MODELS

G 12SE2

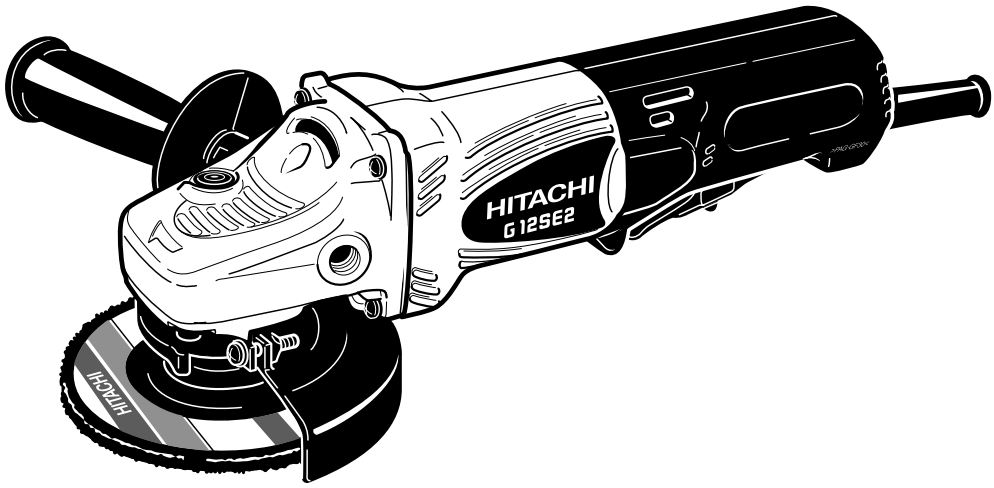
G 13SE2

Hitachi Power Tools

DISC GRINDER
G 12SE2
G 13SE2

TECHNICAL DATA AND SERVICE MANUAL

G



LIST Nos. G 12SE2: E258
G 13SE2: E259

Revised Jul. 2003

REMARK:

Throughout this TECHNICAL DATA AND SERVICE MANUAL, a symbol(s) is(are) used in the place of company name(s) and model name(s) of our competitor(s). The symbol(s) utilized here is(are) as follows:

Symbols Utilized	Competitors	
	Company Name	Model Name
Q	ATRAS COPCO	AG13-125X
B	BOSCH	GWS9-125

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1. PRODUCT NAME

Hitachi Electric Disc Grinder, Model G 12SE2 [115 mm (4-1/2")]

Model G 13SE2 [125 mm (5")]

2. MARKETING OBJECTIVE

The current disc grinders Models G 12SE and G 13SE have obtained high evaluation in power, durability and operability with the paddle switch. However, seven years passed since their development and now the competitors are introducing high-power products to correspond to the market demand for compact and powerful products. The new Models G 12SE2 and G 13SE2 are the upgraded versions of the current Models G 12SE and G 13SE, featuring high power input (1200 W) to compete with the competitors.

Vigorous sales promotion and market share increases are anticipated with the introduction of the new Models G 12SE2 and G 13SE2.

The key features of the Models G 12SE2 and G 13SE2 in comparison with the previous models are as follows:

1) Increased power input and maximum output

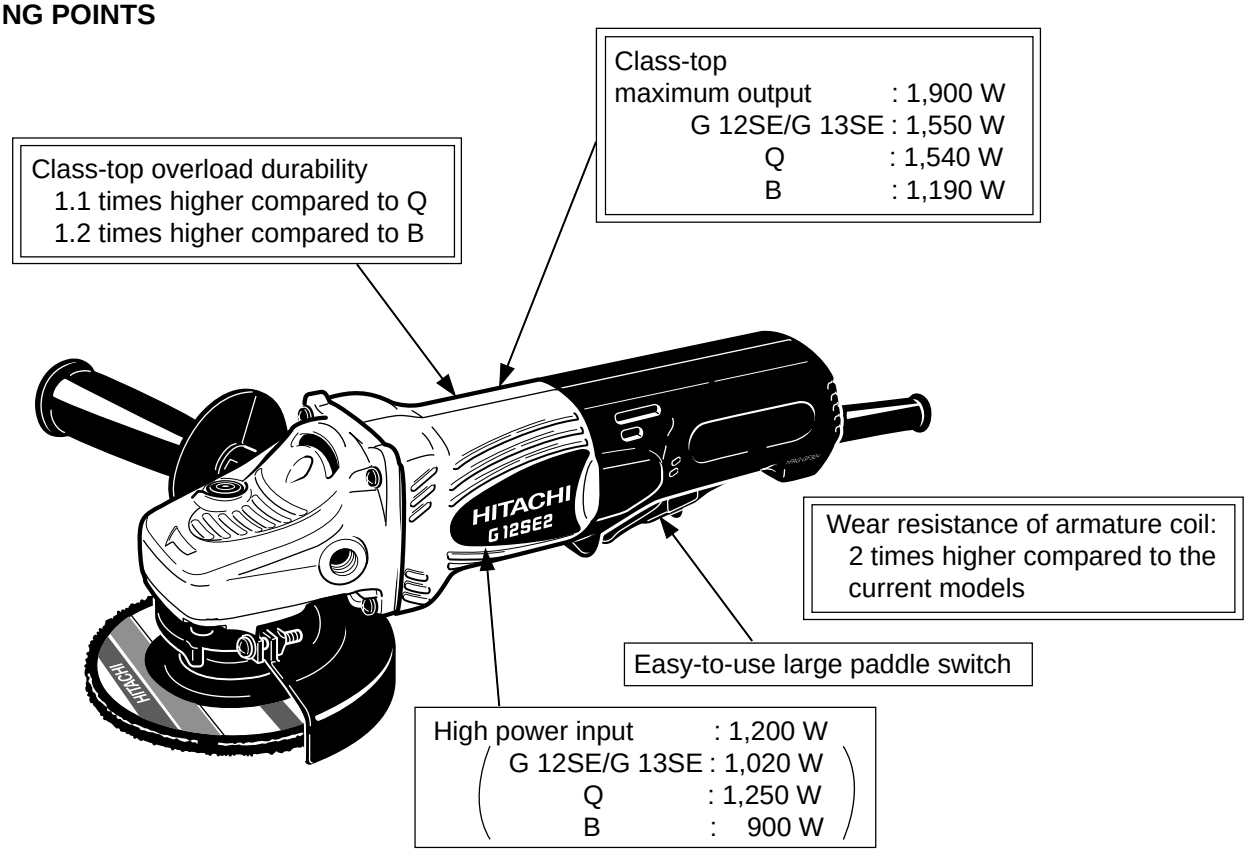
2) Increased overload durability

3) Increased wear resistance of the armature coil

3. APPLICATIONS

- Deburring diecast products and finishing iron, bronze, aluminum and diecast products
- Finishing welds and torch-cut surfaces
- Cutting soft steel materials
- Grooving and cutting concrete and other stone materials

4. SELLING POINTS



- Class-top overload durability

  The Models G 12SE2 and G 13SE2 provide class-top overload durability thanks to an improved cooling mechanism and a high-power motor.

  Practical test data: Comparison of torque when the stator coil temperature rise is 200˚ K

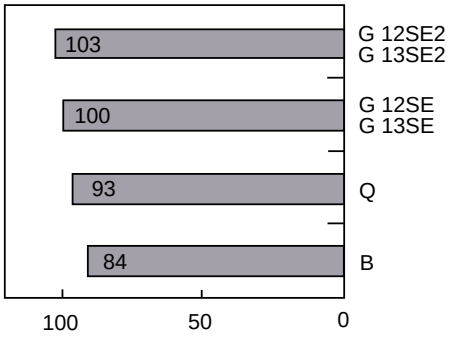


Fig. 1

- Wear resistance of armature coil

  Fan side of the armature coil is sealed with protect tape and wedges at commutator side of the armature coil are extended by 4 to 5.5 mm to minimize wear of the armature coil caused by dust.

  The service life of the armature coil is 2 times longer than the conventional models as a result of the gravel suction test (gravel is forcely sucked in through the vents of the tail cover).

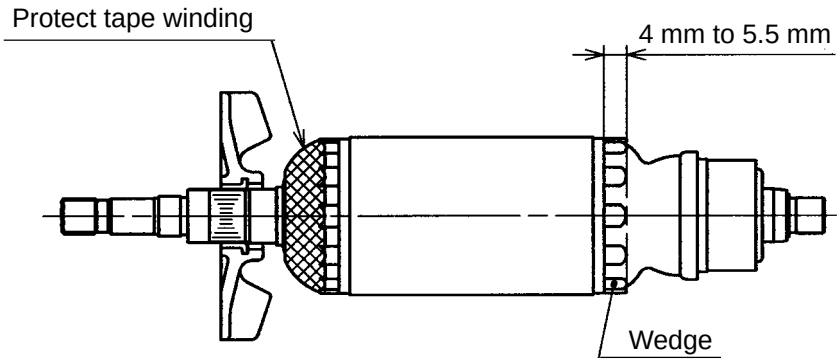


Fig. 2

- Easy-to-use large paddle switch

  Low-effort switch operation ensured by the use of a large paddle lever.

  Gripping any part of the tail cover enables user to touch the switch.

  (1) The switch, locked in position, can be turned off without changing the hand position.

  (2) The grinder can be operated by gripping different parts of the tail cover, even without using the On-Lock mechanism.

  (Note: There is no On-Lock mechanism provided on models for some markets.)

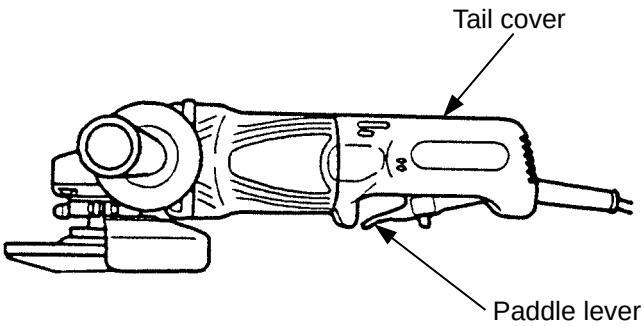


Fig. 3

5. SPECIFICATIONS

<table>
<tr><td colspan="2">Item / Model</td><td>G 12SE2</td><td>G 13SE2</td></tr>
<tr><td rowspan="4">Depressed-center wheels</td><td>Dimensions</td><td>O.D. 115 mm (4-1/2")
x Thickness 6 mm (1/4")
x I.D. 22.2 mm (7/8")</td><td>O.D. 125 mm (5")
x Thickness 6 mm (1/4")
x I.D. 22.2 mm (7/8")</td></tr>
<tr><td>Max. practical peripheral speed</td><td colspan="2">4,800 m/min (15,756 ft/min)</td></tr>
<tr><td>Type</td><td colspan="2">A, 36, Q, B</td></tr>
<tr><td>Spindle thread</td><td colspan="2">U.S.A., Canada: 5/8-11 UNC Other countries: M14 x 2</td></tr>
<tr><td colspan="2">Power source</td><td colspan="2">AC single phase 50 or 60 Hz</td></tr>
<tr><td colspan="2">Voltage and power input</td><td colspan="2"><table><tr><th>Voltage (V)</th><th>Current (A)</th><th>Power input (W)</th></tr><tr><td>110</td><td>10.0</td><td>1,050</td></tr><tr><td>120</td><td>9.5</td><td>1,080</td></tr><tr><td>230</td><td>5.5</td><td>1,200</td></tr><tr><td>240</td><td>5.3</td><td>1,200</td></tr></table></td></tr>
<tr><td colspan="2">No-load speed</td><td colspan="2">110, 120 V: 10,000/min 230, 240 V: 11,000/min</td></tr>
<tr><td colspan="2">Type of motor</td><td colspan="2">AC single phase commutator motor</td></tr>
<tr><td colspan="2">Enclosure</td><td colspan="2">Housing (Green)
Tail cover (Black) ..... Polyamide resin with glassfiber
Gear cover, packing gland ..... Aluminum alloy diecasting</td></tr>
<tr><td colspan="2">Type of switch</td><td colspan="2">Paddle switch</td></tr>
<tr><td colspan="2">Weight Net: *(main body)</td><td colspan="2">1.9 kg (4.2 lbs.)</td></tr>
<tr><td colspan="2">Gross:</td><td>3.2 kg (7.1 lbs.)</td><td>3.3 kg (7.2 lbs.)</td></tr>
<tr><td colspan="2">Type of packing</td><td colspan="2">Corrugated cardboard box</td></tr>
<tr><td colspan="2">Standard accessories</td><td>Depressed-center wheel
115 mm (4-1/2") 1
Side handle 1
Wrench ..... 1</td><td>Depressed-center wheel
125 mm (5") 1
Side handle 1
Wrench ..... 1</td></tr>
<tr><td colspan="2">Optional accessories</td><td colspan="2">Super washer (Code No. 310338)</td></tr>
</table>

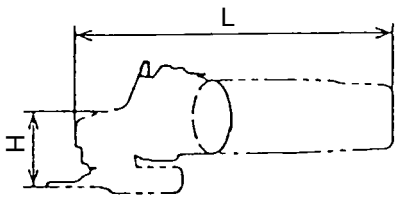
* Net weight excludes cord, side handle, depressed-center wheel, wheel nut, wheel washer and wheel guard.

6. COMPARISONS WITH SIMILAR PRODUCTS

6-1. Specification Comparisons

Maker		HITACHI		Q	B
Model name		G 12SE2 G 13SE2	G 12SE G 13SE		
Capacity: Depressed-center wheel dia.	(mm)	115/125 (4-1/2"/5")	115/125 (4-1/2"/5")	125 (5")	125 (5")
Power input *1	(W)	1,200	1,020	1,250	900
Power output *1	(W)	770	680	800	570
Max. power output *1	(W)	1,900	1,550	1,540	1,130
No-load speed *1	(/min)	11,000	10,000	11,000	11,000
No-load sound pressure level	(dB)	84	84	87	87
Service life of carbon brushes *2	(hr)	100	100	140	150
Weight *3	(kg)	1.9 (4.2 lbs.)	1.9 (4.2 lbs.)	2.1 (4.5 lbs.)	1.8 (4.0 lbs.)
(Actual weight)	(kg)	2.1 (4.5 lbs.)	2.1 (4.5 lbs.)	2.1 (4.5 lbs.)	1.8 (4.0 lbs.)
Dimensions	L (mm)	321 (12-5/8")	321 (12-5/8")	386 (15-13/64")	298 (11-23/32")
	H (mm)	70 (2-3/4")	70 (2-3/4")	70 (2-3/4")	70 (2-3/4")

*1 Depends on market
*2 Service life of carbon brushes in the continuous rated load test
*3 Weight without cord, side handle, depressed-center wheel, wheel nut, wheel washer and wheel guard



6-2. Comparisons in Torque vs. Rotation Speed and Stator Coil Temperature Rise

Figure 4 shows comparisons of the rotation speed and the stator coil temperature rise between a competitive model with respect to torque. Torque represents the magnitude of load, i.e., the amount of pressing force, cutting depth and forward force in actual cutting jobs. This shows that a powerful motor is less likely to burn out because it has both a minimum drop of rotation speed even at a greater torque and a lower stator coil temperature rise at the same torque.

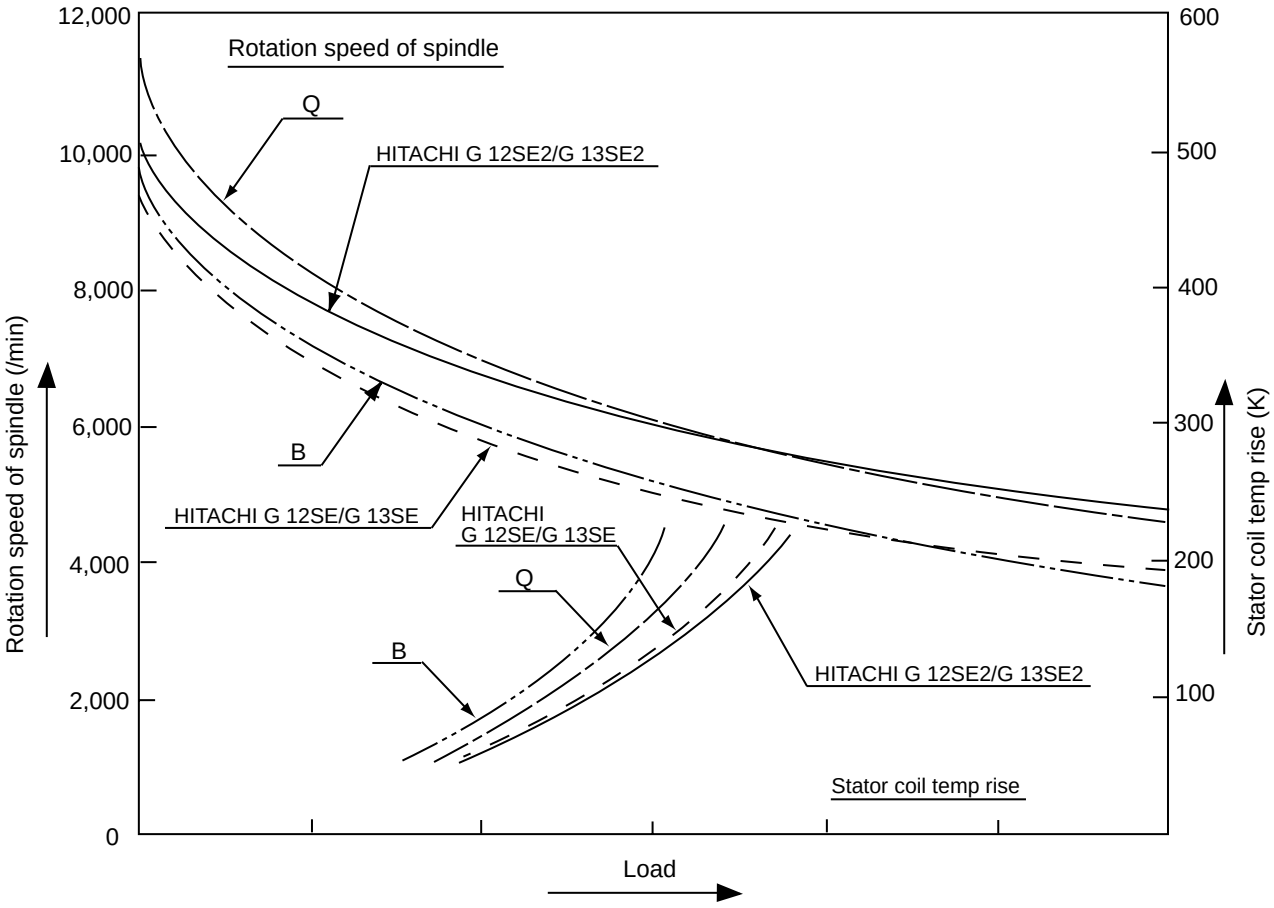


Fig. 4 Comparisons in torque vs. rotation speed and stator coil temperature rise

Figure 4 indicates:

(1) The Models G 12SE2 and G 13SE2 keep higher rotation speed than the Models G 12SE/G 13SE, Q and B in the heavy load range. This means that the working efficiency of the Models G 12SE2 and G 13SE2 is superior to the Models G 12SE/G 13SE, Q and B.

(2) The stator coil temperature rise of the Models G 12SE2 and G 13SE2 is lower than that of the Models G 12SE/G 13SE, Q and B. This means that the Models G 12SE2 and G 13SE2 are resistant to burn out even at a heavy load operation and their motors are tough.

7. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Models G 12SE2 and G 13SE2 Disc Grinders by all of our customers, it is very important that at the time of sale, the salesperson carefully ensures that the buyer seriously recognizes the importance of the contents of the Handling Instructions, and fully understands the meaning of the precautions listed on the Name Plate or Caution Plate attached to each tool.

7-1. Handling Instructions

Although every effort is made in each step of design, manufacture and inspection to provide protection against safety hazards, the dangers inherent in the use of any electric power tool cannot be completely eliminated. Accordingly, general precautions and suggestions for the use of electric power tools, and specific precautions and suggestions for the use of the disc grinders are listed in the Handling Instructions to enhance the safe and efficient use of the tool by the customer. Salespersons must be thoroughly familiar with the contents of the Handling Instructions to be able to offer appropriate guidance to the customer during sales promotion.

7-2. Caution on Name Plate

Each tool is provided with a Name Plate which contains the following basic safety precautions in the use of the tool.

(1) For European countries

(2) For New Zealand and Australia

CAUTION
Read thoroughly HANDLING INSTRUCTIONS before use.

(3) For U.S.A. and Canada

WARNING
To reduce the risc of injury, user must read and understand instruction manual.
Always use proper guards when grinding and wear eye protection.
Use only accessories rated at least ＊ /min.
AVERTISSEMENT
Afin de réduire les resques de blessure, l'utilisateur doit lire et bien comprendre le mode d'emploi.
Utilisez toujours un outil muni d'un protecteur adéquat et portez des lunettes ou une visiére.
N'utilisez que des accessoires prévus pour au moins ＊ /min.

＊ G 12SE2: 13,300
G 13SE2: 12,000

7-3. Precautions on Usage

Never press the pushing button while the depressed-center wheel is rotating.

If the pushing button is pressed while the depressed-center wheel is rotating, the spindle will stop immediately. In such a case, there is a danger that the wheel nut may be loosened so that the depressed-center wheel flies off unexpectedly to cause possible serious injury.

8. PRECAUTIONS IN DISASSEMBLY AND REASSEMBLY

The **[Bold]** numbers in the descriptions below correspond to the numbers in the Parts List.

8-1. Disassembly

(1) Disassembly of the armature (Fig. 5)

1. Open the Lever **[31]**, loosen the Machine Screw (W/Washers) M5 x 25 **[32]**, and remove the Wheel Guard Ass'y (Toolless Type) **[35]**.

2. Loosen the two Tapping Screws (W/Flange) D4 x 35 **[48]** and the Tapping Screw (W/Flange) D4 x 20 **[50]**, and remove Tail Cover (A) **[54]** and Tail Cover (B) **[47]**.

3. Remove the two Carbon Brushes **[51]** from the Brush Holders **[52]**.

4. Remove the four Tapping Screws D5 x 25 **[2]**. The Armature **[12]** can then be taken out simultaneously with the Gear Cover Ass'y **[4]**, Packing Gland **[25]**, and related parts.

5. Remove the four Seal Lock Screws (W/Sp. Washer) M5 x 16 **[26]**.
   The Packing Gland **[25]** can then be taken out together with the Spindle **[28]** and the Gear **[20]**.

6. After removing the two Seal Lock Screws (W/Sp. Washer) M4 x 10 **[1]**, the Armature **[12]** can be extracted together with the Bearing Cover **[11]** and related parts.

7. Carefully wrap the Armature **[12]** with a soft, clean rag to protect it from being damaged, and clamp it securely in a vise. Then, remove the Nut M8 **[5]** and extract the Pinion **[6]**.

8. For the models indicated under Fig. 5, the Ball Bearing 629T12DDC3PS2-L **[9]** can be removed from the Armature **[12]** by utilizing a J-204 Bearing Puller (special repair tool, Code No. 970982) as illustrated.
   After the ball bearing has been removed, the Bearing Cover **[11]** can be easily taken off.

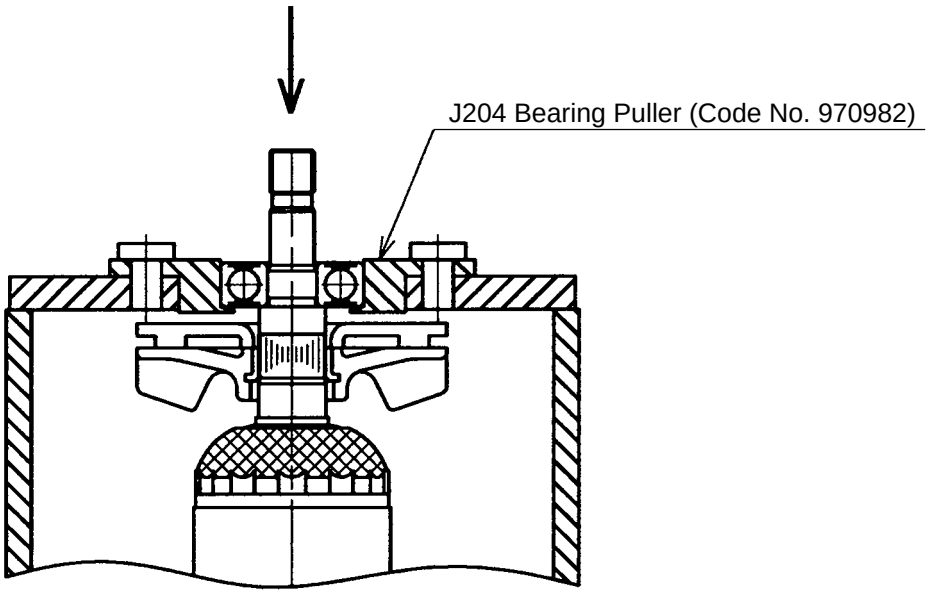


Fig. 5

(2) Disassembly of the dust seal

1. Insert the hooks of the J-204 bearing puller between the commutator and the Dust Seal (A) **[17]** from both sides, and fix the hooks with the wing bolts.
2. Place the J-204 bearing puller on a supporting jig and push down on the armature shaft with a hand press to remove Dust Seal (A) **[17]** together with the Ball Bearing 608VVC2PS2L **[18]**. Replace Dust Seal (A) **[17]** with new one because it is damaged by the removal of the Ball Bearing 608VVC2PS2L **[18]**.

(3) Disassembly of the stator

1. After removing the Armature **[12]** and Switch Box **[44]**, disconnect the lead wires connected to the Brush Holders **[52]**.
2. Loosen the two Hex. Hd. Tapping Screws D4 x 70 **[14]** and remove the Stator **[15]** from the Housing **[41]**. If the Stator **[15]** cannot be easily removed from the Housing **[41]**, disassembly can be facilitated by heating the Housing **[41]** to a temperature of approximately 60˚C (140˚F) with an appropriate heating device.

(4) Disassembly of the gear (Fig. 6)

1. Loosen the four Seal Lock Screws (W/Sp. Washer) M5 x 16 **[26]** fixing the Packing Gland **[25]**, and remove the Packing Gland **[25]** from the Gear Cover Ass'y **[4]**.
2. Support the bottom of the Packing Gland **[25]** with a jig, and push down on the upper portion of the Spindle **[28]** with a hand press until the end surface of the Feather Key 3 x 3 x 8 **[27]** contacts the Ball Bearing 6201DDCMPS2L **[23]** and the Spindle **[28]** cannot be pushed down any more.
3. Turn the Packing Gland **[25]** upside down and fix it, then push down the Spindle **[28]**.
4. Insert the steel plate between the Gear **[20]** and the Packing Gland **[25]**, and push down the Spindle **[28]** with a hand press to remove it.

◦ Replace the Ball Bearing 6201DDCMPS2L **[23]** with new one every time should the gear be disassembled because the stress while pulling out the gear is applied to the Ball Bearing 6201DDCMPS2L **[23]**.

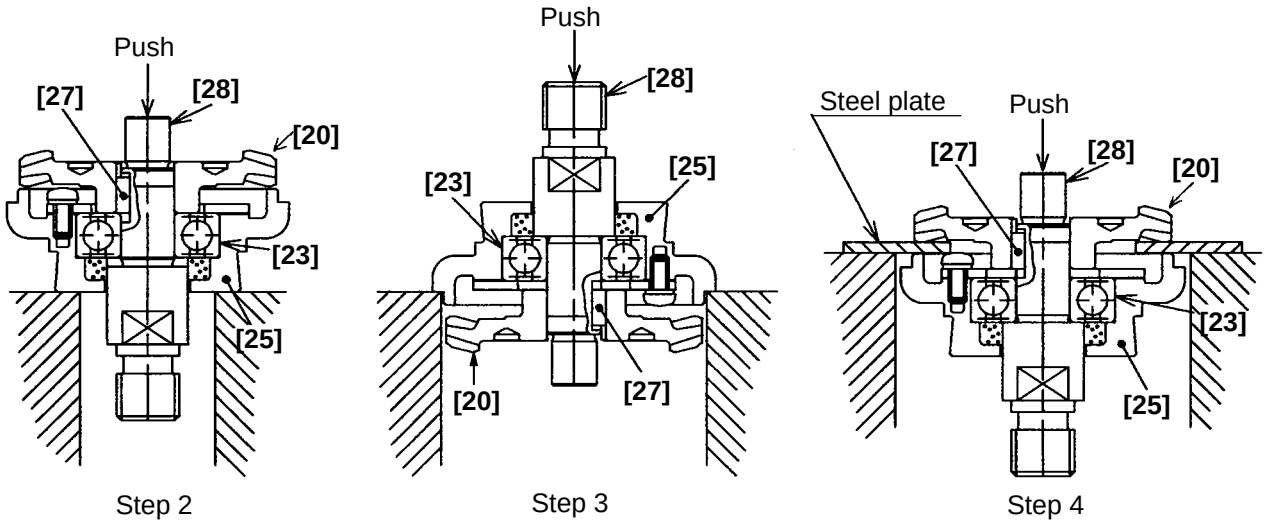


Fig. 6

8-2.Reassembly

Put the parts together in the reverse order of disassembly, with the precautions given below.

(1) Generously lubricate the teeth of Gear **[20]** and Pinion **[6]** with grease. Rub grease onto the teeth with your fingers so that the grease reaches each tooth bottom. Note that under-lubricated Gear **[20]** and Pinion **[6]** may wear at a faster rate.

(2) When replacing the Armature **[12]** and the Ball Bearing 608VVC2PS2L **[18]** on the commutator side, press inward on Dust Seal (A) **[17]** while taking care of its direction until the end face of Dust Seal (A) **[17]** hits against the butting surface of the Armature **[12]** and make sure that Dust Seal (A) **[17]** cannot turn freely. (See Fig. 7.)
Dust Seal (A) **[17]** is an important element for improved dust protection of the Ball Bearing 608VVC2PS2L **[18]**.
Be sure to use a new one at every disassembly work of the Ball Bearing 608VVC2PS2L **[18]**. Do not forget to insert the Thrust Washer **[16]** on the armature side of Dust Seal (A) **[17]**.

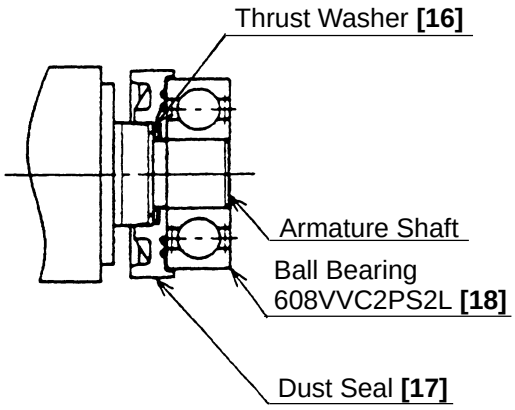


Fig. 7

(3) Apply Three Bond TB 1406 Screw Locking Agent to the following screws.

- Two Seal Lock Screws (W/Sp. Washer) M4 x 10 **[1]** which fix Bearing Cover **[11]** in place.
- Three Seal Lock Screws (W/Sp. Washer) M4 x 8 **[21]** which fix Bearing Cover (B) **[22]** in place.
- Four Seal Lock Screws (W/Sp. Washer) M5 x 16 **[26]** which fix Packing Gland **[25]** in place.

(4) Check that the spring end does not hold the pigtail when mounting the carbon brush. Do not catch the pigtail in the tail cover when mounting the tail cover.

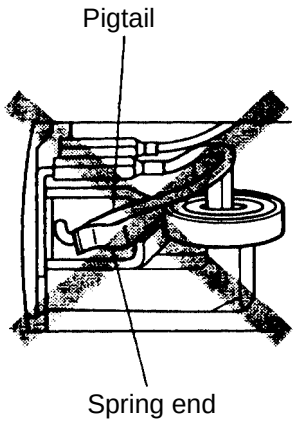


Fig. 8

(5) When replacing the Gear Cover Ass'y **[4]**, lubricate the needle bearing with mixed oil.
Mixed oil: Mixture of Hitachi power tool grease No. 2 (Unilube No. 00) and turbine oil

- Mixture ratio ... 1:1 (weight ratio)
- Volume ... 0.5 cc

8-3. Lubrication Points and Types of Lubricant

Pinion chamber of Gear Cover Ass'y **[4]** ..... Nippeco grease (SEP-3A) 10 g
Generously rub grease onto the gear and pinion.

Needle bearing ..... Mixed oil 0.5 cc
Mixed oil: Mixture of Hitachi power tool grease No. 2 (Unilube No. 00) and turbine oil
Mixture ratio 1:1 (weight ratio)

8-4. Tightening Torque

Tapping Screws D4 **[14] [48] [50] [56]** ..... 2.0 ± 0.5 N•m (20 ± 5 kgf•cm, 1.5 ± 0.4 ft-lbs.)

Seal Lock Screws (W/Sp. Washer) M4 **[1] [21]** ..... 1.8 ± 0.4 N•m (18 ± 4 kgf•cm, 1.3 ± 0.3 ft-lbs.)

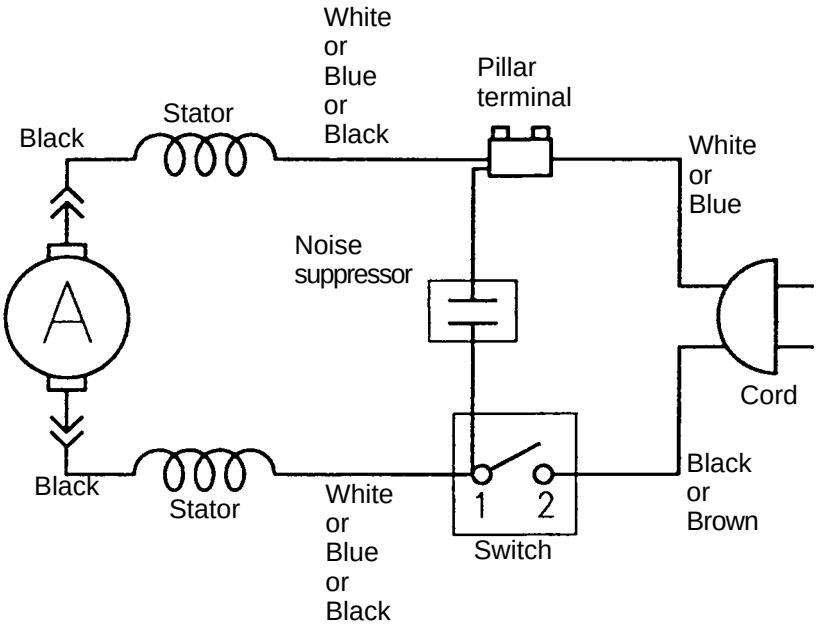
Tapping Screw D5 x 25 **[2]** ..... 2.9 ± 0.5 N•m (30 ± 5 kgf•cm, 2.2 ± 0.4 ft-lbs.)

Seal Lock Screw (W/Sp. Washer) M5 x 16 **[26]** ..... 3.4 ± 0.7 N•m (35 ± 7 kgf•cm, 2.5 ± 0.5 ft-lbs.)

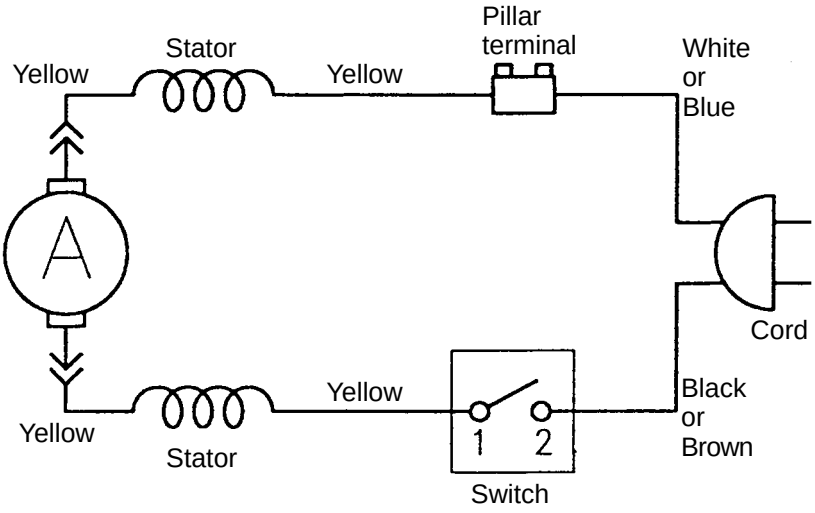
Nut M8 **[5]** ..... 13.7 ± 2.0 N•m (140 ± 20 kgf•cm, 10.1 ± 1.5 ft-lbs.)

8-5. Wiring Diagrams

(1) For European countries, Australia, New Zealand and South Africa



(2) For U.S.A. and Canada



8-6. Insulation Tests

On completion of disassembly and repair, measure the insulation resistance, and conduct the dielectric strength test.

Insulation resistance: 7 M Ω or more with DC 500 V Megohm Tester

Dielectric strength test: AC 4,000 V/1 minute, with no abnormalities ..... 220 V ~~ 240 V products

AC 2,500 V/1 minute, with no abnormalities ..... 110 V ~ 127 V products

8-7. No-load Current Value

After no-load operation for 30 minutes, the no-load current value should be as follows.

Voltage (V)	110	120	230	240
Current (A) max.	4.3	4.3	2.5	2.5

9. STANDARD REPAIR TIME (UNIT) SCHEDULES

MODEL	Variable / Fixed	10	20	30	40	50	60 min.
G 12SE2 G 13SE2	General Assembly	Work Flow Tail Cover (A) Tail Cover (B) Carbon Brush x 2 Brush Holder x 2 Spring x 2 Wheel Guard Ass'y	Switch Paddle Lever Lock Lever Cord Cord Armor Gear Pushing Button Lock Pin	Housing Stator Gear Cover Ass'y Armature Pinion Seal Ring (A) Ball Bearing (629T12DD) Rubber Ring Dust Seal Ball Bearing (608VV) Packing Gland Ball Bearing (6201DD) Spindle Gear Ass'y			

Hitachi Power Tools

LIST NO. E258

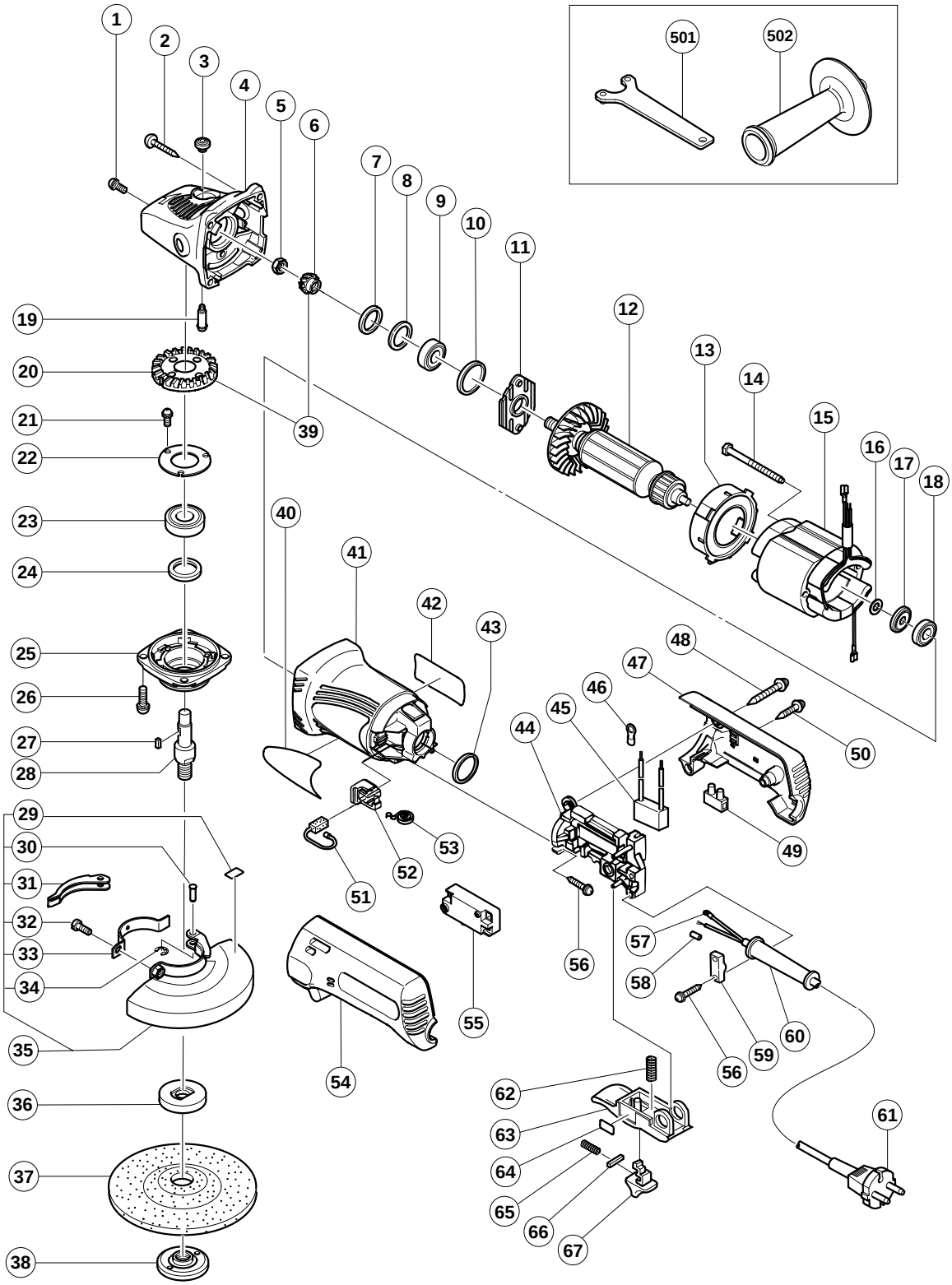
ELECTRIC TOOL PARTS LIST

■ DISC GRINDER

2003・7・25

Model G 12SE2

(E2)



PARTS

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	1	303-255	SEAL LOCK SCREW (W/SP. WASHER) M4X10	2		
	2	320-523	TAPPING SCREW D5X25 (BLACK)	4		
	3	301-944	PUSHING BUTTON	1		
	4	321-737	GEAR COVER ASS'Y	1	INCLUD. 3, 19	
	5	949-558	NUT M8 (10 PCS.)	1		
	6	308-541	PINION	1		
	7	308-543	SEAL RING (A)	1		
	8	980-866	WASHER (C)	1		
	9	629-T12	BALL BEARING 629T12DDC3PS2-L	1		
	10	957-754	RUBBER RING	1		
	11	321-734	BEARING COVER	1		
*	12	360-603U	ARMATURE ASS'Y 110V-120V	1	INCLUD. 9, 16-18	
*	12	360-619E	ARMATURE 230V	1		
*	12	360-603E	ARMATURE 230V-240V	1	FOR NZL, AUS	
	13	321-732	FAN GUIDE	1		
	14	982-021	HEX. HD. TAPPING SCREW D4X70	2		
*	15	340-551C	STATOR 110V	1		
*	15	340-551D	STATOR 120V	1		
*	15	340-551E	STATOR 230V	1		
*	15	340-551F	STATOR 240V	1		
*	16	311-737	THRUST WASHER	1	EXCEPT FOR NZL, AUS	
*	17	311-435	DUST SEAL (A)	1		
*	17	315-877	DUST SEAL	1	FOR NZL, AUS	
	18	608-VVM	BALL BEARING 608VVC2PS2L	1		
	19	301-943	LOCK PIN	1		
	20	321-736	GEAR	1		
	21	991-207	SEAL LOCK SCREW (W/SP. WASHER) M4X8	3		
	22	936-680	BEARING COVER (B)	1		
	23	620-1DD	BALL BEARING 6201DDCMPS2L	1		
	24	308-546	FELT PACKING	1		
	25	308-545	PACKING GLAND	1		
	26	307-046	SEAL LOCK SCREW (W/SP. WASHER) M5X16	4		
	27	944-109	FEATHER KEY 3X3X8	1		
*	28	994-301	SPINDLE (A)	1		
*	28	994-302	SPINDLE (B)	1	FOR USA, CAN	
	29	311-492	LABEL	1		
	30	311-744	SET PIN	1		
	31	311-743	LEVER	1		
	32	880-734	MACHINE SCREW (W/WASHERS) M5X25 (BLACK)	1		
	33	311-491	SET PIECE (B)	1		
	34	874-759	RETAINING RING (E-TYPE) FOR D2.5 SHAFT	1		
	35	311-745	WHEEL GUARD ASS'Y (TOOLLESS TYPE)	1	INCLUD. 29-34	
*	36	937-817Z	WHEEL WASHER	1		
*	36	937-928Z	WHEEL WASHER (A) FOR D16 HOLE	1	FOR USA, CAN	
	37	316-821	D. C. WHEELS 115MM A36Q (25 PCS.)	1		
*	38	994-324	WHEEL NUT M14	1		
*	38	937-923P	WHEEL NUT 5/8"-11UNC	1	FOR USA, CAN	
	39	321-735	GEAR AND PINION ASS'Y	1	INCLUD. 6, 20	
	40		HITACHI LABEL	1		
	41	321-731	HOUSING	1		
	42		NAME PLATE	1		

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	43	321-733	RUBBER RING	1		
	44	311-738	SWITCH BOX	1		
*	45	930-039	NOISE SUPPRESSOR	1	EXCEPT FOR USA, CAN	
*	46	311-741	TERMINAL	1		
*	46	980-063	TERMINAL	1	FOR USA, CAN	
	47	321-739	TAIL COVER (B)	1		
	48	303-694	TAPPING SCREW (W/FLANGE) D4X35 (BLACK)	2		
	49	938-307	PILLAR TERMINAL	1		
	50	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	1		
	51	999-088	CARBON BRUSH (1 PAIR)	1		
	51	999-076	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	1		
	52	317-810	BRUSH HOLDER	2		
	53	308-536	SPRING	2		
	54	321-738	TAIL COVER (A)	1		
*	55	311-739	SWITCH (1P SCREW TYPE) W/O LOCK	1		
*	55	311-740	SWITCH (1P SCREW TYPE) W/O LOCK	1	FOR USA, CAN	
	56	984-750	TAPPING SCREW (W/FLANGE) D4X16	3		
	57	980-063	TERMINAL	1		
*	58	981-373	TUBE (D)	2	FOR GBR (110V)	
	59	960-266	CORD CLIP	1		
	60	953-327	CORD ARMOR D8.8	1		
*	61	500-235Z	CORD	1	(CORD ARMOR D8.8)	
*	61	500-408Z	CORD	1	(CORD ARMOR D8.8) FOR NZL, FIJ, AUS	
*	61	500-249Z	CORD	1	(CORD ARMOR D8.8) FOR USA, CAN	
*	61	500-462Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (110V)	
*	61	500-440Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (230V)	
	62	983-595	SPRING	1		
	63	308-554	PADDLE LEVER	1		
*	64	308-557	LEVER ACTION SEAL	1		
*	64	308-558	LEVER ACTION SEAL	1	FOR NZL, FIJ, AUS, GBR	
	65	301-631	SPRING (F)	1		
	66	982-696	FEATHER KEY 3X3X15	1		
*	67	308-555	LOCK LEVER (BLACK)	1		
*	67	308-556	LOCK LEVER (GRAY)	1	FOR NZL, FIJ, AUS, GBR	

STANDARD ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
501	938-332Z	WRENCH	1		
502	994-322	SIDE HANDLE	1		

OPTIONAL ACCESSORIES

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
*	601	937-825Z	RUBBER PAD	1		
*	601	938-317	RUBBER PAD	1	FOR USA, CAN	
*	602	937-826Z	WASHER NUT	1		
*	602	938-318	WASHER NUT	1	FOR USA, CAN	
	603	314-095	SANDING DISCS 115MM C-P16 (10 PCS.)	1		
	604	314-096	SANDING DISCS 115MM C-P20 (10 PCS.)	1		
	605	314-097	SANDING DISCS 115MM C-P24 (10 PCS.)	1		
	606	314-098	SANDING DISCS 115MM C-P30 (10 PCS.)	1		
	607	314-099	SANDING DISCS 115MM C-P36 (10 PCS.)	1		
	608	314-100	SANDING DISCS 115MM C-P40 (10 PCS.)	1		
	609	314-101	SANDING DISCS 115MM C-P50 (10 PCS.)	1		
	610	314-102	SANDING DISCS 115MM C-P60 (10 PCS.)	1		
	611	314-103	SANDING DISCS 115MM C-P80 (10 PCS.)	1		
	612	314-104	SANDING DISCS 115MM C-P100 (10 PCS.)	1		
	613	314-105	SANDING DISCS 115MM C-P120 (10 PCS.)	1		
*	614	994-312	WHEEL WASHER (C) FOR D20 HOLE	1	FOR USA, CAN	
*	615	310-338	SUPER WASHER	1	EXCEPT FOR USA, CAN	

* ALTERNATIVE PARTS

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Hitachi Power Tools

LIST NO. E259

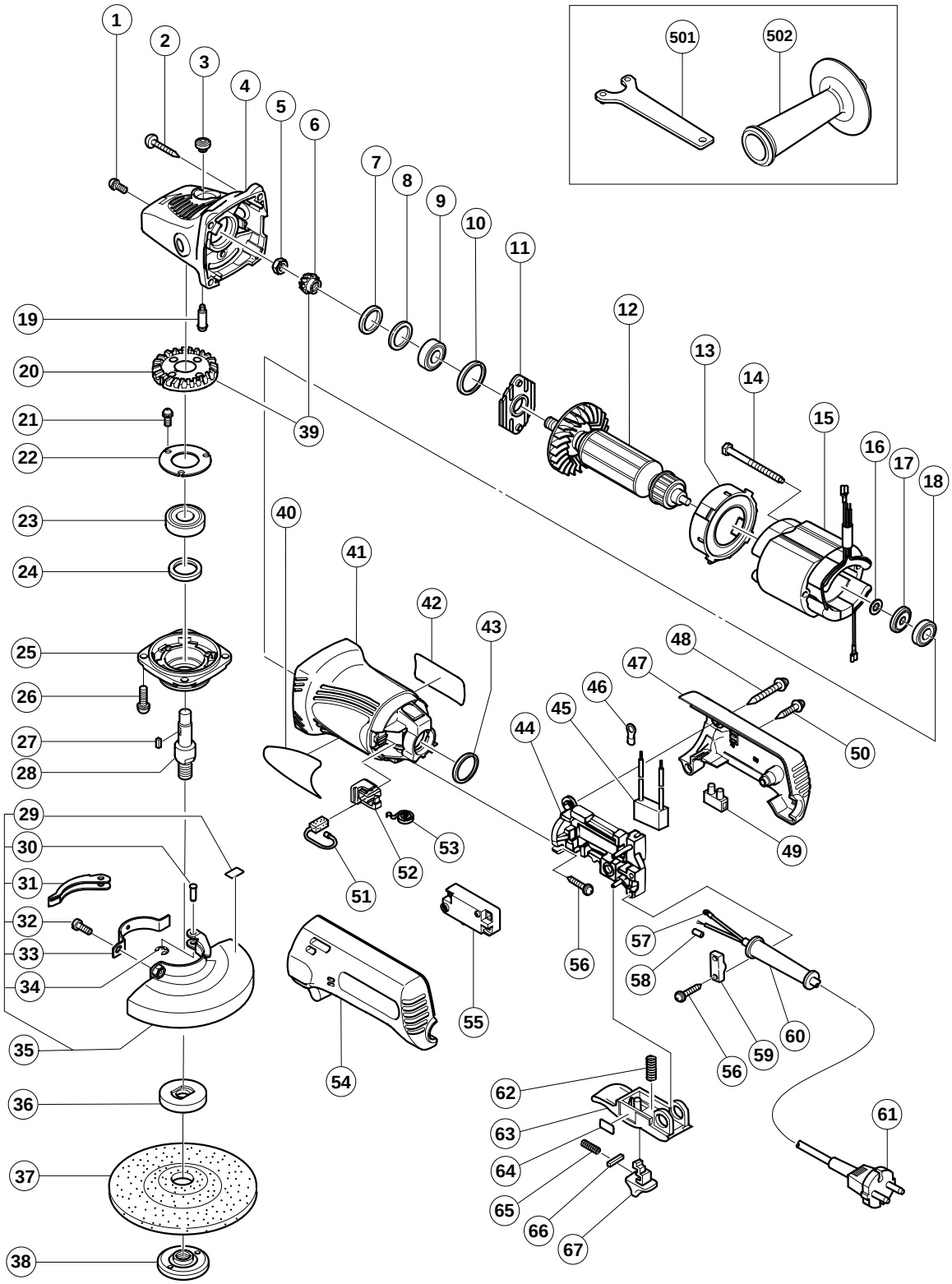
ELECTRIC TOOL PARTS LIST

■ DISC GRINDER

2003・7・25

Model G 13SE2

(E2)



PARTS

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	1	303-255	SEAL LOCK SCREW (W/SP. WASHER) M4X10	2		
	2	320-523	TAPPING SCREW D5X25 (BLACK)	4		
	3	301-944	PUSHING BUTTON	1		
	4	321-737	GEAR COVER ASS'Y	1	INCLUD. 3, 19	
	5	949-558	NUT M8 (10 PCS.)	1		
	6	308-541	PINION	1		
	7	308-543	SEAL RING (A)	1		
	8	980-866	WASHER (C)	1		
	9	629-T12	BALL BEARING 629T12DDC3PS2-L	1		
	10	957-754	RUBBER RING	1		
	11	321-734	BEARING COVER	1		
*	12	360-603U	ARMATURE ASS'Y 110V-120V	1	INCLUD. 9, 16-18	
*	12	360-619E	ARMATURE 230V	1		
*	12	360-603E	ARMATURE 230V-240V	1	FOR NZL, AUS	
	13	321-732	FAN GUIDE	1		
	14	982-021	HEX. HD. TAPPING SCREW D4X70	2		
*	15	340-551C	STATOR 110V	1		
*	15	340-551D	STATOR 120V	1		
*	15	340-551E	STATOR 230V	1		
*	15	340-551F	STATOR 240V	1		
*	16	311-737	THRUST WASHER	1	EXCEPT FOR NZL, AUS	
*	17	311-435	DUST SEAL (A)	1		
*	17	315-877	DUST SEAL	1	FOR NZL, AUS	
	18	608-VVM	BALL BEARING 608VVC2PS2L	1		
	19	301-943	LOCK PIN	1		
	20	321-736	GEAR	1		
	21	991-207	SEAL LOCK SCREW (W/SP. WASHER) M4X8	3		
	22	936-680	BEARING COVER (B)	1		
	23	620-1DD	BALL BEARING 6201DDCMPS2L	1		
	24	308-546	FELT PACKING	1		
	25	308-545	PACKING GLAND	1		
	26	307-046	SEAL LOCK SCREW (W/SP. WASHER) M5X16	4		
	27	944-109	FEATHER KEY 3X3X8	1		
*	28	994-301	SPINDLE (A)	1		
*	28	994-302	SPINDLE (B)	1	FOR USA, CAN	
	29	311-492	LABEL	1		
	30	311-744	SET PIN	1		
	31	311-743	LEVER	1		
	32	880-734	MACHINE SCREW (W/WASHERS) M5X25 (BLACK)	1		
	33	311-491	SET PIECE (B)	1		
	34	874-759	RETAINING RING (E-TYPE) FOR D2.5 SHAFT	1		
	35	311-742	WHEEL GUARD ASS'Y	1	INCLUD. 29-34	
*	36	937-817Z	WHEEL WASHER	1		
*	36	937-922P	WHEEL WASHER (B) FOR D5/8" HOLE	1	FOR USA, CAN	
	37	316-822	D. C. WHEELS 125MM A36Q (25 PCS.)	1		
*	38	994-324	WHEEL NUT M14	1		
*	38	937-923P	WHEEL NUT 5/8"-11UNC	1	FOR USA, CAN	
	39	321-735	GEAR AND PINION ASS'Y	1	INCLUD. 6, 20	
	40		HITACHI LABEL	1		
	41	321-731	HOUSING	1		
	42		NAME PLATE	1		

* ALTERNATIVE PARTS

	ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
	43	321-733	RUBBER RING	1		
	44	311-738	SWITCH BOX	1		
*	45	930-039	NOISE SUPPRESSOR	1	EXCEPT FOR USA, CAN	
*	46	311-741	TERMINAL	1		
*	46	980-063	TERMINAL	1	FOR USA, CAN	
	47	321-739	TAIL COVER (B)	1		
	48	303-694	TAPPING SCREW (W/FLANGE) D4X35 (BLACK)	2		
	49	938-307	PILLAR TERMINAL	1		
	50	301-653	TAPPING SCREW (W/FLANGE) D4X20 (BLACK)	1		
	51	999-088	CARBON BRUSH (1 PAIR)	1		
	51	999-076	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	1		
	52	317-810	BRUSH HOLDER	2		
	53	308-536	SPRING	2		
	54	321-738	TAIL COVER (A)	1		
*	55	311-739	SWITCH (1P SCREW TYPE) W/O LOCK	1		
*	55	311-740	SWITCH (1P SCREW TYPE) W/O LOCK	1	FOR USA, CAN	
	56	984-750	TAPPING SCREW (W/FLANGE) D4X16	3		
	57	980-063	TERMINAL	1		
*	58	981-373	TUBE (D)	2	FOR GBR (110V)	
	59	960-266	CORD CLIP	1		
	60	953-327	CORD ARMOR D8.8	1		
*	61	500-235Z	CORD	1	(CORD ARMOR D8.8)	
*	61	500-408Z	CORD	1	(CORD ARMOR D8.8) FOR NZL, FIJ, AUS	
*	61	500-390Z	CORD	1	(CORD ARMOR D8.8) FOR NOR, FIN	
*	61	500-249Z	CORD	1	(CORD ARMOR D8.8) FOR USA, CAN	
*	61	500-462Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (110V)	
*	61	500-440Z	CORD	1	(CORD ARMOR D8.8) FOR GBR (230V)	
*	61	500-391Z	CORD	1	(CORD ARMOR D8.8) FOR SUI	
	62	983-595	SPRING	1		
	63	308-554	PADDLE LEVER	1		
*	64	308-557	LEVER ACTION SEAL	1	FOR SWITCH (ON-OFF LOCK TYPE)	
*	64	308-558	LEVER ACTION SEAL	1	FOR SWITCH (OFF LOCK TYPE)	
					FOR NZL, FIJ, AUS, GBR, FRA, BEL	
	65	301-631	SPRING (F)	1		
	66	982-696	FEATHER KEY 3X3X15	1		
*	67	308-555	LOCK LEVER (BLACK)	1		
*	67	308-556	LOCK LEVER (GRAY)	1	FOR NZL, FIJ, AUS, GBR, FRA, BEL	

STANDARD ACCESSORIES

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
501	938-332Z	WRENCH	1		
502	994-322	SIDE HANDLE	1		

OPTIONAL ACCESSORIES

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*	601	937-825Z	RUBBER PAD	1		
*	601	938-317	RUBBER PAD	1	FOR USA, CAN	
*	602	937-826Z	WASHER NUT	1		
*	602	938-318	WASHER NUT	1	FOR USA, CAN	
	603	314-062	SANDING DISCS 125MM C-P16 (10 PCS.)	1		
	604	314-063	SANDING DISCS 125MM C-P20 (10 PCS.)	1		
	605	314-064	SANDING DISCS 125MM C-P24 (10 PCS.)	1		
	606	314-065	SANDING DISCS 125MM C-P30 (10 PCS.)	1		
	607	314-066	SANDING DISCS 125MM C-P36 (10 PCS.)	1		
	608	314-067	SANDING DISCS 125MM C-P40 (10 PCS.)	1		
	609	314-068	SANDING DISCS 125MM C-P50 (10 PCS.)	1		
	610	314-069	SANDING DISCS 125MM C-P60 (10 PCS.)	1		
	611	314-070	SANDING DISCS 125MM C-P80 (10 PCS.)	1		
	612	314-071	SANDING DISCS 125MM C-P100 (10 PCS.)	1		
	613	314-072	SANDING DISCS 125MM C-P120 (10 PCS.)	1		
*	614	994-312	WHEEL WASHER (C) FOR D20 HOLE	1	FOR USA, CAN	
*	615	994-313	WHEEL WASHER (C) FOR D22.2 HOLE	1	FOR USA, CAN	
*	616	310-338	SUPER WASHER	1	EXCEPT FOR USA, CAN	

* ALTERNATIVE PARTS

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Hitachi Koki Co., Ltd.

Tokyo Japan