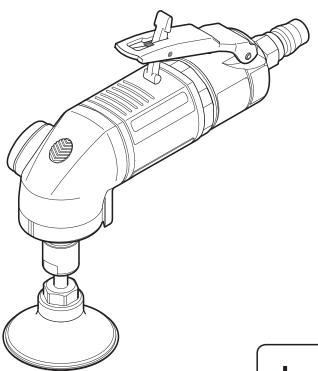


# INSTRUCTION MANUAL

Professional tool Pneumatic sander



Model: MYS-20



# Japan Use Only

### [Specifications]

Model		MYS-20
Maximum operating pressure	MPa	0.6
Air consumption (No load)	m³/min	0.42
Rated speed (No load)	min⁻¹	19000
Abrasive Disc (paper) diameter	mm	23, 38, 50
Mass (weight)	kg	0.55
Sound pressure level *1	dB (A)	82
Sound power level *1	dB (A)	93
Vibration level *2	m/s²	3.3

- \*1 Based on the ISO15744 measurement standard.
- \*2 Based on the 3 axes combined value measurement standard of the ISO28927-3 of the hand-held tool frequency correction vibration acceleration effective value.
- Please read manual carefully before you attempt to use your tool so that you may use it properly and safety.
- Keep the manual handy so you can use it whenever necessary.
- Due to continuous product development/improvement, the specifications and configurations in this document are subject to change without prior notice.

## **Instructions**

Thank you very much for your purchase of this Nitto Kohki product.

Before using your tool, please read this manual carefully so that you may use it properly to get the most out of it. Please keep the manual handy - so you can use it whenever necessary.

The following Safety notations are used throughout the manual to highlight safety precautions for the user and for the tool.

**MARNING:** 

Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in death or serious injury.

**CAUTION:** 

Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in injury or material damage.

Please observe all safety precautions in the manual.

**CAUTION:** Important precautions for tool setup, operation and maintenance.

About pictograms

**⚠ WARNING**:

It might be dangerous to operate the tool if the instructions supplied are not followed.



Using this tool improperly could result in serious injury. Read the instruction manual before use.

### **Contents**

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instructions given)	1
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# California Proposition 65

#### MARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known [to the State of California] to cause cancer birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints,
- Crystalline silica from bricks and cement and other masonry products, and
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

<sup>\*</sup> Please note, however, that failure to observe safety precautions under the "A CAUTION" category could result in a serious occurrence depending on the situation.

# Precautions on Use (Make sure to follow the instructions given)

Before using your tool, to avoid personal injury always take the basic precautions explained in later sections.

# **General Power Tool Safety Warnings**

## **Personal safety**

## **⚠ WARNING**

### Dress properly.

Do not wear loose clothing or jewelry. There is a danger of being caught in moving parts. Wear a pair of non-slip shoes. If your hair is long, wear a protective hair covering to contain your hair.

### Always wear eye protection.

Corrective glasses are not considered eye protection. Always wear appropriate eye protection.

#### Wear a dust mask.

When dust is generated in the workplace, wear a dust mask.

### Use a dust collector or dust collection equipment correctly.

If a dust collector or dust collection equipment are being used, check that these are connected and used properly. Use of a dust collector can reduce risk caused by dust.

 When loud noise is generated in the workplace, wear a hearing protection.

### Do not overreach.

Keep proper footing and balance at all times.

### • Be on your guard when working.

Do not use the tool when you are tired.

When you use the tool, be sure about the handling method, how to work, and pay sufficient attention to the surrounding environment.

### • Never touch the tip of moving parts when the tool is running.

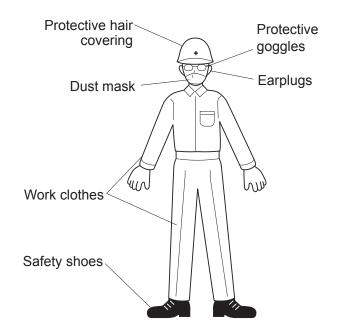
Also, do not direct the tip of moving parts toward people or animals.

### • Be aware of tool vibration and recoil. Some tools can cause a considerable amount of vibration.

Depending on how the product is operated, the type of tool setting, and the length of operation, it could place a tremendous burden on your hands, arms and body.

The tool could cause a vibration injury or tendonitis. Avoid long-term use and take appropriate breaks.

Consult a doctor if you experience any discomfort or pain while operating the tool.





## Work area safety

### ⚠ WARNING

• Do not use the tool at home.

This is a professional tool (industrial or work tool for business). Do not bring the tool home and use it there.

• Keep the work area clean.

Working in a messy work area or work table could cause an accident.

• Be cautious about the work area.

Do not expose the tool to rain.

Do not use the tool in a damp or wet place.

Keep the work area well lit.

- Do not operate the tool in an explosive atmosphere, such as in the presence of flammable liquids (thinner, lacquer, gasoline, etc.) or gas.
- Do not let children come close to the work area.
   Keep children and bystanders away while operating tool.
- Some tools generate loud noise.

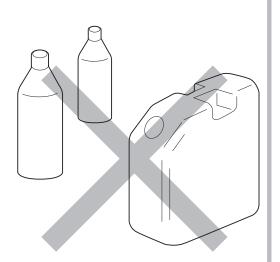
Check that the noise regulations of each area are complied with.

• When work has to be done in high locations, make sure there is nobody underneath the work area.

If the tool or material is dropped, it could cause an accident or injury.

 Before starting operation, make sure that there is no conduit, water pipe or gas pipe by your work area.

If a tool touches a buried object, it could cause electrical shock or leakage, which could cause an accident.



## Before starting to work

### **⚠ WARNING**

• Perform inspection before using the tool.

Before using the tool, check for loose screws on the tool and for damage on the protective cover or other parts, and make sure that the tool operates normally and demonstrates prescribed functions.

Check the position adjustment and tightening status of moving parts, parts damage, attachment status, and all other locations for issues that could affect operation.

For parts replacement and repair, follow the instructions indicated in the instruction manual.

If there are no instructions in the instruction manual, contact the retailer where you purchased the tool or the nearest NITTO service member store.

Do not use the power tool if the switch does not turn it ON and OFF.

• Make sure to properly attach the tip tool.

If the tip tool is not attached properly, there is a risk of jumping out or damage, which could result in injury.

- After adjustment, be sure to remove tools such as Spanners, wrenches, etc.
- Use appropriate tools.

Do not force small tools to do the job of a heavy duty tool. Do not use tools for purposes not intended.

• Do not use tools in an unreasonable manner.

When the specifications are followed, tools can be used efficiently and safely.

• Secure workpieces.

Where possible use clamps or a vise to hold the work. It is safe to hold the workpieces by hand and both hands can be used for operation.

## **Handling tools**

### 

### Storing the tool

When the tool is not used, store the tool in a dry location. Also, store the tool out of the reach of children. For some tools, the storage temperature and humidity are specified. Store the tool in an appropriate location.

• Be cautious about how the tool is carried.

Do not carry the tool with your hand touching the operation switch.

• Do not leave the tool while the tool is still running.

Do not leave the work area until you turn off the operating switch, remove the power source and the tool completely stops.

Do not allow the following chemicals to come into contact with the tool, as parts could deteriorate.

Acetone, benzine, thinner, ketone, ether, trichloroethylene and other similar chemicals

## **Maintenance and Inspection**

### ⚠ WARNING

#### • Do not disassemble or alter the tool.

Using the tool after disassembling or remodeling it could cause an accident or injury.

#### • Inspect tip tools and accessories.

Always inspect tip tools and accessories for damage or deterioration before attaching them to the tool. If damage or deterioration is found, request repair from the retailer where you purchased the tool or the nearest NITTO service member store.

#### Inspect for damaged sections.

Sufficiently check for damage on accessories or other parts, that the tool operates normally, and that work can be performed appropriately.

If there are accessories or parts that have been damaged or could hinder work, request repair from the retailer where you purchased the tool or the nearest NITTO service member store.

### Request repair from a dedicated store.

For repair or replacement of parts, request service from the retailer where you purchased the tool or the nearest NITTO service member store.

Repair requires special knowledge and skills. If repair is performed at a place other than a specialty store, the tool may not demonstrate its full performance or it could lead to an accident or injury.

Request repair with the failed status kept intact. When requesting a repair, do not throw away damaged parts. It could be important information for investigating the failure cause so do not change the status.

### Use genuine parts.

If inappropriate parts are used, it could cause accident or injury.

Genuine parts are listed in the instruction manual or brochure. Inquire at the retailer where you purchased the tool or the nearest NITTO service member store.

### Do not remove the labels or plates on the tools.

If labels or plates are broken or peeling, for a replacement label or plate contact the retailer where you purchased the tool or the nearest NITTO service member store.



# **General Pneumatic Tool Safety Warnings**

### ⚠ WARNING

• Use the tool with proper air pressure.

If the air pressure is high, the rotation speed and reciprocation frequency become faster, causing damage such as damage or accelerated wear. Also, unexpected accidents could occur.

• Connect the tool to air piping.

In some factories, other than air piping, there may be other piping such as oxygen, nitrogen, gas, etc. Before connecting to piping, make sure it is the correct piping.

• Do not start the tool carelessly.

Turn off the operation switch, then attach the Connecting Hose to the tool.

- When attaching, removing, and maintaining accessories, make sure to detach the Connecting Hose from the tool.
- Be cautious about exhaust.

Pneumatic tool exhaust contains oil and drainage, etc. Be careful about the exhaust direction so that the exhaust does not directly hit people nearby.

• Do not allow sources of electricity to touch the tool.

The pneumatic tool is not insulated against contact by electric sources. Because there is a risk of electric shock, do not allow sources of electricity to touch the tool.

### **⚠** CAUTION

Handle the tool with care.

Rough handling could cause accidents or malfunctions. Do not exert an impact on the tool by throwing or dropping it.

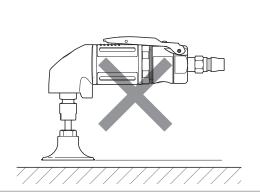
• Handle the Connecting Hose with care.

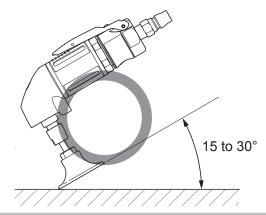
Do not carry the tool by holding the Connecting Hose, and do not pull the Connecting Hose to remove it.

# **Product Specific Safety Rules**

### **⚠ WARNING**

- Use the same size for the Abrasive Paper and Pad. (Example: If the Abrasive Paper is 1", use a 1" Pad.) The chuck diameter is 6 mm. Use genuine Pads.
- Do not use an Abrasive Paper with the allowable rotation speed (written on the Abrasive Paper, Pad, or package box) lower than the actual rotation speed of the tool.
- When mounting the Abrasive Paper or Pad, carefully check for cracks and chips.
   Do not use Abrasive Papers or Pads that are damaged such as cracks or chips. Also, do not use Abrasive Papers soaked in liquid such as water.
- When mounting a new Abrasive Paper, place this tool under an iron workbench or in a cast and operate it for 1 minute or more.
  - At this time, make sure there are no people above the rotating surface of the Abrasive Paper. If the Abrasive Paper is defective, or in case of improper mounting or the Abrasive Paper and Pad have different size, the Abrasive Paper may come off which is extremely dangerous.
- When starting to use this tool, make sure that the rotation speed at 0.6 MPa (6 kgf/cm²) does not exceed the rotation speed indicated on the label or the tool.
- This tool is dedicated to Abrasive Paper.
   Never use Grinding Wheel.
- Always work at the correct angle of 15 to 30 degrees.





# 1 Application

This tool is a pneumatic hand-held sander for polishing/grinding steel materials, etc. using the dedicated Pad and Abrasive Paper.

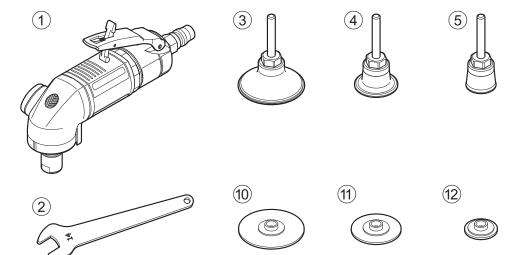
# 2 Checking Inside the Package

When you open the package box, check the contents of the package and also check for any damage that may have occurred during transportation.

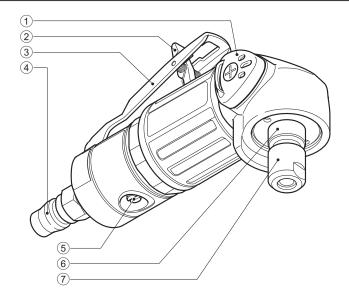
If an abnormality is found, request service from the retailer where you purchased the tool or the nearest NITTO service member store.

	Package content and accessories	Quantity	Check
1	MYS-20 (main unit)	1	
2	Spanner 14	2	
3	Pad 2"	1	
4	Pad 1.5"	1	
5	Pad 1"	1	
6	Instruction Manual (this document)	1	
7	General Catalog	1	
8	Caution for Use	1	
9	Questionnaire Postcard	1	

	Package content and accessories	Quantity	Check
10	Abrasive Paper 2"×#60, #80, #100, #120	2 papers each	
11)	Abrasive Paper 1.5"×#60, #80, #100, #120	2 papers each	
12	Abrasive Paper 1"×#60, #80, #100, #120	2 papers each	



# 3 Part Names



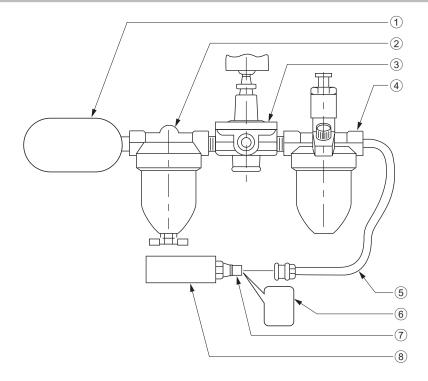
- 1 Exhaust Cover
- 2 Lock Lever
- ③ Throttle Lever
- 4 Coupler
- 5 Adjust Valve
- 6 Spindle
- 7 Chuck Nut

# **4 Air Supply**

### **⚠** CAUTION

• Remove drainage before stating work.

When drainage enters the tool, the vicinity of the exhaust port freezes, which could cause a loss of power.



- 1 Compressor
- 2 Air Filter
- 3 Air Regulator
- 4 Lubricator
- **5** Connecting Hose
- 6 Machine Oil
- 7 Coupler
- 8 Tool

### Air pressure used

Use the tool with air pressure at 0.6 MPa. If the pressure is too low, the tool cannot demonstrate the required performance. If it is too high, it could damage parts of the tool. Use an Air Regulator (3) to adjust the pressure to the appropriate level.

#### Air line

Use a Connecting Hose (⑤) with an internal diameter of 9.5 mm (3/8") between the Compressor (①) and the tool (⑧). Compressed air exits the Compressor and cools and moisture condenses. Some moisture could condense inside the Connecting Hose and get inside the tool, causing a malfunction. Install the Air Filter (②) and Lubricator (④) between the Compressor and the tool.

### Machine oil

Install a Lubricator between the Compressor and the tool, and be sure to use machine oil (ISO VG-10). Failure to do so could cause damage to the tool. Also, if lubricating oil with high viscosity is used, it could cause performance degradation.

### Refueling

Each day before starting work detach the Connecting Hose and refill a few drops (⑥) of machine oil (ISO VG-10) from the Coupler (⑦) to the tool.

After refueling, connect the Connecting Hose and perform idle operation for a few seconds to allow the oil to blend in the entire tool.

# 5 Preparation

### ⚠ WARNING

- Always wear eye protection while working.
   When a lot of dust is generated in the workplace, wear a dust mask.
- When replacing or adjusting the Abrasive Paper or parts, be sure to detach the Connecting Hose from the tool.
- Never touch moving parts while the tool is running.
- After stopping work, the tip of the grinding tool will continue to rotate for a while. Never touch moving parts until the tool completely stops.

# Replacing Pad/Abrasive Paper

### **⚠ WARNING**

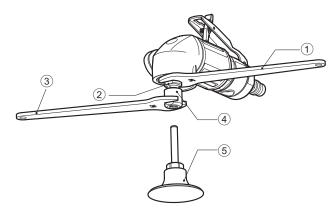
 Before replacing the Grinding Wheel, always turn OFF the Throttle Lever and detach the Connecting Hose from the tool.

### Attaching a Pad

Insert the shaft of the Pad (5) all the way to the rear, turn the Chuck Nut (4) clockwise by the attached Spanner 14 (3) and firmly tighten.

## Removing the Pad

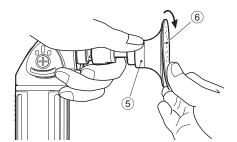
Support the Spindle (2) with the attached Spanner 14 (1), loosen the Chuck Nut (4) by turning it counterclockwise with the other Spanner 14 (3) and pull out the axis of the Pad (5).



- 1 Spanner 14
- 2 Spindle
- 3 Spanner 14
- 4 Chuck Nut
- (5) Pad
- 6 Abrasive Paper

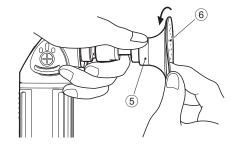
## Attaching the Abrasive Paper

Align the abrasion paper with the thread part of the Pad and turn the Abrasive Paper clockwise to firmly tighten



### Removing the Abrasive Paper

Support the Pad by hand, grasp the end of the Abrasive Paper (⑥) and turn it counterclockwise to remove it



# Start and stop

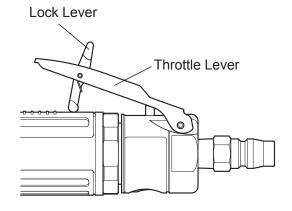
### Start

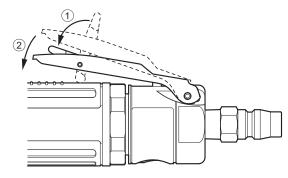
- 1 Check that the Throttle Lever is in the OFF status and insert the Connecting Hose into the Coupler of this tool.
- 2 Hold the tool and while pressing the Lock Lever (1), press the Throttle Lever (2)

  The tool starts.

## Stop

Release your hand from the Throttle Lever.
The Throttle Lever automatically returns to the OFF status.



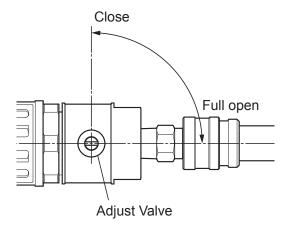


# Adjusting the rotation speed

### **⚠ WARNING**

- Never touch the tip of moving parts.
- **1** Use a flathead screwdriver to turn the Adjust Valve The air flow rate changed that allows the rotation speed to be adjusted.

The maximum rotational position is when the screwdriver groove of the Valve coincides with the axis center of the main unit. Adjust the position according to the purpose of use.



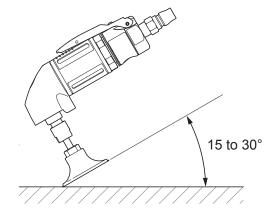
# 6 How to Use

# **Grinding work**

## **⚠** CAUTION

- Do not press the Abrasive Paper strongly against the working surface.

  Doing so could damage parts or damage the Abrasive Paper or Pad.
- 1 Hold the tool with your hand to start
- Lightly touch the Abrasive Paper at an angle of 15 to 30 degrees against the working surface Strongly pressing the tool against the working surface does not change work efficiency.



# 7 Maintenance and Inspection

# Storing the tool

Store the tool according to the following warnings and cautions.

### **⚠ WARNING**

• When the tool is not in use, store out of the reach of children.

## **△** CAUTION

- When the tool is not in use, store in a place with little humidity.
- After completing work, lubricate with machine oil (ISO VG-10) from the hose connecting part of the tool and operate a little before storing.

If the tool is left as is after use, moisture in the air could remain inside the main unit, likely causing rust to occur.

# **Maintenance and Inspection**

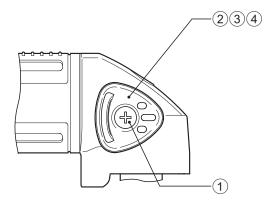
### **⚠ WARNING**

- For maintenance and inspection, be sure to detach the Connecting Hose from the tool.
- Use genuine parts.
- Never touch moving parts while the tool is running.

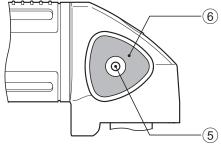
### Replenishing grease

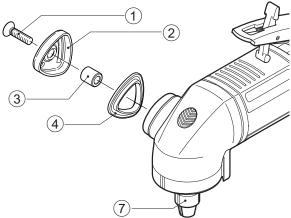
Apply grease (Sumitec 305) as needed to the inside of the main unit about once a month according to the following procedure.

1 Loosen the + Countersunk Head Screw 4x16 (1) of the Exhaust Cover and remove the Exhaust Cover (2), Spacer (3), and Packing Cover (4)



- 2 Use a grease gun to inject grease into the grease inlet (5)
  - Use a grease gun nozzle with a tip outer diameter of less than 3 mm.
  - The nozzle for a grease nipple cannot be used for injection.
  - You do not need to remove the Exhaust Filter (6). If it came off, attach as shown in the illustration.
- Assembling the Exhaust Cover
  Assemble the Exhaust Cover by performing the disassembly procedure in reverse.





- 1 + Countersunk Head Screw 4×16
- 2 Exhaust Cover
- 3 Spacer
- 4 Packing Cover
- 5 Grease Inlet
- 6 Exhaust Filter
- 7 Spindle



4 Perform a trial run and wipe off extra grease that seeps out

Attach a Connecting Hose to the Coupler of the tool and operate the tool. At that time, grease may scatter around the Spindle  $(\fill)$ , so use with care. Stop the tool in a few seconds and always detach the tool from the Connecting Hose, then wipe off any grease that seeps from the periphery of the Spindle.

# **Disposal**

- Separate the tool, accessories, and packing materials for environmentally-friendly recycling.
- When disposing of the tool, follow the rules of each municipality.