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1000 I% = LAST - FIRST + 1      'LENGTH OF CURRENT PROGRAM
1010 MOVE TO #C000              'MOVE TO BURNING LOCATION
1020 SCALL #A000, I%            'EXECUTE BURNING ROUTINE
1030 IF I% <> 0 THEN PRINT "FAILURE AT LOCATION"; I%
1040 RETURN

```

Default Initialization Options

Another unique ROMSQuared feature of XYBASIC is its ability to accept specified values for terminal WIDTH and END OF MEMORY and to execute a program from a specified address in memory (in ROM, for example) without prompting during initialization. This feature allows you to execute a XYBASIC program from ROM without any initialization, i.e. to "load and go" automatically on startup.

Just below its base, XYBASIC contains the following five bytes:

ORG	RSQORG	
DB	0	;default WIDTH @ RSQORG
DW	1	;default END OF MEMORY @ RSQORG+1
DW	0	;default program address @ RSQORG+3

The value of RSQORG depends on which version of XYBASIC you use, as described in Chapter II. Normally its value is 106H for CP/M versions, 3286H for ISIS-II versions, and 163H for Custom I/O versions.

If the byte at RSQORG contains zero, XYBASIC will prompt for WIDTH in the usual way. If not, the specified value is taken as the WIDTH.

XYBASIC takes the word at RSQORG+1 as the value for the top of its RAM working space if the value specified is acceptable. If the value is nonzero but does not leave XYBASIC sufficient RAM, XYBASIC prompts for END OF MEMORY? during initialization in the usual way. If the value is zero, XYBASIC searches for the end of RAM at runtime (as when <carriage return> is typed in response to the initialization prompt).

Finally, if the word at RSQORG+3 is nonzero, XYBASIC assumes it to be the address of a XYBASIC program and attempts to RUN the program at that location. Specifying a value in this word has the same effect as using EXEC to refer to the desired program and then typing RUN; and as with EXEC a R0 error will occur if no program is found at the desired location.