



BILL OF MATERIALS

ITEM	PART NO.	PART DESIGNATION	DESCRIPTION	REQ'D NO
1	5771-09615-00	IC13	BARE P.C. BOARD	1
2	5280-09012-00	IC13	7442 BCD DECODER	1
3	5280-09477-00	IC14, IC16, IC25, IC26	7432 QUAD 2-INPUT OR GATE	4
4	5281-09246-00	IC15	74LS139 DUAL 2 TO 4 LINE DECODER	1
5	5281-09501-00	IC17	74LS395 4-BIT UNIVERSAL SHIFT REG.	1
6	5280-09073-00	IC18	7400 QUAD 2 INPUT NAND	1
7	5280-09013-00	IC19	7404 HEX. INVERTERS	1
8	5280-09551-00	IC20	7425 DUAL 4 INPUT NOR GATES	1
9	5280-08949-00	IC21	7405 HEX INVERTERS WITH OPEN-COLLECTOR OUTPUTS	1
10	5430-08972-00	IC22	MC6821 P.I.A	1
11	5019-09239-00	IC23	4.7K 15 RES. 16 PIN DIP PACK	1
12	5671-09019-00	LED1 THRU LED4	LED RED	4
13	5010-09001-00	R1 THRU R4	RESISTOR, FC, .330OHM 5% 1/4W	7
14	5010-08991-00	R4	RESISTOR, FC, .47K OHM 5% 1/4W	1
15	5043-08980-00	C1 THRU C16	CAP. CERAMIC 0.01 MFD. 50V	24
16	5043-08980-00	C17 THRU C18	CAP. ELECT. 100MFD. 25V	1
17	5043-08986-00	C23	CAP. CERAMIC 0.1 MFD	1
18	5043-08996-00	C24	CAP. CERAMIC .470 MFD. 50V AXIAL	17
19	5700-09004-00	C25	24 PIN IC SOCKET	12
20	5795-08611-00	2P1	40 PIN RIBBON CABLE ASSY. 5"	1
21	5791-09028-00	2J2	4 PIN MALE CONNECTOR 09-65-1041	1
22	5791-09444-00	2J3	10 PIN MALE CONNECTOR 09-65-101	1
23	5791-09027-00	2J4	9 PIN MALE CONNECTOR 09-65-1091	1
24	5510-08975-00	IC24	4049 INVERTING HEX. BUFFER	1
25	5010-09358-00	R9 THRU R14	RESISTOR, FC, 1K OHM 5% 1/4W	6
26	5010-09534-00	W1 THRU W25	RESISTOR, FC, 0 OHM	AS REQ'D
27	SEE CHART	IC1 THRU IC12	SEE CHART	AS REQ'D
28	SEE CHART			

GAME NAME	"DEFENDER" RED LABEL	ASSEM. NO.	PART DESIGNATION	PART NUMBER
IC1	D-8572-3001	A-5343-09636		
IC2		A-5343-09637		
IC3		A-5343-09638		
IC4		A-5343-09639		
IC5		NOT USED		
IC6		A-5343-09640		
IC7		A-5343-09641		
IC8		A-5343-09642		
IC9		A-5343-09643		
IC10		A-5343-09644		
IC11		A-5343-09645		
IC12		A-5343-09646		
JUMPERS		W2, W4, W6, W7, W9, W11, W13, W16, W17, W20, W21, W24		