"LIGHT WEIGHT" "MIGHTY TORQUE OUTPUT"

1 1/2" SQ. DRIVE



Original "N-type" Impact Wrench

"with an innovative no-hammer clutch system newly deveroped by KUKEN."

This tool has been designed for use with input air pressure not greater than 0.62 MPa (90 P.S.I.).

FEATURES:

- Excellent power, compactness and light-weight with minimum vibration.
 - Most logical mechanism for incredible power to weight ratio among impact wrenches ever produced in the world.
- Accurate thread fastening works with patented Nclutch impact mechanism.
 - No loss of lubricant in the clutch facilitates this operation.
- Increased durability achieved by excellent clutches and less damage to bolts and nuts by "Shift-on" action.
- Grip handle with inside trigger is available as optional.
- Low noise level and minimum air consumption.

APPLICATIONS:

Heavy manufacturing Plants, Ship yards, Chemical processing plants, Constructions, Mining applications.

SPECIFICATIONS: (Performance figures are at 0.62 MPa (Pe)(90 P.S.I.) air pressure.)

Capacity Bolt Size	50 mm 2"
Impacts per min	600
Speed R.P.M	3,000
Recommended Torque1,000~3,20	00 Nm 740~2,370 ft-lb
Length47	73 mm
Weight	16.0 kg
Side to Center Distance	61 mm 2 3/8"
Air consumption0.82	m^3/min 29.2 c.f.m.
Hose Size Recommeded	13 mm 1/2"
Air Inlet Thread Size	1/2 *

^{*} IMPORTANT: P.T. or N.P.T. for your choice.

^{*} This tool does not require high air pressure to achive it's maximum torque. Continuous operation at pressure higher than 0.62 MPa(Pe)(90P.S.I.) may cause component failure and shorter tool lite.



SAFETY GUIDELINES PNEUMATIC(AIR) TOOLS IN GENERAL

Thank you very much for purchasing "KUKEN" products.

Please read this manual thoroughly before use and fully understand the content to use pneumatic tools safely.



Warning : Read this manual after fully understanding

Following headlines are provided for safety cautions. All of them are important for your safety. Make sure to follow the information.

Caution: Indicates hazardous situations that the user may be damaged or materials may be damaged if mishandled.

Warning: Indicates extreme situations that the user may die or get severe injury if mishandled.

Even the content of "A Caution" may cause the serious result depending on conditions. ■ This manual should be retained in the place within close reach for repetitive reference.

When you lost or mutilated the warning indication label attached on this manual or product, ask us or the purchased shop for backorder and keep it or attach it on the manual or product properly.

When you transfer or lease this product, make sure to attach this manual to it.

Contact us or the purchased shop for questions on the purchased product or on the content of this manual.

Purpose of use

CUTTING, DRILLING, SANDING, POLISHING, GRINDING, CHAMFERING, REMOVING OF PAINT & RUST, DEBURRING OF WELDING, AND FASTENING/LOOSENING

Do not disregard!

■ Installation of pneumatic tools is as follows.



Use pneumatic tools under the appropriate air pressure. Limit inlet air pressure to 0.62 MPa(Pe) / 90 P.S.I.

Make sure to install the pressure gauge and regulator or others to use pneumatic tools under the appropriate air pressure.

Excessive air pressure may cause injury or death and may lead to wear or failure of tools and materials.

Do not use other power sources than that of air compressor.

Power source of the pneumatic tool is the compressed air generated from the air compressor. Use of other high-pressure gases (oxygen, acetylene gas, propane gas, etc.) than compressor air causes a risk of explosion.

Use a proper air hose.

Use the air hose of oil-resistant and that the external surface of which is wear-resistant, and that complied with the working air pressure for the specified or larger internal diameter. Do not use the aging and extremely long hose.

Securely mount air hose fittings.

When the air hose comes off due to improper mounting, it bounces around by air injection and is very dangerous.

Make sure to mount air hose fittings on the air hose and the pneumatic tool.

Supply clean and dry compressed air.

Supply clean and dry compressed air since refuse and drain water is a cause of accidents and failure.

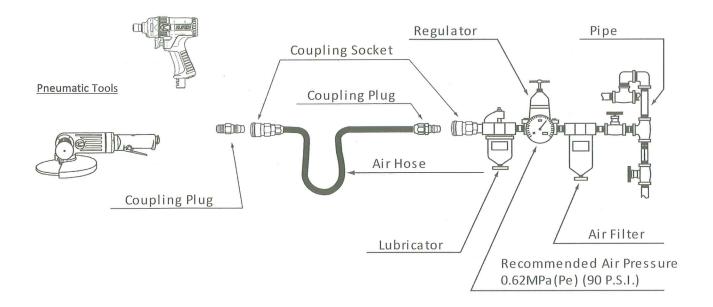
We recommend installing the air dryer and filter.

Lubrication is important.

Lack of lubrication is a cause of not only failure but also accidents due to occurrence of rust and wear.

Supply the air motor with one or two drops of machine oil ISOVG-10 once a day through the air inlet.

Do not supply too much oil in order to avoid the leaking of the clutch grease. The use of lubricators and air filter regulators are suggested.



Operation environment is as follows.

Warning • Keep the work place sufficiently bright and clean at all times.

Dark and disorganized work place may cause accidents. Pay attention to lightings and keep the work place clean and organized.

Do not use the pneumatic tool in the place where there is risk of explosion.

Do not use the pneumatic tool in any case in the place where there is a risk of ignition and explosion. It is dangerous.

Keep away from electricity.

Pneumatic tools are not insulated. Keep away from the electricity to protect users/operators from electrical shock.

Keep work area well ventilated.

Some dust and fumes created by sanding, grinding, drilling, and other construction activities contain chemicals which affects your health. To reduce your exposure to chemicals, keep the work area well ventilated and wear masks.

Clothes at work is as follows.



Warning Ouse in proper clothes.

Do not wear baggy clothes and accessories like a necklace. Wear in proper clothes for use. Cover your long hair with a cap or others so as not to fall over the air tool.

Use the protective equipment.

Use the work protective equipment such as helmets, protective glasses, earplugs, safety shoes, etc.

depending on the content of work for human protection.

User of pneumatic tools is responsible to follow regional safety regulations.

Wear gloves.

Operating air tools for long time hours may cause the physical illness from the vibration.



Be careful for contamination of dusts when connecting the air hose.

Warning Be careful for contamination of dusts when connecting the air hose.

Make sure to flow air through the air hose until dusts and drain water are discharged when connecting the air hose with this equipment.

■ Inspect accessories and attachments for damage or defects before installation on tools.

Using damaged or defective accessories may fail or detach and may cause injury or death.

Inspect the pneumatic tool visually before use.

Do not use the tool if it appears damaged. Damaged tools may cause death or severe injury

Caution Make sure to contact a dealer when you have questions on handling.

Make sure to contact us before connecting this equipment with the air hose when you have any questions on safety and proper manipulation of this equipment, grinding tool, accessories (sockets, couplings, etc.), and peripherals.

Pay attention to the laws and regulations on noise.

You must use the product with the regulated value and below so as not to disturb surroundings. Install the sound insulation wall as necessary.

Be fully careful for working at a high place.

Ensure the safety of scaffold to prevent falling down from a high place during work..

■ Before using sanders and polishers.



Warning Regularly check spindle speed of sanders and polishers with 0.62MPa(Pe) / 90 P.S.I. at tool inlet without an accessory. In accordance with EN 792, the no-load speed may not exceed the rated speed by more than 10%.

Do not use mount a grinding wheel, cut-off wheel, saw or other accessories that require a guard sanders or polishers. It is very dangerous and may cause death or severe injury with certain accessories. Use only insisted accessories.

Do not use worn or damaged accessories.
 Using worn and damaged accessories may cause failure of components and may cause injury or death.

Do not use dirty or worn backup pads.

Always check the mounting face of backup pad before attaching accessories. Make sure it is clean and unworn.

Make sure that the accessory is centered on the backup pads.

Accessories mounted off the center of the backup pad may vibrate or become detached during use. It may cause death or severe injury.

● Do not use an abrasive disc which overhangs the backup pad by more than 6mm (1/4").

Always use correct size abrasive disc.

■ When using the pneumatic tool, follow instructions below



Do not activate throttle when connecting pneumatic tools to air supply.

As tool is connected to air supply, the tool operation will begin immediately if throttle is activated.

● Do not lock pneumatic tool in the ON position.

Locking throttle in the ON position may cause death or severe injury as a result of not being able to turn the tool OFF.

Securely fix and stable a work piece.

Insecure fixation of a work piece may cause an injury by being hit with it. Make sure to securely fix and stable before work.

Do not put your hand or clothes closer to the moving part.

Do not put your hand or clothes closer to the moving part in any case. It is very dangerous during operation.

Take a rest as necessary.

Take a rest as necessary since the continuous work for a long time is a cause of disease. Stop use immediately, ask a doctor consultation and follow the instruction when you feel pain or have other problems with your body.

Work in a improper attitude is dangerous.

Securely hold the air tool and work in a stable position to support the sudden movement.

Avoid the sudden start.

Check that the start switch is at the stop position when connecting the air hose.

Do not put your hand on the start switch when carrying the air tool.

Stop use immediately when you feel something is wrong.Stop use immediately when you feel something is wrong and ask for check and repair. Do not use worn or damaged accessories.

Using worn and damaged accessories may cause failure of components and may cause injury or death.

Do not operate the equipment with no load. Do not operate the equipment with no load since the tip tool might be removed and fall out and it is also a cause of seizure and failure such as early wear of parts.

Do not set a tool down while it is still in motion.

The tool may move uncontrollably if it is still in motion. It may cause death or severe injury.

Caution Make sure to check the rotation direction.

Make sure to check the rotation direction before startup. Switching the rotation must be performed when stopped.

●Always be prepared for unexpected reactive force.

Securely hold the main unit to provide for reactive force absorber you might be swayed by reactive force during the operation.

■ Mounting and replacing accessories for ratchet wrenches and for impact wrenches

damage and scattering of fragments.



Warning Do not use hand tool sockets, bits and/or adapters.
Hand tool sockets, bits and/or adapters may fail and cause death or severe injury.

Always use an attachment dedicated to power tools. Always use the tip tool dedicated to power tools for the equipment since the tip tool for manual use might cause Make sure to remove the air hose.

Make sure to mount or replace a socket after stopping supply of compressed air and removing the air hose. Close the main cock to stop air supply with the air hose and then press the start switch of this equipment to open the valve to discharge the residual air in the air hose before removing the air hose unless the protective equipment (couplings, etc.) for automatic air insulation is used.

Securely mount a socket on the equipment.

After mounting, gently pull the tip tool to check that it does not come off before use.

Perform regular check of the socket.

Always check that the tip tool and insertion part of the tip tool of this equipment is not worn and damaged and ask us for check and repair as necessary. In particular, when he heavy backlash is found between the socket and socket insertion part of this equipment, it may cause damage and an injury; therefore do not use it.

Securely insert the sockets into the bolt or nut.

Securely insert the sockets into the bolt or nut since it is very dangerous that the socket is remove from the bolt or nut during use.

■ Mounting and replacing pads, disc papers, grinding stones, and other accessories.

Warning Always use appropriate pads, disc papers, grinding stones, and other accessories.

Always use the accessories dedicated to power tools for the equipment since the accessory for manual use may cause damages.

And always check if accessories are not damaged, worn or torn.

Do not use worn, dull, and/or damaged accessories. Worn, dull, and damaged accessories do not function as intended. And they may also cause death and injury.

Do not use wet accessories or soaked accessories.

Do not use cutting stone for grinders.

Always be careful with foreign materials to be interfered between the tool and the accessory.

The accessory may be dropped out when operating.

■ Basic cautions for use of pneumatic tool.



Caution Be fully careful when working.

Do not let your guard down and be fully careful when working since the thoughtless and preposterous actions and use when you are tired is a cause of an injury and accidents.

Keep off other persons.

Keep off other persons than the person involved at the work place. In particular, it is dangerous for children.

● Do not use the product unreasonably.
Unreasonable and overloaded use is a cause of damage and failure of the air tool. Make sure to use the product within the capacity.

Be fully careful for the exhaust direction.

Be careful for the exhaust direction and avoid direct exposure of exhaust to eyes and ears since it is a cause of accidents

Handle the pneumatic tool carefully.

Rough handling is a cause of accidents and failure. Do not make an impact on the air tool by throwing and dropping it.

• Handle the air hose carefully.

Do not use the air hose to support, raise, and lower the air tool. Damage of the air hose is a cause of accidents.

Be careful for dropping the pneumatic tool when working at a high place.

Take countermeasures for preventing the air tool from dropping and accidents to be occurred thereby with a safety wire or others when working at a high place.

■ Take full consideration for storage.

Carefully maintain the product and keep it in a dry place where is beyond reach pf children when it is not used.

Do not carry tools by air hose.

Tools may start accidentally. This may cause injury or damage to tools and accessories.

Warning and Caution for Handling



Warning Do not use for other purposes than the specified.

Do not use the product for other purposes than the specified in any case since it is a cause of accidents.

Do not modify the product in any case.

Do not modify and use the product in any cases. It may cause death or severe injury.

Do not dismount parts.

Do not use the product which parts are removed in any case. It may cause death or severe injury.

• Stop air supply and remove the air hose from the pneumatic tool when the danger is expected to occur. Make sure to stop air supply and remove the air hose from the pneumatic tool when the product is not used and maintained, and the tip tool is replaced.

Maintenance, check, and repair.



Caution

Make sure to check the product before use.

Inspect tools visually before use. Do not use tools if they appear damaged.

Make sure to check the loosening of screws and damage on parts before use. It may cause not only worsening of performance and failure but also danger.

Make sure to carry out maintenance and check.

Perform regular maintenance and check for safety and efficient work.

Drain water in the air filter and air compressor tank before and after work.

Contact us or our certified service factory for repair.

Contact us or our certified service factory through the purchased shop or our distributor for repair. Please note that we are not responsible for the accident or malfunction caused by your arbitrary treatment.

Proper maintenance of air tools is suggested for safety and efficiency.



U.K. :EC DECLARATION OF CONFORMITY

:DÉCLARATION DE COMFORMITÉ CE

Deutschland : EG KONFORMITÄTSERKLÄRUNG

France

Nederland

:DECLARACIÓN DE CONFORMIDAD CE España

:DICHIARAZIONE DI CONFORMITÀ CE Italia

:DECLARAÇÃO DE CONFORMIDADE CE Portugal

:EG KONFORMITEITSVERKLARING

:EF ERKLÆRING OM OVERENSSTEMMELSES Danmark

:EG-DEKLARATION OM ÖVERENSSTÄMMELSE Sverige

:EF EVERENSSTEMMELSESERKLÆRING Norge

:EY:N VAATIMUSTENMUKAISUUSILMOITUS Suomi

:ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ ΣΕ Hellas

ΟΔΗΓΙΑ ΤΗΖ ΕΥΡΩΠΑΙΚΗΣΚΟΙΝΟΤΗΤΑΣ

Individual machinery and safety components

Machine seule et composants de sécurité

Gesamtmaschine und Scherheitseinrichtungen

Maquinaria individual y componentes de seguridad

Macchina singola e componenti di sicuerezza

Maquinaria individual e dispositivos de segurança

Individuele machine en veiligheidscomponenten

Enkle maskin og sikkerhetskomponenter

Individuell maskin och säkerhetskomponenter

Individuel maskine og sikkerhedsudstyr

Erilliset koneistot ja turvalaitteet

Ανεξάρτητο μηχάνημα καιεξαρτήματα αδφαλειαζ

KUKEN

We KUKEN CO., LTD. -Osaka, Japan declare under our sole responsibility that the product: to which declaration relates, is in conformity with the requirements of the Council Directive of 17 May 2006 on the approximation of the laws of the Member States relating to machinery(2006/42/EC).

Nous KUKEN CO.,LTD.-Osaka, Japon déclarons sous notre seule résponsabilité exclusive que le produit: auquel se réfère cette déclaration est conforme à la directive du conseil du 17 mai 2006, concernant le rapprochement des législations des états members, relatives aux machines (2006/42/CE).

Wir KUKEN CO.,LTD.-Osaka, Japan erklären hiermit in alleiniger Verantwortung, daß das Produkt auf dsa sich diese Erklärung bezieht, den Anforderungen der "Richtlinie des Rates vom 17. Mai 2006 zur Angleichung der Rechtsvorschriften der Mitgliedsstaaten für Maschinen (2006/42/EG) entspricht.

Nosotros KUKEN CO.,LTD.-Osaka, Japón declaramos bajo nuestra sola responsabilidad que el producto a que se refiere esta declaración, es conforme a los requisitos de la Directiva del Consejó de 17 de mayo 2006 sobre la aproximación de las leyes de los Estados Miembros con relación a la maquinaria (2006/42/CE).

Noi KUKEN CO.,LTD.-Osaka, Giappone dichiariamo sotto nostra unica responsabilità che il prodotto cui questa dichiarazione si riferisce, è conforme ai requisiti della Direttiva del Consiglio del 17 maggio 2006, sul ravvicinamento delle legislazioni degli Stati Membri relative alle macchine (2006/42/CE).

Nós KUKEN CO.,LTD.-Osaka, Japão declaramos sob nossa exclusiva responsabilidade que o produto a que se refere esta declaração está em conformidade com os requisitos da Directiva do Conselho de 17 de Maio de 2006 na avaliação das leis dos Estados Membros relacionadas com maquinaria (2006/42/CE).

Wij KUKEN CO.,LTD.-Osaka, Japan verklaren onder onze exclusieve verantwoordelijkheid dat het product waarop deze verklaring betrekking heeft, in overeenstemming is met de vereisten van de Richtlijn van de Raad van 17 mei 2006 inzake de onderlinge aanpassing van de wetgevingen van de Lid-Staten betreffende machines(2006/42/EG).

Vi KUKEN CO.,LTD.-Osaka, Japan erklærer herved under vort fulde ansvar at maskinen, som denne erklæring gælder for, er i overensstemmelse med de krav som findes ; Ministerrådets direktiver af 17. Maj 2006 om tilnærmning af medlemsstaternes love vedrørende maskindirektivet (2006/42/EF).

Vi, KUKEN CO.,LTD.-Osaka, Japan förklarar härmed på vårt fulla ansvar att maskinen för vilken denna deklaration gäller, överensstämmer med kraven i Ministerrådets direktiv av den 17 maj 2006 om harmonisering av Medlemsstaternas lagar rörande maskiner (2006/42/EG).

Vi KUKEN CO.,LTD.-Osaka, Japan erklærer under eget ansvar, at produktet hvortil denne erklæring relaterer seg, er i overensstemmelse med kravene i Rådets Direktiv av 17. mai 2006 vedr. tilnærmelse mellom medlemslandenes lover for maskiner (2006/42/EF).

Me KUKEN CO.,LTD.-Osaka, Japan vakuutamme olevamme yksinomaisessa vastuussa siitä, että tämä tuote johon tämä ilmoitus viittaa on yhdenmukainen EY:n komission direktiivin, annettu 17 toukokuu 2006 kanssa, joka koskee yhteisön jäsenvaltioiden koneita koskevan lainsäädännön lähentämistä (2006/42/EY).

ΕμείζΚυκεν co.,Ltd.-Οζάκα, Ιαττωνία δηλώνει κάτω αττό τη μόνη ευθύνη μαζ ότι το ττροϊόν το οττοίο αυτή η δήλωση αφορά, είναι σύμφωνα με τιζ ατταιτήσειζ τηζ οδηγίαζ του Συμβουλίου της 17 Μαΐου του 2006 σχετικά με την ττοσέΥΥιση των νομοθεσιών των κρατών μελών σχετικά με τα μηχανήματα (2006/42/ΕΚ).

June 26, 2013

Director - Quality Control

KUKEN

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