MANUAL FOR INDASA™ LOW PROFILE 12,000 RPM 127 mm (5 in) and 150 mm (6 in) RANDOM ORBITAL SANDERS

Declaration of conformity

INDASA - Indústria de Abrasivos, S.A.
Zona Industrial de Aveiro, Lote 46 P.O.Box 3005, 3801-101 AVEIRO PORTUGAL
declare on our sole responsibility that the products
127 mm (5 in.) and 150 mm (6 in.) Random Orbital Sanders
(See "Product Configuration and Specifications" Tables for particular Model)
to which this declaration relates is in conformity with the following standard(s) or other normative document(s) EN ISO15744:2002. Following the provisions of Directive 2006/42/EC

AVEIRO, Jan. 15,2007	J. Machado Lobo, Director	
Place and date of issue	Name	Signature or equivalent marking of authorized person

Operator Instructions

Includes – Please Read and Comply, Proper Use of Tool, INDASA Warranty, Parts Page, Parts List, Product Configuration and Specifications Table, Work Stations, Putting the Tool Into Service, Operating -Instructions, Back-Up Pads.

Important

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

CE

Manufacturer/Supplier

INDASA - Indústria de Abrasivos, S.A.
Zona Industrial de Aveiro, Lote 46 P.O.Box 3005, 3801-101 AVEIRO PORTUGAL
Tel: +351 234 303 600
Fax: +351 234 303 605

Required Personal Safety Equipment


Safety Glasses


Breathing Masks


Ear Protection


Safety Gloves

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

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 10018
3) Following the provisions of Directive 2006/42/EC
4) State and Local Regulations.

Proper Use of Tool

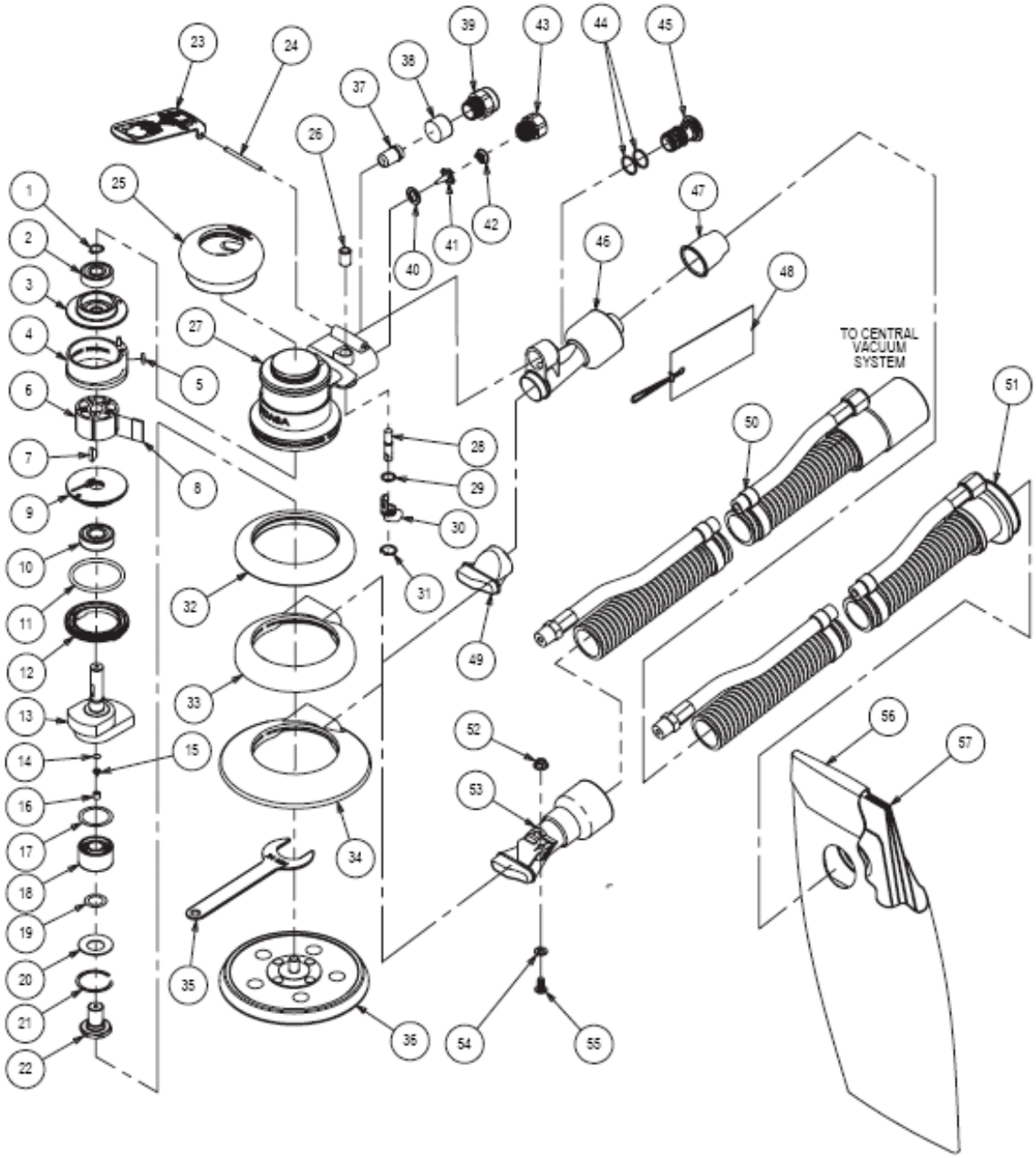
This sander is designed for sanding all types of materials i.e. metals, wood, stone, plastics, etc. using abrasive designed for this purpose. Do not use this sander for any other purpose than that specified without consulting the manufacturer or the manufacturer's authorized supplier.

Do not use back-up pads that have a working speed less than 12,000 RPM free speed. Never use back-up pads that have a weight and/or size different than the machine was specifically designed for.

The Warranty

All INDASA Random Orbital Sanders are warranted for defects in materials or workmanship for one year from the date of delivery to the user. Combined with the INDASA name, this Warranty expresses our total confidence in the superior quality, durability, and performance of the INDASA. Random Orbital Sander. To receive any expressed or implied warranty, tool must be repaired by an authorized INDASA Service Center. 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 INDASA.

Parts Page



ITEM	TORQUE SETTING Nm (lbf-.in)
12	6.2 – 7.3 (55 - 65)
39	1.8 – 2.3 (16 - 20)
43	6.8 – 8.1 (60 - 72)
45	4.0 – 5.4 (36 - 48)
55	3.4 – 3.9 (30 - 35)

Parts List

Item	Part No.	Description	Qty
1	INA0040	RETAINING RING	1
2	INA0021	BEARING	1
3	INB0017	REAR ENDPLATE	1
4	INA0005	CYLINDER ASSEMBLY	1
5	INA0042	O-RING	1
6	INB0005	MACHINED ROTOR	1
7	INA0041	WOODRUFF KEY	1
8	INA0010	VANE	1
9	INB0016	FRONT ENDPLATE	1
10	INA0019	BEARING	1
11	INA0045	O-RING	1
12	INA0001	LOCK RING	1
13	INB0073	6x 3/16 in. ORBIT AirSHIELD TM SHAFT BALANCER	1
	INB0074	5x 3/32 in. ORBIT AirSHIELD SHAFT BALANCER	1
	INB0072	5x 3/16 in. ORBIT AirSHIELD SHAFT BALANCER	1
	INB0075	6x 3/32 in. ORBIT AirSHIELD SHAFT BALANCER	1
14	INA0122	FILTER	1
15	INA0121	DUCKBILL CHECK VALVE	1
16	INA0120	VALVE RETAINER	1
17	INA0937	SHIM	1
18	INA0938	BEARING	1
19	INA0016	SPACER	1
20	INA0017	BELLEVILLE WASHER	1
21	INA0018	RETAINING RING	1
22	INB0018	SPINDLE	1
23	INA1279	LEVER FOR 2.5mm (3/32in) ORBIT 12000 RPM ROS	1
	INA1293	LEVER FOR 5mm (3/16in) ORBIT 12000 RPM ROS	1
24	INA0031	LEVER SPRING PIN	1
25	INB0007	2 1/2 in. GRIP	OPTIONAL
	INB0008	2 3/4 in. GRIP	1
	INB0009	3 in. GRIP	OPTIONAL
26	INA0015	VALVE SLEEVE	1
27	INA1292	HOUSING	1
28	INA0008	VALVE STEM ASSEMBLY	1
29	INA0043	O-RING	1
30	INB0014	SPEED CONTROL	1
31	INA0039	RETAINING RING	1
32	INB0012	5/6 in. NON-VAC SHROUD	1
33	INC0012	5/6 in SUPER VAC TM SHROUD	1
34	INC0073	∅ 6 in. SCREEN ABRASIVE ROS Super VAC SHROUD	1
35	INA0022	24 mm PAD WRENCH	1
36	NA	1 Back-Up Pad supplied with each tool (type determined by model)	1
37	INA0062	INTERNAL MUFFLER	1
38	INA0068	MUFFLER INSERT	1
39	INA0166	MUFFLER HOUSING	1
40	INA0009	VALVE SEAT	1
41	INA0007	VALVE	1
42	INA0014	VALVE SPRING	1
43	INA0013	1/4 - 18 NPT INLET BUSHING ASSEMBLY	1
44	INA0044	O-RING	2
45	INA0006	SGV RETAINER	1
46	INA0410	ASSEMBLY FOR 1 in./28 mm HOSE SuperVAC SGV SWIVEL EXHAUST FITTING	1
47	INA0778	1in /28mm HOSE SEAL	1
48	INA 1280	TAG with INSTRUCTIONS for 1 in. (28 mm) HOSE SEAL	1
49	INC0108	SuperVAC SGV SKIRT/ SHROUD ADAPTER	1
50	INA0392	AIRLINE WITH ∅ 1 in. VAC HOSE TO ∅ 1 in./28 mm x 1 1/2 in. FRICTION FIT ADAPTER ASSEMBLY	1
51	INA0412	∅1 in. VAC HOSE TO DOUBLE BAG FITTING AND AIRLINE ASSY	1
52	INA0048	M5 x 0,8 FLANGED NUT	1
53	INA0099	ROS SUPERVAC TM CV 1 in/28mm SWIVEL EXHAUST ASSEMBLY	1
54	INA0047	WASHER	1
55	INA0769	SCREW	1
56	INC0110	VACUUM BAG	1
57	INC0109	VACUUM BAG INSERT	1

Product Configuration/Specifications:12,000 RPM Random Orbital Sander

Note: All Vacuum machines use ∅ 1 in. Vacuum Hose Fittings.

Orbit	Pad Face	Vacuum Type	Pad Type	Pad Size mm (in.)	Model No.	Pad Part Number	Product Net Wt kg (lb)	Height mm (in.)	Length mm (in.)	"Noise Level dB (A) Pressure (Power)	Vibration Level m/s2 (ft/s2)
2,5 mm (3/32 in.)	Vinyl	Non Vacuum	Low Profile	127 (5)			0.78 (1.72)	82.9 (3.26)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.82 (1.81)	82.9 (3.26)	161.1 (6.34)	83 (89)	3.3 (10.8)
			Tapered Edge	127 (5)			0.79 (1.74)	87.7 (3.45)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.82 (1.81)	87.7 (3.45)	161.1 (6.34)	83 (89)	3.3 (10.8)
		Central Vacuum	Low Profile	127 (5)			0.84 (1.85)	87.7 (3.45)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.91 (2.00)	82.9 (3.26)	161.1 (6.43)	83 (89)	3.3 (10.8)
			Tapered Edge	127 (5)			0.85 (1.87)	87.7 (3.45)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.88 (1.94)	87.7 (3.45)	161.1 (6.34)	83 (89)	3.3 (10.8)
		Self-Gen Vacuum	Low Profile	127 (5)			0.86 (1.90)	87.7 (3.45)	151.4 (5.96)	84 (93)	3.2 (10.5)
				150 (6)			0.91 (2.01)	82.9 (3.26)	164.1 (6.46)	83 (90)	3.1 (10.2)
			Tapered Edge	127 (5)			0.87 (1.92)	87.7 (3.45)	151.4 (5.96)	84 (93)	3.2 (10.5)
				150 (6)			0.91 (2.01)	87.7 (3.45)	164.1 (6.46)	83 (90)	3.1 (10.2)
	Hook	Non Vacuum	Low Profile	127 (5)			0.78 (1.72)	88.4 (3.48)	125.7 (4.95)	79 (86)	2.1 (6.9)
				150 (6)			0.82 (1.81)	82.9 (3.26)	161.1 (6.34)	83 (89)	3.3 (10.8)
			Tapered Edge	127 (5)			0.79 (1.74)	87.7 (3.45)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.82 (1.81)	87.7 (3.45)	161.1 (6.34)	83 (89)	3.3 (10.8)
		Central Vacuum	Low Profile	127 (5)			0.84 (1.85)	87.7 (3.45)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.91 (2.00)	82.9 (3.26)	161.1 (6.43)	83 (89)	3.3 (10.8)
			Tapered Edge	127 (5)			0.85 (1.87)	87.7 (3.45)	148.4 (5.84)	79 (86)	2.1 (6.9)
				150 (6)			0.88 (1.94)	87.7 (3.45)	161.1 (6.34)	83 (89)	3.3 (10.8)
			Screen Abrasive	127 (5)			0.84 (1.85)	84.5 (3.33)	148.9 (5.86)	79 (86)	2.1 (6.9)
				150 (6)			0.89 (1.96)	84.5 (3.33)	160.2 (6.31)	83 (89)	3.3 (10.8)
		Self-Gen Vacuum	Low Profile	127 (5)			0.86 (1.90)	87.7 (3.45)	151.4 (5.96)	84 (93)	3.2 (10.5)
				150 (6)			0.91 (2.01)	82.9 (3.26)	164.1 (6.46)	83 (90)	3.1 (10.2)
			Tapered Edge	127 (5)			0.87 (1.92)	87.7 (3.45)	151.4 (5.96)	84 (93)	3.2 (10.5)
				150 (6)			0.91 (2.01)	87.7 (3.45)	164.1 (6.46)	83 (90)	3.1 (10.2)
			Screen Abrasive	127 (5)			0.86 (1.90)	84.5 (3.33)	151.9 (5.98)	84 (93)	3.2 (10.5)
				150 (6)			0.92 (2.28)	84.5 (3.33)	163.2 (6.42)	83 (90)	3.1 (10.2)
5 mm (3/16 in.)	Vinyl	Non Vacuum	Low Profile	127 (5)			0.81 (1.78)	82.9 (3.26)	149.6 (5.89)	80 (87)	2.6 (8.5)
				150 (6)			0.85 (1.87)	82.9 (3.26)	162.3 (6.39)	79 (83)	3.7 (12.1)
			Tapered Edge	127 (5)			0.81 (1.78)	87.7 (3.45)	149.6 (5.89)	80 (87)	2.6 (8.5)
				150 (6)			0.85 (1.87)	87.7 (3.45)	162.3 (6.39)	79 (83)	3.7 (12.1)
		Central Vacuum	Low Profile	127 (5)			0.87 (1.92)	87.7 (3.45)	149.6 (5.89)	79 (86)	2.6 (8.5)
				150 (6)			0.91 (2.00)	82.9 (3.26)	162.3 (6.39)	77 (85)	3.1 (10.2)
			Tapered Edge	127 (5)			0.87 (1.92)	87.7 (3.45)	149.6 (5.89)	79 (86)	2.6 (8.5)
				150 (6)			0.91 (2.00)	87.7 (3.45)	162.3 (6.39)	77 (85)	3.1 (10.2)
		Self-Gen Vacuum	Low Profile	127 (5)			0.86 (1.90)	87.7 (3.45)	152.6 (6.01)	85 (93)	3.5 (11.5)
				150 (6)			0.94 (2.07)	82.9 (3.26)	165.3 (6.51)	85 (92)	3.5 (11.5)
			Tapered Edge	127 (5)			0.89 (1.96)	87.7 (3.45)	152.6 (6.01)	85 (93)	3.5 (11.5)
				150 (6)			0.94 (2.07)	87.7 (3.45)	165.3 (6.51)	85 (92)	3.5 (11.5)
	Hook	Non Vacuum	Low Profile	127 (5)			0.81 (1.78)	82.9 (3.26)	149.6 (5.89)	80 (87)	2.6 (8.5)
				150 (6)			0.85 (1.87)	82.9 (3.26)	162.3 (6.39)	79 (83)	3.7 (12.1)
			Tapered Edge	127 (5)			0.81 (1.78)	87.7 (3.45)	149.6 (5.89)	80 (87)	2.6 (8.5)
				150 (6)			0.85 (1.87)	87.7 (3.45)	162.3 (6.39)	79 (83)	3.7 (12.1)
		Central Vacuum	Low Profile	127 (5)			0.87 (1.92)	87.7 (3.45)	149.6 (5.89)	79 (86)	2.6 (8.5)
				150 (6)			0.91 (2.00)	82.9 (3.26)	162.3 (6.39)	77 (85)	3.1 (10.2)
			Tapered Edge	127 (5)			0.87 (1.92)	87.7 (3.45)	149.6 (5.89)	79 (86)	2.6 (8.5)
				150 (6)			0.91 (2.00)	87.7 (3.45)	162.3 (6.39)	77 (85)	3.1 (10.2)
			Screen Abrasive	127 (5)			0.87 (1.92)	84.5 (3.33)	150.1 (5.91)	79 (86)	2.6 (8.5)
				150 (6)			0.92 (2.03)	84.5 (3.33)	161.4 (6.35)	77 (85)	3.1 (10.2)
		Self-Gen Vacuum	Low Profile	127 (5)			0.89 (1.96)	87.7 (3.45)	152.6 (6.01)	85 (93)	3.5 (11.5)
				150 (6)			0.94 (2.07)	82.9 (3.26)	165.3 (6.51)	85 (92)	3.5 (11.5)
			Tapered Edge	127 (5)			0.89 (1.96)	87.7 (3.45)	152.6 (6.01)	85 (93)	3.5 (11.5)
				150 (6)			0.94 (2.07)	87.7 (3.45)	165.3 (6.51)	85 (92)	3.5 (11.5)
			Screen Abrasive	127 (5)			0.89 (1.96)	84.5 (3.33)	153.1 (6.03)	85 (93)	3.5 (11.5)
				150 (6)			0.95 (2.10)	84.5 (3.33)	164.4 (6.47)	85 (92)	3.5 (11.5)

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. INDASA ™ 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 6.2 bar (90 psig) 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 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 6.2 bar (90 psi) 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 6.2 bar (90 psi). 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) Do not exceed 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 area of operation before operation.

12) 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.

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.

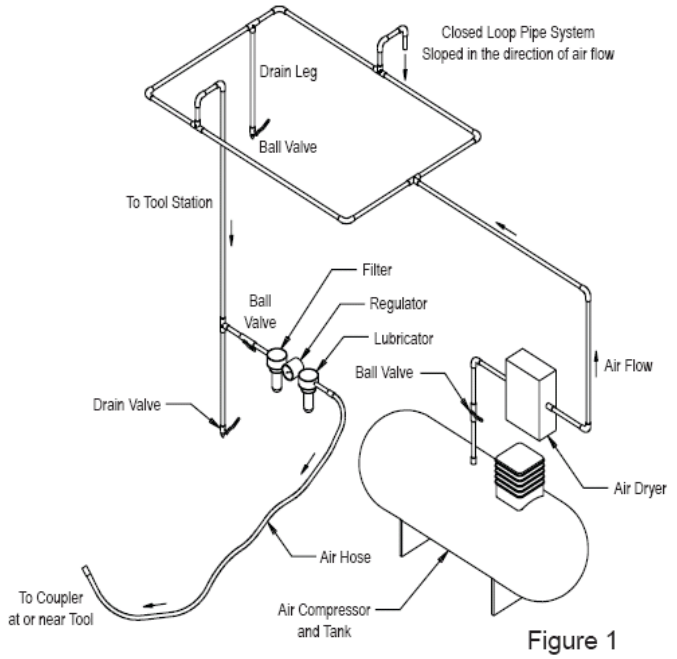


Figure 1

INDASA™ Back-Up Pads

INDASA back-up pads are perfectly mated for use on the INDASA Sander. Constructed from premium, industrial-quality materials and featuring a riveted fiberglass and steel hub with molded urethane, their durability and precise construction are the ideal complement to the performance of the INDASA Sander. See “Product Configuration/ Specifications” Table for the correct replacement pad for a particular model.

Description
127 mm (5 in.) low profile, non vacuum, vinyl face
127 mm (5 in.) low profile, non vacuum, hook face
127 mm (5 in.) tapered edge, non vacuum, vinyl face
127 mm (5 in.) tapered edge, non vacuum, hook face
127 mm (5 in.) low profile, vacuum, 6 holes, hook
127 mm (5 in.) low profile, vacuum, 6 holes, J-hook face
127 mm (5 in.) low profile, vacuum, vinyl face
127 mm (5 in.) low profile, vacuum, hook face
127 mm (5 in.) tapered edge, vacuum, vinyl face
127 mm (5 in.) tapered edge, vacuum, hook face
127 mm (5 in.) low profile, screen vacuum, J-hook face
150 mm (6 in.) low profile, non vacuum, vinyl face
150 mm (6 in.) low profile, non vacuum, hook face
150 mm (6 in.) low profile, non vacuum, J-hook face
150 mm (6 in.) tapered edge, non vacuum, vinyl face
150 mm (6 in.) tapered edge, non vacuum, hook face
150 mm (6 in.) low profile, vacuum, vinyl face
150 mm (6 in.) low profile, vacuum, hook face
150 mm (6 in.) tapered edge, vacuum, vinyl face
150 mm (6 in.) tapered edge, vacuum, hook face