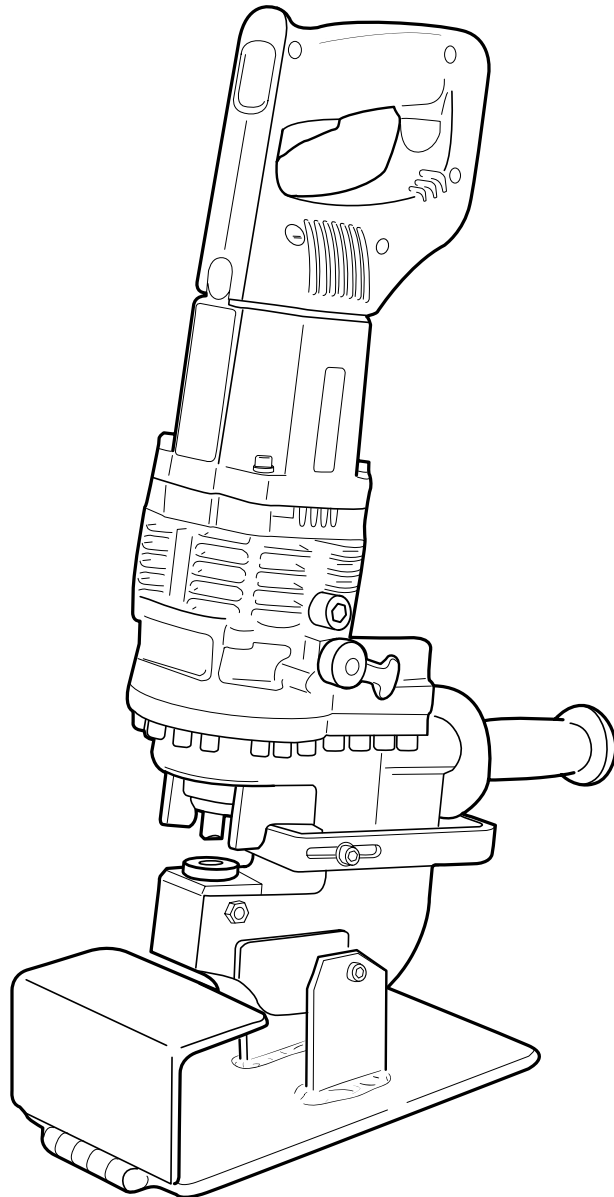


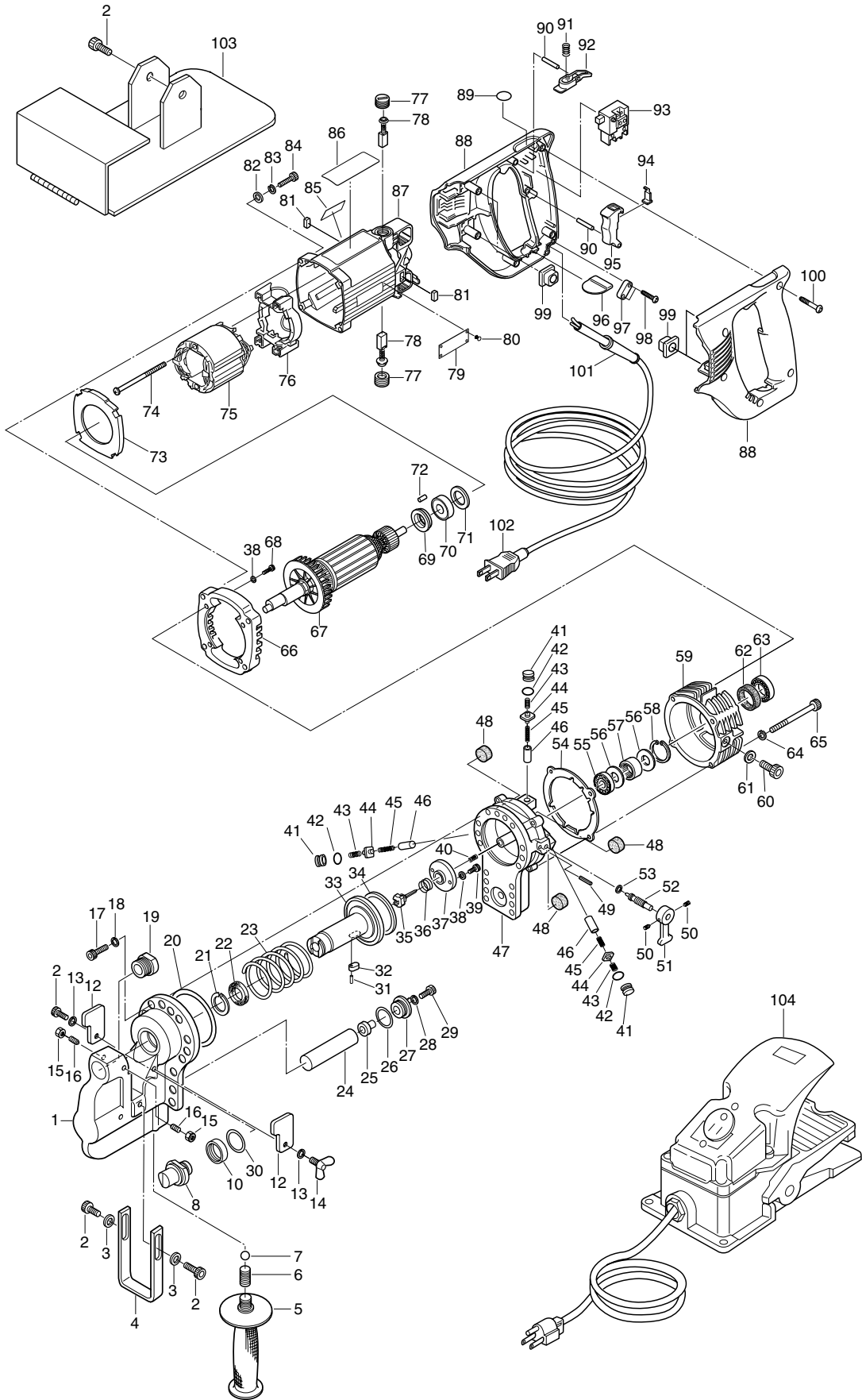
Hougen[®]-**Ogura**[™]

PUNCH PRO[™] ELECTRO-HYDRAULIC HOLE PUNCHER



OPERATOR'S MANUAL
Model 75002.5A

75002.5A EXPLODED VIEW



PARTS LIST - 75002.5A

Det #	Part #	Description	Qty
1	75177	"C" FRAME	1
2	75156	SCREW M6 X 15MM	6
3	75157	FLAT WASHER 6MM	2
4	75176	SOLE LOCATOR	1
5	75063	PUNCHER HANDLE	1
6	75192	SCR-SOC SET M10	1
7	75191	STEEL BALL BEARING	1
8	75427	9/16" PUNCH	1
10	75902	RETAINING NUT	1
11	75903	PIN SPANNER	1
12	75131	STRIPPER	2
13	75162	WASHER-HELI LOCK	2
14	75175	SCR-WING HD M6 X 15MM	1
15	75091	NUT HEX M6	2
16	75189	SCR-SOC SET M6 X 20MM	2
17	75158	SCR-SHC M8 X 20MM	18
18	75159	FLAT WASHER 8MM	18
19	75444	DIE-RD 9/16A	1
	75445	DIE-RD 9/16B	1
20	75185	O-RING	1
21	75152	BACKUP RING	1
22	75153	PACKING ROD SEAL	1
23	75187	PUNCH RETURN SPRING	1
24	75137	OIL BLADDER	1
25	75136	SCR - BLADDER	1
26	75190	O-RING	1
27	75188	SCR-BLADDER BUSHING	1
28	75155	WASHER-HELI LOCK	1
29	75138	SCR-BLADDER RET.	1
30	75904	O-RING	1
31	75099	ROLL PIN	1
32	75135	PUNCH PISTON KEY	1
33	75901	PUNCH PISTON	1
34	75154	PACKING	1
35	75042	RELEASE VALVE	1
36	75043A	VALVE RETURN SPRING	1
37	75183	STOP PLATE	1
38	75101	FLAT WASHER	2
39	75102	SCR-SHC M4 X 6MM	2
40	75184	VALVE RELEASE SPRING	1
41	75325	SEAL-PACKING (w/groove)	3
42	75326	O-Ring	3
43	75052	CHECK VALVE SPRING	3
44	75050	CHECK VALVE	3
45	75053	PISTON RETURN SPRING	3
46	75048 A-J Pump Pistons are replaced by size and fit. The Pump Cylinder will need to be returned to Hougen Mfg. to determine fit.		
47	75320	CYLINDER W/CHAMFER	1
48	75054	MAGNET	3
49	75100	ROLL PIN	1
50	75160	SCR-SET M6 X 8MM	2
51	75047	RETURN LEVER	1
52	75046	RETURN VALVE	1

Det #	Part #	Description	Qty
53	75085	O-RING	1
54	75173	GASKET	1
55	75086	BALL BEARING	1
56	75055	SPACER	2
57	75088	ROLLER BEARING	1
58	75089	RETAINING RING	1
59	75861	PUMP CASE	1
60	75107	SCR-SHC M10 X 15MM	1
61	75090	SEAL WASHER	1
62	75084	OIL SEAL	1
63	75087	BALL BEARING	1
64	75862	WASHER HW5MM	4
65	75873	BOLT HB5 X 50MM	4
66	75874	SUB PLATE	1
67	75821	ARMATURE	1
68	75826	BOLT HB4 X 20MM	4
69	75822	PAPER WASHER	1
70	75823	BALL BEARING 608 LLB	1
71	75824	THURST WASHER 16MM	1
72	75825	RUBBER PIN 4MM	1
73	75827	FAN GUIDE	1
74	75828	SCREW 5 X 65MM	2
75	75829	FIELD 115V	1
76	75830	FIELD SUPPORT SET	1
77	75831	BRUSH CAP	2
78	75832	CARBON BRUSH (PAIR)	2
79	75864	CAUTION TAG	1
80	75833	RIVET	4
81	75834	ANTI VIBRATION RUBBER B	2
82	75835	FLAT WASHER 5MM	4
83	75836	SPRING WASHER 5MM	4
84	75837	BOLT HB 5 X 25MM	4
85	75865	WARNING TAG	1
86	75867	NAME TAG	1
87	75838	MOTOR HOUSING SET	1
88	75839	HANDLE SET	1
89	75840	LABEL	1
90	75841	PIN 3MM	2
91	75842	COMPRESSION SPRING 4MM	1
92	75843	ROCK BUTTON	1
93	75844	SWITCH TG71B	1
94	75845	SPACER	1
95	75846	SWITCH LEVER	1
96	75847	RUBBER PLATE	1
97	75848	CORD CLAMP	1
98	75849	SCREW 4 X 18MM	2
99	75850	ANTI VIBRATION RUBBER A	4
100	75851	SCREW 4 X 25MM	5
101	75852	STRAIN RELIEF	1
102	75870	POWER CORD	1
103	75166	WORK STAND	1
104	75110	FOOT SWITCH	1

ROUND PUNCHES AND DIES FOR 75002.5A

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 3/16 (.188) 10 to 7 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 3/16 (.188) 10 to 7 GA.	F, A, H	Die 25/32 B	75732

SQUARE PUNCHES AND DIES FOR 75002.5A

SQUARE PUNCH				MATERIAL		DIE	
Size			Part No.	Thickness	Style	Size	Part No.
Nominal	Actual	Metric					
1/4"	.256	6.5mm	75800	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/4 B	75804
5/16"	.315	8mm	75801	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 5/16 B	75805
3/8"	.394	10mm	75802	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 3/8 B	75806
7/16"	.433	11mm	75803	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 7/16 B	75807

OBLONG PUNCHES AND DIES FOR 75002.5A

OBLONG PUNCH			MATERIAL		DIE		
Nominal	Size		Part No.	Thickness	Style	Size	Part No.
	Actual	Metric					
1/4" x 1/2"	.256	6.5mm	75638	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/4 x 1/2 A	75643
	x .512	x 13mm		>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	8.5mm	75639	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/32 x 1/2 A	75645
	x .512	x 13mm		>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	11mm	75640	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 7/16 x 5/8 A	75647
	x .650	x 16.5mm		>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	13mm	75641	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/2 x 3/4 A	75649
	x .768	x 19.5mm		>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	14mm	75642	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 9/16 x 13/16 A	75651
	x .827	x 21mm		>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 9/16 x 13/16 B	75652

Legend

