

**MODEL 5 1212 0050  
PNEUMATIC HACK SAW**



**OPERATING MANUAL**



## **TECHNICAL DATA:**

Performance data at 6 bar operating pressure		5 1212 0050 aluminum body	5 1213 0010 steel housing
Cutting capacity for pipes	dia. mm	530	
Cutting capacity for profiles	dia. mm	290	
Stroke number (under load)	1/min.	330	
Stroke of saw blade	mm	60	
Motor output	kW	1.1	
Air consumption	M <sup>3</sup> /min.	1.45	
Air connection		R ¾" male	
ID of hose	mm	13'	
Weight	kg	6,40	10,65
Length	mm	570	

## **OPERATING INSTRUCTIONS:**

Pneumatic Hack Saw

Type 5 1212 .... and 5 1213 ....

The service life and performance for this machine is determined mainly by:

- a) the purity of the air
  - b) the lubrication conditions and maintenance
- a) Before connecting the machine, blow out the air hose. If rust can be formed and water can be deposited in the pipe system, a dirt and water separator should be connected before the machine.
- b) The built-in oiler should always be filled with resin and acid free lubricating oil, SAE 5 W – SAW 10. Thick liquid oils cause the vanes to stick, and thus impair the starting and the performance of the motor. The service life can be improved many times by optimum lubrication. We recommend in particular therefore that service units are fitted before the machine.

Please observe the comments in the information sheet  
Maintenance of Pneumatic Tools

Enclosed and greased ball bearings must not be washed out. At the end of the working period, flush the machine with thin liquid oil, or apply the necessary corrosion protection agent in some other way. Clean the screen at the air inlet regularly. In winter, or if the air is very moist, an anti-freeze lubricant, e.g. "BP-Energol AX", "Kilfrost", or "Kompranol N 74" should be used.

Parts, which are subject to wear, particularly the vanes, should be replaced in good time. They should be regarded as worn out if the width is less than 9.5 mm.

We recommend changing the grease in the gear casing aft 300 hours of operation. Use a special-purpose gear casing grease only:

Consistency class (DIN 51818 German Industrial Standard)	2
Specification type	Lithium
Dripping point	185° C
Worked penetration	265 to 295
Temperature range	-25° C to + 125° C

The anti-friction bearings must be cleaned thoroughly after about 900 hours of operation and re-packed with new ball-bearing grease. The space between inner and outer race must be packed to only about one third capacity in order to prevent excessive heat generation in the bearings.

The proper quantity of grease is very important from the point of good lubrication and low heat generation. The grease quantities listed in the following table must be complied with:

Grease	quantity in grams
in the crank casing	100
in the bevel gears	40
in the spur gears	30

### **OPERATING DIRECTIONS:**

Our Pneumatic Saws are designed for a service pressure of 4 to 6 bars. The Pneumatic Hack Saw is only used in conjunction with a clamping device. For this purpose the ground-in receiving bolt of the clamping device is placed in the lateral bore in gear casing cover (item 70) and fixed by means of locking device (item 73-76). Firmly clamped work-piece will yield a clean cut and will reduce saw blade damage. The selection of the clamping device and of the saw blade depends on the type and size of the work-piece. The saw blade must be cooled and/or lubricated with lubricant or oil.

### **INSTALLATION INSTRUCTIONS:**

Dismantling and assembly should only be carried out using the sectional drawing.

### **GEARING:**

Loosen the 2 acorn nuts (item 94) and 2 screws (item 97) and pull out the motor with sealing washer (item 16), bearing (item 34) and drive block (item 35) from the gear casing (item 30).

Disconnect the drive block from the rotor and disassemble (watch out for the balance ring item 47).

Loosen the screws (items 88 and 89), remove the gear casing cover (item 70) and connecting rod (item 77).

Remove the screws (item 65), pull out the crankshaft (item 51) with bearing plate (item 62). Pay attention to balance ring (item 49).

## **MOTOR:**

Unscrew the governor casing (item 25) with complete valve. Extract the rotary sleeve (item 18) from motor housing. Motor components as end plate (item 7), cylinder bushing (item 4), rotor (item 11) and end plate (item 13) are pressed forwards out of the motor housing and unscrew the weight holder (item 19) from rear rotor pivot (left-hand thread) and disassemble motor.

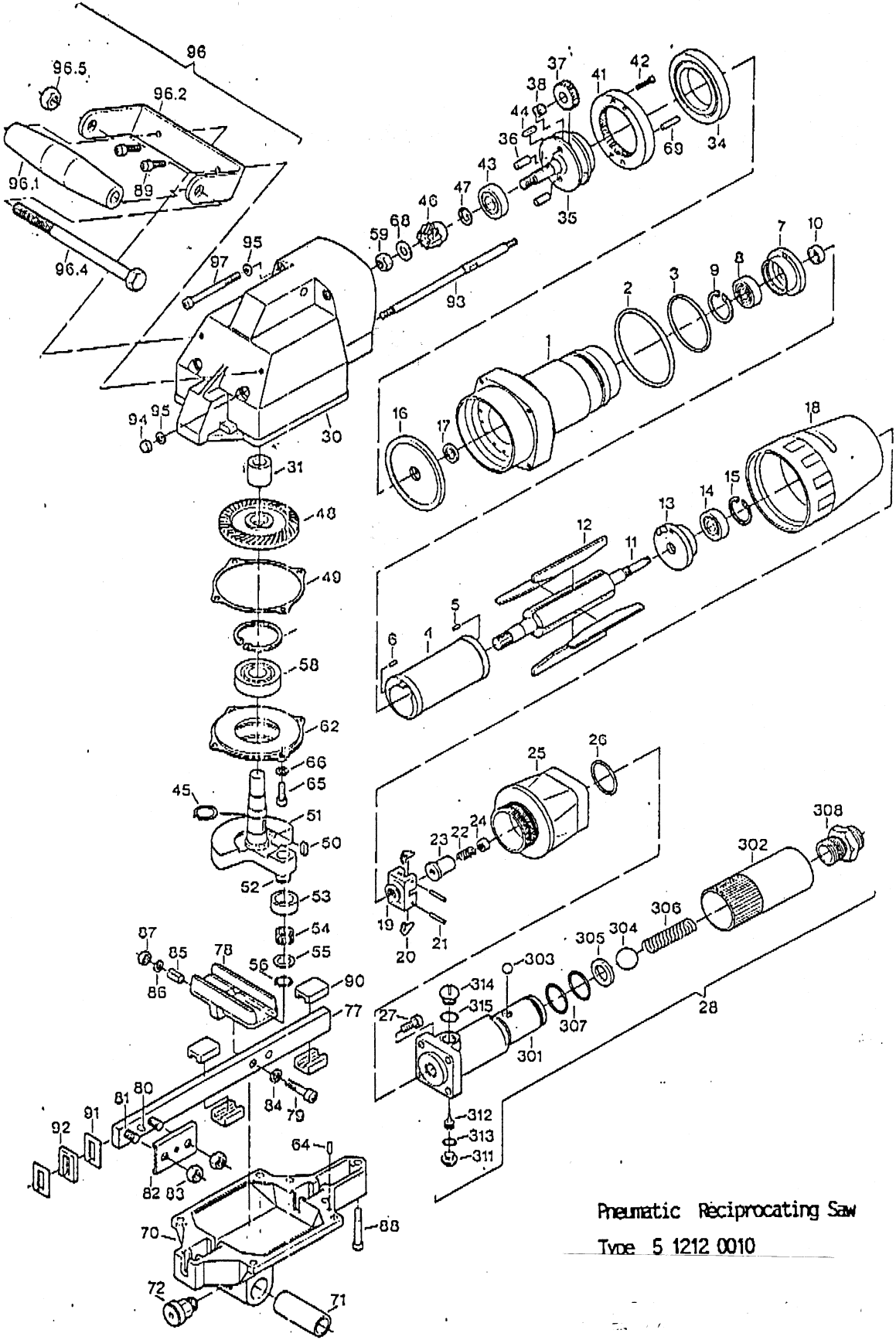
Check all parts for wear and damage and replace, if necessary.

## **ASSEMBLY:**

Assembly is carried out essentially using the reverse procedure. The correct distancing of the motor must be observed. The axial play between rotor and the end plates should be approx. 0.04 mm in both sides.

Hexagon screws (item 79) and hexagon nuts (item 87) for fastening of main driving link (item 78) must be tightened with 15 Nm and connected with loctite 242. Tighten acorn nuts (item 94) with 4 Nm.

**USE ONLY ORIGINAL SPARE PARTS !**



Pneumatic Reciprocating Saw  
Type 5 1212 0010

