

**Mercury Floor Machines, Inc  
New Equipment Warranty**

**Limited Warranty**

Mercury Floor Machines, Inc. warrants new equipment against defects in material and workmanship under normal use and service to the original purchaser. Any statutory implied warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. Mercury Floor Machines, Inc. will not be liable for any other damages, including but not limited to indirect or special consequential damages arising out of or in connection with the furnishing, performance, use or inability to use the machine. This remedy shall be the exclusive remedy of the purchaser. The warranty period is subject to the conditions stated below.

**5 Years - Motor and Gearbox. 1 Year- Service Labor**

Mercury Floor Machines Inc. warrants electric motors and transmission gearboxes on all Mercury floor machines to be free from defects in material and workmanship, under normal use and service for five (5) years to the original purchaser. Parts replaced or repaired under this warranty are warranted for the remainder of the original warranty period. Service labor charges are covered for one (1) year from the date of purchase, when performed by a Mercury authorized-service provider. Freight charges to and from this service providers will be covered for 90 days from the purchase date. After this 90 day period, these freight charges will be paid by the equipment owner. Travel expenses are not covered.

**Wear Items on All Machines**

**Critical Wear Items** - bearings, capacitors, clutches, pulleys, rectifiers, relays, switches, wheels, tires and casters are warranted for manufacturing defects for one (1) year from the purchase date.

**Normal Wear Items** - belts, brushes, bumpers, carbon brushes, cords, finishes, squeegees, actuating cables, and gaskets are warranted for manufacturing defects for ninety (90) days from the purchase date.

All warranties of motors and associated components will be voided; if the machine is used as a floor sander; if the machine is serviced by anyone other than a Mercury-authorized service provider; if the machine is mechanically modified; or if the machine is misused or abused.

The warranty starts on the purchase date by the original purchaser from an authorized Mercury Floor Machines, Inc. distributor, subject to proof of purchase. The Machine Registration Card must be completed and returned immediately at the time of purchase. If proof of purchase cannot be identified, the warranty start date is 90 days after the date of sale to an authorized Mercury Floor Machines, Inc. Distributor.



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MEMBER  
SINCE 1958

**MERCURY ULTRA D.C.**

**Ultra High Speed Burnisher  
1170, 1500, and 2000 RPM - 1.5 HP  
19" and 21"**

Safety enhanced interlock switch / both hands are conveniently in control

Fully adjustable handle position / comfortable for all operators

Motor plugs in at handle base

Separate non-marking transport wheels / prevents tracking in contaminants

Non-marring full wrap bumpers / protects walls and baseboards

2000 RPM model has adjustable pressure front wheel assembly (not pictured) / consistent results even with novice operators

7C29 listed / reliable quality

Flexible pad holder with threaded pad-centering device / conforms to floor irregularities, delivering an even shine and gloss

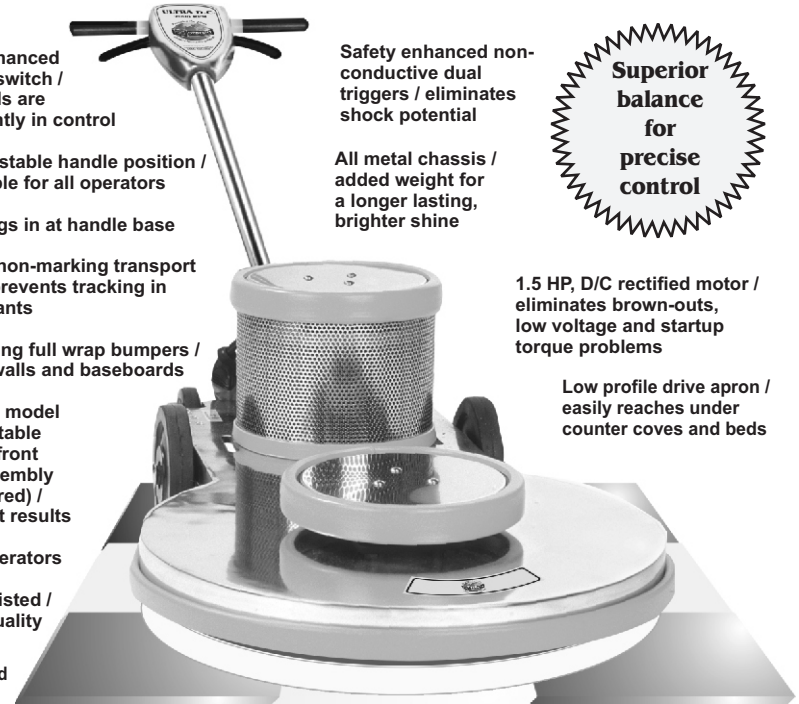
Safety enhanced non-conductive dual triggers / eliminates shock potential

All metal chassis / added weight for a longer lasting, brighter shine

1.5 HP, D/C rectified motor / eliminates brown-outs, low voltage and startup torque problems

Low profile drive apron / easily reaches under counter covers and beds

Balanced chassis design / provides more precise pad pressure



**SPECIFICATIONS**

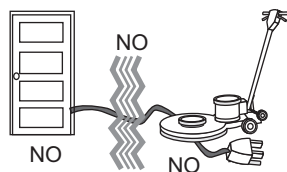
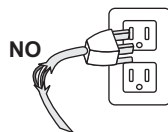
Machine Speed	1170 RPM	1500 RPM	2000 RPM
19" Model No.	DC-19-1170	DC-19-1500	DC-19-2000
Weight	84 lbs.	84 lbs.	86 lbs.
21" Model No.	DC-21-1170	DC-21-1500	DC-21-2000
Weight	87 lbs.	87 lbs.	89 lbs.
Motor Type	1.5 HP D/C rectified		
Amp Draw	13-15 amps		
Chassis	Polished aluminum		
Power Cord	50 foot safety yellow 14/3 Ga.		
Wheels	6 inch non-marking operating 4 inch transport		
Warranty	5 years motor		

# 1.0 Safe Operating Conditions

READ THIS MANUAL BEFORE USING THIS BURNISHING MACHINE. KNOW THE PROPER OPERATION, CORRECT APPLICATIONS AND THE LIMITATIONS OF THIS EQUIPMENT BEFORE USE.

## Reduce the risk of fire, electric shock, or injury:

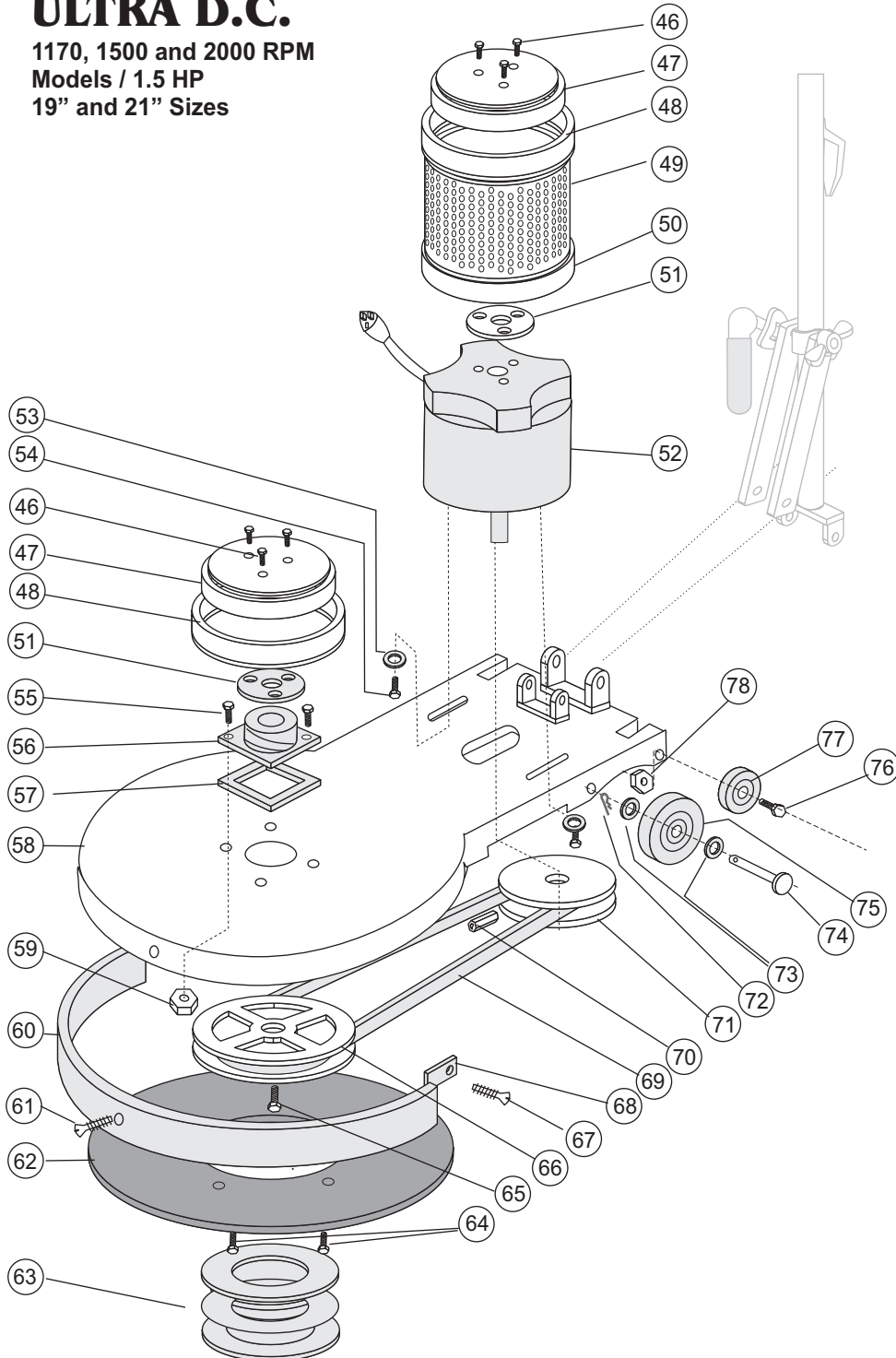
- This burnisher is designed for indoor use only. Do not use outdoors. Do not expose to rain.
- Do not wash motor with flowing water. If motor gets wet, seek authorized service.
- Keep the vents on this air-cooled motor free of debris. Do not operate with the motor covered or with vents blocks.
- Never operate this machine near flammable dusts, liquids or vapors. Never use flammable solvents as a cleaning agent. Engine sparks and operating heat can cause a fire.
- Never handle electrical equipment with wet hands. Never operate this machine in bare feet.
- Unplug the machine when not in use and when servicing the equipment. To unplug, grasp the plug, not the cord.
- Never operate a burnisher with damaged handle controls, cord, or plug. If the equipment is not performing properly, seek repair from a qualified service supplier.
- This floor machine is constructed with electrical grounding at the plug. Operate only when connected to a properly grounded outlet. See section 1.2 for grounding details.
- Prevent electrical cord abuse. Do not close a door upon the cord, drive equipment over it, or run the burnisher over it. Do not expose the cord to hot surfaces. Do not lift, pull or carry this machine by the cord.
- Never operate the burnisher over sharp objects that can be thrown out and harm the operator and damage the floor. Sweep hard-floors before burnishing.
- Train your staff in the proper use of this equipment.



#	Description	Part Number	# Required
46	Drip Cap Mount Screw	B-151	6
47	66 Fr. Drip Cap Cover	M-242	2
48	66 Fr. Drip Cap Cover Bumper	M-239	2
49	UHS Motor Screen	SCR-01	1
50	UHS Motor Screen Bumper	M-238	1
51	Cork Drip Cap Gasket	M-248	2
52	UHS Motor Only	Motor-DC-1MP	1
53	Washer	B-28	2
54	Motor Mount Bolt for UHS Motor	B-143	2
55	Bearing Block Assy Mount Bolt	B-144	4
56	Bearing Block Assembly	BBA-1	1
57	Bearing Block Gasket	B-145	1
58A	Base Casting 19"	A-131	1
58B	Base Casting 21"	A-132	1
59	Motor Mount Lock Nut	B-150	4
60A	Bumper 19"	M-302	1
60B	Bumper 21"	M-303	1
61	Ground Wire Screw	B-68	1
62A	Floppy Disk Driver 19"	DC-18	1
62B	Floppy Disk Driver 21"	DC-20	1
63	Black Pad Retainer - Snap In	PR-7A	1
64	Screw	B-95	4
65	Bolt	B-149	1
66	Pulley Driver	PD-1	1
67	Bumper Screw	B-68	1
68A	Bumper Strap - 19"	M-302a	1
68B	Bumper Strap - 21"	M-303a	1
69A	Drive Belt DC-2000	DB-1	1
69B	Drive Belt DC-1170 And 1500	DB-2	1
70	Allen Head Set Screw For PD	B-149	2
71A	Pulley To Fit Motor 2000 RPM DC	PM-1	1
71B	Pulley To Fit Motor 1170 RPM DC	PM-2	1
71C	Pulley To Fit Motor 1500 RPM DC	PM-3	1
72	Cotter Pin Wheel Axel	B-142	2
73	Spring Washer	B-51	4
74	Wheel Axel	B-16	2
75	6" Wheel	M-250	2
76	Transport Wheel Axel Bolt	B-26	2
77	Transport Wheel 4"	M-209	2
78	Lock Nut	B-77	2

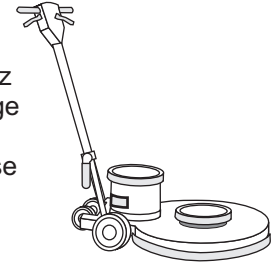
# ULTRA D.C.

1170, 1500 and 2000 RPM  
Models / 1.5 HP  
19" and 21" Sizes



## 1.1 Electric Power

This burnishing machine operates on a 15 amp nominal 115V, 60 HZ, A.C. power circuit. (Motors may be custom wired at the factory for 220 V, 50 Hz international operation.) The amp, hertz, and voltage ratings are listed on the motor spec label found on each machine. Using voltages above or below those indicated on the spec label will damage the motor. Always check your local voltage requirements.



## 1.2 Grounding Instruction

This burnisher must be **grounded** while in use to protect the operator from electrical shock. This floor machine is built with a 3-wire cord and a 3-prong grounding type plug (Figure 1) to fit the properly grounded receptacle.

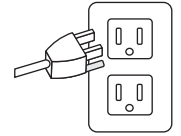


Figure 1

Before using this floor machine, make sure a properly grounded, 3-hole electrical outlet is available. If not, as in some older facilities, use an adaptor for connecting a 3-prong plug to a 2-prong receptacle (Figure 2) to ground to the outlet chassis.

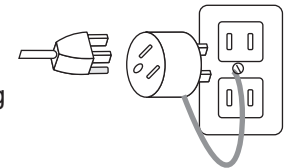


Figure 2

**IMPORTANT!!** This adaptor may not be used in Canada.

**IMPORTANT!!** Never cut off the grounding prong for use in a 2-prong outlet. By doing so, you have cut off your protection from electrical shock.

Never assume that all 3-hole outlets are properly grounded.

Never assume that an adaptor connection (as in Figure 2) is properly grounded. Check the outlet with a **ground fault interrupter device** which quickly indicates if a ground is connected. Correct a faulty grounding before proceeding.

## 1.3 Extension Cords

This floor machine is shipped with a 50 foot (15 M) long safety cord which plugs directly into an approved outlet. The use of an extension cord is not recommended.

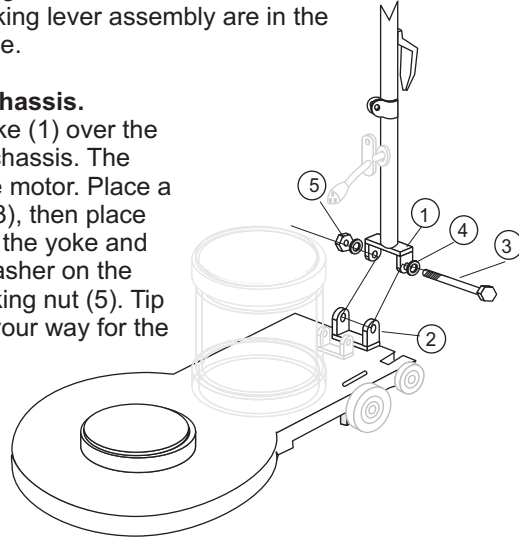
## 2.0 Mount the Handle

This high speed burnisher is shipped from the factory with the handle unattached. You will need two 7/16" wrenches to complete the assembly.

Remove the handle and mounting hardware from its carton. Bolts, nuts, washers and the locking lever assembly are in the plastic bag attached to the handle.

### 1. Mount the handle on the chassis.

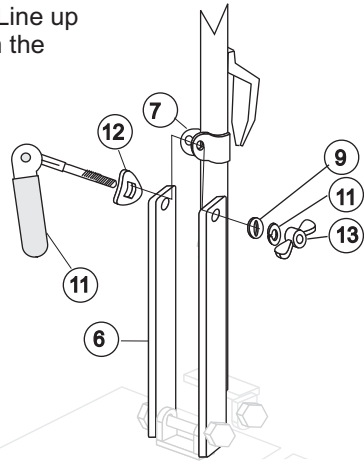
Align the handle with the yoke (1) over the mount (2) on the burnisher chassis. The power cord will be facing the motor. Place a flat washer (4) on a 3" bolt (3), then place the bolt through the holes in the yoke and the mount. Place another washer on the bolt and secure with the locking nut (5). Tip the handle back and out of your way for the next step.



### 2. Mount the support braces on the handle.

Tip the handle up. The handle mounting collar (7) is designed to slide freely up and down the handle tube, allowing the handle to be adjusted for the comfortable operation of all users. Line up the mounting collar with the upper holes in the two straight handle braces (6).

- Place the curved spacer (12) with a square hole onto the locking lever shaft (11). The curve must face the lever.
- Insert the shaft through the upper hole in the left handle brace (6), mounting collar (7), and right handle brace.
- Place a spacer (9) on the shaft.
- Place the split washer (11) on the shaft
- Place the locking wing nut (13) on the shaft.
- Adjust the wing nut for tightness. When correctly installed, the collar slides easily when the cam-engineered locking lever is "up", but is firmly fixed when the lever is "down".

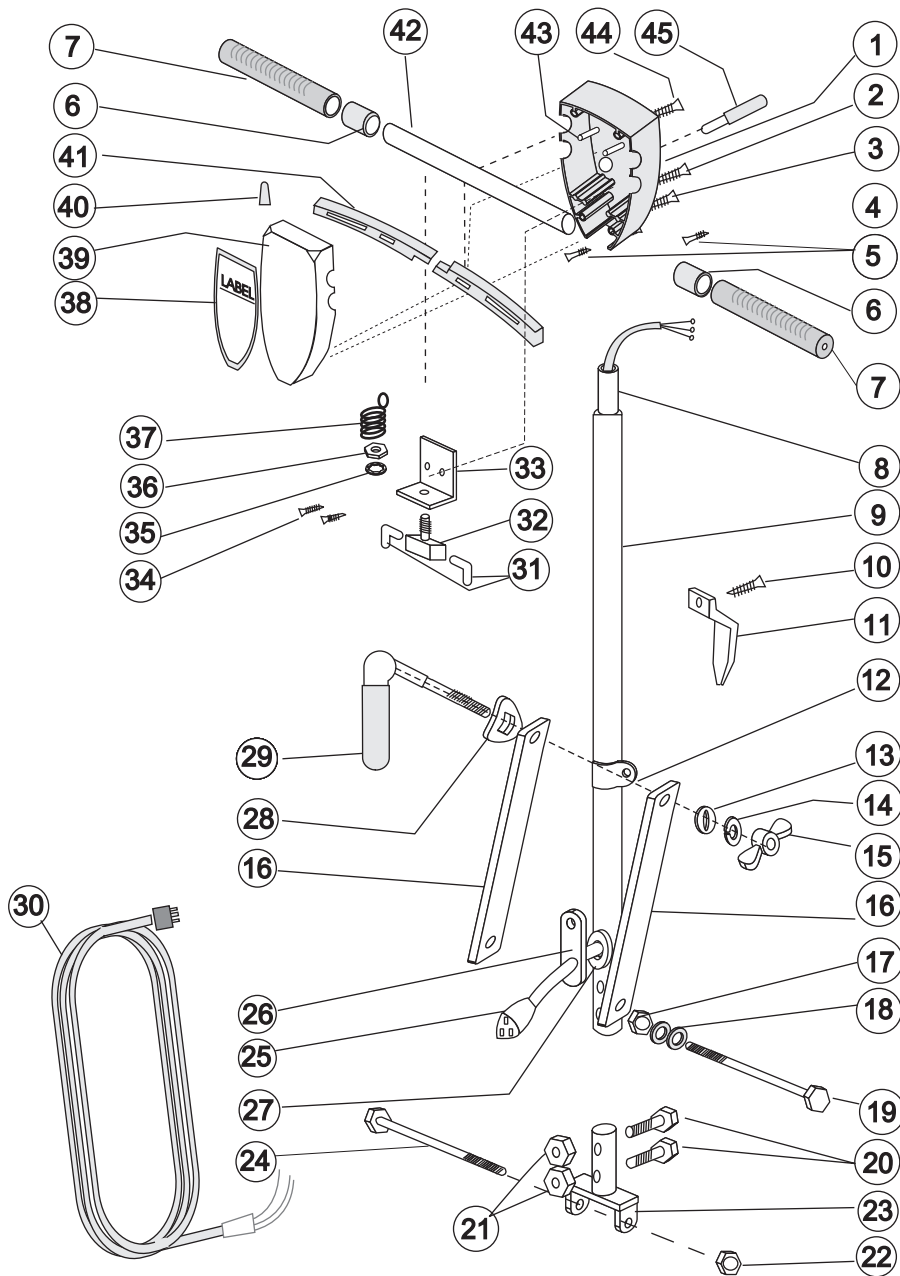


ITEM	DESCRIPTION	PART #	#
1	Switch Box Back Cover	A-104	1
2	Handle Tube Screw	B-23	2
3	Switch Box Closing Screws	B-21	4
4	Strain Relife Clip	M-213	1
5	Switch Plate Screw	B-68	2
6	Rubber Spacer - Yellow	M-218Y	2
7	Hand Grip	M-218	2
8	Handle Tube Insert	M-247	1
9	Handle Tube Assembly	M-206	1
10	Cable Hook Screw	B-2	2
11	Cable Hook	A-164	1
12	Sliding Collar	A-111	1
13	Flat Washer	B-37	1
14	Split Washer	B-39	1
15	Cam Lock Wing Nut	B-25	1
16	Straight Brace	M-233	2
17	Stop Nut	B-10	1
18	Washer	B-28	2
19	Cap Screw	B-9	2
20	Yoke Tube Mount Bolt	B-18A	2
21	Tube Mounting Nut	B-19	2
22	Yoke	A-1001	1
23	Yoke Nut	B10	1
24	Yoke Bolt	B14	1
25	Handle Tube Cable	G-16	1
26	Black Rubber Cable Connector	M-249	1
27	Cable Grommet	B-63	1
28	Rectangular Hole Cam Washer	B-67	1
29	Cam Assembly	C-100	1
29A	Complete Cam Assembly Kit (Includes 1 each Of Drawing Items #13, 14, 15, 28, 29)	CCA	1
30	50 Foot Cable 14/3	G-14-50	1
31	Insulated Flag Wire Connector	G-48	5
32	On-off Switch And Plate Assembly	G-30-AB	1
33	Switch Mounting Plate	G-30-B	1
34	Ground Wire Screw	B-1	2
35	Int. Tooth Lockwasher	B-35	1
36	Flat Hex Nut	B-33	1
37	Trigger Return Spring	G-30-C-T057	1
38	Label - Switchbox	Call For #	1
39	Switch Box Front	A-103	1
40	Wire Nut	G-47	1
41	Triggers	A-105	2
42	16" Crossbar	M-211-A	1
43	Trigger Pins	B-70	2
44	Cross Bar Screw	B-22	2
45	Safety Interlock Assembly	SIA-1	1



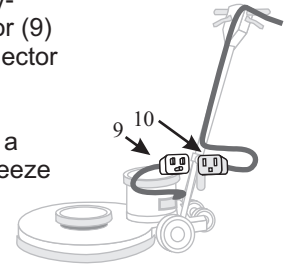
# ULTRA D.C.

1170, 1500 and 2000 RPM  
Models / 1.5 HP  
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## 2.1 Attach the Power Cord

The triple-wire grounded power cord has been factory-installed into the handle tube. Plug the male connector (9) coming out of the motor housing into the female connector (10) coming out of the end of the handle tube.



Now, plug the end of the 50 foot long power cord into a grounded power outlet. Release the safety lever, squeeze the triggers on the handle and check for power to the motor.

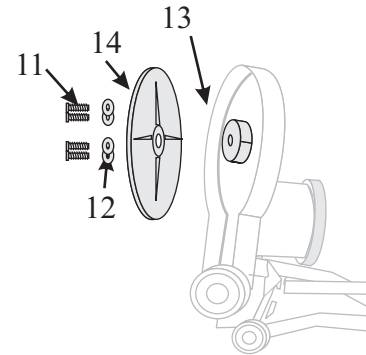
## 2.3 Inspect the Pad Driver

A flexible, high-speed pad driver has been bolted onto the burnishing machine and dynamically balanced. This driver is the connection between the burnisher and a disposable pad that burnishes the hard floor finish. If this molded plastic part ever becomes damaged or if the molded hooks are worn and cannot hold the pad, replace promptly.

Unplug the burnishing machine. Lock the handle in the "up" position and tip the machine back fully.

Remove the 4 mounting screws (11) and washers (12) from the drive hub (13).

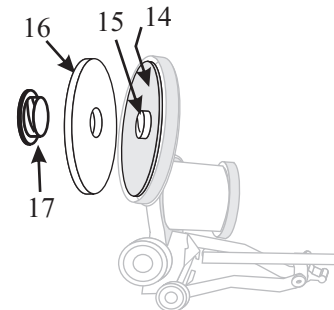
Place the new pad driver (14) onto the main drive pulley. Insert the mounting screws (11) and washer into the bolt hole. Tighten securely.



## 2.4 Install the Pad

The face (bottom) of the pad driver (14) is covered with small "hooks" that grab onto the pad (16). Every time you mount a new pad onto the pad driver, follow these steps:

- Unplug the burnishing machine. Lock the handle in the "up" position and tip the machine back fully.
- Mount the pad (16) over the male shoulder (15) on the pad driver. Make sure that the pad is centered on the driver.
- Insert the locking ring (17) through the center hole in the pad and into the shoulder. Tighten until the locking ring lies below the face of the pad. *If the ring is not fully locked, it will scratch the floor.*

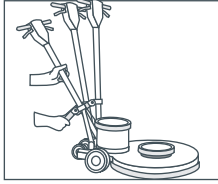


**Never operate the burnisher without a pad.  
Never operate the burnisher with a damaged pad,  
or without a locking ring to hold the pad in place.**

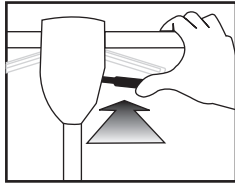
Now, you're ready to go to work!

## 3.0 Operating Tips

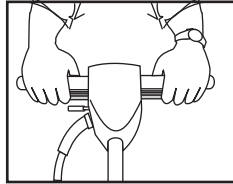
- For indoor use only.
  - Sweep abrasive soils before burnishing.
  - While the pad driver is spinning, keep the burnisher moving to avoid “donut” burns on the floor.
  - To start operation:
    - Unlock the handle by raising the locking lever.
    - Lower the handle to a comfortable position, typically waist height.
    - Relock the handle by pushing the lever down.
- NEVER OPERATE THE MACHINE WITH THE HANDLE UNLOCKED.**
- This burnisher has a high torque motor. Hold the machine firmly with both hands when starting up.
  - Push the red safety interlock switch forward to unlock the dual triggers.
  - Squeeze both triggers to send power to the motor. Once power is on, either trigger will keep power to the motor. To stop, release both triggers.



SET HANDLE HEIGHT



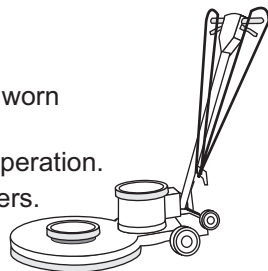
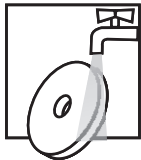
PUSH LOCK FORWARD



SQUEEZE BOTH TRIGGERS

## 3.1 To store your machine

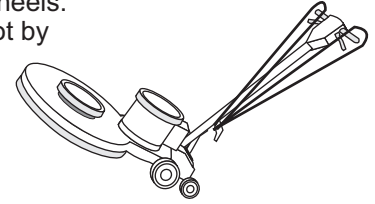
- Lock the handle in the “up” position. Tilt the machine back onto the transport wheels. Never store the machine with the pad on the ground.
- Wind the cord around the handles and the bottom cord hook.
- Wash pads and hang to dry.
- Inspect and maintain equipment on a regular schedule for best results.
  - ✓ Check and clean pads after each operation. Remove soil and chemical buildup. Replace worn or damaged pads.
  - ✓ Check the triggers and switches for proper operation.
  - ✓ Repair or replace damaged skirts and bumpers.
  - ✓ Use air pressure or vacuum to remove dust and debris from the motor vents.
  - ✓ Report any performance problems and repair promptly.



## 3.2 Transport

To transport this machine from the janitor's closet to the work area:

- Lock the handle in the “up” position. Wind the cord around the handles and the bottom cord hook.
- Tip the machine back onto the transport wheels. Push or pull the machine by the handle, not by the cord or any other part of the machine. Travel carefully.



## 4.0 Troubleshooting

Never operate this floor machine when the equipment is not performing as expected or when any part is visibly damaged. The cause and solution for some basic problems are described below. When repair is needed, take the equipment to an authorized repair service center.

### 4.1 Floor machine will not run

- Circuit breaker tripped in building. **Check and reset.**
- Equipment unplugged. **Check plug at wall and at machine base. Plug in.**
- Power cord failure. **Test with a working power cord. Lock the handle up and tip the motor back. Unplug the cord at the motor and plug the motor into your working power cord.**  
**IMPORTANT! THIS IS JUST FOR TESTING. When you do this, you have removed the safety handle controls from the circuit and you are sending power directly to the motor. If the motor now spins, the problem is in the cord or the handle assembly. Seek authorized repair service.**  
**If the motor still does not spin, the problem is either in the male connection at the motor base or in the motor. Seek authorized repair service.**
- Motor sparks or smokes. **Seek authorized repair service.**

### 4.2 Electrical shock to operator

- Equipment wiring failure or electrical short in the machine. **Seek authorized service.**
- Poor grounding or no grounding. **Test the outlet with a ground fault interrupter. Retain a certified electrician to inspect and repair grounding. NEVER clip off the ground plug on your cord.**
- Repeated circuit breaking. **High amp draw and circuit breaking can be an electrical or mechanical problem. Seek authorized repair service.**

### 4.3 High Vibration

- Pad not centered. **Tip machine back and re-center the pad.**
- Unevenly wear or warp to pad or brushes. **Replace.**
- Machine chassis damaged by dropping. **Replace.**