

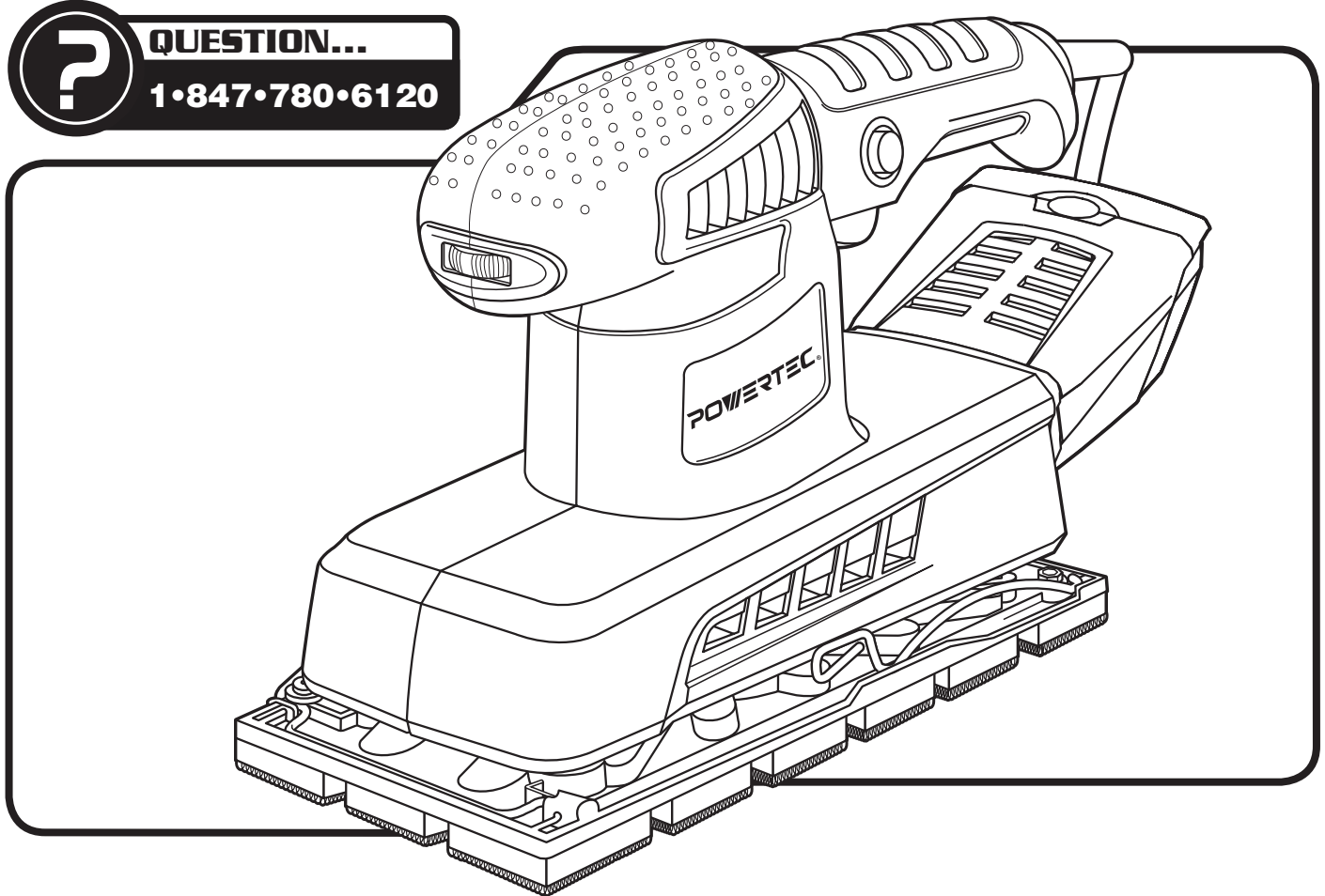
# Owner's Manual

# **POWERTEC**

## **1/2 Sheet Sander**

---

**?** QUESTION...  
1-847-780-6120










Visit us on the web at [www.southerntechllc.com](http://www.southerntechllc.com)



You will need this manual for safety instructions, operating procedures, and warranty. Put it and the original sales invoice in a safe, dry place for future reference.

## TABLE OF CONTENTS

SECTION	PAGE
 <b>SAFETY RULES</b>	<b>1</b>
 <b>ASSEMBLY</b>	<b>3</b>
Unpacking Attaching Sandpaper Attaching Dust Collection Box Power Source Double Insulation Guidelines For Using Extension Cords	
 <b>OPERATIONS</b>	<b>4</b>
Switching On and Off <b>Variable Speed Dial</b> Sanding	
 <b>MAINTENANCE</b>	<b>5</b>
Dust Collection Box Lubrication Cleaning	
 <b>TROUBLESHOOTING</b>	<b>5</b>
 <b>PARTS ILLUSTRATION &amp; LIST</b>	<b>6</b>
 <b>WARRANTY</b>	<b>8</b>

## PRODUCT SPECIFICATIONS

Voltage .....	120V
Hertz .....	60 Hz
Amperage .....	2.5A
Rated Power .....	320 W
Rated Speed .....	6,000–12,000 RPM
Pad Size .....	9 x 4-1/2" (230 x 115 mm)
Paper Size .....	11 x 4-1/2" (279 x 115 mm)
Paper Type .....	Hook and Loop or Non-Adhesive
Dust Port .....	OD 1-5/8" ID 1-3/8"

# GENERAL SAFETY RULES



1

## WARNING

For your own safety, read and understand all warnings and operating instructions before using any tool or equipment.

## WARNING

Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures vary, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment. Always wear OSHA/NIOSH approved, properly fitting face mask or respirator when using such tools.

## WARNING

Failure to follow these rules may result in serious personal injury. Remember that being careless for even a fraction of a second can result in severe personal injury.

## WORK PREPARATION

- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts of the tool.
- Non-slip protective footwear is recommended. Wear protective hair covering to contain long hair.
- Wear eye and hearing protection. Always use safety glasses. Eye protection equipment should comply with ANSI Z87.1 standards. Hearing equipment should comply with ANSI S3.19 standards.
- Wear face mask or dust mask if operation is dusty.
- Be alert and think clearly. Never operate power tools when tired, intoxicated or when taking medications that cause drowsiness.

## WORK AREA PREPARATION

- Keep work area clean. Cluttered work areas and benches invite accidents.
- Work area should be properly lit.
- Do not use the machine in a dangerous environment. The use of power tools in damp or wet locations or in rain can cause shock or electrocution.
- Do not use the machine in the presence of flammable liquids or gases.
- The tools plug must match the outlet. Never modify the plug.
- Do not abuse the power cord. Do not use the cord to carry the tool. Do not pull on the cord to unplug the tool. Keep the power cord away from heat, sharp edges or moving parts. Damage to the cord increases the risk of electrical shock.

- Avoid body contact with grounded surfaces. There is an increased risk of electrical shock if the body is grounded.
- Use the proper extension cord. Make sure your extension cord is in good condition.
- Keep children and visitors away. Your shop is a potentially dangerous environment. Children and visitors can be injured.
- Make your workshop childproof with padlocks, master switches or remove switch keys to prevent any unintentional use of power tools.

## TOOL MAINTENANCE

- Turn the machine "OFF", and disconnect the machine from the power source prior to inspection.
- Maintain all tools and machines in peak condition. Keep tools sharp and clean for best and safest performance.
- Follow instructions for lubricating and changing accessories.
- Check for damaged parts. Check for alignment of moving parts, binding, breakage, mounting and any other condition that may affect tool's operation.
- Poorly maintained tools and machines can further damage the tool or machine and/or cause injury.
- A guard or any other part that is damaged should be repaired or replaced. Do not perform makeshift repairs.
- Inspect power cords often. If power cord is damaged, have it replaced immediately by an authorized service center.

## TOOL OPERATION

- Avoid accidental start-up. Make sure that the tool is in the "OFF" position before plugging in.
- Use the right tool for your job. Do not force your tool or attachment to do a job for which it was not designed.
- Disconnect tool when changing parts.
- Don't force the workpiece on the machine. Damage to the machine and/or injury may result.
- Never leave tool running unattended. Turn the power off and do not leave tool until it comes to a complete stop.
- Do not overreach. Loss of balance can make you fall into a working machine, causing injury.
- Never stand on tool. Injury could occur if the tool tips, or if you accidentally contact the cutting tool.
- Know your tool. Learn the tool's operation, application and specific limitations before using it.
- Use a proper extension cord of the correct gauge. Your extension cord should be in good condition.
- Handle workpiece correctly. Keep hands away from moving parts.

## CAUTION

Think safety! Safety is a combination of operator common sense and alertness at all times when tool is being used.

## WARNING

Do not attempt to operate tool until it is completely assembled according to the instructions.

**SAVE ALL WARNINGS AND INSTRUCTIONS  
FOR FUTURE REFERENCE**



1

2



## SPECIFIC SAFETY RULES FOR SANDER

Be aware of general power tool safety. Make sure all the safety rules are understood.

- Hold power tool by insulated gripping surfaces, when sanding where the sanding pad may contact hidden wiring or its own cord. Contact with a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- Remove all nails from surface to be sanded.
- Unplug the sander before changing sandpaper. Accidental start-ups may occur if the sander is plugged in during a sandpaper change.
- Wear a face or dust mask during operation to reduce the risk of serious respiratory injury.

- Empty dust collection box often. Dispose of coated dust particles (such as resin, polyurethane, varnish, shellac, etc.) according to finish manufacturer's guidelines. Dispose of and remove coated dust particles daily, the accumulation of dust particles could ignite and cause a fire.
- Do not wet sand with this sander.
- Do not use this sander to remove lead based paint.
- Do not use this tool for long periods of time. The tool's vibration may cause permanent injury to fingers, hands and arms. Use glove to provide extra cushion, take frequent rests and limit the daily use of this tool..

**SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE**

3



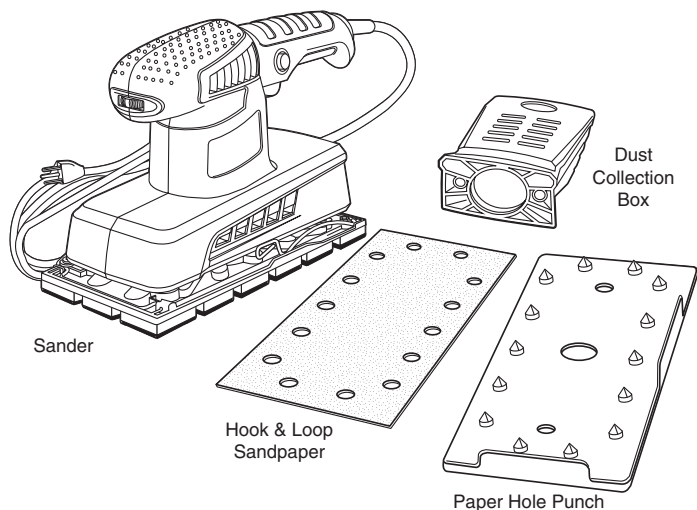
## ASSEMBLY

### UNPACKING

Refer to Figure 1

- Examine shipping carton for freight damage before opening. If shipping carton is damaged file a claim with the carrier immediately.
- Carefully remove all contents from shipping carton. The shipping carton contains:
  - 1 - Sander
  - 1 - Dust Collection Box
  - 1 - Paper Hole Punch
  - 1 - Hook & Loop Sandpaper (80 grit)
  - 1 - Owner's Manual (not shown)

Figure 1



**NOTE:** Contact the customer service center if any of these parts are missing.

**NOTE:** After unit is assembled dispose of all packaging material in an environmentally safe way.

### ATTACHING SANDPAPER

Refer to Figure 2-3

#### **WARNING**

Always turn the tool OFF and remove the plug from the power source outlet before making any adjustments or removing or installing accessories.

**NOTE:** Using damaged sandpaper could damage the hook & loop fastener pad. Do not use damaged or severely used sandpaper.

#### Hook & Loop

- Place the sander with the pad up.
- Place the hook & loop sandpaper sheet onto the pad and align the holes in the sandpaper with the dust extraction holes in the pad.
- Press the sandpaper firmly in place.

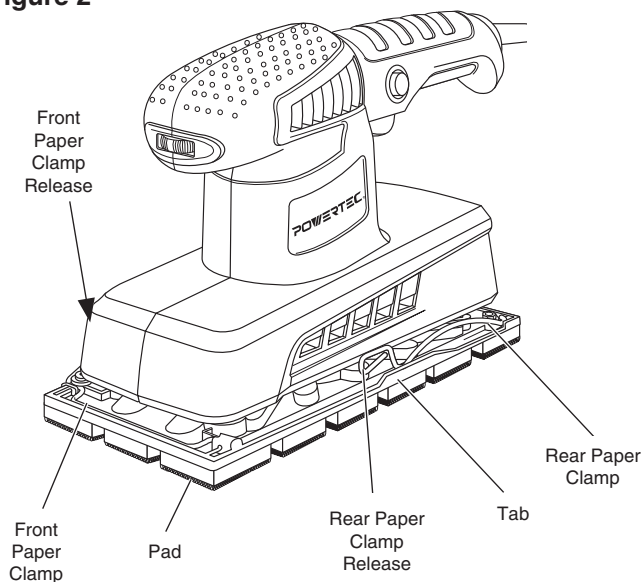
**NOTE:** To remove the hook & loop sandpaper, carefully peel the hook & loop sandpaper away from the pad.

#### Non-Adhesive Sandpaper

- Raise the front paper clamp up and away from the tab on the sander's base. This will release the front paper clamp.
- Slide the sandpaper sheet (the 4.5" side) under the front paper clamp about 1/2 inch (12.7 mm).
- Lower the front paper clamp and lock in place behind the tab on the sander's base.

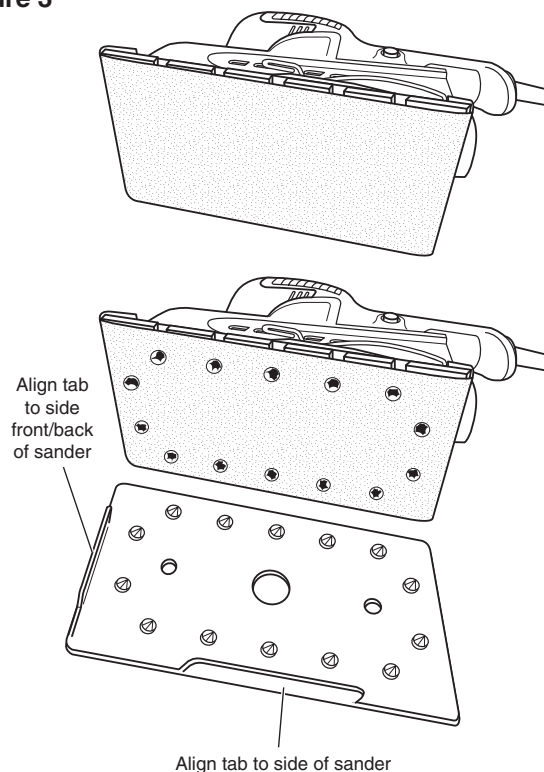
- Raise the rear paper clamp up and away from the tab on the sander's base. This will release the rear paper clamp.
- Stretch the sandpaper around the pad and slide it under the rear paper clamp. Lower rear paper clamp and lock into place behind the tab on the sander's base.

Figure 2



- Place the paper hole punch onto the sanding pad, make sure the tabs on the paper hole punch align with the adjacent side of the sander.
- Press the punch against the pad to perforate the paper. Remove the paper hole punch and paper is ready to use. The holes are needed in the paper to allow for dust collection.

Figure 3



**NOTE:** To remove the non-adhesive sandpaper, raise the front and rear paper clamps up and away from the tabs on the sander's base. This will release the sandpaper.

## ATTACHING DUST COLLECTION BOX

Refer to Figure 4

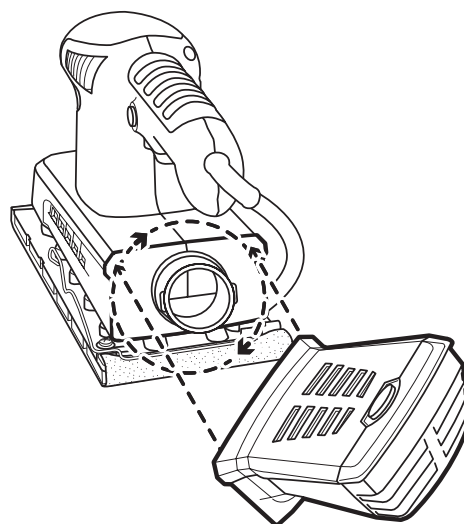
### ⚠ WARNING

Risk of Fire. DO NOT use the dust box when sanding metal.

- Slide dust collection box onto dust port and turn clockwise to lock into place.
- To remove, turn dust extraction box counter clockwise to unlock and slide away from dust port.

**NOTE:** Empty dust collection box often for optimal pick up.

Figure 4



## POWER SOURCE

### ⚠ WARNING

Do not connect to the power source until the machine is completely assembled.

### ⚠ WARNING

This tool is for indoor use only. Do not expose to rain or use in damp locations.

The machine is wired for 120 volts, 60 Hz alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position. Running the unit on voltages which are not within range may cause overheating and motor burn-out. Heavy loads require that voltage at motor terminals be no less than the voltage specified on nameplate.



## DOUBLE INSULATION

This tool is double insulated. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will only fit in a polarized outlet one way. If the plug does not fit the outlet, reverse the plug. If it still does not fit the outlet, have a polarized outlet installed by a qualified electrician. DO NOT change the plug.

Double insulated tools do not need to be grounded.

### WARNING

4

Observe all normal safety precautions to avoid electrical shock. The double insulated system is intended to protect the user from shock in event of a break in the tool's internal insulation.

**NOTE:** Servicing of this product requires extreme care and knowledge of the double insulation system and should be performed only by a qualified service technician. Always use original factory replacement parts when servicing.

## GUIDELINES FOR USING EXTENSION CORDS

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating.

Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

Use a separate electrical circuit for your tools. This circuit should be protected with a 15 A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

4



## OPERATION

Your Powertec sander is designed and engineered to sand wood, plastic, metal, filler and painted surfaces.

### SWITCHING ON AND OFF

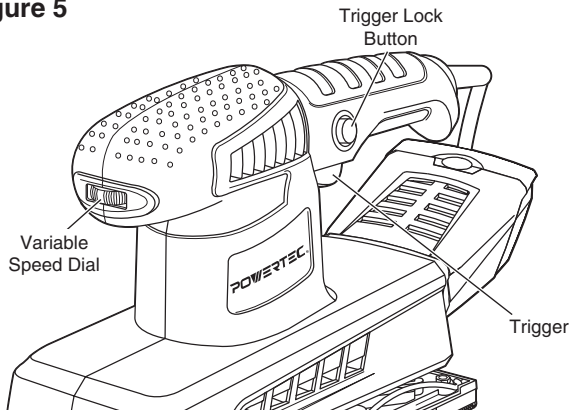
#### Refer to Figure 5

To turn the sander on, squeeze the trigger switch.

To stop the sander, release the trigger switch.

**For continuous operation:** Squeeze the trigger switch to start the sander. While squeezing the trigger switch, press the trigger lock button in and release the trigger switch. The sander will continue to run until the trigger switch is squeezed again to unlock the trigger switch.

Figure 5



### VARIABLE SPEED DIAL

#### Refer to Figure 5

The variable speed dial increases or decreases the speed from 6000 – 12000 RPM (1-Max). Use a higher setting on harder materials and a lower setting on softer materials. Material removal rate increases as speed increases.

### SANDING

#### Sandpaper Selection

- Choose the correct grit and type of sandpaper for the job.
  - Aluminum oxide, silicon carbide, and other synthetic abrasives are best for power sanding
  - Flint and garnet are too soft for economical use in power sanding.
- Coarse grit will remove the most material and finer grit will produce the best finish in all sanding operations.
- The condition of the surface to be sanded determines the grit. Start with a coarse grit and sand until the surface is uniform. Change to a medium grit to remove the scratches left by the coarser grit. Finish with a finer grit. Always continue sanding with each grit until surface is uniform.

**NOTE:** DO NOT use sander without sandpaper, the hook and loop fastener sanding base will be damaged.

#### Sanding

- Start the sander and let it reach full speed and then lower it to the workpiece.
- Move the sander slowly guiding it in a forward and backward motion. DO NOT force or apply pressure to the sander. Let the sander do the work.
- Check the sandpaper often for wear. Change sandpaper when grit is worn.
- Empty the dust box frequently.
- When sanding is complete, turn sander off and remove the sander from the workpiece.

## ⚠ WARNING

Any attempt to repair or replace electrical parts on this tool may be hazardous. Repairs not listed here should be performed by a qualified service technician.

## ⚠ WARNING

To prevent serious injury from tool failure, do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

## ⚠ WARNING

If the supply cord of this power tool is damaged, have it replaced by a qualified service technician.

## ⚠ WARNING

Always turn the tool OFF and remove the plug from the power source outlet before making any adjustments or removing or installing accessories.

## DUST COLLECTION BOX

Refer to Figure 7

### To empty dust collection box

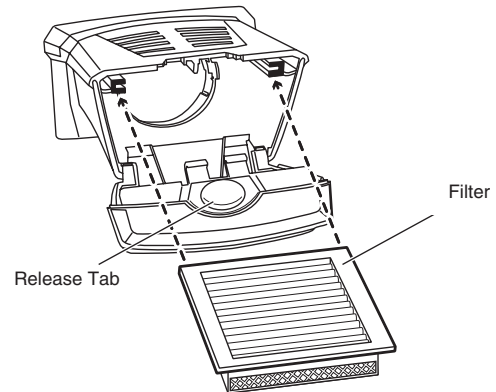
- Turn dust extraction box counter clockwise to unlock and slide away from dust port.
- Empty contents of box into a trash receptacle, tap the box to loosen debris.

### To clean dust collection box filter

- Turn dust extraction box counter clockwise to unlock and slide away from dust port.
- Press release tab to open dust collection box.

- Remove the filter.
- To clean filter tap it on the side of a trash receptacle or blow it with compressed air.

Figure 7



- Replace filter into collection box.

## LUBRICATION

Your tool has been properly lubricated and is ready to use. It is recommended that tools with gears be re-lubricated with a special gear lubricant at every brush change.

## CLEANING

After each use, wipe external surfaces of the tool with a clean cloth.

## ⚠ WARNING

Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.



5

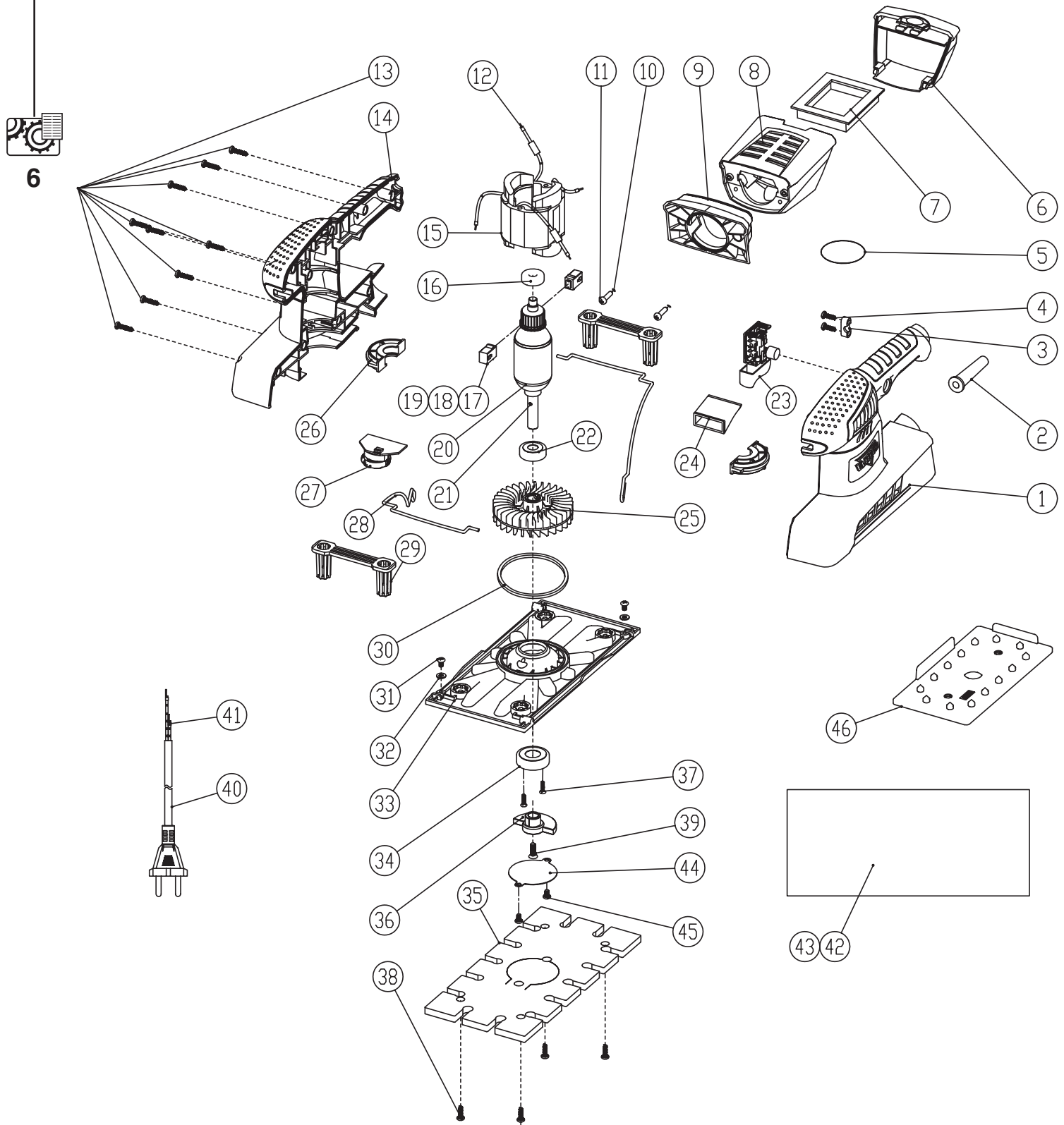
# TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Motor does not run	1. Machine not plugged in	1. Plug power cord into electrical receptacle
	2. Blown fuse or tripped circuit breaker	2. Replace fuse or reset the circuit breaker
	3. Internal damage or wear	3. See a service technician
Excessive noise	1. Internal damage or wear	1. See a service technician
Not sanding effectively	1. Sandpaper problem	2. Using incorrect grit
	2. Using incorrect grit	2. Check sandpaper grit for job being performed. Coarse sandpaper (36-80 grit) Fine sandpaper (100-600 grit)
	3. Dust collection box full	3. Empty dust collection box
	4. Dust collection box filter is dirty	4. Clean dust collection box filter



5

# SANDER PARTS ILLUSTRATION





# SANDER PARTS LIST



7

PARTS LIST

Key				Key			
No.	Part No.	Description	Qty Specification	No.	Part No.	Description	Qty Specification
1	HS1002001	Left housing	1 PA6-GF30	26	HS1002026	Bearing holder	2 PA6-GF30
2	HS1002002	Cord guard	1 PVC	27	HS1002027	Speed regulator	1
3	HS1002003	Cord clip	1	28	HS1002028	Clamping wire	2 65Mn
4	HS1002004	Screw	2 ST4*13	29	HS1002029	Vibration foot	2 PP
5	HS1002005	O-ring	1 42*2mm	30	HS1002030	Dust-proof ring	1
6	HS1002006	Dust box back cover	1 PA6-GF30	31	HS1002031	Screw	2 M4*6
7	HS1002007	Dust filter set	1 ABS	32	HS1002032	4 mm washer	2 "65Mn, out dia.: 10 mm thick: 1 mm"
8	HS1002008	Dust box body	1 PA6-GF30	33	HS1002033	Base plate	1 ADC12
9	HS1002009	Dust box connector	1 PA6-GF30	34	HS1002034	Bearing with washer	1 6002 2RS with washer
10	HS1002010	4 mm washer	2 out dia.:7.6mm	35	HS1002035	Adhesive plate	1 115*230
11	HS1002011	Screw	2 ST4*19 black	36	HS1002036	Metal dollop	1
12	HS1002012	Square insert sheet	2	37	HS1002037	Screw	2 M4*6
13	HS1002013	Screw	9 ST4X16	38	HS1002038	Screw	4 ST4*13
14	HS1002014	Right housing	1 PA6-GF30	39	HS1002039	Screw	1 M5*15
15	HS1002015	Stator	1 φ62*40	40	HS1002040	Power cord	1 2*0.75
16	HS1002016	608 Bearing	1 608 2RS	41	HS1002041	Copper for inner wire	4
17	HS1002017	Brush box	2	42	HS1002042	Adhesive sand paper	1 115x230
18	HS1002018	Brush holder	2	43	HS1002043	Clamping sand paper	1 115x280
19	HS1002019	Carbon brush	2	44	HS1002044	0.5 mm plate	1 201 stainless steel
20	HS1002020	Armature	1 φ37*40	45	HS1002045	Screw	2 M4*6
21	HS1002021	Cylindrical pin	1 φ2.5X10	46	HS1002046	Sand paper puncher	1 ABS
22	HS1002022	Bearing with washer	1 6000 2RS with washer				
23	HS1002023	Switch	1 FA5-10/2B				
24	HS1002024	Dust track	1 PP-GF30				
25	HS1002025	Fan	1 PA6-GF30				



7



## WARRANTY

Thank you for investing in a **POWERTEC** power tool. This product has been designed and manufactured to meet high quality standards and is guaranteed for domestic use against defects in workmanship or material for a period of 12 months from the date of purchase. This guarantee does not affect your statutory rights.

### **SOUTHERN TECHNOLOGIES LLC. BENCH TOP AND STATIONARY POWER TOOL LIMITED 1 YEAR WARRANTY AND 30-DAY SATISFACTION GUARANTEE POLICY**

**POWERTEC** products are designed and manufactured by **Southern Technologies LLC**. All warranty communications should be directed to **Southern Technologies LLC** by calling 847-780-6120, 9 AM to 5 PM, Monday through Friday, US Central Time.

#### **30- DAY SATISFACTION GUARANTEE POLICY**

During the first 30 days after the date of purchase, if you are dissatisfied with the performance of this **POWERTEC** tool for any reason, you may return the tool to the retailer from which it was purchased for a full refund or exchange. You must present proof of purchase and return all original equipment packaged with the original product. The replacement tool will be covered by the limited warranty for the balance of the one year warranty period.

#### **LIMITED ONE YEAR WARRANTY**

This warranty covers all defects in workmanship or materials in this **POWERTEC** tool for a one year period from the date of purchase. This warranty is specific to this tool. **Southern Technologies, LLC** reserves the right to repair or replace the defective tool, at its discretion.

#### **HOW TO OBTAIN SERVICE**

To obtain service for this **POWERTEC** tool you must return it, freight prepaid, to **POWERTEC**. You may call 847-780-6120 for more information. When requesting warranty service, you must present the proof of purchase documentation, which includes a date of purchase. **POWERTEC** will either repair or replace any defective part, at our option at no charge to you. The repaired or replacement unit will be covered by the same limited warranty for the balance of one year warranty period.

#### **WHAT IS NOT COVERED**

This warranty applies to the original purchaser at retailer and may not be transferred.

This warranty does not cover consumable items such as saw blades, knives, belts, discs, cooling blocks and sleeves. This warranty does not cover required service and part replacement resulting from normal wear and tear, including accessory wear.

This warranty does not cover any malfunction, failure or defect resulting from:

- 1) misuse, abuse, neglect and mishandling not in accordance with the owner's manual.
- 2) damage due to accidents, natural disasters, power outage, or power overload.
- 3) commercial or rental use.
- 4) alteration, modification or repair performed by persons not recommended by **POWERTEC**.

#### **DISCLAIMER**

To the extent permitted by applicable law, all implied warranties, including warranties of **MERCHANTABILITY** or **FITNESS FOR A PARTICULAR PURPOSE**, are disclaimed. Any implied warranties, that cannot be disclaimed under state law are limited to one year from the date of purchase. **Southern Technologies LLC**. is not responsible for direct, indirect, incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. **Southern Technologies LLC**., makes no warranties, representations, or promises as to the quality or performance of its power tools other than those specifically stated in this warranty.

**NOTE**

***POWERTEC***

Southern Technologies, LLC  
3816 Hawthorn CT,  
Waukegan, IL 60087