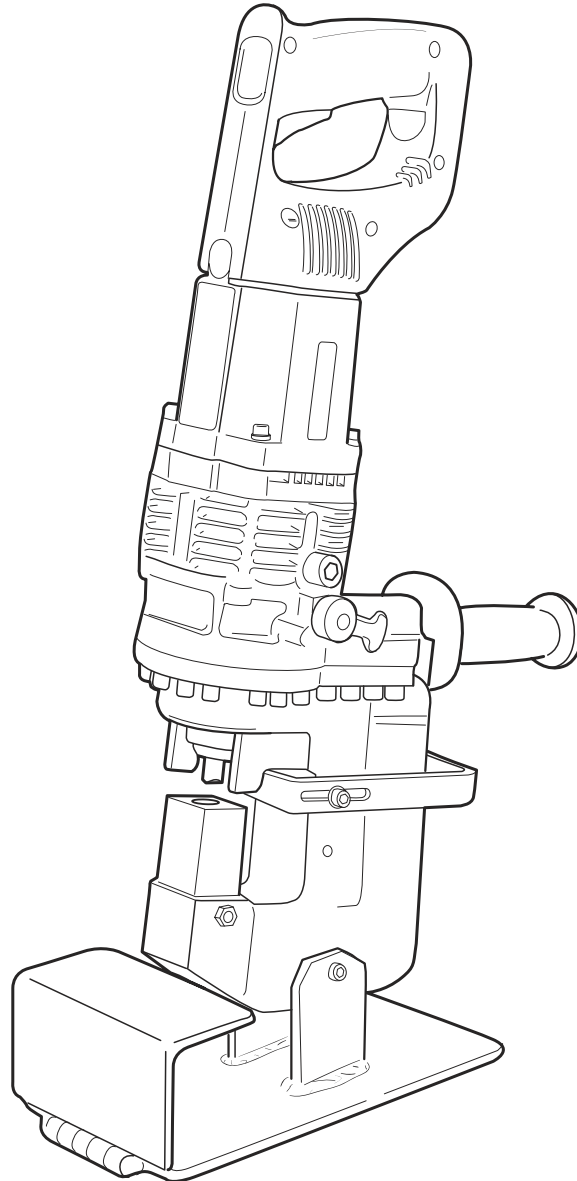


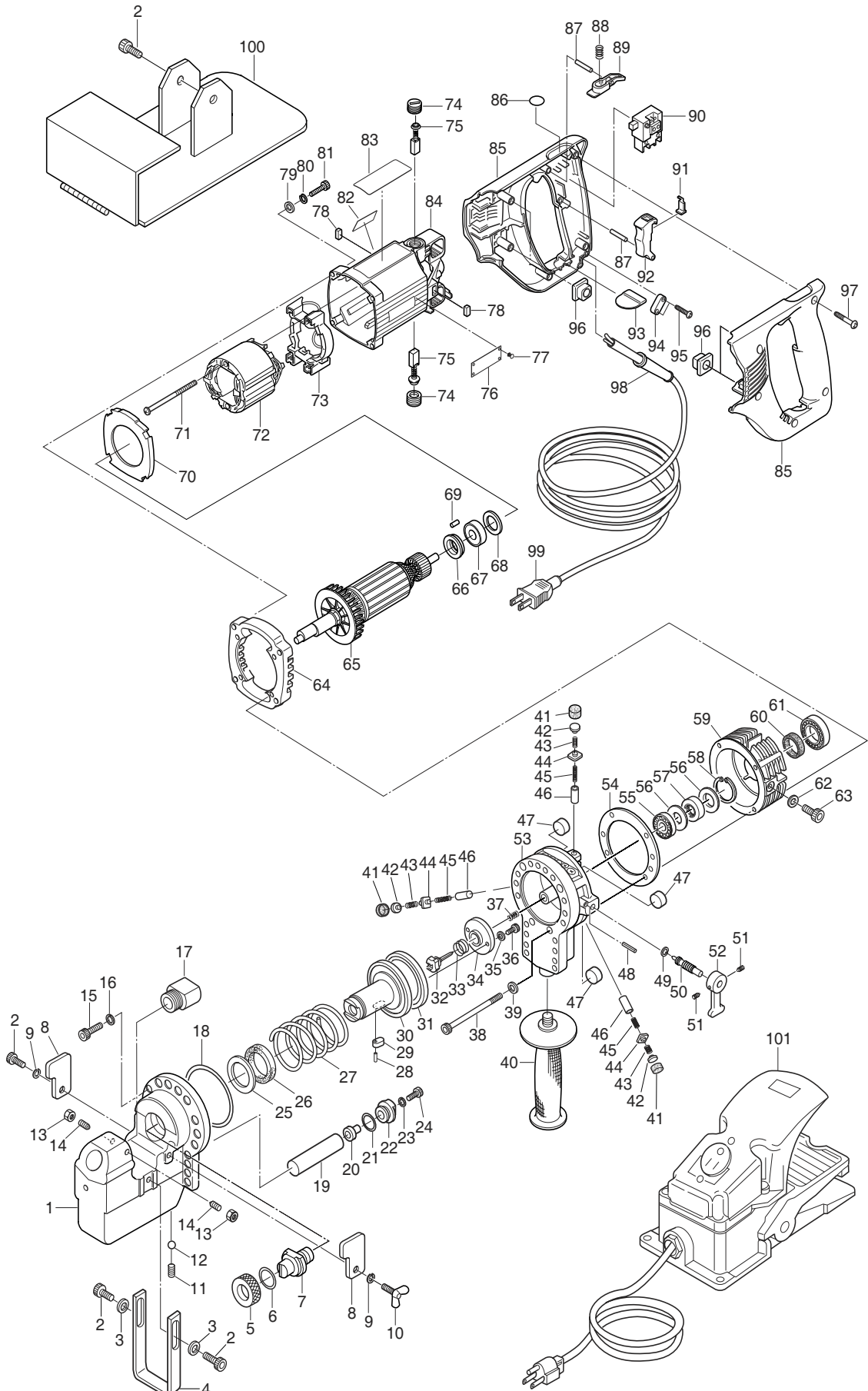
Hougen[®]-**Ogura**[™]

PUNCH PRO[™]
ELECTRO-HYDRAULIC HOLE PUNCHER



OPERATOR'S MANUAL
Model 75003A

75003A EXPLODED VIEW



PARTS LIST - 75003A

DET. #	PART#	DESCRIPTION	QTY.
1	75180	"C" Frame	1
2	75156	SCREW M6 X 15MM	2
3	75157	FLAT WASHER 6MM	2
4	75182	HOLE LOCATOR	1
5	75165	PUNCH RETAINING NUT	1
6	75164	"O" RING	1
7	75427	PUNCH (9/16 DIA.)	1
8	75131	STRIPPER (SHORT)	2
	75131L	STRIPPER (LONG)	2
9	75162	HELI WASHER 6MM	2
10	75156	SCREW M8 X 15MM	6
11	75192	SCREW SS M6 X 10MM	1
12	75191	STEEL BALL	1
13	75091	HEX NUT M6	2
14	75189	SCREW SS M6 X 15MM	2
15	75158	SCREW M8 X 20MM	18
16	75159	SERR. FLAT WASHER 8MM	18
17	75466	DIE (LONG 9/16" TYPE A)	1
	75467	DIE (SHORT 9/16" TYPE B)	1
18	75185	"O" RING	1
19	75137	OIL BLADER	1
20	75136	BLADDER SCREW	1
21	75190	"O" RING	1
22	75188	BLADDER BUSHING SCREW	1
23	75155	HELI LOCK	1
24	75138	BLADDER RET.SCREW	1
25	75152	BACKUP RING	1
26	75153	ROD SEAL PACKING	1
27	75187	PUNCH RETAINING SPRING	1
28	75099	ROLL PIN 2.5MM X 10MM	1
29	75135	PUNCH PISTON KEY	1
30	75128	PUNCH PISTON KEY	1
31	75154	PACKING	1
32	75042	RELEASE VAVLE	1
33	75043A	VALVE RETURN SPRING	1
34	75183	STOP PLATE	1
35	75101	FLAT WASHER 4MM	2
36	75102	HD SCREW M4 X 6MM	2
37	75184	VALVE RELEASE SPRING	1
38	75863	BOLT 5 X 70MM	4
39	75862	WASHER HW5MM	4
40	75063	PUNCH HANDLE	1
41	75049	RUBBER PACKING	3
42	75051	SPRING RETAINER	3
43	75052	CHECK VALVE SPRING	3
44	75050	CHECK VALVE	3
45	75053	PISTON RETURN SPRING	3
46	75048-A	PUMP PISTON 5.996 X 13MM	1-3
	75048-B	PUMP PISTON 5.997 X 13MM	1-3
	75048-C	PUMP PISTON 5.998 X 13MM	1-3
	75048-D	PUMP PISTON 5.999 X 13MM	1-3
	75048-E	PUMP PISTON 6.000 X 13MM	1-3
	75048-F	PUMP PISTON 6.001 X 13MM	1-3
	75048-G	PUMP PISTON 6.002 X 13MM	1-3
	75048-H	PUMP PISTON 6.003 X 13MM	1-3
	75048-I	PUMP PISTON 6.004 X 13MM	1-3

DET. #	PART#	DESCRIPTION	QTY.
	75048-J	PUMP PISTON 6.005 X 13MM	1-3
47	75054	MAGNET	3
48	75100	ROLL PIN 4MM X 20MM	1
49	75085	"O" RING	1
50	75046	RETURN VALVE	1
51	75160	HD SCREW M6 X 8MM	2
52	75047	RETURN LEVER	1
53	75181	CYLINDER	1
54	75186	GASKET	1
55	75086	BALL BEARING	2
56	75055	SPACER	2
57	75088	ROLLER BEARING	1
58	75089	RETAINING RING	1
59	75127	PUMP HOUSING	1
60	75084	OIL SEAL	1
61	75087	BALL BEARING	1
62	75090	WASHER SEAL	1
63	75107	HD SCREW M10 X 15MM	1
64	75820	SUB PLATE	1
65	75821	ARMATURE	1
66	75822	PAPER WASHER	1
67	75823	BALL BEARING 608 LLB	1
68	75824	THURST WASHER 16MM	1
69	75825	RUBBER PIN 4MM	1
70	75827	FAN GUIDE	1
71	75828	SCREW 5 X 65MM	2
72	75829	FIELD 115V	1
73	75830	FIELD SUPPORT SET	1
74	75831	BRUSH CAP	2
75	75832	CARBON BRUSH (PAIR)	2
76	75864	CAUTION TAG	1
77	75833	RIVET	4
78	75834	ANTI VIBRATION RUBBER B	2
79	75835	FLAT WASHER 5MM	4
80	75836	SPRING WASHER 5MM	4
81	75837	BOLT HB 5 X 25MM	4
82	75865	WARNING TAG	1
83	75868	NAME TAG	1
84	75838	MOTOR HOUSING SET	1
85	75839	HANDLE SET	1
86	75840	LABEL	1
87	75841	PIN 3MM	2
88	75842	COMPRESSION SPRING 4MM	1
89	75843	ROCK BUTTON	1
90	75844	SWITCH TG71B	1
91	75845	SPACER	1
92	75846	SWITCH LEVER	1
93	75847	RUBBER PLATE	1
94	75848	CORD CLAMP	1
95	75849	SCREW 4 X 18MM	2
96	75850	ANTI VIBRATION RUBBER A	4
97	75851	SCREW 4 X 25MM	5
98	75852	STRAIN RELIEF	1
99	75870	POWER CORD	1
100	75194	WORK STAND	1
101	75110	FOOT SWITCH	1

ROUND PUNCHES AND DIES FOR 75003A

ROUND PUNCH				MATERIAL		DIE	
Nominal	Size		Part No.	Thickness	Style	Size	Part No.
	Actual	Metric					
1/4"	.256	6.5mm	75421	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 1/4 A	75454
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 1/4 B	75455
5/16"	.315	8mm	75422	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 5/16 A	75456
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 5/16 B	75457
11/32"	.335	8.5mm	75423	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 11/32 A	75458
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 11/32 B	75459
3/8"	.394	10mm	75424	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 3/8 A	75460
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 3/8 B	75461
			75476 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 3/8 A	75438
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 3/8 B	75439
				19/64 (.297) max.	C	Die 3/8 C	75450
7/16"	.433	11mm	75425	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 7/16 A	75462
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 7/16 B	75463
			75477 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 7/16 A	75440
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 7/16 B	75441
				19/64 (.297) max.	C	Die 7/16 C	75451
1/2"	.512	13mm	75426	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 1/2 A	75464
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 1/2 B	75465
			75478 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 1/2 A	75442
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 1/2 B	75443
				19/64 (.297) max.	C	Die 1/2 C	75452
9/16"	.551	14mm	75427	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 9/16 A	75466
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 9/16 B	75467
			75479 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 9/16 A	75444
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 9/16 B	75445
				19/64 (.297) max.	C	Die 9/16 C	75453
5/8"	.625	15.9mm	75428	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 5/8 A	75468
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 5/8 B	75469
11/16"	.688	17.5mm	75429	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 11/16 A	75470
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 11/16 B	75471
3/4"	.750	19mm	75430	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 3/4 A	75472
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 3/4 B	75473
25/32"	.787	20mm	75431	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 25/32 A	75474
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 25/32 B	75475

OBLONG PUNCHES AND DIES FOR 75003A

OBLONG PUNCH			MATERIAL		DIE		
Size			Part No.	Thickness	Style	Size	Part No.
Nominal	Actual	Metric					
1/4" x 1/2"	.256 x .512	6.5mm x 13mm	75638	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 1/4 x 1/2 A	75656
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 1/4 x 1/2 B	75657
			75666 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 1/4 x 1/2 A	75643
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 1/4 x 1/2 B	75644
		19/64 (.297) max.	C	Die 1/4 x 1/2 C	75653		
11/32" x 1/2"	.335 x .512	8.5mm x 13mm	75639	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 11/32 x 1/2 A	75658
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 11/32 x 1/2 B	75659
			75667 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 11/32 x 1/2 A	75645
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 11/32 x 1/2 B	75646
19/64 (.297) max.	C	Die 11/32 x 1/2 C		75654			
7/16" x 5/8"	.433 x .650	11mm x 16.5mm	75640	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 7/16 x 5/8 A	75660
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 7/16 x 5/8 B	75661
			75668 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 7/16 x 5/8 A	75647
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 7/16 x 5/8 B	75648
19/64 (.297) max.	C	Die 7/16 x 5/8 C		75655			
1/2" x 3/4"	.512 x .768	13mm x 19.5mm	75641	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 1/2 x 3/4 A	75662
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 1/2 x 3/4 B	75663
9/16" x 13/16"	.551 x .827	14mm x 21mm	75642	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 9/16 x 13/16 A	75664
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 9/16 x 13/16 B	75665

