

25	RDBUFF	MACRO	&INDEV, &BUFADR, &RECLTH	
30		CLEAR	X	CLEAR LOOP COUNTER
35		CLEAR	A	
40		CLEAR	S	
45		+LDT	#4096	SET MAXIMUM RECORD LENGTH
50	\$LOOP	TD	=X'&INDEV'	TEST INPUT DEVICE
55		JEQ	\$LOOP	LOOP UNTIL READY
60		RD	=X'&INDEV'	READ CHARACTER INTO REG A
65		COMPR	A, S	TEST FOR END OF RECORD
70		JEQ	\$EXIT	EXIT LOOP IF EOR
75		STCH	&BUFADR, X	STORE CHARACTER IN BUFFER
80		TIXR	T	LOOP UNLESS MAXIMUM LENGTH
85		JLT	\$LOOP	HAS BEEN REACHED
90	\$EXIT	STX	&RECLTH	SAVE RECORD LENGTH
95		MEND		

(a)

RDBUFF F1, BUFFER, LENGTH

30		CLEAR	X	CLEAR LOOP COUNTER
35		CLEAR	A	
40		CLEAR	S	
45		+LDT	#4096	SET MAXIMUM RECORD LENGTH
50	\$AALoop	TD	=X'F1'	TEST INPUT DEVICE
55		JEQ	\$AALoop	LOOP UNTIL READY
60		RD	=X'F1'	READ CHARACTER INTO REG A
65		COMPR	A, S	TEST FOR END OF RECORD
70		JEQ	\$AAEXIT	EXIT LOOP IF EOR
75		STCH	BUFFER, X	STORE CHARACTER IN BUFFER
80		TIXR	T	LOOP UNLESS MAXIMUM LENGTH
85		JLT	\$AALoop	HAS BEEN REACHED
90	\$AAEXIT	STX	LENGTH	SAVE RECORD LENGTH

(b)

Figure 4.7 Generation of unique labels within macro expansion.