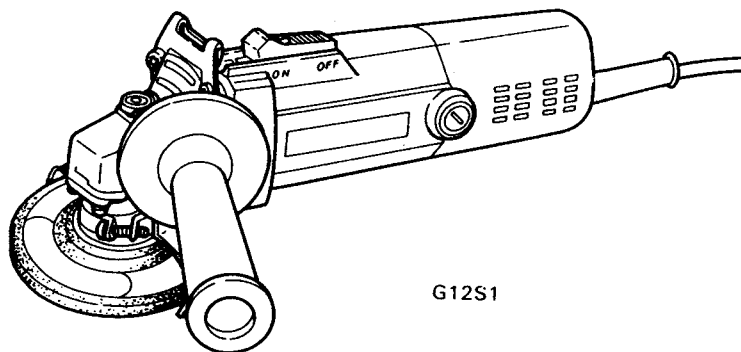


HITACHI

**DISC GRINDER
WINKELSCHLEIFER
MEULEUSE
SMERIGLIATRICE ANGOLARE
HAAKSE SLIJPMACHINE
AMOLADORA ANGULAR**

G 10SD1 · G 12S1



G12S1

Read through carefully and understand these instructions before use.
Diese Anleitung vor Benutzung des Werkzeugs sorgfältig durchlesen und verstehen.
Lire soigneusement et bien assimiler ces instructions avant usage.
Prima dell'uso leggere attentamente e comprendere queste istruzioni.
Deze gebruiksaanwijzing s.v.p. voor gebruik zorgvuldig doorlezen.
Leer cuidadosamente y comprender estas instrucciones antes del uso.



**Handling instructions
Bedienungsanleitung
Mode d'emploi
Istruzioni per l'uso
Gebruiksaanwijzing
Instrucciones de manejo**

English

4. Precautions immediately after finishing operation

After switching off the machine, do not put it down until the grinding 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

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

ASSEMBLING AND DISASSEMBLING THE GRINDING WHEEL (Fig. 2)

CAUTION: Be sure to switch power OFF and disconnect the attachment plug from the power receptacle to avoid serious trouble.

1. Assembling (Fig. 2)

- (1) Turn the equipment upsidedown so that the spindle will be facing up.
- (2) Mount the wheel washer onto the spindle.
- (3) Fit the protuberance of the grinding wheel onto the wheel washer.
- (4) Screw from above the wheel nut onto the spindle.
- (5) As shown in Fig. 2, push in the lock pin to prevent rotation of the spindle. Then, secure the grinding wheel by tightening the wheel nut with the wrench.

2. Disassembling

Follow the above procedures in reverse.

- CAUTIONS:**
- Confirm that the grinding wheel is mounted firmly.
 - Confirm that the lock pin is disengaged by pushing lock pin two or three times before switching the power tool on.

MAINTENANCE AND INSPECTION

1. Inspecting the grinding wheel

Ensure that the grinding 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 (Fig. 3)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush can result in motor trouble, replace the carbon brush with a new one having the same carbon brush No. shown in the figure when it becomes worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

4. Replacing a carbon brush:

Disassemble the brush cap with a minus-head screwdriver. The carbon brush can then be easily removed.

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.

NOTE

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

This appliance is produced to conform to the requirements of B.S. 800: 1977.

This requirement is applicable to appliances for THE UNITED KINGDOM.

IMPORTANT

Correct connection of the plug

The wires of the main lead are coloured in accordance with the following code:

Blue: -Neutral
Brown: -Live

As the colours of the wires in the main lead of this tool may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire coloured blue must be connected to the terminal marked with the letter N or coloured black. The wire coloured brown must be connected to the terminal marked with the letter L or coloured red. Neither core must be connected to the earth terminal.

NOTE

This requirement is provided according to BRITISH STANDARD 2769: 1984.

Therefore, the letter code and colour code may not be applicable to other markets except The United Kingdom.

The noise emitted by this power tool is measured in accordance with IEC 59 (CO) 11, IEC 704, DIN 45 635 Part 21, NFS 31-031 (84/537/EEC for concrete breakers). The sound pressure level at the workplace can exceed 85 dB (A); in this case noise protection for the operator is required.

4. Do not work near welding equipment.

If you work near welding equipment, rotation may become unstable.

SPECIFICATIONS

| Model | | G10SD1 | G12S1 |
|-------------------------|-----------------------|--|------------|
| Voltage (by areas)* | | (110V, 115V, 120V, 127V, 220V, 230V, 240V) | |
| Input | | 550W* | |
| No-load speed | | 11000/min | |
| Wheel | outer dia x inner dia | 100×16 mm | 115×22 mm |
| | peripheral speed | 4300 m/min | 4800 m/min |
| Weight (only main body) | | 1.6 kg | |

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

STANDARD ACCESSORIES

- (1) Grinding Wheel 1
 (2) Wrench 1
 (3) Side Handle 1

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.

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 power 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 grinding wheel shatter during operation. Ensure that the guard is properly fitted and fastened before commencing grinding operation. By slightly loosening the setting screw, the wheel guard can be turned and set at any desired angle for maximum operational effectiveness. Ensure that the setting screw is thoroughly tightened after adjusting the wheel guard.

- 5. Ensure that the grinding wheel to be utilized is the correct type and free of cracks or surface defects.** Also ensure that the grinding wheel is properly mounted and the wheel nut is securely tightened. Refer to the section on "Grinding Wheel Assembly".

6. Conducting a trial run

Before commencing grinding operation, the machine should be given a trial run in a safe area to ensure that it is properly assembled and that the grinding wheel is free from obvious defects. Recommended trial run durations are as follows:

After replacing grinding wheel 3 minutes or more

Prior to starting routine work

..... 1 minutes or more

7. Confirm the lock pin.

Confirm that the lock pin is disengaged by pushing lock pin two or three times before switching the power tool on (See Fig. 2)

8. Fixing the side handle.

Screw the side handle into the gear cover.

PRACTICAL GRINDER APPLICATION**1. Pressure**

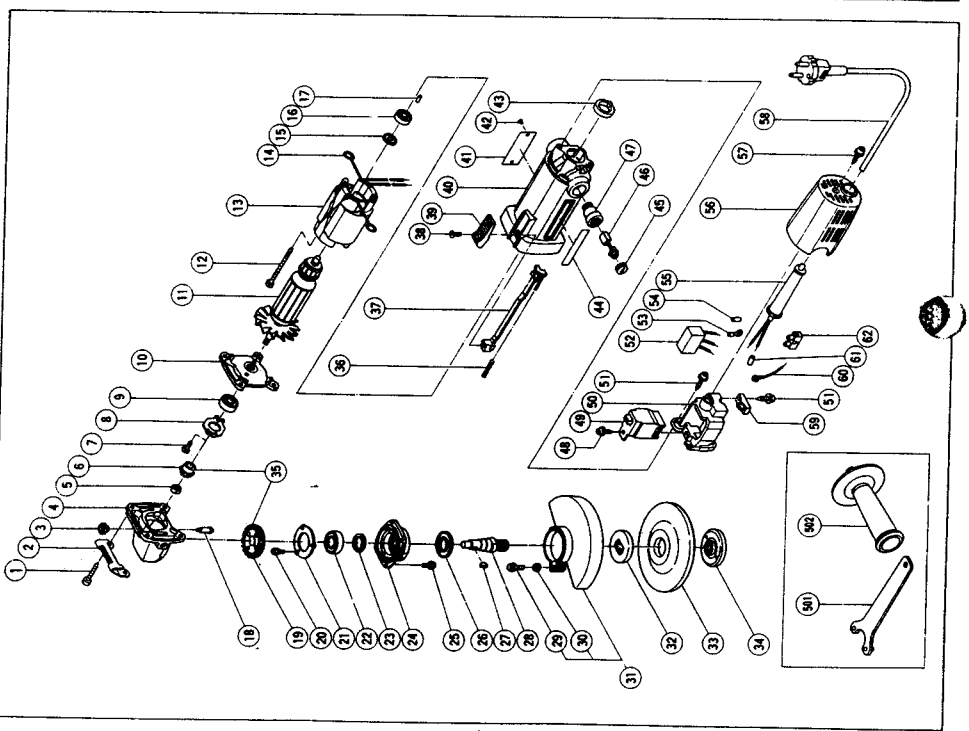
To prolong the life of the machine and ensure a first class finish, it is important that the machine should not be overloaded by applying too much pressure. In most applications, the weight of the machine alone is sufficient for effective grinding. Too much pressure will result in reduced rotational 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 grinding wheel to the material to be ground. As shown in Fig. 1, the machine should be held at an angle of 15°-30° so that the external edge of the grinding wheel contacts the material at an optimum angle.

- 3. To prevent a new grinding wheel from digging into the workpiece, initial grinding should be performed by drawing the grinder across the workpiece toward the operator (Fig. 1 direction B). Once the leading edge of the grinding wheel is properly abraded, grinding may be conducted in either direction.**

The exploded assembly drawing should be used only for authorized service G12S1 facility.



G12S1

| Item No. | Part Name | Part Name | Item No. | Part Name |
|----------|--------------------------------|------------|----------|--------------------------|
| 1 | Tapping Screw | D5x25 | 38 | Flat Hd. Screw |
| 2 | Guard Plate | | 39 | Slide Knob (C) |
| 3 | Pushing Button | | 40 | Housing Ass'y |
| 4 | Gear Cover Ass'y | | 41 | Name Plate |
| 5 | Special Nut | M7 | 42 | Rivet |
| 6 | Pinion | | 43 | Bearing Bushing |
| 7 | Slotted Hd. Screw (Seal Lock) | M4x10 | 44 | HITACHI Label |
| 8 | Bearing Cover | | 45 | Brush Cap |
| 9 | Ball Bearing (608VVMC2EPS2L) | | 46 | Carbon Brush |
| 10 | Inner Cover | | 47 | Brush Holder |
| 11 | Armature | | 48 | Tapping Screw (W/Washer) |
| 12 | Hex. Hd. Tapping Screw | D4x70 | 49 | Slide Switch |
| 13 | Stator Ass'y | | 50 | Switch Holder |
| 14 | Brush Terminal | | 51 | Tapping Screw (W/Flange) |
| 15 | Washer (A) | | 52 | Noise Suppressor |
| 16 | Ball Bearing (626VVMC2ERS2S) | | 53 | Terminal |
| 17 | Bearing Lock | | 54 | Tube (D) |
| 18 | Lock Pin | | 55 | Cord Armor |
| 19 | Gear | | 56 | Tail Cover |
| 20 | Seal Lock Screw (W/Sp. Washer) | M4x10 | 57 | Tapping Screw (W/Washer) |
| 21 | Bearing Cover (B) | | 58 | Cord |
| 22 | Ball Bearing (6001VVCMP2S2L) | | 59 | Cord Clip |
| 23 | Felt Packing | | 60 | Internal Wire |
| 24 | Packing Gland | | 61 | Tube (D) |
| 25 | Seal Lock Screw (W/Sp. Washer) | M4x12 | 62 | Pillar Terminal (B) |
| 26 | Finger | | 501 | Wrench |
| 27 | Woodruff key | 2.5x8 | 502 | Side Handle |
| 28 | Spindle | | | |
| 29 | Machine Screw | M5x20 | | |
| 30 | Spring Washer | M5 | | |
| 31 | Wheel Guard (A) Ass'y | | | |
| 32 | Wheel Washer | | | |
| 33 | Grinding Wheel | 115mm A360 | | |
| 34 | Wheel Nut | M14 | | |
| 35 | Gear Ass'y | | | |
| 36 | Spring | | | |
| 37 | Slide Bar | | | |

Parts are subject to possible modification without notice due to improvements. The drawing and the list are parts structural drawing and parts list of model G12S1. For model G10SD1 refer to the drawing and the list.