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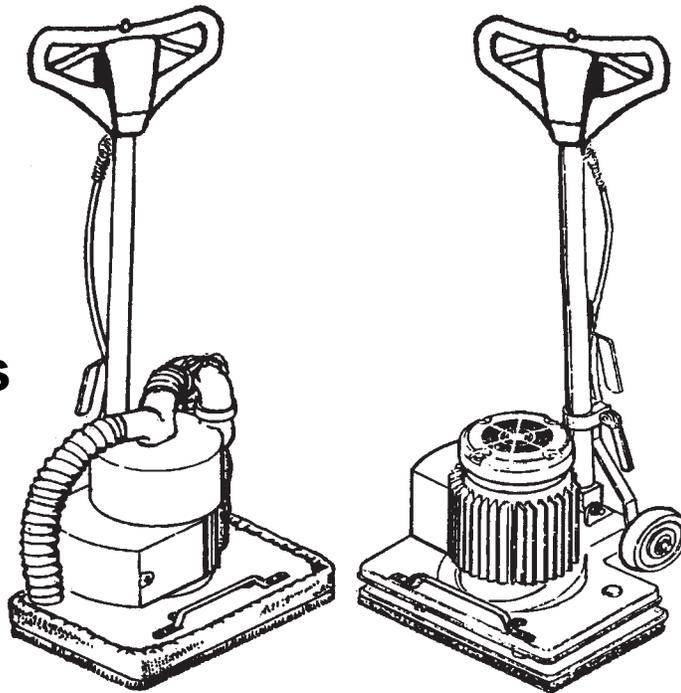
# Clarke<sup>®</sup>

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# American Sanders

Division of  
ALTO<sup>®</sup>

**Operator's  
Manual**



**OBS-18  
OBS-18DC**

## READ THIS BOOK

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your Clarke American Sanders machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operators cannot read English, have this manual explained fully before attempting to operate this machine.

Si Ud. no pueden leer el Inglés, se hagan explicar este manual completamente antes de tratar el manejo o servicio de esta máquina.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books write to: Clarke<sup>®</sup>, 2100 Highway 265, Springdale, Arkansas 72764

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# OPERATOR SAFETY INSTRUCTIONS



**WARNING**



**AVERTISSEMENT**



**ADVERTENCIA**

**DANGER** means: Severe bodily injury or death can occur to you or other personnel if the **DANGER** statements found on this machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **DANGER** statements found in this Owner's Manual and on your machine.

**WARNING** means: Injury can occur to you or to other personnel if the **WARNING** statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **WARNING** statements found in this Owner's Manual and on your machine.

**CAUTION** means: Damage can occur to the machine or to other property if the **CAUTION** statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **CAUTION** statements found in this Owner's Manual and on your machine.



**DANGER:**

Failure to read the Owner's Manual prior to operating or servicing your Clarke American Sanders machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. **If you or your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.**



**DANGER:**

Sanding/finishing wood floors can create an explosive or combustible environment. Do not operate this machine around solvents, thinners, alcohol, fuels, floor finishes, wood dust or any other flammable materials. Cigarette lighters, pilot lights, electrical sparks and all other sources of ignition should be extinguished or avoided. Keep work area well ventilated.



**DANGER:**

Electrocution could occur if the machine is being serviced while the machine is connected to a power source. Disconnect the power supply before servicing.



**DANGER:**

Electrocution or fire could occur if the machine is being operated with a damaged power cord. Keep the power cord clear of the pad. Always lift the cord over the machine. Do not move the machine by the power cord.



**DANGER:**

To avoid injury keep hands, feet, and loose clothing away from all moving parts on the machine. Disconnect the power cord before replacing the pad, changing the abrasive, or when servicing. Do not operate the machine unless all guards are in place. Never leave the machine unattended while connected to a power source.



**DANGER:**

Dust generated from sanding wood floors can spontaneously ignite or explode. Promptly dispose of any sanding dust in a metal container clear of any combustibles. Do not dispose in a fire.



**WARNING:**

Shock hazard. Do not use the machine if it has been rained on or sprayed with water.



**WARNING:**

Injury can occur if protective clothing or equipment is not used while sanding. Always wear safety goggles, protective clothing, and dust mask while sanding.



**WARNING:**

Any alterations or modifications of this machine could result in damage to the machine or injury to the operator or other bystanders. Alterations or modifications not authorized by the manufacturer voids any and all warranties and liabilities.

## Introduction & Machine Specifications

The OBS-18 or OBS-18DC can be used on a variety of surfaces. It is an ideal tool for wood flooring maintenance and restoration work. It is also suitable for cleaning hard surfaces such as tile or Terrazzo.

See Table 1, Page 9 for power cable specifications

Model	OBS-18		OBS-18DC	
	Code Number	07076B	07079B / 07116A /07086B	07081B
Voltage/Frequency	115V/60Hz	230V/50Hz	115V/60Hz	230V/50Hz
Amperage (A)	10	5	10	5
Motor	1 hp	0.75 kw	1hp	0.75kw
Pad Size	12 x 18 inches	305 x 457 mm	12 x 18 inches	305 x 457mm
Orbits Per Minute	3600	3000	3600	3000
Orbit Dia.	1/4 inch	6.4 mm	1/4 inch	6.4 mm
Shipping Weight	125 lbs.	57 kg.	125 lbs.	57 kg
Noise (dBA)	74	74	74	74
Vibration (m/s/s)	16	16	16	16

## Machine Transportation

To transport the machine, follow this procedure:

1. Unplug machine from wall outlet and wrap cord.
2. Raise and lock the handle to the upright position.  
To lock the handle, press down on the locking lever with your foot. See figure 1.
3. Grasp the machine at the lifting sites and place in cargo area. See figure 2.

**WARNING:** The machine is heavy (125 lbs./ 57kg). to avoid injury or damage to the machine use a firm grip and proper lifting technique. Get assistance if necessary.

4. Secure machine to prevent movement in cargo area.

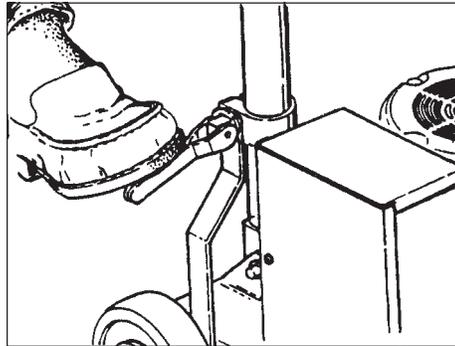


Figure # 1

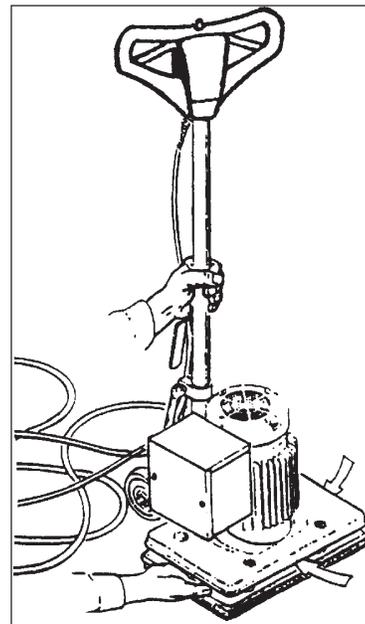


Figure # 2

## Machine Setup

To prepare the machine for use follow this procedure:

1. Familiarize yourself with the machine. Read all danger, warning, and caution statements and the Operation and Parts Manual before operating the machine. If you or the operator are unable to read English, have this manual fully explained before attempting to operate this machine.
2. Install or replace pad. The pad should be replaced if it has become matted down to a thickness of  $3/8$ " or less. To install or replace the pad, follow these instructions:
  - a.) Lock handle in the upright position.
  - b.) Tilt the machine back until it fully rests on the handle.
  - c.) Standing over the machine, remove existing pad then center new pad over pad driver.
  - d.) Press pad against pad driver until the hooks in the driver have set in the pad. See figure 3.
  - e.) Return machine to the upright position.



Figure # 3

**CAUTION:** Damage to the pad driver will occur if the machine is operated without a pad or with a pad that is  $3/8$ " or thinner.

**WARNING:** Never put yourself or let others be in a position to get injured if the machine should tip or fall, while replacing the pad or changing abrasive.

## Operating Instructions - Sanding

To operate the machine as a sander follow this procedure:

1. Move machine to work location. Decide the best approach to sanding the desired area. When sanding the area, work so that you are moving away from the power supply. This will help to avoid entanglement with the power cord and reduce the need to move the power cord as frequently.
2. Install the abrasive. Use the same procedure outlined in MACHINE SETUP for installing the pad, to install the abrasive. Peel the film off the back of the abrasive; center the abrasive over the pad and press it against the pad. The adhesive on the abrasive will hold it to the pad.

**NOTE:** When using screen abrasive, set the screen on the floor then move the machine over the screen. Lower the machine until the pad comes to rest on the screen. Make sure the screen is centered on the pad.

**WARNING:** Injury can occur if the machine is connected to a power source while installing the pad or abrasive. Disconnect the machine before installing the pad/abrasive.

3. Connect the machine to an appropriately fused and grounded circuit.
4. Release the handle by pressing up on the locking lever. Bring the handle to a comfortable position.

**CAUTION:** Do not lock the handle. Locking the handle will prevent the machine from resting evenly on the pad and diminish the machine performance and reliability.

5. Push the interlock button (1), and apply pressure to the levers (2). To stop the machine, release the levers (2). See figure 4.

**CAUTION:** To prevent damage to the flooring and to reduce swirling, keep the machine in motion while the motor is running.

**NOTE:** For sanding cuts and sandpaper, see page 9.

## Operating Instructions - Polishing

To operate the machine as a polisher follow this procedure:

**WARNING:** Injury can occur if the machine is connected to a power source while installing the pad or abrasive. Disconnect the machine before installing the pad/abrasive.

1. Connect the machine to an appropriately fused and grounded circuit.
2. Release the handle by pressing up on the locking lever. Bring the handle to a comfortable position.

**CAUTION:** Do not lock the handle. Locking the handle will prevent the machine from resting evenly on the pad and diminish the machine performance and reliability.

3. Push the interlock button (1), and apply pressure to the levers (2). To stop the machine, release the levers (2). See figure 4.

**CAUTION:** To prevent damage to the flooring and to reduce swirling, keep the machine in motion while the motor is running.

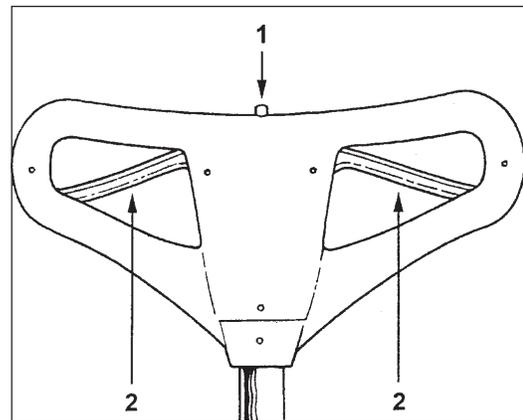


Figure # 4

## Troubleshooting

Problem	Cause	Action
Motor will not start.	<p>No power.</p> <p>Interlock not depressed.</p> <p>Defective switch/ Bad connection</p>	<p>Check power supply and connection</p> <p>Depress Interlock before activating control lever.</p> <p>Contact an authorized Clarke American Sanders Dealer.</p>
Motor fails to start / runs sluggish.	<p>Low voltage from excessive length or undersized extension cord.</p> <p>Defective start capacitor.</p> <p>Defective start switch.</p> <p>Defective start/run capacitor</p> <p>Defective motor low voltage</p>	<p>Use a 14 Ga extension cord, not to exceed 50' length.</p> <p>Contact an authorized Clarke American Sanders Dealer.</p>
Fuse / Circuit Breaker repeatedly trips.	<p>Low voltage.</p> <p>Bad connection.</p> <p>Defective motor.</p>	<p>Eliminate extension cord. Locate power source closer to work site. Have voltage checked by a qualified electrician.</p> <p>Contact an authorized Clarke American Sanders Dealer.</p> <p>Contact an authorized Clarke American Sanders Dealer.</p>



**Clarke®**  
**American Sanders**  
**OBS-18**  
**Assembly Drawing 1/03**

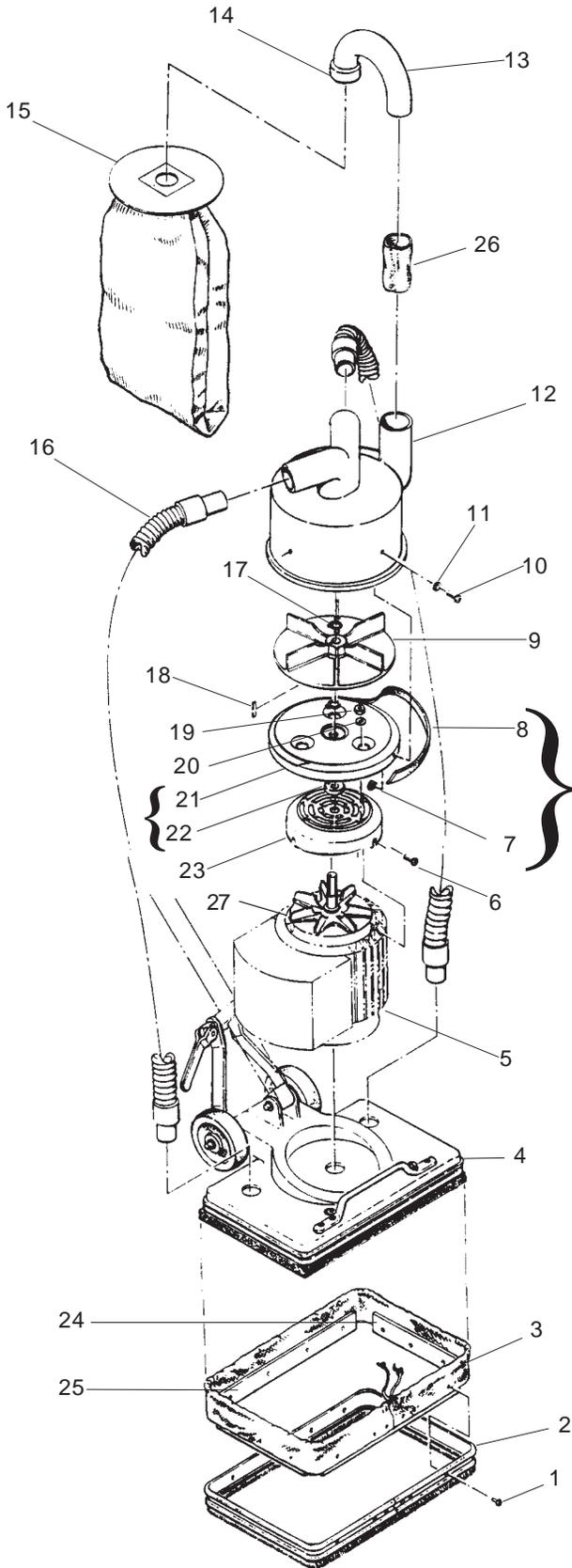
Ref. #	Part No.	Description	Qty
1	85383A	Screw, 10-33 x 3/4	8
2	30285A	Handle, Front	1
3	50798A	Lever, Switch	2
4	50820A	Spring, Extension	2
5	50806A	Button, Interlock	1
6	40109A	Switch	2
7	50799A	Interlock, Main	1
8	50821A	Spring, Compression	1
9	50780A	Handle, Rear	1
10	920722	Nut, 10-32 ESNA	8
11	962957	Screw (CE)	1
12	170686	Lock Nut	1
13	40522A	Cord, Interconnect	1
	10250A	Cord, Interconnect (230V)	1
14	50797A	Strain Relief	1
	58013A	Strain Relief (230V)	1
15	50930A	Cord, Retainer	1
16	62667A	Cover, Enclosure	1
17	41312A	Capacitor, Start (115V) 1	
	41314A	Capacitor, Start (230V) 1	
18	41311A	Capacitor, Run (115V)	1
	41313A	Capacitor, Run (230V)	1
19	22906A	Enclosure, Motor Starter	1
20	77195A	Label, Sanding Warning	1
21	77234A	Label, Heavy Object	1
22	41419A	Circuit Breaker (115V)	1
	41418B	Circuit Breaker(230V)	1
23	47709A	Terminal, 1/4 QD	1
24	51523A	Strain Relief	1
25	40160A	Switch, Start (115V)	1
	47378A	Switch, Start (230V)	1
26	25907A	Screw, 8-32 x 1/2	2
27	44667A	Motor (115V)	1
	44668A	Motor (230V)	1
28	25907A	Mainframe	1
29	81220A	Nut, 1/4-20 Srt'd. Flange 4	
30	86110A	Screw 3/8-16 x 1	4
31	915044	Key, 3/16 X 1	1
32	10666A	Kit, Spring Mount	1
33	925589	Pin 1/8 x 1/2 Roll	1
34	20901A	Base, Pad Driver	1
35	66982A	Retainer, Eccentric	1
36	85718A	Screw, 1/2-13 x 3/4	1
37	32519A	Pad Driver	1
38	976551	Pad, Red	cnt 20

Ref. #	Part No.	Description	Qty
39	-----	Abrasive (sanding only)	Pg. 9
40	50736A	Bearing	1
41	66981A	Retainer, Bearing	1
42	87700A	Screw, 1/4-20 x 1/2	5
43	62814A	Eccentric	1
44	920346	Palnut, 1/2"	4
45	67474A	Shaft, Handle	1
46	306802	Plug	1
47		See Table 1 below	
48	31224B	Bumper	1
49	69153B	Tube, Handle	1
50	627561	Bushing, Strain Relief	1
51	170667	Nut, Wire	3
52	920110	Nut, 5/16-18 ESNA	1
53	60448A	Arm, Link LH	1
54	980215	Washer, 1/2 Nylon	4
55	509240	Tongue	1
56	39857A	Wheel, 5"	2
57	60529A	Axle, Wheel	1
58	461404	Cam, Locking	1
59	925592	Pin, 1/4 x 3/4 Roll	1
60	441301	Bolt, Cam Locking	1
61	980349	Washer, Wear	1
62	60447A	Arm, Link RH	1
63	980645	Washer, 3/8 Plain	1
64	920248	Nut, 3/8-16 ESNA	1
65	85812A	Screw, 5/16-18 x 7/8	1
66	85817A	Screw, 5/16-18 x 2	1
67	980652	Washer, 5/16 Lock	2
68	442001	Clamp, Handle	1
69	64325A	Cord Hook	1
70	930005	Rivet	2
71	54930A	Handle, Lift	1
72	170667	Connector	1
73	85833A	Screw, 10-32 x 3/8	1
74	980603	Washer #10 Ext	1
75	980681	Washer, Bowed	2
76	962822	Screw, 1/4-20 x 5/8	2
77	980614	Washer 1/4 EXT	4
78	84233A	Screw, 1/4-20x3/4 FT	4
79	52465A	Fan Cover OBS18	1
80	70175A	Tag, Warning	1
81	911248	Plug NEMA 5-15P	1
	40023A	Plug AU 1-10P	1
	45609A	Plug UK 1-13P	1
	40073A	Plug, Schuko	1

**TABLE 1**

Electrical System	Part No.	Specification
115V~60Hz	50991A	50' 14- S0 Gray Rubber Jacket w/NEMA 5-15P Plug
	40524A	15m HO7RNF 3G1.0 mm <sup>2</sup> w/AU1-10P Plug
	40523A	15m HO7RNF 3G1.0 mm <sup>2</sup> w/Schuko Plug
230V~50 Hz	50870A	15m HO5VVF 3G1.5 mm <sup>2</sup> Yellow Jacket w/UK1-13P

**Clarke**  
**American Sanders**  
**OBS-18DC**  
**Assembly Drawing and Part List 1/03**

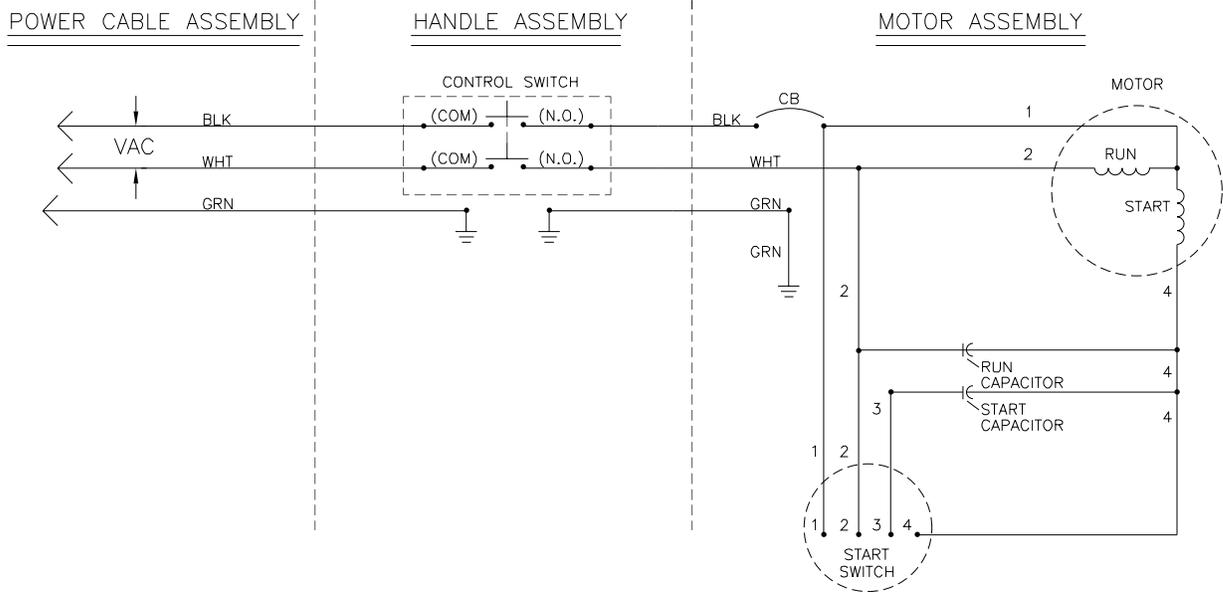


Ref. #	Part No.	Description	Qty
1	930124	Rivet $\frac{3}{16} \times \frac{19}{32}$	16
2	38239A	Skirt, OBS-18	1
3	38015A	Shroud, Housing	1
4	25908B	Mainframe	1
5	44671A	Motor, 1HP TFFC 115V/60Hz	1
5	44673A	Motor, 1 HP 230V/60Hz	1
6	87700A	Screw, $\frac{1}{4}$ -20 x $\frac{1}{2}$	3
7	80092A	Insert, Threaded, 10-32UNF	4
8	34287A	Gasket, Cover	1
9	54765A	Fan	1
10	85383A	Screw, 10-32 x $\frac{3}{4}$	4
11	980982	Washer, #10 Plain	4
12	35242A	Housing, Blower	1
13	53644A	Elbow	1
14	837304	O'Ring	1
15	Ref.	Bag Dust (See Accessories)	
16	30407B	Hose	2
17	797301	Ring, Retaining $\frac{5}{8}$ Ext	2
18	915044	Key, $\frac{3}{16}$ Sq. x 1	1
19	81217A	Nut, $\frac{1}{4}$ -20	3
20	980646	Washer, $\frac{1}{4}$ Plain	3
21	32404A	Cover, Blower Housing	1
22	87617A	Washer, Felt $\frac{1}{2} \times 1\frac{1}{4} \times \frac{1}{4}$	1
23	50275A	Fan Cover (OBS-18DC)	1
24	68806A	Weight, Skirt $10\frac{3}{4}$	1
25	68807A	Weight, Skirt 17	1
26	38109A	Seal, Dust Pipe	2
27	40545A	Motor Fan	1
28	10478A	Asm., Blower Housing Cover (includes 7, 8, 21 & 22)	1

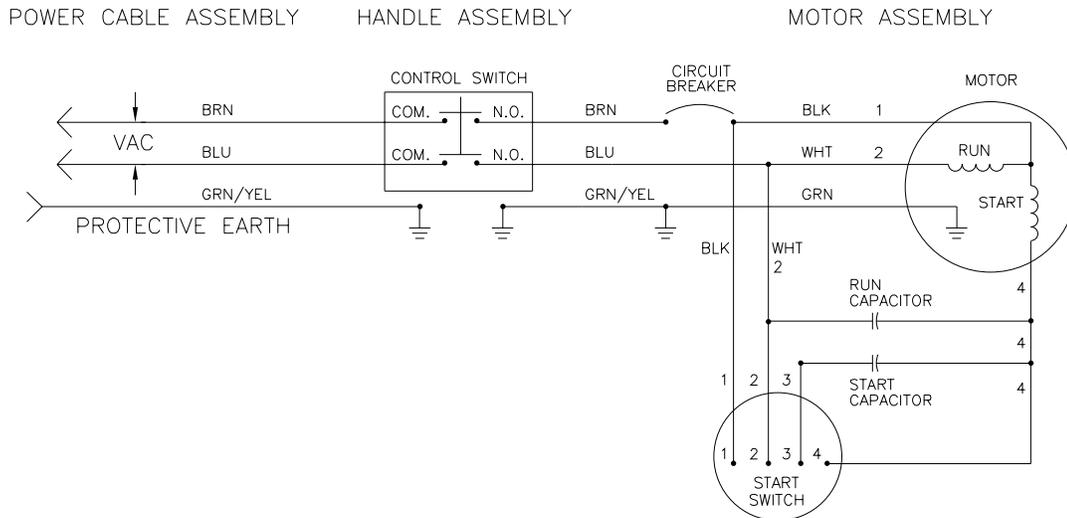
**Accessories**

70401A	Paper Dust Bag (2 per)
50951A	Cloth Dust Bag
976550	12 x 18 White Pad (20 per)
50712A	Paper Dust Bag w/Bun

**Clarke**  
**American Sanders**  
**OBS-18 & 18DC**  
**120v 60 Hz & 230v 50Hz**  
**Electrical Schematic 10/98**



**Clarke**  
**American Sanders**  
**OBS-18 & 18DC**  
**230v 50 Hz "CE"**  
**Electrical Schematic 10/98**



## Sanding Cuts and Sandpaper

### Initial Cut

The purpose of the initial cut is to remove old finish and gross imperfections on the floor surface. Use a course (20-36 grit) grain abrasive.

### Final Cuts

The purpose of a finishing cut is to remove the scratches produced during the initial cut. Use a fine (60-80 grit) grain abrasive.

If the surface remains rough after a finishing cut, it may be necessary to use an even finer grain of abrasive (80-100grit). Care should be taken in selecting the grit size of the abrasive. A very fine grain will close the pores on a wood floor making admission of a stain difficult.

If glazing or burning should occur the abrasive has dulled and must be replaced.

Grain	Use	Standard Grade Part #/Qty.	Professional Grade Part #/Qty.
20 grit	For removing gross imperfections and restoring evenness to old flooring. To remove buildup of paints and varnishes	945950/10	
36 grit	For the first sanding of new flooring (maple, oak). For removing minor imperfections and finishes from old flooring.	945951/20	
$\frac{60 \text{ grit}}{60 \text{ grit}}$ screen mesh	For clean-up from initial cut 36 grit.	$\frac{945954/20}{945960/20}$	
$\frac{80 \text{ grit}}{80 \text{ grit}}$ screen mesh	For final sanding of certain hardwoods. For clean-up of cuts (60 grit).	$\frac{945955/20}{945961/20}$	
$\frac{100 \text{ grit}}{100 \text{ grit}}$ screen mesh	For final sanding of certain hardwoods and conifers where a smooth surface is desired.	$\frac{945956/20}{945962/20}$	
120 grit screen mesh	For final sanding of certain hardwoods and conifers where a smooth surface is desired. For leveling after initial finish coat.	945963/20	
150 grit screen mesh	For scratching surface between coats of finish	945964/20	
180 grit screen mesh	For surface roughing between coats of finish.	945965/20	

# ALTO<sup>®</sup> PRODUCT SUPPORT BRANCHES

## U. S. A. Locations

### HEAD OFFICE

ALTO U.S. Inc., St. Louis, Missouri  
16253 Swingley Ridge Road, Suite 200  
Chesterfield, Missouri 63017-1725

### PRODUCTION FACILITIES

**Clarke<sup>®</sup>**, Springdale, Arkansas  
2100 Highway 265  
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(479) 750-1000  
**Customer Service - 1-800-253-0367**  
**Technical Service - 1-800-356-7274**

**American Lincoln<sup>®</sup>**, Bowling Green, Ohio 43402  
1100 Haskins Road

### SERVICE FACILITIES

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**Clarke American Sanders**  
**A.L. Cook**  
**Customer Service Headquarters and Factory**  
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**Technical Service**  
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+45 72 18 21 00

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Bjornerudveien 24  
N-1266  
+47 2275 1770

## **Clarke® American Sanders U. S. Warranty**

This Clarke American Sanders Industrial/Commercial Product is warranted to be free from defects in materials and workmanship under normal use and service for a period of two years from the date of purchase, when operated and maintained in accordance with Clarke American Sanders' Maintenance and Operations Instructions.

This warranty is extended only to the original purchaser for use of the product. It does not cover normal wear parts such as electrical cable, rubber parts, hoses and motor brushes.

If difficulty develops with the product, you should:

- (a). Contact the nearest authorized Clarke American Sanders repair location or contact the Clarke American Sanders Service Operations Department, 2100 Highway 265, Springdale, Arkansas 72764, for the nearest authorized Clarke American Sanders repair location. Only these locations are authorized to make repairs to the product under this warranty.
- (b). Return the product to the nearest Clarke American Sanders repair location. Transportation charges to and from the repair location must be prepaid by the purchaser.
- (c). Clarke American Sanders will repair the product and or replace any defective parts without charge within a reasonable time after receipt of the product.

Clarke American Sanders' liability under this warranty is limited to repair of the product and/or replacement of parts and is given to purchaser in lieu of all other remedies, including INCIDENTAL AND CONSEQUENTIAL DAMAGES.

THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SPECIFIED HEREIN. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. NO WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY, SHALL BE IMPLIED. A warranty registration card is provided with your Clarke American Sanders product. Return the card to assist Clarke American Sanders in providing the performance you expect from your new floor machine.

Clarke, 2100 Highway 265, Springdale, Arkansas 72764.

**Clarke American Sanders reserves the right to make changes or improvements to its machine without notice.**

**Always use genuine Clarke American Sanders Parts for repair.**

**Clarke®**  
**American Sanders**

Division of  
**ALTO**

**2100 Highway 265  
Springdale, Arkansas, 72764**