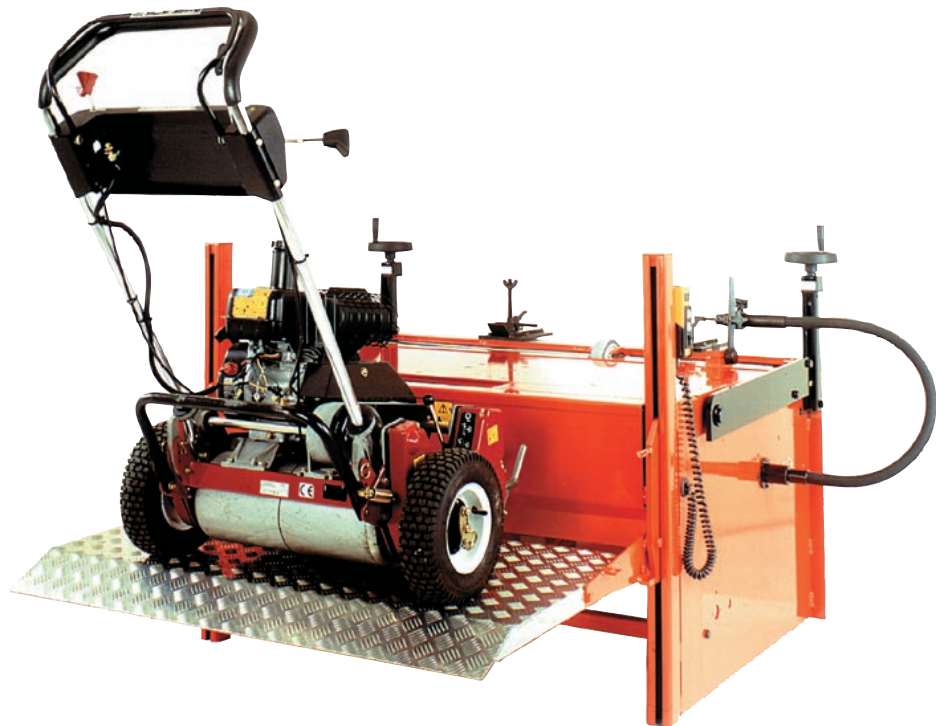


EXPRESS LIFT TABLE

for Express Dual Spin Grinders



User's Guide & Instruction Manual

Please read this manual carefully.

This manual should be kept in a safe place so that it can be used for future reference.

EXPRESS DUAL

Express Dual Lift Table

The Express Lift Table is a carefully designed hydraulic lift table purpose built for attachment to the Express Dual lawn mower reel-grinding machine. Its robust construction and attention to detail should ensure a long and trouble free life.

However, as with all mechanical handling devices caution is required, safe operation can be assured only by constant attention to the operating and maintenance instructions contained in this manual.

It is therefore essential that the responsible person ensure that this machine is operated and/or serviced only by suitably qualified personnel who have read and properly understood this manual.

If you have any service or operational problems contact your distributor,

or phone our

Technical Helpline (USA only) – 1-888 474 6348

or

Bernhard and Company Ltd, England – (+44) 1788 811600

or email

techsupport@bernhard.co.uk

use the technical support feedback form on our web site

www.expressdual.com or www.bernhard.co.uk

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1. Safety

- 1.1 Never load the lift table with more than the rated weight (The rating is shown on a label on the rear of the cover plate – visible when the lift platform plate is in its lowered position).
- 1.2 Always ensure that any load is placed as near as possible in the centre of the table.
- 1.3 Never ride on the left lift.
- 1.4 Never attempt to lift an unstable load.
- 1.5 Never use the table to try to assist another lifting device to lift a large load.
- 1.6 Always carry out routine checks and maintenance as instructed in this manual and at the correct intervals.
- 1.7 When lowering the platform from the vertical position do not let it fall under its own weight.
- 1.8 When not in use always latch the platform into the vertical position or leave it horizontal at ground level.
- 1.9 When lowering a load ensure that the floor space below the table is clear of all objects.

2. General Description

The Express Lift table consists of a fabricated steel mainframe assembly with two vertical rolled steel channels in which the platform carriages are located. The hinged platform is constructed from aluminium-chequered plate to give high strength combined with ease of handling.

Power is supplied by an electro-hydraulic pack with the single hydraulic ram exerting the lift force through a pair of adjustable lifting chains.

Early units used a power pack with a 12v DC electric motor, powered through a transformer wired directly into the Express Dual grinding machine.

Then from March 1998 units utilised a 24v DC power pack and transformer.

From March 2003 the lift power unit is now 220v AC.

All are controlled by a hand held push button panel, which controls both the raising and lowering functions.

3. Operating Procedure

- 3.1 When not in use the lift platform is normally stored in its lowest position, with the table clipped in the vertical position.
- 3.2 To bring into use press the 'UP' button on the control panel until the platform has risen to a convenient height, then unclip the platform and lower it into the horizontal position.

NOTE: It is advisable not to allow the platform to fall under its own weight.

- 3.3 When the platform is horizontal press the 'DOWN' button to lower the platform to the floor and place the mower unit onto the platform. Ensure that the unit is as central as possible and stable before pressing the 'UP' button to bring the platform to the height of the Express Dual table.

NOTE: When the platform reaches its top position the hydraulic power pack will bypass the lifting pressure. Release the "UP" button. DO NOT PRESS IT AGAIN WHILST THE TABLE IS IN IT'S UPPERMOST POSITION.

- 3.4 When the unit has been moved onto the Dual table return the platform to its normal storage position to allow better access to the Dual table and avoid the risk of personal injury on the projecting corners of the platform.
- 3.5 Unload the Dual table in the reverse order.

4. Maintenance and Adjustment

NOTE: Maintenance and adjustment should be carried out by suitably qualified/trained personnel in accordance with the information in this Manual.

As the conditions and frequency of use will vary greatly the following recommendations should be modified if required to suit the prevailing circumstances.

The Express Dual Lift Table is designed and constructed to require the minimum of maintenance. The 3 main requirements are:

1. The correct voltage at the motor terminals when the controls are activated.
2. The correct amount of clean hydraulic fluid of an appropriate grade in the hydraulic system.
3. No build up of dirt or debris around any of the moving parts.

NOTE: When cleaning the Express Dual machine ensure that none of the dust or debris from the grinding process is allowed to enter the Lift table mechanism.

The following checks should be carried out at approximately the intervals stated:

MONTHLY

Visually check the complete unit, confirm that all fixings are secure, that all electrical connections are tight, and that the hydraulic fluid is at the correct level with no visible hydraulic leaks.

3 MONTHLY

In addition to the monthly checks, ensure that the lift platform is level with the Express Dual table at the top of its travel. Adjust if required using the two adjusters (part#14 on exploded parts diagram)

12 MONTHLY

In addition to the above checks, ensure that all parts are clean and free from any damage or obvious wear. Raise the table to the top of its travel and apply a small amount of grease over the whole length of both chains.

On DC powered units visually check the motor brushes for wear.

NOTE: When any moving parts have been replaced or cleaned with a degreasing agent, ensure that they are re-assembled with an adequate quantity of medium grease.

5. Fault Finding

In the event of faulty operation, the following procedure is recommended.

- Check that all moving components are clean and are able to move freely and that they are free from any obvious damage or wear.

- If the lift fails to raise:
 1. Check the fuses.
 2. Use a test meter to check that the correct voltage is present at the motor terminals when the control buttons are operated. If the voltage is low/missing, check back through the circuit to locate the loss of voltage, usually a loose or dirty connection is the cause (on DC units- finally, check the condition of the motor brushes and their freedom to move).

- If the lift fails to lower:
 1. Check the fuses.
 2. Check the voltage at the dump solenoid – if all is OK then the solenoid has probably failed. If not check back check back through the circuit to locate the loss of voltage.

- If the table drifts/drops slightly over time:
 1. Visually check for leaks throughout the system (Power pack, ram, hose) (possible seal failure).
 2. Check dump valve solenoid – could be debris under the seating or a valve failure.

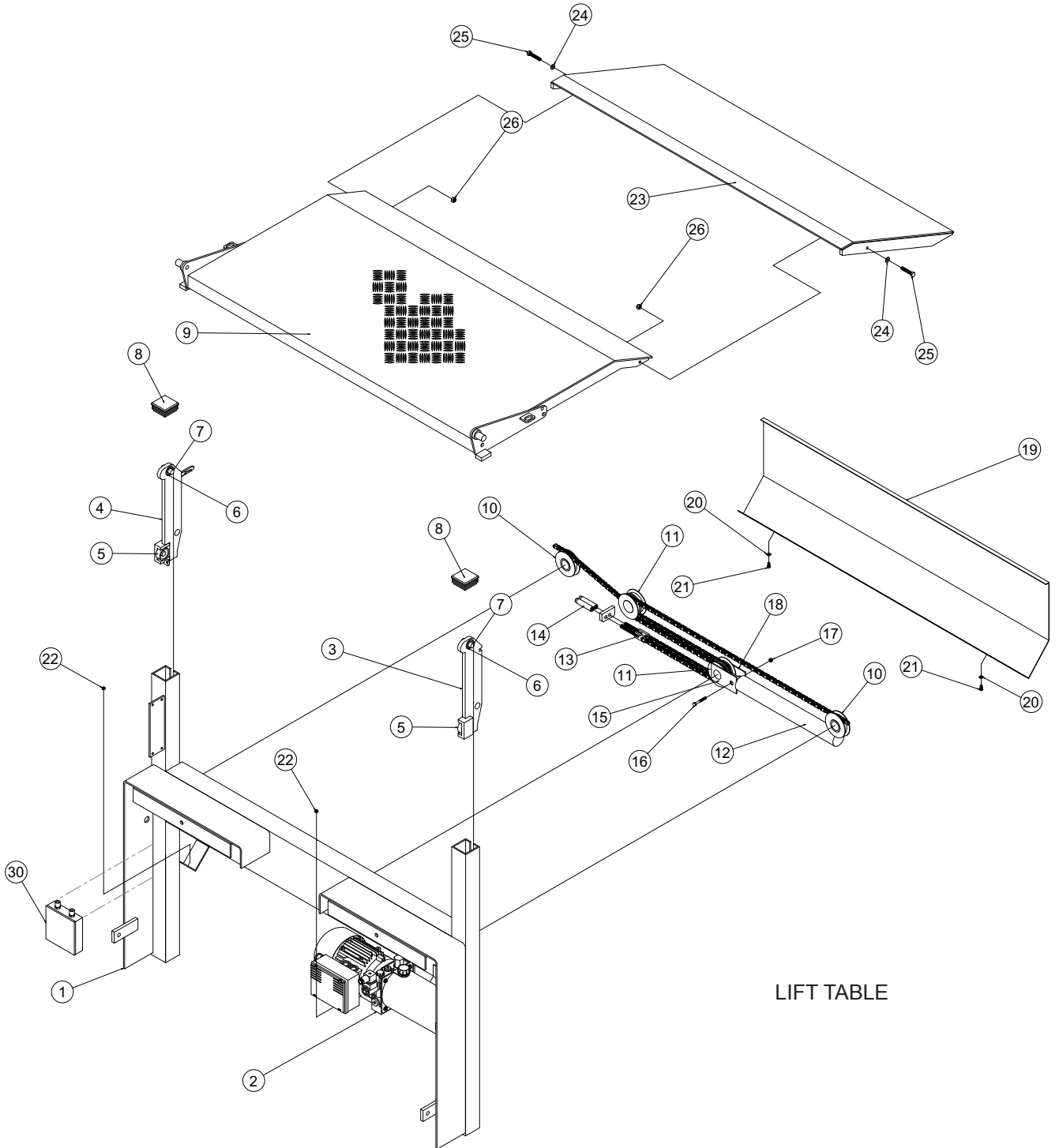
TECHNICAL SPECIFICATIONS

Hydraulic Oil	I.S.O.32 (eg catrol hysol XH)
Capacity	0.9litre (2 pints USA)
Max Hydraulic Pressure	140 Bar (Full Load)

6. Parts List

Ref #	Name of Part	Qty.	Part #
LIFT TABLE			
1	Frame	1	A4138
2	Power Pack 220v	1	A8954
	Power Pack 24v.....	1	A8023
	Power Pack 12v.....	1	A8770
3	L.H. Slider Plate	1	A4127
4	R.H.Slider Plate.....	1	A4128
5	Bearing	2	A7744
6	Bearing	2	A7744
7	Slider Plate Pin	2	A4127
8	Plastic End Cap 60 x 60	2	A6194
9	Taillift Platform.....	1	A4139
10	Single Pulley.....	2	A7209
11	Double Pulley	2	A7204
12	Hydraulic Cylinder complete	1	A6923
13	Chain Screw Tensioner	2	A4119
14	Chain Bottle Tensioner.....	2	A4022
15	L.H. Pulley Mounting Plate.....	2	A4098
16	Hex Head Bolt M6 x 45	1	A5722
17	Nyloc Nut M6.....	1	A5517
18	R.H.Pulley Mounting Plate	1	A4099
19	Cover Plate.....	1	A6319
20	Washer M6	2	A5320
21	Hex Head Screw M6 x 12.....	2	A5718
22	Nut M6	2	A5516
23	Lift Platform Extension.....	1	A4137
24	Washer M8	2	A5321
25	Hex Head Set Screw M8 x 45	2	A5725
26	Nyloc Nut M8.....	2	A5220
27	Lift Table Lowering Solenoid 220v	1	A8943
	Lift Table Lowering Solenoid 24v	1	A8392
	Lift Table Lowering Solenoid 12v	1	A8391
28	Control Pendant 24v (not shown).....	1	A8018
	Mains Control Pendant (not shown).....	1	A8890
29	Label for Tail Lift Pendant (not shown)	1	A6552
30	Mains Tail Lift Controller (not shown).....	1	A8904

6. Parts List (Continued)



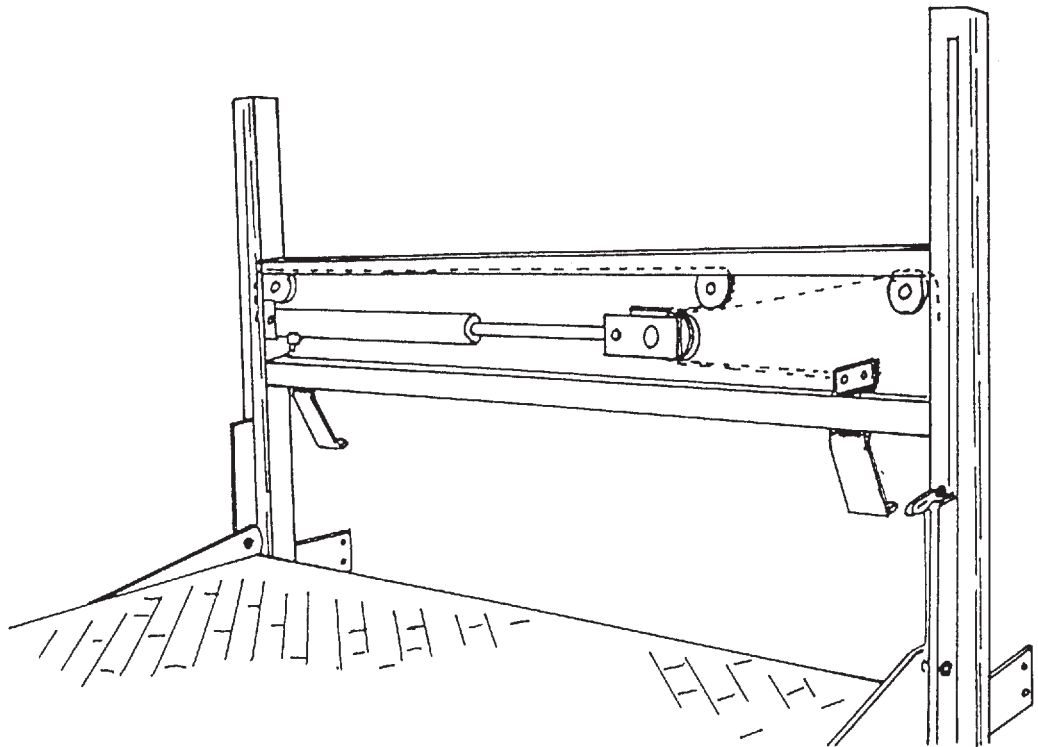


FIG. 1. - OVERALL VIEW WITH COVER REMOVED

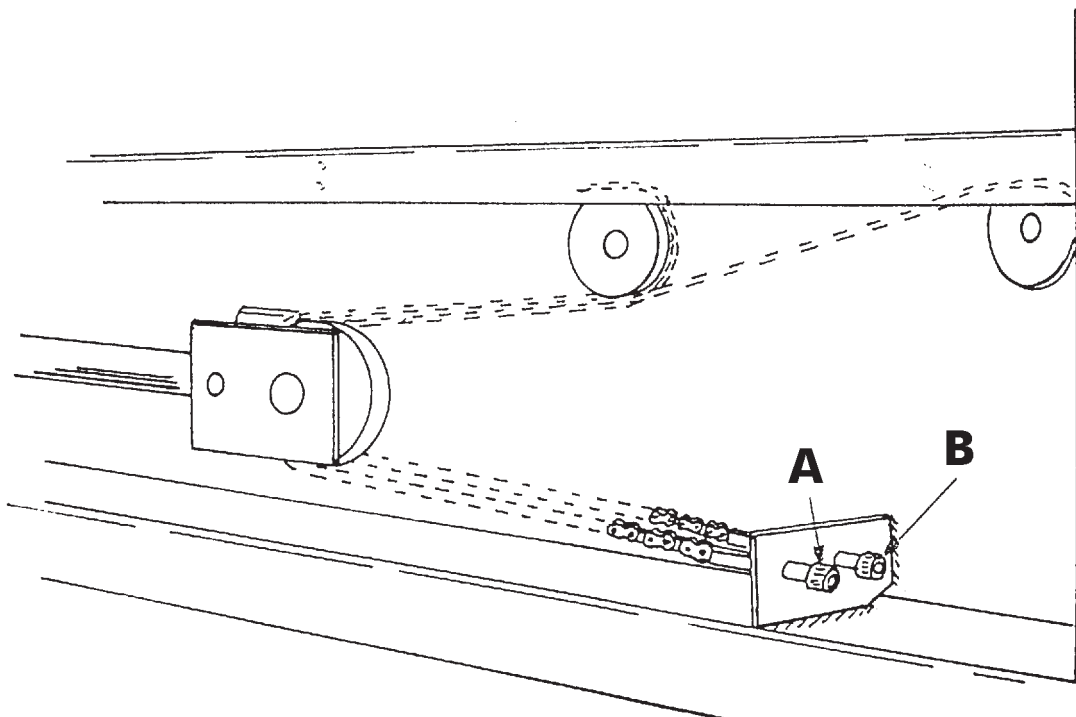


FIG. 2. - TABLE HEIGHT ADJUSTING DETAIL

ADJUSTER A – Raises/Lowers Left Hand Side
 ADJUSTER B – Raises/Lowers Right Hand Side

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