

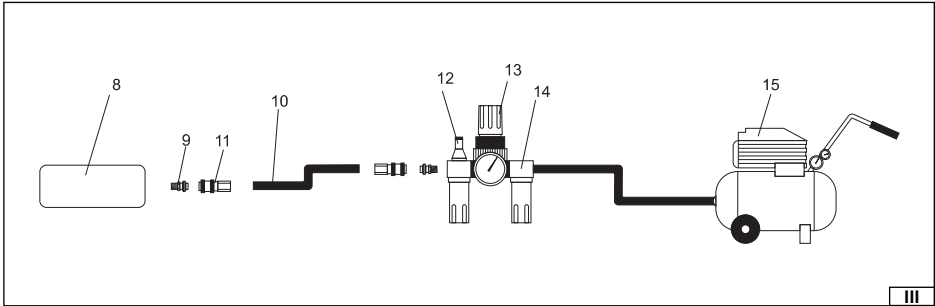
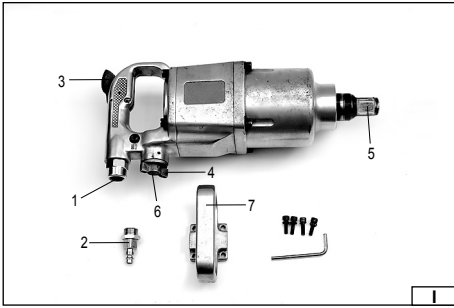
item number:
YT-0959



 **PNEUMATIC WRENCH**



GB



2011

Production year:

TOYA S.A. ul. Sołtysowicka 13-15, 51-168 Wrocław, Polska; www.yato.com

- 1. air inlet
- 2. air inlet connector
- 3. trigger
- 4. turning rotation switch
- 5. collector
- 6. adjustment of pressure
- 7. additional handle
- 8. tool
- 9. hose socket
- 10. hose
- 11. hose connector
- 12. greaser
- 13. reducer
- 14. filter
- 15. compressor



Read the operating instruction



Wear protective goggles



Wear hearing protectors

1
MPa

Maximum working pressure

0.63
MPa

Recommended working pressure

2600
Nm

Maximum turning moment

560
l/min

Required air flow

1”

Size of the collector

4000
min⁻¹

Rotations

1/2”

Diameter of the air connection



**PINLESS
HAMMER
TYPE**

Type of hammer mechanism

CHARACTERISTICS OF THE TOOL

Pneumatic wrench is a tool that is powered with a stream of compressed air at appropriate pressure. Wrenches installed on a collector make screwing down and unscrewing possible, particularly where a high turning moment is required. The tool is not supposed to function in a continuous manner. Correct, reliable and safe functioning of the tool depends on correct operation, therefore:

Before operation of the tool can be commenced, the whole manual must be read and kept.

The supplier cannot be held responsible for any damages or injuries which are caused by using the tool in a manner that does not correspond to its purpose, not observing safety regulations or the recommendations of the present instructions. Using the tool in a manner that does not correspond to its purpose also cancels the guarantee.

EQUIPMENT

The pneumatic wrench is equipped with a connector that facilitates its connection to the pneumatic system.

TECHNICAL DATA

Parameter	Measurement unit	Value
Catalogue number		YT-0959
Length	[mm]	390
Weight	[kg]	10,8
Diameter of the air connection (PT)	["]	1/2
Inside diameter of the air supply hose	["]	1/2
Rotations	[min ⁻¹]	4000
Maximum turning moment	[Nm]	2600
Size of the collector	["]	1
Maximum working pressure	[MPa]	1,00
Recommended working pressure	[MPa]	0,63
Required air flow (at 6,3 bar)	[l/min]	560
Acoustic power (EN ISO 15744:2008)	[dB(A)]	111,4 ± 3,0
Vibrations (EN ISO 8662-7:1997)	[m/s ²]	25,9 ± 1,5

GENERAL SAFETY CONDITIONS

WARNING! During operation of a pneumatic tool, it is recommended to always observe the basic safety regulations including those mentioned below, in order to diminish the risk of fire, electric shock and injury.

Before operation of the tool can be commenced, the whole manual must be read and kept.

ATTENTION! Read all the instructions mentioned below. If they are not observed, there is a risk of electric shock, fire or injury. The notion of „pneumatic tool“ that is used in the instructions refers to all tools that are powered with a stream of compressed air at appropriate pressure.

OBSERVE THE FOLLOWING INSTRUCTIONS

Place of workThe place of work must be well lit and kept clean. Disorder and weak light may be causes of accidents. Do not use pneumatic tools where there is a risk of explosion, in an atmosphere that contains inflammable liquids, gases, or fumes. Prevent access of children and unauthorized persons to the place of work. Loss of concentration may cause loss of control of the tool.

Safety

The connector of the pneumatic tool must fit the socket of the air supply duct. Do not modify the connector or the power supply socket. All ducts, connectors and sockets must be clean, undamaged, in good technical state and suitable to be used with pneumatic tools. Pneumatic tools are not insulated from contact with electric energy sources, and therefore any contact with grounded surfaces must be avoided (pipes, heaters and refrigerators). Grounding of the body increases the risk of electric shock. Do not expose pneumatic tools to atmospheric precipitation or humidity. Water and humidity inside the tool increases the risk of damage and injury. Do not overload the air supply duct. Do not use the duct to carry, connect or disconnect the connector from the compressed air tank. Avoid contact of the power supply cord with heat sources, oils, sharp edges or mobile elements. Do not power the pneumatic tool with oxygen, inflammable or toxic gases. Use only filtered and "lubricated" compressed air whose pressure may be regulated. Make sure that the processed object is properly fixed and will not move during processing.

Personal safety

Work in good physical and psychological condition. Pay attention to what you are actually doing. Do not work if you are tired or under influence of medicines or alcohol. Even a moment of distraction during work may lead to serious injuries. Use personal protection. Wear protective goggles. Using personal protections like anti-dust masks, protective shoes, helmets or hearing protector reduces the risk of serious injuries. While operating a pneumatic tool, wear protective gloves in order to protect yourself from mechanic injuries and thermal influence of the tool. Avoid starting the tool by chance. Make sure the switch is in the position „OFF“, before the tool is connected to the compressed air tank. Keeping a finger on the switch or connecting of the tool when the switch is in the position „ON“ may cause serious injuries. Before the pneumatic tool is connected, remove all the wrenches and other tools that were used for adjustments. A wrench that is left on mobile parts of the tool may cause serious injuries. Keep balance. During the whole period of work, keep an appropriate position. It will facilitate the operation of the pneumatic tool in the case of unpredictable situations during work. Use protective clothes. Do not wear loose clothes or jewellery. Keep the hair, clothes and gloves away from the mobile parts of the tool. Loose clothes, jewellery or long hair may get caught in the mobile parts of the tool. Use dust removing systems and dust containers if the tool is equipped with them. Connect it correctly. A dust removing system diminishes the risk of serious injuries. The feeding duct is under pressure what may cause its dynamic movements and serious injuries.

Operating of a pneumatic tool

Do not use the tool in a manner that does not correspond to its purpose. Do not overload the pneumatic tool. Use a proper tool for a given job. Do not exceed the maximum acceptable working pressure. A proper choice of tool for a given job will guarantee more efficient and safer operation. Before the tool is regulated, accessories changed or the tool stored, the feeding duct must be disconnected. Thus the pneumatic tool is protected from casual switching it on. Store the tools away from children. Do not permit operation of the tool by persons that have not been trained as far as its operation is concerned. The tool must be properly maintained. Check the tool for lack of adjustment and play of mobile parts. Check if any element of the tool is damaged. In the case if any defects are detected, they must be repaired before the pneumatic tool may be used. Many accidents are caused by incorrect maintenance of tools. Cutting tools must be kept clean and sharp. Properly kept cutting tool is easier to control during operation. Use pneumatic tools and accessories with accordance to the above mentioned instructions. Use the tools with accordance to their purpose, taking into account the type and conditions of work. Using the tools for purposes that differ from those for which they were designed, increases the risk of dangerous situation. While operating a pneumatic tool, take into account a possibility of fracturing the working tool, what may cause expulsion of its parts at a high velocity and lead to serious injuries. Make sure the tool is rotating in a correct direction. Unexpected direction of rotation may be a cause of a dangerous situation. Do not place hands near the mobile elements of the pneumatic tool, since it may cause serious injuries. In the case the socket of the collector is damaged, there is a risk of expulsion of parts of the tool at a high velocity and lead to serious injuries. As result of the turning moment, the tool or the reaction stick may turn. It may lead to serious injuries if the body of the operator is within the range of the turning tool or the reaction stick. Adopt an appropriate position during work and be prepared for a turn of the tool. Solely the equipment that is destined to function with pneumatic tools may be used. Using inappropriate equipment may lead to serious injuries. In the case the power supply is suddenly interrupted, the switch of the tool must be immediately released.

Repair

The tool may be repaired solely in authorised service points which use only original spare parts. It will guarantee an appropriate level of safety of the pneumatic tool. Do not clean the pneumatic tool with petrol, solvents or another inflammable liquid. The fumes may ignite causing an explosion of the tool and serious injuries. The tool may only be maintained with high quality materials. It is prohibited to use substances other than those mentioned in the service manual. Before the inserted tool is replaced or dismantled, disconnect the compressed air supply duct.

CONDITIONS OF OPERATION

Make sure the source of compressed air may create appropriate working pressure and guarantee the required flow of the air. If the pressure of the air is too high, use a reduced with a safety valve. The pneumatic tool must be powered through a filter and a greaser. It will guarantee simultaneously cleanliness and lubrication of the air with oil. The state of the filter and the greaser must be checked before each use and, if necessary, the filter must be cleaned or the oil supplied in the greaser. It will guarantee proper operation of the tool and will prolong its durability.

It is necessary to correctly adapt the reaction stick to a given task.

In the case additional holders or supporting stands are used; make sure the tool has been correctly fixed.

Adopt a correct position that will allow you to react to normal or unexpected movements of the tool that may be caused by the turning moment.

Wrenches and other inserted tools must be adapted to work with pneumatic tools. The inserted tools must be in good working order and must be cleaned and not damaged. Their size must fit the dimensions of the collector. It is prohibited to modify the sockets of the wrenches or the collector.

OPERATION OF THE TOOL

Before each use of the tool, make sure that no element of the pneumatic system is damaged. If there are any damaged elements, they should be immediately replaced with new, faultless elements of the system.

Before each use of the pneumatic system, dry the humidity that condensates inside the tool, the compressor and the dusts.

Before use of the tool, assembly additional handle with four bolts. (VII)

Connection of the tool to the pneumatic system

The drawing shows the recommended manner of connection of the tool to the pneumatic system. The presented connection guarantees the most effective operation of the tool and will prolong its durability.

Place a couple of drops of oil (of viscosity SAE 10) to the air inlet.

Into the thread of the air inlet, turn strongly an appropriate terminal that makes it possible to connect an air supply hose. (II)

Install an appropriate terminal on the collector of the tool. **During work with pneumatic tools, use solely the equipment approved for work with percussive tools.**

Adjust a correct direction of rotation. „F” indicates clockwise rotation, „R” – anticlockwise rotation.

Where it is possible, adjust the pressure (turning moment).

Connect the tool to the pneumatic system using a hose of internal diameter 1/2". Make sure the resistance of the hose is at least 1.38MPa. (III)

Work with thimble percussive wrenches

Before screwing with a wrench starts, place the screw or the nut on the thread manually (at least two turns).

Make sure the size of the wrench is correct for the screwed element. A wrong size may be a cause of damage to the wrench, the screw or the nut.

Unscrewing and tightening

Adjust the pressure in the pneumatic system so as it does not exceed the maximum value for the given tool.

Set up the appropriate direction of rotation for the tool (F – tightening, R – unscrewing), and the appropriate turning moment. (V)

Install an appropriate thimble wrench on the collector of the tool. (IV)

Connect the key to the pneumatic system.

Place the key with the thimble installed on the element to be unscrewed or tightened.

Gradually release the trigger of the tool.

Once the work has been concluded, dismantle the pneumatic system and perform appropriate maintenance of the tool.

MAINTENANCE

Never use gasoline, solvents or another inflammable liquid to clean the tool. The fumes may ignite causing an explosion of the tool and serious injuries.

Solvents used to clean the tool holder and the body of the tool may soften the tightening of the machine. Dry thoroughly the tool before you start working with it.

If any irregularities in the functioning of the tool are detected, it must be immediately disconnected from the pneumatic system. All elements of the pneumatic system must be protected from dirt.

Dirt in the pneumatic system may damage the tool and other elements of the pneumatic system.

Maintenance of the tool before every use

Disconnect the tool from the pneumatic system.

Before each use of the tool, place a small amount of maintenance liquid (e.g. WD-40) through the air inlet.

Connect the tool to the pneumatic system and start it for approximately 30 seconds. It will allow spreading the maintenance liquid inside the tool and cleaning it.

Disconnect the tool from the pneumatic system again.

Place a small amount of SAE 10 oil inside the tool through the air inlet and other appropriate holes. It is recommended to use SAE 10 oil whose purpose is maintenance of pneumatic tools. Connect the tool and start it for a while.

Attention! WD-40 cannot be used as appropriate lubricating oil.

Wipe out the excess of oil that comes out through the outlets. If the oil is left, it may damage the tightening of the tool.

Other maintenance actions

Before each use of the tool, make sure there are no signs of damage on the tool. Collectors, tool holders and spindles must be kept clean.

Every six months, or every 100 hours of operation, send the tool for revision which must be realized by qualified personnel in the repair shop. If the tool was used without the recommended air supply system, increase the frequency of overhauls of the tool.

Defects

Stop operation of the tool immediately if any defect in its functioning has been detected. Work with a damaged tool may be a cause of injuries. All repair and replacement of the elements of the tool must be performed by qualified personnel in an authorized repair shop.

Defect	Possible solution
The rotation of the tool is too slow or it is impossible to start the tool	Introduce a small amount of WD-40 through the air inlet. Start the tool for a couple of seconds. It is possible that the blades adhere to the rotor. Start the tool for approximately 30 seconds. Lubricate to tool with a small amount of oil. Attention! Excessive amount of oil may cause a drop in the power of the tool. In such a case, clean the power transmission.
The tool starts but then slows down	The compressor does not provide an appropriate flow of the air. The tool starts with the air collected in the tank of the compressor. While the tank is being emptied, the compressor cannot follow up refilling the tank. Connect the tool to a more efficient compressor.
Insufficient power	Make sure the inside diameter of the installed hoses is not lower than 1/2". Check the regulator of pressure – pressure must be set at the maximum value. Make sure the tool is properly cleaned and lubricated. If there are no results, send the tool for repair.

Once the functioning has been concluded, the casing, ventilation slots, switches, additional handle and protections must be cleansed with a stream of air (at a pressure not exceeding 0.3 MPa), with a brush or a cloth without any chemical substances or cleaning liquids. Tools and handles must be cleansed with a clean cloth.

Worn tools are recyclable waste – it is prohibited to dispose of them throwing them away along with domestic waste, since the tools contain substances that are harmful for people and the environment! We ask for your active assistance in economic management of natural resources and protection of the natural environment by sending the tools to a worn tools disposal point. In order to reduce the quantity of waste that is disposed if, it is necessary to recycle them.

