

INSTRUCTION MANUAL



ORIGINAL INSTRUCTIONS

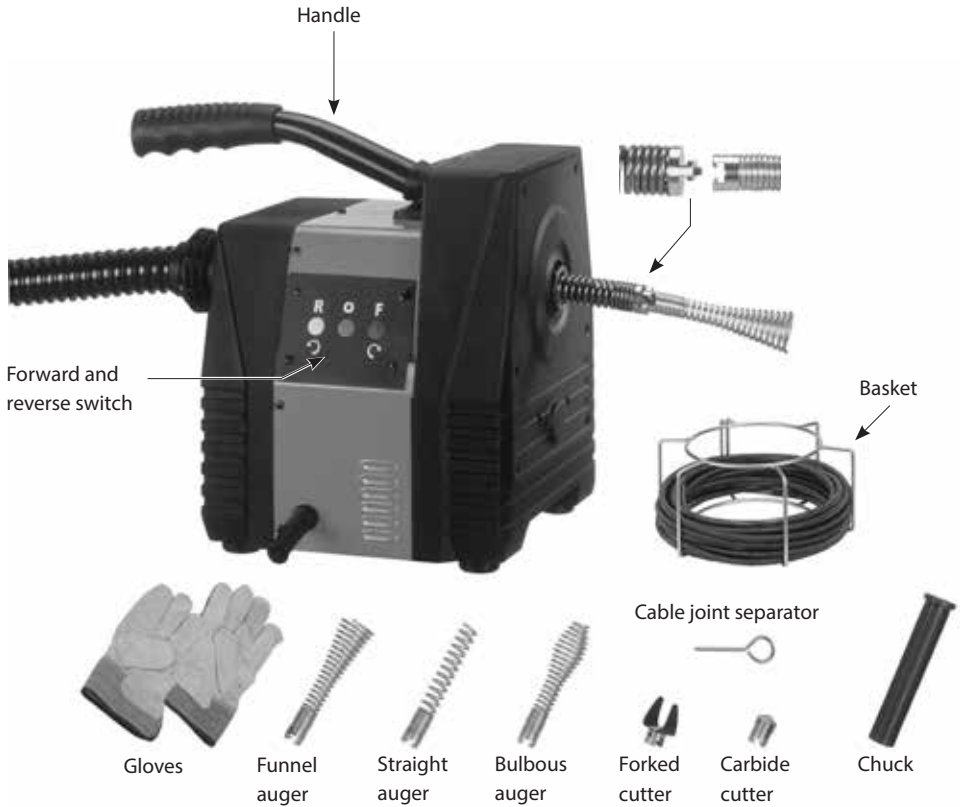
For your personal safety,
READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

CECB

DRAIN CLEANING MACHINE

Power input	600W
Voltage	See machine nameplate
No load min ⁻¹	60Hz: 580 , 50Hz: 480
Dimensions	353mm x 260mm x 325mm
Net weight	19.3 kg (42.46 Lbs)



GENERAL SAFETY INSTRUCTIONS



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference. The term “power tool” in the warnings refers to your mainsoperated (corded) power tool or battery-operated (cordless) power tool.

1) WORK AREA SAFETY

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

2) ELECTRICAL SAFETY

- a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d. **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.
- e. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f. **If operating a power tool in a damp location is unavoidable, use an earth leakage circuit breaker.** Use of an earth leakage circuit breaker reduces the risk of electric shock.

3) PERSONAL SAFETY

- a. **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- b. **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

- c. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d. **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e. **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- f. **Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.
- g. **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.

4) POWER TOOL USE AND CARE

- a. **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- b. **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c. **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d. **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.
- e. **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- f. **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g. **Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5) SERVICE

Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

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.

V.....volts

A.....amperes

Hz.....hertz

W.....watt

~.....alternating current

n_0no load speed

min^{-1}revolutions or reciprocation
per minute



.....warning of general danger



.....class II tool



.....with electrical earth



.....read these instructions



.....always wear eye protection



.....always wear a dust mask.



.....always wear hearing protection



.....wear safety-approved hard hat



do not dispose of electric tools,
accessories and packaging together
with household waste material

TERMINOLOGY USED IN THE MANUAL

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

SPECIFIC SAFETY RULES AND REGULATIONS

Connect earth. The machine needs to connect with the socket with earth.

Wear gloves to make the spirals cable run smoothly through the hands and protect the hands from hurt.

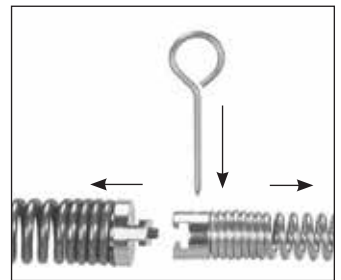
TECHNICAL DATA

Noise and vibration information	
A-weighted emission sound pressure level LPA	72 dB(A)
Uncertainty KPA	3 dB(A)
A-weighted sound-power level LWA	83 dB(A)
Uncertainty KWA	3 dB(A)
Oscillation total value ah	2,4 m/s ²
Uncertainty K	1,5 m/s ²

CONNECTING AND DISCONNECTING CABLES AND ACCESSORIES

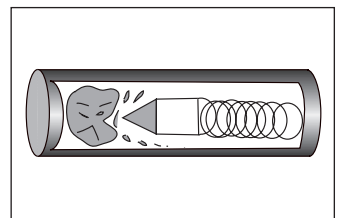
The same coupling is used to attach cables to one another and to attach different accessories such the funnel auger or the carbide cutter .

1. To attach, place female and male coupling together."
2. To disconnect, hold securely and push pin down. Then coupling may be released.



HARD OBSTRUCTION

When a hard obstruction is encountered and the auger is not able to penetrate it, the carbide cutter may be used. For most drain clearing operations, the auger is to be used.



SETTING UP THE CHUCK

There is a 16mm chuck supplied. Choose the chuck which is appropriate for the cable to be used. (The machine is supplied with 2 cables which are 16mm × 5m (L) and 22mm × 5m (L) .)



THE SWITCHES

1. To run the machine in the forward direction, push the button of "F".
2. To reverse direction, first push the button of "O", then push the button of "R".
3. To switch off, press the button of "O".



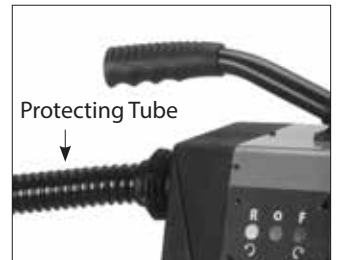
CAUTION: Never switch suddenly both switches at the same time from one direction of rotation to the other as this may damage the motor.

PROTECTING TUBE

The machine is supplied with 1 Protecting Tube to hold the cable and protect the user from being hit by the cable.

The protecting tube could prevent the cable from twisting.

So, do not use the machine without installing the protecting tube for the cable.



OPERATING:

WARNING: To reduce the risk of electric shock, Always clear all water away from the work area before beginning work.

WARNING: Keep the span from the machine to the drain as short as possible to avoid dangerous whipping of the working end of the cable.

WARNING: Keep all bystanders away from the cable at all times.

1. Choose the proper length cable. Always keep the cable as short as is possible to do the job. The supplied cables are 5 meters long each. If one is enough to do the job, do not use more. If more length is needed, add more cables as needed (see above the instructions CONNECTING AND DISCONNECTING CABLES AND ACCESSORIES)
2. Position the unit on a dry stable surface as close as possible to the drain to be cleared.
3. Choose the chuck which is appropriate for the cable to be used.

4. Fit the desired end attachment, either auger or carbide cutter and then feed the cable into the machine from the entrance end and then into the drain to be cleared until it meets the obstruction. Lay the remaining cable as straight as possible behind the machine.
5. To begin clearing the grain, switch the machine on in the forward direction.
6. Press downwards the handle to clamp the cable and penetrate through the obstruction. Then pull upwards the handle to withdraw the cable.
7. If the cable gets stuck in the obstruction. It may be necessary to first stop, then reverse the rotation.
8. When the obstruction is cleared, stop the machine and remove the cable from the drain and clean debris from the cable and its end attachment. If the obstruction is large, repeated attempts may be necessary.
9. Always clean the cable and store properly after each use.

MAINTENANCE

Every 50 hours of operation blow 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.)

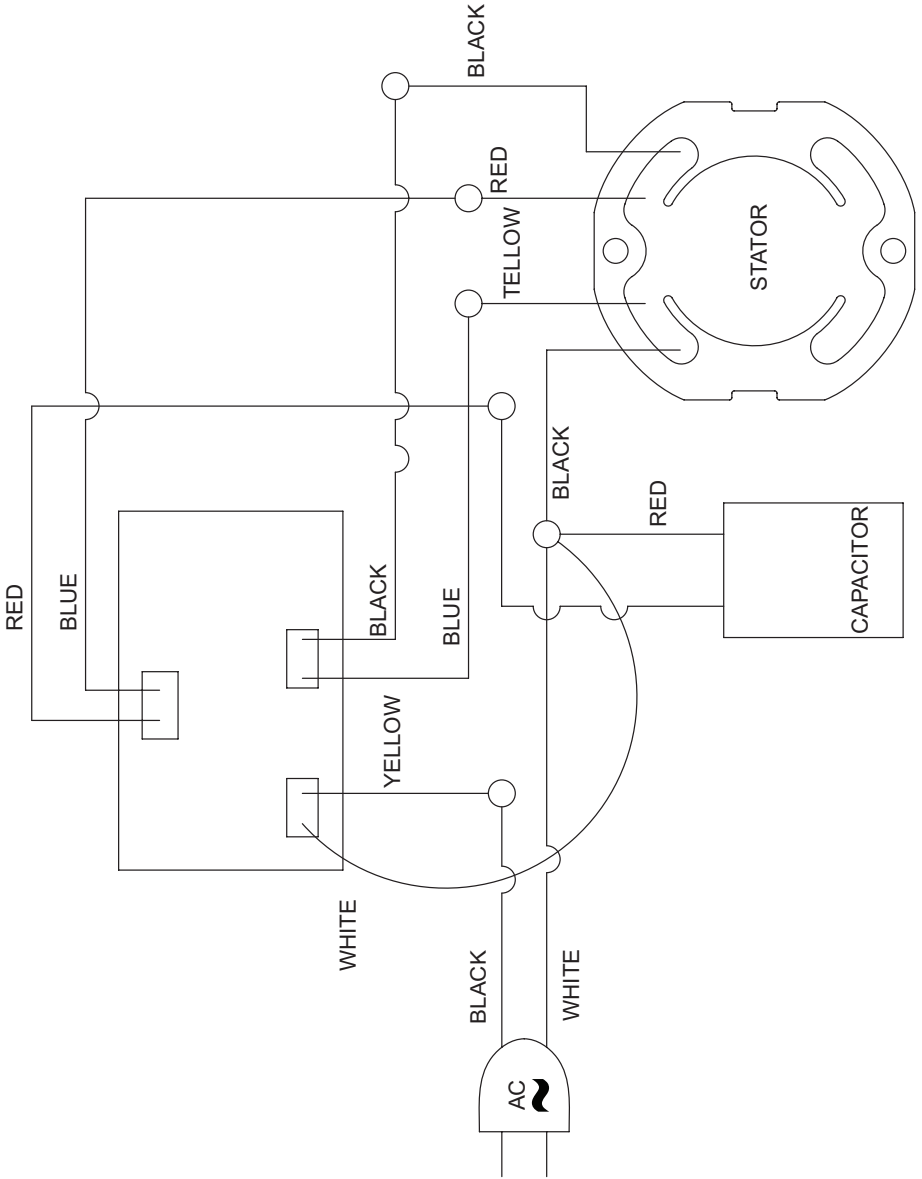
WARNING: Always unplug the machine before performing any maintenance.

1. Ensure that the cable and accessories are kept clean.
2. The motor may be cleaned by blowing the vents with compressed air.
3. All other repairs should be entrusted to a qualified service center.

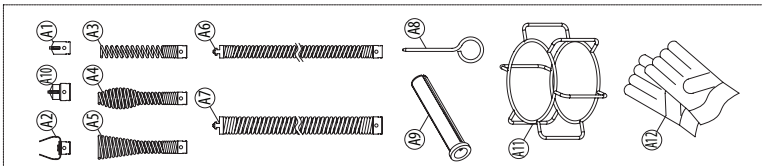
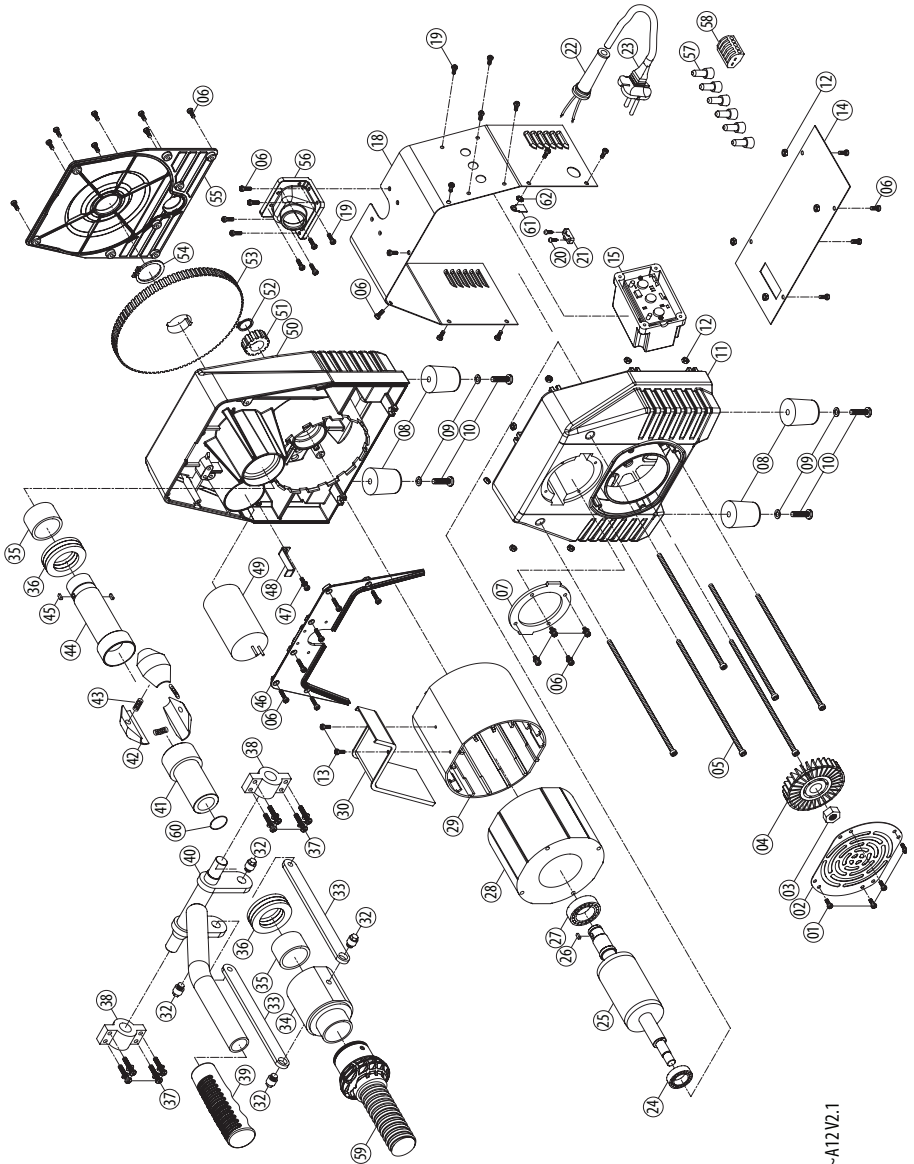
If the replacement of the power supply cord is necessary, this has to be done by the manufacturer or their agent in order to avoid a safety hazard.

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

WIRING



EXPLODED VIEW



NO.01~G2 A1~A12V2.1

PARTS LIST

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	SCREW M4 x 10	4	38	LEVER PIVOT	2
2	MOTOR FAN COVER PLATE	1	39	HANDLE GRIP	1
3	NUT M12 x P1.75	1	40	LEVER HANDLE	1
4	FAN	1	41	CONE SLEEVE-REAR	1
5	SOCKET CAP SCREW M5 x 200	6	42	CLUTCH JAW	3
6	SCREW M4 x 12	33	43	SPRING Ø1 x Ø5 x Ø7 x 15T x 30L	3
7	BOSS	1	44	CONE SLEEVE-FRONT	1
8	FOOT	4	45	PARALLEL KEY 5 x 5 x 12	2
9	FLAT WASHER Ø6 x Ø13 x 1	4	46	INNER PLATE	1
10	PAN HEAD SCREW M6 x 25	4	47	SCREW M4 x 16	1
11	REAR COVER	1	48	CAPACITOR BRACKET	1
12	NUT M4 x 8	11	49	CAPACITOR	1
13	SCREW M4 x 6	2	50	FRONT HOUSING	1
14	BASE PLATE	1	51	INPUT GEAR M2.0 x 14T	1
15	SWITCH UNIT	1	52	EXTERNAL CIRCLIP S-14	1
16	N/A	-	53	OUTPUT GEAR M2.0 x 88T	1
17	N/A	-	54	EXTERNAL CIRCLIP S-34	1
18	BODY	1	55	FRONT COVER	1
19	SCREW M4 x 12	8	56	RUBBER BOOT	1
20	SCREW M4 x 14	2	57	SPLICE TERMINAL C4	6
21	CABLE CLIP	1	58	5 WIRE PUSH-IN CONNECTOR	1
22	CORD ARMOR	1	59	GUIDE HOSE	1
23	POWER SUPPLY CABLE	1	60	C-CLIP Ø1.8 x Ø22.7 x Ø26.3 x 4mm	1
24	BEARING 6201 zz	1	61	EARTHING MARKING	1
25	ROTOR	1	62	STAR WASHER	1
26	PARALLEL KEY 4 x 4 x 10	1	A1	CARBIDE CUTTER Ø16	1
27	BEARING 6302 zz	1	A2	FORKED CUTTER	1
28	STATOR	1	A3	STRAIGHT AUGER Ø16, Ø22	1
29	MOTOR HOUSING	1	A4	BULBOUS AUGER Ø16~Ø27, Ø22~Ø40	1
30	MOTOR GUARD PLATE	1	A5	FUNNEL AUGER Ø16~Ø31, Ø22~Ø55	1
31	N/A	-	A6	CABLE Ø16	1
32	PIVOT BOLT M10	4	A7	CABLE Ø22	1
33	ACTUATOR ARM	2	A8	CABLE JOINT SEPARATOR	1
34	ACTUATOR SLEEVE	1	A9	CHUCK Ø16.5	1
35	BUSHING Ø35 x Ø42 x 26	2	A10	CARBIDE CUTTER Ø22	1
36	THRUST BEARING NLK 2907	2	A11	CABLE BASKET	1
37	SCREW M5 x 20	8	A12	GLOVES	1

