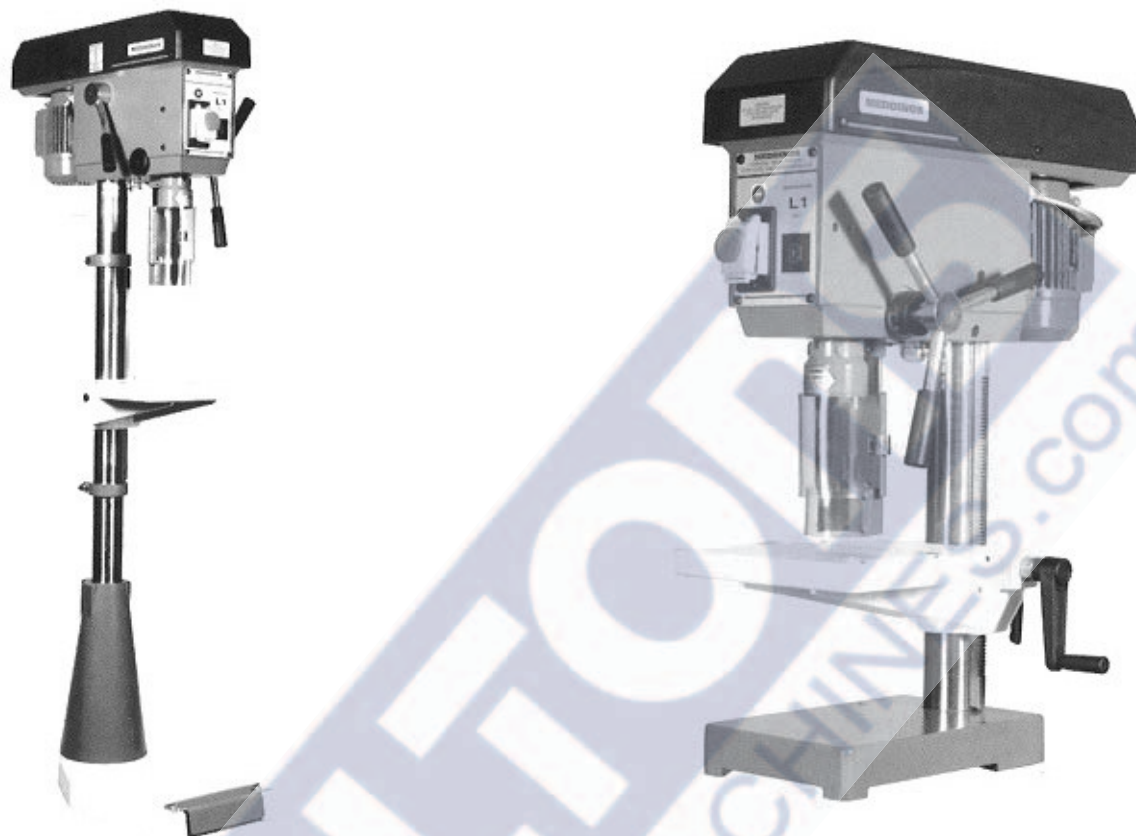


MEDDINGS



L1/V AND L2/III SERIES OPERATING INSTRUCTIONS

**MEDDINGS MACHINE TOOLS
IVYBRIDGE, DEVON**

MEDDINGS

D Hiermit erklären wir, daß die Bauart der auf der Frontseite beschriebenen Maschine allen einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen entspricht.

EG-Richtlinien

EG-Maschinenrichtlinie (98/37 EG)
EG-Niederspannungsrichtlinie (2006/95/EG)
EG-EMV (89/336 EWG)

Angewendete harmonisierte Normen:

DIN EN ISO 12100-1 und -2
EN 60204, Teil 1

E We declare that the machine as described on the front page come up to all general health- and safety rules.

CEE-regulations

CEE-machine standards (98/37 EG)
CEE-low voltage standards (2006/95/EG)
CEE-EMV (89/336 EWG)

applicable harmonized
DIN EN ISO 12100-1 und -2
EN 60204, Teil 1

F Par la présente, nous certifions que la construction de la machine décrite sur la page de garde, est conforme à toutes les prescriptions concernant la sécurité et la préservation de la santé publique.

CEE-directives

CEE-directives de machine (98/37 EG)
CEE-directives de basse tension (2006/95/EG)
CEE-EMV (89/336 EWG)

Normes harmonisées appliquées

DIN EN ISO 12100-1 und -2
EN 60204, Teil 1


Dipl.-Ing. D. Henkes


Dipl.-Ing. E. Höhn



1.0 Sicherheitshinweise – safety instructions – instructions de sécurité



D Lesen Sie die Sicherheitshinweise und die Betriebsanleitung aufmerksam und vollständig durch!

E Read the safety instructions and operating instructions carefully and thoroughly!

F Veuillez tout d'abord lire attentivement les consignes de sécurité et la notice d'utilisation!



Please ensure that you have read, and understand, these instructions fully before attempting to set up or operate the machine.

1) Health & Safety

- a) Meddings Machine Tools Limited are suppliers of Drilling / Milling Machines, Circular Cut-Off and Band Sawing Machines, Scroll and Jigsaws, together with ancillary equipment and machine tools in general. These items are articles and not substances and therefore are not covered by the Control of Substances Hazardous to Health Regulations 1988. However, the following should be considered within the Health and Safety at Work Regulations and the Supply of Machinery Safety Regulations 1992. (CE marking).
- b) This machine is designed for and is only suitable for the conventional drilling of wood, metal and plastics. Any other use constitutes "improper use"; for which the manufacturer cannot be held liable. The user carries sole responsibility for such use.
- c) Products are supplied to a quoted specification. Modifications made to any machines by the users are at their responsibility. Risks associated with the machining of specific substances are the responsibility of the user.
- d) All exposed bare metal on the drilling machine has been coated with anti-rust compound, which must be removed. Suitable solvents are white spirit or turpentine.
- e) The machines weigh approximately

LB1	77kg
LF1	133kg
LB2	84kg
LF2	140kg
- f) It should be noted that the machine has a high centre of gravity and so will require mechanical handling techniques appropriate to the weight and size of the product.
- g) The machine may be lifted by the use of slings under the head, after ensuring that the head is securely locked to the column. It is recommended that personnel employed in the receipt, unloading and siting of our products be provided with the appropriate level of hand protection and safety footwear commensurate with the risk.
- h) It is essential to check that the machine is complete and undamaged before use
- i) Machine mechanisms use a variety of oils and greases. The following information applies across the complete range of substances used and is for general information only. Your own COSHH system should be referred to for specific substances:

Inhalation: Not normally a hazard

Eye Contact: Wash with copious amounts of water

<i>Skin Contact:</i>	Wash with soap and water
<i>Ingestion:</i>	Take water or milk, do not induce vomiting.
<i>Working Practices:</i>	Good housekeeping and personal hygiene are essential when working with lubricants, it is recommended that appropriate personal protective equipment be used.
<i>Medical Aid:</i>	This should be sought in case of eye contact, ingestion, or signs of allergic reaction. If in doubt, ask.
<i>Fire:</i>	Most oils and greases are inflammable. Standard safety precautions in dealing with such materials should be observed.
<i>Metalworking Fluids:</i>	Refer to, "Working safely with metal working fluids". HSE Publication: INDG365)

- j) Under certain operating conditions excessive noise levels may emanate from machining. Under these circumstances, suitable ear protection should be provided and worn. Under no-load conditions machine noise levels are less than 80 dB A (measured at a height of 1.6 metres, 1 metre from the front of the machine.
- k) The machine is provided with guards for both chuck and spindle drive belt. These guards should be fitted on installation and kept in place at all times. They should only be removed once the machine has been isolated from the mains.
- l) Machine setting and adjustments should always be made by a trained operator with the machine power isolated.

2) INSTALLATION:

- a) Machines must be suitably secured by the securing holes provided and suitable fastenings to an appropriate flat surfaced workbench or the floor.
- b) Do not excessively tighten securing fasteners to over stress cast iron base of machine.
- c) The machine requires either a single phase 230v electrical supply in which case it is supplied fitted with a 13 amp British plug or, 3 phase 400v supply for wiring in.
- d) Prior to use, and at regular intervals, carry out the following checks:
 - i) No Volt Starter:
 - Green Button:* When this is pressed the machine will start.
 - Red Button:* When this is depressed power is cut from the motor and the machine slows down and stops.
 - ii) Safety Switch: With the machine running loosen the two side screws holding the belt cover, raise the belt cover. Power should be cut from the

motor as the belt cover is raised by 10 to 15 mm. While the belt cover is raised, if the green button is pressed the motor must not start. If it does, readjust the safety micro switch.

- iii) When the belt cover is fully lowered and secured the motor must not restart until the green button is pressed.
- iv) With the machine running switch off the isolator or remove the plug. The machine will stop. When the isolator is switched on or the plug replaced the machine must not restart until the green button is pressed.
- e) If the machine fails any of the above electrical tests and cannot be corrected by adjusting the micro switch, the machine must not be used and a competent electrician consulted.
- f) With all these tests completed satisfactorily and the guard fitted, the machine is ready for use by a suitably trained operator, taking due regard of all the information set out in this Hand Book and accepted safe working practice

3) OPERATIONAL USE

- a) Machines should only be operated by a suitably trained and qualified operator.
- b) The following good practice should always be followed:
 - i) Always wear safety glasses when using a drilling machine.
 - ii) Always wear safety shoes.
 - iii) Always wear a hat or hairnet if you have long hair.
 - iv) Always keep your hands away from the rotating tool.
 - v) Always ensure that workpiece is clamped firmly by suitable fixing devices.
 - vi) Always isolate the drilling machine before carrying out any maintenance on it.
 - vii) Never wear gloves or finger rings when using a drilling machine.
 - viii) Never run the machine unsupervised.
 - ix) Never remove swarf with your hands, use a chip-hook.
 - x) Never attach chuck key to the machine by cord or chain.
 - xi) Check that the bit or other tool is correctly mounted before switching on.
 - xii) Take special care to observe the tool manufacturer's directions particularly with regard to coolant, maximum tool speed and feed!
 - xiii) Only use original "Meddings" spare, tools and accessories

4) MACHINE OPERATION

- a) The drill is started by pressing the green button and stopped by pressing the red button (figure 2 No 1). These buttons are the normal method for starting and stopping. The switch cover can be padlocked closed to prevent unauthorized use. When making adjustments, or when setting, always switch off at the isolator or unplug.
- b) Always select a speed suitable for the tooling used and application. To change speed the following procedure should be followed:
 - i) Loosen the locking screws along both sides of the belt cover, raise the cover from the rear and tip so that the cover comes to rest covering the front of the drill head.
 - ii) Release the belt tension using the large lever on the left side of the machine.
 - iii) Select the required pulley ratio to give the desired drilling speed. A label is attached to the head casting and the belt cover detailing the no-load drilling speeds for a given pulley ratio.
 - iv) Re-tension the belt using the side lever, DO NOT OVER TENSION THE BELT, there should be around 25mm of movement on one side of the belt between the pulleys.
 - v) Replace the belt cover into position and tighten the retaining screws.
 - vi) L2 series machines are fitted with 2 speed motors to further extend the speed range available controlled by switch on the front panel (figure 2 No 2).
- c) The machine will not start until the belt cover is closed. Always secure the belt cover by adequately tightening the locking screws.
- d) The work piece should be secured to the table as required.
- e) The starwheel rotates in an anti-clockwise direction to lower the drill. Only moderate pressure should be required to drill, if excess force is needed this would indicate incorrect drill speed selection, incorrect or blunt drill bit, or wrong cutting fluid.
- f) The chuck guard provided should be opened by swinging open the front panel, the correct tool, or chuck, inserted in the spindle taper and the guard closed. To the rear of the guard is a thumbscrew to lock the guard in the up position, in operation this screw should be released to allow the guard to rise and fall with the work.
- g) To use the depth gauge follow the following steps:
 - i) Pull the graduated ring, behind the starwheel, out, rotate to the desired depth and push the ring home..

- ii) Commence drilling. Drill until resistance is felt and the hole will be to the required depth. If the depth is critical then test holes should be drilled to ensure the correct setting.

5) MAINTENANCE

- a) **ALWAYS ISOLATE THE MACHINE FROM THE MAINS ELECTRICITY BEFORE CARRYING OUT ANY MAINTENANCE.**
- b) Weekly checks for free movement of starwheel handle and correct operation of all safety devices.
- c) Monthly checks should be made on general condition of machine and that it is correctly set. Drive belt should be checked for condition and signs of excessive stretch, replacing if necessary.
- d) The quill-return spring, like all springs, will fatigue over time and should be inspected, greased regularly and replaced periodically. If the quill return spring is broken the quill and spindle assembly will be fully extended and if raised will, by its own weight, fully extend when released. **CHECK THAT THERE IS FREE MOVEMENT THROUGHOUT THE FULL TRAVEL OF THE QUILL.**
 - i) The spring is located on the opposite side of drilling machine head to starwheel feed handle.
 - ii) To adjust the spring tension to balance the quill refer to figure 3, hold the flange (1) by means of a pin spanner and loosen the screw (7) using 8mm allen key, the tension is increased by rotating the flange clockwise, reduced anti-clockwise. Retighten screw (7) to retain the tension.

6) GUARANTEE

- a) All goods are guaranteed against defective workmanship and material for a period of 24 months from date of despatch.
- b) Parts, which prove defective within this time under normal operations and service when owned by the original user, will be replaced, but no claim for expenditure upon them or for consequential damage will be entertained.
- c) Replacements must be accepted as complete satisfaction of all conditions or warranties. Bought out components and proprietary items such as electric motors, starters, chucks, etc are not included in this guarantee. However, the purchaser will be entitled to receive from us all rights and benefits derived from any guarantee given to us by the manufacturers of such items.



fig 2

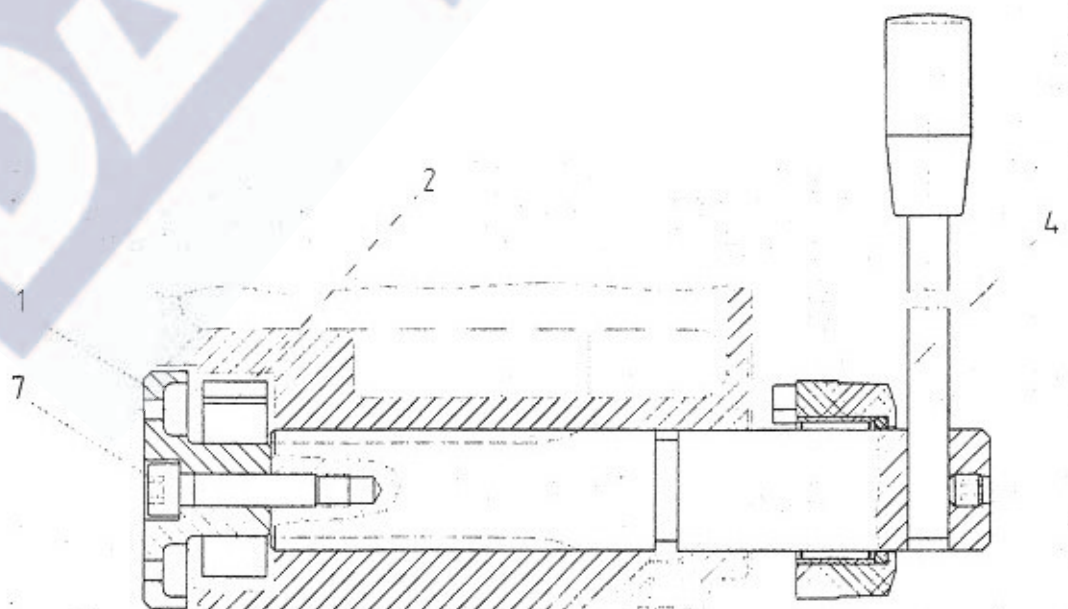
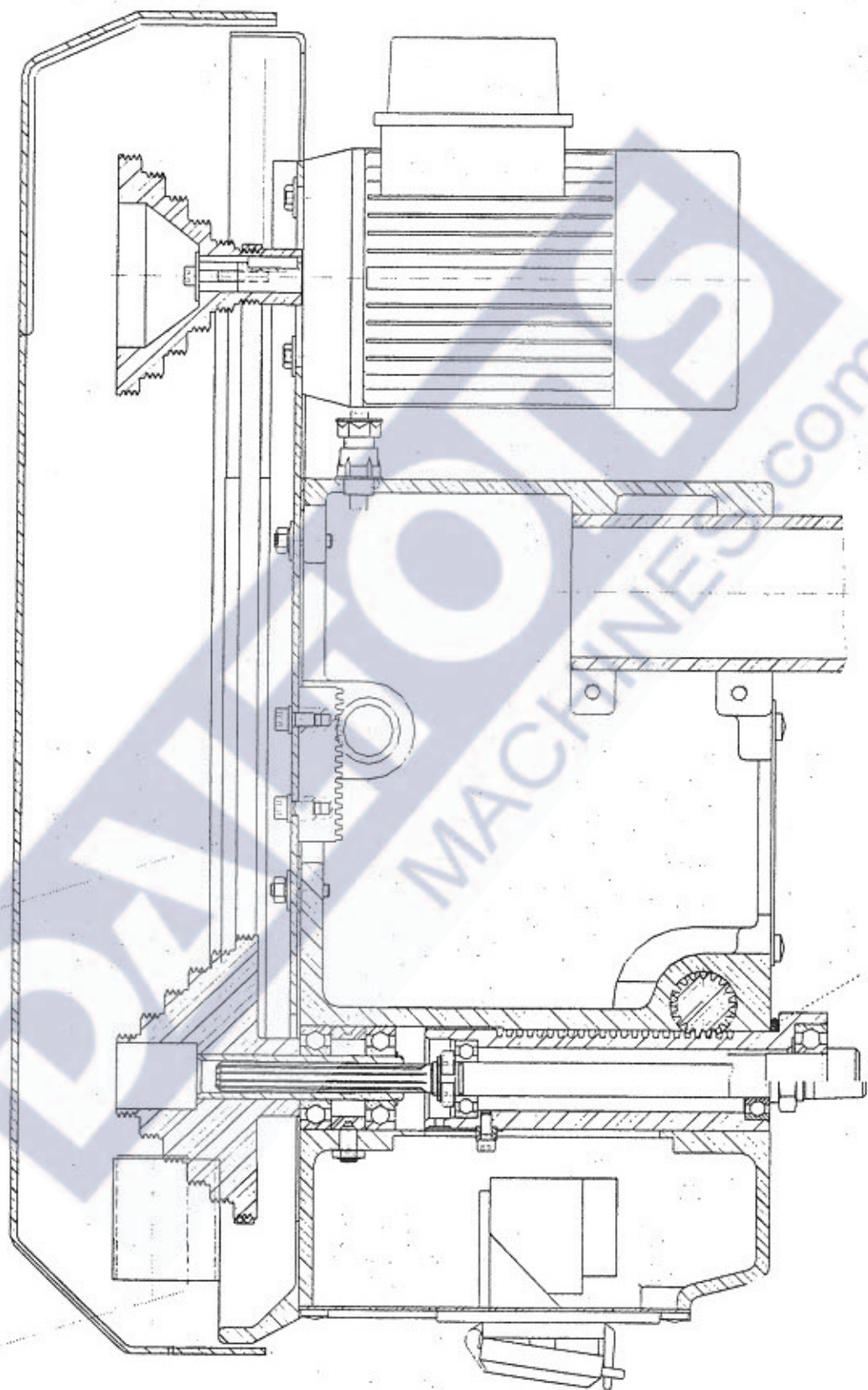


fig 3



Spare parts list for Meddings L1 & L2 series drills

Model reference (+serial No)	296485...	296480...	296465...	296460...	296490...	296470...
Description	LB1 1 phase	LB1 3 phase	LF1 1 phase	LF1 3 phase	LB2	LF2
Main on/off switch	008669	008669	008669	008669	008669	008669
Speed change switch	n/a	n/a	n/a	n/a	008022	008022
Quill return spring	100363	100363	100363	100363	100363	100363
Drive belt	009049	009049	009049	009049	009049	009049
Motor	110598	110599	110598	110599	110616	110616
O-ring	007007	007007	007007	007007	007007	007007
Lighting switch	008700	008700	008700	008700	008700	008700
Lamp holder	009053	009053	009053	009053	009053	009053
Filament lamp	009126	009126	009126	009126	009126	009126
Belt cover	112651	112651	112651	112651	112651	112651

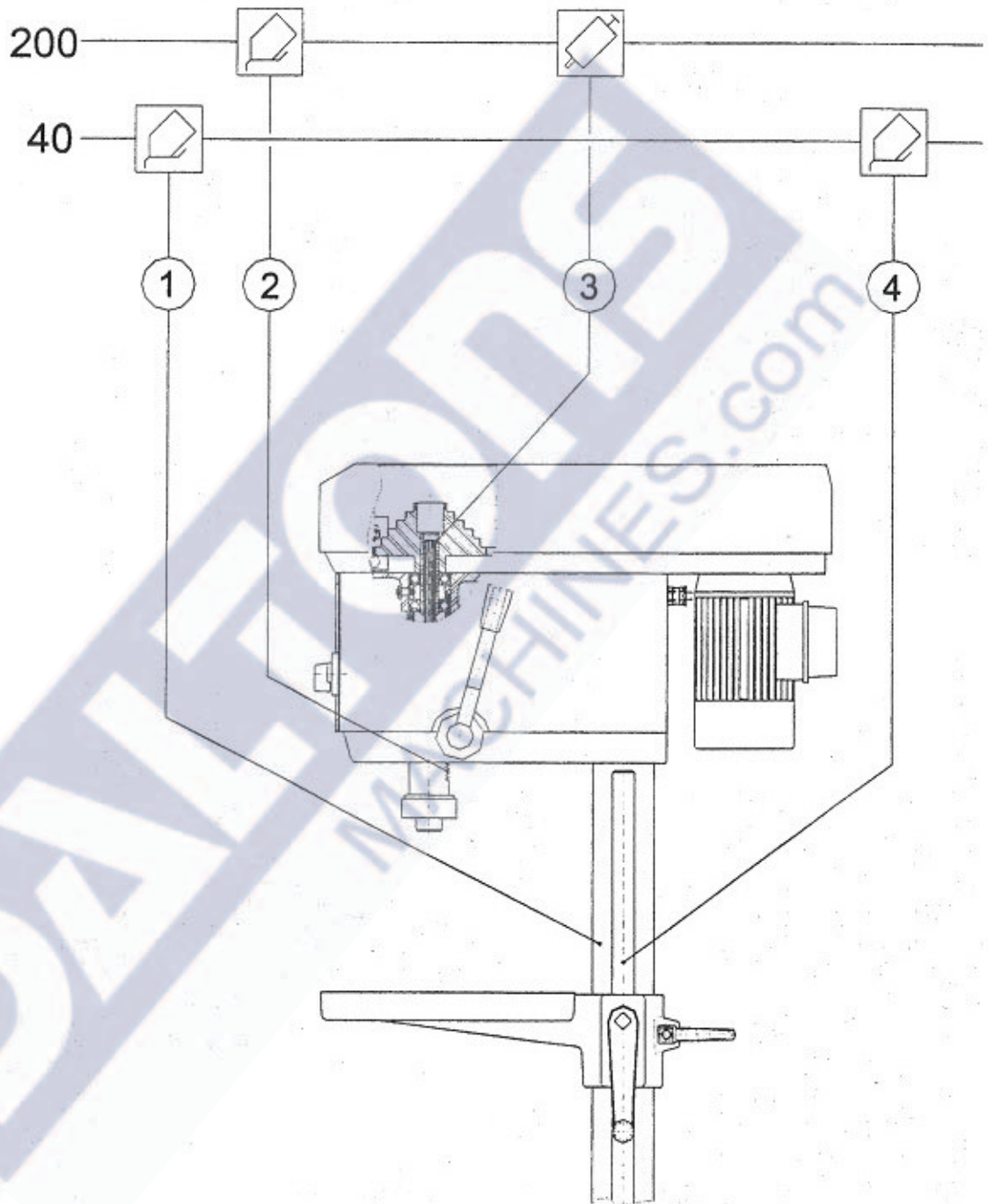
NOTE:- Please ensure the 9 digit model/serial number reference is quoted when requesting spare parts

Lubricating instruction

DIN 51502



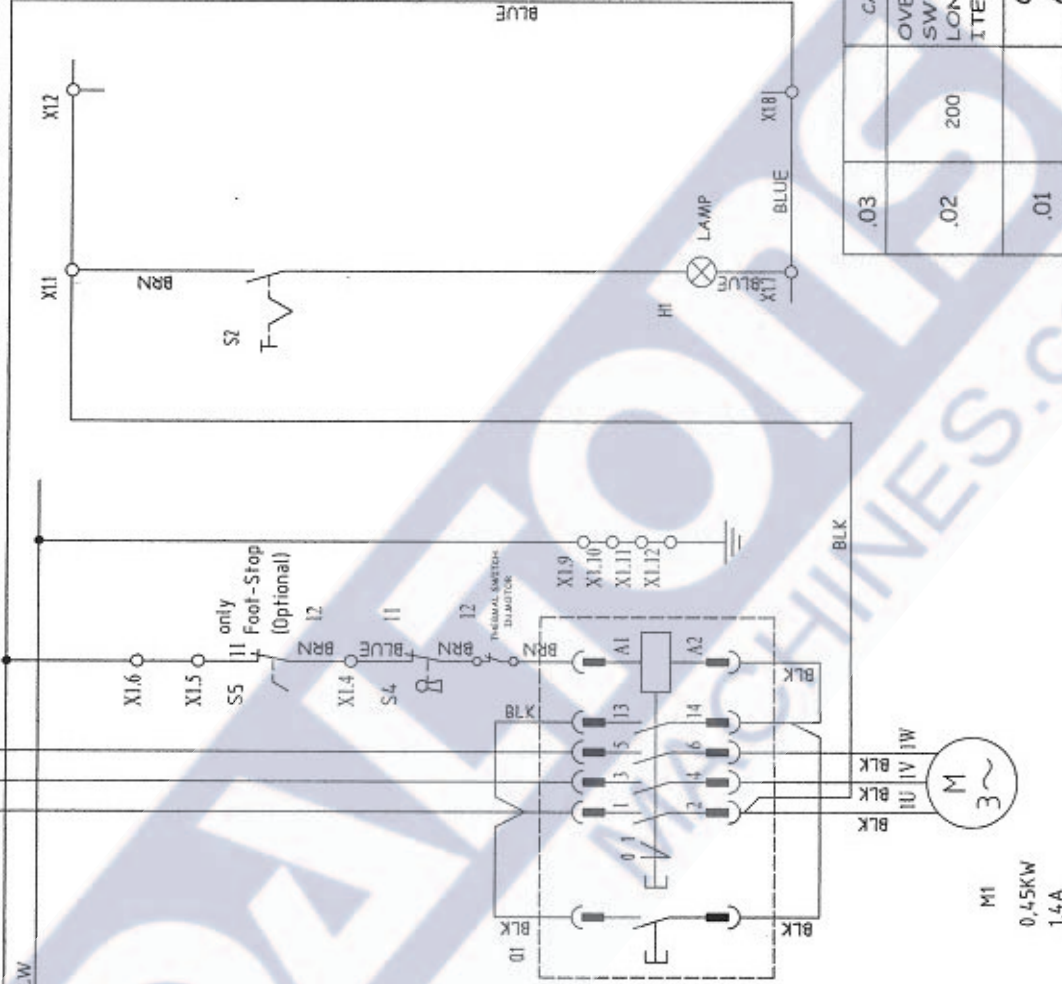
service hours



- 1 Column
- 2 Pinion shaft
- 3 Running bush
- 4 Table rack

Betriebsspannung 3 N PE 400V 50Hz Absicherung 10A
service voltage 3 N PE 400V 50Hz fuses 10A
tension d utilisation 3 N PE 400V 50Hz fusibles 10A

L1 BLK
L2 BRN
L3 GRY
N BLUE
PE GRN/YLW



METRIC

DIMS TO 2 DEC PLACES +/- 0.025 MM
DIMS TO 1 DEC PLACE +/- 0.25 MM
WHOLE NUMBER DIMS +/- 0.5

MEDDINGS MACHINE TOOLS
LEE MILL INDUSTRIAL ESTATE
IVYBRIDGE
DEVON
PL21 9LL

TITLE : L1 MKV WIRING SCHEMATIC. (3~)

FINISH :

MATERIAL :

ISSUE : .03

GENERAL TOLERANCES
UNLESS OTHERWISE STATED

A4
1st ANGLE

SCALE : NTS

DATE : 29.03.07

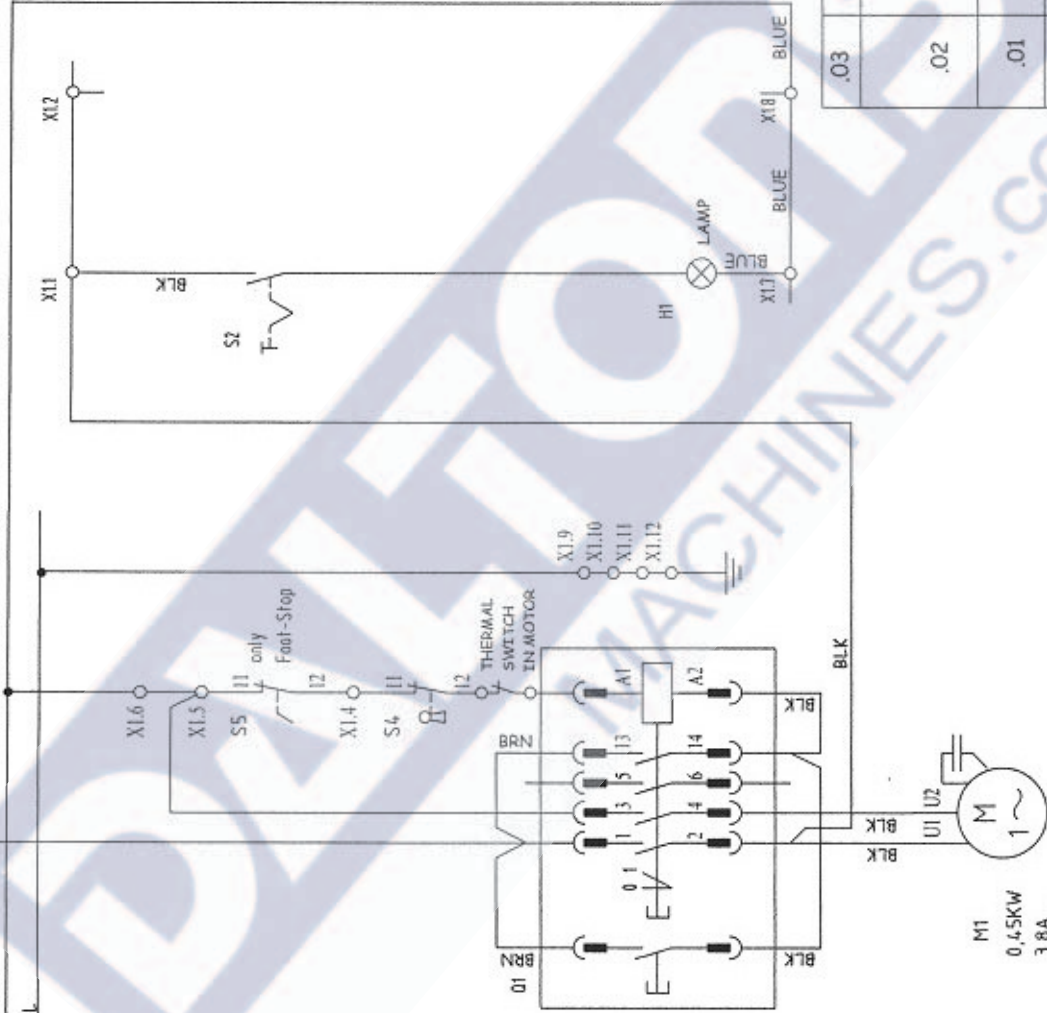
DRN. BY

DRG. No. A/ 10-22241.03

ISSUE	CHANGE	AMENDMENT	WHO / WHEN
.03		CABLE INDENTS ADDED	03.04.08
.02	200	OVERLOAD THERMAL SWITCH IN MOTOR. NO LONGER RETRO FIT ITEM. DRWG AMENDED.	29.07.07 AB
.01		OVERLOAD DETAIL ADDED	29.03.07

Betriebsspannung 1 N PE 230V 50Hz Absicherung 10A L1
 service voltage 1 N PE 230V 50Hz fuses 10A N
 tension d'utilisation 3 N PE 230V 50Hz fusibles 10A PE

BRN
 BLUE
 GRN/YEL



METRIC
 DIMS TO 2 DEC PLACES +/- 0.025 MM
 DIMS TO 1 DEC PLACE +/- 0.25 MM
 WHOLE NUMBER DIMS +/- 0.5

MEDDINGS MACHINE TOOLS
 LEE MILL INDUSTRIAL ESTATE
 IVYBRIDGE
 DEVON
 PL21 9LL

TITLE : L1 MK V WIRING SCHEMATIC (1 ~)

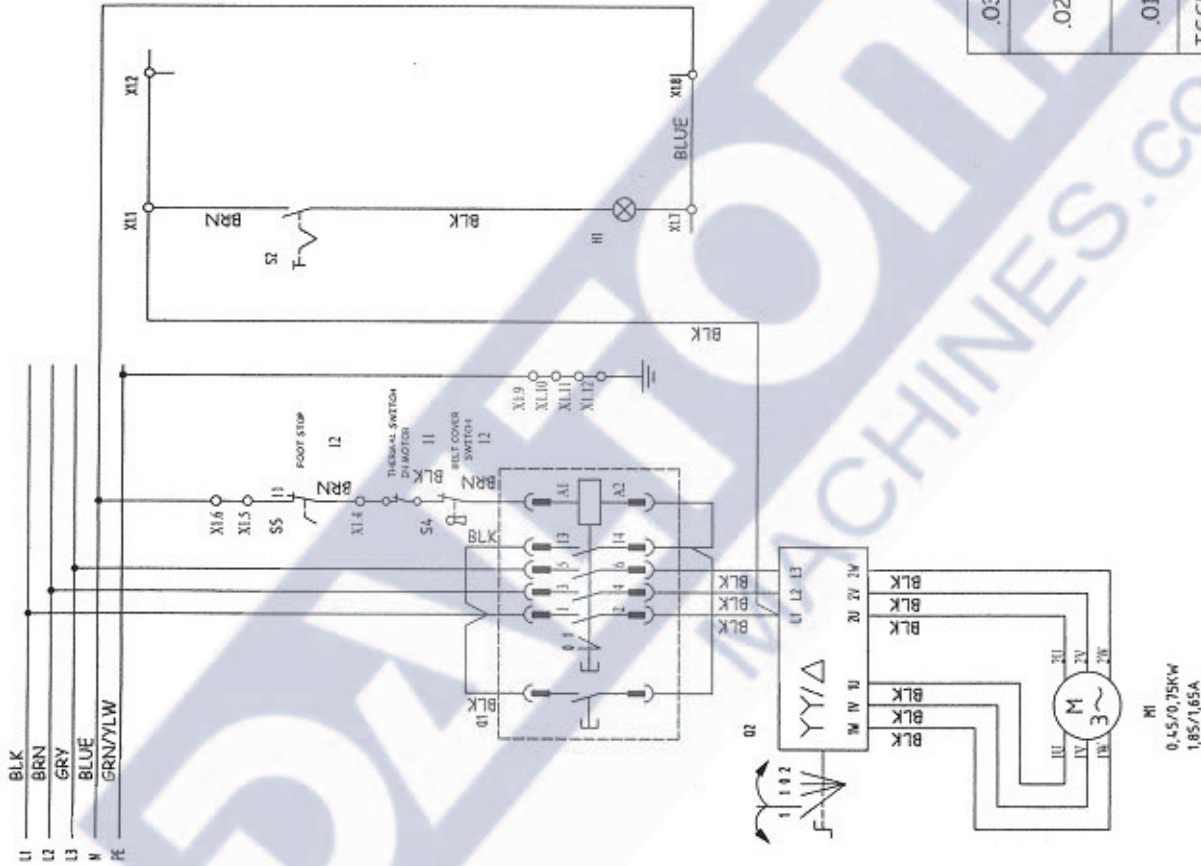
FINISH :
 MATERIAL :
 ISSUE : .03

ISSUE	CHANGE	AMENDMENT	WHO / WHEN
.03		CABLE IDENT'S ADDED	03.04.08
.02	200	OVERLOAD THERMAL SWITCH IN MOTOR. NO LONGER RETRO FIT ITEM. DRWG AMENDED.	29.07.07 AB
.01		OVERLOAD DETAIL ADDED	29.03.07

GENERAL TOLERANCES
 UNLESS OTHERWISE STATED

SCALE : NTS
 DATE : 29.03.07
 DRN. BY
 DRG. No. A/ 10-22240.03

supply voltage 3 NITE 400V 50Hz 50A



METRIC

DIMS TO 2 DEC PLACES +/- 0.025 MM
DIMS TO 1 DEC PLACES +/- 0.25 MM
WHOLE NUMBER DIMS +/- 0.5

MEDDINGS MACHINE TOOLS
LEE MILL INDUSTRIAL ESTATE
IVYBRIDGE
DEVON
PL21 9LL

TITLE : L2 MKIII WIRING SCHEMATIC. (3~)

FINISH :

MATERIAL :

ISSUE : .03

GENERAL TOLERANCES
UNLESS OTHERWISE STATED

SCALE : NTS

DATE : 12.04.07

DRN. BY

DRG. No. A/ 10-22252.03

.03		CABLE DETAILS ADDED	03.04.08
.02	200	OVERLOAD THERMAL SWITCH IN MOTOR. NO LONGER RETRO FIT ITEM	29.07.07
.01		OVERLOAD DETAIL ADDED	29.03.07
ISSUE	CHANGE	AMENDMENT	WHO/ WHEN

A4
1st ANGLE