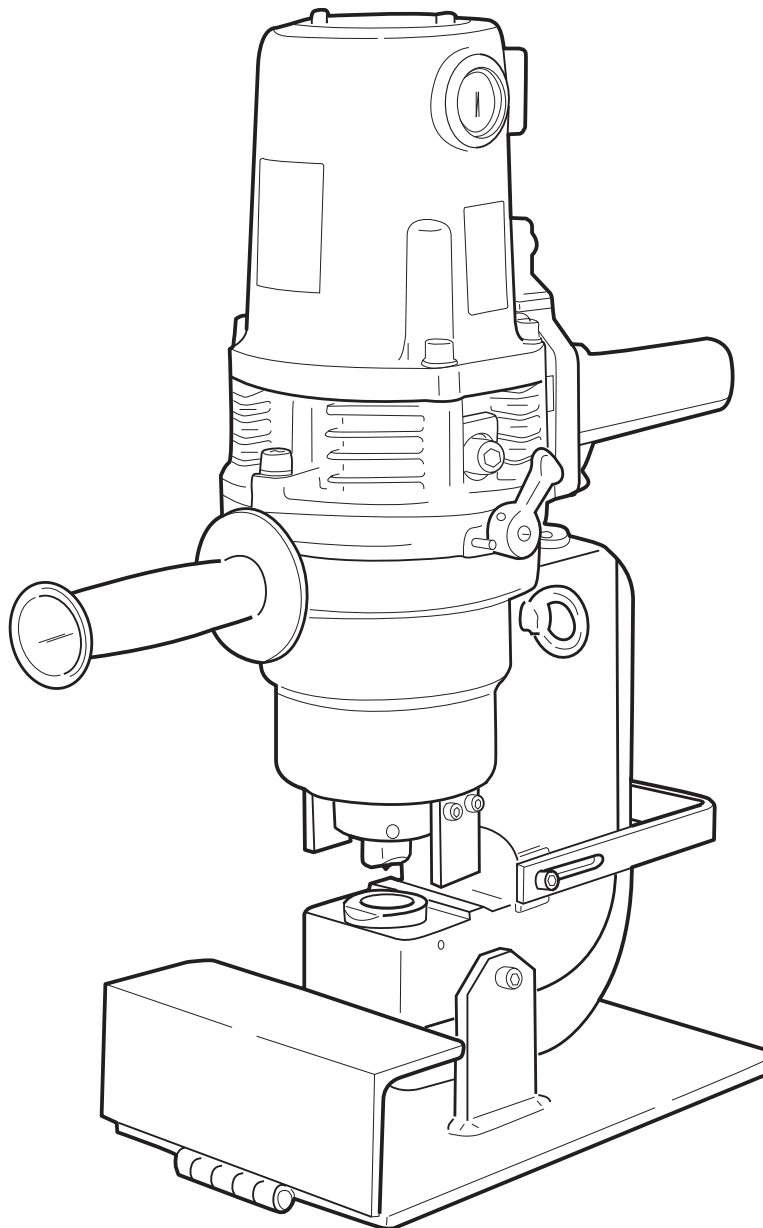


Hougen[®]-Ogura[™]

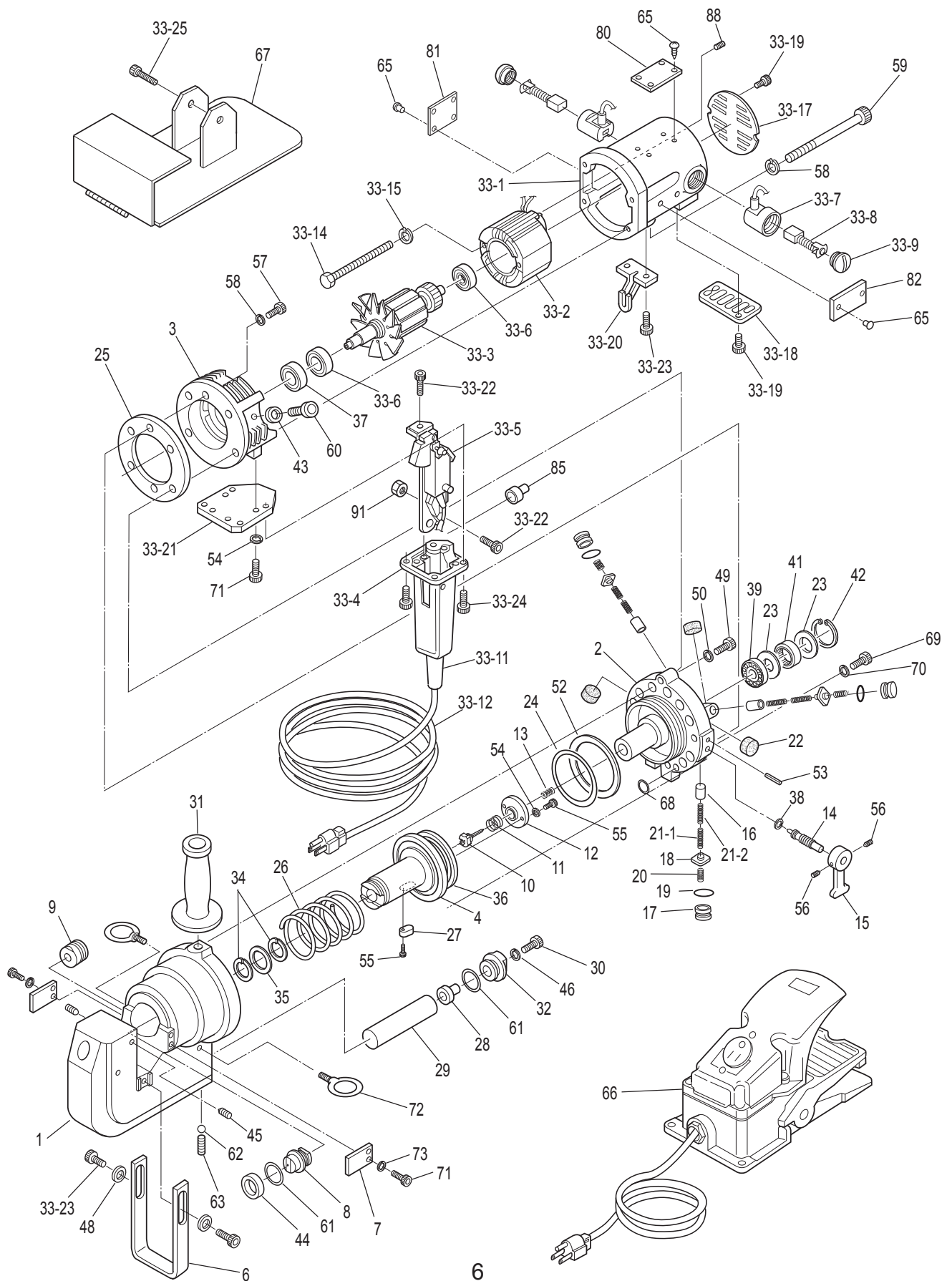
75006 PUNCH PRO[™] ELECTRO-HYDRAULIC HOLE PUNCHER

OPERATOR'S MANUAL

COVERS HOLE PUNCHER PART NUMBERS 0756101 & 0756201



75006 EXPLODED VIEW



PARTS LIST - 75006

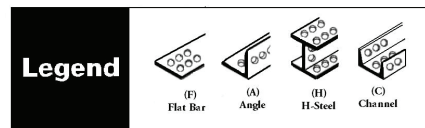
Det #	Part #	Description	Qty
1	75331	"C" Frame	1
2	75324	Cylinder w/chamfer	1
3	75333	Pump Housing	1
4	75334	Punch Piston	1
6	75335	Hole Locator	1
7	75336	Stripper	2
8	75575	Punch 13/16" Dia	1
9	75606	Die 13/16" C-Type	1
	75607	Die 13/16" D-type	1
10	75337	Release valve	1
11	75338	Valve Return Spring	1
12	75268	Stop Plate	1
13	75339	Valve Release Spring	1
14	75046	Return Valve	1
15	75047	Return Lever	1
16	75270 (A-J)	Pump Pistons are replaced by size and fit. The Cylinder must be returned to Hougen Mfg. for correct Piston size.	
17	75325	Rubber Packing w/groove	3
18	75050	Check Valve	3
19	75326	O-ring	3
20	75052	Check Valve Spring	3
21-1	75340	Piston Return Spring	3
21-2	75341	Piston Return Spring	3
22	75054	Magnet	3
23	75271	Spacer	2
24	75272	O-Ring	1
25	75342	Gasket	1
26	75343	Punch Return Spring	1
27	75275	Punch Piston Key	1
28	75136	Bladder Screw	1
29	75344	Oil Bladder	1
30	75138	Bladder Retaining Screw	1
31	75063	Punch Handle	1
32	75345	Bladder Bushing Screw	1
33-1	75277	Motor Housing	1
33-2	75278	Field (115V)	1
	76475	Field (230V)	1
33-3	75279	Amature (115V)	1
	76474	Field (230V)	1
33-4	75346	Switch Handle	1
33-5	75365	Switch	1
33-6	75281	Ball Bearing	1
33-7	75282	Brush Holder	2
33-8	75283	Carbon Brush (Pair)	1
33-9	75284	Brush Cap	2
33-11	75074	Strain Relief (115V)	1
	76446	Strain Relief (230V)	1
33-12	75347	Power Cord (115V)	1
	76476	Power Cord (230V)	1
	76478	Power Cord (230V, Type I)	1
33-14	75285	Hex HD Bolt M5 x 50mm	2
33-15	75150	Heli Lock Washer 5mm	2
33-17	75287	Motor Top Grill	1

Det #	Part #	Description	Qty
33-18	75288	Motor Side Grill	1
33-19	75289	Pan HD M5 x 8mm	4
33-20	75348	Support Bracket	1
33-21	75349	Adaptor Plate	1
33-22	75350	Pan HD Screw M4 x 8mm	4
33-23	75156	Soc HD Screw M6 x 15mm	4
33-24	75351	Soc HD Screw M6 x 18mm	4
33-25	75301	Soc HD Screw M8 x 15mm	2
34	75293	Back Up Ring	2
35	75294	Rod Seal Packing	1
36	75295	Packing	1
37	75296	Oil Seal	1
38	75085	O-Ring	1
39	75086	Ball Bearing	1
40	75297	Ball Bearing	1
41	75088	Roller Bearing	1
42	75298	Retaining Ring	1
43	75090	Washer Seal	1
44	75352	Punch Retaining Nut	1
45	75092	Soc Set Screw M6 x 15mm	2
46	75155	Heli Lock Washer M10	1
48	75157	Flat Washer	2
49	75316	Soc HD Screw M10 x 25mm	11
50	75353	Serr. Flat Washer 10mm	11
52	75309	Back Up Ring	1
53	75100	Roll Pin 4mm x 20mm	1
54	75105	Serr. Flat Washer 5mm	6
55	75307	Soc HD Screw M5 x 10mm	3
56	75160	Soc Set Screw M6 x 8mm	2
57	75236	Soc HD Screw M8 x 30mm	1
58	75093	Heli Lock Washer 8mm	5
59	75354	Soc HD Screw M8 x 85mm	4
60	75107	Soc HD Screw M10 x 15mm	1
61	75355	O-Ring	2
62	75356	Steel Ball	1
63	75357	Soc Set Screw M12 x 15mm	1
65	75109	Rivet	10
66	75110	Foot Switch (115V)	1
	76479	Foot Switch (230V)	1
	76480	Foot Switch (230V, Type I)	1
67	75359	Work Stand	1
68	75360	O-Ring	1
69	75303	Soc HD M12 x 25mm	2
70	75304	Serr Flat Washer 12mm	2
71	75361	Soc HD Screw M5 x 15mm	8
72	75362	Eye Bolt	2
73	75150	Heli Lock Washer 5mm	4
80	75033	Warning Tag	1
81	75034	Caution Tag	1
82	75032	Name Tag	1
85	75113	Wire Connector (large)	1
88	75318	Soc Set Screw M5 x 6mm	2
89	75247	Pan HD Screw M3 x 5mm	2
91	75310	Hex Nut M4	2

ROUND PUNCHES AND DIES FOR 75006

ROUND PUNCH			Part No.	MATERIAL		DIE	
Nominal	Actual	Metric		Thickness	Style	Size	Part No.
3/8"	.394	10mm	75945	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 3/8 A	75948
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 7/16 A	75578
7/16"	.433	11mm	75568	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 7/16 B	75579
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 7/16 C	75580
				5/16 (.312) max.	C	Die 7/16 CC	75616
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 15/32 A	75949
15/32"	.472	12MM	75946	>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 15/32 B	75950
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 15/32 C	75951
				5/16 (.312) max.	C	Die 15/32 CC	75952
1/2"	.512	13MM	75569	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/2 A	75581
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/2 B	75582
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 1/2 C	75583
				5/16 (.312) max.	C	Die 1/2 CC	75617
9/16"	.552	14mm	75570	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 9/16 A	75584
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 9/16 B	75585
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 9/16 C	75586
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 9/16 D	75587
				5/16 (.312) max.	C	Die 9/16 CC	75618
5/8"	.625	15.9mm	75571	>5/16 (.312) to 1/2 (.500)	C	Die 9/16 CD	75619
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 5/8 A	75588
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 5/8 B	75589
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 5/8 C	75590
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 5/8 D	75591
11/16"	.688	17.5mm	75572	5/16 (.312) max.	C	Die 5/8 CC	75620
				>5/16 (.312) to 1/2 (.500)	C	Die 5/8 CD	75621
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/16 A	75592
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/16 B	75593
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 11/16 C	75594
23/32"	.709	18mm	75947	>3/8 (.375) to 1/2 (.500)	F, A, H	Die 11/16 D	75595
				5/16 (.312) max.	C	Die 11/16 CC	75622
				>5/16 (.312) to 1/2 (.500)	C	Die 11/16 CD	75623
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 23/32 A	75953
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 23/32 B	75954
3/4"	.750	19mm	75573	>1/4 (.250) to 3/8 (.375)	F, A, H	Die 23/32 C	75955
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 23/32 D	75956
				5/16 (.312) max.	C	Die 23/32 CC	75957
				>5/16 (.312) to 1/2 (.500)	C	Die 23/32 CD	75958
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 3/4 A	75596
>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 3/4 B	75597				
>1/4 (.250) to 3/8 (.375)	F, A, H	Die 3/4 C	75598				
>3/8 (.375) to 1/2 (.500)	F, A, H	Die 3/4 D	75599				
5/16 (.312) max.	C	Die 3/4 CC	75624				
>5/16 (.312) to 1/2 (.500)	C	Die 3/4 CD	75625				

ROUND PUNCH			Part No.	MATERIAL		DIE	
Nominal	Actual	Metric		Thickness	Style	Size	Part No.
25/32"	.787	20mm	75574	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 25/32 A	75600
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 25/32 B	75601
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 25/32 C	75602
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 25/32 D	75603
				5/16 (.312) max.	C	Die 25/32 CC	75626
13/16"	.812	20.6mm	75575	>5/16 (.312) to 1/2 (.500)	C	Die 25/32 CD	75627
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 13/16 A	75604
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 13/16 B	75605
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 13/16 C	75606
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 13/16 D	75607
7/8"	.875	22.2mm	75576	5/16 (.312) max.	C	Die 13/16 CC	75628
				>5/16 (.312) to 1/2 (.500)	C	Die 13/16 CD	75629
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 7/8 A	75608
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 7/8 B	75609
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 7/8 C	75610
15/16"	.938	23.8mm	75577	>3/8 (.375) to 1/2 (.500)	F, A, H	Die 7/8 D	75611
				5/16 (.312) max.	C	Die 7/8 CC	75630
				>5/16 (.312) to 1/2 (.500)	C	Die 7/8 CD	75631
				5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 15/16 A	75612
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 15/16 B	75613
>1/4 (.250) to 3/8 (.375)	F, A, H	Die 15/16 C	75614				
>3/8 (.375) to 15/32 (.469)	F, A, H	Die 15/16 D	75615				



OBLONG PUNCHES AND DIES FOR 75006

OBLONG PUNCH			Part No.	MATERIAL		DIE	
Nominal	Actual	Metric		Thickness	Style	Size	Part No.
7/16" x 5/8"	.433 x .650	11mm x 16.5mm	75705	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 7/16 x 5/8 A	75709
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 7/16 x 5/8 B	75710
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 7/16 x 5/8 C	75711
				5/16 (.312) max.	C	Die 7/16 x 5/8 CC	75723
1/2" x 3/4"	.512 x .768	13mm x 19.5mm	75706	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 1/2 x 3/4 A	75712
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 1/2 x 3/4 B	75713
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 1/2 x 3/4 C	75714
				5/16 (.312) max.	C	Die 1/2 x 3/4 CC	75724
9/16" x 13/16"	.551 x .827	14mm x 21mm	75707	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 9/16 x 13/16 A	75715
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 9/16 x 13/16 B	75716
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 9/16 x 13/16 C	75717
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 9/16 x 13/16 D	75718
				5/16 (.312) max.	C	Die 9/16 x 13/16 CC	75725
				>5/16 (.312) to 1/2 (.500)	C	Die 9/16 x 13/16 CD	75726
11/16" x 13/16"	.709 x .827	18mm x 21mm	75708	5/64 (.078) to 1/8 (.125) 14 to 11 GA.	F, A, H	Die 11/16 x 13/16 A	75719
				>1/8 (.125) to 1/4 (.250) 10 to 3 GA.	F, A, H	Die 11/16 x 13/16 B	75720
				>1/4 (.250) to 3/8 (.375)	F, A, H	Die 11/16 x 13/16 C	75721
				>3/8 (.375) to 1/2 (.500)	F, A, H	Die 11/16 x 13/16 D	75722
				5/16 (.312) max.	C	Die 11/16 x 13/16 CC	75727
				>5/16 (.312) to 1/2 (.500)	C	Die 11/16 x 13/16 CD	75728

