

CHAMPION
CUTTING TOOL CORP



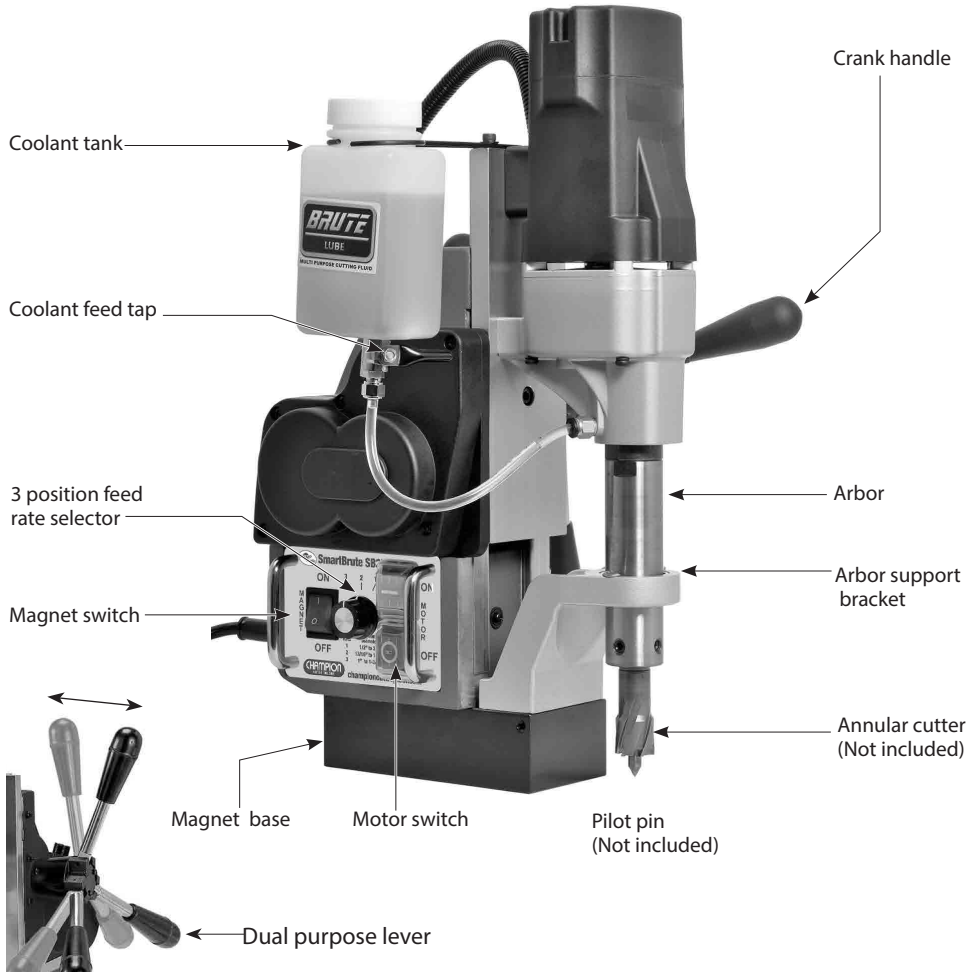
SB35

SmartBrute

Automatic Magnetic Drill Press



OPERATOR'S MANUAL



MODEL		SB35
POWER INPUT		1100 W
VOLTAGE		110 / 120
NO / FULL LOAD min ⁻¹		550 / 330
CAPACITY	DIA. X DEPTH OF CUT (HAND FEED)	1-3/8" x 2"
	DIA. X DEPTH OF CUT (AUTO FEED)	1-3/16" x 1-3/4"
	DIA. X DEPTH OF TWIST DRILL (HAND FEED ONLY)	1/2" x 4-3/8"
MAGNETIC ADHESION		3370 lbs
NET WEIGHT		36 lbs

STANDARD ACCESSORIES

- * WRENCH M8
- * HEX. KEY M2.5
- * HEX. KEY M4
- * CHIP GUARD KIT
- * COOLANT TANK KIT
- * SAFETY CHAIN



WARNING: Cancer & reproductive harm - See P65Warnings.ca.gov for more info.



WARNING! Read and understand all instruction before operating any drilling system. Failure to follow all instructions listed below may result in electrical shock, damage to drilling system and even personal injury.

GENERAL SAFETY INSTRUCTIONS

Work area

1. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmosphere, such as in the presence of flammable liquids, gases or extreme dust.** Power tools create sparks that may ignite gases as well as flammable liquids.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical Safety

1. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the ground prong or modify the plug in any way. Do not use any adaptor plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
2. **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
3. **Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock. **When operating a power tool outside, use an outdoor extension cord marked . W-A. or. W.** These cords are rated for outdoor use and reduce the risk of electric shock.

Personal Safety

1. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.
2. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.
3. **Avoid accidental starting. Be sure switch is off before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
4. **Remove adjusting keys or switches before turning the tool on.** A wrench or a key that is left attached



to a rotating part of the tool may result in personal injury.

5. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.
6. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hardhat, or hearing protection must be used for appropriate conditions.

Tool use and care

1. **Use clamps or other practical way to secure and support the work piece to a stable platform.**
Holding the work by hand or against your body is unstable and may lead to loss of control.
2. **Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.
3. **Do not use tool if switch does not turn it on or off.** Any tool that cannot be controlled with the switch is dangerous and must be repaired.
4. **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.
5. **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
6. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control.
7. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tools operation.** If damaged, have the tool serviced before using. Poorly maintained tools cause many accidents.
8. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

Service



Only qualified repair personnel must perform tool service. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing tool, use only identical replacement parts. Follow instructions in the maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury.

Symbols used in this manual

IMPORTANT: Some of the following symbols may be used on your tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.



Symbol	Name	Designation/Explanation
V	Volt	Voltage (potential)
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
kg	Kilograms	Weight
min	Minutes	Time
s	Seconds	Time
∅	Diameter	Size of drill bits
n ₀	No load speed	Rotational speed, at no load
min ⁻¹	Revolutions per minute	Revolutions, strokes, surface speed per minute.
0	Off position	Zero speed, zero torque...
1, 2, 3, ...	Selector settings	Feed Rate: Lower number means higher feed rate.
~	Alternating current	Type or a characteristic or current
	Class I construction	With electrical earth
	Warning symbol	Alerts user to warning messages

Terminology used in the manual

- Warning:** This term means that there is a risk of physical harm or death to the operator or people nearby.
- Caution:** This term means that there is a risk of damage to the machine, cutting tool or other equipment.
- Note:** These terms offer useful information relating to the operation of the machine or its maintenance.

SPECIFIC SAFETY RULES AND REGULATIONS

- Always use safety chain.** Magnet can release.
- The magnet's adhesion depends on the thickness of the work piece.** Always ensure that the work piece is a minimum of 7/16" thick.
- Metal chips and other debris will seriously hamper magnetic adhesion.** Always ensure that the magnet is clean and free of rust and scale.
- Other units used on the same receptacle will cause uneven voltage that could lead to the magnet releasing.** Always use the tool alone on the receptacle.
- It is hazardous to use the drill upside-down.** Do not exceed 90 degrees from horizontal.
- Avoid the magnet releasing.** Ensure that the magnet has properly adhered to the work piece before beginning drilling.
- Avoid operating annular cutters without coolant fluid.** Always check coolant level before operating.
- Do not operate with dull or damaged cutting tools.** This may overload the motor.
- Protect the motor.** Never allow cutting fluid, water, or other contaminants to enter the motor.



10. Metal chips are very sharp and hot. Clean up with a magnetic chip collector.

CAUTION: Never Position Machine on a work piece between the electrode and the ground of any arc type welder. Damage to the machine will result, as the welder will ground through the machine's ground cable. When drilling stacked work materials, always stop to clear the slug after the first layer is drilled.

WARNING: Do not operate the machine on a workpiece which is being welded on at the same time. This may lead to damage to the machine and possible injury.

WARNING: NEVER attempt to use machine with incorrect current or abnormally low voltage. Check machine nameplate to ensure that correct voltage and Hz are used. When drilling non-ferrous (non-magnetic) work materials, only use a manufacturer- approved fixture such as a vacuum base adapter.

Magnet Base Duty Cycle

This machine is not intended for production-line type use.

Do not leave the magnet base activated continuously for more than 60 minutes. If the magnet base is overheated, allow it to cool for 30 minutes before continuing.

CAUTION: Turn the magnet base off when not in use. Leaving the magnet base on continuously will damage it.

ASSEMBLY

Coolant tank assembly required. First attach clear tube to the bottom of the coolant tank. To do this, first loosen the nut and slide nut onto the tube. Then slide tube onto the nipple. Then tighten the nut. Slide tank hanger over the screw on the upper right hand side of slide and tighten. Finally insert the other end of the tube into the quick-release connector in the gearbox. Just directly push in to install. **(To remove, first firmly push the red collar of the connector and pull the tube out.)** Cutting coolant fluid is always required when using annular cutters. Open tank cover and fill. Check coolant fluid level often. Keep coolant tap closed when not in use.

Chip guard must be used. To attach the chip guard, use the supplied butterfly bolts to bolt to the magnet. It is not necessary to remove guard to clean chips. Simply raise guard to its upper position.

Safety chain must be used. Loop chain around the work piece and feed through the machine's handle and clip in place.

INSTALLING ANNULAR CUTTERS

CAUTION: Never use a cutting tool that is larger than the maximum rated capacity of the machine.

1. To insert an annular cutter, first insert the pilot pin into the cutter. Then slide the cutter into the arbor, align the proper flat with the locking screw(s) and tighten securely with the supplied hex wrench.



CAUTION: Ensure that the locking screw is on a flat of the cutter and not just against the rounded shank.

2. Ensure that the oil feed tap is on and coolant feeds properly by pushing the pilot pin. If it feeds too quickly or slowly, adjust the tap accordingly. Keep the tap closed when not in use.



MANUAL FEED OPERATION

WARNING: Always ensure that the magnet is adhered properly to the work piece before beginning drilling.

NOTE: If mounting to a curved surface beam, mount the machine parallel to the curve in the work piece.

WARNING: Avoid operating at more than 90 degrees from horizontal. When drilling at such an angle take precautions to prevent cutting coolant from entering the motor. Paste-type coolant should be used.

1. First fit cutting tool into arbor and line up with intended center of cut. Then switch magnet on.
2. Press green motor on button to start motor. Use the crank handle to feed to work. Always use very light pressure when beginning the cut and just as the tool is breaking through. The crank handle offers tremendous leverage; so do not use too much force. Allow the cutting tool to determine the pace. With experience, the operator will be able to determine the best pace to feed to the work. There should be some degree of audible slowing of the motor but not bogging in the cut. Correct cutting speed with a properly sharp annular cutter will produce long unbroken chips, which produce a "bird's" nest shaped bundle of chips around the cut.

NOTE: Always ensure that the cutting tool is sharp.

WARNING: ALWAYS clear chips when there is too much build-up. Excessive chip build-up could result in a jammed cutter or other hazardous situation.

WARNING: The slug ejects at end of cut and is very hot. Always provide a method of catching the slug, where the ejected slug may cause injury to people below.

CAUTION: Never attempt to cut half-circles or to stitch drill (overlapping holes) with a carbide tipped (TCT) annular cutter. This may damage the cutter.

CAUTION: Never attempt to re-enter a half-finished cut if the magnet has been turned off and the machine shifted in the interim. This may damage the cutter.



To Use Twist Drills

WARNING: NEVER attempt to use SB35 machine in auto feed mode when using twist drills. THIS MAY RESULT IN MAGNET LIFTING. ALWAYS use in manual mode when using twist drills.

To use twist drills, the arbor support bracket must be removed by removing the three socket head bolts. Then an optional chuck adaptor arbor and chuck must be fitted. Follow the instructions below to replace the arbor support bracket.

Arbor support bracket replacement

1. Replace arbor support bracket and screw in the 3 hex head bolts finger tight only (ensure that the needle bearing is clean and adequately greased.)
2. Replace the annular cutter arbor.

WARNING: Use extreme caution to avoid contacting the rotating arbor shaft!

3. Double check to ensure that there is no binding anywhere throughout the stroke.



INSTRUCTIONS FOR AUTO-FEED OPERATION

WARNING: NEVER use poor quality, incorrect sized or dull cutters in auto feed mode. THIS MAY RESULT IN MAGNET LIFTING.

The Auto-Feed Feature

A lever incorporated into the feed handle engages or disengages the feed drive gears. If the auto-feed mode is not engaged, the machine may be used in the same fashion as the manual machine as described above. Below are the additional instructions needed to operate in auto-mode.

IMPORTANT: When in manual mode, the three lever handles will be pointing outward slightly (out). When in auto-feed mode, the lever handles will be parallel with the side of the machine (in).

NOTE: Do not operate the auto machine banked to one side in the plane of the lever as this may allow the machine to slip into or out of auto-feed mode unexpectedly.

WARNING: Do not attempt to drill a work piece which is thicker than the maximum cutting depth of the cutter being used. Never exceed 1-3/16"





diameter cutters when using auto-feed mode.

THE FEED RANGE SELECTOR

There is a 3-position range selector switch on the switch panel which allows ideal feed rate for various sized cutters. Select the feed range which corresponds to the cutter diameter being used.

POSITION	RANGE
1	1/2" to 3/4"
2	13/16" to 15/16"
3	1" to 1-3/16"



AUTO-FEED OPERATION

1. Always begin drilling manually (with the handles pointing out) as described above in "OPERATION-GENERAL".
2. Only after the cutter has begun cutting for a few seconds and has raised a chip should the auto feed be engaged.

NOTE: Do not cut manually for more than 10 seconds before shifting into auto feed. If manual cutting continues for more than 10 seconds, as soon as auto feed is engaged, rather than cutting, it will directly stop.

3. To engage auto-feed, push any of the lever handles in. The gears may not always line up perfectly. If the handle will not push in, simply raise the feed upward slightly and the lever will engage.
4. As a precaution, always keep one hand near to the motor shut off switch in order to shut off quickly in the event of any problem.
5. Once the hole is drilled, the machine will continue to feed for 3 seconds (to fully finish hole) and then will automatically shut off.

NOTE: This machine is equipped with safety override systems which will automatically engage: If the load exceeds maximum for 2 seconds or more, the motor and feed will stop and stay in that position. Only the magnet will stay on. This will alert the operator of an overload problem. If this happens repeatedly, stop operation and find the cause of the excessive load. It could be a bad cutter or other problem.

WARNING: WHENEVER THE MACHINE STOPS DUE TO OVERLOAD IN THIS WAY, RAISE THE CUTTER CLEAR OF THE WORKPIECE BEFORE RESTARTING

NOTE: When drilling very deep holes with long reach cutters, there is considerable build up of chips. This may interfere with operation and even cause the machine to stop from overload. In this situation, we recommend stopping to clear the chips after the first 25mm (1 inch) or so, then continuing to finish the cut.



1 3/4" IS THE MAXIMUM DEPTH OF CUTTING WITH AUTO FEED.

NOTE: The maximum rated thickness of material with the auto feed function is 1-3/4". For drilling thickness up to 2" , finish by hand feed.

WARNING: PAY ATTENTION TO THE CONDITION OF THE CUTTER. This is particularly important with an auto feed machine. A dull or damaged cutter may cause a dangerous situation.

WARNING: NEVER ATTEMPT TO DRILL MATERIAL THICKER THAN THE DEPTH CAPACITY OF THE CUTTER. If the cutter is allowed to "bottom out" the feed system may cause the magnet to lift (usually it will overload first).

NOTE: In very light load conditions, such as when using very small cutters or drilling a very thin work piece, often the load drop will not be enough to signal the machine's electronic control board to automatically stop. If this occurs, it does not indicate a malfunction.

MAINTENANCE

Every 50 hours of operation, blow low pressure compressed air through the motor while running at no load to clean out accumulated dust. (If operating in especially dusty conditions, perform this operation more often.)

1. Keep the machine clean and free of chips.
2. Check for loose fittings and tighten as needed.
3. Ensure that the ventilation slots are clear so that motor can be cooled normally. Blow low-pressure compressed air through the ventilation slots with the motor running to keep motor clean.

THE ARBOR SHAFT

Keep the arbor shaft free of dirt and lightly grease as needed. If the arbor support bearing is noisy, it may be dirty or have a chip lodged in it. Remove the arbor shaft to clean and re-grease the arbor support bearing.

THE GIBS (DOVETAIL SLIDES)

The gibs require adjustment if too loose. To adjust, loosen the lock nuts and adjust the adjustment screws evenly while moving the handle up and down. Adjust so that there is no free play, or binding anywhere in its range of travel. Then retighten the lock nuts. Periodically check, lubricate, and adjust as needed.



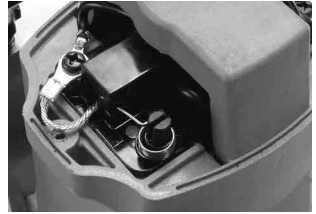
THE CARBON BRUSHES

The carbon brushes are a normal wearing part and must be replaced when they reach their wear limit.

Caution: Always replace the brushes as a pair.

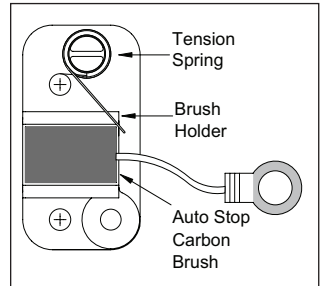
To replace:

1. Remove the 4 screws and remove the motor tail cover.
2. Using pliers rotate the brush spring out of the way and slide the old carbon brush out of the brush holder.
3. Unscrew the screw to remove the brush lead. The old carbon brush may now be lifted away.
4. Install a new brush. Installation is the reverse of removal.
5. Replace the motor tail cover.



AUTO STOP CARBON BRUSH

The SB35 has auto-stop carbon brushes which protect the magnetic drill press by shutting it off before damage can occur. If this happens, check the brushes for wear.



MAGNET TROUBLESHOOTING

Full magnet performance is absolutely essential for magnetic drill operation.

If the magnet works, but does not hold well, it is likely that one of the coils has failed. If the magnet does not work at all, it is likely to be a failed rectifier. (It is highly unlikely that both magnet coils would fail at the same time)

NOTE: A faulty magnet coil can also damage the rectifier, so whenever there is a magnet problem, BOTH the magnet coils and rectifier must be checked.

WARNING: Never attempt to operate a magnetic drill with a faulty magnet!

CHECKING THE MAGNET (qualified technicians only)

If the magnet is not working well, it must be checked. Separate the wires of each individual coil and test the resistance of each coil separately (note that 110V models are wired in parallel). The resistance of the coils of different sized magnets varies, but it should be in the region of hundreds of ohms. Most importantly, both coils must have very nearly the same resistance. If one of the coils has zero resistance, it means that it is shorted. If one of the coils has infinite resistance, it means that the circuit is broken. If either coil has a problem, the magnet must be replaced. A faulty magnet may also cause damage to the rectifier. Also check the rectifier when replacing a faulty magnet (see below).

CHECKING THE RECTIFIER (Qualified technicians only)

The rectifier takes the AC household current and converts it to DC to power the magnet. If it fails, the magnet coils will not receive power.

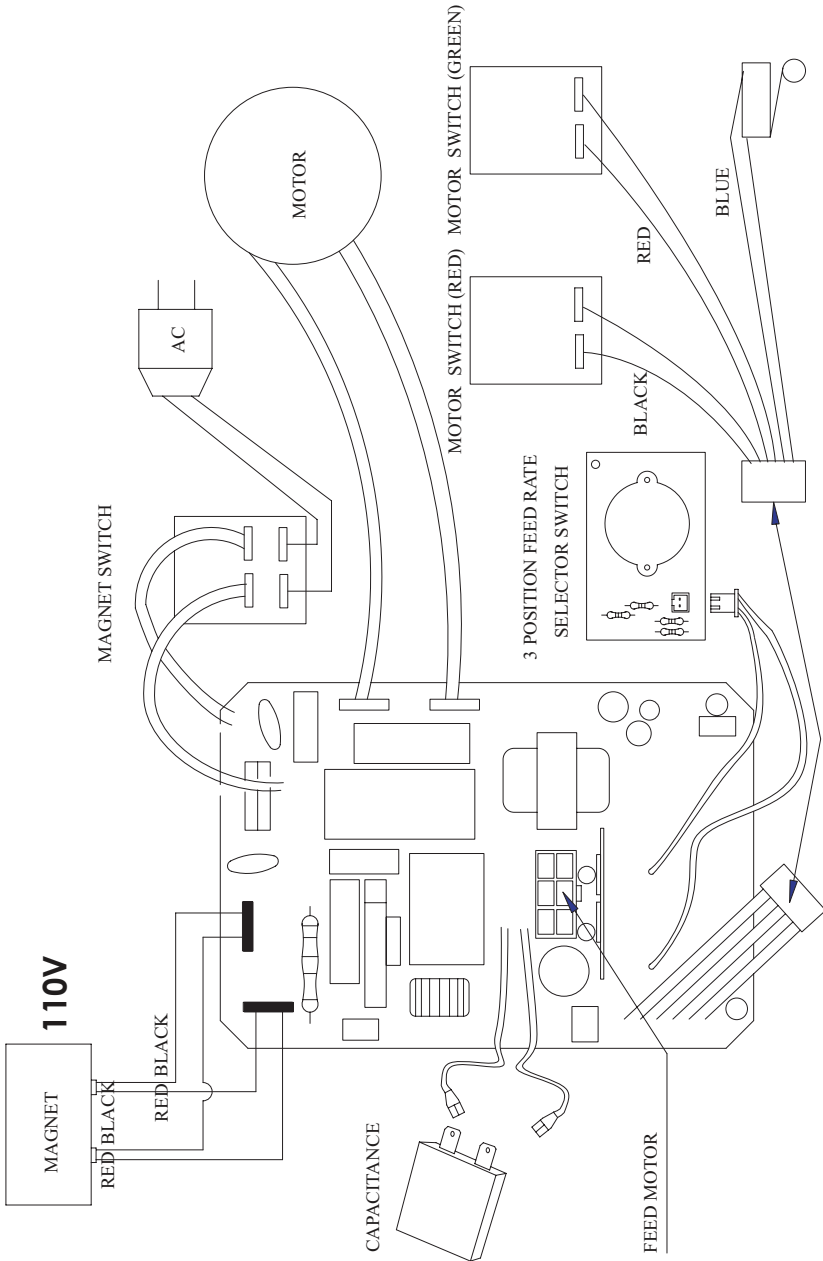


Disconnect the rectifier and test the resistance of both circuits of the rectifier between the AC and the DC sides. Note that polarity matters, so you can only take a reading if test probes are oriented correctly. Each side will be the opposite of the other. Both circuits should have very nearly the same resistance reading. If one of the circuits has zero resistance, it means that it is shorted. If one of the circuits has infinite resistance, it means that the circuit is broken.

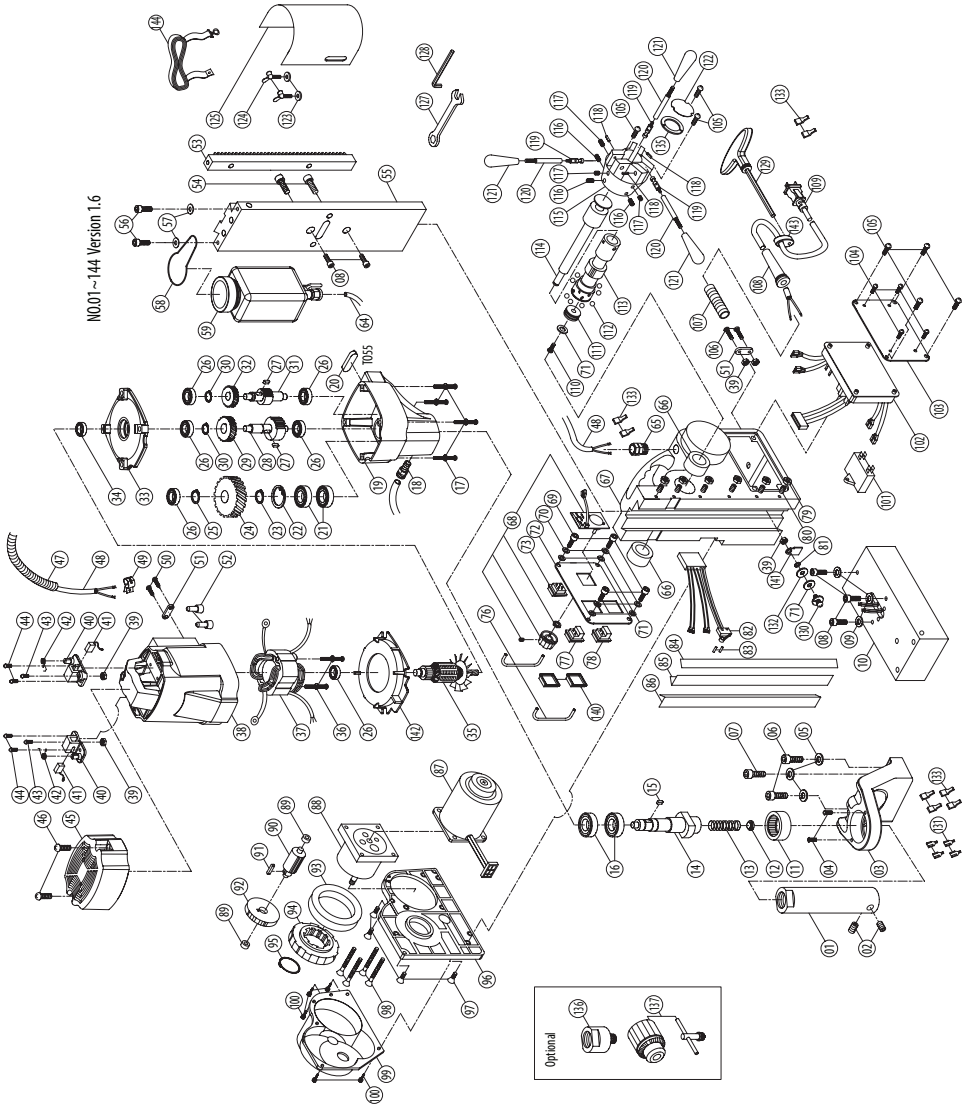
If the replacement of the power supply cord is necessary, this has to be done by the repair center in order to avoid a safety hazard.

WARNING: All repairs must be entrusted to an authorized service center. Incorrectly performed repairs could lead to injury or death.

Wiring:



SB35 Automatic Magnetic Drill Press





NO.	Parts Name	QTY	SB35-72	SWITCH PANEL 125x82x1.5T	1
SB35-1	COMPLETE SET SCREW WITH ARBOR M27x3 -122.5L	1	SB35-73	MAGNET SWITCH 110V	1
SB35-2	SET SCREWS M8x7	2	SB35-76	SWITCH GUARD BAR 64mm	2
SB35-3	ARBOR SUPPORT BRACKET	1	SB35-77	MOTOR ON SWITCH 110V GREEN	1
SB35-4	TRUSS HEAD MACHINE SCREW M5x8	2	SB35-78	MOTOR OFF SWITCH 110V RED	1
SB35-5	SPRING WASHER M8	3	SB35-79	HEX NUT M5	6
SB35-6	SOCKET CAP SCREW M8x55	2	SB35-80	SOCKET SET SCREW M5x20	6
SB35-7	SOCKET CAP SCREW M8x30	1	SB35-81	EXTERNAL STAR WASHER M5	1
SB35-8	SOCKET CAP SCREW M6x20	5	SB35-82	LIMIT SWITCH 110V	1
SB35-9	SPRING WASHER M6	3	SB35-83	PIN	2
SB35-10	ELECTROMAGNET 164x80x48	1	SB35-84	GIB TENSIONER 258x11x1.2T	1
SB35-11	NEEDLE BEARING HK 3516-B	1	SB35-85	GIB STRIP-RIGHT 258mm	1
SB35-12	WATER SEAL 16x16	1	SB35-86	GIB STRIP-LEFT 258mm	1
SB35-13	SPRING Ø1.5xØ13.3xØ16.3x161x140L	1	SB35-87	FEED MOTOR	1
SB35-14	SPINDLE M27x3 x121mm	1	SB35-88	FEED MOTOR GEAR BOX	1
SB35-15	PARALLEL KEY 5x5x10	1	SB35-89	BUSHING Ø8xØ12x6	2
SB35-16	OIL SEAL Ø28 x Ø40 x 7	2	SB35-90	FEED INTERMEDIATE GEAR 10T	1
SB35-17	PANHEAD TAPPING SCREW M5x70	4	SB35-91	PARALLEL KEY 4x4x10	1
SB35-18	PUSH LOCK FITTING PT1/8"x Ø6	1	SB35-92	FEED OUTPUT GEAR 80T	1
SB35-19	GEAR HOUSING	1	SB35-93	BALL BEARING 6809	1
SB35-20	PARALLEL KEY 4x4x30	1	SB35-94	ENGAGEMENT GEAR 63T	1
SB35-21	BALL BEARING 6003	2	SB35-95	EXTERNAL CIRCLIP S-30	1
SB35-22	INTERNAL CIRCLIP R-35	1	SB35-96	FEED SUPPORT BASE	1
SB35-23	EXTERNAL CIRCLIP S-17	1	SB35-97	FLAT HEAD MACHINE SCREW M5x15	4
SB35-24	OUTPUT GEAR M1.25x37T	1	SB35-98	FLAT HEAD MACHINE SCREW M5x30	4
SB35-25	EXTERNAL CIRCLIP S-15	1	SB35-99	AUTO FEED COVER	1
SB35-26	BALL BEARING 608	6	SB35-100	PANHEAD TAPPING SCREW M5x20	5
SB35-27	PARALLEL KEY 4x4x8	2	SB35-101	CAPACITOR 110V	1
SB35-28	COUNTERSHAFT M1.25x12T	1	SB35-102	ELECTRONICS BOARD 110V	1
SB35-29	LAY GEAR M1.0x34T	1	SB35-103	SIDE PANEL 125x82x1.5T	1
SB35-30	EXTERNAL CIRCLIP S-10	2	SB35-104	PANHEAD TAPPING SCREW M4(3.5)x6	4
SB35-31	INPUT SHAFT M1.0x9T	1	SB35-105	PANHEAD MACHINE SCREW M4x8	7
SB35-32	INPUT GEAR M1.0x30T	1	SB35-106	PANHEAD MACHINE SCREW M4x30	2
SB35-33	GEAR PLATE	1	SB35-107	CABLE PROTECTOR 7CM(5/16")	1
SB35-34	BALL BEARING 6001-LLU	1	SB35-108	CORD ARMOR	1
SB35-35	ARMATURE 110V-73x42x45	1	SB35-109	POWER SUPPLY CABLE 16AWG(16A)x3Ck.5M-SJTW	1
SB35-36	PANHEAD TAPPING SCREW M5x60	2	SB35-110	TRUSS HEAD MACHINE SCREW M4x10	1
SB35-37	STATOR 110V-73x42x45	1	SB35-111	SELECTOR CAM	1
SB35-38	MOTOR HOUSING	1	SB35-112	CHECK BALL Ø5	8
SB35-39	HEX NUT M4x8	5	SB35-113	CRANK SPINDLE Ø28	1
SB35-40	CARBON BRUSH HOLDER 7x11	2	SB35-114	SELECTOR ROD	1
SB35-41	CARBON BRUSH 7x11x17(2PCS)	1 PAIR	SB35-115	CRANK HUB	1
SB35-42	BRUSH SPRING 0.35x3x3T	2	SB35-116	SOCKET SET SCREW M8x10	3
SB35-43	PANHEAD MACHINE SCREW M4x10	2	SB35-117	DETENT UNIT M6x13	3
SB35-44	PANHEAD TAPPING SCREW M4x12	4	SB35-118	ROLL PIN Ø4.2x25	3
SB35-45	MOTOR TAIL CASTING	1	SB35-119	CRANK LEVER TIP	3
SB35-46	PANHEAD TAPPING SCREW M4x25	2	SB35-120	CRANK LEVER	3
SB35-47	CABLE PROTECTOR (5/16"x7CM)40CM(5/16")	1	SB35-121	CRANK GRIP	3
SB35-48	WIRE 1.25x2CxØ8CM-VCTF	1	SB35-122	HUB COVER	1
SB35-49	CABLE CLAMP	1	SB35-123	FLAT WASHER Ø6x Ø13x1	2
SB35-50	PANHEAD TAPPING SCREW M4x14	2	SB35-124	BUTTERFLY SCREW M6x10	2
SB35-51	CABLE CLIP	2	SB35-125	CHIP GUARD	1
SB35-52	CRIMP CAP CONNECTOR C4	2	SB35-126	N/A	-
SB35-53	GEAR RACK M1.5x150L	1	SB35-127	COMBINATION WRENCH M8	1
SB35-54	SOCKET CAP SCREW M8x16	2	SB35-128	SOCKET HEX KEY M2.5	1
SB35-55	SLIDE PLATE 238mm	1	SB35-129	CHUCK KEY M4	1
SB35-56	SOCKET CAP SCREW M5x16	2	SB35-130	PANHEAD MACHINE SCREW M4x16	1
SB35-57	FLAT WASHER Ø5x Ø12x1	2	SB35-131	FEMALE SPADE TERMINAL FDV1-250	4
SB35-58	COOLANT TANK BRACKET	1	SB35-132	RUBBER WASHER Ø4xØ11x1	1
SB35-59	COOLANT TANK ASSEMBLY 400cc	1	SB35-133	SPADE TERMINAL BOOT FDV1-250	8
SB35-64	TUBE 20CM	1	SB35-135	HUB PLATE	1
SB35-65	CABLE GLAND N-MG016-13B-ST-XA(5/16")	1	SB35-136	CHUCK ADAPTOR M27x3 -1/2x20	1
SB35-66	BUSHING Ø28xØ32x12	2	AC35-1220	½" Drill Chuck	1
SB35-67	STAND BODY	1	SB35-140	SWITCH BOOT	2
SB35-68	MAIN SWITCH-3 POSITION 110V	1	SB35-141	EARTHING MARKING	1
SB35-69	SOCKET CAP SCREW M4x16	4	SB35-142	FAN SHROUD	1
SB35-70	SPRING WASHER M4	4	SB35-143	HEX KEY HOLDER M4	1
SB35-71	FLAT WASHER Ø4xØ10x1	6	SB35-144	SAFETY BELT	1



SB35

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