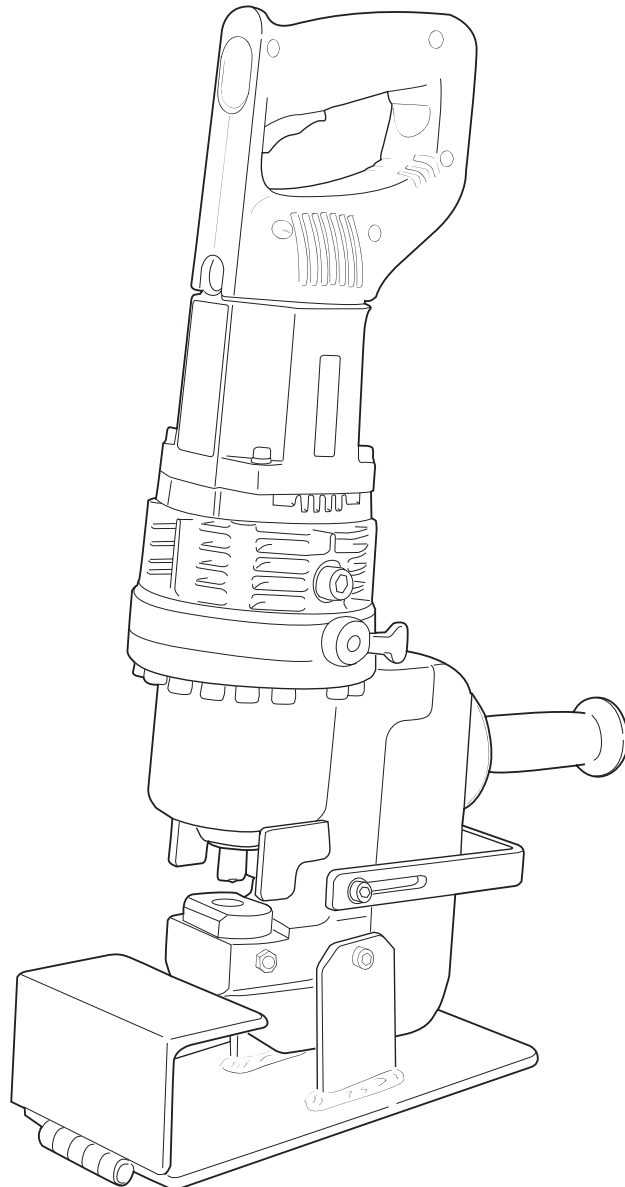


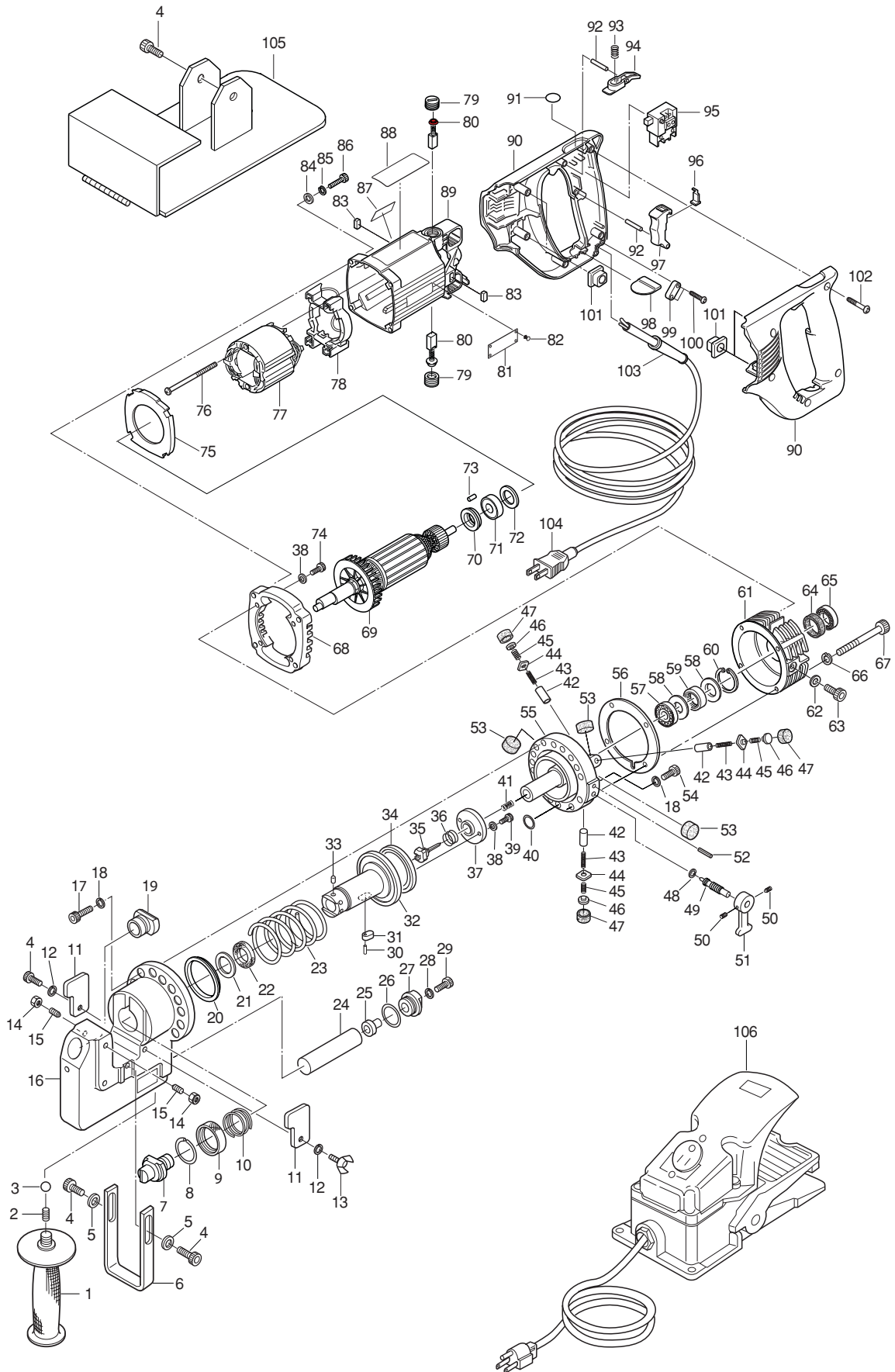
# ***Hougen***<sup>®</sup>-**Ogura**<sup>™</sup>

## **PUNCH PRO<sup>™</sup> ELECTRO-HYDRAULIC HOLE PUNCHER**



**OPERATOR'S MANUAL  
Model 75004A**

# MODEL 75004A EXPLODED VIEW



# MODEL 75004A PARTS LIST

DET. #	PART#	DESCRIPTION	QTY.
1	75063	PUNCHER HANDLE	1
2	75192	SCR-SOC SET M10 X 10MM	1
3	75191	STEEL BALL	1
4	75156	SCR-SHC M6 X 15MM	6
5	75157	FLAT WASHER 6MM	2
6	75182	HOLE LOCATOR	1
7	75492	PUNCH 11/16" DIA.	1
8	75251	RETAINING RING	1
9	75253	COUPLING SLEEVE	1
10	75252	JOINT PIN SPRING	1
11	75215	STRIPPER	1
12	75162	WASHER-HELI LOCK 6MM	8
13	75175	SCR-WING HD	1
14	75091	NUT HEX M6	2
15	75189	SCR-SOC SET M6 X 20MM	2
16	75210	"C" FRAME	1
17	75236	SCR-SHC M8 X 30 MM	13
18	75159	FLAT WASHER 8MM	15
19	75516	DIE -RD 11/16" S-TYPE	1
	75517	DIE -RD 11/16" T-TYPE	1
20	75219	CYLINDER PACKING	1
21	75233	BACKUP RING	1
22	75234	PACKING ROD SEAL	1
23	75221	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 RETAINING	1
30	75099	ROLL PIN	1
31	75135	PUNCH PISTON KEY	1
32	75250	PUNCH PISTON	1
33	75254	JOINT PIN	6
34	75235	PACKING	1
35	75216	RELEASE VALVE	1
36	75217	VALVE RETURN SPRING	1
37	75218	STOP PLATE	1
38	75101	FLAT WASHER 4MM	2
39	75102	SCR-SHC M4 X 6MM	2
40	75240	O-RING	1
41	75184	VALVE RELEASE SPING	1
42	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
43	75053	PISTON RETURN SPRING	3
44	75050	CHECK VALVE	3
45	75052	CHECK VALVE SPRING	1-3
46	75051	SPRING RETAINER	3
47	75049	RUBBER PACKING SEAL	3
48	75085	O-RING	1

DET. #	PART#	DESCRIPTION	QTY.
49	75046	RETURN VALVE	1
50	75160	SCR-SET M6 X 8MM	2
51	75047	RETURN LEVER	1
52	75100	ROLL PIN	1
53	75054	MAGENT	3
54	75241	SCR-SHC M8 X 25MM	2
55	75211	CYLINDER	1
56	75220	GASKET	1
57	75086	BALL BEARING	1
58	75055	SPACER	2
59	75088	ROLLER BEARING	1
60	75089	RETAINING RING	1
61	75860	PUMP HOUSING	1
62	75090	SEAL WASHER	1
63	75107	SCR-SHC M10 X 15MM	1
64	75084	OIL SEAL	1
65	75087	BALL BEARING	1
66	75872	WASHER HW6MM	4
67	75871	BOLT HB6 X 50MM	4
68	75874	SUB PLATE	1
69	75821	ARMATURE	1
70	75822	PAPER WASHER	1
71	75823	BALL BEARING 608 LLB	1
72	75824	THURST WASHER 16MM	1
73	75825	RUBBER PIN 4MM	1
74	75826	BOLT HB4 X 20MM	4
75	75827	FAN GUIDE	1
76	75828	SCREW 5 X 65MM	2
77	75829	FIELD 115V	1
78	75830	FIELD SUPPORT SET	1
79	75831	BRUSH CAP	2
80	75832	CARBON BRUSH (PAIR)	2
81	75864	CAUTION TAG	1
82	75833	RIVET	4
83	75834	ANTI VIBRATION RUBBER B	2
84	75835	FLAT WASHER 5MM	4
85	75836	SPRING WASHER 5MM	4
86	75837	BOLT HB 5 X 25MM	4
87	75865	WARNING TAG	1
88	75869	NAME TAG	1
89	75838	MOTOR HOUSING SET	1
90	75839	HANDLE SET	1
91	75840	LABEL	1
92	75841	PIN 3MM	2
93	75842	COMPRESSION SPRING 4MM	1
94	75843	ROCK BUTTON	1
95	75844	SWITCH TG71B	1
96	75845	SPACER	1
97	75846	SWITCH LEVER	1
98	75847	RUBBER PLATE	1
99	75848	CORD CLAMP	1
100	75850	SCREW X 18MM	2
101	75850	ANTI VIBRATION RUBBER A	4
102	75841	SCREW 4 X 25MM	5
103	75852	STRAIN RELIEF	1
104	75870	POWER CORD	1
105	75194	WORK STAND	1
106	75110	FOOT SWITCH	1

# ROUND PUNCHES AND DIES

ROUND PUNCH				MATERIAL		DIE	
Nominal	Size		Part No.	Thickness	Style	Size	Part No.
	Actual	Metric					
1/4"	.256	6.5mm	75484	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/4 R	75495
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/4 S	75496
5/16"	.315	8mm	75485	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 5/16 R	75497
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 5/16 S	75498
11/32"	.335	8.5mm	75486	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/32 R	75499
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/32 S	75500
3/8"	.394	10mm	75487	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 3/8 R	75501
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 3/8 S	75502
				5/16 (.312) max.	C	Die 3/8 C	75524
7/16"	.433	11mm	75488	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 7/16 R	75503
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 7/16 S	75504
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 7/16 T	75505
				5/16 (.312) max.	C	Die 7/16 C	75525
1/2"	.512	13mm	75489	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/2 R	75506
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/2 S	75507
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 1/2 T	75508
				5/16 (.312) max.	C	Die 1/2 C	75526
9/16"	.551	14mm	75490	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 9/16 R	75509
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 9/16 S	75510
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 9/16 T	75511
				5/16 (.312) max.	C	Die 9/16 C	75527
5/8"	.625	15.9mm	75491	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 5/8 R	75512
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 5/8 S	75513
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 5/8 T	75514
				5/16 (.312) max.	C	Die 5/8 C	75528
11/16"	.688	17.5mm	75492	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/16 R	75515
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/16 S	75516
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 11/16 T	75517
				5/16 (.312) max.	C	Die 11/16 C	75529
3/4"	.750	19mm	75493	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 3/4 R	75518
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 3/4 S	75519
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 3/4 T	75520
				5/16 (.312) max.	C	Die 3/4 C	75530
25/32"	.787	20mm	75494	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 25/32 R	75521
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 25/32 S	75522
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 25/32 T	75523
				5/16 (.312) max.	C	Die 25/32 C	75531

# OBLONG PUNCHES AND DIES

OBLONG PUNCH			Part No.	MATERIAL		DIE	
Size				Thickness	Style	Size	Part No.
Nominal	Actual	Metric					
1/4" x 1/2"	.256 x	6.5mm x	75669	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/4 x 1/2 R	75674
		.512		13mm	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/4 x 1/2 S
11/32" x 1/2"	.335 x	8.5mm x	75670	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/32 x 1/2 R	75676
		.512		13mm	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/32 x 1/2 S
7/16" x 5/8"	.433 x	11mm x	75671	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 7/16 x 5/8 R	75678
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 7/16 x 5/8 S	75679
	.650	16.5mm		>1/4 (.250) to 3/8 (.375)	F, A, H	Die 7/16 x 5/8 T	75680
				5/16 (.312) max.	C	Die 7/16 x 5/8 C	75687
1/2" x 3/4"	.512 x	13mm x	75672	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/2 x 3/4 R	75681
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/2 x 3/4 S	75682
	.768	19.5mm		>1/4 (.250) to 3/8 (.375)	F, A, H	Die 1/2 x 3/4 T	75683
				5/16 (.312) max.	C	Die 1/2 x 3/4 C	75688
9/16" x 13/16"	.551 x	14mm x	75673	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 9/16 x 13/16 R	75684
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 9/16 x 13/16 S	75685
	.827	21mm		>1/4 (.250) to 3/8 (.375)	F, A, H	Die 9/16 x 13/16 T	75686
				5/16 (.312) max.	C	Die 9/16 x 13/16 C	75689

