

MODEL 186260

DUAL HOOKSWITCH FLASH PCB

CONTENTS	PAGE
1. INTRODUCTION	1
2. GENERAL DESCRIPTION	1
3. REMOVAL	1
4. DISASSEMBLY	3
5. REPLACEMENT PARTS	3
6. INSTALLATION	3

1.01 This section covers the Model 186260 dual hookswitch flash PCB (Printed Circuit Board). (See Figure 1.) A general description as well as information on removal, disassembly, replacement parts, and installation is included.

1.02 Whenever this section is reissued, reason for reissue will be listed in this paragraph.

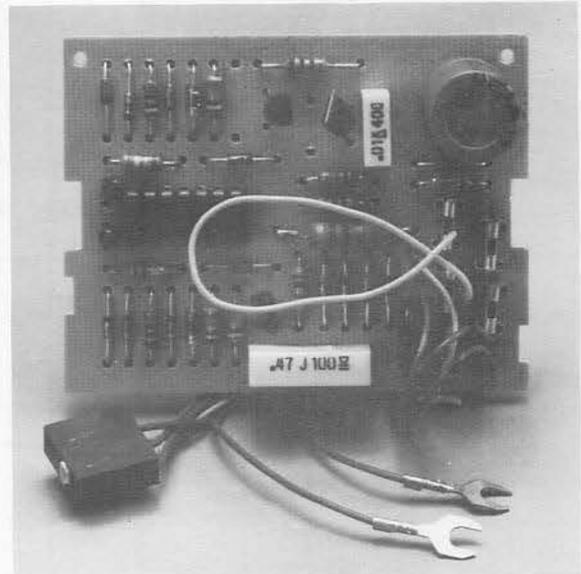
1.03 For information concerning telephones that the dual hookswitch flash PCB is used in, refer to the appropriate section in Volume 1 of the ITT Telephone Apparatus Practices Manual.

2. GENERAL DESCRIPTION

2.01 The Model 186260 PCB is a dual hookswitch flash circuit for use in ITT single-line telephones used with a PBX. The circuit provides a precise time period for hookswitch flash operation and hookswitch line disconnect. (See Figure 2.)

2.02 The dual hookswitch flash circuit is activated by the telephone hookswitch or the FLASH button on the telephone. The circuit provides two separate timed line disconnects.

2.03 A 1.5 to 2.5 second line disconnect is sent via the telephone to the PBX when the station user presses and releases the telephone hookswitch. The PBX line is disconnected.



AW 85-172

Figure 1: Model 186260 Dual Hookswitch Flash PCB

2.04 A 500 to 700 millisecond line disconnect is sent via the telephone to the PBX when the station user presses and releases the FLASH button. The PBX recognizes the line disconnect as a hookswitch flash, used to place a call on hold and to access other PBX features.

2.05 The dual hookswitch flash circuit is a printed circuit assembly. (See Figure 3.) It is designed for field replacement; it is mounted to the telephone base. The PCB is connected to the telephone circuit with spade-tip leads and a double-row slip-on connector block.

2.06 The dual hookswitch flash PCB is identified by a code number etched on the PCB. Refer to ordering information in Table A for an explanation of the code number.

3. REMOVAL

3.01 To remove the dual hookswitch flash PCB from the telephone, proceed as follows:

- (a) Remove the telephone faceplate.

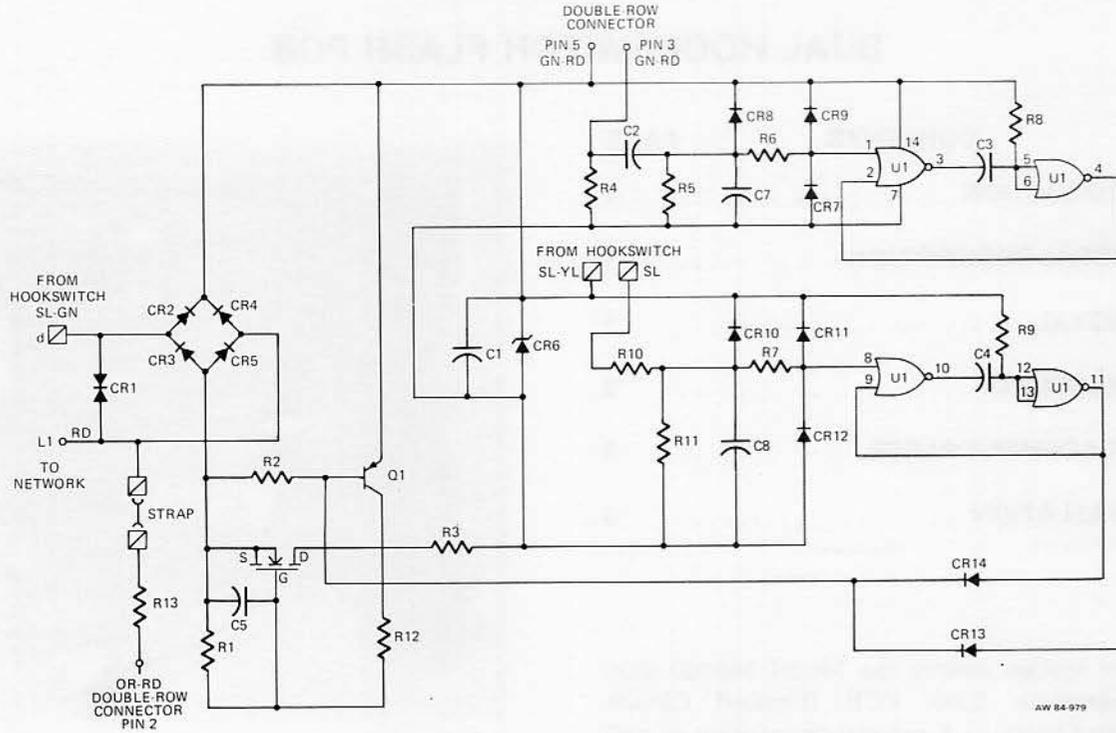


Figure 2: Model 186260 Dual Hookswitch Flash PCB, Schematic

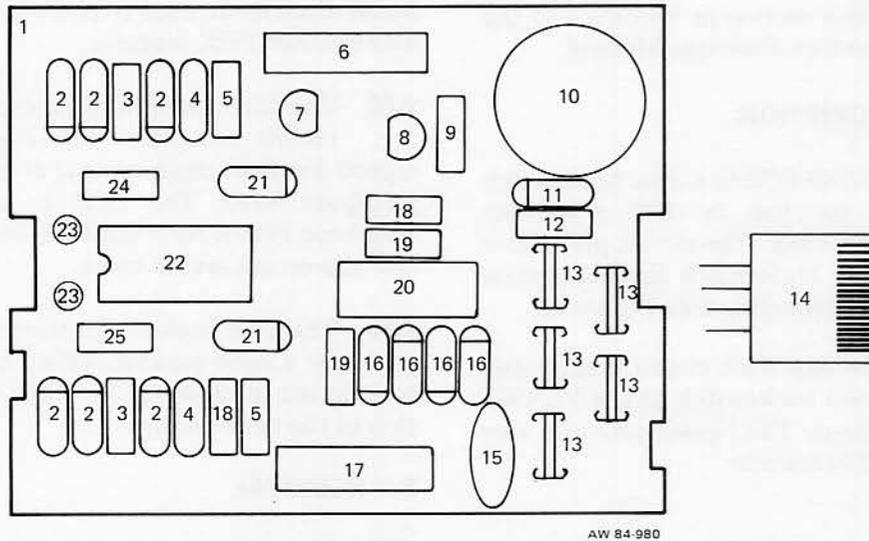


Figure 3: Model 186260 Dual Hookswitch Flash PCB, Component Location

TABLE A
ORDERING INFORMATION

CODE NUMBERS			
PCB CODE NUMBERS ARE FORMED IN TWO STEPS AS FOLLOWS:			
(1) PCB Model Number (See Part 1)			186260
(2) PCB Style (See Part 2)			101
PART 1 PCB MODEL NUMBER		PART 2 PCB STYLE	
CODE	DESCRIPTION	CODE	DESCRIPTION
186260	Model 186260 Dual Hookswitch Flash PCB	101	Standard PCB

AW 84-982

- (b) Remove the telephone housing.
- (c) Loosen the dial mounting screws.
- (d) Lift the dial from the mounting brackets and move it to one side.
- (e) Disconnect the double-row connector from the rear of the dial.
- (f) Disconnect the spade-tip connector leads that are attached to the PCB.
- (g) Remove the PCB from the mounting location.

4. DISASSEMBLY

4.01 Disassembly of the dual hookswitch flash PCB is not recommended since it would require removal of components and terminals. For maintenance purposes, it is suggested that a questionable unit be substituted with a known good unit.

5. REPLACEMENT PARTS

5.01 Replacement parts for the dual hookswitch flash PCB are listed in Table B.

6. INSTALLATION

6.01 To install the dual hookswitch flash PCB inside the telephone, proceed as follows:

- (a) Remove the telephone faceplate and housing.
- (b) Remove the dial and move it to one side.
- (c) Place the PCB in the mounting location.
- (d) Connect the spade-tip leads to the PCB while referring to the circuit label of the telephone.
- (e) Attach the double-row connector to the rear of the dial.
- (f) Replace the dial in the mounting brackets and secure it with the mounting screws.
- (g) Replace the telephone housing and faceplate.

TABLE B
REPLACEMENT PARTS LIST

INDEX NO	PART NUMBER	DESCRIPTION	QUANTITY USED
		Model 186260 Dual Hookswitch Flash PCB	101
1	186259-101	PC Board, Drilled	1
2	180656-102	Diode, 1N4148, CR7-CR12	6
3	181789-134	Resistor, 1 K, 1/4 W, $\pm 5\%$, R6, R7	2
4	180464-112	Capacitor, 0.1 MFD, 50 V, C7, C8	2
5	181789-158	Resistor, 100 K, 1/4 W, $\pm 5\%$, R4, R11	2
6	181789-121	Resistor, 100 Ohm, 1/4 W, $\pm 5\%$, R10	1
7	185327-101	Transistor, 2N5401, Q1	1
8	186271-101	VMOS, VK1010, Q2	1
9	182075-126	Capacitor, 0.01 MFD, 250 V, C5	1
10	181819-101	Capacitor, 470 MFD, 16 V, C1	1
11	182311-101	Diode, Zener, 1N5231B, CR6	1
12	181789-156	Resistor, 68 K, 1/4 W, $\pm 5\%$, R13	1
13	187948-101	Terminal, Spade	5
14	188695-101	Connector, Double-Row	1
15	184672-101	MOV, Bidirectional, CR1	1
16	180658-101	Diode, 1N4004, CR2-CR5	4
17	182075-104	Capacitor, 0.47 MFD, 100 V, C2	1
18	181789-146	Resistor, 10 K, 1/4 W, $\pm 5\%$, R5, R12	2
19	181789-169	Resistor, 1 M, 1/4 W, $\pm 5\%$, R1, R2	2
20	185672-470	Resistor, 47 Ohm, 1 W, $\pm 5\%$, R3	1
21	184751-101	Diode, Schottky, 1N6263, CR13, CR14	2
22	182407-154	IC, CD4001UBE, U1	1
23	182315-102	Capacitor, 6.8 MFD, 10 V, C3, C4	2
24	181789-193	Resistor, 620 K, 1/4 W, $\pm 5\%$, R9	1
25	181789-160	Resistor, 150 K, 1/4 W, $\pm 5\%$, R8	1
	190106-628	Wire Assembly, YL, (Not Shown)	1
	190106-105	Wire Assembly, RD, (Not Shown)	1

AW 84-983