

Instruction Manual

Die Grinders

RG-16AKLW RG-25LW RG-382 RG-383 RG-38C RG-38CX

This Instruction Manual was written to give the user with information about the safe operation and maintenance of NPK die grinders. Read this manual thoroughly and become completely familiar with your angle grinder before using it.

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Safety alert symbols used in this manual

This instruction manual uses the following safety alert symbols. When you see those symbols in the text, follow the safety message to avoid personal injury or death.

⚠ WARNING: Failure to follow the instructions in

the message might cause a serious

accident or death.

⚠ CAUTION: Failure to follow the instructions in

the message might cause personal injury or damage to the air tool.
Remember that if you fail to follow

the instructions in \bigwedge CAUTION messages, it might also cause a serious accident or consequence.



★ Read this manual thoroughly and become completely familiar with the angle grinder before using it. We don't take any responsibility for an accident or malfunction caused by misuse or improper operation.

* Keep this manual as a ready reference for anyone

who may use the angle grinder.
★ If this instruction manual is missing or any warning or caution label attached to the angle grinder is missing or defaced (damaged or illegible), replace with a new one. The instruction manual and labels are available through your local NPK dealer.

If the angle grinder is to be leased, loaned or sold to anyone, this manual must be with the angle

grinder.

If you have any question about the product or the description in this manual, contact us or your local NPK

Safety precautions to be taken when using the air grinder Before use



WARNING

- ★ Angle grinders are air tools designed for grinding with a grinding stone. Do not use the angle grinder for purposes other than specified. Failure to do so may cause a serious accident.
- ★ For air grinders with a grinding stone that is larger than 50 mm in diameter, a stone guard must be installed.
- Make sure that the grinding stone meets the requirements (dimensions and peripheral speed) of your air grinder.

Never use a grinding stone whose maximum speed or maximum peripheral speed (indicated on the decal) is less than those indicated on the grinder or the stone guard.

* Run the grinder without load in a safe place more tun the grinder without load in a safe place more than 1 minute before the day's work or more than 3 minutes whenever the grinding stone is replaced with a new one, to check for proper operation.

Operation of the grinder without load should be performed in a safe place in order to prevent the possibility of an accident occurring if the grinding stone breeks.

stone breaks.

★ Do not use the side face of the grinding stone unless

it is specially designed for that purpose.

The grinding stone may break and cause a serous accident.

★ Do not use cutting stones for surface grinding. Otherwise, the cutting stone may be damaged and cause a serous accident.

Do not use an air pressure of more than 0.6 MPa. If the angle grinder is used with an air pressure other than specified, the grinding stone will exceed its maximum peripheral speed, thus causing an accident.

★ Check the operating speed when conducting maintenance and inspection, or replacing stones.

Measure the operating speed using an air pressure of 0.6 MPa with grinding stone not installed. If the operating speed measured exceeds the value indicated on the decal attached to the device, the grinder should be repaired.

Never use a damaged, excessively worn, or otherwise defective stone guard. If the grinding stone should be damaged, a serious



Do not use any grinding stone that is wet or have been immersed in water or other liquid.

If a wet grinding stone is used, it may break, causing an accident.

Do not use the angle grinder with the stone guard removed.

If the grinding stone is damaged, it may cause a serious accident.

★ Do not reuse the stone guard damaged by fragments of a broken grinding stone.

The use of a damaged guard may cause an accident.

In dusty operating conditions, proper measures should be taken to protect the operator, such as installing a dust collector.

Operation in a dusty environment may pose a health hazard to the operator.

Use accessories in a proper manner. If you have any question about how to use them, contact their respective manufacturers or dealers.

Improper use of accessories may result in an accident.

★ Make sure that no one is under your position when using the angle grinder at an elevated place. If you drop the grinder accidentally, there is a danger of causing a serious injury.

★ Before starting operation, remove all tools used for adjustment from the grinder.
Tools may fly off and cause injury.

* It is advisable to install a filter, pressure reducing valve, oiler at the air supply port.

★ Use the air hose that is less than 5 meters in length and that is shown in the specification.

During use

WARNING

★ Never use the angle grinder in a place where there

is a danger of causing an explosion.

If the angle grinder is used in the presence of flammables (gas, liquid, or powder), grinding sparks may cause an explosion or fire.

* Keep hands and feet away from the grinding stone while it's running.

There is a danger of causing injury. Remember that the grinding stone will keep turning for a while after turning off the starter switch.

★ Do not allow people to stand in the direction in which grinding sparks fly.
Grinding sparks can get into eyes. If the grinding

stone breaks, there is a danger of causing an injury. * Avoid contact with grinding sparks.

Direct contact with grinding sparks may cause injury or burns.

Wear protective glasses.

Flying objects, dust or sparks may cause damage to the operator's eyes.

★ Wear a dust-proof mask in a dusty environment.

Working in a dusty environment may pose a health hazard to the operator.

Use ear protection to prevent the exposure to high noise level. It is advisable to wear ear protection even if the operating noise is low level.

Exposure to loud noise for long hours may cause hearing disorder.

★ Wear vibration-proof gloves.

Continuous, long-hour operation using the air grinder might cause illness, due to vibration. Wear vibration-proof gloves and take a break as necessary.

Do not touch the work immediately after it's ground or polished.

The work is extremely hot and can cause burns.



★ Do not apply impact or excessive force to the grinding

stone when operating.

If impact or excessive force is applied to the grinding stone when grinding, the stone may crack and fly apart, causing an accident.

★ If you drop the angle grinder or bump it against something, inspect for any signs of damage, cracks, or deformation. If any damage is found, have it repaired. Do not use a damaged tool; otherwise it can cause an

★ Do not start the angle grinder abruptly.

Avoid abrupt starts; otherwise it might cause an accident or the malfunction of the machine. Operate the starter switch carefully.



accident.

WARNING

* When the angle grinder is not provided with an oiler, add approximately 0.5 ml of turbine oil (ISO VG 32 or equivalent) through the air supply port, before and after operation. Then allow the air grinder to run without load for 2 to 3 seconds, with care not to allow dirt or dust into the system.

Unlubricated operation may cause the air tool to fail to operate normally, thus resulting in an accident.

- ★ When the angle grinder tool is provided with an oiler, add turbine oil (ISO VG 32 or equivalent) and adjust the drip rate of oil to a few drips per minute. Unlubricated operation may cause the air tool to fail to operate normally, thus resulting in an accident.
- ★ Before starting each shift, drain the tank or air filter. Air containing a lot of drain will cause the malfunction of the angle grinder or result in an accident.
- Use caution not to allow the entrance of dirt into the unit when connecting the air hose.

Failure to protect the unit against the entrance of foreign matter may cause the malfunction of the angle grinder or an accident. Before connecting the air hose to the angle grinder, idle the machine until no dirt or drain comes out of it, and wipe away any dirt or dust from the air hose connection area.

When installing the grinding stone



WARNING

- * Replacement of grinding stones and a subsequent test run should be conducted only by "qualified personnel who have received special training".
- Visually inspect and conduct a hammering test on the grinding stone for chips, cracks, or wear. Check for a damaged or missing decal. If any defect is found, do not use the machine.

If a defective stone is used, it may break and cause an accident.

- Do not remove the decal attached to the grinding stone. If the grinding stone is not used according to the rating shown on the decal, it might break, causing an accident.
- When installing or removing the grinding stone, stop the supply of air and remove the air hose from

the angle grinder.

If the grinding stone accidentally rotates, it may result in an accident. When the angle grinder is not provided with a protective device (such as a coupler) that automatically shuts off the supply of air, close the air cock, run the machine to drain the air remaining in the air hose, and then remove the air hose. Failure to do so may allow the residual air to burst out, causing the hose to spring loose and jump around.

★ Use genuine NPK parts (flanges or bolts) when installing grinding stones.

Use of improper parts may damage the grinding stone, thus causing a serious accident.

(continued on next page)

MARNING

★ Do not use the angle grinder if the grinding stone mounting shaft, screw, flange, or bolt is worn or damaged.

Otherwise, the grinding stone may come off and cause an accident.

- ★ When installing a grinding stone onto the shaft, do not force it on and make sure there is no looseness.

 Do not use an improperly sized grinding stone by modifying or by using a bushing. The grinding stone may break and cause an accident.
- ★ Use caution not to allow the entrance of foreign matter between the grinding stone and the flange. The grinding stone may break and cause an accident.
- ★ Tighten the grinding stone to the specified torque. If installed insecurely, the grinding stone may come off during operation, causing an accident.
- ★ Do not tighten the lock screw or the wheel nut beyond the specified torque. Overtightening may cause the grinding stone to break, thus resulting in an accident.
- ★ Before using the angle grinder, make sure the grinding stone is securely in place and has no run-out. Otherwise, the grinding stone may come off, causing an accident.
- ★ Install the stone guard in place securely.

 Poor installation of the stone guard will cause a serious accident if the grinding stone breaks.

Operation

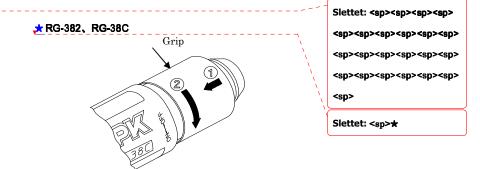
■ Installing the grinding stone

★ RG-382 & RG-38C

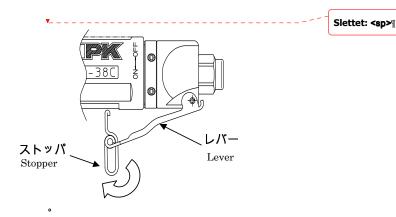
- ① Install the grinding stone on the grinder.
- ② Fit the collet body spanner onto the collet body to keep it from moving.
- ③ Fit the collet nut spanner onto the collet nut and tighten to the torque of approximately 4 Nm.
 ※The same applies to lever-type grinders (RG-383 and RG-38CX and RG-16AKLW and RG-25LW).

Removing the grinding stone

- ① Fit the collet body spanner onto the collet body to keep it from moving.
- ② Fit the collet nut spanner onto the collet nut and loosen it to remove the grinding stone.
 - * The same applies to lever-type grinders (RG-383



★ RG-16AKLW,RG-25LW,RG-383,RG-38CX



Operation

★ RG-382 & RG-38C

Start: Press the grip in the direction of the arrow \odot and turn it to ON.

Stop: Turn the grip to OFF.

★ RG-16AKLW,RG-25LW,RG-383,RG-38CX

Start: Turn the stopper toward the grinding stone side and depress the lever.

Stop: Remove your hand from the lever.

Specifications

型式	といし寸法 外径× 厚さ× 穴径	といしの 最高周速度	無負荷 回転数	全長	質量	ホース口金取付ね	ホース	空気消費量
Model No.	Capacity (wheel Size)	Max. Peripheral Speed	Max. Free Speed min ⁻¹	Overall Lenath	Net weight	Air Inlet Thread	Hose Size	Air Con- sumption m ³ /min
	<u>mm</u>	m/s	min	mm	ka	Rc_	<u>mm</u>	m/mn
RG- 16AKI W	φ 16	33	35000	177	0.4	1/4	6.3	0.25
RG-251 W	ω 20	33	30000	176	1.1	1/4	6.3	0.4
RG-382	o 25	33	22000	173	06	1/4	95	0.5
RG-383	o 25	33	22000	178	0.6	1/4	9.5	0.5
RG-38C	o 25	33	22000	178	06	1/4	95	05
RG-38CX	o 25	33	22000	183	0.6	1/4	95	0.5

使用する砥石は、最高使用周速度が33m/s 2000m/min/以上であることをご確認下さい。

仕様は予告なく変更することがあります。

Specifications are subject to change without notice

Slettet: <sp>¶

Maintenance and inspection



WARNING

Maintenance and inspection

Make sure to perform maintenance and inspection at regular intervals for safe operation of the angle grinder.

★ It is advisable to have the angle grinder disassembled

and adjusted by a specialist at regular intervals.

To keep the performance and avoid an unexpected accident, it is advisable to ask a specialist to disassemble and adjust the angle grinder at regular intervals.

Repair



WARNING

- ★ Unauthorized modification or repair can cause an accident. We don't take any responsibility for an accident or malfunction if the angle grinder is modified or repaired by the user himself. The repair, disassembly, and adjustment must be left to your local NPK dealer.
- ★ For any additional information required, please refer to your local NPK dealer or the following NPK offices.