



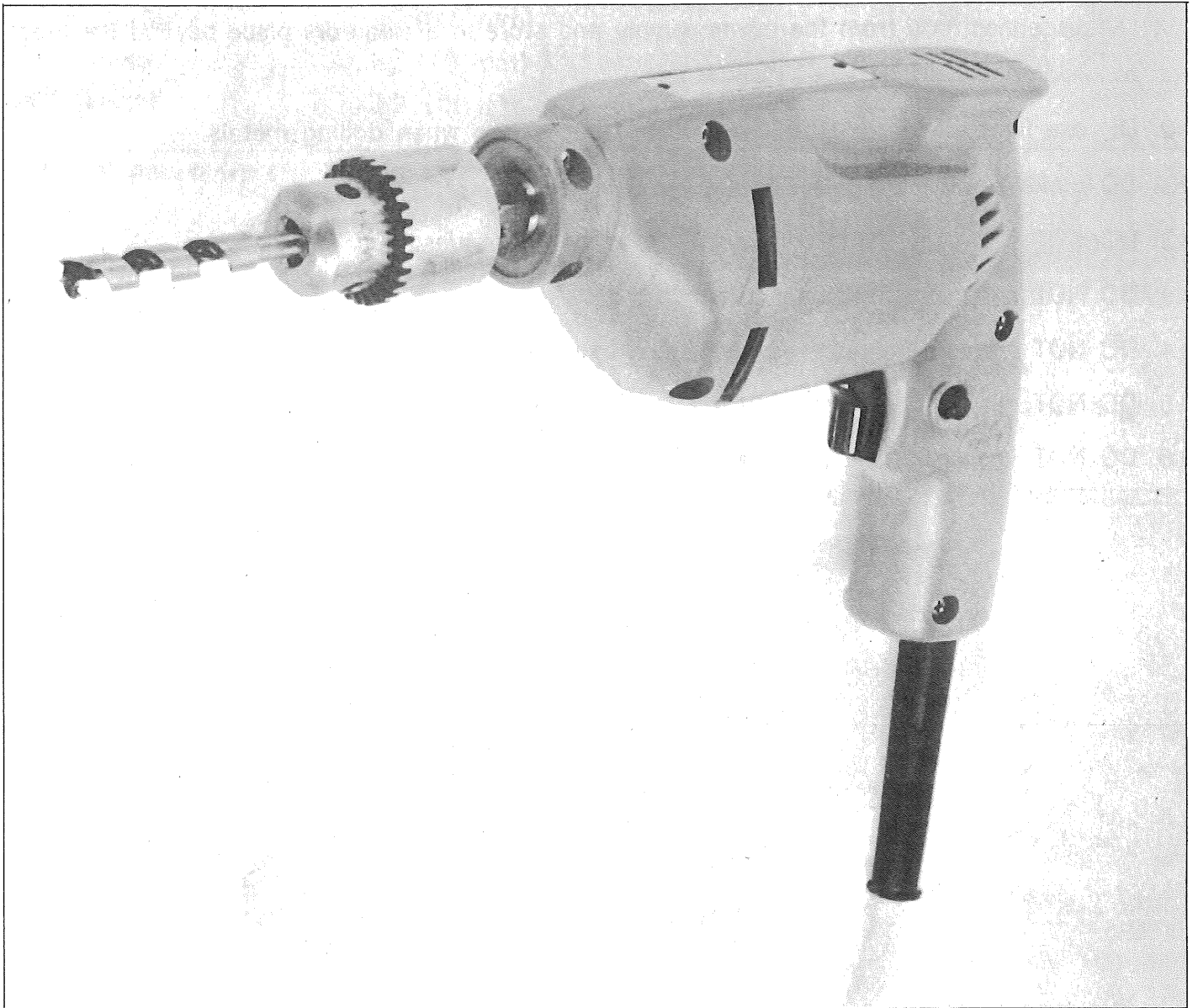
**$\frac{3}{8}$ " ELECTRIC DRILL**

**MODEL NO. D-680**

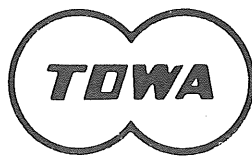
**DOUBLE INSULATED**

**OWNER'S  
OPERATING  
MANUAL**

**BE SURE TO READ THIS OWNER'S MANUAL THOROUGHLY BEFORE USING YOUR TOOL**



**TOWA ELECTRIC IND. CO., LTD. NAGOYA, JAPAN**



## ● INSTRUCTIONS TO CUSTOMER

1. DO read this manual before using your drill.
2. DO be sure the voltage of the power supply agrees with the data on the nameplate.
3. DO be sure the switch is in OFF position before connecting drill to the power supply.
4. DO be sure working area is clean.
5. DO keep away children from working area and not allow them to operate drill.
6. DO disconnect your drill from the power supply, when not in use, when cleaning, changing bits, attachments, carbon brushes or doing maintenance.
7. DO insert drill bit in the chuck the full length of the jaws.
8. DO use Towa's replacement parts only.
9. DO disconnect drill from the power supply and store in a clean dry place beyond the reach of children.
10. DO use light oil on drill bits to prevent overheating when drilling metals.
11. DO make small pilot hole when working in metals.
12. DO NOT force tool, allow drill to perform as it was designed.
13. DO NOT carry drill by power cord.
14. DO NOT change direction while drill is running.
15. DO NOT carry drill with the switch in ON position.
16. DO NOT keep drill running when not in use.



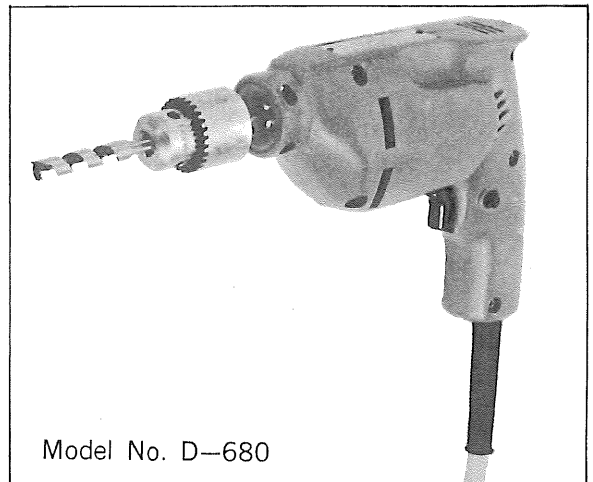
## FEATURES

\* DOUBLE INSULATION assures complete safety against electric shock.

\* LIGHT WEIGHT: only 2.2g1bs.

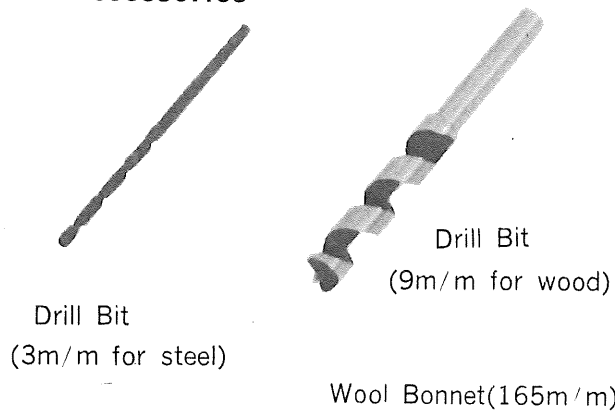
### ● SPECIFICATIONS

Motor	240 V
	Single Phase 50~60 Hz
Ampere	1.2 A
Input	260 W
No Load Speed	2,600 R. P. M.
Capacity:	
Wood	5/8" (15 mm)
Steel	1/4" (6.5 mm)
Drill Chuck	3/8" (10 mm)
Net Weight	2.2 lbs. (1kg)

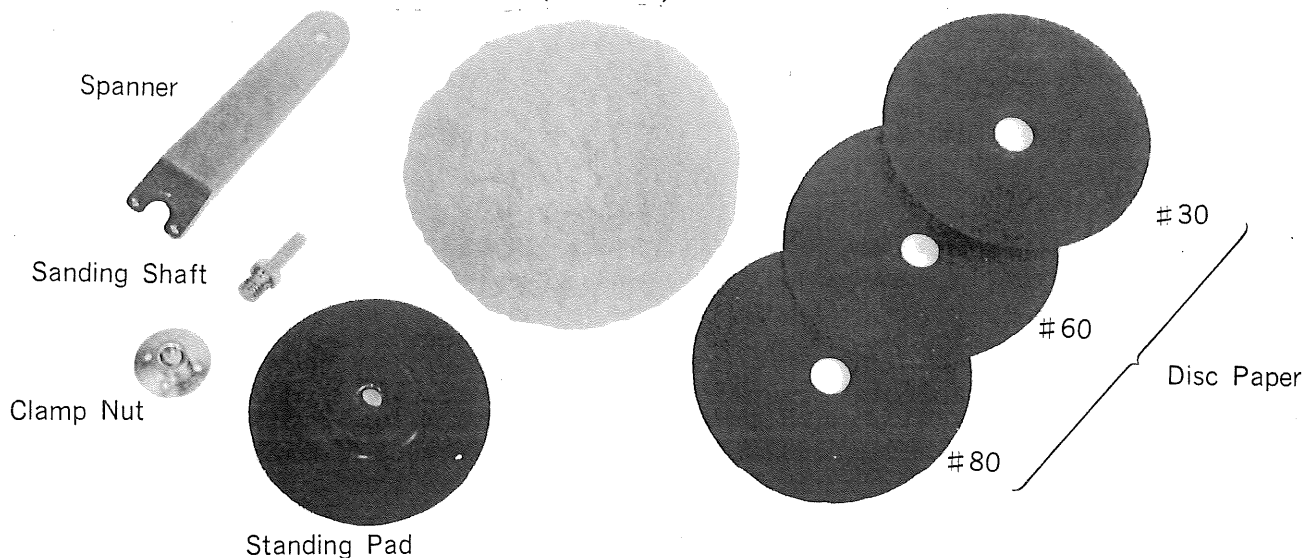
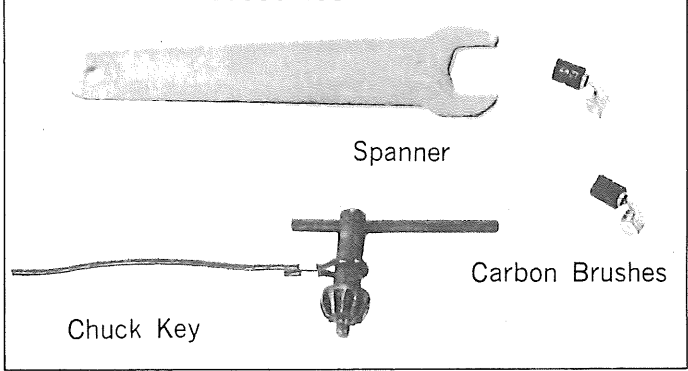


Model No. D-680

### Special Accessories



### Standard Accessories

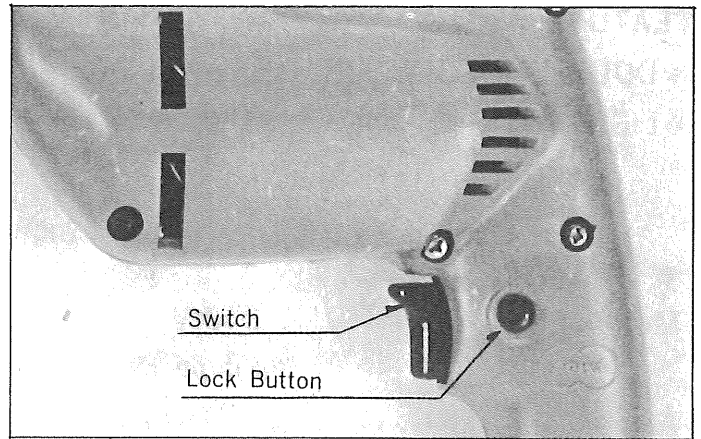


### ● SWITCH

Depress trigger switch to start drilling and release switch to stop.

The lock button may be engaged while trigger is depressed.

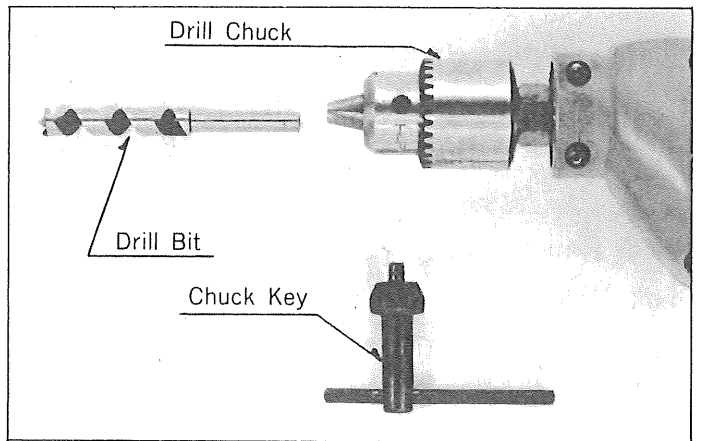
This locking mechanism may be easily released by depressing trigger switch again.



### ● MOUNTING OF DRILL BIT

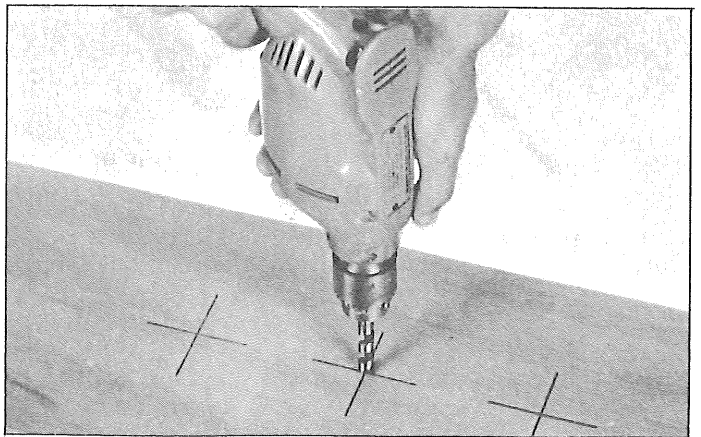
Insert the chuck key in the chuck using the three holes on the chuck in turn and turn the key counter-clockwise to wide open chuck jaws.

Insert a drill bit and close the chuck jaws by turning the key in a clockwise direction.



### ● DRILLING IN WOOD

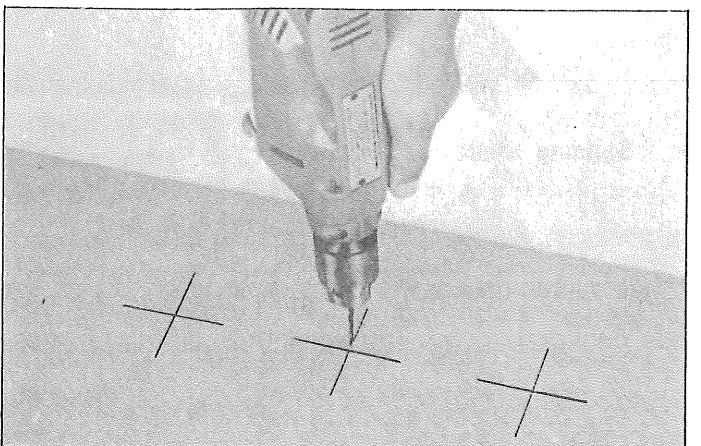
To prevent ugly splits around the drilled hole on the reverse side of lumber, place a scrap lumber beneath the material to be drilled.

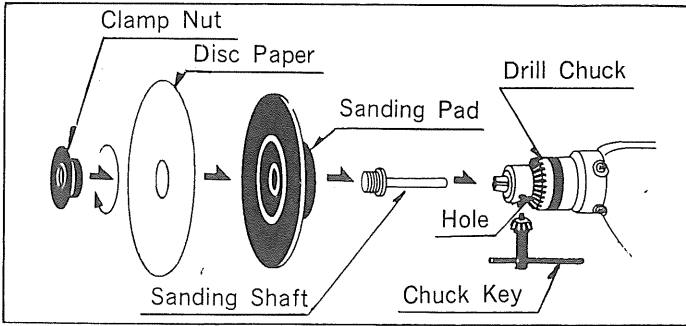


### ● DRILLING IN METAL

Metals such as steel sheets, brass and aluminum sheets, stainless steel, pipe may also be drilled.

Before drilling, mark the point to be drilled with a nail or a punch.





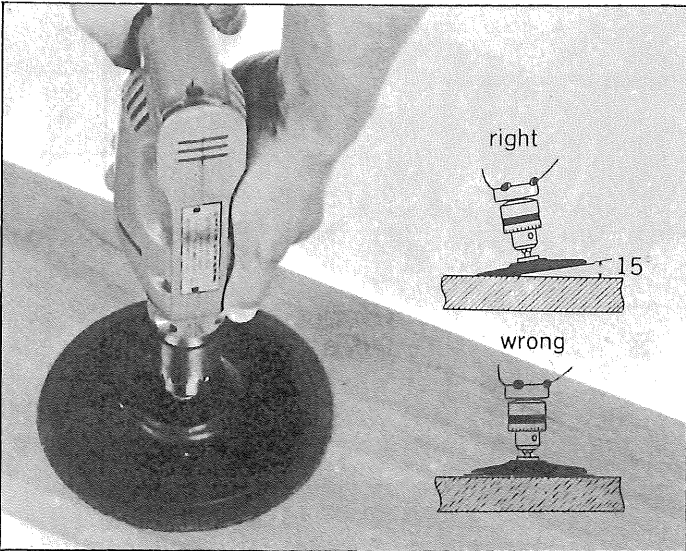
● **MOUNTING OF DISC PAPER**

Your drill may be converted to disc sander by mounting special attachment(optional).

1. Place sanding shaft in the chuck.
2. Next, mount in order of pad, disc paper and clamp nut.

Efficient for rust removing, surface finishing of lumber and pre-finishing for painting.

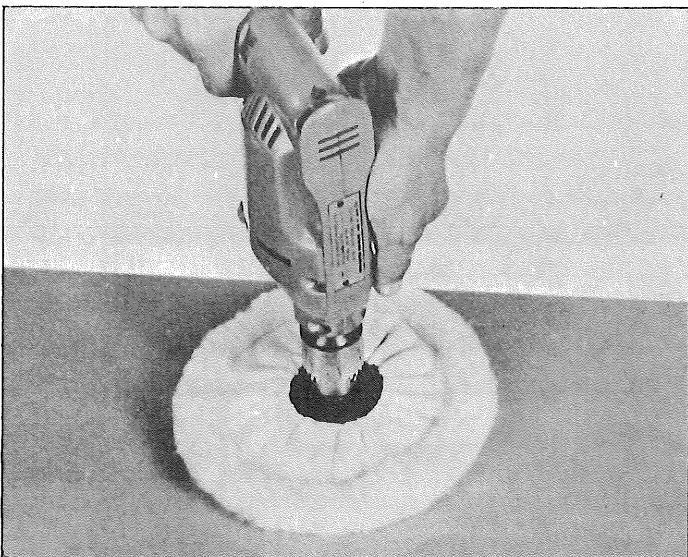
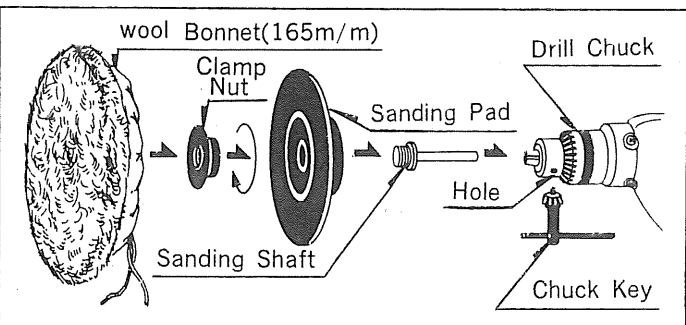
Use coarse grit sandpaper for removing rust and paint, and fine grit paper for wood board finishing.



● **MOUNTING OF WOOL BONNET**

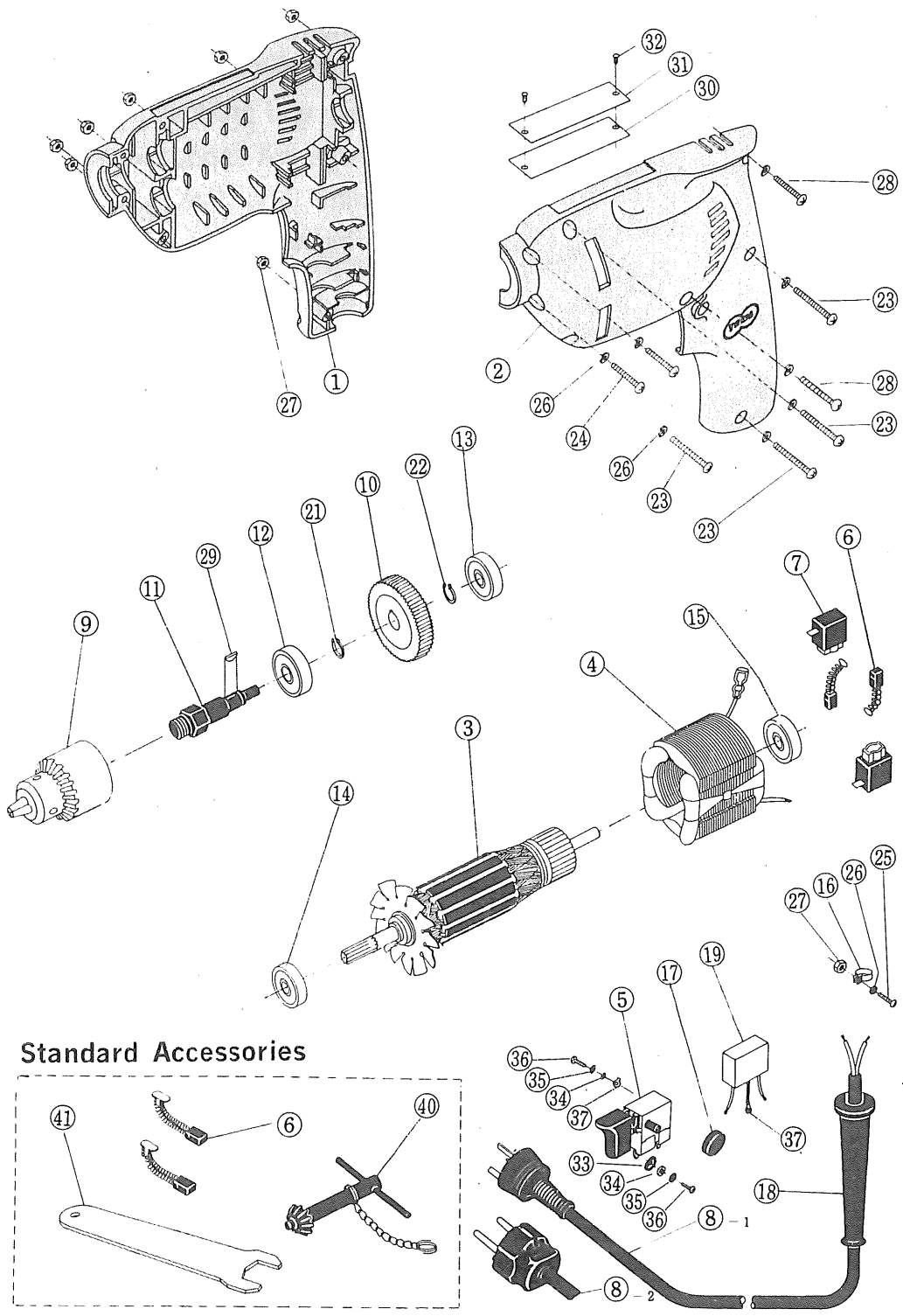
Install a wool bonnet as illustrated to the right. Put wool bonnet over sanding pad and fasten strings.

USE AS A POLISHER for best finishing of furniture, window panes, automobiles, etc.





# EXPLODED VIEW OF ELECTRIC DRILL MODEL D-680



## PARTS LIST

Ref.No.	DESCRIPTION	Ref.No.	DESCRIPTION
1	Motor Housing A	22	Retaining Ring (C)
2	Motor Housing B	23	Phil. Pan Screw M4×25
3	Armature Assembly	24	Phil. Pan Screw M4×16
4	Field Coil Assembly	25	Phil. Pan Screw M4×8
5	Trigger Switch	26	Spring Washer M4
6	Carbon Brush	27	Hex. Nut M4
7	Brush. Holder	28	Phil. Pan Screw M4 × 20
8-1	Cord Assembly (240V)	29	Woodruff Key
8-2	Cord Assembly (220V)	30	Base, Name Plate
9	Drill Chuck	31	Name Plate
10	Final Gear	32	Rivet
11	Gear Shaft	33	Reusable Washer M3
12	Ball Bearing # 6001ZZ	34	Washer M3
13	Ball Bearing # 607ZZ	35	Toothed Lock Washer M3
14	Ball Bearing # 608ZZ	36	Phill. Pan Screw M3×7
15	Ball Bearing # 627ZZ	37	Terminal
16	Cord Clamp		STANDARD ACCESSORIES
17	Switch Pad	40	Chuck Key
18	Cord Holder	6	Carbon Brush
19	Condenser	41	Spanner
21	Retaining Ring (C)		



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