S0407

The information in the table is specific to the S0407. This model is being sold through OfficeMax in 2003 and is probably sold at other locations under other model #s. It has large plastic wheels and the drive cam is adjustable to one of 20 equally spaced positions. The drive wheel has 12 equally spaced gates, 11 of them false gates. The false gates are the same width as the true gate. This lock is difficult to manipulate with contact readings.

This lock provides 160 possible combinations for a given set of wheels. The variations are achieved by selecting one of the twenty driver settings, and by changing the orientation and position of the wheels. (20 driver settings x 2 wheel orientations x 2 wheel positions x 2 wheels = 160 combinations). Additional combinations are possible by using 2 identical wheels, and more still are possible if additional wheel molds are used with different drive pin locations. This table currently shows combinations using driver #8 and wheels #3 and #6, but is easily extended when additional wheel patterns turn up. The only information required is the drive pin location for each side of the wheel (the gate is at zero).

You shouldn't need to try all the combinations shown in the table to open this lock. There are a few simple things you can do to limit the possibilities. The position of the false (or actual) gate closest to zero can be used to identify the cam position or at least limit it to 4 of 20 possible positions. The Table shows the location of the identifying false gate for each cam adjustment position.

Each row in the table represents a drive cam setting. Each group of 3 columns represents a distinct wheel configuration. Combinations in the same row share the same final number and identifying gate position as shown on the left.

There are a number of simple steps you can take to eliminate most combination possibilities. The first is to locate the identifying false gate position. This is the gate nearest to zero. Locate the Right and Left boundaries and the approximate center of this gate. Compare this to the positions shown on the left side of the table. There should be four rows that approximately match your readings. The combinations in these 4 rows are possible combinations for your lock. The true final number is one of four possibilities.

The position of the gate on wheel 2 can be located easily by feel. Dial AWL to pick up all wheels, then dial RIGHT until you pick up wheel #2 (but NOT wheel #1). Apply pressure to the wheels with the lever as you slowly rotate the dial. In each of the false gate positions you will feel the drag as you turn the dial and the fence rubs against wheel #2. You will also feel drag in between false gates as the fence drags on wheel #3. When you reach a gate where the drag is no longer felt you have located wheel #2s gate. This test only works when wheel #2 is picked up by wheel #3. Don't oscillate the dial. Instead rotate it steadily in a single direction.

If you reach the point where Wheel #1 picks up without finding a gate, then it is probably hidden between false gates. In this case, repeat the procedure rotating in the opposite direction. The shift caused by the fixed flies will move the gate out of its shadowed position. If you find gate #2 dialing left, convert it to a right dialing number by adding 5. When looking for the second number on the table don't expect an exact match. The #2 gate and the overlapping false gate on wheel #3 will not match up exactly, and this will shift the apparent position of the gate slightly.

Once you find Gate #2, and you have limited gate #3 to one of four possibilities based on the false gate shift, you should be able to locate the entire combination in the table. If this doesn't open the lock then either one or both wheels are undocumented, or it is a different style of lock.

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Sentry S0407

Fence Position:	**25**
Pin Width:	**2.5**

Dial Seq: **3L-2R-1L**

W #3 = D8			W #1		W #2		W #3		W #1		W #2		W #3		W #1		W #2		W #3		W #1		W #2		W #3	
ID False Gate			3A		6A		D8		3B		6B		D8		3A		6B		D8		3B		6A		D8	
L	CEN	R	I	O	I	O	I	O	I	O	I	O	I	O	I	O	I	O	I	O	I	O	I	O	I	O
			17	42	21	46	-	58	58	83	54	79	-	58	17	42	54	79	-	58	58	83	21	46	-	58
95.5	97.0	98.5	33		11.5		72		92		78.5		72		33		78.5		72		92		11.5		72	
98.8	0.3	1.8	28		6.5		67		87		73.5		67		28		73.5		67		87		6.5		67	
2.2	3.7	5.2	23		1.5		62		82		68.5		62		23		68.5		62		82		1.5		62	
97.2	98.7	0.2	18		96.5		57		77		63.5		57		18		63.5		57		77		96.5		57	
0.5	2.0	3.5	13		91.5		52		72		58.5		52		13		58.5		52		72		91.5		52	
95.5	97.0	98.5	8		86.5		47		67		53.5		47		8		53.5		47		67		86.5		47	
98.8	0.3	1.8	3		81.5		42		62		48.5		42		3		48.5		42		62		81.5		42	
2.2	3.7	5.2	98		76.5		37		57		43.5		37		98		43.5		37		57		76.5		37	
97.2	98.7	0.2	93		71.5		32		52		38.5		32		93		38.5		32		52		71.5		32	
0.5	2.0	3.5	88		66.5		27		47		33.5		27		88		33.5		27		47		66.5		27	
95.5	97.0	98.5	83		61.5		22		42		28.5		22		83		28.5		22		42		61.5		22	
98.8	0.3	1.8	78		56.5		17		37		23.5		17		78		23.5		17		37		56.5		17	
2.2	3.7	5.2	73		51.5		12		32		18.5		12		73		18.5		12		32		51.5		12	
97.2	98.7	0.2	68		46.5		7		27		13.5		7		68		13.5		7		27		46.5		7	
0.5	2.0	3.5	63		41.5		2		22		8.5		2		63		8.5		2		22		41.5		2	
95.5	97.0	98.5	58		36.5		97		17		3.5		97		58		3.5		97		17		36.5		97	
98.8	0.3	1.8	53		31.5		92		12		98.5		92		53		98.5		92		12		31.5		92	
2.2	3.7	5.2	48		26.5		87		7		93.5		87		48		93.5		87		7		26.5		87	
97.2	98.7	0.2	43		21.5		82		2		88.5		82		43		88.5		82		2		21.5		82	
0.5	2.0	3.5	38		16.5		77		97		83.5		77		38		83.5		77		97		16.5		77	

Sentry S0407 Pg 2 of 2

W #3 = D8		
ID False Gate		
L	CEN	R
95.5	97.0	98.5
98.8	0.3	1.8
2.2	3.7	5.2
97.2	98.7	0.2
0.5	2.0	3.5
95.5	97.0	98.5
98.8	0.3	1.8
2.2	3.7	5.2
97.2	98.7	0.2
0.5	2.0	3.5
95.5	97.0	98.5
98.8	0.3	1.8
2.2	3.7	5.2
97.2	98.7	0.2
0.5	2.0	3.5
95.5	97.0	98.5
98.8	0.3	1.8
2.2	3.7	5.2
97.2	98.7	0.2
0.5	2.0	3.5

W #1	W #2	W #3
6A	3A	D8
I / O	I / O	I / O
21 / 46	17 / 42	- / 58
29	15.5	72
24	10.5	67
19	5.5	62
14	0.5	57
9	95.5	52
4	90.5	47
99	85.5	42
94	80.5	37
89	75.5	32
84	70.5	27
79	65.5	22
74	60.5	17
69	55.5	12
64	50.5	7
59	45.5	2
54	40.5	97
49	35.5	92
44	30.5	87
39	25.5	82
34	20.5	77

W #1	W #2	W #3
6B	3B	D8
I / O	I / O	I / O
54 / 79	58 / 83	- / 58
96	74.5	72
91	69.5	67
86	64.5	62
81	59.5	57
76	54.5	52
71	49.5	47
66	44.5	42
61	39.5	37
56	34.5	32
51	29.5	27
46	24.5	22
41	19.5	17
36	14.5	12
31	9.5	7
26	4.5	2
21	99.5	97
16	94.5	92
11	89.5	87
6	84.5	82
1	79.5	77

W #1	W #2	W #3
6B	3A	D8
I / O	I / O	I / O
54 / 79	17 / 42	- / 58
96	15.5	72
91	10.5	67
86	5.5	62
81	0.5	57
76	95.5	52
71	90.5	47
66	85.5	42
61	80.5	37
56	75.5	32
51	70.5	27
46	65.5	22
41	60.5	17
36	55.5	12
31	50.5	7
26	45.5	2
21	40.5	97
16	35.5	92
11	30.5	87
6	25.5	82
1	20.5	77

W #1	W #2	W #3
6A	3B	D8
I / O	I / O	I / O
21 / 46	58 / 83	- / 58
29	74.5	72
24	69.5	67
19	64.5	62
14	59.5	57
9	54.5	52
4	49.5	47
99	44.5	42
94	39.5	37
89	34.5	32
84	29.5	27
79	24.5	22
74	19.5	17
69	14.5	12
64	9.5	7
59	4.5	2
54	99.5	97
49	94.5	92
44	89.5	87
39	84.5	82
34	79.5	77