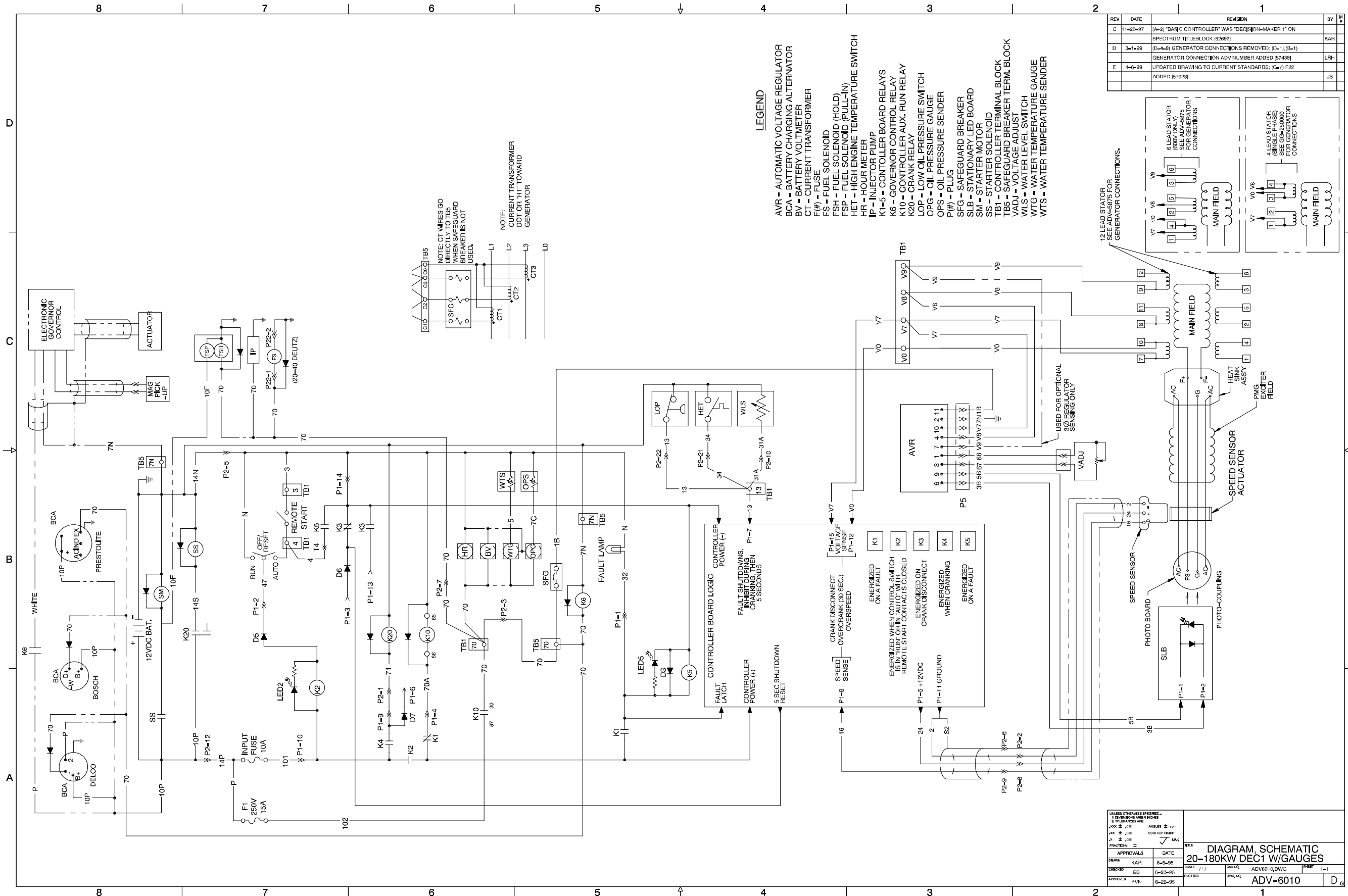
Manual Controller, Schematic Diagram, Sheet 2, ADV-5665-G



Decision-Maker™ 3+ and Decision-Maker™ 3 Controllers, Schematic Diagram, ADV-6002-E



Decision-Maker™ 1, Schematic Diagram, Expanded w/Engine Gauges and AC Meters (12-Lead), ADV-6008-G

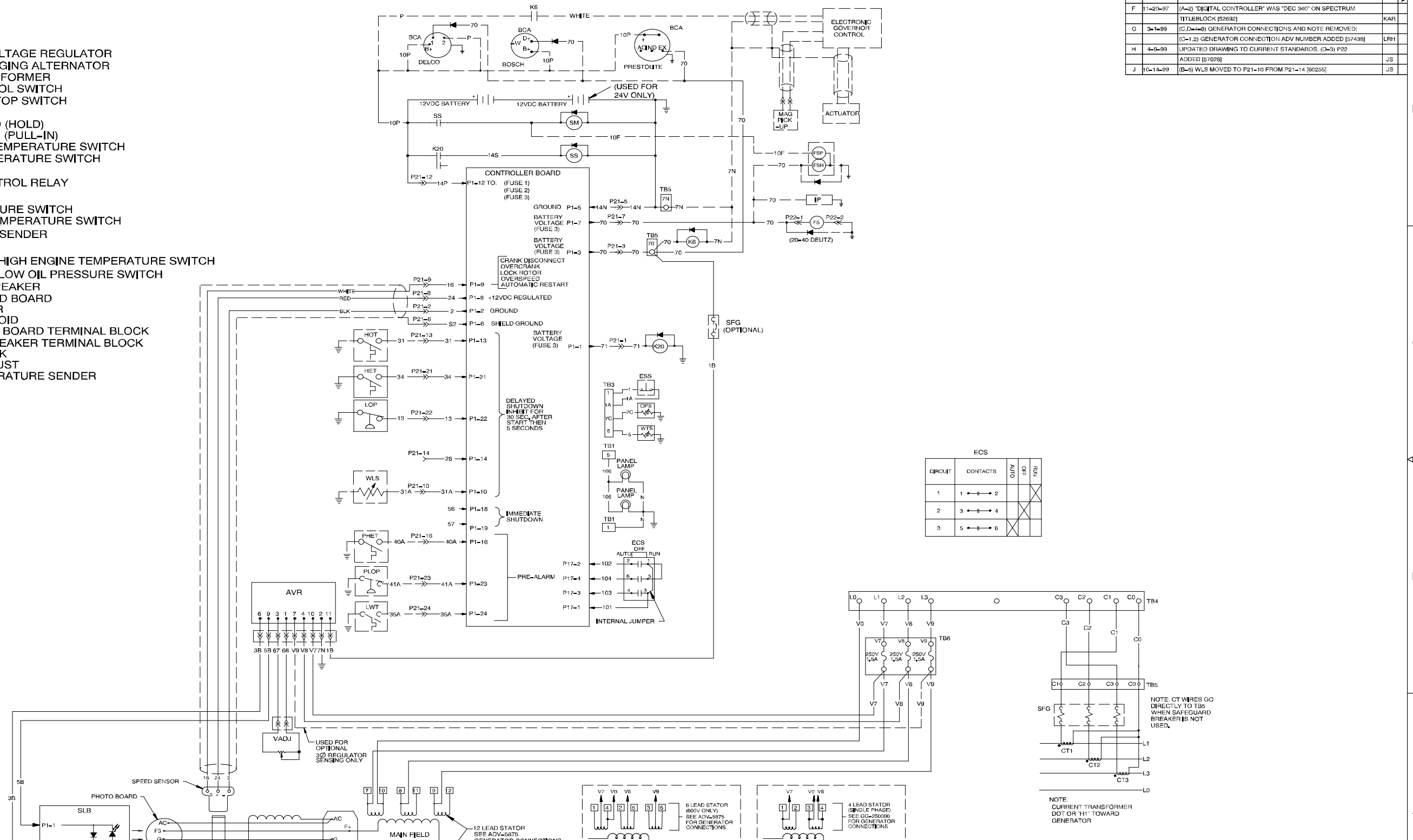


Decision-Maker™ 1 Controller, Schematic Diagram, Standard and Standard w/Engine Gauges, ADV-6010-E

**LEGEND**

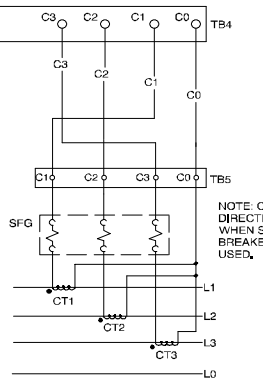
- AVR - AUTOMATIC VOLTAGE REGULATOR
- BCA - BATTERY CHARGING ALTERNATOR
- CT - CURRENT TRANSFORMER
- ECS - ENGINE CONTROL SWITCH
- ESS - EMERGENCY STOP SWITCH
- FS - FUEL SOLENOID
- FSH - FUEL SOLENOID (HOLD)
- FSP - FUEL SOLENOID (PULL-IN)
- HET - HIGH ENGINE TEMPERATURE SWITCH
- HOT - HIGH OIL TEMPERATURE SWITCH
- IP - INJECTOR PUMP
- K6 - GOVERNOR CONTROL RELAY
- K20 - CRANK RELAY
- LOP - LOW OIL PRESSURE SWITCH
- LWT - LOW WATER TEMPERATURE SWITCH
- OPS - OIL PRESSURE SENDER
- P(#) - PLUG
- PHET - PRELIMINARY HIGH ENGINE TEMPERATURE SWITCH
- PLOP - PRELIMINARY LOW OIL PRESSURE SWITCH
- SFG - SAFEGUARD BREAKER
- SLB - STATIONARY LED BOARD
- SM - STARTER MOTOR
- SS - STARTER SOLENOID
- TB1-4 - CONTROLLER BOARD TERMINAL BLOCK
- TB5 - SAFEGUARD BREAKER TERMINAL BLOCK
- TB9 - A.C. FUSE BLOCK
- VADJ - VOLTAGE ADJUST
- WTS - WATER TEMPERATURE SENDER

REV	DATE	REVISION	BY	W
F	11-20-97	(A-2) 'DIGITAL CONTROLLER' WAS 'DEC 340' ON SPECTRUM	KAR	
		TITLEBLOCK [52692]		
G	3-1-99	(C-D-1-6) GENERATOR CONNECTIONS AND NOTE REMOVED;		
		(C-1-2) GENERATOR CONNECTION ADV NUMBER ADDED [57438]	LRH	
H	4-9-99	UPDATED DRAWING TO CURRENT STANDARDS. (D-3) P22		
		ADDED [57029]	JS	
J	10-14-99	(B-6) WLS MOVED TO P21-10 FROM P21-14 [60255]	JS	



ECS

CIRCUIT	CONTACTS	AUTO	OFF	RUN
1	1 → 2			X
2	3 → 4		X	
3	5 → 6	X		



UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES ANGLES ± 1/2°		TITLE	
DRAWN: KAR		DIAGRAM, SCHEMATIC	
CHECKED: EB		20-180KW DEC340	
APPROVED: SL		SCALE: 1/1/1	SHEET: 1-2
DATE: 7-17-95		DWG. NO.: ADV-6130A_DWG	DATE PLOTTED: 7-17-95
		DWG. NO.: ADV-6130	BY: D.G.

REV	DATE	REVISION	BY	WF
B	11-21-97	(A-2) 'DIGITAL CONTROLLER' WAS 'DEC 340' ON SPECTRUM		
		TITLEBLOCK [52692]	KAR	
H	4-12-99	DRAWING UPDATED TO CURRENT STANDARDS. INTERCONNECT BOARD LIST MOVED FROM SHEET 3: (A=1) 2 OF 2 WAS		
		2 OF 3 [57028]	JS	
J	10-14-99	SEE SHEET 1 OF 2 [R0255]	JS	

### INTERCONNECT BOARD

#### OUTPUT CONNECTIONS

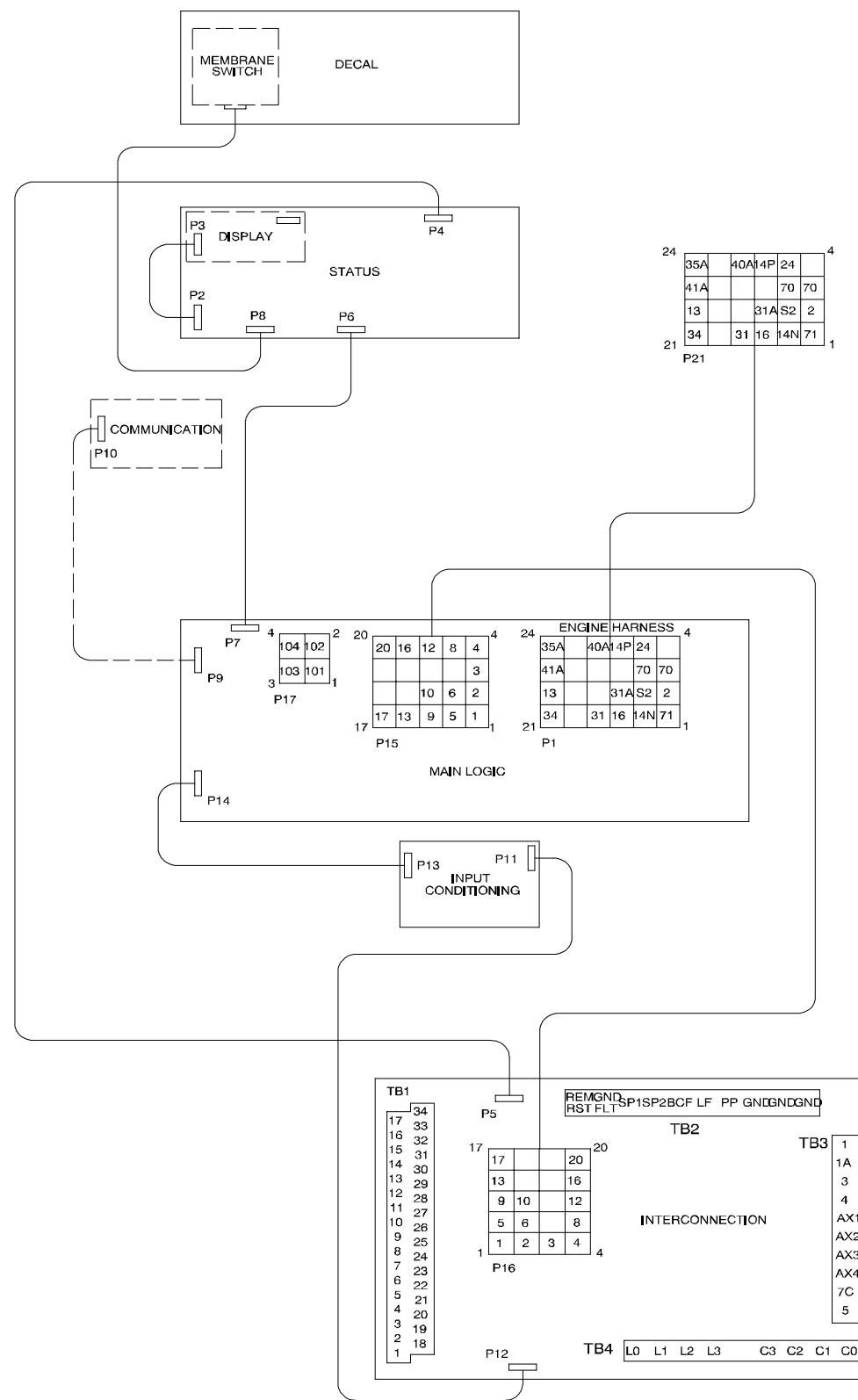
- TB1-1 ENGINE GROUND
- TB1-2 ENGINE GROUND
- TB1-3 ENGINE GROUND
- TB1-4 ENGINE GROUND
- TB1-5 PANEL LAMP OUTPUT
- TB1-6 RDO-10
- TB1-7 RDO-9
- TB1-8 RDO-7
- TB1-9 RDO-5
- TB1-10 NIA RELAY OUTPUT (80)
- TB1-11 OVERCRANK RELAY OUTPUT (12)
- TB1-12 LOW BATTERY VOLTAGE RELAY OUTPUT (62)
- TB1-13 LOW ENGINE TEMPERATURE RELAY OUTPUT (35)
- TB1-14 LOW OIL PRESSURE RELAY OUTPUT (38)
- TB1-15 HIGH ENGINE TEMPERATURE RELAY OUTPUT (36)
- TB1-16 LOW OIL PRESSURE WARNING RELAY OUTPUT (41)
- TB1-17 HIGH ENGINE TEMPERATURE WARNING RELAY OUTPUT (40)
- TB1-18 42A
- TB1-19 42A
- TB1-20 42A
- TB1-21 DVR DOWN VOLTAGE ADJUSTMENT
- TB1-22 DVR COMMON VOLTAGE ADJUSTMENT
- TB1-23 DVR UP VOLTAGE ADJUSTMENT
- TB1-24 RDO-8
- TB1-25 RDO-6
- TB1-26 RDO-4
- TB1-27 RDO-3
- TB1-28 RDO-2
- TB1-29 RDO-1
- TB1-30 SYSTEM READY RELAY OUTPUT (60)
- TB1-31 E-STOP RELAY OUTPUT (48)
- TB1-32 BATTERY CHARGER FAULT RELAY OUTPUT (61)
- TB1-33 LOW FUEL RELAY OUTPUT (63)
- TB1-34 OVERSPEED RELAY OUTPUT (39)

#### AC INPUT CONNECTIONS

- TB4-1 L0 (V0)
- TB4-2 L1 (V7)
- TB4-3 L2 (V8)
- TB4-4 L3 (V9)
- TB4-5
- TB4-6 C3
- TB4-7 C2
- TB4-8 C1
- TB4-9 C0

#### INPUT CONNECTIONS

- TB2-1 REMOTE RESET \*
- TB2-2 GROUND FAULT \*
- TB2-3 NOT USED
- TB2-4 NOT USED
- TB2-5 BATTERY CHARGER FAULT \*
- TB2-6 LOW FUEL \*
- TB2-7 PRIME POWER MODE \*
- TB2-8 ENGINE GROUND
- TB2-9 ENGINE GROUND
- TB2-10 ENGINE GROUND
- TB3-1 E-STOP GROUND (1)
- TB3-2 E-STOP (1A)
- TB3-3 REMOTE START (3)
- TB3-4 REMOTE START (4)
- TB3-5 AUXILIARY 1 \*
- TB3-6 AUXILIARY 2 \*
- TB3-7 AUXILIARY 3 \*
- TB3-8 AUXILIARY 4 \*
- TB3-9 OIL PRESSURE SENDING UNIT (7C)
- TB3-10 WATER TEMPERATURE SENDING UNIT (5)



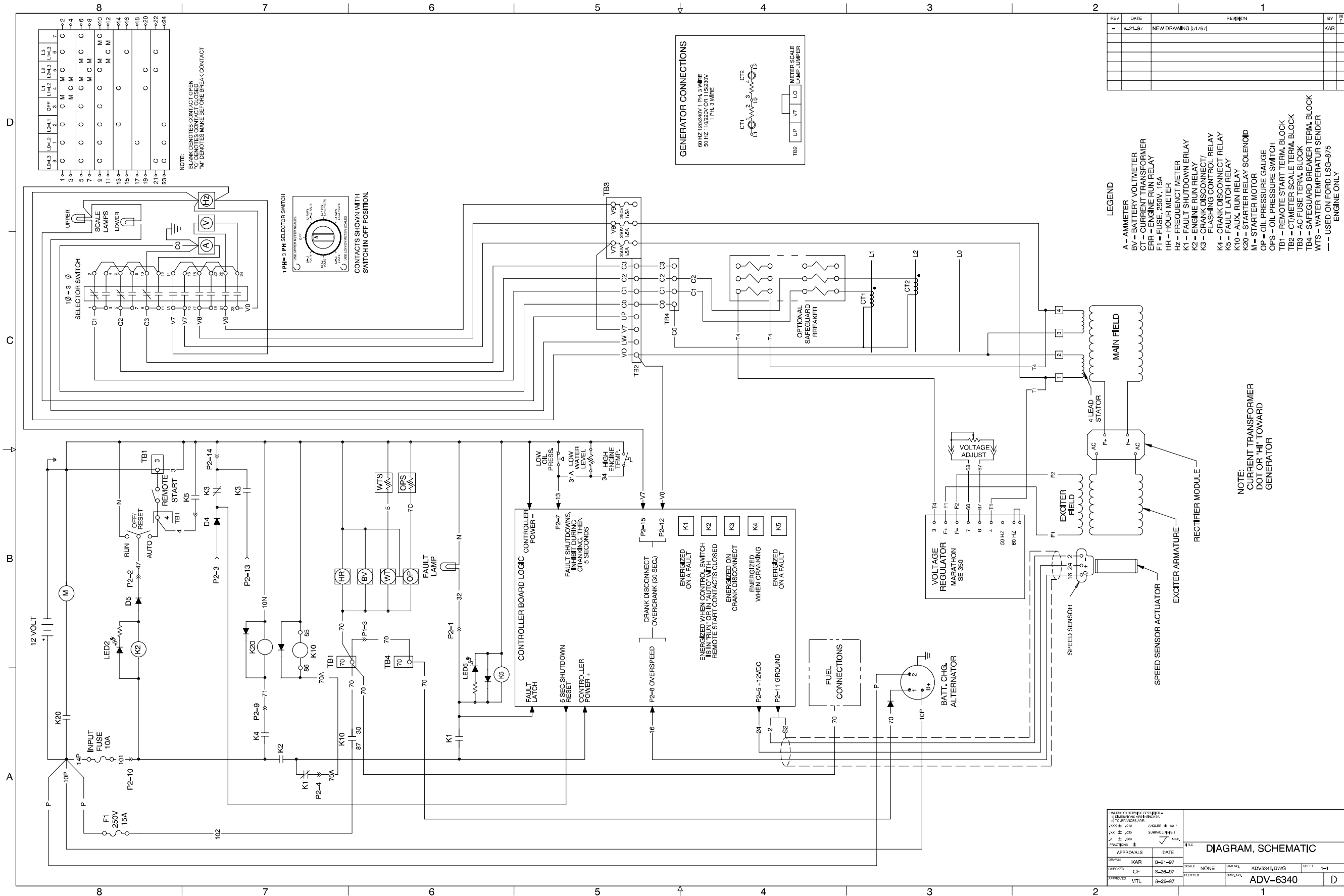
#### P1 CONNECTIONS (ENGINE TO MICRO BOARD)

##### POSITIONS

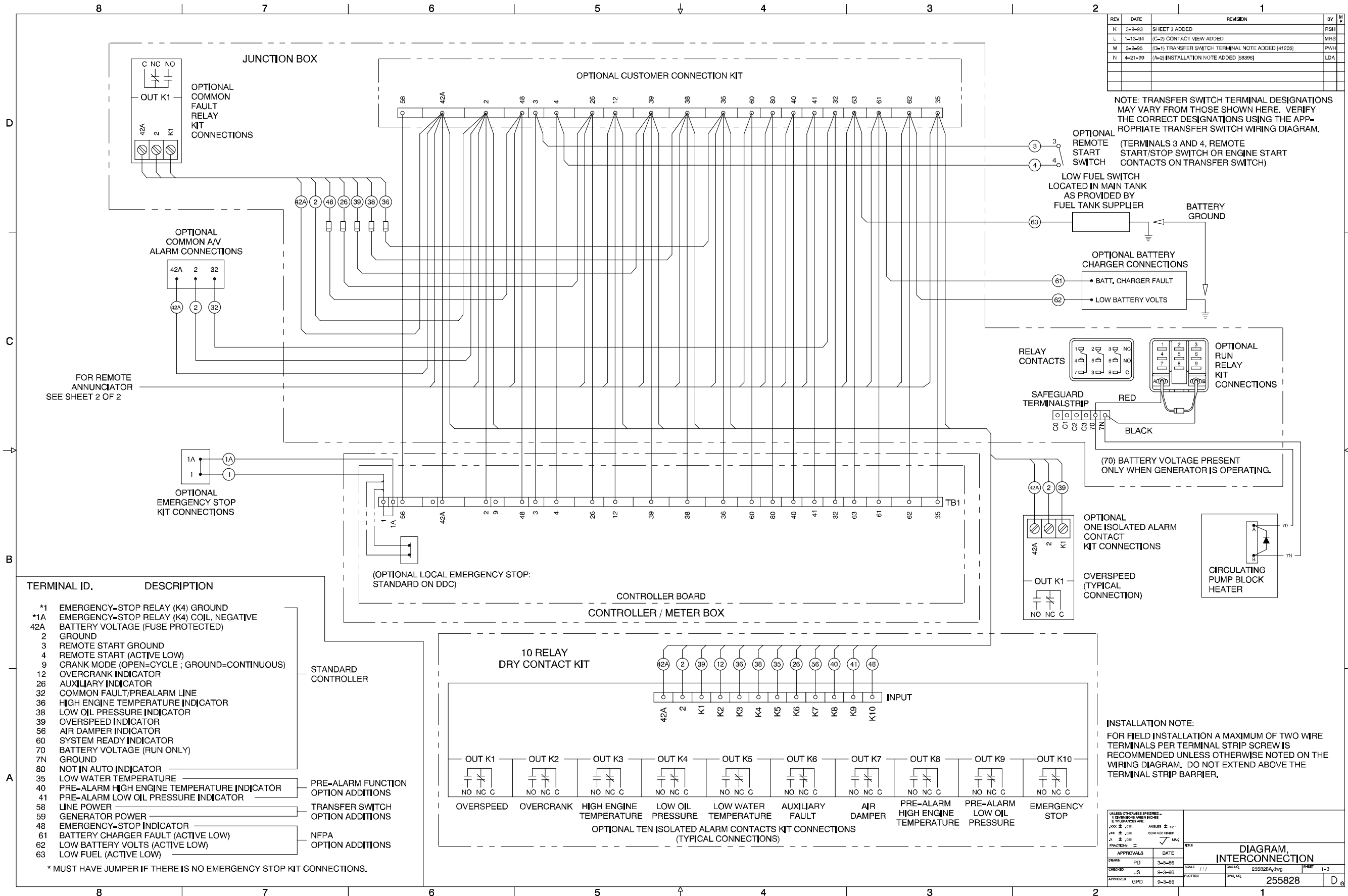
- 1 ENGINE CRANK (71)
- 2 SPEED SENSOR GROUND (2)
- 3 SAFEGUARD BREAKER (70)
- 4 B.C. ALTERNATOR FLASHING
- 5 STARTER MOTOR GROUND (14N)
- 6 SPEED SENSOR SHIELD (S2)
- 7 ENGINE RUN (70)
- 8 V+ SPEED SENSOR (24)
- 9 SPEED SENSOR SIGNAL (16)
- 10 LOW COOLANT LEVEL PTC (31A)
- 11 NOT USED
- 12 BATTERY + (14P)
- 13 HIGH OIL TEMPERATURE SWITCH INPUT (31) \*
- 14 LOW COOLANT LEVEL SWITCH INPUT (31) \*
- 15 NOT USED
- 16 HIGH ENGINE TEMPERATURE WARNING SWITCH INPUT (40A) \*
- 17 NOT USED
- 18 AIR DAMPER SWITCH INPUT (56) \*
- 19 AIR DAMPER SWITCH OUTPUT (57)
- 20 NOT USED
- 21 HIGH ENGINE TEMPERATURE SWITCH INPUT (34) \*
- 22 LOW OIL PRESSURE SWITCH INPUT (13) \*
- 23 LOW OIL PRESSURE WARNING SWITCH INPUT (41A) \*
- 24 LOW ENGINE TEMPERATURE SWITCH INPUT (35A) \*

\* GROUND TO ACTIVATE

UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN INCHES		TITLE	
AX ± .010 SURFACE FINISH	ANULES ± 10°	DIAGRAM, SCHEMATIC	
APPROVALS	DATE	20-180KW DEC340	
DRAWN: KAR	DATE: 4-1-99	SCALE: 1/1	DWG. NO. ADV/9130/LDW3
CHECKED: EB	DATE: 7-12-99	SHEET: 2-2	
APPROVED: SL	DATE: 7-17-99	PLOTTED:	ADV-6130 D G

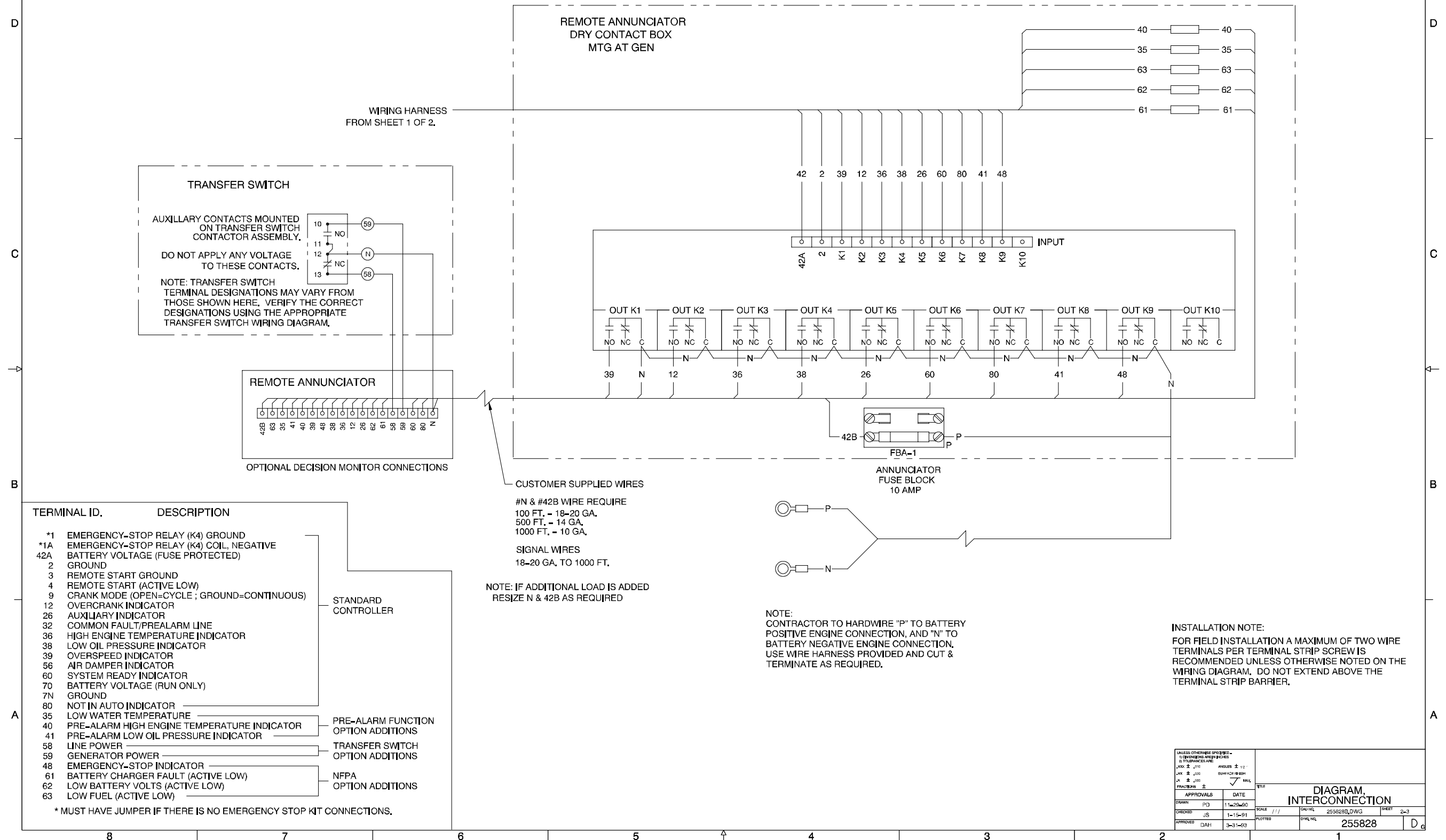


Decision-Maker™ 1, Schematic Diagram, Expanded w/Engine Gauges and AC Meters (4-Lead), ADV-6340-

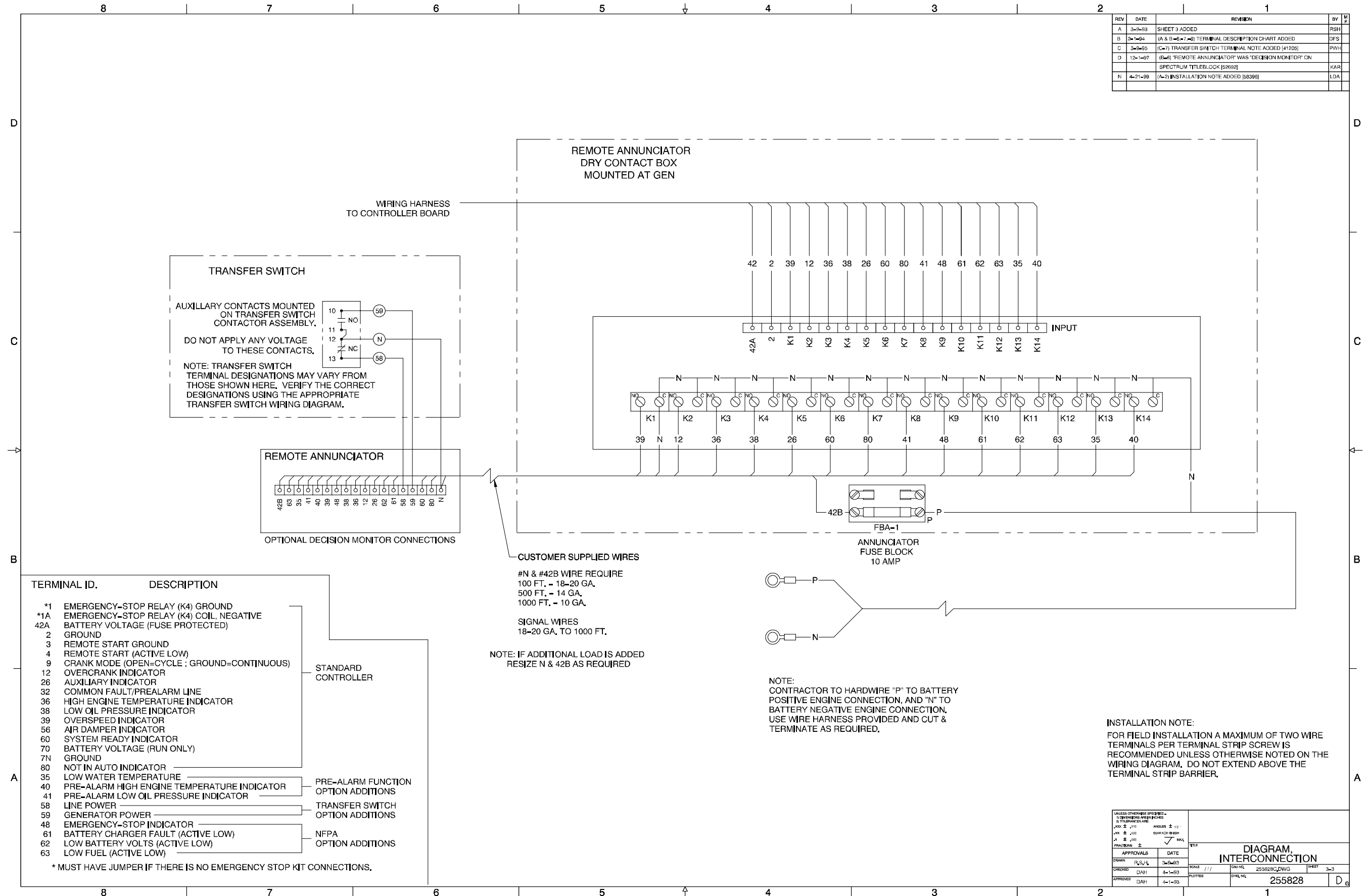


Decision-Maker™ 3+ and Decision-Maker™ 3, Accessory Connections, Accessories, 255828A-N

REV	DATE	REVISION	BY	MR
J	3-9-93	SHEET 3 ADDED	FSH	
K	2-1-94	(A & B - 6-7-8) TERMINAL DESCRIPTION CHART ADDED	DPS	
L	3-9-95	(C-7) TRANSFER SWITCH TERMINAL NOTE ADDED [41205]	PWH	
M	12-1-97	(B-7) 'REMOTE ANNUNCIATOR' WAS 'DECISION MONITOR' ON SPECTRUM TITLEBLOCK [52692]	KAR	
N	4-21-99	(A-2) INSTALLATION NOTE ADDED [58395]	LDA	

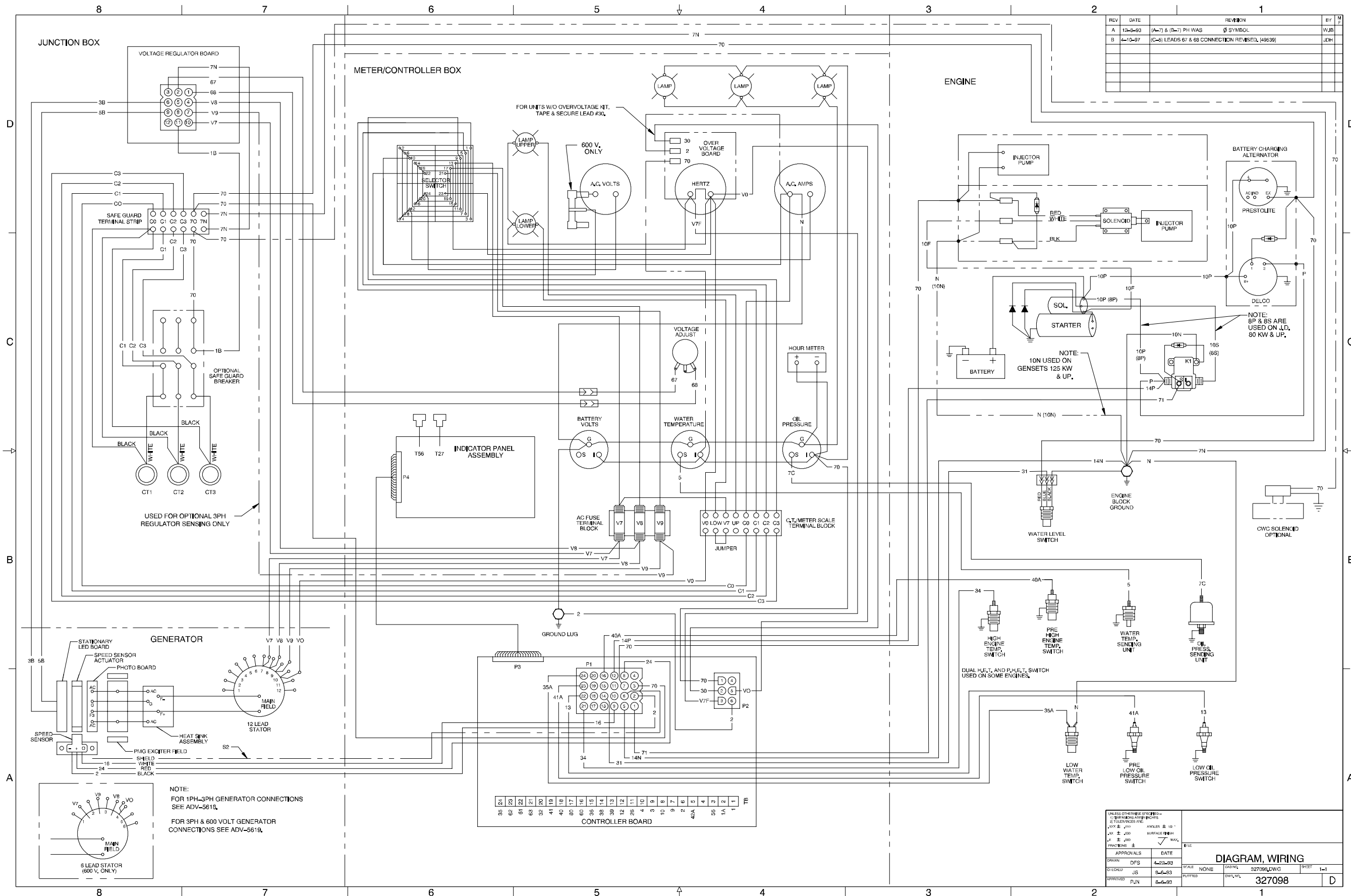


REV	DATE	REVISION	BY
A	3-9-93	SHEET 3 ADDED	PSH
B	3-1-94	(A & B) TERMINAL DESCRIPTION CHART ADDED	DFS
C	3-9-95	(C-7) TRANSFER SWITCH TERMINAL NOTE ADDED [41205]	PWH
D	12-1-97	(B-6) 'REMOTE ANNUNCIATOR' WAS 'DECISION MONITOR' ON SPECTRUM TITLEBLOCK [52692]	KAR
N	4-21-99	(A-2) INSTALLATION NOTE ADDED [58396]	LDA

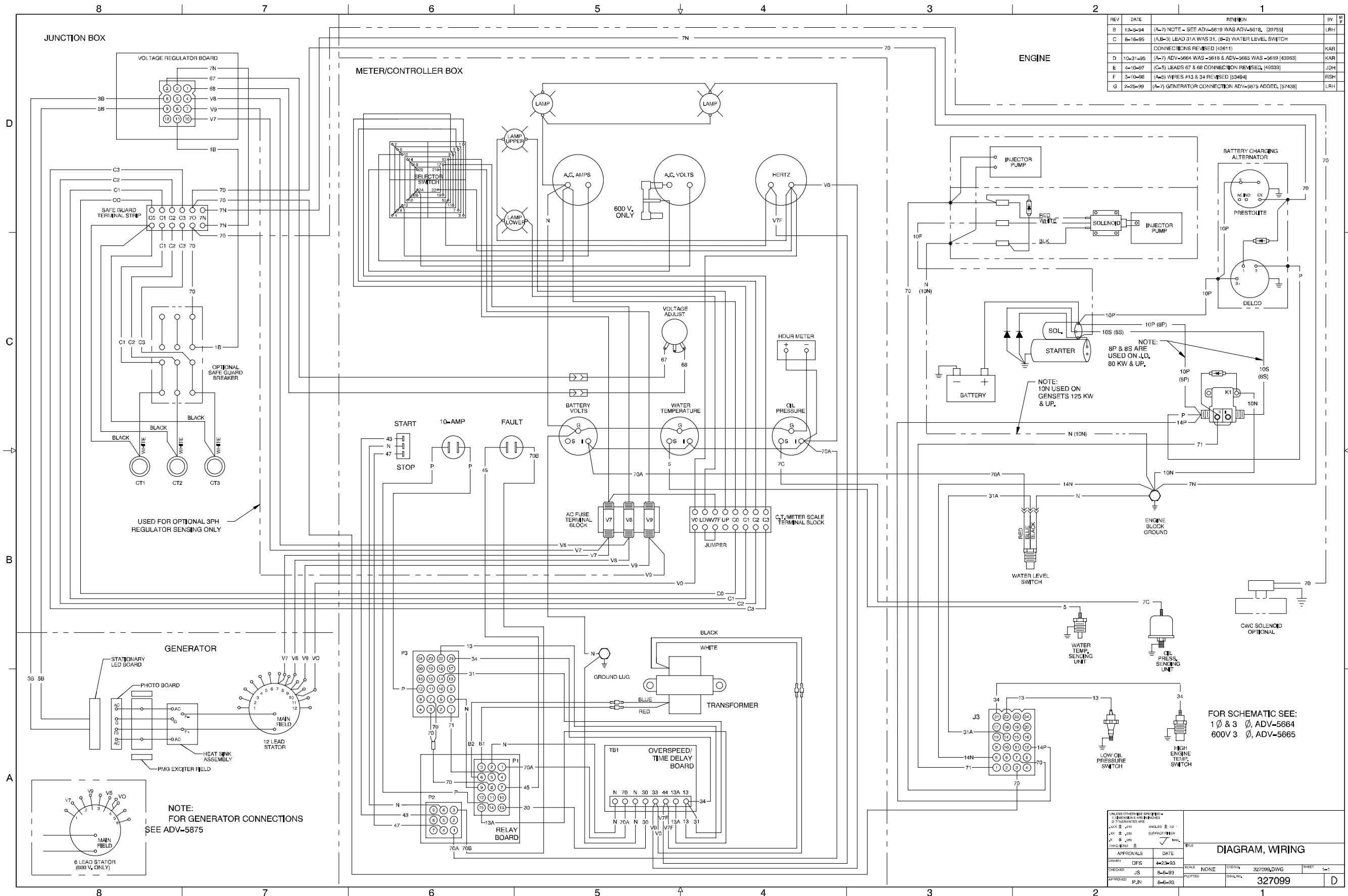


Decision-Maker™ 3+ and Decision-Maker™ 3, Accessory Connections, Remote Annunciator Kit, Sheet 2, 255828C-N

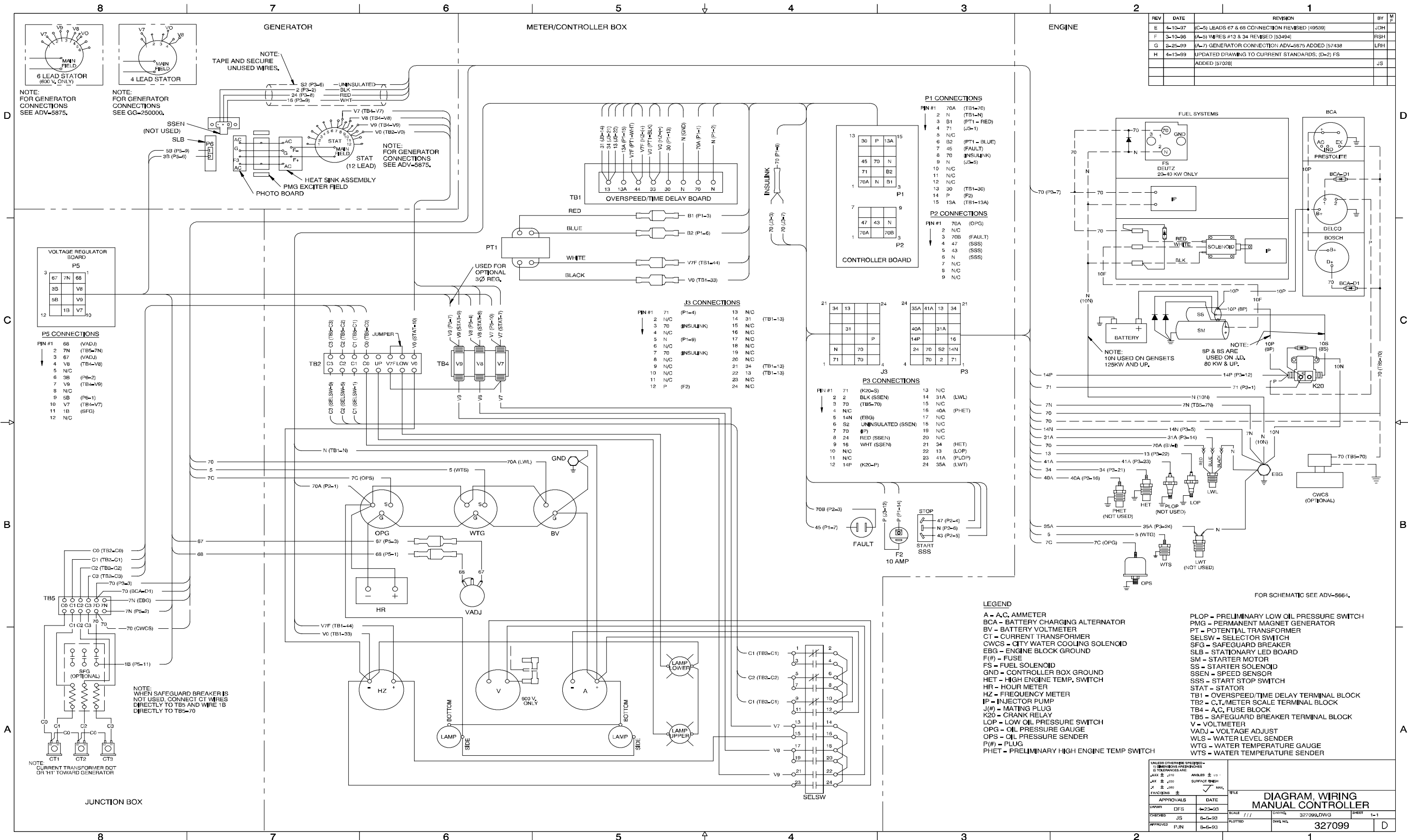




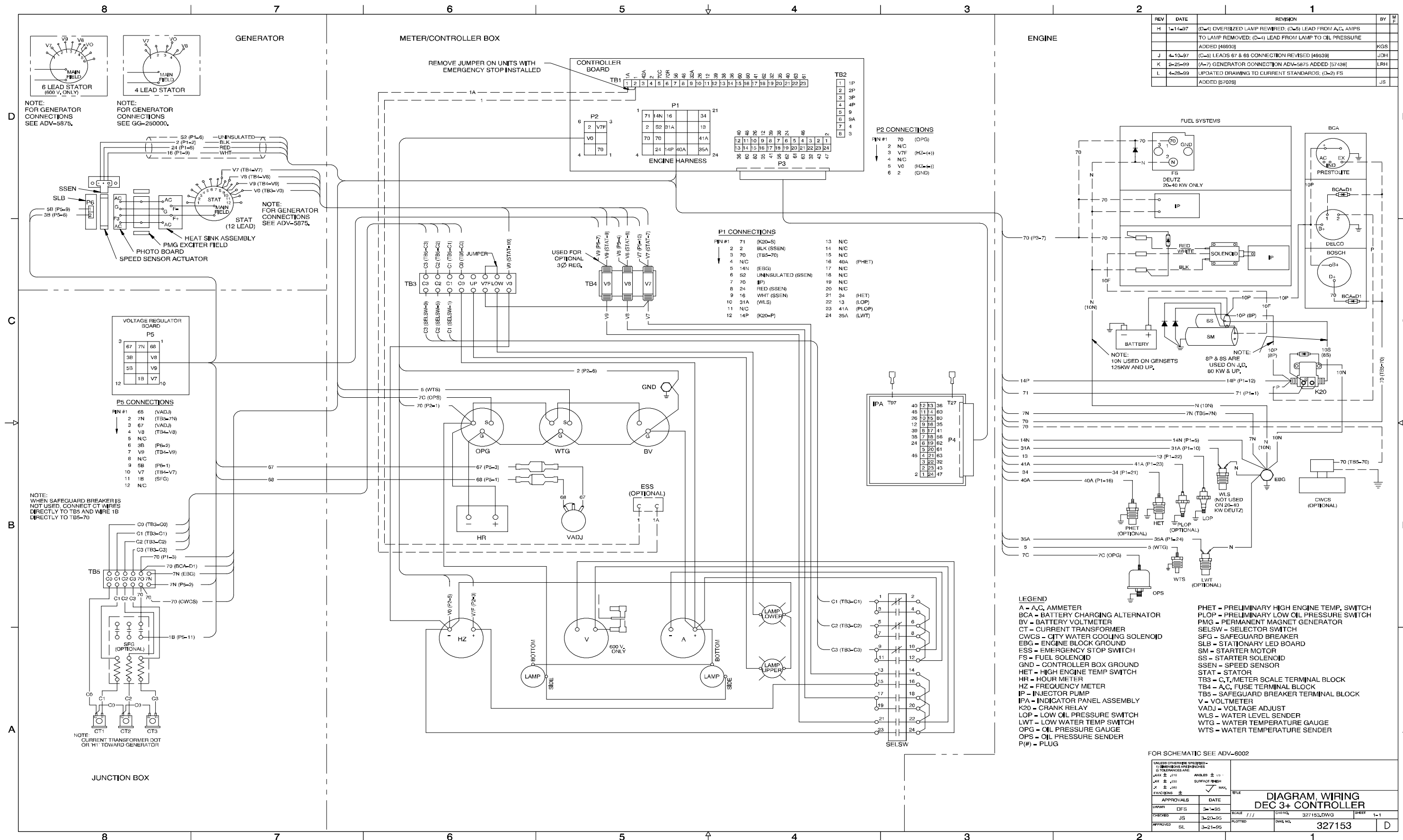
Decision-Maker™ 3+ and Decision-Maker™ 3 Controllers, Point-to-Point Wiring Diagram, Sheet 2, 327098-B



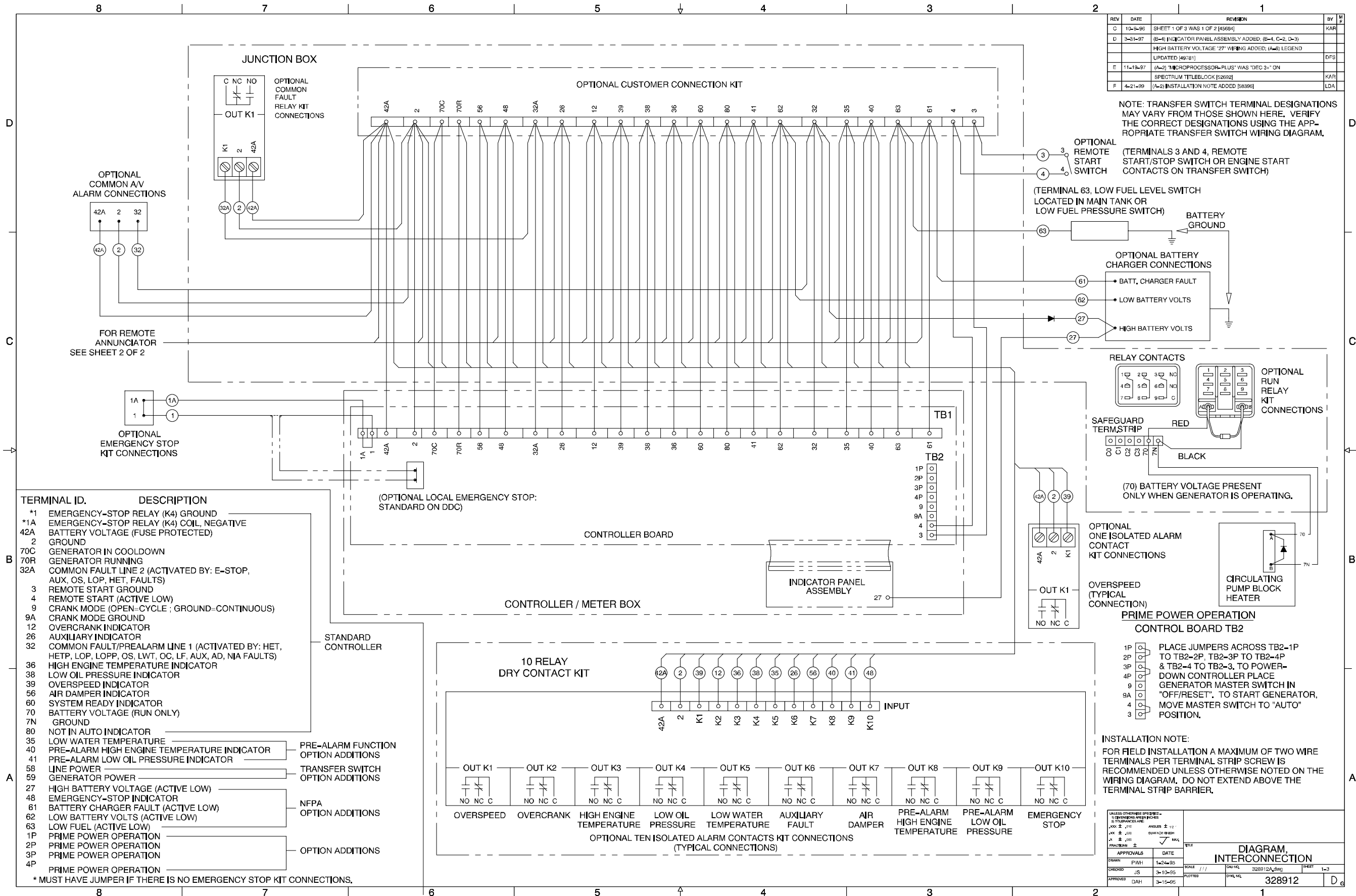
Manual Controller, Point-to-Point Wiring Diagram, 327099-G



Manual Controller, Point-to-Point Wiring Diagram, 327099-H

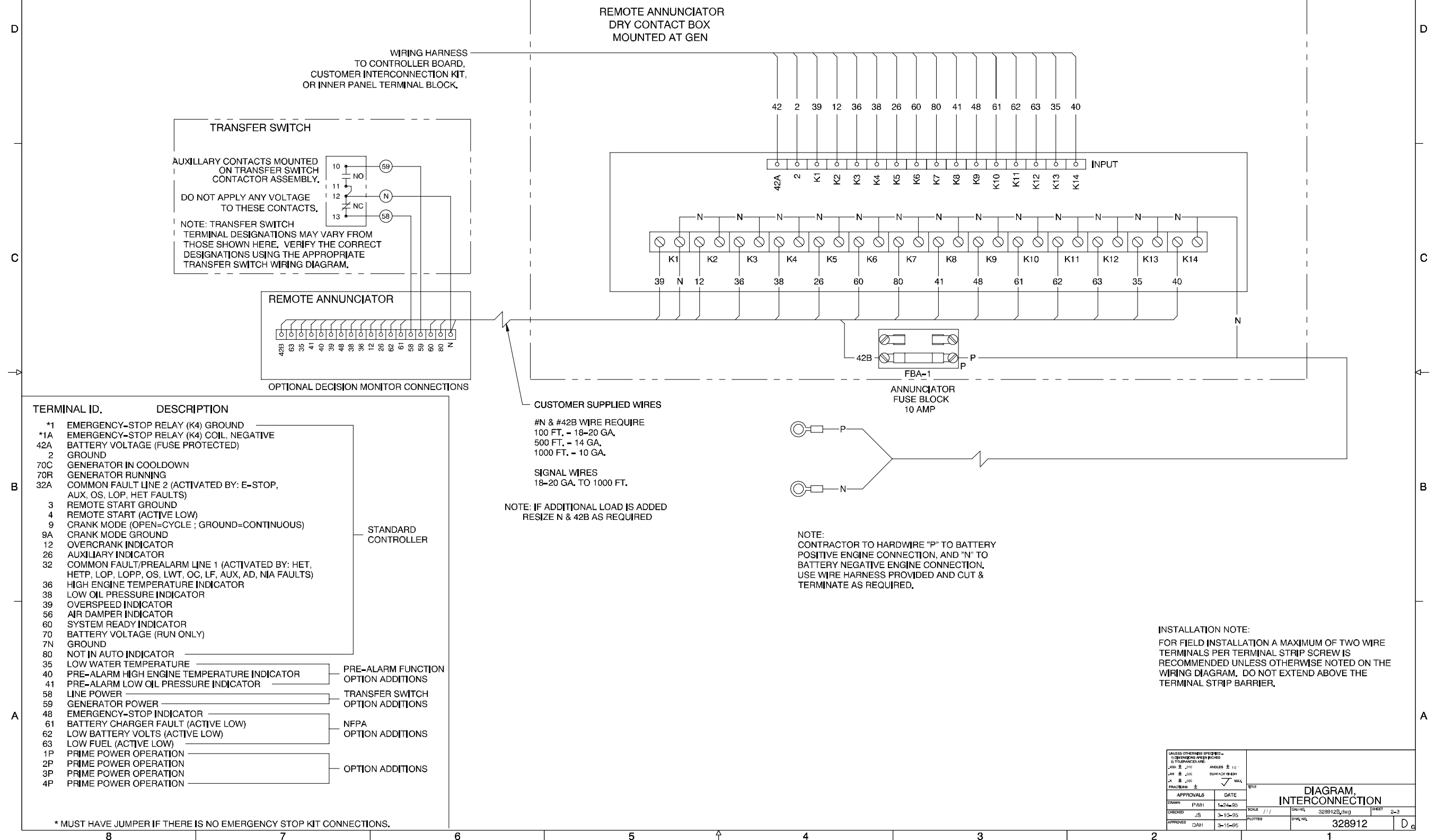


Decision-Maker™ 3+ and Decision-Maker™ 3 Controllers, Point-to-Point Wiring Diagram, 327153-L

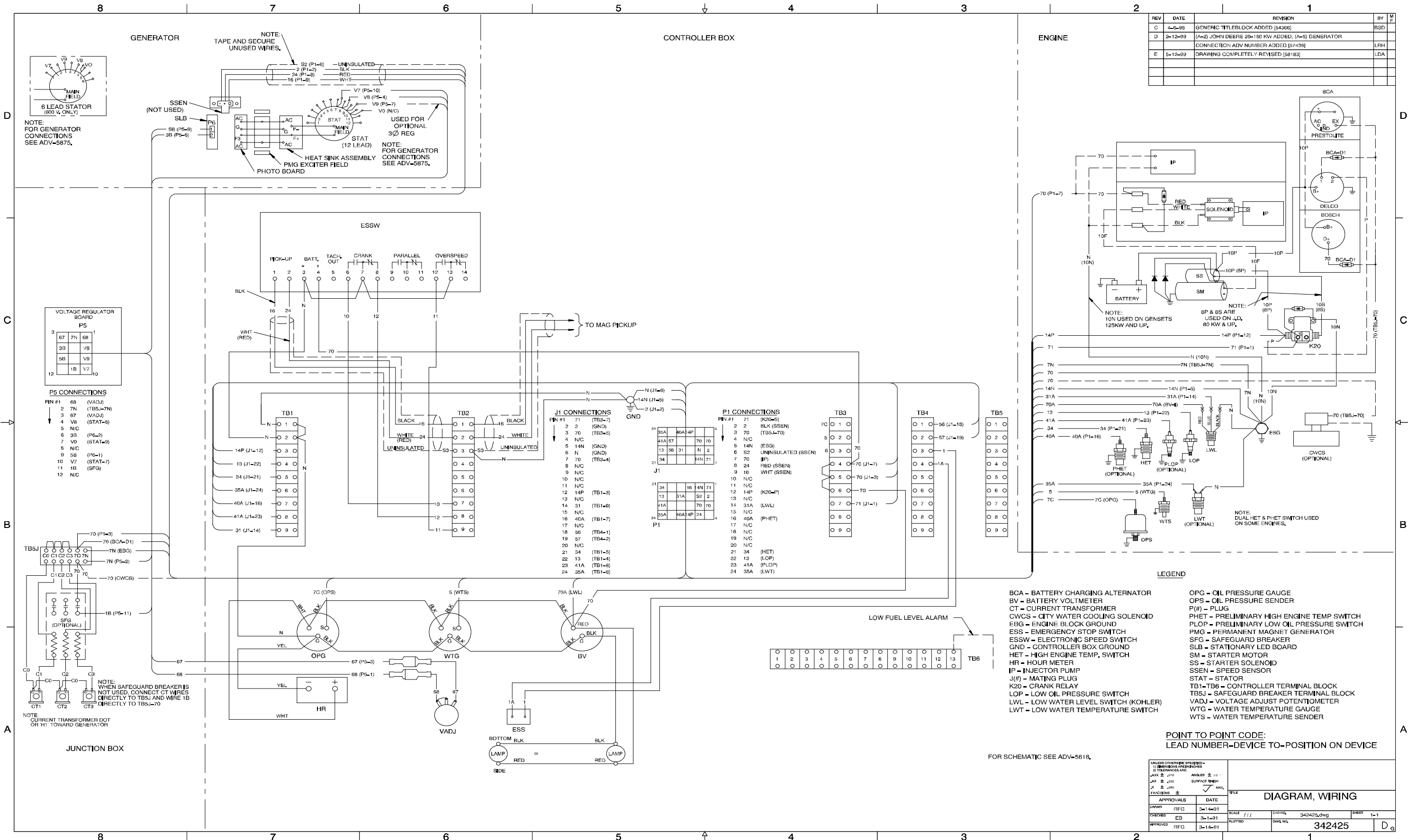


Decision-Maker™ 3+ and Decision-Maker™ 3 Controllers, Accessory Connections, Accessories, 328912A-F

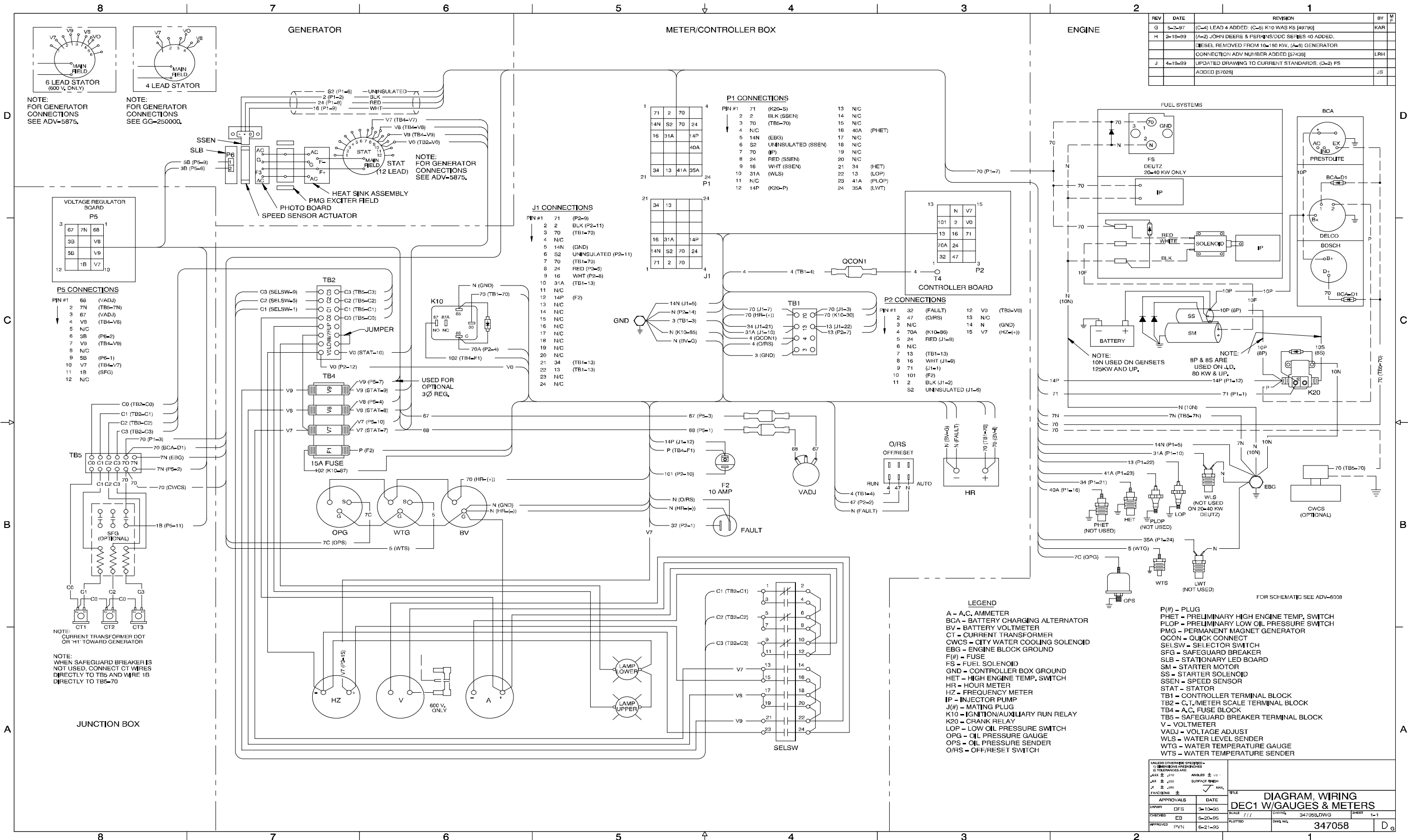
REV	DATE	REVISION	BY	CHK
C	11-19-97	(A=2) MICROPROCESSOR PLUS WAS DEC 3+ & (B=7)		
		"REMOTE ANNUNCIATOR" WAS "DECISION MONITOR" ON SPECTRUM TITLEBLOCK (5692)	KAR	
D	9-3-98	(A=2) 20-2000 KW WAS 20-1600 KW; (D=8) CUSTOMER INTERCONNECTION KIT, OR INNER PANEL TERMINAL BLOCK, ADDED (56975)	LDS	
F	4-21-99	(A=2) INSTALLATION NOTE ADDED (56396)	LDA	



Decision-Maker™ 3+ and Decision-Maker™ 3, Accessory Connections, Remote Annunciator Kit, 328912B-F



Engine Gauge Box for Paralleling Switchgear, Point-to-Point Wiring Diagram, 342425-E

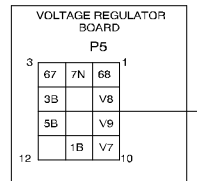


REV	DATE	REVISION	BY
G	5-2-97	(C-5) LEAD 4 ADDED; (C-5) K10 WAS KS [49790]	KAR
H	2-18-99	(A-2) JOHN DEERE & PERINS/DCC SERIES 40 ADDED; DIESEL REMOVED FROM 10N/80 KW, (A-3) GENERATOR CONNECTION ADV NUMBER ADDED [57438]	LRH
J	4-18-99	UPDATED DRAWING TO CURRENT STANDARDS; (C-2) FS ADDED [57028]	JS

NOTE: FOR GENERATOR CONNECTIONS SEE ADV-5875.

NOTE: FOR GENERATOR CONNECTIONS SEE GG-250000.

NOTE: FOR GENERATOR CONNECTIONS SEE ADV-5875.



**P5 CONNECTIONS**

PIN #1	WIRE	FUNCTION
1	68	(VADJ)
2	7N	(TB5-7N)
3	67	(VADJ)
4	V8	(TB4-V8)
5	N/C	
6	3B	(P6-2)
7	V9	(TB4-V9)
8	N/C	
9	5B	(P6-1)
10	V7	(TB4-V7)
11	1B	(SFG)
12	N/C	

**J1 CONNECTIONS**

PIN #1	WIRE	FUNCTION
1	71	(K20-S)
2	2	BLK (SSEN)
3	70	(TB5-70)
4	N/C	
5	14N	(EBG)
6	S2	UNINSULATED (SSEN)
7	70	(IP)
8	24	RED (SSEN)
9	16	WHT (SSEN)
10	31A	(WLS)
11	N/C	
12	14P	(K20-P)
13	N/C	
14	N/C	
15	N/C	
16	40A	(PHET)
17	N/C	
18	N/C	
19	N/C	
20	N/C	
21	34	(HET)
22	13	(LOP)
23	41A	(PLOP)
24	35A	(LWT)

**P2 CONNECTIONS**

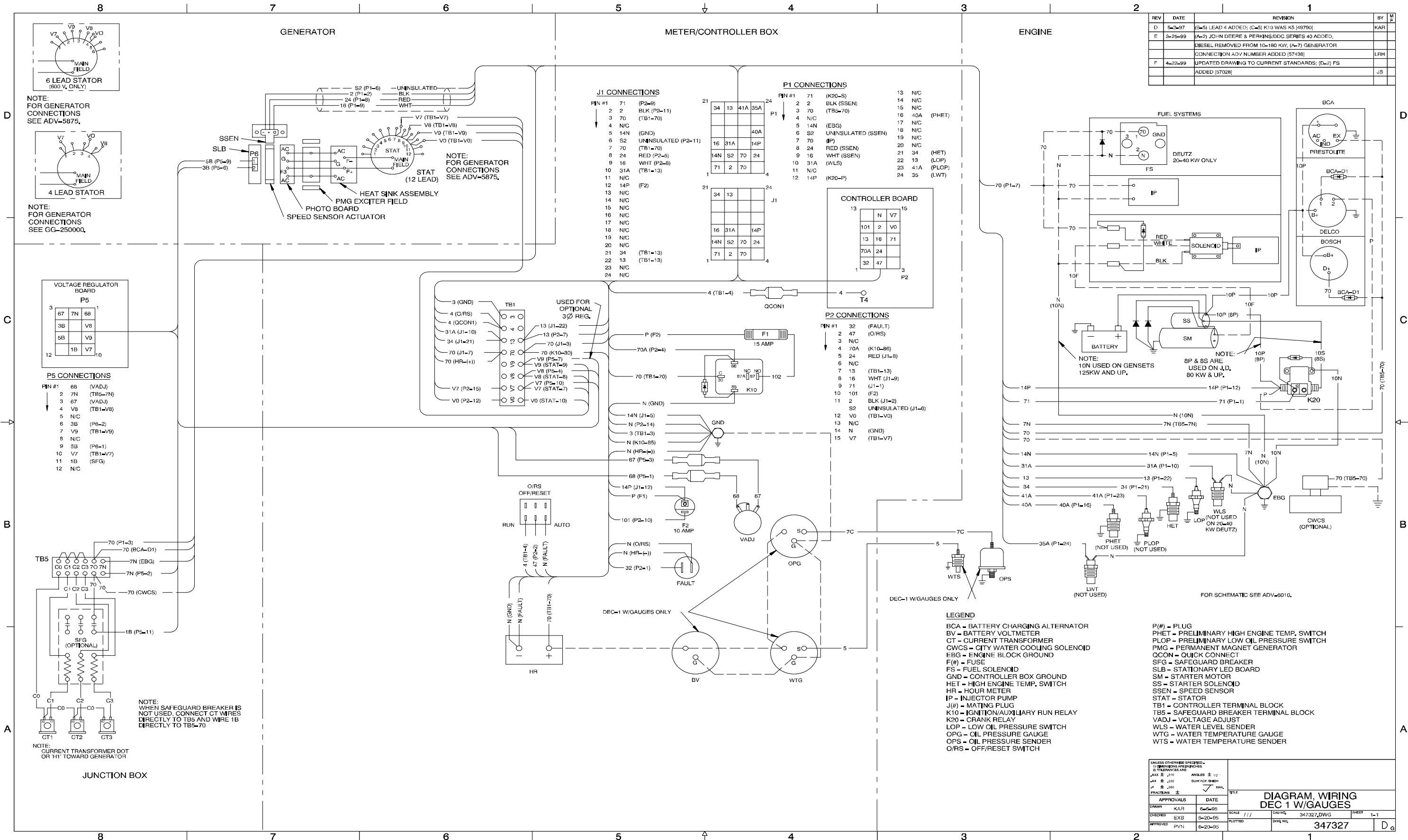
PIN #1	WIRE	FUNCTION
1	32	(FAULT)
2	47	(O/RS)
3	N/C	
4	70A	(K10-S)
5	24	RED (J1-3)
6	N/C	
7	13	(TB1-13)
8	16	WHT (J1-9)
9	71	(J1-1)
10	101	(F2)
11	2	BLK (J1-2)
12	V0	(TB2-V0)
13	N/C	
14	N	(GND)
15	V7	(K2-V7)

- LEGEND**
- A - A.C. AMMETER
  - BCA - BATTERY CHARGING ALTERNATOR
  - BV - BATTERY VOLTMETER
  - CT - CURRENT TRANSFORMER
  - CWCS - CITY WATER COOLING SOLENOID
  - EBG - ENGINE BLOCK GROUND
  - F# - FUSE
  - FS - FUEL SOLENOID
  - GND - CONTROLLER BOX GROUND
  - HET - HIGH ENGINE TEMP. SWITCH
  - HR - HOUR METER
  - HZ - FREQUENCY METER
  - IP - INJECTOR PUMP
  - J# - MATING PLUG
  - K10 - IGNITION/AUXILIARY RUN RELAY
  - K20 - CRANK RELAY
  - LOP - LOW OIL PRESSURE SWITCH
  - OPG - OIL PRESSURE GAUGE
  - OPS - OIL PRESSURE SENDER
  - O/RS - OFF/RESET SWITCH

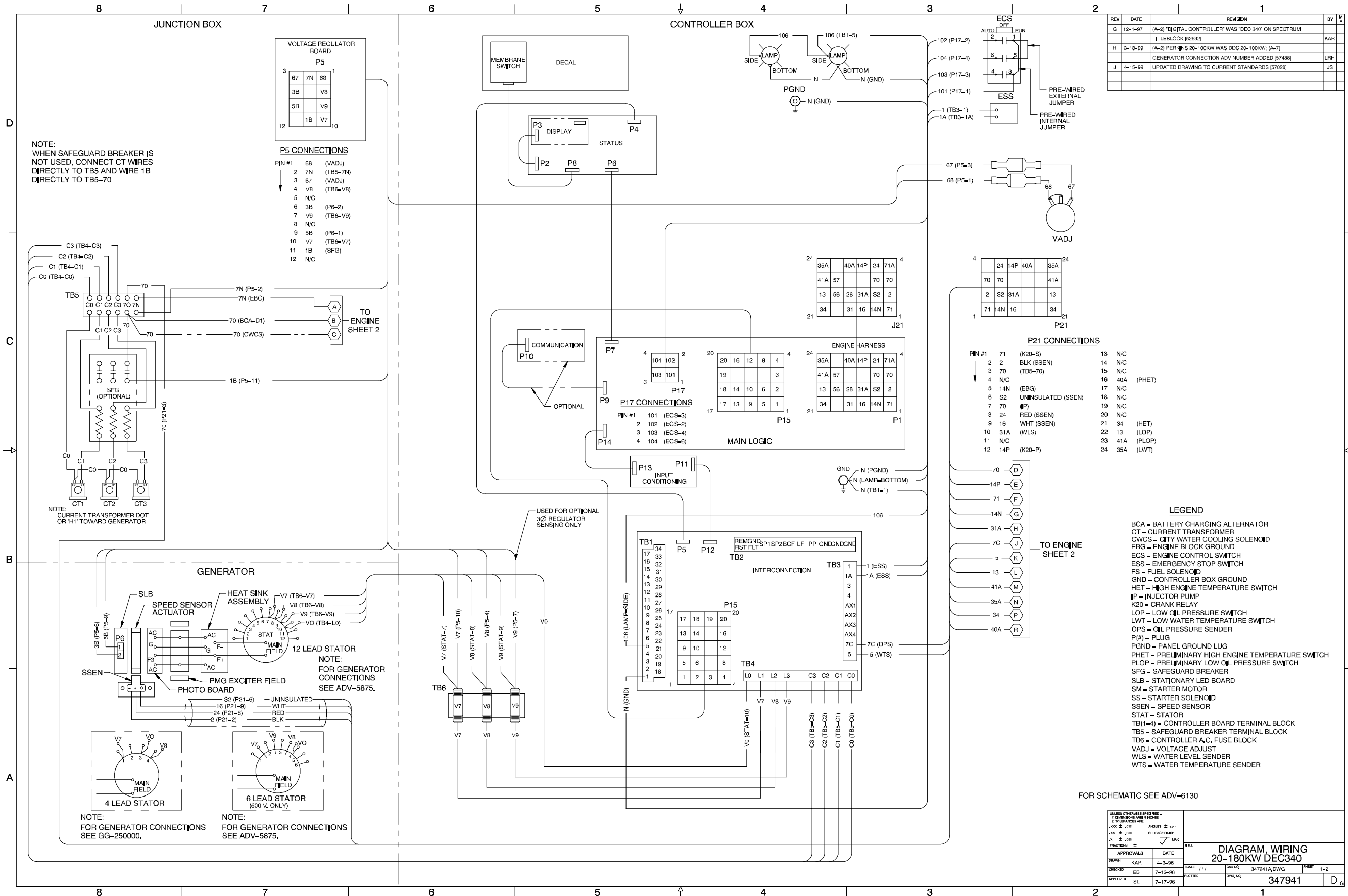
- P/# - PLUG
- PHET - PRELIMINARY HIGH ENGINE TEMP. SWITCH
- PLOP - PRELIMINARY LOW OIL PRESSURE SWITCH
- PMG - PERMANENT MAGNET GENERATOR
- QCON - QUICK CONNECT
- SELSW - SELECTOR SWITCH
- SFG - SAFEGUARD BREAKER
- SLB - STATIONARY LED BOARD
- SM - STARTER MOTOR
- SS - STARTER SOLENOID
- SSEN - SPEED SENSOR
- STAT - STATOR
- TB1 - CONTROLLER TERMINAL BLOCK
- TB2 - C.T./METER SCALE TERMINAL BLOCK
- TB4 - A.C. FUSE BLOCK
- TB5 - SAFEGUARD BREAKER TERMINAL BLOCK
- V - VOLTMETER
- VADJ - VOLTAGE ADJUST
- WLS - WATER LEVEL SENDER
- WTG - WATER TEMPERATURE GAUGE
- WTS - WATER TEMPERATURE SENDER

UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN INCHES		TOLERANCES ARE:	
XXX ± .015	ANGLES ± 1°	XXX ± .003	SURFACE FINISH
XXX ± .005		XXX ± .005	MAX
FINISHES			
APPROVALS	DATE	TITLE	
DRAWN DFS	3-10-95	DIAGRAM, WIRING	
CHECKED EB	5-20-95	DEC1 W/GAUGES & METERS	
APPROVED PVN	6-21-95	SCALE 1/1	SHEET 1-1
		PLOTTED	DWG. NO. 347058

Decision-Maker™ 1, Point-to-Point Wiring Diagram, Expanded w/Engine Gauges and AC Meters (12-Lead), 347058-J



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, Standard and Standard w/Engine Gauges, 347327-F



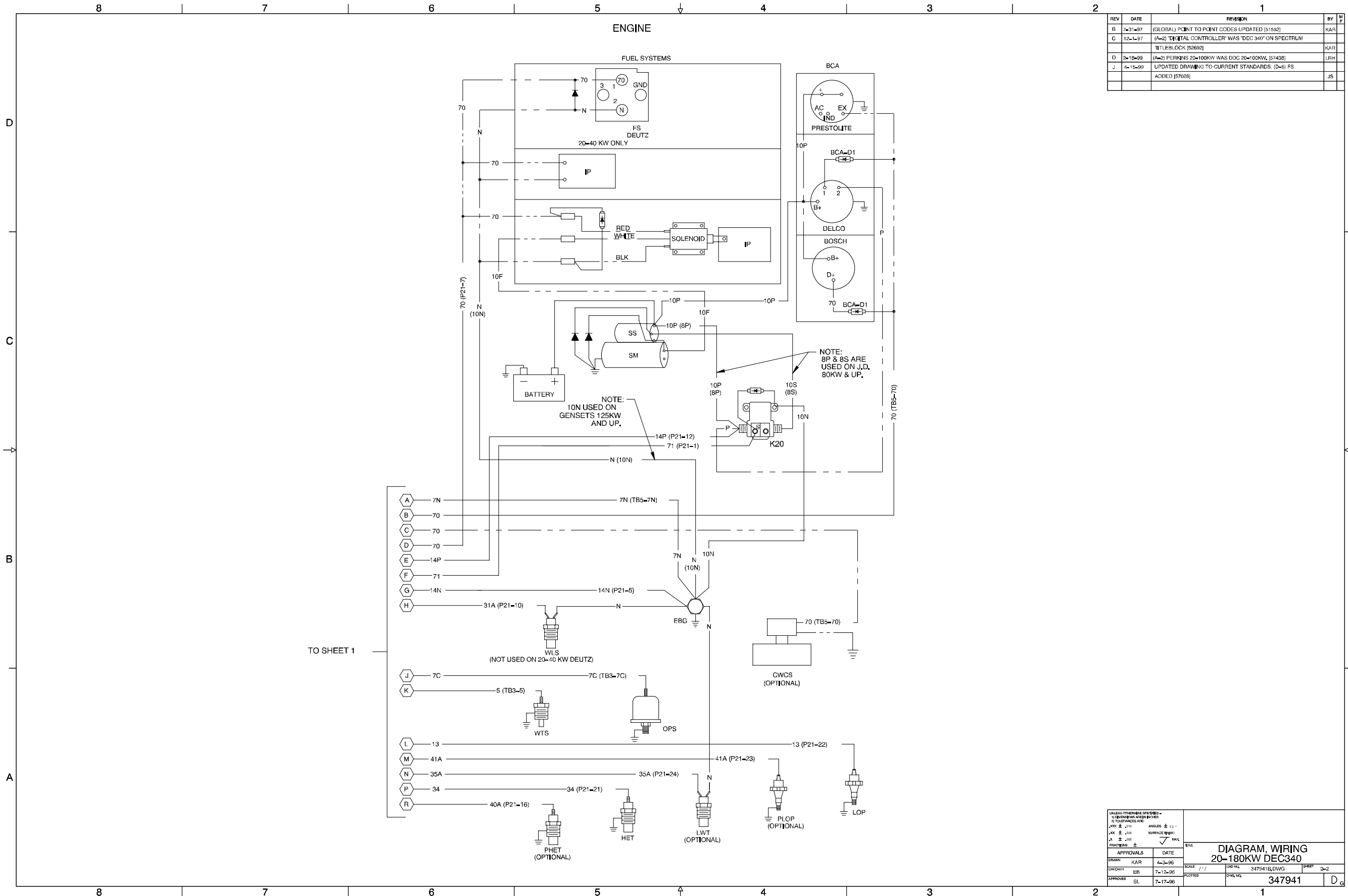
REV	DATE	REVISION	BY	CHK
G	12-1-97	(A=2) DIGITAL CONTROLLER WAS DEC 3407 ON SPECTRUM		
		TITLEBLOCK (526932)	KAR	
H	2-18-99	(A=2) PERFORMS 20-100KW WAS DDC 20-100KW (A=7)		
		GENERATOR CONNECTION ADV NUMBER ADDED (57436)	LRH	
J	4-15-99	UPDATED DRAWING TO CURRENT STANDARDS (57028)		
			JS	

- LEGEND**
- BCA - BATTERY CHARGING ALTERNATOR
  - CT - CURRENT TRANSFORMER
  - CWCS - CITY WATER COOLING SOLENOID
  - EBG - ENGINE BLOCK GROUND
  - ECS - ENGINE CONTROL SWITCH
  - ESS - EMERGENCY STOP SWITCH
  - FS - FUEL SOLENOID
  - GND - CONTROLLER BOX GROUND
  - HET - HIGH ENGINE TEMPERATURE SWITCH
  - IP - INJECTOR PUMP
  - K20 - CRANK RELAY
  - LOP - LOW OIL PRESSURE SWITCH
  - LWT - LOW WATER TEMPERATURE SWITCH
  - OPS - OIL PRESSURE SENDER
  - P(#)- PLUG
  - PGND - PANEL GROUND LUG
  - PHET - PRELIMINARY HIGH ENGINE TEMPERATURE SWITCH
  - PLOP - PRELIMINARY LOW OIL PRESSURE SWITCH
  - SFG - SAFEGUARD BREAKER
  - SLB - STATIONARY LED BOARD
  - SM - STARTER MOTOR
  - SS - STARTER SOLENOID
  - SSEN - SPEED SENSOR
  - STAT - STATOR
  - TB(1-4) - CONTROLLER BOARD TERMINAL BLOCK
  - TB5 - SAFEGUARD BREAKER TERMINAL BLOCK
  - TB6 - CONTROLLER A.C. FUSE BLOCK
  - VADJ - VOLTAGE ADJUST
  - WLS - WATER LEVEL SENDER
  - WTS - WATER TEMPERATURE SENDER

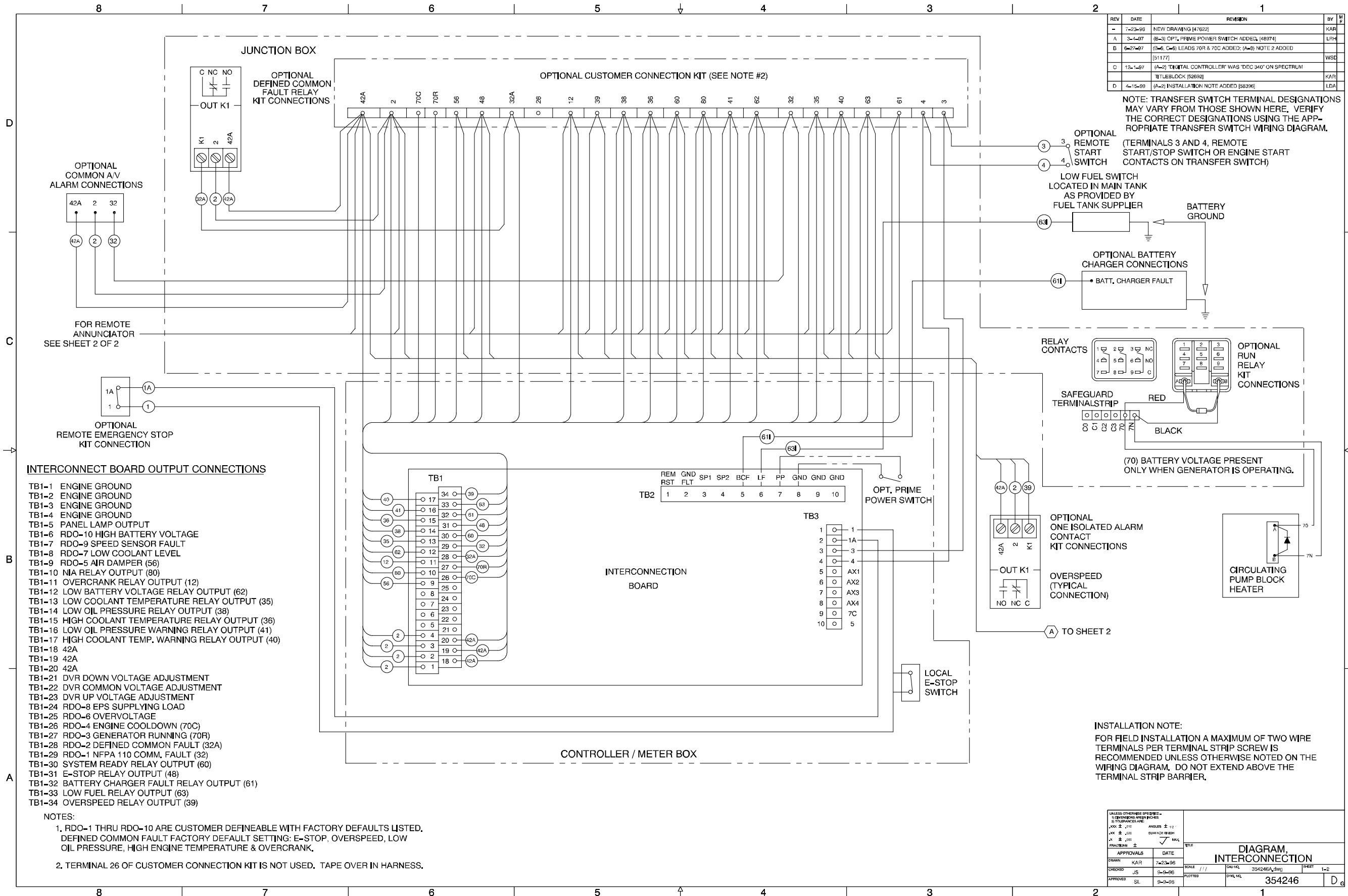
FOR SCHEMATIC SEE ADV-6130

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± 10° X.X ± .010 BUSHING DEPTH X.X ± .010		DATE	SCALE	DWG. NO.	SHEET
APPROVALS	DATE				
DRAWN KAR	4-2-99				
CHECKED EB	7-12-99				
APPROVED SL	7-17-99				
<b>DIAGRAM, WIRING</b> <b>20-180KW DEC340</b>				347941	D <sub>g</sub>

Decision-Maker™ 340 Controller, Point-to-Point Wiring Diagram, Sheet 1, 347941A-D

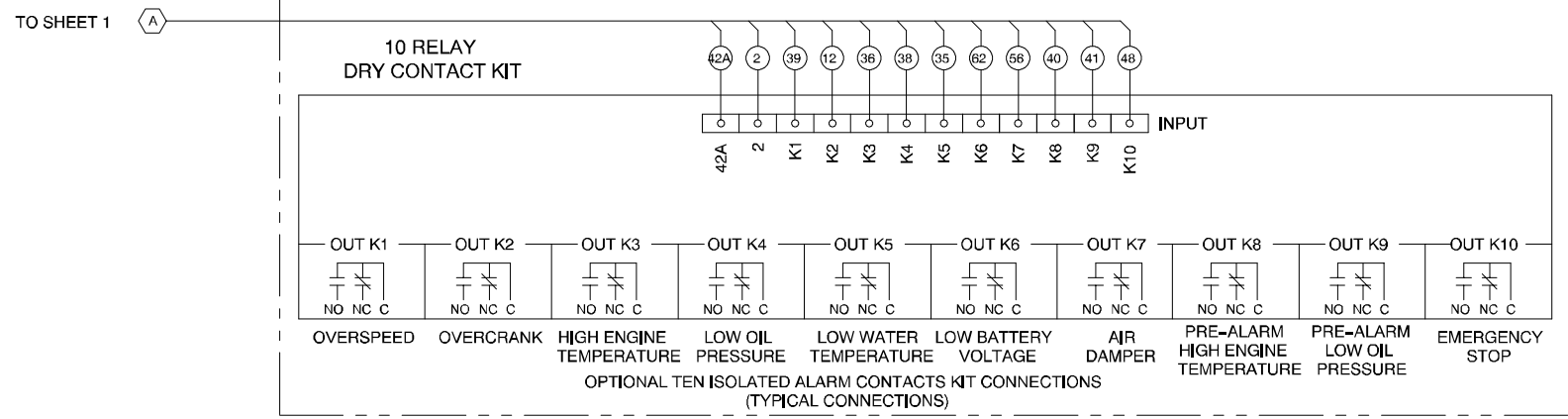


Decision-Maker™ 340 Controller, Point-to-Point Wiring Diagram, Sheet 2, 347941B-J

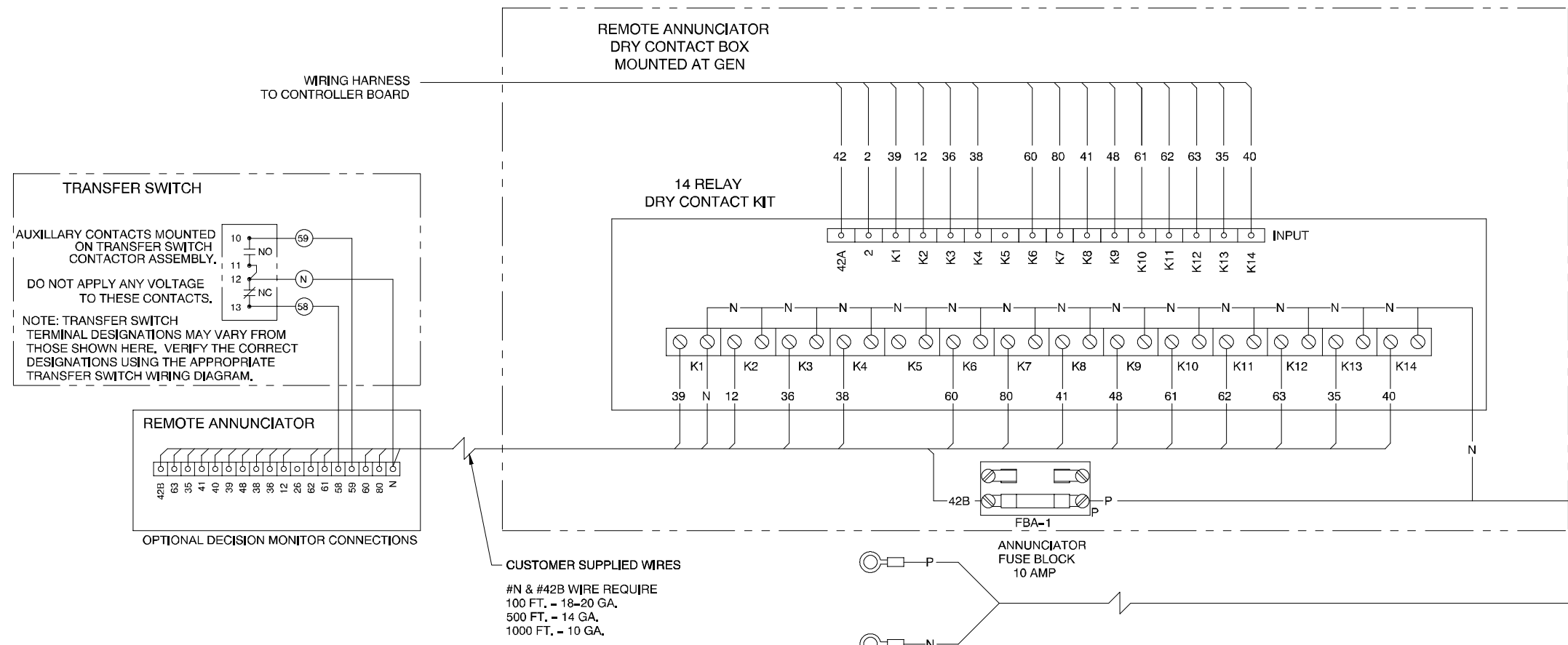


Decision-Maker™ 340 Controller, Accessory Connections, Accessories, 354246A-D

REV	DATE	REVISION	BY
-	7-23-06	NEW DRAWING (47822)	KAR
A	12-1-07	(A-2) DIGITAL CONTROLLER WAS "DEC 340" ON SPECTRUM	
		TITLEBLOCK (26992)	KAR
D	4-15-09	(C-2) INSTALLATION NOTE ADDED (38398)	LDA

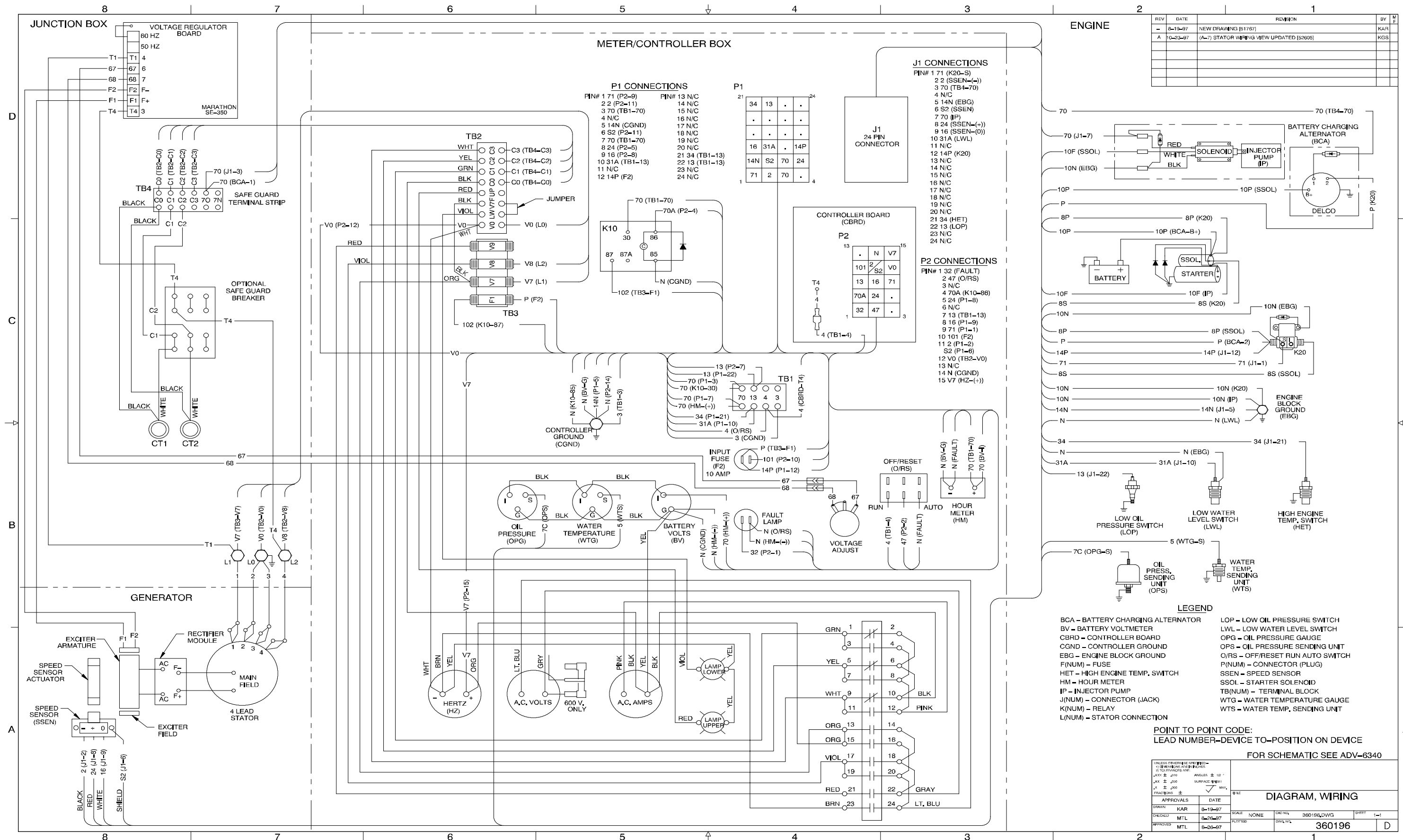


**INSTALLATION NOTE:**  
 FOR FIELD INSTALLATION A MAXIMUM OF TWO WIRE TERMINALS PER TERMINAL STRIP SCREW IS RECOMMENDED UNLESS OTHERWISE NOTED ON THE WIRING DIAGRAM. DO NOT EXTEND ABOVE THE TERMINAL STRIP BARRIER.



APPROVALS		DATE	SCALE	TITLE
DRAWN	KAR	7-23-06	1/1	DIAGRAM, INTERCONNECTION
CHECKED	JS	5-9-06		
APPROVED	SL	9-9-06		
DRAWING NO. 354246(DWG)			SHEET 2-2	

**Decision-Maker™ 340 Controller, Accessory Connections, Remote Annunciator Kit, 354246B-D**



Decision-Maker™ 1, Point-to-Point Wiring Diagram, Expanded w/Engine Gauges and AC Meters (4-Lead), 360196-A







**TP-5718 1/00b**

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