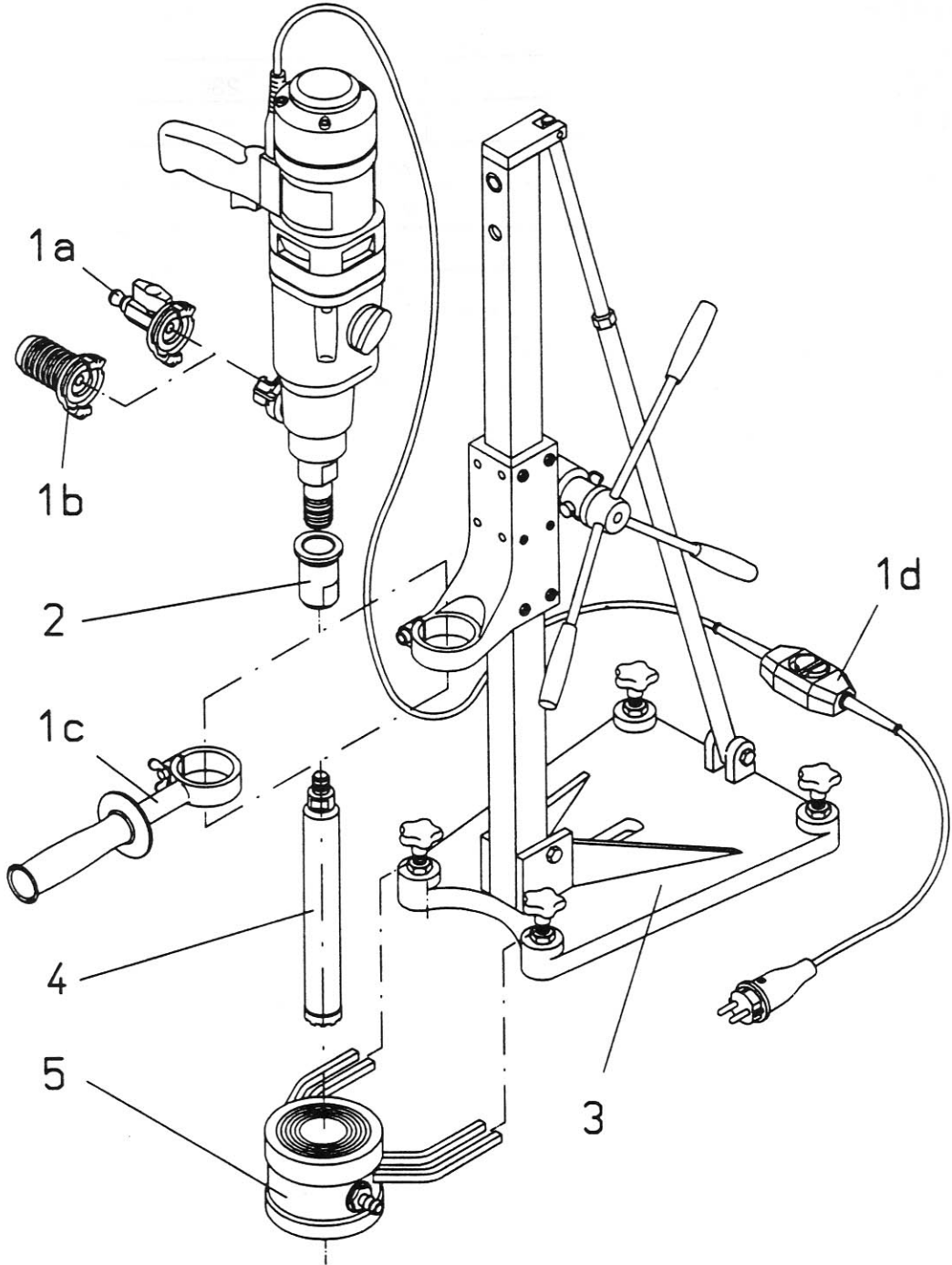


DK 12, DK 13, DK 14



WEKA



INSTRUCTIONS FOR USE - DIAMOND CORE DRILL DK 12 / DK 13 / DK 14

Please read carefully before putting the machine into operation!

With the WEKA core drilling machine you own an excellent product of quality, with which you will certainly be fully satisfied if you use it for its designed use.

Technical Data

Rated Voltage	V	230	110
Rated Current	A	7,5	15
Power input	W	1600	
Power output	W	1080	
Frequency	Hz	50 - 60	
Rated Speeds (Rated Load)	1/min	580 / 1400 / 2900	
Drilling Diam. used with drill rig approx. / concrete	mm	15 - 130	
Drilling Diam. hand-held approx. / concrete	mm	15 - 60	
Drilling Diam. hand-held approx. / masonry	mm	20 - 150	
Weight DK 12/14 / DK 13	kg	5,9 / 6,3	
Tool fixture DK 12/14		G 1/2"	
Tool fixture DK 1203/DK 1403 / DK 13		1 1/4" UNC + G 1/2"	

Operating data

Gear/Speed	1/min	1/580	2/1400	3/2900
Release Torque/Safety Clutch	Nm	58	25	12
Core bit diam. concrete	mm	65 - 130	30 - 55	15 - 25
Water volume approx..	l/min	1	0,7	0,5

1. TECHNICAL DESCRIPTION

The DK 12 is a universal core drill. It can be used manually as well as in a stand (3) (drilling hand-held or by stand).

The DK 13 is an universal core drill, which may be used wet (with water supply) as well as dry (with dust exhauster). It is used especially as a hand-held machine, but it can also be used in a drill stand (3).

The DK 14 can only be used when fixed to a drill stand. (drilling directed by stand)

All three types of machines are designed for boring rocks, concrete and masonry.

The material that is loosened by drilling is washed away by water provided through the diamond core bits (4). The supply of water can be controlled by the ball valve (1a). At the same time, the tool is cooled (wet drilling).

The boring tool (4) consists of a tube with an appropriate tool adapter G 1/2" , or 1 1/4" UNC, and with soldered-on or welded-on diamond segments.

In case of wet drilling it is possible to suck up the water again with a vacuum cleaner through a water-collecting ring (5).

ATTENTION: Avoid wet drilling upwards (overhead drilling). If it is indispensable use absolutely a perfect, all right and functioning water-collecting ring.

Only for DK 13: By exhausting the removed material through the drill bit and the hose coupling (1b) with a vacuum cleaner, the tool is cooled, too (dry drilling only possible in masonry)

1.1 List of contents

- DK 12 - Diamond core drill (1), with ball valve and connect-nipple (1a), handle with clamp ring (1c), PRCD inline protector (1d) and instructions manual.
Special accessories: Carrying case, start drilling aid with water-collecting ring.
- DK 13 - Diamond core drill (1), with ball valve and connect-nipple (1a), tail end (1b), handle with clamp ring (1c), PRCD inline protector (1d) and instructions manual.
Special accessories: Carrying case, elastic bore piercer, start drilling aid with water collecting ring.
- DK 14 - Diamond core drill (1), with ball valve and connect-nipple (1a), PRCD inline protector (1d) and instructions manual.

1.2 Sound emission and vibration acceleration (EN 50144)

The typical A-weighted sound pressure level is 86 dB(A).
The typical A-weighted sound capacity level is 99 dB.
The typical weighted acceleration is 2,5 m/s².

2. PREPARATION

Make sure that the machine did not get damaged by the transport. Check that the rated voltage indicated on rating plate conforms with main voltage.

2.1 Connection to the power supply

According to the general safety precautions the electric connection of diamond core drills with water supply is on principle to be done by a ground fault current interrupter (GFCI). Likewise, those machines are only to be used at sockets with protective plug reception, earthed according to the regulations.

According to those regulations WEKA core drills with water supply are provided with a PRCD inline protector assembled between the cord.
The PRCD includes a ground fault current interrupter as well as an undervoltage breaker.

The PRCD is ready for service after connecting the electric main by pressing the ON button. If the voltage is disconnected, the PRCD switches off and is, after the voltage returns, to start once more.

**ATTENTION: Do not put the PRCD into water. It is regularly to be checked on perfect functioning by pressing the TEST-key.
Never use a core drill without a GFCI being directly connected to the mains connection.**

2.2 Water supply

Connect the machine with the water supply by using a GARDENA coupling to the Quick Connect Nipple.

ATTENTION: maximum water pressure 3 bar.

Use only clean water because the sealing wears more quickly with dirty water.
If water comes out of the indicator hole the rotary shaft seals are to be replaced immediately.
It is preferable to have this done in an authorized specialist's workshop only.

2.3 Installation in the drill stand

In the drill stand, the DK 12/13/14 is fastened by clamping the gearbox (Ø 60 mm). Put the machine into a solidly designed drill stand that is equipped with a clamping ring that exactly fits the machine. Divided clamping devices which do not tighten exactly in the middle of the gear's neck are unsuitable and damage it.
Be careful that the machine's axis is absolutely parallel to the stand column.

2.4 Motor switch (1e) and overload protection

After having switched on the motor starts softly (only 230 V version). If the machine is overloaded due to excessive pressure, unsuitable bits or if the tool jams, the motor electronic (resp. the overload switch at 110 V) stops the motor. It starts gently again if you switch the motor off and then on again.

In case of 110 V versions it is possible to restart by pressing the red pin in the switch handle. Do the best for not overload the machine and if it has happened take care to have a sufficient period to cool down the motor.

2.5 Gear changing

The DK 12/13/14 is equipped with a 3-speed gear unit. Please do never change gears forcibly but only when the machine is just coming or has already come to a stop.

2.6 Safety clutch

The integrated safety clutch protects the operator, the machine and the tools against high mechanical overstrain.

Please notice that the safety clutch is activated after only 2-3 seconds because otherwise the wear and the development of heat increases greatly.

3. OPERATING INSTRUCTIONS

3.1 Diamond core bits

The tool fixture of DK 12 and DK 14 is prepared for standard core bits with G 1/2" female adapter.

The DK 1203 and the DK 1403 is provided with a combined spindle. So it is possible to fix tools with G 1/2" female and 1 1/4" UNC male thread.

The DK 13 is provided with a 1 1/4" UNC spindle. By using the additional adapter (2) it is possible to fix tools with G 1/2" female thread.

Only use appropriate diamond tools of high quality.

Especially when drilling manually use core bits that cut easily and have a low specific initial pressure.

Take care that the segments jut out sufficient against the tube.

It is useful to apply some waterresistant grease to the thread of your tool so it can be taken off again more easily.

Take care that the radial run out at the diamond segments of the core bits is no more than 1 mm.

3.2 Drilling - directed by a drill rig

Since the drill stand is not included in the delivery, we merely want to point out some important things you should note when using the machine.

Please observe the special instructions for the drill rig.

Kinds for fixing the rig

Fixing the stand using dowels, by vacuum and by a brace.

The mainly applied method to fix the stand is given by using dowels. It is preferable to use metal dowels. The diameter must be at least 10 mm.

When fixing the stand by vacuum, take care that the vacuum is sufficient high.

Make sure the seals are not worn out.

Please take care that the rig is really fixed solid and stable, if by the aid of the adjusting screws at the base plate of the rig the vacuum seal is released.

3.3 Drilling - hand held

Open the ball valve and start the machine. Hold the core drill as rigidly as possible. Touch the surface you want to work on with the core bit in a slight angle (of about 30° to the axe). After the bit has worked its way into the object for about 1/8-1/4 of the circle's circumference, turn the core drill up into a right-angled position, using sufficient initial pressure. Anyway, it is better to use the start drilling aid, or the elastic bore piercer.

Rule of pressure: drilling diameter in mm $\times 8$ = contact power in N. Use especially for bigger core bits a drilling-start aid which helps to keep track for the first few millimeters. This can simply be a wooden plate with a recess in it in the shape of a triangle in which the core bit can be guided.

Take special care that the core bit is directed in a straight way in the drilled hole so it does not block.

ATTENTION: Please do consider that the machine has a very high torque, especially in the first gear. Therefore, drill manually only extremely concentrated, especially when working in the first gear and with diameters of more than 60 mm. In case of a sudden blocking of the core bit the machine, despite the safety clutch, might get out of control and hurt you considerably.

3.4 Boring with DK 13

In case of dry drilling fix the exhaust hose on the tail end, couple the tail end to the suction fitting on the machine and start the dust exhauster.

For apply to drill exactly a bore piercer art.-no.: DK 13820 is disposable. It is to put into the spindle and after a depth of bore hole of maximal 10 mm it is to remove again.

Use by dry drilling absolutely a powerful dust exhauster which's filter doesn't obstruct. Drilling dry is only possible if the masonry is absolutely dry - risk of obstruction.

Before work dry, take care that the spindle is inside absolutely dry.

By the rest proceed as explained in 3.4.

3.5 General directions for drilling

Adjust the quantity of water by using the ball valve to such an extent that the loose material gets completely washed out of the drilled hole.

You do not wash out enough material if mud occurs around the drilled hole.

Use sufficient contact pressure. If it is too low the diamonds tend to polish. This means that the feed speed becomes less until finally no material is cleared away any more.

In this case the segments are to "sharpen" again by means of a SiC-grindstone.

Take care that the core bit does not vibrate; otherwise the diamonds are detached by force.

By drilling of reinforcements you might have to use greater initial pressure and the next lower gear.

In case the machine gets stuck do not try to loosen it by switching it on and off. Immediately switch off the machine and loosen the bit by turning an appropriate wrench to the left and right. At the same time, pull the machine out of the drilled hole carefully.

Take care not to cut a water-pipe or even an electric mains. In case of doubt use a line detector for searching the drilling area.

4. MAINTENANCE

ATTENTION: Always and on principle pull the mains plug before beginning with works of maintenance or repairs.

Clean the machine after you have finished drilling. Do not forget to clean the core bit thread and grease it.

Clean the machine with a dry or moist cleaning-rag and not with a jet of water. Keep the ventilation apertures clean.

4.1 Oil-bath lubrication (art. no.:9012001-130ml)

After the first 100 hours of using the machine you should replace the gear system's oil. Get this done in a specialist's workshop or demand on the appropriate technical documents for this work.

ATTENTION: If oil comes out of the machine, stop working with it immediately. Leakage of oil does damage the gear system.

4.2 Carbon brushes (art.no.:DK10125)

After you have used the machine for about 300 hours you should check the carbon brushes for wear and replace them if necessary. Like any other work on the motor this must be done by an electrical specialist.

5. SPECIAL SAFETY PRECAUTIONS - PLEASE NOTE !

This diamond core drill is assigned for commercial use only. It may only be used by trained people. Proper use extends only to the drilling of rock, concrete and masonry..

Pay attention that water gets not into the machine, switch handle, terminal case and the electrical connections.

For operation, the national regulations for working with this core drill must be observed.

Electric tools must regularly (approx. 6 months) be checked for safety by a specialist.

Pay attention drill vertically (overhead drilling) only with appropriate safety equipments (water-collecting ring).

After an interruption of work first see for yourself that the core bit turns loosely before you start the machine again.

Wear ear protection when working with this machine.

6. GUARANTEE

This product is covered by a guarantee for a period of six months from the date of purchase. The guarantee covers all defects or damages of the product during the guarantee period evidently due the defaults in workmanship or material and is limited to repair and/or adjustment. The guarantee is not valid in case of normally wear and tear, if the product has been misused, used contrary to the instruction manual, or by using extraneous parts.

DECLARATION OF CONFORMITY

We hereby declare under our sole responsibility that this product conforms with the following standards. IEC 745-1, IEC 745-2-1, EN 55014, EN 50082-2, EN 61000-3-2, EN 61000-3-3 in accordance to the regulations of directive 73/23/EEC, 98/37/EEC and 89/336/EEC.

WEKA Elektrowerkzeuge



7. GENERAL SAFETY PRECAUTIONS

Please read and keep them!

CAUTION: The following fundamental safety precautions must always be observed when using electric tools/machines as protection against an electric shock, the risk of injury and a fire hazard.

Please read and take note of these precautions before you use the tool/machine. Keep these safety precautions in a safe place!

1. Keep your place of work clean and tidy. Disorder where you are working creates a potential risk of accidents.
2. Make allowance for influence from the surroundings. Don't expose your electric tools/machines in damp or wet surroundings. Make sure the work area is well lit. Don't use electric tools/machines near burning liquids or gases.
3. Always protect yourself against an electric shock. Never touch grounding (earthing) parts e.g. pipes, radiators, cookers ovens, refrigerators .
4. Keep children away. Don't let other persons touch the tool/machine or supply cord. Keep them away from your work area.
5. Keep your electric tool/machine in a safe place. Electric tools/machines not in use should be kept in a dry locked-up place out of the reach of children.
6. Don't overload your electric tools/machines. You will do your work better and safer in the specified performance/rating range.
7. Always use the right electric tool/machine for the job. Don't use underpower tools/machines or attachments for heavier duty jobs. Don't use electric tools/machines for work and purposes for which they are not intended e.g. don't use a hand-held circular saw to cut down trees or cut up branches.
8. Wear suitable clothing. Don't wear loose clothing or jewelery. They could be caught up by moving parts. When working outside, the use of rubber gloves and non-slip shoes are recommended. Wear a helmet or cap if you have long hair.
9. Always wear protective goggles. If work causes dust, wear a mask as well.
10. Connect dust extraction equipment. If device is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.
11. Don't use the supply cord for any other purpose. Don't carry the electric tool/machine by the supply cord and don't pull the plug out of the socket/ recaptacle by pulling the supply cord. Protect the cable from heat, oil and sharp edges.

- 12.** Don't bend over too far when working. Avoid an unusual stance. Make sure that you are standing firmly and keep your balance at all times.
- 13.** Take good care for your electric tool/machine. Keep the drill bits, insert tool etc. sharp and clean so that you can do your work better, safer and more reliably. Observe the cleaning and maintenance regulations and the instructions for changing drill bits, insert tool etc. Check the supply cord regularly and have it renewed by a recognized specialist if it is damaged. Check the extension supply cord regularly and, if it is damaged, replace it. Keep grips and side handles dry and free from oil and grease.
- 14.** Always pull out the plug from the mains if the electric tool/machine is not in use, prior to cleaning and maintenance work and when changing a drill bit, insert tool etc., such as a drill bit, saw blade or insert tools of any kind.
- 15.** Never leave a key in place. Always check before switching on that the key or adjusting tools have been removed.
- 16.** Avoid any unintentional start-up. Never carry a plugged-in electric tool/machine with your finger on the switch. Always make sure that the switch is off, when plugging the electric tool/machine into the main electric supply.
- 17.** If an extension supply cord is used outside, only use one which has been approved for the purpose and is correspondingly marked.
- 18.** Be attentive at all times. Keep your eye on your work. Remain in a sensible frame of mind and don't use the electric tool/machine if you cannot concentrate completely.
- 19.** Check your electric tool/machine for damage. You must check the safety devices or damaged parts carefully for perfect functioning in keeping with the intended purpose before using the electric tool/machine further. Check whether the moving parts function properly, whether they aren't sticking, whether any parts are broken, whether all other parts work properly and are fitted correctly, and make sure that all other conditions which can influence operation and running of the electric tool/machine are as they should be. Damaged guards and protective devices and parts must be repaired properly by an authorized service workshop or replaced provided that nothing else is stated in the operating instructions. Damaged switches must also be replaced in the recognized service workshop. Never use electric tools/machines which cannot be switched on and off by the switch.
- 20.** Caution! For your own safety's sake, only use accessories and attachments which are given in the operating instructions or in the respective catalogue. The use of accessories or insert tools or attachments other than those specified in the operating instructions can result in personal injury to you.
- 21.** Only have repairs carried out by recognized electrical specialists. This electric tool/machine complies with respective safety regulations. Repairs may only be carried out by an electrical specialist otherwise an accident hazard for the operator can exist.

Intentionally Blank

Fig	Req.	Description	Weka Part	DP Part	Fig	Req.	Description	Weka Part	DP Part
1	1	Motorcase	DK10101	2700650	100	1	Gear Box	DK13201	2701849
2	1	Intermediate Flange	DK10102	2700651	102	1	Clamp Ring	DK12202	2700693
3	1	Motor Top Hood	DK10103	2700652	104	1	Bearing Socket(for clutch wheel)	DK10221	2700699
4	1	Protection Cover(For Top Level)	DK10104	2700653	106	1	Gear Change Grip	DK10203	2700694
5	1	Switch Handle 230V	DK12105	2701453	108	1	Gear Change Lever	DK20205	2700695
	1	Switch Handle 110V	DK12105.11	2701452	110	1	Drill Spindle cpl. w. Pos 126,182,184	DK13206	2701850
6	1	Insulating Ring	DK10106	2701197	112	1	Pinion Shaft	DK10208	2700697
7	1	Electronic Module 230V	DK10510	2701383	114	1	Clutch Wheel	DK12209	2700698
	1	Electronic Module 110V	DK10511	2701427	116	1	Gear Wheel 1	DK10212	2700700
8	1	Armature w/Fan & Bearings 230V	DK10108	2701334	118	1	Gear Wheel 3	DK10213	2700701
	1	Armature w/Fan & Bearings 110V	DK10108.11	2700655	120	1	Slide Gear Wheel	DK10214	2700702
10	1	Field compl. 230V	DK10109	2701335	122	2	Brake Disk	DK10218	2700703
	1	Field compl. 110V	DK10109.11	2700656	124	1	Pressure Disk	DK10219	2700704
11	1	Seal Bush	DK10113	2700657	126	2	Protective Sleeve	DK13220	2701851
12	1	Fixing Ring	DK10114	2700658	128	1	Protective Disc L	DK13222	2701852
13	1	Electronic Case 110V & 230V	DK10135	2701354	130	1	Protective Disc R	DK13223	2701853
14	2	Fieldscrew Insulating Sleeve	DK10116	2700659	132	1	Protective Bushing	DK13210	2701854
15	1	Brush Holder Disc	DK10117	2700660	136	1	Quick Connect Nipple	DK20225	2700706
16	1	Air Conducting Disk	DK10118	2700662	138	1	Handle	DK12 8900014	2700707
17	1	Mounting Plate 110V	DK12 DK10119	2700661	150	1	Ball Bearing	629 6062900	2700948
	1	Mounting Plate 230V	DK12 DK12120	2701384	152	1	Ball Bearing	60/28 2RS 6060282	2701855
18	1	Terminal Case Packing	DK12 DK10122	2701567	154	2	Needle Bush	HK1010 6310100	2700709
25	2	Carbon Brush 230V	DK10125	2701336	156	1	O-Ring	RDR78x2 5578002	2700710
	2	Carbon Brush 110V	DK10125.11	2700663	158	1	O-Ring	RDR20x3 5520003	2700711
26	1	Cooling Profile 110V & 230V	DK10140	2701385	160	1	O-Ring	RDR11x2.5 5511025	2700712
28	1	Ball Bearing	6060011	2700664	164	2	Rotary Shaft Seal	28x47x7 5028477	2701856
29	1	Ball Bearing	6060002	2700665	166	1	Rotary Shaft Seal	AD22x35x7 5022357	2700714
30	1	Compensation Washer	2628171	2700666	168	1	Ball Valve with Grip	G1/4"i/l 7014001	2700715
32	1	O-Ring RDR26x2.5	4526025	2700667	1	1	Grip	7014005	2700925
33	1	O-Ring RDR24x1.5	4524015	2700668	170	1	Double Nipple	G3/4"a DK13227	2701857
34	1	V-Seal	5112000	2700669	172	2	Sealing Ring	G1/4" 7014003	2700717
36	1	Thread Roll.Head Screw M4X6	0504006	2701386	173	1	Sealing Ring	G3/4" 7034003	2701858
37	4	Hex. Soc. Head Screw M5x35	0105035	2700670	174	1	Hose Coupling 32mm (Std.)	7000532	2701859
38	*4	Raised Head Screw M5x25 DK12	0205025	2701203	1	1	Hose Coupling 38mm (Optional)	7000538	2701860
38	*4	Raised Head Screw M5x20 DK12	0205020	2700671	176	1	Threaded Coupling	G3/4" 7034500	2701861
39	2	Fill. Head Screw M4x100	0204100	2700672	178	1	Threaded Coupling	G1/4" 7014500	2701862
40	2	Fill. Head Screw M3x5	0203005	2700673	180	1	Disk Spring	4028142	2700718
42	2	Sl. Pan Head Screw M4x6	0304006	2700674	182	1	Pressure Spring	0.5x3.2x16 4305016	2700719
43	2	Pan Head Tapping Screw DK12	0539095	2700675	184	1	Ball	RB-4 2204000	2700720
44	2	Pan Head Tapping Screw DK12	0539019	2700676	186	1	Parallel Key	A5x5x4 3005040	2701087
48	2	Hexagon Nut M4	1004000	2700677	188	1	Parallel Pin	5m6x16 2505016	2700721
49	4	Round Head Grooved Pin 2.3x4	2223004	2700678	190	1	Parallel Pin	4m6x10 2504010	2700722
52	4	Locking Washer SM5	1805000	2700735	192	1	Parallel Pin	3m6x16 2503016	2700723
54	3	Curved Spring Washer A4	1804137	2700680	194	1	Shim Ring	PS10x16x1 1910161	2700724
55	1	Medium Washer 4.3	1804433	2700681	196	1	Retaining Ring	AV14 3514001	2700726
56	2	Medium Washer 3.2	1803433	2700682	198	1	Retaining Ring	SW18 3618000	2700727
58	1	Int. Suppr. Capacitor	DK10130	2700683	200	1	Retaining Ring	28x1.5 3528015	2701863
61	1	Cord 110V/230V AWG 16	8738151	2700684	202	1	Retaining Ring	47x1.75 2547175	2700729
62	1	Cord Sleeve	DK12 8701000	2700685	204	1	Retaining Ring	52x2 2552002	2701864
64	1	Cord Clamping Piece	DK12 8800010	2700686	206	1	Hexagon Nut	BM12x1.5 1012015	2700730
65	1	Motor Switch 110V/230V	DK12 8015212	2701454	208	1	Hex. Soc. Head Screw	M5x80 0105080	2700731
67	1	Motor Protective Switch 110V	8010615	2700688	210	3	Hex. Soc. Head Screw	M5x50 0105050	2700732
68	1	Knurled Nut	DK12 8001001	2700689	212	1	Hex. Soc. Head Screw	M5x16 0105016	2700733
70	1	Tube Water-Level	7510029	2700690	214	1	Wing Screw	M6x40 DK12 0506040	2700734
71	1	Tin Water-Level	7500015	2700691	216	5	Locking Washer	SM5 1805000	2700735
73	1	Fan	DK20105	2700692	218	1	Medium Washer	A 6 DK12 1806125	2700736
						1	Pointing Sticker	DK20620	2700737
						1	Gear Oil 80W-90	4 oz 9012001	2700738
						1	Ball Valve Assembly(water shut-off)	7014000	2700806
					230	1	Adaptor Sleeve	DK13240	2701865
					250	1	AF Element	AE10	4600502
					262	1	O-Ring	RDR32x1.5 5532015	2701866

NOTES: *Fig. 38a. Used on all 110V & 230V drills with electronic overload module.

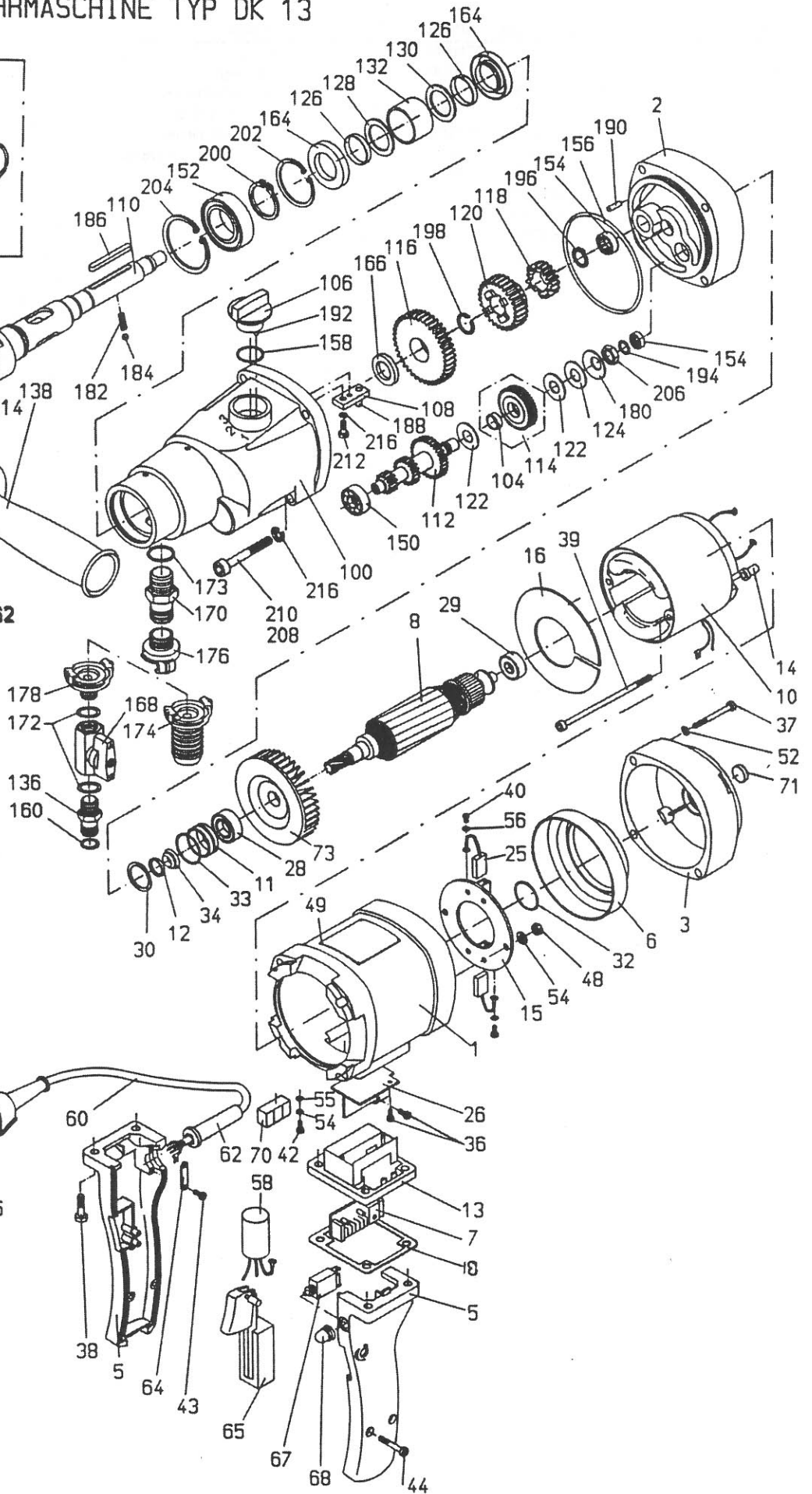
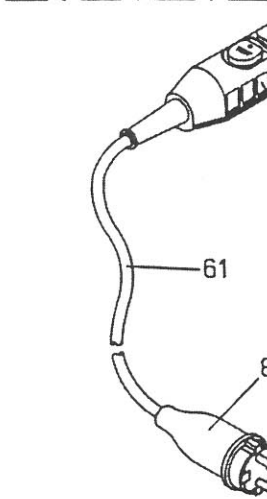
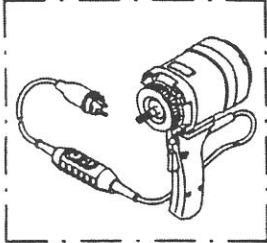
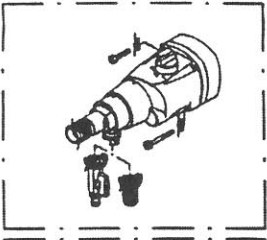
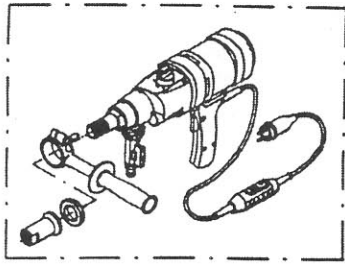
*Fig. 38b. Used on all 110V drills with thermal motor protective switch.

**Slip torque of clutch(pinion shaft out of drill mounted in bench vise) 12-14NM(8.8-10.3 ft-lbs)

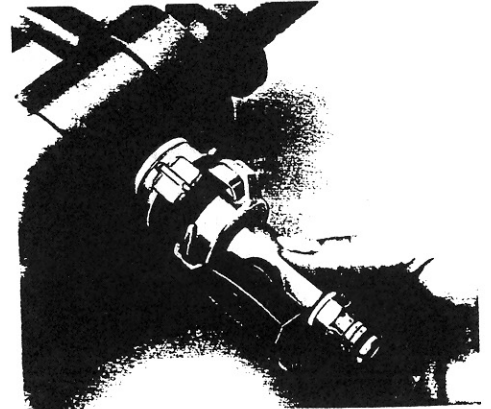
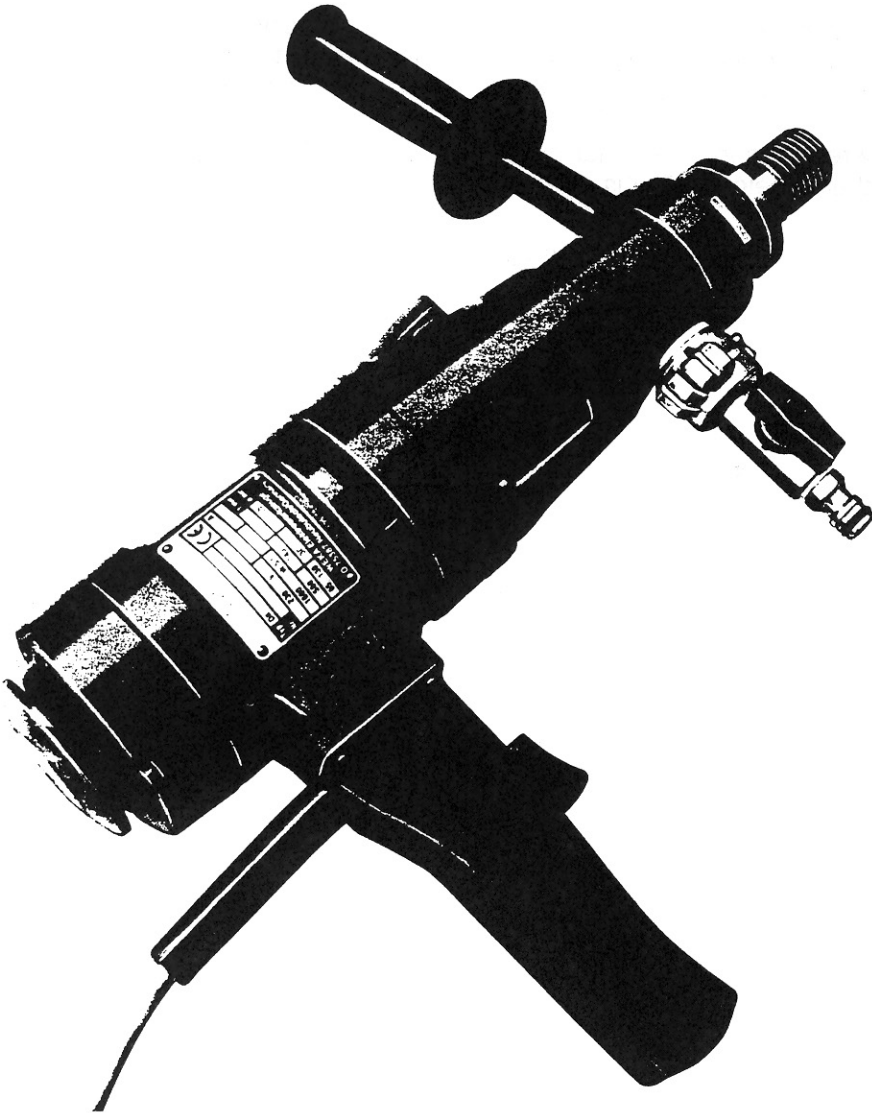
**Overall drill length w/5/8"-11 adapt. = 19.500"

w/o adapt. = 17.000"

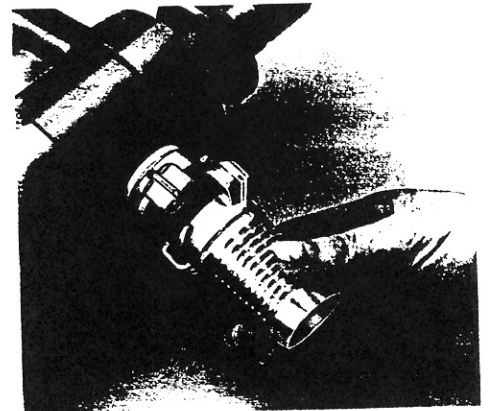
DIAMANT-KERNBOHRMASCHINE TYP DK 13



DK 13 Wet-Dry 3-Speed Diamond-Core Drill



*Coupling ball valve
for wet drilling*



*Coupling exhaust adapter
for dry drilling*

Technical Data

Nominal power	W	1600
Output power	W	1100
Load speed	1/min	580/1400/2900
Length	mm	420
Weight	kg	6,3
Drilling Ø approx.		
in drill stand (concrete)	mm	15 - 130
hand held (concrete)	mm	15 - 60
hand held (bricks)	mm	20 - 150
Tool fixture		1 1/4" + G 1/2" female
Mounting neck Ø	mm	60
suitable Drill rig		KS 13

WEKA
ELEKTROWERKZEUGE

WEKA has combined two machines in one. Without further costly appurtenances or equipments it is possible to drill wet or dry. After simply changing the water- respectively the vacuum-adapter the drill is ready to work.

A special designed sealing system with superposed protective rings allows this combination of water cooling and dust exhausting.

In addition to a high efficiency motor and gearing unit, especially following features are to show:

Universal Operation and high flexibility

The DK 13 is a really flexible core drill. With *one* machine it is possible to produce core boreholes in concrete (water supply) or bricks, respectively masonry (dry with dust exhausting). It is a hand held machine and - if it is required to bore bigger holes - a drill, which can be fitted on a appropriate rig, e.g. the WEKA type KS 13.

The DK 13 is supplied completely with wrenches in a very handy carrying case with a special tray. On the upper side the machine is deposited and below there is space enough for some core bits.

Tool fixture and AF- Element

It is possible, to use drill bits with standard tool fixture 1 1/4" UNC. A tool adapter for G 1/2" bits for wet drilling belongs to the delivery unit.

A new designed Antifriction-Element (AF-Element) fitted on the drill spindle provides for an easy sever the drill bit, i.e. sever torque is reduced to 50%.

Elastic bore piercer

For easy put on the drill bit to work, an elastic bore-on piercer is available (special appurtenance). Especially for exact drill positions this device is an indispensable appliance.

The application is very easy. Before starting the drill insert the bore-on piercer, fix the peak exactly in the centre, drill approximately one mm deep, remove the bore-on piercer and go on with the drilling.

3 - speed gear

Large drilling range (s. techn. Data) with easy speed adjustment to each hole diameter.

Oil-bath lubrication

Optimal gear lubrication for high efficiency and durability.

Overload clutch

Protection for operator as well as machine and tools against mechanical overloads.

An indispensable safety element for hand operated core drills.

Motor protection switch

Protects the motor against electrical overload.

Motorelectronic (optional)

More comfortable operation by soft start and electronic motor protection. The impressed current-time delay characteristic allows short-cycle motoroverloads below the clutch torque largely. After achieving the clutch torque the overload electronic switches off the motor fast. That means more safety and less wear for the machine.

Levelling aid

Two integrated levels enable exact horizontal and vertical working positioning.

Metal Casing

In proportion to plastic cases the aluminium case of WEKA drills is mechanical and thermal more stable and durable.

WEKA and Environment

WEKA electric tools are mainly made of steel and aluminium. Plastics are only used if it is unavoidable. Sandwich material is not to be used.

WEKA electric tools are solidly designed. Scrap-mature machines will be taken to pieces completely and separated materialy. Thereby the machines are 90% recyclable.

Electrical Safety

The DK 13 corresponds to the European regulations, as well to the following normative documents EN 50144-2-1, IEC 745-2-1, EN 50 014, EN 50 082, EN 61 000.

According these documents it is designed with double insulation and supplied with an additional earth wire. The requirement to use electric tools with water supply via a ground fault current interrupter is fulfilled by assembling an Inline Protector between the cord.

WEKA professional electric drills offers a high quality standard combined with a maximum in efficiency. They are designed for permanent and professional operation. Into the DK 12 / DK 14 is combined excellent performance with a high technical standard and these packed in a handy and solid aluminium case.

DK 12 - universal diamond core drilling machine which can be fixed in a drillstand or used as a hand held drill.

DK 14 - standard diamond core drilling machine for operation in the drillstand.

Both versions performs the following features.

3 - speed gear

Large drilling range (s. techn. Data) with easy speed adjustment to each hole diameter.

Oil-bath lubrication

Optimal gear lubrication for high efficiency and durability.

Overload clutch

Protection for operator as well as machine and tools against mechanical overloads.

An indispensable safety element for hand operated core drills.

Motor protection switch

Protects the motor against electrical overload.

Motorelectronic (optional)

More comfortable operation by soft start and electronic motor protection. The impressed current-time delay characteristic allows short-cycle motoroverloads below the clutch torque largely. After achieving the clutch torque the overload electronic switches off the motor fastly. That means more safety and less wear for the machine.

Levelling aid

Two integrated levels enables exact horizontal and vertical working positioning.

Metal Casing

In proportion to plastic cases the aluminium case of WEKA drills is mechanical and thermal more stable and durable.

WEKA and Environment

WEKA electric tools are mainly made of steel and aluminium. Plastics are only used if it is unavoidable. Sandwich material is not to be used.

WEKA electric tools are durable. Scrap-mature machines will be taken to pieces completely and seperated materially.

Thereby the machines are 95% recycable.

Electrical Safety

The DK 12 / DK 14 corresponds to the regulations of the European directives as well as to the European standard EN 50144-2-1 respectively EN 61029-1.

They are designed in double insulation with additional earth wire.



WEKA Elektrowerkzeuge

Auf der Höhe 20

D 75387 Neubulach

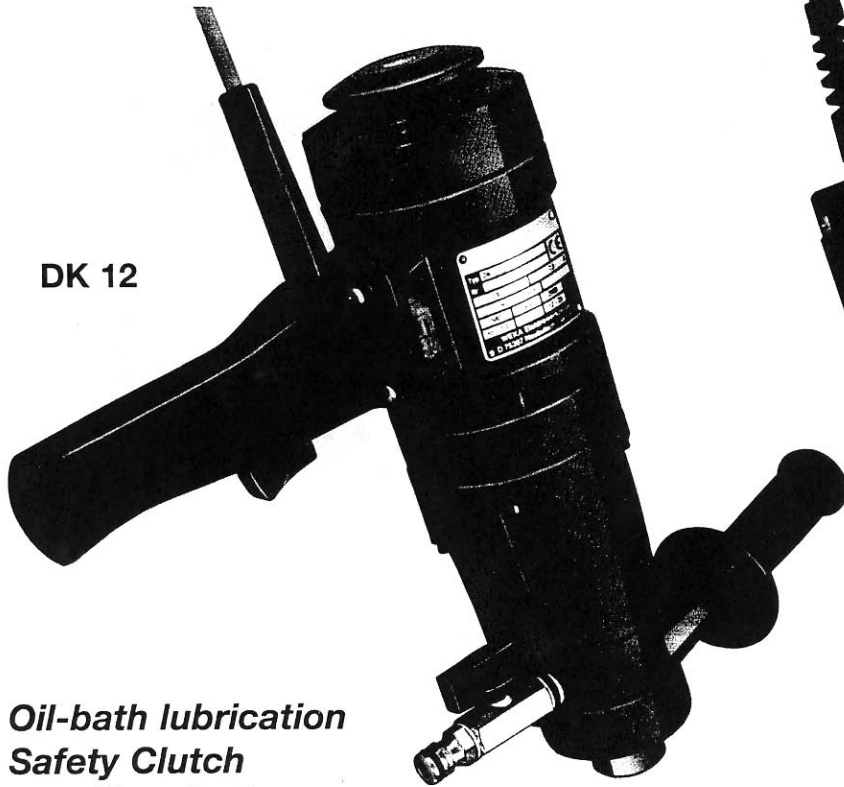
Telephone: ++49 7053 6381

Telefax: ++49 7053 3138

Marketing through / Your local agency

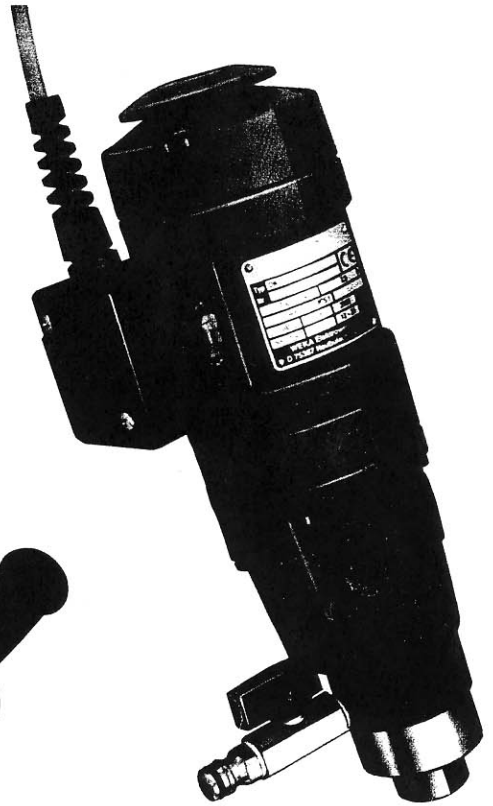
3-Speed Diamond Core Drill DK 12 / DK14

DK 12



***Oil-bath lubrication
Safety Clutch
Levelling device
Electronic soft start and overload protection***

DK 14

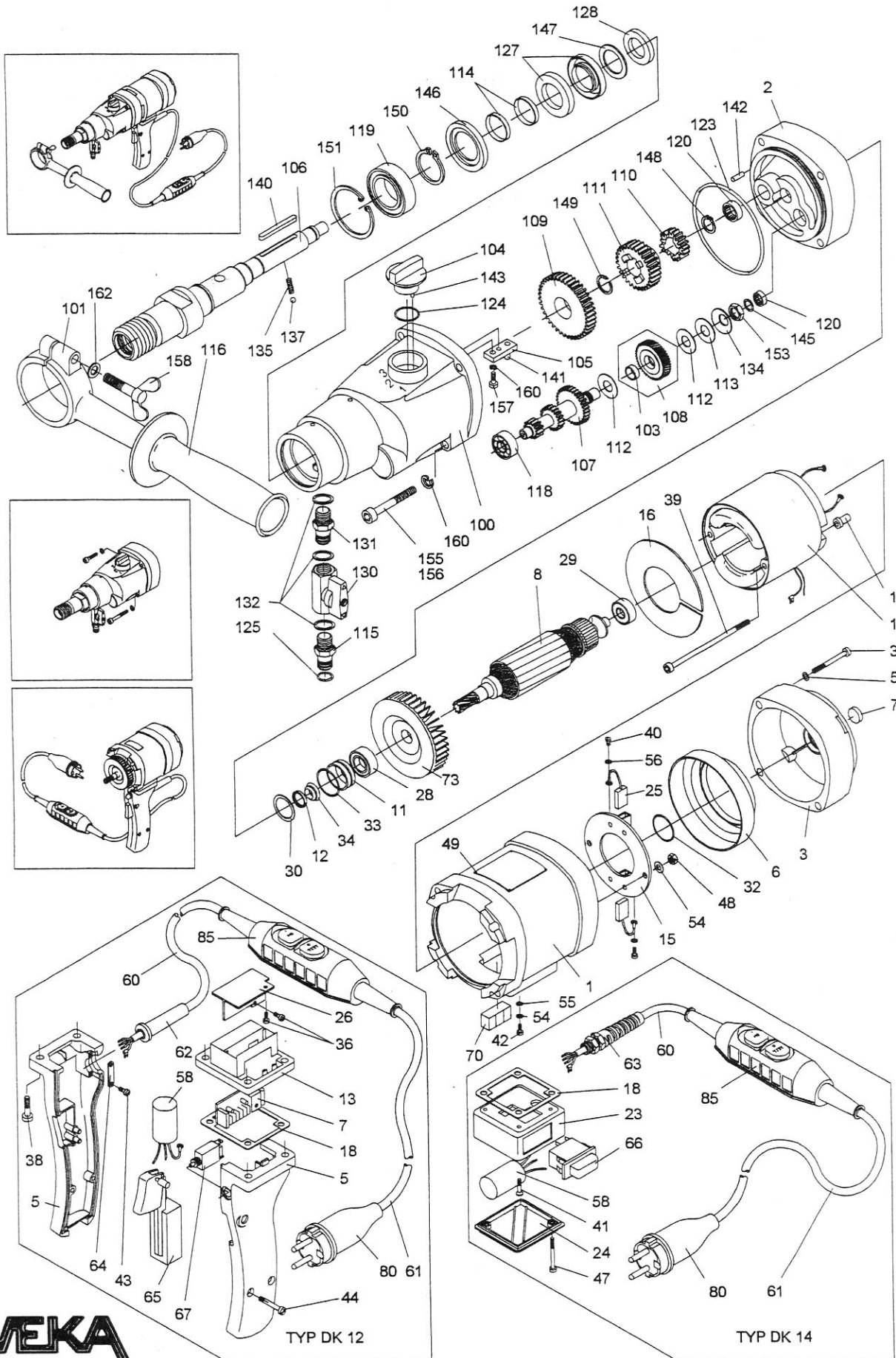


Technical Data:

Type		DK 12/ DK 14
Nominal power	W	1600
Output power	W	1100
Load speed	1 /min	580/1400/2900
Length	mm	350
Weight	kg	5,9
Drilling Ø in concrete c.		
in drill stand	mm	15- 130
hand held	mm	15 - 60
Tool fixture		G 1/2"
Type DK 1203/DK 1403		1 1/4" + G1/2"
Mounting neck Ø	mm	60

WEKA
ELEKTROWERKZEUGE

DIAMANT-KERNBOHRMASCHINE TYP DK 12/14



WEKA

TYP DK 12

TYP DK 14

Fig	Req.	Description	Weka Part	DP Part	Fig	Req.	Description	Weka Part	DP Part
1	1	Motorcase	DK10101	2700650	100	1	Gear Box	DK10201	2700936
2	1	Intermediate Flange	DK10102	2700651	101	1	Clamp Ring	DK12202	2700693
3	1	Motor Top Hood	DK10103	2700652	104	1	Gear Change Grip	DK10203	2700694
n/a	1	Protection Cover(For Top Level)	DK10104	2700653	105	1	Gear Change Lever	DK20205	2700695
5	1	Switch Handle 230V	DK12105	2701453	106	1	Drill Spindle cpl. w. Pos 114,135,137		
	1	Switch Handle 110V	DK12105.11	2701452			Tool Thread G 1/2"	DK10206	2700696
6	1	Insulating Ring	DK10106	2701197			Tool Thread 1-1/4 + G 1/2"	DK10206.3	2701395
7	1	Electronic Module 230V	DK10510	2701383	107	1	Pinion Shaft	DK10208	2700697
	1	Electronic Module 110V	DK10511	2701427	108	1	Clutch Wheel	DK12209	2700698
8	1	Armature w/Fan & Bearings 230V	DK10108	2701334	103	1	Bearing Socket(for clutch wheel)	DK10221	2700699
8	1	Armature w/Fan & Bearings 110V	DK10108.11	2700655	109	1	Gear Wheel 1	DK10212	2700700
10	1	Field compl. 230V	DK10109	2701335	110	1	Gear Wheel 3	DK10213	2700701
	1	Field compl. 110V	DK10109.11	2700656	111	1	Slide Gear Wheel	DK10214	2700702
11	1	Seal Bush	DK10113	2700657	112	2	Brake Disk	DK10218	2700703
12	1	Fixing Ring	DK10114	2700658	113	1	Pressure Disk	DK10219	2700704
13	1	Electronic Case 110V & 230V	DK10135	2701354	114	2	Protective Sleeve	DK10220	2700643
14	2	Fieldscrew Insulating Sleeve	DK10116	2700659	115	1	Quick Connect Nipple	DK20225	2700706
15	1	Brush Holder Disc	DK10117	2700660	116	1	Handle	DK12 8900014	2700707
16	1	Air Conducting Disk	DK10118	2700662	118	1	Ball Bearing	629 6062900	2700948
17	1	Mounting Plate 110V	DK12 DK10119	2700661	119	1	Ball Bearing	6005 2RS 6060052	2700708
	1	Mounting Plate 230V	DK12 DK12120	2701384	120	2	Needle Bush	HK1010 6310100	2700709
18	1	Terminal Case Packing	DK12 DK10122	2701567	123	1	O-Ring	RDR78x2 5578002	2700710
25	2	Carbon Brush 230V	DK10125	2701336	124	1	O-Ring	RDR20x3 5520003	2700711
	2	Carbon Brush 110V	DK10125.11	2700663	125	1	O-Ring	RDR11x2.5 5511025	2700712
26	1	Cooling Profile 110V & 230V	DK10140	2701385	127	2	Rotary Shaft Seal	AD24x40x7 5024407	2700713
28	1	Ball Bearing	6060011	2700664	128	1	Rotary Shaft Seal	AD22x35x7 5022357	2700714
29	1	Ball Bearing	6060002	2700665	130	1	Ball Valve with Grip	G1/4"i/I 7014001	2700715
30	1	Compensation Washer	2628171	2700666		1	Grip	7014005	2700925
32	1	O-Ring RDR26x2.5	4526025	2700667	131	1	Double Nipple	G1/4"a 7014002	2700716
33	1	O-Ring RDR24x1.5	4524015	2700668	132	3	Sealing Ring	G1/4" 7014003	2700717
34	1	V-Seal	5112000	2700669	134	1	Disk Spring	4028142	2700718
36	1	Thread Roll.Head Screw M4X6	0504006	2701386	135	1	Pressure Spring	0.5x3.2x16 4305016	2700719
37	4	Hex. Soc. Head Screw M5x35	0105035	2700670	137	1	Ball	RB-4 2204000	2700720
38a	*4	Raised Head Screw M5x25 DK12	0205025	2701203	140	1	Parallel Key	A5x5x40 3005040	2701087
38b	*4	Raised Head Screw M5x20 DK12	0205020	2700671	141	1	Parallel Pin	5m6x16 2505016	2700721
39	2	Fill. Head Screw M4x100	0204100	2700672	142	1	Parallel Pin	4m6x10 2504010	2700722
40	2	Fill. Head Screw M3x5	0203005	2700673	143	1	Parallel Pin	3m6x16 2503016	2700723
42	2	Sl. Pan Head Screw M4x6	0304006	2700674	145	1	Shim Ring	PS10x16x1 1910161	2700724
43	2	Pan Head Tapping Screw DK12	0539095	2700675	146	1	Supporting Ring	DK10204	2700992
44	2	Pan Head Tapping Screw DK12	0539019	2700676	147	1	Shim Ring	PS25x40x0.3 1925403	2701088
48	2	Hexagon Nut M4	1004000	2700677	148	1	Retaining Ring	AV14 3514001	2700726
49	4	Round Head Grooved Pin 2.3x4	2223004	2700678	149	1	Retaining Ring	SW18 3618000	2700727
52	4	Locking Washer SM5	1805000	2700735	150	1	Retaining Ring	25x1.2 3525012	2700728
54	3	Curved Spring Washer A4	1804137	2700680	151	1	Retaining Ring	47x1.75 2547175	2700729
55	1	Medium Washer 4.3	1804433	2700681	153	1	Hexagon Nut	BM12x1.5 1012015	2700730
56	2	Medium Washer 3.2	1803433	2700682	155	1	Hex. Soc. Head Screw	M5x80 0105080	2700731
58	1	Int. Suppr. Capacitor	DK10130	2700683	156	3	Hex. Soc. Head Screw	M5x50 0105050	2700732
61	1	Cord 110V/230V AWG 14	8738151	2700684	157	1	Hex. Soc. Head Screw	M5x16 0105016	2700733
62	1	Cord Sleeve	DK12 8701000	2700685	158	1	Wing Screw	M6x40 DK12 0506040	2700734
64	1	Cord Clamping Piece	DK12 8800010	2700686	160	5	Locking Washer	SM5 1805000	2700735
65	1	Motor Switch 110V/230V	DK12 8015212	2701454	162	1	Medium Washer	A 6 DK12 1806125	2700736
67	1	Motor Protective Switch 110V	8010615	2700688			Pointing Sticker	DK20620	2700737
68	1	Knurled Nut	DK12 8001001	2700689			Gear Oil 80W-90	4 oz 9012001	2700738
70	1	Tube Water-Level	7510029	2700690			Ball Valve Assembly(water shut-off)	7014000	2700806
71	1	Tin Water-Level	7500015	2700691					
73	1	Fan	DK20105	2700692					

NOTES: *Fig. 38a. Used on all 110V & 230V drills with electronic overload module.

*Fig. 38b. Used on all 110V drills with thermal motor protective switch.

****Slip torque** of clutch(pinion shaft out of drill mounted in bench vise) 12-14NM(8.8-10.3 ft-lbs)

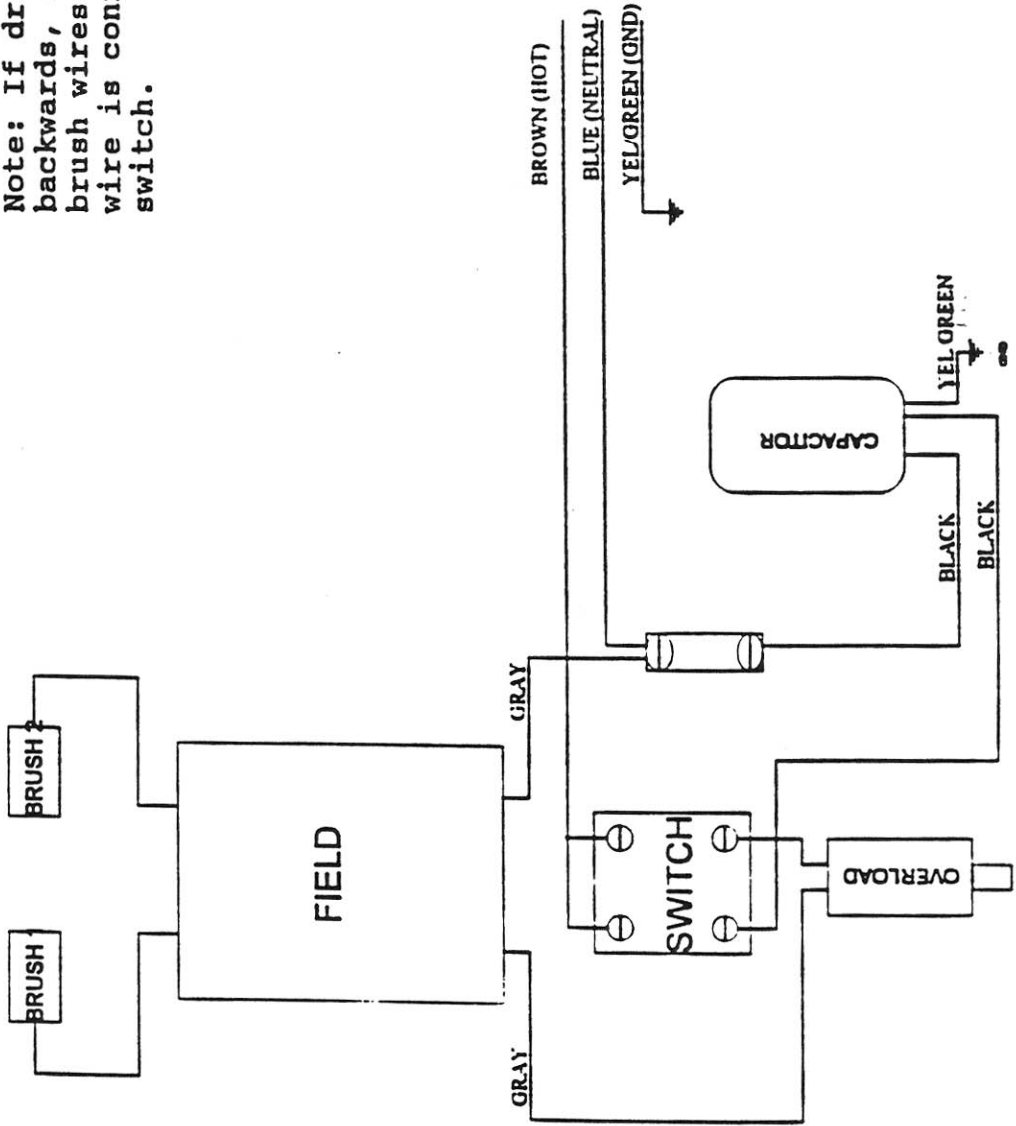
**Overall drill length w/drill spindle G 1/2"(old style DK10206) w/5/8"-11 adapt. = 15.750"

w/1-1/4"-7 adapt. = 16.750"

**Overall drill length w/drill spindle 1-1/4" + G 1/2"(new style DK10206.3) = 16.000"

w/ 5/8"-11 adapt. = 18.000"

Note: If drill rotates backwards, interchange brush wires 1 and 2. Brown wire is connected to switch.



DK-12 Hand Drill

DATE	APR 1964
BY	J. J. W. / J. H. M. / J. H. M.
CHKD	J. H. M.
APP'D	J. H. M.
REV	

Intentionally Blank

EQUIPMENT AND PARTS WARRANTY

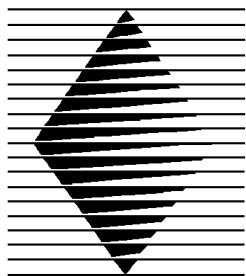
Diamond Products warrants all equipment manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to Customer.

The responsibility of Diamond Products under this Warranty is limited to replacement or repair of defective parts at Diamond Products' Elyria, Ohio factory, or at a point designated by it, of such parts as shall appear to us upon inspection at such parts, to have been defective in material or workmanship, with expense for transportation and labor borne by Customer.

In no event shall Diamond Products be liable for consequential or incidental damages arising out of the failure of any Product to operate properly.

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