

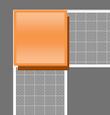
2009



# Instruction Fans

## RGF

These instructions wherever relevant, are applicable to the entire range of ÅKERSTEDTS centrifugal fans



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### Explanation name

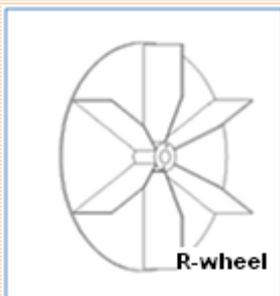
R = Smoke

G= Gas

F = Fan

A = Internal letter

B = Internal letter



# Instruktion Chimneyfan

## RGF

### 1. General

The instructions must be read and understood by all personnel concerned before any work with the product is begun.

The direction of rotation of the fan is indicated by an arrow on the fan casing.

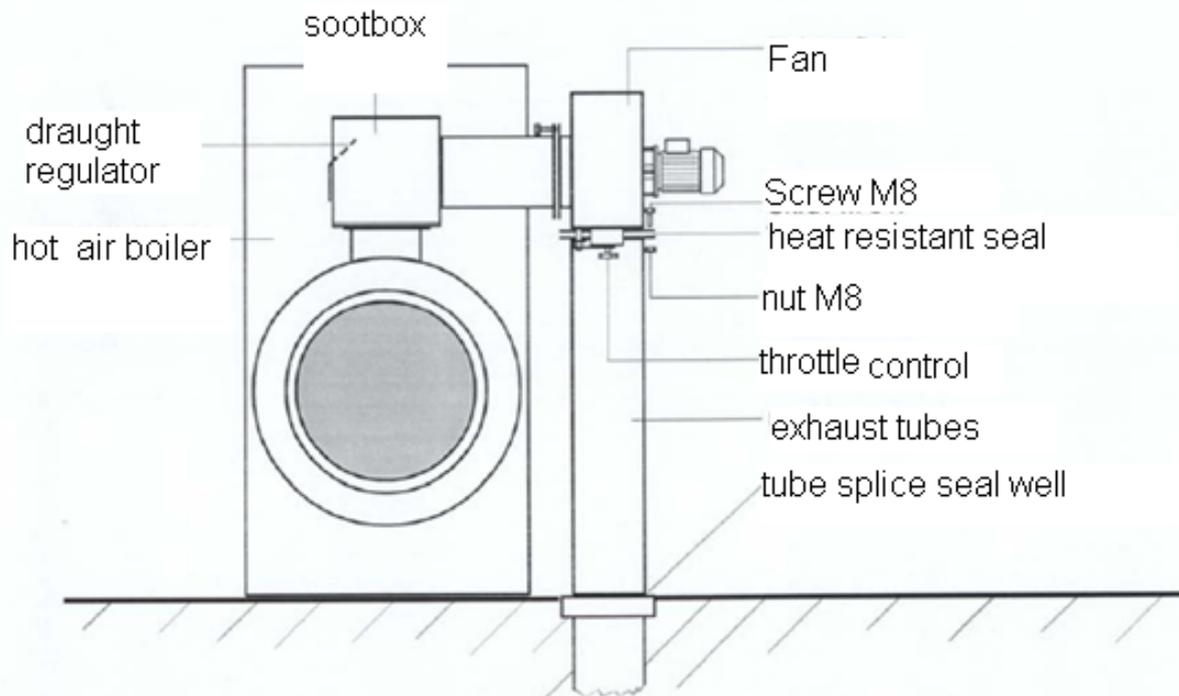
The type designation of the fan is specified on an identification plate on the fan.



**Whenever you get in touch with Åkerstedts, it is important that you state the correct fan designation and design.**

#### **Viktigt:**

RGF-fans purpose is only transporting smokegas with a temperature of **max 400°C**. If the fan is used for other purpose is the manufatcure NOT responsible for eventually damage. That kind of use is at your own risk.



Picture 1: Fan mounting picture

## 2. Installation

### Installation and anchoring

All the fans are thoroughly tested and test-run prior to delivery.

The rotating parts in the centrifugal fans have been both statically and dynamically balanced.

The fan may only be mounted, maintenance, and be repaired by personal that is well known with the fan and its function and knows about the risks.

The fan is prepared with a special hub for cooling, this limits the heat to transferring to the engine.

### 2.1 Connection to the ducting

#### Mounted without anti-vibration:

The dead weight of the connected ducting must not apply a load on the fan casing the

casing may be deformed come in contact with the impeller.

### 2.3 Fan placement

1. The fan must be placed in a fireprotected area with /that has right fire protection class that authorities require.
2. Sootbox, exhaust tubes and fan may not be placed too close to inflammable material.
3. The fan must be placed in environment where the temperature is normal (ca 20 °C).

### 2.4 Assembling of the fan

1. Mount the fan and connect it to inlet tube and outlet tube (picture 1)
2. The fan cannot be started until it's connected to in and outlet tubes.
3. All joints must be sealed between the fan, exhaust tube and splice tube.

## 2.4 Assembling

All electricity shall be deducted by a qualified electrician. The electric motor must be equipped with a working switch. Cables should be positioned so that they don't come

in contact with the fanhousing.

**Note! Ask before installation: securitymanager, chimney sweepmaster and insurers who provide advice and guidance on the requirements for fire safety measures.**

## 3. Commissioning

### 3.1 Before starting the fan

*Before starting the fan, check the following:*

1. That the electric motor is wired for the correct mains
2. That all phases are connected
3. That the ducting is properly secured and is tight against the fan without applying any load on the casing.
4. That no tools or other objects have been left inside the fan.
5. The fan must not be operated without a connection on both inlet and outlet.

### Safety

In accordance with the Labour Welfare Act and the directives of the National Board of Occupational Safety and Health, adequate protection is required for rotating machine Parts.

## 4. Maintenance

### 4.1 Fan

At repair and maintenance make sure the power is off.

*The following items must be checked at least once every 12 months:*

1. Check the fan balance. Feel the fan casing and ascertain that there are no abnormal vibrations. (NOTE! The fan has to be cold!)
2. Check that the motor doesn't exceed the rated current, and that there is equal amperage in all the phases.
3. Check that air is sucked in between the motor and fanside.
4. Clean the wheel from soot.

### 3.2 After the fan has been started

*After the fan has been started check the following:*

1. That the impeller is rotating in the right direction
2. That there are no abnormal vibration or noise
3. That the bearing temperature is normal
4. That the motor doesn't exceed the rated current
5. That there is equal amperage in all the phases
6. That air is sucked in between the motor and fanside.

### 4.2 Electric motor

**Inspect at least once every 12 months!**

Bearings:

- Listen to the bearings
- A whistling sound indicates that the bearing has run dry

- A scraping or thumping sound indicates that bearing balls or ball races are damaged

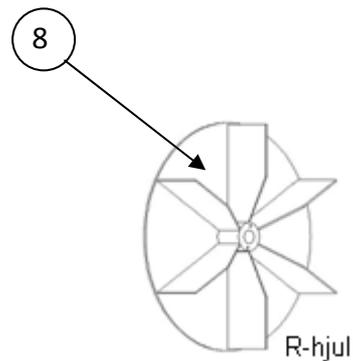
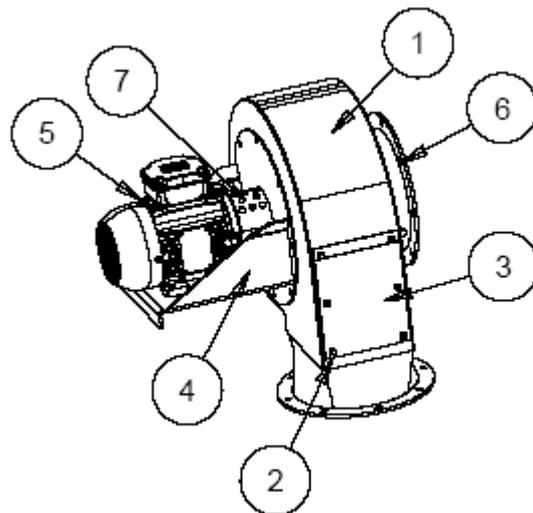
***Any damaged bearings ought to be replaced! . Also check that the motor mounts are intact and that the mounting bolts are properly tightened.***

**Clean at least once every 12 months:**

The interior of the motor should be kept free of dust, grime and oil. In particular, clean the motor cooling fan and the grille below.

Clean with a dry cloth. If the motor is especially dirty, white spirit or the like may be used as a solvent. The motor is likely to overheat if layers of dirt obstruct the flow of air that cools the stator.

|          | <b>Spare Part List</b>             |
|----------|------------------------------------|
| <b>1</b> | <b>Fanhousing</b>                  |
| <b>2</b> | <b>Seal</b>                        |
| <b>3</b> | <b>Inspectiondoor</b>              |
| <b>4</b> | <b>Motorshelf</b>                  |
| <b>5</b> | <b>Motor</b>                       |
| <b>6</b> | <b>Inlet</b>                       |
| <b>7</b> | <b>Bossprotection</b>              |
| <b>8</b> | <b>Fanwheel inkl. cooling boss</b> |



## Exempel på användningsområde

