

# Mercury Floor Machines, Inc. New Equipment Warranty



## One-Touch Dry Scrub Floor Machine Model No. DS-18 1 HP, 1725 RPM

### 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.

### 1-Year Motor, 1-Year Service Labor

Mercury Floor Machines, Inc. warrants electric motors on all Mercury Floor Machines to be free from defects in material and workmanship, under normal use and service for one (1) year 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 provider will be covered for ninety (90) days from the purchase date. After this ninety (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 machines 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 must be registered immediately following its purchase. The machine registration form may be completed online at [www.mercuryfloormachines.com/registration.aspx](http://www.mercuryfloormachines.com/registration.aspx) or contact Mercury Floor Machines for a registration card. If proof of purchase cannot be identified, the warranty start date is ninety (90) days after the date of sale to an authorized Mercury Floor Machines, Inc. distributor.



### Mercury Floor Machines, Inc.

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### Design and Engineering Features:

- Heavy-duty, high quality components prepare floors to be refinished in half the time compared to conventional stripping process.
- Chemical-free stripping used for refinishing wood floors and scrubbing.
- Cleans edges and corners in every room – no stripper run-off and no ruined floors under doors.
- Precision balanced weight distribution for safe, even and aggressive cleaning with low vibration.
- Large non-marking wheels for clean transport to protect completed areas.
- Safety enhanced interlock switch on handle leaves both hands conveniently in control.
- Heavy-duty components provide durable and dependable scrubbing.
- No side torque and operates in any direction.
- Ergonomic carrying handle offers operator comfort and safety during transport.
- Convenient handle with dual switch levers for operation with either hand.
- Totally enclosed motor for less maintenance.
- Mercury 6-Quart Backpack attachment for quick and easy clean-up.
- Only takes minutes opposed to hours it takes for an operator to become acquainted with a conventional rotary machine.



*Scrub an  
Entire Floor  
with One  
Machine!*

### Specifications

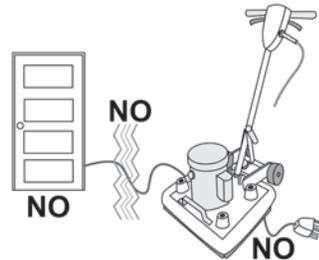
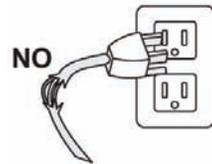
Model No.	DS-18
Cleaning Pad Size	12 in. x 18 in.
Motor	1 HP
Voltage/Frequency	120 V / 60 Hz
Orbital Speed	1725 RPM
Power Cable	(1) 50-Foot, 14/3-Gauge Safety Power Cord
Sound Level	70 dB
Weight	120 lbs.
Warranty	1-Year Motor, 1-Year Service Labor

## 1.0 Safety Instructions

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

### Reduce the Risk of Fire, Electric Shock or Injury:

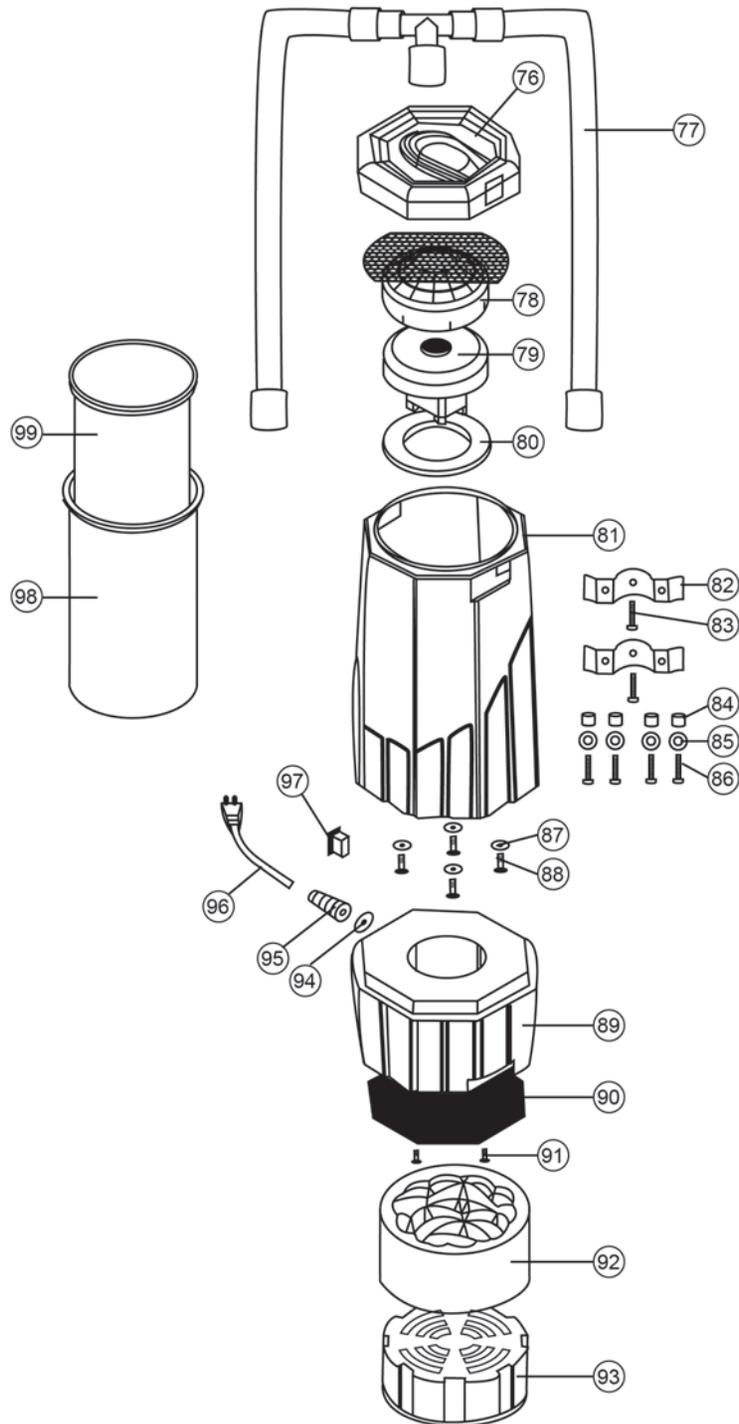
- This floor machine is designed for indoor use only. Do not use outdoors. Do not expose to rain.
- Do not wash the motor with flowing water. If the motor gets wet, seek authorized service.
- Keep the vents on this air-cooled motor free from debris. Do not operate with the motor covered or with vents blocked. Do not use this machine as a floor sander.
- 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 fire.
- Never handle electrical equipment with wet hands. Never operate this machine with bare feet.
- Unplug the machine when not in use and when servicing the equipment. To unplug, grasp the plug not the cord.
- Do not operate a floor machine with damaged handle controls, cord or plug. If the equipment is not performing properly, seek repair from a qualified service supplier.
- This 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 on the cord, drive equipment over it, or run the floor machine over it. Do not expose the cord to hot surfaces. Do not lift, pull or carry this floor machine by the cord.
- Never operate the machine over sharp objects that can be propelled out from under the machine and harm the operator or damage the floor. Sweep hard floors before scrubbing or buffing.
- Train your staff in proper use of this machine.



## 11.0 6-Quart Backpack Parts List

Item No.	Description	Part No.	Qty.
76	6 qt. Backpack Lid - Black	BP-6-L-BLK	1
77	Complete 4" Super Flex Hose with Cuffs 1-1/2" Diameter	10-0036	2
78	HEPA Dome Filter with Bag Support	10-0219-6	1
79	D.P. Motor	10-0346	1
80	Vacuum Motor Gasket	10-0199	1
81	1-Touch Tank - Red	BP-1T-T-Red	1
82	Handle Clamp	PVK1-3M	2
83	Bracket Screw	B-2	2
84	Spacer for BDP-13A	B-65	4
85	Washer	B-37	4
86	Cap Screw	B-31	4
87	1/4" Flat Washer	10-0015	4
88	Motor Screw	10-0014	4
89	1-Touch Base - Black	BP-1T-B-BLK	1
90	6 qt. Deflector Plate	10-0016-6	2
91	Deflector Screw	10-0017	1
92	Sound Dampening Band	10-0018	1
93	6 qt. Dual Cell Noise Filter	10-0019-6	1
94	Strain Relief Nut	10-0027-A	1
95	Pigtail Strain Relief	10-0027	1
96	17" Power Cord	10-0026	1
97	On/Off Switch	10-0025	1
98	6 qt. Cloth Bag for 6 qt. Backpack	10-0007-6	1
99	6 qt. Paper Bags/10 Pack	10-0197	0.1
Not Pictured	Hose Cuff Straight	10-0155	4
Not Pictured	Washer for Rivet 10-0205	10-0204-B	4
Not Pictured	Body Rivet for Backpack	10-0205	4
Complete	One-Touch Vacuum - Black/Red	70-7000	1

## 10.0 6-Quart Backpack Schematic Drawing



### 1.1 Electrical Power

This floor machine operates on a 13 amp, nominal 120 V, 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 floor 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 Instructions

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

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

**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. Check before use.

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 are Never Recommended

The floor machine is built with a 50-foot safety power cord which plugs directly into an approved outlet. Use of any extension cord(s) is **NEVER RECOMMENDED**.

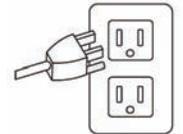
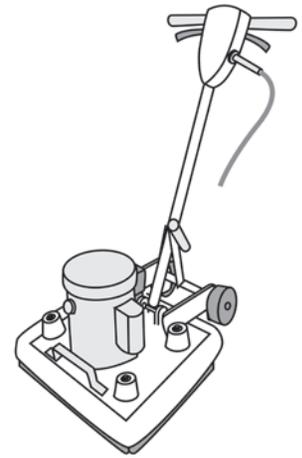


Figure 1

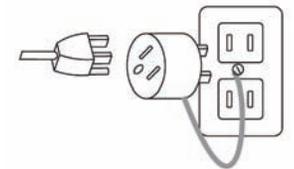


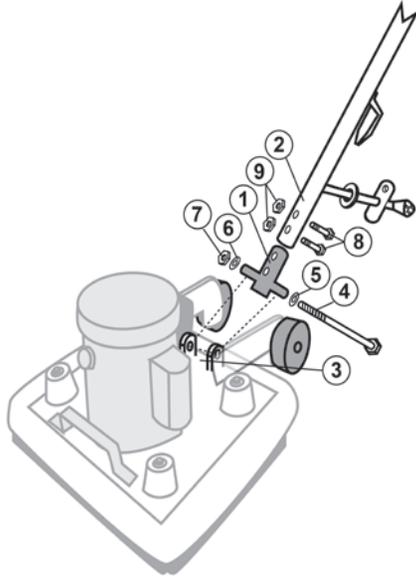
Figure 2

## 2.0 Machine Handle

The floor machine is shipped from the factory with the handle attached. No assembly is required. The following instructions detail how to reattach the handle if the handle or parts need to be replaced. You will need two (2) 7/16" wrenches to complete the assembly.

### 1. Mount the handle to the chassis:

Slide the yoke (1) into the handle tube assembly (2). Align the two vertical holes in each part. Slide a yoke bolt (8) through each hole and secure a yoke nut (9) onto the end of each bolt. Place the connected yoke and handle tub assembly into the brackets on the machine base (3). Slide a nylon flat washer (5) onto the yoke pin screw (4). Insert the yoke with washer into the first bracket hole, then yoke and out through the second bracket hole. Slide a second nylon flat washer (6) onto the end of the yoke pin screw (7) and tighten a yoke nut to the end of the yoke pin screw.

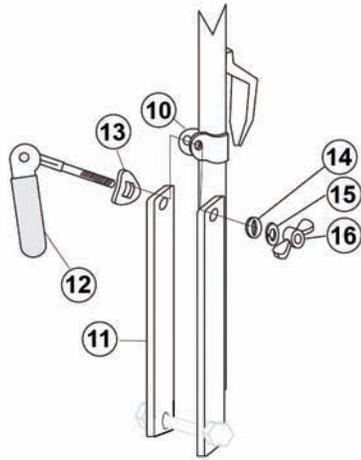


### 2. Mount the support braces on the handle:

Tip the handle up. The handle mounting collar (10) 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 (11).

### 3. Complete handle assembly:

- Place the curved spacer (13) with a square hole onto the locking lever shaft (12). The curve must face the lever.
- From behind the machine, insert the shaft through the right handle brace (11), the mounting collar (10) and the left handle brace.
- Place a spacer (14) on the shaft.
- Place the split washer (12) on the shaft.
- Place the locking wing nut (15) 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."



## 9.0 6-Quart Backpack Troubleshooting Guide

**CAUTION:** Always disconnect power cord before servicing vacuum.

**WARNING:** Repairs should only be performed by an authorized service center.

### PROBLEM: Loss of vacuum

CAUSE	SOLUTION
Cap is damaged	Inspect and replace if needed
Faulty vacuum motor	Call manufacturer or service center
Full paper bag filter	Replace paper filter bag
Clogged hose or wand	Remove obstruction
Loose or broken fan	Call manufacturer or service center

### PROBLEM: Motor is not running

CAUSE	SOLUTION
Faulty on/off switch	Call manufacturer or service center
Power cord defective	Call manufacturer or service center
Loose connection or wiring	Call manufacturer or service center
Motor defective	Call manufacturer or service center
Blown fuse or tripped circuit breaker	Replace fuse or reset circuit breaker

### PROBLEM: Dust blowing from vacuum when running

CAUSE	SOLUTION
Full paper bag	Replace filter bag
Paper filter bag not installed properly	Reinstall or replace paper filter bag properly
Cloth filter bag is dirty	Clean cloth filter bag
Cloth or paper filter bag is torn	Replace

## 8.0 6-Quart Backpack Operation Instructions

### PREPARATION AND OPERATION. DRY ONLY!

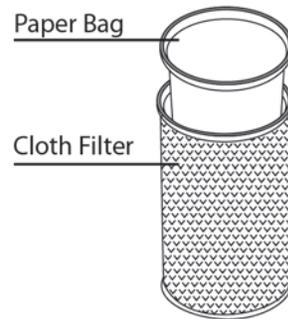
The 6-quart backpack is attached to the floor machine when shipped from the factory. No assembly is required. This vacuum is equipped with an air-thru motor and is designed for dry pickup only.

### Getting Started:

Make sure your on/off switch is in the OFF position. Remove lid and check to make sure you have both a cloth filter bag and paper filter bag in place. Secure lid back onto the vacuum body, tightening securely. Both bags must be used at all times. Any damage resulting from the lack of using both bags will not be covered under warranty.

### To Change Paper Filter Bag:

1. Unscrew lid from body.
2. Remove full paper bag from the tank and dispose of properly.
3. Take new paper filter bag and set inside cloth filter bag, expanding it to the sides of the cloth filter bag.
4. Screw lid tightly back onto body.



### Cloth Filter Maintenance:

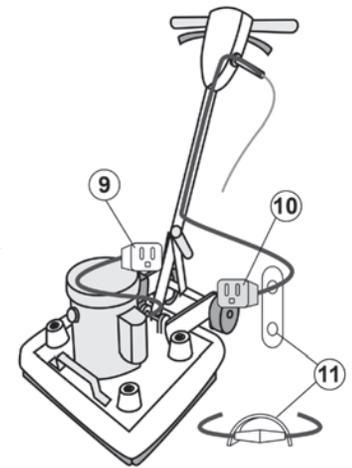
The cloth filter should be inspected and cleaned each time you empty the tank. DO NOT wash the cloth filter. It could cause shrinkage of the cloth and damage to the gasket. Simply shake off any dust or loose particles and brush the exposed surface with a soft bristle brush.

## 2.1 Attach the Power Cord

The triple-wire grounded power cord has been factory-installed into the handle tube. A flexible rubber cable connector (11) is used to secure the plug-in connections. The floor machine ships with this connector mounted on the cord coming out of the handle (10).

Stretch the connector and slip the male connector (9) (coming out of the motor housing) through the connector hole and then into the female connector.

Plug the end of the 50-foot power cord into a grounded power outlet. Squeeze the triggers on the handle and check for power to the motor.



## 2.2 Install the Pads

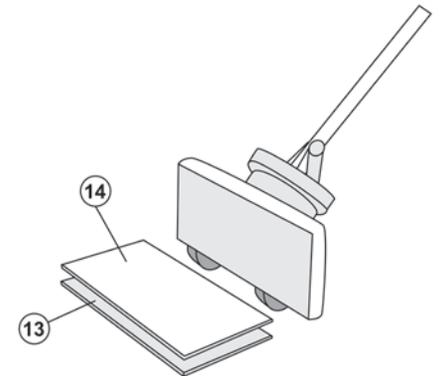
Unplug the floor machine. Lock the handle in the "up" position and tip the machine back fully.

First, place the maroon-colored Stripping Pad (13) onto the floor, below the foot of the machine. Next, place the Filler Pad (14) directly on top of the maroon-colored stripping pad.

**WARNING:** The Filler Pad must be used when using this machine. The Filler Pad helps reach into depressions and variations in the floor's surface. Also, as the Stripping Pad wears, the Filler Pad protects the floor from scratching by the machine's base plate.

Tip the machine towards the pads and maneuver the machine so that the pads are aligned directly below of the bottom plate. Place the machine base onto the pads, ensuring the entire stack of pads are tucked underneath the machine base, and tip the machine into the upright position.

The machine is now ready for operation.

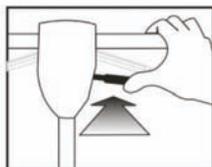
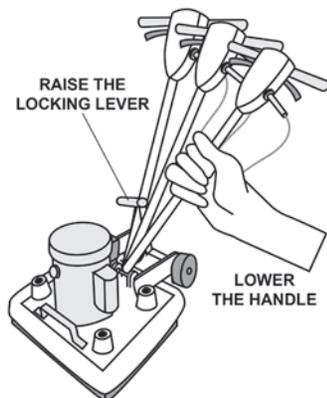


### 3.0 Operating Tips

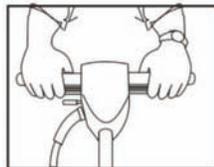
- For indoor use only. Sweep abrasive soils before using machine.
- While the pad driver is moving, keep the machine moving to avoid burns on the floor.

#### 3.1 To Start Operation:

- Unlock the handle by raising the locking lever.
- Lower the handle to a comfortable position, typically waist high.
- Relock the handle by pushing the lever down. **NEVER OPERATE THE MACHINE WITH THE HANDLE UNLOCKED.**
- 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 power the motor. Once power is on, either trigger will keep power to the motor. To stop, release both triggers.



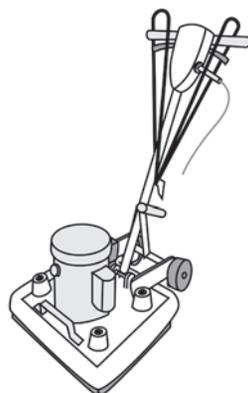
PUSH LOCK FORWARD



SQUEEZE BOTH TRIGGERS

#### 3.2 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.
- 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.
- Wash pads and hang to dry.
- Check triggers and switches for proper operation.
- Use air pressure or vacuum to remove dust and debris from the motor vents.
- Report problems and repair promptly.



### 7.0 Parts List Continued

Item No.	Description	Part No.	Qty.
46	17.875" x 12" Pad with Holes	MCPAD	1
47	Aluminum Plate	AP-01	1
48	3/8 x 16 x 1 Socaet Head Screw	DS-FHS	1
49	Motor Shaft Washer	DS-TFWZP	4
50	Motor Shaft Key	DS-R59	1
51	Motor Bolt	DS-R58	4
52	Rubber Bushing	RB-01	8
53	1/4-28 x 51/2" Hex HD Cap Screws	DS-HHCS	4
54	Rubber Inner Tower Spacer	DS-R23	8
55	Rubber Tower Spacer	DS-R22	8
56	Thick Flat Washer	DS-FWPS	8
57	Acorn Cap Nits	DS-NSAC	4
58	Motor, 1 HP 115/230 V, 60 HZ	MOTOR/DRY SCRUB	1
59	Cable Strain Relief	G-66P	1
60	Pigtail with Female Outlet	G-15ACF	1
61	Twist Lock - Male	DS-R63	1
62	Motor Cord	DS-R62	1
63	Metal Wire Holder	DS-R61	1
64	Motor Bell	DS-R64	1
65	Capacitor Box	DS-R65	1
66	Motor Capacitor	DS-R66	1
67	Capacitor Box Fastener	DS-R67	1
68	Machine Base	DS-IRONCW	1
69	Flywheel	FW-01	1
70	Dry Scrub Bearing	DSBR-02	2
71	Bearing Sleeve	BS-01	1
72	Rubber Spacer	B-5	2
73	5" Rubber Wheel	M-260	2
74	Axel	B-14	2
75	Dust Ports	PVC-Pipe 1 1/2"	2
76	Skirt w/ Brush	MCSKIRT	1
77	Thumb Screw	B-96	5
78	3/8 Flat Washer	B-28	8
79	Nut	B-10	2
Not Pictured	Filler Pad	42071218	1
Not Pictured	Maroon Stripping Pad	40441218	1
Not Pictured	2" Velcro Strips for DS-18	V-CRO Pad	1

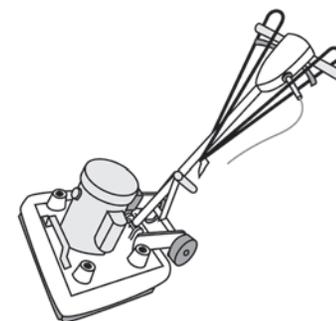
## 7.0 Parts List

Item No.	Description	Part No.	Qty.
1	Trigger Pins	B-70	2
2	Switch Box Back Cover	A-104-S	1
3	Cross Bar Screw	B-22	2
4	Safety Interlock Assembly	SIA-1	1
5	Handle Tube Screw	B-23	2
6	Switch Box Closing Screws	B-21	4
7	Strain Relief Clamp - Black	M-213	1
8	Black Hand Grip - Red Band	M-218-R	2
9	Ground Wire Screw	B-68	2
10	Handle Tube Insert	M-247	1
11	Handle Tube with Yoke Plated	M-206	1
12	Cable Hook Screw	B-2	2
13	Cable Hook	A-164	1
14	Cam Assembly	C-100	1
14a	Complete Cam Assembly (Includes 1 each of Drawing Items #13, 14, 15, 28, 29)	CCA	1
15	Rectangular Hole Cam Washer	B-67	1
16	Straight Brace	M-233	2
17	Flat Washer	B-37	1
18	Split Washer	B-39	1
19	Cam Lock Wing Nut	B-25	1
20	Sliding Collar	A-111	1
21	Cable Grommet	B-63	1
22	Black Rubber Cable Connector	M-249	1
23	Handle Tube Cable	G-16	1
24	PVC Axel Sleeve 1" Diameter	DS-PVC SLEEVE	1
25	Hub Caps	V0038	2
26	Spring Washer	B-51	2
27	9" Axel	M-217	1
28	Yoke Bolt	B-18A	2
29	Yoke Pin Screw	B-14	1
30	Nylon Flat Washers	DS-NFW	2
31	Yoke	DS-Yoke	1
32	Yoke Nut	B10	1
33	Yoke Nut	B-19	2
34	50-Ft., 14/3-Gauge Power Cord - Red	G-14-50/R	1
35	Switch Mounting Plate	G-30-B	1
36	On-off Switch and Plate Assembly	G-30-AB	1
37	Insulated Flag Wire Connector	G-48	5
38	Switch Plate Wire Screw	B-1	2
39	Int. Tooth Lock Washer	B-35	1
40	Flat Hex Nut	B-33	1
41	Trigger Return Hook Spring	G-30-C-T057	1
42	Label - Switchbox		1
43	Switch Box Front	A-103	1
44	Wire Nut	G-47	1
45	Trigger	A-105	2
46	16" Crossbar	M-211-A	1
Complete	Complete Handle Assy. w/ 50 Ft. Cord - Red	M-100-50-R	1

## 3.3 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 machine when the equipment is not performing as expected or when any parts are 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 Machine will not Run:

- Circuit breakers are tripped in the building. *Check and reset.*
- Equipment is 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 of the handle assembly. *Seek authorized repair service.*

If the motor still does not work, 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.*

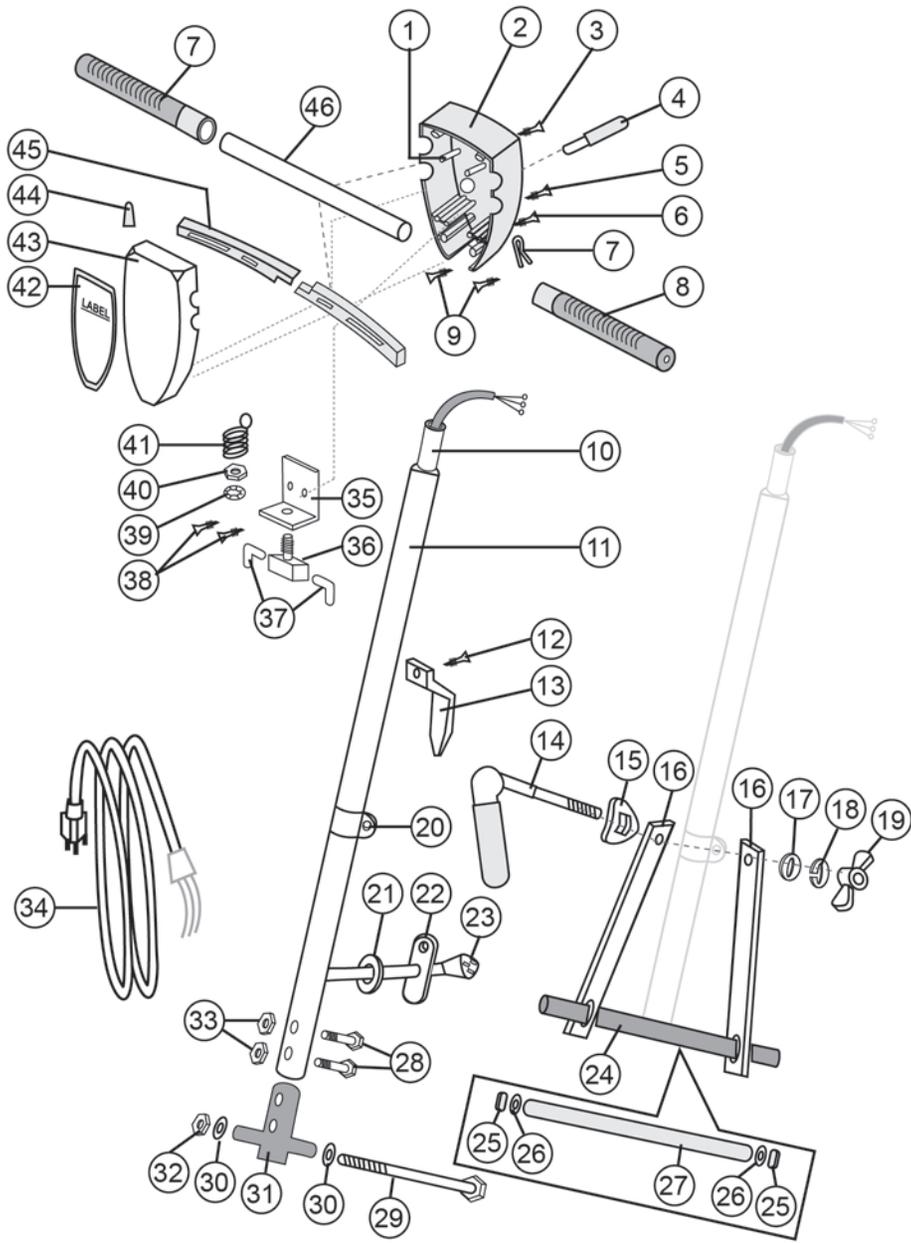
### 4.2 Electrical Shock to Operator:

- 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 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:

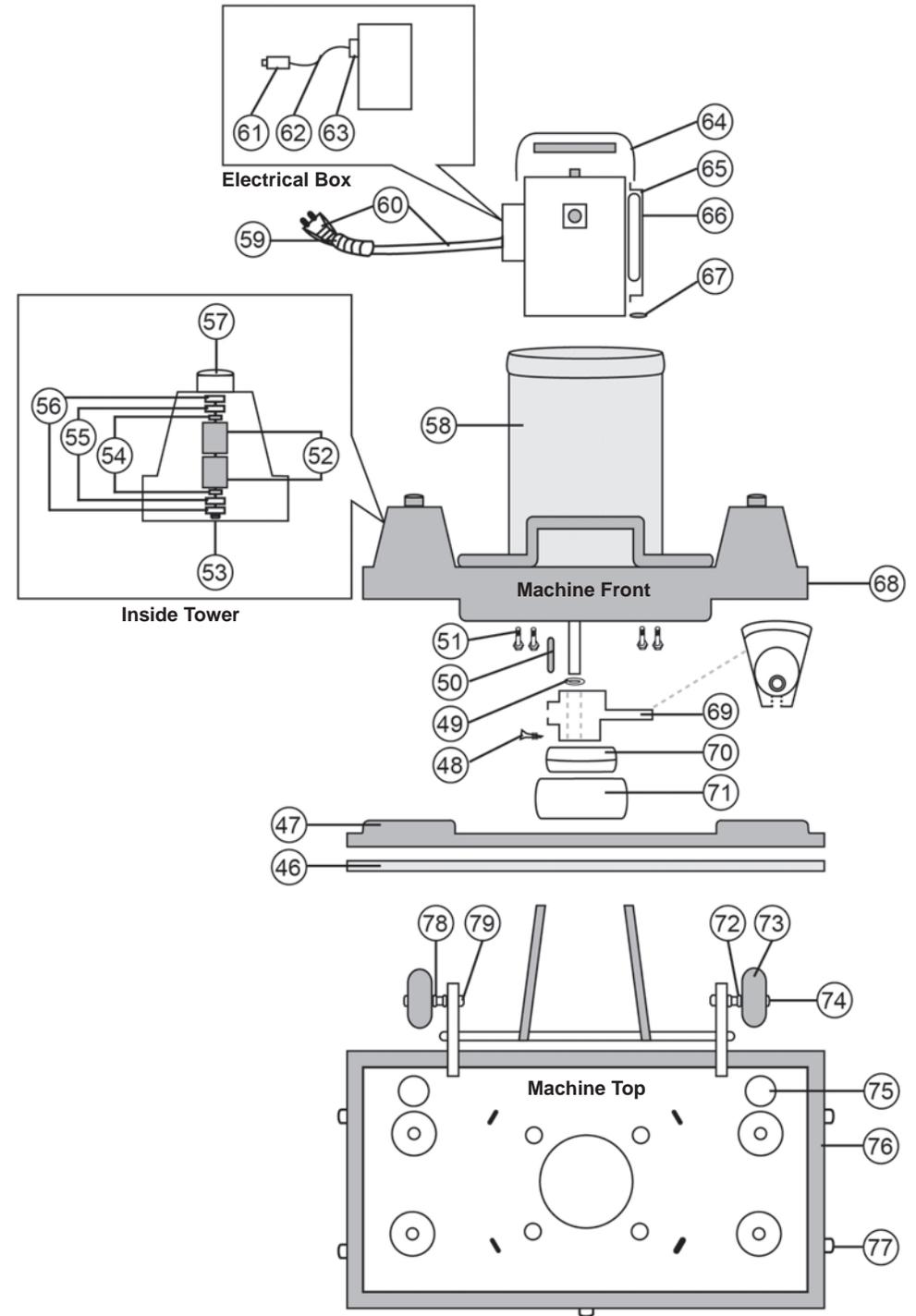
- Pads are not centered on the pad driver. *Tip machine back and re-center the pad.*
- Uneven wear or warp to pad or brushes. *Replace.*
- Machine chassis is damaged by dropping. *Replace.*

## 5.0 Handle Schematic Drawing



(8) Dry Scrub Floor Machine

## 6.0 Machine Schematic Drawing



Dry Scrub Floor Machine (9)