Wiring Diagrams

Industrial Generator Sets

Models:

10/12/18RY/RZ (Ford-Powered)
17/22RY (Ford-Powered)

Controllers:
Decision-Maker™ 3
Decision-Maker™ 1 Expanded
Decision-Maker™ 1

ISO 9001
KOHLER GENERATORS
INTERNATIONALLY REGISTERED

KOHLER®
POWER SYSTEMS

TP-5716 6/01b

Product Identification Information

Product identification numbers determine service parts. Record the product identification numbers in the spaces below immediately after unpacking the products so that the numbers are readily available for future reference. Record field-installed kit numbers after installing the kits.

Generator Set Identification Numbers

Record the product identification numbers from the generator set nameplate(s).

Model Designation _____

Specification Number _____

Serial Number _____

Accessory Number	Accessory Description

Engine Identification

Record the product identification information from the engine nameplate.

Manufacturer _____

Model Designation _____

Serial Number _____

x:in:007:001

Introduction

This manual provides wiring diagrams for the 10/12/18RY/RZ and 17/22RY Ford-powered model generator sets equipped with one of the following controllers:

- Decision-Maker™ 3
- Decision-Maker™ 1

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.

x:in:001:002

Service Assistance

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- Look on the product or in the information included with the product
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- Inside the U.S.A. and Canada, call 1-800-544-2444
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Fax: (65) 264-6455

X:in:008:001

Notes

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.

See Figure 1 for an explanation of drawing numbers.

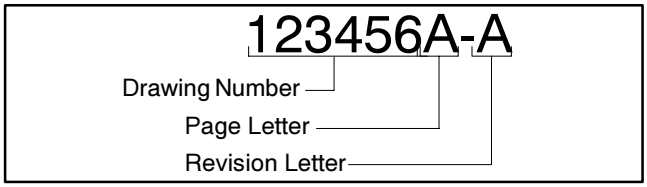


Figure 1 Drawing Number Legend

Wiring Diagram Cross-Reference

Generator Set Model	Hz	Generator Set Spec No.	Wiring Diagram Version No.
10RY/RZ	50/60	PA-110401–PA-110490 GM17783-GA1, GM17783-GA2	1 2
12RY/RZ	50/60	PA-110501–PA-110563, PA-110568, PA-110569 GM17783-GA3, GM17783-GA4	1 2
17RY	50/60	PA-110564, PA-110565, PA-110570, PA-110571, PA-110572, PA-110576 GM13954-GA1, GM13954-GA2 GM17789-GA1, GM17789-GA2	1 2 3
18RY/RZ	50/60	PA-185501–PA-185515 PA-185102–PA-185106 PA-185107, PA-185108, PA-185110, PA-185111	1 2 3
22RY	50/60	PA-110566, PA-110567, PA-110573, PA-110574, PA-110575, PA-110577 GM13954-GA3, GM13954-GA4 GM17789-GA3, GM17789-GA4	1 2 3

Controller Wiring Diagrams Reference

10–12RY/RZ Controller Description	Version 1	Page	Version 2	Page
Decision-Maker™ 3				
Point-to-Point Wiring Diagram				
4-Lead RY	226575-C	31	GM17853-	19
4-Lead RY Remote Mounted	226494-B	26	—	—
12-Lead RZ	226513-B	29	GM17859-	25
12-Lead RZ Remote Mounted	226496-A	27	—	—
600-Volt RZ	226513-B	29	—	—
600-Volt RZ Remote Mounted	226496-A	27	—	—
Schematic Diagram				
4-Lead RY	ADV-5723-D	3	ADV-5723-D	3
12-Lead RZ	ADV-5724-D	4	ADV-5724-D	4
600-Volt RZ	ADV-5725-D	5	—	—
Accessory Connections				
Accessories	256876A-F	38	256876A-F	38
Remote Annunciator Kit				
10-Relay	256876B-F	39	256876B-F	39
14-Relay	256876C-F	40	256876C-F	40
Decision-Maker™ 1				
Point-to-Point Wiring Diagram				
4-Lead RY	226518-F	30	GM17852-	18
12-Lead RZ	226511-D	28	GM17854-	20
Schematic Diagram				
4-Lead RY	ADV-5721-G	1	ADV-5721-G	1
12-Lead RZ	ADV-5722-G	2	ADV-5722-G	2

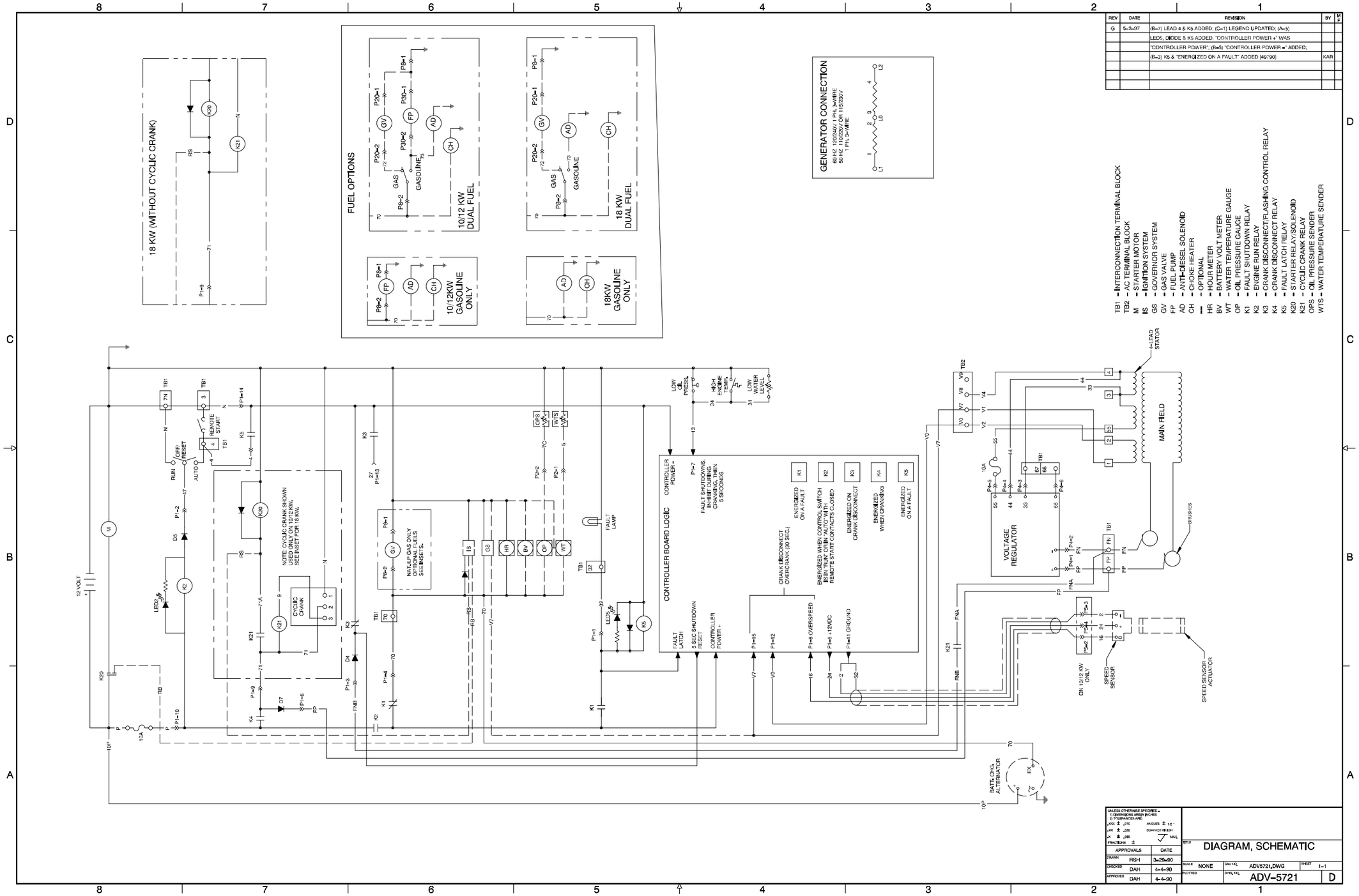
Controller Wiring Diagrams Reference, continued

17/22RY Controller Description	Version 1	Page	Version 2	Page	Version 3	Page
Decision-Maker™ 1						
Point-to-Point Wiring Diagram						
4-Lead	358244-B	51	GM13855-A	14	GM17855-	21
4-Lead with Meters and Gauges	358256-A	53	GM13857-A	16	GM17857-	23
12-Lead	358255-B	52	GM13856-	15	GM17856-	22
12-Lead with Meters and Gauges	358257-A	54	GM13858-	17	GM17858-	24
Schematic Diagram						
4-Lead	ADV–6406-A	6	ADV-6558-A	10	ADV-6558-A	10
4-Lead with Meters and Gauges	ADV–6408-A	8	ADV-6560-	12	ADV-6560-	12
12-Lead	ADV–6407-B	7	ADV-6559-	11	ADV-6559-	11
12-Lead with Meters and Gauges	ADV–6409-B	9	ADV-6561-	13	ADV-6561-	13

Note: Version 1 controllers have separate cyclic crank boards.
Version 2 and 3 controllers have integrated circuit boards.

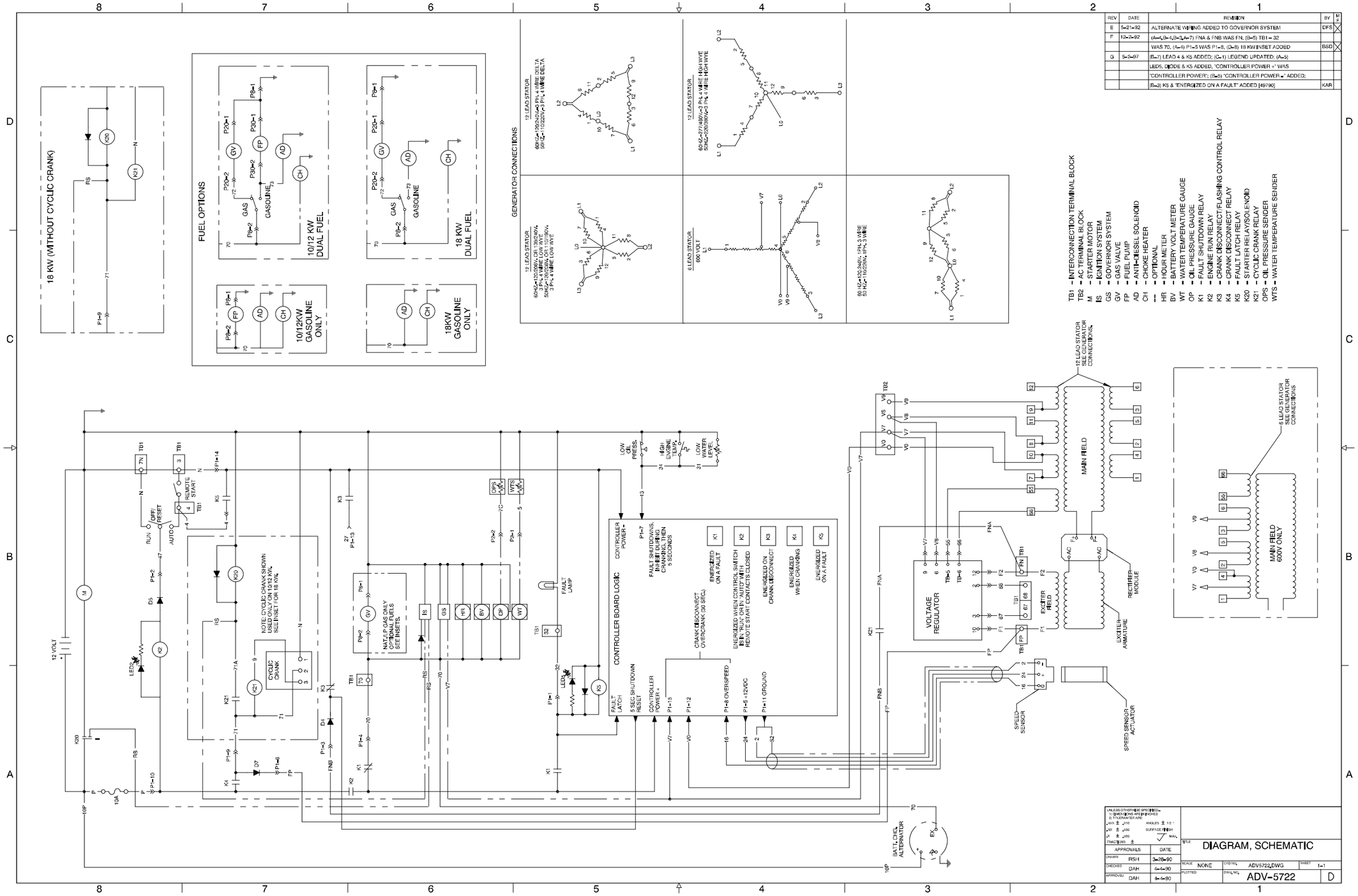
18RY/RZ Controller Description	Version 1	Page	Version 2	Page	Version 3	Page
Decision-Maker™ 3						
Point-to-Point Wiring Diagram						
4-Lead	254845-N	33	326453-	41	326453-	41
4-Lead Remote Mounted	256481-D	36	326455-	43	326455-	43
12-Lead/600-Volt	254961-J	35	326454-D	42	326454-D	42
12-Lead/600-Volt Remote Mounted	256482-B	37	326456-	44	326456-	44
Schematic Diagram						
4-Lead	ADV-5723-D	3	ADV-5723-D	3	ADV-5723-D	3
12-Lead	ADV-5724-D	4	ADV-5724-D	4	ADV-5724-D	4
600-Volt	ADV-5725-D	5	ADV-5725-D	5	ADV-5725-D	5
Accessory Connections						
Accessories	256876A-F	38	256876A-F	38	256876A-F	38
Remote Annunciator Kit						
10-Relay	256876B-F	39	256876B-F	39	256876B-F	39
14-Relay	256876C-F	40	256876C-F	40	256876C-F	40
Decision-Maker™ 1						
Point-to-Point Wiring Diagram						
4-Lead						
Sheet 1	254843-P	32	326457-A	45	326870A-	47
Sheet 2	—		—	—	326870B-	48
12-Lead						
Sheet 1	254960-J	34	326458-A	46	326871A-	49
Sheet 2	—		—	—	326871B-	50
Schematic Diagram						
4-Lead	ADV-5721-G	1	ADV-5721-G	1	ADV-5721-G	1
12-Lead	ADV-5722-G	2	ADV-5722-G	2	ADV-5722-G	2

Note: Version 1 uses the Ford LSG-423 engine.
Version 2 uses the Ford LRG-423 engine.
Version 3 uses the Ford LRG-425 engine.



REV	DATE	REVISION	BY
G	5-3-07	(B-7) LEAD 4 & K5 ADDED; (C-1) LEGEND UPDATED; (A-5)	
		LED5, DIODE & K5 ADDED. "CONTROLLER POWER +" WAS	
		"CONTROLLER POWER"; (B-5) "CONTROLLER POWER -" ADDED;	
		(B-3) K5 & "ENERGIZED ON A FAULT" ADDED [49790]	KAR

Decision-Maker™ 1 Controller, Schematic Diagram, 4-Lead, ADV-5721-G

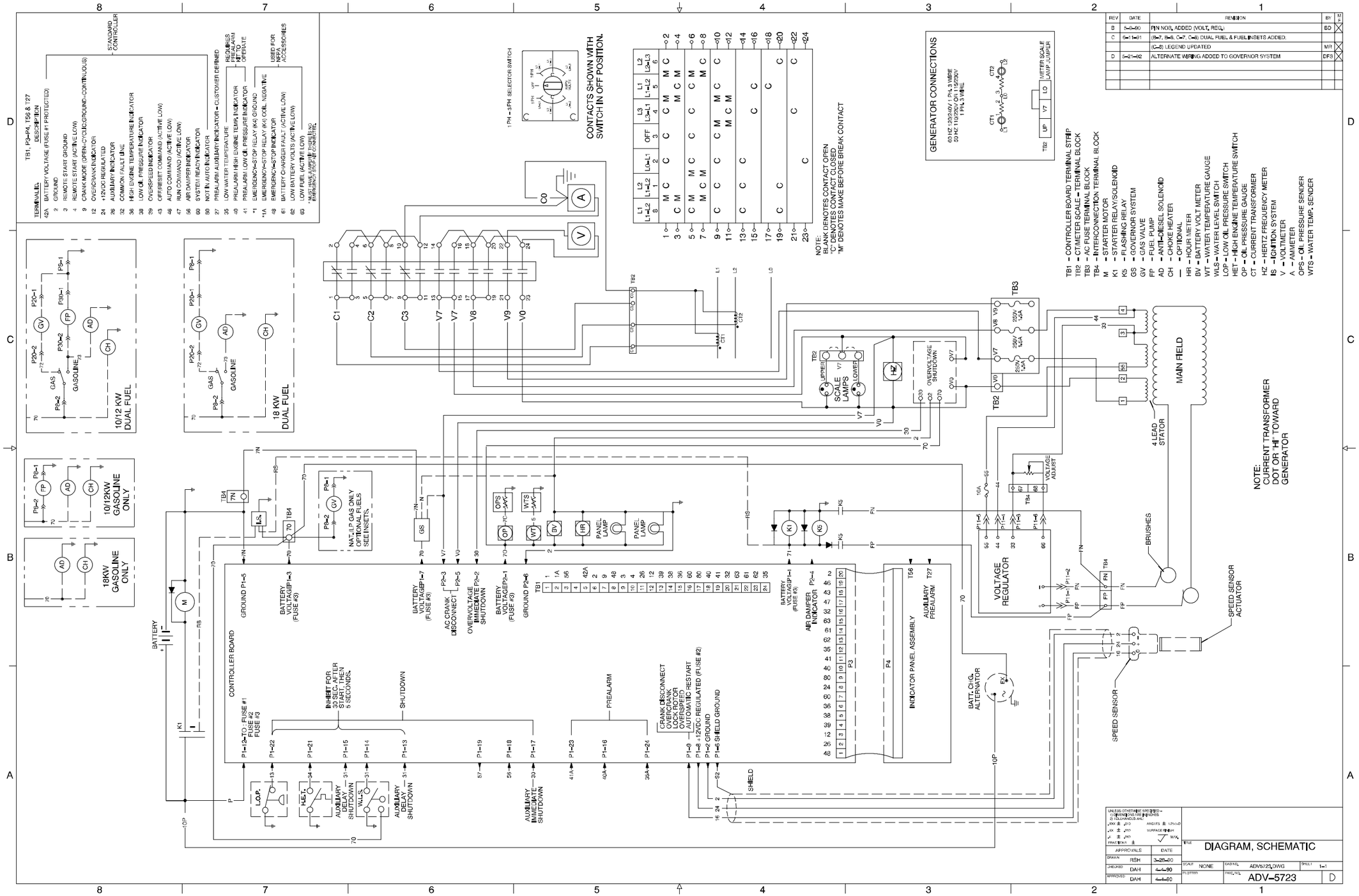


REV	DATE	REVISION	BY	E	M
E	5-21-92	ALTERNATE WIRING ADDED TO GOVERNOR SYSTEM	DFS	X	
F	12-2-92	(A-4,B-4,B-9,A-7) FNA & FNB WAS FN, (B-5) TB1 – 32			
		WAS 70, (A-4) P1-5 WAS P1-8, (D-8) 18 KW INSET ADDED	BSD	X	
G	5-3-97	(B-7) LEAD 4 & K5 ADDED; (C-1) LEGEND UPDATED; (A-5)			
		LED5, DIODE & K5 ADDED, "CONTROLLER POWER +" WAS			
		"CONTROLLER POWER"; (B-5) "CONTROLLER POWER +" ADDED;			
		(B-3) K5 & "ENERGIZED ON A FAULT" ADDED [49790]	KAR		

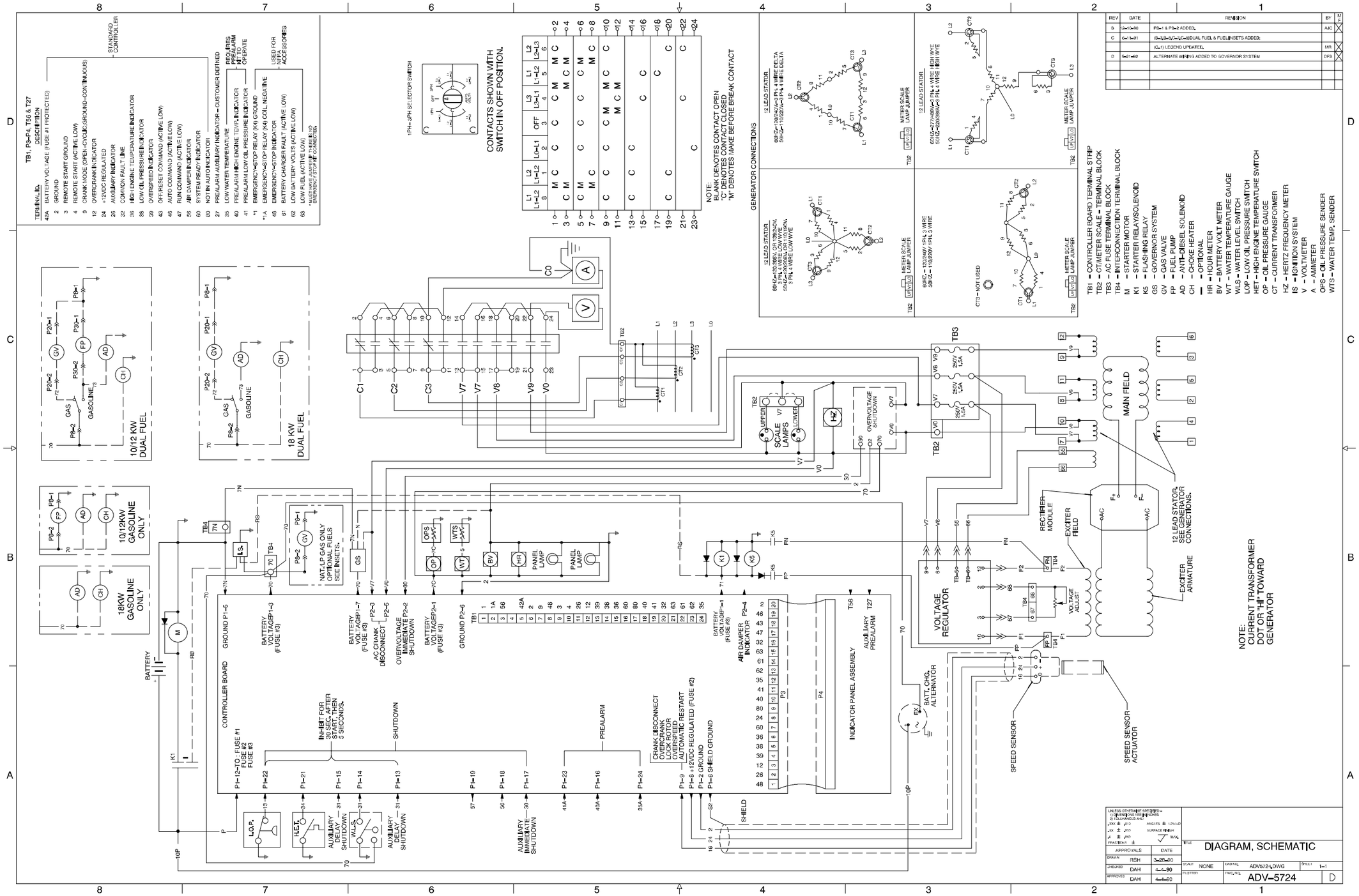
APPROVALS		DATE
DRAWN	RSH	3-28-90
CHECKED	DAH	4-4-90
APPROVED	DAH	4-4-90

SCALE NONE · DWG NO. ADV5722.DWG · SHEET 1-1

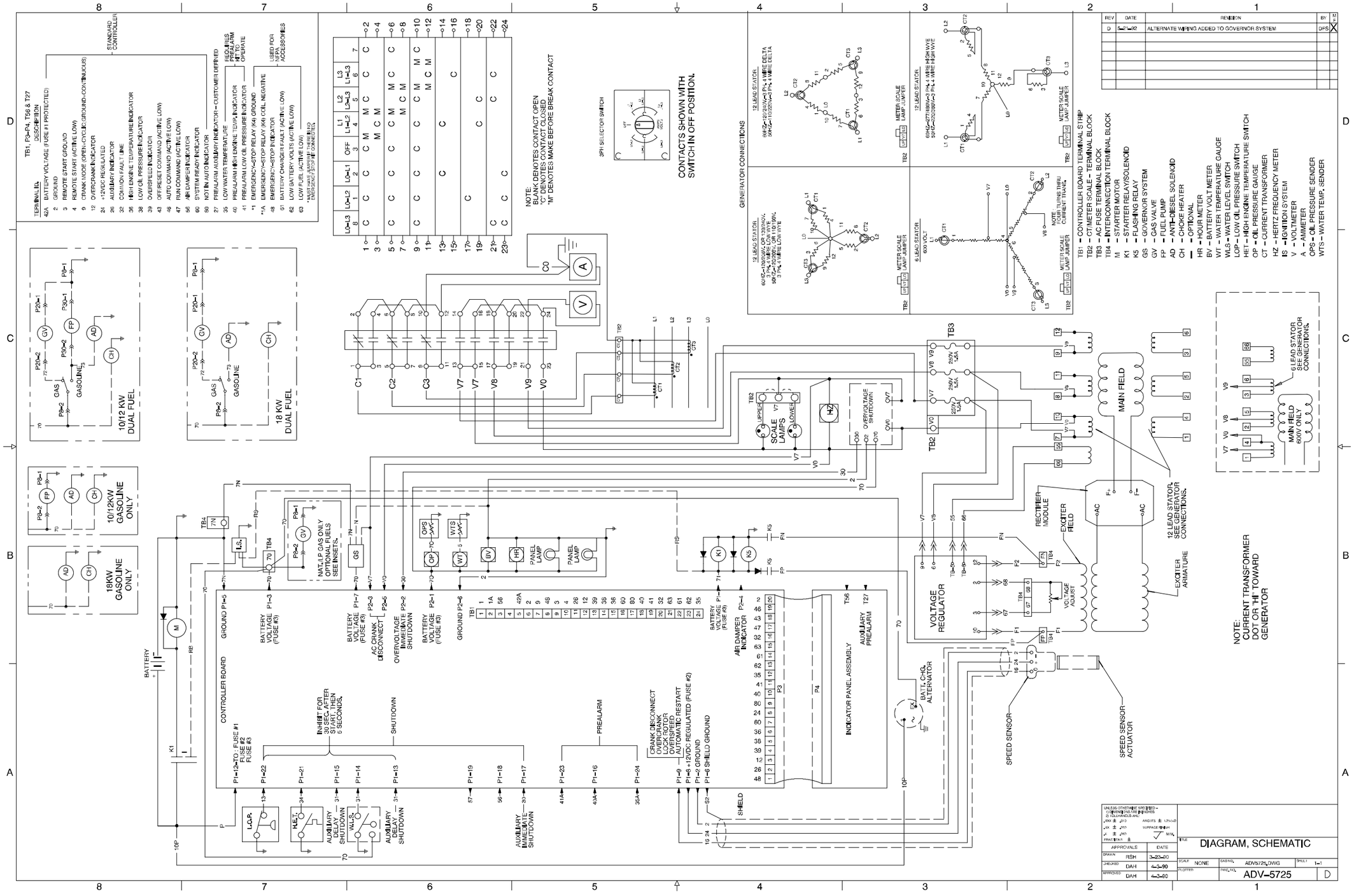
Decision-Maker™ 1 Controller, Schematic Diagram, 12-Lead, ADV-5722-G



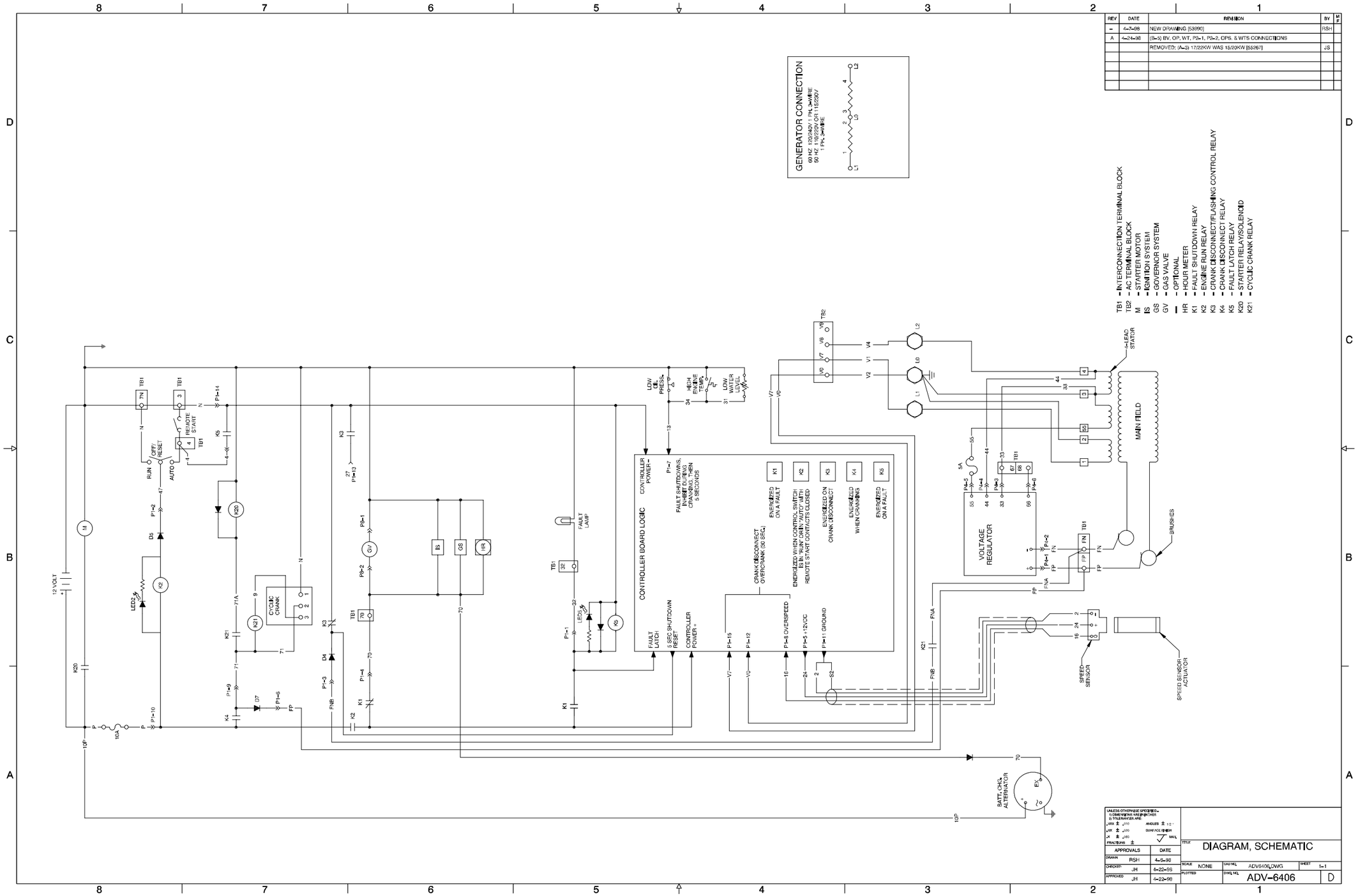
Decision-Maker™ 3 Controller, Schematic Diagram, 4-Lead, ADV-5723-D



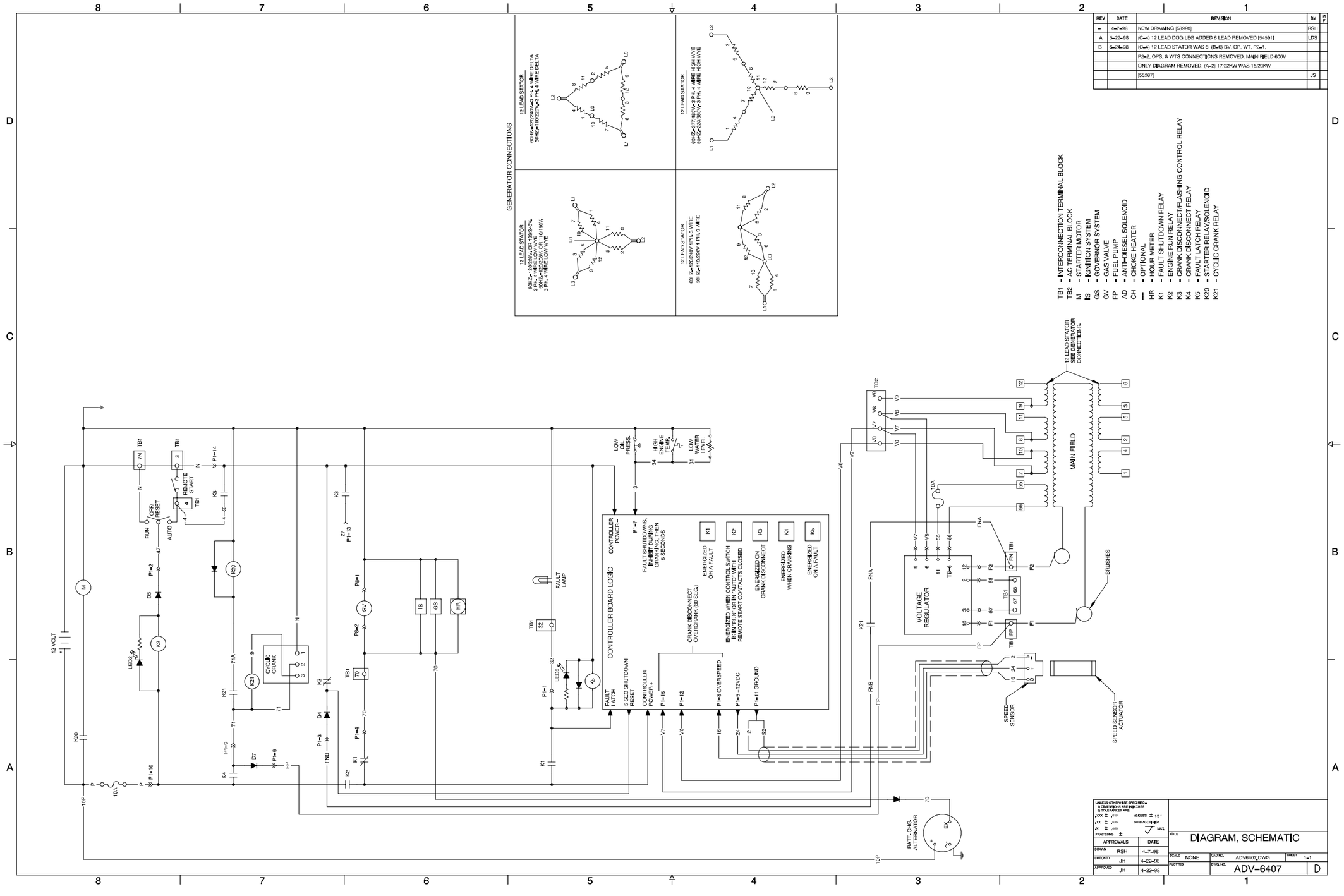
Decision-Maker™ 3 Controller, Schematic Diagram, 12-lead, ADV-5724-D



Decision-Maker™ 3 Controller, Schematic Diagram, 600-Volt, ADV-5725-D

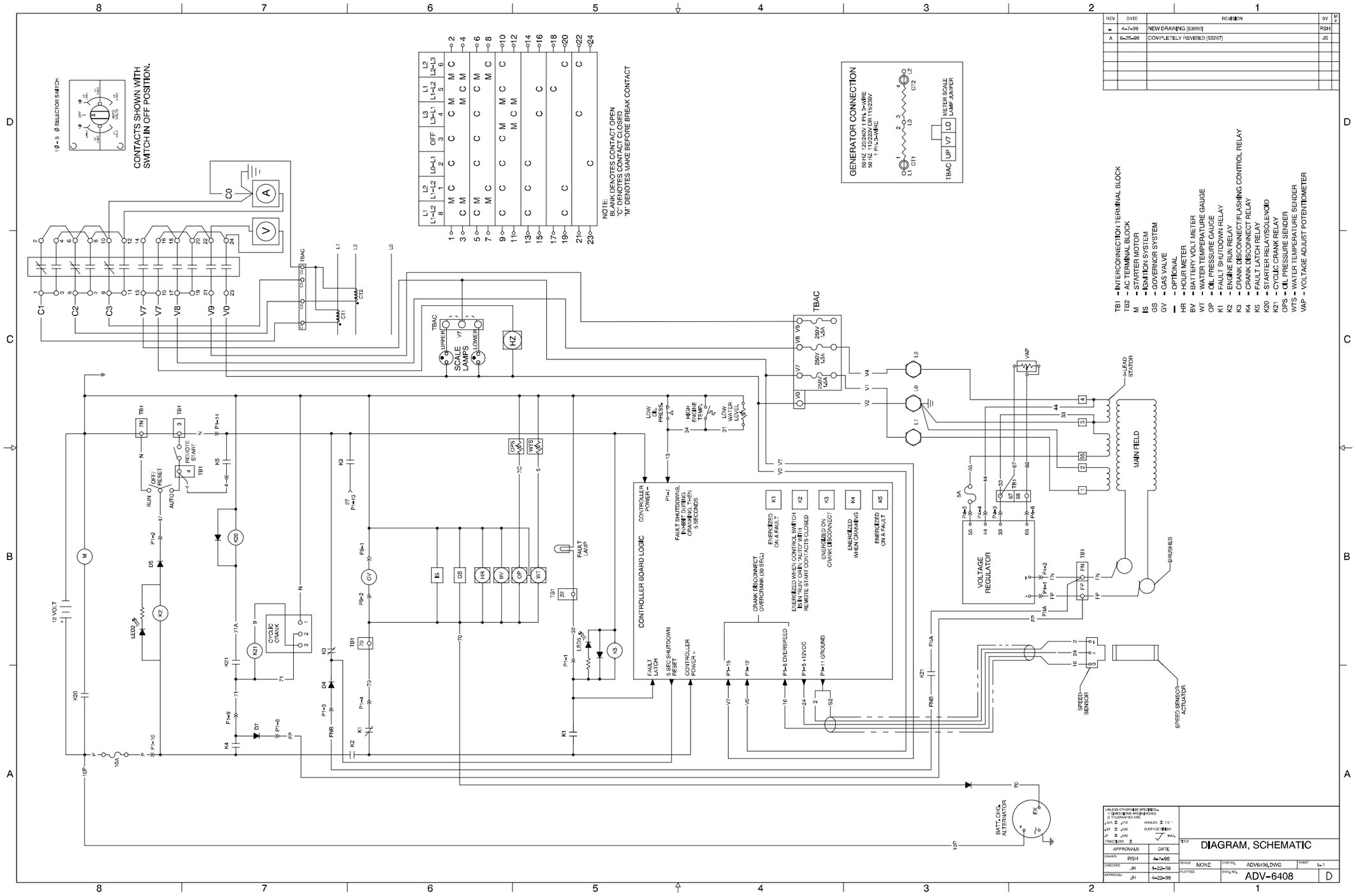


Decision-Maker™ 1 Controller, Schematic Diagram, 4-Lead, ADV-6406-A

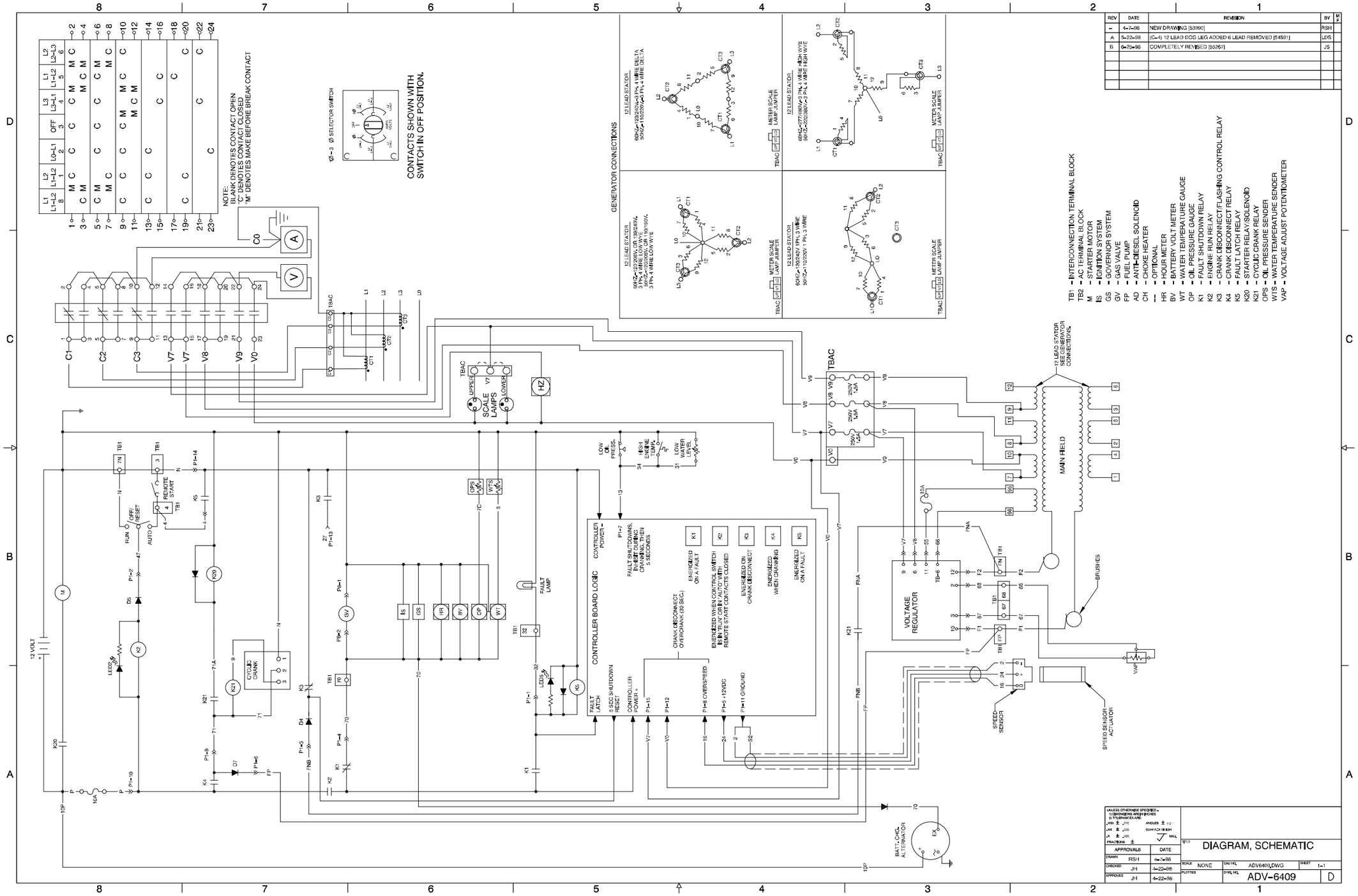


REV	DATE	REVISION	BY	M F
-	4-7-98	NEW DRAWING [53990]	RSH	
A	5-22-98	(C-4) 12 LEAD DOG LEG ADDED 6 LEAD REMOVED [54591]	LDS	
B	6-24-98	(C-4) 12 LEAD STATOR WAS 6, (B-6) BV, OP, WT, P2-1, P2-2, OPS, & WTS CONNECTIONS REMOVED. MIN FIELD 600V		
		ONLY DIAGRAM REMOVED; (A-2) 17.22KW WAS 15/20KW		
		[55267]	JS	

Decision-Maker™ 1 Controller, Schematic Diagram, 12-Lead, ADV-6407-B

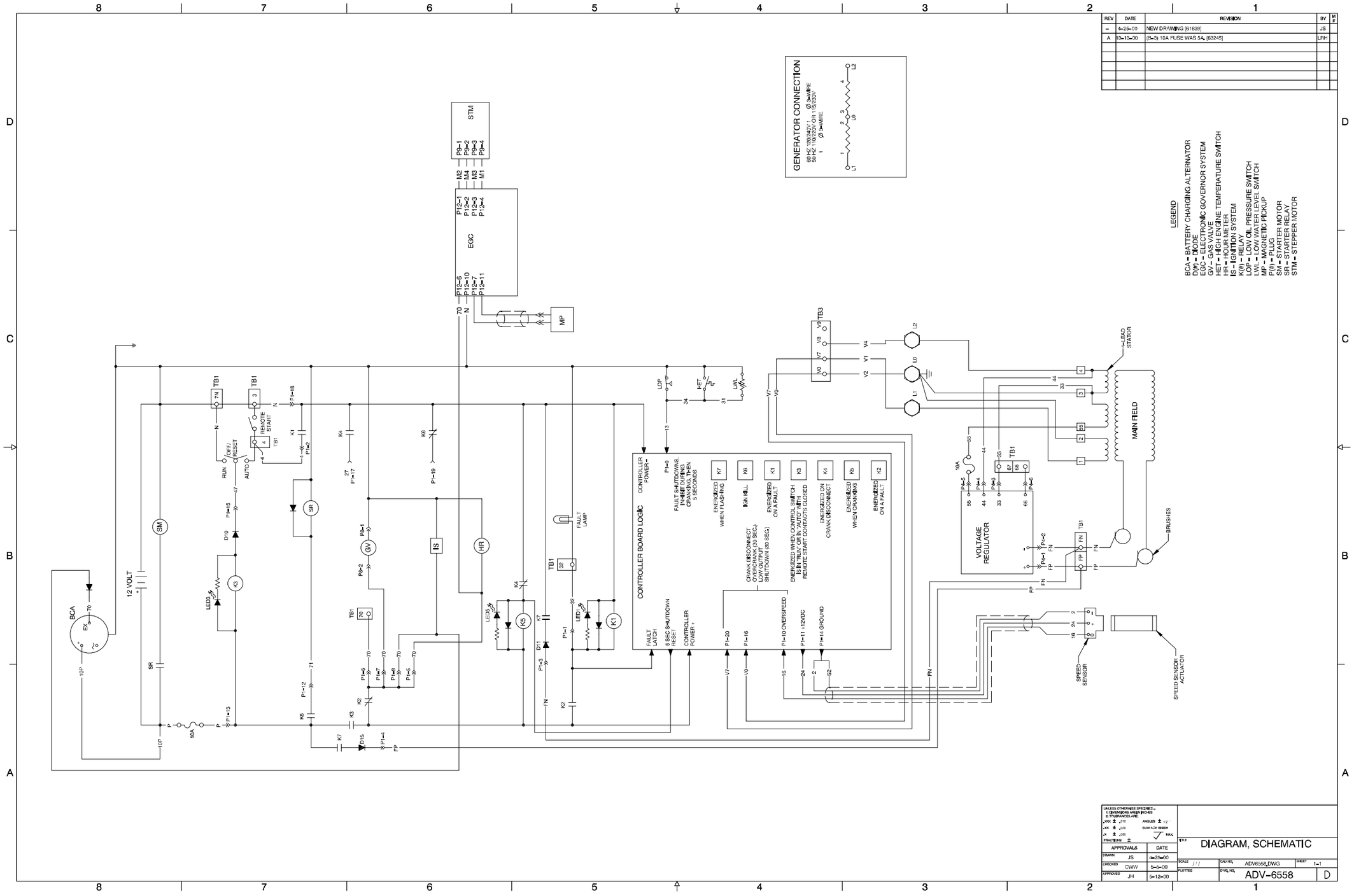


Decision-Maker™ 1 Expanded Controller, Schematic Diagram, 4-Lead, ADV-6408-A

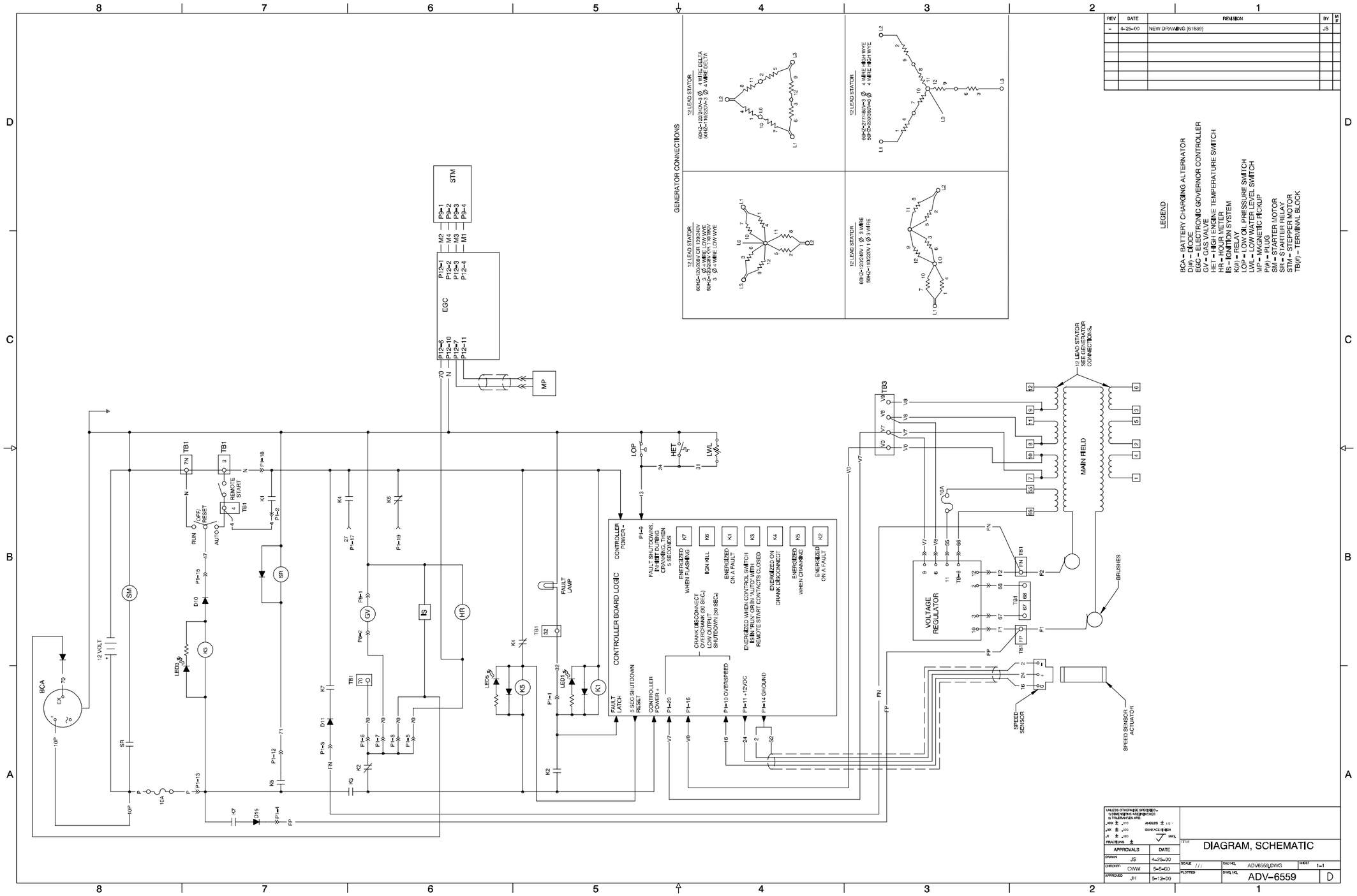


REV	DATE	REVISION	BY
–	4-7-96	NEW DRAWING [53990]	RSH
A	5-22-98	(C-4) 12 LEAD DOG LEG ADDED 6 LEAD REMOVED [54591]	LDS
B	6-26-98	COMPLETELY REVISED [55267]	JS

Decision-Maker™ 1 Expanded Controller, Schematic Diagram, 12-Lead, ADV-6409-B

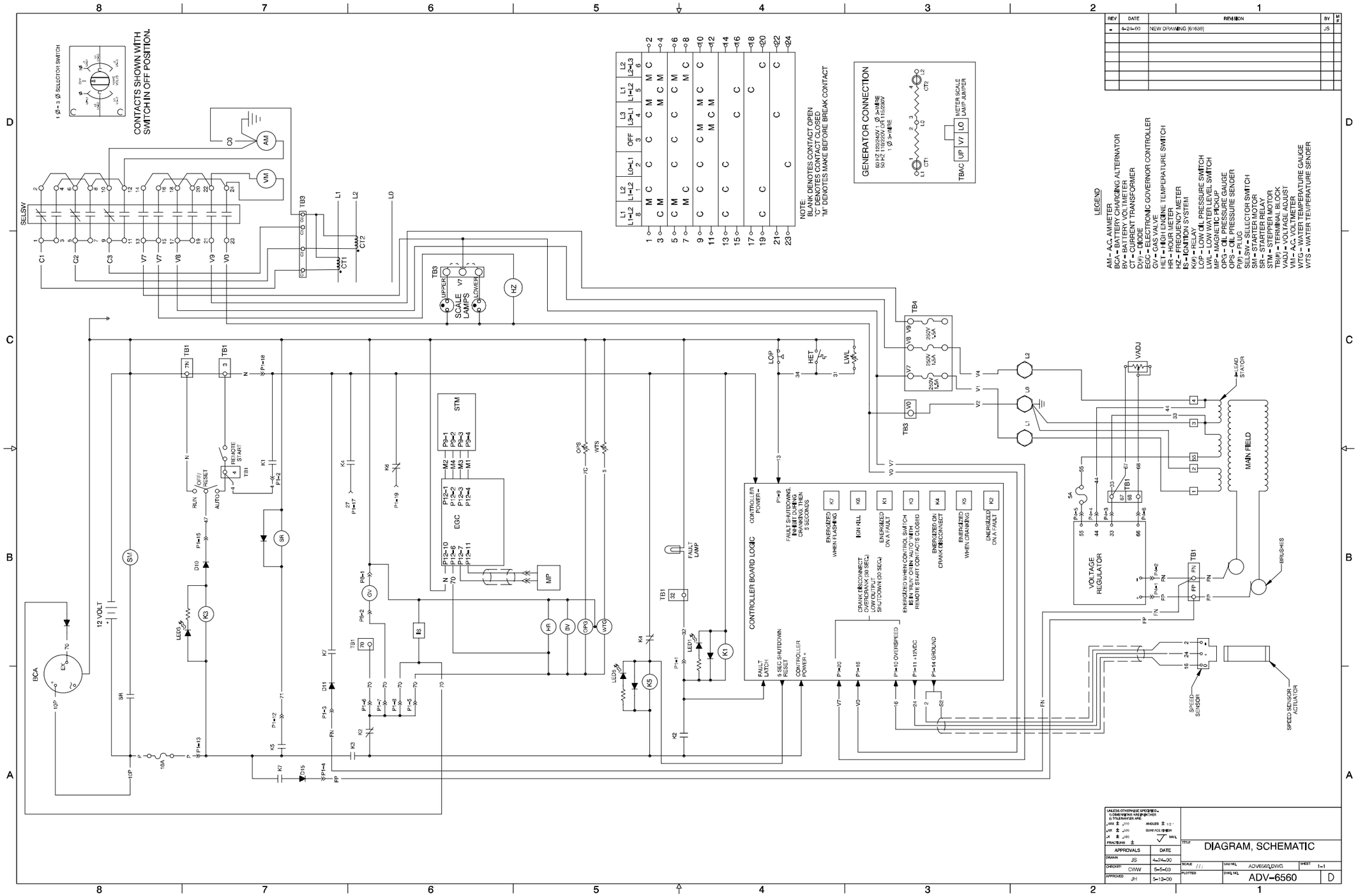


Decision-Maker™ 1 Controller, Schematic Diagram, 4-Lead, ADV-6558-A

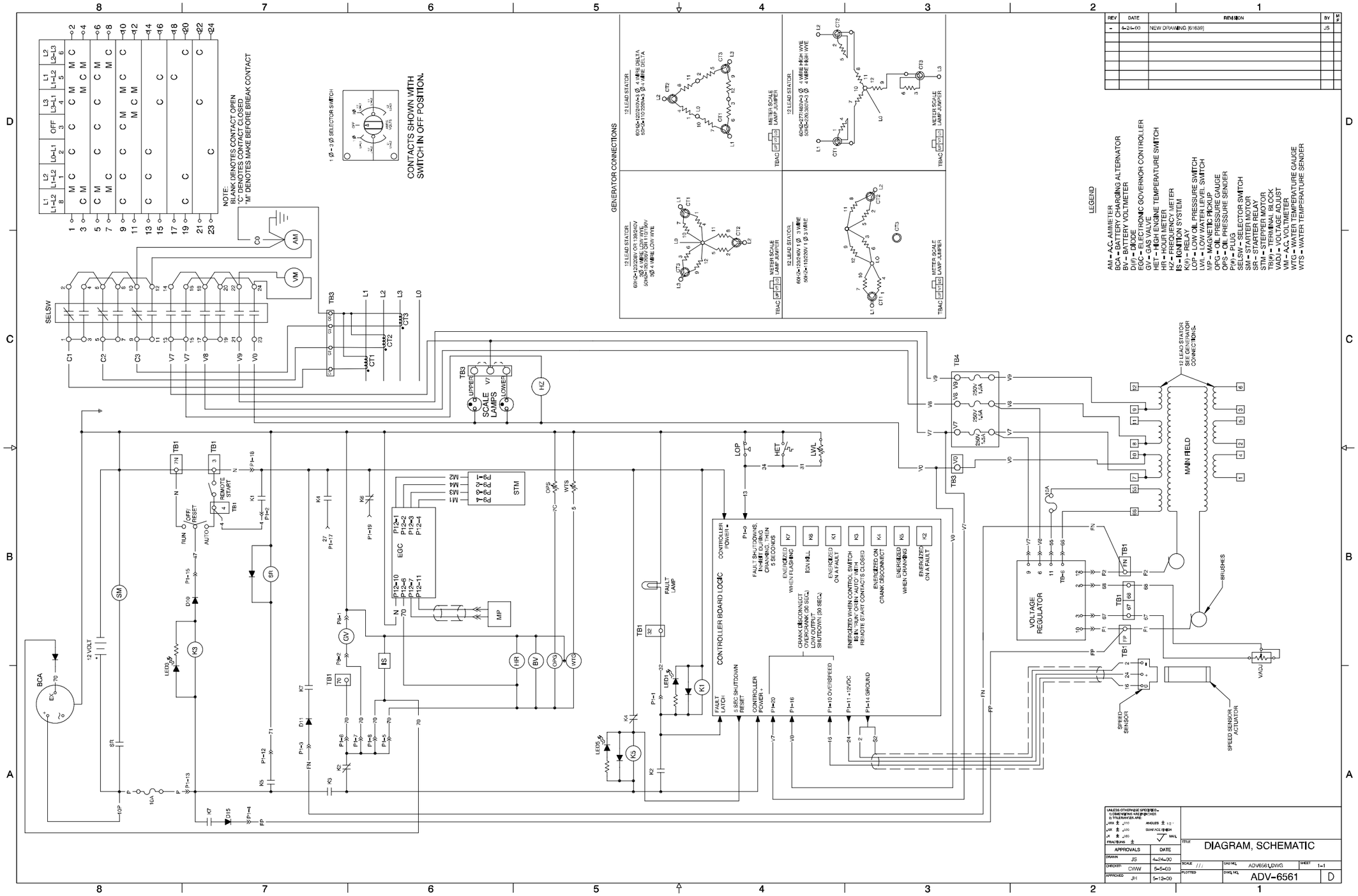


REV	DATE	REVISION	BY	M R
-	4-25-00	NEW DRAWING [61639]	JS	

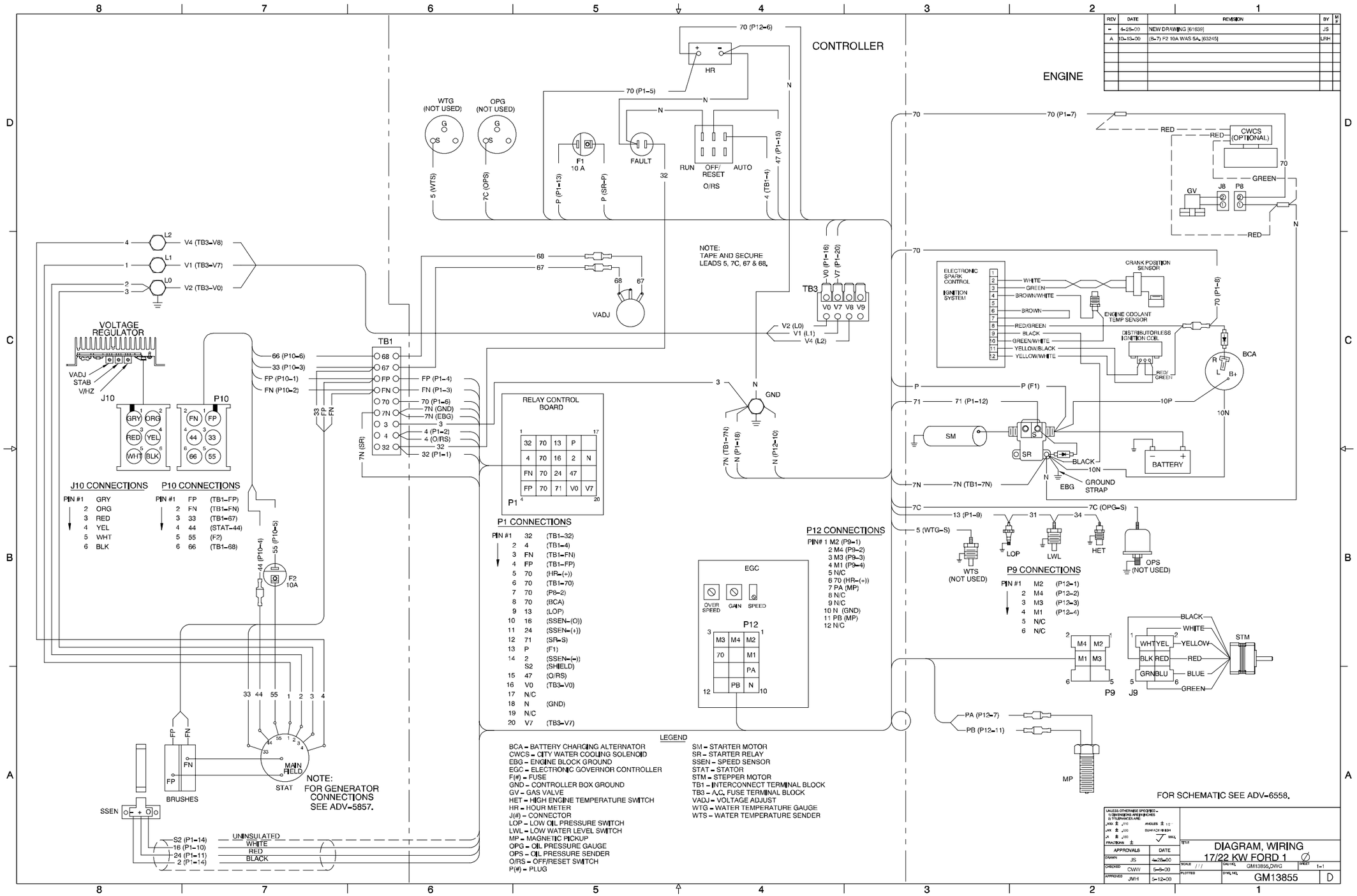
Decision-Maker™ 1 Controller, Schematic Diagram, 12-Lead, ADV-6559-



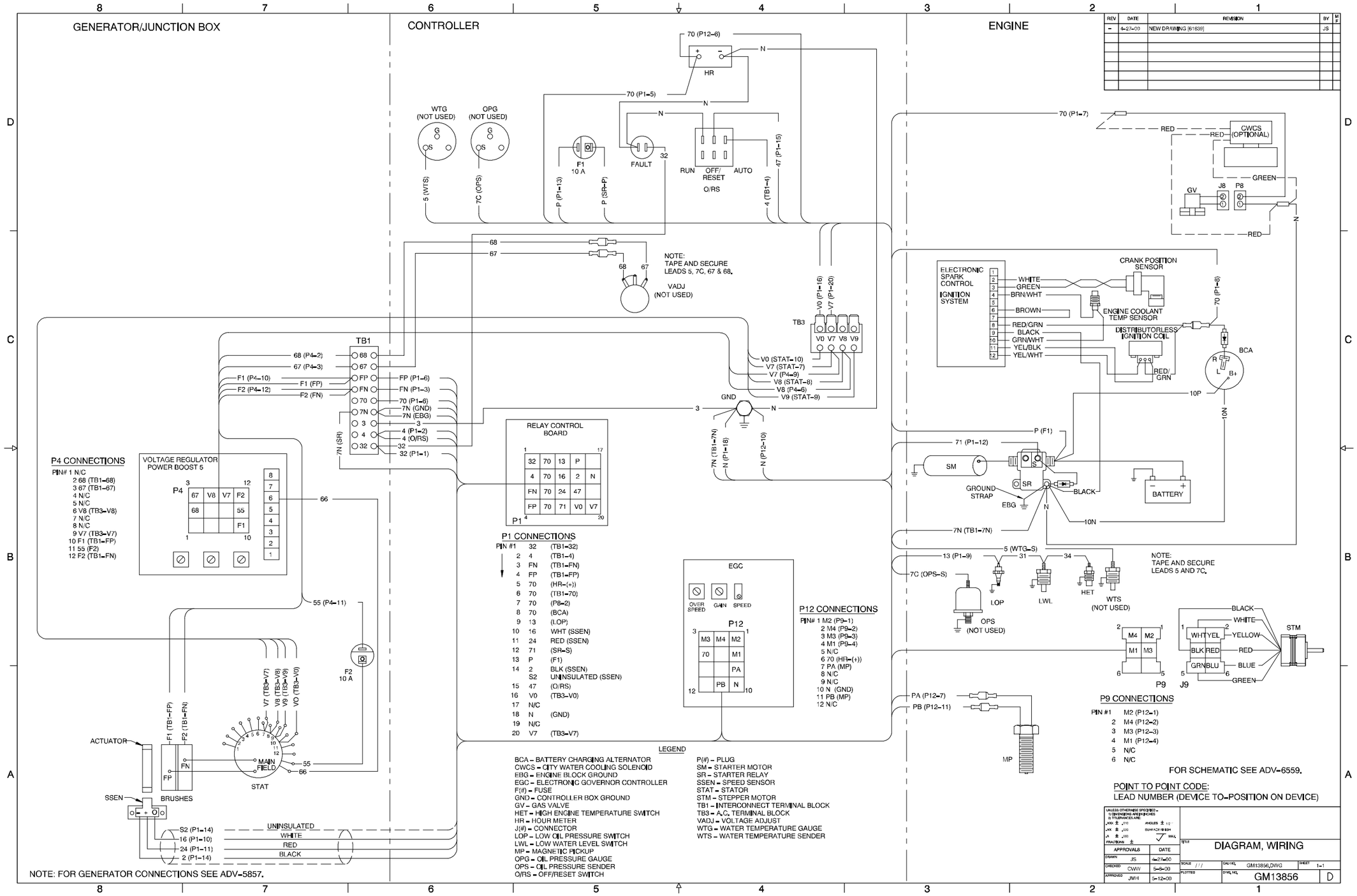
Decision Maker™ 1 Expanded Controller, Schematic Diagram, 4-Lead, ADV-6560-



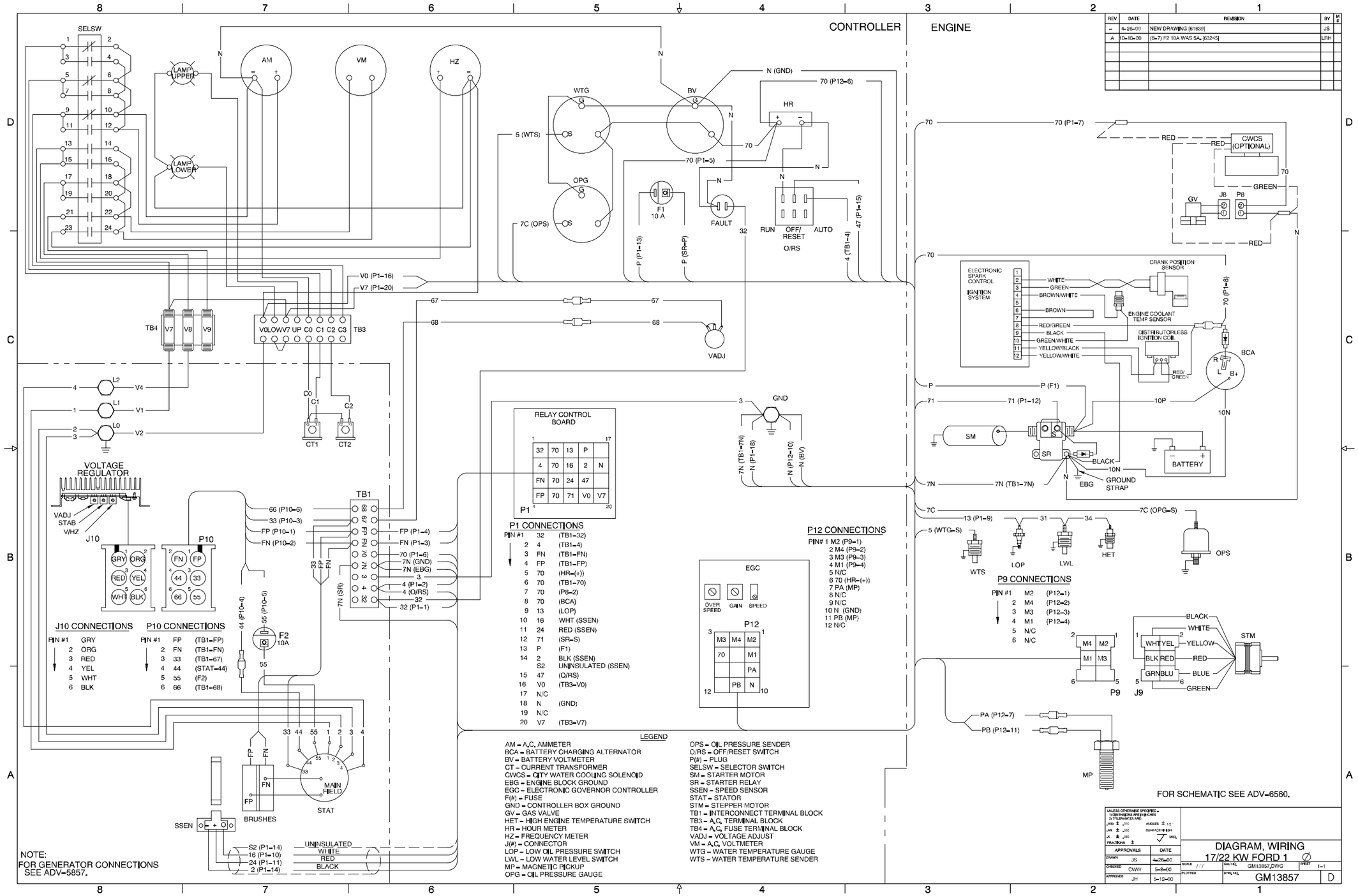
Decision Maker™ 1 Expanded Controller, Schematic Diagram, 12-Lead, ADV-6561-



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, GM13855-A



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, GM13856-



REV	DATE	REVISION	BY	M F
–	4-26-00	NEW DRAWING [61638]	JS	
A	10-13-00	(B-7) F2 10A WAS 5A. [63245]	LRH	

P1 CONNECTIONS

PIN #1		
2	4	(TB1-4)
3	FN	(TB1-FN)
4	FP	(TB1-FP)
5	70	(HR-(+))
6	70	(TB1-70)
7	70	(P8-2)
8	70	(BCA)
9	13	(LOP)
10	16	WHT (SSEN)
11	24	RED (SSEN)
12	71	(SR-S)
13	P	(F1)
14	2	BLK (SSEN)
	S2	UNINSULATED (SSEN)
15	47	(O/RS)
16	V0	(TB3-V0)
17	N/C	
18	N	(GND)
19	N/C	
20	V7	(TB3-V7)

P12 CONNECTIONS

PIN# 1 M2 (P9-1)
2 M4 (P9-2)
3 M3 (P9-3)
4 M1 (P9-4)
5 N/C
6 70 (HR-(+))
7 PA (MP)
8 N/C
9 N/C
10 N (GND)
11 PB (MP)
12 N/C

P9 CONNECTIONS

PIN #1		
2	M4	(P12-2)
3	M3	(P12-3)
4	M1	(P12-4)
5	N/C	
6	N/C	

J10 CONNECTIONS

PIN #1	
2	ORG
3	RED
4	YEL
5	WHT
6	BLK

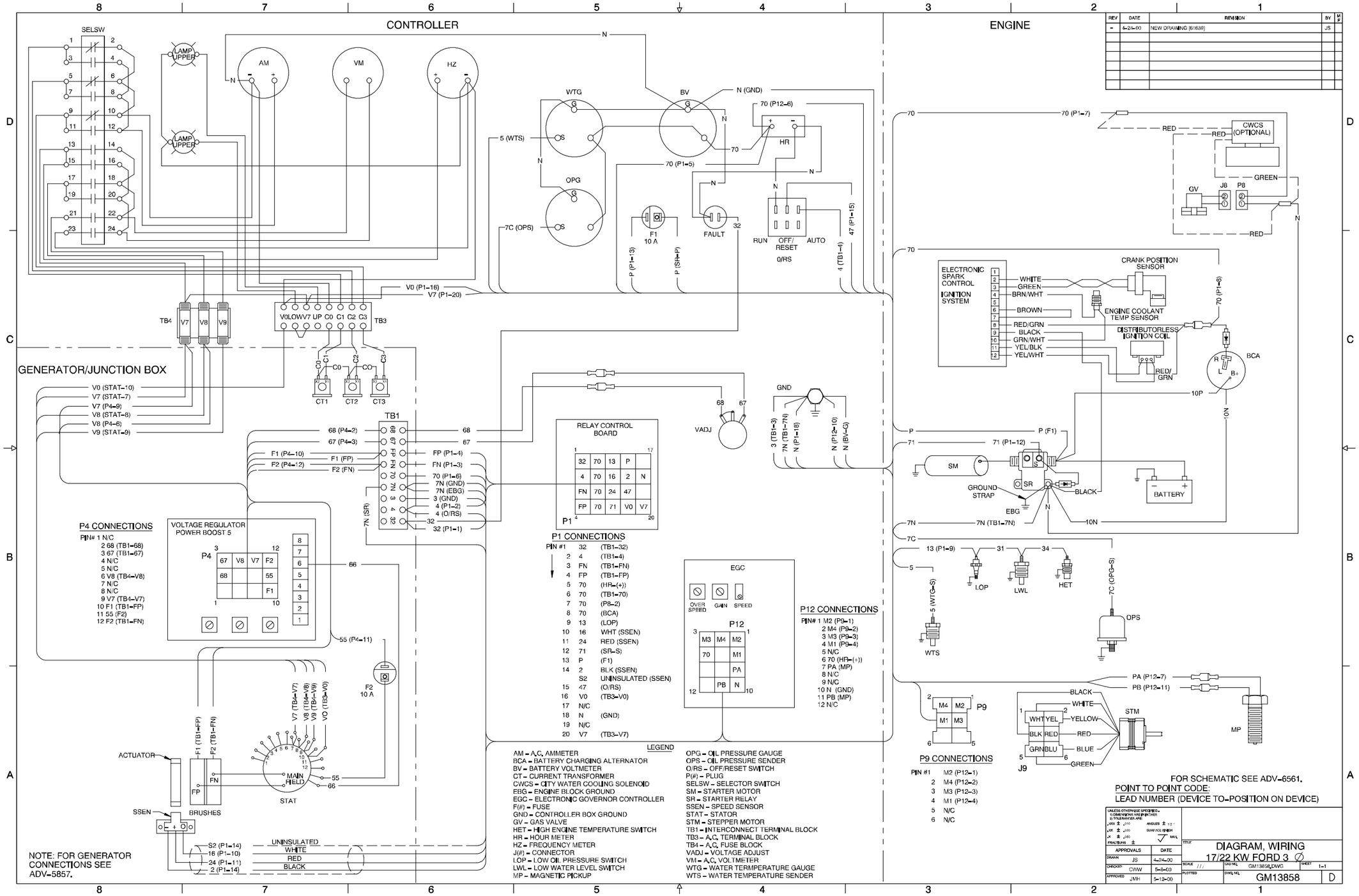
P10 CONNECTIONS

PIN #1		
2	FN	(TB1-FN)
3	33	(TB1-67)
4	44	(STAT-44)
5	55	(F2)
6	66	(TB1-68)

LEGEND

AM = A.C. AMMETER
BCA = BATTERY CHARGING ALTERNATOR
BV = BATTERY VOLTMETER
CT = CURRENT TRANSFORMER
CWCS = CITY WATER COOLING SOLENOID
EBG = ENGINE BLOCK GROUND
EGC = ELECTRONIC GOVERNOR CONTROLLER
F(#) = FUSE
GND = CONTROLLER BOX GROUND
GV = GAS VALVE
HET = HIGH ENGINE TEMPERATURE SWITCH
HR = HOUR METER
HZ = FREQUENCY METER
J(#) = CONNECTOR
LOP = LOW OIL PRESSURE SWITCH
LWL = LOW WATER LEVEL SWITCH
MP = MAGNETIC PICKUP
OPG = OIL PRESSURE GAUGE
OPS = OIL PRESSURE SENDER
O/RS = OFF/RESET SWITCH
P(#) = PLUG
SELSW = SELECTOR SWITCH
SM = STARTER MOTOR
SR = STARTER RELAY
SSEN = SPEED SENSOR
STAT = STATOR
STM = STEPPER MOTOR
TB1 = INTERCONNECT TERMINAL BLOCK
TB3 = A.C. TERMINAL BLOCK
TB4 = A.C. FUSE TERMINAL BLOCK
VADJ = VOLTAGE ADJUST
VM = A.C. VOLTMETER
WTG = WATER TEMPERATURE GAUGE
WTS = WATER TEMPERATURE SENDER

Decision-Maker™ 1 Expanded Controller, Point-to-Point Wiring Diagram, 4-Lead, GM13857-A



P4 CONNECTIONS

PIN# 1 N/C
2 68 (TB1-68)
3 67 (TB1-67)
4 N/C
5 N/C
6 V8 (TB4-V8)
7 N/C
8 N/C
9 V7 (TB4-V7)
10 F1 (TB1-FP)
11 55 (F2)
12 F2 (TB1-FN)

P1 CONNECTIONS

PIN #		
1	32	(TB1-32)
2	4	(TB1-4)
3	FN	(TB1-FN)
4	FP	(TB1-FP)
5	70	(HR-(+))
6	70	(TB1-70)
7	70	(P8-2)
8	70	(BCA)
9	13	(LOP)
10	16	WHT (SSEN)
11	24	RED (SSEN)
12	71	(SR-S)
13	P	(F1)
14	2	BLK (SSEN)
	S2	UNINSULATED (SSEN)
15	47	(O/RS)
16	V0	(TB3-V0)
17	N/C	
18	N	(GND)
19	N/C	
20	V7	(TB3-V7)

P12 CONNECTIONS

PIN# 1 M2 (P9-1)
2 M4 (P9-2)
3 M3 (P9-3)
4 M1 (P9-4)
5 N/C
6 70 (HR-(+))
7 PA (MP)
8 N/C
9 N/C
10 N (GND)
11 PB (MP)
12 N/C

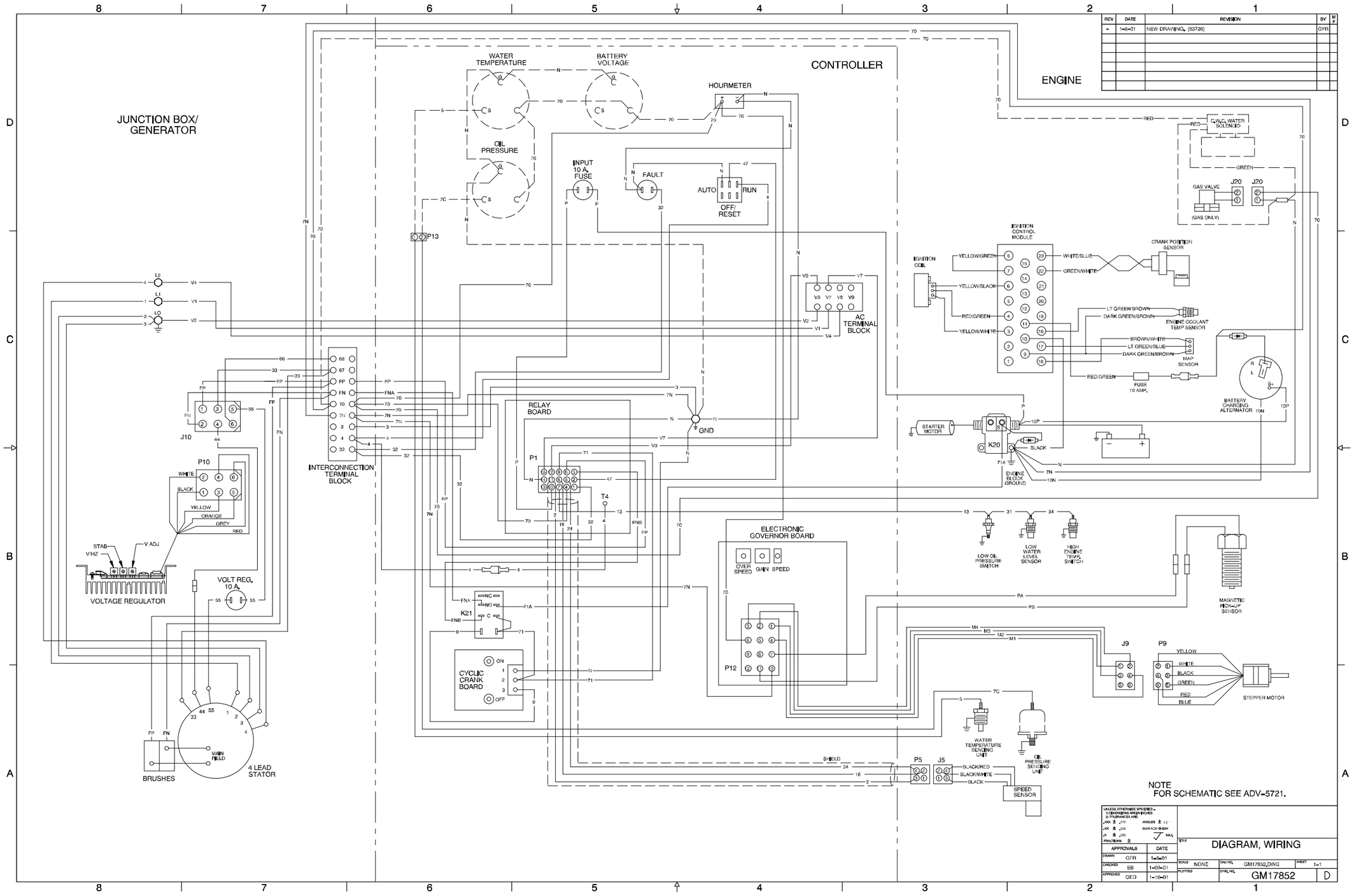
P9 CONNECTIONS

PIN #	
1	M2 (P12-1)
2	M4 (P12-2)
3	M3 (P12-3)
4	M1 (P12-4)
5	N/C
6	N/C

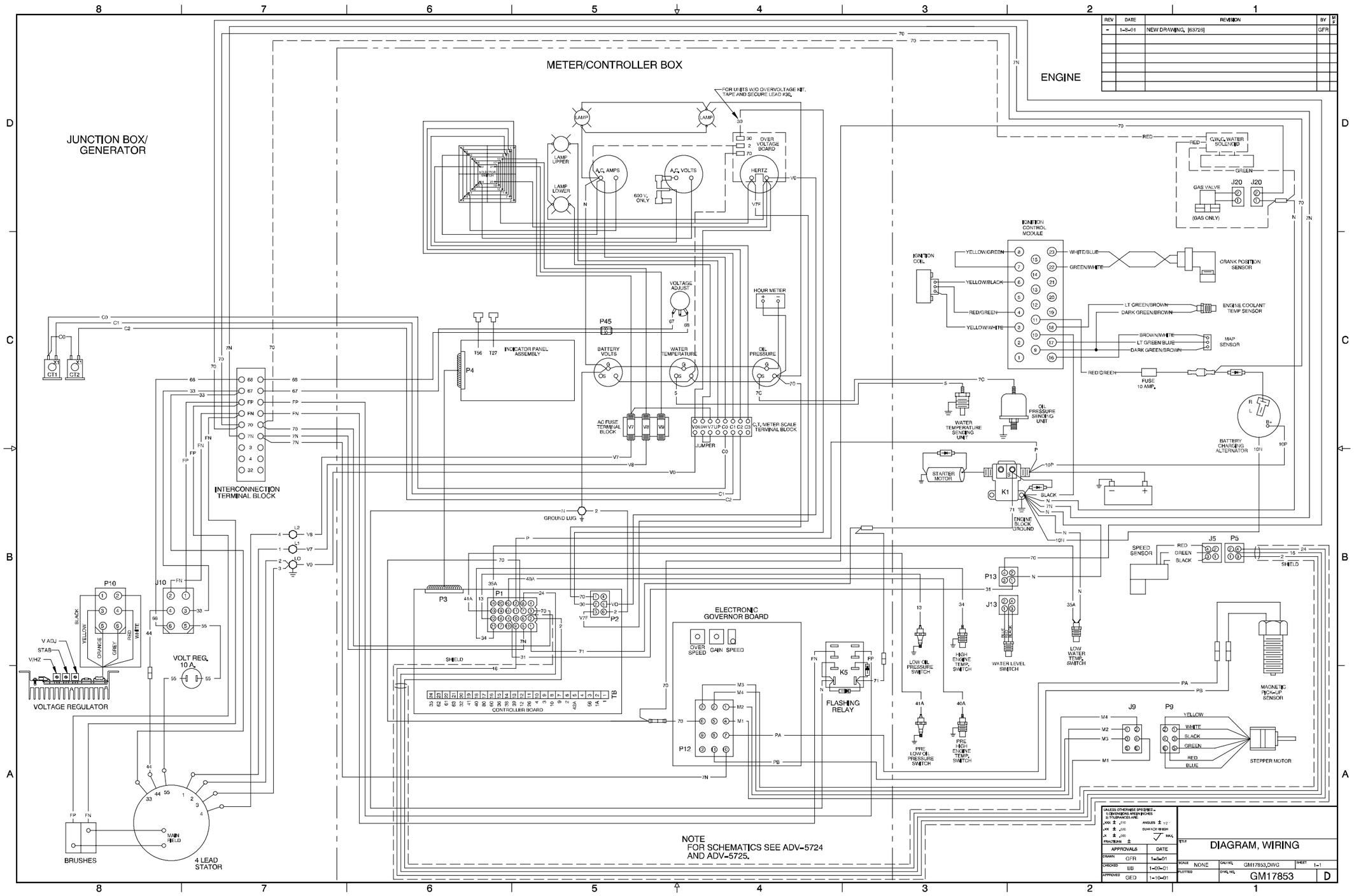
LEGEND

AM = A.C. AMMETER
BCA = BATTERY CHARGING ALTERNATOR
BV = BATTERY VOLTMETER
CT = CURRENT TRANSFORMER
CWCS = CITY WATER COOLING SOLENOID
EBG = ENGINE BLOCK GROUND
EGC = ELECTRONIC GOVERNOR CONTROLLER
F(#) = FUSE
GND = CONTROLLER BOX GROUND
GV = GAS VALVE
HET = HIGH ENGINE TEMPERATURE SWITCH
HR = HOUR METER
HZ = FREQUENCY METER
J(#) = CONNECTOR
LOP = LOW OIL PRESSURE SWITCH
LWL = LOW WATER LEVEL SWITCH
MP = MAGNETIC PICKUP
OPG = OIL PRESSURE GAUGE
OPS = OIL PRESSURE SENDER
O/RS = OFF/RESET SWITCH
P(#) = PLUG
SELSW = SELECTOR SWITCH
SM = STARTER MOTOR
SR = STARTER RELAY
SSEN = SPEED SENSOR
STAT = STATOR
STM = STEPPER MOTOR
TB1 = INTERCONNECT TERMINAL BLOCK
TB3 = A.C. TERMINAL BLOCK
TB4 = A.C. FUSE BLOCK
VADJ = VOLTAGE ADJUST
VM = A.C. VOLTMETER
WTG = WATER TEMPERATURE GAUGE
WTS = WATER TEMPERATURE SENDER

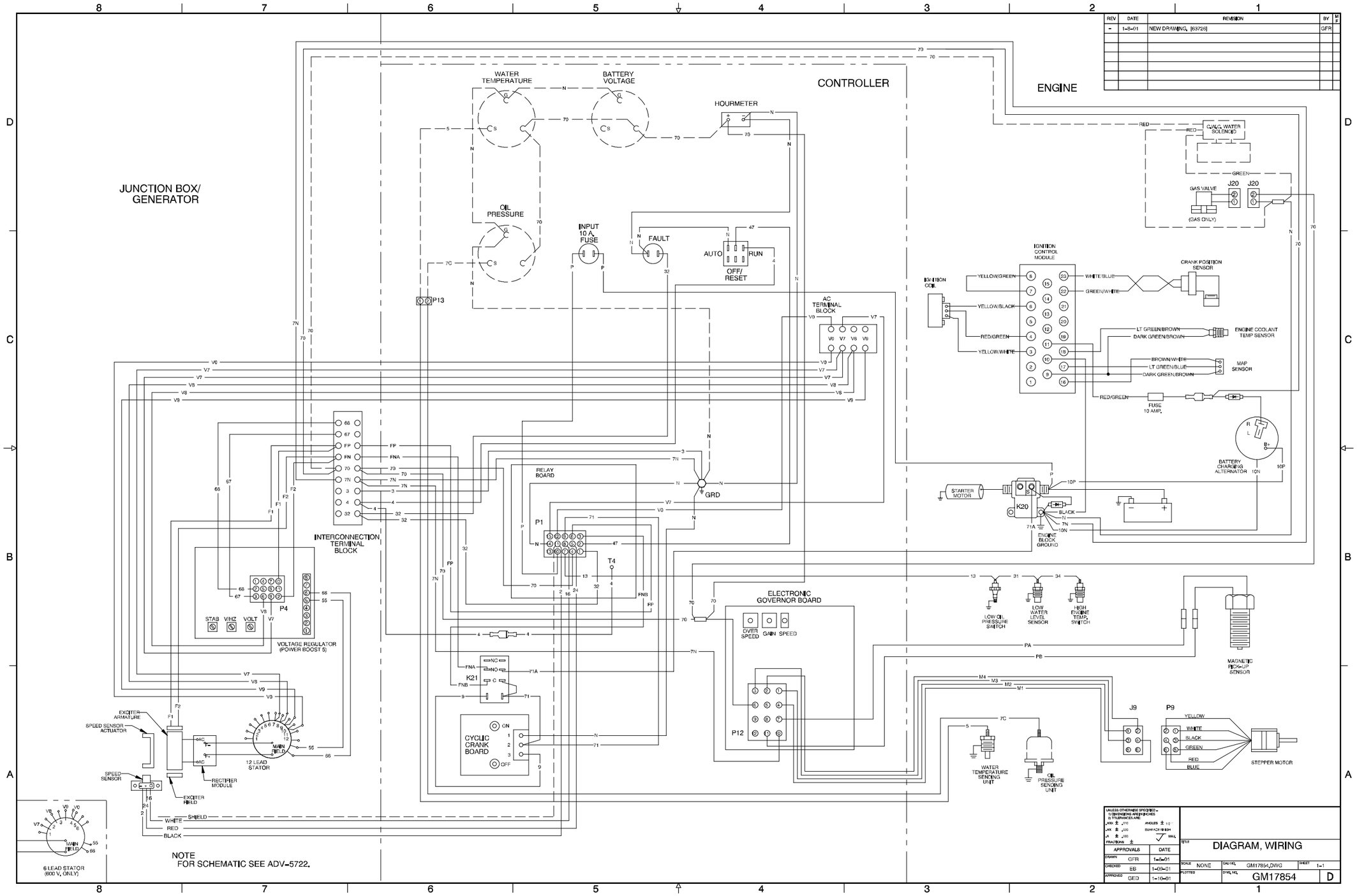
Decision-Maker™ 1 Expanded Controller, Point-to-Point Wiring Diagram, 12-Lead, GM13858-



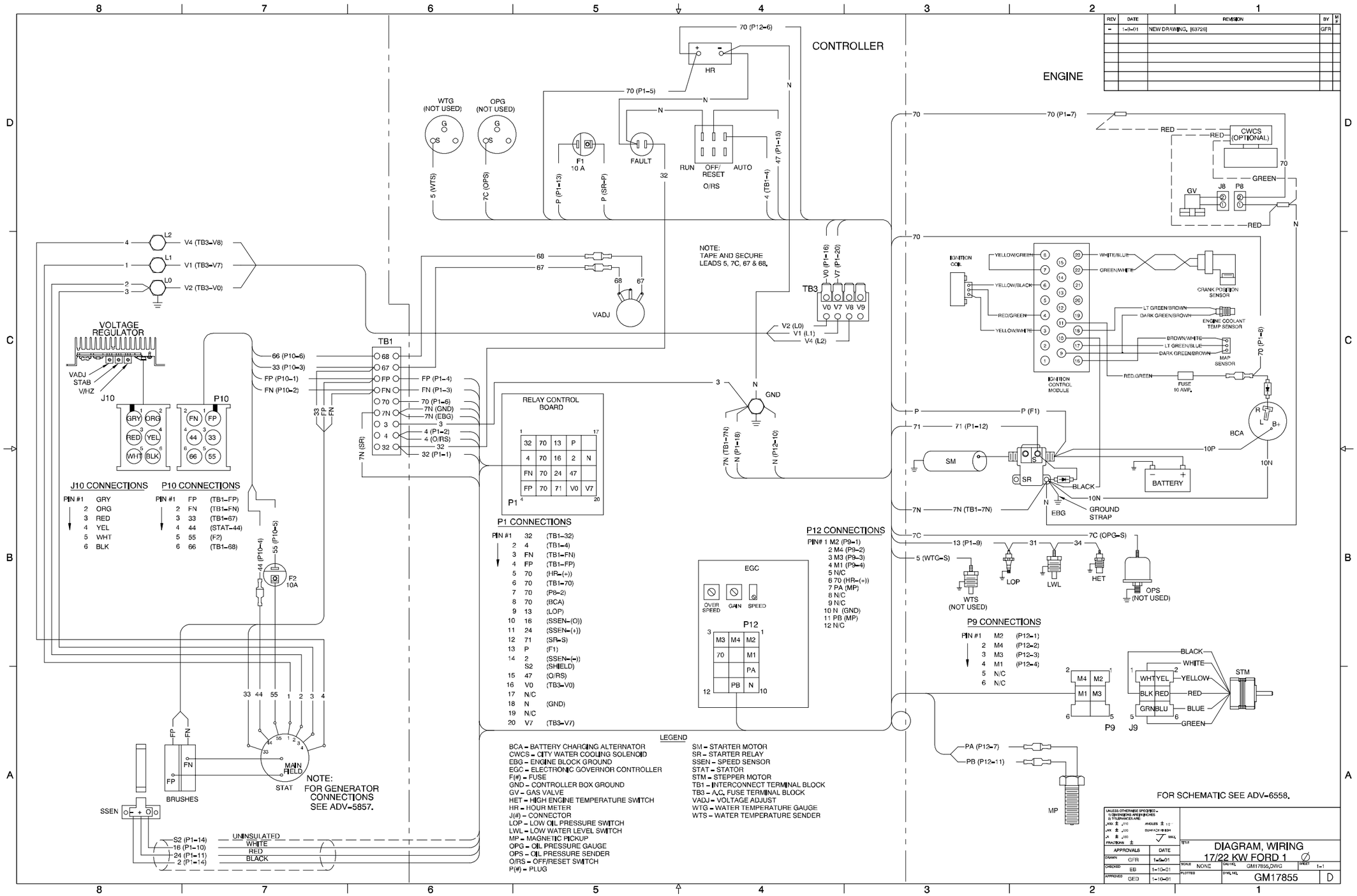
Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, GM17852-



Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead, GM17853-

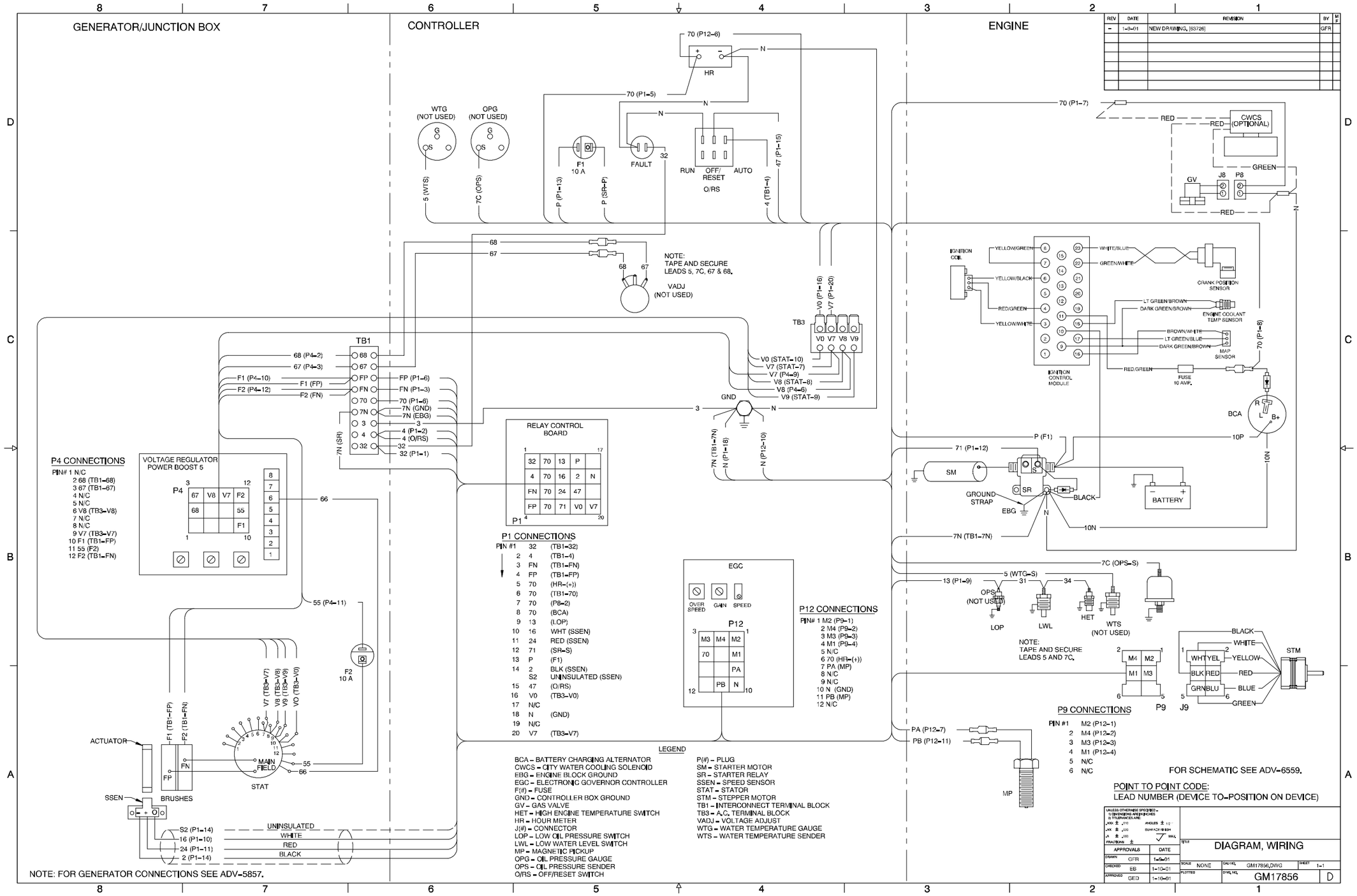


Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, GM17854-

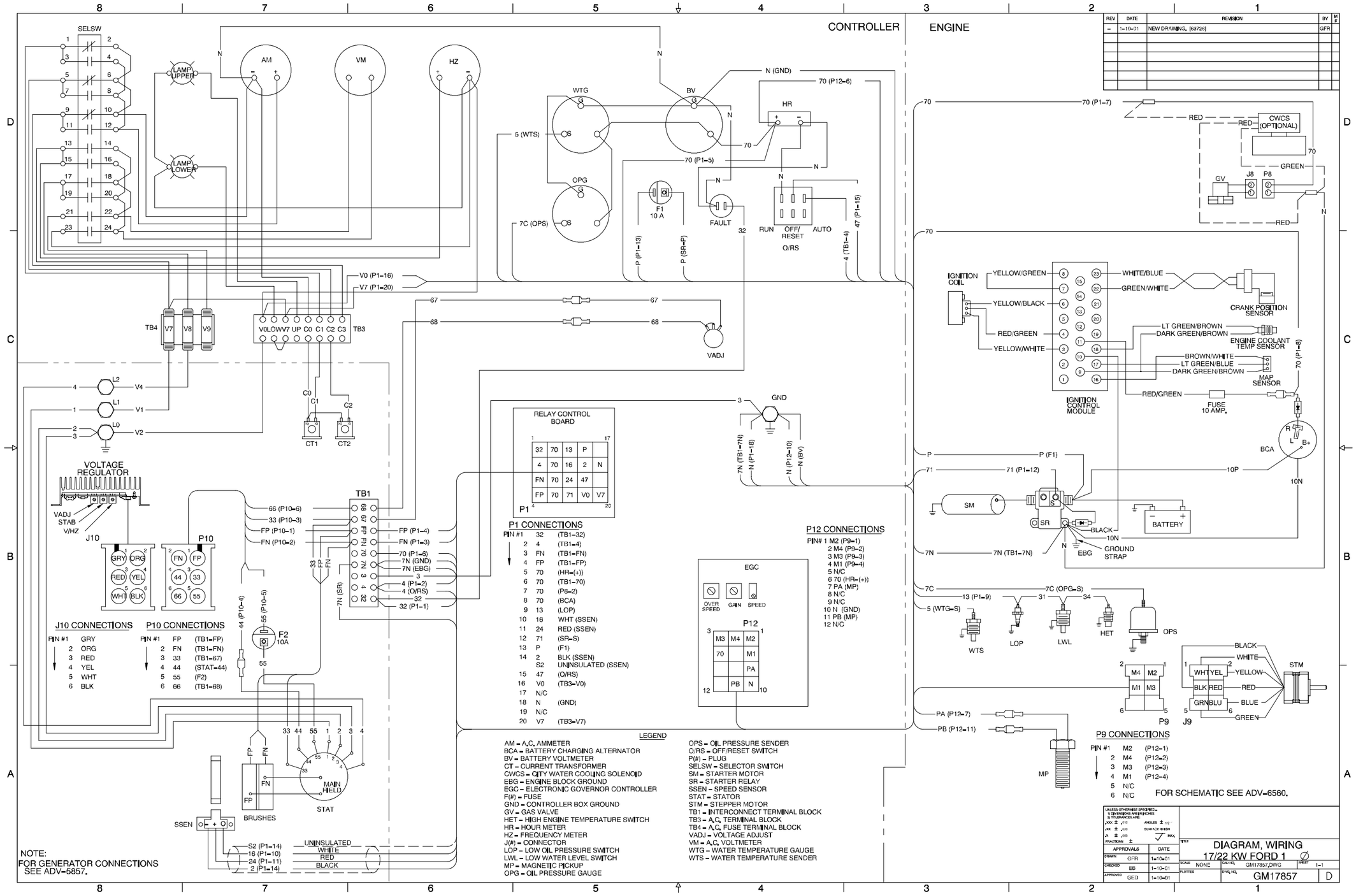


REV	DATE	REVISION	BY	M F
–	1–9–01	NEW DRAWING. [63726]	GFR	

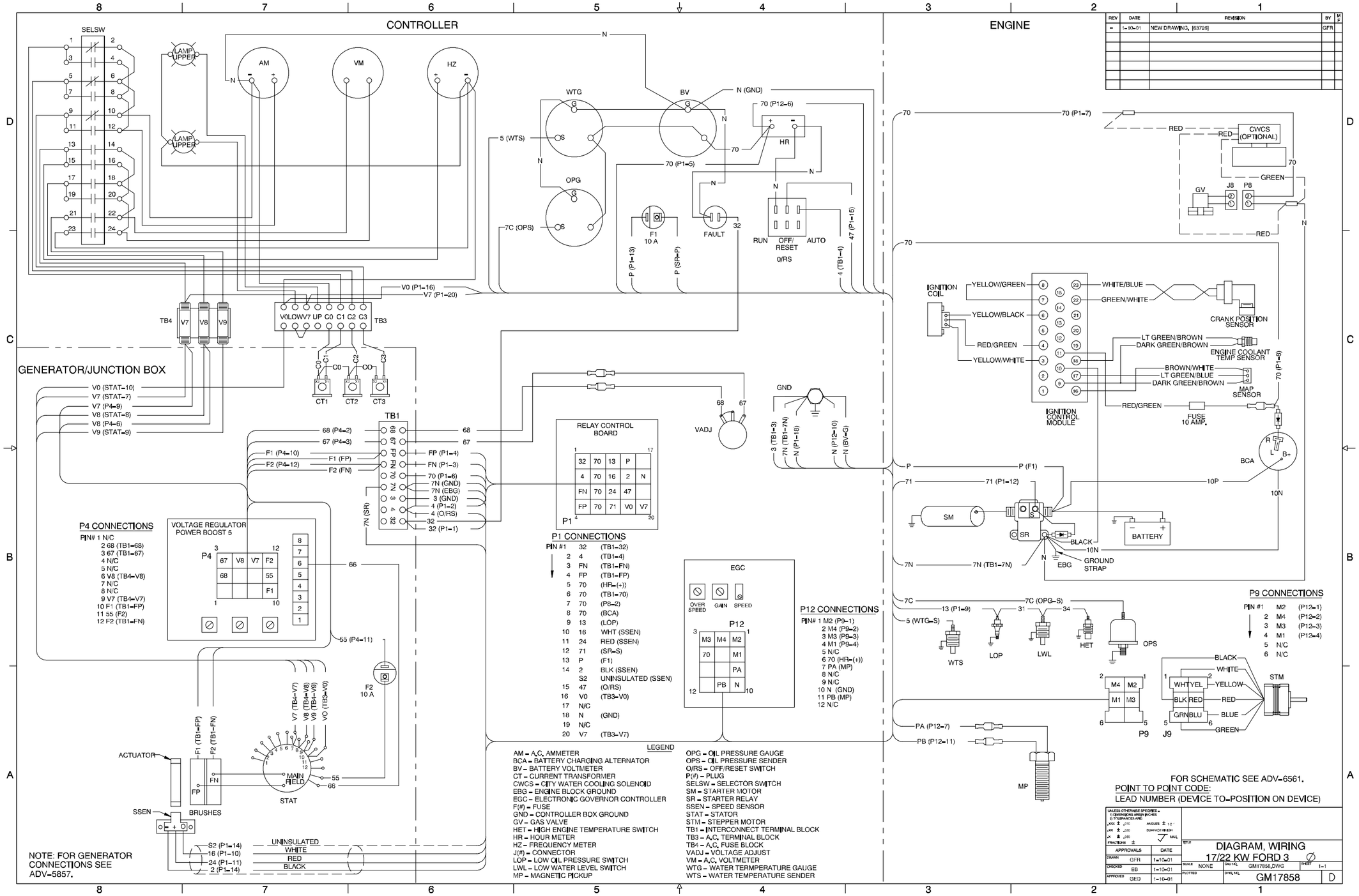
Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, GM17855-



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, GM17856-



Decision-Maker™ 1 Expanded Controller, Point-to-Point Wiring Diagram, 4-Lead, GM17857-



P4 CONNECTIONS

PIN# 1 N/C
2 68 (TB1-68)
3 67 (TB1-67)
4 N/C
5 N/C
6 V8 (TB4-V8)
7 N/C
8 N/C
9 V7 (TB4-V7)
10 F1 (TB1-FP)
11 55 (F2)
12 F2 (TB1-FN)

P1 CONNECTIONS

PIN #1		
2	4	(TB1-4)
3	FN	(TB1-FN)
4	FP	(TB1-FP)
5	70	(HR-(+))
6	70	(TB1-70)
7	70	(P8-2)
8	70	(BCA)
9	13	(LOP)
10	16	WHT (SSEN)
11	24	RED (SSEN)
12	71	(SR-S)
13	P	(F1)
14	2	BLK (SSEN)
	S2	UNINSULATED (SSEN)
15	47	(O/RS)
16	V0	(TB3-V0)
17	N/C	
18	N	(GND)
19	N/C	
20	V7	(TB3-V7)

P12 CONNECTIONS

PIN# 1 M2 (P9-1)
2 M4 (P9-2)
3 M3 (P9-3)
4 M1 (P9-4)
5 N/C
6 70 (HR-(+))
7 PA (MP)
8 N/C
9 N/C
10 N (GND)
11 PB (MP)
12 N/C

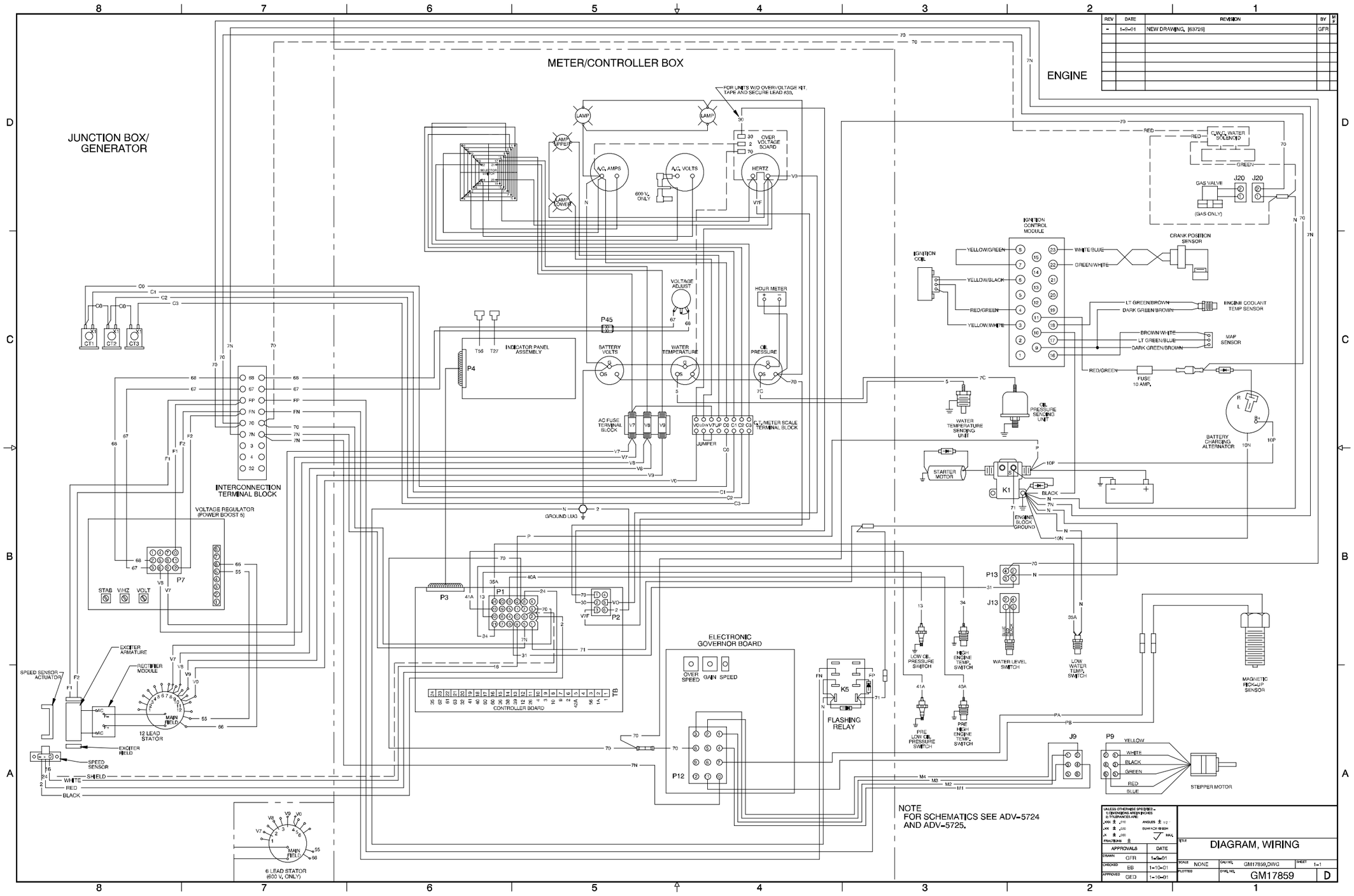
P9 CONNECTIONS

PIN #1		
2	M4	(P12-1)
3	M3	(P12-2)
4	M1	(P12-3)
5	N/C	
6	N/C	

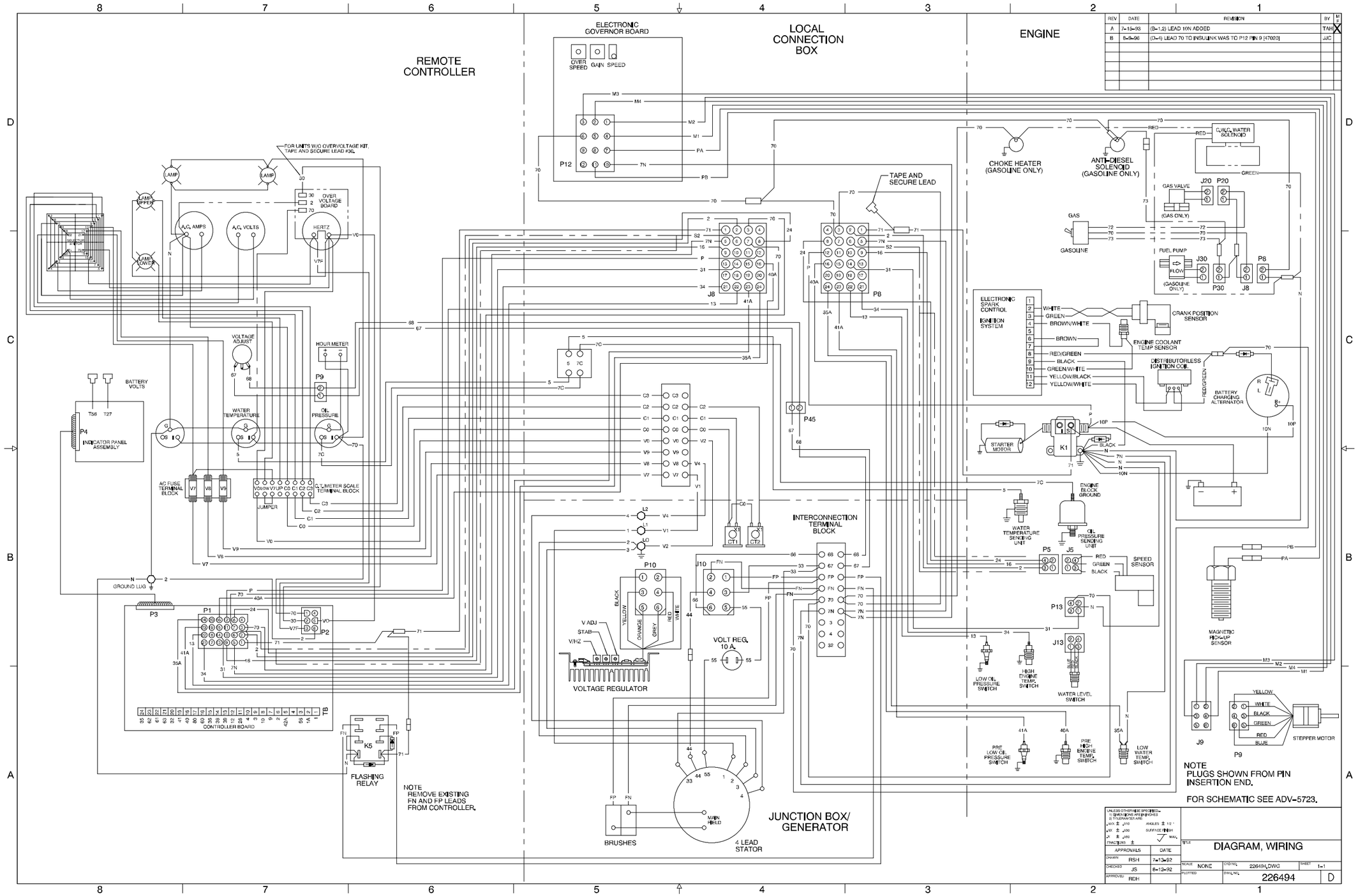
LEGEND

AM = A.C. AMMETER
BCA = BATTERY CHARGING ALTERNATOR
BV = BATTERY VOLTMETER
CT = CURRENT TRANSFORMER
CWCS = CITY WATER COOLING SOLENOID
EBG = ENGINE BLOCK GROUND
EGC = ELECTRONIC GOVERNOR CONTROLLER
F(#) = FUSE
GND = CONTROLLER BOX GROUND
GV = GAS VALVE
HET = HIGH ENGINE TEMPERATURE SWITCH
HR = HOUR METER
HZ = FREQUENCY METER
J(#) = CONNECTOR
LOP = LOW OIL PRESSURE SWITCH
LWL = LOW WATER LEVEL SWITCH
MP = MAGNETIC PICKUP
OPG = OIL PRESSURE GAUGE
OPS = OIL PRESSURE SENDER
O/RS = OFF/RESET SWITCH
P(#) = PLUG
SELSW = SELECTOR SWITCH
SM = STARTER MOTOR
SR = STARTER RELAY
SSEN = SPEED SENSOR
STAT = STATOR
STM = STEPPER MOTOR
TB1 = INTERCONNECT TERMINAL BLOCK
TB3 = A.C. TERMINAL BLOCK
TB4 = A.C. FUSE BLOCK
VADJ = VOLTAGE ADJUST
VM = A.C. VOLTMETER
WTG = WATER TERMPERATURE GAUGE
WTS = WATER TEMPERATURE SENDER

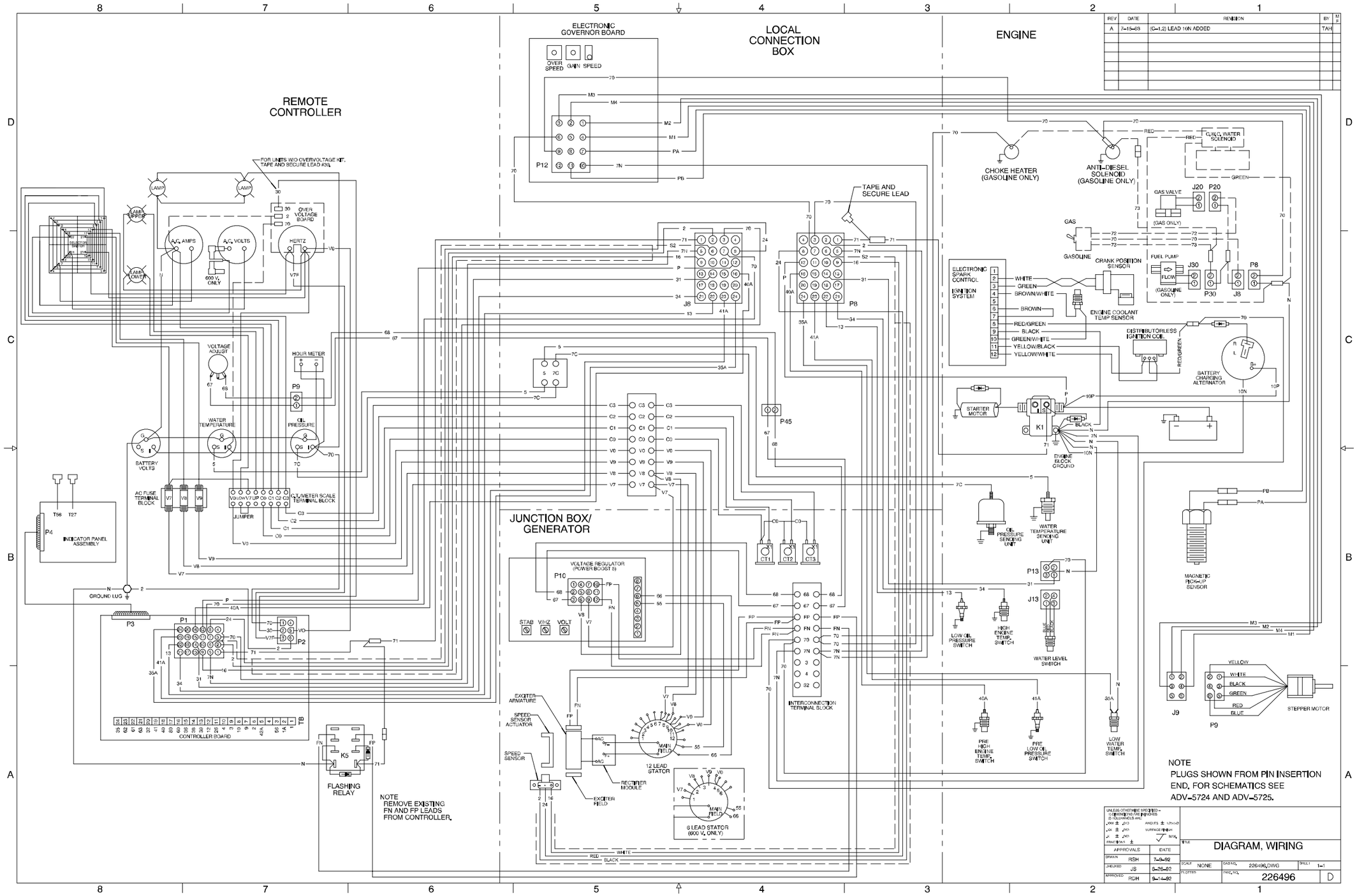
Decision-Maker™ 1 Expanded Controller, Point-to-Point Wiring Diagram, 12-Lead, GM17858-



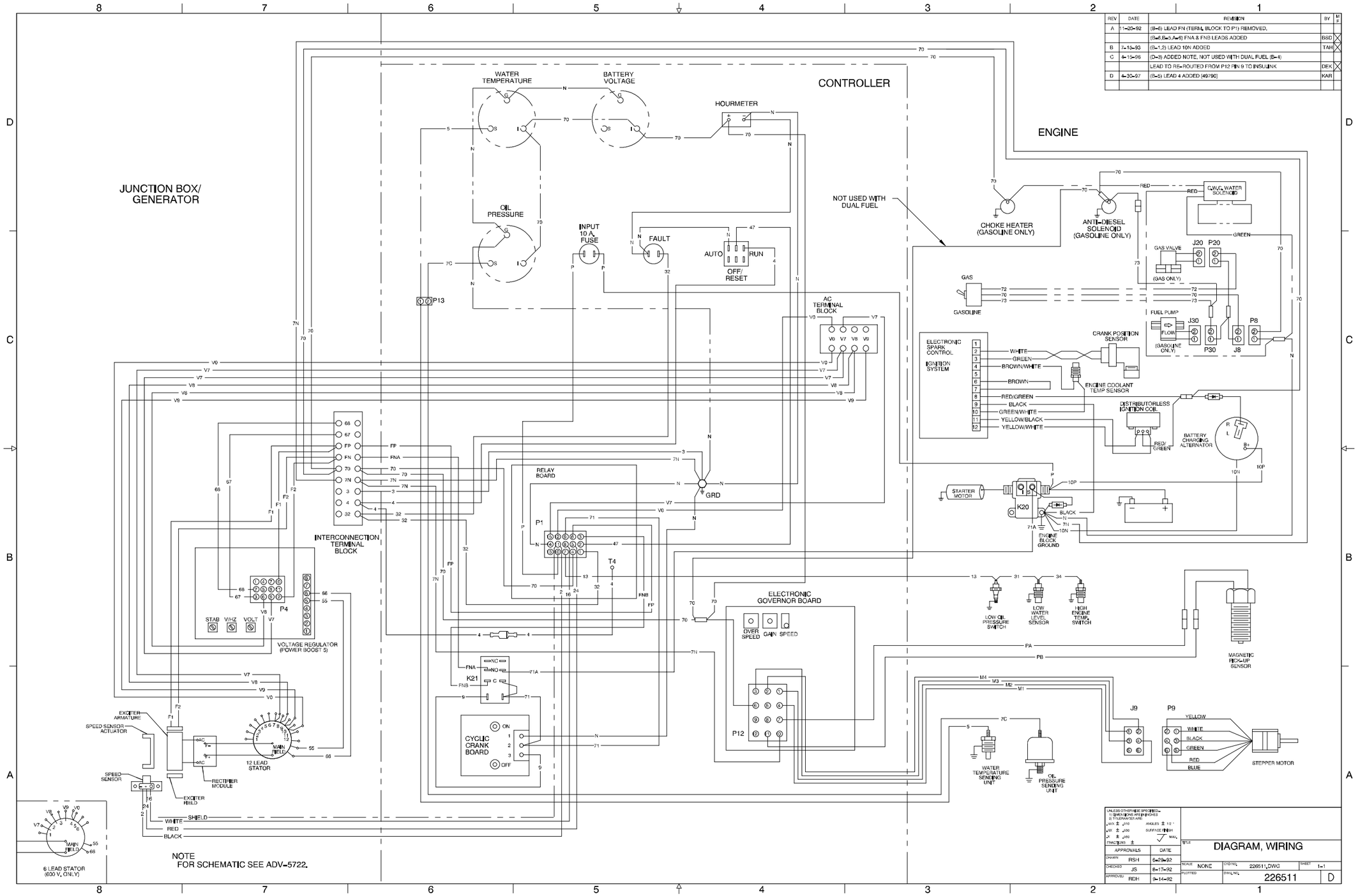
Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead, GM17859-



Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead Remote Mounted, 226494-B

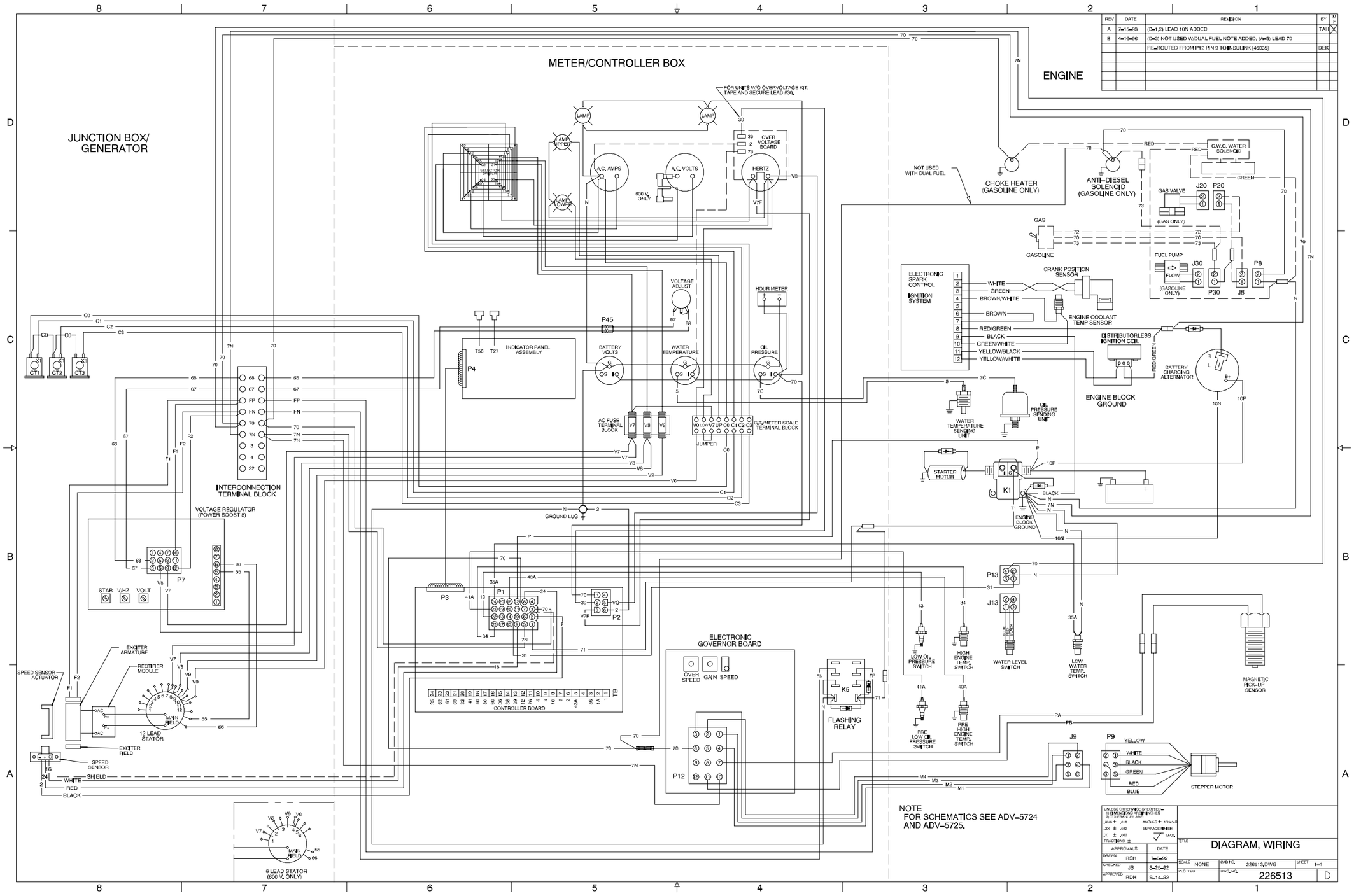


Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead/600-Volt Remote Mounted, 226496-A

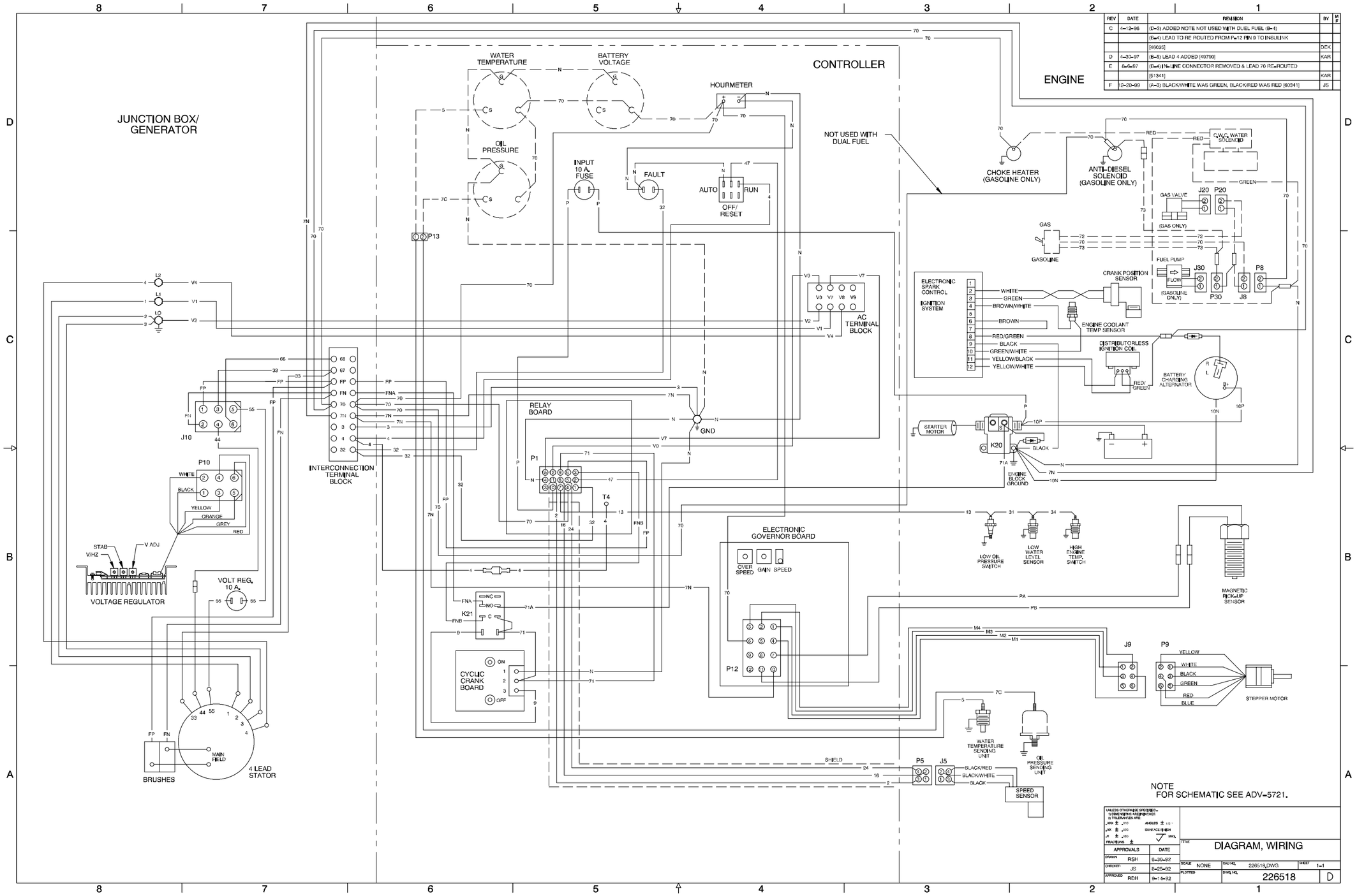


REV.	DATE	REVISION	BY
A	11-20-92	(B-6) LEAD FN (TERM. BLOCK TO P1) REMOVED.	
		(B-8,B-3,A-6) FNA & FNB LEADS ADDED	BSD
B	7-13-93	(B-1,2) LEAD 10N ADDED	TAH
C	4-15-96	(D-3) ADDED NOTE, NOT USED WITH DUAL FUEL (B-4)	
		LEAD TO RE-ROUTED FROM P12 PIN 9 TO INSULINK	DEK
D	4-30-97	(B-5) LEAD 4 ADDED (49790)	KAR

Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, 226511-D

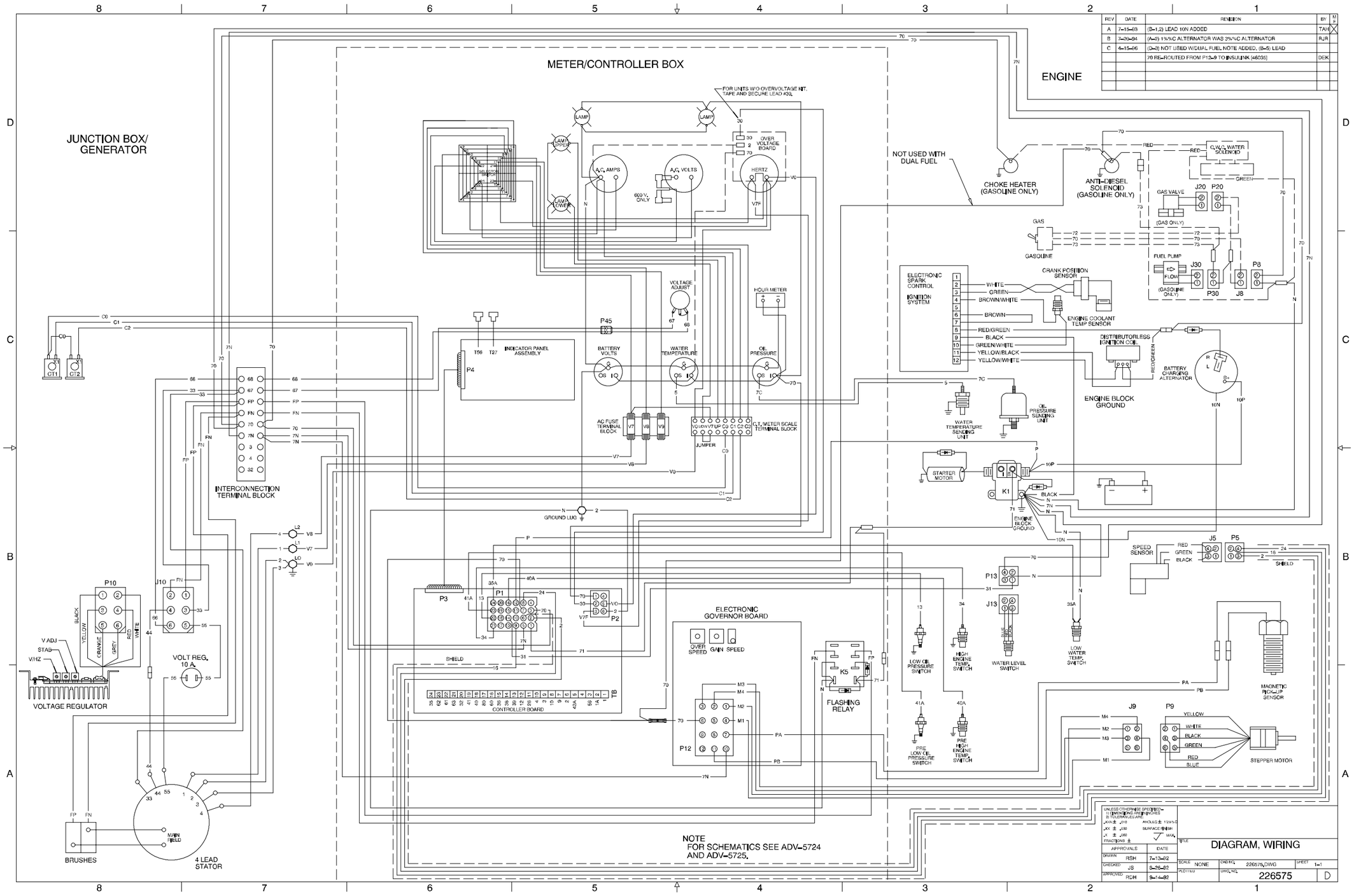


Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead/600-Volt, 226513-B

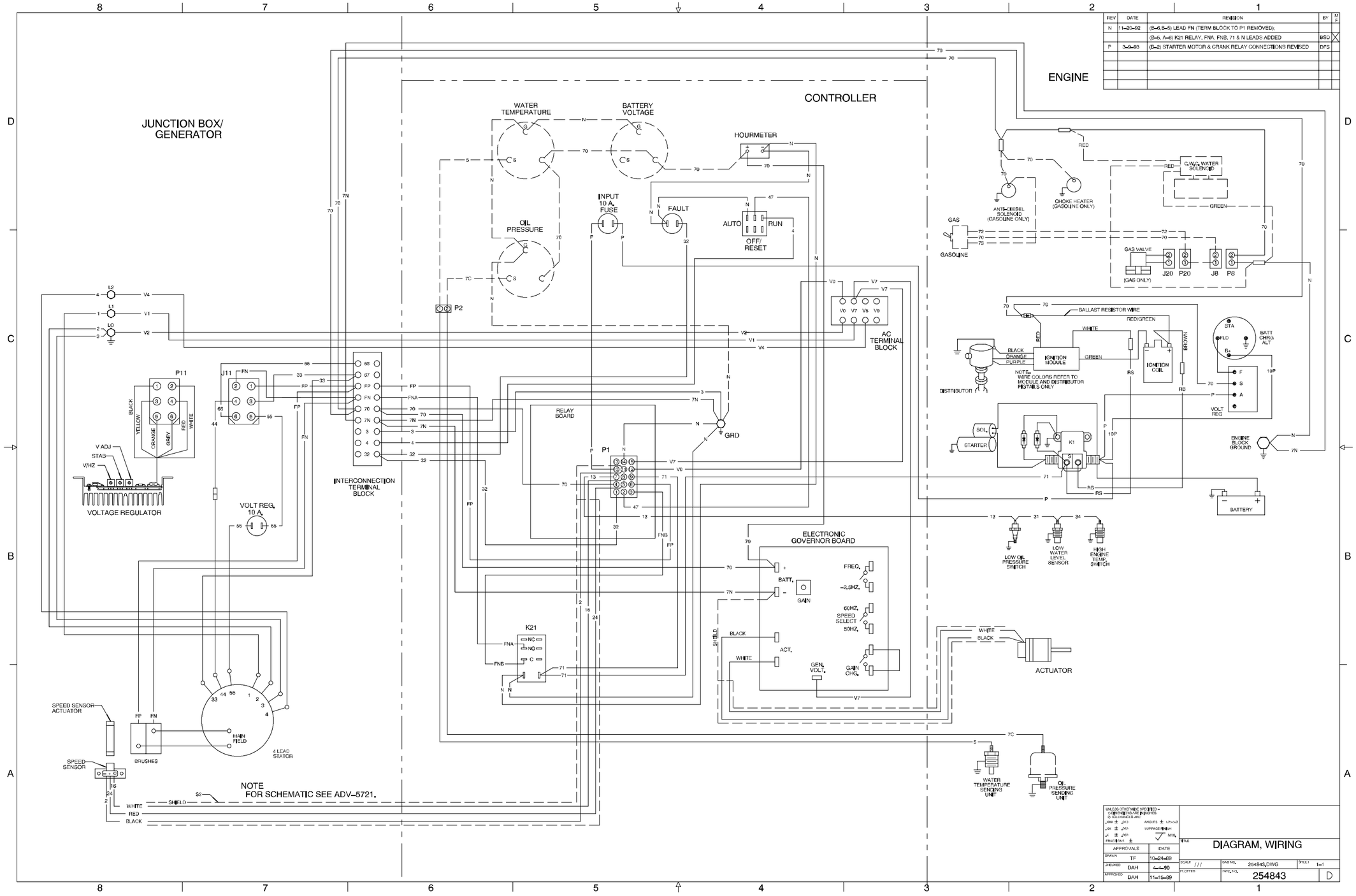


REV	DATE	REVISION	BY	M F
C	4-12-96	(D-3) ADDED NOTE NOT USED WITH DUEL FUEL (B-4)		
		(B-4) LEAD TO RE ROUTED FROM P-12 PIN 9 TO INSULINK		
		[49035]	DEK	
D	4-30-97	(B-5) LEAD 4 ADDED [49790]	KAR	
E	8-5-97	(B-4) IN-LINE CONNECTOR REMOVED & LEAD 70 RE-ROUTED		
		[51341]	KAR	
F	12-20-99	(A-3) BLACK/WHITE WAS GREEN, BLACK/RED WAS RED [60341]	JS	

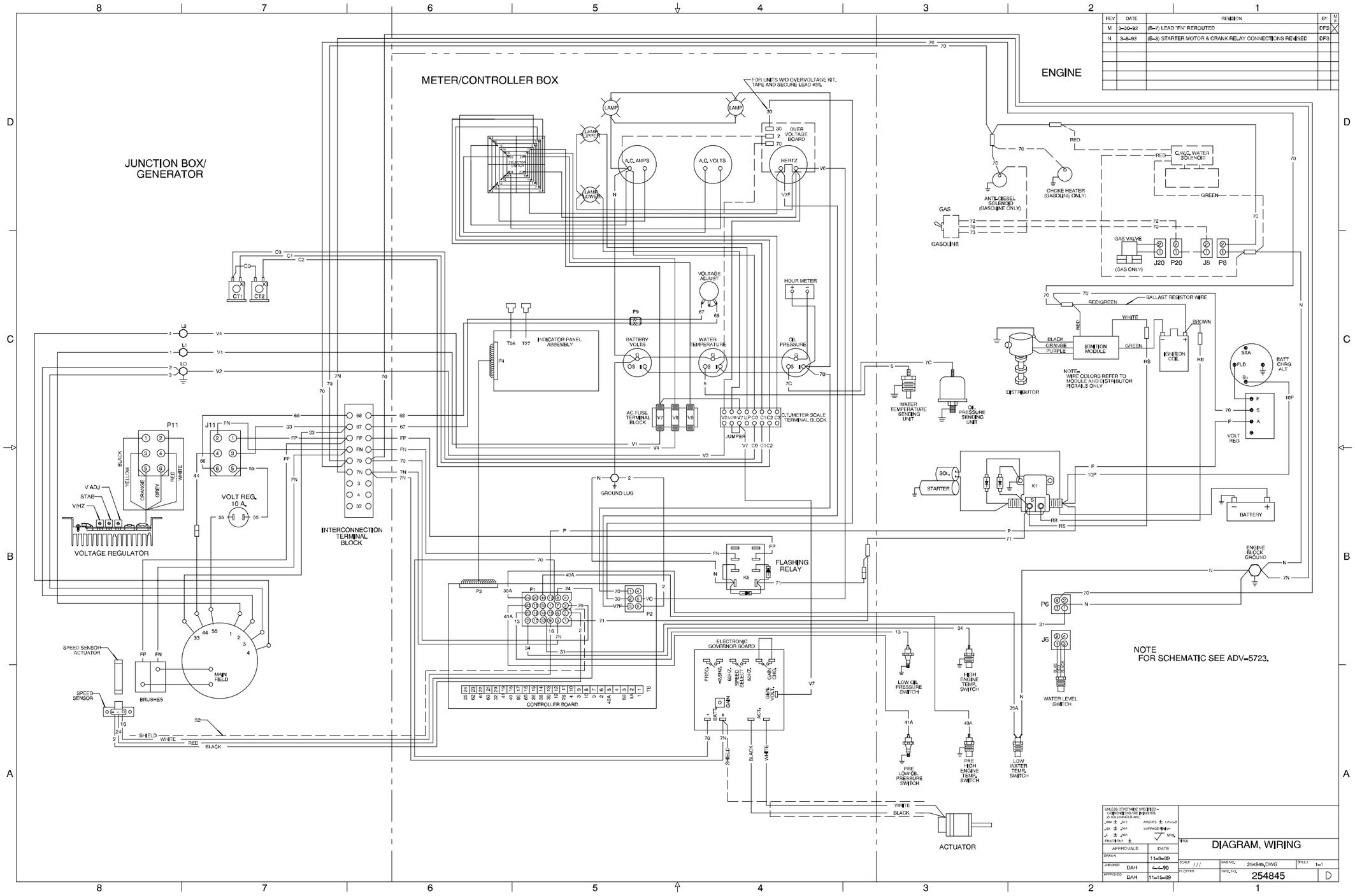
Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, 226518-F



Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead, 226575-C

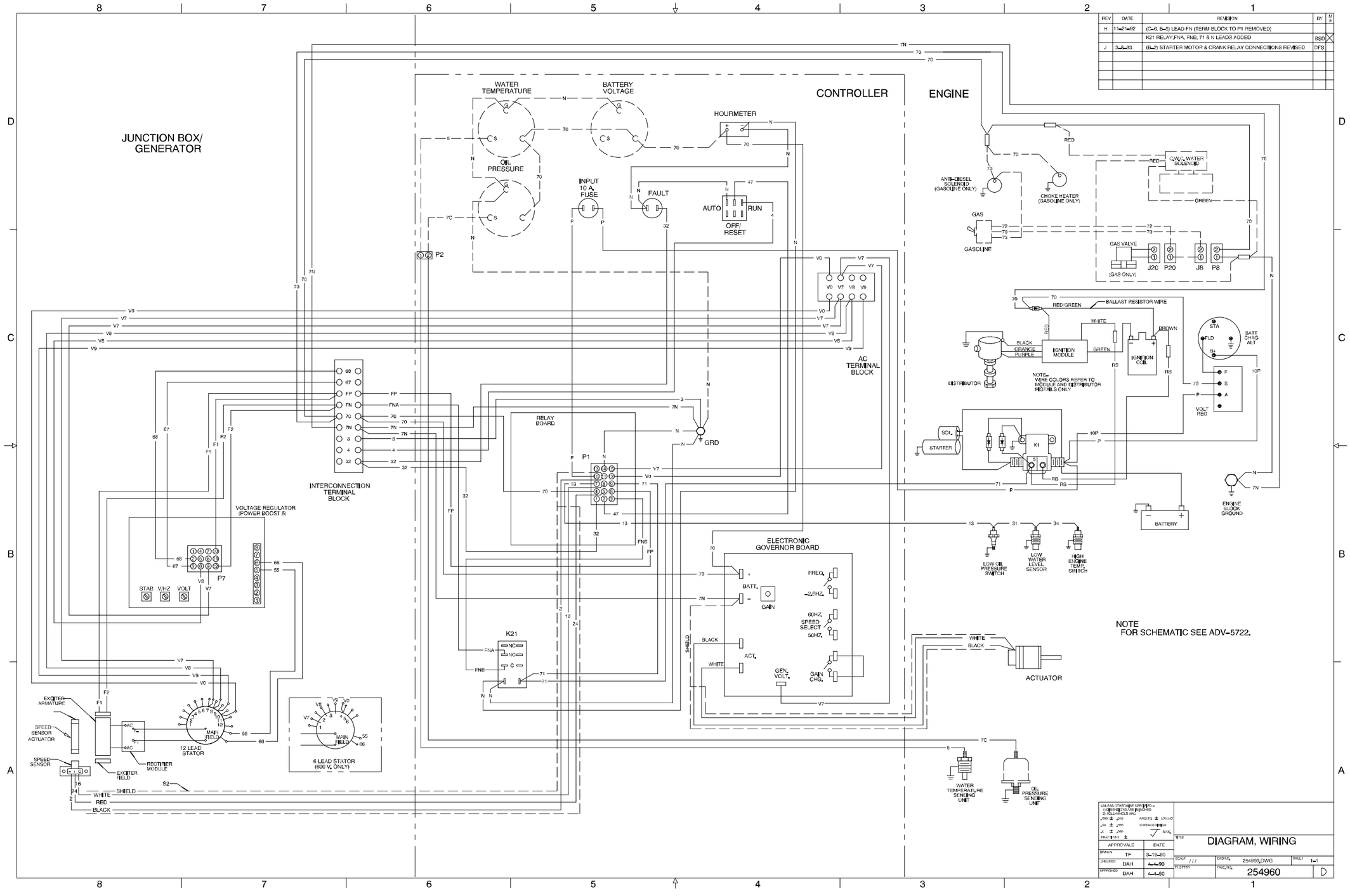


Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, 254843-P

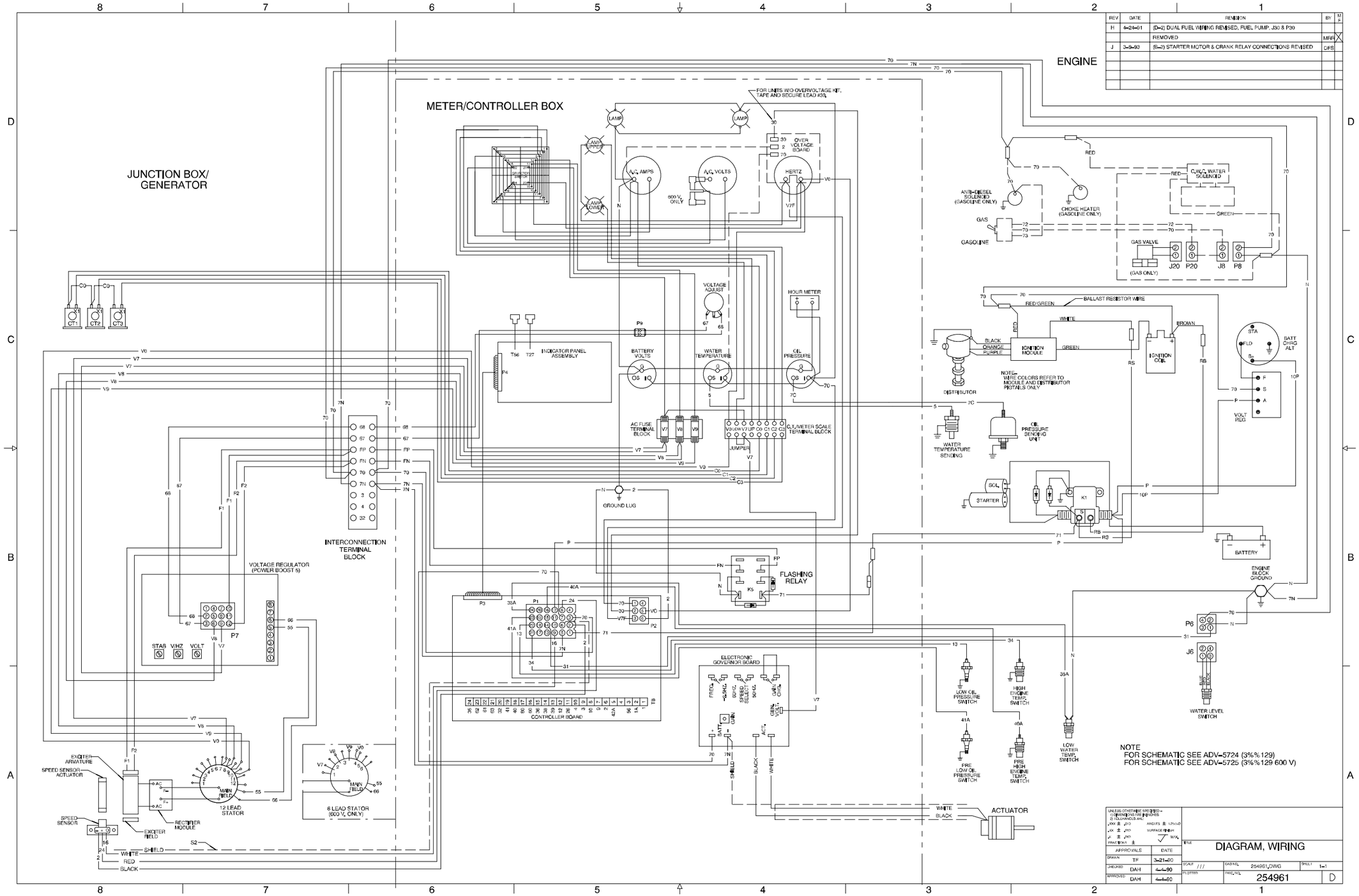


REV	DATE	REVISION	BY	M N
M	3–30–92	(B–7) LEAD "FN" REROUTED	DFS	X
N	3–8–93	(B–3) STARTER MOTOR & CRANK RELAY CONNECTIONS REVISED	DFS	

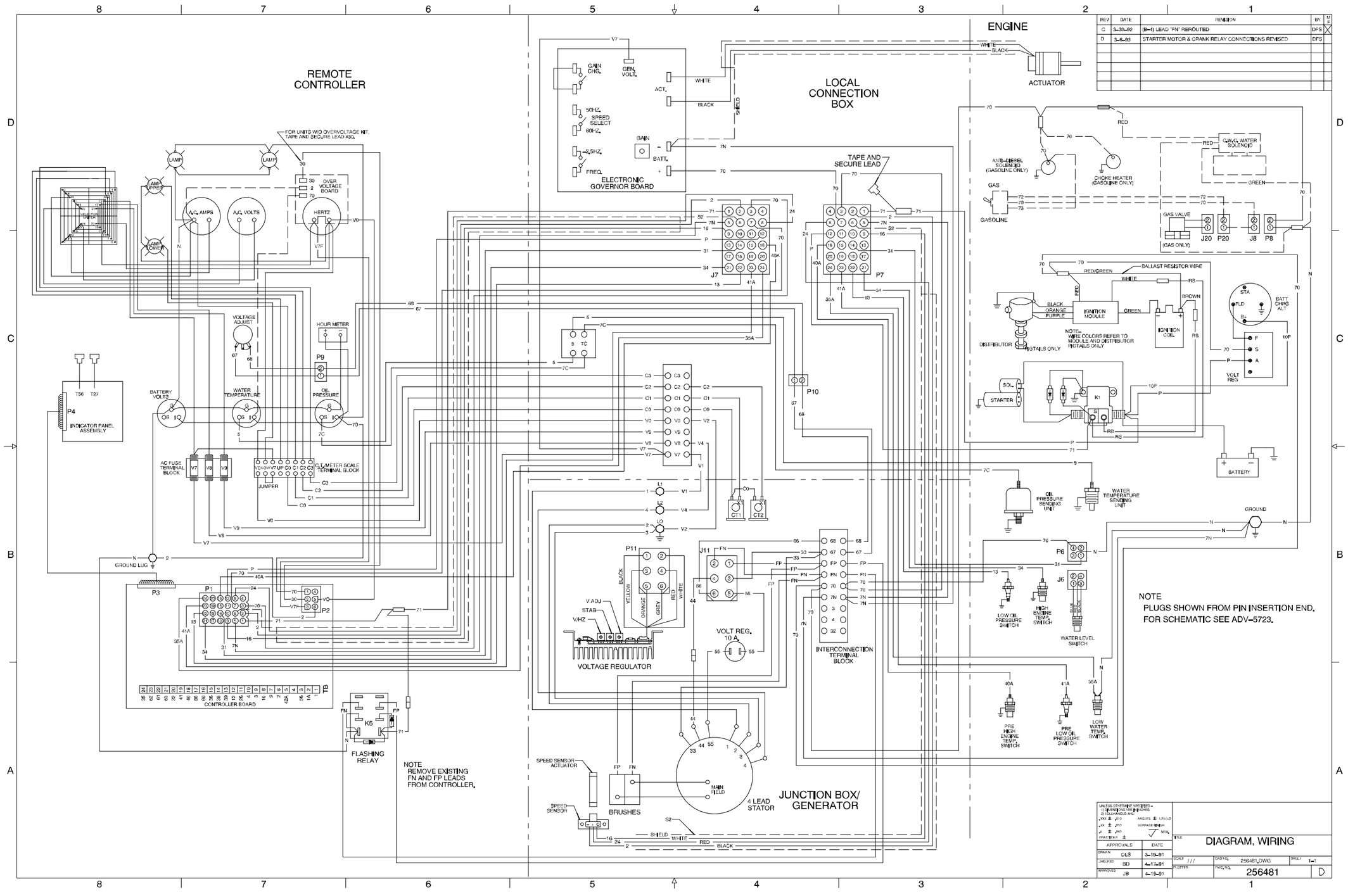
Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead, 254845-N



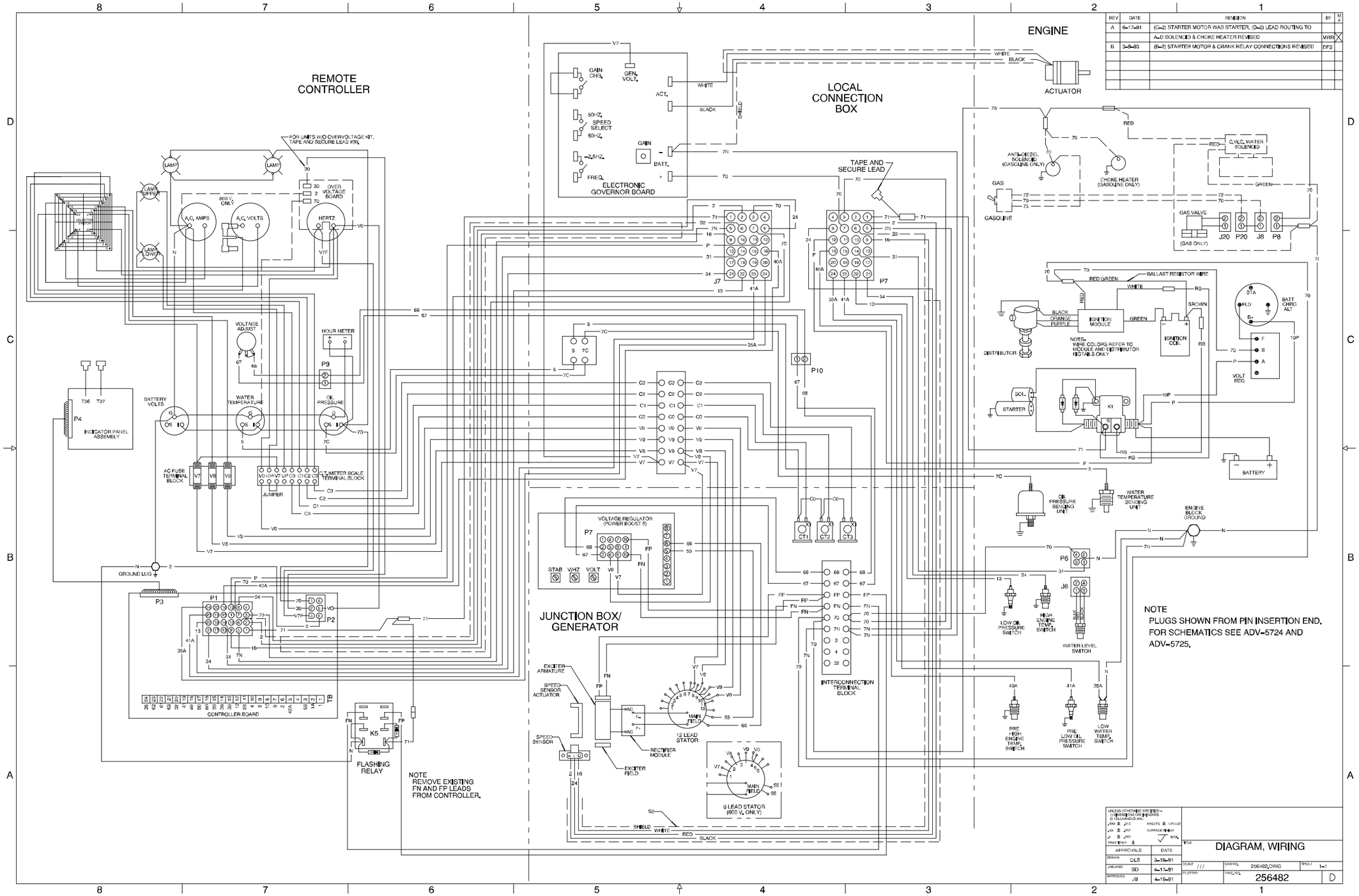
Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, 254960-J



Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead/600-Volt, 254961-J

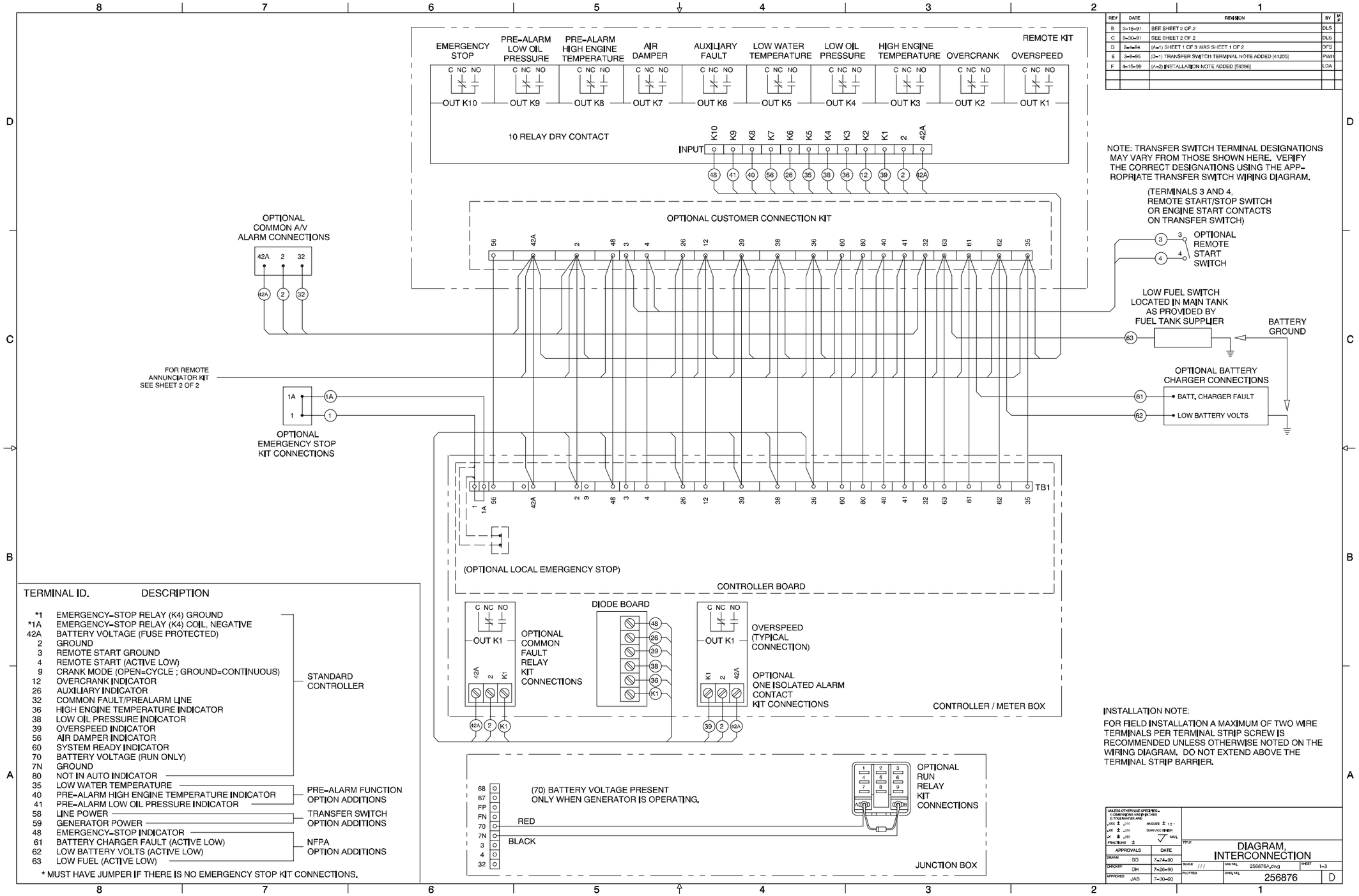


Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead Remote Mounted, 256481-D



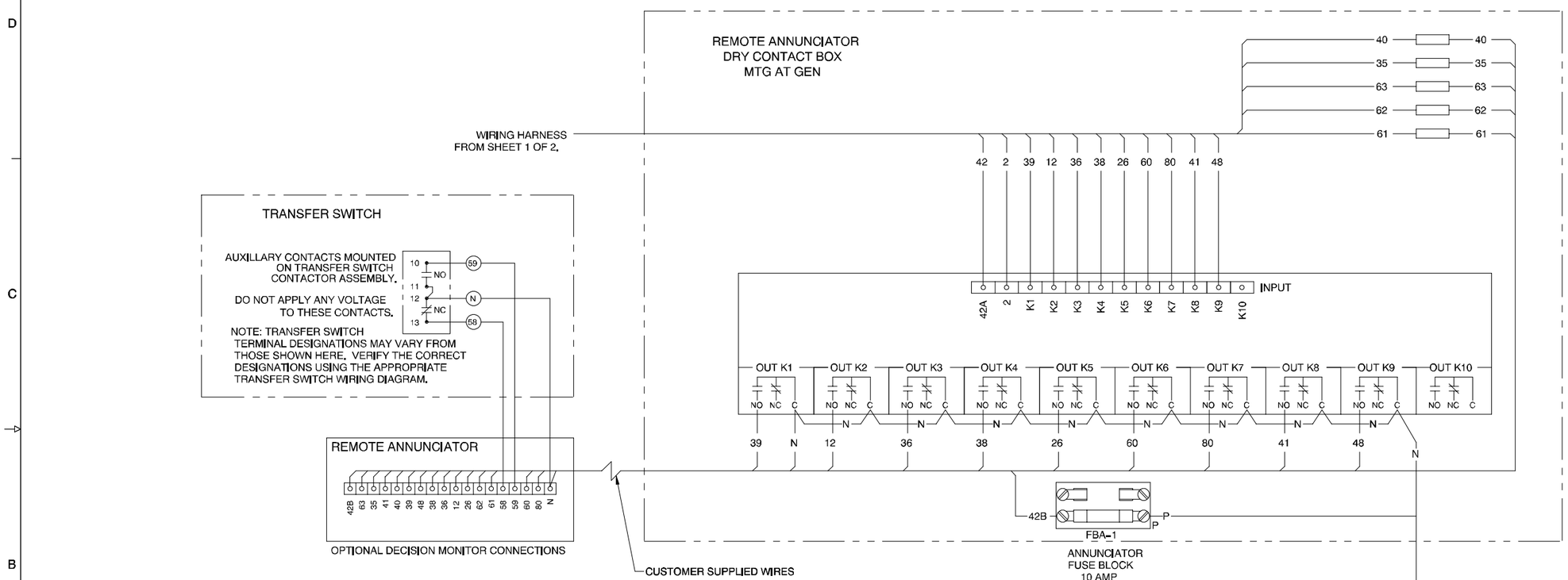
Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead/600-Volt Remote Mounted, 256482-B

REV	DATE	REVISION	BY	M F
B	2-15-91	SEE SHEET 2 OF 2	DLS	
C	9-30-91	SEE SHEET 2 OF 2	DLS	
D	2-14-94	(A-1) SHEET 1 OF 3 WAS SHEET 1 OF 2	DFS	
E	3-9-95	(D-1) TRANSFER SWITCH TERMINAL NOTE ADDED [41205]	PWH	
F	4-15-99	(A-2) INSTALLATION NOTE ADDED [59396]	LDA	



Decision-Maker™ 3 Controller, Accessory Connections, Accessories, 256876A-F

REV	DATE	REVISION	BY	M F
C	8-20-91	(B-8) 42B WAS 42A; (B-4) ADDED ANNUCIATOR FUSE BLOCK		
		BLOCK WIRING & NOTE	DLS	
D	8-20-91	(A-6-7-8, B-6,-7,-8) TERMINAL DESCRIPTION CHART ADDED		
		(A-1) SHEET 2 OF 3 WAS SHEET 2 OF 2	DFS	
E	3-9-95	(C-7) TRANSFER SWITCH TERMINAL NOTE ADDED [41205]	PWH	
F	4-15-99	(A-2) INSTALLATION NOTE ADDED [58396]	LDA	

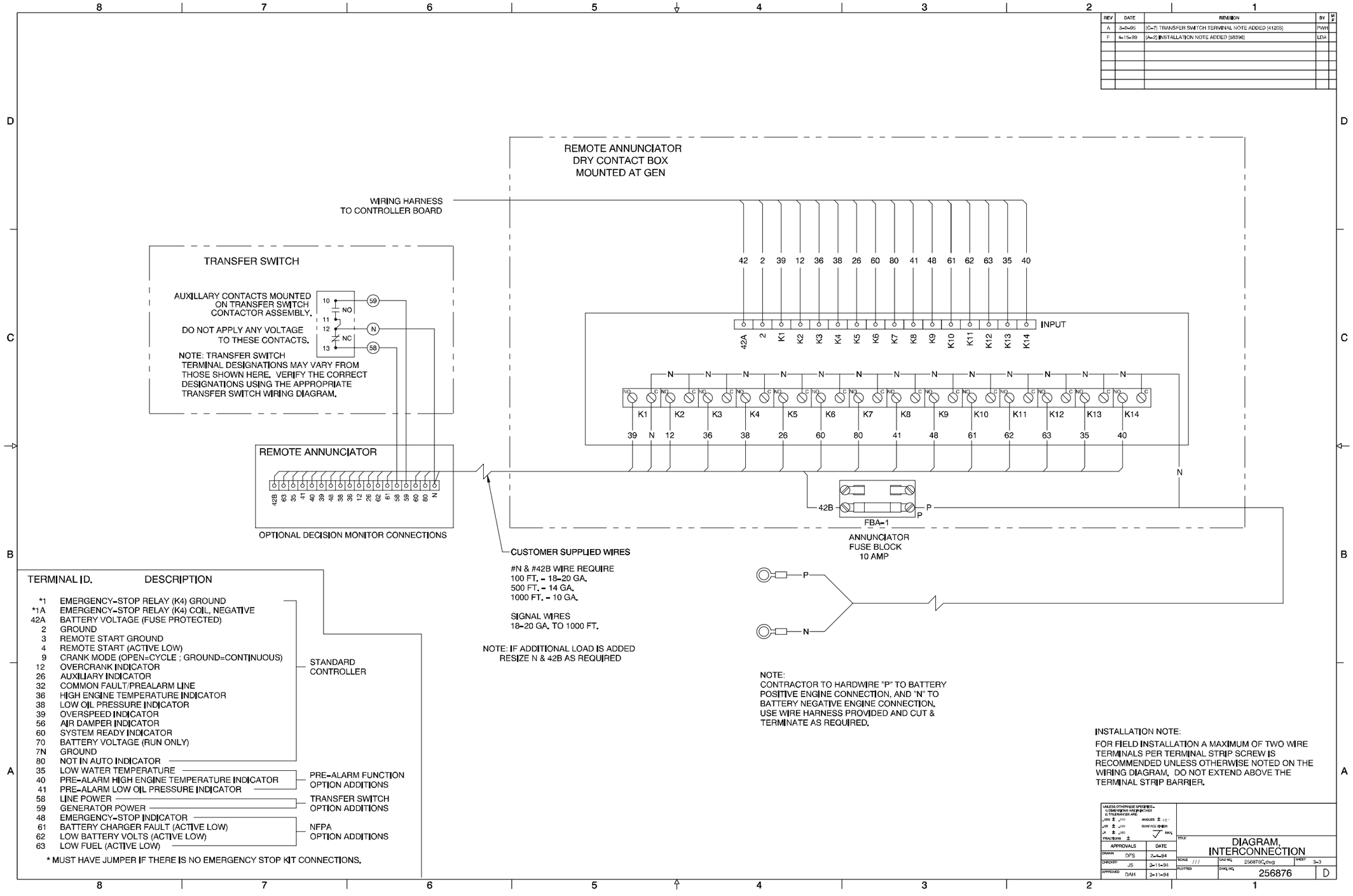


TERMINAL ID.	DESCRIPTION	
*1	EMERGENCY-STOP RELAY (K4) GROUND	STANDARD CONTROLLER
*1A	EMERGENCY-STOP RELAY (K4) COIL, NEGATIVE	STANDARD CONTROLLER
42A	BATTERY VOLTAGE (FUSE PROTECTED)	STANDARD CONTROLLER
2	GROUND	STANDARD CONTROLLER
3	REMOTE START GROUND	STANDARD CONTROLLER
4	REMOTE START (ACTIVE LOW)	STANDARD CONTROLLER
9	CRANK MODE (OPEN=CYCLE ; GROUND=CONTINUOUS)	STANDARD CONTROLLER
12	OVERCRANK INDICATOR	STANDARD CONTROLLER
26	AUXILIARY INDICATOR	STANDARD CONTROLLER
32	COMMON FAULT/PREALARM LINE	STANDARD CONTROLLER
36	HIGH ENGINE TEMPERATURE INDICATOR	STANDARD CONTROLLER
38	LOW OIL PRESSURE INDICATOR	STANDARD CONTROLLER
39	OVERSPEED INDICATOR	STANDARD CONTROLLER
56	AIR DAMPER INDICATOR	STANDARD CONTROLLER
60	SYSTEM READY INDICATOR	STANDARD CONTROLLER
70	BATTERY VOLTAGE (RUN ONLY)	STANDARD CONTROLLER
7N	GROUND	STANDARD CONTROLLER
80	NOT IN AUTO INDICATOR	STANDARD CONTROLLER
35	LOW WATER TEMPERATURE	PRE-ALARM FUNCTION OPTION ADDITIONS
40	PRE-ALARM HIGH ENGINE TEMPERATURE INDICATOR	PRE-ALARM FUNCTION OPTION ADDITIONS
41	PRE-ALARM LOW OIL PRESSURE INDICATOR	PRE-ALARM FUNCTION OPTION ADDITIONS
58	LINE POWER	TRANSFER SWITCH OPTION ADDITIONS
59	GENERATOR POWER	TRANSFER SWITCH OPTION ADDITIONS
48	EMERGENCY-STOP INDICATOR	NFPA OPTION ADDITIONS
61	BATTERY CHARGER FAULT (ACTIVE LOW)	NFPA OPTION ADDITIONS
62	LOW BATTERY VOLTS (ACTIVE LOW)	NFPA OPTION ADDITIONS
63	LOW FUEL (ACTIVE LOW)	NFPA OPTION ADDITIONS

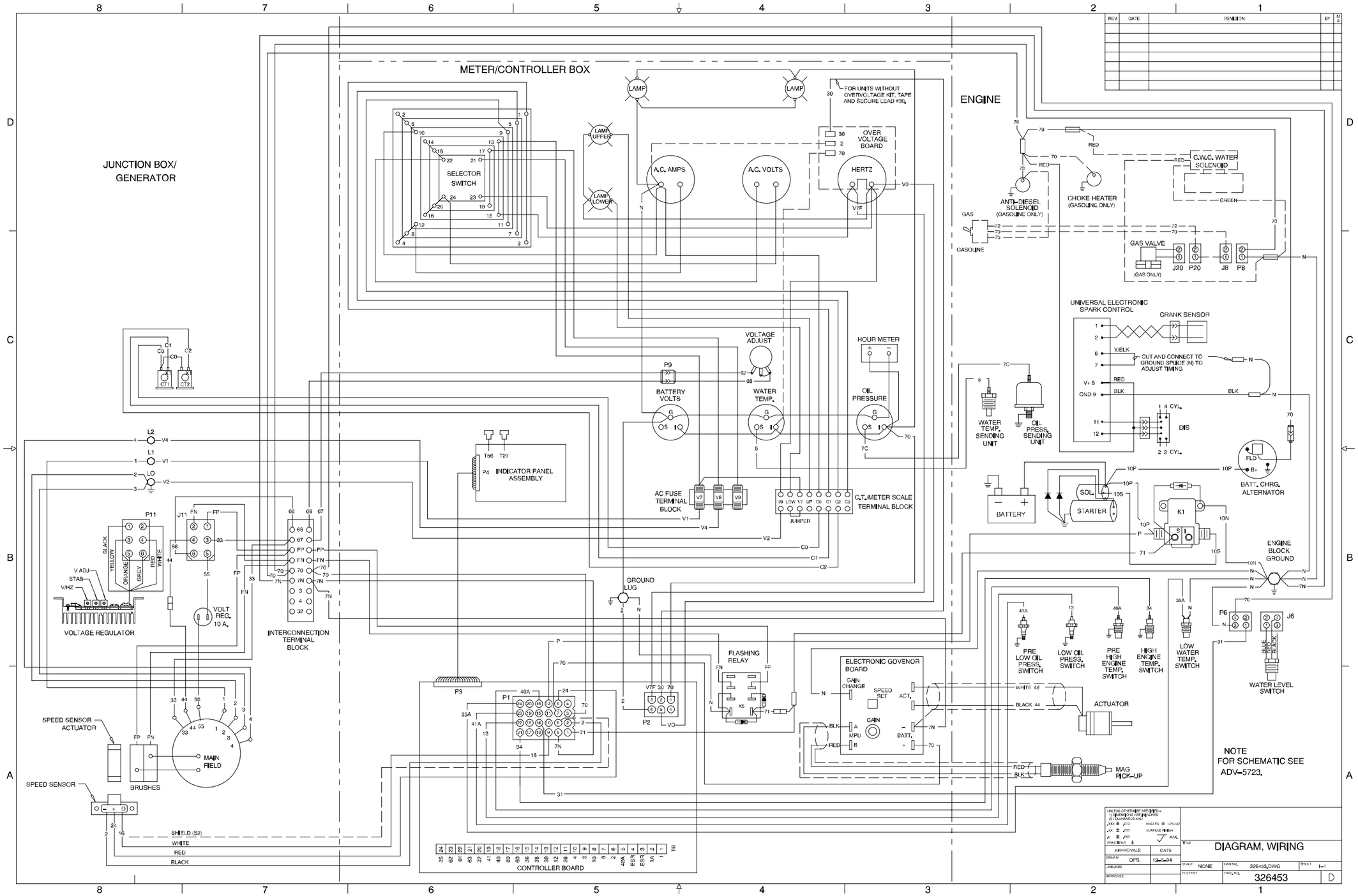
* MUST HAVE JUMPER IF THERE IS NO EMERGENCY STOP KIT CONNECTIONS.

Decision-Maker™ 3 Controller, Remote Annunciator Kit, 10-Relay, 256876B-F

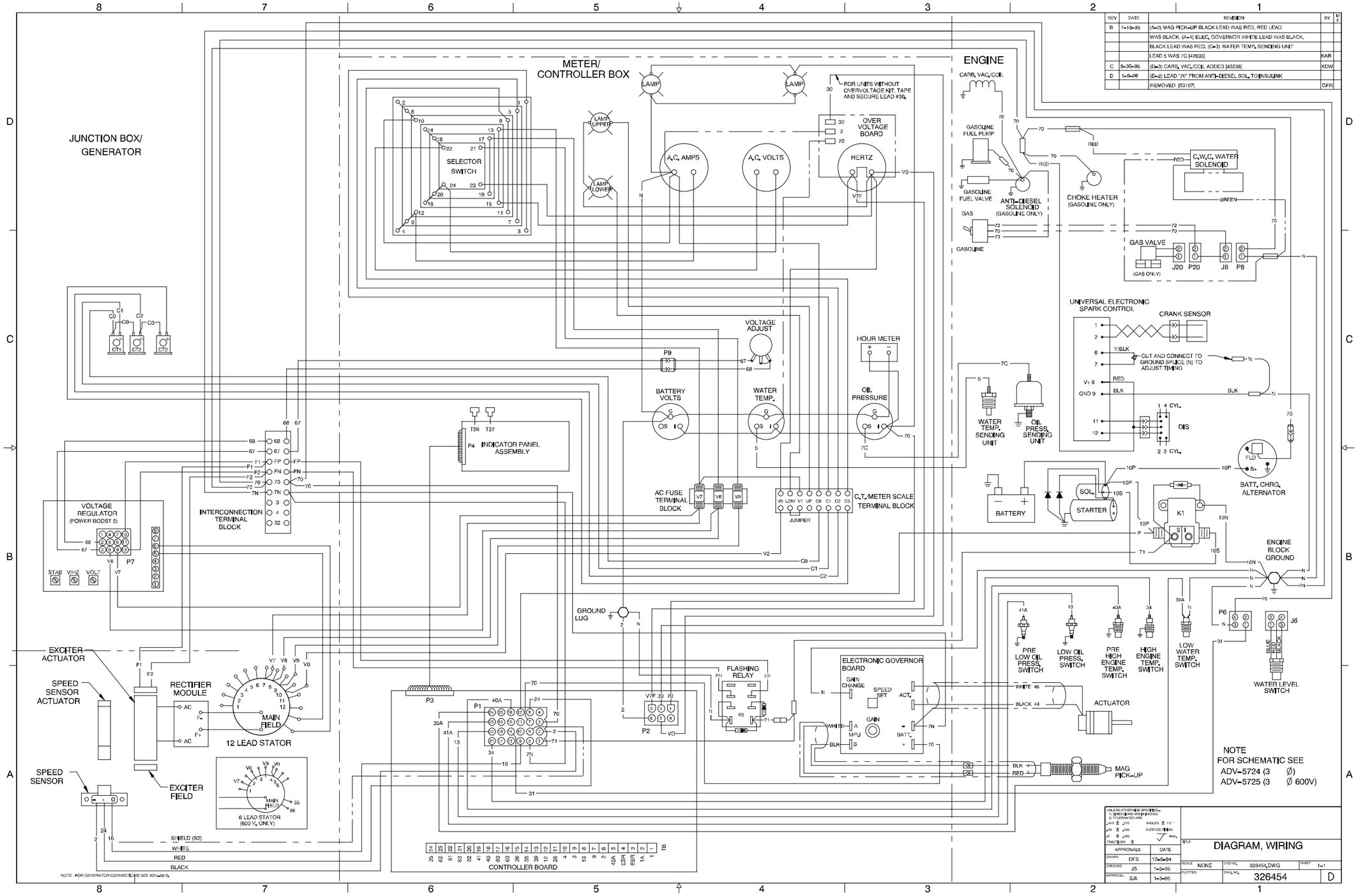
REV	DATE	REVISION	BY	M F
A	3-8-95	(C-7) TRANSFER SWITCH TERMINAL NOTE ADDED [41205]	PWH	
F	4-15-99	(A-2) INSTALLATION NOTE ADDED [58396]	LDA	



Decision-Maker™ 3 Controller, Remote Annunciator Kit, 14-Relay, 256876C-F

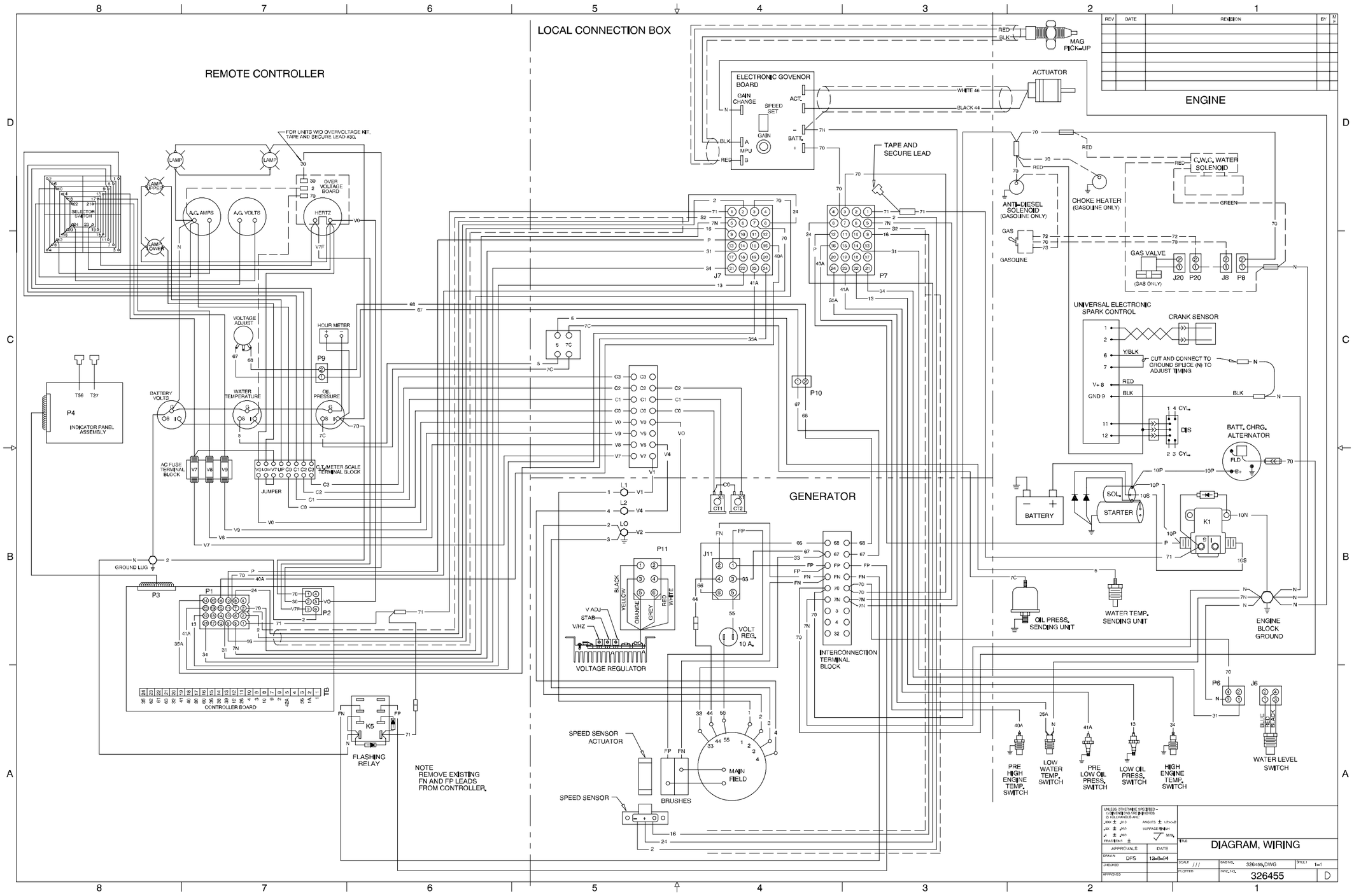


Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead, 326453-

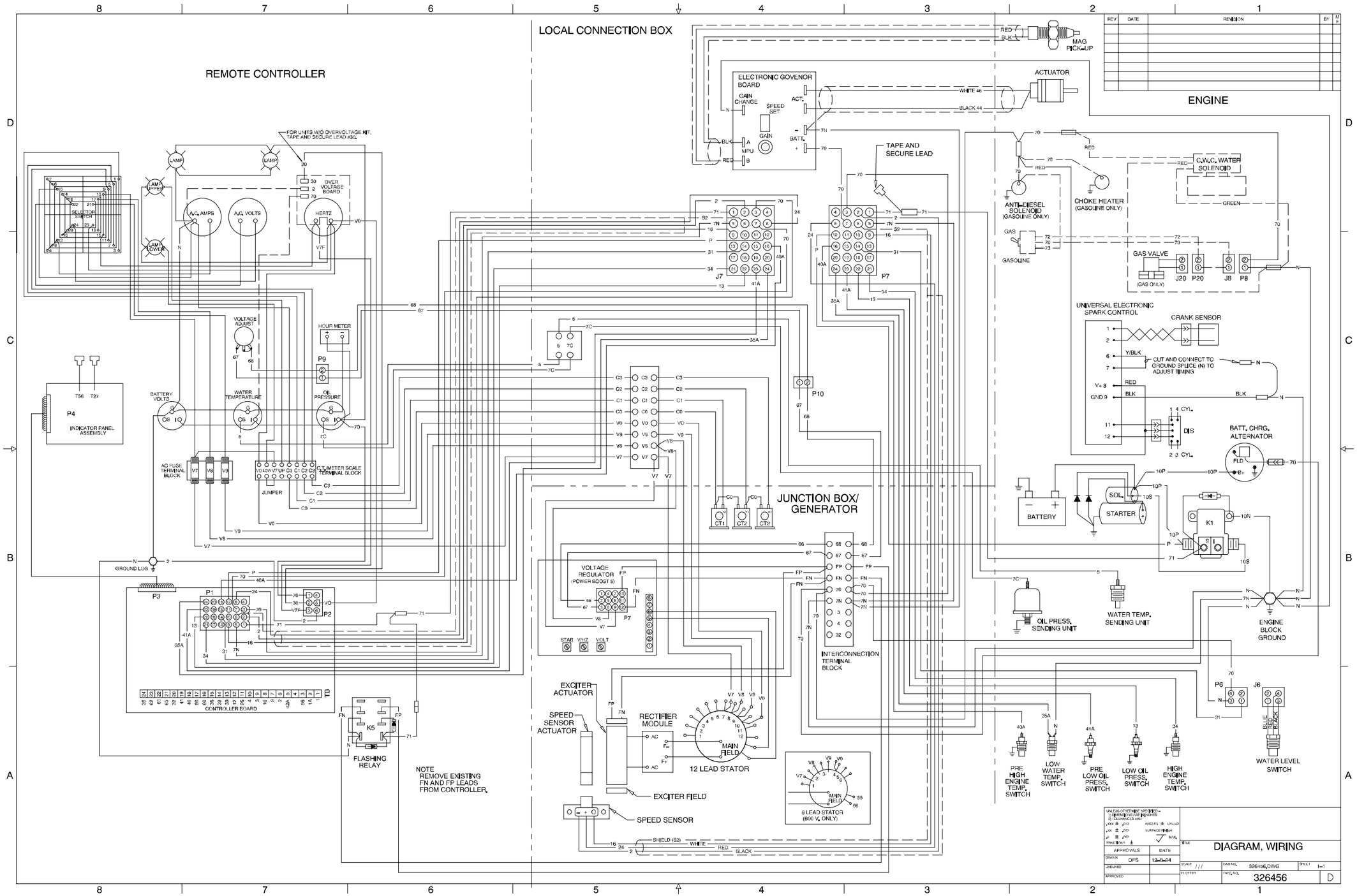


REV.	DATE	REVISION	BY	M F
B	7-18-95	(A-2) MAG PICK-UP BLACK LEAD WAS RED, RED LEAD		
		WAS BLACK. (F-4) ELEC. GOVERNOR WHITE LEAD WAS BLACK,		
		BLACK LEAD WAS RED, (G-3) WATER TEMP. SENDING UNIT		
		LEAD 5 WAS 7C [42633]	KAR	
C	8-30-95	(D-3) CARB. VAC./COIL ADDED [43238]	KDW	
D	1-9-98	(D-2) LEAD "70" FROM ANTI-DIESEL SOL. TO INSULINK		
		REMOVED [53167]	GFR	

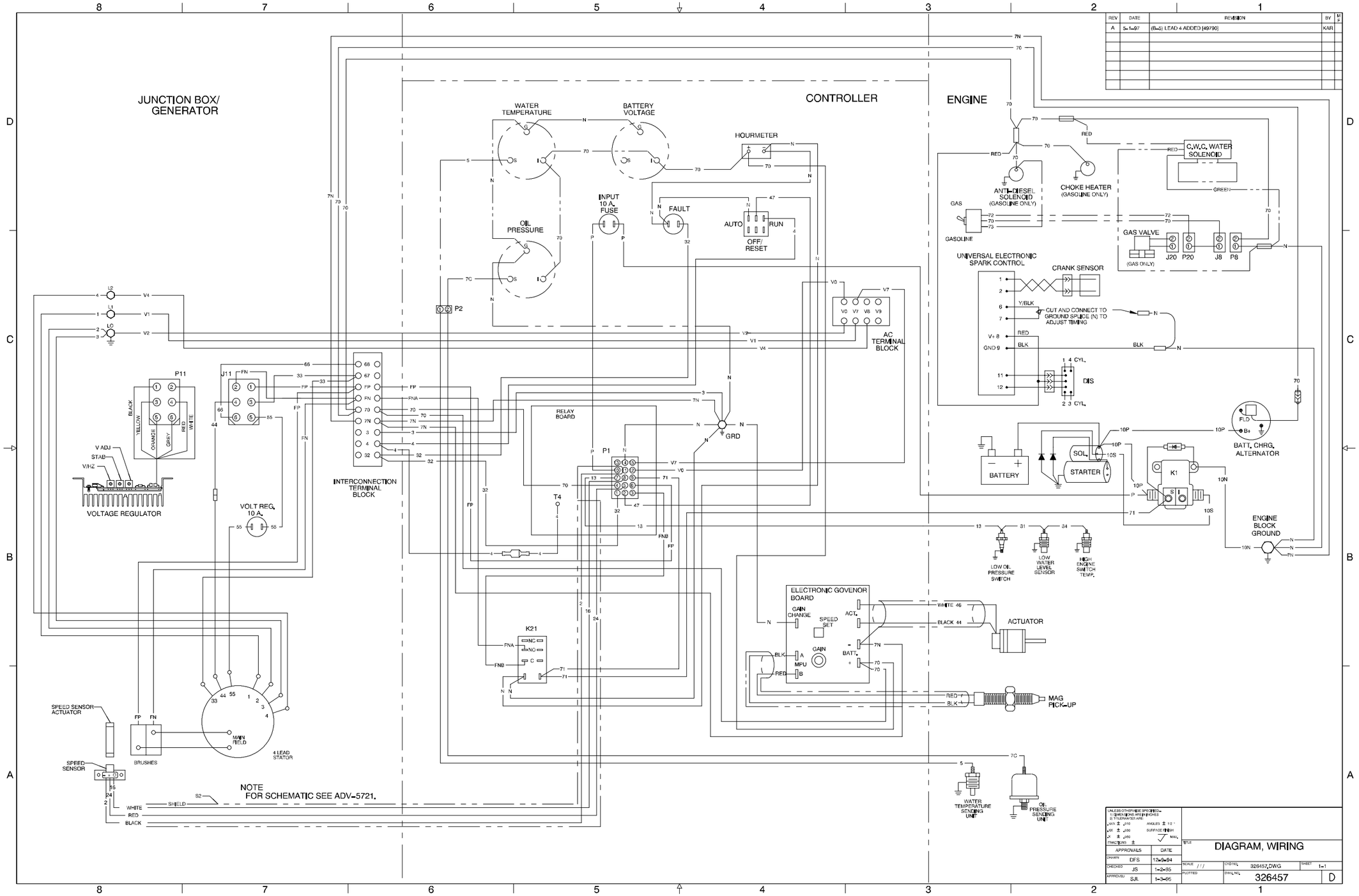
Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead/600-Volt, 326454-D



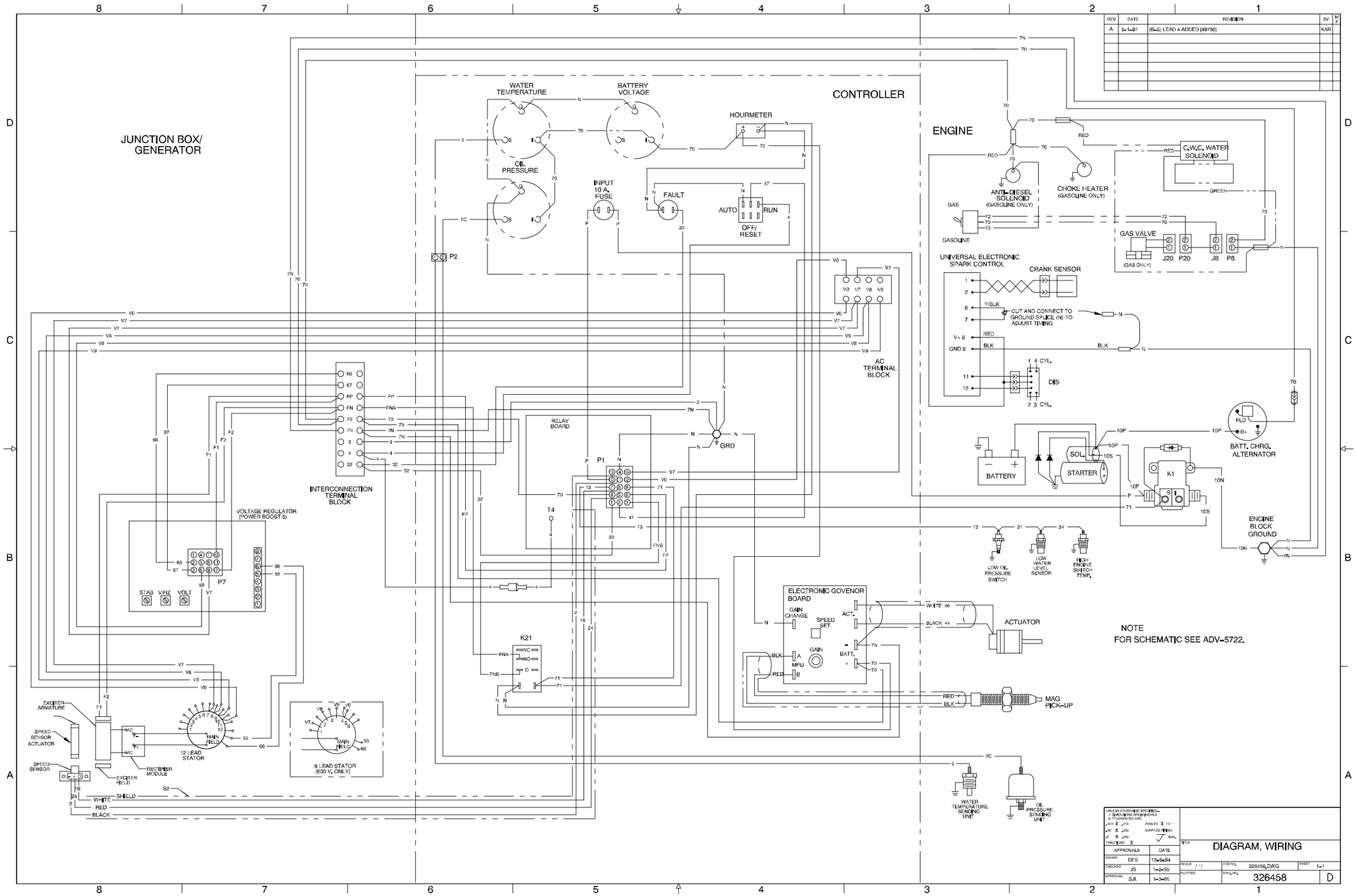
Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 4-Lead Remote Mounted, 326455-



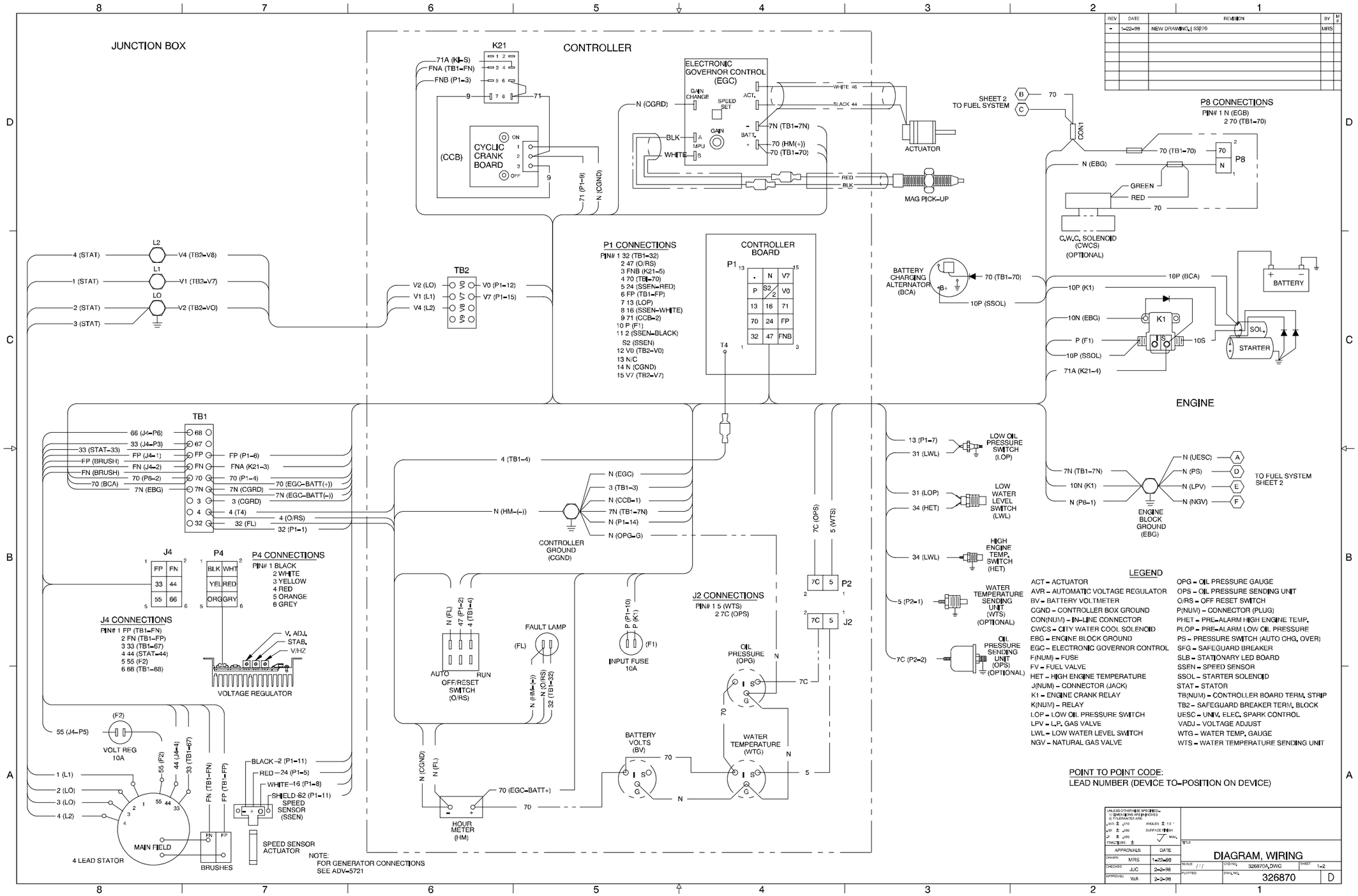
Decision-Maker™ 3 Controller, Point-to-Point Wiring Diagram, 12-Lead/600-Volt Remote Mounted, 326456-



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, 326457-A



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, 326458-A



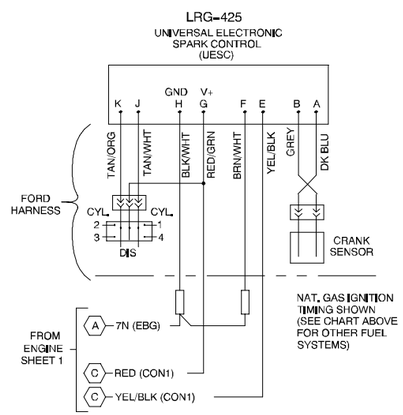
Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, Sheet 1, 326870A-

REV	DATE	REVISION	BY	M F
-	1-27-98	NEW DRAWING, ECO 33270	MRS	

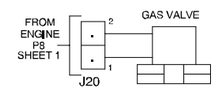
ENGINE

FUEL TYPE	LRG-425 IGN. WIRING	IGN. TIMING
NATURAL GAS	CONNECT YEL/BLK LEAD TO LEAD "70" & BRN/WHT LEAD TO LEAD "7"	29 °
LP GASEOUS	CONNECT BRN/WHT LEAD TO LEAD "7", DO NOT CONNECT YEL/BRN LEAD	24 °
GASOLINE	DO NOT CONNECT EITHER YEL/BLK OR BRN/WHT LEADS	11 °
DUAL FUEL NAT. GAS & GASOLINE	DO NOT CONNECT EITHER YEL/BLK OR BRN/WHT LEADS	11 °
DUAL FUEL L.P. & GASOLINE	DO NOT CONNECT EITHER YEL/BLK OR BRN/WHT LEADS	11 °
DUAL FUEL NAT. GAS & L.P.	CONNECT BRN/WHT LEAD TO LEAD "7", DO NOT CONNECT YEL/BRN LEAD	24 °

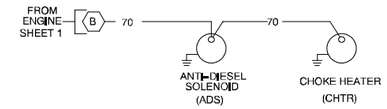
NOTE (LRG-425 ONLY):
CONNECTING YEL/BLK LEAD TO 12V (LEAD "70")
WILL ADVANCE TIMING 5° OR TO GROUND
(LEAD "7N") WILL RETARD TIMING 3°



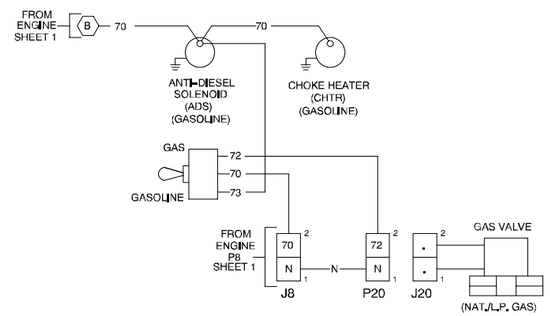
FUEL SYSTEMS



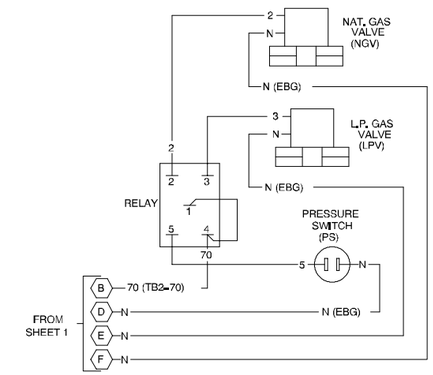
NATURAL/L.P. GAS ONLY



GASOLINE ONLY



MANUAL CHANGEOVER VAPOR GAS/GASOLINE



AUTO CHANGEOVER NAT./L.P. GAS

L.P. GAS LIQUID WITHDRAWAL

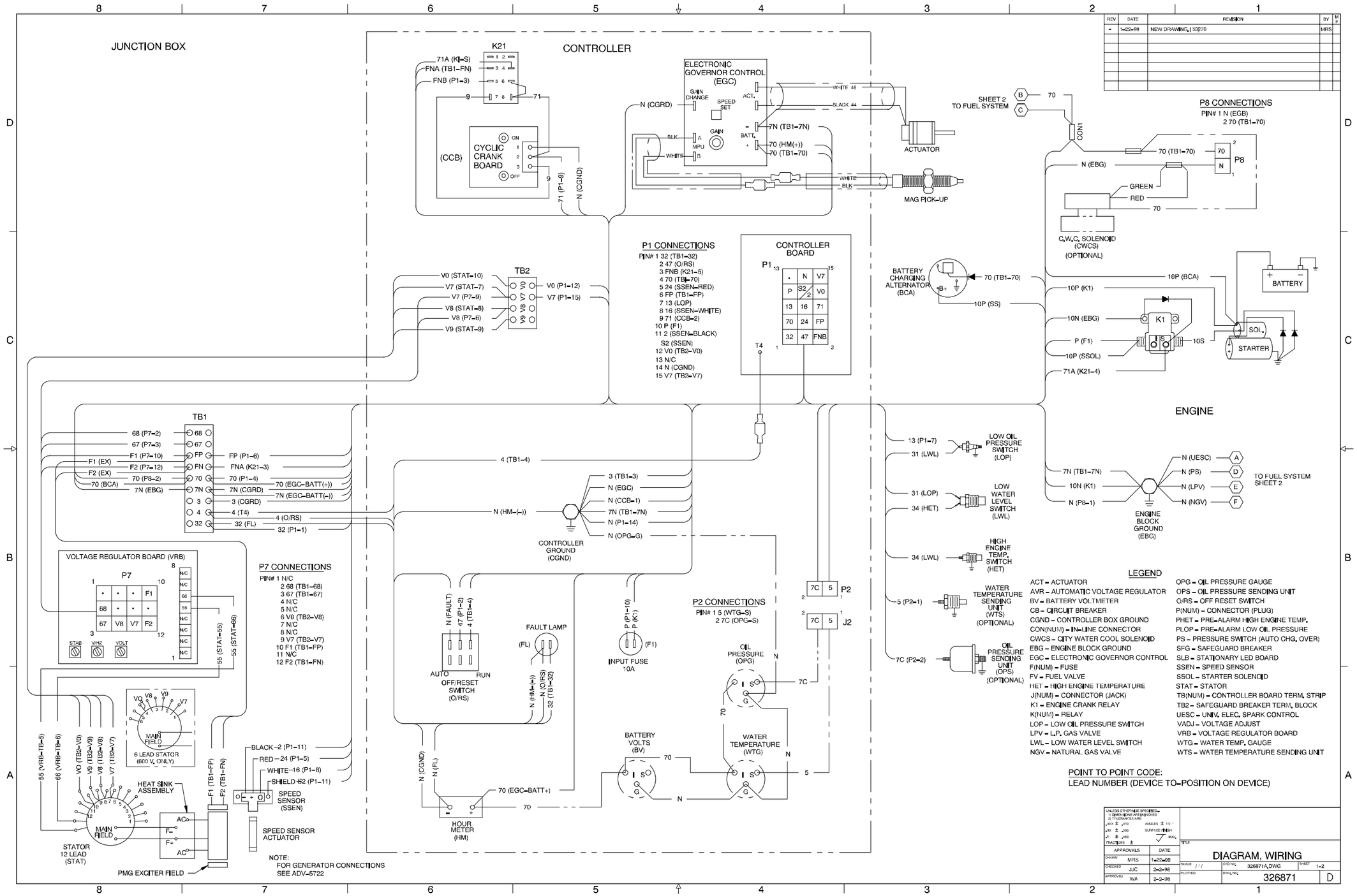
APPROVALS		DATE
DRAWN	MRS	1-27-98
CHECKED	JJC	2-2-98
APPROVED	WA	2-2-98

TITLE DIAGRAM, WIRING

SCALE 1/1 | CAD FILE 326870B.DWG | SHEET 2-2

PLOTTED | DWG. NO. 326870 | D

Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, Sheet 2, 326870B-



Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, Sheet 1, 326871A-

REV	DATE	REVISION	BY	M F
-	1-27-98	NEW DRAWING, ES3270	MRS	

ENGINE

FUEL TYPE	LRG-425 IGN. WIRING	IGN. TIMING
NATURAL GAS	CONNECT YEL/BLK LEAD TO LEAD "70" & BRN/WHT LEAD TO LEAD "N"	29 °
LP GASEOUS	CONNECT BRN/WHT LEAD TO LEAD "N" DO NOT CONNECT YEL/BRN LEAD	24 °
GASOLINE	DO NOT CONNECT EITHER YEL/BLK OR BRN/WHT LEADS	11 °
DUAL FUEL NAT. GAS & GASOLINE	DO NOT CONNECT EITHER YEL/BLK OR BRN/WHT LEADS	11 °
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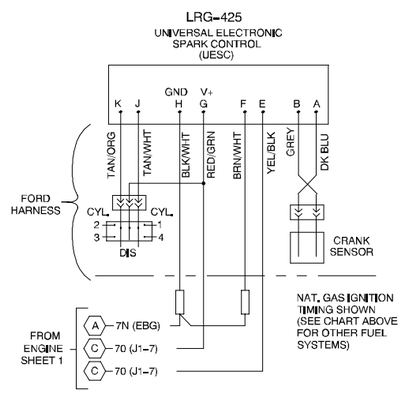
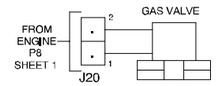
DUAL FUEL NAT. GAS & L.P.	CONNECT BRN/WHT LEAD TO LEAD "N" DO NOT CONNECT YEL/BRN LEAD	24 °

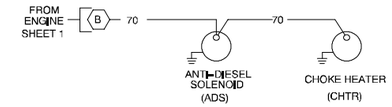
NOTE (LRG-425 ONLY):
CONNECTING YEL/BLK LEAD TO 12V (LEAD "70") WILL ADVANCE TIMING 5° OR TO GROUND (LEAD "7N") WILL RETARD TIMING 3°



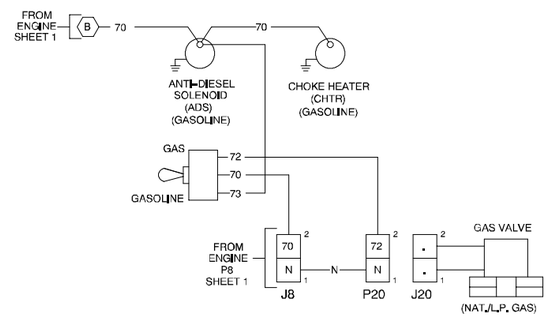
FUEL SYSTEMS



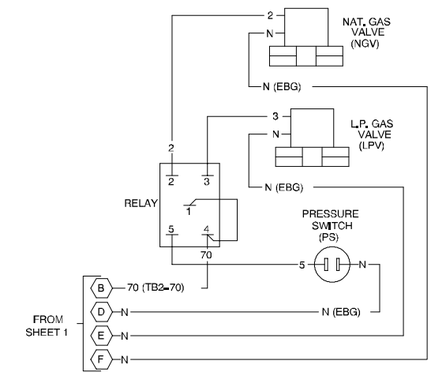
NATURAL/L.P. GAS ONLY



GASOLINE ONLY



MANUAL CHANGEOVER VAPOR GAS/GASOLINE



AUTO CHANGEOVER NAT./L.P. GAS

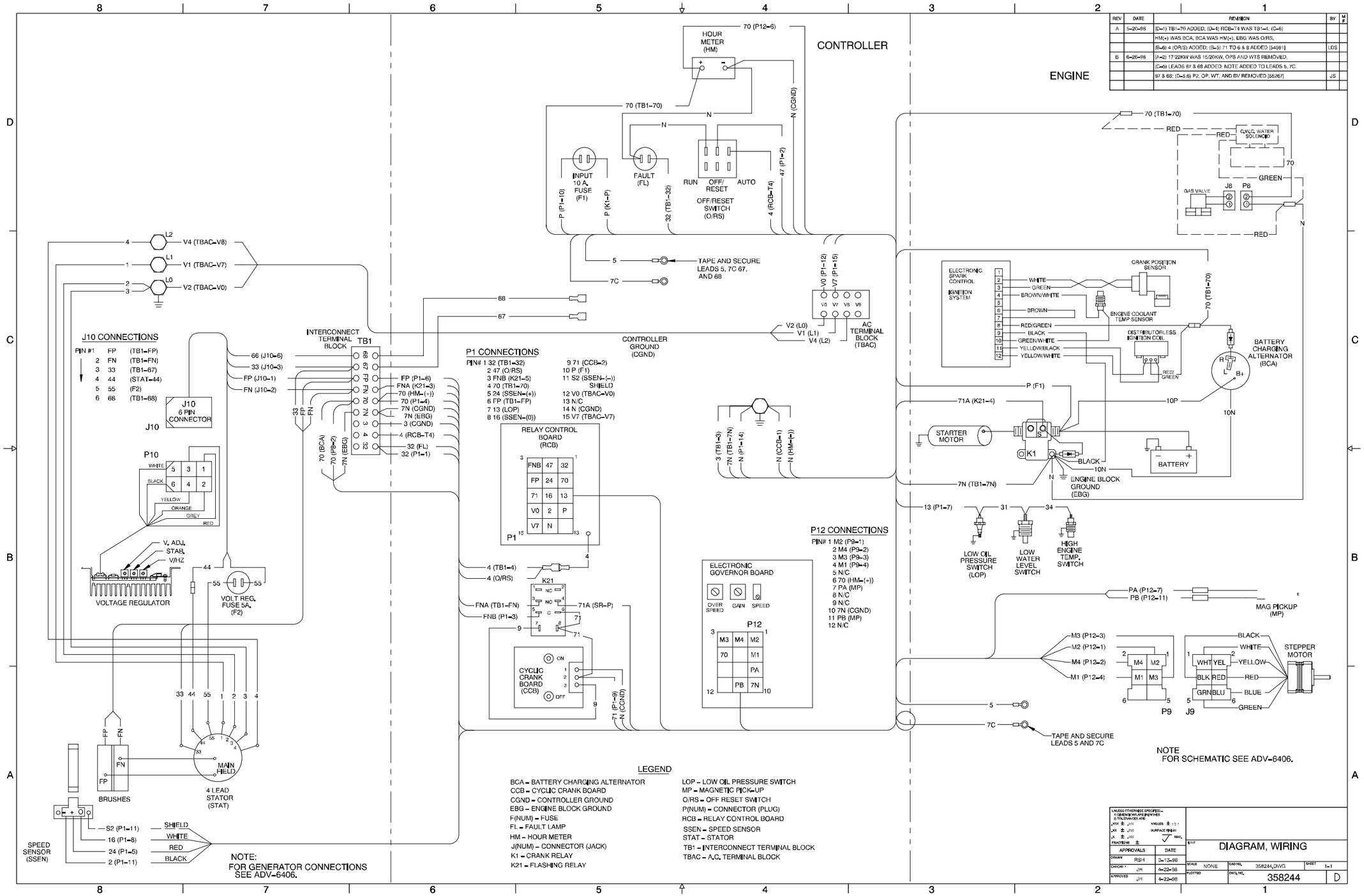
L.P. GAS LIQUID WITHDRAWAL

APPROVALS		DATE
DRAWN	MRS	1-27-98
CHECKED	JJC	2-2-98
APPROVED	WA	2-2-98

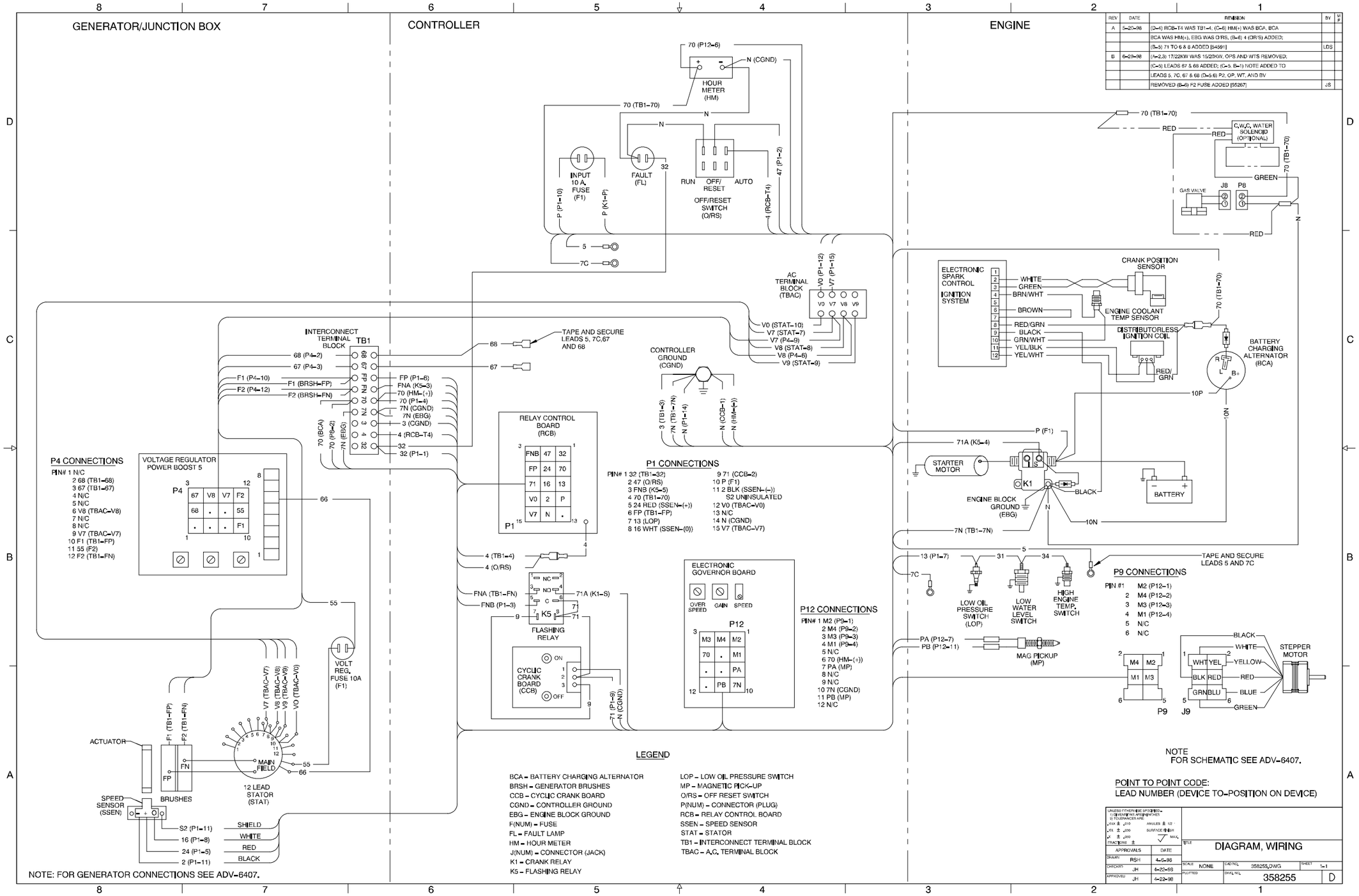
TITLE DIAGRAM, WIRING

SCALE 1/1 | CAD FILE 326871B.DWG | SHEET 2-2 | PLOTTED | DWG. NO. 326871 | D

Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, Sheet 2, 326871B-



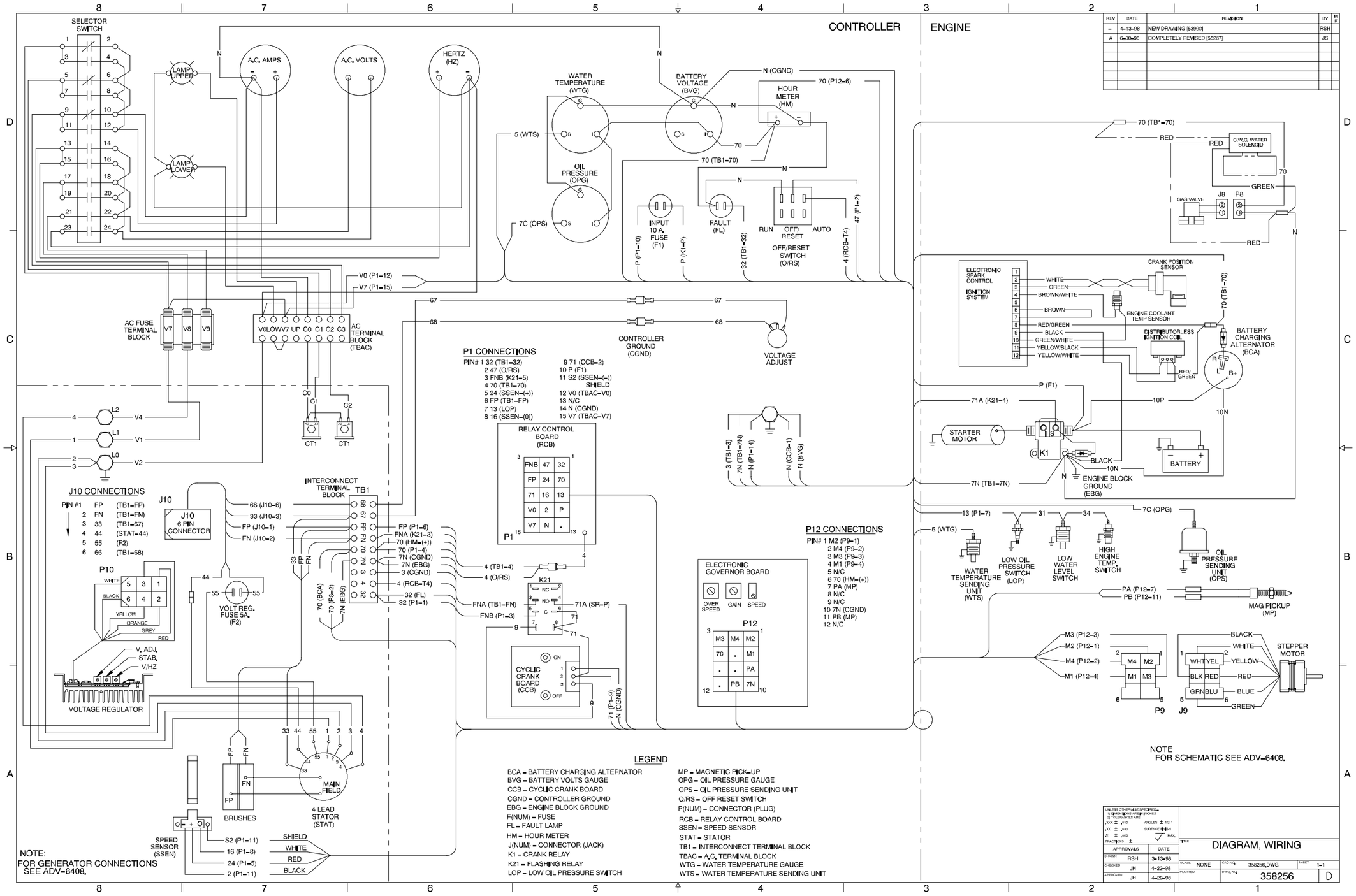
Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 4-Lead, 358244-B



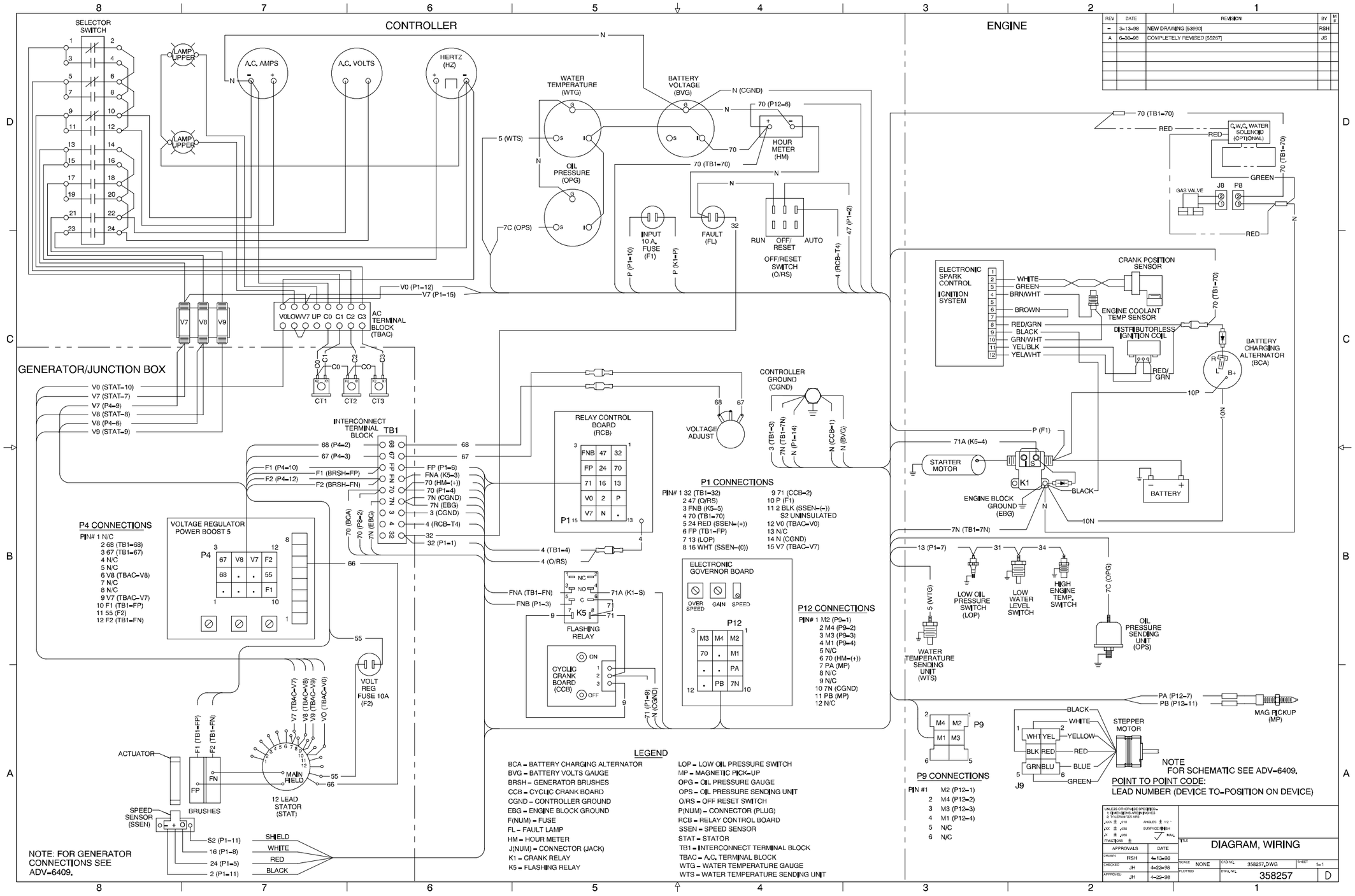
REV.	DATE	REVISION	BY	M F
A	5–20–98	(D–4) RCB–T4 WAS TB1–4, (C–6) HM(+) WAS BCA, BCA		
		BCA WAS HM(+), EBG WAS O/RS, (B–6) 4 (OR'S) ADDED;		
		(B–5) 71 TO 6 & 8 ADDED [54591]	LDS	
B	6–29–98	(A–2,3) 17/22KW WAS 15/20KW, OPS AND WTS REMOVED;		
		(C–5) LEADS 67 & 68 ADDED; (C–5, B–1) NOTE ADDED TO		
		LEADS 5, 7C, 67 & 68 (D–5,6) P2, OP, WT, AND BV		
		REMOVED (B–6) F2 FUSE ADDED [55267]	JS	

APPROVALS	DATE	TITLE	DIAGRAM, WIRING
DRAWN RSH	4–6–98		
CHECKED JH	4–20–98	SCALE NONE	CAD NO. 358255.DWG
APPROVED JH	4–22–98	PLOTTED	DWG. NO. 358255 D

Decision-Maker™ 1 Controller, Point-to-Point Wiring Diagram, 12-Lead, 358255-B



Decision-Maker™ 1 Expanded Controller, Point-to-Point Wiring Diagram, 4-Lead, 358256-A



Decision-Maker™ 1 Expanded Controller, Point-to-Point Wiring Diagram, 12-Lead, 358257-A

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TP-5716 6/01b

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