```
0000                    org     0
                ;
                ; Cassette Loader for 8K BASIC Version 4.0
                ;
                ;   ** Set sense switch A12 on (2SIO terminal) **
                ;   ** Set sense switch A9,A8 on (ACR load) **
                ;
                ; H = msb of load address
                ; L = lsb of load address = length of loader = leader byte

0000 21C21F             lxi     h,01fc2h        ;8K BASIC v4.0
0003 311200     loop    lxi     sp,stack        ;init SP so a RET jumps to loop
0006 DB06               in      06h             ;get sio status
0008 0F                 rrc                     ;new byte available?
0009 D8                 rc                      ;no (jumps back to loop)
000A DB07               in      07h             ;get the byte
000C BD                 cmp     l               ;new byte = leader byte?
000D C8                 rz                      ;yes (jumps back to loop)
000E 2D                 dcr     l               ;not leader, decrement address
000F 77                 mov     m,a             ;store the byte (reverse order)
0010 C0                 rnz                     ;loop until L = 0
0011 E9                 pchl                    ;jump to code just downloaded

0012 0300       stack   dw      loop
0014                    end
```

Here is the program in octal for easier entry into the Altair:

```
 0: 041 302 037 061 022 000 333 006
10: 017 330 333 007 275 310 055 167
20: 300 351 003 000
```