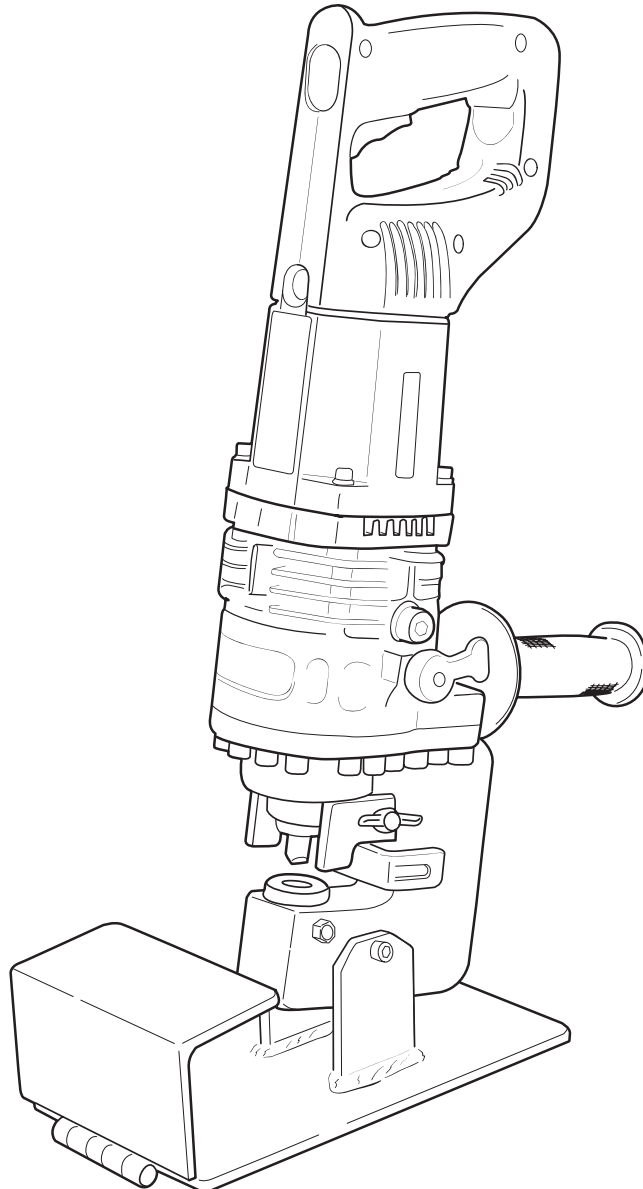


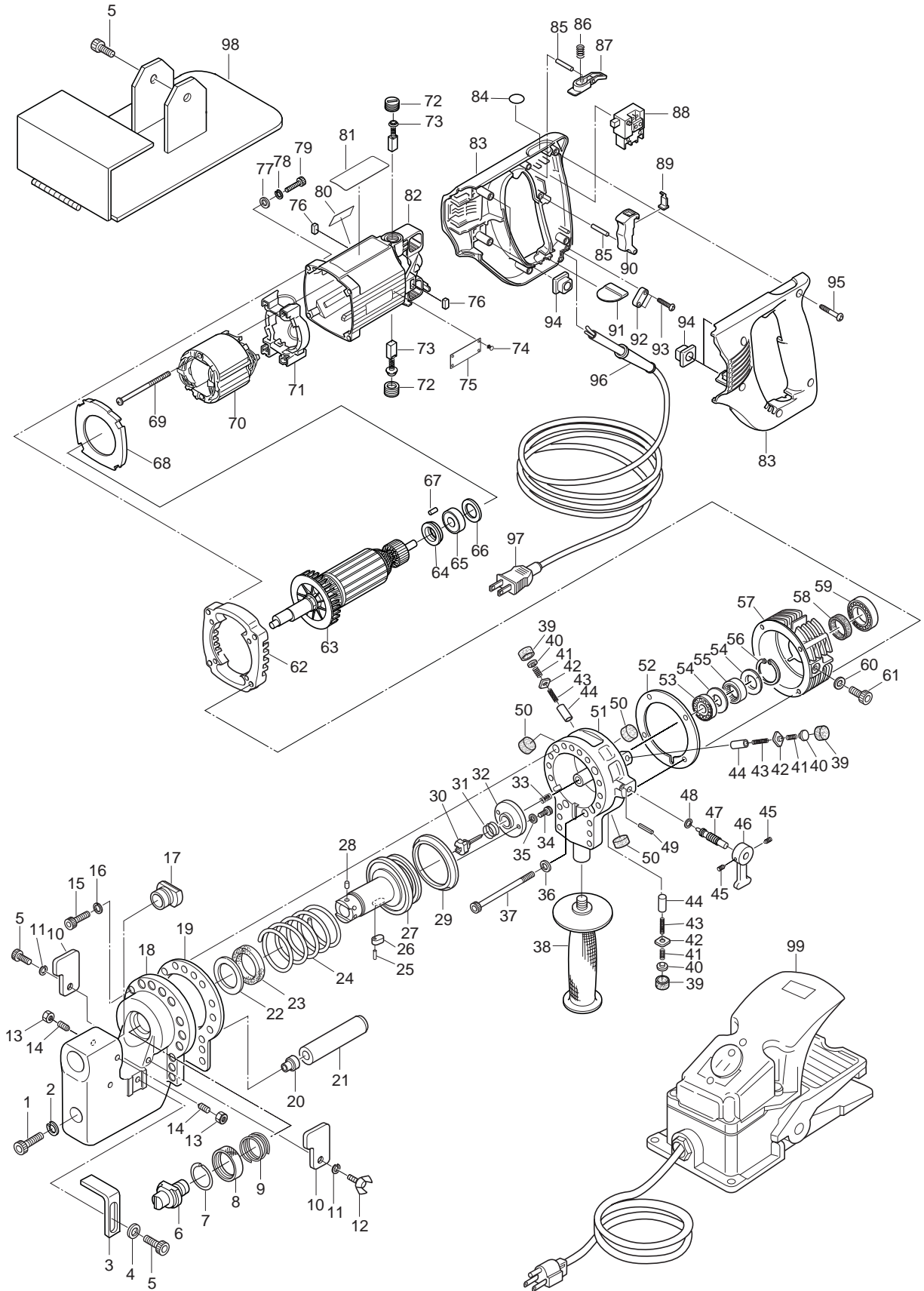
Hougen[®]-**Ogura**[™]

PUNCH PRO[™] ELECTRO-HYDRAULIC HOLE PUNCHER



**OPERATOR'S MANUAL
Model 75002A**

75002A EXPLODED VIEW



PARTS LIST - 75002A

DET. #	PART#	DESCRIPTION	QTY.
1	75138	SCR-BLADDER RETAINING	1
2	75155	HELI-LOCK WASHER 10MM	1
3	75130	HOLE LOCATOR	1
4	75157	FLAT WASHER 6MM	2
5	75156	SCR-SHC M6 X 15MM	6
6	75427	PUNCH 9/16	1
7	75117	RETAINING RING	1
8	75115	COUPLING SLEEVE	1
9	75116	JOINT PIN SPRING	1
10	75131	STRIPPER	1
11	75162	HELI WASHER LOCK 6MM	2
12	75175	SCR-WING HD	2
13	75091	NUT HEX M6	2
14	75092	SCR-SOC M6 X 15MM	2
15	75158	SCR-SHC M8 X 20 MM	16
16	75159	FLAT WASHER 8MM	16
17	75444	DIE -RD 9/16A	1
	75445	DIE -RD 9/16B	1
18	75125	"C" FRAME	1
19	75132	GASKET	1
20	75136	SCR- BLADDER	1
21	75137	OIL BLADDER	1
22	75152	BACKUP RING	1
23	75153	ROD-SEAL PACKING	1
24	75134	PUNCH RETURN SPRING	1
25	75099	ROLL PIN	1
26	75135	PUNCH PISTON KEY	1
27	75118	PUNCH PISTON	1
28	75114	JOINT PIN	6
29	75154	PACKING	1
30	75042	RELEASE VALVE	6
31	75043	VALVE RETURN SPRING	1
32	75044	STOP PLATE	1
33	75045	VALVE RELEASE SPRING	1
34	75102	SCR-SHC M4 X 6MM	2
35	75101	FLAT WASHER 4MM	2
36	75862	WASHER HW5MM	4
37	75863	BOLT 5 X 70MM	4
38	75063	PUNCHER HANDLE	1
39	75049	RUBBER PACKING	3
40	75051	SPRING RETAINER	3
41	75052	CHECK VALVE SPRING	3
42	75050	CHECK VALVE	3
43	75053	PISTON RETURN SPRING	3
44	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
	75048-J	PUMP PISTON 6.005 X 13MM	1-3
45	75160	SCR-SET M6 X 8MM	2

DET. #	PART#	DESCRIPTION	QTY.
46	75047	RETURN LEVER	1
47	75046	RETURN VALVE	1
48	75084	OIL SEAL	1
49	75100	ROLL PIN	1
50	75054	MAGENT	3
51	75126	CYLINDER	1
52	75133	GASKET	1
53	75086	BALL BEARING	2
54	75055	SPACER	2
55	75088	ROLLER BEARING	1
56	75089	RETAINING RING	1
57	75127	PUMP HOUSING	1
58	75084	OIL SEAL	1
59	75087	BALL BEARING	1
60	75090	SEAL WASHER	1
61	75107	SCR-SHC M10 X 15MM	1
62	75820	SUB PLATE	1
63	75821	ARMATURE	1
64	75822	PAPER WASHER	1
65	75823	BALL BEARING 608 LLB	1
66	75824	THURST WASHER 16MM	1
67	75825	RUBBER PIN 4MM	1
68	75827	FAN GUIDE	1
69	75828	SCREW 5 X 65MM	1
70	75829	FIELD 115V	1
71	75830	FIELD SUPPORT SET	1
72	75831	BRUSH CAP	2
73	75832	CARBON BRUSH (PAIR)	2
74	75833	RIVET	4
75	75864	CAUTION TAG	1
76	75834	ANTI VIBRATION RUBBER B	2
77	75835	FLAT WASHER 5MM	4
78	75836	SPRING WASHER 5MM	4
79	75837	BOLT HB 5 X 25MM	4
80	75865	WARNING TAG	1
81	75866	NAME TAG	1
82	75838	MOTOR HOUSING SET	1
83	75839	HANDLE SET	1
84	75840	LABEL	1
85	75841	PIN 3MM	2
86	75842	COMPRESSION SPRING 4MM	1
87	75843	ROCK BUTTON	1
88	75844	SWITCH TG71B	1
89	75845	SPACER	1
90	75846	SWITCH LEVER	1
91	75847	RUBBER PLATE	1
92	75848	CORD CLAMP	1
93	75850	SCREW X 18MM	2
94	75850	ANTI VIBRATION RUBBER A	4
95	75841	SCREW 4 X 25MM	5
96	75852	STRAIN RELIEF	1
97	75870	POWER CORD	1
98	75194	WORK STAND	1
99	75110	FOOT SWITCH	1

ROUND PUNCHES AND DIES FOR MODEL 75002A

Round Punch				Material		Die	
Size			No.	Thickness	Style	Size	No.
Nominal	Actual	Metric					
1/4"	.256	6.5mm	75421	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/4 A	75432
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/4 B	75433
5/16"	.315	8mm	75422	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 5/16 A	75434
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 5/16 B	75435
11/32"	.335	8.5mm	75423	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/32 A	75436
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/32 B	75437
3/8"	.394	10mm	75424	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 3/8 A	75438
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 7/16 A	75440
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 1/2 A	75442
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 9/16 A	75444
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 5/8 A	75446
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 5/8 B	75447
11/16"	.688	17.5mm	75429	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/16 A	75448
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/16 B	75449
3/4"	.748	19mm	75430	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 3/4 A	75729
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 3/4 B	75730
25/32"	.787	20mm	75431	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 25/32 A	75731
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 25/32 B	75732

OBLONG PUNCHES AND DIES FOR 75002A

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 1/4 x 1/2 A	75643
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 11/32 x 1/2 A	75645
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 7/16 x 5/8 A	75647
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	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 1/2 x 3/4 A	75649
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/2 x 3/4 B	75650
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 9/16 x 13/16 A	75651
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 9/16 x 13/16 B	75652

