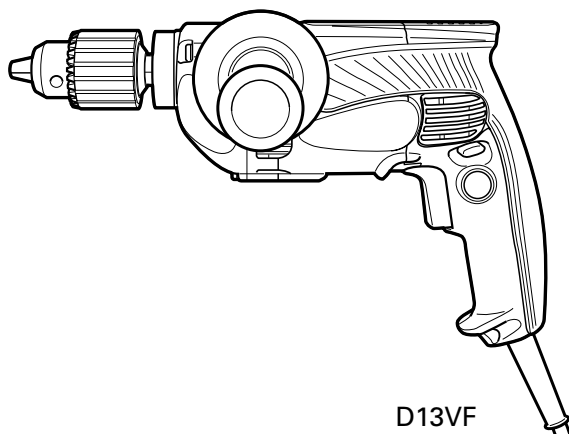


# HITACHI

## DRILL

**MODEL D 10VF · D 10VG**  
**D 13VF · D 13VG**

## HANDLING INSTRUCTIONS



**NOTE:**

Before using this Electric Power Tool, carefully read through these HANDLING INSTRUCTIONS to ensure efficient, safe operation. It is recommended that these INSTRUCTIONS be kept readily available as an important reference when using this power tool.



**Hitachi Koki**

## GENERAL POWER TOOL SAFETY WARNINGS

### WARNING

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

#### 1) Work area safety

- a) **Keep work area clean and well lit.**  
*Cluttered or dark areas invite accidents.*
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.**  
*Power tools create sparks which may ignite the dust or fumes.*
- c) **Keep children and bystanders away while operating a power tool.**  
*Distractions can cause you to lose control.*

#### 2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.**  
*Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.**  
*There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.**  
*Water entering a power tool will increase the risk of electric shock.*
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.**  
*Damaged or entangled cords increase the risk of electric shock.*
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.**  
*Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.**  
*Use of an RCD reduces the risk of electric shock.*

#### 3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.**  
*A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use personal protective equipment. Always wear eye protection.**  
*Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.**

*Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*

- d) **Remove any adjusting key or wrench before turning the power tool on.**

*A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*

- e) **Do not overreach. Keep proper footing and balance at all times.**

*This enables better control of the power tool in unexpected situations.*

- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.**

*Loose clothes, jewellery or long hair can be caught in moving parts.*

- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.**

*Use of dust collection can reduce dust related hazards.*

#### 4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.**

*The correct power tool will do the job better and safer at the rate for which it was designed.*

- b) **Do not use the power tool if the switch does not turn it on and off.**

*Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*

- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.**

*Such preventive safety measures reduce the risk of starting the power tool accidentally.*

- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.**

*Power tools are dangerous in the hands of untrained users.*

- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.**

*Many accidents are caused by poorly maintained power tools.*

- f) **Keep cutting tools sharp and clean.**

*Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.**

*Use of the power tool for operations different from those intended could result in a hazardous situation.*

#### 5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.**

*This will ensure that the safety of the power tool is maintained.*

### PRECAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

## DRILL SAFETY WARNINGS

1. Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.
2. Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

3. Do not wear gloves made of stuff liable to roll up such as cotton, wool, cloth or string, etc.
4. Prior to drilling into walls, ceilings or floors, ensure there are no electric cables or conduits inside.

## SPECIFICATIONS

Model		D10VF	D10VG	D13VF	D13VG	
Voltage (by areas)*		(110V, 115V, 120V, 127V, 220V, 230V, 240V) ~				
Power input		710W*				
No load speed		0-3,000/min	0-1,200/min	0-850/min	0-600/min	
Drill chuck capacity		10 mm		13 mm		
Capacity	Steel	Twist Bit	10 mm	10 mm	13 mm	13 mm
		Hole Saw	-	38 mm	51 mm	70 mm
	Wood	Flat Spade Bit	25 mm	32 mm	40 mm	40 mm
		Auger Bit	-	-	32 mm	38 mm
		Hole Saw	29 mm	70 mm	102 mm	114 mm
Weight (without cord)						
Spec. for keyed chuck		1.8 kg	1.9 kg	2.1 kg	2.1 kg	
Spec. for keyless chuck		1.8 kg	1.9 kg	2.0 kg	2.0 kg	

\*Be sure to check the nameplate on product as it is subject to change by areas.

<Capacity with Angle attachment (Optional accessory for D13VF and D13VG)>

Model		D13VF		D13VG		
Speed of angle unit		LOW(650/min)	HIGH(1350/min)	LOW(400/min)	HIGH(900/min)	
Capacity	Steel	Twist Bit	13 mm	13 mm	13 mm	13 mm
		Hole Saw	64 mm	32 mm	70 mm	51 mm
	Wood	Flat Spade Bit	40 mm	32 mm	40 mm	40 mm
		Auger Bit	38 mm	29 mm	38 mm	32 mm
		Hole Saw	114 mm	64 mm	114 mm	102 mm

## STANDARD ACCESSORIES

<D10VF>

(1) Chuck wrench (Spec. only for keyed chuck) ..... 1

<D10VG and D13VF>

(1) Side handle ..... 1

(2) Chuck wrench (Spec. only for keyed chuck) ..... 1

<D13VG> <D13VF for Australia>

(1) Side handle ..... 1

(2) Handle joint ..... 1

(3) Chuck wrench (Spec. only for keyed chuck) ..... 1

Standard accessories are subject to change without notice.

## OPTIONAL ACCESSORIES (sold separately)

<D10VF>

(1) Side handle ..... 1

(2) Hook (A) ..... 1

<D10VG>

(1) Hook (A) ..... 1

<D13VF and D13VG>

(1) Hook (A) ..... 1

(2) Angle attachment ..... 1

Optional accessories are subject to change without notice.

## APPLICATIONS

- Boring holes in metal, wood, and plastic.

## PRIOR TO OPERATION

### 1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

### 2. Power switch

Ensure that the power switch is in the OFF position. If the plug is connected to a receptacle while the power switch is in the ON position, the power tool will start operating immediately, inviting serious accident.

### 3. Extension cord

When the work area is removed from the power source. Use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

### 4. Selecting the appropriate drill bit:

- When boring metal or plastic  
Use ordinary metalworking drill bits.
- When boring wood  
Use ordinary woodworking drill bits.  
However, when drilling 6.5 mm or smaller holes, use a metalworking drill bit.

### 5. Mounting and dismounting of the bit

For keyed chuck (Fig. 1)

- (1) Open the chuck jaws, and insert the bit into the chuck.
- (2) Place the chuck wrench in each of the three holes in the chuck, and turn it in the clockwise direction (viewed from the front side). Tighten securely.
- (3) To remove the bit, place the chuck wrench into one of the holes in the chuck and turn it in the counterclockwise direction.

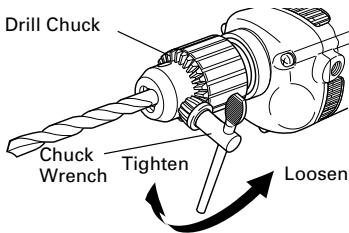


Fig. 1

For keyless chuck (Fig. 2)

- (1) Open the chuck jaws, and insert the bit into the chuck.  
To open the chuck jaws, hold the ring while turning the sleeve in the counterclockwise direction (viewed from the front side).
- (2) Firmly grasp the ring and turn the sleeve in the clockwise direction. Tighten securely.
- (3) To remove the bit, firmly grasp the ring and turn the sleeve in the counterclockwise direction.

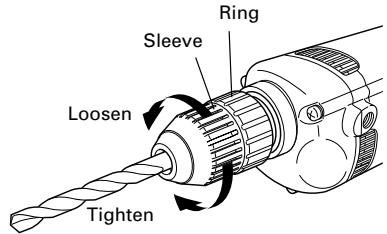


Fig. 2

- (4) If it is hard to loosen the sleeve, fix the spindle using the open-end wrench, hold the sleeve firmly, and turn it in the loosening direction (counterclockwise when viewed from the front). (Fig. 3)

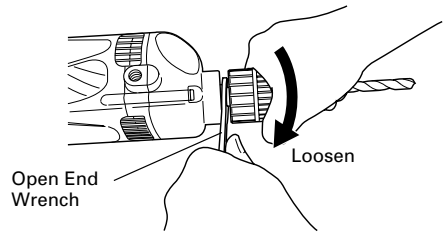


Fig. 3

### 6. Installing the side handle

For D10VG and D13VF

A Side handle is supplied with drill. It can be installed on either side of the tool for right or left handed use. To install the side handle, thread it into the socket on the desired side of the tool and tighten it securely. (Fig. 4)

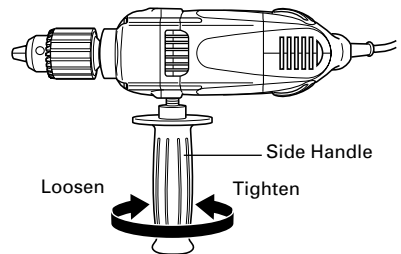


Fig. 4

For D13VG

D13VF for Australia

The large torque of the motor for this drill can result in considerable reaction to your arms during drilling work. Accordingly, make absolutely sure before use that the side handle and the handle joint are completely installed. (Fig. 5)

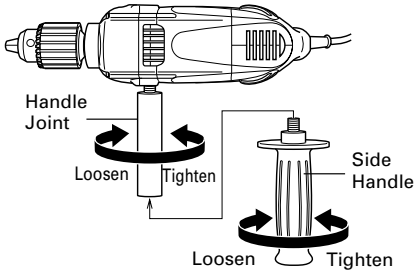


Fig. 5

**7. Check the rotational direction (Fig. 6)**

The bit rotates clockwise (viewed from the rear side) by pushing the R-side of the push button. The L-side of the push button is pushed to turn the bit counterclockwise. (The (L) and (R) marks are provided on the body.)

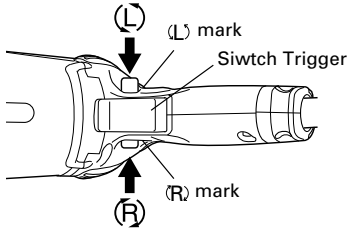


Fig. 6

**8. Attaching the angle unit. (Optional accessory for D13VF and D13VG)**

(1) Removing chuck from drill (Fig. 7)

To remove the chuck from the drill, open the chuck jaws as far as possible and turn out the locking screw (left hand thread). This screw locks the chuck to the spindle. And hold the drill so that only the chuck rests firmly and squarely on the edge of a solid bench. Install the hex. bar wrench into the chuck. Turn the chuck until the wrench is at about a 30° angle to the bench top and strike the wrench sharply with a hammer so the chuck turns in the counterclockwise direction (viewed from the front side). This should loosen the chuck from the spindle which has a right hand thread and you will be able to remove the chuck by hand.

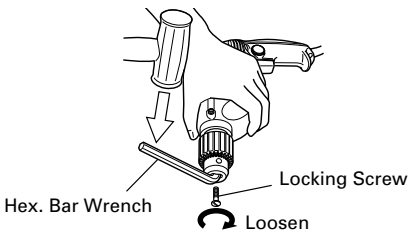


Fig. 7

**CAUTION:**

If the chuck cannot be removed by striking the wrench, don't strike the wrench forcibly and send the drill to a HITACHI AUTHORIZED SERVICE CENTER.

(2) Attaching the angle unit.

After removing the chuck, engage the coupling to the drill spindle. Fit the joint sleeve to the gear cover, attach the angle unit to the other end of the joint sleeve, and turn the angle unit slightly in either direction so the hex. hole in the coupling engages the hex. portion of the angle unit spindle. Adjust the direction of the angle unit and tighten the joint sleeve by clamping bolts.

Tighten two clamping bolts equally and gradually in turn with a torque of 61-70 In-lbs. (70-80kg-cm) (extent of force which can be subjected by only a wrist with the open end wrench provided to tight clamping bolts.). (Fig. 8)

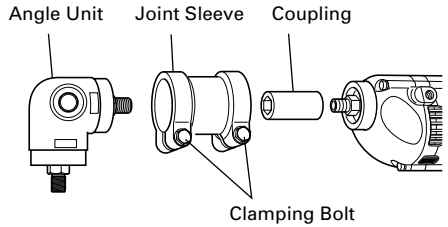


Fig. 8

To operate the angle unit at low speed, attach the chuck to the angle unit spindle at the side marked "LOW" and secure the locking screw. At this setting, the drilling speed is decreased to about 70% and the drilling torque increased to about 150%. (Fig. 9)

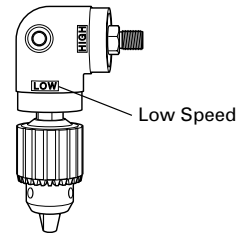


Fig. 9

To operate the angle unit at high speed, attach the chuck to the angle unit spindle at the side marked "HIGH" and secure the locking screw. At this setting, the drilling speed is increased to about 150% and the drilling torque decreased to about 70%. (Fig. 10)

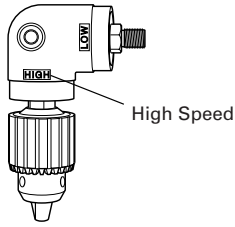


Fig. 10

(3) Installing the side handle (Fig. 11)

The side handle can be installed on either side of the angle unit for right or left handed use. To install the side handle, thread it into the socket on the desired side of the angle unit and tighten it securely.

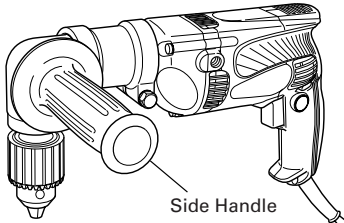


Fig. 11

(4) Removing chuck from angle unit (Fig. 12)

- The chuck can be removed from angle unit in the same manner it was removed from the drill; however, ALWAYS REMOVE ANGLE UNIT FROM THE DRILL BEFORE ATTEMPTING TO LOOSEN CHUCK. This will prevent damage of drills gear. Use open end wrench provided to hold angle unit spindle before attempting to loosen chuck.

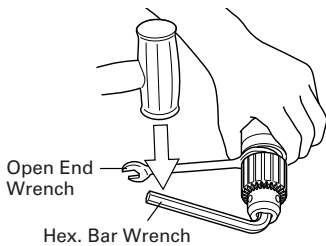


Fig. 12

**CAUTION:**

If the chuck cannot be removed by striking the wrench, don't strike the wrench forcibly and send the drill to a HITACHI AUTHORIZED SERVICE CENTER.

**9. Attaching the hook. (Optional accessory) (Fig. 13)**

To attach the hook, it is necessary to disassemble the handle portion which covered the tool's electrical system. For your continued safety and electrical shock protection, installing the hook on this drill should ONLY be performed by a HITACHI AUTHORIZED SERVICE CENTER.

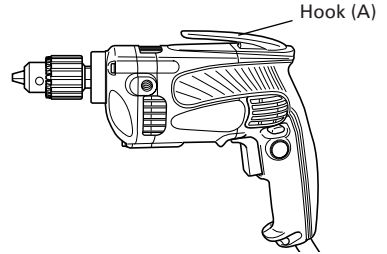


Fig. 13

**CAUTION:**

When the power tool is used with a hook fixed to it, pay attention to the following points:

- Before hanging the main unit from the waist belt, make sure that the drill has come to a complete stop.
- While it is suspended from the waist belt, the power plug must be disconnected from the power source.
- Do not walk about with the power tool hanging from the waist belt.
- In the case of operation in a high place, it is dangerous to drop the tool accidentally. If the hook is deformed or hung from the wrong position, there is danger that the hook will slip off and the tool will fall. Be careful to avoid danger.
- In making a through hole, the power tool sometimes shakes violently when the workpiece is pierced, from example. Be careful you are not hurt by the hook even if such situation happens.

**10. RCD**

The use of a residual current device with a rated residual current of 30mA or less at all times is recommended.

**HOW TO USE**

**1. Switch operation**

- When the trigger is depressed, the tool rotates. When the trigger is released, the tool stops.
- The rotational speed of the drill can be controlled by varying the amount that the trigger switch is pulled. Speed is low when the trigger switch is pulled slightly and increases as the trigger switch is pulled more.
- Pulling the trigger and pushing the stopper, it keeps the switched-on condition which is convenient for continuous running. When switching off, the stopper can be disconnected by pulling the trigger again.

**2. Drilling**

- When drilling, start the drill slowly, and gradually increasing speed as you drill.
- Always apply pressure in a straight line with the bit. Use enough pressure to keep drilling, but do not push hard enough to stall the motor or deflect the bit.

- To minimize stalling or breaking through the material, reduce pressure on drill and ease the bit through the last part of the hole.
- If the drill stalls, release the trigger immediately, remove the bit from the work and start again. Do not click the trigger on and off in an attempt to start a stalled drill. This can damage the drill.
- The larger the drill bit diameter, the larger the reactive force on your arm.  
Be careful not to lose control of the drill because of this reactive force.  
To maintain firm control, establish a good foothold, use side handle, hold the drill tightly with both hands, and ensure that the drill is vertical to the material being drilled.

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## **MAINTENANCE AND INSPECTION**

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### **1. Inspecting the drill bits**

Since use of an abraded drill bits will cause motor malfunctioning and degraded efficiency, replace the drill bits with a new one or resharpening without delay when abrasion is noted.

### **2. Inspecting the mounting screws:**

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

### **3. Maintenance of the motor**

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

### **4. Inspecting the carbon brushes**

For your continued safety and electrical shock protection, carbon brush inspection and replacement on this tool should **ONLY** be performed by a HITACHI AUTHORIZED SERVICE CENTER.

### **5. Service parts list**

#### **CAUTION**

Repair, modification and inspection of Hitachi Power Tools must be carried out by an Hitachi Authorized Service Center.

This Parts List will be helpful if presented with the tool to the Hitachi authorized Service Center when requesting repair or other maintenance.

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

#### **MODIFICATION**

Hitachi Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts (i.e. code numbers and/or design) may be changed without prior notice.

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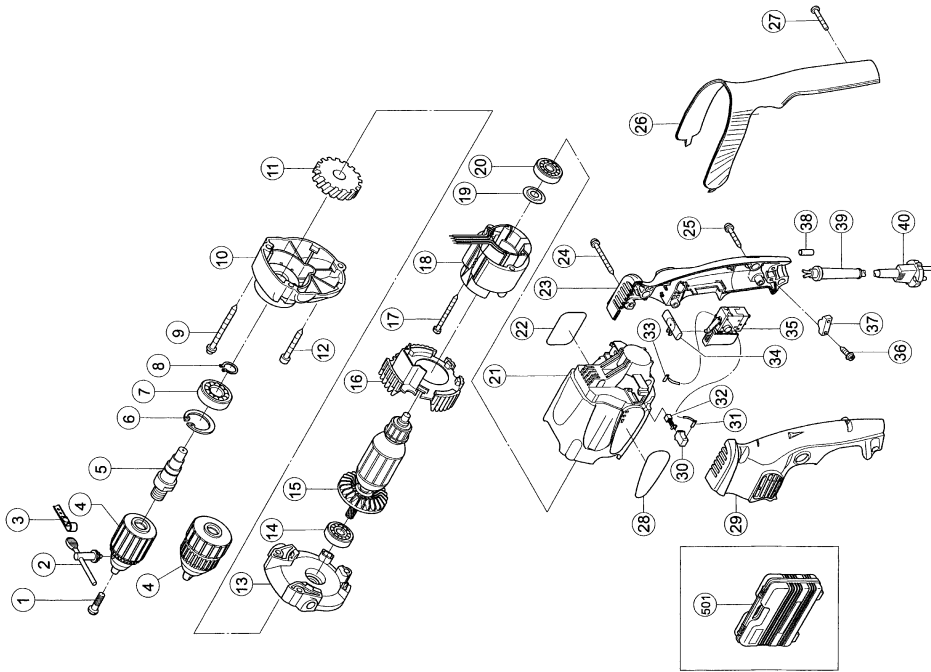
#### **NOTE**

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

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# D10VF

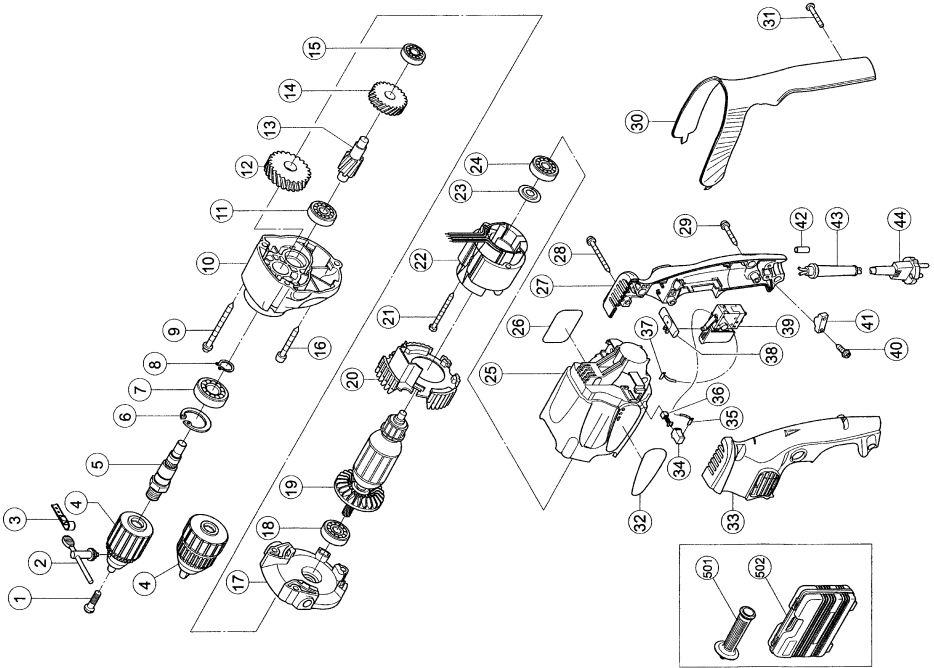
Item No.	Code No.	No. Used	Remarks	Item No.	Code No.	No. Used	Remarks
1	311-959	1	M6×23	35	319-339	1	
2	319-529	1	10VLR-J	36	984-750	2	D4×16
3	950-288	1		37	937-631	2	
4	319-342	1	10VLR-J "2"	38	981-373	2	
4	319-343	1	10VLRD-N	39	953-327	1	
5	319-335	1		40	_____	1	
6	948-001	1		501	319-543	1	
7	600-2VV	1	6002VCMPS2L				
8	939-544	1					
9	317-449	2	D5×50				
10	319-334	1					
11	319-336	1					
12	316-458	1	D5×40				
13	319-333	1					
14	608-DDM	1	608DDC2PS2L				
15	_____	1					
16	319-329	1					
17	981-421	2	D4×55				
18	_____	1					
19	982-631	1					
20	608-VVM	1	608VVC2PS2L				
21	319-328	1					
22	_____	1					
23	319-331	1					
24	303-694	2	D4×35				
25	301-653	1	D4×20				
26	319-332	1					
27	319-337	2	D4×25				
28	_____	1					
29	319-330	1					
30	955-203	2					
31	319-638	1	72L				
32	999-041	2					
33	319-637	1	72L				
34	316-166	1					





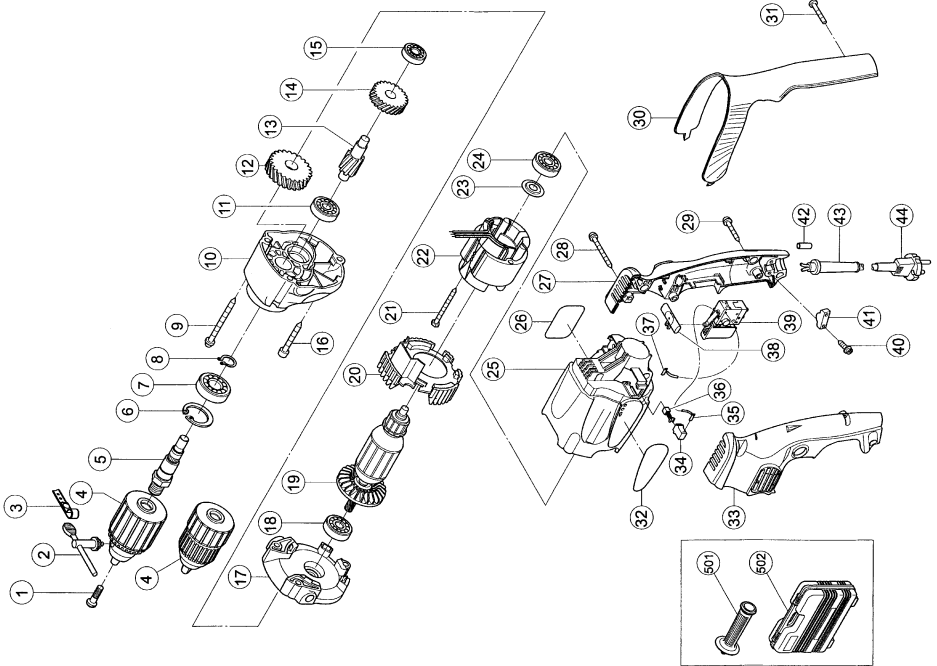
# D10VG

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1	311-959	1	M6×23	35	319-341	1	86L
2	319-529	1	10VLR-J	36	999-041	2	
3	950-288	1		37	319-340	1	86L
4 1	319-342	1	10VLR-J "2"	38	316-166	1	
4 2	319-343	1	10VLRD-N	39	319-339	1	
5	319-346	1		40	984-750	2	D4×16
6	948-001	1		41	937-631	1	
7	600-2VV	1	6002VCMF52L	42	981-373	2	
8	939-544	1		43	953-327	1	
9	305-701	2	D5×60	44	_____	1	
10	319-345	1		501	981-205	1	
11	627-VVM	1	627VVC2PS2L	502	319-543	1	
12	319-347	1					
13	319-545	1					
14	319-544	1					
15	606-ZZM	1	606ZC2PS2L				
16	316-458	1	D5×40				
17	319-344	1					
18	608-DDM	1	608DDC2PS2L				
19	_____	1					
20	319-329	1					
21	981-421	2	D4×55				
22	_____	1					
23	982-631	1					
24	608-VVM	1	608VVC2PS2L				
25	319-328	1					
26	_____	1					
27	319-331	1					
28	303-694	2	D4×35				
29	301-653	1	D4×20				
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31	319-337	2	D4×25				
32	_____	1					
33	319-330	1					
34	955-203	2					



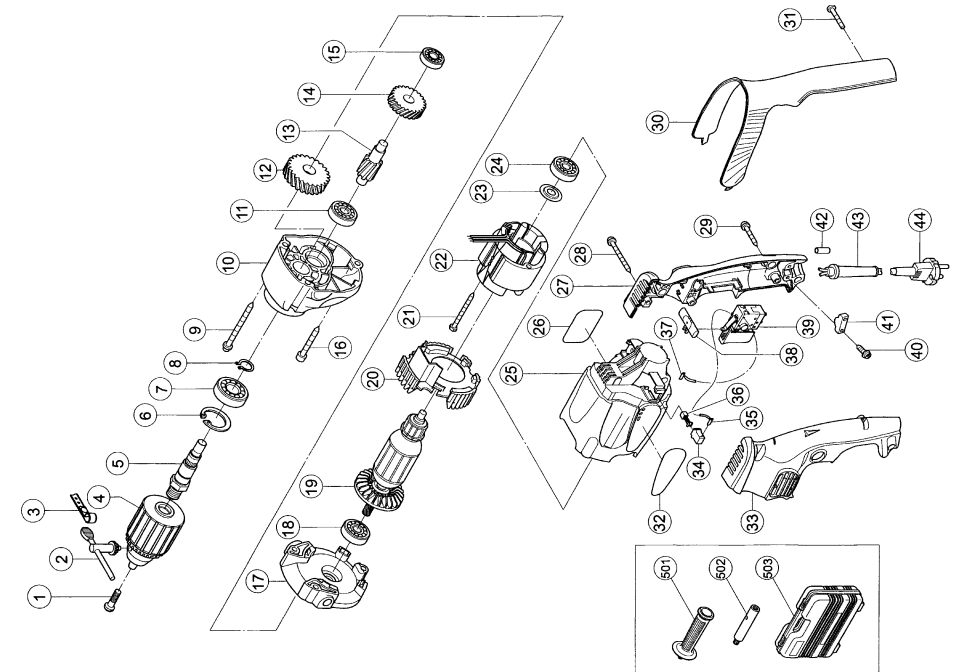
# D13VF

Item No.	Code No.	No. Used	Remarks	Item No.	Code No.	No. Used	Remarks
1	311-959	1	M6×23	35	319-341	1	86L
2	319-527	1	13VLR-J	36	999-041	2	
3	950-288	1		37	319-340	1	86L
4	319-303	1	13VLR-J "2"	38	316-166	1	
4	319-304	1	13VLRD-N	39	319-302	1	
5	319-346	1		40	984-750	2	D4×16
6	948-001	1		41	937-631	1	
7	600-2VV	1	6002VCMPS2L	42	981-373	2	
8	939-544	1		43	953-327	1	
9	305-701	2	D5×60	44	_____	1	
10	319-345	1		501	981-205	1	
11	627-VVM	1	627VVC2PS2L	502	319-543	1	
12	319-299	1					
13	319-547	1					
14	319-544	1					
15	606-ZZM	1	606ZZC2PS2L				
16	316-458	1	D5×40				
17	319-344	1					
18	608-DDM	1	608DDC2PS2L				
19	_____	1					
20	319-329	1					
21	981-421	2	D4×55				
22	_____	1					
23	982-631	1					
24	608-VVM	1	608VVC2PS2L				
25	319-328	1					
26	_____	1					
27	319-331	1					
28	303-694	2	D4×35				
29	301-653	1	D4×20				
30	319-332	1					
31	319-337	2	D4×25				
32	_____	1					
33	319-330	1					
34	955-203	2					



# D13VG

Item No.	Code No.	No. Used	Remarks
1	311-959	1	M6×23
2	319-527	1	13VLR-J
3	950-288	1	
4	319-303	1	13VLR-J "2"
5	319-346	1	
6	948-001	1	
7	600-2VV	1	6002VVCMP2S2L
8	939-544	1	
9	305-701	2	D5×60
10	319-345	1	
11	627-VVM	1	627VVC2PS2L
12	319-305	1	
13	319-548	1	
14	319-544	1	
15	606-ZZM	1	606ZZC2PS2L
16	316-458	1	D5×40
17	319-344	1	
18	608-DDM	1	608DDC2PS2L
19		1	
20	319-329	1	
21	981-421	2	D4×55
22		1	
23	982-631	1	
24	608-VVM	1	608VVC2PS2L
25	319-328	1	
26		1	
27	319-331	1	
28	303-694	2	D4×35
29	301-653	1	D4×20
30	319-332	1	
31	319-337	2	D4×25
32		1	
33	319-330	1	
34	955-203	2	
35	319-341	1	86L



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