



## ROTORBLASTER

### OPERATING INSTRUCTIONS & SERVICE MANUAL



#### **Important Safety Instructions**

Read all warnings and instructions in this manual.

Do not proceed until you fully understand its contents

These WARNINGS are included for the health and safety of the operator and those in the immediate vicinity.

Save these instructions.

#### **Storm Machinery**

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# Internal Pipe RotorBlast Tool RB01



## 1. Introduction

The RotorBlaster is a high-performance mobile device for abrasive blast cleaning of the inner surfaces of pipes.

It is suited for operating in straight pipes up to 12m in length and with diameters from 300 to 900 mm.

## 2. Basic Parameters

**Application Pipe:** the short legs are suitable for pipe I.D. 300~400mm; the long legs are suitable for pipe I.D. 400~900mm

**Driving Energy:** compressed air

**Operating Pressure:** 6 - 7 bar

**Air Supply Hose:** 32mm - 50mm

**Air Consumption:** 268 CFM at 7 bar

**Applicable Abrasive:** steel shot, copper slag, silica sand, chrome slag, platinum slag and copper slag etc; grain size should be more than 20 mesh (less than 1mm)

**Nozzle:** 8mm x 2

**Connector:** with 1/4" internal thread, equipped with PU pipe connectors (applicable to 12mm O.D.), and pagoda-shaped connectors with 13mm inner diameter

**Pneumatic Drive Motor:** air hose internal diameter must be 13mm / by adjusting the ball valve you control the speed of the rotating head (it must rotate slowly)

### 3. Parts Diagram

See Fig.1

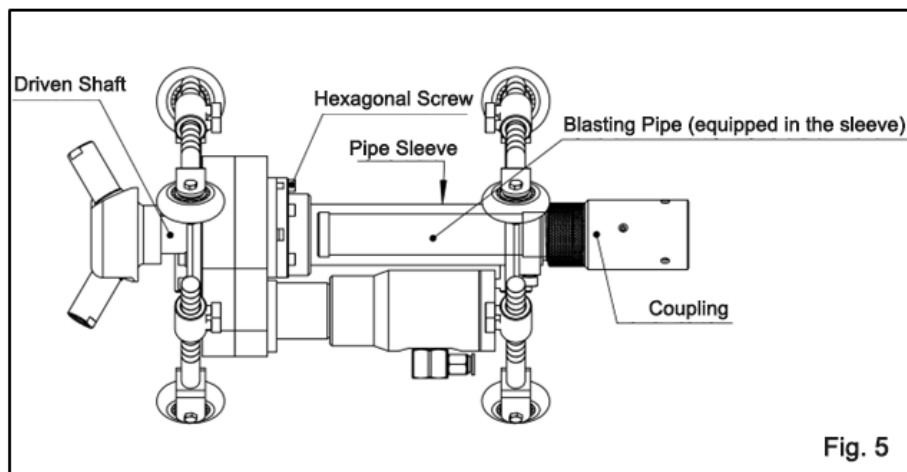
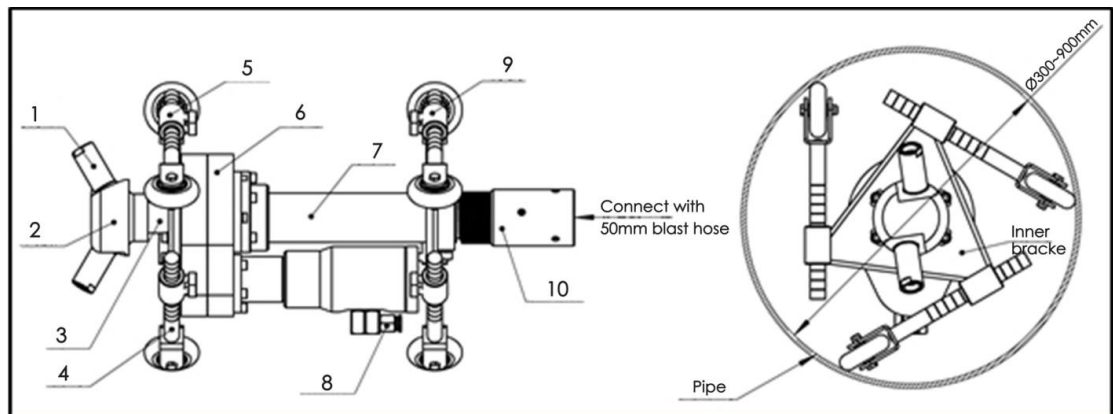
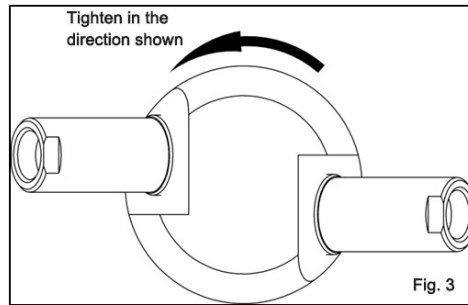


Fig. 5

1. Nozzle
2. Rotating head
3. Driven shaft
4. Caster bracket
5. Inner bracket to hold legs
6. Gearbox
7. Outer protective sleeve + inner nylon tube
8. 13mm hose connector and inline filter
9. Outer bracket to hold legs
10. Lock nut and coupler

### 4. Installation

- 1) Use the allen key provided to fix the inner bracket and outer bracket to the main body of the RB01
- 2) Install the nozzle on the rotating head (see Fig. 2) - fasten the nozzles but do not tighten them, it will strip the nylon thread
- 3) Install the rotating head on the driven shaft by turning it anti-clockwise (see Fig. 3)



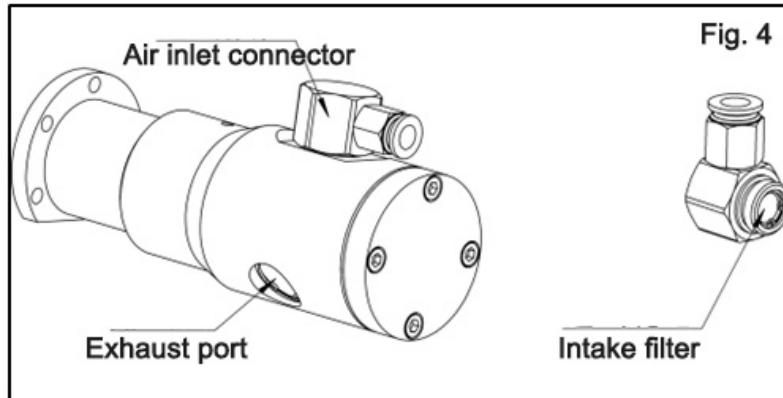
- 4) Choose a suitable caster bracket or legs according to the pipe size you need to blast and adjust the length (RB01 is equipped with two sets of different lengths of caster brackets/legs, use the short one when the pipe I.D. less than 400mm, and use the long one when the pipe I.D. more than 400mm)
- 5) Connect the air hose to the pneumatic rotating motor
- 6) Connect the inlet coupling and lock nut onto the RB01. Fasten the coupling but do not tighten it, ensure the reader understand this. Lock the lock nut ring firmly to the coupling then connect the blast hose to the RB01.

## 5. Operation Guide

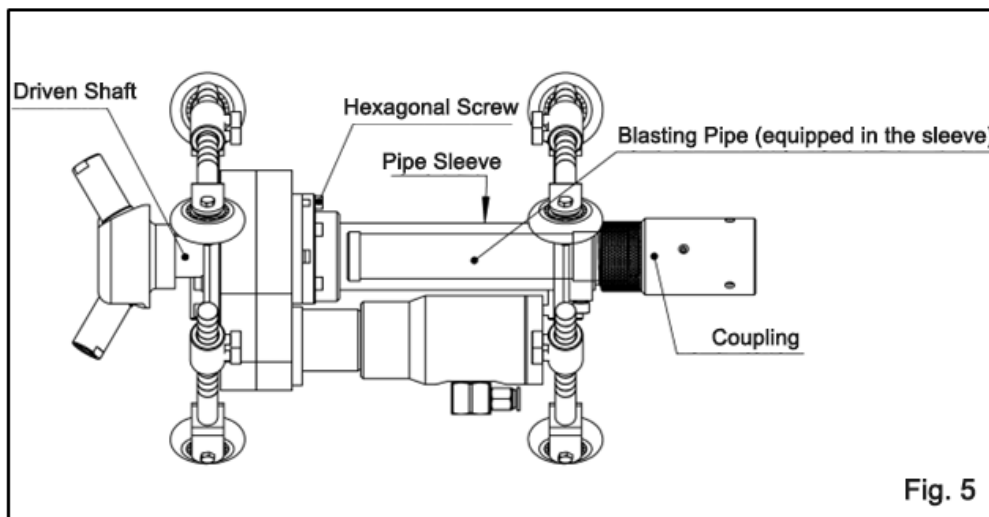
- 1) Precautions before starting up: check whether the connections of various parts of the machine body and the bolts are tight; check whether the connection between the rotating head and the driven shaft is tight to prevent air leakage; check whether the connection between the nozzle and the rotating head is tight.
- 2) Switching sequence: when starting up, first turn on the pneumatic power motor, and then activate the sandblasting pot when the pneumatic power motor is rotating at 3-6 revolutions per second. The head must rotate slowly. Use the ball valve to control the speed. When shutting down, first turn off the sandblasting pot and then turn off the pneumatic power motor.
- 3) The air working pressure of the rotary motor is 6 - 7 bar. If the speed is not ideal, the air pressure can be adjusted, but the maximum pressure should not exceed 7 bar.
- 4) In order to prolong the service life of the tool RB01, boron carbide nozzles are used.
- 5) The air pressure of this machine is relatively high. Calculated from the outlet of the nozzle, the one-way effective spraying distance is 900mm, and the impact force is large. Therefore, the air compressor must be turned on only after the RB01 is installed in the pipe to be cleaned, so as not to hurt people.
- 6) When using, first pull the RB01 to the outlet of the pipe. Push the device by the abrasive blast hose through the pipe. Pull the RB01 back at a speed that ensures the necessary level of cleaning.
- 7) When the RB01 exits the pipe, make sure that the blast pot is fully discharged.
- 8) A 13mm water trap must be mounted onto the blast pot to feed air to the pneumatic motor.

## 6. Maintenance

- 1) If you use fittings that do not match the device, pay attention to the depth of the thread, so as not to screw too deep and affect the air intake flow. Regularly check whether the **exhaust port** of the motor (see Fig. 4) and the **intake filter** in the air connector are blocked by dust and impurities, so as not to affect the intake and exhaust flow, which causes speed dropping. Also check the 1/2" filter for abrasives and water.



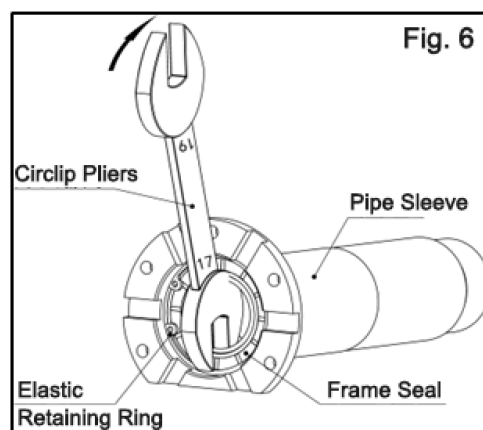
- 2) Regularly check the wear of the parts and replace the parts that are close to failure in time (see Fig. 5)



★ Inner nylon tube replacement: Disassemble the hose coupling and pull out the blasting pipe backward to replace it.

★ Replacing the driven shaft: take the rotating head off, loosen the locking and disassemble the blasting pipe sleeve, then pull out the driven shaft to replace it.

★ Replace the frame seal ring: disassemble the blasting pipe sleeve, remove the elastic retaining ring with a circlip pliers first, then remove the frame seal ring with an open wrench (see Fig. 6); replace it with a new one.



- 3) Prevent water or oil (grease) from entering the interior when not in use

## 7. Daily Inspections

Remove RB01 from the blast hose. Do not remove the inlet coupling. Remove the spinblast head and inspect for wear

Hold up the RB01 and look through the center. Check the nylon tube for wear and check the rotary tube for wear.

Replace when necessary.

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