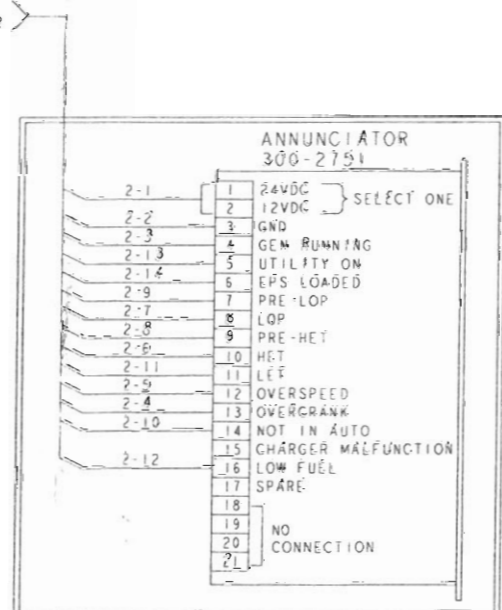
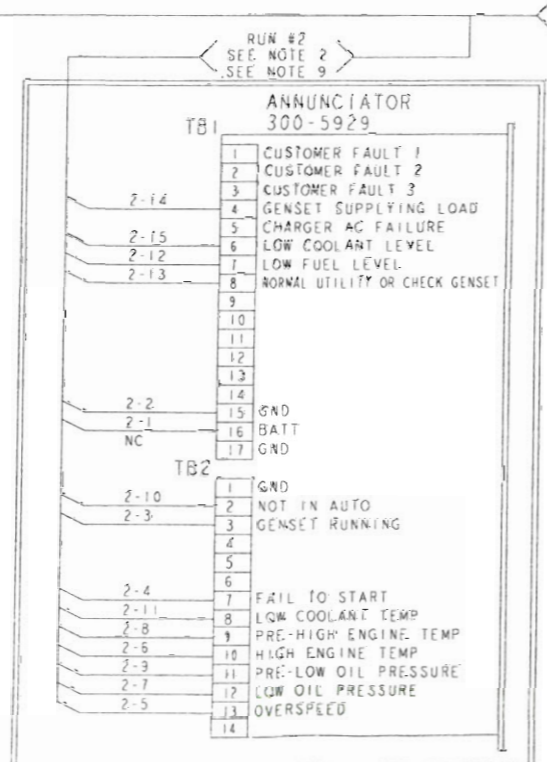
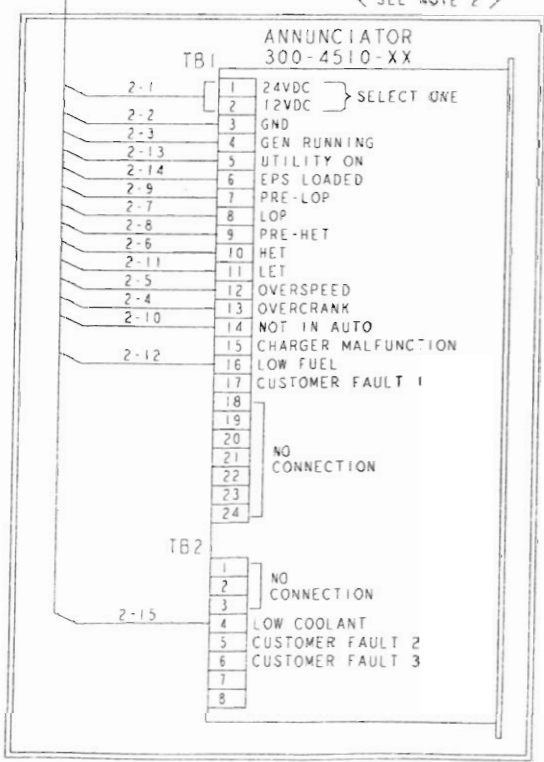
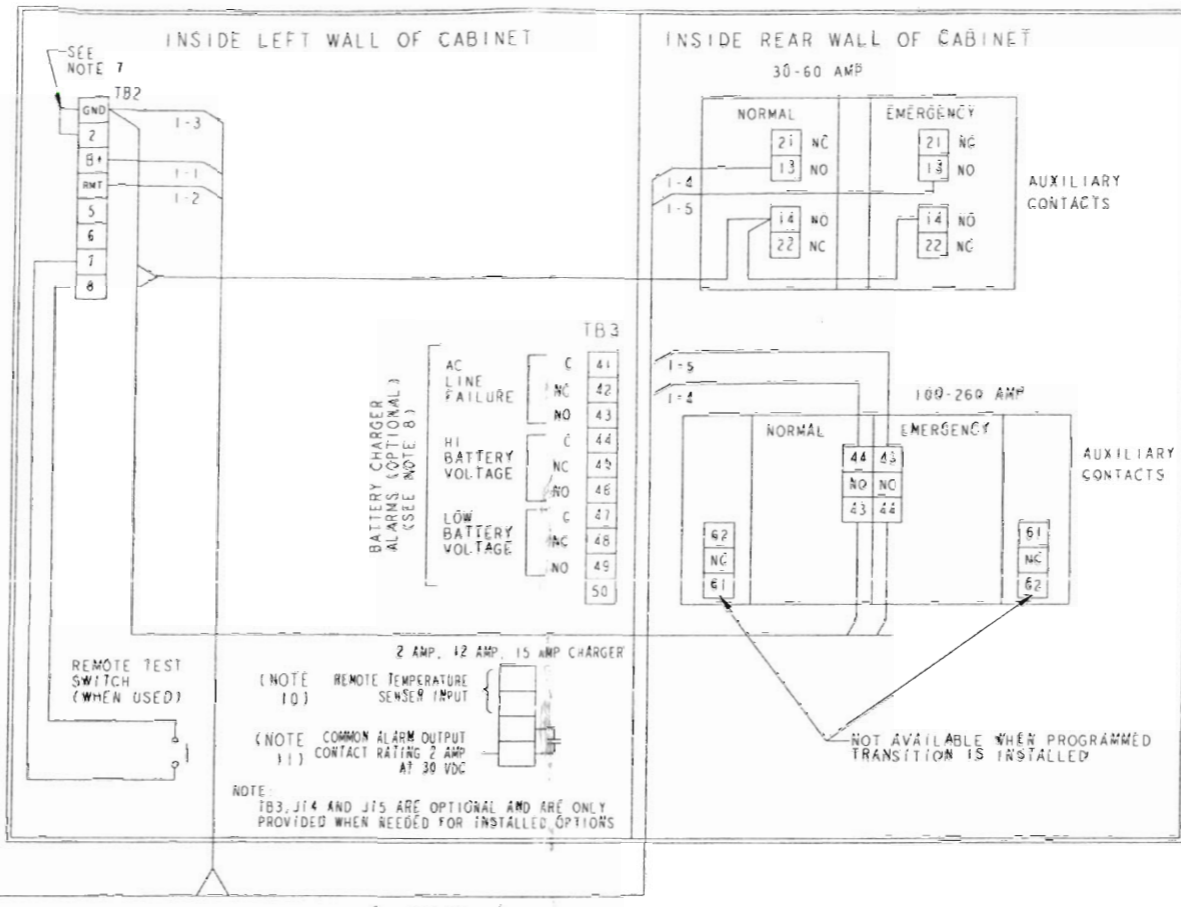
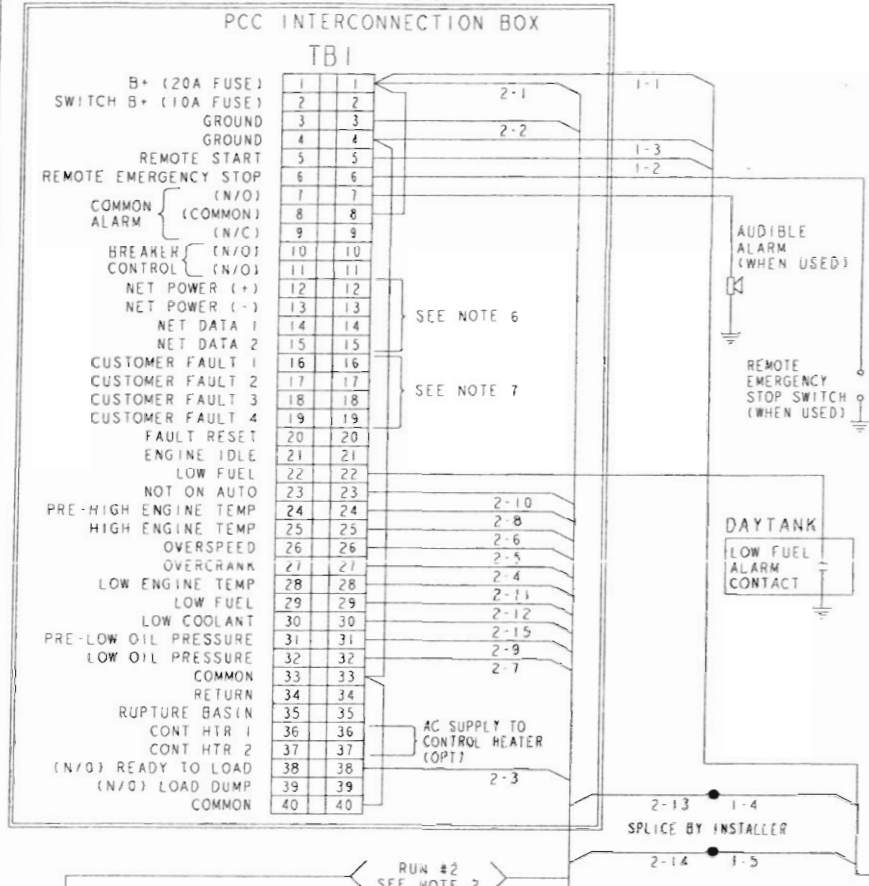


ONAN/CUMMINS GENERATOR SET WITH PCC CONTROL

LC SPEC A CHANGEOVER CONTACTOR WITH 2 WIRE START LT SPEC J TRANSFER SWITCH WITH 2 WIRE START

REV NO	LTN	NO	REVISION	ZONE	CHKD	APPROVED	DATE
FRD22293	C	1	REVISED & REDRAWN IN PRO.E		LJK	JEM	12-03-04
		2	SEE SHEET 2		LJK	JEM	12-03-04
		3	SEE SHEET 3		LJK	JEM	12-03-04
		4	SEE SHEET 4		LJK	JEM	12-03-04
		5	SEE SHEET 5		LJK	JEM	12-03-04



WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)		
	A	B	C
16	1000	50	-
14	1500	80	5
12	2400	125	10
10	4000	200	15
8	-	300	25
6	-	500	40
4	-	800	60
2	-	1250	100

- NOTES**
- WIRE SIZES MUST BE AS FOLLOWS. RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH. WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4, -5 USE COL A. WITH 2 AMP CHARGER-LEADS 1-1 & 1-3, USE COL B. WITH 10, 12, 15 AMP CHARGER-LEADS 1-1 & 1-3, USE COL C. SELECT THE APPROPRIATE DC BATTERY CABLE FOR THE DISTANCE BETWEEN THE BATTERY CHARGER AND THE BATTERY. USE 12 GA OR LARGER WIRE FOR CONNECTION TO TB2-B+. IF THE DISTANCE IS GREATER THAN 10 FEET SPLICE A LARGER GA PER THE TABLE.
 - RUN #2-GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
 - FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISSY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
 - CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
 - REFER TO ONAN 900-0366 POWER COMMAND NETWORK & OPERATION MANUAL. FOR WIRING INSTRUCTIONS.
 - INPUTS FOR CUSTOMER FAULTS, GROUNDED SIGNAL REQUIRED TO ACTIVATE INPUT (MAX 50 MA.)
 - INSTALL JUMPER BETWEEN TB2-1 & TB2-2. FOR SETS WITH PCC CONTROL.
 - BATTERY CHARGER ALARMS ONLY AVAILABLE ON 10 AMP CHARGERS.
 - REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929
 - USE THE INVENTER REMOTE TEMPERATURE PROBE (R193-0530).
 - THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT: LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE, OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2-AMP CHARGER).

ITEM	PART NO	QTY	DESCRIPTION OR MATERIAL	DATE
1	LT, LC	1	CHANGEOVER CONTACTOR	12-03-04
2	J	1	TRANSFER SWITCH	12-03-04

DESIGN NOT SCALE PRINT

APPROVED BY: SWIRING, DATE: 12-03-04

DATE: 12-03-04

SCALE: 1/1

PROJECT: WD-INTERCONNECTION

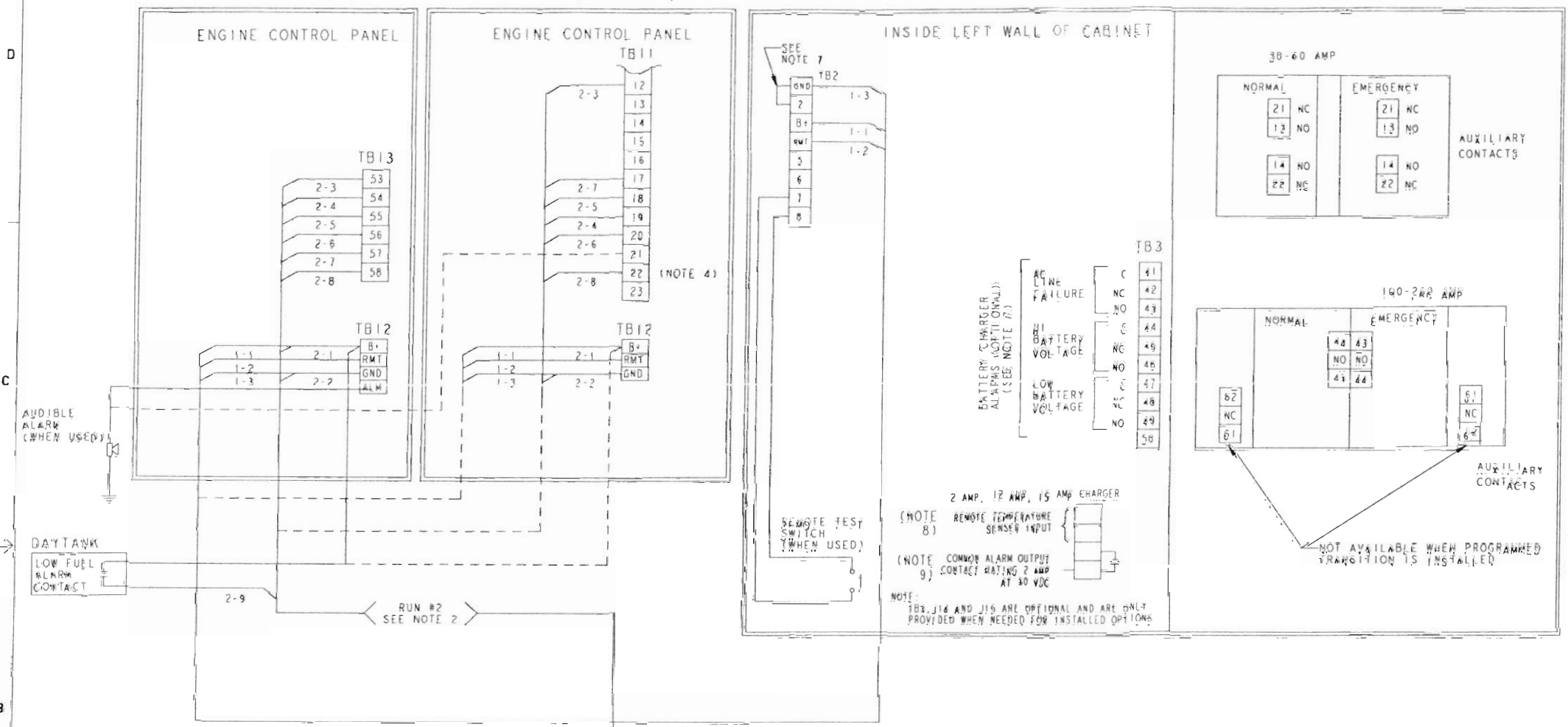
DRAWN TO: LT, LC

SHEET: 1 OF 5

ONAN/CUMMINS ENGINE GENERATOR SET
SERIES ENT SERIES RJC, RDJC, RDJF

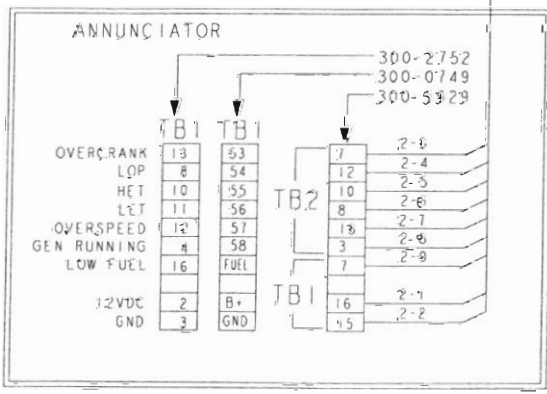
LC SPEC A CHANGOVER CONTACTOR WITH 2 WIRE START
LT SPEC J TRANSFER SWITCH WITH 2 WIRE START

REV NO	DATE	BY	CHKD	APPROVED	DATE
FRD22293	C	4	REVISED & REDRAWN IN PROJE	EJK/JMS	12-03-04



2 AMP, 12 AMP, 15 AMP CHARGER
(NOTE 8) REMOTE TEMPERATURE SENSER INPUT
(NOTE 9) COMMON ALARM OUTPUT CONTACT RATING 2 AMP AT 30 VDC
NOTE: TB3 J14 AND J15 ARE OPTIONAL AND ARE ONLY PROVIDED WHEN NEEDED FOR INSTALLED OPTIONS

- NOTES:
- WIRE SIZES MUST BE AS FOLLOWS:
RUN #1 GENSET TO TRANSFER SWITCH MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH
WITH NO BATT CHARGER-LEADS 1-1, 1-2, 1-3 USE COL. A
WITH 2 AMP CHARGER-LEADS 1-1 & 1-3, USE COL. B
WITH 10, 12, 15 AMP CHARGER-LEADS 1-1 & 1-3, USE COL. C
SELECT THE APPROPRIATE DC BATTERY CABLE FOR THE DISTANCE BETWEEN THE BATTERY CHARGER AND THE BATTERY. USE 12 GA OR LARGER WIRE FOR CONNECTION TO TB2-B1. IF THE DISTANCE IS GREATER THAN 10 FEET SELECT A LARGER GA PER THE TABLE.
 - RUN #2 GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
 - FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISSY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1
 - MAY BE TB13-24 ON SOME UNITS. CHECK DC CONTROL DIAGRAM BEFORE WIRING.
 - INSTALL JUMPER BETWEEN TB2-2 & TB2-3.
 - CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX
 - BATTERY CHARGER ALARMS ONLY AVAILABLE ON 10 AMP CHARGER.
 - USE THE INVENTOR REMOTE TEMPERATURE PROBE T0193-05301.
 - THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT: LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE, OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER).



WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)		
	A	B	C
4/6	1000	50	-
1/4	1500	89	5
1/2	2400	125	10
1/0	4000	200	15
8	-	300	25
6	-	500	40
4	-	800	60
2	-	1250	100

DO NOT SCALE PRINT

ANG TOL: 1/8

SCALE: 1/1

TOLERANCE UNLESS OTHERWISE SPECIFIED: 1/16 IN (3.175 MM)

DATE: 12-03-04

APPROVED: B. SIMMONS

DATE: 12-03-04

DESCRIPTION OR MATERIAL: WD-INTERCONNECTION

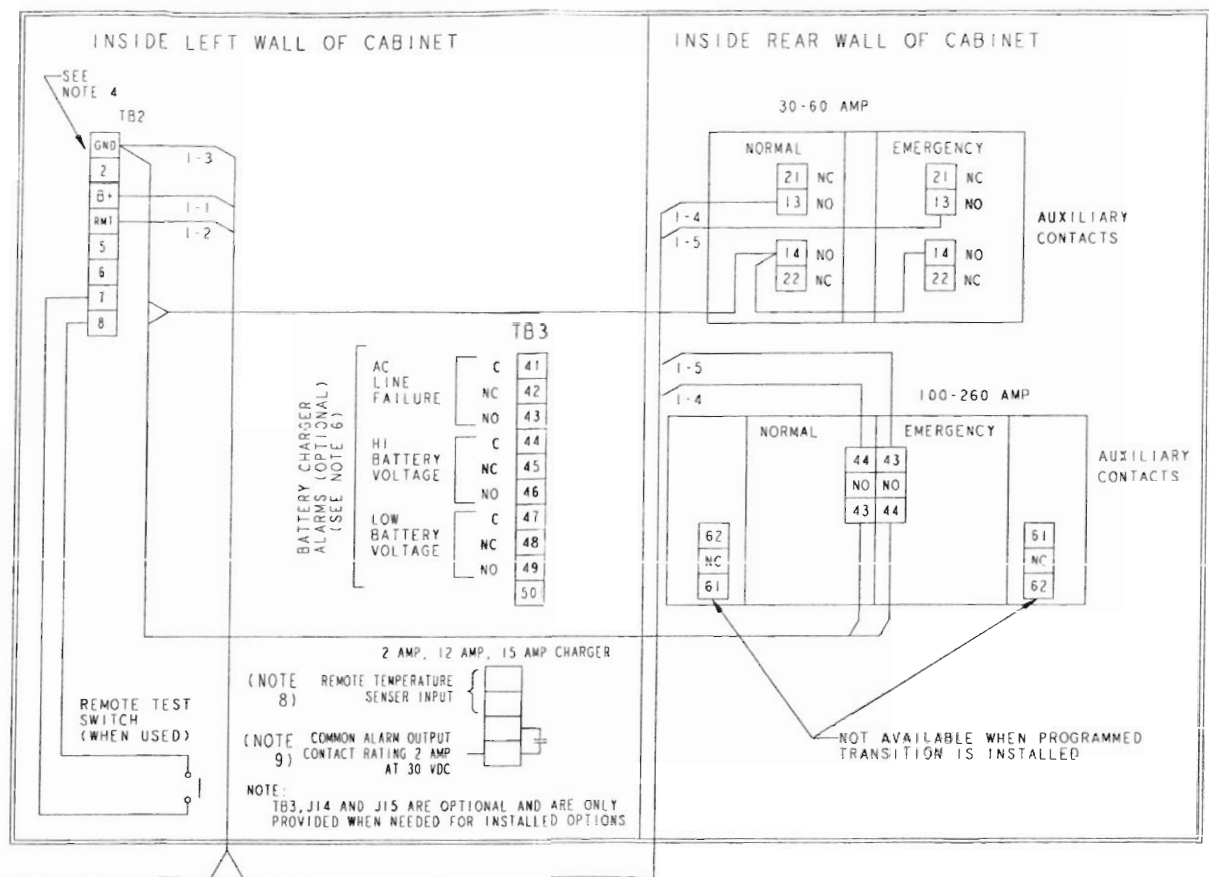
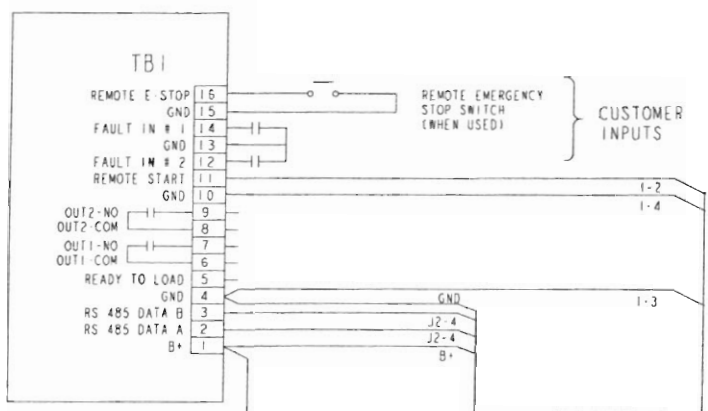
CUMMINS POWER GENERATION

PG 0625_3559

LC SPEC A CHANGEOVER CONTACTOR WITH 2 WIRE START
LT SPEC J TRANSFER SWITCH WITH 2 WIRE START

REL NO	LTN	NO	REVISION	ZONE	DR	CHKR	APPROVER	DATE
FRD22293	C	5	THIS SHEET ADDED		LJK	JTM	SIMMING	12-03-04

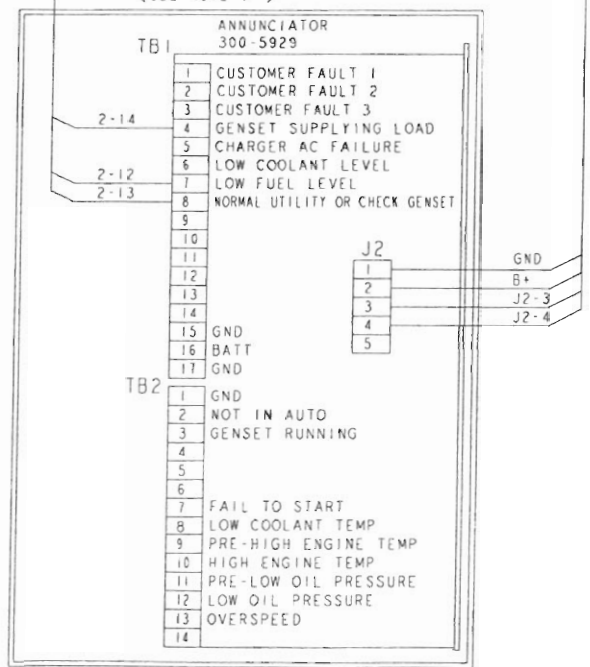
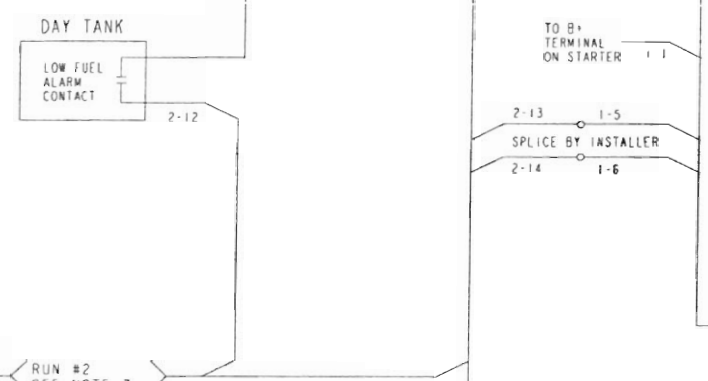
ONAN/CUMMINS GENERATOR SET
WITH PCC1301 CONTROL



WIRE SIZE (AWG)	DISTANCE IN FEET, ONE WAY (MULTIPLY BY 0.3 FOR METERS)		
	A	B	C
16	1000	50	-
14	1600	80	5
12	2400	125	10
10	4000	200	15
8	-	300	25
6	-	500	40
4	-	800	60
2	-	1250	100

NOTES.

- WIRE SIZES MUST BE AS FOLLOWS:
RUN #1-GENSET TO TRANSFER SWITCH-LEAD SIZE MUST BE INCREASED IF A BATTERY CHARGER IS INSTALLED IN THE SWITCH.
WITH NO BATT CHARGER-LEADS 1-1, -2, -3, -4, -5 USE COL. A
WITH 2 AMP CHARGER-LEADS 1-1 & 1-3, USE COL. B
WITH 10, 12, 15 AMP CHARGER-LEADS 1-1 & 1-3, USE COL. C
- SELECT THE APPROPRIATE DC BATTERY CABLE FOR THE DISTANCE BETWEEN THE BATTERY CHARGER AND THE BATTERY. USE 12 GA OR LARGER WIRE FOR CONNECTION TO TB2-B+. IF THE DISTANCE IS GREATER THAN 10 FEET SPLICE A LARGER GA PER THE TABLE.
- RUN #2-GENSET TO ANNUNCIATOR-ALL LEADS, USE COL. A
- FOR MULTIPLE TRANSFER SWITCHES, DUPLICATE RUN #1 FOR EACH SWITCH. DAISY CHAIN CONNECTION IS ACCEPTABLE PROVIDED WIRE SIZE & DISTANCE TO THE LAST SWITCH MEET THE SPECS IN NOTE 1.
- DO NOT INSTALL JUMPER BETWEEN TB2-2 & TB2-3 OR BETWEEN TB2 & TB2-1.
- CONTACTS RATED: 4 AMPS AT 30 VDC OR 120V MAX.
- BATTERY CHARGER ALARMS ONLY AVAILABLE ON 10 AMP CHARGERS.
- REFER TO 0900-0301 FOR INSTALLATION OF 0300-5929.
- USE THE INVENTER REMOTE TEMPERATURE PROBE (0193-0530).
- THE FOLLOWING FAILS WILL CAUSE A BATTERY CHARGER ALARM OUTPUT: LOW BATTERY VOLTAGE, HIGH BATTERY VOLTAGE, LOW AC INPUT VOLTAGE, HIGH AC INPUT VOLTAGE OVERCURRENT, HIGH CHARGER TEMPERATURE, BATTERY FAILURE, HIGH BATTERY TEMPERATURE (NOT AVAILABLE ON 2 AMP CHARGER)
- NETWORK CONNECTIONS: 18 GA TWISTED PAIR OR CAT 5 CABLE. TOTAL NETWORK LENGTH CANNOT EXCEED 4000 FEET UP TO 20 NODES CAN BE CONNECTED TO THE NETWORK. (NOTE: ANY COMMUNICATIONS WIRE CONNECTED TO THE GENSET SHOULD BE STRANDED CABLE.)



DO NOT SCALE PRINT		TOLERANCE UNLESS OTHERWISE SPECIFIED		QTY	ITEM	PART NO	DESCRIPTION OR MATERIAL	DATE
±0.015	±0.005	±0.005	±0.005					
±0.030	±0.010	±0.010	±0.010					
±0.060	±0.020	±0.020	±0.020					
±0.120	±0.040	±0.040	±0.040					
±0.240	±0.080	±0.080	±0.080					

DATE	BY	CHKD	APPROVED	DATE
12-03-04	LKAPLAN			
12-03-04	J. MILLER			
12-03-04	B. SIMMING			

CUMMINS POWER GENERATION 4400 73RD AVE NE MINNEAPOLIS, MINNESOTA 55432	TITLE WD-INTERCONNECTION	SHEET 5 OF 5
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