HITACHI

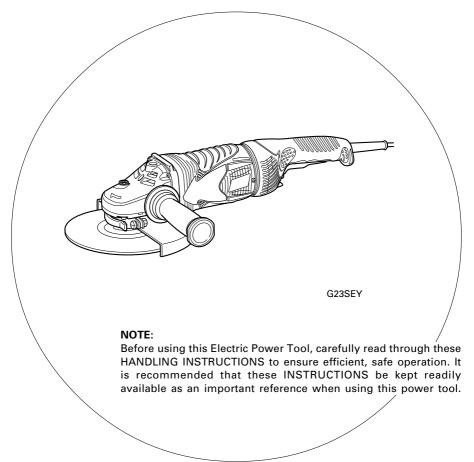
Disc Grinder

Model G 18SCY · G 18SEY

G 18UBY · G 23SCY

G 23SEY · G 23UBY

Handling instructions





GENERAL SAFETY RULES

WARNING!

Read all instructions

Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

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

SAVE THESE INSTRUCTIONS

1) Work area

a) Keep work area clean and well lit.

Cluttered and 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 of fumes.

 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.

 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 safety equipment. Always wear eye protection.
 Safety equipment such as dust mask, non-skid safety
 shoes, hard hat, or hearing protection used for
 appropriate conditions will reduce personal injuries.
- Avoid accidental starting. Ensure the switch is in the off position before plugging in.

Carrying power tools with your finger on the switch or plugging in 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 these devices 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.

 Disconnect the plug from the power source 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.

 Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools 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 and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.

Use of the power tool for operations different from 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.

PRECAUTIONS ON USING DISC GRINDER

- Never operate these power tools without Wheel Guards.
- Check that speed marked on the wheel is equal to or greater than the rated speed of the grinder. Use only depressed center wheels rated at 80m/s or
- 3. Ensure that the wheel dimensions are compatible with the grinder and that the wheel fits the spindle.
- 4. Abrasive wheels shall be stored and handled with care in accordance with manufacturer's instructions.

- Inspect the depressed center wheel before use, do not use chipped, cracked or otherwise defective products.
- Always hold the body handle and side handle of the power tool firmly. Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
- 7. Do not use cutting-off wheels for side grinding.
- 8. Do not use of separate reducing bushings or adapters to adapt large hole abrasive wheels.
- The wheel continues to rotate after the tool is switched off.

SPECIFICATIONS

Model		G18SCY	G18SEY	G18UBY	G23SCY	G23SEY	G23UBY
Voltage	(by areas)*1			(110V, 220V, 2	230V, 240V) ~		
Input*1		2400 W	260	0 W	2400 W	2600) W
No-load	speed		8500/min			6600/min	
	Outer dia.		180 mm			230 mm	
Wheel	Hole dia.			22 ו	mm		
	Peripheral speed			80	m/s		
Weight ³	12			5.1	kg		
Starting	current limiter*3	No	No	Yes	No	No	Yes

- *1 Be sure to check the nameplate on product as it is subject to change by areas.
- *2 Weight: Only main body
- *3 The starting current limiter produces the starting current to such an extent that a fuse (16A, slow-blow) is not tripped.

STANDARD ACCESSORIES

- (1) Wrench 1
- (2) Side handle 1

Depressed center wheels are not provided as standard accessories.

Standard accessories are subject to change without notice.

APPLICATIONS

- Removal of casting fin and finishing of various types of steel. bronze and aluminum materials and castings.
- Grinding of welded sections or sections cut by means of a cutting torch.
- Grinding of synthetic resins, slate, brick, marble, etc.
- Cutting of synthetic concrete, stone, brick, marble and similar materials

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, which could cause a serious accident.

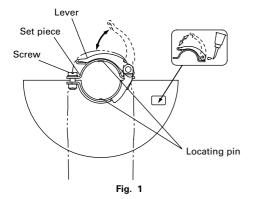
3. Extension cord

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. Fitting and adjusting the wheel guard

The wheel guard is a protective device to prevent injury should the depressed center wheel shatter during operation. Ensure that the guard is properly fitted and fastened before commencing grinding operation.

- [Installing and adjusting the wheel guard]
- Open the lever and insert the locating pin of wheel guard, bringing it into line with the across flats of packing ground.
- Then, turn the wheel guard to a desired position (for use)
- Close the lever and fix it. If and when required, carry out adjustments by tightening or loosening the screw.
- If the lever does not move smoothly, apply some lubricating oil to the sliding section between the set piece and the lever.
- Fasten the wheel guard at the position where the across flats of the wheel guard positioning pin and packing ground are aligned (the position where the wheel guard is inserted), but do not use it.



5. Ensure that the depressed center wheel to be utilized is the correct type and free of cracks or surface defects. Also ensure that the depressed center wheel is properly mounted and the wheel nut is securely tightened, refer to the section on "Depressed Center Wheel Assembly".

6. Conducting a trial run

Ensure that the abrasive products is correctly mounted and tightened before use and run the tool at no-load for 30 seconds in a safe position, stop immediately if there is considerable vibration or if other defects are detected.

If this condition occurs, check the machine to determine the cause.

7. Confirm the spindle lock mechanism

Confirm that the spindle lock is disengaged by pushing push button two or three times before switching the power tool on (See **Fig. 3**).

8. Fixing the side handle

Screw the side handle into the gear cover.

9. RCI

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

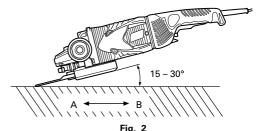
PRACTICAL GRINDER APPLICATION

1. Pressure

To prolong the life of the machine and ensure a first class finish, it is important that the machine should not be overloaded by applying too much pressure. In most applications, the weight of the machine alone is sufficient for effective grinding. Too much pressure will result in reduced rotational speed, inferior surface finish, and overloading which could reduce the life of the machine.

2. Grinding angle

Do not apply the entire surface of the depressed center wheel to the material to be ground. As shown in **Fig. 2**, the machine should be held at an angle of 15° – 30° so that the external edge of the depressed center wheel contacts the material at an optimum angle.



3. To prevent a new depressed center wheel from digging into the workpiece, initial grinding should be performed by drawing the grinder across the workpiece toward the operator (Fig. 2 direction B). Once the leading edge of the depressed center wheel is properly abraded, grinding may be conducted in either direction.

4. Switch operation

Switch ON: Push the locking button forward and then press the switch lever.

* For continuous use, press the switch lever. The switch lever is locked by pushing the locking button forward once again.

(*Subject to change depending on area.)

Switch OFF: Press and release the switch lever.

5. Precautions immediately after finishing operation

After switching off the machine, do not put it down until the depressed center wheel has come to a complete stop. Apart from avoiding serious accidents, this precaution will reduce the amount of dust and swarf sucked into the machine.

CAUTION:

- O Check that the work piece is properly supported.
- Ensure that ventilation openings are kept clear when working in dusty conditions.

If it should become necessary to clear dust, first disconnect the tool from the mains supply (use non-metallic objects) and avoid damaging internal parts.

- Ensure that sparks resulting from use do not create a hazard e.g. do not hit persons, or ignite flammable substances.
- Always use eye and ear protection.

Other personal protective equipment such as dust mask, gloves, helmet and apron should be worn when necessary.

If in doubt, wear the protective equipment.

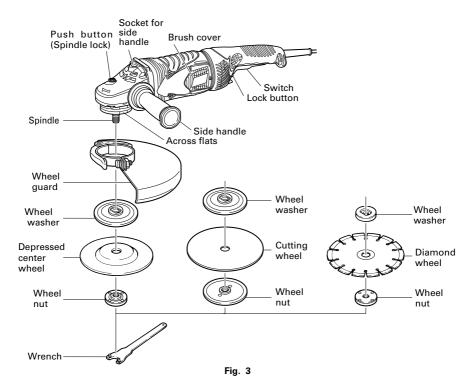
When the machine is not use, the power source should be disconnected.

ASSEMBLING AND DISASSEMBLING THE DEPRESSED CENTER WHEEL AND OTHER TOOLS

CAUTION:

Be sure to switch OFF and disconnect the attachment plug from the receptacle to avoid a serious accident.

- 1. Assembling (Fig. 3)
- (1) Turn the machine upside down so that the spindle is facing upward.
- (2) Mount the wheel washer onto the spindle.
- (3) Fit the protruding part of the depressed center wheel or cutting wheel or diamond wheel onto the wheel washer.



(4) Screw the wheel nut onto the spindle.
(For diamond wheel assembling, use the wheel nut with the convex side against the diamond wheel.)

(5) Insert the push button to prevent rotation of the spindle, and tighten the wheel nut with the accessory wrench, as shown in Fig. 3.

2. Disassembling

Follow the above procedures in reverse.

CAUTION:

- Comfirm that the depressed center wheel is mounted firmly.
- Confirm that the push button is disengaged by pushing push button two or three times before switching the power tool on.

MAINTENANCE AND INSPECTION

1. Inspecting the depressed center wheel

Ensure that the depressed center wheel is free of cracks and surface defects.

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. 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.

4. Replacing supply cord

If the supply cord of Tool is damaged, the Tool must be returned to Hitachi Authorized Service Center for the cord to be replaced.

5. 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.

6. 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.

MODIFICATIONS:

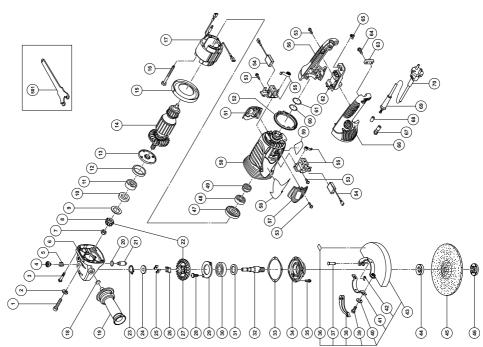
Hitachi Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts may be changed without prior notice.

NOTE:

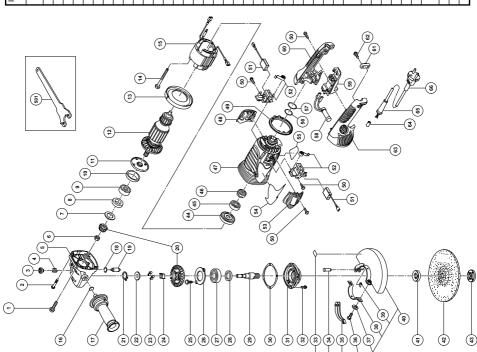
Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

	ΩŤŹ	No.	Part Name	α'TY
SEAL LOCK HEX. SOCKET HD. BOLT M5×14	2	46	WHEEL NUT M14×2	-
SPRING WASHER M5	2	47	DUST SEAL	-
TAPPING SCWER (W/FLANGE) D5×35	4	48	\vdash	1
PUSHING BUTTON		<u>අ</u> ද	BEARING BUSHING	- ,
SPRING GEAR COVER ASS'V		3 2	+	-[-
N COVER ASS 1	- -	25	+	
NC	-	23	+	
WASHER	-	24	-	2
PACKING	-	22	-	2
BEARING 6301DDCMPS2L	-	29	HANDLE (B)	-
BER RING (B)	1	22	BRUSH COVER	1
RING COVER (A)	-	28		-
ATURE	-	23	-	-
GUIDE	-	8	O-RING (I.D. 24.7)	-
. HD. TAPPING SCREW D5×75	2	9	O-RING (I.D. 31.2)	-
TOR	-	62	SWITCH	-
WASHER	-	ဗ္ဗ	CORD CLIP	-
HANDLE	-	9	TAPPING SCREW (W/FLANGE) D4×16	2
NG	-	92	SWITCH COVER	-
VIII	-	99	Н	-
R ASS'Y	-	67	\vdash	2
AINING RING FOR D10 SHAFT	-	89	Н	2
PLING COVER	-	69	\vdash	1
PLING DAMPER	4	2	$\overline{}$	-
PLING	-	501	WRENCH	-
~	-			
HINE SCREW M5×10	2			
RING COVER (B)	-			
BEARING 6302DDCMPS2L	-			
PACKING (B)	-			
DLE	-			
- PLATE	-			
KING GLAND	-			
SOCKET HD. BOLT (W/FLANGE) M5×16	4			
7	-			
PIN	-			
:R	-			
T M8×22	-			
NG WASHER M8	-			
PIECE	-			
NING RING (E-TYPE) FOR D5 SHAFT	-			
EL GUARD ASS'Y				
WHEEL STREET (A)	- ,-			
	SPECIAL NUT MITO PINION PINION PINION SEAL WASHER EELT PACKING BALL BEARING 630 IDDCMPS2L RUBBER RING (B) BEARING COVER (A) ARMATURE FAN GUIDE HEX. HD. TAPPING SCREW DEX75 STATOR FELT WASHER SIDE HANDLE COVERING GEAR ASSY RETAINING RING FOR DIO SHAFT COUPLING GEAR ASSY COUPLING DAMPER COUPLING GOOVER COUPLING GEAR MACHINE SCREW MBS10 BEARING COVER (B) BEARING COVER (B) BEARING COVER (B) BEARING COVER (B) BEARING GOADE COUPLING GEAR MACHINE SCREW MBS10 ELT PACKING (B) BEARING GOADE COUPLING GEAR MACHINE SCREW MBS10 ELT PACKING (B) BEARING COVER (B) BEARING GLAND BEARING GLAND HEX. SOCKETHD, BOLT WIFLENDE SET PIN LEVER SET PIN	DCMPS2L D10 SHAFT D10 SHAFT D00 SHAFT OR D5 SHAFT A24R	DCMPS2L 1 BEW DSx75 2 1 1 D10 SHAFT 1 DCMPS2L 1 ANGEl M6x16 4 1 1 ANGEL M6x16 1 ANGEL M6	DCMPS2L 1 55 DCMPS2L 1 56 DCMPS2L 1 56 DCMPS2L 1 56 D10 SHAFT 1 66 D10 SHAFT 1 66 D10 SHAFT 1 67 ANGE) M6x16 4 70 DCMPS2L 1 67 DCMPS2L 1 69 DCMPS2L

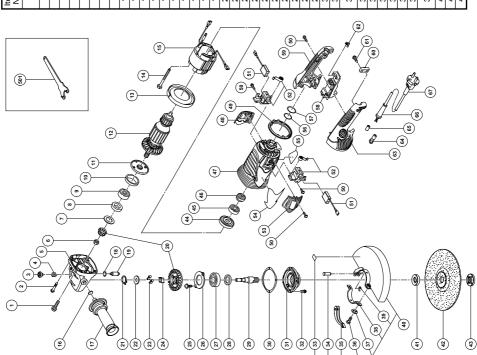


α'TY	1	-	-	-	-	1	1	8	2	2	1	-	1	1	1	1	-	-	2	1	2	-	-	7																				
Part Name	WHEEL NUT M14×2	DUST SEAL	BALL BEARING 6200VVCMPS2L	BEARING BUSHING	HOUSING	BRUSH COVER	HANDLE DAMPER	TAPPING SCREW (W/FLANGE) D4×16	CARBON BRUSH 7×17×22.5	BRUSH HOLDER SET	HANDLE (B)	BRUSH COVER	HITACHI LABEL	NAME PLATE	O-RING (I.D. 24.7)	O-RING (I.D. 31.2)	SWITCH	CORD CLIP	TAPPING SCREW (W/FLANGE) D4×16	HANDLE (A)	TUBE (D)	CORD ARMOR		WRENCH																				
/ Item No.	46	47	48	49	20	21	25	53	24	22	26	22	28	29	9	61	62	83	64	92	99	67	89	201			1				_													_
α'n	4	2	4	-	-	1	-	1	-	1	-	-	-	-	-	2	-	-	1	-	-	-	-	-	4		- 2	-	-	1	-	-	-	4	-	-	-	1	1	1	1	-	-	-
Part Name	SEAL LOCK HEX. SOCKET HD. BOLT M5×14	SPRING WASHER M5	TAPPING SCWER (W/FLANGE) D5x35	PUSHING BUTTON	SPRING	GEAR COVER ASS'Y	SPECIAL NUT M10	PINION	SEAL WASHER	FELT PACKING	BALL BEARING 6301DDCMPS2L	RUBBER RING (B)	BEARING COVER (A)	ARMATURE	FAN GUIDE	HEX. HD. TAPPING SCREW D5×75	STATOR	FELT WASHER	SIDE HANDLE	O-RING	LOCK PIN	GEAR ASS'Y	RETAINING RING FOR D10 SHAFT	COUPLING COVER	COUPLING DAMPER	GEAR	MACHINE SCREW M5×10	BEARING COVER (B)	BALL BEARING 6302DDCMPS2L	FELT PACKING (B)	SPINDLE	SEAL PLATE	PACKING GLAND	HEX. SOCKET HD. BOLT (W/FLANGE) M5x16	LABEL	SET PIN	LEVER	BOLT M8×22	SPRING WASHER M8	SET PIECE	RETAINING RING (E-TYPE) FOR D5 SHAFT	WHEEL GUARD ASS'Y	WHEEL WASHER (A)	D. C. WHEELS 180MM A24R
Item No.	-	2	3	4	2	9	7	8	-	10 F	11 E	12 F	13 E	-	15 F	16	17 8	18	19 8		_	\rightarrow	\rightarrow	\rightarrow	+	8 6	+	-	-		\rightarrow	\rightarrow	\rightarrow	\rightarrow	\dashv	-	_	39 E	40 8	41 5	42 F	\rightarrow	\rightarrow	45
		90-	N							(<u>1</u>)—	(\$£	(2))- -	(±)						/ /(§)	b (23)	/(\$	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			(S)			(29)						3	4		(8)	3 (5)	-(89)		
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Item No.	Part Name	αΉ	Item No.	Part Name	ΩŢ
,	SEAL LOCK HEX. SOCKET HD. BOLT	^	43	WHEEL NUT M14×2	-
-	M5×14	7	44	DUST SEAL	-
2	TAPPING SCREW (W/FLANGE) D5×35	4	45	BALL BEARING 6000VVCMPS2L	-
က	PUSHING BUTTON	-	46	BEARING BUSHING	-
4	SPRING	-	47	HOUSING ASS'Y	-
2	GEAR COVER ASS'Y	-	48	BRUSH COVER	-
9	SPECIAL NUT M10	1	49	HANDLE DAMPER	-
7	SEAL WASHER	1	20	TAPPING SCREW (W/FLANGE) D4×16	9
œ	FELT PACKING	1	51	CARBON BRUSH 7×17×22.5	L
6	BALL BEARING 6301VVCMPS2L	1	52	BRUSH HOLDER SET	~
10	RUBBER RING (B)	1	53	BRUSH COVER	-
11	BEARING COVER (A)	1	54	HITACHI LABEL	-
12	ARMATUR	-	55	NAME PLATE	-
13	FAN GUIDE	1	56	O-RING	_
14	HEX. HD. TAPPING SCREW D5×75	2	27	O-RING	_
15	STATOR	1	28	RESISTOR	-
16	FELT WASHER	1	29	SWITCH	-
17	SIDE HANDLE	-	9	HANDI E (B)	-
18	O-RING	-	9	COBD CLIP	-
19	LOCK PIN	-	63	TAPPING SCREW (W/FI ANGE) D4×16	,
20	GEAR AND PINION SET	1	83	HANDLE (A)	╙
21	RETAINING RING FOR D10 SHAFT	1	64	TUBE (D)	7
22	COUPLING COVER	1	65	CORD ARMOR D10.7	-
23	COUPLING DAMPER	4	99	CORD	-
24	COUPLING	1	501	WRENCH	-
22	MACHINE SCREW M5×10	2			1
56	BEARING COVER (B)	1			
27	BALL BEARING 6302VVCMPS2L	1			
78	FELT PACKING (B)	-			
53	SPINDLE	-			
၉	SEAL PLATE	-			
3	PACKING GLAND	-			
32	HEX. SOCKET HD. BOLT (W/FLANGE) M5×16	4			
33	LABEL	-			
34	SET PIN	-			
32	LEVER	-			
36	BOLT M8×22	-			
37	SPRING WASHER M8	-			
88	SET PIECE	-			
33	RETAINING RING (E-TYPE) FOR D5	-			
40	WHEEL GUARD ASS'Y	-			
4	WHEEL WASHER (A)	-			
: 5					



8			140.00		
9 6	Part Name	Ω'TY	No.	Part Name	α'n
-	SEAL LOCK HEX. SOCKET HD. BOLT	2	43	WHEEL NUT M14×2	-
- [M5×14	7	44	DUST SEAL	1
2	TAPPING SCREW (W/FLANGE) D5x35	4	45	BALL BEARING 6000VVCMPS2L	1
က	PUSHING BUTTON	-	46	BEARING BUSHING	-
4	SPRING	-	47	HOUSING ASS'Y	-
2	GEAR COVER ASS'Y	-	48	BRUSH COVER	-
9	SPECIAL NUT M10	-	49	HANDLE DAMPER	-
7	SEAL WASHER	-	20	TAPPING SCREW (W/FLANGE) D4x16	∞
ω	FELT PACKING	-	21	CARBON BRUSH 7×17×22.5	7
6	BALL BEARING 6301DDCMPS2L	-	52	BRUSH HOLDER SET	7
10	RUBBER RING (B)	-	23	BRUSH COVER	-
1	BEARING COVER (A)	-	54	HITACHI LABEL	-
12	ARMATURE ASS'Y	-	22	NAME PLATE	-
13	FAN GUIDE	-	26	O-RING	-
14	HEX. HD. TAPPING SCREW D5×75	2	22	O-RING	-
15	STATOR	1	28	SWITCH	-
16	FELT WASHER	-	29	HANDLE (B)	-
17	SIDE HANDLE	-	09	CORD CLIP	-
18	O-RING	1	61	TAPPING SCREW (W/FLANGE) D4x16	7
19	LOCK PIN	1	62	SWITCH COVER	-
20	GEAR AND PINION SET	-	63	HANDLE (A)	-
21	RETAINING RING FOR D10 SHAFT	٦	94	TERMINAL M4.0	2
22	COUPLING COVER	1	92	TUBE (D)	7
23	COUPLING DAMPER	4	99	CORD ARMOR	-
24	COUPLING	-	29	CORD	-
25	MACHINE SCREW M5×10	2	501	WRENCH	-
26	BEARING COVER (B)	-			
27	BALL BEARING 6302VVCMPS2L	-			
28	FELT PACKING (B)	-			
59	SPINDLE	-			
က္က	SEAL PLATE	-			
31	PACKING GLAND	-			
32	HEX. SOCKET HD. BOLT (W/FLANGE) M5×16	4			
33	LABEL	1			
34	SET PIN	1			
35	LEVER	1			
36	BOLT M8×22	1			
37	SPRING WASHER M8	-			
88	SET PIECE	-			
33	RETAINING RING (E-TYPE) FOR D5 SHAFT	-			
40	WHEEL GUARD ASS'Y	-			
41	WHEEL WASHER (A)	-			
42	D. C. WHEELS 230MM A24R	1			



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n Part Name	WHEEL NUT M14×2	DUST SEAL	BALL BEARING 6200VVCMPS2L	BEARING BUSHING	HOUSING	BRUSH COVER	_	-	CARBON BRUSH 7×17×22.5	-	HANDLE (B)	BRUSH COVER	Н	NAME PLATE	O-RING (I.D. 24.7)	O-RING (I.D. 31.2)	SWITCH	CORD CLIP	TAPPING SCREW (W/FLANGE) D4x16	HANDLE (A)	-	Н	CORD	WRENCH																				
y No.	46	47	48	49	20	2	25	23	24	22	26	22	28	29	9	61	62	83	9	65	99	67	89	201	_	_	_	_	_	_		_	_	_	1	_	_	1	_	_	_	1	1	\Box
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Part Name	SEAL LOCK HEX. SOCKET HD. BOLT M5×14	SPRING WASHER M5	TAPPING SCWER (W/FLANGE) D5x35	PUSHING BUTTON	SPRING	GEAR COVER ASS'Y	SPECIAL NUT M10	PINION	SEAL WASHER	FELT PACKING	BALL BEARING 6301DDCMPS2L	RUBBER RING (B)	BEARING COVER (A)	ARMATURE	FAN GUIDE	HEX. HD. TAPPING SCREW D5×75	STATOR	FELT WASHER	SIDE HANDLE	O-RING	LOCK PIN	GEAR ASS'Y	RETAINING RING FOR D10 SHAFT	COUPLING COVER	COUPLING DAMPER	COUPLING	GEAR	MACHINE SCREW M5×10	BEAKING COVER (B)	PALL DEALING BOOZDOOM SZL	SPINDLE	SEAL DI ATE	PACKING GLAND	HEX SOCKET HD BOLT (W/EI ANGE) M5×16	I ABEL	SET PIN	LEVER	BOLT M8×22	SPRING WASHER M8	SET PIECE	RETAINING RING (E-TYPE) FOR D5 SHAFT	WHEEL GUARD ASS'Y	WHEEL WASHER (A)	D. C. WHEELS 230MM A24R
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Part Name	WHEEL NUT M14×2	DUST SEAL	BALL BEARING 6200VVCMPS2L	BEARING BUSHING	HOUSING	BRUSH COVER	HANDLE DAMPER	TAPPING SCREW (W/FLANGE) D4×16	CARBON BRUSH 7×17×22.5	BRUSH HOLDER SET	HANDLE (B)	BRUSH COVER	HITACHI LABEL	NAME PLATE	O-RING (I.D. 24.7)	O-RING (I.D. 31.2)	RESISTOR	SWITCH	CORD CLIP	TAPPING SCREW (W/FLANGE) D4×16	HANDLE (A)	TUBE (D)	CORD ARMOR	CORD	WRENCH																			
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Part Name	SEAL LOCK HEX. SOCKET HD. BOLT M5×14	SPRING WASHER M5	TAPPING SCWER (W/FLANGE) D5x35	PUSHING BUTTON	SPRING	GEAR COVER ASS'Y	SPECIAL NUT M10	PINION	SEAL WASHER	FELT PACKING	BALL BEARING 6301DDCMPS2L	RUBBER RING (B)	BEARING COVER (A)	ARMATURE	\rightarrow	\rightarrow	STATOR	FELT WASHER	SIDE HANDLE	O-RING	LOCK PIN	GEAR ASS'Y	RETAINING RING FOR D10 SHAFT	COUPLING COVER	COUPLING DAMPER	COUPLING	MACHINE SCREW M5×10	BEARING COVER (B)	BALL BEARING 6302DDCMPS2L	FELT PACKING (B)	SPINDLE	\rightarrow	\rightarrow	HEX. SOCKET HD. BOLT (W/FLANGE) M5x16	+	SEL PIN	LEVEK	BOLT M8x22	SPRING WASHER M8	SET PIECE	RETAINING RING (E-TYPE) FOR D5 SHAFT	WHEEL GUARD ASS'Y	-	D. C. WHEELS 230MM AZ4R
Item No.	-	2	က	4	2	9	7	∞	6	10	11	12	13	14	15	16	17	9	19	20	21	22	23	24	52	56	78	8	93	31	32	33	34	32	8 8	3	38	33	9	41	45	43	44	2
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Shinagawa Intercity Tower A, 15-1, Konan 2-chome, Minato-ku, Tokyo, Japan