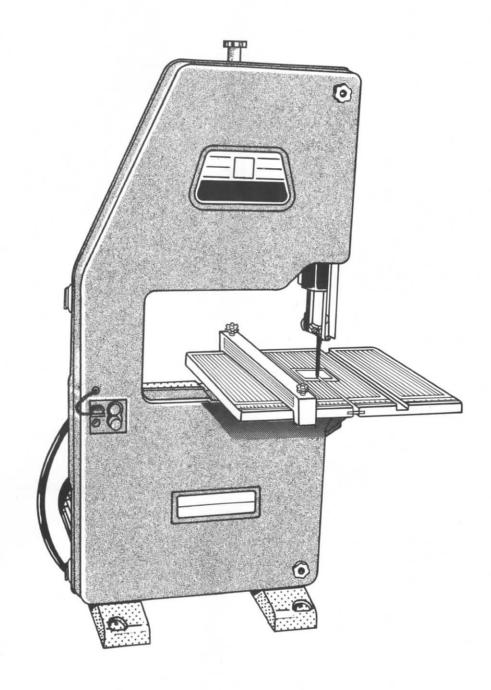
DW 3401 DW 3403 DW 3501 DW 3503

TWO-SPEED BANDSAW

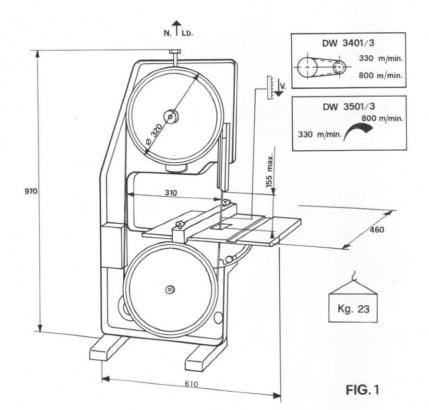
VARIABLE SPEED BANDSAW



Operating instructions

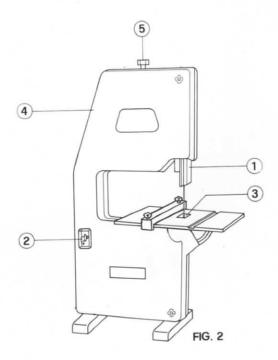


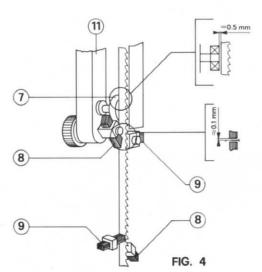
DEWALT®

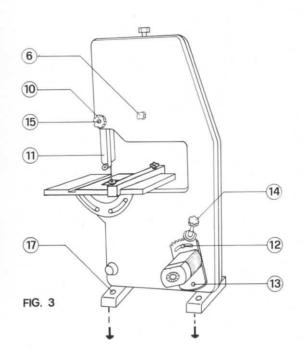


_ b _	ь	N.	Lb.
	16	800	160
3	12	600	120
3	10	500	100
3	6	300	60

10 N. \approx 1 Kg.







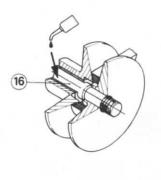


FIG. 5

DW 3501 - DW 3503

CONTENTS

1. Dimensions	page	1
2. Main components	,,,	2
3. Guarantee	"	2
4. Safety-Important do's and don'ts	"	3
5. Mounting the worktable	"	4
6. Switching on	,,	4
7. Adjusting blade guide and tension	,,	5
8. Changing speed on the DW 3401/3	,, -	5
9. Adjusting speed on the DW 3501/3	,,	5
0. Maintenance	,,	5

2. MAIN COMPONENTS - See Fig. 2 - 5

- 1. Blade guard
- 2. Safety key / on-off switch
- 3. Table insert
- 4. Hinged cover
- 5. Tension adjuster
- 6. Blade centring adjuster
- 7. Rear blade support roller
- 8. 45° Blade guide
- 9. Horizontale blade guide
- 10. Blade guard height adjuster
- 11. Upper blade guard / guide assembly
- 12. Motor location bolt
- 13. Motor pivot bolt
- 14. Speed adjuster (DW 3501/3)
- 15. Retention nut
- 16. Variable diameter speed pulley (DW 3501/3)
- 17. Bench mounting points

3. GUARANTEE

DeWalt products are covered by a manufacturer's guarantee. If during the guarantee period of 6 months from purchase date, a DeWalt product becomes defective due to faulty material or workmanship, Black & Decker guarantee to repair it free-of-charge provided that:

- 1. The product has not been misused.
- 2. Repairs have not been attempted by persons other than our own Service Staff or the staff of authorised repairers.
- 3. Proof of purchase date is produced.

For the address of your nearest DeWalt Service & Repair Centre telephone Black & Decker on Slough (0753) 74277.

4. SAFETY-IMPORTANT DO'S AND DON'TS

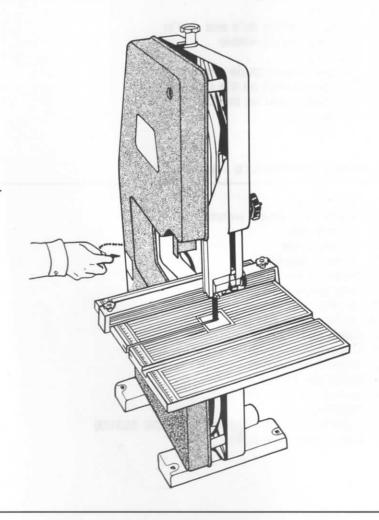
- 4.1 The upper blade guard (1) should be adjusted so that it is no more than 10 mm above the surface of the material being cut.
 - When the machine is not being used, lower the blade guard to completely cover the blade.
- 4.2 When the machine is not in use, and when changing blades or carrying out other maintenance, remove the safety key (2) from the switch casing to prevent accidental starting. For complete safety disconnect the machine from the mains supply also.
- 4.3 Keep the work area clean, tidy and free of all hand tools, etc.
- 4.4 Before switching on, ensure that the worktable is secured at the angle required for the job in hand.
- 4.5 Always use sharp blades of the correct type designed for the material/cut involved.
- 4.6 Keep hands well clear of the blade. Use a push stick for narrow cuts.
- 4.7 Ensure that the central table insert (3) is always properly located before starting the machine.
- 4.8 Never run the machine without first securing the hinged cover (4) in its closed position.
- 4.9 The machine should always be secured to a bench or the optional DeWalt legstand (Cat. No. DA 880) via the holes in the base using the bolts (17) supplied with the bandsaw.
- 4.10 When working in abnormal conditions (exceptionally cold temperatures, lower mains supply voltage than normal or following a long period of inactivity) the machine may have a tendency to stick. In such a case, slacken off the blade tension to a level of about 100 n., switch on the motor and (while the motor is running) gradually increase the tension to that indicated in the table on the top right-hand corner of page 1.
 - With model DW 3501/3 it is sufficient to reduce the blade speed by turning the handle (14) above the motor, which will assist the acceleration of the motor.
- 4.11 If you are unlikely to use your machine for some time, slacken off the tension adjuster (5) completely, to eliminate the risk of the blade wheels becoming distorted, with resultant imbalance.

OPERATION OF THE SAFETY KEY:

The machine's start button can only be pressed if the key has first been inserted the right way round in the adjacento slot.

When not in use the key and its plastic retention chain can be removed from the machine.

Always remove the key before opening the hinged cover to gain access inside the machine.



5. MOUNTING THE WORKTALBLE

To prevent damage in transit, your bandsaw is packed with the worktable detached from the machine. The mounting procedure is as follows:

- 5.1. Slacken the black hexagonal-headed bolts that secure the parallel fence mounting bracket to the leading edge of the worktable. The bracket can then be swung out from the table, pivoting on the cross-headed screw.
- 5.2. The worktable can then be fed past the blade via the blade slot in the middle and the 4 threaded holes in the underside of the table located over the 2 holes in each of the two-semi-circular support brackets.
- 5.3. Using 4 black hexagonal-headed bolts and galvanised washers, secure the table to the brackets with the box spanner supplied. You will probably find it easier to do this with the table tilted out of the horizonatal position. The table angle can be set by slackening the clamp adjacent to the 0 45° scale on the motor side of the machine. Resecure the parallel fence mounting bracket.

- 5.4. Having secured the table, raise the upper blade guard to its highest position by turning knob (10) and, with a setsquare against the side of the blade, check that the table in its horizontal position is actually at right/angles to the blade. Adjust, if necessary, by altering the height of the black stop-screw positioned on the main-frame underneath the rear of the worktable.
- 5.5 When making straight cuts, the parallel fence can be clamped at any point along its mounting bracket either left or right of the blade. The drilled holes in the left-hand side of the fence allow for a batten to be secured to it for ripping longer materials with accuracy.

6. SWITCHING-ON

6.1. WIRING UP TO THE MAINS

Single-Phase 220-240V Models

Connect a standard 13 amp rubber-covered earthed plug to the cable attached to the machine. Make sure that the cable clamp is holding the outer sheath of the cable securely before fixing the cap to the plug.

Plug in and switch on at the mains socket. Three-Phase 380-415V Models

Three-Phase machines should be wired directly into the mains by a suitably qualified electrician.

6.2. THE SWITCH

The control switch on your bandsaw has several important features apart from its ideal positioning:

— "No volt release" so that, in the event of a power-cut, inadvertent restarting is prevented. Whenever the mains supply has been removed from the machine, the green "on" button has to be pressed to start it again.

- Safety key, without which the machine cannot be switched on. The key therefore prevents unauthorised use of the machine.

- Warning light to show when the machine is running (important in a busy workshop, where the bandsaw's quiet induction motor may not otherwise be heard above the general noise level).

7. ADJUSTING BLADE GUIDES AND TENSION

- 7.1. Adjust the blade tension by turning the knob (5) until the appropriate tension figure aligns with the top edge of the machine casing. The correct tension can be set according to the width of the blade used (see table in top right-hand corner of page 1).
- 7.2. With the machine disconnected from the mains supply and the front hinged cover open (unscrew the two orange plastic retention knobs - top and bottom on the side of the cover) the blade can be centred on its roller-wheels as follows: - with your finger on one of the spokes of the upper wheel rotate the wheel and, at the same time with the other hand, turn the centring knob (6) until the blade takes up its correct central position on the rim of the upper wheel. Only a fraction of a turn on the knob (6) will normally be necessary to position the blade correctly.
- 7.3. Adjust the upper and lower blade guides and rollers as shown in fig. 4.

The rear blade support roller is fixed in position by an allen screw against its shaft mounting.

The 45° diagonal and horizontal blade guides are likewise fixed in position with allen screws. Once these blade guides have been set so that they are literally just clear of the side of the blade, each of the upper and lower pairs of guides can be adjusted laterally relative to the teeth of the blade by turning the black milled knob to the rear. The correct adjustment in when the teeth of the blade are just proud of the blade, each of the upper and lower pairs of guides can be adjusted laterally relative to the teeth of the blade by turning the black milled knob to the rear. The correct adjustment is when the teeth of the blade are just proud of the blade guides, ensuring that the guides are always running against the flat area of the bandsaw blade.

Note that adjustment of the lower blade guides will be facilitated by removing the plastic insert from the centre of

the table and tilting the table out of its normal horizontal position.

7.4. Before starting a cut adjust the upper blade guard (11) by turning the knob (10), so that the bottom of the guard is about 10mm above the surface of the material to be cut.

8. CHANGING SPEED ON THE DW 3401/3

8.1. SPEED I - 330 m/min. is for cutting plastics and non-ferrous metals (using the appropriate blades). The lower speed is obtained with the drive belt running on the smaller diameter pulley on the motor shaft. If the belt is at present on the larger pulley, the procedure for changing speed is as follows:

Slacken the motor retention bolt (12) and tilt the motor to the left to relax the drive belt.

- The belt can now be eased by hand from the blade roller pulley which then facilitates the removal of the other end of the belt from the large drive pulley on the motor shaft.
- Return the belt to the roller pulley and then ease the other end of it onto the smaller pulley on the motor drive shaft.
- Now tilt the motor back to the right until the drive belt is reasonably taut (similar to the fan belt on a car) and secure the motor retention bolt (12).

8.2. SPEED II - 800 m/min. is for cutting timber.

If the drive belt is at present on the smaller drive pulley, repositioning to the larger drive pulley is the reverse of the procedure detailed in 8.1. above.

9. CHANGIN SPEED ON THE DW 3501/3

9.1. On this model the blade speed is infinitely variable between 330-800 m/min. by turning knob (14). The speed should only be changed with the Motor/Blade running.

9.2. The speed label on or adjacent to the motor indicates the direction in which the motor has to tilt to obtain the speed required (fully to the left for maximum speed or fully to the right for minimum speed). At each extreme you will be able to "feel" when you have reached the limit of adjustment - do not force it any further or the belt could be stretched. Intermediate speeds are not marked on the scale because of the variables involved (belt tension, bandsaw blade tension, etc.). Experience with the machine will show you where the appropriate intermediate speed can be selected for a given material.

10. MAINTENANCE

- 10.1. All bearings are sealed and require no lubrication.
- 10.2. Periodically check the rack + pinion mechanism of the blade guard height adjuster. If slacks develops, tighten retention nut (15).
- 10.3. DW 3501/3: Check periodically the motor retention bolts (12-13) and, if loose, tighten them as appropriate.
- 10.4 DW3501/3: Periodically grease lightly the bearing surface behind the inner flange of the drive pulley (16) on the motor shaft.
- 10.5 Should your machine require service or replacement parts, contact Black & Decker on Slough (0753) 74277 for the name of your nearest DeWalt service and repair centre.

CORRIGIBLE OF THE Sth. PARAGRAPH

" MOUNT THE WORKTABLE "

PLEASE NGTE

THE WORKTABLE ON THIS BANDSAW, HAS BEEN IMPROVED FEATURING A MORE ACCURATELY ADJUSTABLE PARALLEL FENCE.

THIS NEW FENCE DOES NOT HOWEVER HAVE ANY PRE-DRILLED HOLES IN IT AS SUGGESTED IN PARA 5.5. OF THE ENGLOSED INSTRUCTION LEAFLET.

TO ADJUST THE DISTANCE OF THE FENCE FROM THE BLADE, PROCEED AS FOLLOWS

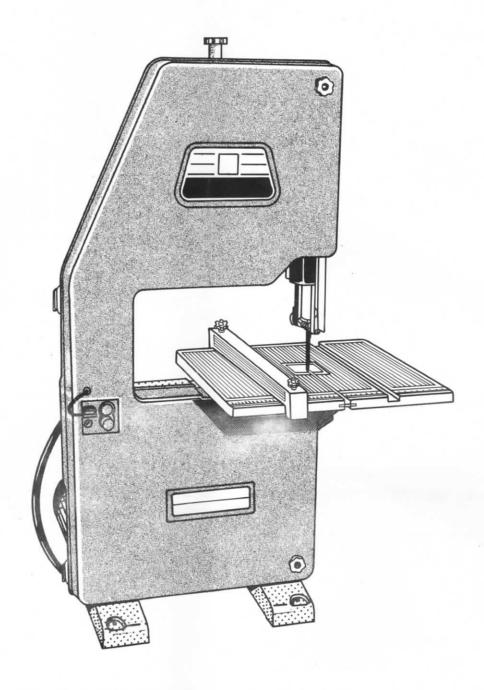
- SLACKEN THE TWO PLASTIC KNOBS AT EACH END OF THE FENCE.
- ON LOADING EDGE OF TABLE.
- FIRST TIGHTEN THE PLASTIC KNOB AT THIS FORWARD END OF THE FENCE, AND THEN TIGHTEN THE KNOB AT THE FAR END.
- CHECK WITH A RULE THAT THE FENCE IS ACTUALLY AT THE REQUIRED DISTANCE FROM BLADE.

 READJUST AS NECESSARLY.

DW 3401 DW 3403

DW 3501 DW 3503 **BAND SAW TWO SPEEDS**

BAND SAW VARIABLE SPEED



Manual of spare parts, wiring diagrams and accessories



DEWALT®

DW 3501 - DW 3503

Spare parts - Wiring diagrams - Accessories

1	.1	l.	SPARE	PARTS

1.1.1. DW 3401/3 Mechanical parts

1.1.2. DW 3501/3 Mechanical parts (Variation compared to DW 3401-DW 3403)

1.1.3. DW 3401/3 DW 3501/3 Single phase Motor - Three phase motor

1.1.4. DW 3401/3 DW 3501/3 Switch box

1.1.5. DW 3401/3 DW 3501/3 Special executions

1.2. WIRING DIAGRAMS

1.2.1. DW 3401/3 DW 3501/3 Wiring diagrams

1.3. ACCESSORIES

ATTENTION: MODELS DW 3403 - DW 3503 ARE AVAILABLE ONLY AS A VERSION FOR ITALY - U.K. - GERMANY - BENELUX AND SCANDINAVIAN COUNTRIES -

ATTENTION

WHEN ORDERING SPARE PARTS, PLEASE SPECIFY THE FOLLOWING:

a) Exact number of part required

c) Serial number of machine

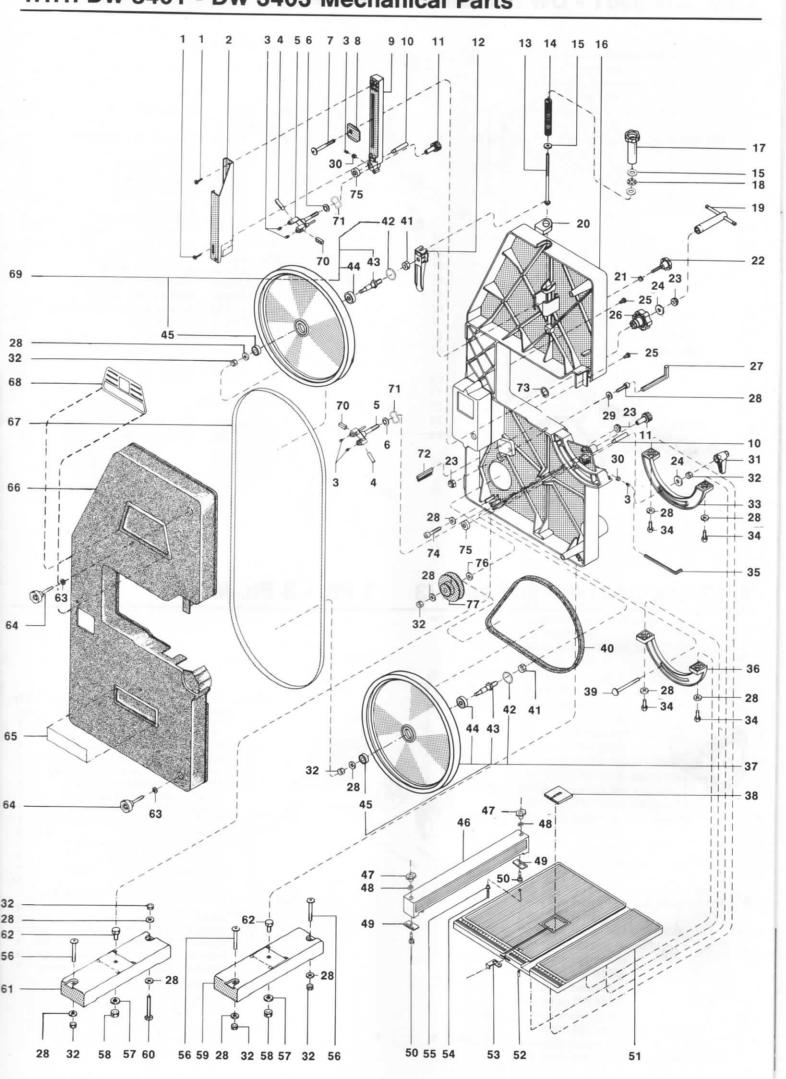
b) Model of machine

d) Voltage (For electrical parts)

1.1.1. DW 3401 - DW 3403 Mechanical Parts

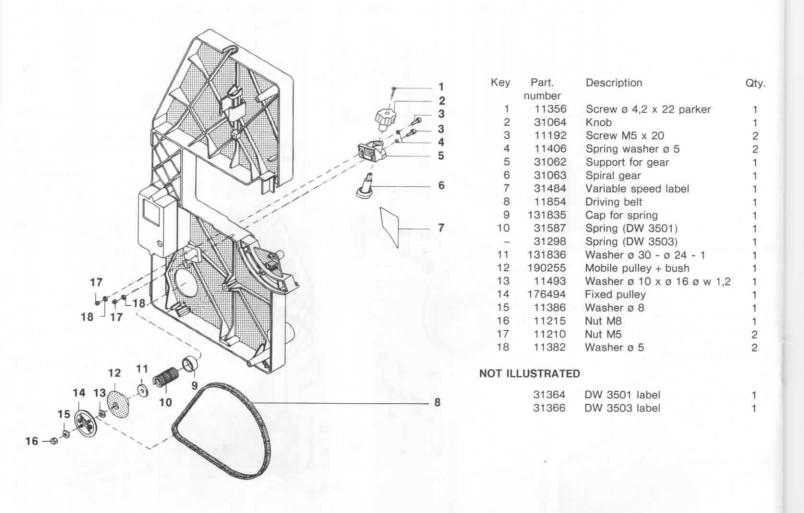
Key	Code number	Description	Qty.
1	11260	Tapping screw Ø 4,2 x 19	2
2	31570	Band saw guard	1
3	11076	Grub screw M5 x 8	6
4	32799	Guide block 45°	2 2
5	176491 11412	Band saw guide block Retaining ring ø 10	2
7	11381	Screw M8 x 70	1
8	31302	Plate for guide rod	i
9	72997	Band saw guide rod	i
10	32796	Bearing pin	2
11	31304	Blade setting threaded ring	2 2 1
12	76496	Upper band wheel bracket	1
13	11353	Screw M6 x 150	1
14	31297	Spring Ø 14 x Ø 3 x 105	1
15	11688	Washer Ø 6 x Ø 18	3
16	176550	Frame	3 1
17	31299	Knob Ø 40 x 82 + nut M6	1
18	22040	Bearing	1
19	11147	Tubolar spanner hex 13 mm.	1
20	31609	Bush guide Ø 20	1
21	11205	Nut M6	
22	31185	Knob M6 x 45 UNI 5739	1
23	11220	Self-locking nut M8	3 2
24	11410	Washer Ø 8 x Ø 24	2
25	11274	Screw T.C.B. M5 x 15 taptite	2
26	32492	Knob with gear	1
27	11116	Hex wrench 6 mm.	NOO! IN .
28	11023	Screw M8 x 30	Shunaya Ia 1
29	11386	Washer Ø 8	17
30	11210	Nut M5	2
31	197346	Clamping lever	1 7
32	11215	Nut M8	1
33	76492	Tilting crescent (with index)	4
34 35	11148 11107	Screw M8 x 20	1
36	76543	Hex wrench 2,5 mm. x 110 mm. Tilting crescent	i
37	131689	Driving band wheel + bearings + axle	1
38	31223	Table insert	i
39	11352	Screw M8 x 80	i
40	11853	Driving belt	i
41	11217	Nut M10	4
42	11733	Seeger ring	2
43	31624	Bandwheel axle	2 2 2 2
44	22038	Bearing 6200 - 2 Z	2
45	22029	Bearing 608 - 2 Z	2
46	76546	Rip fence	1
47	32964	Knob + nut M6	2
48	33920	Washer Ø 16 x Ø 6 x 1,5	2 2 2
49	76547	Clamp for fence	2
50	11127	Screw M6 x 65	2
51	76545	Table	1
52	11474	Pin Ø 6 x 14	1
53	31559	Connection plate	1
54	11054	Grub screw M5 x 20 UNI 5923	1
55	11698	Insert	1
56	11067	Screw M8 x 60	3
57	11387	Washer Ø 10	3 2 2
58	11217	Nut M10	2
59	131368	Right side base	1
60	11193	Screw M8 x 60	1
61	131367	Left side base	1
62	11154	Screw M10 x 25	2 2 2 1
63	11693	Retaining ring Ø 6	2
64	31467	Knob M6 x 40 UNI 5737	2
65	31363	DW 3401 label	
-	31365	DW 3403 label	1
66	197117	Casing	1
67	DA853	Band saw blade	1
68	31910	De Walt label	1
69	131690	Driven band wheel + bearing + axle	1
70	32798	Guide block 90°	2 2 1
71	11522	Load spring	2
72 73	132825	Brush	1
74	11442	Retaining ring Ø 22	i
74 75	11025	Screw M8 x 40	2
	22029	Ball bearing ISO 608 - 2 Z Washer Ø 10 x Ø 16 x 1,2 DIN 988	1
76 77	11493 76493	Two grooved pulley	1
		two grooved pulley	1
TOM	ILLUSTRATED	Importor nomestate (Constitución contes)	THE PERSON NAMED IN COLUMN
	31947 31954	Importor nameplate (Scandinavian version) Nameplate with arrow (Scandinavian version)	1
	0.001		
	31957	Istruction nameplate for changing the spe Nameplate for blade tension adjustment (\$	ed (Scandinavian version) 1 Scandinavian version) 1

1.1.1. DW 3401 - DW 3403 Mechanical Parts

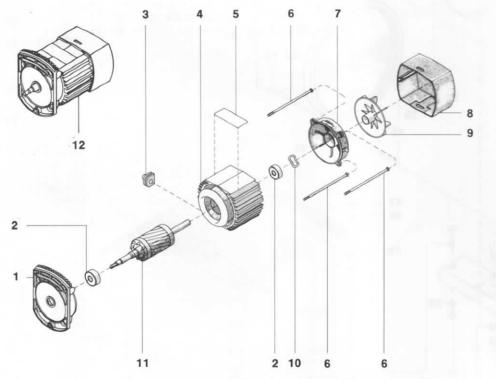


1.1.2. DW 3501 - DW 3503 Mechanical Parts

(Variation compared to the models DW 3401 - DW 3403

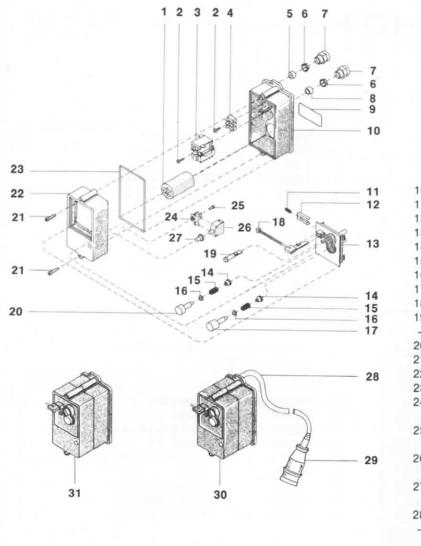


1.1.3. DW 3401/3 - DW 3501/3 1 Ph. - 3 Ph. Motor



Key	Part.	Description	Qty.
	number		
1	176473	Front flanged calotte	1
2	22004	Ball bearing	1
3	31112	Motor cable gasket	1
4	198861	1 Ph. complete housing	1
-	198862	3 Ph. complete housing	1
5	31370	DW 3401 motor label	1
-	31371	DW 3501 motor label	1
-	31388	DW 3403 motor label	1
-	31389	DW 3503 motor label	1
6	31280	Tie rod	4
7	76485	Rear motor calotte	1
8	31124	Fan housing	1
9	31128	Fan	1
10	11570	Load spring	1
11	198814	DW 3401/3 - DW 3503	
		Rotor	1
-	198927	DW 3501 Rotor	1
12	198858	DW 3501 Complete motor	1
-	198857	DW 3401 Complete motor	1
-	198859	DW 3403 Complete motor	1
-	198860	DW 3503 Complete motor	1

1.1.4. DW 3401/3 - DW 3501/3 Switch box



Key

2

3

5

6

7

8

Part.

number 44539

11259

44544

44554

44561

44599

44631

44543

44553

31272

31273

31270

31271

31272

Description

Capacitor 12 uf. - 450 V (DW 3401-DW 3501)

Contactor 220 V - 50 Hz (DW 3401-DW 3501)

Contactor 380 V - 50 Hz (DW 3403 DW 3503, without micro switch) Contactor 240 V - 50 Hz

Contactor 380 V - 50 Hz (DW 3403

Screw Ø 2,9 x 16

(DW 3401-DW 3501)

Contactor 415 V - 50 Hz (DW 3403-DW 3503)

DW 3503 with micro switch)

Terminal board 3 poles

Terminal board 4 poles

Cable grip gasket Ø 9,5

Cable grip gasket Ø 12,5

Cable grip gasket Ø 9,5

(DW 3401-DW 3501)

(DW 3403-DW 3503)

Cable grip clamp

Cable grip nut

(italian version)

Qty.

2

5	31376	(DW 0404 DW 0504)	
	0.4.0.77	(DW 3401-DW 3501)	
-	31377	Switch box nameplate 380 V	1
		(DW 3403-DW 3503)	
-	31453	Switch box nameplate 240 V	1
		(DW 3401-DW 3501)	
= 1	31454	Switch box nameplate 220 V (DW 3401	1
		DW 3501, with micro switch)	
-	31706	Switch box nameplate 415 V	1
		DW 3403-DW 3503)	
-	31761	Switch box nameplate 380 V (DW 3403	1
		DW 3503, with micro switch)	
10	31267	Box bottom	1
11	32739	Spring for blocking guide	1
12	31278	Blocking slide for push button	1
13	31269	Push button - holder insert	1
14	31277	Push button gasket	2
15			2
	31276	Push button spring	
16	11600	Retaining spring ring Ø 4	2
17	31285	Emergency red push button	1
18	31629	Safety key	1
19	44542	Warning light (DW 3401-DW 3501)	1
1	44555	Warning light (DW 3403-DW 3503)	.1
20	31275	Green push button	1
21	11375	Screw Ø 4,2 x 32	2
22	31268	Box cover	1
23	31284	Box gasket	1
24	31369	Bracket for micro switch fixing	1
		(special execution with micro switch)	
25	11309	Screw Ø 3,5 x 13 (special execution	1
		with micro switch)	
26	44439	Micro switch (special execution with	1
		micro switch)	
27	31279	Cap for micro switch	1
		(special execution with micro switch)	
28	44521	Cable with plug (DW 3401-DW 3501)	1
-	144600	Cable (DW 3401-DW 3501, italian	1
		and U.K. execution)	
-	144601	Cable (DW 3403-DW 3503, available	1
	111001	also for german version)	- 1
	144635	Cable (DW 3403-DW 3503,	1
	144055	U.K. execution)	1
	144636	Cable (DW 3403-DW 3503,	- 4
	144030		1
20	44000	italian execution)	-
29	44230	CEE plug (DW 3403-DW 3503,	1
		special execution)	
30	197078	Complete switch box + cable	1
		(DW 3403-DW 3503, U.K. execution)	
-	197083	Complete switch box + cable	1
		(DW 3403-DW 3503)	
-	197101	Complete switch box + cable	1
		(DW 3403-DW 3503, italian execution)	
-	198852	Complete switch box + cable	1
		(DW 3401-DW 3501, U.K. execution)	
-	198854	Complete switch box + cable	1
		(DW 3401-DW 3501)	ň
-	198855	Complete switch box + cable	1
		(DW 3403-DW 3503, german execution)	
-	198893	Complete switch box + cable	1
		(DW 3401-DW 3501, italian execution)	
31	197036	Complete switch box (DW 3403	1
- 1		DIM OFFICE CHILDIN DOX (DVV 0400	1

CW 3503, U.K. execution)

Complete switch box

(DW 3401 DW 3501)

Complete switch box

(DW 3403-DW 3503)

Complete switch box

Complete switch box

Complete switch box (DW 3403 DW 3503, italian execution)

(DW 3401-DW 3501, U.K. execution)

(DW 3401-DW 3501, italian execution)

1

1

197077

198818

198819

198850

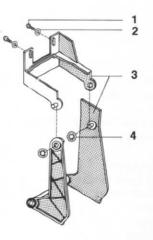
198851

Switch box nameplate 220 V

31376

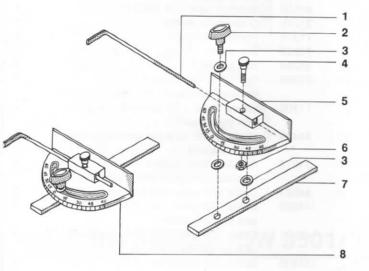
1.1.5. DW 3401/3 - DW 3501/3 Special Executions

1.1.5.1. Swinging band protection



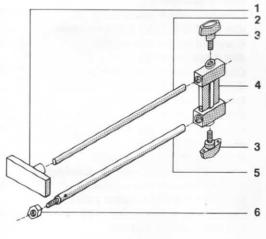
Key	Part. number	Description	Qty
1	11287	Screw Ø 4 x 10	2
2	11380	Washer Ø4	2
3	32869	Swinging protection assy.	1
4	11397	Retaining ring Ø 8	2

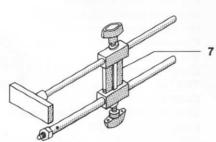
1.1.5.2. Mitre fence (DA 860)



Key	Part. number	Description	Qty
1	132966	Gauge	1
2	33994	Knob with screw M8 x 18	1
3	11386	Washer Ø 8	3
4	32974	Lock knob	1
5	72831	Scale	1
6	11212	Nut M6	1
7	132832	Scale guide	1
8	DA860	Mitre fence	1

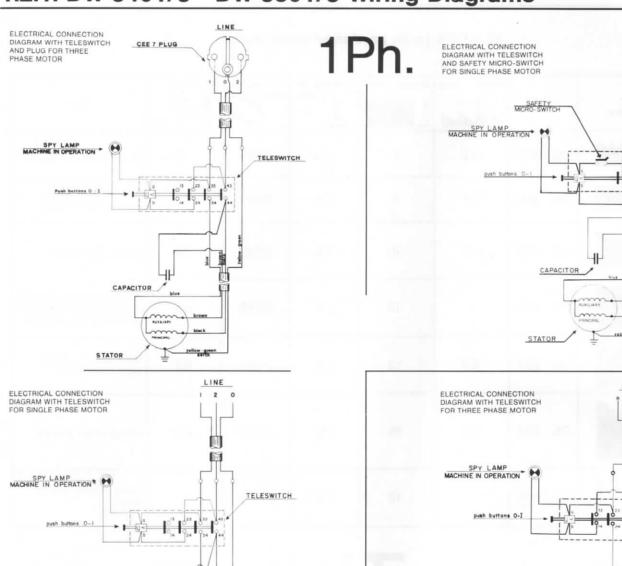
1.1.5.3. Cut length gauge (DA 862)





Key	Part. number	Description '	Qty
1	32614	Foot for gauge	1
2	132851	Base	1
3	33994	Knob with screw M8 x 18	2
4	172613	Cross brace	1
5	132834	Gauge	1
6	11215	Nut M8	1
7	DA862	Cut length gauge	1

1.2.1. DW 3401/3 - DW 3501/3 Wiring Diagrams

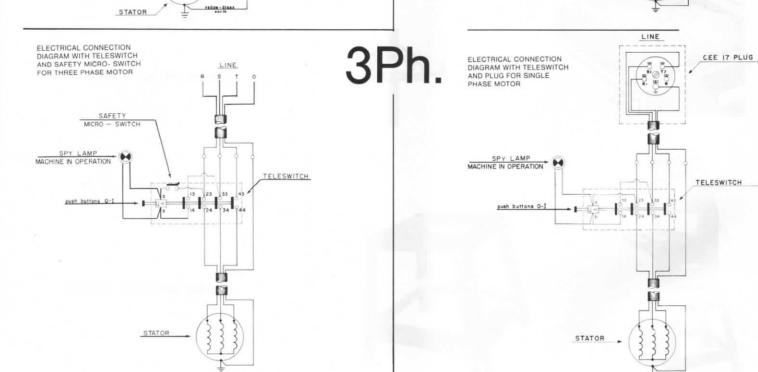


CAPACITOR

TELESWITCH

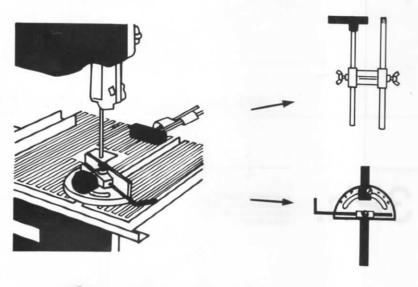
TELESWITCH

STATOR



BLADES (with hardened steel teeth)

Life size reproduction	Cat.	n.	Pitch mm.	Width mm.	Thickness mm.	Length mm.	R. min	Use
	DA	855	3.2	6	0.6	2095	16	Wood (contour work).
***************************************	DA	856	1.8	6	0.6	2095	16	Non-ferrous metal sheets and tubes.
	DA 8	858	3.2	10	0.6	2095	36	Plasticized wood.
	DA 8	353	4	12	0.6	2095	63	General purpose (wood plastic, light alloy) sup = plied with the machine
	DA 8	357	3.2	12	0.6	2095		Non-ferrous metal plates and bars.
	DA 8	354	6.3	16	0.6	2095	80	Wood (thich pieces).
Sharpened	DA 8	359		12	0.4	2095		Foam rubber, leather, cloth.



DA 862 CUT-LENGHT GAUGE







DA 880 MACHINE STAND