

**OPERATOR'S MANUAL FOR AirVANTAGE™
10,000 OPM 3 x 4 in. (75 x 110 mm)
ORBITAL SANDERS**



<p>Declaration of conformity AirVANTAGE™ Tools 10018 Lower Azusa Road, Unit #C; El Monte, California 91731 USA declare on our sole responsibility that the products 3 in. x 4 in. 10,000 OPM Orbital Sanders (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 15744:2002. Following the provisions of 89/392/EEC as amended by 91/368/EEC & 93/44/EEC 93/68/EEC Directives and consolidating Directive 98/37/EC</p>								
Place and date of issue	Name	Signature or equivalent marking of authorized person						
<p>Operator Instructions Includes – Please Read and Comply, Proper Use of Tool, Warranty, Product Configuration and Specifications Table, Parts Page, Parts List, Back-Up Pads, Work Stations, Putting the Tool Into Service, Operating Instructions and Compressor Layout.</p>	<p>Important Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe accessible location.</p>							
<p>Manufacturer/Supplier AirVANTAGE™ Tools 10018 Lower Azusa Road; Unit #C; El Monte, California 91731 USA Tel: (626) -575-4568 Fax: (626)-575-4968</p>	<p align="center">Required Personal Safety Equipment</p> <table border="0"> <tr> <td>Safety Glasses</td> <td>Breathing Masks</td> </tr> <tr> <td>Safety Gloves</td> <td>Ear Protection</td> </tr> </table>		Safety Glasses	Breathing Masks	Safety Gloves	Ear Protection		
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Safety Gloves	Ear Protection							
<p>Recommended Airline Size - Minimum 10 mm 3/8 in</p>	<p>Recommended Maximum Hose Length 8 meters 25 feet</p>	<p align="center">Air Pressure</p> <table border="0"> <tr> <td>Maximum Working Pressure</td> <td>6.2 bar</td> <td>90 psig</td> </tr> <tr> <td>Recommended Minimum</td> <td>NA</td> <td>NA</td> </tr> </table>	Maximum Working Pressure	6.2 bar	90 psig	Recommended Minimum	NA	NA
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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

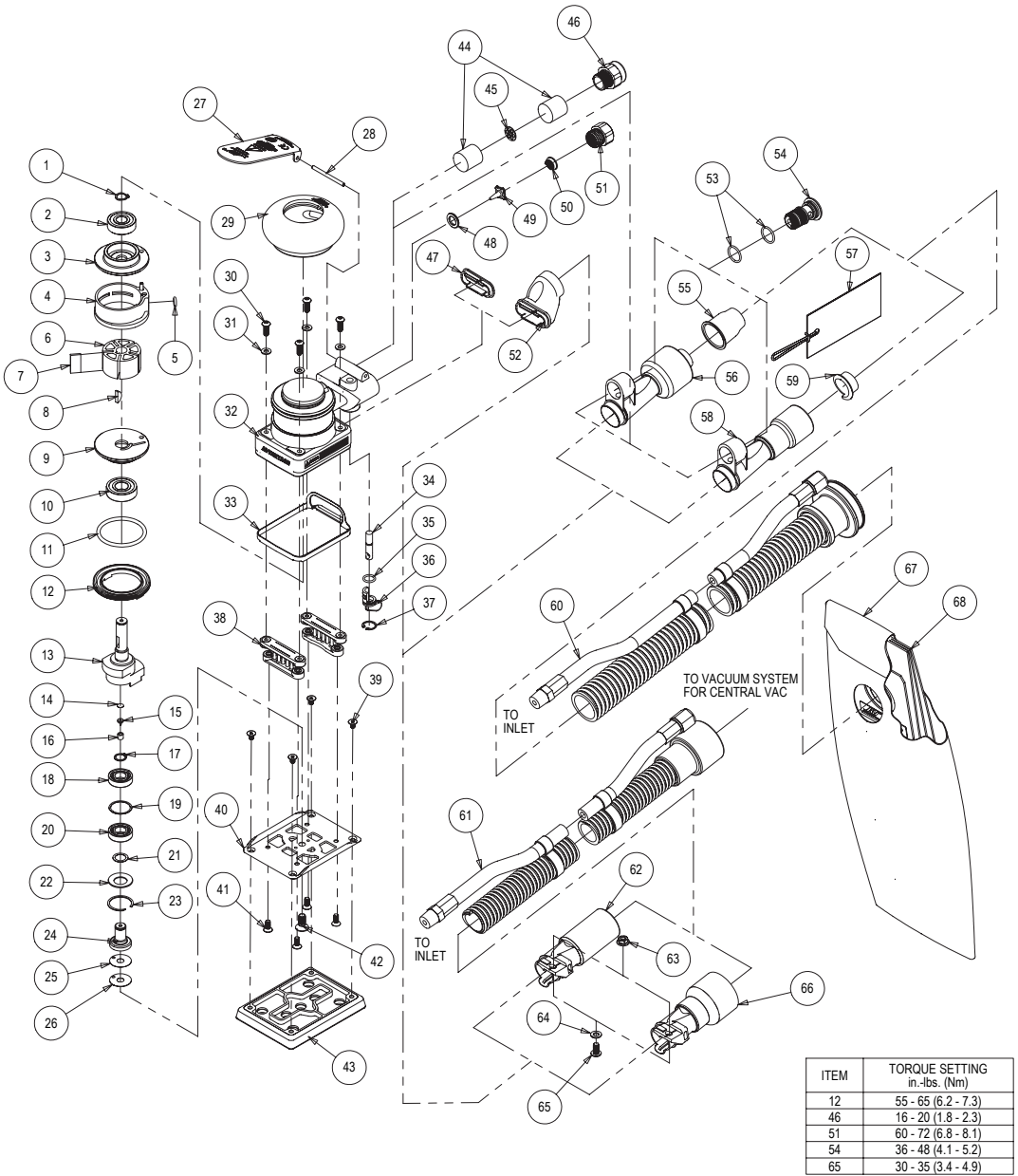
This sander is designed for sanding all types of materials i.e. metals, wood, stone, plastics, etc. using abrasive designed for this purpose. Do not use this sander for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier.

Do not use back-up pads that have a working speed less than 10,000 RPM free speed. Never use back-up pads that have a weight and/or size different than the machine was specifically designed for.

AirVANTAGE™ Warranty

All AirVANTAGE™ Orbital Sanders are warranted for defects in materials or workmanship for one year from the date of delivery to the user. Combined with the AirVANTAGE™ name, this Warranty expresses our total confidence in the superior quality, durability, and performance of the AirVANTAGE™ LP. To receive any expressed or implied warranty, tool must be repaired by an authorized AirVANTAGE™ Service Center. The "Service Instructions" section in this document is provided for use after completion of the warranty period. To receive warranty, tools must be operated under the conditions as described in the "Putting the Tools into Service" section of this document and be connected to an air supply system as shown in Figure 1. Tools that have been exposed to extreme conditions will be covered under warranty at the sole discretion of AirVANTAGE™

Parts Page



Parts List

Item	Part No.	Description	Qty.
1	AVA0040	RETAINING RING	1
2	AVA0021	BEARING	1
3	AVA0065	REAR ENDPLATE	1
4	AVA0067	CYLINDER ASSEMBLY	1
5	AVA0042	O-RING	1
6	AVB0005	ROTOR	1
7	AVA0010	VANE	5
8	AVA0041	KEY	1
9	AVA0064	FRONT ENDPLATE	1
10	AVA0019	BEARING	1
11	AVA0045	O-RING	1
12	AVA0001	LOCK RING	1
13	AVB0102	SHAFT BALANCER	1
14	AVA0122	FILTER	1
15	AVA0121	VALVE	1
16	AVA0120	RETAINER	1
17	AVA0107	RETAINING RING	1
18	AVA0162	BEARING	1
19	AVA0196	SHIM	1
20	AVA0161	BEARING	1
21	AVA0108	SHIM	1
22	AVA0126	WASHER	1
23	AVA0177	RETAINING RING	1
24	AVA0163	SPINDLE ASSEMBLY	1
25	AVA0079	SPACER	Optional
26	AVA0080	SPACER	1
27	AVA0175	LEVER	1
28	AVA0031	SPRING PIN	1
29	AVB0007	2 1/4 in. (65 mm) GRIP	Optional
	AVB0008	2 3/4 in. (69 mm) GRIP	1
	AVB0009	3 in. (75 mm) GRIP	Optional
30	AVA0768	SCREW	4
31	AVA0076	WASHER	4
32	AVA0198	HOUSING	1
33	AVC0162	SHROUD SEAL	1
34	AVA0008	VALVE STEM ASSEMBLY	1
35	AVA0043	O-RING	1
36	AVB0014	SPEED CONTROL	1
37	AVA0039	RETAINING RING	1
38	AVC0018	MINI PAD SUPPORT ASSEMBLY	2
39	AVA0766	SCREW	4
40	AVB0101	PAD BACKING	1
41	AVA0767	SCREW	4
42	AVA0078	SCREW	1
43	NA	SEE "AirVANTAGE™ BACKUP PADS" ON PAGE 5 (type/size determined by model)	1
44	AVA0032	MUFFLER	2
45	AVA0038	PLATE	1
46	AVA0166	MUFFLER HOUSING	1
47	AVB0069	SNAP-IN VACUUM COVER PLATE	1
48	AVA0009	SEAT	1
49	AVA0007	VALVE	1
50	AVA0014	VALVE SPRING	1
51	AVA0013	INLET BUSHING	1
52	AVC0017	SNAP-IN EXHAUST ADAPTER (Standard on vacuum models)	1
53	AVA0044	O-RING	2
54	AVA0722	SGV RETAINER	1
55	AVA0778	1 in. (28 mm) HOSE SEAL	1
56	AVA0410	Ø 1 in. (28 mm) HOSE SuperVAC™ SGV SWIVEL EXHAUST ASSEMBLY	1
57	AVA0933	1 in. (28 mm) HOSE SEAL TAG WITH INSTRUCTION	1
	AVA0857	3/4 in. (19 mm) HOSE SEAL TAG WITH INSTRUCTION	1
	AVA0409	Ø 3/4 in. (19 mm) HOSE SuperVAC™ SGV SWIVEL EXHAUST ASSEMBLY	Optional
58	AVA0409	Ø 3/4 in. (19 mm) HOSE SuperVAC™ SGV SWIVEL EXHAUST ASSEMBLY	Optional
59	AVA0854	3/4 in. (28 mm) HOSE SEAL	1
60	AVA0412	Ø 1 in. (28 mm) VACUUM HOSE TO Ø 1 in. (28 mm) DOUBLE BAG FITTING AND AIRLINE ASSEMBLY	1
	AVA0411	Ø 3/4 in. (19 mm) VACUUM HOSE TO Ø 3/4 in. (19 mm) DOUBLE BAG FITTING AND AIRLINE ASSEMBLY	Optional
61	AVA0300	Ø 3/4 in. (19 mm) HOSE TO Ø 3/4 in. (19 mm) x Ø 1 in. (28 mm) HOSE ADAPTER COUPLING AND AIRLINE ASSEMBLY	Optional
62	AVA0298	Ø 3/4 in. (19 mm) SuperVAC™ CV SWIVEL EXHAUST ASSEMBLY	Optional
63	AVA0048	NUT	1
64	AVA0047	WASHER	1
65	AVA0769	SCREW	1
66	AVA0092	Ø 1 in. (28 mm) SuperVAC™ CV SWIVEL EXHAUST ASSEMBLY	1
67	AVA0468	CLOTH VACUUM COLLECTION BAG	1
68	AVA0470	VACUUM BAG INSERT	1

Product Configuration/Specifications: 10,000 OPM 3 x 4 in. (75 x 110mm) Orbital Sander

Note: All Self Generated Vacuum machines use Ø 1 in. Vacuum Hose Fittings Standard. Ø ¾ in. is available.
All Central Vacuum machines use Ø 1 in. Vacuum Hose Fittings Standard. Ø ¾ in. is available.

Orbit	Pad Face	Vacuum Type	Pad Type	Model No.	Pad Part Number	Product Net Weight Pound (kg)	Height inch (mm)	Length inch (mm)	Power HP (watts)	Air Consumption scfm (LPM)	*Noise Level dBA	*Vibration Level m/s ²
1/8 in. (3 mm)	Vinyl	Non-Vacuum	Standard	340000	1272700	1.55 (0.70)	3.3 (83.5)	5.5 (139)	.24 (179)	16 (453)	76	2.6
		Central Vacuum	Standard	340034	1272710	1.65 (0.75)	3.3 (83.5)	8.0 (202)	.24 (179)	16 (453)	76	2.6
		Self-Gen. Vacuum	Standard	340067	1272710	1.70 (0.77)	3.3 (83.5)	8.2 (209)	.24 (179)	16 (453)	81	3.5
	Hook	Non-Vacuum	Standard	340001	1272701	1.55 (0.70)	3.3 (83.5)	5.5 (139)	.24 (179)	16 (453)	76	2.6
		Central Vacuum	Standard	340035	1272711	1.65 (0.75)	3.3 (83.5)	8.0 (202)	.24 (179)	16 (453)	76	2.6
			Screen Vacuum	340036	1272742	1.65 (0.75)	3.3 (83.5)	8.0 (202)	.24 (179)	16 (453)	76	2.6
		Self-Gen. Vacuum	Standard	340068	1272711	1.70 (0.77)	3.3 (83.5)	8.2 (209)	.24 (179)	16 (453)	81	3.5
			Screen Vacuum	340069	1272742	1.70 (0.77)	3.3 (83.5)	8.2 (209)	.24 (179)	16 (453)	81	3.5

The noise test is carried out in accordance with EN ISO 15744:2002: Measurement of noise emission from hand-held non-electric power tools.
The vibration test is carried out in accordance with EN 28662-1. Hand-held portable power tools – Measurement of vibration at the handle. Part 1: General and EN 28662-8, 1997. Hand-held portable power tools – Measurement of vibration at the handle. Part 8: 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. AirVANTAGE™ 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:

<http://europe.osha.eu.int> (Europe)

<http://www.osha.gov> (USA)

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 in any position but before any such use, the operator must be in a secure position having a firm grip and footing and be aware that the sander 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 90 psig (6.2 bar) when the tool is running with the lever fully depressed. It is recommended to use an approved 3/8 in. (10 mm) x 25 ft (8 m) 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 tool to the air supply and run 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 be 90 PSI (6.2 Bar) while the tool is running so the maximum RPM is not exceeded. The tool can be run at lower pressures but should never be run higher than 90 PSI (6.2 Bar). If run at lower pressure the performance of the tool is reduced.

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 back-up pad. Be careful and center the abrasive on the back-up 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 remove the air supply to the sander before fitting, adjusting or removing the abrasive or back-up pad.
- 6) Always adopt a firm footing and/or position and be aware of torque reaction developed by the sander.
- 7) Use only correct spare parts.
- 8) Always ensure that the material to be sanded is firmly fixed to prevent its movement.
- 9) Check 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) Dust can be highly combustible. Vacuum dust collection bag should be cleaned or replaced daily. Cleaning or replacing of bag also assures optimum performance.
- 11) Do not exceed maximum recommended air pressure. Use safety equipment as recommended.
- 12) 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 area of operation before operation.
- 13) Take care to avoid entanglement with 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 and can be very dangerous.
- 14) Keep hands clear of the spinning pad during use.
- 15) If the tool appears to malfunction, remove from use immediately and arrange for service and repair.
- 16) 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.

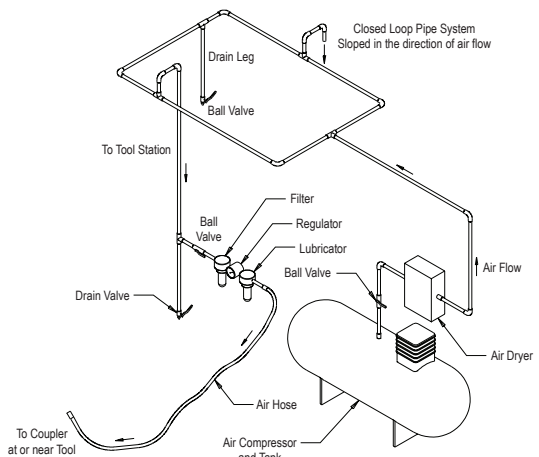


Figure 1

AirVANTAGE™ Back-Up Pads

AirVANTAGE™ 3 in. x 4 in. pads are perfectly mated for use on the Low Profile Orbital Sander. The molded urethane pads are constructed from premium, industrial-quality materials for durability.

Description	Part #
screw-on, non-vacuum, vinyl face pad	1272700
screw-on, non-vacuum, hook face pad	1272701
screw-on, non-vacuum, j-hook face pad	1272702
screw-on, standard vacuum, vinyl face pad	1272710
screw-on, standard vacuum, hook face pad	1272711
screw-on, standard vacuum, j-hook face pad	1272712
screw-on, screen vacuum, j-hook face pad	1272742