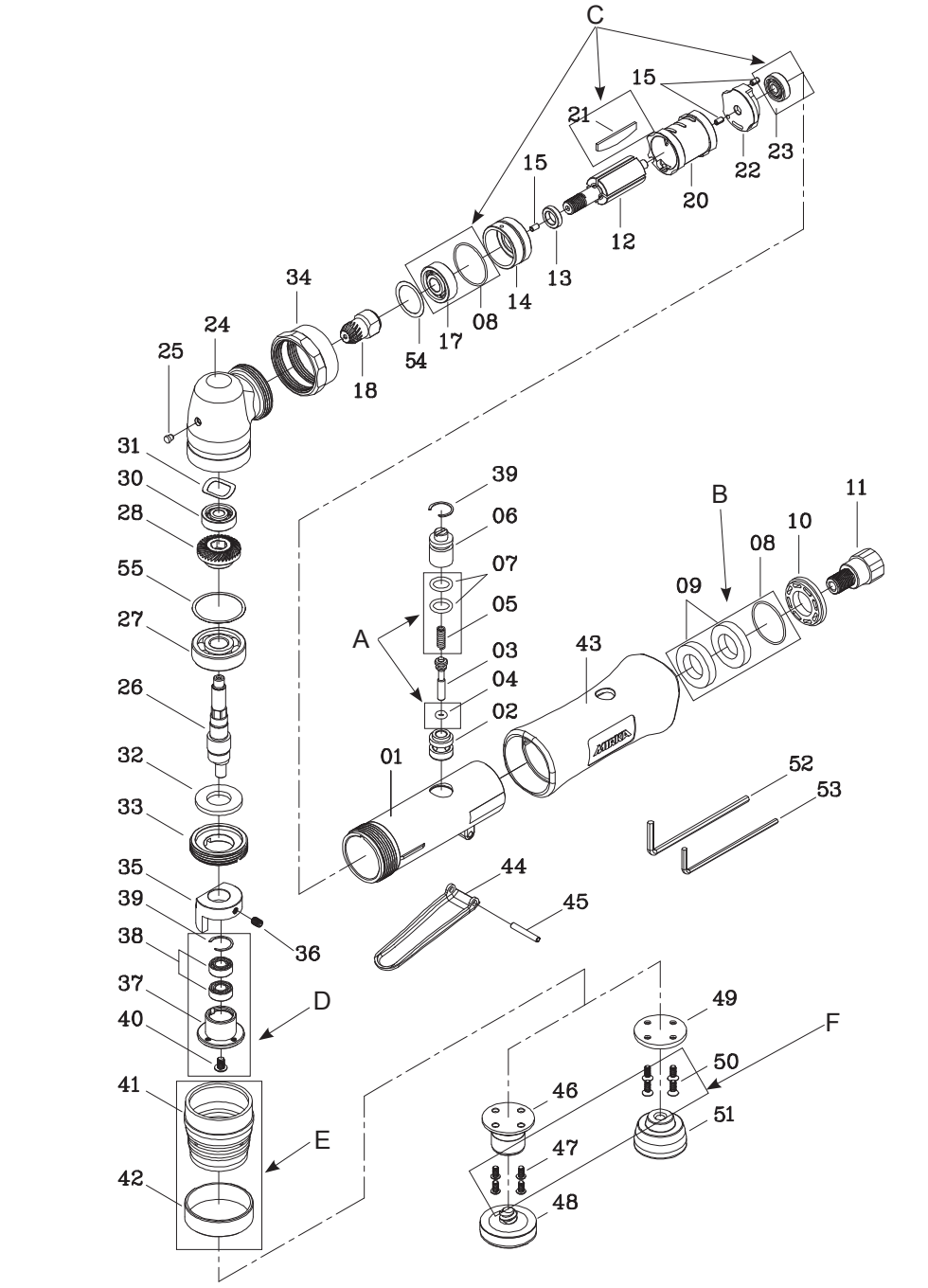
Mirka® AOS

32 mm (1 ¼")

Parts Page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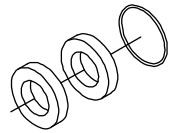
Parts List

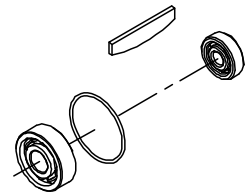
Item	P/N	Description	Qty.
1	AOS001	THROTTLE HANDLE	1
2	AOS002	THROTTLE VALVE	1
3	AOS003	VALVE STEM	1
A	**AOS107**	**O-RING AND VALVE SPRING KIT**	
4	AOS004	O-RING	1
5	AOS005	VALVE SPRING	1
6	AOS006	AIR REGULATOR	1
A	**AOS107**	**O-RING AND VALVE SPRING KIT**	
7	AOS007	O-RING	2
B	**AOS109**	**MUFFLER AND O-RING KIT**	
8	AOS008	O-RING	1
9	AOS009	MUFFLER FELT	2
10	AOS010	MUFFLER PLATE	1
11	AOS011	AIR INLET BUSHING	1
12	AOS012	ROTOR	1
13	AOS013	SPACER	1
14	AOS014	FRONT END PLATE	1
15	AOS015	SPRING PIN	3
C	**AOS121**	**BEARING AND VANES KIT**	
17	AOS017	BALL BEARING	1
8	AOS008	O-RING	1
18	AOS018	BEVEL PINION	1
20	AOS020	CYLINDER	1
C	**AOS121**	**BEARING AND VANES KIT**	
21	AOS021	VANES	4
22	AOS022	REAR END PLATE	1
C	**AOS121**	**BEARING AND VANES KIT**	
23	AOS023	BALL BEARING	1
24	AOS024	ARBOR CASING	1
25	AOS025	OILER	1
26	AOS026	ARBOR	1
27	AOS027	BALL BEARING	1
28	AOS028	BEVEL GEAR	1
30	AOS030	BALL BEARING	1
31	AOS031	WAVE WASHER	1
32	AOS032	DUST SEAL	1
33	AOS033	ARBOR BEARING CAP	1
34	AOS034	LOCK NUT	1
35	AOS035	COUNTER WEIGHT	1
36	AOS036	SET SCREW	1
D	**AOS137**	**SPINDLE BEARING ASSEMBLY**	
37	AOS037	BALANCE SHAFT	1
38	AOS038	BALL BEARING	2
39	AOS039	SANP RING	2
40	AOS040	HEX.SOCKET BUTTON HEAD SCREW	1
E	**AOS141**	**BOOT AND BOOT CLAMP KIT**	
41	AOS041	BOOT	1
42	AOS042	BOOT CLAMP	1
43	AOS043	GRIP(Mirka)	1
44	AOS044	THROTTLE LEVER	1
45	AOS045	SPRING PIN	1
46	AOS046	QUICK LOCK PLATE ASSEMBLY	1
F	**AOS147**	**SCREW KIT**	
47	AOS047	HEX.SOCKET BUTTON HEAD SCREW	4
48		QUICK LOCK BACKING PAD 32mm (1 1/4") PSA, SOFT	1
		QUICK LOCK BACKING PAD 32mm (1 1/4") GRIP, SOFT	1
49	AOS049	1/4" FEMALE PLATE	1
F	**AOS147**	**SCREW KIT**	
50	AOS050	HEX SOCKET FLAT CONUNTERSUNK SCREW	4
51		32mm BACKING PAD PSA, SOFT	1
52	AOS052	L SHAPE HEX. WRENCH(2.5mm)	1
53	AOS053	L SHAPE HEX. WRENCH(2.0mm)	1
54	AOS054	SPACER (Ø17mm x Ø21.8mm x 0.05mm)	OPT
55	AOS055	SPACER (Ø26mm x Ø29.5mm x 0.05mm)	OPT

Spare Parts Kits

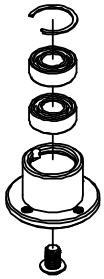
A AOS107 O-Ring & Valve Spring Kit
Code: 8992331071



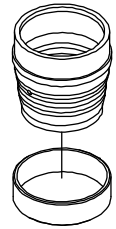
B AOS109 Muffler & O-Ring Kit
Code: 8992331091



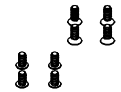
C AOS121 Bearing & Vanes Kit
Code: 8992331211



D AOS137 Spindle Bearing Kit
Code: 8992331371



E AOS141 Boot & Clamp Kit
Code: 8992331411



F AOS147 Screw Kit
Code: 8992331471

Mirka 8,500 rpm
AOS 32 mm (1 1/4 in.)

Declaration of conformity

Mirka Ltd.
FI-66850 Jeppo, Finland
declare on our sole responsibility that the product
32 mm (1 1/4 in.) 8,500 rpm Angle Orbital Sander (see "Product Configuration/Specifications" table for particular model)
to which this declaration relates is in conformity with the following standard(s) or other normative document(s) EN ISO 15744:2008. Following the provisions of 89/392/EEC as amended by 91/368/EEC & 93/44/EEC 93/68/EEC Directives and consolidating Directive 2006/42/EC

Jeppo 28.03.2016	MIRKA	
Place and date of issue	Company	Stefan Sjöberg, CEO

Operator Instructions

Includes – Please Read and Comply, Proper Use of Tool, Work Stations, Putting the Tool Into Service, Operating Instructions, Product Configuration/Specifications Tables, Parts Page, Parts List, Trouble shooting guide.

Important

Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible location.

CE

Manufacturer/Supplier

Mirka Ltd.
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Finland
Tel: + 358 20 760 2111
Fax: +358 20 760 2290

Required Personal Safety Equipment

Safety Glasses
Safety Gloves
Breathing Masks
Ear Protection

Recommended Airline Size - Minimum		Recommended Maximum Hose Length		Air Pressure		
10 mm	3/8 in	8 meters	25 feet	Maximum Working Pressure	6.2 bar	90 psig
				Recommended Minimum	NA	NA

Original Instructions

Please Read and Comply with

1) General Industry Safety & Health Regulations, Part 1910, OSHA 2206, available from: Superintendent of Documents; Government Printing Office; Washington DC 20402
2) Safety Code for Portable Air Tools, ANSI B186.1 available from: American National Standards Institute, Inc.; 1430 Broadway; New York, New York 10018
3) State and Local Regulations.

Proper Use of Tool

This tool is designed for sanding all types of materials i.e. metals, wood, stone, plastics, etc. using abrasive designed for this purpose. Do not use this tool for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier. Do not use backung pads that have a working speed less than 8,500 rpm free speed.

Work Stations

The tool is intended to be operated as a hand-held tool. It is always recommended that the tool be used when standing on a solid floor. It can be used in any position but before any such use, the operator must be in a secure position and have a firm grip and footing, and be aware that the tool can develop a torque reaction. See the section "Operating Instructions".

Putting the Tool into Service

Use a clean lubricated air supply that will give a measured air pressure at the tool of 6.2 bar (90 psig) bar when the tool is running with the lever fully depressed. It is recommended to use an approved 10 mm (3/8 in.) x 8 m (25 ft) maximum length airline. It is recommended that the tool be connected to the air supply as shown in Figure 1.

Do not connect the tool to the airline system without incorporating an easy to reach and operate air shut-off valve. The air supply should be lubricated. It is strongly recommended that an air filter, regulator and lubricator (FRL) be used as shown in Figure 1 as this will supply clean, lubricated air at the correct pressure to the tool. Details of such equipment can be obtained from your supplier. If such equipment is not used then the tool should be manually lubricated

To manually lubricate the tool, disconnect the airline and put 2 to 3 drops of suitable pneumatic motor lubricating oil such as Fuji Kosan FK-20, Mobil ALMO 525 or Shell TORCULA® 32 into the hose end (inlet) of the machine. Reconnect the tool to the air supply and run the tool slowly for a few seconds to allow air to circulate the oil. If the tool is used frequently, lubricate it on a daily basis or lubricate it if the tool starts to slow or lose power.
It is recommended that the air pressure at the tool is 6.2 bar (90 psig) while the tool is running. The tool can run at lower pressures but never higher than 6.2 bar (90 psig).

Operating Instructions

1) Read all instructions before using this tool. All operators must be fully trained in its use and aware of these safety rules. All service and repair must be carried out by trained personnel.
2) Make sure the tool is disconnected from the air supply. Select a suitable abrasive and secure it to the backung pad. Take care to center the abrasive on the backung pad.
3) Always wear required safety equipment when using this tool.
4) When sanding always place the tool on the work then start the tool. Always remove the tool from the work before stopping. This will prevent gouging of the work due to excess speed of the abrasive.
5) Always disconnect the air supply from the tool before fitting, adjusting or removing the abrasive or backung pad.
6) Always adopt a firm footing and/or position and be aware of the torque reaction developed by the tool.
7) Use only correct spare parts.
8) Always ensure that the material to be sanded is firmly fixed to prevent its movement.
9) Check the hose and fittings regularly for wear. Do not carry the tool by its hose; always be careful to prevent the tool from being started when carrying the tool with the air supply connected.
10) Do not exceed the maximum recommended air pressure. Use safety equipment as recommended.
11) The tool is not electrically insulated. Do not use where there is a possibility of coming into contact with live electricity, gas pipes, water pipes, etc. Check the working area before operation.
12) Take care to avoid entanglement of the moving parts of the tool with clothing, ties, hair, cleaning rags, etc. If entangled, it will cause the body to be pulled towards the work and moving parts of the machine, which can be very dangerous.
13) Keep hands clear of the spinning pad during use.
14) If the tool appears to malfunction, remove from use immediately and arrange for service and repair.
15) Do not allow the tool to free speed without taking precautions to protect any persons or objects from the loss of the abrasive or pad.

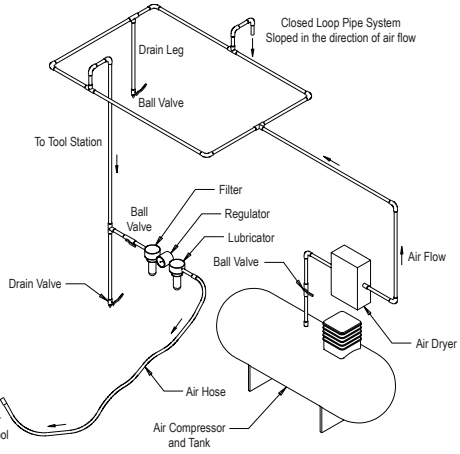


Figure 1

Product Configuration/Specifications: 8,500 rpm AOS 32mm (1 1/4in.)

Orbit	Pad Size mm (in.)	Model Number	Product Net Weight kg (pounds)	Height mm (inch)	Length mm (inch)	Power watts (HP)	Air Consumption LPM (scfm)	*Noise Level dBA	*Vibration Level m/s^2	*Uncertainty K m/s^2
3 mm (1/8 in.)	32 (1 1/4)	AOS130NV	0.60 (1.32)	104.5 (4.11)	156.9 (6.18)	357 (0.48)	509 (18)	75.5	2.22	0.72

The noise test is carried out in accordance with EN ISO 15744:2008 – Hand-held non-electric power tools – Noise measurement code – Engineering method (grade 2) and EN ISO 11203:2009 Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and other specified positions from the sound power level.

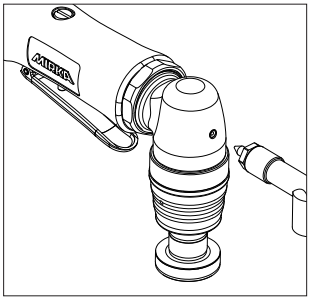
The vibration test is carried out in accordance with EN ISO 28927-3, Hand-held portable power tools – Test method for evaluation of vibration emission – Part 3: Polishers and rotary , orbital and random orbital sanders.

Specifications subject to change without prior notice.

*The values stated in the table are from laboratory testing in conformity with stated codes and standards and are not sufficient for risk evaluation. Values measured in a particular work place may be higher than the declared values. The actual exposure values and amount of risk or harm experienced to an individual is unique to each situation and depends upon the surrounding environment, the way in which the individual works, the particular material being worked, work station design as well as upon the exposure time and the physical condition of the user. Mirka, Ltd. cannot be held responsible for the consequences of using declared values instead of actual exposure values for any individual risk assessment.

Further occupational health and safety information can be obtained from the following websites:
https://osha.europa.eu/en (Europe)
http://www.osha.gov (USA)

Greasing Instructions:
Hold the tool in a horizontal position to keep the grease in the correct position.
Lubricate with gear grease (molybdenum disulfide) using a suitable grease gun through the (25) Oiler with 2 to 3 plunges for 24 hours of use.



Troubleshooting Guide

Symptom	Possible Cause	Solution
Low power and/or low free speed.	Insufficient air pressure.	Check air line pressure at the Inlet of the tool while the tool is running at free speed. It must be 6.2 bar (90 psig/620 kPa).
	Clogged Muffler(s).	The Muffler can be back-flushed with a clean, suitable cleaning solution until all contaminates and obstructions have been removed. If the Muffler can not be properly cleaned then replace it. Replace Muffler Insert.
	Plugged Inlet Screen.	Clean the Inlet Screen with a clean, suitable cleaning solution. If the Screen cannot be cleaned, replace it.
	One or more worn or broken vanes.	Install a complete set of new Vanes (all vanes must be replaced for proper operation). Coat all vanes with quality pneumatic tool oil.
	Internal air leakage in the Motor Housing indicated by higher than normal air consumption and lower than normal speed.	Check for proper Motor alignment and O-Ring engagement. Check for damaged O-Ring in Front End Plate. Remove Motor Assembly and re-install the Motor Assembly.
	Motor parts worn.	Overhaul Motor. Contact authorized Mirka Service Center.
	Worn or broken Spindle Bearings.	Replace the worn or broken Bearings.
Air leakage through the Air Regulator and/or Valve Stem.	Dirty, broken or bent Valve Spring, Valve or O-Ring.	Disassemble, inspect and replace worn or damaged parts.
Vibration/rough operation.	Incorrect Pad.	Only use Pad sizes and weights designed for the machine.
	Addition of interface pad or other material.	Only use abrasives and/or interfaces designed for the machine. Do not attach anything to the Tool's Pad face that was not specifically designed to be used with the Pad and Tool.
	Improper lubrication or buildup of foreign debris.	Disassemble the Tool and clean in a suitable cleaning solution. Reassemble the Tool.
	Worn or broken Rear or Front Motor Bearing(s).	Replace the worn or broken Bearings.

MIRKA

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Quality from start to finish