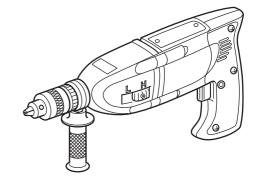


Models No. ► 8419B-2

Description ► 19mm 2-speeds Hammer drill

CONCEPTION AND MAIN APPLICATIONS

The changing mood for rotation only / rotation and hammering can be changed by turning of change ring and also speed can be changed in two speeds to allow suitable speed for their usage. Additionally the machine can be mounted on 43 Type drill stand.



► Specifications

Voltage(V)	Current(A)	Cycle(Hz)	Continuous rating input(W)
Single phase 100	6.3	50-60	600

No load speed	High speed 2,300/min., Low speed 900/min.		
Blows per minute	High speed 46,000/min., Low speed 18,000/min.		

Max.	Speed change Usage	High speed	Low speed
drilling	Concrete	14mm	19mm
capability	Steel	Steel plate 6.5mm, aluminum 13mm	Steel plate 13mm
	Wood	18mm	30mm

Overall length	350mm
Net weight (kg)	3.0kg
Power supply cord	2.5m
Insulating classes	Double insulation

► Standard equipment

No.	Name	Part Number	Quantity	Usage
1	Grease assembly	1230563	1	Used as side handle.
	Grip 32	2734356	1	For grip assembly
	Grip base	3129762	1	For grip assembly
	Belt	3425213	1	For grip assembly
	Cap square neck bolt M6x30	2519553	1	For grip assembly
	Chuck complete S13	7632066	1	

► Optional accessories

No.	Name	Part Number
1	T.C.T. drill 5-70	7110236
2	T.C.T. drill 6.5-80	7110038
3	T.C.T. drill 7.5-90	7110245
4	T.C.T. drill 8.5-100	7110047
5	T.C.T. drill 8.5-180	7110263
6	T.C.T. drill 11-120	7110056
7	T.C.T. drill 14-150	7110254
8	T.C.T. drill 14-180	7110272
9	T.C.T. drill 14-300	7110281

No.	Name	Part Number
10	T.C.T. drill 16-220	7110399
11	T.C.T. drill 19-220	7110407
12	Hole saw 79	1230347
13	Hole saw 95	1230338

► Disassembling / Assembling

Disassembling method

Disassemble the machine unit according to following procedure referring disassembled figure in next page.

- Removing of drill chuck.
- Removing of handle cover

Handle cover can be removed by loosening three pan head screws M4x28 using Phillips screwdriver. Be sure to be careful not to loose M4 spring washer and hexagonal M4 nut for motor housing side at this removing.

- Removing of brush holder and carbon brush.
- Removing of motor housing and gear housing cover.

Remove four M5x45 pan head screws mounted on motor housing. Then motor housing and gear housing can be removed and at the same time armature that is inserted 608LLB ball bearing and dust seal 8 on its front side and insulation washer and 627LB ball bearing on its rear side can be removed. At this time be sure to be careful not to loose rubber pin 4 and flat washer 14 in housing at bearing inserted portion.

- Removing of gear housing cover and gear complete 9-19-41.

 Gear housing cover can be removed easily by inserting minus drivers into both sides holes and pry the driver a little. Gear complete 9-19-41 that is ball bearings are mounted at both sides also are removed.
- Removing of change lever, shifter rod complete, and gear complete 39-49

 Change level can be removed together with compression spring 5 by loosening minus M4 flat head screw. Then shifter rod complete and gear complete 39-49 are removed at the same time.
- Removing of spindle

Detach stop spring E-10 from gear housing to remove spindle from housing then change ring also be removed together. Remove retaining ring (hole) R-32 and push toward spline side to remove spindle from change ring then spindle is removed together with dust seal 20.

• Removing of cam A and cam B

Turn cam A toward clockwise direction using spanner to remove cam A from spindle because cam A is tightened with left-handed screw. Removing of cam A also allow removing of 600ZLLB ball bearing. Insert tool into minus groove at cam B and turn to counter-clockwise direction to remove cam B from gear housing because cam B also is tightened by left-handed screw.

► Assembling method

Assembling can be achieved by just reverse order from disassembling procedures paying attention for following points. (Refer to figure below.)

- Apply adequate grease to cam portions and gear portions before inserting.
- Center alignment is required between É"7 portion of shifter rod and É"9 portion of gear housing to mount change lever.

