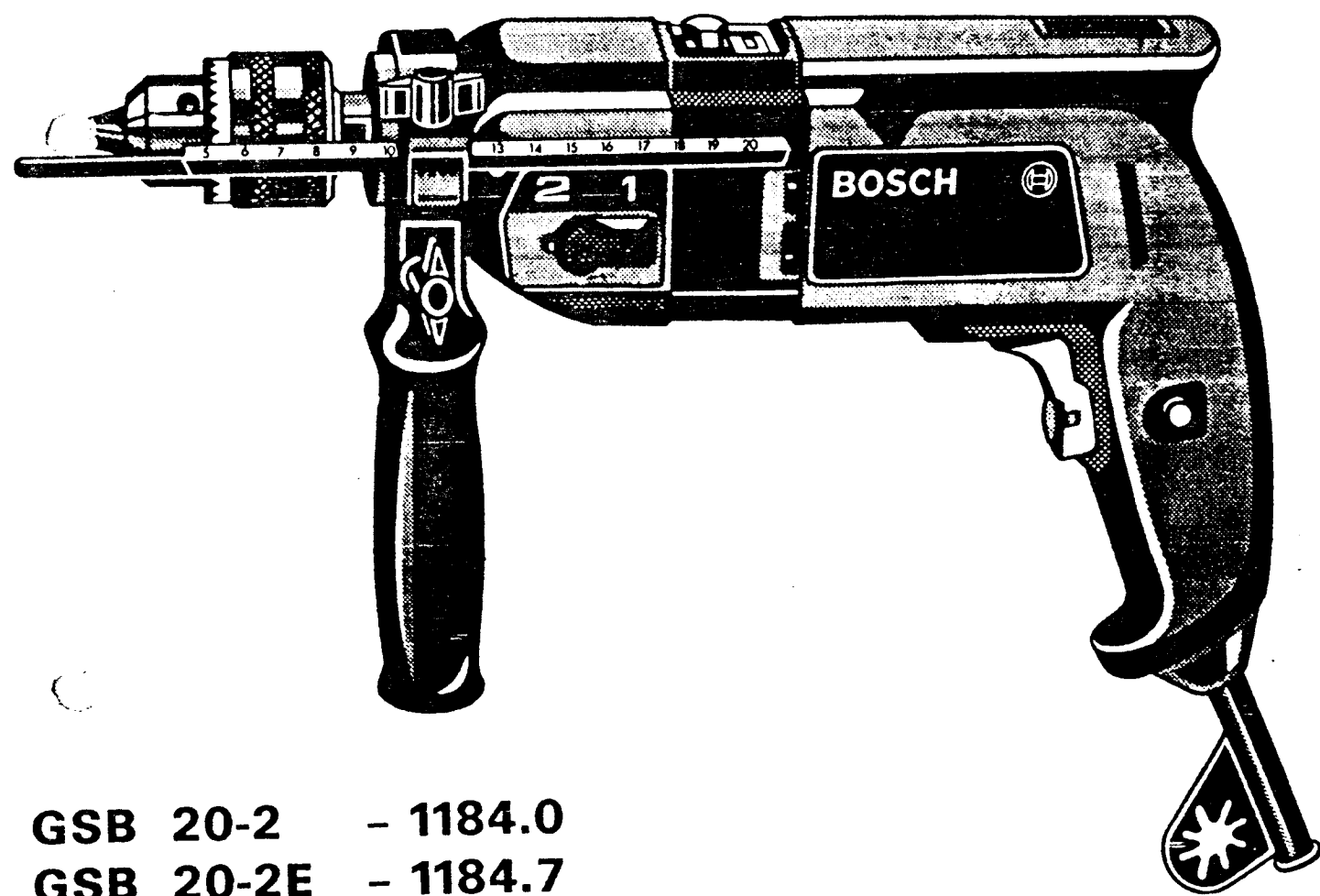




BOSCH

Schlagbohrmaschine
Perceuse à percussion
Hammer Drill
Taladradora a percusión
Trapani battenti
Slagboremaskine
Slagbormaskin
Slagboormachines
Iskuporakone

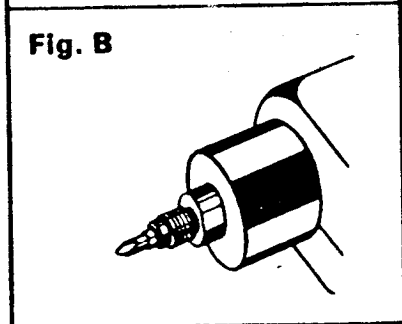
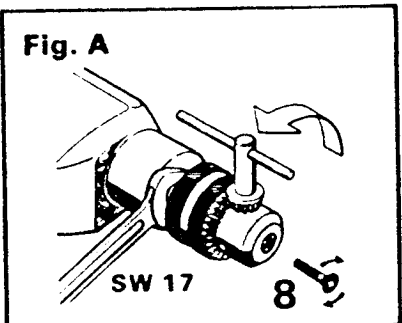
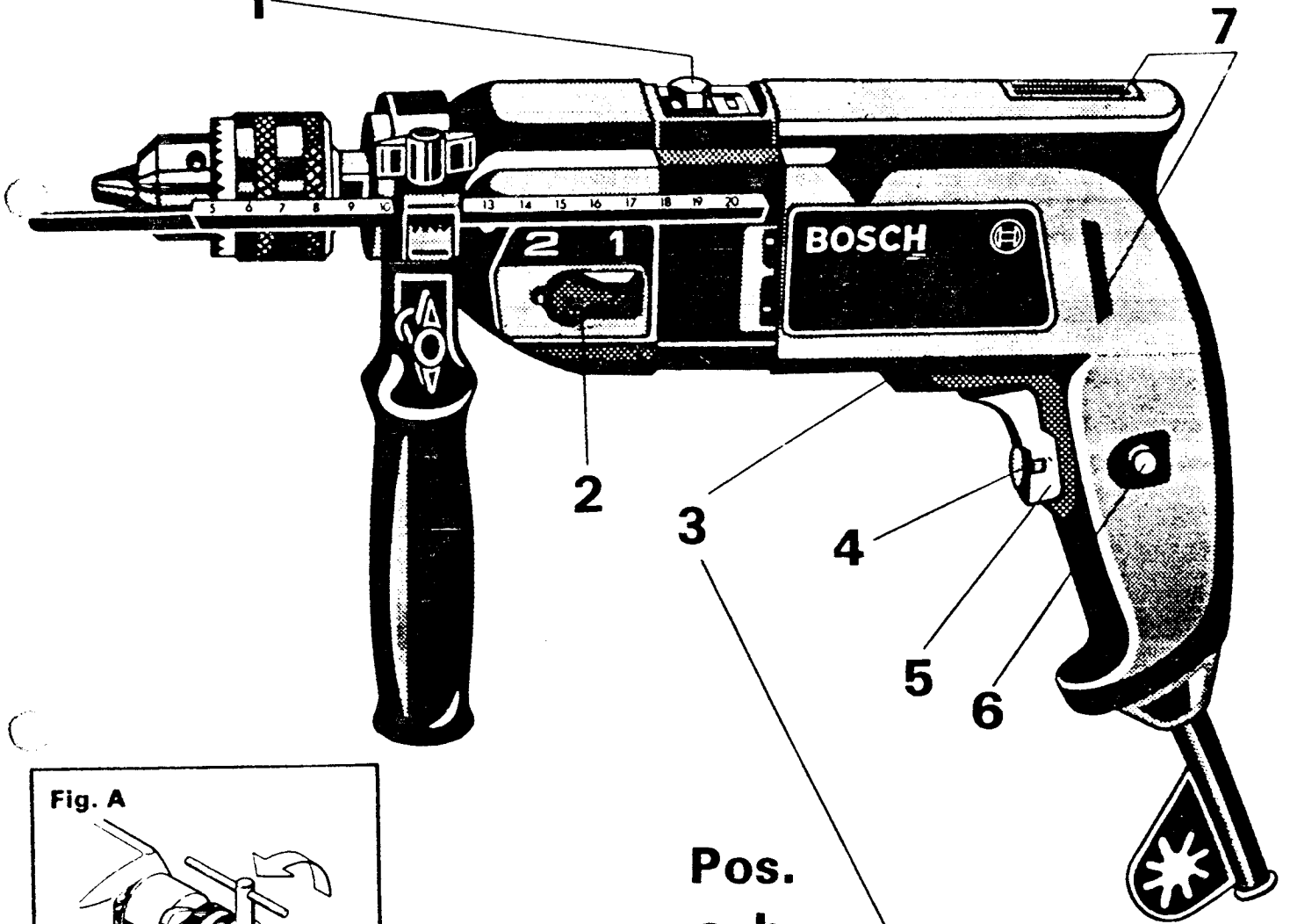
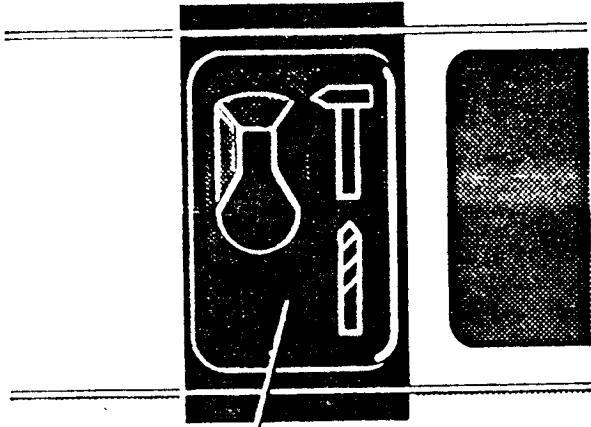


GSB 20-2 - 1184.0
GSB 20-2E - 1184.7
GSB 20-2RE - 1194.7

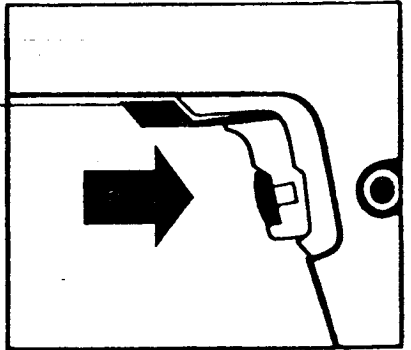
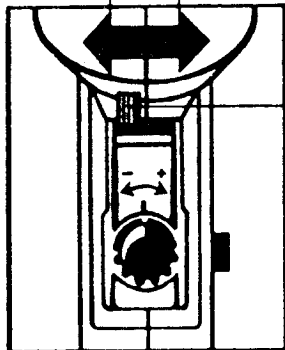


Dieses Elektrowerkzeug ist
entsprechend den Richtlinien
76/889/EWG + 82/499/EWG bzw.
DIN 57875/VDE 0875 funkentstört.

Bedienungsanleitung
Instructions d'emploi
Operating Instructions
Instrucciones de manejo
Istruzioni d'uso
Betjeningsvejledning
Bruksanvisning
Gebruiksaanwijzing
Käyttöohje



**Pos.
a b**



Operating Instructions for the all-insulated, two-speed Impact Drills BOSCH GSB 20-2, GSB 20-2E and GSB 20-2RE



English

Technical Data	GSB 20-2 1184.0	GSB 20-2E 1184.7	GSB 20-2RE 1194.7	
Power Input	701	701	701	W
Power Output	380	380	380	W
Full load speed, right hand rotation	650/2000	0-650/0-2000	0-650/0-2000	r.p.m
Full load speed, left hand rotation	-	-	0-650/0-2000	r.p.m
No. of impacts at full load, right hand rotation	10400/32000	0-10400/0-32000	0-10400/0-32000	/min
Drilling capacity in concrete	20/13 (3/4 / 1/2)	20/13 (3/4 / 1/2)	20/13 (3/4 / 1/2)	mm (")
in steel	13/8 (1/2 / 1/4)	13/8 (1/2 / 1/4)	13/8 (1/2 / 1/4)	mm (")
in wood	40/25 (1 5/8 / 1)	40/25 (1 5/8 / 1)	40/25 (1 5/8 / 1)	mm (")
Spindle thread	1/2" x 20 UNF 2	1/2" x 20 UNF 2	1/2" x 20 UNF 2	
Chuck capacity	1,5-13 (1/16 - 1/2)	1,5-13 (1/16 - 1/2)	1,5-13 (1/16 - 1/2)	mm (")
Weight without cord and chuck	approx. 2,2 (4,8)	approx. 2,2 (4,8)	approx. 2,2 (4,8)	kg (lbs.)

Safety Instructions

Refer to enclosed sheet 1 609 929 150.

General

These 3 Impact Drills distinguish themselves particularly by the correct ergonomic form, the two-speed draw key transmission and the high power.

Besides conventional drilling and impact drilling work, the models GSB 20-2E and GSB 20-2RE offer, due to the electronic switch, additional features such as starting a hole without centre punch, drilling of ceramics and glass, setting of screws and nuts and also tapping.

The model GSB 20-2RE has an incorporated reversing switch which allows also the removal of screws and nuts.

Electrical connection

Important!

The machine should be connected only to a power supply of the same voltage as indicated on the nameplate.

Connect the Impact Drill to the power supply only if the switch is in the «OFF» position.

All insulation of the Impact Drill ensures the user maximum safety, even when drilling into live wires.

The tool may be connected to all types of wall sockets and extension cords, even to those without protective earthing contact.

Important!

Instruction for connecting 2-core cable to plug.

The wires in the mains cable are coloured in accordance with the following code:

blue = neutral

brown = live

Do **not** connect blue or brown to earth terminal in plug.

Switch

Type GSB 20-2

Momentary running:

The machine is switched on or off by pressing or releasing the large trigger 5.

Continuous running:

The trigger 5 can be held in the «ON» position by depressing the button 6 on the side of the grip. It can be released by quickly pressing the trigger 5 which then returns automatically to the «OFF» position.

Type GSB 20-2E and GSB 20-2RE

The Impact Drills GSB 20-2E and GSB 20-2RE are equipped with an electronic switch which permits a continuous speed control. It is possible to adapt the speed of your drill according to the type of work being performed, i.e. low speed for starting the hole without centre punch, for reaming, for setting wood screws, etc. Operation is very simple: Low pressure - low speed, increased pressure - increased speed.

In addition it is possible to pre-set the desired speed with the adjusting knob 4 which is built into the trigger. The pre-set speed can be locked in with the small button 6 on the side. You also have the possibility of changing the speed, even in the locked in position, by simple turning the adjusting knob.

The mechanical 2-speed gear also allows speed reduction with full motor output for large drill diameters.

Continuous running: see GSB 20-2.

Basically, 1st gear should be used for lower speeds. By doing this you will have the required high torque for such work at the drill spindle available.

If the Drill is to be used in the lower electronic speed settings, it should be run from time to time at the highest speed setting at no load to cool the motor sufficiently and bring it to its normal operating temperature.

Reversing switch

Only type GSB 20-2RE

With the incorporated reversing switch 3 the sense of rotation can be changed. Due to this, the range of application of this tool is substantially enlarged, for example for the removal of screws and nuts, etc.

Setting direction of rotation:

Position a: **Right hand rotation**

Position b: **Left hand rotation**

Important:

Only reverse the direction of rotation when the motor is at standstill.

An interlock in the trigger prevents reversing when switched on. The reversing switch can only be activated when main switch is in the off position.

Attention:

The Impact Drill GSB 20-2RE has to be set on right hand rotation when impact drilling.

Gear part and impact mechanism**Change of speed**

The Impact Drills have a 2-speed draw key transmission. It can best be shifted during runout or at standstill. Turn lever **2** by 180° into the opposite position.

The lever comes to a click stop in the position 1 and 2 (first and second gear). **If it cannot be switched at standstill, turn the chuck by hand until the gears engage and the lever can be shifted into the desired position.**

Change from drilling to impact drilling

You can select between drilling and impact drilling with the lever **1** on top of the Impact Drill. For drilling bring the lever into the position of the drill bit symbol, for impact drilling turn lever by 180° into the position of the hammer symbol. The lever comes to a click stop when set properly.

Attention:

The Impact Drill GSB 20-2RE has to be set on right hand rotation when impact drilling.

Operating hints

Drilling in concrete, rock and masonry is generally done with engaged impact mechanism.

When drilling delicate materials such as wall and other tiles, it is essential to start with ordinary drilling and, once the tile is pierced, to continue with impact drilling.

In deep boreholes the drill bit should be pulled out occasionally in order to remove the dust and chippings from the hole.

Taking off drill chuck (Fig. A)

The drill chuck of the Impact Drill GSB 20-2RE is secured on the spindle with a screw **8**. To remove the chuck from the spindle, open the chuck jaws and completely remove the securing screw.

Attention:

The securing screw is left-hand threaded.

Screwdriving (Fig. B)

After removal of the drill chuck, the screwdriver bit can be inserted in the internal hexagon of the drill spindle. The bit is secured by a retaining ring.

When screwdriving, turn lever **1** to the position "Drilling".

Important:

The enclosed side handle is to be utilized for safety reasons (reaction moment).

Maintenance and lubrication

Before starting any work on the machine, pull the plug out of the wall socket.

The ventilation openings **7** for cool air must be kept free and clean. Damaged plugs and cords must be replaced immediately for your own safety. If the cord on an all-insulat-

ed tool has to be replaced, **never** connect an earthwire. Provide the gearbox with new grease after each second brush change. A BOSCH service station will be glad to do this job for you speedily and efficiently.

Carbon brushes and commutator

Before starting any work on the machine, pull the plug out of the wall socket.

The carbon brushes switch off when a replacement becomes necessary. For replacement use only original BOSCH carbon brushes.

Order number for one pair, 2 604 321 905.

If the commutator shows signs of scorching or burnt spots, it should be resurfaced before new brushes are fitted. **Never clean commutator with emery cloth!**

A BOSCH service station will be glad to do these jobs for you speedily and efficiently.

Standard accessories

1 additional handle complete
1 depth gauge
1 chuck with key

Special accessories

Drill stand	0 603 040 201 or ... 301
Carrying case	2 605 438 213

Guarantee

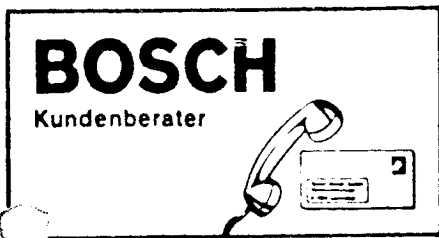
We guarantee BOSCH tools for six months from the date of purchase (proof through invoice or delivery slip). Defects which are due to normal wear and tear, overload or misuse are not covered by this guarantee. In case of complaint, please send the machine, undismantled, to your dealer or the nearest BOSCH service station for electric power tools.

This electric tool is radio and TV suppressed in compliance with the Directive of the European Communities 76/889 + 82/499.



BOSCH

Typ: 0 600 000 000
000 V~ 00 Hz
000/min
<input type="checkbox"/>



Hinweis/Note/Avis

Geben Sie bitte bei allen Rückfragen **unbedingt** die 10stellige Bestellnummer **Ihrer Maschine** an!

Be sure to name the 10-digit order number of **your machine** on all inquiries.

Veillez **toujours** indiquer le numéro de commande de **votre machine** pour toutes questions!

Der besondere Service

Unser Kundenberater hilft Ihnen gern bei kniffligen Fragen zur Technik und zum Kundendienst. Schreiben Sie uns, oder rufen Sie uns zum Ortstarif unter Nr. 01 30 79 03 an. Wir rufen auch zurück, um Ihnen Kosten zu ersparen.

Ausserhalb der Geschäftszeit nimmt ein automatischer Anrufbeantworter ihren Anruf auf.

SCINTILLA AG
Geschäftsbereich Elektrowerkzeuge
CH-4501 Solothurn/Schweiz