

SC8E Scarifier Manual



SASE Company, Inc.
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www.SASECompany.com



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Congratulations on your decision to get the Power of SASE behind you! SASE is committed to excellence, excellence in the quality of products we sell and excellence in service and support after the sale. It is important to us that your business continues to succeed and grow, and we know that the right products, service and support can have a great impact on your bottom line.

SASE has made great strides in the concrete preparation and polishing industry over the years. With a 40,000 square foot distribution and service facility in Seattle, a 22,000 square foot distribution and service facility in Knoxville, and local sales and technical support representatives throughout the United States, SASE is able to provide unsurpassed service and technical support for the contractor.

At SASE we engineer and manufacture our own equipment, which allows us to be in control of the quality of the equipment we sell. SASE offers a complete line of concrete preparation and polishing equipment, our newest introduction being our new line of PDG planetary diamond grinders, which is setting a new standard for the concrete grinding and polishing industry. SASE is also the leader in diamond tooling technology.

We look forward to a long and prosperous partnership with you! Thank you again for choosing SASE. You won't regret having the Power of SASE behind your company!

Sincerely,

SASE Company, Inc.

Jim Weder

President

SASE Company Inc. Equipment Safety Policy Statement

SASE Company, Inc. is adamant that safety is one of the highest priorities for both our employees and customers. When considering set-up and operation of any piece of equipment supplied, manufactured, distributed, rented or serviced by SASE Company, Inc., the safety and protection of people should always be a top priority.

All customers and employees should follow all OSHA and local safety standards, requirements and regulations.

The use of the following safety equipments are both recommended and required when operating any piece of equipment supplied, manufactured, distributed, rented or serviced by SASE Company, Inc.

- > OSHA approved/certified eye protection (safety glasses).
- OSHA approved/certified hearing and ear protection.
- OSHA approved/certified foot protection (steel toed boots).
- OSHA approved/certified respirator or breathing device.
- OSHA approved head protection (hard hat).
- Proper protective work gloves.
- Proper protective clothing limiting skin exposure.

(The list is not meant to be all inclusive. Please exercise sound judgments during operation.)

The work area must always have proper ventilation to minimize the health and safety risks of propane and gasoline emissions and airborne dust.

All SASE Company Equipment is engineered, designed and provided with dust control shrouds and vacuum ports. It is strongly recommended that an approved dust containment system be connected to and used in conjunction with all SASE Company equipment during operational use. SASE Company supplies, distributes, rents and services dust control systems with HEPA filtration.

Extreme caution must be exercised at all times when electrical power is considered. All SASE employees are prohibited from working on or hard wiring our equipments to any power source that has not been provided by SASE Company Inc. Any such work must be performed by a certified electrical technician. No SASE employee is permitted or authorized to work on, operate, or connect our equipment or equipment belonging to our customers to an electrical source that does not meet OSHA approved specifications. There are no exceptions to this policy! SASE Company, Inc. also strongly recommends that only certified electricians be permitted to deal with or manipulate electrical power sources within our customers' facilities or on their job-sites.

Finally, we at SASE Company, Inc. cannot stress enough the importance of following general safety practices, the utilization of appropriate safety equipment and the application of common sense when operating equipment supplied, manufactured, distributed, rented or serviced by SASE Company, Inc. both on the job-site and in the field.

(JJL 07/2010)

Important Information



DO NOT OPERATE THIS EQUIPMENT WITHIN AN ENCLOSED AREA. The exhaust from the internal combustion engine contains carbon monoxide, an odorless and deadly poison. <u>If using equipment indoors</u>, proper and adequate ventilation is required. An approved OSHA air-monitoring system must be in place at all times. **Avoid inhalation of exhaust gas**.

Carbon monoxide gas is toxic. Breathing it can cause unconsciousness and may KILL you. Avoid any areas or actions that expose you to carbon monoxide.

Do to the use of the equipment; suitable protective clothing must be worn or bodily harm may occur. The machine operator must wear eye protection, gloves, earplugs and non-slip safety shoes.

When doing work that causes dust, wear an appropriate respiratory mask that will protect you from the type of dust you are working in.

Before operation please read about this topic and other important safety information that is contained within the enclosed *Engine Owners Manual*.

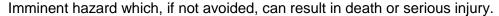
Safety Communication

READ AND UNDERSTAND BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT

Safety Instructions are preceded by a graphic alert symbol of DANGER, WARNING, or CAUTION



Imminent hazard which, if not avoided, will result in death or serious injury.





Hazards which, if not avoided, could result in serious injury and or damage to the equipment.

General Instructions

Maintain the machine in safe operating condition with all guards in place and secure all mechanical fasteners tight.

Ensure all controls in working order and the machine is configured for the job application.

Be sure all safety decals can be clearly read and understood. Replace damaged or missing decals immediately.

Equipment should only be operated by trained personnel in good physical condition and mental health.

Never operate this machine while under the influence of drugs, alcohol or when taking medications that impair the senses or reactions, or when excessively tired or under stress.

Avoid deck inserts, pipes, columns, openings, electrical outlets, or any objects protruding from slab surface.

Maintain a safe operating distance to other personnel. It is the **operators' responsibility** to keep other people (workers, pedestrians, bystanders, etc.) at a safe distance during operation.

Block off the work area in all directions. Failure to do so may result in others being injured by flying debris or exposing them to harmful dust and noise.

For the operator's safety and the safety of others, always keep all guards in place during operation.

Never let equipment run unattended.

(PPE) Personal Protection Equipment



Proper safety attire must be worn when operating this machinery. The operator must wear approved safety equipment appropriate for the job such as hard hat and safety shoes when conditions require.



Ear protection must be worn at all times when this machine is in use. During normal use, sound levels exceed 92dB.



Eye protection must be worn at all times when this machine is in use. Use only ANSI approved safety glasses to help prevent eye injury.



Operator must wear appropriate clothing and footwear. Steel toe safety shoes should be worn.

Do not wear loose clothing or jewelry that can get tangled or caught in moving parts. Keep body parts and loose clothing away from moving parts. Failure to do so could result in dismemberment or death.

General Operation

Stop motor/engine when adjusting or servicing this equipment. Maintain a safe operating distance from flammable materials.

Sparks from the cutting-action of this machine can ignite flammable materials or vapors.

Check motor rotation.

DO NOT use if drum rotation is incorrect - have a qualified electrician make the necessary change in the main control panel or motor connection box.

Before Starting the Machine

Perform a visual inspection of the entire machine and all daily maintenance according to the *Maintenance Schedule*.

Locate and be familiar with all engine/motor and operating controls.

For Gasoline models, obtain the *Engine Manufacturer's Owner's Manual*. Read it and understand it before continuing. Follow the engine manual for break-in instructions.

Use the correct cutters for the job. Be sure cutter drum is balanced, the number, size and type of cutter wheels are correct.

Be sure all fasteners are tight and secure, check for signs of metal cracking or fatigue, inspect for damage to electrical wiring, damage to fuel lines, check bearings, etc.

Be sure all guards are in place.

Inspect work area to determine the presence and location of deck inserts, pipes, columns and objects protruding from the slab surface so that they may be avoided during operation.

Safety warnings and guidelines do not by themselves eliminate danger. They are not given as substitutes for proper accident prevention and good judgment.

Electrical Powered Equipment



For Electric Models - Electric motors must be properly grounded at all times. Check the outlet box to be sure the electrical service is properly grounded. Be sure adequate power is available. Insufficient power will cause a motor to overheat and burn out.

Use only grounded extension cords correctly sized for the current draw and voltage drop (amp rating and length). Never use frayed, damaged, taped or under rated extension cords.



Electrical shock could result in death or serious injury to the operator and damage to the equipment.

Extreme care must be taken when operating electric models with water present: Ensure power cord is properly grounded, is attached to a Ground-Fault-Interrupter (GFI) outlet, and is undamaged.

Check all electrical cables - be sure connections are tight and cable is continuous and in good condition. Be sure cable is correctly rated for both the operating current and voltage of this equipment.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with qualified electrician or service person if there is any doubt as to whether the outlet is properly grounded. Adhere to **all** local codes and ordinances.

NOTE: In the event of a malfunction or breakdown, grounding provides a path of least resistance for the electric current to dissipate. The motor is equipped with a grounded plug and must be connected to an outlet that is properly installed and properly grounded. DO NOT modify the plug provided on the motor. If the plug does not fit the outlet have a qualified electrician install the proper receptacle.

Switch motor OFF **before** disconnecting power.

Do not disconnect power by pulling cord. To disconnect, grasp the plug, not the cord.

Unplug power cord at the machine when not in use and before servicing.

Starting the Engine/Motor for Electric Models

Be sure the "OFF" button is depressed on the motor starter box.

Hook up the correct voltage/phase electrical power source by plugging into the connector provided. If the cord does not mate with the connector, consult a qualified licensed electrician before continuing.

Verify that the electrical current being supplied is the proper voltage and phase required to run the equipment.



POISONOUS EXHAUST

Gasoline Powered Models

DO NOT operate any gasoline powered equipment without adequate ventilation. Carbon monoxide is an invisible, odorless gas that can kill.

NEVER REFUEL A HOT ENGINE OR AN ENGINE WHILE IT IS RUNNING.

Only refuel a cool "stopped" engine in a well-ventilated area. Properly clean any spilled fuel before starting the engine.



Gasoline is extremely flammable and poisonous. It should only be dispensed in well ventilated areas, and with a cool engine..

Engine exhaust from this product contains chemicals known to cause cancer, birth defects or other reproductive harm.



Small gasoline engines produce high concentrations of carbon monoxide (CO). Gasoline or propane powered equipment should not be used in enclosed or partially enclosed areas. Symptoms of CO poisoning include, headache, nausea, weakness, dizziness, visual problems and loss of consciousness. If symptoms occur get into fresh air and seek medical attention

immediately.

Gasoline Models - Consult the *Engine Manufacturer's Owner's Manual* and follow the directions for starting the engine and allow the engine to warm up.

Refer to the Engine/Motor Manufacturer's Owner's Manual for maintenance information specific to the engine/motor used.

Dust Warning



Some dust created by grinding and other construction activities contains chemicals known to cause cancer, birth defects, or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from concrete and other masonry products.

Your risk of exposure to these chemicals varies depending on how often you do this type of work.



To reduce your risk work in a well ventilated area, use a dust control system, such as an industrialstyle vacuum, and wear approved personal safety equipment, such as a dust/particle respirator designed to filter out microscopic particles.

Dry Grinding

Dry Grinding creates a large volume of airborne dust. For health reasons, the operator should wear an applicable respirator. The dust may contain chemicals known to cause serious illnesses, including Silicosis - a fatal disease of the lungs.

Check the chemical properties of the material to be removed and follow all EPA/OSHA regulations.

An Industrial vacuum, capable of handling high volume of fine dust, should be used when dry grinding with this machine. If the material being used is hazardous or contains Silica - the vacuum unit should be capable of removing Silica and hazardous particles of less than 3 microns and if necessary, have the capability to be equipped with a HEPA filter.

Most standard drum type units use a paper bag filter. The dust created during grinding is extremely fine and will clog the filter bag of these units and eventually damage the vacuums motor. In addition, damage to the engine could occur.

The collected debris and filters should be disposed of according to procedures that comply with current EPA/OSHA standards

Serious injury or death could occur if this machine is used improperly

Maintenance

Proper belt tension must be maintained to transmit the engine/motor power to the cutting drum. An over tensioned belt will shorten belt and bearing life.

A damaged, stretched or excessively worn belt should be replaced.

Check oil level before operation. Change engine oil and filter according to engine manufacturers recommendations.

Engine Air Filter

Important! Clean air filter element daily

Inspect the air filter for excess dust, dirt or damage before the engine is operated. More often if operating in an extremely dusty environment.

Operating the engine with a damaged or dirty air filter, or without an air filter, will allow dirt to enter the engine causing premature engine wear which is not covered under the engine manufacturer's warranty.

Follow the engine manufacturer's procedures for keeping filters in good condition.

Never work on or under equipment without first securing the equipment to prevent it from moving or falling.

Always work on a flat and level surface.

Remove spark plug lead on gasoline engine models or disconnect the supply voltage connector on electric models before performing any maintenance.

Disconnect the power cord at the machine.

Operating Procedures for SC8E (GAS)

Start-Up

- Add oil and gasoline to the machine.
- Move the fuel valve lever to the ON position.
- Move the choke lever to the CLOSED position (cold engine).
- Move the throttle lever 1/3 of the way toward the FAST position.
- Turn the engine switch to the ON position.
- Operate the starter by lightly pulling the starter grip until you feel resistance, then pull briskly.
- Gently return the starter grip.
- Lower drum and begin grinding.
- Read the following additional information before operating your scarifier.

Caution: Never tilt the unit back on the handle. Oil will flow into the cylinder head and could severely damage the motor and void the warranty.

Drive Motor/Engine:

The internal combustion engines are supplied without fuel or motor oil. Therefore, be sure to fill them as instructed in the manufacturer's manual. If the motor suddenly stops, the oil could be to low or it may have been overfilled.

Caution: Start the motor ONLY when the cutter drum assembly is in the raised position and the parking brake on.

Cutter/Drum Configuration

Check to make sure that the drum is configured with the cutters we recommend for the application in question. When working with special milling cutters, be extra careful about the correct direction of drum rotation and correct cutter installation. Never tip the machine on its back to look at the cutters. This can be done quickly and easily by removing the endplate. When putting the endplate back on the machine, make certain to check the tightening torque of cover nuts.

Caution: To avoid bearing damage, repeat this check of the cover nuts from time to time.

Working with the Scarifier:

To engage the drum, lift the black handle up and proceed in forward motion with the lever. Once the drum engages, you can go lower for more aggressive cutting or back up for lighter scarifying. For fine-tuning of the adjustment depth, turn the black dial clockwise until the desired adjustment is reached.

Caution: Do not lower the black handle too deep. This will NOT increase productivity. When the depth is set correctly, the machine will run smoothly.

To stop scarifying, lift the black handle up and proceed in a backward motion until the lever is in the uppermost position

Changing the cutter drum:

Always be sure to switch off the machine before removing the endplate. This will prevent any flying debris from injuring the worker. Remove the cover nuts from the endplate, and then remove the endplate to expose the cutter drum assembly.

Dust Control:

Should dust control be of concern, please contact SASE to inquire about our powerful dust control vacuums. The SC8E can be used with an optional 2" vacuum connection.

If you need further assistance, please call our toll free number .800.522.2606.

Cutter and Flail Shaft Recommendations



- The above flail shafts are showing excessive wear. These shafts should have been replaced much earlier.

To a great extent, economical use of cutter drums depends upon proper maintenance. Changing flail shafts before they become excessively worn and begin to oval out the shaft holes can significantly increase the life of the drum. If you run a machine with badly worn flail shafts you can easily destroy a drum in just a few hours. These shafts are only surface hardened in order to maintain their internal strength. This is why it is important to replace them as soon as the grooves are 1/5 of an inch or 5mm deep.

Changing the shafts early provides the following advantages:

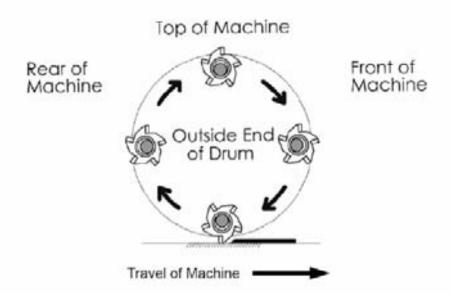
- The drum shaft holes will not wear as fast thus increasing drum life.
- Breakage of shafts can be avoided, thus saving a great deal of downtime refitting the machine.

Recommendations:

- When working with five or eight point Tungsten Carbide tipped cutters or special milling cutters, replace the shafts every fifteen to twenty hours of operation.
- When working with steel cutters change the shafts every time new cutters are installed.
- Change the entire cutter/drum assembly after 3 sets of cutters have been used up, if not sooner.



- Direction of Rotation for Milling Cutters -



Correct rotation of the Milling Cutters is critical to successful resurfacing and to insure maximum wear life. Drum and cutter assembly should be mounted so that cutters are rotating towards the front of the machine as indicated above.

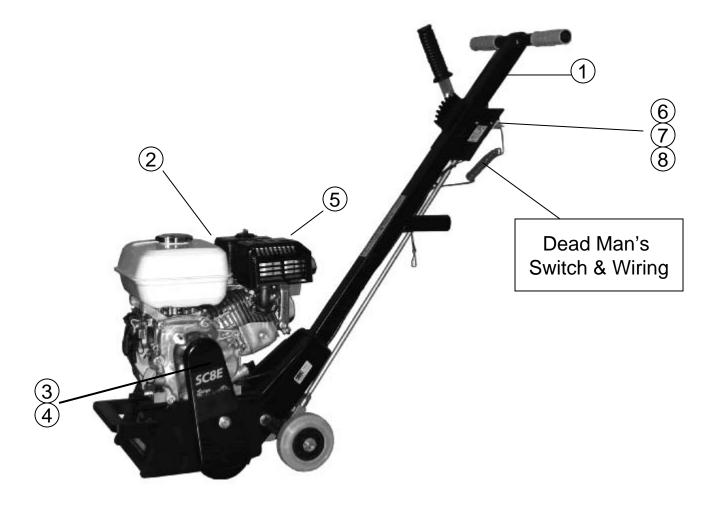
Incorrect rotation can lead to premature wear and early failure.

Note: These Milling Cutters were originally designed by VON ARX engineers for the removal of specialty coatings. Some examples of these coatings are; Elastomerics, Thermoplastics, Urethane, Rubberized and Asphalt base coatings.

Milling Cutters are high quality tools and as such should be applied carefully. They are not normally appropriate for aggressive milling or grinding of concrete.

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SC8E Gas



SC8E Gas SC.08.020				
Item No	Part No	Description	Quantity	
1	SC.08.000	Black SC8E Chassis	1	
2	HON.GX160	5.5 HP GX160 FR 200 Engine	1	
3	NB.10.250	5/16 -24 X 3/4 Hex Screw	1	
4	NB.30.401	5/16 X 30 Fender Washer	1	
5	HON.2026227	Muffler Deflector (comes with HON.GX160)	1	
16	SC.08.115	Upper Toothed Pulley FR200 SC8E Gas	1	

Emergency Stop Bracket

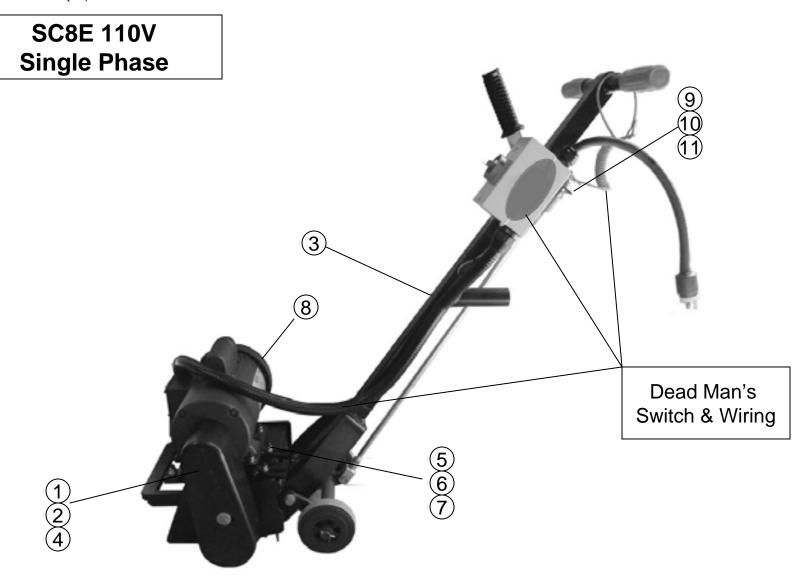
6	NB.19.101	8-32 X 3/4 Pan Head Screw	2
7	NB.20.133	8-32 Nyloc Nut	2
8	795.00.76	Mounting Emergency Stop Bracket FR200	1

Dead Man's Switch & Wiring

9	795.00.12	11" X 0.125" Black Zip Tie	2
10	795.00.19	Emergency Stop Switch Tether with Cord	1
11	795.00.20	16-14 AWG Bullet Connector Blue Nylon	1
12	795.00.21	22-18 AWG Ring-1/4" Stud Red Nylon	1
13	795.00.22	22-18 AWG Butt Connector Red Vinyl	2
14	795.00.23	3/8" Heat Shrink Tubing Black	4 in
15	AIW.16X2CRD	Power Cord 16/2	6 ft

^{*}Honda engine

^{*}Orient the upper pulley nipple toward motor



SASE Company Inc.

SC8E 110V Single Phase SC.08.040				
Item No	Part No	Description	Quantity	
1	NB.10.114	M8 X 20 Hex Head Screw	1	
2	NB.30.403	M8 X 30 Fender Washer	1	
3	SC.08.000	Black SC8E Chassis	1	
4	SC.08.113	Upper Toothed Pulley FR200	1	
5	SC.08.117	T-BOLT Short FR 200 SC8E	8	
6	SC.08.120	Mounting Pair Rail FR 200 SC8E	1	
7	SC.08.121	Electric Mounting Plate FR 200 SC8E	2	
8	ZZ.03500T	Electric Motor 1 PH 110V FR200 SC8E	1	

Emergency Bracket

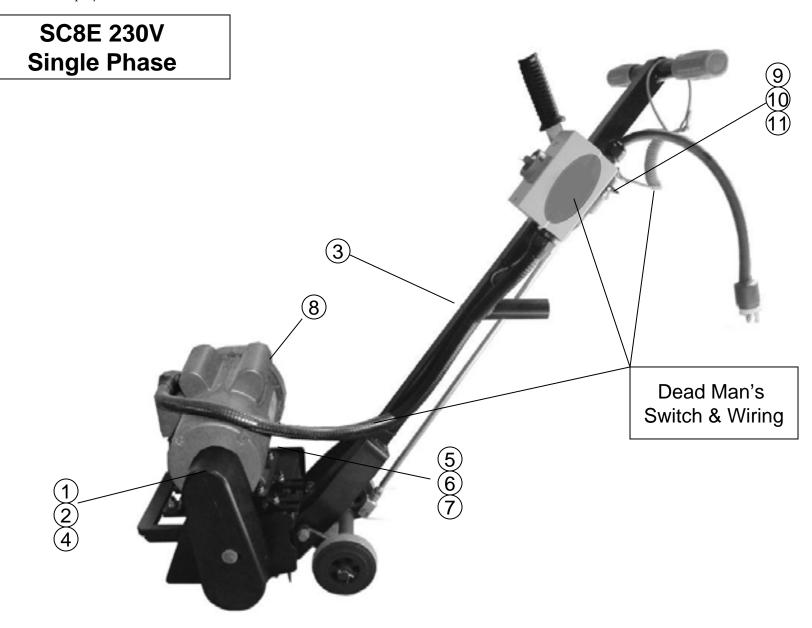
9	NB.19.101	8-32 X 3/4 Pan Head Screw	2
10	NB.20.133	8-32 Nyloc Nut	2
11	795.00.76	Mounting Emergency Stop Bracket FR200	1

Dead Man's Switch & Wiring

12	795.00.04	3/4" Liquidtight Flexible Conduit	4 ft
13	795.00.05	3/4" L/T Bullet Connector LT75P	2
14	795.00.06	3/4" W/R Black SLRN21	1
15	795.00.08	3/4-IN 45 Bullet L/T Connector	1
16	795.00.10	18 Gauge Wire Nut Yellow	3
17	795.00.12	Zip Tie Black 11" X 0.125"	2
18	795.00.19	Emergency Stop Switch Tether with Cord	1
19	795.00.20	16-14 AWG Bullet Connector Blue Nylon	1
20	795.00.21	22-18 AWG Ring-1/4" Stud Red Nylon	1
21	795.00.22	22-18 AWG Butt Connector Red Vinyl	2
22	795.00.23	3/8" Heat Shrink Tubing Black	4 in
23	AIW.10X3CRD	Power Cord 10/3	6 ft
24	AIW.16X2CRD	Power Cord 16/2	1 ft
25	ELE.33031	Twistlock Male Plug L5-15P	1
26	MCC.27AA110	Shunt Relay Module 110V for 25A Switch	1
27	MCC.27.25A	25 Amp Switch	1
28	MCC.27.KAZ	Switch Enclosure Box for 25 Amp	1
29	NB.19.101	8-32 X 3/4 Pan Head Screw	2
30	NB.20.133	8-32 Nyloc Nut	2

^{*}Orient the upper pulley nipple outward motor

^{*}Align bolts through Motor Slots



SC8E 230V Single Phase SC.08.042				
Item No	Part No	Description	Quantity	
1	NB.10.114	M8 X 20 Hex Screw	1	
2	NB.30.403	M8 X 30 Fender Washer	1	
3	SC.08.000	Black SC8E Scarifier Chassis	1	
4	SC.08.113	Upper Toothed Electric Pulley FR200	1	
5	SC.08.117	Short T-bolt FR 200	8	
6	SC.08.120	Mounting Pair Rail FR200	1	
7	SC.08.121	Electric Mounting Plate FR200	2	
8	ZZ.L3515T	Electric Motor 1 Phase 230V FR200 SC8E	1	

Emergency Bracket

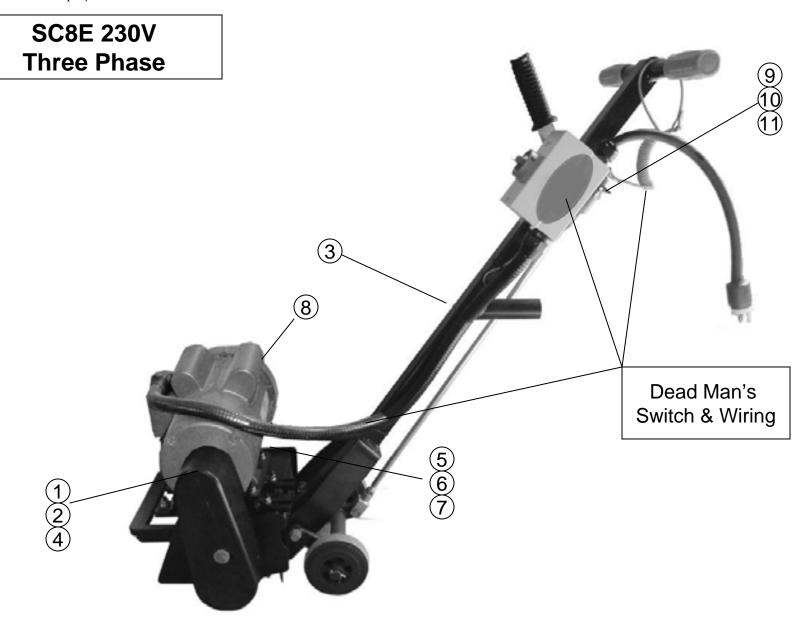
9	NB.19.101	8-32 X 3/4 Pan Head Screw	2
10	NB.20.133	8-32 Nyloc Nut	2
11	795.00.76	Mounting Emergency Stop Bracket FR200	1

Dead Man's Switch & Wiring

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795.00.04	3/4" Liquidtight Flexible Non-metallic Conduit	4 ft
795.00.05	3/4" L/T Bullet Connector LT75P	1
795.00.06	3/4" W/R Black SLRN21	1
795.00.08	3/4-IN 45 L/T Bullet Connector	3
795.00.10	18 Yellow Gauge Wire Nut	1
795.00.12	Black Zip Tie 11" X 0.125"	1
795.00.19	Emergency Stop Switch Tether with Cord	1
795.00.22	22-18 AWG Butt Connector Red Vinyl	2
795.00.23	3/8" Heat Shrink Tubing Black	4 in
AIW.10X3CRD	Power Cord 10/3	6 ft
AIW.16X2CRD	Power Cord 16/2	1 ft
MCC.27.16A	16 Amp Switch	1
MCC.27.25AA220	Shunt Relay Module for 220 V	1
MCC.27.KAZ	Switch Enclosure Box for 25A Switch	1
NB.19.101	8-32 X 3/4 Pan Head Screw	2
NB.20.133	8-32 Nyloc Nut	2
	795.00.04 795.00.05 795.00.06 795.00.08 795.00.10 795.00.12 795.00.22 795.00.23 AIW.10X3CRD AIW.16X2CRD MCC.27.16A MCC.27.25AA220 MCC.27.KAZ NB.19.101	795.00.04 3/4" Liquidtight Flexible Non-metallic Conduit 795.00.05 3/4" L/T Bullet Connector LT75P 795.00.06 3/4" W/R Black SLRN21 795.00.08 3/4-IN 45 L/T Bullet Connector 795.00.10 18 Yellow Gauge Wire Nut 795.00.12 Black Zip Tie 11" X 0.125" 795.00.19 Emergency Stop Switch Tether with Cord 795.00.22 22-18 AWG Butt Connector Red Vinyl 795.00.23 3/8" Heat Shrink Tubing Black AIW.10X3CRD Power Cord 10/3 AIW.16X2CRD Power Cord 16/2 MCC.27.16A 16 Amp Switch MCC.27.KAZ Shunt Relay Module for 220 V MCC.27.KAZ Switch Enclosure Box for 25A Switch NB.19.101 8-32 X 3/4 Pan Head Screw

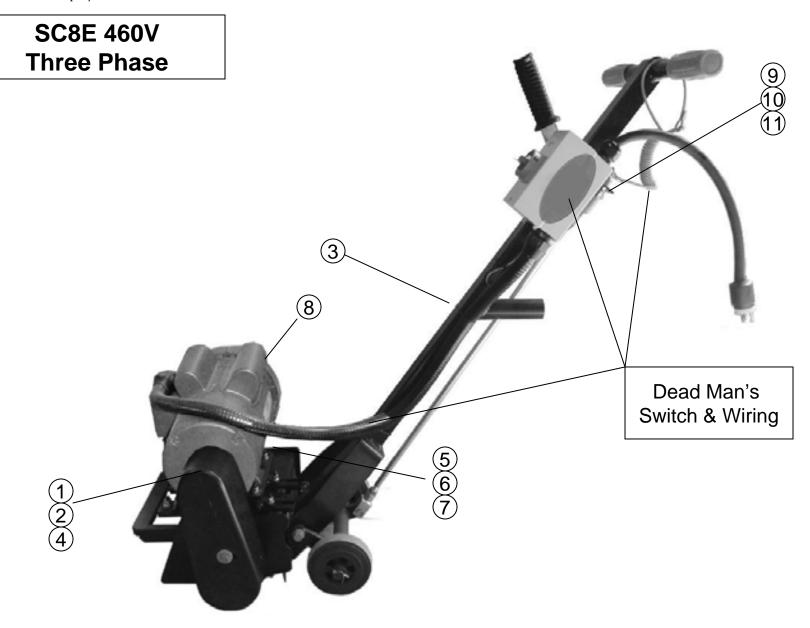
^{*}drill and tap

^{*}Black = 1+5 White = 4+8



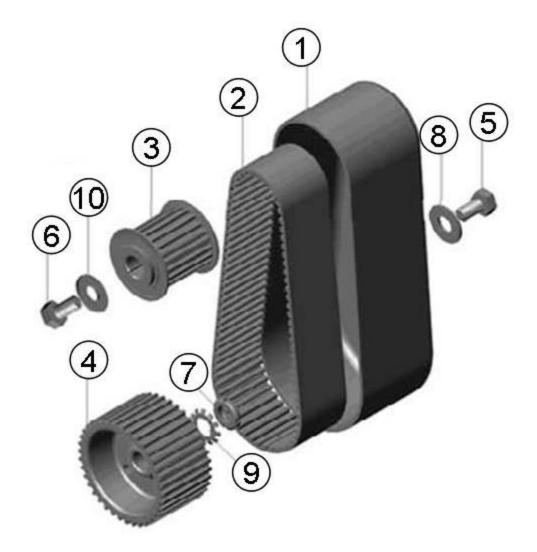
SC8E 230V Three Phase SC.08.044				
Item No	Part No	Description	Quantity	
1	NB.10.114	M8 X 20 Hex Screw	1	
2	NB.30.403	M8 X 30 Fender Washer	1	
3	SC.08.000	Black SC8E Scarifier Chassis	1	
4	SC.08.113	Upper Toothed Electric Pulley FR200	1	
5	SC.08.117	Short T-bolt FR 200	8	
6	SC.08.120	Mounting Pair Rail FR200	1	
7	SC.08.121	Electric Mounting Plate FR200	2	
8	ZZ.M3559T	Electric Motor 3 Phase FR 200 SC8E	1	
		Emergency Bracket		
9	NB.19.101	8-32 X 3/4 Pan Head Screw	2	
10	NB.20.133	8-32 Nyloc Nut	2	
11	795.00.76	Mounting Emergency Stop Bracket FR200	1	
	•		·	
		Dead Man's Switch & Wiring		
12	795.00.04	3/4" Liquidtight Flexible Conduit	4FT	
13	795.00.05	3/4" L/T Bullet Connector LT75P	1	
14	795.00.06	3/4" W/R Black SLRN21	1	
15	795.00.08	3/4-IN 45 Bullet L/T Connector	3	
16	795.00.10	18 Gauge Wire Nut Yellow	1	
17	795.00.11	20 Gauge Wire Nut Orange	1	
18	795.00.12	Zip Tie Black 11" X 0.125"	2	
19	795.00.19	Emergency Stop Switch Tether with Cord	1	
20	795.00.20	16-14 AWG Bullet Connector Blue Nylon	1	
21	795.00.21	22-18 AWG Ring-1/4" Stud Red Nylon	1	
22	795.00.22	22-18 AWG Butt Connector Red Vinyl	2	
23	795.00.23	3/8" Heat Shrink Tubing Black	4 IN	
24	AIW.12X4CRD	Power Cord 12/4	6 FT	
25	AIW.16X2CRD	Power Cord 16/2	1 FT	
26	MCC.27AA220	Shunt Relay Module for 220 V	1	
27	MCC.27.10A	10 Amp Switch	1	
28	MCC.27.KAZ	Switch Box Enclosure for 25A Switch	1	
29	NB.19.101	8-32 X 3/4 Pan Head Screw	2	
30	NB.20.133	8-32 Nyloc Nut	2	

*Orient the upper pulley, nipple toward motor



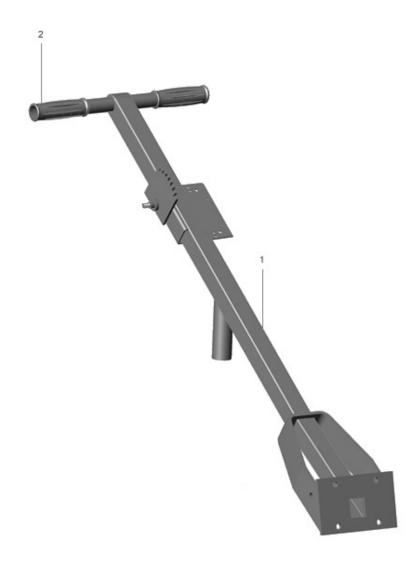
		SC8E 460V Three Phase SC.08.046	
tem No	Part No	Description	Quanti
1	NB.10.114	M8 X 20 Hex Screw	1
2	NB.30.403	M8 X 30 Fender Washer	1
3	SC.08.000	Black SC8E Scarifier Chassis	1
4	SC.08.113	Upper Toothed Electric Pulley FR200	1
5	SC.08.117	Short T-bolt FR 200	8
6	SC.08.120	Mounting Pair Rail FR200	1
7	SC.08.121	Electric Mounting Plate FR200	2
8	ZZ.M3559T	Electric Motor 3 Phase FR 200 SC8E	1
		Emergency Bracket	
9	NB.19.101	8-32 X 3/4 Pan Head Screw	2
10	NB.20.133	8-32 Nyloc Nut	2
11	795.00.76	Mounting Emergency Stop Bracket FR200	1
	•		•
		Dead Man's Switch & Wiring	
12	795.00.04	3/4" Liquidtight Flexible Conduit	4FT
13	795.00.05	3/4" L/T Bullet Connector LT75P	1
14	795.00.06	3/4" W/R Black SLRN21	1
15	795.00.08	3/4-IN 45 Bullet L/T Connector	3
16	795.00.10	18 Gauge Wire Nut Yellow	1
17	795.00.11	20 Gauge Wire Nut Orange	1
18	795.00.12	Zip Tie Black 11" X 0.125"	2
19	795.00.19	Emergency Stop Switch Tether with Cord	1
20	795.00.20	16-14 AWG Bullet Connector Blue Nylon	1
21	795.00.21	22-18 AWG Ring-1/4" Stud Red Nylon	1
22	795.00.22	22-18 AWG Butt Connector Red Vinyl	2
23	795.00.23	3/8" Heat Shrink Tubing Black	4 IN
24	AIW.12X4CRD	Power Cord 12/4	6 FT
25	AIW.16X2CRD	Power Cord 16/2	1 FT
26	MCC.27AA440	Shunt Relay Module for 440 V	1
27	MCC.27.63A	6.3 Amp Switch	1
28	MCC.27.KAZ	Switch Box Enclosure for 25A Switch	1
29	NB.19.101	8-32 X 3/4 Pan Head Screw	2
30	NB.20.133	8-32 Nyloc Nut	2

Parts for Belt Guard



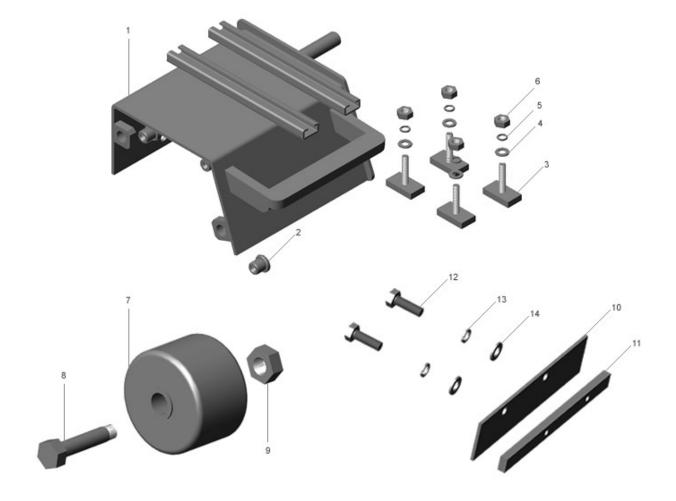
	Belt Guard SC8E				
Item No	Part No	Description	Quantity		
1	SC.08.118	Belt Guard	1		
2	SC.08.119	Toothed Belt 640	1		
3	SC.08.113	Upper Toothed Pulley FR200 SC8E Electrics	1		
3	SC.08.115	Upper Toothed Pulley FR200 SC8E Gas	1		
	HON.1441062	Key, Drive Shaft FR 200	1		
4	SC.08.203	Lower Toothed Pulley	1		
5	NB.10.126	Hex M10x16 Hex Screw	1		
6	NB.10.250	5/14-24x3/4 Hex Screw	1		
7	NB.20.112	Shaft Nut	1		
8	NB.30.118	M10 Flat Washer	1		
9	NB.30.218	Safety Washer	1		
10	NB.30.401	5/16x30 Fender Washer	1		

Parts for Handle Bar



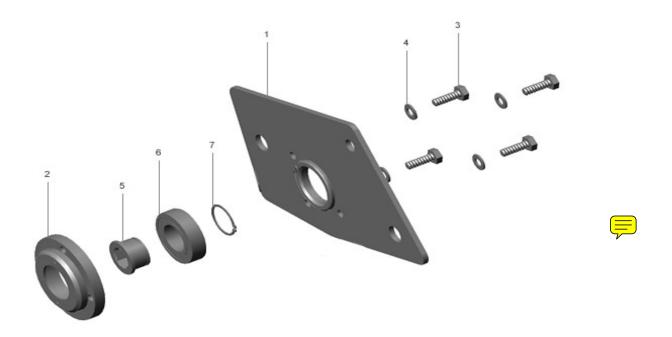
List of Items for Handle Bar			
Number	Part Number	Description	Quantity
1	SC.08.210	BAR, HANDLE	1
2	SC.08.211	GRIP, HANDLE	2

Parts for Housing; Front Wheel; Dust Shield



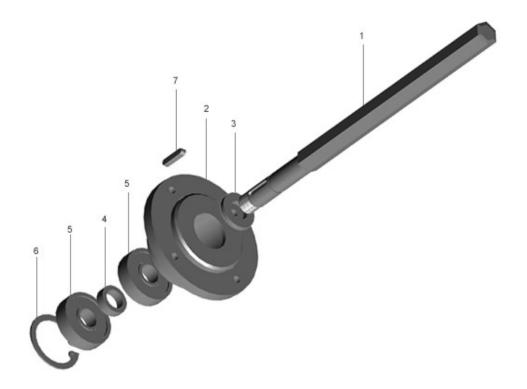
List of Items for Housing, Front Wheel, Dust Shield			
Number	Part Number	Description	Quantity
1	SC.08.207	HOUSING	1
2	SC.08.208	BUSHING, CENTERING	2
3	SC.08.116	T-BOLT, LONG (FOR GAS ENGINE)	4
Not shown	SC.08.117	T-BOLT, SHORT (FOR ELECTRIC MOTOR)	8
Not shown	SC.08.120	RAILS, MOUNTING FOR ELECTRIC MOTOR	1 SET
4	NB.30.118	WASHER, FLAT M8	4
5	NB.30.212	WASHER, LOCK M8	4
6	NB.20.114	NUT, HEXAGONAL M8	4
7	SC.08.901	WHEEL, FRONT	1
8	NB.10.124	SCREW, HEXAGONAL M8X60	1
9	NB.20.114	NUT, HEXAGONAL M8X.8	1
10	SC.08.900	SHIELD, DUST	1
11	SC.08.902	BAR, CLAMPING	1
12	NB.10.110	SCREW, HEXAGONAL M10X25	2
13	NB.30.120	WASHER, LOCK M10	2
14	NB.30.110	WASHER, FLAT M10	2

Parts for Housing End Plate



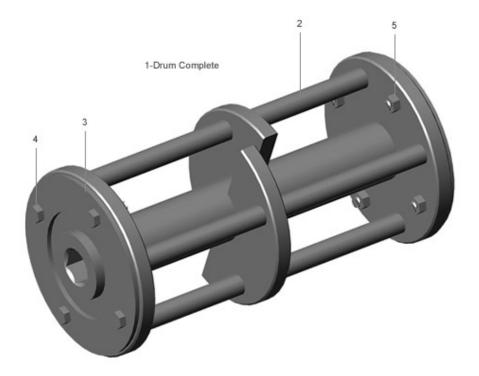
List of Items for Housing End Plate			
Number	Part Number	Description	Quantity
1	SC.08.601	ENDPLATE, HOUSING	1
2	SC.08.602	FLANGE, BEARING	1
3	NB.10.130	SCREW, HEXAGONAL M8X16	4
4	NB.30.212	WASHER, LOCK M8	4
5	SC.08.605	BUSHING, DRIVE	1
6	SC.08.604	BEARING, ENDPLATE	1
7	NB.40.112	SNAP RING, EXTERNAL M30	1

Parts for Hex Drive Shaft



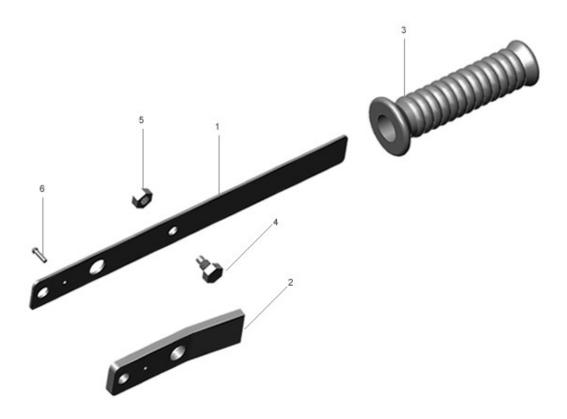
List of Items for Hex Drive Shaft			
Number	Part Number	Description	Quantity
1	SC.08.401	SHAFT, HEXAGONAL DRIVE	1
2	SC.08.402	HOUSING, BEARING	1
3	SC.08.403	RING, SPACER	1
4	SC.08.405	BUSHING, SPACER	1
5	SC.08.404	BEARING, SEALED 6303 2 RS	2
6	NB.40.111	CIRCLE CLIP, M47	1
7	NB.70.111	KEY, WOODRUFF 5X10X25	1

Parts for Drum



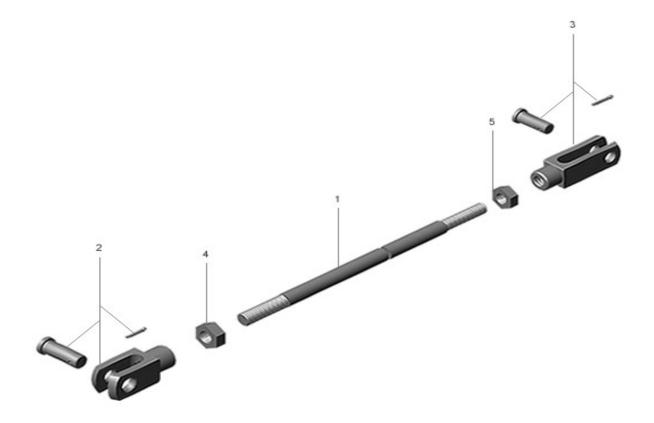
List of Items for Drum			
Number	Part Number	Description	Quantity
1	SC.08.500	DRUM, COMPLETE	1
2	SC.08.510	SHAFT, FLAIL 12MM	4
3	SC.08.507	PLATE, END	2
4	NB.10.116	SCREW, HEXAGONAL M6X20	8
5	NB.20.132	NUT, NYLON SELF LOCKING M6	8

Parts for Depth Adjuster Lever



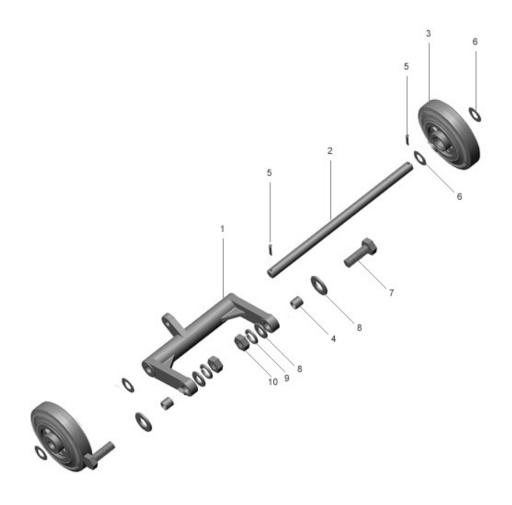
Parts for Depth Adjuster Lever				
Number	Part Number	Description	Quantity	
1	SC.08.303	LEVER, DEPTH ADJUSTMENT	1	
2	SC.08.304	PLATE, LOCKING	1	
3	SC.08.305	HANDGRIP, RUBBER	1	
4	NB.10.170	SCREW, HEXAGONAL SET M8	1	
5	NB.20.120	NUT, HEXAGONAL M8X.5	1	
6	NB.50.126	RIVET, M4X10	1	

Parts for Depth Adjustment Rod



Parts for Depth Adjustment Rod				
1	SC.08.301	ROD, DEPTH ADJUSTMENT	1	
2	NB.80.111	JOINT, FORK 12 X 24	1	
3	NB.80.110	JOINT, FORK 10 X 40	1	
4	NB.20.113	NUT, HEXAGONAL M12X.8d	1	
5	NB.20.115	NUT, HEXAGONAL M10X.8d	1	

Parts for Rear Axle Bracket



List of Items for Rear Axle Bracket				
Number	Part Number	Description	Quantity	
1	SC.08.801	BRACKET, AXLE	1	
2	SC.08.802	AXLE	1	
3	SC.08.803	WHEEL	2	
4	SC.08.804	BUSHING, MB 1515 DU	2	
5	NB.50.123	PIN, COTTER 3.2X25	2	
6	NB.30.117	WASHER, FLAT 28X2.5	4	
7	NB.10.125	SCREW, HEXAGONAL M12X40	2	
8	NB.30.134	WASHER, FLAT M12	2	
9	NB.30.130	WASHER, LOCK M12	2	
10	NB.20.113	NUT, HEXAGONAL M12	2	

SC08E SPARE PARTS LIST

SC.08.910 KIT, SPARE PARTS FR 200 SC8E GX160 5.5 H.P.*

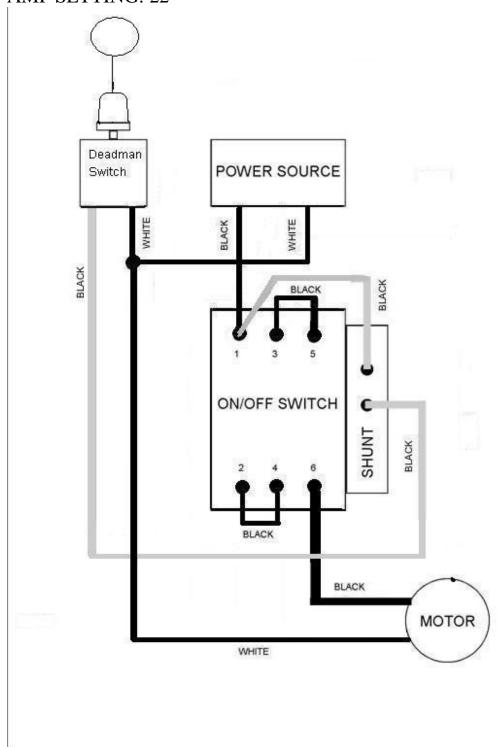
Components	Description	Quantity
SC.08.119	BELT, TOOTHED 640 SC8 FR200 GAS/ELEC	1
SC.08.510	SHAFT, 12 MM FLAIL SC8 FR200	16
SC.08.604	BEARING, ENDPLATE FR200 SC08E 6006-2RS	1
HON.1441113	PLUG, SPARK	1
HON.2893881	ELEMENT, AIR FILTER GX160	1

SC.08.911 KIT, SPARE PARTS SC8E FR200 ELECTRIC/AIR*

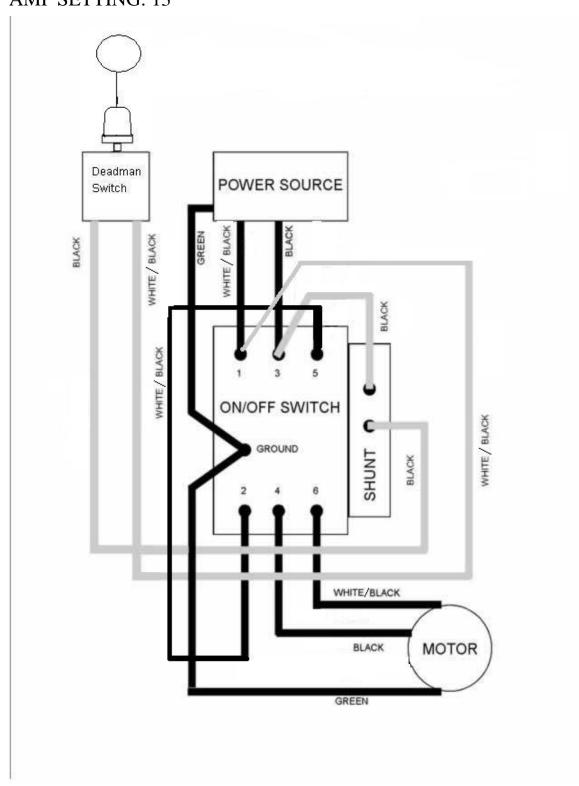
Components	Description	Quantity
SC.08.119	BELT, TOOTHED 640 SC8 FR200 GAS/ELEC	1
SC.08.510	SHAFT, 12 MM FLAIL SC8 FR200	16
SC.08.604	BEARING, ENDPLATE FR200 SC08E 6006-2RS	1

SC8E 110 VOLT SINGLE PHASE SWITCH AND SHUNT WIRING DIAGRAM

AMP SETTING: 22



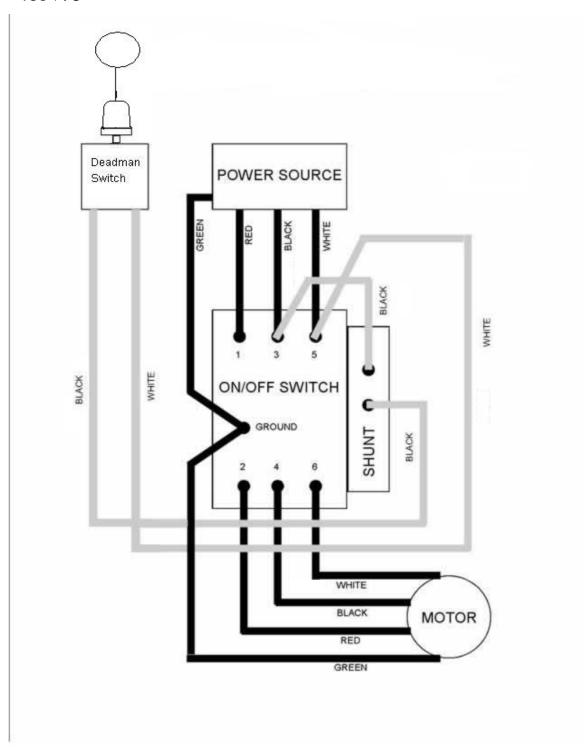
SC8E 230 VOLT SINGLE PHASE SWITCH AND SHUNT WIRING DIAGRAM AMP SETTING: 13



SC8E 230/460 VOLT THREE PHASE SWITCH AND SHUNT WIRING DIAGRAM

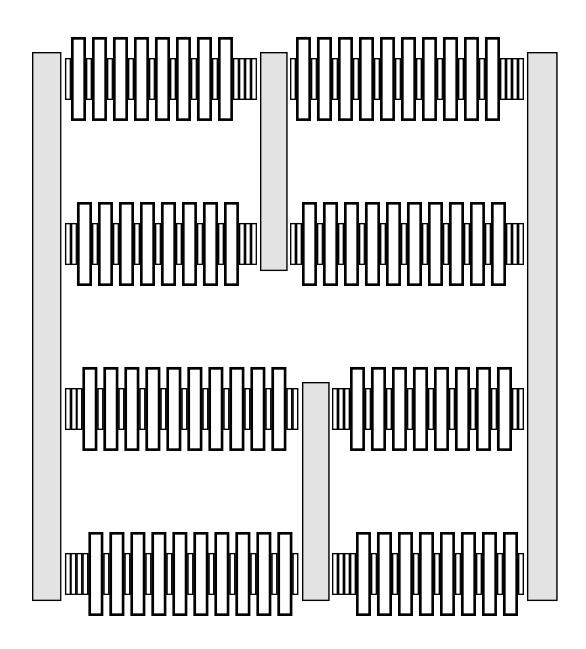
AMP SETTING

230V: 10 460V: 5



SC08E

5 POINT SMALL TUNGSTEN CUTTERS



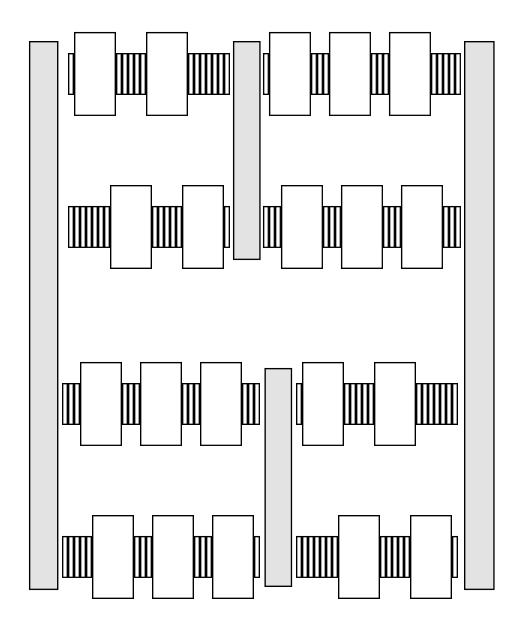
Theoretical Assembly

ST5 FR200 Cutter Set - 800.ST5.72/100 Components: 72 Cutters - 700962 104 Spacers - 625.06.09A

Attention: There can be a difference in number of spacers, but there must be a clearance of 1/8" to 3/16" between the supporting segments.

SC08E

5 POINT SMALL MILLING CUTTERS



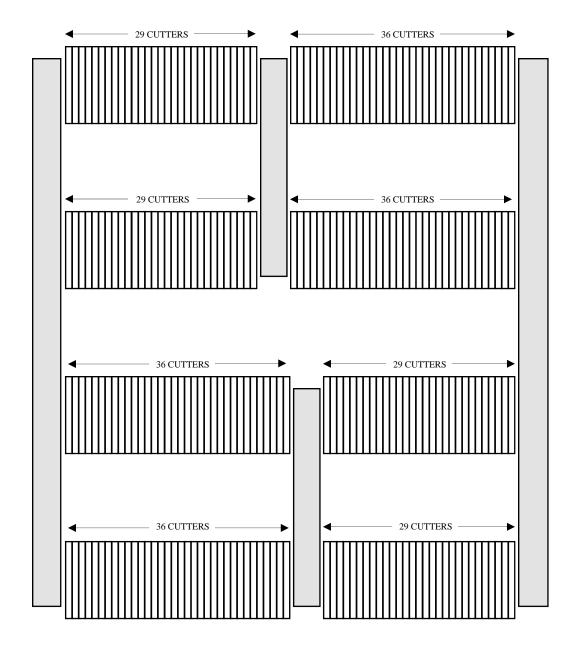
Theoretical Assembly

SRM FR 200 Cutter Set - 800.SRM.20/100 Components: 20 Cutters - 615.01.11 100 Spacers - 625.06.09A

Attention: There can be a difference in number of cutters, but there must be a clearance of 1/8" to 3/16" between the supporting segments.

SC08E

18 POINT STAR CUTTERS



Theoretical Assembly

SS FR 200 Cutter Set - 800.SS.260/00 Components: 260 Cutters - 615.01.04

Attention: There can be a difference in number of spacers, but there must be a clearance of 1/8" to 3/16" between the supporting segments.



MANUFACTURER'S WARRANTY POLICY

Included in this warranty are the following pieces of equipment:

Planetary Diamond Grinders: PDG 8000, PDG 6000, PDG 5000, Edge Pro 180

Dust Extractors: Bull 1250, Bull 300, Bull 45

Scarifiers: SC12E, SC10E, SC8E

Our Commitment to our customer:

SASE Company ("SASE") equipment is warranted to be free of defects in workmanship and materials for a period of one (1) year from original date of purchase. In the event that you should have a claim SASE shall repair, replace or remedy the defective parts resulting from the faulty design, materials or workmanship. Note: This warranty is only valid for equipment either sold by SASE or by an authorized wholesaler or distributor.

Limitations:

- Warranty does not apply to cosmetic damage, damage due to lightning, electrical surges, fire, flood, or other acts of God, accident, misuse, abuse, repair or alteration by other than factory service (unless service center was approved in writing by SASE), negligence, or improper or neglected maintenance as recommended by SASE.
- Common wear parts, such as belts, bearings, seals, filters, dust skirts, wheels, etc., are exempt from warranty.
- SASE is not responsible for loss of income or down time as a result faulty design, materials or workmanship.
- Warranty coverage is valid once a warranty registration card is filled out and returned to SASE.
- A \$100 labor charge may be assessed on the items returned for warranty repair in which no fault is found. Freight charges and associated fees will then become the responsibility of the customer in such an instance.
- Damages which are caused during transportation are not covered under warranty. Such damage claims should be filed with the freight carrier

Claims:

In the unlikely event that you should experience a defect please contact your SASE representative or a SASE service technician by calling 1.800.522.2606. Please have all pertinent information readily available such as, invoice with date of purchase, model and serial number, and an explanation of the issue. SASE will respond immediately with a corrective action.

Freight responsibility for approved warranty claims:

If the piece of equipment was purchased within 90 days of warranty claim, SASE will arrange for ground freight and will assume all ground freight charges to send the customer the parts required or to send the equipment to an authorized SASE repair center. This includes inbound and outbound ground freight and all fees (duties, fuel surcharges) associated with the shipment.

If the piece of equipment was purchased beyond 90 days and prior to one (1) year of warranty claim, SASE will cover 50% of all ground freight charges, including inbound and outbound freight and all fees (duties, fuel surcharges) associated with the shipment.



PRODUCT & WARRANTY REGISTRATION

WARRANTY IS VOID IF NOT RETURNED AND REGISTERED WITH SASE WITHIN 30 DAYS OF PURCHASE

COMPANY	′						
NAME ANI	D TITLE						
STREET A	DDRESS						
CITY			STATE		ZIP	COUNTRY	
PHONE _				EMAIL			
DATE OF I	PURCHASE			SERIA	AL NUMBER		
INVOICE NUMBER OF PURCHASE							
	PDG 8000	PDG 6000	PDG	5000	EDGE PRO	O 180 SC8E	
	SC10E	SC12E	BUL	L 1250	BULL 300	BULL 45	

PLEASE FILL OUT IN FULL AND SUBMIT TO: SASE COMPANY 2475 STOCK CREEK BLVD ROCKFORD TN, 37853 FAX: 865.745.4110 EMAIL: JohnA@SASECompany.com

QUESTIONS? CALL 800.522.2606