DAW

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DAW	Decimal Adjust W Register
Syntax:	[*label*] DAW
Operands:	None

Operation:	If [W<3:0> >9] or [DC = 1] then
	(W<3:0>) + 6 → W<3:0>;
	else
	(W<3:0>) → W<3:0>;
	
	If [W<7:4> >9] or [C = 1] then
	(W<7:4>) + 6 → W<7:4>;
	else
	(W<7:4>) → W<7:4>;

Status Affected:	C
Encoding:	0000 0000 0000 0111
Description:	DAW adjusts the eight-bit value in W, resulting from the earlier addition of two variables (each in packed BCD format) and produces a correct packed BCD result.
Words:	1
Cycles:	1

Q Cycle Activity:

Q1	Q2	Q3	Q4
Decode	Read register W	Process Data	Write W

Example1:   DAW

  Before Instruction

      W   =   0xA5
      C   =   0
      DC   =   0

  After Instruction

      W   =   0x05
      C   =   1
      DC   =   0

Example 2:

  Before Instruction

      W   =   0xCE
      C   =   0
      DC   =   0

  After Instruction

      W   =   0x34
      C   =   1
      DC   =   0

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