












**Orbital Sander
EZ-Sand
Operator's Manual**



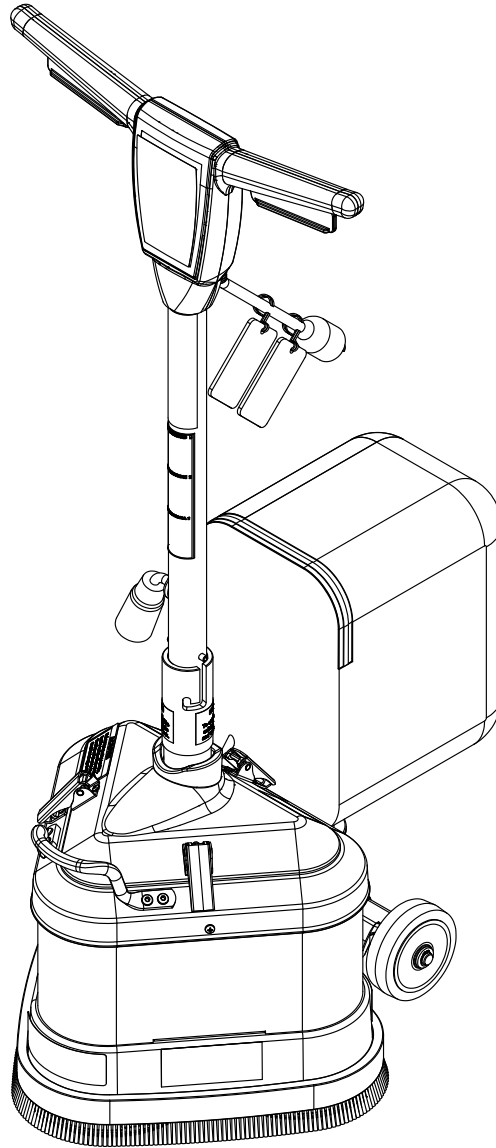
Operator Safety Instructions

- 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 this manual have it 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:** Electrocutation could occur if the machine is being serviced while the machine is connected to a power source. Disconnect the power supply before servicing.
-  **DANGER:** Electrocutation 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:** This sander is not to be used on pressure treated wood. Some pressure treated woods contain arsenic and sanding pressure treated wood produces hazardous dust. Inhaling hazardous dust from pressure treated wood can cause serious injury or death. Sanding pressure treated wood decks or uneven surfaces can damage the sander which is not covered under warranty or damage waiver.
-  **WARNING:** This machine should be grounded while in use to protect the operator from electric shock. This machine is provided with a three-conductor cord and a three-contact grounding type attachment plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect this wire to anything other than the grounding pin of the attachment plug.
-  **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.

*****THIS MACHINE IS INTENDED FOR COMMERCIAL USE ONLY*****

Introduction & Machine Specifications



Model	EZ Sand - HDTR
Code Number	07163A
Voltage Frequency	115V / 60Hz
Amperage (A)	12
Motors (3)	1/3 hp each
Pad Size (3)	7" O.D. each
Power Cable	40 Ft. 12/3 Ga. Gray Rubber Jacketed
Orbits Per Minute	5000 Each Motor
Orbit Diameter	1/4 inch
Shipping Weight	110 lbs
Noise (dBA)	74
Vibration (m/s/s)	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 vertical and upright position. To lock the handle, unhook the knurled collar by raising and twisting it (See Figure 1), and then allow it to slide into the black cast iron weight (See Figure 1A).
3. Unlock the three levers that attach the black cast iron weight to the base machine by lifting up.
4. Unplug the interconnect cord from the base machine. Now the handle can be lifted separately and placed in the cargo hold.
5. The base machine can be lifted by grasping both the front lift handle and underneath the axle area (See Figure 2).

⚠ WARNING:

The machine is heavy (67 lbs./34kg). The handle weight is 35 lbs./16 kg. To avoid injury or damage to the machine use a firm grip and proper lifting technique. Get assistance if necessary.

6. Always transport the machine with sandpaper attached to the drivers. Damage to the grip face will occur if sandpaper is not in place during transport or storage.
7. Secure machine to prevent movement in cargo area.



Figure 1



Figure 1A



Figure 2

Machine Set-Up

To prepare the machine for use follow this procedure:

1. Familiarize yourself with the machine. Read all danger, warning, and caution statements and the Operator's 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. Attach the handle to the base machine by following these instructions:
 - A. The handle label should be pointing towards the front of the machine and the black iron casting should drop down into the top of the base machine securely.
 - B. Snap the three latches down to the base machine. The hooks on the latches should slip over the keepers that are attached to the base machine. The latches should require a slight push to snap them into place (See Figure 3).
 - C. Plug the cord at the bottom of the handle into cord coming out of the machine base and slightly twist to lock it in place (See Figure 3A).
3. Install or replace sandpaper. The sandpaper should be replaced if it is ripped, torn or the hook material is too worn to allow attachment of sandpaper. To install or replace the sandpaper follow these instructions:
 - A. Make sure the power cord is not connected to a wall outlet or any power source.
 - B. Lock handle in the upright position.
 - C. Tilt the machine back until it fully rests on the handle.
 - D. While kneeling and facing the bottom of the machine, remove the existing sandpaper (See Figure 4).
 - E. Press the new sandpaper against the grip face until the hooks in the driver have set into the sandpaper (See Figure 4A).
 - F. Return machine to the upright position.



CAUTION:

Damage to the grip face on the driver will occur if the machine is operated without sandpaper installed.



CAUTION:

Always store the machine with sandpaper installed on all of the drivers to prevent damage to the grip face.



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.



Figure 3



Figure 3A



Figure 4



Figure 4A

Dust Collection

This sanding machine is designed to be operated with a remote vacuum dust collection system or with the included dust bag.

Preparing Remote Vacuum Dust Collection Systems

To prepare the machine for remote vacuum dust collection systems that have a 2" hose end, install 2" hose end (Figure 5 - "A") directly over the exhaust tube (Figure 5 - "B").

To prepare the machine for remote vacuum dust collection systems that have a 1 ½" hose end, follow this procedure:

1. Install the 2" x 1½" hose end adaptor (Part No. 30563A) (Figure 5 - "C") over the exhaust tube (Figure 5 - "B").
2. Insert 1 ½" hose end (Figure 5 - "D") into the adaptor (Figure 5 - "C").

NOTE: Start the remote vacuum collection system before operation.

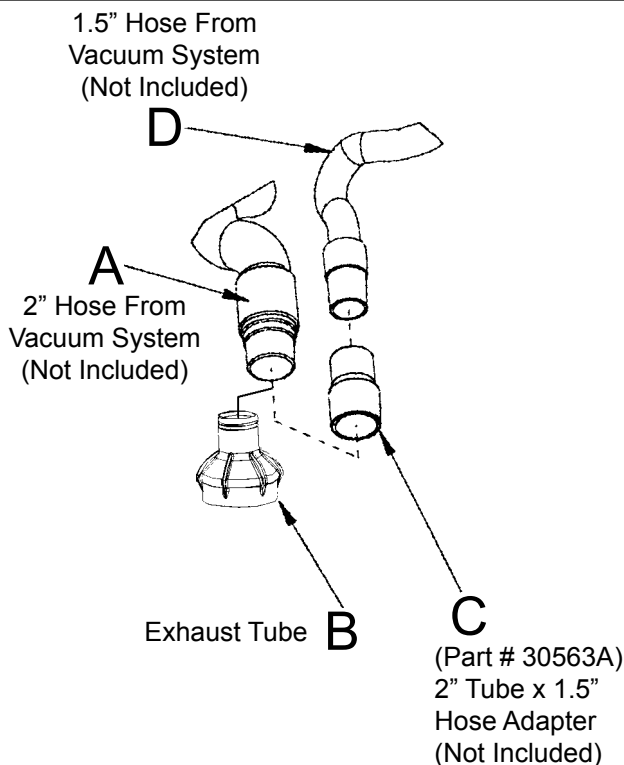


Figure 5

Preparing to use the included dust bag

To prepare the machine for use with the included dust bag (Part No: 53544C), follow this procedure:

1. Install the dust bag by pressing the end onto the exhaust tube until the ring locks into the groove (Figure 6).
2. To remove the dust bag from the exhaust tube, pry up the end of the bag opening to partially release the internal rib from the groove, then pull.
3. To empty the dust bag, unzip the disposal flap and force contents out by inverting the bag.

NOTE: For best results, empty frequently. Follow all warnings posted in this manual and on the dust bag.

WARNING:
Never leave sanding dust unattended!

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.

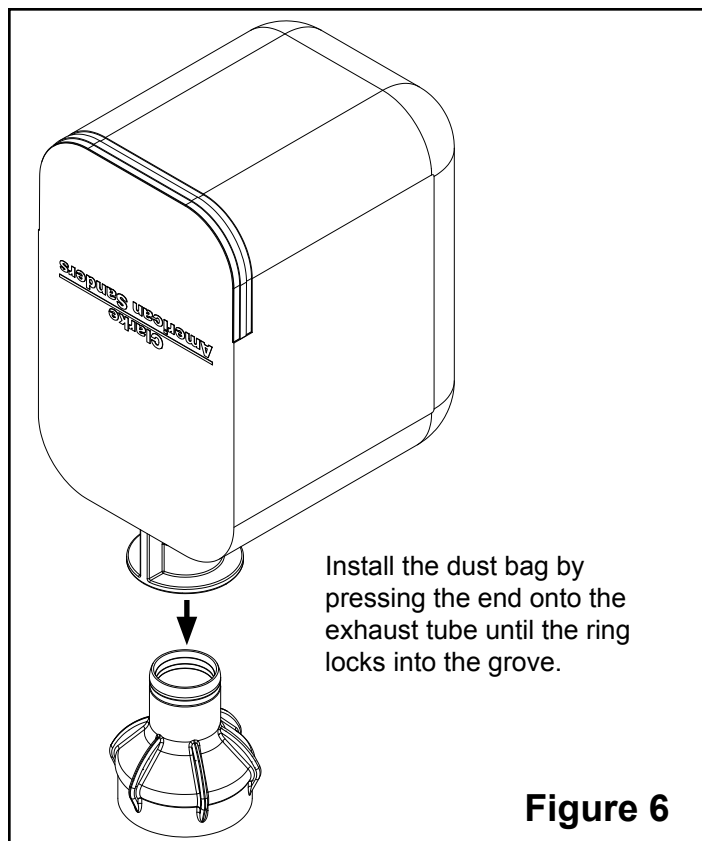


Figure 6

Operating Instructions

Follow this procedure for sanding floors:

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 sandpaper. Use the same procedure outlined in **MACHINE SETUP** to install the sandpaper. The sandpaper uses a hook and loop system which is identical to how the pads attach to the drivers. Center the sandpaper over the driver and press it against the driver until the grip face has set into the sandpaper.



WARNING:

Injury can occur if the machine is connected to a power source while installing the sandpaper. Disconnect the machine before installing the sandpaper.

3. Connect the machine to an appropriately fused and grounded circuit.
4. While holding the handle, reach down and slide the knurled locking collar up the handle tube and hook it to the pin in the tube by rotating it (See Figure 7). Lower the handle down to a comfortable position.
5. To run the machine, push the interlock button (See Figure 8 - "1"), and apply pressure to the levers (See Figure 8 - "2"). To stop the machine, release the levers (See Figure 8 - "2").



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 A9



Figure 7



Figure 8

Troubleshooting

Problem	Possible Cause	Solution
Motor will not start.	No Power.	Check power supply and connection.
	Interlock not depressed.	Depress Interlock before activating control lever.
	Defective switch / Bad Connection	Contact an authorized American Sander Technology Dealer.
Motor fails to start / runs sluggish.	Low voltage from excessive length or undersized extension cord.	Use a 14 Ga extension cord, not to exceed 50' length.
	Defective start switch.	Contact an authorized American Sander Technology Dealer.
	Defective motor.	Contact an authorized American Sander Technology Dealer.
Fuse / Circuit Breaker repeatedly trips.	Low Voltage.	Eliminate extension cord. Locate power source closer to work site.
		Have voltage checked by a qualified electrician.
	Bad Connection.	Contact an authorized American Sander Technology Dealer.
Handle feels loosely connected to machine base.	The latches have loosened up.	Contact an authorized American Sander Technology Dealer.
		To tighten latches, loosen the lock nut, screw in the latch hook and then tighten the lock nut.

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.

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