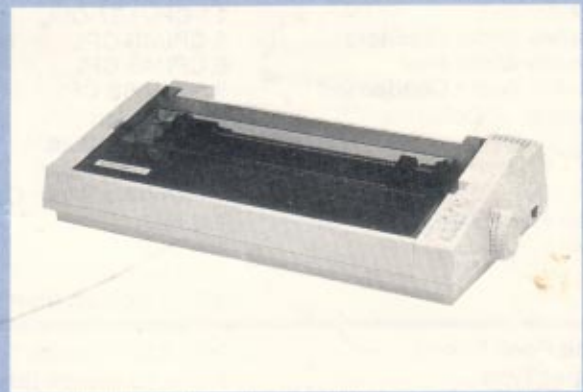
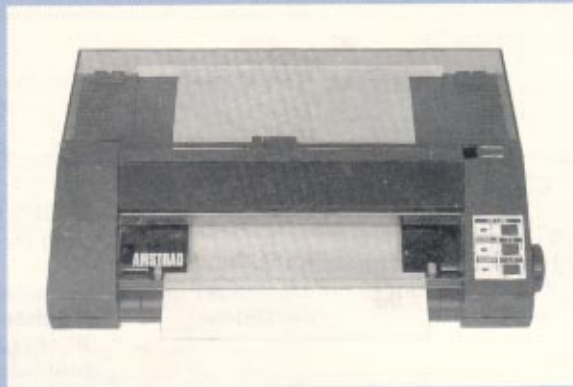


AMSTRAD

<http://amstrad.cpc.free.fr>



**DMP2000 / DMP3000
DMP4000
PRINTER**

SERVICE MANUAL

**DMP2000/3000 SECTION ONLY.
FOR DMP4000 SEE PAGES 13 ONWARDS**


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TECHNICAL SPECIFICATION

| | DMP2000 | DMP3000 |
|---|---|--|
| Print System: | Impact Dot-Matrix | Impact Dot-Matrix |
| Print Speed | 105 CPS max | 105 CPS (normal character) 52 CPS (double width character) |
| Printing Characteristics (vertical x horizontal) | 9 x 9 (normal character) 9 x 10 (expanded character) 9 x chosen amount (9 pin bit-image) 96 characters ASCII + international character sets | 9 x 9 (normal character) 9 x 10 (double width character) 8 x chosen amount (bit-image) 9 x chosen amount (9 pin bit-image) 96 characters ASCII + Italics + international character sets |
| Normal Character Size | | 2.1 (width) x 2.55 (height) mm |
| Print Sizes | | |
| Standard (Pica) | 10 CPI/80CPL | 10 CPI/80 CPL |
| Mini (Elite) | 12 CPI/96 CPL | 12 CPI/96 CPL |
| Condensed | 17 CPI/137 CPL | |
| Double Width Standard | 5 CPI/40 CPL | 5 CPI/40 CPL |
| Double Width Mini | 6 CPI/48 CPL | 6 CPI/48 CPL |
| Double Width Condensed | 8.5 CPI/68 CPL | 8.5 CPI/68 CPL |
| Number of Columns | 80 (Standard) 40 (Double Width) 132 (Condensed) 66 (Double Width Condensed) | 80 (Standard) 40 (Double Width) 132 (Condensed) 66 (Double Width Condensed) |
| Line Feed Rates | 1/6 inch 1/8 inch 7/72 inch n/216 inch programmable n/72 inch programmable | 1/6 inch 1/8 inch 7/72 inch n/216 inch programmable n/72 inch programmable |
| Line Feed Speed | 200 mS(1/6 inch) | 200 mS(1/6 inch) |
| Paper Type | 4.5 to 10 inches fan-fold (tractor feed) 4 to 9.5 inches cut sheet or roll paper (friction feed) | 4.5 to 10 inches fan-fold (tractor feed) 4 to 9.5 inches cut sheet or roll paper (friction feed) |
| Number of Copies | 2 sheets (including original) 40 gsm pressure-sensitive paper train | 2 sheets (including original) 40 gsm pressure-sensitive paper train |
| Interface | Parallel (Centronics compatible) | Parallel (Centronics compatible) |
| Ink Ribbon | Cassette (1 million characters life per ribbon) | Cassette (1 million characters life per ribbon) |
| Dimensions | 380 (w) x 100 (h) x 260 (d) mm | 400 (w) x 250 (d) x 100 (h) mm |
| Weight | | 4.2Kg |
| Mains Supply | 220-240V AC 50Hz | 220-240V AC 50Hz |

SAFETY TEST

PLEASE NOTE: When any work is completed on this unit, correct safety tests must be carried out to ensure continued electrical safety.

PLEASE NOTE: All parts shown with the part number prefix  are Safety Items and must be replaced with similar items having an identical safety specification.

All of these items may be purchased direct from AMSTRAD PLC.

Interface

| PIN | DESIGNATION | I/O | DESCRIPTION |
|-----|--------------|-----|--|
| 1 | DATA STROBE | IN | Taking pin low enables receiving of DATA 0 to DATA 7. Minimum necessary pulse width is 0.5 μ S. |
| 2 | DATA 0 (LSB) | IN | 8-bit data signal. Taking pin high or low corresponds to 1 and 0 respectively. |
| 3 | DATA 1 | | |
| 4 | DATA 2 | | |
| 5 | DATA 3 | | |
| 6 | DATA 4 | | |
| 7 | DATA 5 | | |
| 8 | DATA 6 | | |
| 9 | DATA 7 (MSB) | | |
| 10 | ACKNOWLEDGE | OUT | Active low output pulse generated when data entry and processing are completed. After this signal, subsequent data will be accepted. This signal is also generated when changing from off line to on line. |
| 11 | BUSY | OUT | Output high under any of the following conditions: a. Going off line. b. Paper feed or printing operation. c. When a control code is received. |
| 12 | PE | OUT | Output high when paper is out. (When on line, paper out is sensed after executing a paper feed command. When off line, paper out is always sensed.) |
| 13 | SELECT | OUT | On line and off line correspond to high and low respectively. When off line, DATA 0 to DATA 7 are not receivable. |

| PIN | DESIGNATION | I/O | DESCRIPTION |
|-----|-------------|-----|---|
| 14 | NC | | |
| 15 | NC | | |
| 16 | 0V | | |
| 17 | CHASSIS GND | | |
| 18 | +5V | OUT | +5V (50mA max) power supply output. |
| 19 | GND | | Signal ground. |
| 20 | GND | | Signal ground. |
| 21 | GND | | Signal ground. |
| 22 | GND | | Signal ground. |
| 23 | GND | | Signal ground. |
| 24 | GND | | Signal ground. |
| 25 | GND | | Signal ground. |
| 26 | GND | | Signal ground. |
| 27 | GND | | Signal ground. |
| 28 | GND | | Signal ground. |
| 29 | GND | | Signal ground. |
| 30 | GND | | Signal ground. |
| 31 | INPUT PRIME | IN | Taking pin low initialises printer. Minimum necessary pulse width is 100 μ S. |
| 32 | FAULT | OUT | Output low when off line. |
| 33 | GND | | |
| 34 | NC | | |
| 35 | +5V | OUT | |

DIP switch settings

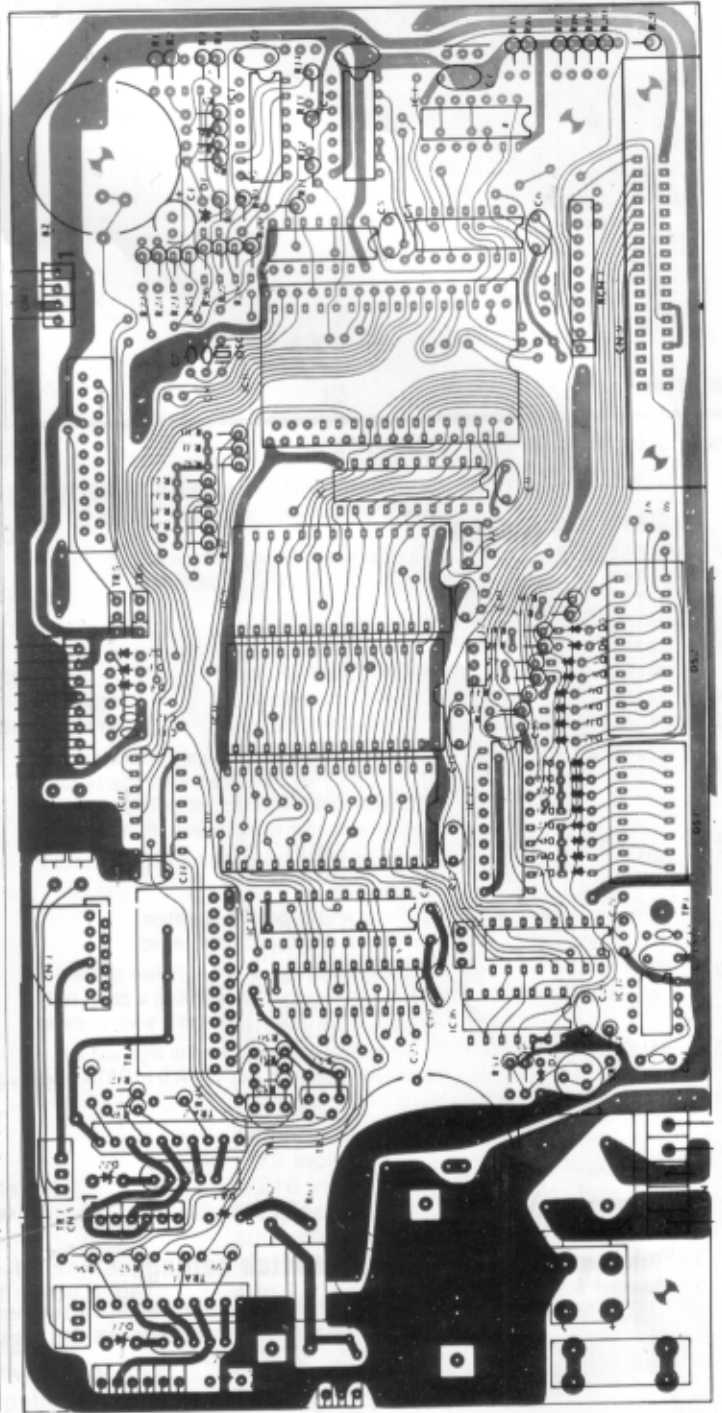
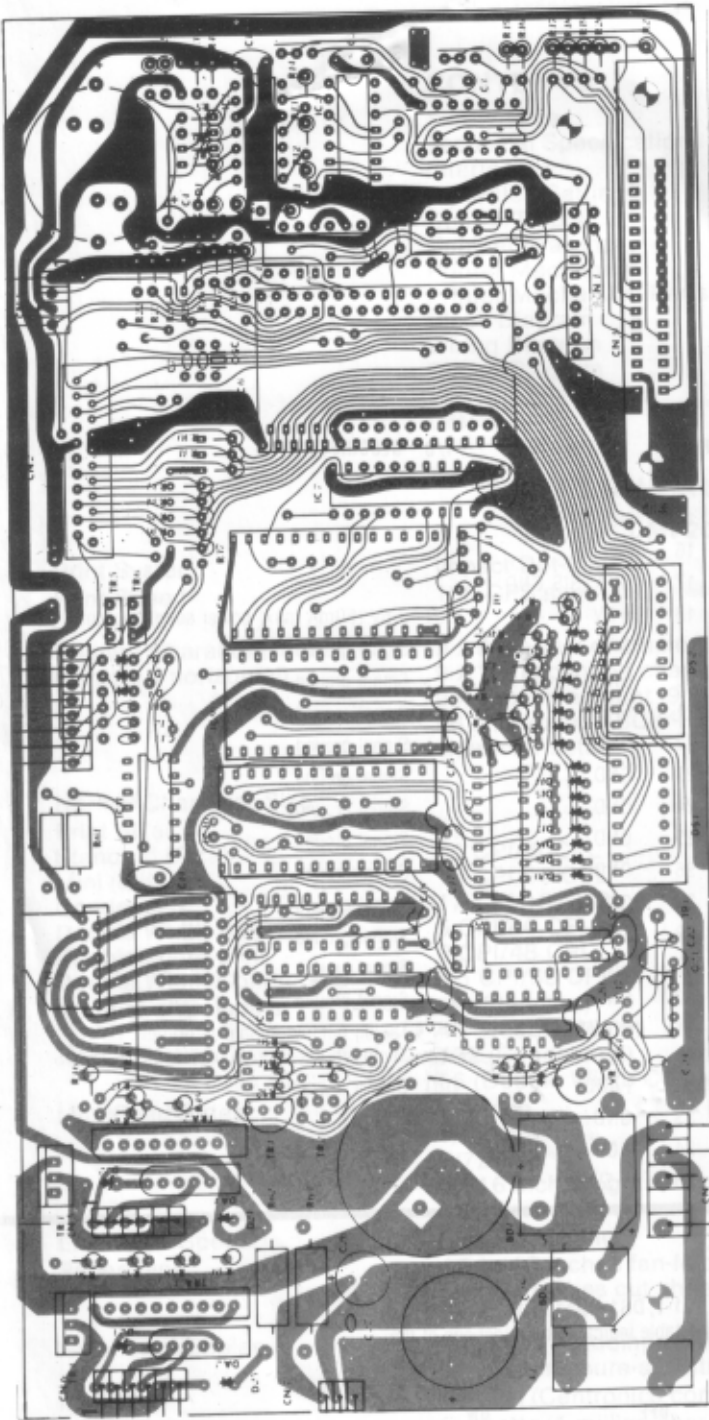
Described below is how to adjust DIP switches DS1-1, DS1-2 and DS1-3 to select one of the international character sets. The following table indicates the functions of the remaining DIP switches:

| SWITCH | FUNCTION | OFF | ON |
|--------|--------------------------|--------------------|---------------------|
| DS1-1 | International characters | See Chapter 2 | See Chapter 2 |
| DS1-2 | International characters | See Chapter 2 | See Chapter 2 |
| DS1-3 | International characters | See Chapter 2 | See Chapter 2 |
| DS1-4 | CR function | CR only | CR & LF |
| DS1-5 | Paper out sensor | Enable | Disable |
| DS1-6 | Page length | 11 inch | 12 inch |
| DS1-7 | Code unit | 8 units | 7 units* |
| DS1-8 | Default character set | Standard | NLQ-Standard |
| DS2-1 | Zero character | Unslashed | Slashed |
| DS2-2 | Default skip perforation | Disable | Enable |
| DS2-3 | Buffer mode | Character | Graphics |
| DS2-4 | Buffer mode | Character/graphics | Download |
| DS2-5 | SLCT IN signal | Not sent | Automatically sent |
| DS2-6 | Alarm bleeper | Disable | Enable |
| DS2-7 | Default typeface | Bold off | Condensed & Bold on |
| DS2-8 | Default typeface | Condensed off | Bold on |
| DS2-9 | Do not use | | |
| DS2-10 | Do not use | | |

* Set DS1-7 ON when using the printer with an Apple computer.

REMEMBER – Always switch the printer off before adjusting the DIP switches.

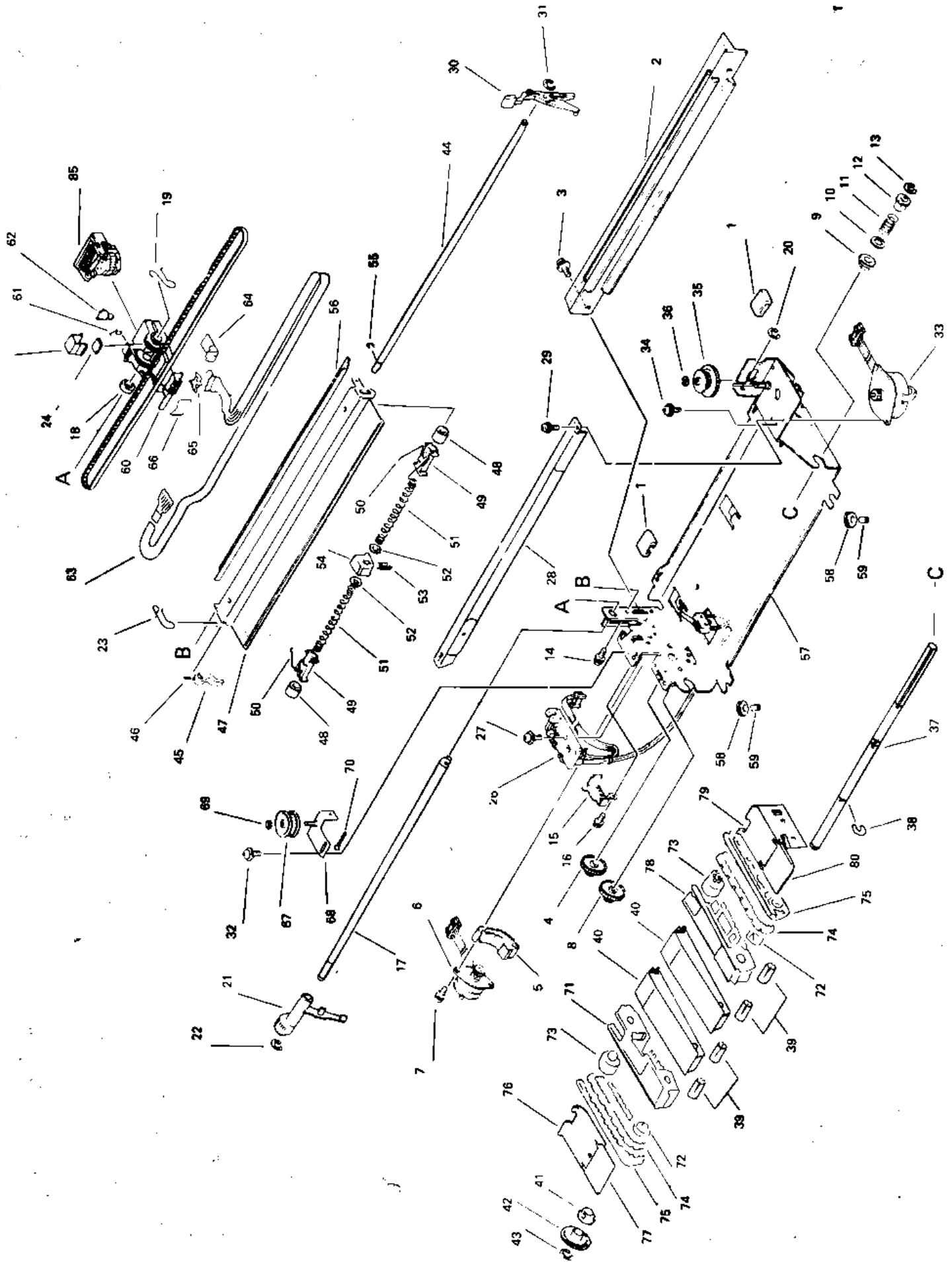
CONTROL P.C.B.'S



CABINET PARTS LIST

| Sym | Description | DMP2000 | DMP3000 |
|-----|---------------------------------|-----------|-----------|
| 1 | Top Cabinet | 190701 | 190851 |
| 2 | Bottom Cabinet | 190702 | 190852 |
| 3 | Dust Cover | 190703 | 190850 |
| 4 | Rotary Knob | 190704 | 190853 |
| 5 | Shield Plate | 190705 | 190705 |
| 6 | Heat Sink | | |
| 7 | Paper Guide | 190706 | 190706 |
| 8 | Metal Leg | 190707 | 190707 |
| 9 | Earth Tag | | |
| 10 | Name Plate | 190708 | 190856 |
| 11 | Function Inlay | 190709 | 190855 |
| 12 | Bottom Inlay | 190710 | 190854 |
| 13 | Rubber Foot Dia 10x1.6mm | 190711 | 190711 |
| 14 | Rubber Ring | | |
| 15 | Printer Mechanism | 190712 | 190712 |
| 16 | Mains Transformer | 190713 | 190713 |
| 17 | AC Power Cord BS Lead 3 Core 6' | | |
| 18 | Power Switch 2Pit SDE3GE | 190714 | 190714 |
| 19 | PCB Main | | |
| 20 | PCB AC | | |
| 21 | PCB LED | | |
| | Printer Ribbon | SOFT06049 | SOFT50015 |
| | Printer Cable - PL2 | | |

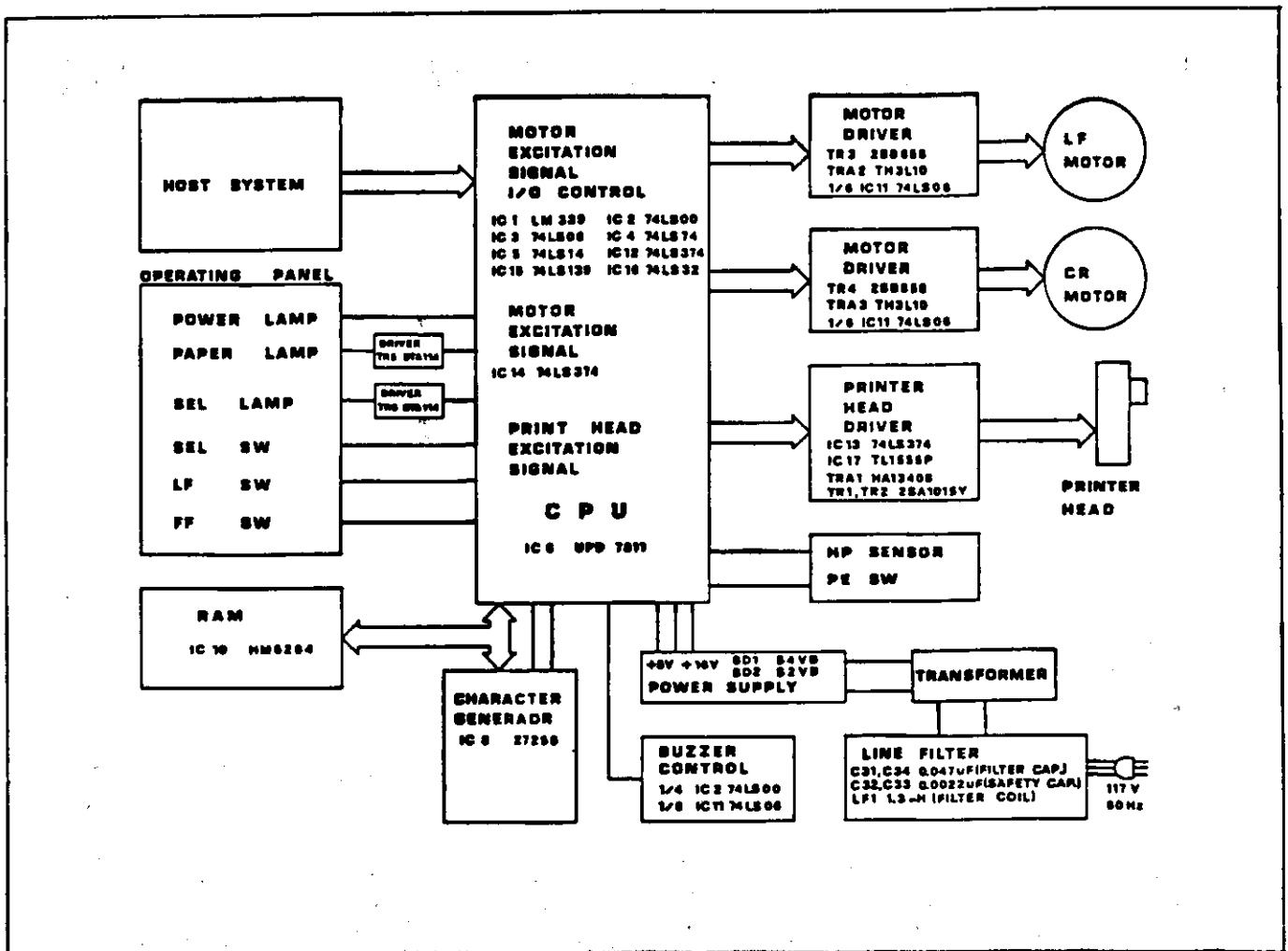
PRINTER MECHANISM

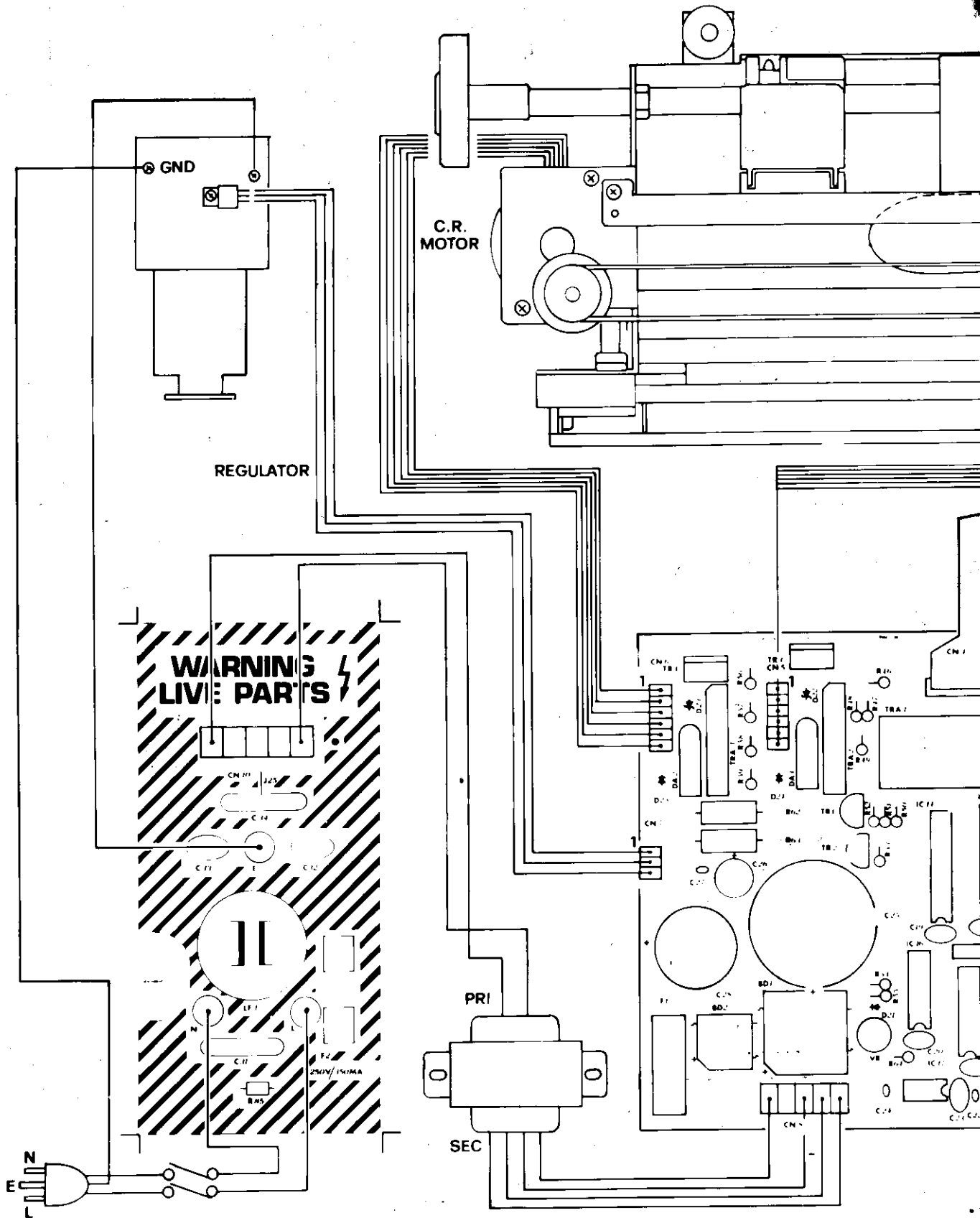


PRINTER MECHANISM PARTS LIST

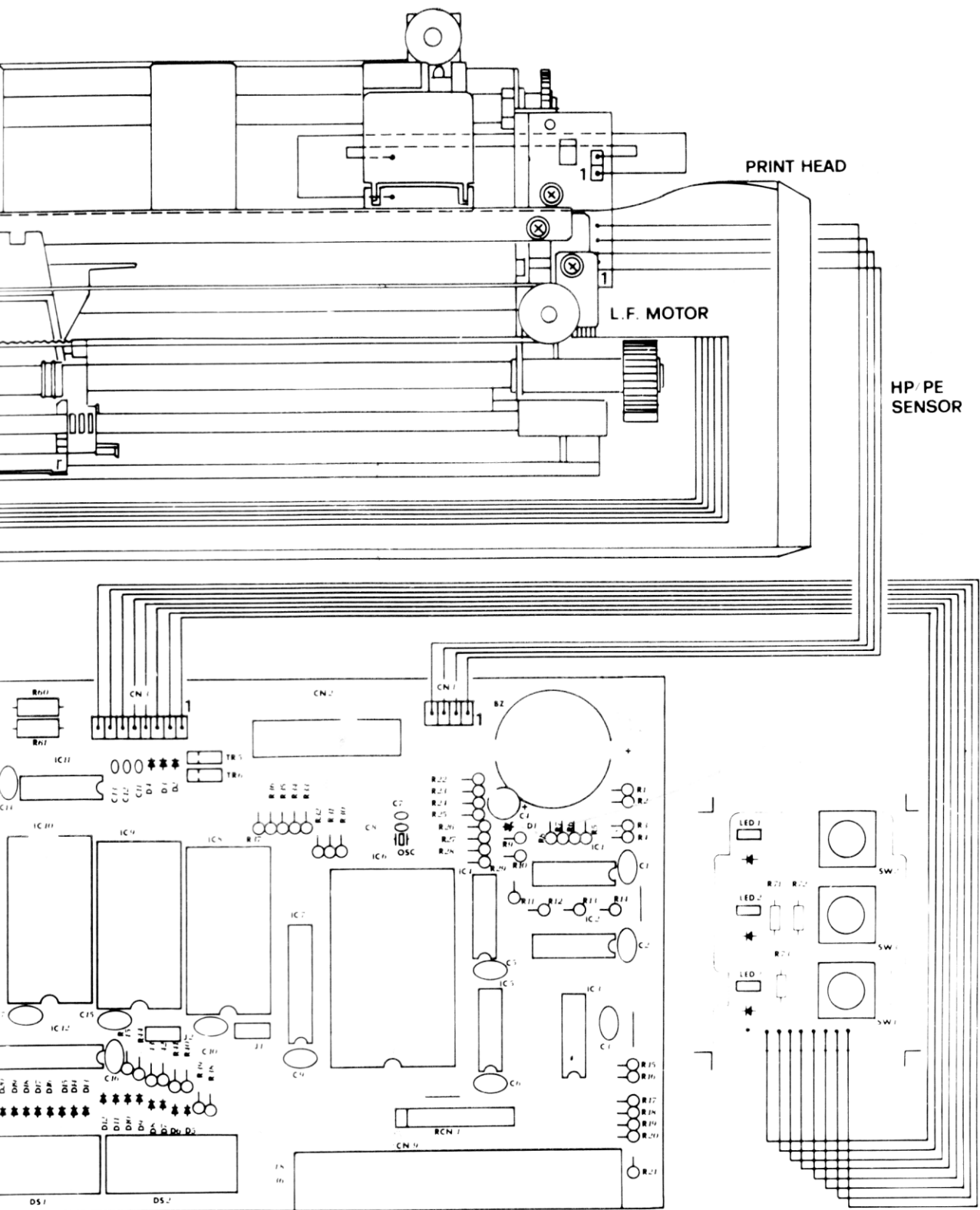
| Sym | Description | Part No. | | | |
|-----|-----------------|----------|----|-----------------------------|-----------|
| 1 | Damper R | 190748 | 47 | Sub Frame | 190782 |
| 2 | Set Platen | 190749 | 48 | Set Roller | 190783 |
| 4,8 | LF gear | 190750 | 49 | SP Bracket | 190784 |
| 5 | LF Heat Sink | 190751 | 50 | Roller Spring | 190785 |
| 6 | Set LF Motor | 190752 | 51 | Guide Spring | 190786 |
| 9 | Bush | 190753 | 52 | Washer | 190787 |
| 10 | Poly Slider | 190754 | 53 | Guide Spring-B | 190788 |
| 11 | LF Spring | 190755 | 54 | Centre Guide | 190789 |
| 12 | LF Collar | 190756 | 55 | Paper Press | 190790 |
| 13 | E Ring E-6 | 190757 | 57 | Set Base | 190791 |
| 15 | Clip Plate | 190758 | 58 | Damper F | 190792 |
| 17 | Set CR Shaft | 190759 | 59 | Damper Collar | 190793 |
| 18 | Felt Ring | 190760 | 60 | Set Carriage | 190794 |
| 19 | CR Spring R | 190761 | 61 | Stopper Spring | 190795 |
| 20 | E Ring E-4 | 190762 | 62 | Ribbon Stopper | 190796 |
| 21 | Gap Lever | 190763 | 63 | Set FPC | 190797 |
| 23 | CR Spring L | 190764 | 64 | Cable Clamp | 190798 |
| 24 | Upper Felt | 190765 | 65 | Pressure BD | 190799 |
| 25 | Upper Spring | 190766 | 66 | Pressure Spring | 190800 |
| 26 | Sensor Assy. | 190767 | 67 | ADJ Pulley | 190801 |
| 28 | Set Guide Frame | 190768 | 68 | Set ADJ. Plate | 190802 |
| 30 | Release Lever | 190769 | 71 | Tractor L | 190803 |
| 31 | E Ring E-3 | 190770 | 72 | Main Sprocket | 190804 |
| 33 | Set CR Motor | 190771 | 73 | Set Feed Roller | 190805 |
| 35 | Set CR Gear | 190772 | 74 | Pin Belt | 190806 |
| 36 | E Ring E-2 | 190773 | 75 | Tractor Plate | 190807 |
| 37 | LF Shaft | 190774 | 76 | Tractor Cover L | 190808 |
| 38 | C Ring | 190775 | 77 | Cover Plate L | 190809 |
| 39 | Tractor Stopper | 190776 | 78 | Tractor R | 190810 |
| 40 | Paper Guide | 190777 | 79 | Tractor Cover R | 190811 |
| 42 | LF Shaft Gear | 190778 | 80 | Cover Plate R | 190812 |
| 44 | Roller Shaft | 190779 | 85 | Print Head With Ribbon Mask | 190813 |
| 45 | S Release Lever | 190780 | 86 | Printer Ribbon | SOFT06049 |
| 46 | Screw M3x6 | 190781 | | | |

DMP2000/3000 BLOCK DIAGRAM



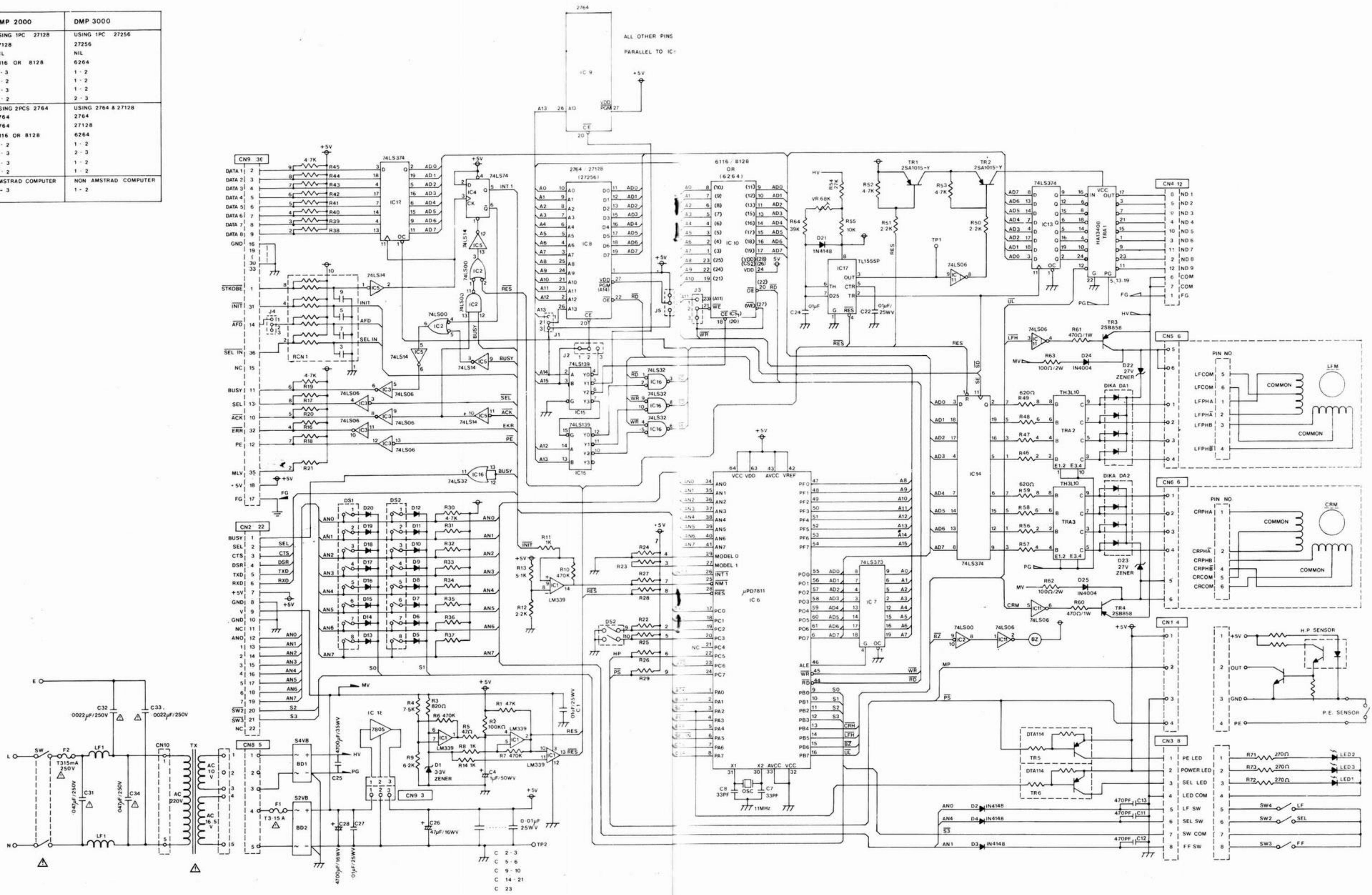


WIRING DIAGRAM



DMP2000/3000 CIRCUIT DIAGRAM

| | DMP 2000 | DMP 3000 |
|-------|------------------|----------------------|
| IC 8 | USING 1PC 27128 | USING 1PC 27256 |
| IC 9 | 27128 | 27256 |
| IC 10 | NIL | NIL |
| J 1 | 6116 OR 8128 | 6264 |
| J 2 | 2-3 | 1-2 |
| J 3 | 1-2 | 1-2 |
| J 4 | 2-3 | 1-2 |
| J 5 | 1-2 | 2-3 |
| | | |
| IC 8 | USING 2PCS 2764 | USING 2764 & 27128 |
| IC 9 | 2764 | 2764 |
| IC 10 | 2764 | 27128 |
| IC 10 | 6116 OR 8128 | 6264 |
| J 1 | 1-2 | 1-2 |
| J 2 | 2-3 | 2-3 |
| J 3 | 2-3 | 1-2 |
| J 4 | 1-2 | 1-2 |
| J 5 | 2-3 | 1-2 |
| | | |
| J 4 | AMSTRAD COMPUTER | NON AMSTRAD COMPUTER |
| J 5 | 2-3 | 1-2 |



ELECTRICAL PARTS LIST

| Circ. Ref. | Description | Part No. |
|--------------------------------|------------------------------|----------|
| IC's | | |
| IC1 | LM339/HA17339 | 190724 |
| IC2 | HD74LS00P | 190728 |
| IC3, 11 | MB74LS06 | 190729 |
| IC4 | HD74LS74AP | 40014 |
| IC5 | HD74LS14P | 190730 |
| IC6 | uPD7811G-071 | 190733 |
| IC7 | HD74LS373P | 170108 |
| IC8 | HN4827128G-25 50nS | 190722 |
| IC10 | MB8128-15 | 190723 |
| IC12-14 | HD74LS374P | 190727 |
| IC15, 16 | HD74LS139P | 190726 |
| IC17 | HA17555 | 190725 |
| TRA1 | HA13408 | 190814 |
| TRA2, 3 | TH3L10 | 190734 |
| IC18 | L7805CY | 190731 |
| Transistors | | |
| TR1, 2 | 2SA1015-Y | 170453 |
| TR3, 4 | 2SB858B | 190721 |
| TR5, 6 | DTA114E | 151096 |
| Diodes | | |
| D1 | Zener Diode 3.3V DC | 190719 |
| D2-22 | Sig Diode IN4148 | 190715 |
| D23 | Zener Diode 27VDC | 190720 |
| D24, 25 | IN4004 | 190716 |
| BD1 | Bridge Rect S4VB10 | 190718 |
| BD2 | Bridge Rect S2VB10 | 190717 |
| DA1, 2 | Diode Array D1CA | 190815 |
| LED1, 2 | LED Grn TLG211 | 190744 |
| LED 2 | LED Red TLR211 | 190743 |
| Miscellaneous | | |
| DS1 | 8 Way Dip Switch N/O | 190737 |
| DS2 | 10 Way Dip Switch N/O | 190738 |
| SW1 | Power Switch 2Pit | ▲190714 |
| SW2-4 | P/B Tact Switch 1 Pit | 190739 |
| TX | Mains Transformer BS | ▲190713 |
| LF1 | Mains Filter Coil | ▲190740 |
| BZ | Piezo Bleeper | 190736 |
| OSC | Ceramic Resonator 11MHz | 190742 |
| VR | Semifixed Resistor 68 ohm | 190745 |
| RCN1 | RC Network T002 | 190732 |
| Resistors | | |
| Desc. | Circ. ref. | Part No. |
| 47ohm | R5 | 10020 |
| 82 ohm | R3 | 10031 |
| 330ohm | R7, 72, 73 | 10044 |
| 620ohm | R46-49, 56-59 | 190816 |
| 1kohm | R8, 11, 14 | 10061 |
| 2.2kohm | R12, 50, 51 | 10069 |
| 4.7kohm | R15-22, 24-45, 52, 53 | 10077 |
| 5.1kohm | R13 | 190817 |
| 6.2kohm | R9 | 190818 |
| 7.5kohm | R4 | 190819 |
| 10kohm | R55 | 10085 |
| 27kohm | R54 | 10095 |
| 39kohm | R64 | 10099 |
| 47kohm | R1 | 10101 |
| 100kohm | R2 | 10109 |
| 470kohm | R6, 7, 10 | 10131 |
| 100ohm/2W | R62, 63 | 190820 |
| 470ohm/1W | R60, 61 | 190821 |
| Ceramic Capacitors | | |
| 33pF | C7, 8 | 150514 |
| 470pF | C11-13 | 190822 |
| 0.01uF | C22, 27 | 24011 |
| Mono Glass Capacitors | | |
| 0.1uF/50V DC | C1-3, 5, 6, 9, 10, 14-21, 23 | 190823 |
| Mylar Capacitors | | |
| 0.01uF | C24 | 21006 |
| Electrolytic Capacitors | | |
| 1uF/50V | C1, 4 | 20062 |
| 47uF/16V | C26 | 20049 |
| 4700pF/16V | C28 | 150479 |
| Polystyrene Capacitors | | |
| 0.0022uF/250V | C32, 33 | ▲190824 |
| 0.047uF/250V | C31, 34 | ▲190825 |

DMP4000 SECTION

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| Wiring Diagram | 19 |
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SAFETY TEST

PLEASE NOTE: When any work is completed on this unit, correct safety tests must be carried out to ensure continued electrical safety.

PLEASE NOTE: All parts shown with the part number prefix \triangle are Safety Items and must be replaced with similar items having an identical safety specification.

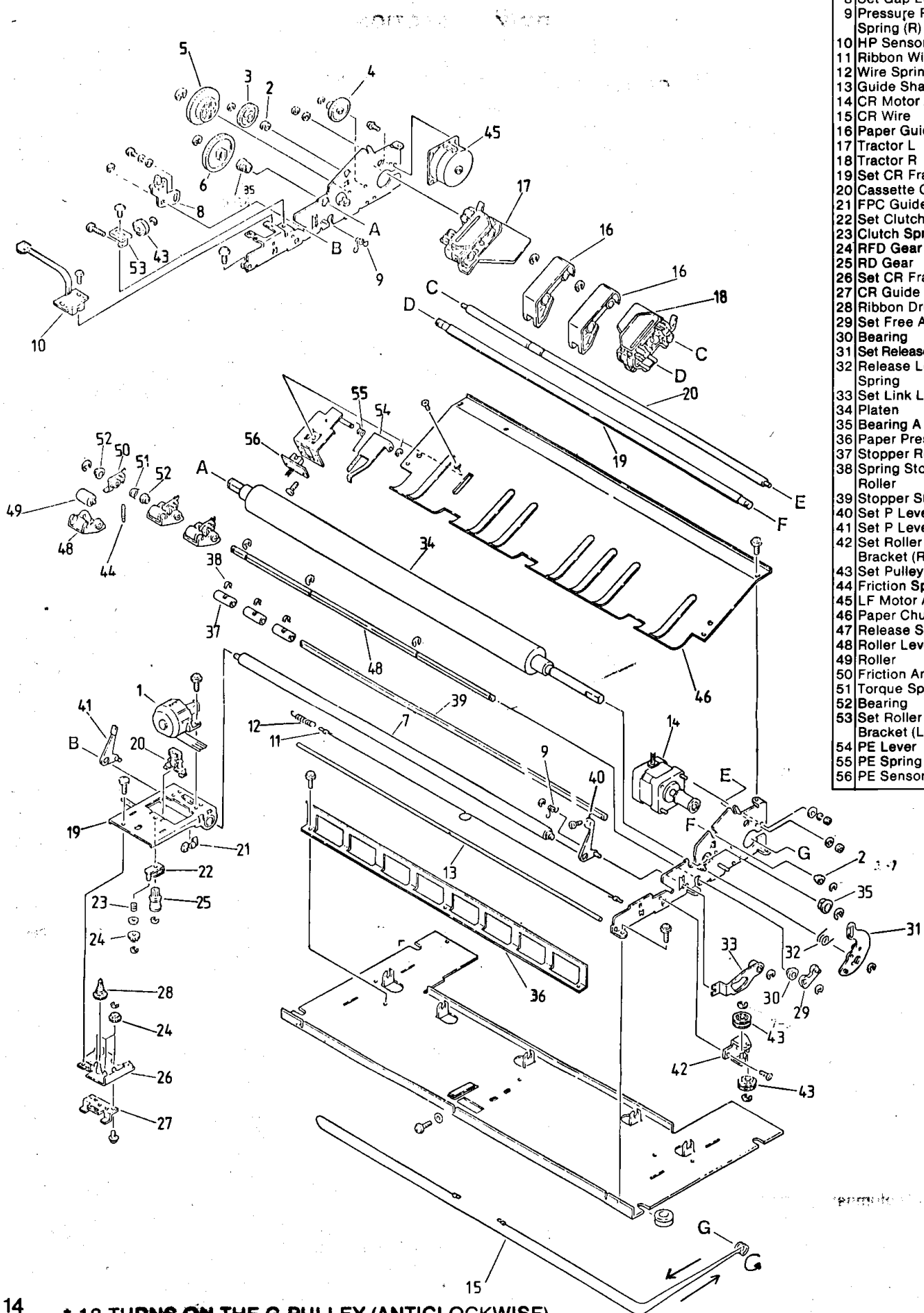
All of these items may be purchased direct from AMSTRAD PLC.

| | |
|---|---|
| <p>Print system: Wire dot-matrix</p> <p>Print speed: 200 CPS (standard) 50 CPS (NLQ)</p> <p>Printing characteristics (vertical x horizontal): 9 x 9 (ASCII characters - table 1) 18 x 9 (ASCII characters - table 2) 12 x 11 (special characters - tables 3.1 and 3.2) 24 x 11 (special characters - tables 4.1 and 4.2) 8 x chosen amount (bit-image graphics)</p> <p>Characters: ASCII - 96 Italics - 96 NLQ - 96 NLQ italics - 96 International character sets - 9 Special characters - 132</p> <p>Print sizes: Standard (Pica) - 10 CPI / 136 CPL Mini (Elite) - 12 CPI / 163 CPL Condensed - 17 CPI / 233 CPL</p> <p>Number of columns: 136 (standard) 233 (condensed)</p> | <p>Line feed rates: 1/6 inch 1/8 inch 7/72 inch $n/72$ inch programmable $n/216$ inch programmable</p> <p>Line feed speed: 100 mS (1/6 inch)</p> <p>Paper type: Tractor feed (fan fold) - 3 to 16¹/₂ inches (75 to 420 mm) Friction feed (cut sheet or roll) - 2 to 15¹/₂ inches (50 to 395 mm)</p> <p>Interface: Parallel (Centronics compatible)</p> <p>Mains supply: 220-240 Volts AC 50 Hz</p> <p>Dimensions: 24 (width) x 14 (depth) x 5 (height) inches (600 x 350 x 120 mm)</p> <p>Weight: 9.5 kg</p> |
|---|---|

MECHANISM PARTS LIST

PRINTER MECHANISM EXPLODED VIEW & PARTS LIST

| Sy | Description | Part No. |
|----|------------------------|----------|
| 1 | Print Head | 190972 |
| 2 | Tractor Bearing | 190974 |
| 3 | Tractor Gear | 190975 |
| 4 | Idler Gear A | 190977 |
| 5 | Idler Gear B | 190979 |
| 6 | Platen Gear | 190980 |
| 7 | Carriage Shaft | 190985 |
| 8 | Set Gap Lever A | 190986 |
| 9 | Pressure Roller | 190989 |
| 10 | HP Sensor Assy | 190991 |
| 11 | Ribbon Wire | 191050 |
| 12 | Wire Spring | 191051 |
| 13 | Guide Shaft | 190992 |
| 14 | CR Motor Assy. | 190993 |
| 15 | CR Wire | 191052 |
| 16 | Paper Guide M | 190994 |
| 17 | Tractor L | 190995 |
| 18 | Tractor R | 190996 |
| 19 | Set CR Frame A | 190999 |
| 20 | Cassette Catch | 191000 |
| 21 | FPC Guide | 191001 |
| 22 | Set Clutch Plate | 191002 |
| 23 | Clutch Spring | 191003 |
| 24 | RFD Gear | 191004 |
| 25 | RD Gear | 191005 |
| 26 | Set CR Frame B | 191006 |
| 27 | CR Guide | 191007 |
| 28 | Ribbon Drive | 191008 |
| 29 | Set Free Arm | 191013 |
| 30 | Bearing | 191014 |
| 31 | Set Release Lever | 191015 |
| 32 | Release Lever Spring | 191016 |
| 33 | Set Link Lever | 191017 |
| 34 | Platen | 191018 |
| 35 | Bearing A | 191019 |
| 36 | Paper Press | 191020 |
| 37 | Stopper Roller | 191021 |
| 38 | Spring Stopper Roller | 191022 |
| 39 | Stopper Shaft | 191023 |
| 40 | Set P Lever (R) | 191024 |
| 41 | Set P Lever (L) | 191025 |
| 42 | Set Roller Bracket (R) | 191053 |
| 43 | Set Pulley D16 | 191054 |
| 44 | Friction Spring | 191029 |
| 45 | LF Motor Assy | 191032 |
| 46 | Paper Chute | 191033 |
| 47 | Release Shaft | 191034 |
| 48 | Roller Lever | 191035 |
| 49 | Roller | 191036 |
| 50 | Friction Arm | 191037 |
| 51 | Torque Spring | 191038 |
| 52 | Bearing | 191039 |
| 53 | Set Roller Bracket (L) | 191040 |
| 54 | PE Lever | 191043 |
| 55 | PE Spring | 191044 |
| 56 | PE Sensor Assy | 191045 |

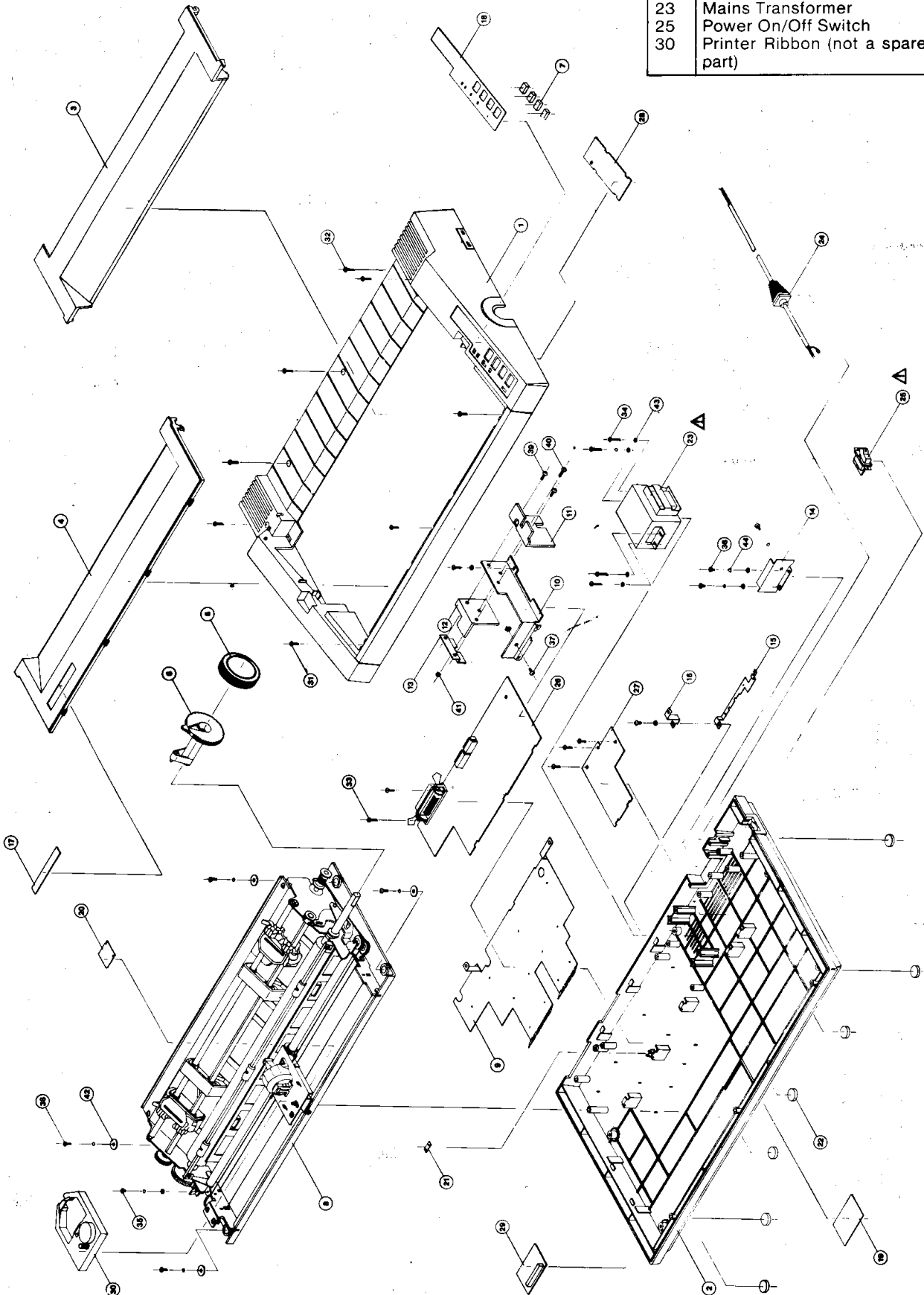


14 * 13 TURNS ON THE G-PULLEY (ANTICLOCKWISE)

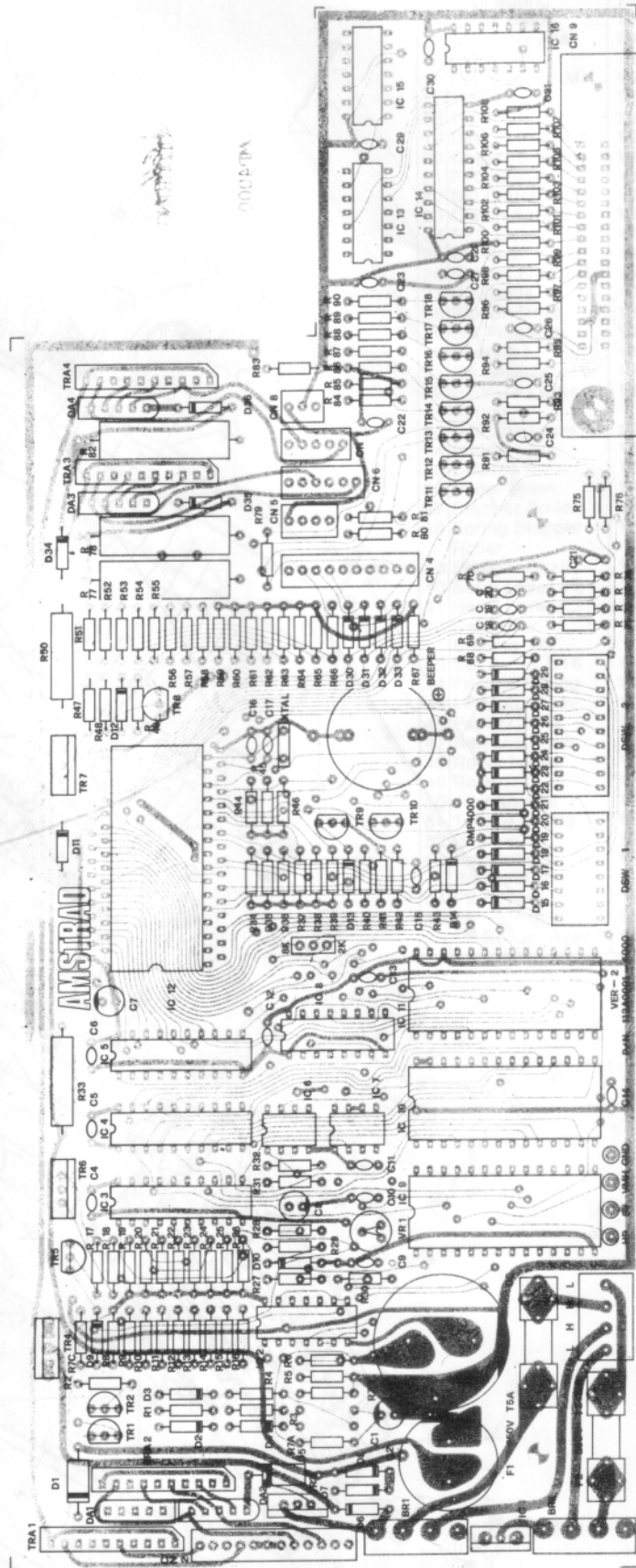
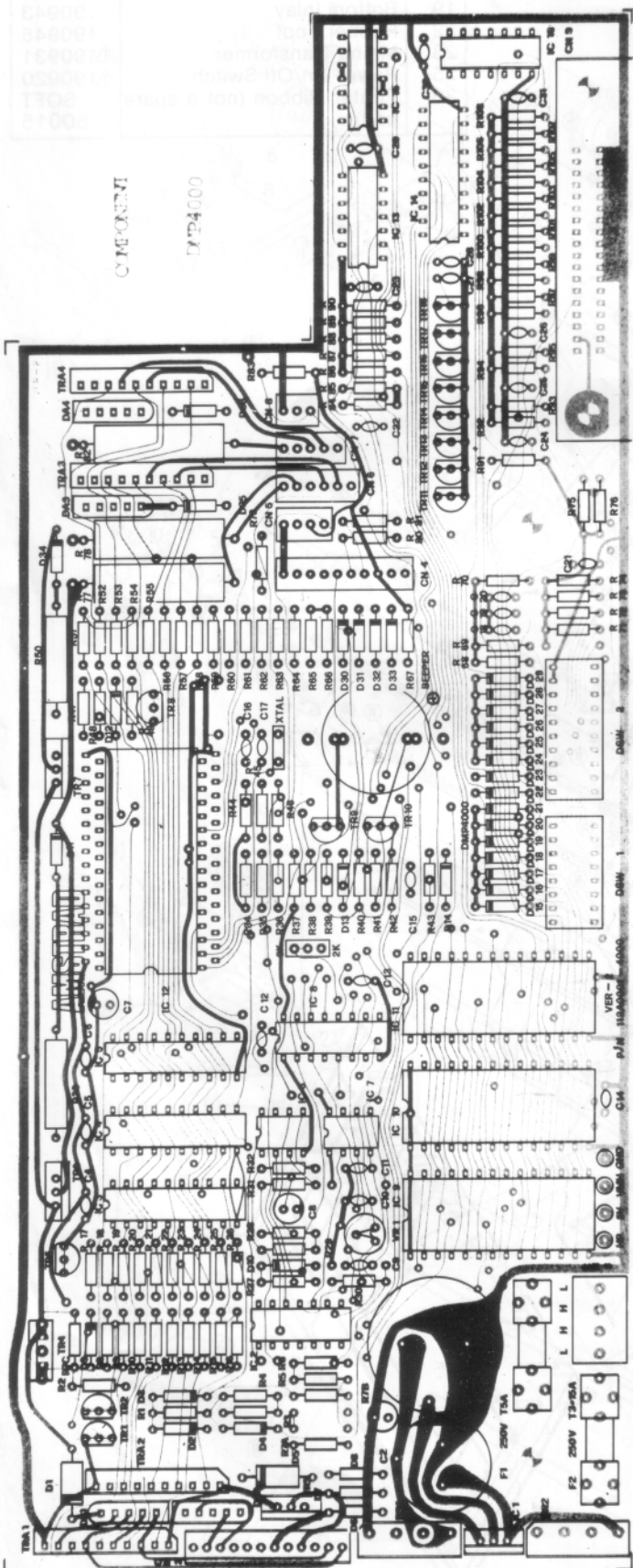
CABINET PARTS LIST

| Sym | Description | Part No. |
|-----|-----------------------------------|------------|
| 1 | Top Cabinet | 190936 |
| 2 | Bottom Cabinet | 190937 |
| 3 | Upper Dust Cover | 190934 |
| 4 | Lower Dust Cover | 190935 |
| 5 | Rotary Knob | 190941 |
| 6 | Roller Release Knob | 190942 |
| 7 | Push Button | 190940 |
| 8 | Printer Mechanism | 190929 |
| 17 | Name Plate | 190946 |
| 18 | Function Inlay | 190944 |
| 19 | Bottom Inlay | 190943 |
| 22 | Rubber Foot | 190945 |
| 23 | Mains Transformer | △190931 |
| 25 | Power On/Off Switch | △190920 |
| 30 | Printer Ribbon (not a spare part) | SOFT 50015 |

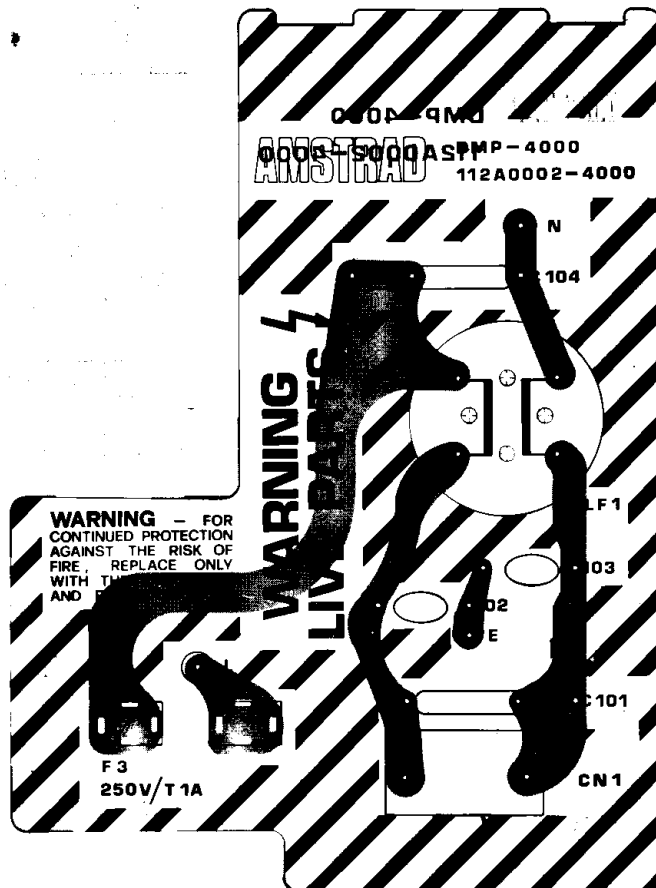
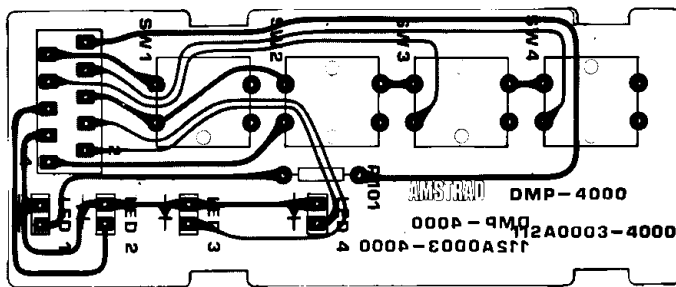
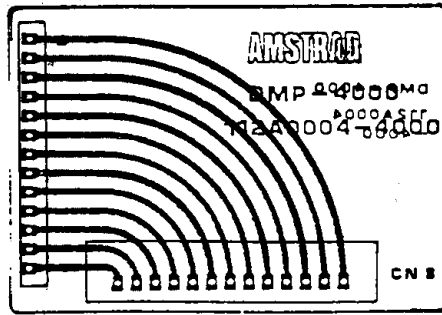
CABINET DRAWING



COMPONENT LAYOUTS



PCB LAYOUTS



DMP4000
ELECTRICAL PARTS LIST

| Ref. No. | Description | Part No. | Description | Ref. No. | Part No. |
|------------------------|----------------------|----------|--------------------------------|--|----------|
| IC's | | | Resistors | | |
| IC6 | IC LM393 | 190900 | 18ohm | R43 | 10012 |
| IC7 | IC NE555 | 190901 | 180ohm | R112, 113, 116 | |
| IC8 | IC 74LS139 | 190722 | 220ohm | R41 | 10040 |
| IC3 | IC 74LS273 | 190903 | 330ohm | R79-81, 201 | 10044 |
| IC4 | IC 74LS373 | 170108 | 470ohm | R92, 94 | 10048 |
| IC14 | IC 74LS374 | 190727 | 680ohm | R1, 9-16, 51-58 | 10052 |
| IC5 | IC 74LS377 | 190904 | 1kohm | R3, 18, 42, 45, 47, 67-74, 78, 87-90, 93, 96-108 | 10061 |
| IC15 | IC 74LS00 | 190728 | 2k2ohm | R4, 19-27, 59-66 | 10069 |
| IC2 | IC 74LS02 | 190905 | 4k7ohm | R8, 17, 34-39, 40, 44, 46, 48, 49, 75, 76, 83-86, 91, 95, 110, 115 | 10077 |
| IC13 | IC 74LS14 | 190730 | 5k1ohm | R5, 28 | 10078 |
| IC16 | IC 74LS74 | 40014 | 6k8ohm | R29, 114 | 10081 |
| IC1 | IC Regulator 7805 | 190731 | 10kohm | R31, 70 | 10085 |
| IC10 | IC UPD7811 | 190733 | 18kohm | R6 | 10091 |
| IC9 | IC EPROM 256K 250nS | 190857 | 22kohm | R7A, 111 | 10093 |
| IC11 | IC S.RAM 6264-15 | 190858 | 51kohm | R30 | 10102 |
| | IC 28 Way Socket | 190506 | 470kohm | R32 | 10125 |
| Transistors | | | 7.5ohm/3W | R77, 78 | 191055 |
| TR1, 2, 5, 8, 9, 11-18 | TR 2SC3656 | 190908 | 22ohm/2W | R50 | 191056 |
| TR4 | TR 2SB882 | 190909 | 36ohm/2W | R33 | 191057 |
| TR6, 7 | TR 2SB886 | 190910 | Ceramic Capacitors | | |
| TR3 | TR 2SD1196 | 190911 | 22pF | C16, 17 | 150511 |
| TRA1-4 | TR Array TH3L10 | 190734 | 100pF | C11 | 24016 |
| PH1, 2 | TR SP5216 | 191046 | 470pF | C24, 25, 27, 31 | 24004 |
| TR20 | TR DTC114N | 191047 | 0.001uF | C9, 18-21 | 24027 |
| TR19 | TR 2SC1815 | 170447 | 0.01uF | C10 | 24011 |
| Diodes | | | 0.22uF/250V | C102, 103 | △191058 |
| D2-4, 9, 12-33 | D IN4148 | 190715 | 0.047uF/250V | C101, 104 | △191059 |
| D6, 7, 11, 34 | D IN4004 | 190716 | 0.1uF | C4-6, 12-14, 22, 23, 26, 28-30 | 24020 |
| BR1, 2 | D Bridge Rect. KBL02 | 190912 | Electrolytic Capacitors | | |
| D10 | D Zener 3.3V 0.5W | 190913 | 1uF/50V | C8 | 20062 |
| D35, 36 | D Zener RD47F 47V | 190915 | 10uF/16V | C7 | 20024 |
| D1, 5, 8 | D Zener IN6275 | 190916 | 4700uF/16V | C2 | 150479 |
| DA1-4 | D Array DICA20 | 190917 | 6800uF/C3 | | 191060 |
| LED1, 2 | LED Red | 190926 | | | |
| LED3, 4 | LED Green | 190927 | | | |
| Switches | | | | | |
| SW | Mains Switch | △190920 | | | |
| DSW1 | Dip Switch 8 Way | 190737 | | | |
| DSW2 | Dip Switch 10 Way | 190738 | | | |
| SW1-4 | Tact Switch | 190921 | | | |

| Circ. Ref. | Description | Part No. |
|----------------------|----------------------------|----------|
| Miscellaneous | | |
| LF1 | Filter Coil 1.3mH | 190918 |
| X Tal | 11 MHz Ceramic Resonator | 190919 |
| VR1 | Semi Fixed Resistor 68kohm | 190928 |
| | Piezo Bleeper | 190736 |
| | Printer Cable - PL2 | 190947 |
| | Instruction Book | 190948 |
| | 36 Way Connector | 190949 |
| | Fuse T1A 250V | △190959 |
| | Fuse T5A 250V | △190960 |
| | Fuse T3.15A 250V | S/88150 |

