

# **550 ADJUSTABLE HANDLE WALK-BEHIND SCRAPER SERVICE MANUAL**

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**Read Manual Before Servicing Machine**



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# Specifications



Product Specifications									
Width	Max. Length	Height	Weight (Machine Only)	Speed	RPM	Amps	Vibration		
							X Axis	Y Axis	Z Axis
17.75" (45 cm)	32.5" (83 cm)	42.5" (108 cm) with handle 21" (53 cm) without handle	123 lb (55.8 kg)	Manual	1,725	Under 10	5.5 m/s <sup>2</sup>	11.1 m/s <sup>2</sup>	11.6 m/s <sup>2</sup>

Machine Variants			
Region	Serial Number	Input Power	Body Panels
Domestic	550-10XXXX	120V / 60 Hz	Silver Vein
	550-12XXXX	120V / 60 Hz	Green
	550-23XXXX	120V / 60 Hz	Silver Vein
International	550-11XXXX	230V / 50 Hz	Silver Vein
	550-13XXXX	230V / 50 Hz	Silver Vein
	550-20XXXX	110V / 50 Hz	Silver Vein
	550-27XXXX	230V / 50 Hz	Silver Vein
	550-29XXXX	230V / 50 Hz	Silver Vein

## GENERAL RULES FOR SAFE OPERATION

Before use, anyone operating or performing maintenance on this equipment must read and understand this manual, as well as any labels packaged with or attached to the machine and its components. Read the manual carefully to learn equipment applications and limitations, as well as potential hazards associated with this type of equipment. Keep manual near machine at all times. If your manual is lost or damaged, contact National Flooring Equipment (NFE) for a replacement.

### PERSONAL

#### Dress properly and use safety gear.

Do not wear loose clothing; it may be caught in moving parts. Anyone in the work area must wear safety goggles or glasses, hearing protection during extended use, and a dust mask for dusty operations. Hard hats, face shields, safety shoes, etc. should be worn when specified or necessary.

#### Maintain control; stay alert.

Keep proper footing and balance, and maintain a firm grip. Observe surroundings at all times and use common sense. Do not use when tired, distracted, or under the influence of drugs, alcohol, or any medication that may cause decreased control.

#### Keep hands away from all moving parts and tooling.

Wear gloves when changing tooling. Remove tooling when machine is not in use and/or lower cutting head to the floor.

#### Do not force equipment.

Equipment will perform best at the rate for which it was designed. Excessive force only causes operator fatigue, increased wear, and reduced control.

### ENVIRONMENT

#### Avoid use in dangerous environments.

Do not use in rain, damp or wet locations, or in the presence of explosive atmospheres (gaseous fumes, dust, or flammable materials). Remove materials or debris that may be ignited by sparks. Keep work area tidy and well-lit - a cluttered or dark work area may lead to accidents. Extreme heat or cold may affect performance.

#### Protect others in the work area and be aware of surroundings.

Provide barriers or shields as needed to protect others from debris and machine operation. Children and other bystanders should be kept at a safe distance from the work area to avoid distracting the operator and/or coming into contact with the machine. Operator should be aware of who is around them and their proximity. Support personnel should never stand next to, in front of, or behind the machine while the machine is running. Operator should look behind them before backing up.

#### Do not come within 3 ft. of the machine's perimeter during operation.

#### Guard against electric shock.

Ensure that machine is connected to a properly grounded outlet. Prevent bodily contact with grounded surfaces, e.g. pipes, radiators, ranges, and refrigerators. When scoring or making cuts, always check the work area for hidden wires or pipes.

### MAINTENANCE & REPAIRS

#### Begin maintenance work only when the machine is shut down, unplugged, and cooled down.

#### Use proper cleaning agents.

Ensure that all cleaning rags are fiber-free; do not use any aggressive cleaning products.

#### Schedule regular maintenance check-ups.

Ensure machine is properly cleaned and serviced. Remove all traces of oil, combustible fuel, or cleaning fluids from the machine and its connections and fittings. Retighten all loose fittings found during maintenance and repair work. Loose or damaged parts should be replaced immediately; use only NFE parts.

#### Do not weld or flame-cut on the machine during repairs, or make changes to machine without authorization from NFE.

### EQUIPMENT

#### Use proper parts and accessories.

Only use NFE-approved or recommended parts and accessories. Using any that are not recommended may be hazardous.

#### Ensure accessories are properly installed and maintained.

Do not permanently remove a guard or other safety device when installing an accessory or attachment.

#### Inspect for damaged parts.

Check for misalignment, binding of moving parts, loose fasteners, improper mounting, broken parts, and any other conditions that may affect operation. If abnormal noise or vibration occurs, turn the machine off immediately. Do not use damaged equipment until repaired. Do not use if power switch does not turn machine on and off. For all repairs, insist on only identical NFE replacement parts.

#### Maintain equipment and labels.

Keep handles dry, clean, and free from oil and grease. Keep cutting edges sharp and clean. Follow instructions for lubricating and changing accessories. Motor and switches should be completely enclosed at all times with no exposed wiring. Inspect cord regularly. Labels carry important information; if unreadable or missing, contact NFE for a free replacement.

#### Avoid accidental starting; store idle equipment.

When not in use, ensure that the machine is unplugged; do not turn on before plugging in. Store in a dry, secured place. Remove tooling when storing, and keep away from children.



**CAUTION!** ENSURE PROPER USE OF EXTENSION CORDS. IF AMP DRAW IS HIGHER THAN SHOWN ON TABLE OR CORD IS LONGER THAN 50 FT, SEE AN ELECTRICIAN.

ASSUMPTIONS: 3% ALLOWABLE VOLTAGE DROP, COPPER CONDUCTORS RATED FOR 75°C, 1.25 SAFETY FACTOR, CORD VOLTAGE RATING OF 600VAC, PROPER CORD TYPES (STO, STOW, SOOW).

Amp Draw	Gauge
0-12	14
13-16	12
14-24	10
25-40	8

# Safety

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## WALK-BEHIND SCRAPER SAFETY GUIDELINES

Before use, anyone operating this equipment must read and understand these safety instructions.

### SCRAPING

#### **Beware of hidden obtrusions.**

Watch out for hidden dangers and protrusions in flooring. Do not use on largely uneven surfaces.

#### **Observe location of electrical supplies and extension cords.**

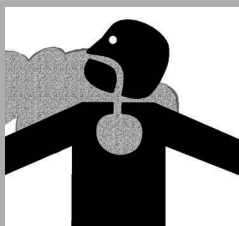
Do not allow cutting heads to come into contact with any electrical supply or extension cord.

#### **Use correct tooling and accessories.**

Provide barriers or shields as needed to protect others from debris. After mounting tooling, check for proper alignment.

#### **Use for correct applications.**

Do not force equipment to do heavier duty work than it was made for.



**WARNING:** GRINDING/CUTTING/DRILLING OF MASONRY, CONCRETE, METAL AND OTHER MATERIALS CAN GENERATE DUST, MISTS AND FUMES CONTAINING CHEMICALS KNOWN TO CAUSE SERIOUS FATAL INJURY OR ILLNESS, SUCH AS RESPIRATORY DISEASE, CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. IF YOU ARE UNFAMILIAR WITH THE RISKS ASSOCIATED WITH THE PARTICULAR MATERIAL BEING CUT, REVIEW THE MATERIAL SAFETY DATA SHEET AND/OR CONSULT YOU EMPLOYER,

THE MATERIAL MANUFACTURER/SUPPLIER, GOVERNMENTAL AGENCIES SUCH AS OSHA AND NIOSH AND OTHER AUTHORITIES ON HAZARDOUS MATERIALS. CALIFORNIA AND SOME OTHER AUTHORITIES, FOR INSTANCE, HAVE PUBLISHED LISTS OF SUBSTANCES KNOWN TO CAUSE CANCER, REPRODUCTIVE TOXICITY, OR OTHER HARMFUL EFFECTS. CONTROL DUST, MIST AND FUMES AT THE SOURCE WHERE POSSIBLE. IN THIS REGARD USE GOOD WORK PRACTICES AND FOLLOW THE RECOMMENDATIONS OF THE MANUFACTURER/SUPPLIER, OSHA/NIOSH, AND OCCUPATIONAL AND TRADE ASSOCIATIONS. WHEN THE HAZARDS FROM INHALATION OF DUST, MISTS AND FUMES CANNOT BE ELIMINATED, THE OPERATOR AND ANY BYSTANDERS SHOULD ALWAYS WEAR A RESPIRATOR APPROVED BY OSHA/MSHA FOR THE MATERIAL BEING CUT.

# Troubleshooting Guide

Problem	Cause	Solution
No power	Insufficient power	Inspect electrical cord for damage
	Switch/Circuit	Check if circuit breaker and/or switch are tripped
Motor noise	Fan guard is malfunctioning	Ensure fan guard is not bent
Machine is hard to handle	Machine is too heavy	Remove counterweight
	Blade is too large	Change to a smaller blade size
	Blade is too dull	Sharpen blade
Blown fuses or circuit breakers	Wrong extension cord	Use appropriate extension cord (see Safety)
	Poor quality outlet	Move to a different outlet or better circuit
Rattling	Loose fasteners	Check for loose nuts and bolts and re-tighten
	Worn out isolators	Replace isolators
Difficulty inserting shank	Shank holder is too tight	Remove paint from shaft of the shank with sandpaper, emery cloth, or a solvent

# Maintenance

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## MAINTAINING EQUIPMENT



**WARNING:** ALWAYS UNPLUG MACHINE BEFORE MAINTAINING. NEVER DISASSEMBLE THE TOOL OR TRY TO DO ANY REWIRING ON THE TOOL'S ELECTRICAL SYSTEM. FAILURE TO DO SO COULD CAUSE DAMAGE TO MACHINE OR SERIOUS INJURY. CONTACT NFE FOR ALL REPAIRS.

Keep equipment in good repair by adopting a regular maintenance program.

On a daily basis, complete the following:

- Examine the general condition of equipment.
- Inspect guards, switches, and cords for damage.
- Check for loose screws, misalignment, binding of moving parts, improper mounting, broken parts and any other conditions that may affect safe operation.

If abnormal noise or vibration occurs, turn the equipment off immediately and have the problem corrected before further use. Do not use damaged equipment. Tag damaged equipment "DO NOT USE" until repaired.

During maintenance checks or regular inspections, complete the following:

- Perform mechanical inspection.
- Clean pulleys, spindles, bearings, housing, etc.
- Perform electrical inspection (switch, cord, plugs, etc.).
- Check nuts on shock absorbers and bottom plates.
- Check all screws and fittings for a tight and secure fit.
- Sharpen dull blades.
- Clean dust and debris from vents.
- Keep the equipment handle clean, dry, and free of oil or grease.

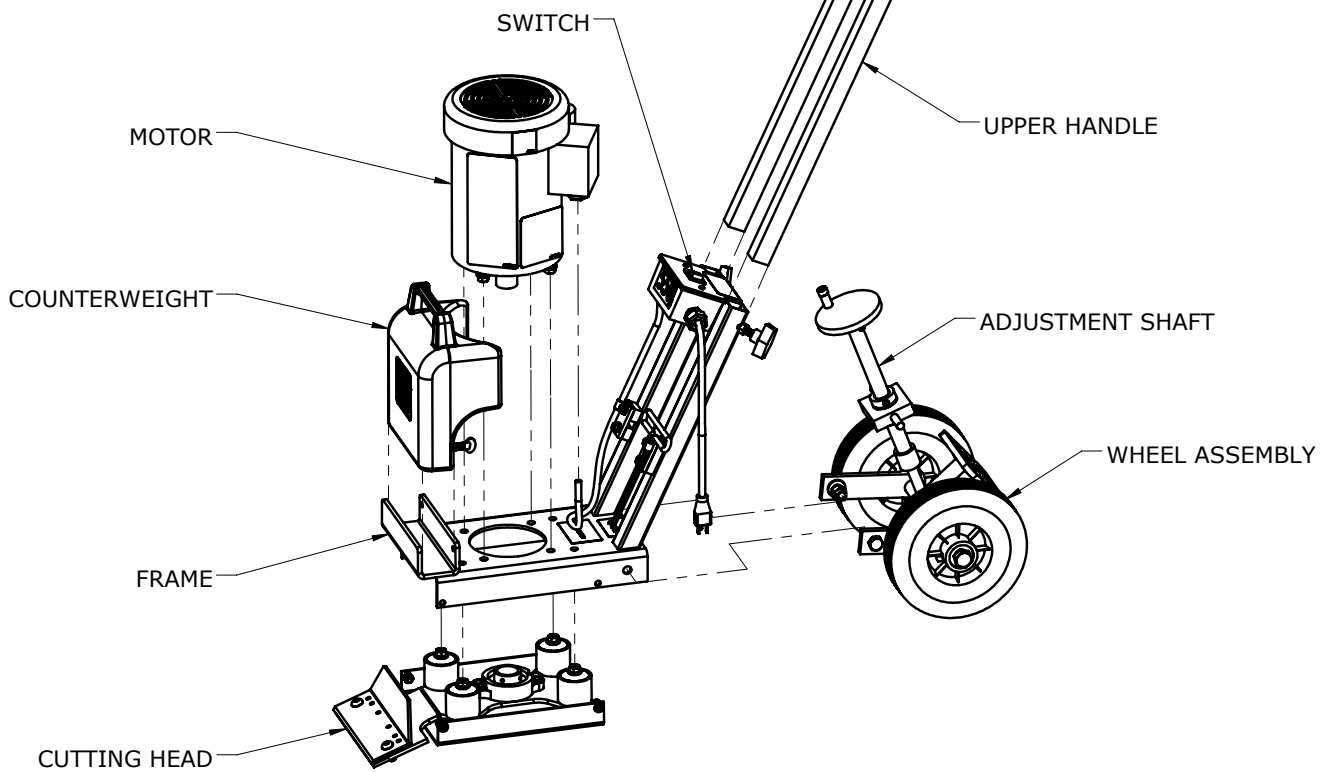
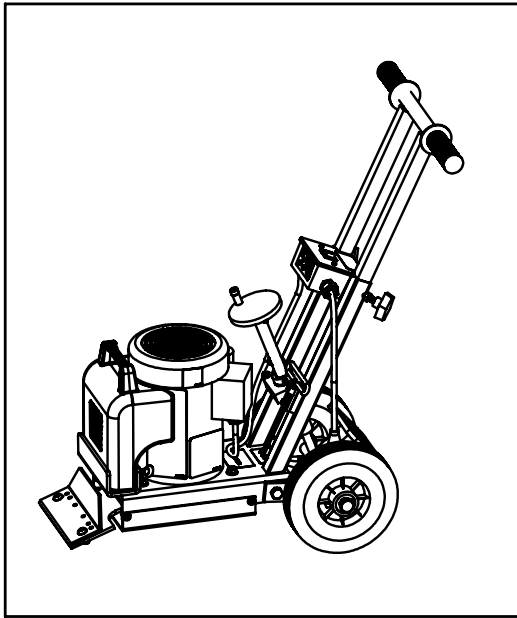
Use only mild soap and a damp cloth to clean. Some cleaning agents and solvents are harmful to plastic and insulated parts. Do not clean with: gasoline, turpentine, lacquer thinner, paint thinner, chlorinated cleaning solvents, ammonia, or any household detergents containing ammonia. Never use flammable or combustable solvents around equipment.

**Note:** Machine is pressure washable. Motor, motor junction box, capacitor box, and switch are protected from splashes of water but must not be subjected to jets of high pressure. Thoroughly dry machine before use. Do not use machine when wet or damp.



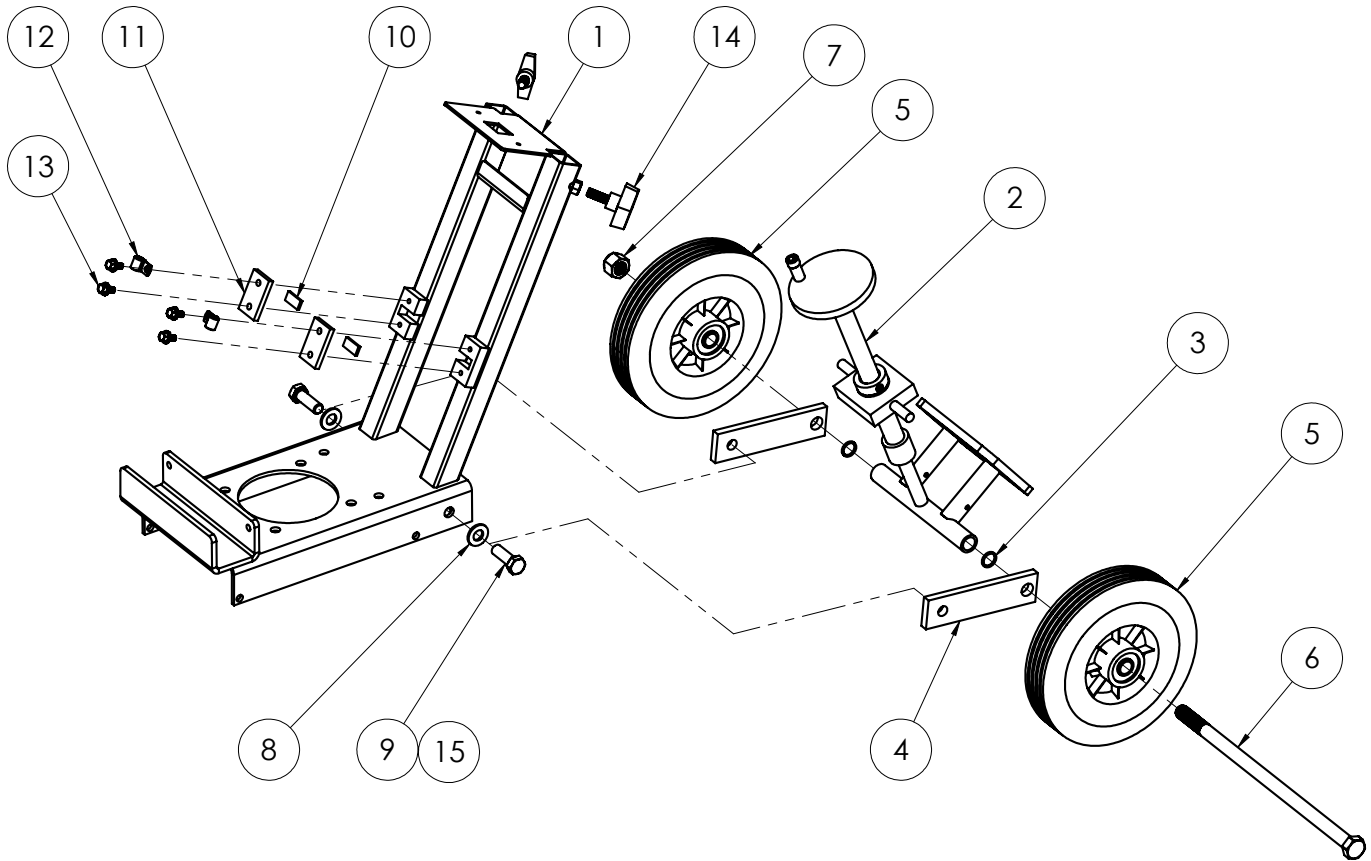
# Parts List and Diagrams

## OVERALL MACHINE



# Parts List and Diagrams

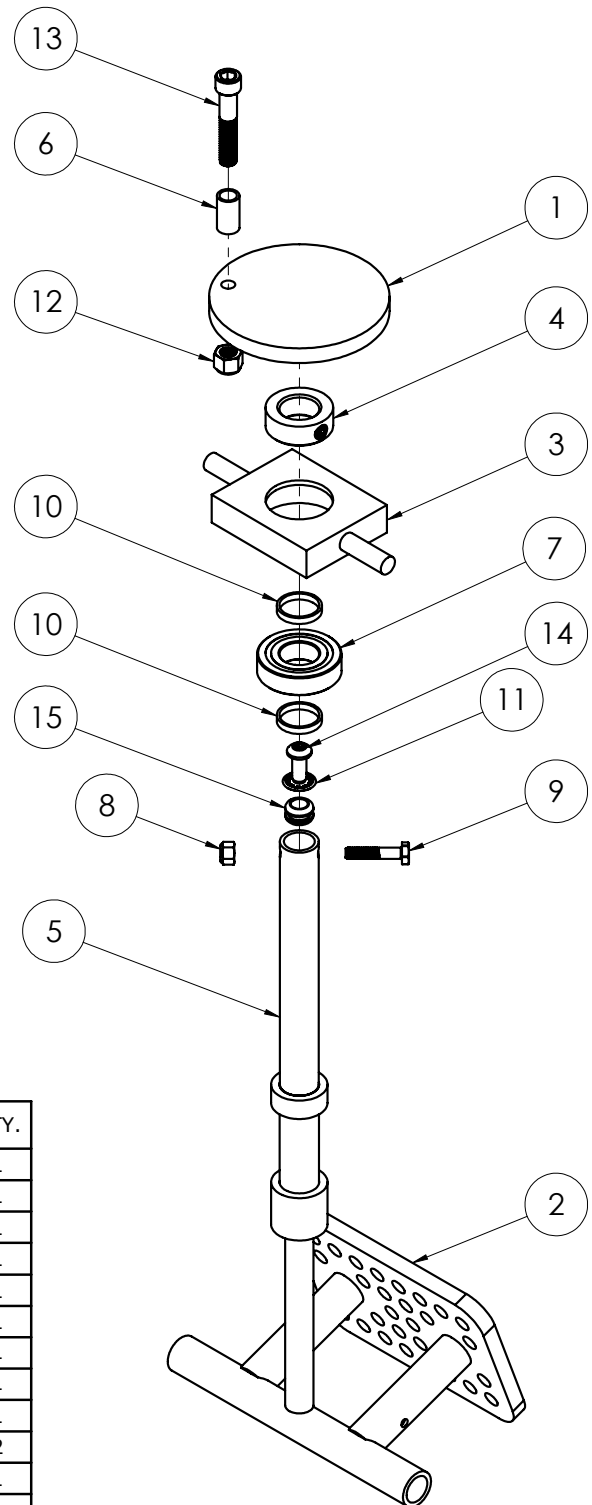
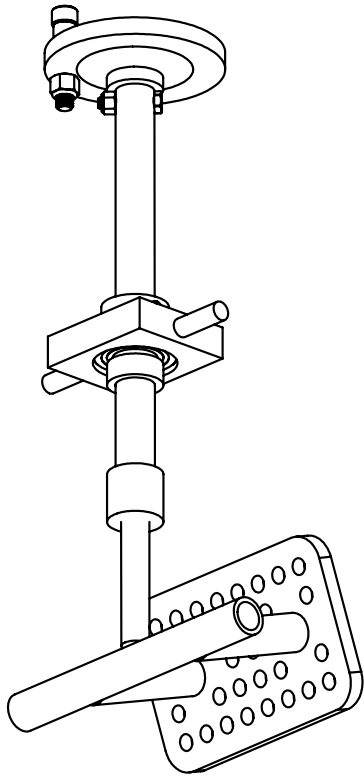
## FRAME AND WHEEL ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	402411-SV	FRAME, BASE, Silver Vein (550-10XXXX, 550-23XXXX, 550-11XXXX, 550-13XXXX, 550-20XXXX 550-27XXXX, 550-29XXXX ONLY)	1
1	402411-G	FRAME, BASE, Green (550-12XXXX ONLY)	1
2	550-11	Assembly, Wheel Adjustment	1
3	72901	"O"-Ring	2
4	500-25	Bracket, Wheel Leg	2
5	550-29	Wheel, 2-1/2 Center	2
6	73521	5/8-11x14 HHCS	1
7	73525	Nut, 5/8-11 Nylock	1
8	73424	Washer, Flat, Zinc SAE 1/2	2
9	73406	Bolt, Hex Head Cap 1/2-13x1-1/4	2
10	402380	DAMPER, RUBBER	2
11	550-8	Bracket Cover	2
12	63-P30	Clamp, Wire 3/8	2
13	73001	Bolt, Wizlock 1/4-20x1/2	4
14	73240	3/8-16x1.0 T-KNOB	2
15	73402	Nut, Nylock, 1/2-13	2

# Parts List and Diagrams

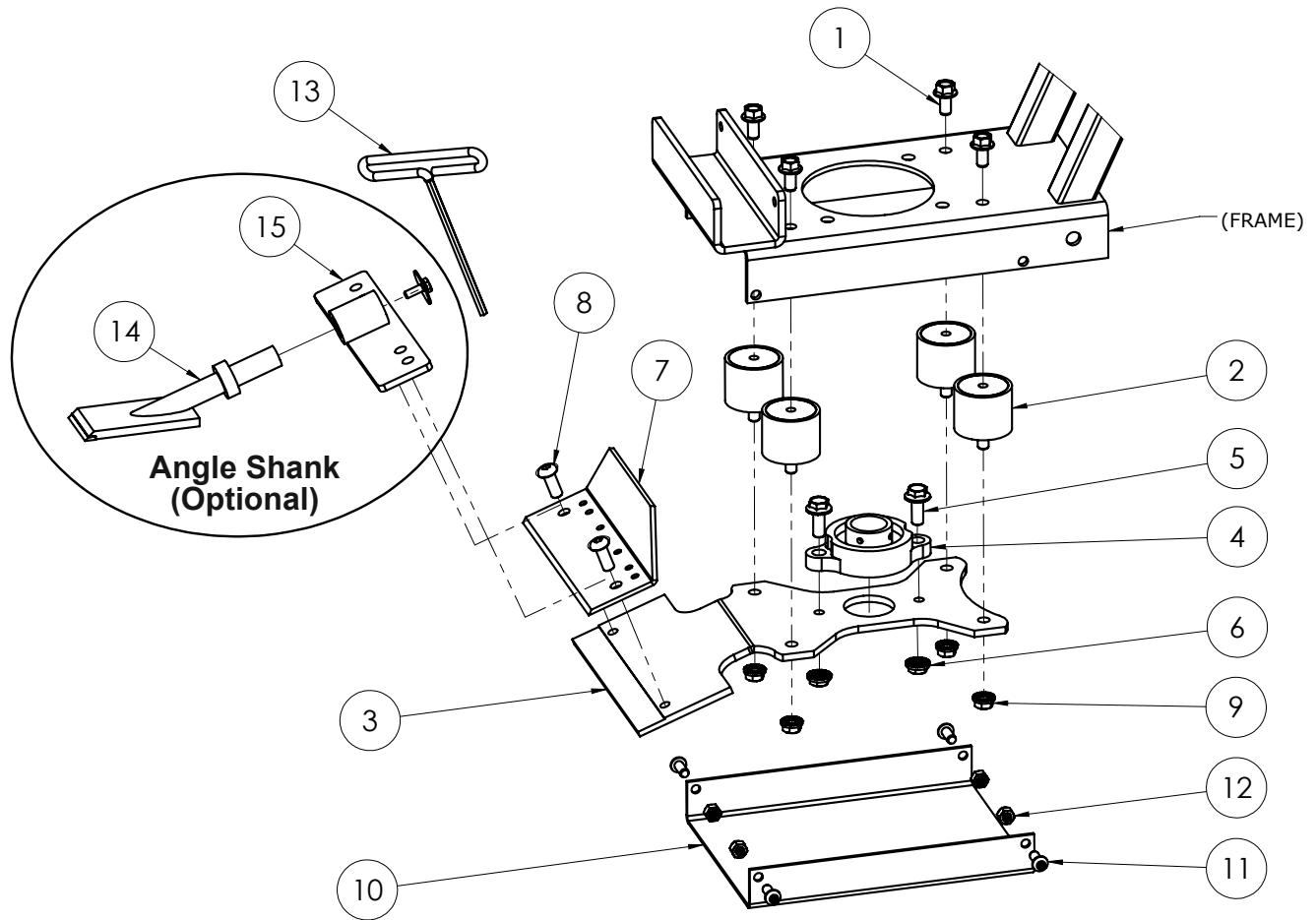
## 550-11 WHEEL ADJUSTMENT ASSEMBLY



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	550-12D	WHEEL, ADJUSTMENT	1
2	550-4	T-BAR, ADJUSTMENT	1
3	550-5	PLATE, BEARING	1
4	550-5B	COLLAR, SHAFT 7/8	1
5	550-6	SHAFT, ADJUSTMENT	1
6	5600-83	SPACER, ROUND, .375 X .500 X .875	1
7	71101	Bearing, 7/8 ID, R14-2RS	1
8	73008	Nut, Nylock 1/4-20	1
9	73013	1/4-20x1-1/4 HHCS	1
10	73102	SPACER, .16x1.0Dx.88 ID	2
11	73202	WASHER, INTERNAL LOCK, 3/8	1
12	73207	NUT, NYLOCK, 3/8-16	1
13	73249	3/8-16x2 SHCS	1
14	73308	5/16-18x3/4 BSCS	1
15	74749	GROMMET, RUBBER 3/8"	1

# Parts List and Diagrams

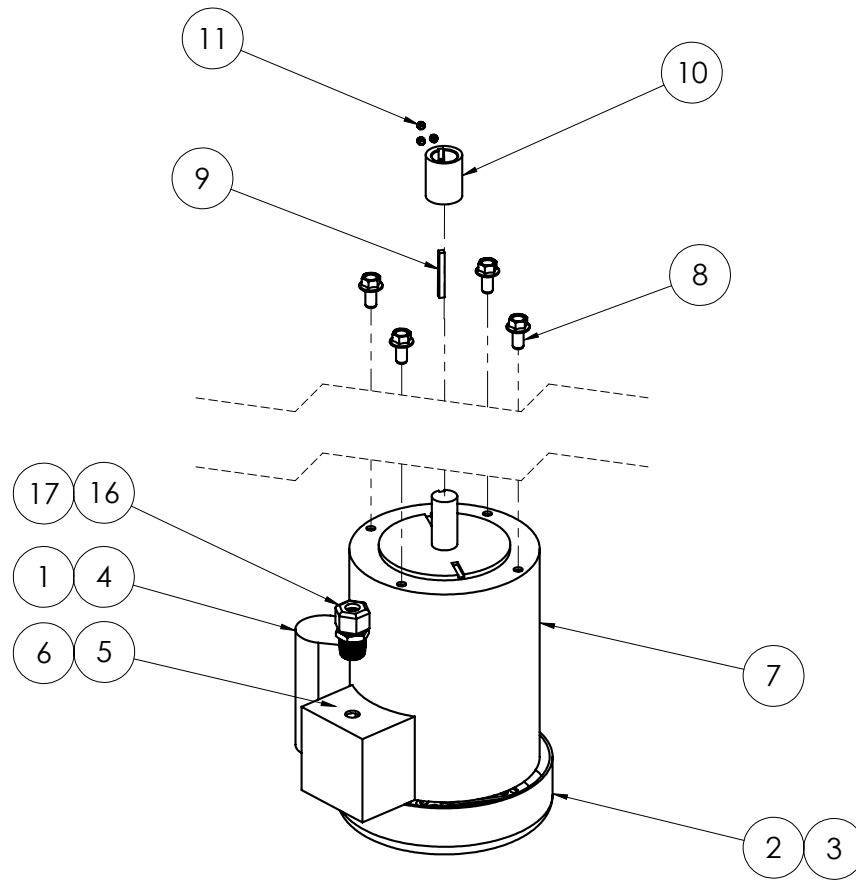
## CUTTING HEAD



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	73259	3/8-16 X 3/4 HHFS, SERRATED	4
2	70810	Isolator, Vibration	4
3	5280-8	Cutting Head	1
4	71131	Bearing 1-1/4 ID, SBLF 206-20	1
5	74651	Bolt, Wizlock, M10-1.5 x 30mm, Class 8.8	2
6	74654	M10-1.50 Flanged Nut, Serrated	2
7	5280-136	Cover, Blade	1
8	74649	Screw, Button Head Cap w/ Flange M10-25	2
9	73211	Nut, Flange, Serrated, 3/8-16	4
10	505-1000	Cover, Bottom Plate	1
11	73308	5/16-18x3/4 BSCS	4
12	73322	Nut, Nyloc, 5/16-18	4
13	5280-137W	Wrench, Blade, 6mm	1
14	552	Shank, Angle 2-1/2 x 4 (Optional)	1
15	551	Holder, Angle Shank (Optional)	1

# Parts List and Diagrams

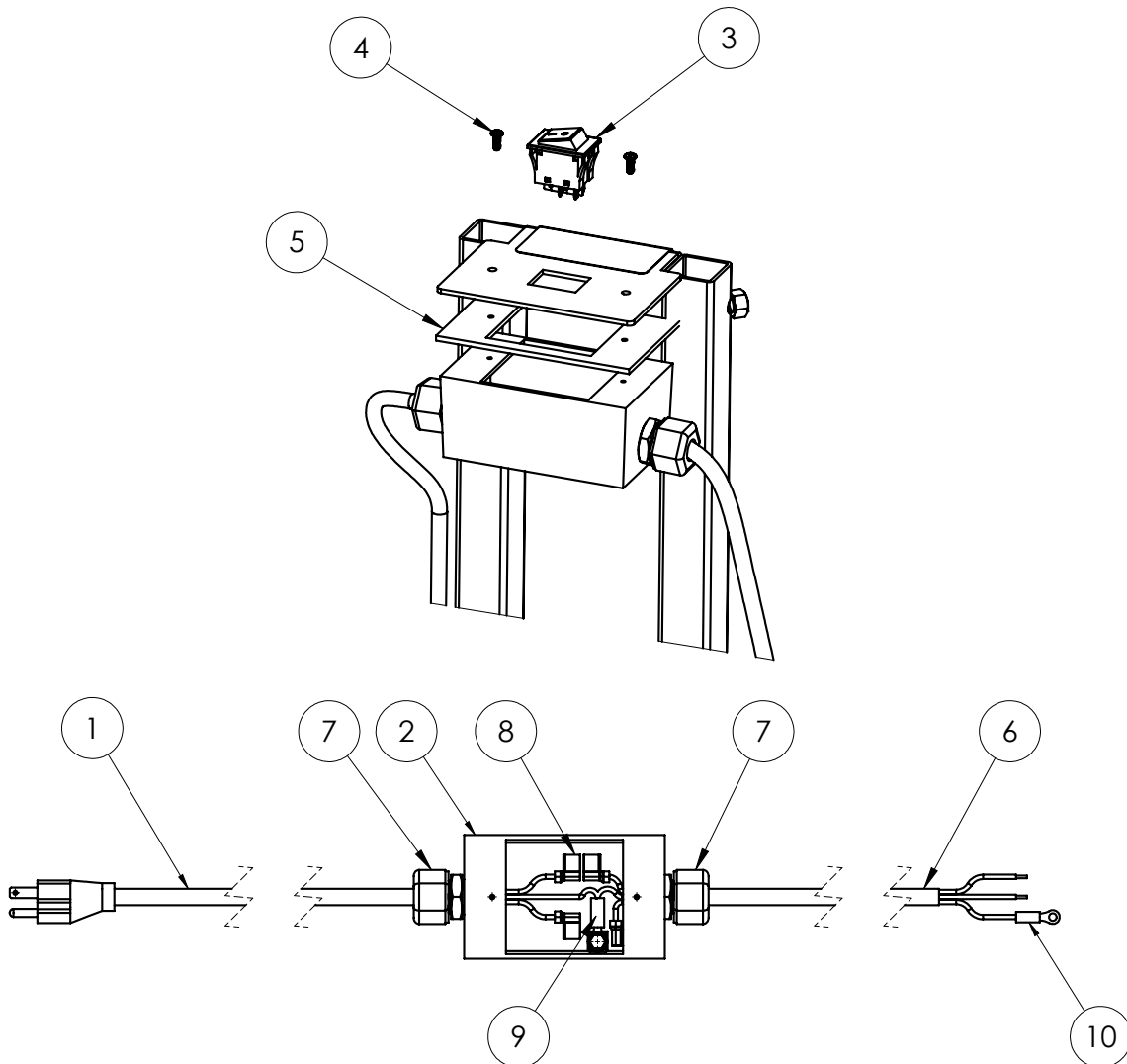
## MOTOR



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	550-23	Capacitor	1
2	62180	Motor Fan Cover	1
3	62181	Motor Fan (Not Shown)	1
4	62182	Cover, Capacitor, Leeson	1
5	62190	Electric Box Only	1
6	62191	Electrical Box Cover Only	1
7	72351	Motor 1 HP, 116691.00	1
8	73259	Bolt, Flange, Serrated, SAE 3/8-16 X 3/4	4
9	73902	Key, Woodruff, 3/16"	1
10	550-101	Eccentric, 1.250 OD X .875 ID	1
11	73039	Screw, Set, 1/4-20x3/16	3
12	72810	Caps, Splice, (Not Shown)	2
13	72811	Caps, Insulator, Splice (Not Shown)	2
14	74730	Grommet, Rubber 5/8" (Not Shown)	1
15	72351-10	Spring, 50 Hz (Not Shown)(550-11XXXX, 550-13XXXX, 550-20XXXX, 550-27XXXX, 550-29XXXX ONLY)	2
16	73502	Strain Relief, Straight 1/2 Inch	1
17	73401	Nut, Strain relief, steel, 1/2"	1

# Parts List and Diagrams

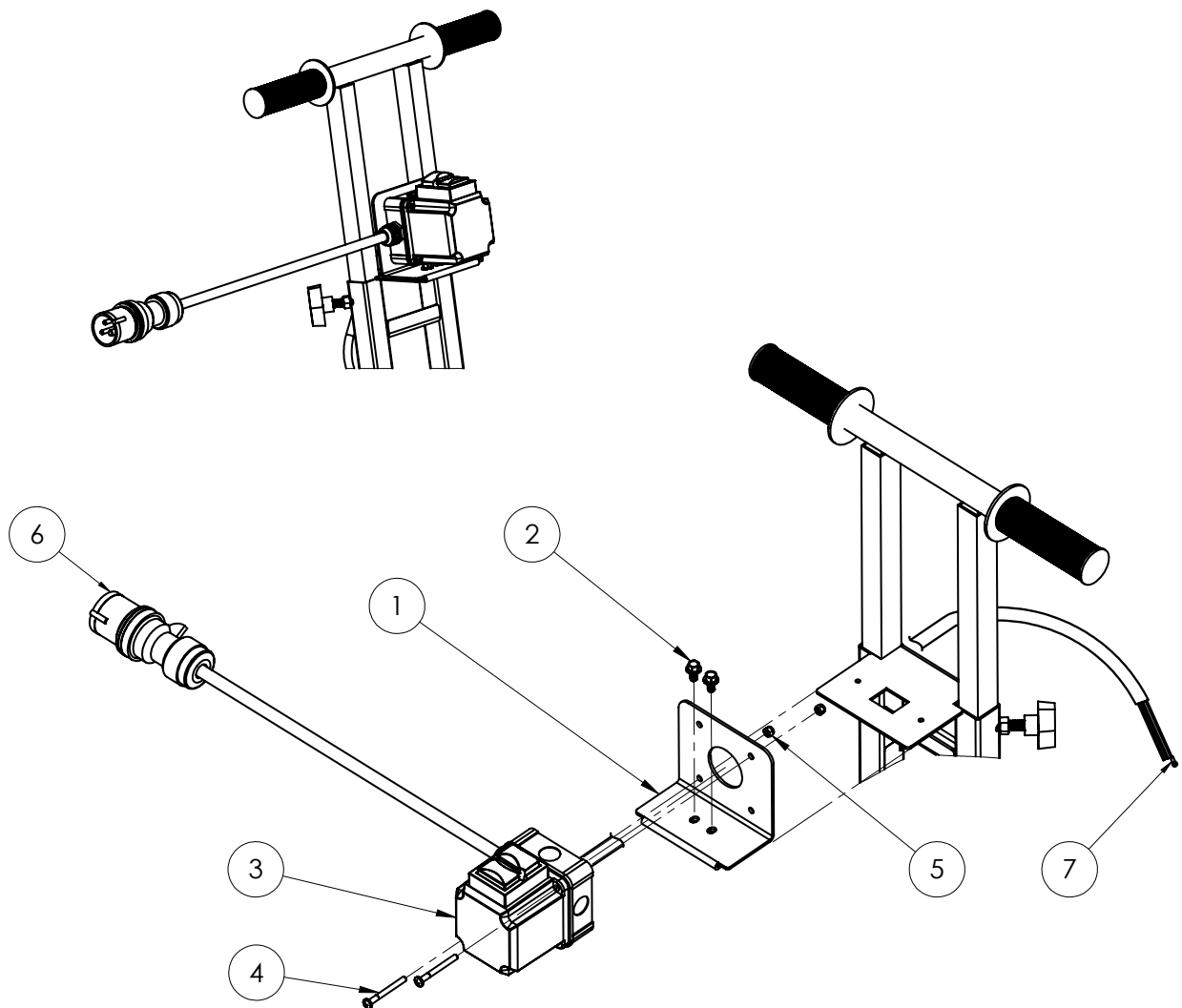
## SWITCH - DOMESTIC MACHINES



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	500-12	Cord, Power, Molded 5-15P Plug, 19"	1
2	550-15	Box, Electrical Without Cover	1
3	6280-207	Switch, On-Off	1
4	74510	Screw, Phillips Pan Head Machine 6-32 x 3/8	2
5	550-18	Gasket, Electrical Box	1
6	72565	Wire, 14/3	2.5'
7	73502	Strain Relief, Straight 1/2 inch	2
8	92819	Disconnect, Quick, Nylon, 16-14 Gauge	4
9	72768	Terminal, 12-10 Gauge, Nylon C, 10	1
10	72821	Terminal, Ring, 16-14 Gauge, Nylon, 10 Stud	1

# Parts List and Diagrams

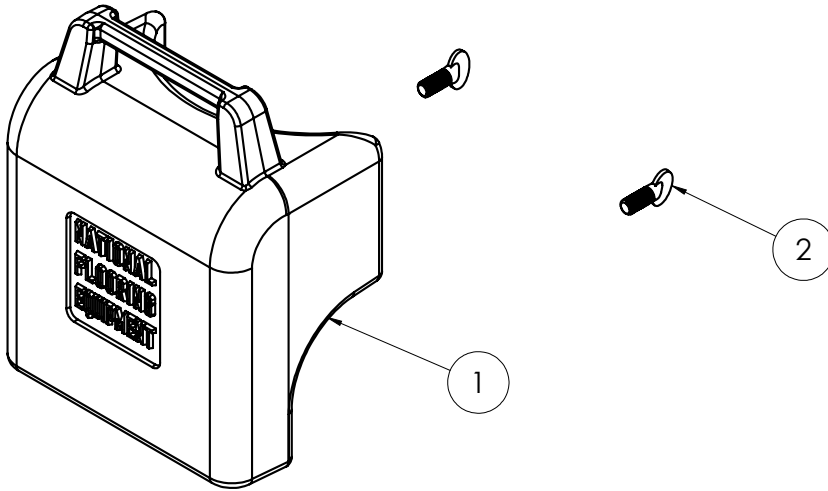
## SWITCH - INTERNATIONAL MACHINES



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	403865	Bracket, Mount, Switch	1
2	73001	Bolt, Wizlock 1/4-20x1/2	2
3	403871	Switch, Safety, 110V, 50Hz, UK (550-20XXXX)	1
3	403872	Switch, Safety, 230V, 50Hz (550-11XXXX, 550-13XXXX, 550-27XXXX, 550-29XXXX)	1
4	403797	Screw, Phillips Pan Head, M5-0.8 x 50mm	2
5	401517	Nut, M5-.80 Nylock	2
6	403870	Plug, Male, IEC 60309, 110-130V, 16A, 3W, Yellow (550-20XXXX)	1
6	72715	Plug, Male, AU1-10P, 250V, 10A (550-13XXXX)	1
6	401438	Plug, Male, EU1-16P, 250V, 16A (550-11XXXX)	1
6	401551	Plug, Male, UK1-13P, 250V, 13A (550-27XXXX, 550-29XXXX)	1
7	72821	Terminal, Ring, 16-14 Gauge, Nylon, 10 Stud	1

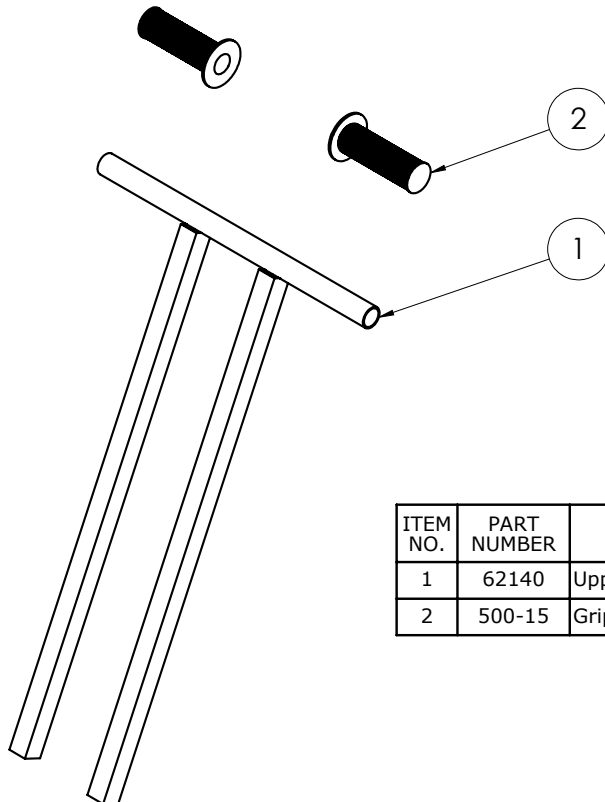
# Parts List and Diagrams

## COUNTERWEIGHT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	550-28-SV	Counterweight, Front, Cast, Silver Vein (550-10XXXX, 550-23XXXX, 550-11XXXX, 550-13XXXX, 550-20XXXX, 550-27XXXX, 550-29XXXX ONLY)	1
1	550-28-G	Counterweight, Front, Cast, Green (550-12XXXX ONLY)	1
2	73273	3/8-16x3/4 Screw, Thumb	2

## UPPER HANDLE

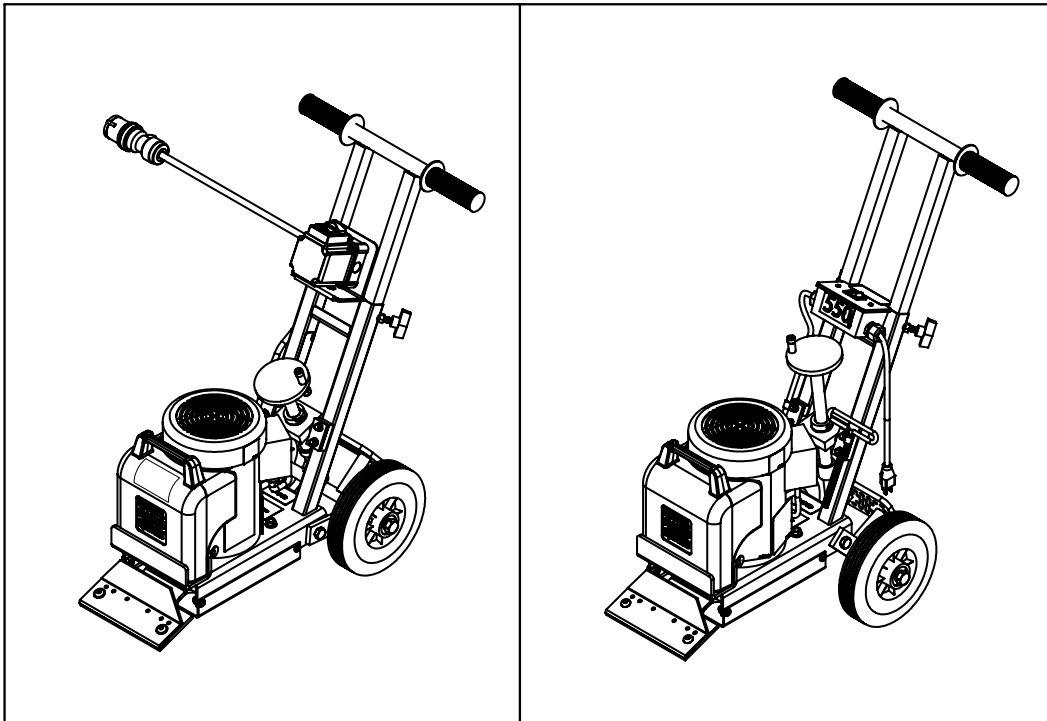


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	62140	Upper Handle	1
2	500-15	Grip, Handle (Pair)	1



# Parts List and Diagrams

## LABELS



**International**

**Domestic**

ITEM NO.	PART NUMBER	DESCRIPTION	Qty.
1	403356	Kit, Labels, 550, English	1
2	402627	Label, 1.5 x 2 (550-23XXXX Only)	3
3	403866	Label, CE, 550, 230V, 50 Hz (550-11XXXX, 550-13XXXX, 550-27XXXX, 550-29XXXX Only)	1
4	403867	Label, CE, 550, 110V, 50 Hz (550-20XXXX Only)	1

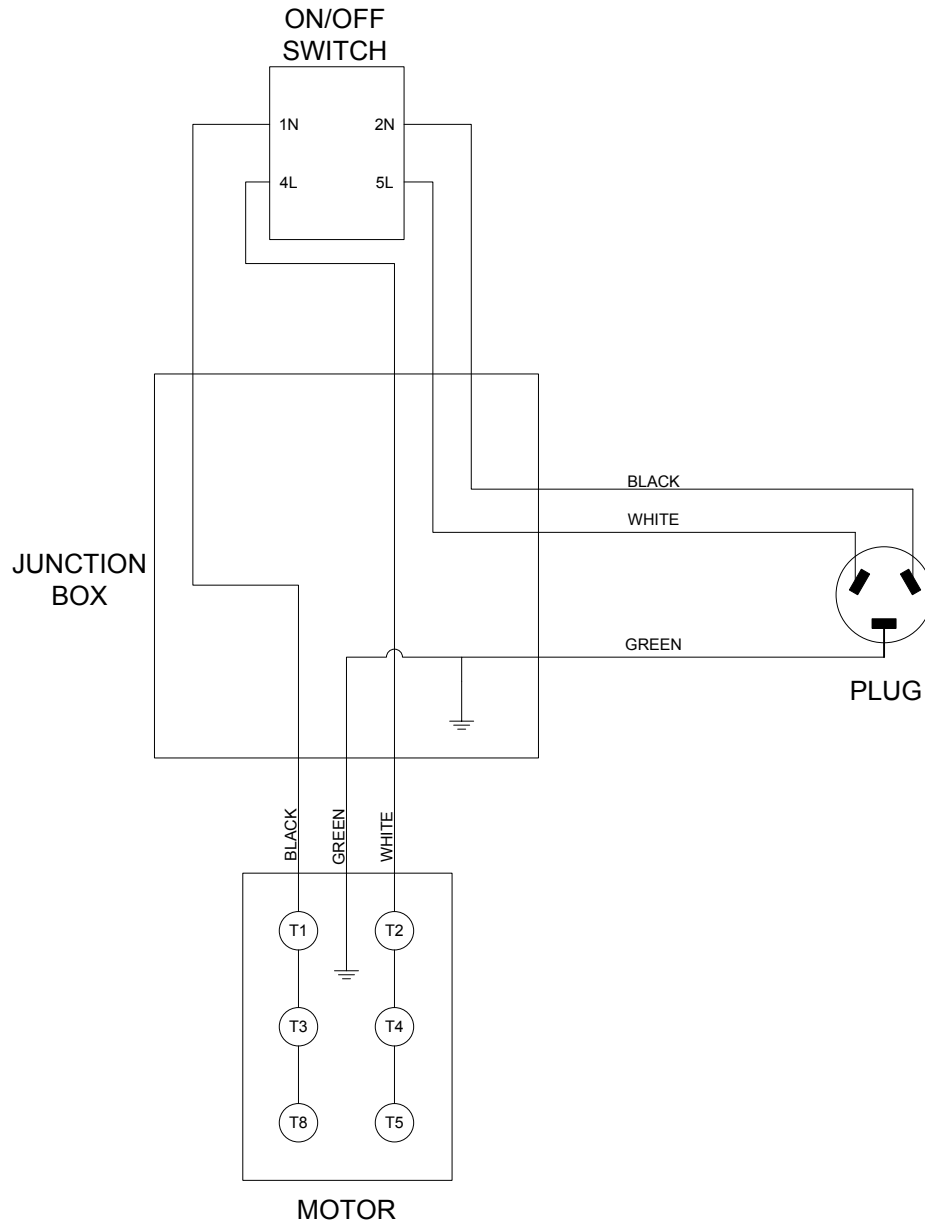
## ACCESSORIES

PART NUMBER	DESCRIPTION	QTY.
5170	Blade Kit	1

# Parts List and Diagrams

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## WIRING DIAGRAM



# Warranty

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National Flooring Equipment Inc. (referred to as "the Company") warrants that each new unit manufactured by The Company, to be free from defects in material and workmanship in normal use and service for a period of twelve (12) months from date of shipment from the Company. For administrative ease, will honor warranty for a period of fifteen (15) months from date of shipment from the company. Accessories or equipment furnished and installed on the product by the Company but manufactured by others, including but not limited to: engines, motors, electrical components, transmissions etc., shall carry the accessory manufacturers own warranty. Battery warranties are prorated over the warranty period. Customer is responsible for the inspection of equipment / parts upon delivery. Freight damages reported beyond authorized time frame will not be honored.

The Company, at its determination of defect, will repair or replace any product or part deemed to be defective in material or workmanship within specified warranty time period. All product determinations and / or repairs will take place at the designated Company repair facility, or at a certified warranty location designated by the Company. The Company will coordinate and be responsible for all freight expenses associated with valid warranty claims. Freight and shipping expenses associated with abuse or misuse will be back charged to the Distributor/Customer. The Company reserves the right to modify, alter or improve any part / parts without incurring any obligation to replace any part / parts previously sold without such modified, altered or improved part / parts. In no event shall the seller or manufacturer of the product be liable for special, incidental, or consequential damages, including loss of profits, whether or not caused by or resulting from the negligence of seller and / or the manufacturer of the product unless specifically provided herein. This warranty shall not apply to any products or portions there of which have been subjected to abuse, misuse, improper installation or operation, lack of recommended maintenance, electrical failure or abnormal conditions and to products which have been tampered with, altered, modified, repaired, reworked by anyone not approved or authorized by the Company or used in any manner inconsistent with the provisions of the above or any instructions or specifications provided with or for the product. Any and all unauthorized onsite warranty work conducted by unauthorized personnel or any outside person(s), is not covered by the Company unless the work has been pre-authorized by a predetermined manufacturer representative. This excludes wearable parts and/or consumables.

Defective or failed material or equipment shall be held at the purchaser's premises until authorization has been granted by the Company to return or dispose of defective products. Products returned for final inspection must be returned with a manufacturer authorized Return Material Authorization (RMA). Any unauthorized return of equipment will be declined at the dock by the Company. Any non-approved items returned with approved returned items are subject to rejection and will not be credited. Credit will be issued for material found to be defective upon the Company's inspection based on prices at time of purchase.

**TO OBTAIN SERVICE CONTACT NATIONAL FLOORING EQUIPMENT, INC. TOLL FREE AT 800-245-0267 FOR A REPAIR AUTHORIZATION NUMBER. COD FREIGHT RETURNS WILL NOT BE ACCEPTED. FREIGHT COLLECT SHIPMENTS WILL NOT BE ACCEPTED. WARRANTY REPAIRS MUST BE ACCOMPANIED BY DATE OF PURCHASE RECEIPT AND A RETURN/ REPAIR AUTHORIZATION NUMBER.**

**RETURN/REPAIR AUTHORIZATION NUMBER:** \_\_\_\_\_

**MACHINE SERIAL NUMBER:** \_\_\_\_\_



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Web Site: [www.nationalequipment.com](http://www.nationalequipment.com) • E-Mail: [info@nationalequipment.com](mailto:info@nationalequipment.com)