

# 4. POWER TOOLS

## AIR RATCHETS



### WARNING

#### Air Ratchets

- Do not use this machine outside its designated usage.
- Do not use outside the ratchet's capability or specifications.
- Do not operate while in an awkward posture.
- Make sure that all operators are wearing safety glasses, earplugs, a hard hat, a dust mask, safety boots, and clothing that comply with the work purpose and environment while working.
- Always use head tools (such as sockets) that are compatible with impact wrenches, and remove the air hose (coupler) before replacing.
- Always make sure the head tools, etc. are securely attached before commencing work.
- Do not touch the drive areas or turning areas of head tools.

- Before use make sure there are no irregularities, such as cracks or irregular operating sounds.
- If there are any abnormalities during use, stop the ratchet immediately to inspect, have the ratchet serviced if required.
- Use only the specified air pressure. Do not use any power source other than compressed air.
- Always attach the air hose (coupler, etc.) securely.
- Always hold the object being worked on securely when using the ratchet.
- Do not operate near flammable materials, such as gasoline (petrol) or gas.
- Watch for Air Ratchet recoil at the beginning of loosening or at the end of tightening operations.



### CAUTION

#### Air Ratchets

- Handle the machine with care. Do not throw or drop the machine.
- Do not run a ratchet freely as it may lead to early wear and tear.
- To prevent early wear and tear, do not use the machine continuously on full power for more than a minute.

- Add oil as required through the inlet after each use.
- As the ratchet cannot control the torque, use a torque wrench to tighten if a specified torque is required.

### Air Ratchet Overview

\*Torque levels are only estimates as these will vary according to conditions.

Type / Drive Angle	Mini-type	Standard-type	High-speed type	Power type	Recoilless type
1/4" sq.	JAR203A 				
3/8" sq.					JAR311 
1/2" sq.		JAR407A 			JAR411 

### Description



#### ■ Twin Pole & Damper System

A new system is used with the gear structure that allows sound rotation at high speeds without gear slippage.



#### ■ Regulator Ring

Simply twist the regulator ring to switch rotating speed.



#### ■ Teasing Throttle Lever

The throttle lever controls precise rotation adjustments.



#### ■ Recoilless Mechanism

Work can be carried out without jamming one's hand when working in confined areas.



#### ■ 360-degree rotational exhaust

The exhaust position can be set in accordance with each operation as required.

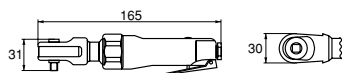
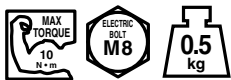


### ● MINI-TYPE 1/4" sq. MINI-RATCHET

No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of hose used
JAR203A	200rpm	0.06m <sup>3</sup> /min	PT1/4"	8mm

- Attachment: 1 Air Regulator
- Attachment: 1 Air Coupler (20PM)

This lightweight and compact machine is suitable for working around confined spaces, such as engines and doors.



Recommended Air Hose JAH-065



\*MINIRATCHE is a registered trademark of KYOTO TOOL CO., LTD.

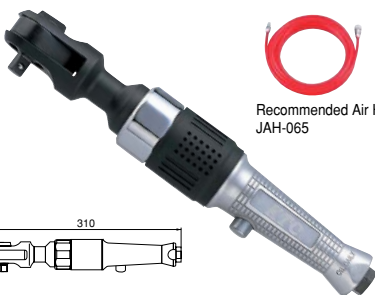
\*Please check the merchandise inventory for a product that is marked by before placing an order.

3/8" sq.

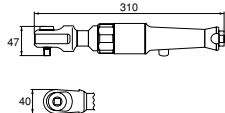
● HIGH-POWER TYPE 3/8"sq. "MEGA-RATCHET" U. PAT

No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of hose used
JAR309A	270rpm	0.65m <sup>3</sup> /min	PT1/4"	8mm

• Attachment: 1 Air Regulator  
Attachment: 1 Air Coupler (20PM)  
Ideal for work that demands high torque, such as large buses, trucks and construction machines. This machine is also used especially when replacing claws on agricultural machines.



Recommended Air Hose JAH-065

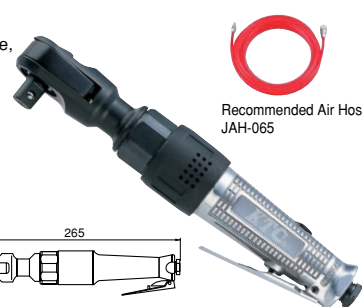


1/2" sq.

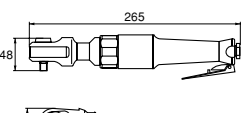
● STANDARD TYPE 1/2"sq. "POWER-RATCHET"

No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of hose used
JAR407A	160rpm	0.5m <sup>3</sup> /min	PT1/4"	8mm

• Attachment: 1 Air Regulator  
Attachment: 1 Air Coupler (20PM)  
Ideal for work that demands high torque, such as servicing of automobiles and truck engines, etc.



Recommended Air Hose JAH-065



3/8" sq.

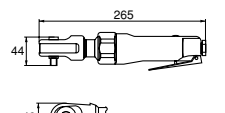
● RECOILLESS TYPE 3/8"sq. "POWER-RATCHET (NON-KICK)" PAT / U. PAT

No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of hose used
JAR311	300rpm	0.11m <sup>3</sup> /min	PT1/4"	8mm

• Attachment: 1 Air Regulator  
Attachment: 1 Air Coupler (20PM)  
The recoilless mechanism eliminates recoil when carrying out loosening and tightening operations. This means that work can be carried out safely as hands will not become jammed when working in confined spaces.



Recommended Air Hose JAH-065



1/2" sq.

● RECOILLESS TYPE 1/2"sq. "POWER-RATCHET (NON-KICK)" PAT / U. PAT

No.	No. of rotation (unloaded)	Air consumption (unloaded)	Air inlet	Inner diameter of hose used
JAR411	300rpm	0.11m <sup>3</sup> /min	PT1/4"	8mm

• Attachment: 1 Air Regulator  
Attachment: 1 Air Coupler (20PM)  
The recoilless mechanism eliminates recoil when carrying out loosening and tightening operations. This means that work can be carried out safely as hands will not become jammed when working in confined spaces.



Recommended Air Hose JAH-065

