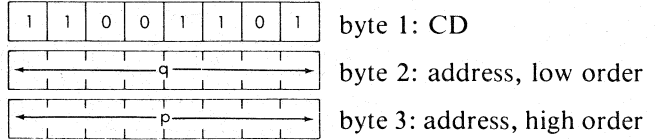## CALL pq

Call subroutine at location pq.

Function:

$(SP - 1) \leftarrow PC_{high}; (SP - 2) \leftarrow PC_{low}; SP \leftarrow SP - 2; PC \leftarrow pq$
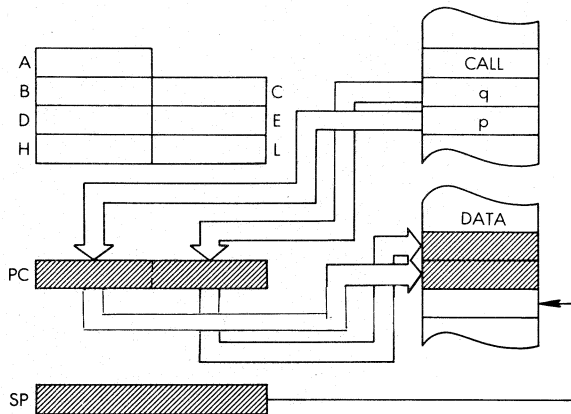
Format:

| 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | byte 1: CD

| ← q → | byte 2: address, low order

| ← p → | byte 3: address, high order

Description:

The contents of the program counter are pushed onto the stack as described for the PUSH instructions. The contents of the memory location immediately following the opcode are then loaded into the low order half of the PC and the contents of the second memory location after the opcode are loaded in the high order half of the PC. The next instruction will be fetched from this new address.
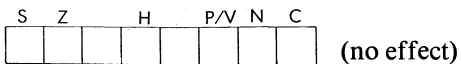
Data Flow:

Timing: 5 M cycles; 17 T states: 8.5 usec @ 2 MHz
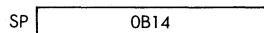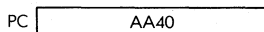
Addressing Mode: Immediate.

Flags:

S	Z		H		P/V	N	C

(no effect)

Example: CALL   40B1

Before: **After:**

PC	AA40

PC	40B1

SP	0B14

SP	0B12

CD
B1
40

OBJECT CODE

0B12	9A
0B13	01
0B14	F4

0B12	40
0B13	AA
0B14	F4