



INSTRUCTIONS

FOR

Porta•Mobile II™

HAILER KIT 19A130963G1 & G2

(OPTIONS 2109 & 2110)

LB130425A
(DF-8413)

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DESCRIPTION

Hailer Kit 19A130963G1 & G2 allows the Porta•Mobile II™ to be used as a Public Address system with either an internal or external speaker. Hailer Kit 19A130963G1 is for internal speaker operation and Hailer Kit 19A130963G2 is for external speaker operation.

The Hailer Kit consists of a switch mounted on the Porta•Mobil II control panel labeled HAILER and an audio preamplifier board mounted on the system board.

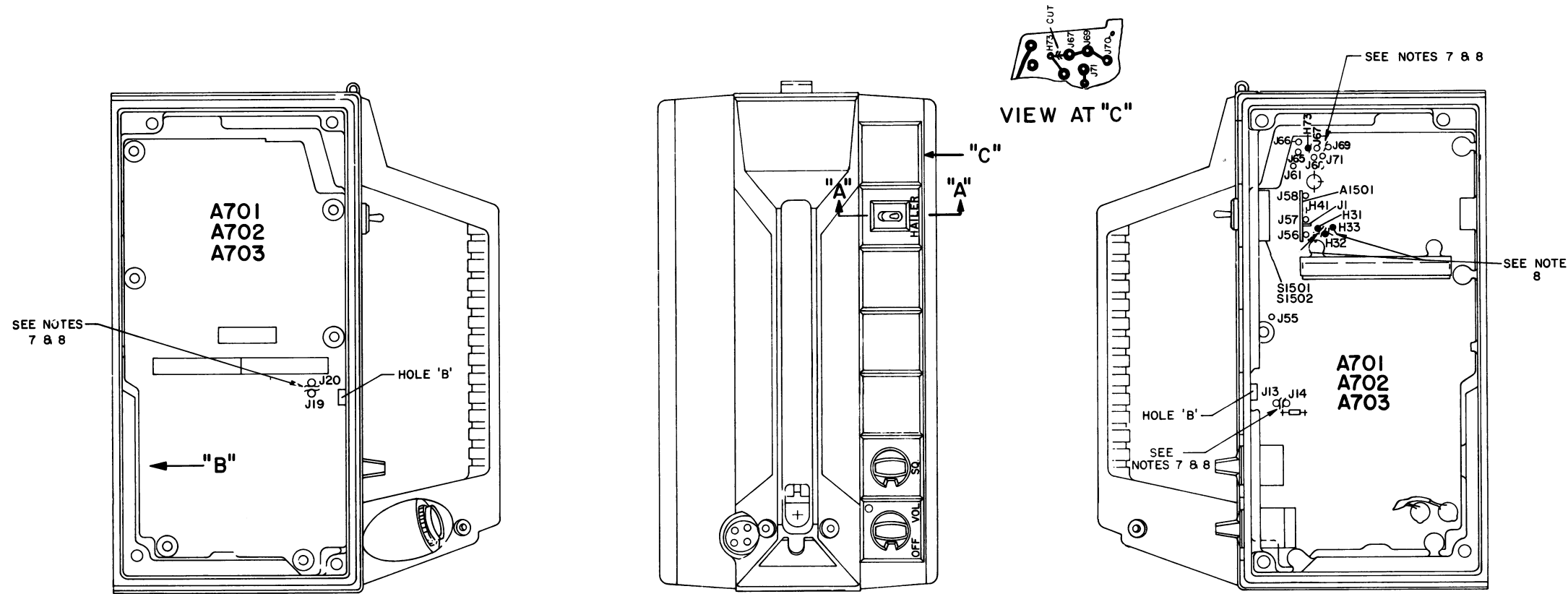
With the switch in the HAILER position the transmitter will not key. With the PTT switch pressed the receiver will not receive and the output of the power amplifier is controlled by the volume control.

Installation and Interconnection diagrams contain the necessary information to install a Hailer Kit (See Table of Contents).

CIRCUIT ANALYSIS

When switch S1501 is in the HAILER position switch contacts 8 and 9 are opened and contacts 8 and 7 are closed switching MIC HI from the transmitter input to the input of preamplifier board 19B226808G1 at P1. Switch contacts 2 and 3 are opened and contacts 1 and 2 are closed switching REC AUDIO HI from the input to the audio power amplifier through the volume control and switching AUDIO OUT of the preamplifier through the Volume Control to the input of the audio power amplifier. Switch contacts 5 and 6 are opened removing the PTT switch from the transmitter keying circuit and contacts 4 and 5 are closed disabling the tone decoder.

If the Hailer Kit is a 19A130963G2 switch contacts 11 and 12 are opened removing the internal speaker and switch contacts 10 and 11 are closed connecting an external speaker.



THESE INSTRUCTIONS COVER THE INSTALLATION OF
OPTION PL19A130963G1, G2 HAILER

PL19A130963G1

CONNECTIONS CHART		
FROM	TO	WIRE COLOR
S1501-P1	A1501-J1	T28-W-GA
S1501-P2	A701, A702, A703-J14	T28-W-V
S1501-P3	A701, A702, A703-J13	T28-W-B
S1501-P4	A701, A702, A703-J61	T28-W-G
S1501-P5	A701, A702, A703-J68	T28-W-Y
S1501-P6	A701, A702, A703-J67	T28-W-O
S1501-7	A701, A702, A703-H41	T28-W-BR
S1501-P8	A701, A702, A703-J19	T28-BL
S1501-P9	A701, A702, A703-J20	T28-W

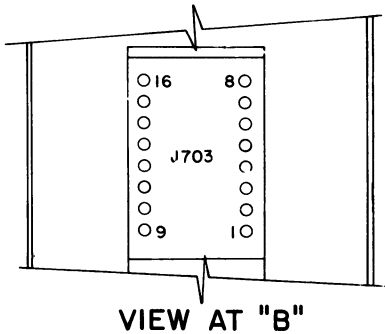
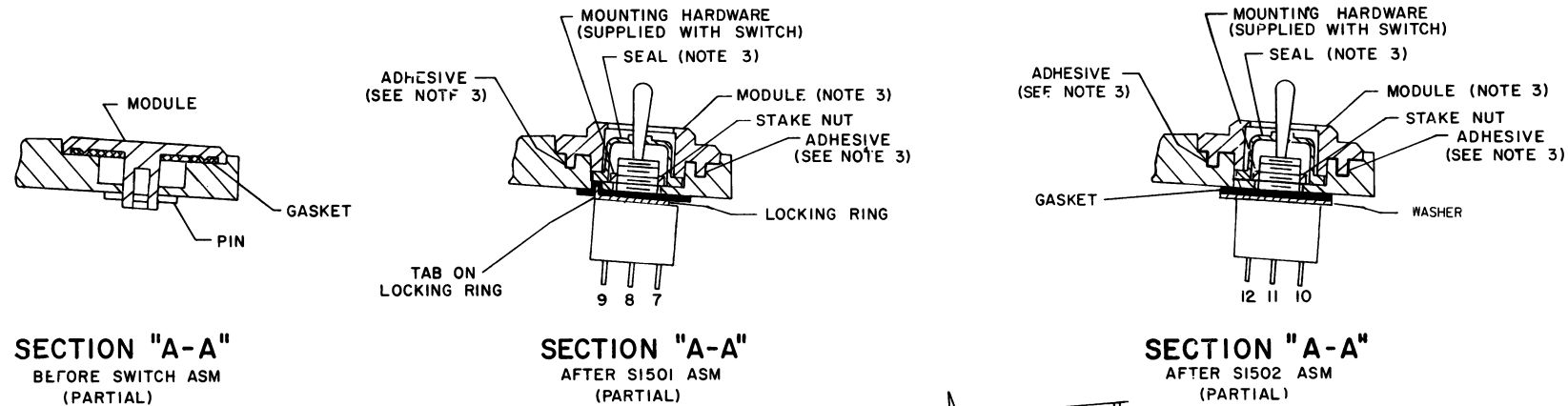
** ROUTE THRU HOLE 'B'.

PL19A130963G2

CONNECTION CHART		
FROM	TO	WIRE COLOR
S1502-P1	A1501-J1	T28-W-GA
S1502-P2	A701, A702, A703-J14	T28-W-V
S1502-P3	A701, A702, A703-J13	T28-W-B
S1502-P4	A701, A702, A703-J61	T28-W-G
S1502-P5	A701, A702, A703-J68	T28-W-Y
S1502-P6	A701, A702, A703-J67	T28-W-O
S1502-7	A701, A702, A703-H41	T28-W-BR
S1502-P8	A701, A702, A703-J19	T28-BL
S1502-P9	A701, A702, A703-J20	T28-W
S1502-10	A701, A702, A703-H31	T28-W-BK
S1502-11	A701, A702, A703-H33	T28-W
S1502-12	A701, A702, A703-H32	T28-GA
J703-13	A703-H53	T22-O
J703-14	A703-H75	T22-BR

USED ON MOTORCYCLE & MOBILE UNITS ONLY
(SEE NOTE 11)

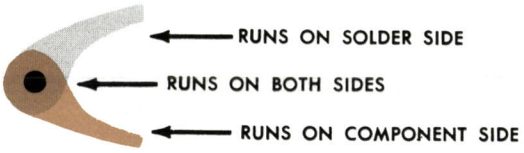
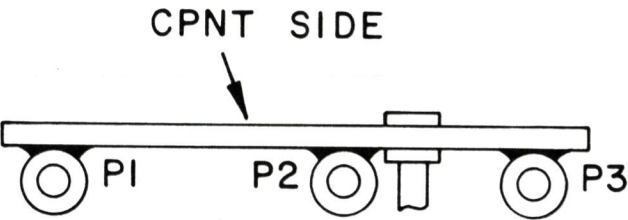
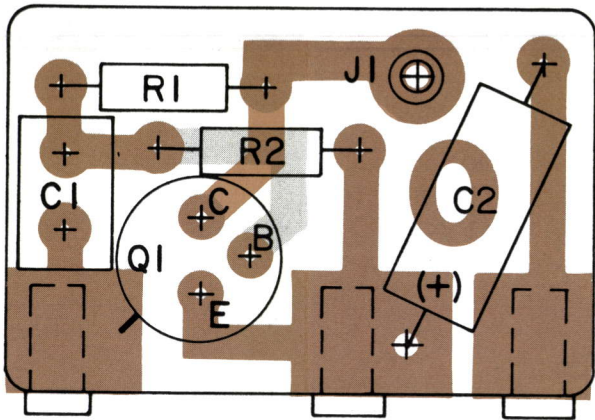
- INSTRUCTIONS:
1. REMOVE FRONT AND BACK COVERS IF PRESENT.
 2. REMOVE PIN, GASKET AND DUMMY MODULE AT POSITION SHOWN AND DISCARD.
 3. ASSEMBLE WASHER & GASKET TO S1501 OR S1502, SEAL AND MODULE PART OF KIT PL19A130963G1 OR G2 IN POSITION SHOWN. FILL KEYING SLOT IN THREADED SWITCH BUSHING WITH RTV PER P15F-EA106P1 OR P2. DISCARD LOCKING RING THAT IS PART OF SWITCH. APPLY ADHESIVE PER CPD PROCESS P15F-EA106P4 TO CAVITIES SHOWN AND ASSEMBLE MODULE TO CASE. OVERFLOW OF ADHESIVE BETWEEN MODULE AND CASE SURFACES IS PERMISSIBLE. CLAMP MODULE DURING CURING CYCLE.
 4. ASSEMBLE HAILER BOARD CALL FOR ON INDEX 19R226760 TO J56, J57 AND J58 AS SHOWN.
 5. MAKE CONNECTIONS PER CHART ABOVE.
 6. SOLDER ALL ELECTRICAL CONNECTIONS.
 7. FOR PL19A130963G1 KIT CUT RUN ON SOLDER SIDE OF SYSTEMS BOARD A701, A702, A703 BETWEEN J13-J14, J67-H73 & J19-J20.
 8. FOR PL19A130963G2 KIT CUT RUN ON SOLDER SIDE OF SYSTEMS BOARD A701, A702, A703 BETWEEN J13-J14, J67-H73, H31-H32, H32-H33 & J19-J20.
 9. ASSEMBLE FRONT AND REAR COVERS IF REQUIRED.
 10. FOR CONTROL WIRE CLAMPING INFORMATION REFER TO DRAWING 19D423115 NOTE 7.
 11. SUPPORT WIRES SOLDERED TO J703 BY STAKING IN PLACE WITH A COATING OF ADHESIVE PER PROCESS P15F-EA106P2.



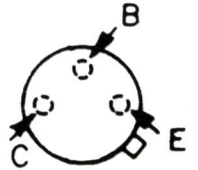
(19D423744, Rev. 10)

INSTALLATION DIAGRAM

HAILER KIT 19A130963G1 & G2



LEAD IDENTIFICATION
FOR Q1



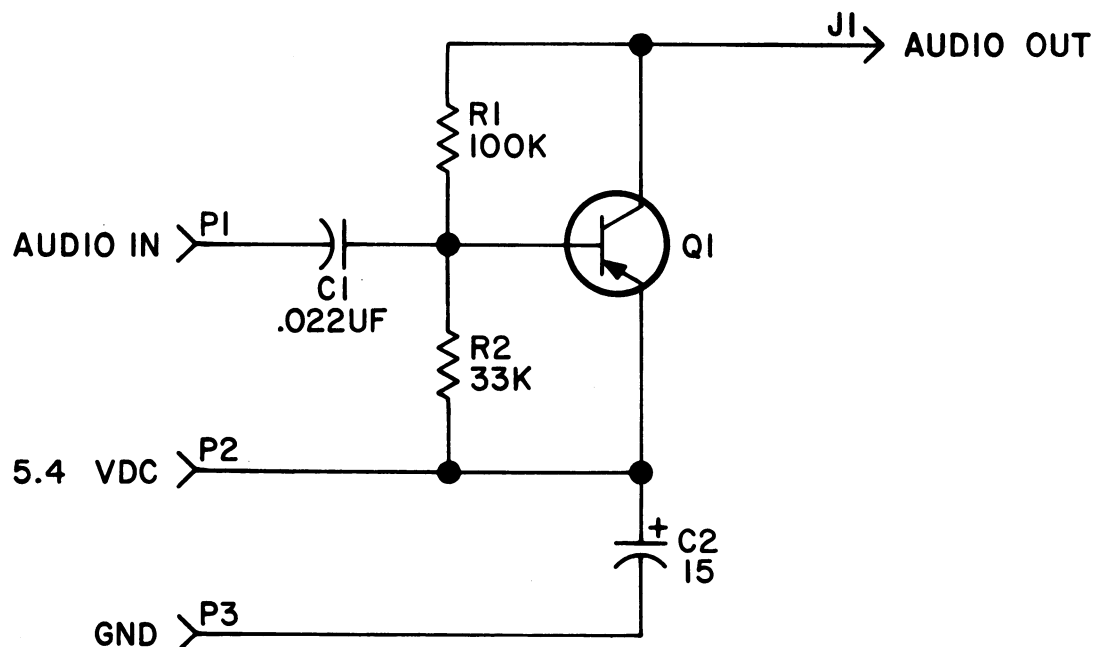
TOP VIEW

NOTE: LEAD ARRANGEMENT, AND NOT
CASE SHAPE, IS DETERMINING
FACTOR FOR LEAD IDENTIFICATION.

(19B232128, Rev. 0)
(19B226781, Sh. 2, Rev. 0)
(19B226781, Sh. 3, Rev. 0)

OUTLINE DIAGRAM

HAILER KIT 19A130963G1 & G2



ALL RESISTORS ARE 1/8 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG = 1,000,000 OHMS. CAPACITOR VALUES IN PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF = MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH = MILLIHENRYS OR H = HENRYS.

IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

(19B227284, Rev. 1)

SCHEMATIC DIAGRAM

HAILER KIT 19A130963G1 & G2

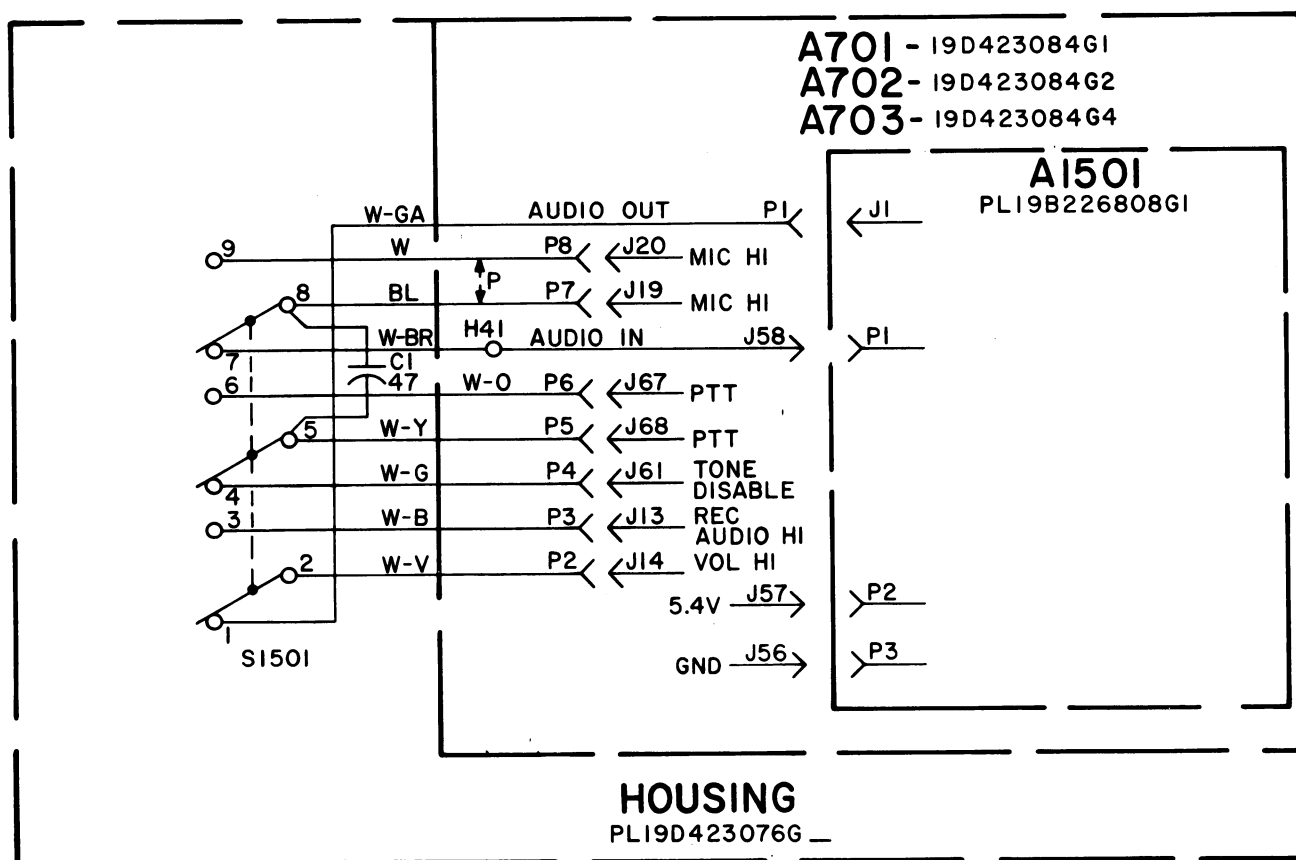
PARTS LIST

LBI-30424

HAILER KIT
 19A130963G1 INT. SPEAKER
 19A130963G2 EXT. SPEAKER

SYMBOL	GE PART NO.	DESCRIPTION
A1501		COMPONENT BOARD 19B226808G1
		----- CAPACITORS -----
C1	19A116244P2	Ceramic: 0.022 μ f \pm 20%, 50 VDCW.
C2	5491674P34	Tantalum: 15 μ f \pm 20%, 6 VDCW; sim to Sprague Type 162D.
		----- JACKS AND RECEPTACLES -----
J1	19A116366P2	Contact, electrical: sim to Cambion 460-3233-01-03.
		----- PLUGS -----
P1 thru P3	19A115834P4	Contact, electrical: sim to AMP 2-332070-9.
		----- TRANSISTORS -----
Q1	19A129187P1	Silicon, PNP.
		----- RESISTORS -----
R1	3R151P104J	Composition: 0.10 megohm \pm 5%, 1/8 w.
R2	3R151P333J	Composition: 33,000 ohms \pm 5%, 1/8 w.
		----- SWITCHES -----
S1501		HAILER-INT. SPEAKER 19B226809G1
		----- CAPACITORS -----
C1	19A116114P6053	Ceramic: 47 pf \pm 5%, 100 VDCW; temp coef -470 PPM.
		----- PLUGS -----
P1 thru P8	19A115834P4	Contact, electrical: sim to AMP 2-332070-9.
		----- SWITCHES -----
	19A116648P9	Toggle: 3PDT; sim to C and K Components 7301SDG.
		----- CABLES -----
	19A116596P1	Cable: 2 conductors No. 28 AWG stranded (7 x 36), teflon insulation.
S1502		HAILER-EXT. SPEAKER 19B226809G2
		----- CAPACITORS -----
C1	19A116114P6053	Ceramic: 47 pf \pm 5%, 100 VDCW; temp coef -470 PPM.
		----- PLUGS -----
P1 thru P8	19A115834P4	contact, electrical: sim to AMP 2-332070-9.
		----- SWITCHES -----
	19A116648P10	Toggle: 4PDT; sim to C and K Components 7401SDG.
		----- CABLES -----
	19A116596P1	Cable: 2 conductors No. 28 AWG stranded (7 x 36), teflon insulation.
		----- MISCELLANEOUS -----
	NP276504P7	Nameplate.
	19B226358G7	Lens.
	19C320975P1	Seal.
	4035306P1	Insulator, fiber. (Q1).

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES.



IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/8 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS.

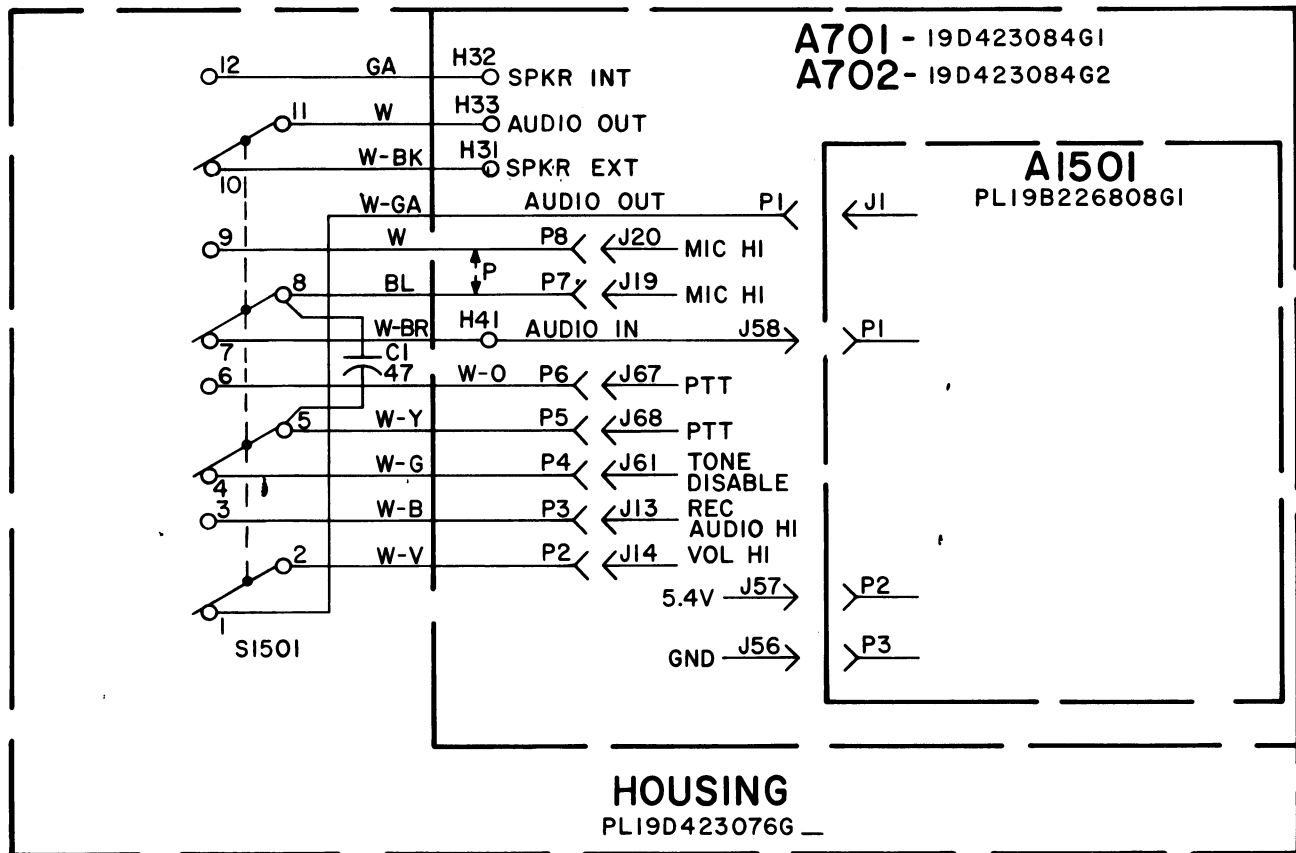
NOTES:

1. ALL WIRE T28.
2. C1 & P1-P8 ARE PART OF SI501.
3. CUT RUNS BETWEEN FOLLOWING POINTS:
 - A - J13 & J14
 - B - J67 & H73
 - C - J19 & J20

(19B226810, Rev. 3)

INTERCONNECTION DIAGRAM

INTERNAL SPEAKER OPERATION



IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/8 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS.

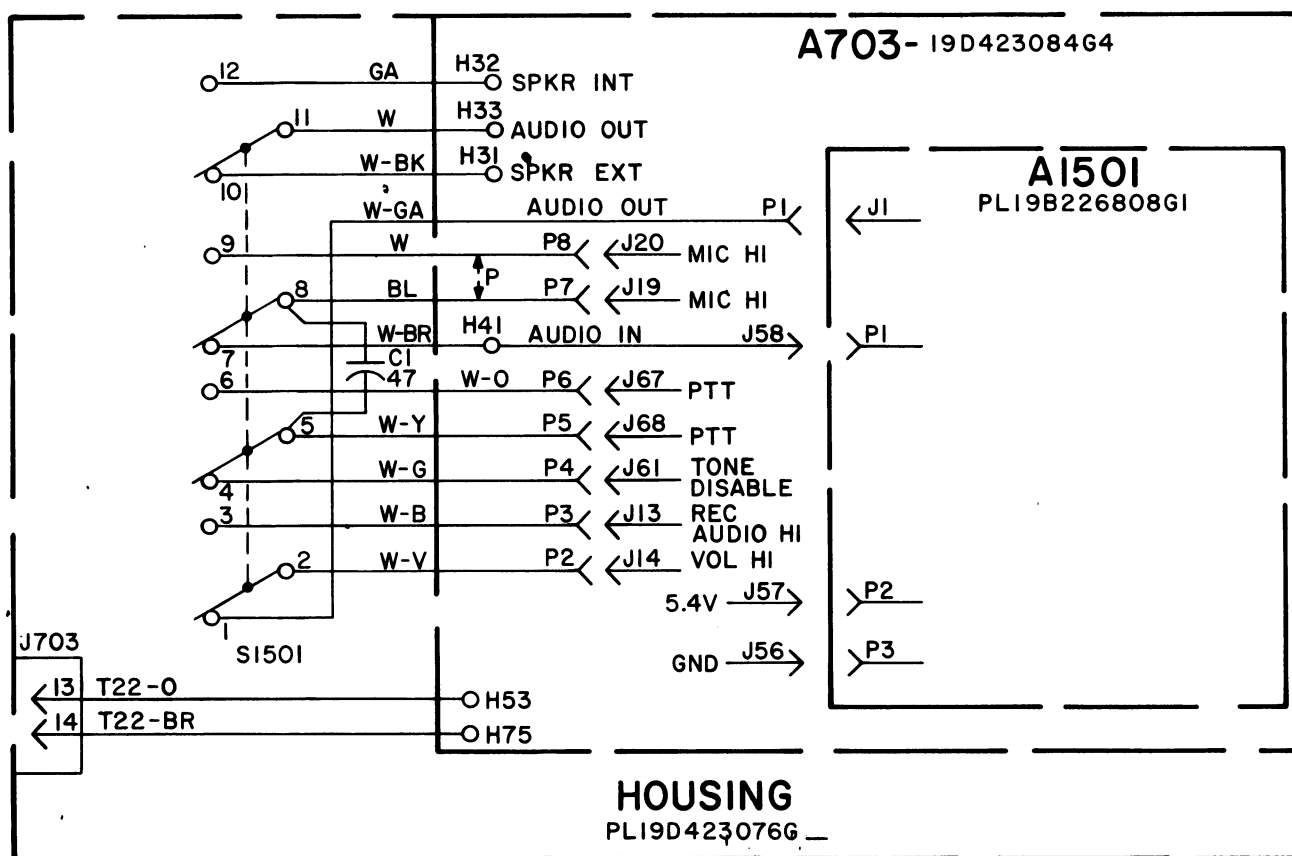
NOTES:

1. ALL WIRE T28.
2. C1 & P1-P8 ARE PART OF S1501.
3. CUT RUNS BETWEEN FOLLOWING POINTS:
 - A - J13 & J14
 - B - J67 & H73
 - C - J19 & J20
 - D - H31 & H32
 - E - H32 & H33

(19B226811, Rev. 3)

INTERCONNECTION DIAGRAM

PORTABLE EXTERNAL SPEAKER OPERATION



IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/8 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG = 1,000,000 OHMS. CAPACITOR VALUES IN PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF = MICROFARADS.

NOTES:

1. ALL WIRE T28.
2. C1 & P1-P8 ARE PART OF S1501.
3. CUT RUNS BETWEEN FOLLOWING POINTS:
 - A - J13 & J14
 - B - J67 & H73
 - C - J19 & J20
 - D - H31 & H32
 - E - H32 & H33

(19B227290, Rev. 2)

INTERCONNECTION DIAGRAM

MOBILE OR MOTORCYCLE EXTERNAL SPEAKER OPERATION