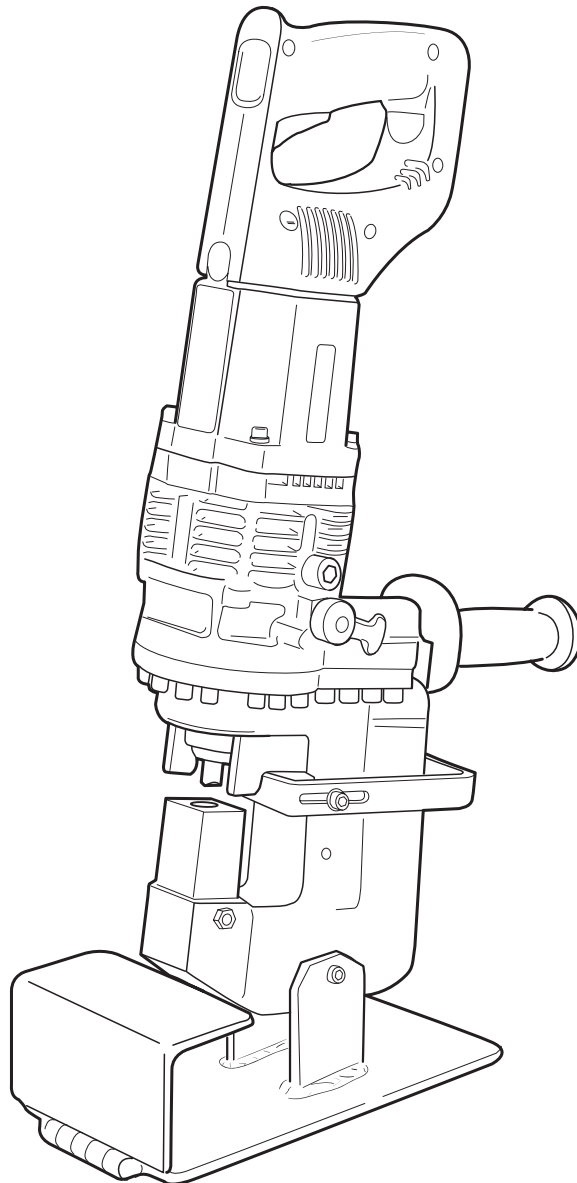


Hougen[®]-Ogura[™]

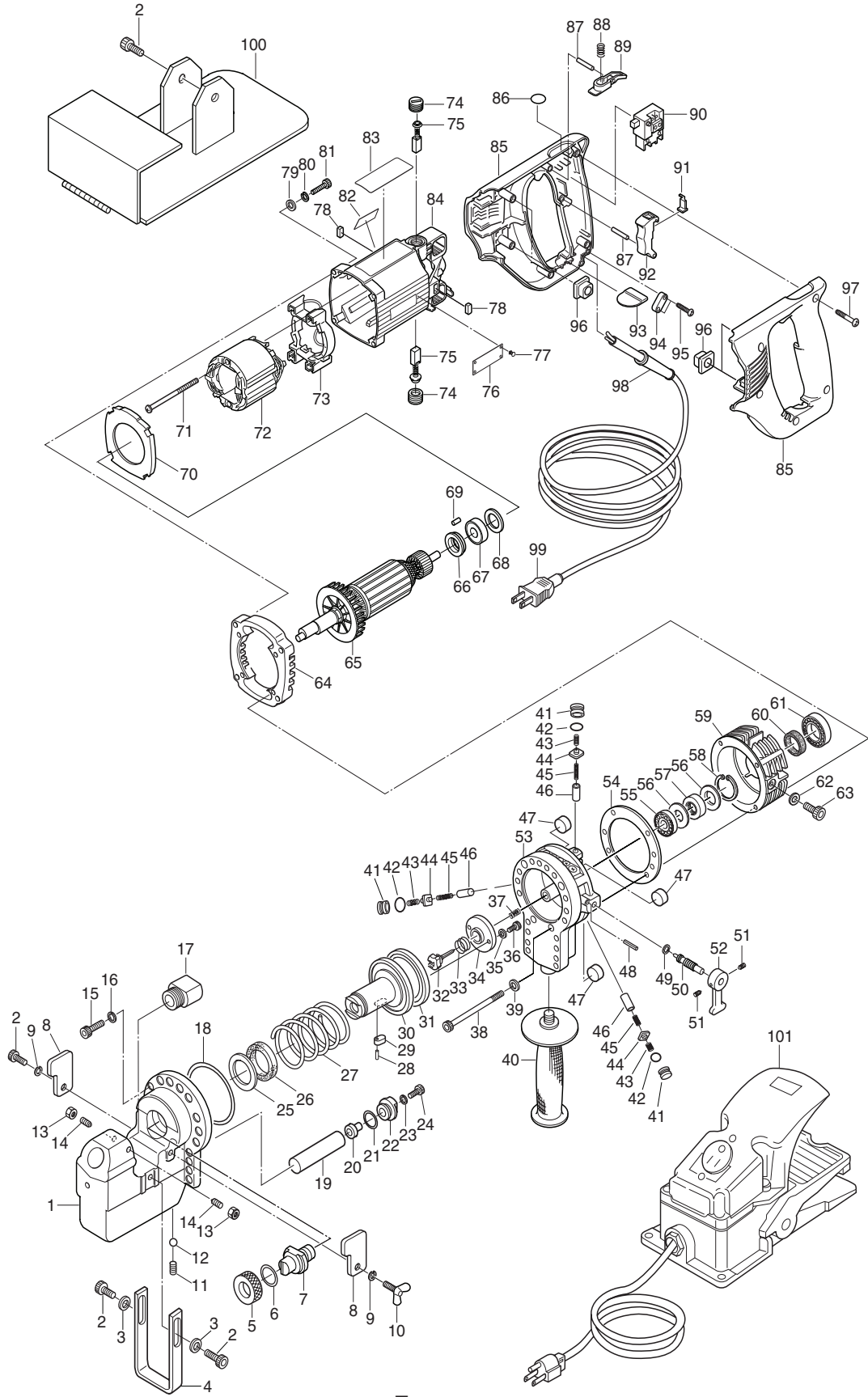
75003A PUNCH PRO[™]
ELECTRO-HYDRAULIC HOLE PUNCHER

OPERATOR'S MANUAL

COVERS HOLE PUNCHER PART NUMBERS 0753101 & 0753201



75003A EXPLODED VIEW



PARTS LIST - 75003A

Item	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 Die	1
8	75131	Stripper	2
	75131L	Stripper (Long)	2
9	75162	Helix Washer 6MM	2
10	75156	Screw 8MM X 15MM	6
11	75192	Screw 6MM X 10MM	1
12	75191	Steel Ball	1
13	75091	Hex Nut M6	2
14	75189	Screw M6 X 15MM	2
15	75158	Screw M8 X 20MM	18
16	75159	Flat Washer	18
17	75466	Die - Long 9/16 Type A	1
	75467	Die - Long 9/16 Type B	1
18	75185	O-Ring	1
19	75137	Oil Bladder	1
20	75136	Bladder Screw	1
21	75190	O-Ring	1
22	75188	Bladder Bushing Screw	1
23	75155	Helicoil	1
24	75138	Bladder Retain. Scew	1
25	75152	Back Up Ring	1
26	75153	Rod Seal Packing	1
27	75187	Punch Return Spring	1
28	75099	Roll Pin 2.5mm X 10mm	1
29	75135	Punch Piston Key	1
30	75128	Punch Piston	1
31	75154	Packing	1
32	75042	Release Valve	1
33	75043A	Valve Return Spring	1
34	75183	Stop Plate	1
35	75101	Flat Washer 4mm	2
36	75102	Screw 4mm X 6mm	2
37	75184	Valve Release Spring	1
38	75863	Bolt 5mm X 70mm	4
39	75862	Washer 5mm	4
40	75063	Punch Handle	1
41	75325	Rubber Packing w/groove	3
42	75326	Packing O-Ring	3
43	75052	Check Valve Spring	3
44	75050	Check Valve	3
45	75053	Pump Piston Return Spring	3
46	75048 A-J	Pump Pistons are replaced by size and fit. PumP Cylinder should be sent to Hougen Mfg.	
47	75054	Magnet	3
48	75100	Roll Pin	1
49	75085	O-Ring	1
50	75046	Return Valve	1
51	75160	Screw 6mm X 8mm	2
52	75047	Return Lever	1

Item	Part #	Description	Qty
53	75321	Cylinder w/ Chamfer	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	Screw 10mm X 15mm	1
64	75820	Sub Plate	1
65	75821	Armature (115V)	1
	76469	Armature (230V)	1
66	75822	Paper Washer	1
67	75823	Ball Bearing	1
68	75824	Thrust Washer 16mm	1
69	75825	Rubber Pin	2
70	75827	Fan Guide	1
71	75828	Screw 5mm X 65mm	2
72	75829	Field (115V)	1
	76470	Field (230V)	1
73	75830	Field Support Set	1
74	75831	Brush Cap	2
75	75832	Carbon Brush (pair)	1
76	75864	Caution Tag	1
77	75833	Rivet	4
78	75834	Anti-Vibration Pad	2
79	75835	Flat Washer	4
80	75836	Spring Washer	4
81	75837	Bolt 5mm 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	2
88	75842	Compression Ring	1
89	75843	Button	1
90	75844	Switch	1
91	75845	Spacer	1
92	75846	Switch Lever	1
93	75847	Rubber Plate	1
94	75848	Cord Clamp (115V)	1
	76446	Cord Clamp (230V)	1
95	75849	Screw 4mm X 18mm	2
96	75850	Anti-Vibration Pad	4
97	75851	Screw 4mm X 25mm	5
98	75852	Strain Relief (115V)	1
	76449	Strain Relief (230V)	1
99	75870	Power Cord (115V)	1
	76451	Power Cord (230V)	1
	76477	Power Cord (230V, Type I)	1
100	75194	Work Stand	1
101	75110	Foot Switch (115V)	1
	76479	Foot Switch (230V)	1
	76480	Foot Switch (230V, Type I)	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
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	
15/32"	.472	12mm	75917	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 15/32 A	75920
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 15/32 B	75921
			75918 (LP)	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H, L	Die 15/32 A	75922
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H, L	Die 15/32 B	75923
			19/64 (.297) max.	C	Die 15/32 C	75924	
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
23/32"	.709	18mm	75919	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 23/32 A	75925
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 23/32 B	75926
3/4"	.748	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	
Nominal	Size		Part No.	Thickness	Style	Size	Part No.
	Actual	Metric					
1/4" x	.256 x	6.5mm x	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
1/2" x	.512 x	13mm x	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	.335 x	8.5mm x	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
1/2" x	.512 x	13mm x	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	.433 x	11mm x	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
5/8" x	.650 x	16.5mm x	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	.512 x	13mm x	75641	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 1/2 x 3/4 A	75662
3/4" x	.768 x	19.5mm x		>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	.551 x	14mm x	75642	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die LD 9/16 x 13/16 A	75664
13/16" x	.827 x	21mm x		>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die LD 9/16 x 13/16 B	75665

