

Castex®

HS-1100/HS-1500/HS-1900

High Speed Floor Machine

U.S. PATENT NO.: D.343,932 & D.345,035

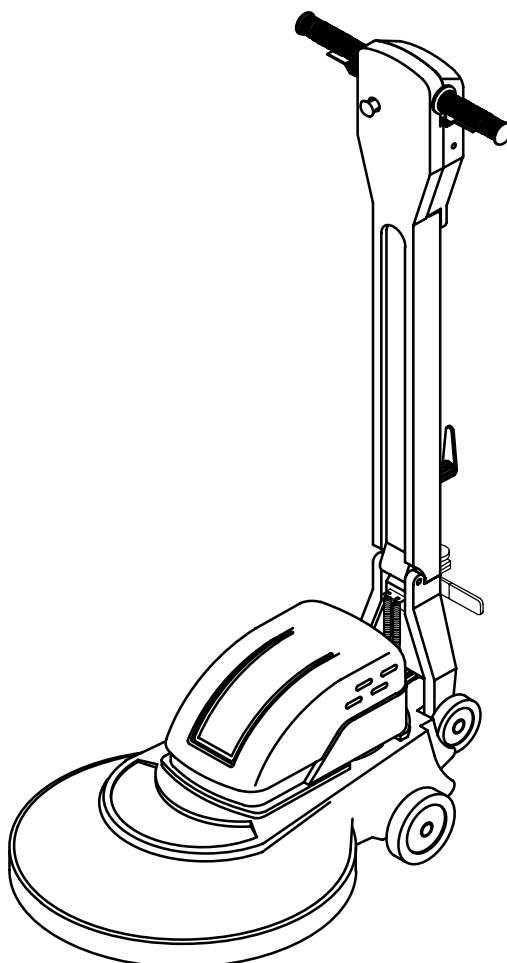
Model No.:

608250 – HS-1100

607364 – HS-1500

607365 – HS-1900

Operator and Parts Manual



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607368
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OPERATION

This manual is furnished with each new model. It provides necessary operation and maintenance instructions.

Read this manual completely and understand the machine before operating or servicing.

This machine will provide excellent service. However, the best results will be obtained at minimum costs if:

- The machine is operated with reasonable care.
- The machine is maintained regularly - per the machine maintenance instructions provided.
- The machine is maintained with manufacturer supplied or equivalent parts.

MACHINE DATA

Please fill out at time of installation for future reference.	
Model No.-	_____
Install. Date -	_____
Serial No.-	_____

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SAFETY PRECAUTIONS

This machine is intended for commercial use. It is suited to burnish floors in an indoor environment and is not constructed for any other use. Use only recommended burnishing pads.

The following safety alert symbols are used throughout this manual as indicated in their description.

⚠ WARNING: To warn of hazards or unsafe practices which could result in severe personal injury or death.

FOR SAFETY: To identify actions which must be followed for safe operation of equipment.

The following information signals potentially dangerous conditions to the operator or equipment:

FOR SAFETY:

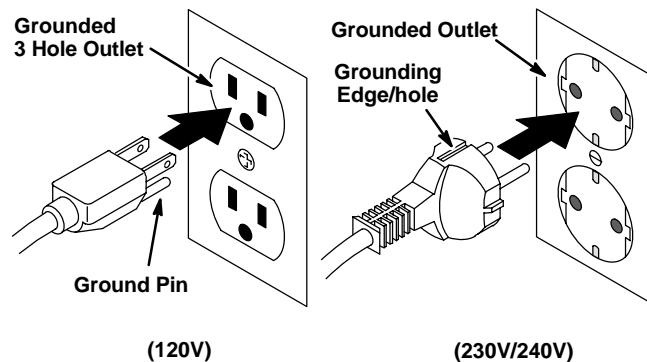
1. **Do not operate machine:**
 - Unless trained and authorized.
 - Unless operator manual is read and understood.
 - In flammable or explosive areas unless designed for use in those areas.
 - Unless cord is properly grounded.
 - With damaged cord or plug.
 - If not in proper operating condition.
 - In outdoor areas.
 - In standing water.
 - With the use of an extension cord.
2. **Before operating machine:**
 - Make sure all safety devices are in place and operate properly.
3. **When using machine:**
 - Do not run machine over cord.
 - Do not pull machine by plug or cord.
 - Do not pull cord around sharp edges or corners.
 - Do not unplug by pulling on cord.
 - Do not stretch cord.
 - Do not handle plug with wet hands.
 - Keep cord away from heated surfaces.
 - Do not release handle grips until pad comes to a complete stop.
 - Go slow on inclines and slippery surfaces.
 - Report machine damage or faulty operation immediately.

4. **Before leaving or servicing machine:**
 - Turn off machine.
 - Unplug cord from wall outlet.
5. **When servicing machine:**
 - Unplug cord from wall outlet.
 - Avoid moving parts. Do not wear loose jackets, shirts, or sleeves.
 - Use manufacturer supplied or approved replacement parts.

⚠ WARNING: Hazardous Voltage. Shock or electrocution can result. Unplug machine before servicing.

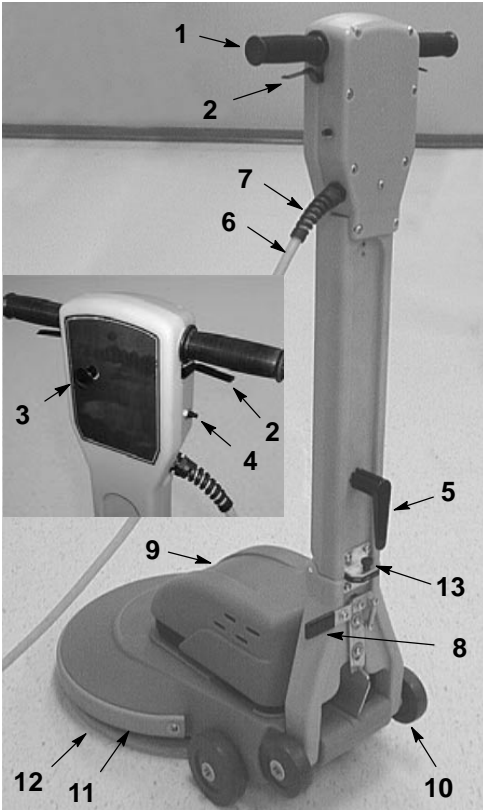
GROUNDING INSTRUCTIONS

Machine must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electrical shock. This machine is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed in accordance with all local codes and ordinances. Do not remove ground pin; if missing, replace plug before use.



OPERATION

MACHINE COMPONENTS



1. Control Handle Grips
2. Control Triggers
3. Safety Lock Button
4. Circuit Breaker Button
5. Quick Release Power Cord Hook
6. 23 m (75 ft) Power Cord
7. Cord Grip
8. Handle Release Foot Lever
9. Motor Cover
10. Transport Wheels
11. Pad Driver
12. Burnish Pad
13. Handle Lock Knob

MACHINE SETUP

1. Carefully check carton for signs of damage. Report damages at once to carrier.
2. Unfold handle to the upright position and lock handle using the handle lock knob (*Figure 1*).



FIG. 1

3. Install burnishing pad, with handle locked in the upright position, carefully tilt machine back on handle.
4. Remove centerlock from pad driver. Position burnishing pad on pad driver and replace centerlock securely (*Figure 2*).

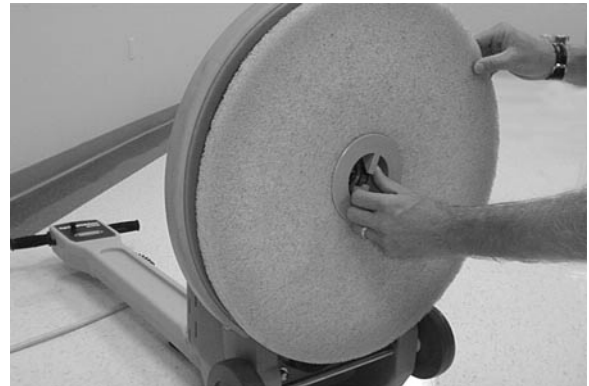


FIG. 2

NOTE: Burnishing pads are sold separately. Consult your authorized distributor for pad recommendations.

Pad Specifications:

- For 2000 RPM Burnishing.
- 25 mm (1.0 in) Thickness
- 510 mm (20 in) diameter with 90 mm (3.5 in) center hole.

NOTE: Spray buffing is only recommended with the 1100 model. The 1500/1900 models should not be used for spray buffing; circuit breaker may trip or machine overloading may occur. The 1500/1900 models require more power at increased amp draw due to higher speeds.

- Return machine to upright position after pad is installed.
- For easy power cord removal, pull and turn cord hook upward (Figure 3).

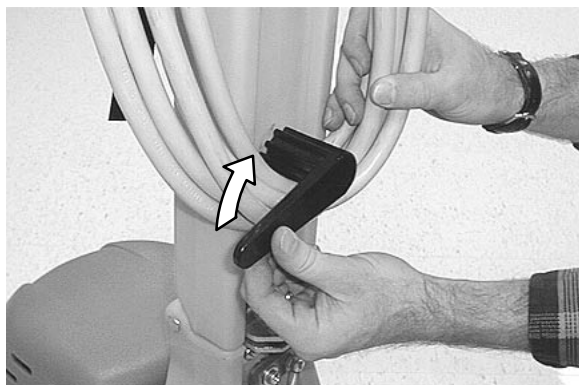


FIG. 3

- Plug power cord into a grounded wall outlet (Figure 4).

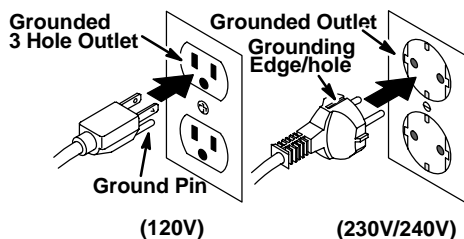


FIG. 4

FOR SAFETY: Do not operate machine unless cord is properly grounded or with the use of an extension cord.

MACHINE OPERATION

FOR SAFETY: Do not operate machine unless operator manual is read and understood.

NOTE: Before operating machine, be certain that floor is dry and clean of debris.

- Lower handle by stepping down on handle release foot lever (Figure 5).



FIG. 5

- To begin burnishing, depress safety lock button and pull triggers. Release safety lock button once machine starts (Figure 6).



FIG. 6

ATTENTION: Use caution when starting out. Machine will jolt when triggers are pulled.

- Push machine forward or use a "W" pattern motion.

ATTENTION: Keep machine moving to prevent floor surface damage.

- To prevent motor overload, periodically check pad for excessive soil build-up. Turn pad over, clean or replace when necessary.

NOTE: If circuit breaker trips while operating, unplug power cord, wait 15 seconds and reset breaker switch to resume operation (Figure 7).



FIG. 7

- To stop machine, release triggers and the safety lock button will automatically engage.

FOR SAFETY: When using machine, do not release handle grips until pad comes to complete stop.

- When finished burnishing, perform the maintenance procedures.

OPERATION

MACHINE MAINTENANCE

⚠ WARNING: Hazardous Voltage. Shock or electrocution can result. Unplug machine before servicing.

AFTER EACH USE:

1. Remove pad and wash. Never use soiled pads.
2. Clean machine base with damp cloth. Do not power spray or hose off machine.
3. Inspect power cord for damage, if worn or damaged, replace immediately.
4. Wipe power cord with damp cloth and neatly coil around cord hook and handle.
5. Weekly, blow out pad motor with compressed air at 5 psi. Gradually increase to 30 psi to remove all dust from motor.
6. Periodically check that all bolts and nuts are tight.

NOTE: Gear system and motor are factory lubricated and require no further attention.

7. Monthly, check tension of drive belt. To tighten belt, remove (4) allen screws that attach pad driver. Locate belt tension bolt and loosen lock nut, turn tension bolt clockwise until belt is taut, retighten lock nut (Figure 8).

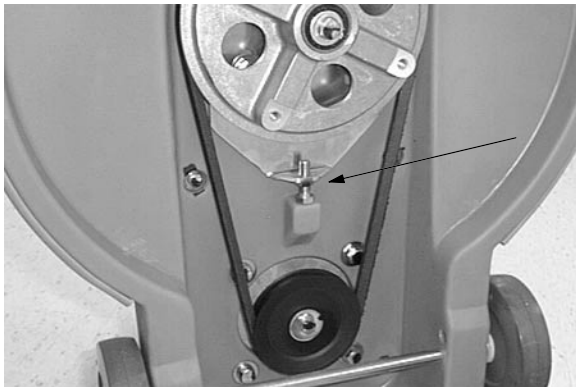


FIG. 8

8. Every 250 hours of operation, check motor carbon brushes for wear. Replace brushes when 10 mm (0.38 in) or less in length.

STORING MACHINE

1. Remove burnishing pad from machine and neatly coil cord around cord hook and handle (Figure 9).
2. Store machine tilted back on rear wheels to prevent pad driver damage.
3. For minimal storage or transport space, fold handle down and position as shown (Figure 9).

ATTENTION: Do not expose to rain. Store indoors.

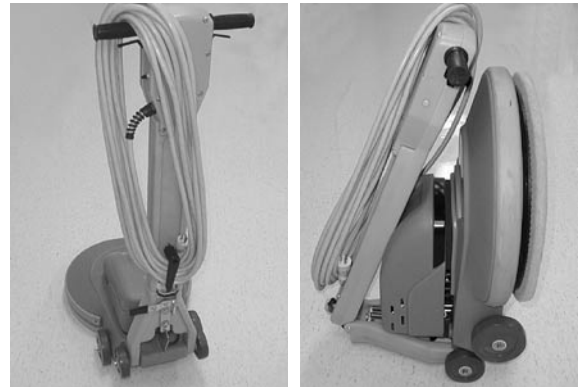


FIG. 9

RECOMMENDED STOCK ITEMS

Refer to the Parts List section for recommended stock items. Stock Items are clearly identified with a bullet preceding the parts description (Figure 10).

Ref.	Part No.	Description	Qty.
1	701103	ASM.,STANDPIPE	1
2	180613	•FLOAT, SHUTOFF	1
3	230187	NIPPLE	1
4	101714	•GASKET	1
5	210240	NUT, FLANGED	1

FIG. 10

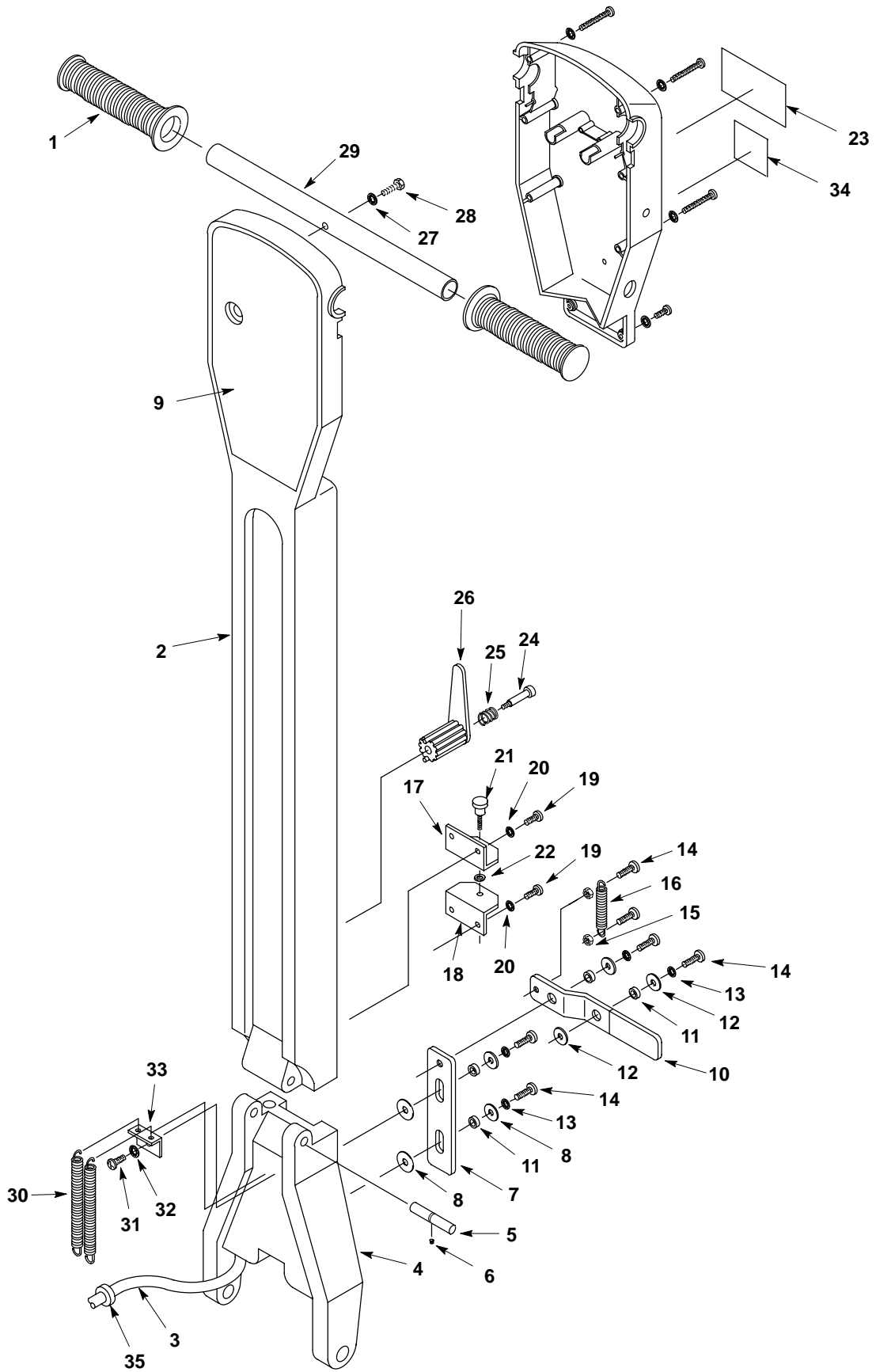
TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Motor does not operate.	Machine unplugged.	Plug machine into a grounded outlet.
	Tripped circuit breaker	Determine cause, wait at least 15 seconds before resetting circuit breaker on machine.
	Tripped building circuit breaker.	Reset breaker or change to different circuit.
	Faulty power cord.	Contact Service Center.
	Faulty wiring.	Contact Service Center.
	Faulty trigger switch.	Contact Service Center.
	Faulty Rectifier	Contact Service Center.
Machine circuit breaker trips continuously.	Soiled Pad.	Replace Pad.
	Improper pad for application	Change to proper pad.
	Defective circuit breaker.	Contact Service Center.
	Worn carbon brushes in motor.	Contact Service Center.
Pad spins slowly or not at all.	Loose drive belt.	Tighten drive belt.
	Broken drive belt.	Replace drive belt.

SPECIFICATIONS

MODEL	HS-1100	HS-1500	HS-1900
WIDTH	530 mm (20.75 in)	530 mm (20.75 in)	530 mm (20.75 in)
HEIGHT	1240 mm (49 in)	1240 mm (49 in)	1240 mm (49 in)
LENGTH	760 mm (29.75 in)	760 mm (29.75 in)	760 mm (29.75 in)
FOLDED HEIGHT	520 mm (20.5 in)	520 mm (20.5 in)	520 mm (20.5 in)
FOLDED LENGTH	900 mm (35 in)	900 mm (35 in)	900 mm (35 in)
WEIGHT	32Kg (70.5 lbs)	32Kg (70.5 lbs)	32Kg (70.5 lbs)
PAD MOTOR	230V, 1.12kW, 8Amp, 50Hz 120V, 1.5hp, 15Amp, 60Hz	230V, 1.12kW, 8Amp, 50Hz 120V, 1.5hp, 15Amp, 60Hz	230V, 1.12kW, 8Amp, 50Hz 120V, 1.5hp, 15Amp, 60Hz
PAD/BRUSH SPEED	1200 RPM	1600 RPM	2000 RPM
POWER CORD LENGTH	23 m (75 ft) Gauge 3X1.5mm	23 m (75 ft) Gauge 3X1.5mm	23 m (75 ft) Gauge 3X1.5mm
PAD DIAMETER	510 mm (20 in)	510 mm (20 in)	510 mm (20 in)
DECIBEL RATING AT OPERATOR'S EAR, INDOORS ON TILE FLOOR	70dB(A)	70dB(A)	70dB(A)

HANDLE GROUP



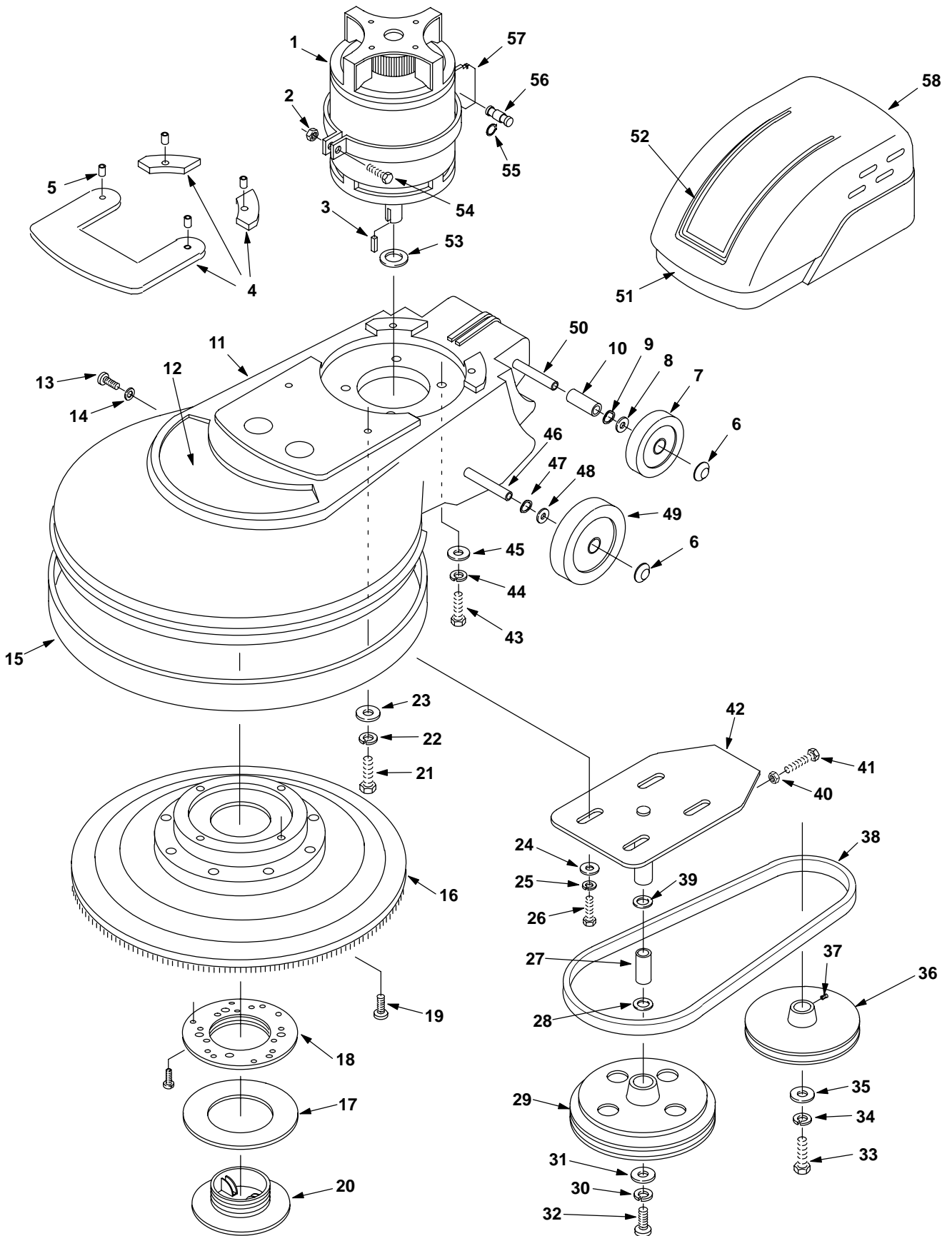
HANDLE GROUP

REF	PART #	DESCRIPTION	QTY.
1	200823	●GRIP, HANDLE TUBE	2
2	607336	HANDLE, UPPER, BLUE	1
3	130204	CORD, 14/3X57", BLACK	1
4	607338	HANDLE, LOWER, BLUE	1
5	603116	PIN, HANDLE PIVOT	1
6	140860	SCREW, SET	1
7	603107	LATCH, HANDLE	1
8	140003	WASHER, 1/4X1	4
9	608251	DECAL, HS-1100	1
	607366	DECAL, HS-1500	1
	607367	DECAL, HS-1900	1
10	603106	LEVER, HANDLE LATCH	1
11	140147	BUSHING	4
12	579210	WASHER, FLAT	3
13	578244000	WASHER, LOCK	4
14	578321000	SCREW, M6X1.0X16	6
15	579029	NUT, M6	2
16	606217	SPRING, HANDLE LATCH	1
17	604267	BRACKET, PIVOT UPPER	1
18	604268	BRACKET, PIVOT LOWER	1

REF	PART #	DESCRIPTION	QTY.
19	578321000	SCREW, M6X10.0X16	4
20	578244000	WASHER, LOCK	2
21	606015	●KNOB, HANDLE LOCK	1
22	140037	●WASHER, NYLON	1
23	120619	DECAL, WARNING	1
24	140239	SCREW, 3/8X1-3/4	1
25	603108	SPRING, SWITCH	1
26	603104	HOOK, CORD HANDLE	1
27	578244000	WASHER, LOCK	1
28	200031444	SCREW, M6X1.0X30	1
29	604306	TUBE, FOLDING HANDLE	1
30	140437	SPRING	2
31	578321000	SCREW, M6X1.0X16	1
32	578299000	SCREW, 10-32X.625"	1
33	230773	BRACKET, SPRING	1
34	578729	DECAL, READ MANUAL	1
35	130141	BUSHING, STRAIN-RELIEF	1

● RECOMMENDED STOCK ITEMS

BASE GROUP



BASE GROUP

REF	PART #	DESCRIPTION	QTY.
1	600825	●MOTOR, 120V (HS-1100/HS-1500)	1
1	130498	●MOTOR, 120V (HS-1900)	1
	190742	●-CARBON BRUSH CARD ASM.	1
	22117	●-CARBON BRUSH	4
	190753	●-RECTIFIER	1
2	140546	NUT, 5/16-18	1
3	140628	KEY, PULLEY	1
4	600824	GASKET SPACER SET (HS-1100/HS-1500 120V)	1
5	069760417	SLEEVE (HS-1100/HS-1500 120V)	4
6	103019	CAP, HUB	4
7	103066	WHEEL	2
8	4252	WASHER, 1/2	2
9	3148.816	WASHER, FLAT 7/8X1/2	2
10	140148	BUSHING	2
11	607360	BASE, HIGH SPEED, BLUE	1
12	120101	DECAL, CASTEX	1
13	140824	SCREW, 1/4-20X5/8	2
14	140003	WASHER, 1/4	2
15	602544	BUMPER, 4.5'	1
▽16	240240	●ASM., PAD DRIVER	1
▲17	572084000	WASHER, CENTERLOCK	1
▲18	621326000	RING, CENTERLOCK	1
▲19	140949	SCREW, 5/16-18X1-1/4	4
▲20	621327000	●CENTERLOCK, PAD	1
21	600591	SCREW, 1/4-20X1-7/8 (1900)	4
	140209	SCREW, 1/4-20X2-1/2 (HS-1100/HS-1500 120V)	4
22	140016	WASHER, LOCK 1/4	4
23	140000	WASHER, FLAT 1/4	4
24	140013	WASHER, 3/8	4
25	140017	WASHER, LOCK 3/8	4
26	140201	SCREW, 3/8-16X3/4	4
27	230446	SPACER	1
28	140123	●BEARING	1
29	230425	PULLEY, DRIVE	1
30	140017	WASHER, LOCK 3/8	1
31	140013	WASHER, 3/8	1

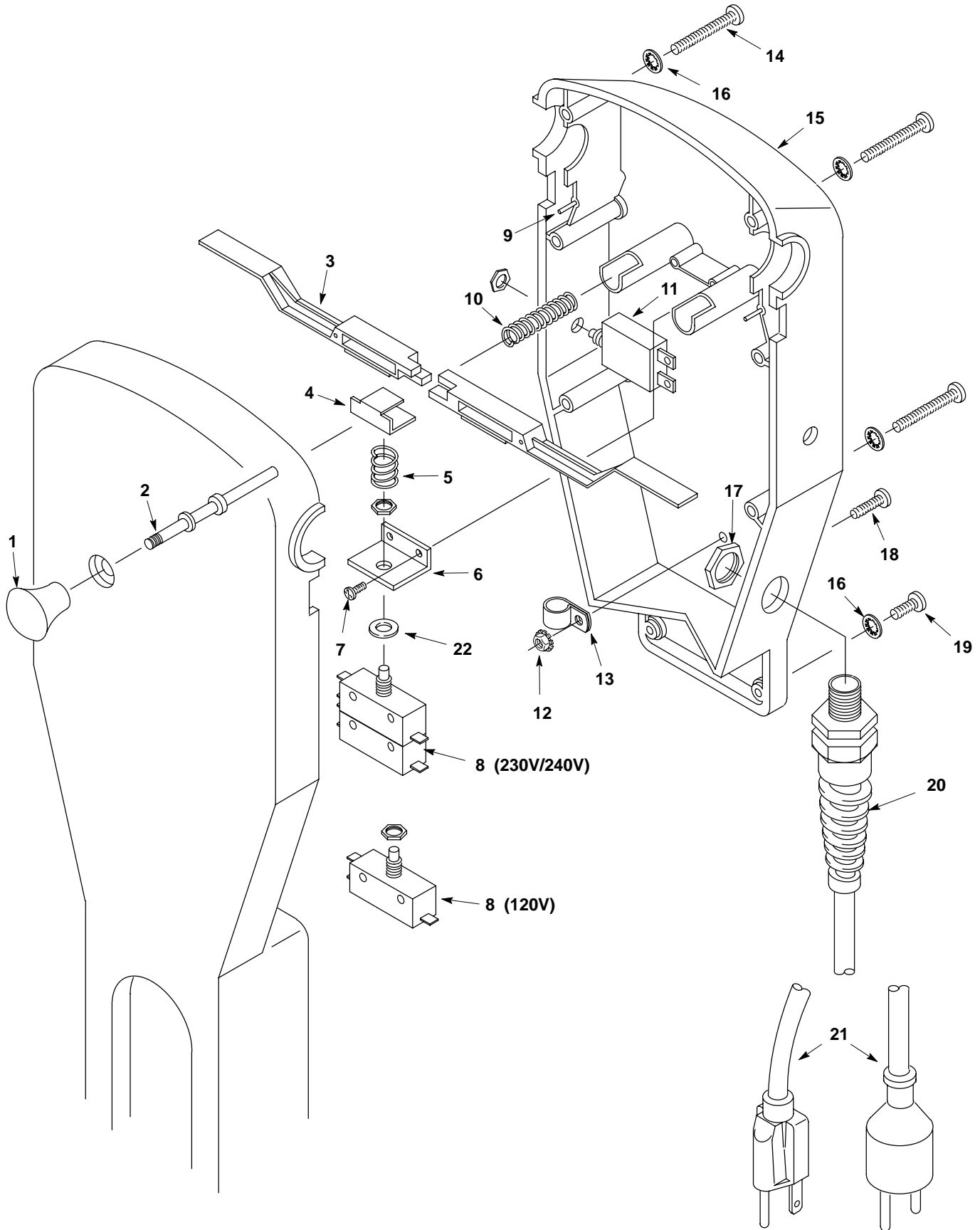
REF	PART #	DESCRIPTION	QTY.
32	140201	SCREW, 3/8-16X3/4	1
33	140223	SCREW, 5/16-18X3/4	1
34	140015	WASHER, LOCK 5/16	1
35	25732	WASHER, 1-1/4X.359	1
36	240075	●PULLEY, HS-1100	1
	240076	●PULLEY, HS-1500	1
	240077	●PULLEY, HS-1900	1
37	140859	SCREW SET (HS-1100/HS-1500)	1
38	240078	●BELT (HS-1100)	1
	240079	●BELT (HS-1500)	1
	240080	●BELT (HS-1900)	1
39	140123	●BEARING	1
40	140545	NUT, JAM 3/8-16	1
41	140232	SCREW, 3/8-16X1-1/4	1
42	230448	BRACKET, BASE	1
43	140232	SCREW, 3/8-16X1-1/4	4
44	140017	WASHER, LOCK 3/8	4
45	140013	WASHER, 3/8	4
46	608913	AXLE	1
47	4252	WASHER, 1/2	4
48	3148.816	WASHER, FLAT 7/8X1/2	2
49	103067	●WHEEL	2
50	608910	PIVOT, SHAFT HANDLE	1
51	120582	DECAL, RECESS	1
52	N/A	DECAL, COVER	1
53	230447	SPACER, PULLEY	1
54	140221	SCREW, 5/16-18X1-1/4	1
55	140421	RING, PIN	1
56	230772	PIN, PLATE	1
57	230918	PLATE, LATCH	1
58	607362	COVER, MOTOR, BLUE	1

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

CONTROL HANDLE GROUP



CONTROL HANDLE GROUP

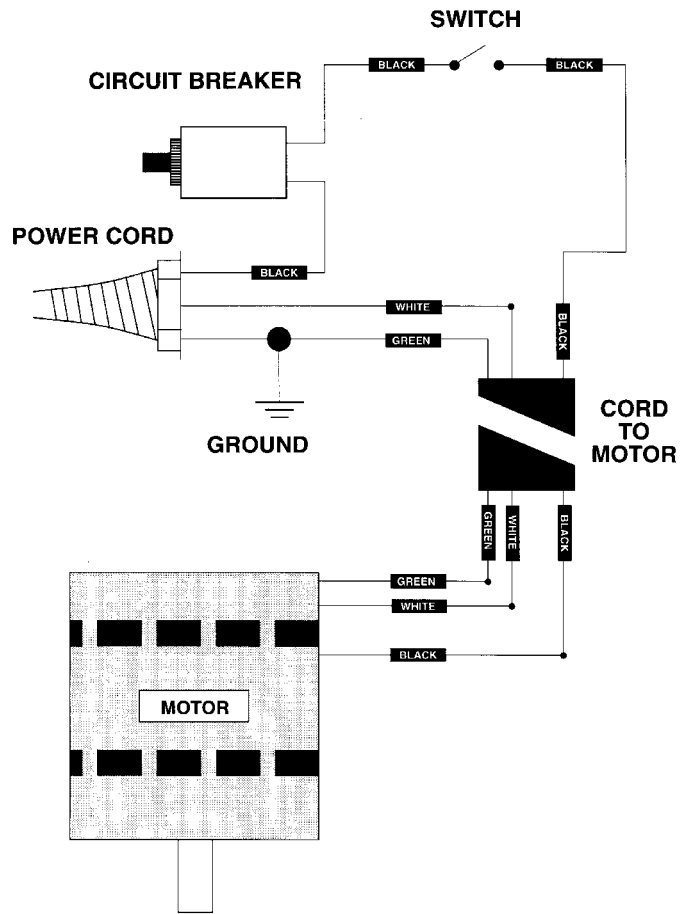
REF	PART #	DESCRIPTION	QTY.
1	603291	KNOB, PLASTIC	1
2	603112	PIN, HANDLE LOCK	1
3	603105	TRIGGER, HANDLE	2
4	603111	CLIP, SWITCH LEVER	1
5	603108	SPRING, SWITCH	1
6	603109	BRACKET, SWITCH	1
7	140350	SCREW, #10X1/2	2
8	606292	●SWITCH, 20 AMP (120V)	1
	603110	●SWITCH, 20 AMP (230V/240V)	1
9	603114	DOWEL	2
10	140401	SPRING, LOCK BUTTON	1
11	605201	●BREAKER, CIRCUIT 17A, 120V (HS-1100/HS-1500)	1
	130752	●BREAKER, CIRCUIT 20A, 120V (HS-1900)	1
12	140519	NUT, 10-24 KEP	1

REF	PART #	DESCRIPTION	QTY.
13	140324	CLAMP	1
14	603292	SCREW, M6X1.0X45	4
15	606103	HOUSING, HANDLE BOTTOM	1
16	578244000	WASHER, LOCK	6
17	140504	NUT	1
18	140900	SCREW, 10-24X3/4	1
19	578321000	SCREW M6X1.0X16	2
20	602849	●CORD GRIP (120V)	1
	130167	●CORD GRIP (230V)	1
21	610974	POWER CORD, 23M (120V)	1
	600396	POWER CORD, 23M (230V)	1
22	140028	WASHER, 3/8 FLAT (FOR 230V/240V SWITCH ONLY)	1

● RECOMMENDED STOCK ITEMS

ELECTRICAL DIAGRAM

120V



230V/240V

