# **INSTRUCTION MANUAL**

# PNEUMATIC RECIPROCATING FILE

Please read this manual carefully before you attempt to use your tool so that you may use it properly and safely.

**SUPER HAND** 

Model ASH-900

**PROFESSIONAL TOOL** 



# **Specifications**

Model	ASH-900
Maximum Operating Pressure	0.6 MPa
Air Consumption (No Load)	0.13 m³/min
Rated Speed (No load)	6300 min <sup>-1</sup>
Stroke Length	9 mm
Shank Dia.	5 mm
Mass (Weight)	0.5 kg
Sound Pressure Level	62.5 dB(A)
Sound Power Level	73.5 dB(A)
Vibration Level [Uncertainty K]	4.8 m/s <sup>2</sup> [3.0 m/s <sup>2</sup> ]
Thread Size of Air Inlet	Rc1/4

The specifications and configurations contained in this document are subject to change without prior notice due to improvements we are making day in, day out.



Manufactured by:

# NITTO KOHKI Co., Ltd.

2-9-4, Nakaikegami, Ohta-ku, Tokyo, 146-8555, Japan Tel : (81)-3-3755-1111 Fax : (81)-3-3753-8791

E-mail: overseas@nitto-kohki.co.jp URL: www.nitto-kohki.co.jp

Keep the manual handy – so you can use it whenever necessary.

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.

· English : Please ask your dealer or

distributor for instruction manual

in local language(s).

· German : Bitte fragen Sie Ihren Händler

nach eine Betriebsanleitung in

Landessprache.

· French : S'il vous plait, veuillez demandez

á votre foumisseur de manuel instruction en langue locale.

· Spanish : Por favor, cantacte con su

> distribuidor para el manual de instrucciones en español.

· Portuguese : Por favor pessa ao seo agente

ou distribuidor o manual de instrucces ih linguagen local.

· Italian : Per Manuale Istruzioni in lingua

locale Vi preghiamo di rivolgervi

al rivenditore o distributore.

· Dutch : Vraag uw handelaar

om een nederladstalige gebruiksaanwijzing.

· Swedish : Be er lokala Åtreförsäljare eller

distributör om manualer pá

svenska.

· Danish : Venligst henvend Dem til den

danske distributør for instructions

manualer.

· Polish : Prosze pytac swojego dealera

> lub dystrybutora o instrukcje obslugi w jezyku localnym.

· 中文 :請向當地供應商或経銷商詢問中

文使用説明書

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# **PICTOGRAM**



Warning: It might be dangerous to operate the tool if  $\Delta$  the instructions supplied are not followed.



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



Always wear suitable eye protection.



Always wear suitable hearing protection.



Always wear respiratory protective equipment (PPE).

### **TERMS AND DEFINITIONS**

# **MAX (AIR PRESSURE)**

MAX (AIR PRESSURE) that a pneumatic tool is intended to be operated at, as specified by the manufacture.

eq. Maximum Operating Pressure

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

**WARNING:** 

**CAUTION:** 

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

Indicates a potentially hazardous situation which, if not avoided by following the

instructions given, could result in injury or material damage.

Please note, however, that failure to observe safety precautions under the "ACaution" category could result in a serious occurrence depending on the situation: please observe all safety precautions in the manual.

# IMPORTANT SAFETY INSTRUCTIONS

When using the tool, please observe the safety precautions below to prevent possible accident or injury.

# **GENERAL: TOOLS**



# **TO OPERATORS**

 Wear proper clothing for the type of work being done.

Take care so that clothing, ties, hair etc. will not become entangled with the moving parts. If items become entangled it will cause the operator to be pulled towards the tool and lead to possible cause of accident or injury.

Always wear suitable eye protection.

Remember, regular glasses are not safety glasses. The lenses are only shock resistant, which will not give you sufficient eye protection you may need in your working environment.

- Always wear suitable hearing protection.
- Wear respiratory protective equipment (PPE).
   Wear respiratory protective equipment (PPE) when working in an environment where dust particles are generated in operation.
- Always wear suitable protective gloves.
- Avoid working posture that is too stressful.
   Always ensure a firm footing and well balanced posture.
- Do not operate the tool if you are too tired.
- Never touch any moving parts of the tool when running.

## **ABOUT WORK AREA**

• Keep the work area clean.

Cluttered work areas (e.g. workbench) invite accidents.

• Carefully select the work area.

Do not expose tool to rain.

Do not use tool in a wet or soaked area.

See that the work area is adequately illuminated.

- Never work near inflammable liquid or in a potentially explosive atmosphere.
- Keep children away from the work area.

Keep children and unauthorized people away from the work area to avoid accident or injury.

## **BEFORE OPERATION**

# • Inspect tool before use.

Before using, check that screws are securely tightened, that any protective cover or guard is securely in place, other parts are free from damage and that the tool runs as it should.

Check that moving parts are properly adjusted for positioning and tightened, that parts are free from damage and properly mounted, and that all other parts are in good condition for normal operation.

Should you find any damage to the protective cover or other part, replace it in accordance with the Operation Manual. If there are no instructions in the Manual, please contact the sales agent through which you have purchased your tool or an authorized dealer near you for repair.

Likewise, if a switch failure occurs, contact sales agent through which you have purchased your tool or an authorized dealer near you for repair.

Do not use the tool if it does not start or stop with the start/stop switch.

# Securely mount cutter

An improperly mounted cutter may fly out, causing possible damage to the tool or injury to the operator.

- Always remove spanner, wrench, etc., once adjustment has been made with them.
- Use a tool appropriate for the application.
   Avoid heavy-duty application that is beyond the capacity of tool.
- Do not use the tool for purposes other than what it is designed for.
- Do not abuse tool.

Use tool in accordance with the specifications: you'll get the most out of it while ensuring safety.

• Securely fasten workpiece in place.

Use a vice or clamp to securely fasten the workpiece in place. It is much safer this way than holding it in your hand, allowing you to operate the tool with both hands.

# **ABOUT HANDLING**

How to store tool.

When the tool is not used, store it in a dry area and out of reach of children.

How to carry tool.

Do not touch the start switch while the tool is being carried.

 Do not leave the tool unattended while it is running.

Turn off the start switch and disconnect the tool from power source. Do not leave the work area until the tool comes to a complete stop.

## MAINTENANCE/SERVICE

# • Do not take apart or modify tool.

Disassembly or modification carried out without the supervision of a qualified or authorized service engineer could result in an accident or injury.

# • Inspect cutting tool and accessories, etc.

Always check to see that cutting tool and accessories, etc. are in good operating condition without damage or deterioration before you mount them on the tool. Should you find any damage to an accessory or part, please contact sales agent through which you have purchased your tool or an authorized dealer near you for repair.

# • Check parts for damage.

When you have found damage to accessory or other part, carefully check the damaged part to determine the extent of influence it has upon the functions of the tool – that is, determine whether it can still perform its normal functions.

Check to see that the linkage of the moving parts is OK, that all parts are OK without damage, that they are properly mounted, and that the tool functions normally. Should you find any damage to an accessory or part that may hamper proper functioning of the tool, please contact sales agent through which you have purchased your tool or an authorized dealer near you for repair.

# Have your tool repaired at an authorized Nitto Service Center.

For repair or parts replacement, please contact the sales agent through which you have purchased your tool or an authorized dealer near you.

# • Use only Nitto genuine parts.

Use of improper parts may result in serious accident. To obtain a Nitto genuine part, consult this Manual or contact the sales agent from which you have purchased your tool directly.

# • Do not detach label or nameplate from tool.

When a label/nameplate gets damaged, worn or becomes missing, contact the sales agent through which you have purchased your tool or Nitto Kohki Co. Ltd, directly for a replacement.

# **DISPOSAL**

 When a tool is taken permanently out of service, it is advised that the tool is disassembled, degreased and parts separated by material and recycled locally in the appropriate manner.

# GENERAL: PNEUMATIC TOOLS

# **WARNING**

# • Use appropriate air pressure.

Excessively high air pressure will increase the tool number of revolutions or strokes causing not only potential premature failure/breakage but could also lead to an unexpected accident or injury.

# • Connect tool to air supply line.

There are various types of pipes running in a factory in addition to the pneumatic line (such as oxygen, nitrogen, gas and water). For this reason, always ensure that you are connecting to the pneumatic line.

# Start tool properly.

Turn the start switch OFF before connecting to the air supply line.

- Always disconnect the tool from the air supply line before putting on/taking off any accessory and prior to carrying out any maintenance work.
- Avoid exposure to exhaust air.

Pneumatic tool exhaust air contains oil and contaminated moisture. Make sure the exhaust air is not directed towards your face or anyone else within the work area.

# Keep tool off electricity.

This pneumatic tool is not electrically insulated. To avoid a potential electric shock do not use where there is a possibility of coming into contact with live electricity.

# **A** CAUTION

# Handle tool carefully.

Abusive use of tool could invite failure or accident. Do not throw, drop or shock the tool.

# Handle connecting hose carefully.

Do not carry the tool by the air hose. Do not pull the air hose to disconnect.

# INSTRUCTIONS FOR THIS TOOL

# **About Your Tool**

# **WARNING**

 Inspect an attachment for chips or cracks prior to mounting.

Do not use an attachment that is chipped or cracked or otherwise damaged.

 Make Certain the diameter of the attachment mandrel suits the chuck.

Fasten the attachment securely.

- Wear protective glasses and a dustproof mask
   Operation generates chips and dust particles, etc.
   which may cause eye and/or respiratory injury:
   Always use PPE (Personal Protective Equipment)
   for eye and respiratory protection.
- When you replace or adjust the cutting tool or parts, be sure to disconnect the air hose from the tool.
- Never touch the moving parts while in operation.

# **A** CAUTION

- Use NITTO genuine parts files and pads.
- Use of the ones other than NITTO genuine parts may cause abnormal vibration or defective finishing surface.
- ullet The weight of the accessory for this tool should be 12  $\sim$  28g.
- This tool is for filing workpieces using the exclusive file. Do not poke workpieces with the tip of the file, or it can result in failure.
- When the user installs an additional air control valve available in the market in the middle of air supply line, while keeping the valve ring of the tool to "on" position, and controls on/off with the air control valve, use air hose of less than 11mm I.D. and in less than 1.5m in length from the tool to the valve. Failure to follow the above instruction may cause malfunction.

# 1. USAGE

This tool is for filing the workpieces using the exclusive file.

# 2. CHECK THE CONTENTS OF THE PACKAGE

Check the contents and make sure that the tool does not have any damage which may have occurred during transportation. The contents should correspond to the list as follows. In case of damage/missing parts, please contact the sales agent from whom you purchased the tool.

Package Contents	Qty	Check
SUPER HAND ASH-900	1set	
Rat Tail File SF-10	1	
Triangular Taper File SF-11	1	
Half Round File	4	
(Rat Tail / Double Cut ) SF-12	ı	
Flat Bastard File SF-13	1	
Hex. Socket Screw Key 2.5	1	
Bushing R1/4x NPT1/4	1	
Instruction Manual	1	
Declaration of Conformity	1	
Caution for Use	1	

# 3. AIR SUPPLY

### 3-1. Air Pressure

Adjust air pressure with the air regulator to the appropriate level for the pneumatic tool used.

Air pressure that is too low will stop the tool from operating at full capacity.

Air pressure that is too high may cause damage to the tool.

# **3-2. Air Line** (Fig.1)

Use a 9.5 mm (3/8") I.D. connecting hose between the compressor and the tool. Drained water, etc., if flown into the tool, could cause tool failure. Install an air filter between the compressor and the tool.

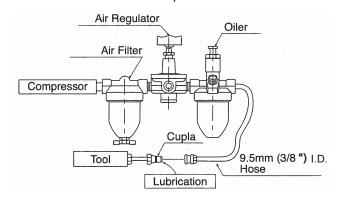


Fig. 1

## 3-3. Lubrication

Install an oiler between the compressor and the tool. Use the machine oil ISO VG-10. Failure to lubricate as required may result in damage to the tool. Use of oil that is too thick will reduce the performance of the tool.

# 4. MOUNTING AND REMOVING THE FILE

# **MARNING**

 Be sure to turn off the air supply and disconnect the air hose.

# 4-1. Mounting / Removing the file (Fig. 2)

## Mounting

Insert the file shank into the Holder and tighten the Hex. Socket Set Screw with the Hex. Socket Screw Key until the file is securely fixed.

# Removing

Loosen the Hex. Socket Set Screw with the Hex. Wrench Key and take it out.

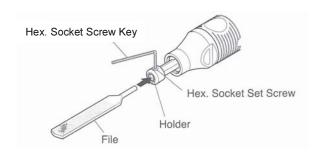


Fig. 2

# 5. HOW TO OPERATE THE TOOL

# **WARNING**

- Always wear eye protection during operations.
   Start the operation and press the tool slightly to the workpiece.
- Even if the tool is strongly pressed, the filing efficiency cannot be improved.

# 5-1. Start and Stop (Fig. 3)

To start: Turn the Valve Ring clockwise and align " \( \bigs \) " with "ON" on the Housing.

To stop: Turn the Valve Ring counterclockwise and align "▲" with "OFF" on the Housing.

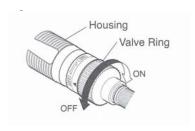


Fig. 3

# 5-2. How to use the Sanding Pad (Optional Parts) (Fig. 4)

(1) Attach the Abrasive Paper on the sponge of

- Sanding Pad and fix it with the Paper Clamp as shown on the Fig. 4.
- (2) Mount the Sanding Pad in the Same manner as the one for the file and carry out operation.
- (3) Cut the locally available Abrasive Paper 20mm x 190mm size and use it.

Caution: The Sanding Pad may cause the larger vibration of the tool than the one caused by the file.

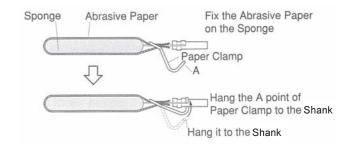


Fig. 4

# 6. THREAD SIZE OF HOSE FITTING

The product comes with a metal fitting with Rc(metric) thread. Connect the Bushing R thread x NPT thread included as standard accessories, if you would like to have American NPT thread instead.

# 7. STORAGE

# **A** CAUTION

 When tool is not used, store it out of reach of children.

Avoid storing the tool in a location subject to high humidity. If the tool is left as it is used, residual moisture on the inside can cause rusting. Before storing, and after operation, oil the tool at the air inlet with machine oil ISO VG-10 and run it for a short time.

### 8. ORDERING SERVICE PARTS

For further operational and handling information or for replacement of parts and components, contact the company from whom you purchased the tool or an authorized dealer.

In ordering parts and components give each part number, part name and quantity required.

Use only NITTO genuine parts.

# 9. OPTIONAL PARTS

Part No.	Description	Qty
TA9A222	Rat File SF-10	5pcs
TA9A223	Triangular Taper File SF-11	5pcs
TA9A224	Half Round File (Rat Tail / Double Cut) SF-12	5pcs
TA9A225	Flat Bastard File SF-13	5pcs
TB03887	Sanding Pad Ass'y	1set

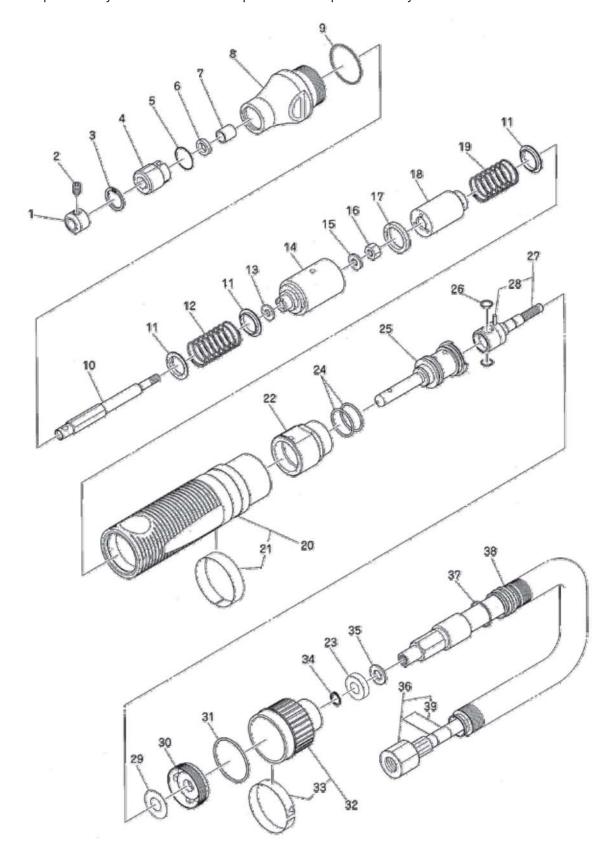
# 10. EXPLODED DIAGRAM: ASH-900

# **MARNING**

This diagram is for your reference only. Do not attempt to service or repair the Tool.

Do not take the Tool apart. Contact an authorized Nitto dealer for all service and repair of the Tool. Improper service and repair can cause accidents and service injuries.

Never attempt to modify the Tool. Never attempt service or repair the Tool yourself.



The part numbers with ( ) are included in the Ass'y parts written above them.

No.	Part No.	Description	Qty	Price
1	Q12315	Collar	1	
2	TQ00485	Hex. Socket Set Screw with Flat Point 5x6	1	
3	TQ12316	Internal Retaining Ring IRTW-17	1	
4	TQ12206	Guide Holder	1	
5	LP06802	O-Ring S-16	1	
6	TQ12317	Oil Seal G7x11x2	1	
7	TQ12318	Bushing 70B-0710	1	
8	TQ12305	Front Case	1	
9	TP15440	O-Ring JASO-1026	1	
10	TQ12209	Holder	1	
11	TQ12319	Spring Holder	3	
12	TQ12321	Spring 2x17.4x39	1	
13	TQ12376	Washer WSSB12-5-1	1	
14	TQ12207	Cylinder	1	
15	LP09810	Washer M5	1	
16	TQ03747	Hex. Nut M5	1	
17	TQ12322	Damper	1	
18	TB08333	Piston Ass'y	1 set	
19	TQ12324	Spring 2x17.4x26.8	1	
20	TB08654	Housing Ass'y	1 set	
21	(TQ12682)	Label Warning	1	
22	TQ12325	Rear Cap	1	
23	TQ13319	Silencer	1	
24	CP24319	O-Ring JASO-1018	2	
25	TB08405	Valve Shaft Ass'y	1 set	

No.	Part No.	Description	Qty	Price
26	TP11994	O-Ring P-4	2	
27	TB03878	Hose Nipple Ass'y	1 set	
28	(TP07006)	Spring Pin 2X8	1	
29	TQ05002	Shim	1	
30	TQ13162	Lock Plate	1	
31	CP25822	O-Ring JASO-2028	1	
32	TB08413	Valve Ring Ass'y	1 set	
33	(TQ12327)	Label Arrow	1	
34	TQ05009	External Retaining Ring STW-7	1	
35	TP03822	Washer M6	1	
36	TB08131	Air Hose K Ass'y	1 set	
39	(TQ11519)	Label Lubrication	1	
37	CP25581	O-Ring HASO-1015	1	
38	TQ01125	Exhaust Hose	1	

# **ACCESSORIES**

No.	Part No.	Description	Qty	Price
		Rat Tail File SF-10	1	
		Triangular Taper File SF-11	1	
		Half Round File (Rat Tail / Double Cut) SF-12	1	
		Flat Bastard File SF-13	1	
	TP04305	Hex. Socket Screw Key 2.5	1	
	TP02236	Bushing R 1/4x NPT 1/4	1	
	TQ12691	Instruction Manual	1	
	TQ12715	Declaration of Conformity	1	



### Overseas Affiliates / Offices

### NITTO KOHKI U.S.A., INC.

46 Chancellor Drive, Roselle, IL 60172 U.S.A.

Tel:(1)-630-924-9393 Fax:(1)-630-924-0303

#### NITTO KOHKI EUROPE CO., LTD.

Unit A5, Langham Park Industrial Estate, Maple Road, Castle Donington, Derbyshire DE74 2UT, U.K.

Tel: (+44)-1332-653800 Fax:(+44)-1332-987273

#### NITTO KOHKI DEUTSCHLAND GMBH

Lerchenstr.47 D-71144 Steinenbronn, Germany

Tel:(49)-7-157-22436 Fax:(49)-7-157-22437

# NITTO KOHKI CO., LTD., SINGAPORE BRANCH

10 UBI CRESCENT #01-62,

UBI TECHPARK LOBBY D, SINGAPORE 408564,

Tel: (65)-6227-5360 Fax:(65)-6227-0192

#### NITTO KOHKI AUSTRALIA PTY. LTD.

77 Brandl St., Brisbane Technology Park, Eight Mile Plains QLD 4113 Australia

Tel:(61)-7-3340-4600 Fax:(61)-7-3340-4640

# NITTO KOHKI CO., LTD., **BANGKOK REPRESENTATIVE OFFICE**

M&A Business Center 38Q. House Convent Bldg., 7th Floor, Unit 7A, Convent Rd., Silom, Bangrak, Bangkok 10500 Thailand

Tel: (66)-2-632-0307 Fax:(66)-2-632-0308

#### NITTO KOHKI (SHANGHAI) CO., LTD.

Room1506, suite C, Orient International Plaza, NO85 LouShanGuan Road, Shanghai, 200336, CHINA

Tel: (86)-21-6415-3935 Fax:(86)-21-6472-6957

### NITTO KOHKI CO., LTD., SHENZHEN REPRESENTATIVE OFFICE

2005C Shenzhen ICC Tower, Fuhuasanlu 168, Futian District, Shenzhen, Guangdong, 518048 China

Tel: (86)-755-8375-2185 Fax:(86)-755-8375-2187

### EC DECLARATION OF CONFORMITY

We hereby declare that the following our product conforms with the essential health and safety requirements of EU Directives.

PORTABLE PRECISION FINISHING FILE Product:

SUPER HAND:ASH-900,SH-100A Model: Serial No:

In the case of 6 digits serial number. 

Consecutive numbers (00001~99999) ► Last digit (0-9) of year (A.D.)

In the case of 7 digits serial number.

XXXXXXX

Consecutive numbers (00001~99999) ► Last two digits (00-99) of year (A.D.)

Manufacturer: NITTO KOHKI Co., Ltd.

2-9-4, Nakaikegami, Ohta-ku, Tokyo, 146-8555, Japan

Authorised person to prepare the technical construction file(TCF) in the community:

Masatoshi Ogue

President

NITTO KOHKI EUROPE Co., Ltd.

Unit A5, Langham Park Industrial Estate, Maple Road, Castle Donington, Derbyshire DE74 2UT, U.K. Tel:(44)-1332-653800 Fax:(44)-1332-987273

Directive: 2006/42/EC Machinery Directive

The above product has been evaluated for conformity with above directives using the following European standards. The technical construction file (TCF) for this product is retained at the above manufacturer's location.

Machinery Directive: EN ISO12100:2010, EN ISO11148-9:2012, others

Sound Pressure/Power Level: EN ISO15744:2008, EN ISO4871:1996

Vibration Level: EN28927-8:2009

Signature: Date/Place: /Tokyo, Japan

Name: Katsunobu Kishi

General Manager MACHINE TOOLS Business Div. Title:

NITTO KOHKI Co., Ltd. 2-9-4, Nakaikegami, Ohta-ku, Tokyo, 146-8555, Japan

Being the responsible person appointed and employed the manufacturer.