

# DEPRAG

## Operating Instruction Booklet

### Air Motor

68-009/IEC71A

445478 A

Dear Customer:

This tool is the result of more than 70 years of experience in the design and manufacturing of pneumatic tools for the industrial market.

We kindly ask that you read these operating instructions carefully so that you will be able to use this tool safely and for many years to come. If you need additional information, please contact your DEPRAG Representative, one of our international support offices or us direct at DEPRAG. We will be happy to answer any questions. Please visit our web site: [www.deprag.com](http://www.deprag.com)

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Read and observe the Operating Instruction Booklet, prior to and during operation of tool.

## **1. Safety Tips**

Generally, the operator of the equipment and/or machinery is responsible for the equipment's perfect condition and operation, while observing all necessary safety regulations. The equipment and/or machinery has been constructed in accordance with the newest level of technology while recognizing all necessary safety-related requirements. Nevertheless, while operating the equipment and/or machinery there is a risk of bodily harm to the operator as well as damage to equipment and/or machinery and other property.

Operate the equipment and/or machinery only if equipment/machinery

- Is used for the task it was designed for
- is in perfect working condition and safe to use.

It is important to observe the technical data of the equipment, especially in regards to the environmental temperatures. Prerequisite for the safe conduct and the uninterrupted operation of the equipment, is the knowledge of the basic safety tips and the safety regulations. Additionally, all current regulations for a safe operational area, for accident-prevention guidelines of electrical and mechanical installations, as well as noise suppression demands must be observed. During any maintenance or repair work, a clean work surface is recommended. Also, it is not recommended to either eat or smoke during repair or maintenance. Arbitrary changes made to the equipment, which alters its designated use, voids the warranty and cancels the manufacturers liability.

- The tool is not insulated to protect against an electrical power surge.
- It is not recommended to use this tool in explosive hazardous environments, unless it was specifically designed for such a use.
- During the disconnection or reconnection of the tool from the compressed air, an injury is possible because of a whipping pressure-hose.

The operating instruction booklet, especially the safety symbols and safety tips attached to the equipment or included in the documentation, must be observed at all times by all persons getting into contact with the equipment.



Never go above the max. possible idle speed of the motor (see techn. specifications). Throttles in the air connectors of motor housing 445337 are adjusted to allow the max. possible idle speed. The sizes of the throttles are also adjusted to the direction of rotation of the motor.

## **2. Operation**

Blow out air line and pressure hose, prior to connection it to the tool. Make sure, that all air lines have a sufficient cross-section (see technical data) and hoses must be free of bends and kinks. The hose length should not exceed 2 meters.

All DEPRAG Motors, may be operated either with or without lubricated air. Best results are achieved, when motor is lubricated with 1 – 2 drops of oil per 1m<sup>3</sup>. When motor is operated with dry air, a performance reduction of up to 20% occurs and maintenance increases!

Check pressure at directly on the machine. The Regulator needs to be adjusted to an airflow of 6 bar (85 PSI). A higher pressure leads to increased wear and tear. A lower pressure results into reduced power output.

In regards to air-quality according to ISO8573-1, we recommend:

	<b>CLASS</b>	<b>RESIDUE OF OIL</b>	<b>RESIDUE OF DUST</b>		<b>RESIDUE OF WATER</b>	
		Content mg/m <sup>3</sup>	Particle Size µm	Concentration max. mg/m <sup>3</sup>	Dew Point °C	Pressure Concentration max. g/m <sup>3</sup>
Lubricated Air	4	5	15	8	+3	6
Dry Air	3	1	5	5	-20	0,88

### **3. Assembly – Disassembly**

**Disassembly:** (see Spare Parts Drawing)



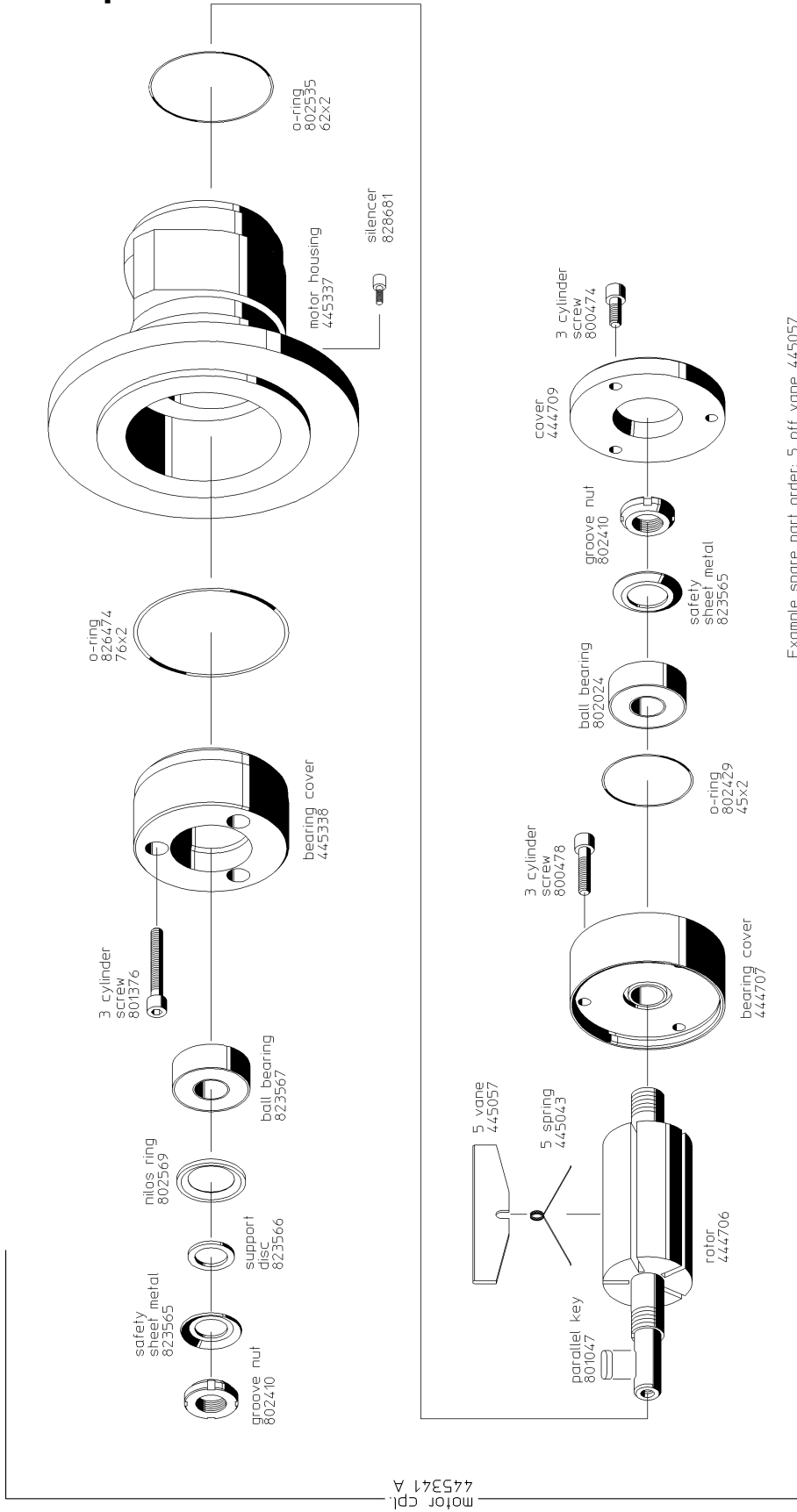
**Prior to disassembly, disconnect equipment from air-supply! Only experienced maintenance personnel may assemble or disassemble this equipment.**

After repair or maintenance, verify that equipment runs to specification!

Principally, use only DEPRAG original spare parts. Otherwise, a reduction in equipment power output and an increased maintenance requirement will occur.

If NON-DEPRAG parts are installed, DEPRAG is entitled to void any existing warranty and liability obligations.

### 3.1 Spare Parts List



Example spare part order: 5 off vane 445057

## **4. Maintenance and Upkeep**

Testing and maintenance can be provided by Operator, disassembly and re-assembly of the DEPRAG Air Motor should be done by experienced maintenance personnel only. Incorrect assembly or disassembly can lead to injury of an operator and damage of the tool.

The motor requires little maintenance. If the following service rules are observed, the tool will have a long life expectancy and will remain in a safe condition.

- Check tool on a regular basis for external damage.
- Check your maintenance unit on a regular basis, make sure that sufficient oil is in the lubricator (if lubrication is used) and that the adjustment is correct. We recommend for your lubricator DEPRAGOL, part 790081 E.
- After cleaning, the gearing parts have to be greased prior to re-assembly, preferably with Grease, part 807293.
- After assembly fill 2 – 3 drops of DEPRAGOL into the air inlet nipple.
- Grease the gearing, ball, and needle bearing, as well as the o-rings every 500 operating hours, or at least once a year with a suitable grease.
- If motor is used without lubrication, reduce the maintenance requirement to 250 operating hours.
- If motor has not been used for a longer time period, drip a couple drops of Oil into the motor and let the motor run for 5 – 10 seconds.
- If malfunctioning, we recommend sending the motor to DEPRAG.

**5. Technical Data**

**Hersteller** DEPRAG SCHULZ GMBH u. CO.  
**Adresse** Kurfürstenring 12 - 18 Postfach 1352  
D-92224 Amberg D-92203 Amberg  
**Telefon** 09621/371-0  
**Fax** 09621/371-120

<b>Type</b>		<b>68-009/IEC71A</b>
<b>Part No.</b>		<b>445478 A</b>
<b>Air inlet R</b>		G ½ "
<b>Air Inlet L</b>		G ½ "
<b>Speed (unloaded)</b>	<b>(min<sup>-1</sup>)</b>	9000
<b>Air Consumption</b>	<b>m<sup>3</sup>/min</b>	1,9
<b>Power</b>	<b>kW</b>	1,6
<b>Machine Diameter</b>	<b>mm</b>	160
<b>Length</b>	<b>mm</b>	605
<b>Weight</b>	<b>kg</b>	4,2
<b>Hose I.D.</b>	<b>mm</b>	LW 13
<b>Noise Level (dB(A)) with silencer</b>		85
<b>Vibration</b>	<b>m/s<sup>2</sup></b>	< 2,5

**6. Assembly Tools**

<b>Part No.</b>	<b>Name</b>	
461589	Wrench	for 802410 groove nut
461650	Punch	for ball bearing
461650	Punch	for 444706 rotor
461808	Clamping jaw	for 444706 rotor
461634	Fixture	for 445337 motor housing

## 7. Declaration of Manufacturer

### **EC-Declaration of Manufacturer in accordance with the CE-Machine-Guideline 98/37/EC, appendix II B**

DEPRAG SCHULZ GMBH u. CO.  
Kurfürstenring 12 – 18                      Postfach 1352  
D-92204 Amberg                                D-92203 Amberg

declares, that the construction of

motor


**68-009/IEC71A**

its design this tool is meant for integration with another machine.  
Operation of this tool is not permitted unless the complete unit of  
mounted machines conforms with the national Protection of Labour  
Regulations, especially in application of the Provision and Use of Work  
Equipment Regulations Directive.

used standards

- EN 292

Amberg, 14.07. 2004

  
Dipl. Ing. (FH) A. Langig  
Mr. Design Dept.

## **8. Service Locations and Authorized Partners**

**ARGENTINA**

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# DEPRAG

**DEPRAG SCHULZ GMBH u. CO.**

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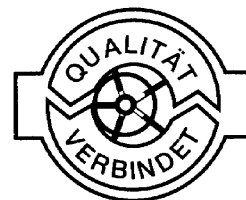
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ZERTIFIZIERT NACH DIN EN ISO 9001

Mai-04 Änderungen vorbehalten / Technical alterations reserved