

EUROCODE SERIES (ANALOGUE CONTROLLER)

OPERATOR INSTRUCTIONS
PARTS LISTING
CIRCUIT DIAGRAMS
INSTALLATION DETAILS

These instructions cover the following models;

EUROCODE 150

EUROCODE 180

EUROCODE 300

Designed and manufactured by:

OPEN DATE EQUIPMENT LIMITED UNITS 8 & 9, PUMA TRADE PARK, 145, MORDEN ROAD, MITCHAM, SURREY, CR4 4DG. UNITED KINGDOM.

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EUROCODE SERIES INDEX.

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DECLARATION OF CONFORMITY

We hereby declare that the following machinery complies with the essential health and safety requirements of the Machinery Directive 89/392/EEC, 91/368/EEC and 93/44/EEC enacted in the United Kingdom by the Supply of Machinery (Safety) Regulations 1992. Machine Description **Hot Foil Printer** Model Eurocode Type Serial number Manufactured by **Open Date Equipment Limited.** Address Units 8 & 9, Puma Trade Park, Morden Re Mitcham, Surrey, CR4 4DG. United-K This machinery has been and manufactured in accorda wing transposed harmonised European standards. EN292: parts 1 and 2, 1991. Safe general principles of design. EN294: 1992 hces to prevent danger zones being reached by of Machinery - Electrical equipment of machines -EN60204: pa Specification requirements. EN50081: part 1, 1992. Electromagnetic compatibility - Generic emission standard. EN50082: part 2, 1992. Electromagnetic compatibility - Generic immunity standard. In addition, this machinery has been designed and manufactured in accordance with British Standard BS5304: 1988, Safety of Machinery. A technical construction file for this machinery is retained at the above address.

This Declaration of Conformity complies with Regulation 22 of The Supply of Machinery (Safety) Regulations 1992.

IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions carefully. Follow all warnings and instructions marked on the product.
- Always disconnect the printhead and controller from the mains electricity and air supply before attempting to clean or service it.
- 3. Never operate the printhead unless it is installed within the mounting frame supplied. When installed correctly the gap between the printer and print base should not be greater than 4mm (see page 30).
- 4. Do not use the product near water. Never spill liquid of any kind on to the product.
- 5. Do not place this product on an unstable stand, table or machine. It may fall causing serious damage to the product or injury to the operator.
- 6. Never insert objects of any kind into this product through any openings or gaps as they may touch dangerous voltage points or short circuit parts that could result in fire or electric shock.
- 7. This product should only be operated from the type of electrical supply as indicated on the rear of the printhead control unit (see page 7).
- 8. Ensure that the printhead connection cable is fully secured to the printhead with the screws attached to the "D" connector cover. Failure to do this will result in the machine not being properly earthed.
- 9. Use only the power cable supplied with the product. The cable supplied is three core, utilising one wire as a grounding conductor. This must be connected to a suitable earthing point at the electrical supply This is a safety feature. If any doubt arises in trying to connect the power cable, please contact the manufacturer or agent who supplied the product.
- 10. Do not allow anything to rest on the power cable. Do not locate the product where persons will walk on the cable.
- 11. If an extension cable is used with this product, make sure that the total ampere ratings of the equipment plugged into the extension cable does not exceed the extension cable ampere rating. Also make sure that the total rating does not exceed the fuse rating.
- 12. Do not service this product yourself as opening or removing guards may expose you to dangerous voltage points, major burns and other risks. Refer all servicing to qualified personnel.
- 13. Do not attempt to use to use this product in areas where explosive gases or substances are present.
- 14. Once the product is under normal working conditions, care must be taken when removing the type holder as you can easily burn yourself. There is a yellow warning sign on the type holder access door indicating a danger. Open the door by gripping it at the side. The type holder should be held by its plastic handle only. Never touch metal parts as temperatures could be as high as 220 degrees C.
- 15. Disconnect the product from the electrical and air supplies and refer servicing to qualified personnel under the following conditions.
 - a. If the power cable is damaged or frayed.
 - b. If the air pipes are damaged in any way.
 - c. If liquid has been spilled into or if the product has been exposed to rain or water.
 - d. If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the instructions. Improper adjustment may result an damage needing qualified technicians to restore the product to normal operating conditions.

OPERATING INSTRUCTIONS

ELECTRONIC CONTROL UNIT (refer to page 6)

PRINT switch Switches on the print cycle. Switch off to silence the audible alarm.

POWER/HEAT Doubles as the main power switch (does not isolate the internal

switch circuitry). Leave on to maintain operating temperature. Four to five minutes should be allowed for the printhead to warm up

from cold.

PRINT TIMER Adjusts the dwell time, i.e. the period of time that the type/die face

is control in contact with the substrate. Higher numbers indicate

longer dwell time. Range is 12 to 650 milli-seconds.

TEMPERATURE Adjusts the head temperature. Higher numbers indicate higher

control temperature. Range is 75 to 220 degrees C. (see page

17).

TEST button Manually operates the printhead.

LED 1 (green) Indicates that the solenoid valve circuit is in order. Switches off

during the print cycle, when the foil alarm sounds and when the

type/die holder door is open.

LED 2 (red) Lights when the printhead is heating.

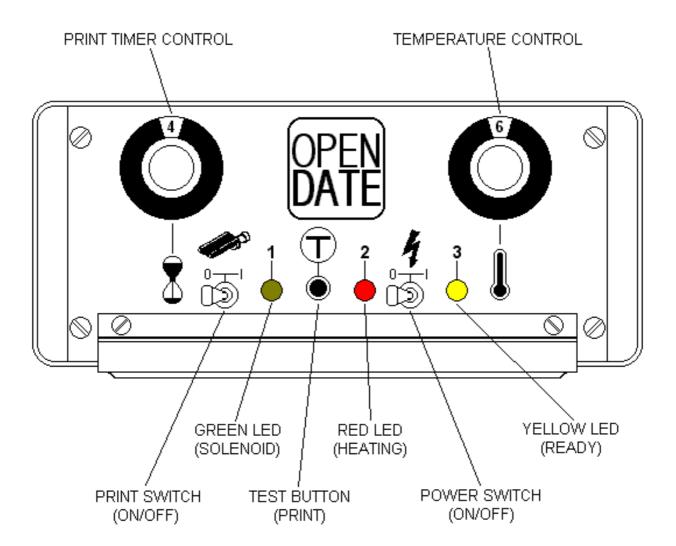
LED 3 (amber) Indicates that the printhead is at operating temperature.

NOTE. It is normal for the red and amber LED's (lights) to alternate every

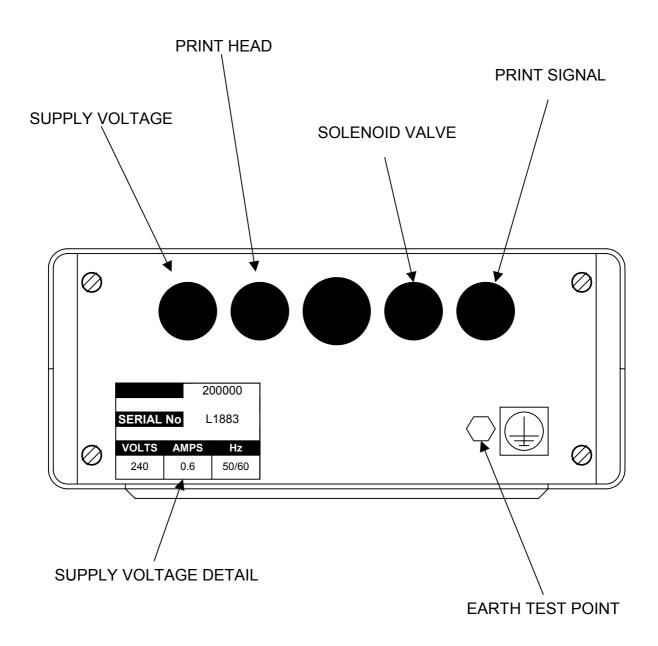
minute or so. This indicates that the operating temperature is

being maintained.

ELECTRONIC CONTROL UNIT FRONT PANEL



ELECTRONIC CONTROL UNIT REAR PANEL (Cables omitted for clarity)



OPERATING INSTRUCTIONS

MAGAZINE REMOVAL

To remove the foil magazine, slide the catch away from the type holder access door, hold in place and withdraw the magazine using the two handles. Turn off the **PRINT** switch to silence the audible alarm.

FOIL THREADING (refer to page 9)

- (I) Fit an empty foil core onto the rewind mandrel.
- (II) Disengage the pinch drive roller.
- (III) Remove label from a new roll of foil.
- (IV) Fit new roll of foil onto take-off mandrel (note unwind direction as shown on threading diagram).
- (V) Thread foil around all rollers as shown on threading diagram. Note, the gloss side of the foil should face inwards throughout the foil path.
- (VI) Attach end of foil to empty core on rewind mandrel, gloss side facing inwards.
- (VII) Wind foil on a few turn to track and tension it.
- (VIII) Engage pinch drive roller.

Hold the magazine by the two handles, slide in onto the locating pins and push to lock in place. Turn the **PRINT** switch on.

FITTING TYPE/DIE HOLDER

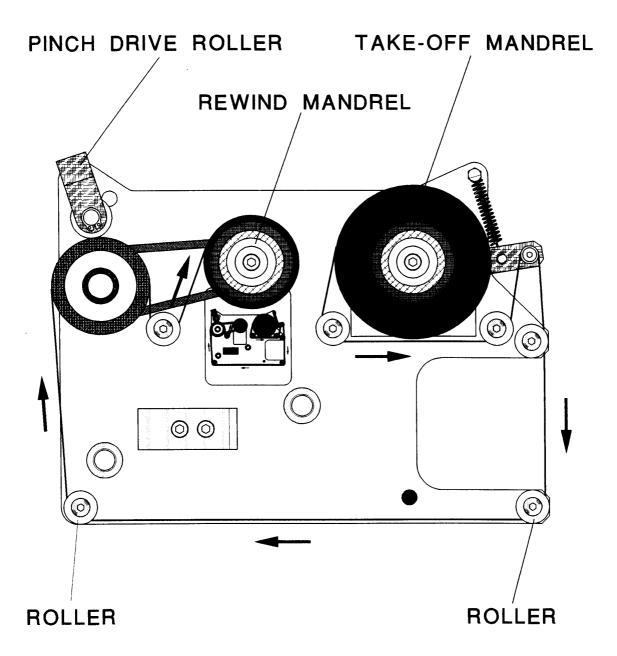
NEVER ASSUME THAT A TYPE/DIE HOLDER IS COLD.

Only pick up a type/die holder by its handle. Ensure that the face of the magnetic catch is clean, open the red type holder access door (the alarm will sound unless the print switch is off), align the type/die holder within the two side locators and slide in until the magnet catches on the end plate. Close the door.

FOIL FEED ADJUSTING SCREW

This is used to adjust the amount of foil used per print, winding it in reduces the foil pull. Ensure that the locking nut is fully tightened after adjustment. A gap of 1 or 2mm is recommended between each section of used foil.

FOIL THREADING DIAGRAM



INITIAL SETTING PROCEDURE

- (1) Ensure that printing foil and substrate are compatible. If in doubt, contact foil supplier for assistance.
- (2) Remove type holder from printhead.
- (3) Ensure that rubber print base is clean, undamaged and securely retained in position under printer.
- (4) Set air pressure regulator. 4 to 7 Bar is recommended (60 to 100 PSI).
- (5) Set **PRINT** control to 3 and **HEAT** control to 5.
- (6) Switch **HEAT** on, leave **PRINT** off. 3 to 4 minutes should be allowed for printer to reach working temperature.
- (7) Load type or die into holder, centrally if possible and fasten securely. Make sure that type face is clean.
- (8) Load type/die holder into printer and close door. If cold, allow 3 to 4 minutes for holder to heat up before printing.
- (9) Load foil as detailed on page 8.
- (10) Turn on **PRINT** switch.
- (11) Place a sample of substrate material under printer and press **TEST** button. Inspect resulting print.
- (12) Adjust print levelling screws until a light, uniform print impression is achieved. Lock levelling screws.
- (13) Adjust foil metering screw for economic foil use as detailed previously and tighten thumb nut.

PRINT ORIENTATION

To rotate the printer and therefore turn the overprint through 90 degrees, remove the foil magazine (if applicable), unscrew the clamping handle until the location square on top of the printhead is clear of the top rails, turn it to the required position, tighten the clamping handle and replace the magazine.

TEMPERATURE ADJUSTMENT refer to page 6)

- Normal setting is about 5.
- Should the print not fully adhere to the substrate a higher setting may be used.
- Small, fine detail print generally requires a lower temperature.
- Thermoplastic films and especially polyethylene generally require a lower temperature.
- Aluminium foils, paper and untreated polyester require a higher temperature.

INITIAL SETTING PROCEDURE

PRINT TIMER ADJUSTMENT (refer to page 6)

- Normal setting is about 4.
- Generally, the larger the print, the higher the setting.
- Should the print not adhere fully to the substrate, a higher setting may be used.
- Remember, the printhead can only operate during the stationary cycle of the web, if the print time is longer than this the web may break.
- Should the dwell time have to be decreased to accommodate higher production speeds, it may be necessary to compensate by increasing the temperature setting.

AIR FLOW CONTROLS (refer to page 12)

The air flow restrictors are usually attached to the solenoid valve exhaust ports. They work by regulating the speed at which air is exhausted from the air cylinder.

Turning the adjusting screws will alter the exhaust air flow and consequently the print ram velocity, it will also affect noise levels.

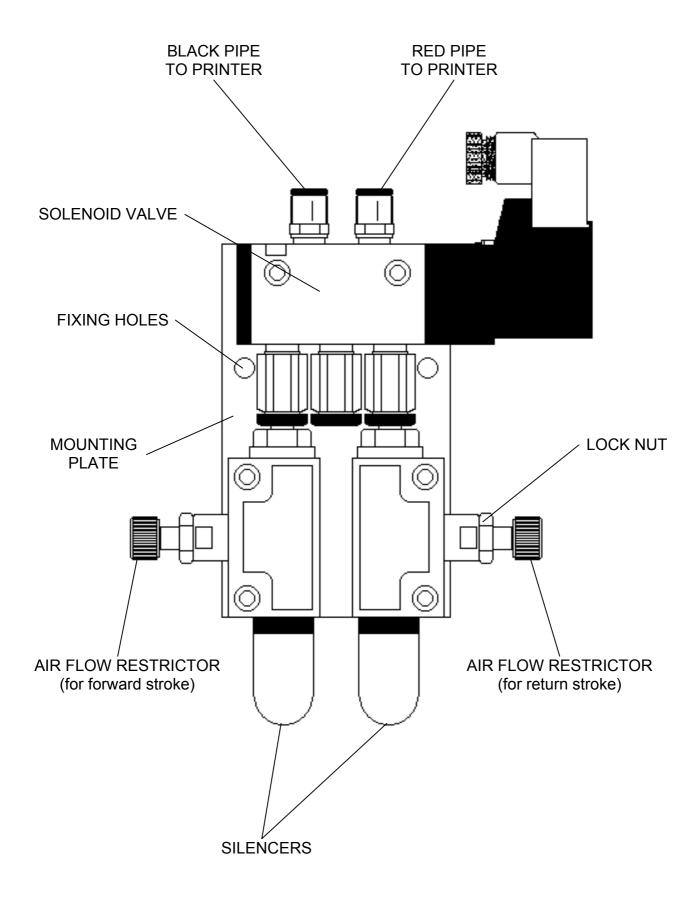
Increasing the exhaust air flow from the forward stroke of the print ram will increase the print pressure. Decreasing the exhaust air flow will reduce print pressure and the resulting print will be lighter.

The drive for the printing foil is taken from the return stroke of the print ram. Increasing the exhaust air flow will speed up the foil feed. To ensure efficient foil feeding, the return stroke should be as gentle as possible.

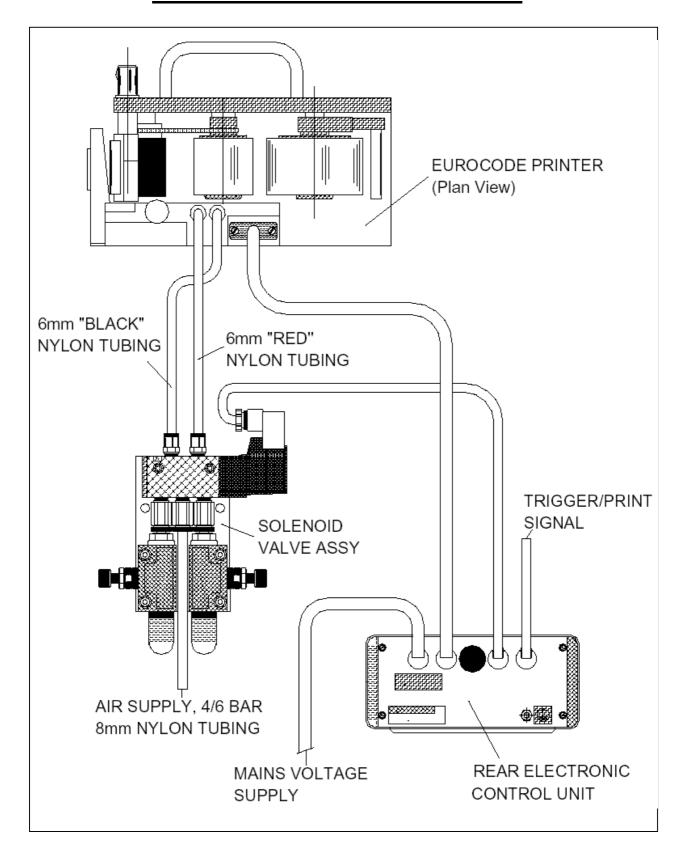
For higher speed operation, the exhaust air flow from both the forward and return strokes will have to be increased

Note, it is very important that the print ram returns fully before the next print cycle commences.

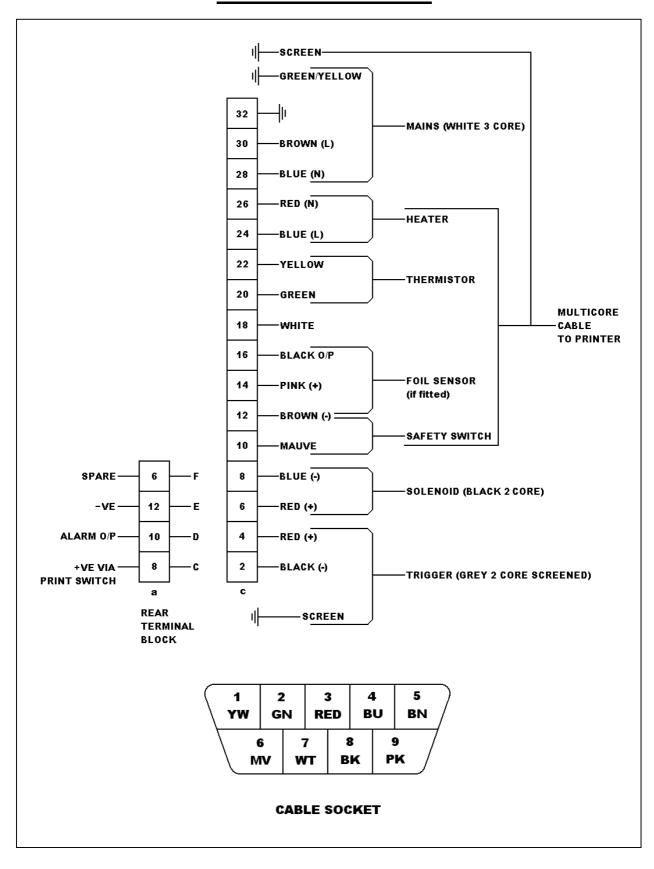
SOLENOID VALVE ASSEMBLY



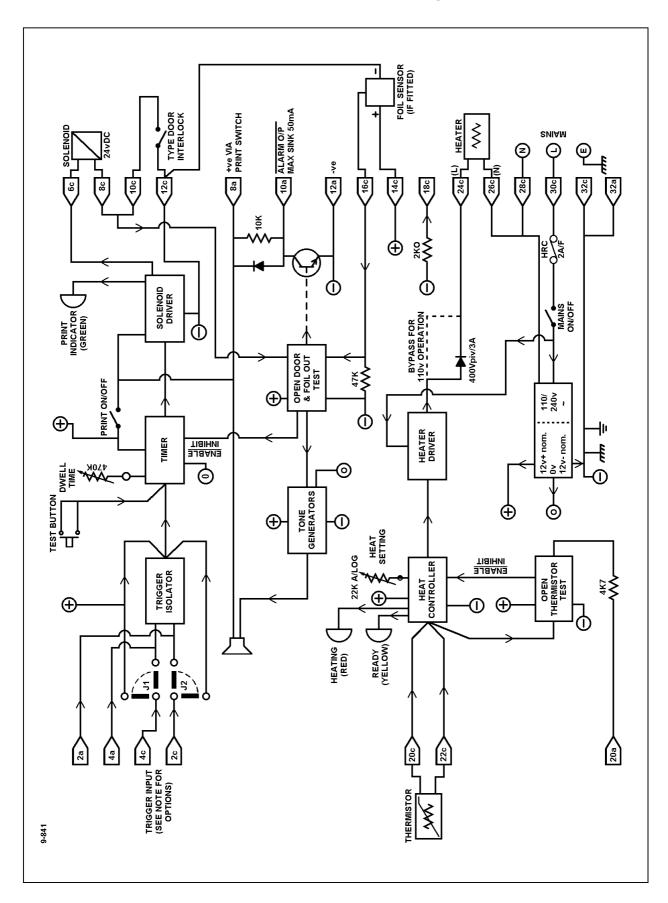
EUROCODE CONNECTION DETAILS



WIRING DIAGRAM – ELECTRONIC CONTROL UNIT. DRAWING NO. 9-842



BLOCK DIAGRAM FOR EUROCODE & SPRINT SERIES CONTROLLER Drawing No. 9-841

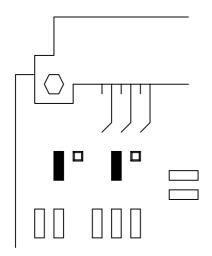


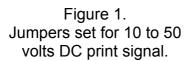
TRIGGER SIGNAL SELECTION

The trigger signal which initiates the print cycle can be either a DC voltage or taken from a pair of normally open contacts. The option is selected by moving the blue jumpers at the rear of the main printer control card. When supplied, the board is configured to accept a DC print signal.

- 1. Horizontally mounted boards are normally configured to accept a DC print signal within the range 10 to 50 volts (polarity unimportant), and the blue selector jumpers are pegged north-south i.e. sitting parallel to each other, see figure 1.
- 2. For triggering from a normally open contact source such as a relay, microswitch or foot switch, the selector jumpers should be set east/west i.e. in line with each other, see figure 2.

N.B. Vertically mounted boards for use in DIN41494 ("Eurocard") enclosures are pegged east-west. Both print signal options are then available and can be selected by suitable wiring to the PCB connector within the enclosure.





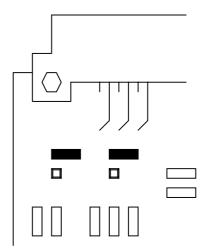
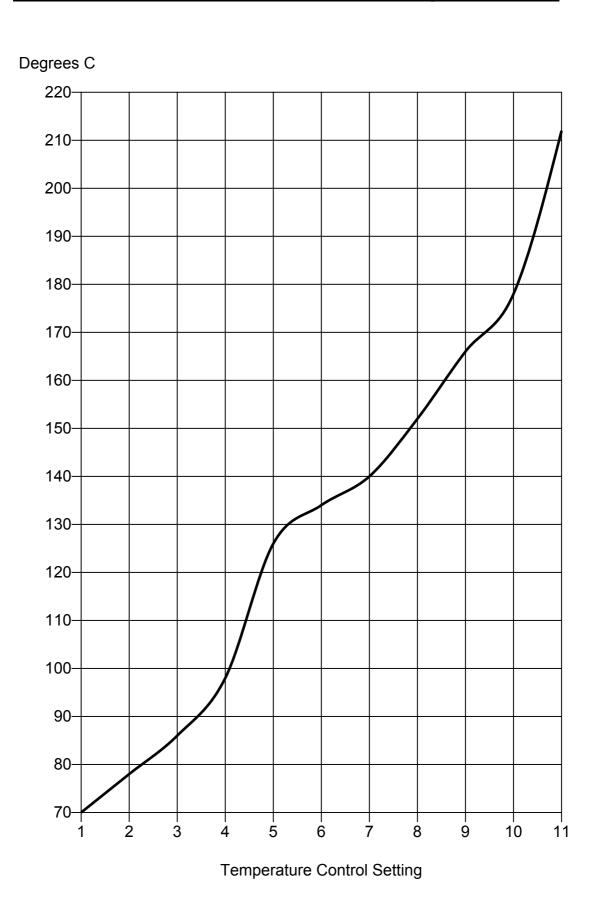


Figure 2.
Jumpers set for normally open print signal.

Printhead Temperature Relative to Settings (nominal).



ELECTRONIC FAULT FINDING

FAULT	POSSIBLE CAUSE
No lights when control unit is switched on.	No power to control unit.
	Fuse blown on PCB.
Control panel lights, including green, are	No air.
illuminated but printer will not operate either by remote trigger signal or TEST button.	Fault on PCB.
Control panel lights, except green, are	Solenoid valve failure.
illuminated and printer will not operate either by remote trigger signal or TEST	Solenoid valve disconnected.
button.	PRINT switch off.
Alarm sounds continually.	Type holder door open.
	Foil magazine not fully engaged.
	Safety microswitch failure.
	Printer plug not properly mated.
	No foil present (if foil alarm is fitted).
	Foil not positioned over sensor (if fitted).
	Foil sensor misaligned (if fitted).
	Foil sensor failure (if fitted).
Printer does not heat, red L.E.D. is illuminated.	Heater failure.
murmialeu.	Broken wire between heater and socket.
	Fault on PCB.
Printer does not heat, yellow L.E.D. is	Plug/socket disconnected.
illuminated. In extreme cold conditions press and hold down TEST button for 5 -	Thermistor failed open/short circuit.
10 seconds.	Fault on PCB.
Heater fails to switch off, yellow L.E.D. stays on.	Fault on PCB.
Heater fails to switch off, red L.E.D. stays	Fault on PCB.
on.	Thermistor probe loose in housing.

MECHANICAL FAULT FINDING

FAULT	POSSIBLE CAUSE
Insufficient foil pull.	Foil adjusting screw wound in too far.
	Pinch roller not engaged.
	Torsion spring on body broken.
	Grub screw loose in cam or lever.
	Drive roller damaged or dirty.
	Insufficient clearance between printer and print base.
	Cam worn.
	Fork-end roller worn.
Solenoid operates but printer does not.	No air.
	Air pipe damaged.
Printer operates but does not print, i.e.	Printing foil exhausted.
impression but no print.	Printing foil not being driven through.
	Printing foil not suitable for substrate.
	Little or no heat.
Printing foil tracks over to one side.	Bent spindle on foil magazine.
	Brake arm loose.
	Pinch roller misaligned with drive roller.
Foil rewind is loose.	Green drive belt worn out or dirty.
	Foil feed too rapid (slow down return
	stroke of print ram, see page 11).
Printer is sluggish.	Insufficient air pressure.
	Flow restrictors wound in too far.
	Faulty valve.

PRINT QUALITY DETERIORATION.

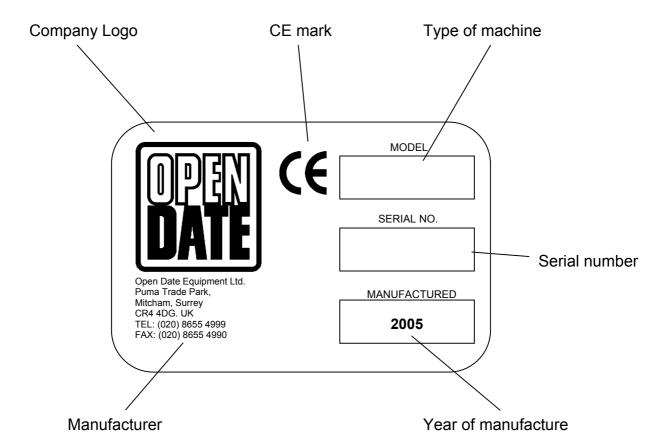
Print quality deterioration can be attributed to any of the following causes;

POSSIBLE CAUSE	CURE
Insufficient foil pull	See page 19.
Insufficient air pressure.	Check pressure regulator setting. See that pipes are not damaged.
Printer not level with print base.	Adjust levelling screws.
Too much or too little heat.	Check that settings are correct.
Dirty, worn or damaged dies or type.	Clean or replace.
Damaged or out of position print base rubber.	Replace or re-position.
Printing foil not compatible with substrate.	Contact foil supplier.
Substrate surface altered, i.e. different coating.	Contact substrate or foil supplier.
Print ram not completing full stroke.	Open forward flow restrictor (where fitted). Increase print dwell time.
Substrate moving before print head is clear.	Reduce print dwell time.
Print Dwell incorrectly set.	Adjust as necessary.

MACHINE SERIAL NUMBER IDENTIFICATION

The identification label can be found on the outside of the printer, usually on the rear guard.

Always quote the model and serial number when ordering spare parts.



RECOMMENDED SPARES LIST

Covering:

EUROCODE 150 / 180 / 300

<u>MEC</u>	HANIC	CAL	STOCK REF
	1.	Spring Set (Eurocode 150)	SPR620216
<u>or</u>		Spring Set (Eurocode 180)	SPR620215
<u>or</u>		Spring Set (Eurocode 300)	SPR620217
	2.	Drive Belt (Eurocode 150)	DRI110022
<u>or</u>		Drive Belt (Eurocode 180)	DRI620048
<u>or</u>		Drive Belt (Eurocode 300)	DRI620049
	3.	Drive Roller Assembly	DRI620204
	4.	Fork End Roller Assembly	FOR620208
	5.	Brake Strap (Eurocode 150/180)	BRA620038
<u>or</u>		Brake Strap (Eurocode 300)	BRA620051
	6.	Grey Self Adhesive Print Base	SABASE
		300 x 450mm sheet	
<u>or</u>	7.	White Silicone Rubber Print Base	SRBASE
		300 x 300 x 3mm thick sheet	

ELECTRICAL

1.	Cartridge Heater (240v)	HEA501506
2.	Thermistor Probe	THE500502
3.	Microswitch for Door	SWI395011
4.	Plug-In Control Card (see note below)	CPC290500
5.	Pack of Fuses (5)	FUS393500
6.	Solenoid Valve without fittings	VAL510517

Note. The stock reference for the plug-in control card listed above (item 4 or 5) refers to the 240v, horizontal (box mount) unit. Other variations are available which your printer may have been supplied with. If in doubt, please advise the serial number of your existing unit to our sales office.

This list covers machines supplied after 1st January 1999 for the first two years of operation only.

EUROCODE PARTS LIST

MECHANICAL

Item numbers refer to those on the assembly drawings. When ordering spare parts please use the Stock Reference.

ITEM	Piodoc doc ti	ne Stock Reference.			
Magazine plate	ITFM	DESCRIPTION	STOCK REF	OTY	NOTES
2				1	<u>110125</u>
2b				1	Includes items 26 44 50 56 57
See supplementary list for Eurocode 300.					
3	20	Rewind hub assy	HOR050505	Т	
Door assy	_			_	
5 Roller spindle SPI620005 6 6 Anchor ANC190006 1 7 Foil guide GUI620006 1 8 Bush BUS190008 2 9 Drive roller spindle SPI620007 1 10 Dancing bar DAN620008 1 11 Roller ROL620009 1 12 Bush BUS190012 1 13 Drive roller assy DRI620204 1 Includes items 15,22,32,33,45. 14 Dancing arm ARM620011 1 Includes items 15,22,32,33,45. 15 Pulley PUL190015 1 Includes items 15,22,32,33,45. 16 Spring post SPR190017 1 Yoke YOK620012 1 17 Spring post SPR190017 1 Yoke YOK62012 1 19 Spindle SPR190017 1 Yoke YOK20012 1 21 Pinch roller say PINE20015 1 In					
6 Anchor ANC190006 1 7 Foll guide GUIGE0006 1 8 Bush BUS190008 2 9 Drive roller spindle SPIE20007 1 10 Dancing bar DAN620008 1 11 Roller ROL62009 1 12 Bush BUS190012 1 13 Drive roller assy DRE20204 1 Includes items 15,22,32,33,45. ARM620014 1 15 Pulley PUL190015 1 16 Sping post SPR190016 2 17 Sping post SPR190017 1 18 Yoke YOK620012 1 19 Spindle SPIE20013 1 19 Spindle SPIE20013 1 20 Pinch roller assy PIN620205 1 Includes items 28. PIN620013 1 21 Pinch roller spindle SPIE20015 1 22 Washer WAS620016 1 23 Spacer SPA120042 2 25 Drive belt DRI110022 1 Part of Spring Set. 8 Bush BUS190016 2 29 Handle HAN50502 1 31 Circlip CLI530024 2 29 Handle HAN50502 1 31 Circlip CLI530024 2 32 Seal SEA512034 1 Part of Spring Set. 9 Spring SPR530035 1 Part of Spring Set. 9 Spring SPR530035 1 Part of Spring Set. 9 Spring SPR530036 1 Part of Spring Set. 9 Spring SPR530036 1 Part of Spring Set. 9 Washer WAS620037 1 Part of Spring Set. 9 Handle HAN50502 1 MAx20 1 1 Spring SPR530036 1 Part of Spring Set. 9 Handle HAN50502 1 MAx40 2 Part of Spring Set. 9 Spring SPR530036 1 Part of Spring Set. 1 M4x20 4 M			DOO620203		Includes items 52,74,112.
7	5	Roller spindle	SPI620005	6	
S	6	Anchor	ANC190006	1	
9 Drive roller spindle SPI620007 1 10 Dancing bar ROL620009 1 11 Roller ROL620009 1 12 Bush BUS190012 1 13 Drive roller assy DRI620204 1 Includes items 15,22,32,33,45. 14 Dancing arm ARM620011 1 15 Pulley PUL190015 1 16 Spring post SPR190016 2 17 Spring post SPR190017 1 18 Yoke YOK620012 1 19 Spindle SPI620013 1 19 Spindle SPI620013 1 20 Pinch roller assy PIN620205 1 Includes item 28. 21 Pinch roller spindle SPI620015 1 22 Washer WAS620016 1 23 Spacer SPA120042 1 24 Support SUP190024 2 25 Drive belt DRI110022 1 Part of Spring Set. 26 Bearing BEA520003 6 See supplementary list for EUrocode 300. 27 Brake strap BRA620038 1 See supplementary list for Eurocode 300. 28 Bearing BEA521006 2 29 Handle HAN530502 1 30 Grub screw 1 M5x6 31 Circlip CLI530024 2 32 Seal SEA512034 1 Part of Spring Set. 33 Clutch bearing BEA521004 2 34 Spring SPR530034 1 Part of Spring Set. 36 Grub screw 1 M4x2 37 CSK screw 1 M4x2 38 Button screw 7 M4x8 39 Spring SPR530035 1 Part of Spring Set. 40 Dowel pin 1 Grub screw 1 M4x2 41 Button screw 2 M4x4 42 Pan head screw 4 M5x20 43 CSK screw 1 M4x2 44 Pan head screw 4 M5x20 45 CSK screw 1 M4x2 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 4 M512005 1 Part of Spring Set. 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 4 M5x200 1 Part of Spring Set. 49 Cylinder liner LIN620017 1 M3x6 41 Button screw 1 M3x6 42 Pan head screw 4 M5x20 43 CSK screw 1 M3x6 44 Pan head screw 1 M3x6 45 CSK screw 1 M3x6 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 4 M5x20035 8 49 Cylinder liner 1 LIN620017 1 M3x6 50 Diff 210005 1 Part of Spring Set. 50 Dive boss DRI120005 1 Part of Spring Set. 51 Washer 4 WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121008 1	7	Foil guide	GUI620006	1	See supplementary list for Eurocode 300.
10	8	Bush	BUS190008	2	
10	9	Drive roller spindle	SPI620007	1	
11					
12		· ·		=	
13					
14					Includes items 15 22 32 33 45
15	_	•		· ·	Includes items 15,22,52,55,45.
16					
17					
18					
19					
Pinch roller assy	18	Yoke	YOK620012	1	
Pinch roller spindle	19		SPI620013	1	
Pinch roller spindle	20	Pinch roller assy	PIN620205	1	Includes item 28.
22	21		SPI620015	1	
23		·	WAS620016	1	
24				=	
Drive belt DRI110022 1					
See supplementary list for EC 300 & 180.					Part of Spring Sot
26 Bearing BEA520003 6 See supplementary list for Eurocode 300. 27 Brake strap BRA620038 1 See supplementary list for Eurocode 300. 28 Bearing BEA521006 2 29 Handle HAN530502 1 30 Grub screw 1 M5x6 31 Circlip CLI530024 2 32 Seal SEA512034 1 Part of Seal Kit. 33 Clutch bearing BEA521504 2 34 Spring SPR530034 1 Part of Spring Set 35 Spring SPR530035 1 Part of Spring Set. 36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 M4x25 44 Pan head scre	25	Drive beit	DKITTOUZZ	ı	
Brake strap	00	Б .	DE 4 500000	•	
28 Bearing BEA521006 2 29 Handle HAN530502 1 30 Grub screw 1 M5x6 31 Circlip CLI530024 2 32 Seal SEA512034 1 Part of Seal Kit. 33 Clutch bearing BEA521504 2 34 Spring SPR530034 1 Part of Spring Set 35 Spring SPR530035 1 Part of Spring Set. 36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 1 M3x6 <t< td=""><td>-</td><td></td><td></td><td></td><td>See supplementary list for Eurocode 300.</td></t<>	-				See supplementary list for Eurocode 300.
Pandle		•			See supplementary list for Eurocode 300.
30 Grub screw 1 M5x6 31 Circlip CLI530024 2 32 Seal SEA512034 1 Part of Seal Kit. 33 Clutch bearing BEA521504 2 34 Spring SPR530034 1 Part of Spring Set 35 Spring SPR530035 1 Part of Spring Set. 36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 M2x25 43 CSK screw 2 M4x25 44 Pan head screw 4 N0.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300.					
31		Handle	HAN530502		
32 Seal SEA512034 1 Part of Seal Kit. 33 Clutch bearing BEA521504 2 34 Spring SPR530034 1 Part of Spring Set 35 Spring SPR530035 1 Part of Spring Set. 36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 <t< td=""><td>30</td><td>Grub screw</td><td></td><td>1</td><td>M5x6</td></t<>	30	Grub screw		1	M5x6
33	31	Circlip	CLI530024	2	
34 Spring SPR530034 1 Part of Spring Set 35 Spring SPR530035 1 Part of Spring Set. 36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3x6 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set.	32	Seal	SEA512034	1	Part of Seal Kit.
34 Spring SPR530034 1 Part of Spring Set 35 Spring SPR530035 1 Part of Spring Set. 36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3x6 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set.	33	Clutch bearing	BEA521504	2	
Spring SPR530035 1					Part of Spring Set
36 Grub screw 2 M4x4 37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1	-				
37 CSK screw 1 M4x20 38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009			01 11000000		
38 Button screw 7 M4x8 39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back					
39 Spring SPR530008 1 Part of Spring Set. 40 Dowel pin 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back disc DIS121008 1				•	
40 Dowel pin 1 1 6 dia x 28 41 Button screw 4 M5x20 42 Pan head screw 2 No.2-56 x 1/4" 43 CSK screw 2 M4x25 44 Pan head screw 4 No.2-56 x 1/8" 45 CSK screw 1 M3x6 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back disc DIS121008 1			00050000		
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45 CSK screw 1 M4x8 46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 56 Back disc DIS121008 1	44	Pan head screw		4	No.2-56 x 1/8"
46 Grub screw 1 M3x6 47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 56 Back disc DIS121008 1					
47 Button screw 1 M3x6 48 Washer 1 M3 49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 56 Back disc DIS121008 1					
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49 Cylinder liner LIN620017 1 50 Spring clip SPR530001 2 Part of Spring Set. 51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back disc DIS121008 1					
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51 Washer WAS120035 8 52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back disc DIS121008 1					Dowl of Covins Col
52 Hinge block HIN122006 1 53 Handle HAN120079 2 54 Back disc DIS121009 1 55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back disc DIS121008 1					Part of Spring Set.
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55 Drive boss DRI120052 1 See supplementary list for Eurocode 300. 56 Back disc DIS121008 1		Handle	HAN120079	2	
56 Back disc DIS121008 1	54	Back disc	DIS121009	1	
56 Back disc DIS121008 1	55	Drive boss	DRI120052	1	See supplementary list for Eurocode 300.
	56	Back disc		1	· · · · · ·
A DIANGHUU DIKA 120000 I	57	Brake hub	BRA120063	1	

EUROCODE MECHANICAL PARTS LIST cont'd.

<u>ITEM</u>	<u>DESCRIPTION</u>	STOCK REF	QTY	NOTES
58	Roller	ROL620018	6	
59	Grub screw		1	M4x5
60	Main body	N/A	1	
61	Piston	PIS620020	1	Piston/Seal assy ref. PIS620200
62	Bottom cap	N/A	1	,
63	Databox packing	PAC190028	i	
64		PIN620022	1	
	Guide pin			
65	Washer	WAS620065	1	
66	Needle Bearing	BEA521008	1	
67	Spindle	SPI620059	1	
68	Spring	SPR530033	1	Part of Spring Set.
69	Cam	CAM620025	1	. •
70	Mounting plate	PLA620026	1	
71	Lock nut	NUT620027	i	
72/73			1	Includes item 91.
	Foil adjusting screw assy	ADJ620207		
74	Dowel pin		2	3 dia x 10
75	Plug housing	HOU130023	1	
76	Drive spindle	SPI620029	1	
77	Strike plunger	PLU620036	1	
78	Timing pulley	PUL620030	1	
79	"O" ring	O-R512005	1	Part of Seal Kit.
80	Rod seal	SEA512038	2	Part of Seal Kit.
				Part of Sear Nit.
81	Microswitch support	SUP620031	1	
82	Nose bearing	BEA620070	1	
83	Piston seal	SEA512036	1	Part of Seal Kit.
84	Bush	BEA520017	1	
85	Microswitch	SWI395010	1	
86	Clutch Bearing	BEA521507	1	
87	Needle bearing	BEA521001	1	
	<u> </u>	DLA321001		M4::20
88	Cap screw		2	M4x30
89	"O" ring	O-R512030	1	Part of Seal Kit.
90	Timing belt	BEL522512	1	
91	Roll pin		1	3 dia x 20
92	Cap screw		4	M6x20
93	Grub screw		1	M5x8
94	Button screw		10	M4x8
95	Lock nut		1	M10
96 96	LOCK Hut		1	WITO
97				
98				
99	Needle bearing	BEA520018	1	
100	Dowel pin		1	
101	Cap screw		2	M3x25
102	Cap screw		4	M4x45
102	Cheese head screw		2	
	Cheese head strew		4	M2x10
104			4	140.0
105	Grub screw		1	M8x8
106	CSK screw		2	M3x6
107	Side locator	SID120014	2	
108	Cushion	DAM120074	2	
109	Location pin	LOC620032	2	
110	lever	LEV620110	1	
				Includes item 96
111	Timing pulley assy	PUL620219	1	Includes item 86.
112	Magnet	MAG531001	1	
113	Roller	N/A	1	Part of item 121.
114	Insulating plate	INS120012	1	
115	Heater block	HEA120013	1	
116			•	
	Mounting server	CCD400070	2	
117	Mounting screw	SCR120070	2	
118	Keep plate	KEE120030	1	
119	Button screw		4	M5x8
120	Cover	COV620034	1	
-	Fork end assy	FOR620208	1	Includes items 100,113.
121				
121 122	Cap screw		1	M4x12

EUROCODE MECHANICAL PARTS LIST cont'd.

<u>ITEM</u>	DESCRIPTION	STOCK REF	<u>QTY</u>	<u>NOTES</u>	
123	Top Cylinder Bearing	BEA620064	1		
124	Bush	BUS620035	1		
125	Keep plate	CAT620125	1		
126	CSK screw		3	M4x10	
127	Thumb plate	THU620127	1		
128	·				
129	Locking plate	LOC620129	1		
130	Cap screw		2	M4x20	
131	Spring	SPR530032	1	Part of Spring Set.	
132	Grub screw		1	M3x8	
133	Plug	PLU620037	2		
134	Washer	WAS120035	5		

SUPPLEMENTARY LIST FOR EUROCODE 300 ITEMS ONLY.

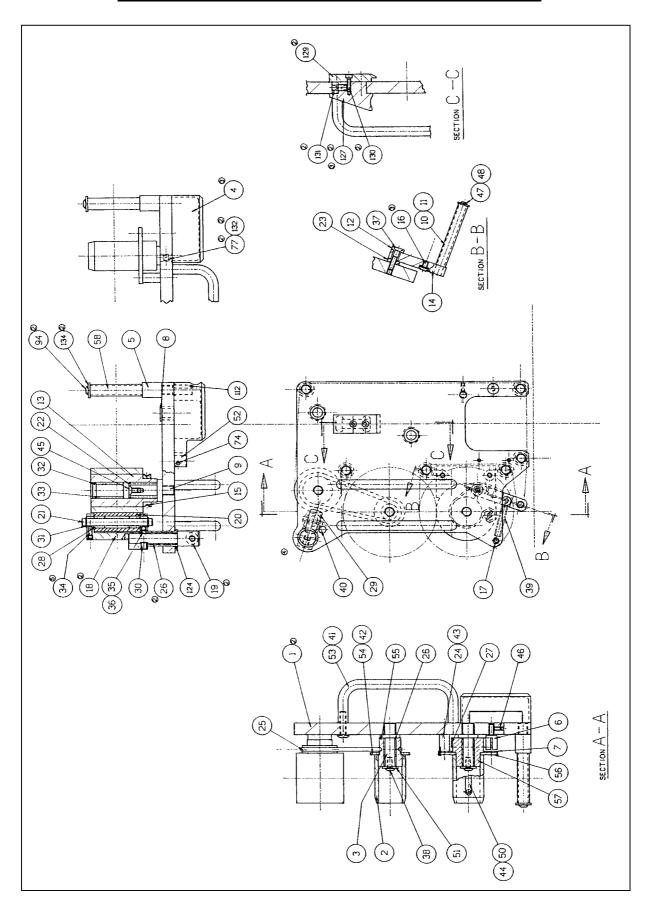
<u>ITEM</u>	DESCRIPTION	STOCK REF	QTY	<u>NOTES</u>
2c	Rewind hub assy	HUB620203	1	Includes items 42,44,50,54,148,149.
135	Magazine Plate	N/A	1	
136	Foil Guide	GUI620040	1	
137	Drive Belt	DRI620049	1	Part of Spring Set.
138	Brake Strap	BRA620051	1	
147	Hub Spindle	SPI620147	1	
148	Clutch Bearing	BEA521505	1	
149	Drive Boss	DRI620149	1	

SUPPLEMENTARY LIST FOR EUROCODE 180 ITEMS ONLY.

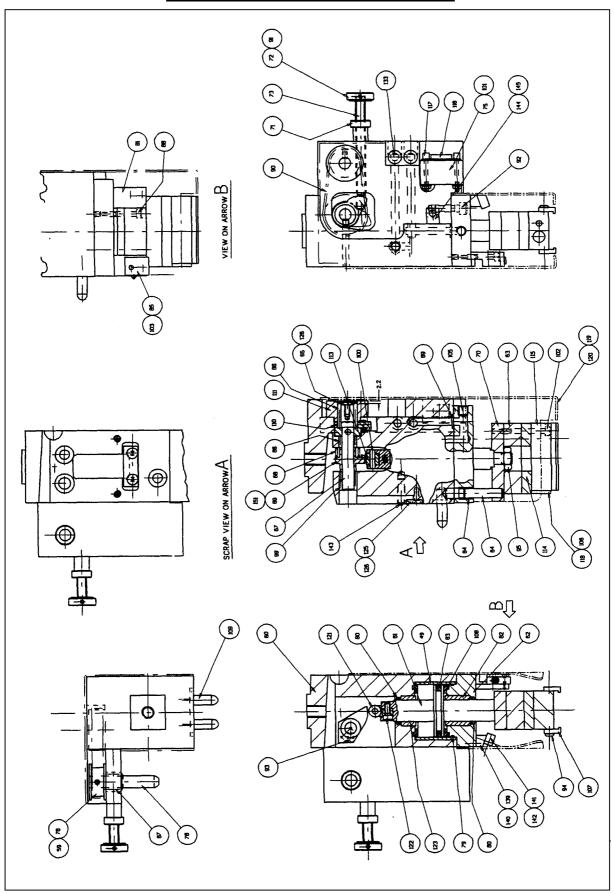
ITEMDESCRIPTIONSTOCK REFQTYNOTES25Drive BeltDRI6200481Part of Spring Set.150Magazine PlateN/A1
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DNICHMATIC	STOCK REF
PNEUMATIC Solenoid valve without fittings.	VAL510517
ELECTRONIC Cartridge heater, 240v, 250w. Thermistor probe. Safety microswitch. "End of foil alarm" sensor.	HEA501506 THE500502 SWI395011 ALA395018 CPC290500
Plug-in printer control card, 240v, box mount (horizontal). For other control card variants please contact the sales office. REPAIR KITS	CPG290500
Seal kit containing all seals. Spring set containing all springs and drive belt (Eurocode 150). Spring set containing all springs and drive belt (Eurocode 300). Spring set containing all springs and drive belt (Eurocode 180).	SEA620209 SPR620216 SPR620217 SPR620215

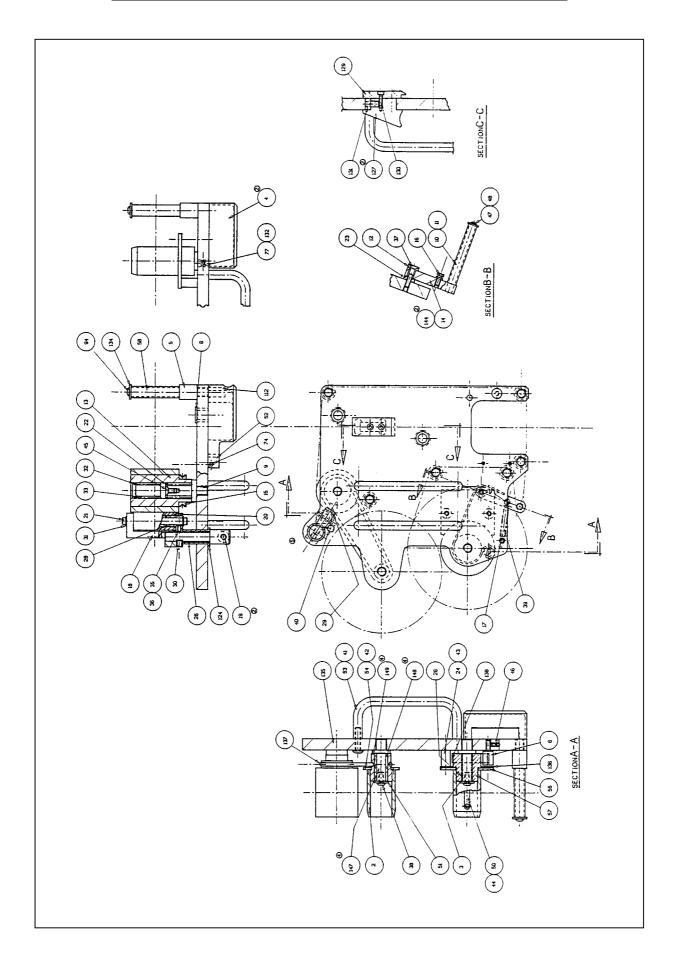
EUROCODE 150/180 MAGAZINE DETAILS



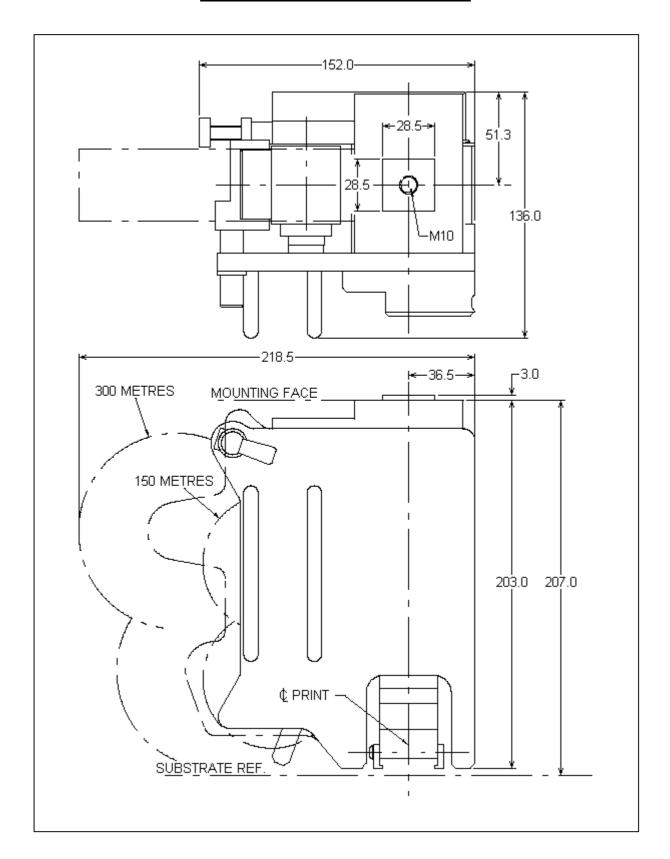
EUROCODE BODY DETAILS



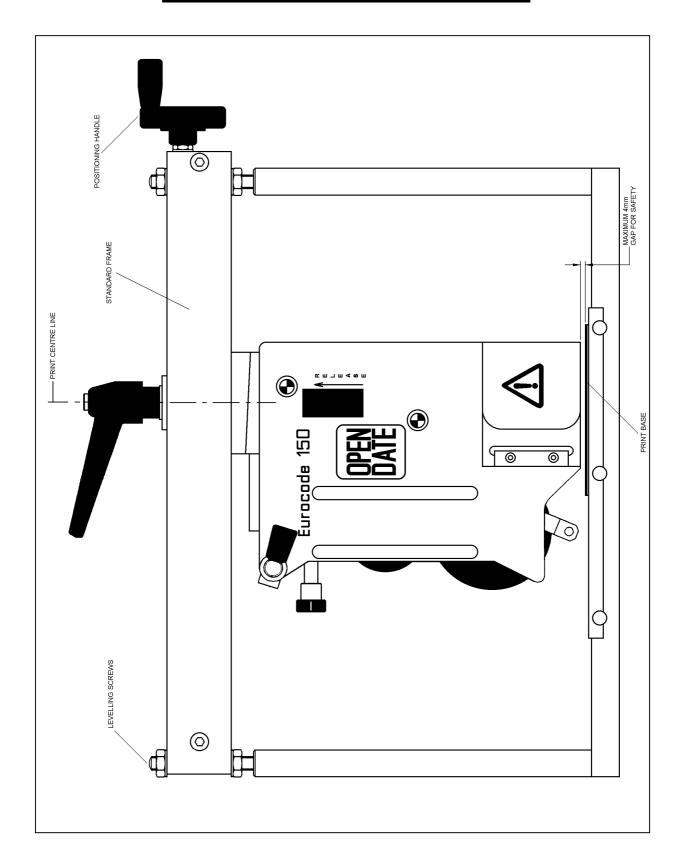
EUROCODE 300 MAGAZINE DETAILS (Iss. 5)



EUROCODE DIMENSIONS



EUROCODE FRAME INSTALLATION



EUROCODE SERIES AIRBORNE NOISE EMISSIONS.

Comprehensive tests have been carried out with the Eurocode fitted in a standard printer frame and mounted onto a typical label applicator. Measurements were taken at 1.6 metres above floor level and approximately 1 metre away from the printer in all directions.

The measuring equipment used for conducting the tests was a Digital Sound Level Meter, type d-1405E supplied by Lucas CEL. Before the tests were carried out the instrument was calibrated and fitted with a foam windshield.

The results shown below are based upon a standard type installation for the printer, the operating air pressure was set at 6 bar and the air flow restrictors correctly adjusted.

The noise levels shown below are the equivalent continuous "A-weighted" sound pressure levels in decibels "dB(A)".

PRINTS PER MINUTE	NOISE LEVEL - DECIBELS (dB)
100	65
200	69
300	72
400	75



OPEN DATE EQUIPMENT LTD. UNITS 8 & 9, PUMA TRADE PARK, 145 MORDEN ROAD, MITCHAM, SURREY, CR4 4DG. UNITED KINGDOM.

STANDARD WARRANTY TERMS AND CONDITIONS - HOT FOIL PRINTERS

Open Date printers should be installed and operated according to the instructions given in the operating manual. No liability will be accepted for faults caused by incorrect installation or operation of the equipment or if the product has been altered or subject to unreasonable use.

The following components are not covered by warranty as they will be subject to wear and tear: -

- 1. Print base rubber.
- 2. Hardened steel type.

Should you have cause to claim for repair under warranty then please contact our service department stating the model, serial number of the product and the nature of the fault.

We reserve the right to charge for components replaced during the warranty period which are subsequently found to be damaged due to any of the above conditions not being followed.

Any items repaired or replaced under warranty will carry the balance of the original warranty period only.

OPEN DATE GROUP COMPANIES

FRANCE

OPEN DATE FRANCE Z.I. D'Attichy No.8, Voie Industrielle 60350 Attichy.

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GERMANY

OPEN DATE GmbH Mittlere Stammig 4 D-97292 Uttingen

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