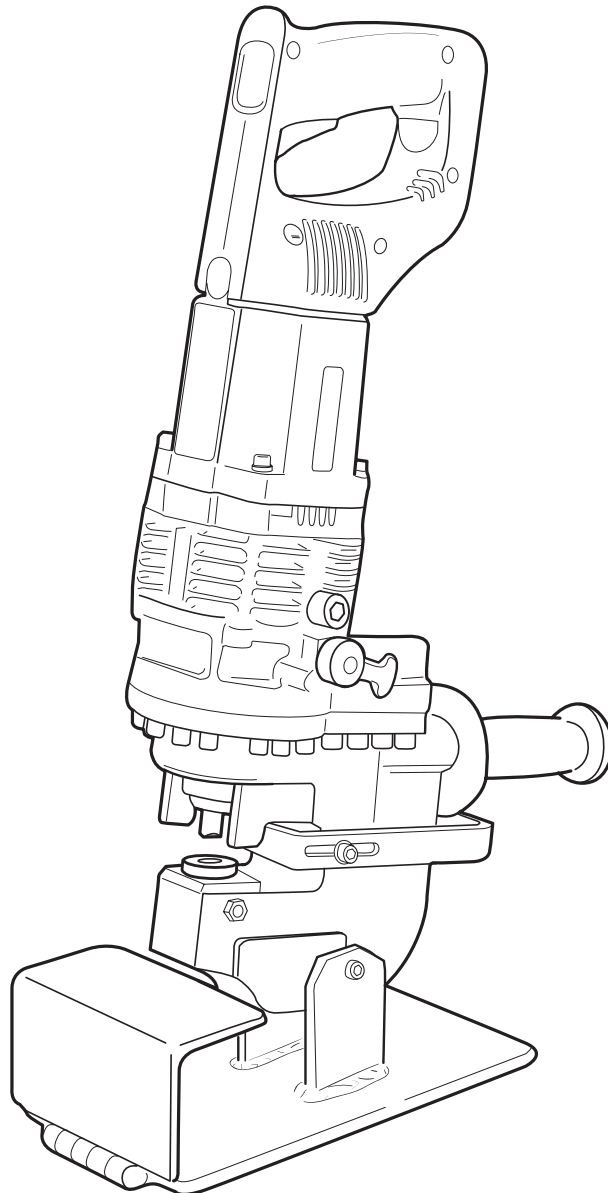


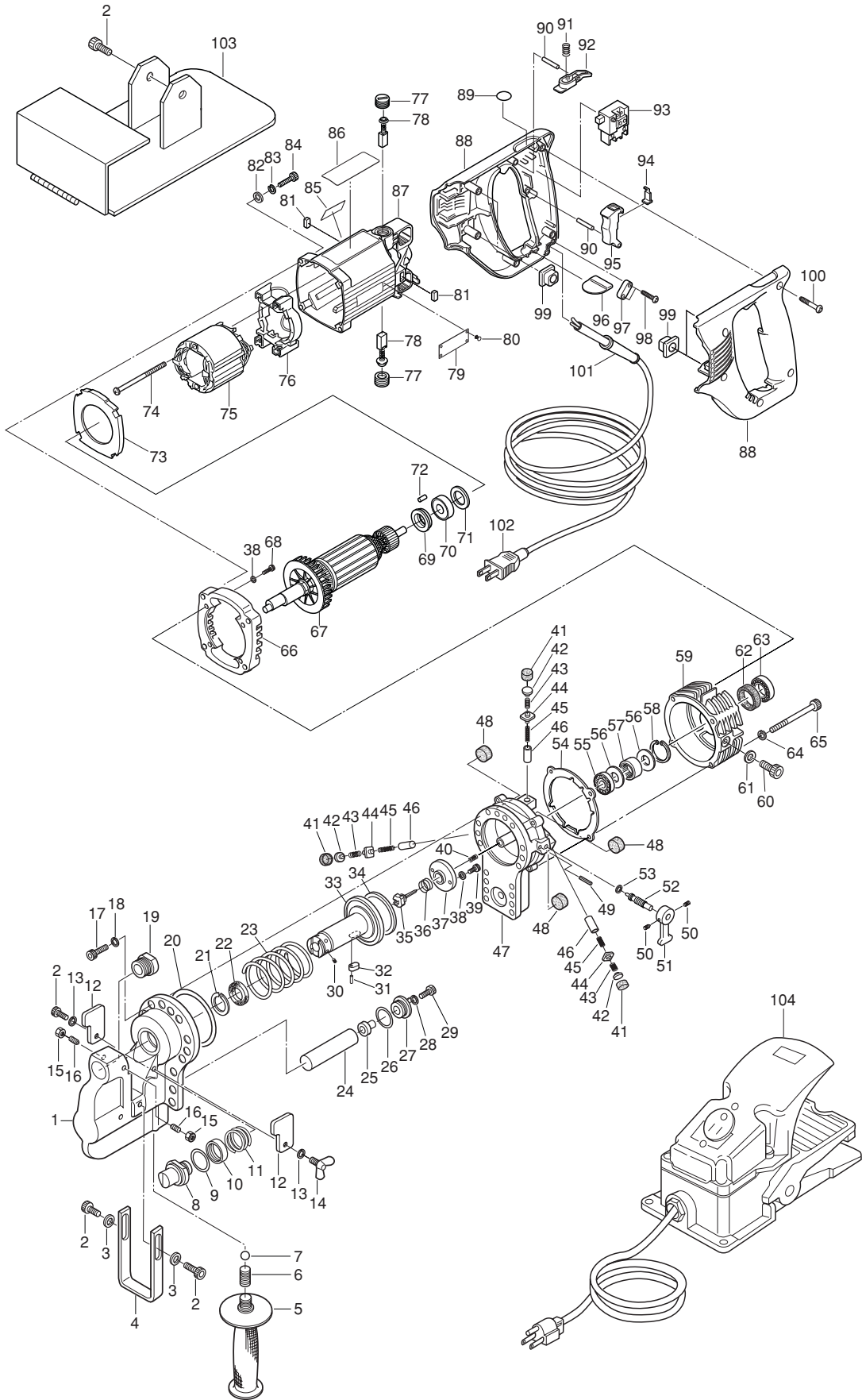
Hougen[®]-**Ogura**[™]

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 | HOLE 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 |
| 9 | 75117 | RETAINING RING | 1 |
| 10 | 75115 | COUPLING SLEEVE | 1 |
| 11 | 75116 | JOINT PIN SPRING | 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 20 MM | 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 | 75114 | JOINT PIN | 6 |
| 31 | 75099 | ROLL PIN | 1 |
| 32 | 75135 | PUNCH PISTON KEY | 1 |
| 33 | 75118 | 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 | 75049 | SEAL-PACKING | 3 |
| 42 | 75051 | SPRING RETAINER | 3 |
| 43 | 75052 | CHECK VALVE SPRING | 3 |
| 44 | 75050 | CHECK VALVE | 3 |
| 45 | 75053 | PISTON RETURN SPRING | 3 |
| 46 | 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 |
| 47 | 75174 | CYLINDER | 1 |
| 48 | 75054 | MAGNET | 3 |

| DET. # | PART# | DESCRIPTION | QTY. |
|--------|-------|-------------------------|------|
| 49 | 75100 | ROLL PIN | 1 |
| 50 | 75160 | SR-SET M6 X 8MM | 2 |
| 51 | 75047 | RETURN LEVER | 1 |
| 52 | 75046 | RETURN VALVE | 1 |
| 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 | 75850 | SCREW X 18MM | 2 |
| 99 | 75850 | ANTI VIBRATION RUBBER A | 4 |
| 100 | 75841 | 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 |

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



SQUARE PUNCHES AND DIES FOR 75002.5A

| SQUARE PUNCH | | | MATERIAL | | DIE | | |
|--------------|--------|--------|----------|--|---------|------------|----------|
| Nominal | Size | | Part No. | Thickness | Style | Size | Part No. |
| | 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 |