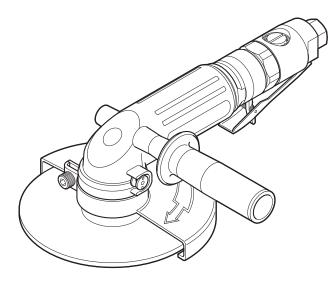


PNEUMATIC ANGLE GRINDER

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

MYTON PROFESSIONAL TOOL

Model MLG-70



Specifications

	Model		MLG-70
Rated Air Pressure		MPa	0.6
Air Consumption	(No Load)	m³/min	0.7
	(Full Load)	m³/min	1.3
Rated Speed(No Load)		min⁻¹(r/min)	7,600
Depressed Center	Diameter	mm(inch)	180(7)
Grinding Wheel	Hole	mm(inch)	22(7/8)
Mass(Weight)		kg	2.5
Sound Pressure Level		dB(A)	89
Sound Power Level		dB(A)	100
Vibration Level	Body	m/s²	2.5
	Handle	m/s²	4.7
Thread size of Air Inlet			Rc3/8

Due to continuous product development/improvement the specifications and configurations in this document are subject to change without prior notice.



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

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

Original Instructions

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

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

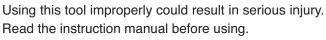
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PICTOGRAM



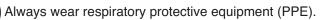
Warning: It might be dangerous to operate the tool if the instructions supplied are not followed.



Always wear suitable eye protection.



Always wear suitable hearing protection.



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

WARNING :	Indicates a potentially hazardous situation which, if not avoided by following the instructions given, could result in death or serious injury.
A CAUTION:	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. Caution: Important precautions for tool setup, operation and maintenance.

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 to avoid entanglement with the moving parts of the tool with clothing, ties, hair etc. 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.
- 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.
- 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 occurrence.

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

• Use appropriate air pressure.

Excessively high air pressure will increase the 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.

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

• Protect your body from the chips/filings.

Hot chips/filings may fly out from the work piece. Always wear safety glasses, dust mask, earplugs, gloves (except knitted gloves) and long-sleeved garment.

Keep your face well away from the work piece.

- Do not use any Grinding Wheel with the rated speed (r/min) that is lower than the actual no load speed of the grinder. Make sure the dimensions of the Grinding Wheel you are using is applicable to the specification of the grinder.
- Make sure there are no cracks, chips or damage to the Grinding Wheel prior to use. Do not use any wheels wet or without labels.
- Use Nitto Kohki's Wheel Flanges only. However, do not use any of them which have cracks, chips or worn. Do not use the alternative flanges or flat washers.
- Make sure if the Grinding Wheel is adaptable to the Wheel Flanges.

Do not use reducing bushing to meet the Wheel Lock unless they are supplied by the Grinding Wheel manufacturer.

 Make sure there are no cracks, distortion or wear marks on the thread of the Spindle or Wheel Lock.

The label on the wheel has to be the same or bigger diameter than that of a Spindle.

- Make sure if there is any cracks, distortion or worn on a thread of a Spindle or Wheel Lock. Do not use the grinder if you ever find one.
- Do not use the side of the Grinding Wheel (except for specific side use Grinding Wheels)
- Always use the Wheel Guard for the grinder if the maximum diameter of the Grinding Wheel is over 50mm.
- Use the Wheel Guard provided. Failure to do so could result in injury.
- Replace damaged, bent or severely worn Wheel Guard. Do not use any Wheel Guard which can damage the Grinding Wheel.
- Air pressure for the grinder must not exceed 0.6MPa (6kgf/cm²).

- Do not start or stop grinders suddenly. Open a Throttle Lever gradually when you start operation.
- After a grinder has been repaired and returned, check the no load speed with a tachometer before you use to make sure its actual speed at 0.6MPa (6kgf/cm²) does not exceed the rated speed printed on the Wheel Guard. Do the same check after each stage of the work process of work even in normal use. Set the Adjust Valve to the maximum speed position when you check the no load speed.
- Only qualified/trained operators should attach or replace Grinding Wheels as well as checking/ testing them.
- Release the Throttle Lever when air supply is stopped.
- Make sure no one is around grinding circumferences before trial running.
- Run a trial for a minute before start grinding and for three minutes after replacement of Grinding Wheels to make sure there is no problem on the grinder.
- Grind slowly until the Grinding Wheels get warmer in case Wheels seem cold at the start.
- Always operate the grinder at the correct angle. $(15^{\circ}\sim 30^{\circ})$. (Fig.1)



Fig. 1

• Do not put any inflammable liquid or use the grinding tool in a potentially explosive atmosphere as there is a possibility of sparks when grinding which could cause a fire/ explosion.

1. USAGE

This tool is for grinding workpieces using a Type 27 Depressed Center Grinding Wheel.

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
MYTON MLG-70	1set	
Handle Ass'y	1set	
Wheel Guard Ass'y	1set	
Hex. Socket Screw Key 6	1	
Hex. Socket Screw Key 10	1	
Bushing R3/8×NPT3/8	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.

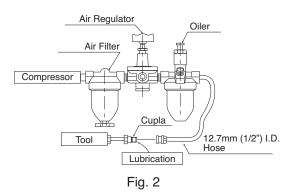
Air pressure that is too low will stop the tool from operating at full capacity.

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

3-2. Air Line (Fig.2)

Use a 12.7 mm (1/2") 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.



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. PREPARATION

Mounting the Handle Ass'y

Screw the Handle Ass'y into the Housing Sub Ass'y. It can be mounted on either right or left side of the Housing Sub Ass'y. Be sure to mount the Handle Ass'y before use.

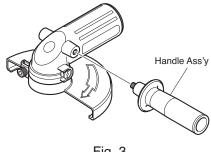


Fig. 3

5. GRINDING WHEELS

The maximum operating speed marked on the Grinding Wheel, blotters, or packaging, shall equal or exceed the rated speed on the grinder.

Use with Type 27 Depressed Center Grinding Wheels.

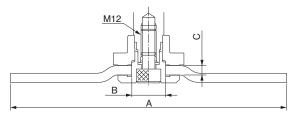


Fig. 4

	MLG-70	
А	180mm (7")	
В	22mm (7/8")	
С	6mm (1/4"), 8mm (5/16")	

A : Diameter of the Grinding Wheel

B : Hole of the Grinding Wheel

C : Thickness of the Grinding Wheel

6. MOUNTING AND DISMOUNTING GRINDING WHEEL

Always turn off the air supply and disconnect the air supply hose.

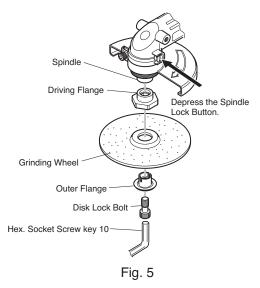
Read and thoroughly understand **IMPORTANT INSTRUCTIONS FOR GRINDER** before carrying out these operations.

Mounting

- 1. Insert the Outer Flange into the center hole of the Grinding Wheel.
- 2. While depressing the Spindle Lock Button lightly, place the Driving Flange on the Spindle and rotate it until it comes to stop, then push the Spindle Lock Button down to the hilt until comes to lock the position.
- 3. Align the cutout of the Outer Flange with the Parallel Key on the Spindle, place the set of the Outer Flange and the Grinding Wheel on the Spindle, and tighten it with the accessory Hex. Socket Screw Key 10. Releasing your hand from the Spindle Lock Button will automatically unlock the Spindle.

Removal

- While depressing the Spindle Lock Button lightly, rotate the Grinding Wheel with your hand until it comes to stop, and then deeply push the Spindle Lock Button down to the hilt until comes to lock the position.
- 2. Loosen the Disk Lock Bolt with the accessory Hex. Socket Screw Key 10, and remove the Grinding Wheel.

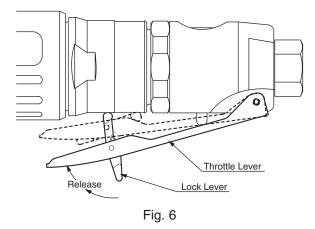


7. HOW TO OPERATE THE TOOL

Start and Stop

To start, release the lock lever and grasp the throttle lever.

To stop, release the throttle lever.



Adjust Valve

Be sure to keep hands clear of moving parts.

The desired number of rotation between maximum rpm and minimum rpm is obtained by turning the groove of valve clockwise or counterclockwise with screwdriver.

Maximum rotation

Position the groove of Adjust Valve horizontal to main body.

Minimum rotation

Position the groove of Adjust Valve vertical to main body.

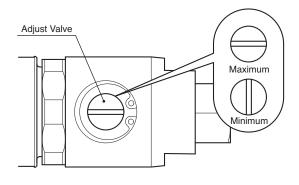


Fig. 7

8. STORAGE

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.

9. MAINTENANCE

Supply additional appropriate amount of Shell Alvania Grease S#2 into the Gear Case with about once a month interval.

- 1. Loosen the Screw 4x20 and remove the Exhaust Cover, the Toothed Washer CW-4, the Spacer, and the Exhaust Filter.
- 2. Inject grease with a grease gun into the Grease Port next to the Exhaust Port.

The outside diameter of the nozzle tip of the grease gun must be 4mm or smaller. The nozzle for grease nipple cannot be used for this grease filling, because the shape of the Grease Port is different from that of the nozzle for grease nipple.

- 3. Before putting back the Exhaust Cover, execute idle running and wipe out excessive grease.
- 4. For assembly, see Fig.8 and put back the parts in the reverse order of disassembly.

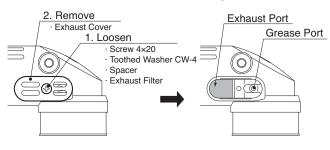


Fig. 8

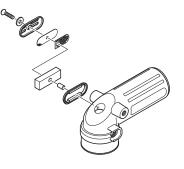


Fig. 9

10. 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.

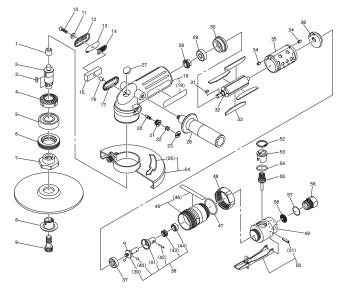
This diagram is for your reference only. Do not attempt to service or repair the Tool.

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.	PartsNo.	Description	Qty
1	TQ12088	Needle Bearing BK1012	1
2	TQ12546	Spindle	1
3	TP09933	Parallel Key Both Ends Round 4X4X12	1
4	TQ12547	Gear	1
5	TP04138	Ball Bearing 6204ZZ	1
6	TB08263	Bearing Set Screw Ass'y	1set
7	TQ00772	Lock Plate	1
8	TQ00771	Disk Lock	1
9	TP11688	Hex. Socket Head Cap Screw 12X25	1
10	TQ12330	Raised Countersunk Head Screw 4X20	1
11	TQ12647	Toothed Washer CW-4	1
12	TQ12076	Exhaust Cover	1
13	TQ12570	Filter Support	1
14	TQ12541	Silencer Plate	1
15	TQ12540	Exhaust Filter	1
16	TQ12109	Spacer 5X6X11.8	1
17	TQ12559	Packing Cover	1
18	TB08606	Housing SUB Ass'y	1set
19	(TQ12663)	Label Warning CE Marking	1
20	TQ12542	Lock Pin	1
21	TQ12537	Pin Guide	1
22	TQ12544	Conical Spring 0.6X7.2X8.8X8	1
23	TQ12543	Lock Button	1
27	TQ12571	Plug	1
28	TQ12070	Pinion	1
29	TQ12087	Ball Bearing 638ZZ	1
30	TQ12064	EndPlate B	1
31	TP10130	Parallel Key Both Ends Round 3X3X10	1
32	TQ12061	Rotor	1
33	TB08555	Blade Ass'y	1set
34	TP04061	SpringPin 3X 6 AW	2

No.	PartsNo.	Description	Qty
35	TQ12062	Cylinder	1
36	TQ12063	EndPlate A	1
37	TP06242	Ball Bearing 629ZZ	1
38	TB08258	Governor Ass'y	1set
39	(TQ12066)	Base	1
40	(TP01566)	Ball Ø6	3
41	(TQ12067)	Sleeve	1
42	(TQ12090)	Needle Roller 2.5X13.8	1
43	(TQ12069)	Spring 1.4X15.5X15.5	1
44	(TQ12068)	Stopper	1
45	TB08668	Valve Holder Ass'y	1set
46	(TQ12750)	Label Model	1
47	TP17445	O-ring S-35.5	1
48	TP17452	Lock Ring	1
49	TQ12662	Valve Body	1
50	TB08669	Lever Ass'y	1set
51	(TP13893)	SpringPin 3X30AW	1
52	TP10448	Internal Retaining Ring C-24	1
53	TQ12668	Adjust Valve	1
54	TP10714	O-ring S-22	1
55	TA96331	Valve Stem Ass'y	1set
56	TP01658	Filter	1
57	CP25821	O-ring JASO-1020	1
58	TQ12671	Bushing M22XRc3/8	1

Accessories

No.	PartsNo.	Description	Qty
24	TB08608	Wheel guard Ass'y	1set
25	(TQ12640)	Label Warning Wheel guard	1
26	TB08265	Handle Ass'y	1set
	TP00170	Hex. Socket Screw Key 6	1
	TP11723	Hex. Socket Screw Key 10	1
	TQ02350	Bushing R3/8XNPT3/8	1
	TQ12673	Instruction Manual	1



Overseas Affiliates / Offices

Nitto Kohki U.S.A., Inc. 4525 Turnberry Drive, Hanover Park, IL 60133, U.S.A

Tel: (1)-630-924-9323 Fax: (1)-630-924-0303 http://www.nittokohki.com/index.html

Nitto Kohki Europe Co., Ltd.

Unit 21, Empire Centre, Imperial Way, Watford Hertfordshire, WD24 4TS, United Kingdom

Tel: (44)-01923-239668 Fax: (44)-01923-248815 http://www.nitto.co.uk/

Nitto Kohki Deutschland GmbH

Lerchenstr. 47, D-71144 Steinenbronn, Germany

Tel: (49)-7157-22436 Fax: (49)-7157-22437 http://www.nitto-kohki.de/

Nitto Kohki Australia Pty. Ltd.

77 Brandl Street, Eight Mile Plains QLD 4113, Australia

Tel: (61)-7-3340-4600 Fax:(61)-7-3340-4640 http://www.nitto-australia.com.au/

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 http://www.nitto-kohki.co.jp/e/nksb/

Nitto Kohki Co., Ltd. Shanghai Representative Office #1117 Ruijing Building, Maoming South Road, Shanghai 200020 China

Tel: (86)-21-6415-3935 Fax:(86)-21-6472-6957 http://www.nitto-kohki.cn/

Nitto Kohki Co., Ltd. Shenzhen Representative Office #0726 International Culture Building, 3039, Shennan Zhong Rd., FutianDistrict, Shenzhen, 518003 China

Tel: (86)-755-8375-2185 Fax:(86)-755-8375-2187 http://www.nitto-kohki.cn/

Nitto Kohki Co., Ltd. Bangkok Representative Office 38Q, House Convent Bldg, 7th Floor, Unit 7A, Convent Rd, Silom, Bangkok,10500 Thailand

Tel: (66)-2-632-0307 Fax:(66)-2-632-0308 http://www.nittobkk.com/eng_index.htm

	EC DECLAR	ATION OF CONFORMITY
	reby declare that the followin fety requirements of EEC Dir	g our product conforms with the essential health rectives.
	Product:	PNEUMATIC ANGLE GRINDER
	Model:	MYTON: MLG-70
	Serial No:	X X X X X X Consecutive numbers (00001~99999) → Christian era's last digit (0~9)
	Manufacturer:	NITTO KOHKI Co., Ltd. 2·9·4, Nakaikegami, Ohta·ku, Tokyo, 146·8555, Japan
	Authorised Compiler In Th	e Community:
		NITTO KOHKI EUROPE Co., Ltd. Unit21, Empire Centre, Imperial Way, Watford Hertfordshire, WD24 4TS, UK Tel:(44)-01923-239668 Fax:(44)-01923-248815
	Directive:	98/37/EC and 2006/42/EC Machinery Directive
The ab	oove product has been evaluat	ted for conformity with above directives using the following European standards.
The tee	chnical construction file (TCF) for this product is retained at the above manufacturer's location.
	Machinery Directive:	EN ISO12100·1:2003, EN ISO12100·2:2003, EN ISO14121·1:2007, EN792·7:2001+A1:2008, others
	Sound Pressure/Power Lev	el: EN ISO15744:2008, EN ISO4871:1996
	Vibration Level:	EN28662-1:1992, EN ISO8662-4:1995
	Name: <u>K.Kishi</u>	
	Title: <u>GENERAL MANA</u>	AGER MACHINE TOOLS DIV.
Being t	the responsible person appoin	nted and employed the manufacturer.