

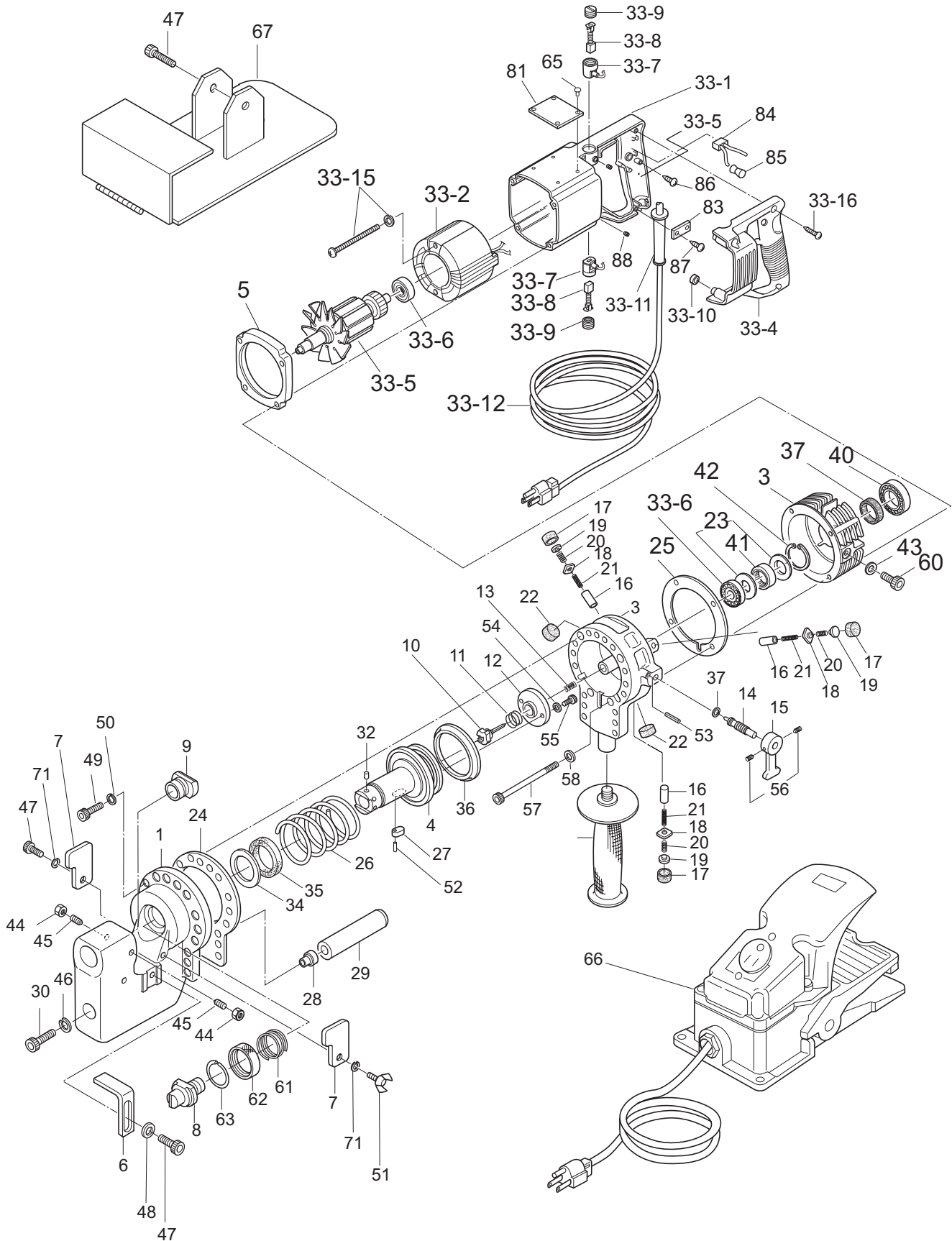
**Hougen®-Ogura™**

**PUNCH PRO™ ELECTRO-HYDRAULIC HOLE PUNCHER**

**OPERATOR'S MANUAL**  
**Model 75002**



# 75002 EXPLODED VIEW

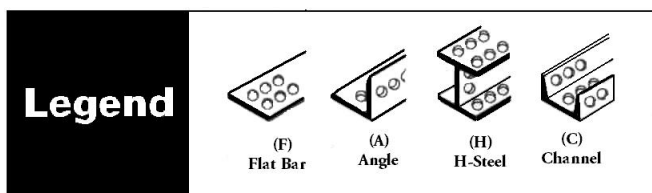


# PARTS LIST - 75002

Detail No.	Description	Part No.	No. Req'd.	Detail No.	Description	Part No.	No. Req'd.
1	"C" Frame	75125	1	33-11	Strain Relief	75074	1
2	Cylinder	75126	1	33-12	Power Cord	75148	1
3	Pump Housing	75127	1	33-15	SCR M5 x 62mm w/ washer	75150	2
4	Punch Piston	75118	1	33-16	PH Screw M4 x 18MM	75151	1
5	Sub Plate	75129	1	34	Back Up Ring	75152	1
6	Hole Locator	75130	1	35	Rod Seal Packing	75153	1
7	Stripper	75131	1	36	Packing	75154	1
8	Punch 9/16" Dia.	75427	Incl.	37	Oil Seal	75084	1
9	Die 9/16 Dia A-Type	75444	Incl.	38	"O" Ring	75085	
	Die 9/16" Dia B-Type	75445	Incl.	40	Ball Bearing	75087	1
10	Release Valve	75042	1	41	Roller Bearing	75088	1
11	Valve Return Spring	75043	1	42	Retaining Ring	75089	1
12	Stop Plate	75044	1	43	Washer Seal	75090	1
13	Valve Release Spring	75045	1	44	Hex Nut- M6	75091	2
14	Return Valve	75046	1	45	SS Screw M6 x 15mm	75092	2
15	Return Lever	75047	1	46	Heli Lock Washer 10mm	75155	1
16	Pump Piston	75048-A	#1	47	SH Screw M6 x 15mm	75156	6
	Pump Piston	75048-B	#1	48	Flat Washer 6mm	75157	2
	Pump Piston	75048-C	#1	49	SH Screw M8 x 20MM	75158	16
	Pump Piston	75048-D	#1	50	Flat Washer 8mm	75159	16
	Pump Piston	75048-E	#1	51	Screw, Wing M6 x 15mm	75175	1
	Pump Piston	75048-F	#1	52	Roll Pin 2.5mm	75099	1
	Pump Piston	75048-G	#1	53	Roll Pin 4mm	75100	1
	Pump Piston	75048-H	#1	54	Flat Washer 4mm	75101	2
	Pump Piston	75048-I	#1	55	SH Screw M4 x 6mm	75102	2
	Pump Piston	75048-J	#1	56	SS Screw M6 x 8mm	75160	2
17	Rubber Packing	75049	3	57	SH Screw M5 x 90MM	75161	4
18	Check Valve	75050	3	58	Heli Lock Washer 5mm	75105	8
19	Spring Retainer	75051	3	59	Heli Lock Washer 6mm	75162	2
20	Check Valve Spring	75052	3	60	SH Screw M10 x 15mm	75107	1
21	Piston Return Spring	75053	3	61	Joint Pin Spring	75116	1
22	Magnet	75054	3	62	Sleeve Coupling	75115	1
23	Spacer	75055	2	63	Retaining Ring	75117	1
24	Gasket	75132	1	65	Rivet	01893	12
25	Gasket	75133	1	66	Foot Switch	75110	1
26	Punch Return Spring	75134	1	67	Work Stand	75194	1
27	Punch Piston Key	75135	1	71	Heli Washer Lock 6mm	75162	2
28	Bladder Screw	75136	1	80	Warning Tag	75033	1
29	Oil Bladder	75137	1	81	Caution Tag	75034	1
30	Bladder Ret. Spring	75138	1	82	Name Plate	75028	1
31	Puncher Handle	75063	1	83	Power Cord Retainer	75112	1
32	Joint Pin	75114	6	84	Filter Capacitor	75163	1
33-1	Motor Housing	75139	1	85	Wire Connector	75167	1
33-2	Field	75140	1	86	PH Screw M4 x 8mm	75350	1
33-3	Armature	75141	1	87	PH Srew M4 x 10mm	75079	1
33-4	Switch Cover	75142	1	88	SS Screw	75246	2
33-5	Switch	75143	1				
33-6	Ball Bearing	75086	2				
33-7	Brush Holder	75144	2				
33-8	Carbon Brush Set (2)	75145	1				
33-9	Brush Cap	75146	2				

# ROUND PUNCHES AND DIES FOR b MODEL 75002

ROUND PUNCH			MATERIAL		DIE		
SIZE			Part No.	Thickness	Style	Die Size	Part No.
Nominal	Actual	Metric					
1/4"	(.256)	6.5mm	75421	5/64 to 1/8 - 14-11 GA	F,A,H	1/4 A	75432
				>1/8 to 1/4 - 10-3 GA.	F,A,H	1/4 B	75433
5/16"	(.315)	8mm	75422	5/64 to 1/8 - 14-11 GA	F,A,H	5/16 A	75434
				>1/8 to 1/4 - 10-3 GA.	F,A,H	5/16 B	75435
11/32"	(.335)	8.5mm	75423	5/64 to 1/8 - 14-11 GA	F,A,H	11/32 A	75436
				>1/8 to 1/4 - 10-3 GA.	F,A,H	11/32 B	75437
3/8"	(.394)	10mm	75424	5/64 to 1/8 - 14-11 GA	F,A,H	3/8 A	75438
				>1/8 to 1/4 - 10-3 GA.	F,A,H	3/8 B	75439
				19/64 Max.	C	3/8 C	75450
7/16"	(.433)	11mm	75425	5/64 to 1/8 - 14-11 GA	F,A,H	7/16 A	75440
				>1/8 to 1/4 - 10-3 GA.	F,A,H	7/16 B	75441
				19/64 Max.	C	7/16 C	75451
1/2"	(.512)	13mm	75246	5/64 to 1/8 - 14-11 GA	F,A,H	1/2 A	75442
				>1/8 to 1/4 - 10-3 GA.	F,A,H	1/2 B	75443
				19/64 Max.	C	1/2 C	75452
9/16"	(.551)	14mm	75427	5/64 to 1/8 - 14-11 GA	F,A,H	9/16 A	75444
				>1/8 to 1/4 - 10-3 GA.	F,A,H	9/16 B	75445
				19/64 Max.	C	9/16 C	75453
5/8"	(.625)	15.9mm	75428	5/64 to 1/8 - 14-11 GA	F,A,H	5/8 A	75446
				>1/8 to 1/4 - 10-3 GA.	F,A,H	5/8 B	75447
11/16"	(.688)	17.5mm	75429	5/64 to 1/8 - 14-11 GA	F,A,H	11/16 A	75448
				>1/8 to 1/4 - 10-3 GA.	F,A,H	11/16 B	75449



# OBLONG PUNCHES AND DIES FOR 75002

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 to 1/8 14 to to 11 GA. >1/8 to 1/4 10 to 3 GA. 19/64 (.297) Max.	F,A,H F,A,H C	Die 1/4+ 1/2 A	75643 75644 75653			
11/32" x 1/2"	.335 x .512	8.5mm x 13mm				75639		5/64 to 1/8 14 to to 11 GA. >1/8 to 1/4 10 to 3 GA. 19/64 (.297) Max.	F,A,H F,A,H C	Die 11/32 x 1/2 A Die 11/32 x 1/2 B Die 11/32 x 1/2 C
7/16" x 5/8"	.433 x .650	11mm x 16.5mm				75640		5/64 to 1/8 14 to to 11 GA. >1/8 to 1/4 10 to 3 GA. 19/64 (.297) Max.	F,A,H F,A,H C	Die 7/16 5/8 R Die 7/16 x 5/8S Die 7/16 x 5/8 C
1/2+ x 3/4"	.512 x .768	13mm x 19.5mm	75641	5/64 to 1/8 14 to to 11 GA. >1/8 to 1/4 10 to 3 GA.	F,A,H F,A,H	Die 1/2+ x 3/4 A Die 1/2+ x 3/4 B	75649 75650			
9/16" x 13/16"	.551 x .827	14mm x 21mm	75642	5/64 to 1/8 14 to to 11 GA. >1/8 to 1/4 10 to 3 GA.	F,A,H F,A,H	Die 9/16 x 13/16 R Die 9/16 x 13/16 S	75651 75652			

