MAINTENANCE MANUAL
FOR
DELTA/RANGR STATIONS
BATTERY STANDBY OPTION (BU1B)
19D438326G1-3

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DESCRIPTION

The Battery Standby option is used in Delta and Rangr station applications, to permit continued station operation in the event of an AC power failure. The option provides internal switching in the station to a customer-supplied 13. 8 volt battery source.

The Battery Standby option consists of a circuit board mounted on the station chassis, and an interconnect harness.

NOTE

The station battery standby option does not charge the 9-Volt Memory Backup battery.

CIRCUIT ANALYSIS

When the station is powered by an AC source, relay K1 on the Battery Standby board is energized and 13.8 VDC is supplied to the radio from the power supply in the station. This DC voltage is also supplied to the system board.

If AC power fails, relay K1 is de-energized and the battery voltage is switched through the relay to the radio.

When the AC power is restored, the relay is once again energized and the radio is powered from the station power supply.

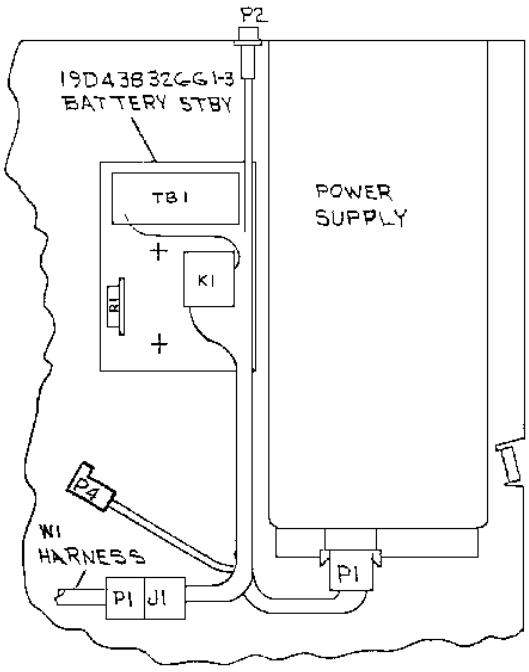

Figure 1 - Battery Standby Board

INSTALLATION PROCEDURE

DESK TOP STATIONS

To install the Battery Standby option in desk top stations:

1. Mount the option circuit board to the station chassis adjacent to the station power supply (Refer to Figure 1).
2. Modify the system board as follows:
   A. Cut the printed wire run from J3-3 to R97 (refer to Figure 1).
   B. Solder a wire from R97 to J4-1.
3. Connect P1 on the Battery Standby harness to the station power supply.
4. Connect P1 from the radio to J1 on the Battery Standby harness.
5. Mount P2 on the Battery Standby harness on the back of the station chassis. The standby battery is connected to P2-1 (+) and P2-2 (-).
6. Connect P4 on the Battery Standby harness to J4 on the system board.

WALL MOUNT STATIONS

To install the Battery Standby option in wall mount stations:

1. Mount the option circuit board to the station chassis adjacent to the station power supply (refer to Figure 1).
2. Connect P1 on the Battery Standby harness to the station power supply.
3. Connect P1 from the radio to J1 on the Battery Standby harness.
4. Mount P2 on the Battery Standby harness on the back of the station chassis. The standby battery is connected to P2-1 (+) and P2-2 (-).
5. P4 on the Battery Standby harness is not used in wall mount installations; tie it back along the harness.

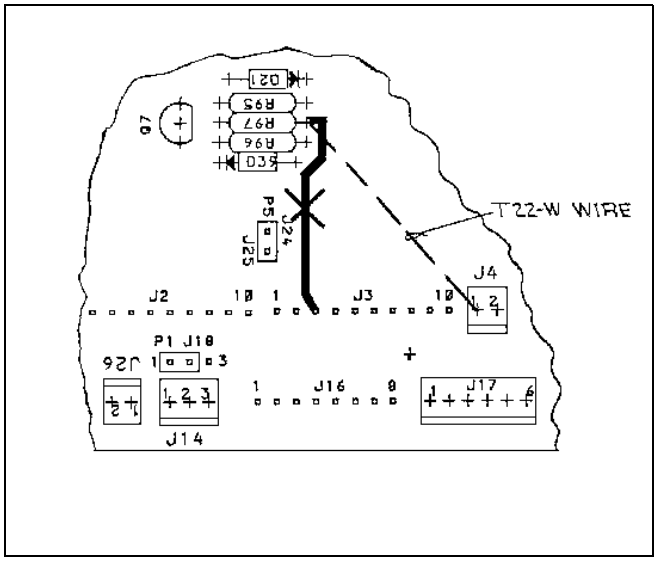

Figure 2 - System Board Modification

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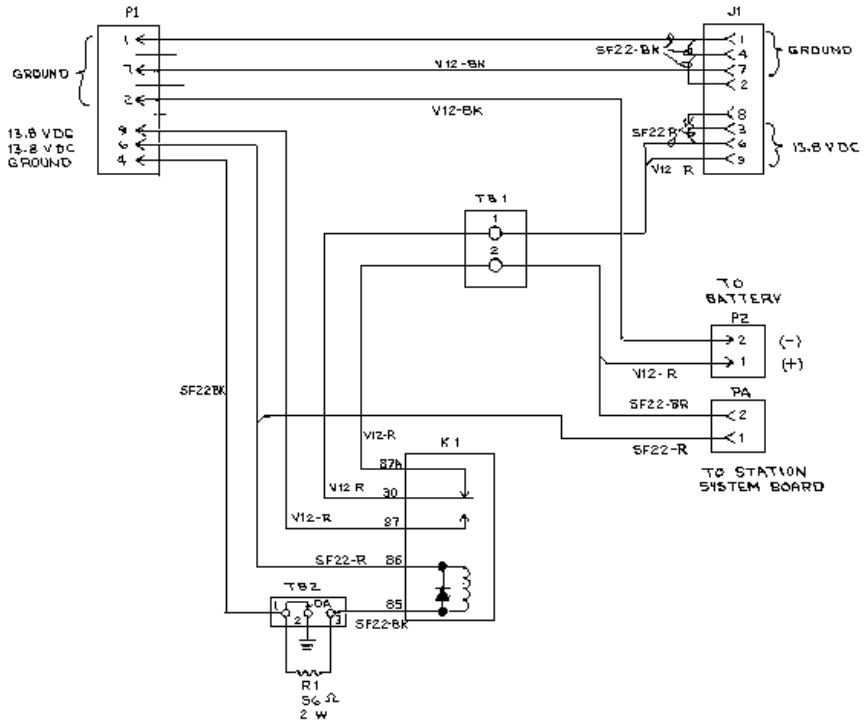

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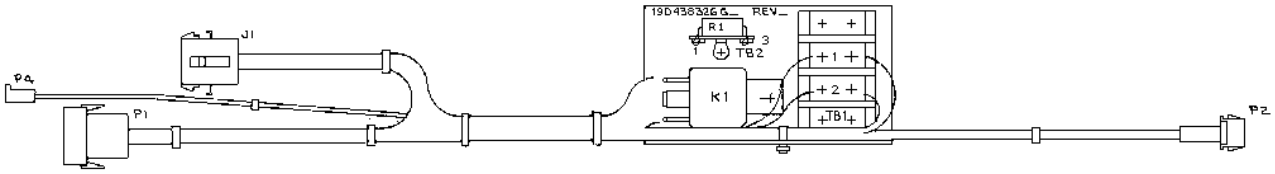
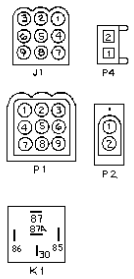


WIRE CONNECTION CHART				
FROM	TERMINATE WITH ITEM	TO	TERMINATE WITH ITEM	WIRE
*J1-1	5	*J1-4	5	SF22-BK
*J1-1	5	P1-1	7	SF22-BK
J1-7	4	P1-7	6	V12-BK
*J1-3	5	*J1-6	5	SF22-R
*J1-6	5	*TB1-1	12	SF22-R
J1-9	4	*TB1-1	11	V12-R
P1-2	6	P2-2	6	V12-BK
P1-4	7	TB2-1	---	SF22-BK
P1-6	7	*K1-86	8	SF22-R
P1-9	6	K1-87	9	V12-R
K1-85	8	*TB2-3	---	SF22-BK
K1-87A	9	*TB1-2	11	V12-R
K1-30	9	TB1-1	11	V12-R
*TB2-1	---	*TB2-2	---	DA
P4-1	10	*K1-86	8	SF22-R
P4-2	10	*TB1-2	12	SF22-BR
P2-1	6	*TB1-2	11	V12-R
*J1-4	5	J1-2	5	SF22-BK
*J1-3	5	J1-8	5	SF22-R

* MORE THAN ONE CONNECTION AT THIS LOCATION

PIN IDENTIFICATION FOR J1, P1, P2, P4, AND K1 IS SHOWN FROM WIRING SIDE.



(19D438326, Sh. 1, Rev. 4)

BATTERY STANDBY OPTION
19D438326G1-3

PARTS LIST

BATTERY STANDBY RELAY ASSEMBLY
19D438326G1,3
ISSUE 2

SYMBOL	GE PART NO.	DESCRIPTION
		- - - - - - - - - - - JACKS - - - - - - - - - - -
J1	19A134281P4	Connector: 9 contacts, sim to CAT 1-480672-0. (Used in G1).
		- - - - - - - - - - - RELAYS - - - - - - - - - - -
K1	19A149299P1	Relay.
		- - - - - - - - - - - PLUGS - - - - - - - - - - -
P1	19A134281P3	Connector: 9 contacts, sim to CAT 1-480673-0. (Used in G1).
P2	19A134281P2	Shell. (Used in G1).
P4	19A700041P28	Shell. (Used in G1).
		- - - - - - - - - - RESISTORS - - - - - - - - -
R1	19A700111P33	Composition: 56 ohms + or - 5%, 2 w.
		- - - - - - - - - TERMINAL BOARDS - - - - - -
TB1	19C301087P46	Two terminals rated 30 amp at 25 VRMS; sim to GE CR151D35102AS.
TB2	7775500P7	Phenolic: 2 insulated, 1 ground terminal.
		- - - - - - - - - MISCELLANEOUS - - - - - - - - -
	19A149294G1	Support Assembly. (Used in G1).
	19A149294G2	Support Assembly. (Used in G3).
	19A134282P2	Contact. (Used in G1).
	19A134282P7	Contact, electrical: sim to AMP 350308-1. (Used in G1).
	19A134282P4	Contact. (Used in G1).
	19A134282P5	Contact, electrical: sim to AMP 61627-2. (Used in G1).
	4029484P1	Terminal, quick disconnect: sim to AMP 41772. (Used in G1).
	4029484P3	Terminal, quick disconnect: sim to AMP 41450. (Used in G1).
	19A700041P26	Contact: sim to Molex 08-50-0113. (Used in G1)
	19B209260P7	Solderless terminal. (Used in G1).
	19B209260P17	Solderless terminal. (Used in G1).
	19J706152P5	Retainer strap: sim to Panduit Corp. SST-1.
	19D438326G2	Harness.
	M80P15010B6	Machine screw: No. 8-32 x .625.
	M403P16B6	Lockwasher, internal tooth: No. 8.
	M80P15006B6	Machine screw, panhead: No. 8-32 x 3/8.
	M80P13004B6	Machine screw: No. 6-32 x 1/4.
	M80P15004B6	Machine screw: No. 8-32 x .250.
	M404P13B6	Lockwasher, internal tooth: No. 6.
	M80P13005B6	Machine screw, panhead: No. 6-32 x 5/16. (Used in G3).
	7141225P3	Hex Nut: No. 6-32. (Used in G3).
	M404P13B6	Lockwasher, internal tooth: No. 6. (Used in G3).

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES