

Operating & Maintenance Instructions

The Bull Dog™ 351



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Rev. 05/05 ca

INDEX

	Page
INDEX	1
NOTICE- READ BEFORE USING MACHINE	2
OPERATION INSTRUCTIONS	3
SOLENOID ATTACHMENT DIAGRAM	4
VACUUM ATTACHMENT DIAGRAM	4
EXPLODED VIEW	5
PARTS LIST	6
BELT REPLACEMENT INSTRUCTIONS	7
TOP BRUSH REPLACEMENT INSTRUCTIONS	7
BOTTOM BRUSH REPLACEMENT INSTRUCTIONS	7
SIDE BRUSH REPLACEMENT INSTRUCTIONS	7
ELECTRICAL DIAGRAM	8
INSTRUCTIONS FOR ATTACHING SOLENOID VALVE	8
INSTRUCTIONS FOR ATTACHING VACUUM CLEANER	8
MAINTENANCE OF COVER	9
REPLACEMENT PARTS	9
ON SITE REPAIR	10
WARRANTY	11

NOTICE

PLEASE READ FIRST BEFORE USING MACHINE

When used properly, your Liberty Shoe Brush Machine is designed to deliver the most effective and efficient power cleaning of footwear available. In order to do this, the motorized brushes must spin at a moderate rate of speed and care must be taken to use the machine correctly.

For maximum performance please note the following:

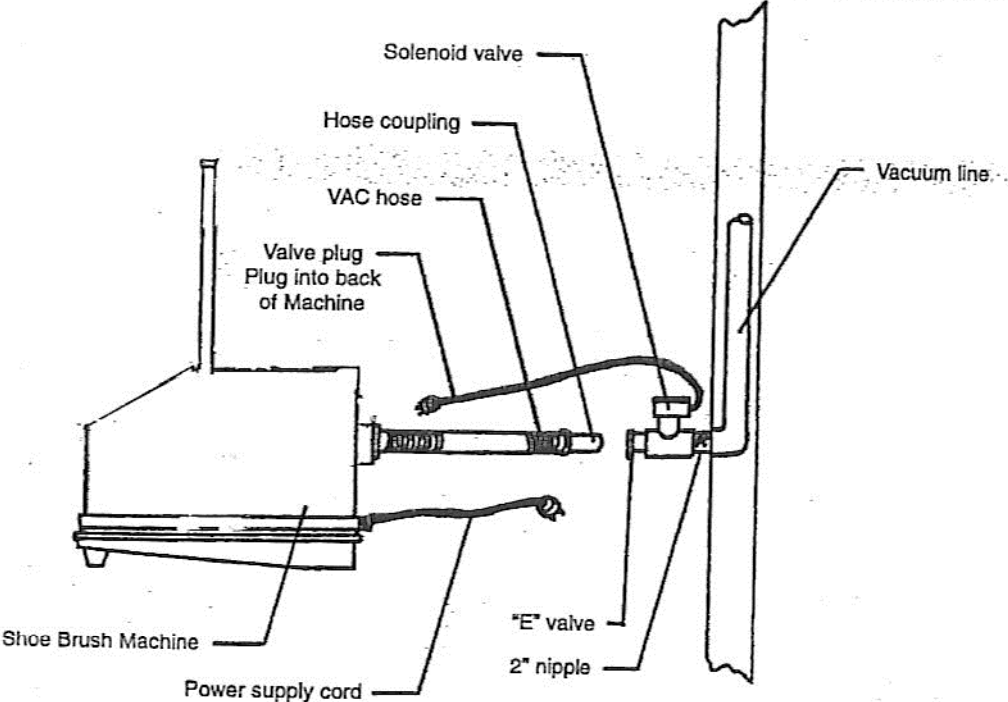
- 1** Shoes **must** be tightly and securely laced and tied. Long hanging laces can be caught on the brushes as they spin thus causing a problem for the user of the machine.
- 2** Nylon stocking, “fashion” shoes, **must not** be used in the shoe brush machine. (Examples: open toed shoes, high heels, canvas or sneaker style footwear and shoes with tassels.)
- 3** Read this manual before using the Shoe Brush Machine. **Important** information for unpacking and handling is included.
- 4** Unplug unit prior to taking the cover off for replacing any parts.
- 5** Shoe Brush Machine is intended for indoor use.

OPERATING INSTRUCTION FOR THE BULL DOG™ SHOE BRUSH MACHINE

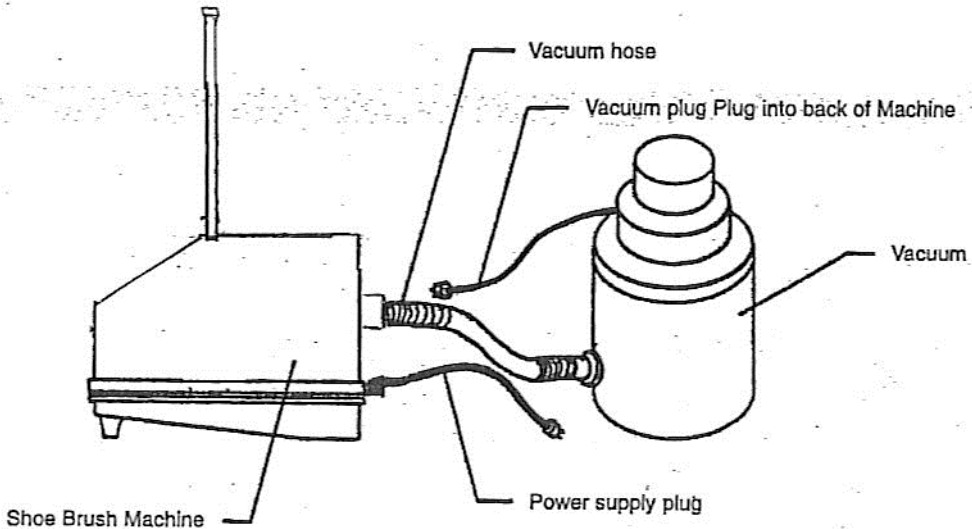
- Step 1.** Read entire manual carefully.
- Step 2.** Connect machine to proper voltage.
- Step 3.** Connect vacuum or solenoid valve by following the attached instructions.
- Step 4.** Stand as close to machine as possible.
- Step 5.** Hold handle, press switch and hold.
- Step 6.** Insert shoe as far as possible, withdraw and repeat.
- Step 7.** After completed the 2nd shoe, release switch.

Thank you,
Liberty Industries Management

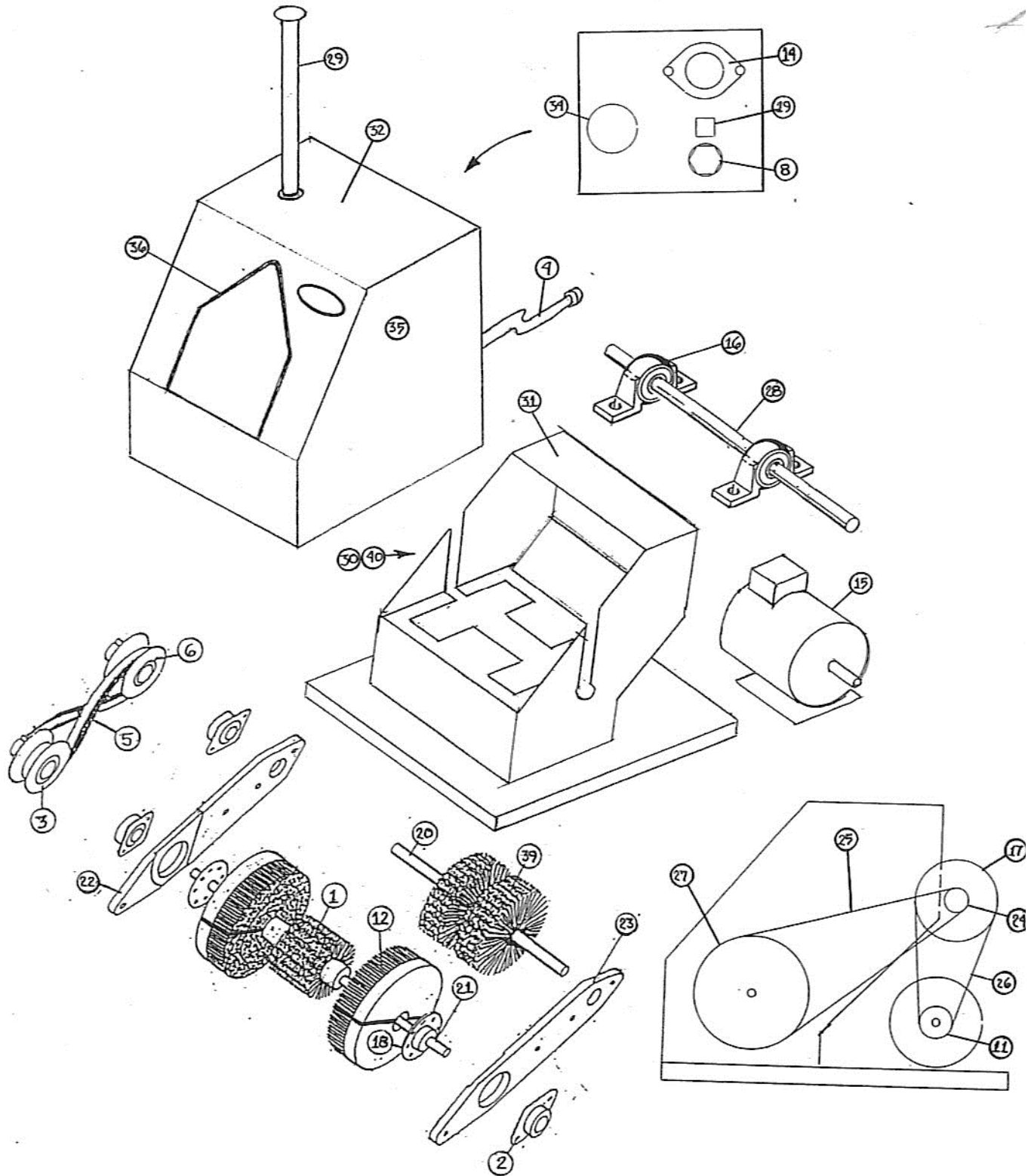
SOLENOID ATTACHMENT INSTRUCTIONS



VACUUM ATTACHMENT INSTRUCTIONS



EXPLODED VIEW



PARTS LIST BULL DOG™

Liberty Shoe Cleaner Model 351

Model # and Serial # must be noted when ordering parts

If ordered without serial number the responsibility of the incorrect part remains with the buyer.

351#	Inv. No.	Description	No. Req'd
1	20-2103	Bottom Brush	1
2	20-2122	Pillow Block	3
3	20-2221	3" V Belt Pulley	1
4	20-2117	Cord	1
5	20-2225	Round Belt	1
6	20-2215	4" V Belt Pulley	1
7	20-2139	10-24 Threaded Rod	1
8	20-2195	Nylon Relief Strain	4
9	20-2391	Separator Pulley bracket	1
10	20-2390	Separator Pulley	1
11	20-2128	Sheave, Bottom Drive	1
12	20-2419	Split Side Brushes (set = 2 halves)	2
13	20-2112	Rubber Grommet	1
14	20-2116	Outlet, Electrical	1
15	20-2118	¼ hp Electric Motor	1
16	20-2123	Pillow Block	2
17	20-2129	Sheave ,Top Driven	1
18	20-2263	Side Brush Hubs for D Shape Shaft	2
19	20-2352	15 amp Breaker	1
20	20-2354	Top Brush Shaft	1
21	20-2274	Bottom Brush Shaft	1
22	20-2224	Brush Arm, Left	1
23	20-2253	Brush Arm, Right	1
24	20-2412	Sheave, Top Drive	1
25	20-2413	Belt, 4L430	1
26	20-2414	Belt, 4L290	1
27	20-2415	Sheave, Bottom Brush	1
28	20-2416	Pillow Block Shaft	1
29	20-2417	Stainless Steel Handle	1
30	20-2418	Switch Housing Assembly	1
31	20-2310	Motor Housing	1
32	20-2410	Cover, Stainless Steel	1
33	20-2282	Stainless Steel Hose Clamp	2
34	20-2162	Hose, 101-3	1'
35	20-2411	Nameplate	1
36	20-2420	Single Lip Trim	2.5'
37	20-2405	Slot Cover LH	1
38	20-2421	Slot Cover RH	1
39	20-2105	Top Brush	1
40	20-2234	Switch Micro	1

GENERAL MAINTENANCE

It is suggested that at least once a week the cover be removed and all dirt and heavy matter be vacuumed from base of machine.

REPLACEMENT OF BELTS

Replacement of Motor Belt

1. Unplug electrical cord.
2. Unscrew cover from based and remove cover.
3. All belts are “roll off”, “roll on”. No removal of pulleys is required.
4. Belt tensioning, if required, is accomplished by adjusting the rear shaft pillow blocks.
5. Replace cover and re-plug the electrical cord.

REPLACEMENT OF BRUSHES

Replacement of Top Brush

1. Unplug electrical cord.
2. Unscrew cover from base and remove cover.
3. Remove the round belt and pulley.
4. Loosen set screws (do not remove) on pillow blocks.
5. Pull aluminum arms off shaft and remove top brush assembly.
6. Remove set screws from upper brush and replace.
7. Reassemble in reverse order.

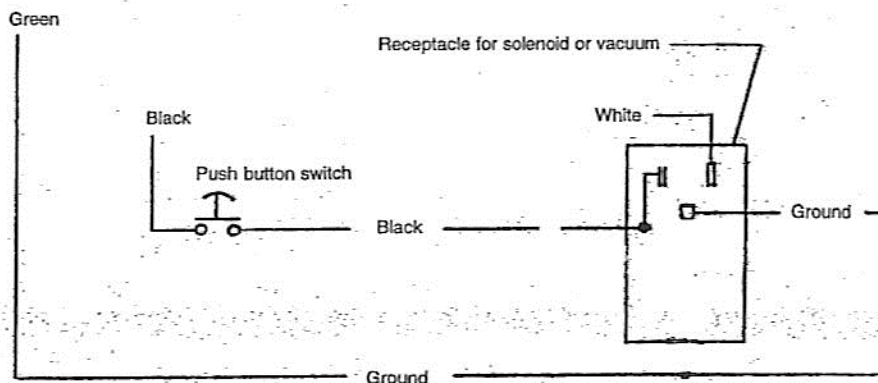
Replacement of Bottom Brush

1. Unplug electrical cord.
2. Unscrew cover form base and remove cover.
3. Remove round belt and pulley.
4. Remove V-belt and pulley.
5. Remove the side plate slot covers.
6. Remove 10-24 nuts off threaded bearings.
7. Pull aluminum brush arms from bearings.
8. Pull 5/16 bolts from pillow blocks and remove from shaft.
9. Remove lower brush assembly from unit and remove side brushes.
10. Replace bottom brush and reassemble by reversing steps.

Replacement of Two Piece Side Brushes

1. Follow steps 1 & 2 above.
2. Loosen and remove side plate slot covers.
3. Rotate the two piece side brushes until the screws appear in the side plate slots.
4. With a screwdriver remove the four screws (two per half) holding the side brushes to the cast hub.
5. After removing the side brushes replace each half by refastening the two screws into the cast hub.

ELECTRICAL DIAGRAM



INSTRUCTIONS FOR ATTACHING SOLENOID VALVE

See Diagram # 1, Page 4

1. Remove "E" valve which is generally used at a wall connection.
2. Connect 2" threaded pipe to vacuum system.
3. Connect solenoid valve to 2" threaded connector.
4. Connect "E" valve to solenoid valve.
5. Plug vacuum hose into "E" valve and clamp other end to Shoe Brush Machine.
6. Plug solenoid valve into electrical box located on Shoe Brush Machine.
7. System is ready for operation

INSTRUCTIONS FOR ATTACHING VACUUM CLEANER

See Diagram # 2, Page 4

1. Attach end of vacuum hose over connection on base of Shoe Brush Machine with hose clamp.
2. Attach other end of vacuum hose into vacuum tank.
3. Plug vacuum cord into electrical box on back of Shoe Brush Machine
4. Turn switch on vacuum to "on" position.
5. System is ready for operation

NOTE: Vacuum will only operate with operation of the push bottom on the Shoe Brush Machine.

Replace bags and filters in the vacuum system periodically for peak operating efficiency.

MAINTENANCE

To keep the unit looking clean, we recommend the use of a stainless steel cleaner for maintenance of all exterior and interior parts.

If not maintained properly, the exterior parts may over a period of time become covered with dirt, grease and grime in such a way that the surface grime will eventually become unremovable.

Along with a good interior vacuuming, we suggest a thorough weekly cleaning using a stainless steel cleaner inside and out.

Use a Tacky Mat ® in front of machine to catch small particulate matter when stepping down or up.

If the above suggestions are followed, your machine will look newer longer and provide you with years of trouble free service.

REPLACEMENT KIT

Consists of:

1 set of brushes	(4)
1 set of belts	(3)
1 set of wrenches for socket head screws	(4)

Shoe Brush Machine Rebuilding – quoted upon request and evaluation.

SERVICE & PARTS

Always use factory replacement parts to insure optimum performance

For Factory authorized service and parts please contact our customer service department at Phone: 860-828-6361 or Toll Free at 800-828-9595, Fax 860-828-8879.

Use only original replacement parts manufactured by Liberty Industries, Inc., 133 Commerce Street, East Berlin, CT 06023. Substitutions may lead to malfunction, abnormal wear or consequential damage to your new shoe cleaning machine.