

EKASAND

93 x 178 mm (3²/₃ x 7 in.)

Orbital Sander



Features:

- Free Speed of 10,000 Orbits Per Minute
- Variable Speed Control with Palm Style On/Off Lever
- 3 Sizes of Ergonomic Cushion-Grips for comfort and stability
- Low Profile for Operator Control and Comfort
- Rear Exhaust Directs Air away from work
- Suggested Applications:
Sanding and Finishing a Variety of Materials including Wood, Metal, Plastic, Fiberglass Composites, Solid Surfaces and other Sandable Surfaces



WARNING

Always wear safety goggles to protect your eyes.



OIL DAILY

Oil daily for superior performance.

Operators Instructions

Includes – Features and Suggested Applications, Please Read and Comply, Assembly Drawing of Machines, Parts List, Proper Use of Tool, Work Stations, Putting the Tool Into Service, Operating Instructions, EKASAND Service Tools and Accessories, EKASAND Back-Up Pads™, EKASAND Service Kit, EKASAND Warranty

Important

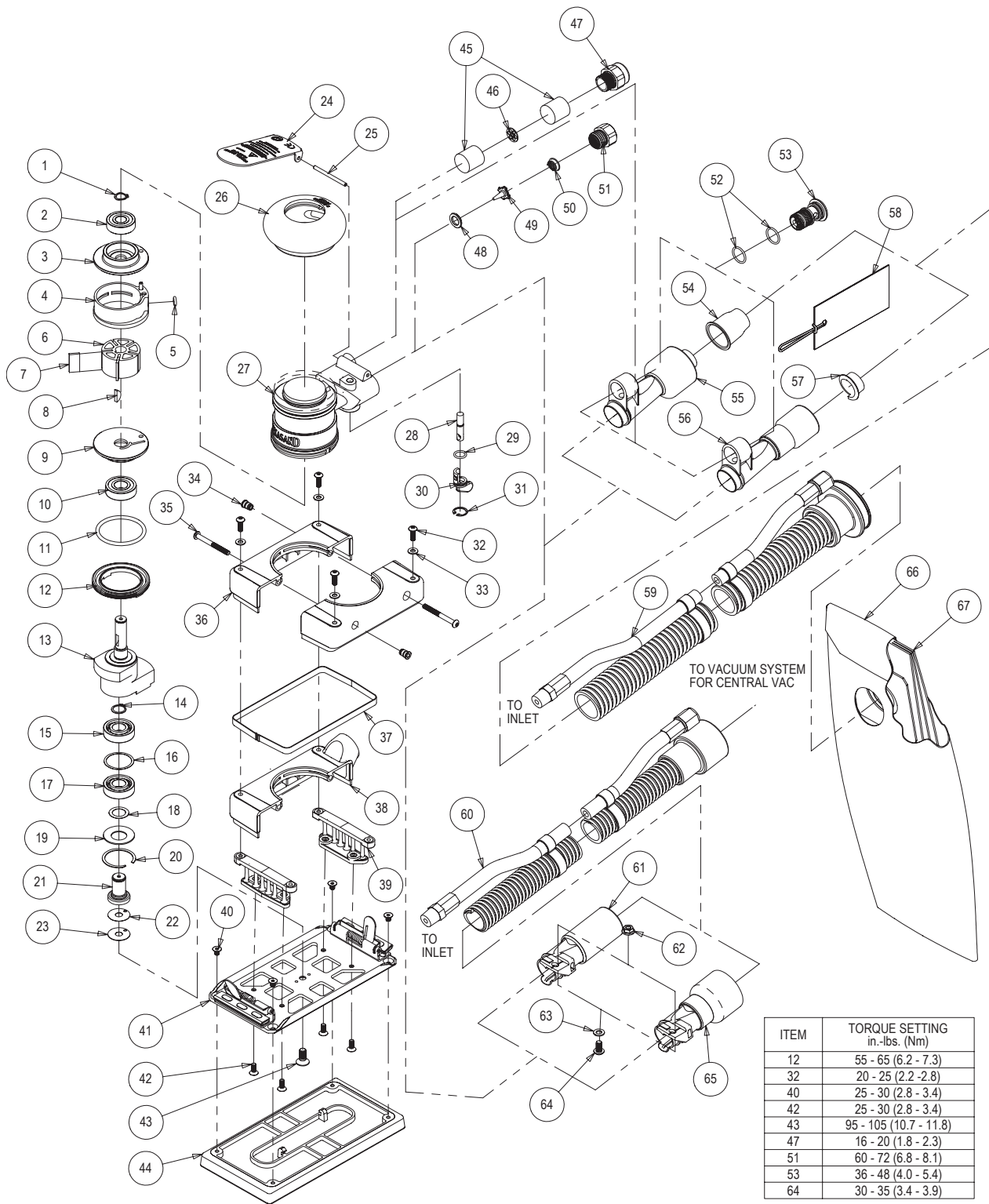
Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe, accessible location.

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, NY 10018
- 3) State and Local Regulations.
Key parts of the above regulations are excerpted below. They are not intended to be inclusive. Study and comply with all regulations.
 - 1) TOOL INTENT – Tool shall be used only for purposes intended in its design.
 - 2) AIR SUPPLY – Test and operate tools at 90 PSIG (6.1 Bar) maximum unless tool is marked otherwise. Use recommended airline filters - regulators – lubricators (FRL).
 - 3) UNUSUAL SOUND or VIBRATION – If tool vibrates or produces an unusual sound, repair immediately for correction.
 - 4) OPERATOR PROTECTIVE EQUIPMENT – Wear goggles or face shield whenever tool is in operation. Other protective clothing shall be worn, if necessary.
 - 5) SAFETY MAINTENANCE PROGRAM – Employ a safety program to provide inspection and maintenance of all phases of tool operation and air supply equipment in accordance with "Safety Code for Portable Air Tools."

EKASAND

EKASAND 93 x 178 mm (3²/₃ x 7 in.) Orbital Sander



EKASAND

Part List			
ITEM	P/N	DESCRIPTION	QTY
1	ESA0400	EXTERNAL RETAINING RING	1
2	ESA1200	10 X 26 X 8 BEARING - 2 SHIELDS	1
3	ESA5600	SMALL BORE REAR END PLATE	1
4	ESA7600	SMALL BORE ALLOY CYLINDER ASSEMBLY	1
5	ESA2400	5 mm x 2.0 mm O-RING	1
6	ESB5000	MACHINED ROTOR	1
7	ESA0100	VANE	5
8	ESA1400	3 mm x 13 mm WOODRUFF KEY	1
9	ESA4600	SMALL BORE FRONT ENDPLATE	1
10	ESA9100	12 X 28 X 8 BEARING - 2 SHIELDS	1
11	ESA5400	39.4 mm x 3.1 mm O-RING	1
12	ESA1000	LOCK RING	1
13	ESB3720	3 2/3 X 7 in 3/16 in ORBIT SHAFT BALANCER (FOR CLAMP STYLE SCREW-ON PAD)	1
	ESB4720	3 2/3 X 7 in 3/16 in ORBIT OS SHAFT BALANCER (FOR SCREW ON TYPE PADS)	1
14	ESA0900	11.9 mm (15/32 in.) RETAINING RING	1
15	ESA5300	12 X 28 X 8 BEARING NO SEALS/SHIELDS	1
16	ESA3910	SPACER 27.0 x 23.0 x 0.10	1
17	ESA0200	12 X 28 X 8 BEARING - 1 SEAL	1
18	ESA6100	SPACER 12.1 ID x 18.0 OD x 0.2 THK	1
19	ESA7100	BELLEVILLE WASHER	1
20	ESA8100	RETAINING RING	1
21	ESA3110	SPINDLE ASSEMBLY	1
22	ESA9700	SPACER 6.5 ID x 20.0 OD x 0.2 THK	OPT
23	ESA0800	SPACER 6.5 ID x 20.0 OD x 0.4 THK	1
24	ESA4110	THROTTLE LEVER FOR GENERIC 10000 OPM OS	1
25	ESA1300	LEVER SPRING PIN	1
26	ESA3490	GRIP 2 1/2 in.	OPT
	ESA4490	GRIP 2 3/4 in.	1
	ESA5490	GRIP 3 in.	OPT
27	ESA6601	MACHINED HOUSING FOR EKASAND 3in LW	1
28	ESA8000	VALVE STEM ASSEMBLY	1
29	ESA3400	9 mm x 1.5 mm O-RING	1
30	ESB4100	SPEED CONTROL	1
31	ESA9300	INTERNAL RETAINING RING	1
32	ESA8670	HEX SOCKET BUTTON HEAD MACHINE SCREW M4 x 12	4
33	ESA6700	M4 WASHER 4.3 ID x 9 OD x 0.8 THK	4
34	ESA1700	THREADED INSERT 4 MM	2
35	ESA0770	HEX SOCKET HEAD CAP SCREW M4 x 40	2
36	ESC7610	3 2/3 in. x 7 in. NV SHROUD (RH/LH)	2
37	ESA9610	SHROUD SEAL	1
38	ESD0100	3 2/3" x 7" CV/SGV SHROUD	1

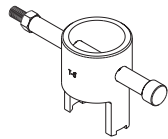
EKASAND

39	ESC0100	PAD SUPPORT ASSEMBLY	2
40	ESA6670	HEX SOCKET COUNTERSUNK HEAD MACHINE SCREW M4 x 6	4
41	ESC6210	3 2/3 x 7 in. PAD BACKING ASSEMBLY W/TORSION CLAMPS - FOR SCREW ON PADS	1
	ESC0610	MACHINED 3 2/3 x 7 IN. SCREW-ON PAD BACKING	1
42	ESA7670	HEX SOCKET COUNTERSUNK HEAD MACHINE SCREW M4 x 10	4
43	ESA8700	SOCKET FLAT COUNTER SUNK MACHINE SCREW M6 x 14	1
44	NA	1 pad supplied with each tool (type determined by model)	1
45	ESA2300	MUFFLER INSERT (for 10000 RPM Machines)	2
46	ESA8300	MUFFLER PLATE	1
47	ESA6610	MUFFLER HOUSING	1
48	ESA9000	VALVE SEAT	1
49	ESA7000	VALVE	1
50	ESA4100	VALVE SPRING	1
51	ESA3100	1/4-18 NPT INLET BUSHING ASSEMBLY	1
52	ESA4400	14.0 x 1.5 O-RING	2
53	ESA2270	10000 RPM SGV RETAINER	1
54	ESA8770	1 in./28 mm HOSE SEAL	1
55	ESA0140	ASSEMBLY FOR 1 in./28 mm HOSE SuperVAC SGV SWIVEL EXHAUST FITTING	1
56	ESA9040	ASSEMBLY FOR 3/4 in./19 mm HOSE SuperVAC SWIVEL EXHAUST FITTING	OPT
57	ESA4580	3/4 in./19 mm HOSE SEAL	OPT
58	ESA1411	TAG W/INSTRUCTION FOR EKASAND 1 in./28 mm HOSE SEAL	1
	ESA9311	TAG W/ INSTRUCTION FOR EKASAND 3/4 in./19 mm HOSE SEAL	OPT
59	ESA1140	Ø 3/4 in. VAC HOSE TO DOUBLE BAG FITTING AND AIRLINE ASSY	OPT
	ESA2140	Ø 1 in. VAC HOSE TO DOUBLE BAG FITTING AND AIRLINE ASSY	1
60	ESA0030	Ø 3/4 in. VAC HOSE TO Ø 3/4 in. x 1 in./28 mm ADAPTER COUPLING AND AIRLINE ASSM	OPT
61	ESA8920	OS SuperVAC 3/4 in. CV SWIVEL EXHAUST ASSEMBLY	OPT
62	ESA8400	M5 x 0.8 FLANGED NUT	1
63	ESA7400	M5 WASHER	1
64	ESA9670	HEX SOCKET BUTTON HEAD MACHINE SCREW M5 x 10	1
65	ESA2900	1 in./28 mm OS SuperVAC CV SWIVEL EXHAUST ASSEMBLY	1
66	ESC0110	VACUUM BAG	1
67	ESC9010	VACUUM BAG INSERT	1

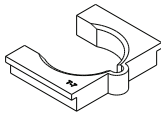
EKASAND

EKASAND Service Tools and Accessories

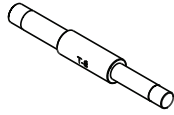
When an EKASAND OS needs to be serviced, we offer a tool kit to make the disassembly/assembly fast and easy. The Service Tools are highly recommended for use with the Overhaul Service Kit. NOTICE: To receive any expressed or implied warranty, the tool must be repaired by an authorized EKASAND Service Center.



T-6 Motor Lock Ring Wrench/Spindle Puller



T-7 Soft Collar



T-8 Motor Face Plate Bearing Removal Tool



T-13 Bearing Press Tool



T-9 Bearing Puller



T-1 Bearing Press Tool



T-12 5/16-24 to M6 x 1P Adapter Assembly



T-3 OS Spindle Bearing Press Tool

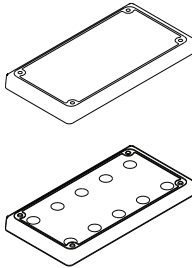
ESA9740 Universal Service Tool Kit

ESA5840 3²/₃ x 7 in. Service Tool Kit

EKASAND Back-Up Pads

EKASAND back-up pads are perfectly mated for use on the EKASAND. 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 EKASAND.

Description	Part#
EKASAND 3 ² / ₃ x 7 in. non-vacuum, vinyl face pad	2573300
EKASAND 3 ² / ₃ x 7 in. vacuum, vinyl face pad	2573310
EKASAND 3 ² / ₃ x 7 in. non-vacuum, hook face pad	2573301
EKASAND 3 ² / ₃ x 7 in. vacuum, hook face pad	2573311



EKASAND Overhaul Service Kit

The ESA4311 EKASAND Overhaul Service Kit contains all the replacement parts that naturally wear over time and a straightforward manual to make servicing an EKASAND sander simple.

Overhauling the Orbital Sander can be made even easier with the use of the above Service Tools. The Service Tools also reduce the chance of improper assembly.

ESA4311 Overhaul Service Kit Contents			
Item	Part No.	Description	Qty.
1	ESA0400	Retaining Ring	1
2	ESA1200	Bearing	1
5	ESA2400	O-ring	1
6	ESB5000	Rotor	1
7	ESA0100	Vane	5
8	ESA1400	Key	1
10	ESA9100	Bearing	1
15	ESA5300	Bearing	1
16	ESA3910	Spacer	1
17	ESA0200	Bearing	1
28	ESA8000	Valve Stem Assembly	1
29	ESA3400	O-ring	1
31	ESA9300	Internal Retaining Ring	1
39	ESC0100	Pad Support	2
45	ESA2300	Muffler Insert	2
47	ESA6610	Muffler Housing	1
48	ESA9000	Valve Seat	1
49	ESA7000	Valve	1
50	ESA4100	Valve Spring	1
N/A	ESA2620	Service Instructions	1

EKASAND Warranty

All EKASAND Orbital Sanders are warranted for defects in materials or workmanship for 1 year following the date of delivery to the user. Combined with the EKASAND name, this Warranty expresses our total confidence in the superior quality, durability, and performance of the EKASAND.

EKASAND

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 OPM free speed.

Work Station

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 PSI/6.1 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 meter 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 lubricated by shutting off the air supply to the tool, depressurizing the line by pressing the lever on the tool. Disconnect the airline and put 2 to 3 drops of a suitable pneumatic motor lubricating oil, preferably incorporating a rust inhibitor into the hose end (inlet) of the machine. Reconnect tool to air supply and run tool slowly for a few seconds to allow air to circulate the oil. If tool is used frequently lubricate on daily basis and if tool starts to slow or lose power.

It is recommended that the air pressure at the tool be 90 PSI/6.1 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/6.1 Bars. 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) 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.
- 4) Always remove the air supply to the sander before fitting, adjusting or removing the abrasive or back-up pad.
- 5) Always adopt a firm footing and/or position and be aware of torque reaction developed by the sander.
- 6) Use only correct spare parts.
- 7) Always ensure that the material to be sanded is firmly fixed to prevent its movement.
- 8) 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.
- 9) Do not exceed maximum recommended air pressure.
- 10) 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.

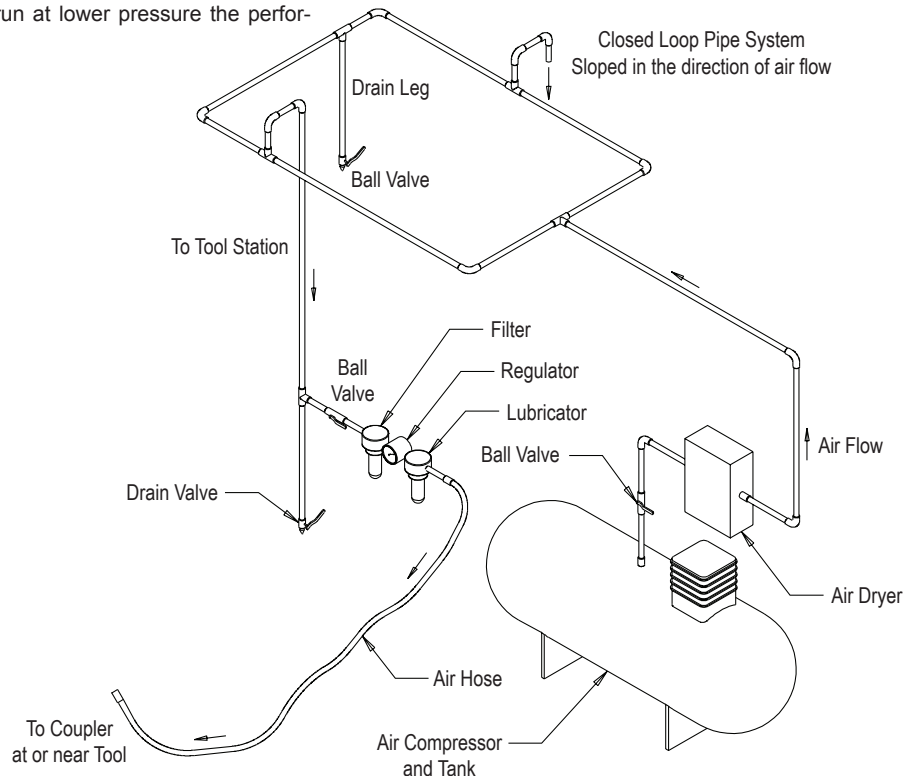


Figure 1