Linde Baker

EW / EWR

Electric Powered Pallet Truck



SERVICE MANUAL

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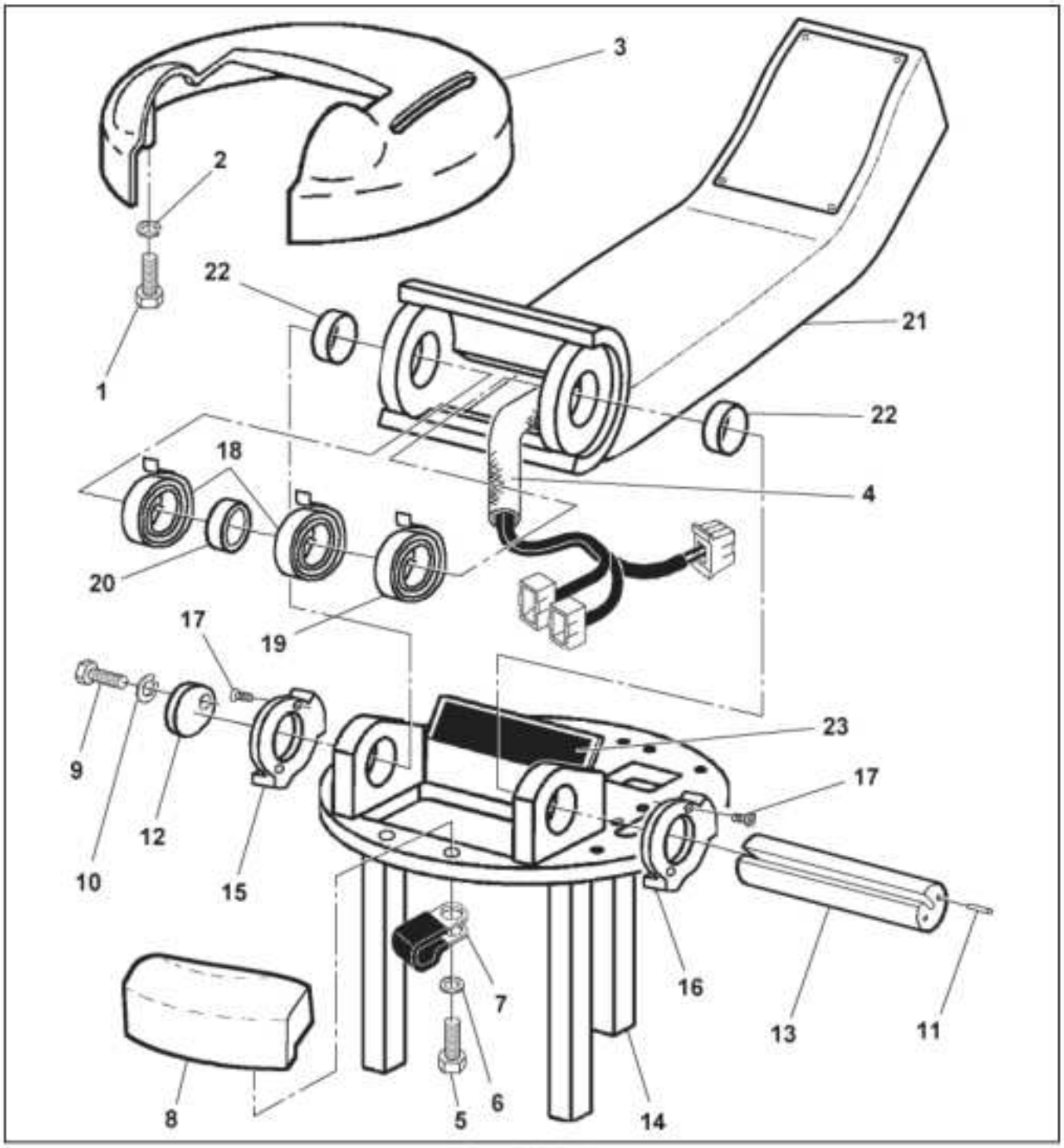
			Abbreviation/Description	Units	English	Metric
Characteristics	1	Model	Manufacturer's Model Designation		EWR60/80	EWR60/80
	2	Capacity Rating	Base Capacity	lb/kg	6000/8000	2722/3629
	3	Load Center	Lc	in/mm	Varies	Varies
	4	Power Source	Electric, Diesel, LP, Other		Electric	Electric
	5	Position of Operator	Walkie, Rider/Stand, Rider/Sitdown		Walkie/Rider	Walkie/Rider
	6a	Tire Type	R = Rubber, P = Poly; Front/Rear (EWR60)		R/P	R/P
	6b	Tire Type	R = Rubber, P = Poly; Front/Rear (EWR80)		P/P	P/P
	7	Wheels(x = driven)	Total number x number driven; Front/Rear		3x1;1/2	3x1;1/2
	8	Steering	Power/Manual		Manual	Manual
Dimensions	22	Total Length	**L4**		See Table	See Table
	23a	Overal Width	**W**	in/mm	36	914
	23b	Outside Fork Spread	**W2**		See Table	See Table
	26	Overall Truck Height	**H6**	in/mm	59.5	1511
	28	Turning Radius	**TR**		See Table	See Table
	30	Fork Lift	**H**	in/mm	6	152
	31	Fork Lowered Height	**S** at Tip /at Battery Box	in/mm	3.25/3.50	83/89
	34	Fork Width	**W3**	in/mm	9 or 10	229 OR 254
	35	Fork Length	**L3**		See Table	See Table
	36a	Head Length	**L2**-12V (EWR60 only)	in/mm	37.9	962.5
	36b	Head Length	**L2**-24V (EWR60/80)	in/mm	43.1	1095.5
	37a	Skirt or Bumper	**H8** Height	in/mm	8.09	205.7
	37b	Skirt or Bumper	**H9** Clearance	in/mm	4.5	114.3
Performance	39a	Travel Speed	With/Without Load-12V Avg. (EWR60 only)	mph/kmh	3.4/5.2	5.4/8.3
	39b	Travel Speed	With/Without Load-24V Avg. (EWR60/80)	mph/kmh	5.5/7.5	8.7/11.9
	43a	Gradeability	With Load-12V (EWR60 only)	%	10	10
	43b	Gradeability	With Load-24V (EWR60/80)	%	10/5	10/5
Weight	49a	Weight	Including Battery-12V Avg. (EWR60 only)	lb/kg	1540	700
	49b	Weight	Including Battery-24V Avg. (EWR60/80)	lb/kg	2090	950
Chassis	57	Tire Size	Drive (Front)	in/mm	10 x 5	254 x 127
	58	Tire Size	Load (Rear)	in/mm	3.25 x 6..375	83/162
	59	Wheelbase	**WB**		See Table	See Table
	62	Brake System	Mechanical/Hydraulic, Electric, Pneumatic		Mechanical	Mechanical
Drive	69a	Battery Compartment	W1 x L - 12V (EWR60 only)	in/mm	8.25 x 31.5	210 x 800
	69b	Battery Compartment	W1 x L - 24V (EWR60/80)	in/mm	13.5 x 31.5	343 x 800
	70a	Voltage	EWR60	V	12 or 24	12 or 24
	70b	Voltage	EWR80	V	24	24
	71	Amp Hours	Recommended		450 or 510	450 or 510
	72a	Battery Weight	Suggested Minimum - 12V (EWR60 only)	lb/kg	450	204
	72b	Battery Weight	Suggested Minimum - 24V (EWR60/80)	lb/kg	900	408
	73a	Drive Motor	hp/kw Rating-12V (EWR60 only)	hp/kw	1.8	1.35
	73b	Drive Motor	hp/kw Rating-24V (EWR60/80)	hp/kw	3	2.26
	74	Drive Motor Size	Diameter	in/mm	6.9	175.3
	76	Pump Motor Size	Diameter	in/mm	4.3	109.2
	87	Travel Control	EWR60/80		PMC	
	88	Speed Control	EWR60/80		Infinitely Variable	

All values base on 48" forks.

External Reinforcing bars are used on forks 72in/1829mm long or longer. The external reinforcing bars increase overall fork width to 23in/584mm or 28in/711mm and decrease the distance between forks 1in/25mm.

Travel speeds are average speeds and may vary by .5mph.

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Control Handle

1 Screw
2 Washer, Lock
3 Cap
4 Harness, Handle
5 Screw M6 x 30
6 Washer
7 Clamp, Harness
8 Stop, Handle
9 Screw M6 x 20
10 Washer, Lock
11 Pin, Roll
12 Cap
13 Shaft
14 Weldment, Handle Mounting
15 Cam, Brake
16 Cam, Coast Control
17 Screw, Socket Head 1/4-20 x 1/2
18 Spring, Return, Large
19 Spring, Return, Small
20 Spacer
21 Weldment, Handle
22 Bushing
23 Rubber Pad (Requires Adhesive #142883)

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TROUBLESHOOTING PMC

The troubleshooting flow chart on the previous page shows the test, correct reading and areas to check in a logical, diagnostic sequence. Detailed information for checking is indicated in the chart by the numbers and letters in parentheses, which refer to the paragraphs in the text for troubleshooting.

The troubleshooting procedures are intended to assist in diagnosing problems. The PMC itself is a sealed unit and is not serviceable, so the intent is to determine if the trouble is in the PMC or some other part of the motor control circuitry. You should follow the tests in the order in which they are listed. If not, incorrect conclusions may be reached.

Refer to the electrical schematic in the Electrical Section for circuit tracing, connection points, identification of components, etc.

The following procedures are for trucks which will not run. If the problem is that the Motor runs full speed with no accelerator control actuation, look for wiring errors or shorts, especially those which would connect the M- cable to B-. If there are none, the PMC is defective.

Before testing the system or PMC, make sure that:

The Key Switch is off, if the truck is equipped with one.

The Battery Connector is disconnected.

⚠ WARNING:

JACK THE DRIVE WHEEL OF THE TRUCK OFF THE FLOOR. ENSURE THE VEHICLE IS SECURELY BLOCKED. THE DRIVE WHEEL MUST BE FREE TO TURN.

1 Check for power to the PMC

A Plug in Battery Connector.

B Turn on Key Switch.

C Connect voltmeter (-) lead to the B- terminal of the PMC. Connect voltmeter (+) lead to the B+ terminal of the PMC. Voltage reading should be full battery voltage. If not, there is a problem in the Battery or the cables between the Battery and the PMC.

D Unplug the Battery and trace the cables from the Battery Connector to the PMC for continuity. Ensure the terminals in the Battery Connector are not burned or pitted, preventing good contact.

2 Check Potentiometer circuitry

A Unplug Battery.

B Remove connectors to terminals 2 and 3 of PMC. Connect an ohmmeter to the two wires removed. Measure resistance as you rotate the Roller Control on the Control Handle. The resistance should vary smoothly and be within these ranges:

Roller Control - neutral	open
Roller Control - barely on	5k ohms (approximately)
Roller Control - full on	1k ohms (approximately)

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