ILFORD ILFOSPEED 5250 DRYER

OPERATING INSTRUCTIONS

Contents

NOTE
This manual was prepared for the 220/240V ILFOSPEED 5250 dryer. The differences between this and the 120V model are described on page 12.

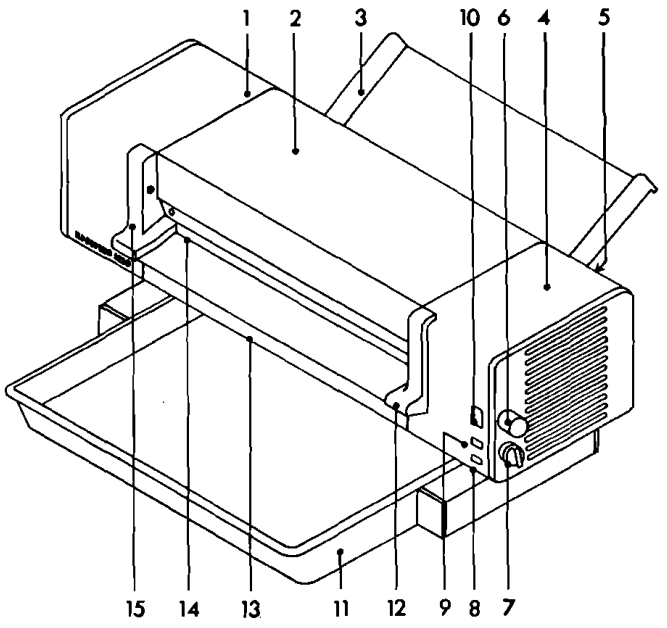
This is the ILFOSPEED 5250 dryer

The ILFOSPEED 5250 dryer has been specially designed to dry polyethylene laminated photographic papers to an exceptionally high standard. The superb qualities of the renowned 4250 dryer form the basis of the 5250 dryer: the uncompromising drying system using radiant heaters to ensure an optimum quality finish on all ILFOSPEED or ILFOSPEED MULTIGRADE paper surfaces (and most other polyethylene coated papers, black and white or colour), the high speed of operation with low power consumption, the quiet well-designed roller system for day-in day-out reliability, and the compact and pleasing styling which fits so well into any darkroom.

The ILFOSPEED 5250 dryer has several additional features: a wider feed to accept 50.8 x 61.0cm (20 × 24inch) prints and give greater processing capacity: now about 400 20.3 × 25.4cm (8 × 10inch) ILFOSPEED or ILFOSPEED MULTIGRADE prints can be dried every hour to a very high standard, a wider speed range with slow speeds to allow the drying of polyethylene laminated colour prints, and a front roller assembly which can easily be removed for cleaning. The ILFOSPEED 5250 dryer warms up and is ready for use in approximately 1½ minutes.

By following the operating instructions in this booklet, continuous and reliable operation of the 5250 dryer is assured. For the technical facts see the specification on page 21.

1 Left hand end cover
2 Centre panel
3 Receive tray
4 Right hand end cover
5 Main fuse holder (at rear of dryer)
6 Speed control
7 'On-off-run' control
8 'Mains on' indicator
9 Machine ready indicator
10 Speed indicator
11 Wet print dish
12 Right hand paper guide
13 Feed-in tray assembly
14 Feed-in slot
15 Left hand paper guide



Installing your ILFOSPEED 5250 dryer

Siting
Select a position for the dryer (on a firm, level surface) so that the legs do not project over the edge of the bench.

Check that the heaters have not been damaged in transit: see 'Servicing your ILFOSPEED 5250 dryer' for procedure (page 9). Withdraw the two plastic transit wedges situated one at each end of the front roller assembly unit. This unit is packed separately within the ILFOSPEED 5250 dryer carton. Fit the front roller assembly: see 'Maintaining your ILFOSPEED 5250 dryer' for procedure (page 9).

Leave a space of 30cm (12inches) at each end of the dryer for air circulation and access.

An alternative location for the ILFOSPEED 5250 dryer is against an aperture in the darkroom wall through which it can deliver dry prints into a white light area. See page 11.

Keep corrosive chemicals (eg activators) well away from the dryer.

Attachment of receive tray
Fit the print receive tray at the most convenient angle with notch 'A' under lug 'B', or notch 'C' under lug 'B'.

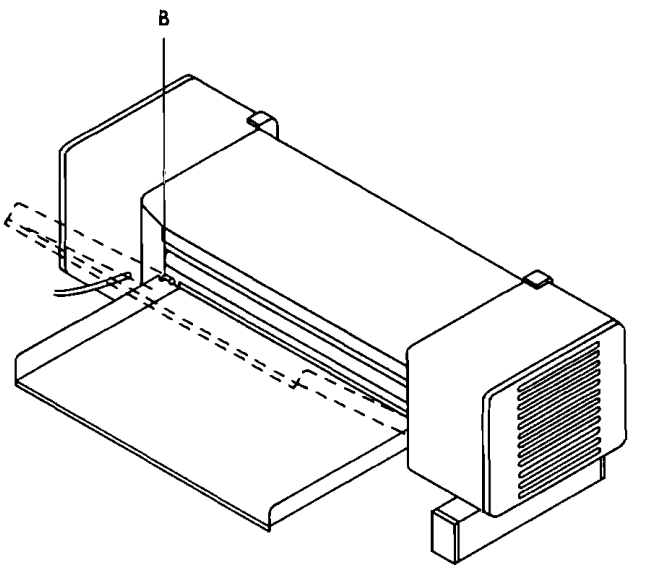
Place the wet-print dish under the dryer in the position shown on the page opposite.

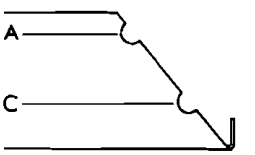
Electrical connections
(220V and 240V models)
Connect a plug of at least 10amp rating to the electrical lead as follows:

Brown wire to the live pin (marked L).
Blue wire to the neutral pin (marked N).
Green/yellow wire to the earth pin (marked E or ⏚).

If a fused plug is used it needs a 10 or 13amp fuse.

If in any doubt about making the electrical connections consult a competent electrician.



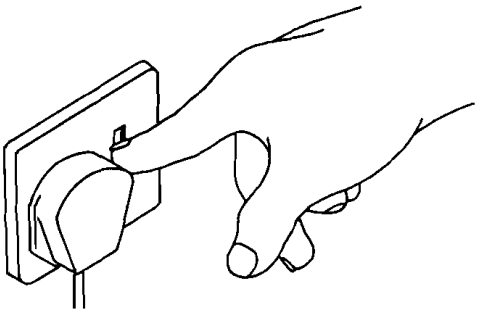


Drying ILFOSPEED and ILFOSPEED MULTIGRADE prints

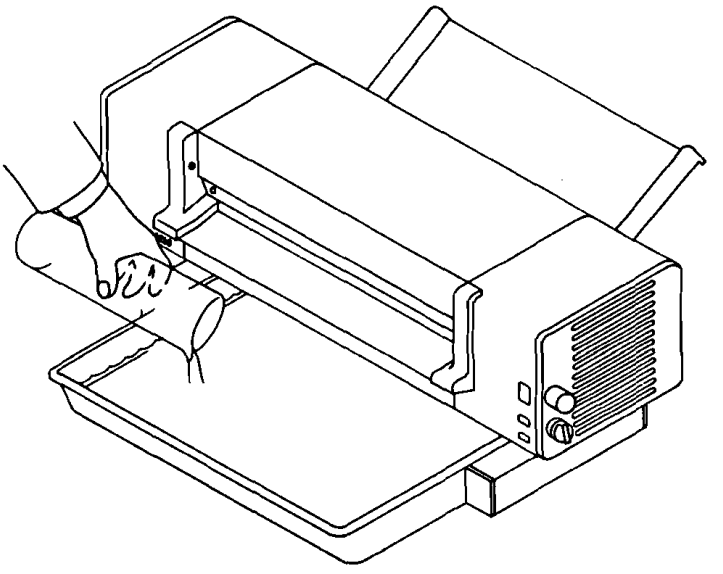
1 Expose and process your ILFOSPEED or ILFOSPEED MULTIGRADE prints.

Note: prints less than 7.4 x 10.5cm should not be dried through the 5250 dryer.

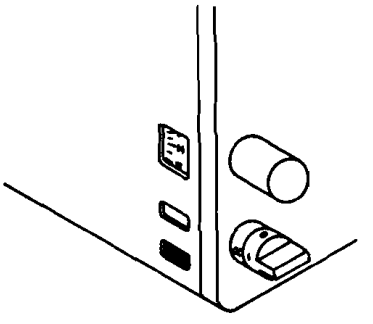
2 Connect the dryer to the electrical supply and switch on.



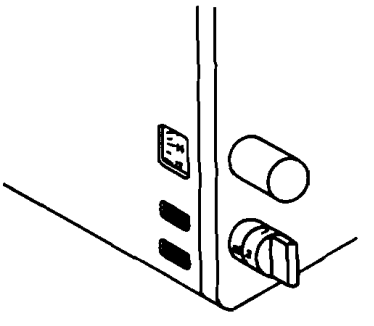
3 Partly fill the wet-print dish with enough cold water to cover the prints.



4 Switch on the electrical supply to the dryer by turning the lower knob clockwise from position 0 to position 1. The lower red light will come on.

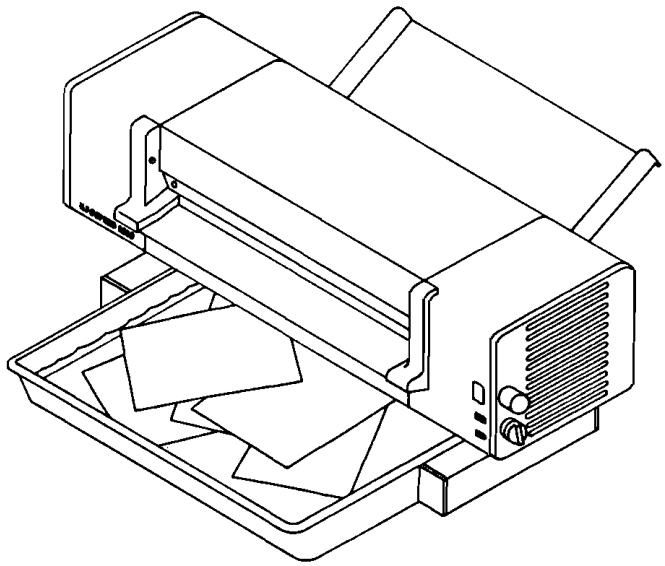


5 Turn the lower knob clockwise to position 2. The fans, heaters and drive will now switch on, and after approximately 1½minutes the upper red light will come on indicating that the dryer has warmed up and is ready to receive prints.

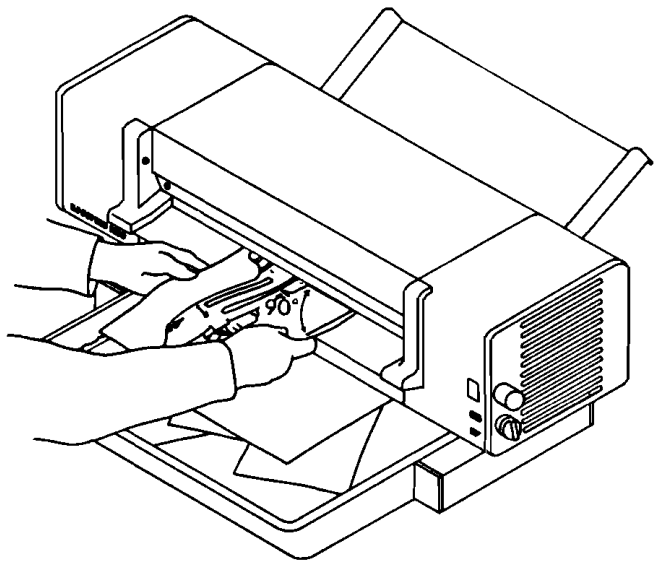


6 Transfer washed ILFOSPEED or ILFOSPEED MULTIGRADE prints to the wet-print dish.

7 Set the transport speed to 14 by turning the upper knob. The speed setting will be indicated in the window in the right hand end cover. See also operating step 12.

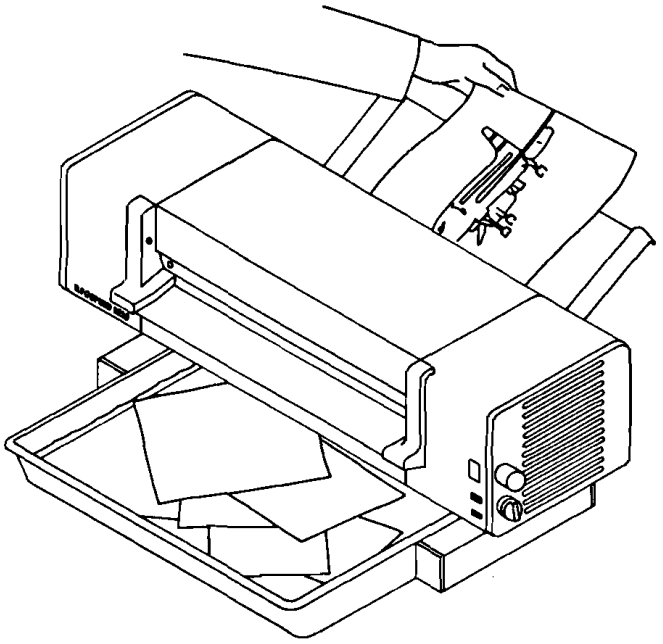


8 When both red lights are on insert wet prints face up. Make sure that they are inserted squarely. Feed small prints short edge first. Do not overlap one print with another.



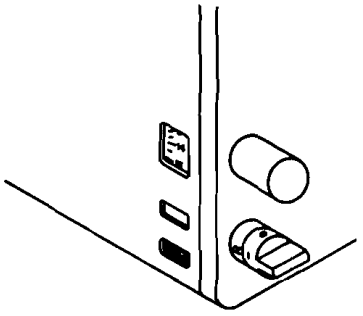
9 Take the dried ILFOSPEED or ILFOSPEED MULTIGRADE print from the receive tray. In the unlikely event that a print does not emerge, see operating check 2 (page 8).

Prints may be allowed to stack on the receive tray if required.

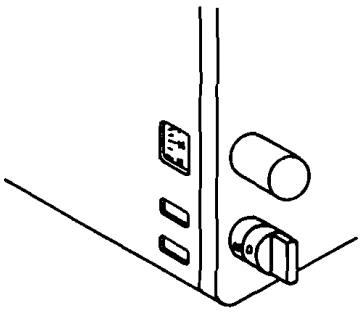


10 When all prints are dry, turn the lower knob to 1. The upper light will go out, and the heaters will switch off. The fans and drive will continue to run for approximately 1½ minutes and then switch off automatically.

The switch can be left in this stand-by position until the dryer is ready for use once more.



11 To switch off the electrical supply wait until the fans stop (the fans will run for approximately 1½ minutes to cool the machine down). Then turn the lower knob to 'O'.



12 The drying speeds for optimum quality can be found by trial. If glossy, semi-matt, silk or pearl prints are damp when they emerge, or if glossy prints show streaks of less than perfect gloss, set the transport speed control to a lower number.

If any prints show excessive curl or surface blistering, or if semi-matt, silk or pearl surfaces show glossy areas, set the speed control to a higher number.

Prints showing dampness, curl or less than perfect gloss can be re-wetted and re-dried.

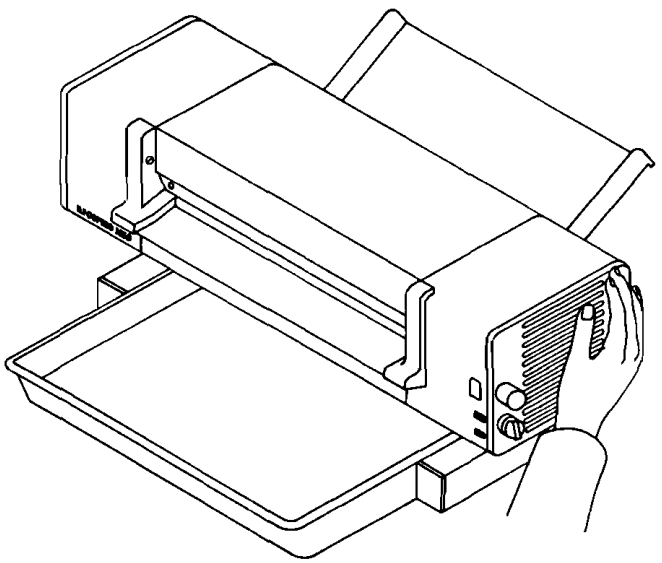
Lack of drying could be caused by damaged heaters. See 'Servicing your ILFOSPEED 5250 dryer'.

Drying prints other than ILFOSPEED or ILFOSPEED MULTIGRADE

The ILFOSPEED 5250 dryer may be used to dry some other types of polyethylene laminated photographic papers, black and white or colour. The procedure is the same as for ILFOSPEED and ILFOSPEED MULTIGRADE paper, but the speed settings for optimum results must be found by experience. As a guide for drying colour paper, settings between 4 and 7 should be tried initially and adjusted for optimum results as for ILFOSPEED and ILFOSPEED MULTIGRADE papers.

If colour papers are dried, residual chemicals may contaminate the front roller assembly and this must be cleaned as instructed in 'Maintaining your ILFOSPEED 5250 dryer' on page 9.

Operating checks



Check 1
After carrying out operating step 5, check that the fans are drawing in air by ensuring there is air movement at the grilles in each end cover.

Check 2
If a print does not emerge from the dryer into the receive tray, check as follows:

1 Remove the front roller assembly as described on page 9.

2 Raise the centre panel and retrieve the print.

3 Replace the front roller assembly.

Check 3
If prints will not dry, even at the slowest speed setting, it is possible that one or more of the heaters is not working.

To check that all heaters are working, turn off the room lighting and, with the dryer running normally, look through the grille in the left hand end cover. The ends of the three heaters (two lower and one upper) should be seen glowing red.

Maintaining your ILFOSPEED 5250 dryer

The only maintenance to be carried out on the ILFOSPEED 5250 dryer is cleaning.

1 The water in the wet-print dish should be clean. Change it daily, or more frequently if necessary.

2 Occasionally, wipe the outside of the machine with a damp cloth.

3 If the ILFOSPEED 5250 dryer has been used to dry resin-coated colour paper the front roller assembly must be removed from the machine and cleaned before any ILFOSPEED or ILFOSPEED MULTIGRADE prints are dried. The rollers should be cleaned with warm water and a soft bristle brush.

If the dryer is used continuously to dry colour paper the front roller assembly should be removed from the machine and thoroughly cleaned once a week.

Removing the front roller assembly

1 Switch off the dryer (see steps 10 and 11 on page 7) and when the fans and drive have stopped, disconnect it from the mains electrical supply.

2 Remove the upper screw from each paper guide.

3 Remove the feed-in tray assembly, complete with attached paper guides, by lifting it up and swinging it away from the dryer.

4 Raise the centre panel and slide out the front roller assembly.

The dryer is reassembled by reversing the above procedure.

It is a simple task to fit a replacement heater by following the instructions below. If in any doubt about carrying out this work, consult a competent electrician. If other parts need replacing or repairing, consult ILFORD Limited or the supplier of the dryer; they will be pleased to help.

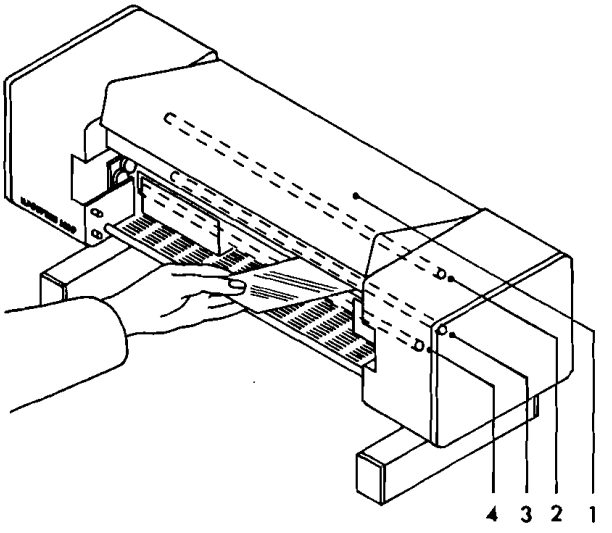
Important
Before carrying out any of the following work, disconnect the dryer from the electrical supply.

Checking for damaged heaters
1 Remove the front roller assembly as described on page 9.

2 Raise the centre panel (1) to see the top heater (2).

3 Do the same for the lower back heater (3).

4 With the aid of a mirror check the lower front heater (4) by viewing from each end.



Replacing a heater
1 Heaters can only be removed from the left hand end of the dryer.

2 Remove the two screws from the left hand paper guide and remove the guide.

3 Remove the five screws securing the left hand end cover and remove the cover.

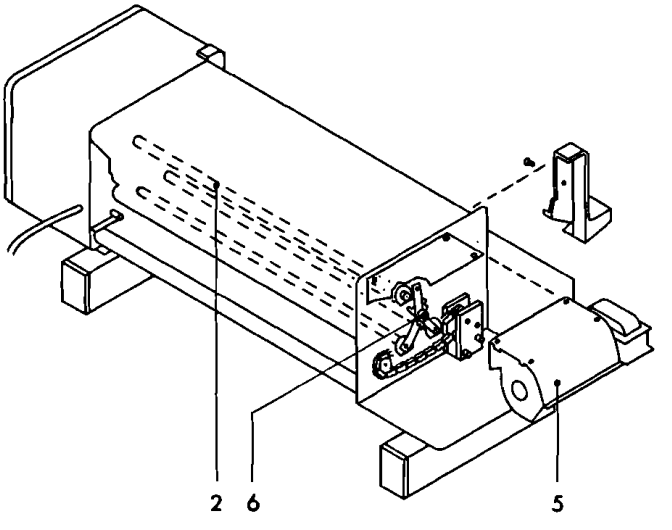
4 If the upper heater (2) is to be removed, remove the screws holding the fan (5) and lift the fan away from the dryer.

5 Loosen the contact strip screw (6) by one turn.

6 Rotate the appropriate contact strip away from the end of the heater to be removed.

7 Withdraw the damaged heater.

8 Carefully fit a new heater, and re-assemble the dryer by reversing the above instructions.

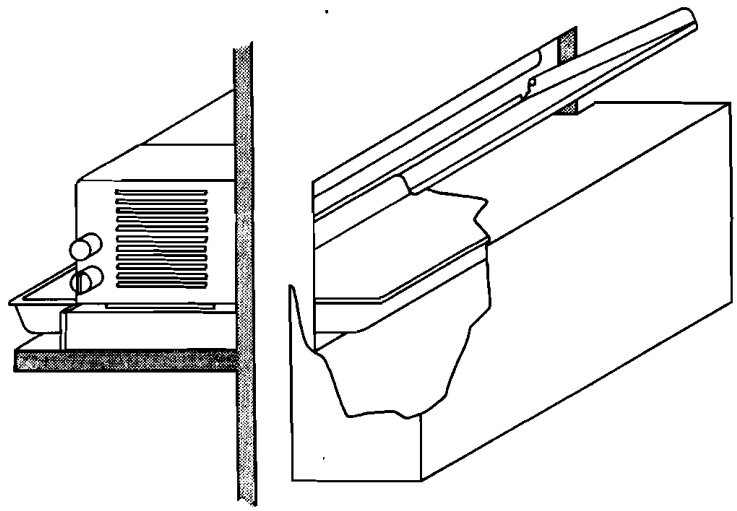


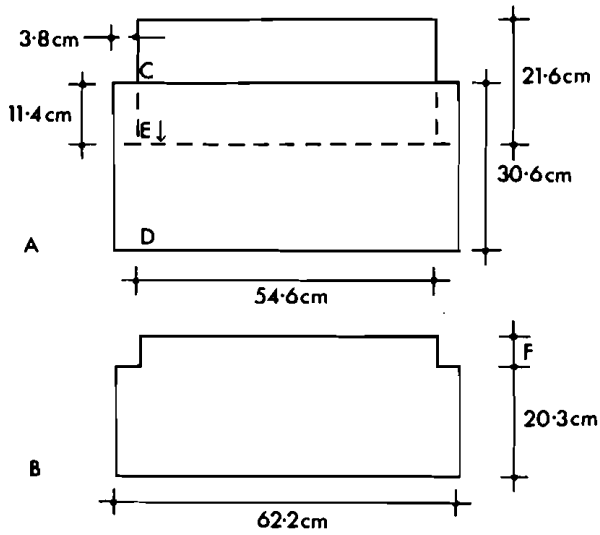
Caution
To avoid contaminating the silica sheath of the heater, handle only with gloved hands or a cloth.

Print delivery through a darkroom wall

Here we show a general guide to positioning the ILFOSPEED 5250 dryer against an aperture in a darkroom wall. It may be found that further light trapping may be required.

A Front view
B Plan
C Aperture in wall
D Light trap
E Bench top
F Thickness of wall





ILFOSPEED 5250 dryer: 120V model

1 Certain parts of the 120V ILFOSPEED 5250 dryer differ from those of the 220/240V model. Where appropriate, spare parts should be ordered using the part numbers below and not those listed in the main parts list.

Ref	Part number	Description (fixings and washers in brackets)	Quantity (per machine)
16	6004-1-353	Bulkhead, RH (109, 110)	1
18	6004-0-354	Inner end bracket, RH (111)	1
33	6004-1-352	Bulkhead, LH (109, 110)	1
52	6004-4-351	Cut-out bracket, LH (103, 112)	1
53	6004-4-350	Cut-out insulator	2
54	6004-0-100/151	Safety cut-out (120, 121, 122)	2
56	6004-0-100/157	Fan and motor, LH (123)	1
57	6004-3-355	Heater 120V	3
60	6004-0-100/156	Fan and motor, RH (123)	1
69	6004-4-351	Cut-out bracket, RH (103, 112)	1
70	6004-3-358	Timer speed control unit (101, 102)	1
120	6004-0-100/150	M3.5 x 8mm TAP-TITE screw	4
139	6004-4-361	Mains lead (not shown)	1
140	6004-3-357	Label 120V (not shown)	1
141	6004-0-100/152	Mains lead bush (not shown)	1
142	6004-0-100/153	Resistor for neon (not shown)	1

2 The 10A fuse and fuse holder (ref 61 and 62) are not included in the 120V machine and should be deleted from the parts list, the drawing on page 17 and the circuit diagram.

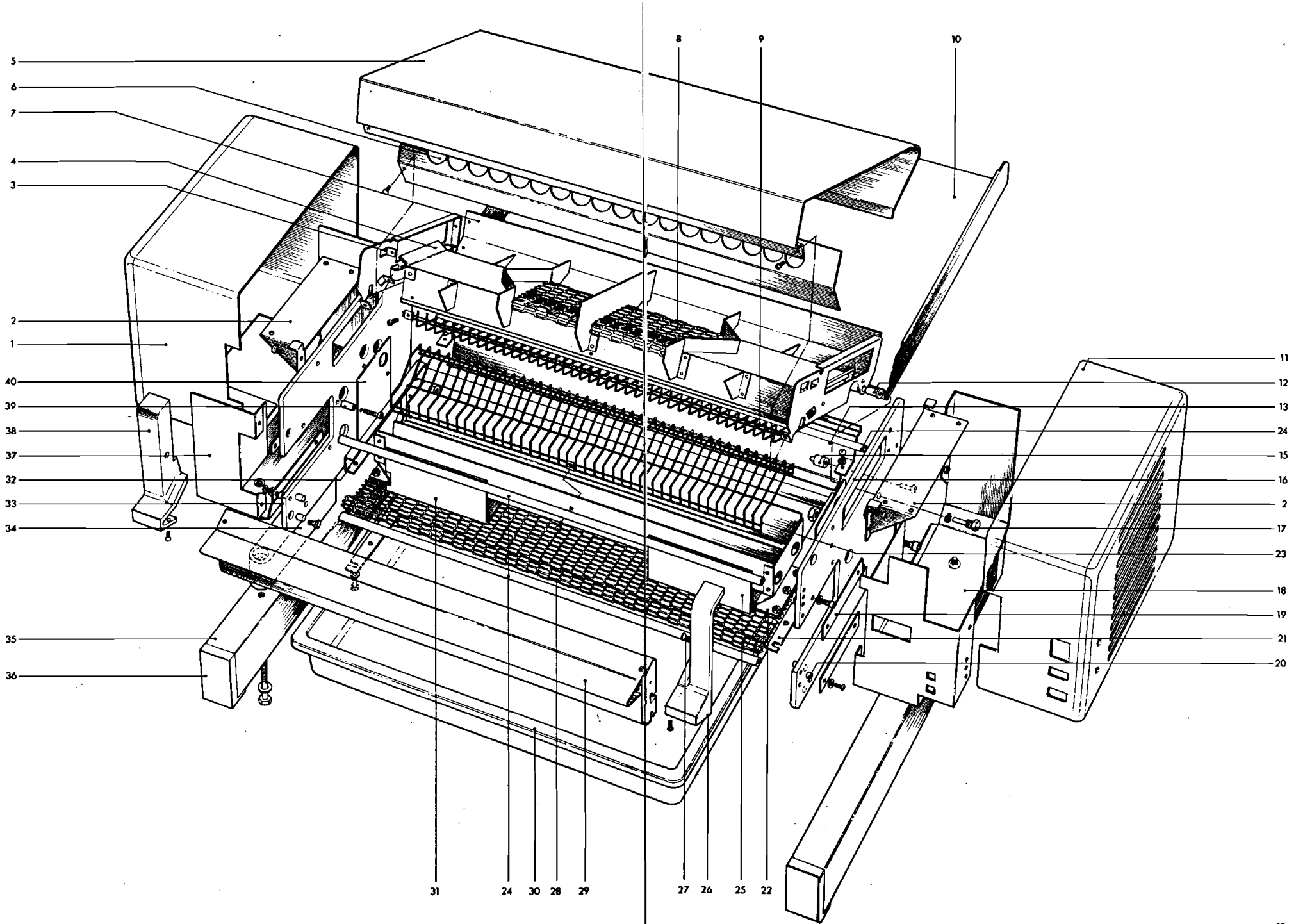
3 The electrical details on page 21 should read

Voltage	120V ac
Frequency	60Hz
Current	12.1 amps
Power consumption	1450W

Ref	Part number	Description (fixings and washers in brackets)	Quantity (per machine)
1	6004-2-103	End cover assembly LH (101, 102, 105, 107)	1
2	6004-2-195	Fan mounting bracket (103, 112)	2
3	6004-1-127	End plate assembly	1
4	6004-1-120	Reflector, upper	1
5	6004-2-121	Main Cover (105, 106)	1
6	6004-3-124	Front baffle (106)	1
7	6004-3-123	Rear baffle (106)	1
8	6004-3-125	Inlet panel	2
9	6004-2-122	Reflector guard, upper (106)	1
10	6004-2-190	Stacker	1
11	6004-2-104	End cover assembly, RH (101, 102, 105, 107)	1
12	6004-3-126	Pivot	2
13	6004-2-188	Rear roller guard (103, 106)	1
15	6004-3-208	Pin for stacker (102, 108)	2
16	6004-1-183	Bulkhead, RH (109, 110)	1
17	6004-3-212	Pivot screw (110)	2
18	6004-0-181	Inner end bracket, RH (111)	1
19	6004-3-204	Guide strip for roller assembly (104)	4
20	6004-4-224	Slide spacer	8
21	6004-3-199	Exhaust panel clamping strip (102, 108)	2
22	6004-1-184	Reflector, lower (101, 102)	1
23	6004-2-194	Reflector guard, lower (106)	1
24	6004-3-206	Tie bar (102, 113)	3
25	6004-3-225	Outlet shield, RH (102, 108)	1
26	6004-2-185	Paper guide, RH (124, 138)	1
27	6004-3-219	Captive screw	2
28	6004-3-203	Exhaust panel	1
29	6004-2-108	Feed-in tray assembly	1
30	6004-1-186	Dish	1
31	6004-3-226	Outlet shield, LH (102, 108)	1
32	6004-2-187	Torque tube, lower	1
33	6004-1-182	Bulkhead, LH (109, 110)	1
34	6004-2-193	Foot spacer	2
35	6004-2-191	Foot (110, 114)	2
36	6004-2-192	Closing foot	4
37	6004-0-180	Inner end bracket, LH (111)	1
38	6004-2-189	Paper guide, LH (124, 138)	1
39	6004-100-86	Heat shield spacer	8
40	6004-3-198	Heat shield (103, 116)	2
41	6004-2-165	Gear mounting plate	1
42	6004-3-139	Gear (118)	4
43	6004-3-167	Gear and pinion shaft	2
44	6004-3-166	Bush, gear shaft	2
45	6004-3-170	Pinion (118)	2
46	6004-3-168	Bush, gear shaft	2
47	6004-0-100/50	8mm chain x 38 link (spring clip)	1
48	6000-0-100/8	Insulating bush (102, 119)	2
49	6004-3-220	Heater contact	2
50	6004-3-221	Heater contact	4
51	6004-3-136	DELRIN bearing	10

Ref	Part number	Description (fixings and washers in brackets)	Quantity (per machine)
52	6004-3-229	Cut-out bracket, LH (103, 112)	1
53	6004-3-200	Cut-out insulatar	2
54	6004-0-100/55	Safety cut-out (120, 121, 122)	2
55	6004-3-138	Spring	4
56	6004-2-196	Fan and motor, LH (123)	1
57	6004-3-230 or	Heater 220V	3
	6004-3-231	Heater 240V	3
58	6004-2-106	Roller output, lower (125)	1
59	6004-2-105	Roller output, upper (125)	1
60	6004-3-197	Fan and motor, RH (123)	1
61	6004-0-100/46	Fuse holder	1
62	6004-0-100/51	Fuse 10A	1
64	6004-3-207	Heater mounting plate (103, 112)	6
65	6004-3-213	Bearing retaining plate	2
66	6004-3-205	Motor spacer (130)	2
67	6004-0-100/48	Terminal block (103, 127, 128)	1
68	6004-3-222	DC motor (129)	1
69	6004-3-228	Cut-out bracket, RH (103, 112)	1
70	6004-3-235	Timer speed control unit (101, 102)	1
71	6004-3-216	Speed control knob (131)	1
72	6004-4-280	Insulation plate	1
73	6004-3-210	On-off-run knob (131)	1
74	6004-0-100/14	Rotary switch (101, 102 Type H4)	1
75	6004-3-217	Speed control shaft (110, 132)	1
76	6004-4-282	Compression spring	1
77	6004-0-100/13	Gear, bevel	2
78	6004-0-100/16	LED (light emitting diode)	1
79	6004-0-100/17	Neon SL4 A	1
80	6004-3-109	Dial assembly (131)	1
81	6004-4-274	Microswitch insulator	2
82	6000-0-100/4	Microswitch V3	3
83	6004-3-214	Microswitch spacer (103, 133, 134, 135)	1
84	6004-0-100/52	Potentiometer 47kΩ/0.5W	1
85	6004-3-202	Spring plate for microswitch (103, 112)	1
86	6004-0-100/32	Two-way terminal block (103, 127, 128)	1
87	6004-3-201	Spacer (118)	1
88	6004-2-135	Roller end slide, LH	1
89	6004-3-137	DELRIN bearing	2
90	6004-3-140	Tie rod for rollers (136, 137)	2
91	6004-2-144	Roller, drive	2
92	6004-2-143	Roller, idler	2
93	6004-2-134	Roller end slide, RH	1
94	6004-3-110	Transit wedge (not shown)	2
95	6004-3-169	Spacing washer	4
96	6004-1-102	Front roller unit assembly (complete)	1
97	6000-0-100/15	Microswitch insulator	2

Ref	Part number	Description
101	6004-0-100/18	M4 x 6mm pan head screw
102	63-230-02	ø4mm washer, spring
103	63-230-01	ø3mm washer, spring
104	6004-0-100/11	M3 x 8mm TAP-TITE screw
105	6004-100-90	Cup washer, M3
106	6004-0-100/41	No 3 x 6.5mm self-tap screw
107	6004-100-81	No 7 x 9.5mm self-tap screw
108	6004-0-100/23	M4 x 10mm pan head screw
109	63-202-12	M6 x 12mm HEX socket head screw
110	63-230-04	ø6mm washer, plain
111	6004-0-100/24	M4 x 6mm CSK screw
112	6004-0-100/8	M3 x 6mm TAP-TITE screw
113	63-202-05	M4 x 12mm socket head screw
114	63-204-14	M6 x 35mm HEX socket head screw
116	6004-0-100/56	M4 x 12mm TAP-TITE screw
117	63-222-10	ø4mm x 10mm roll pin
118	6004-2-102/3	ø1.5mm x 18mm roll pin
119	6004-0-100/1	M5 x 25mm TAP-TITE screw
120	6004-0-100/35	M2 x 8mm pan head screw
121	6004-0-100/36	M2 HEX nut
122	6004-0-100/37	ø2mm washer, plain
123	6004-0-100/6	5.5 x 9.5mm self-tap screw
124	6004-100-80	Spring nut
125	6004-0-100/29	ANDERTON circlip DIN 1500-350/9
126	6004-0-100/31	M6 nut
127	6004-0-100/33	M4 x 16mm pan head screw
128	63-206-01	M3 HEX nut
129	6004-0-100/21	M4 x 25mm HEX socket head screw
130	6004-0-100/22	M4 x 10mm CSK screw
131	6004-0-100/15	M3 x 8mm grub screw
132	6004-0-100/72	Circlip
133	6004-0-100/45	M3 x 20mm pan head screw
134	6004-0-100/49	M3 x 30mm pan head screw
135	6004-0-100/70	M3 x 25mm TAP-TITE screw
136	63-206-03	M5 HEX nut
137	63-231-03	ø5mm washer, plain
138	6004-100-81	Pan head self-tap screw M7 x 9.5mm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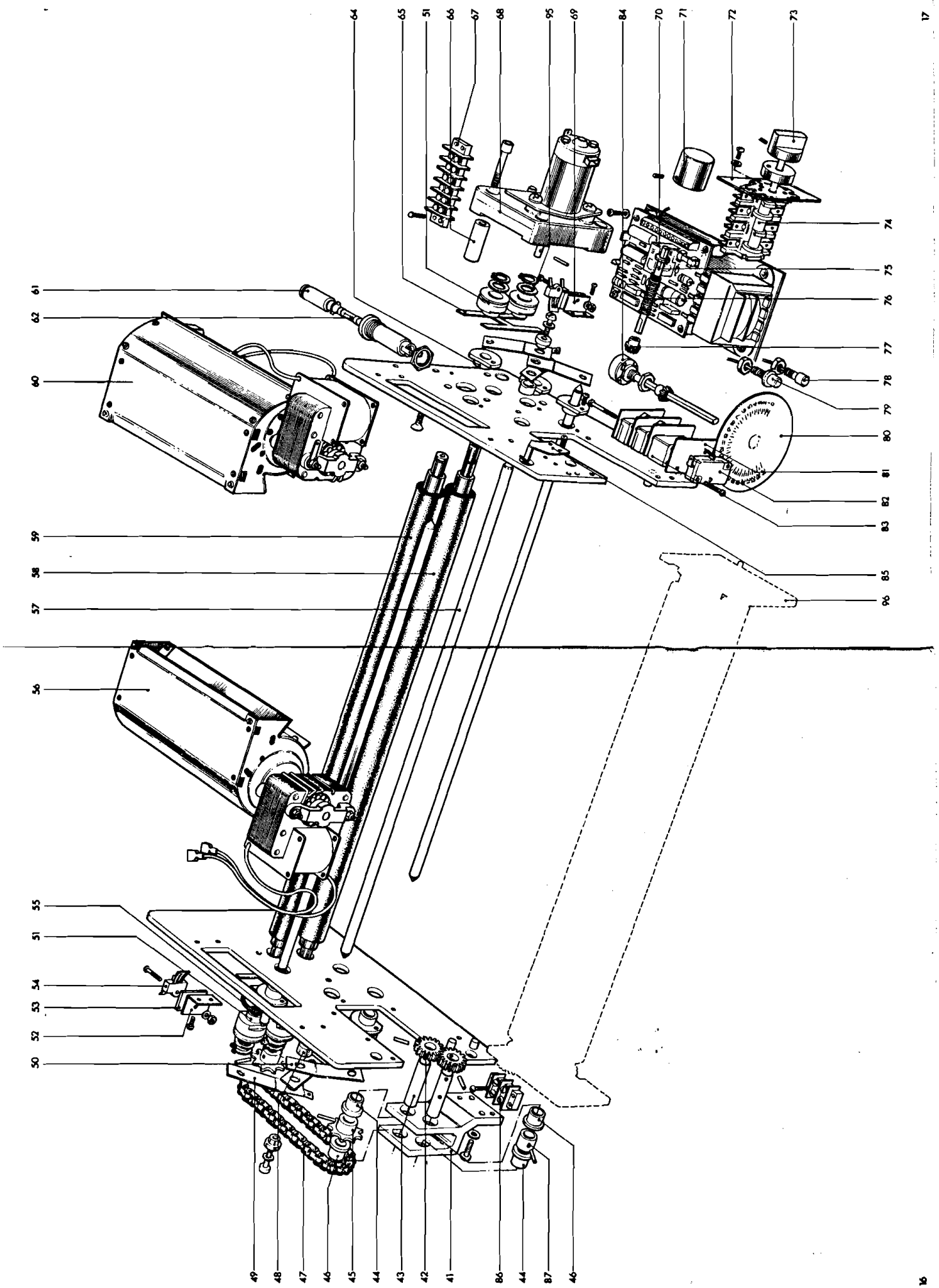
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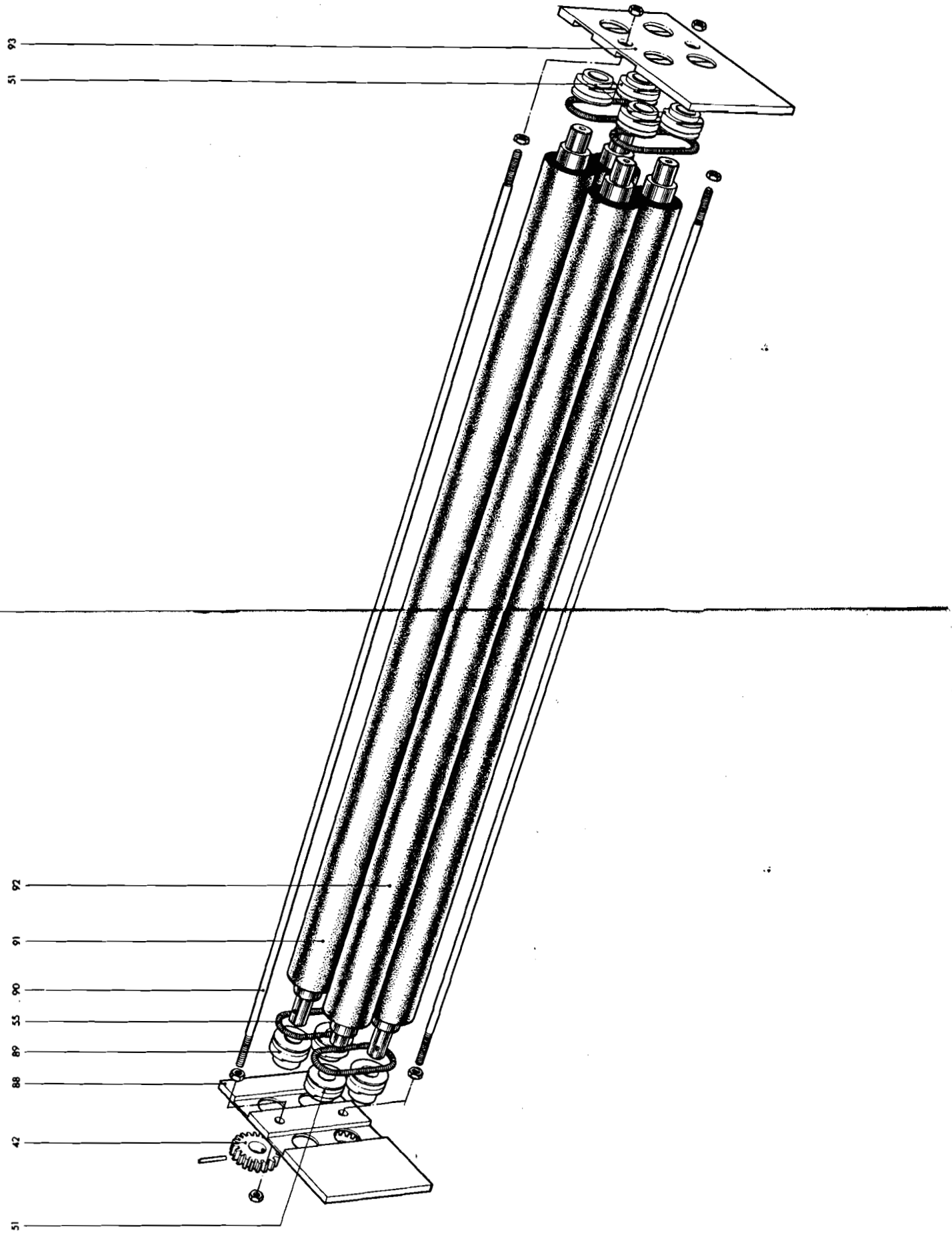
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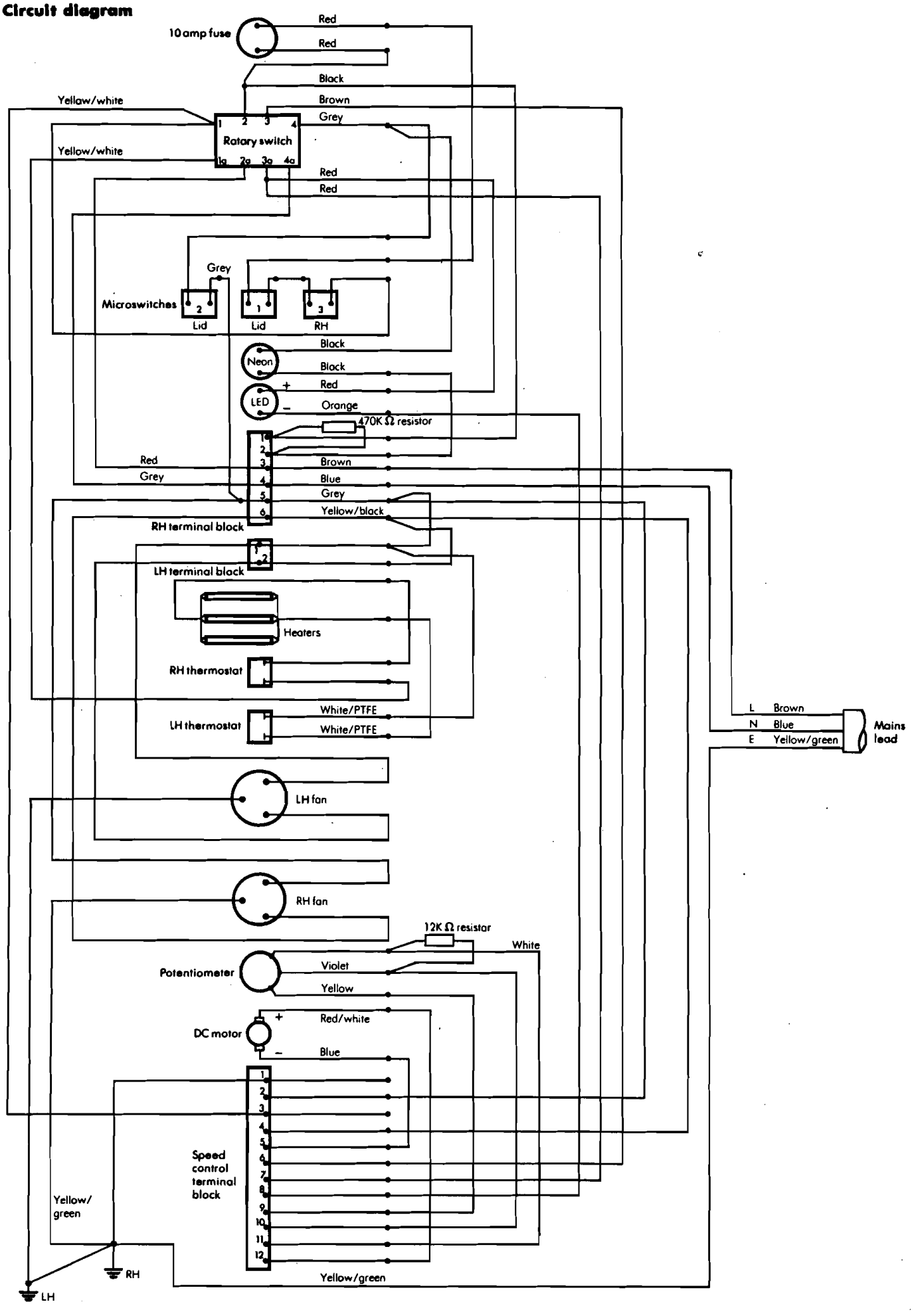
Circuit diagram



Specification

Dimensions		
Overall length	88cm	$34^{5}/_{8}$inches
Overall depth	50cm	$19^{5}/_{8}$inches
Overall height	28.5cm	$11^{5}/_{16}$inches
Width of feed-in slot	51.6cm	$20^{5}/_{16}$inches
Throughput		
of 20.3 x 25.4cm (8 x 10inch) ILFOSPEED prints per hour	up to 400	
Access time		
for 20.3 x 25.4cm (8 x 10inch) ILFOSPEED print at speed setting 14	24seconds approximately	
Paper sizes accepted		
Maximum width	50.8cm	20inches
Maximum continuous length	61cm	24inches
Minimum width	7.5cm	3inches
Minimum length	13cm	5inches
Weight		
Dryer complete with receive tray and wet-print dish	23Kg	51lb
Electrical details		
Voltage: two models	220V ac	240V ac
Frequency	50Hz	50Hz
Current	6.6amps	6.0amps
Power consumption	1450W	1450W
2 microswitches are incorporated to disconnect power to heaters, drive and fans when the centre panel is raised. A third microswitch is incorporated which cuts off power to the dryer when the upper screw holding the right-hand paper guide is removed.		
Speed range		
Setting 0	15.2cm/min	6inches/min
Setting 24	116.8cm/min	46inches/min