

# ***Rotabroach***<sup>TM</sup>

## **ADDER MAGNETIC DRILLING MACHINE**



### **Model No. CM/705/1 & CM/705/3**

This machine (Serial No \_\_\_\_\_) is CE approved

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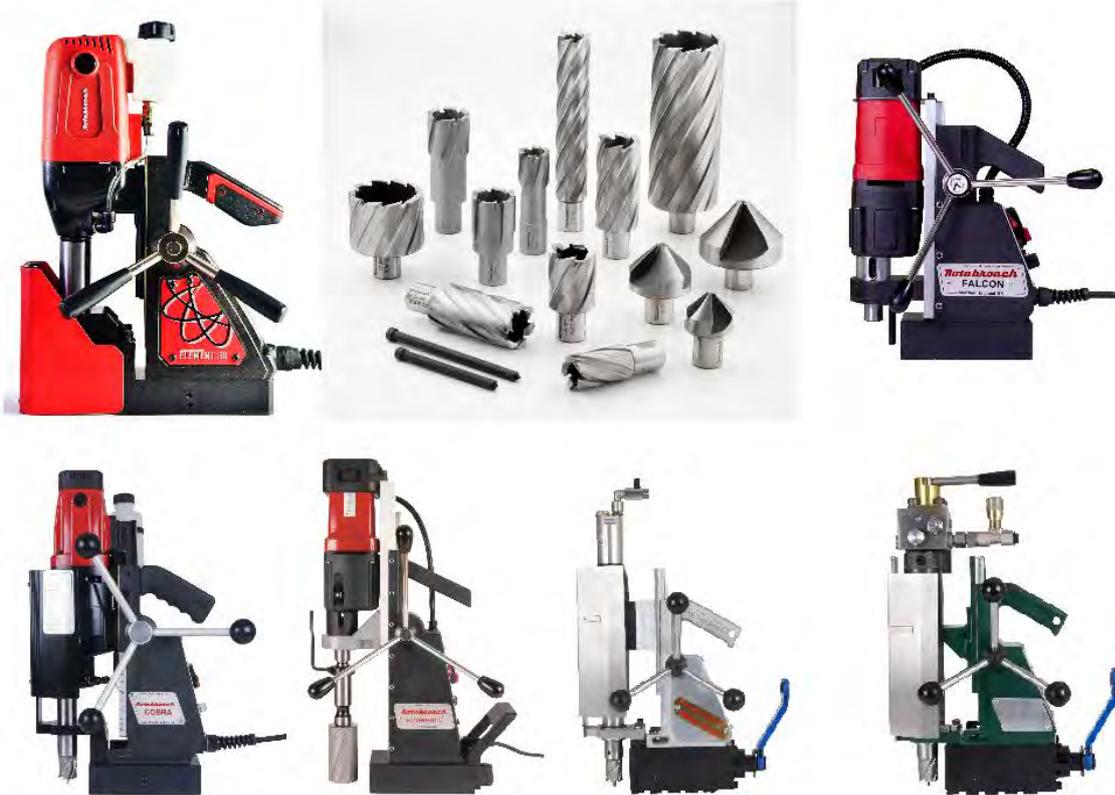
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**Thank you for purchasing our Adder magnetic drill.  
We would really like your feedback on the machine.**

***Other Products by Rotabroach™:***



**Thank you for your purchase of our product.**

For more information please visit our website at [www.rotabroach.co.uk](http://www.rotabroach.co.uk)

Or contact our sales department on +44 (0) 114 2212 510

## CONTENTS

	Page
1) Intended Use	4
2) General safety instructions	4
3) Machine Specification	7
4) Operating instructions	8
5) Mounting of cutters	9
6) Remedies for hole making problems	9
7) Wiring Diagram	10
8) Exploded diagram of machine	11
9) Parts List	12
10) Maintenance checks	13
11) Trouble shooting	15
12) Warranty	17

## 1) INTENDED USE

The magnetic drill is intended for use to drill a hole in a ferrous material. The magnet is used to hold the drill in place whilst the drill is functioning elevating the stress placed on the user and increase the low precision that would be incurred when using a hand held drill. It is designed for use in Fabrication, Construction, Railways, Petrochemical and any other application when drilling ferrous metal. Any deviation from its intended use will not be the subject of responsibility from Rotabroach™.

**WARNING! Read and understand all instructions 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.**

## 2) GENERAL SAFETY INSTRUCTIONS

### Work area

**Keep your working area clean and well lit.** Cluttered benches and working stations cause accidents as well as dark spaces. Always ensure working stations are clean and well lit.

**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. Dust may enter the ventilation system causing clogging and overheating.

**Keep bystanders, children and visitors away from moving parts of the power tool.** Any distractions can cause you to lose control of the power tool and an injury could take place.

### Electrical Safety

**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 dance 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.

**Never carry a tool by the cord or hose and do not “yank” the cord or the hose to disconnect it from the receptacle.**

Always carry the power tools properly and store in dry and dust free place.

Keep cords and hoses away from heat, oil and sharp edges. Damaged cords increase the risk of electric shock.

**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

**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.

**Dress properly. Do not wear loose clothing or jewellery. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewellery, or long hair can be caught in moving parts.

**Avoid accidental starting. Be sure the switch is off before plugging in the machine.** Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.

**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.

**Do not overreach. Keep a proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

**Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hardhat, and hearing protection must be used for appropriate conditions.

### Tool use and care

**Use clamps or other practical ways 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.

**Do not force the 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.

**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.

**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.

**Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

**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.

**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.

**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 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
ϕ	Diameter	Size of drill bits
No	No load speed	Rotational speed, at no load
.../min	Revolutions per minute	Revolutions, strokes, surface speed per minute.
0	Off position	Zero speed, zero torque...
1, 2, 3, ...	Selector settings	Speed setting, higher number means greater speed
~	Alternating current	Type or a characteristic or current
	Class II construction	Double Insulated, construction tool
	Warning symbol	Alerts user to warning messages

### 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.

## FORESEEABLE MISUSE

- During operation, failure to keep the cable away from the machine body, will result in the cable damaged by the drill bit, causing electric conduction and other accidental injury.
- Before operation, when plugging in the power source, failure to turn all the switches to position <off>, may result in accidental start-up from the machine, causing accidental injury.
- During suspended operation, failure to tie the safety belt to fasten the magnetic drill in place may result in the magnetic drill coming away from the work surface and then cause an injury – this is particularly apparent if there is a power failure or the machine powers down suddenly.

## OTHER RISKS

- During operation, wear loose clothing or jewellery and wear a protective hair covering to contain long hair, failure to do this may present an accidental injury by being caught in moving parts.
- During operation, if excessive effort is used to push and press the machine, this could result in the magnet coming away from the work surface suddenly and cause accidental injury.
- Before mounting or removing the drill bit, failure to disconnect the supply will result the accidental start-up, causing personal injury.

## SPECIFIC SAFETY RULES AND REGULATIONS

**Always use safety chain.** Mounting can release.

**The magnet's adhesion depends on the thickness of the work piece.** Always ensure that the work piece is a minimum of 12mm (7/16 in.) thick. If it is not, then use a piece of steel plate at least 12mm thick and larger than the magnet below the work piece to supplement the magnetic adhesion.

**Metal chips and other debris will seriously hamper magnetic adhesion.** Always ensure that the magnet is clean.

**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.** Always lubricate the cutter and add as needed during the cut. Always lubricate the cutter and add as needed during the cut.

**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 enter the motor.

**Metal chips are often very sharp and hot.** Never touch them with bare hands. Clean up with a magnetic chip collector and a chip hook or other appropriate tool.

**CAUTION: NEVER position the machine on a work piece between the electrode and the ground of any arc type welder – this will cause damage to the machine, as the welder will grind through the machine's ground cable.**

**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.**

## USING THE SAFETY STRAP

The safety strap must always be used.

Loop the strap through the slot above the magnet and around the work piece. Push on the spring buckle and thread the loose end of the strap through the loop and pull tight. Push on the spring buckle to release strap.

### 3) MACHINE SPECIFICATION



Model Number	CM/705/1A / CM/705/3A
Motor specification	110V full load 10.8A 1100W 230V full load 5.4A 1100W
No Load rpm	650 rpm
Max hole cutting capacity	35mm x 25mm deep
Overall dimensions	Height 210mm Width 100mm Length 285mm
Net weight	10Kg
Spindle bore	19.05 (3/4")
Magnetic adhesion	1500kgs
Safety feature	Electronic overload

**Note:** This machine is fitted with an electronic overload protection. To reset please turn off the machine using the magnet switch and leave for 5 seconds then restart the machine as normal.

## 4) OPERATING INSTRUCTIONS

**WARNING:** Always ensure that the magnet has 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 stick lubricant should be used.



**NOTE:** Always ensure that the cutting tool is sharp. A dull cutter typically will have finer and/or choppy shavings.

**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 (drill overlapping holes) with a TCT cutter. This may destroy the cutter.

### REVERSING OR CHANGING THE POSITION OF THE CRANK LEVER

The Crank Lever is quick-release and adjustable to suit different operating conditions.

If it is required to mount the crank lever on the opposite side or to change its position, push the Release Button in the centre of the Crank Hub and remove. Press the Button and mount on the opposite side or in the desired position.



### THE LED WORK LIGHT

Models equipped with the LED WORK LIGHT have a light which is always on whenever the machine is plugged in. This can be useful when working in dark work spaces.



**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 destroy the cutter.

## 5) MOUNTING OF CUTTERS

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

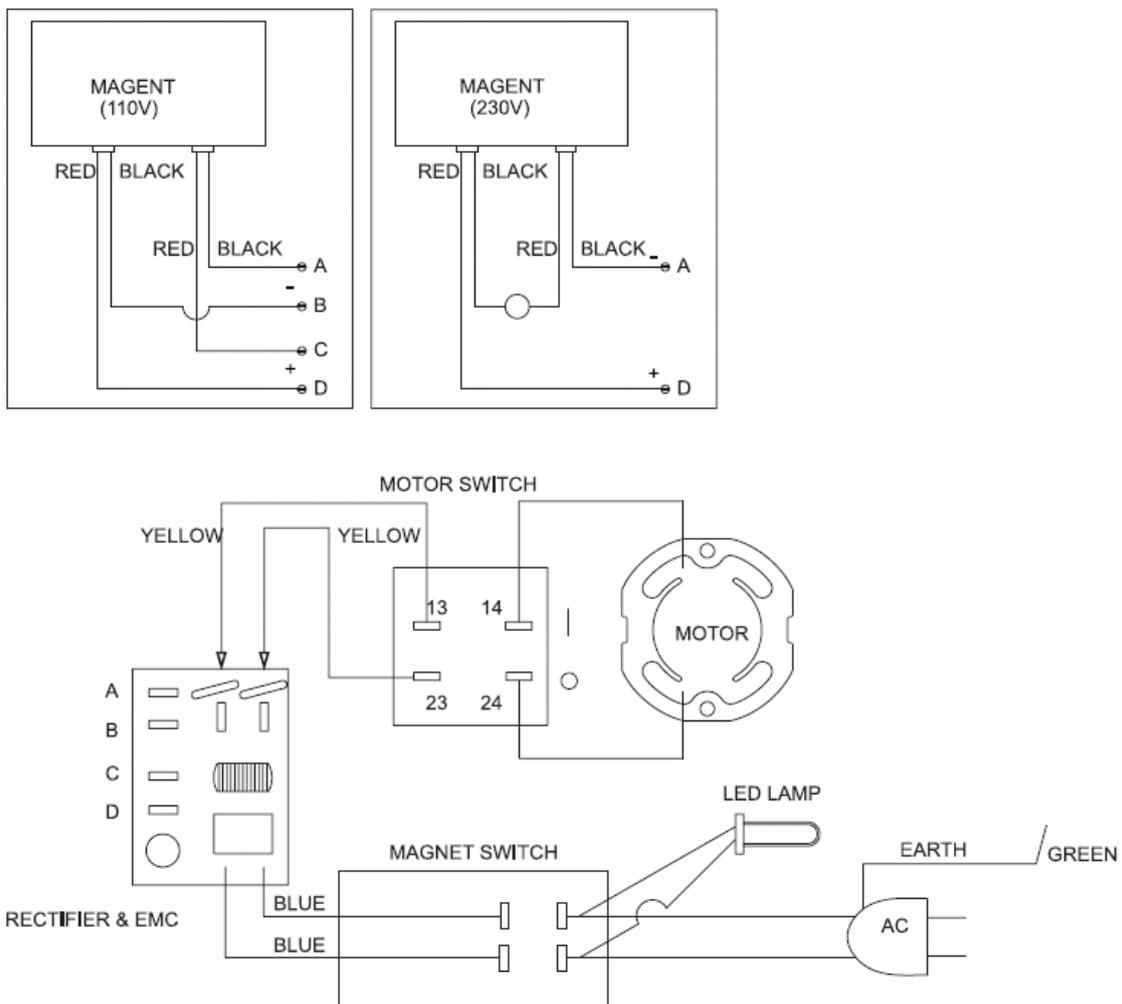
- The machine has been made to accept cutters having 19.05mm (3/4") dia. shanks.
- The following procedure is to be used when mounting cutters.
- Lay the machine on its side with feed handles uppermost, ensuring arbor is wound down to its lowest point to enable access to socket screws RD4066.
- Take appropriate pilot and place through the hole in cutter shank. Insert shank of cutter into bore of arbor, ensuring alignment of two drive flats with socket screws.
- Tighten both screws using hexagon key.

## 6) REMEDIES FOR HOLE MAKING PROBLEMS

<i>Problem</i>	<i>Cause</i>	<i>Remedy</i>
1) Magnetic base won't hold effectively	Material being cut may be too thin for efficient holding.  Swarf or dirt under magnet.  Irregularity on magnet contact or work-piece.  Insufficient current going to magnet during drilling cycles.	Attach an additional piece of metal under work-piece where magnet will be located, or mechanically clamp magnetic base to work-piece. Clean magnet.  Use extreme care; file any imperfections flush to surface.  Confirm power supply and output from control unit, check supply cable.
2) Cutter skips out of centre-punch mark at initiation of cut	Magnetic base is not holding effectively.  Worn arbor bushing and/or ejector collar.  Too much feed pressure at start of cut.  Cutter is dull, worn, chipped or incorrectly sharpened.  Poor centre-punch mark; weak pilot spring; pilot not centred in centre-punch mark.  Worn or bent pilot, worn pilot hole.  Loose bolts on motor bushing support bracket, main casting or loose gib adjusting set screws.	See causes and remedies above.  Replace! Only a few thousandths wear permissible. New arbor bushing is needed. Light pressure only is needed until a groove is cut. The groove then serves as a stabilizer.  Replace or re-sharpen. Sharpening service is available.  Improve centre-punch and/or replace worn parts  Replace part or parts  Adjust where necessary
3) Excessive drilling pressure required	Incorrectly re-sharpened, worn or chipped cutter.  Coming down on swarf lying on surface of work-piece.  Gibs out of adjustment or lack of lubrication.  Swarf accumulated (packed) inside cutter.	Re-sharpen or replace.  Take care not to start a cut on swarf.  Adjust setscrews, and lubricate.  Clear cutter.
4) Excessive cutter breakage	Steel swarf or dirt under cutter. Incorrectly re-sharpened or worn cutter.  Cutter skipping. Slide-ways need adjustment.  Cutter not attached tightly to arbor.  Insufficient use of cutting oil or unsuitable type of oil.	Remove cutter, clean part thoroughly and replace. Always have a new cutter on hand to refer to for correct tooth geometry, together with instruction sheet. See causes and remedies (2). Tighten sideways.  Retighten.  Inject oil of light viscosity into the coolant-inducing ring and check that oil is being metered into cutter when pilot is depressed. If not, check pilot groove and arbor internally for

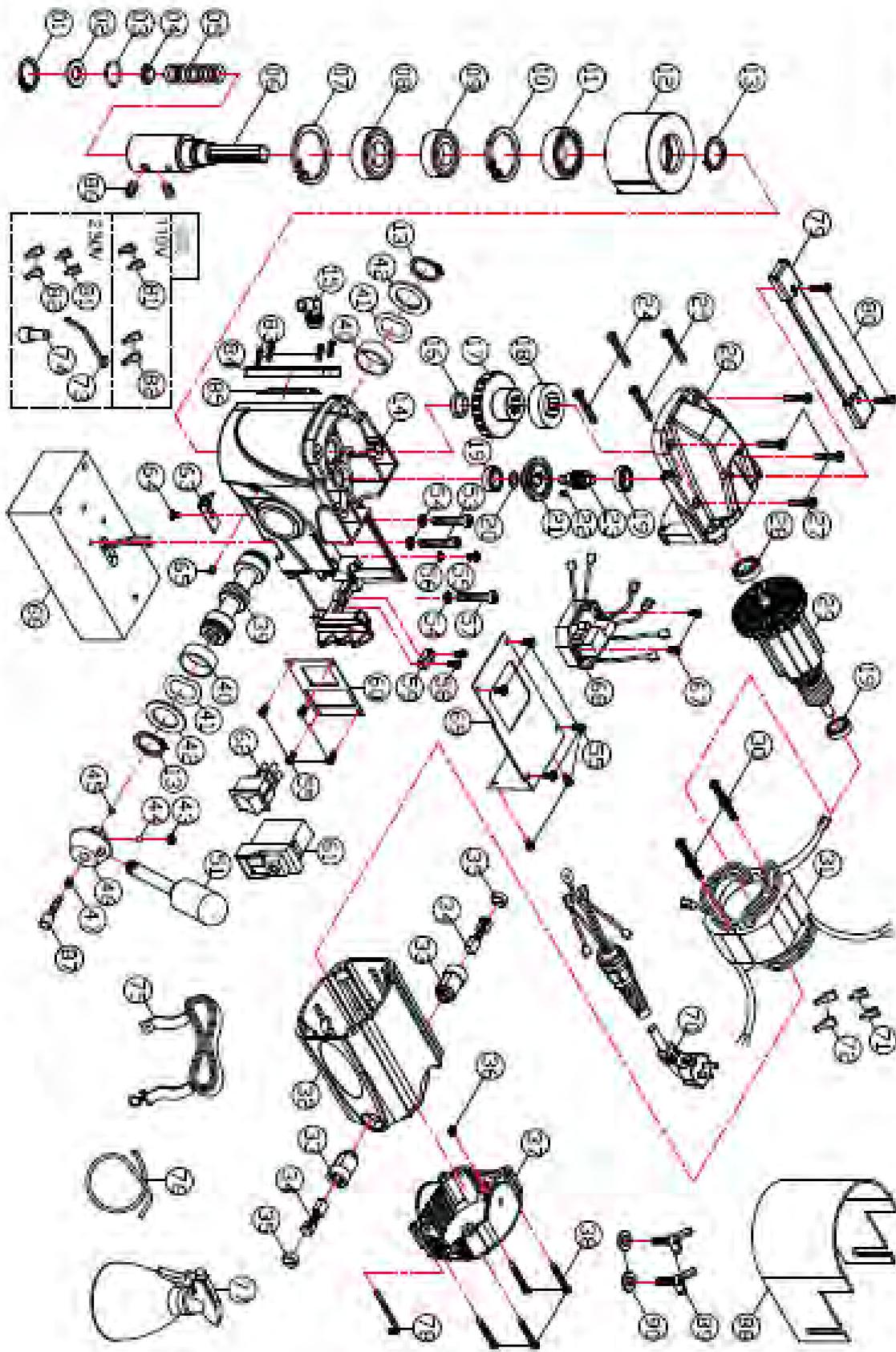
		dirt or apply oil externally. (Even a small amount of oil is very effective).
5) Excessive cutter wear	See cause and remedy above  Incorrectly re-sharpened cutter.  Insufficient or spasmodic cutting pressure.	Refer to instructions and a new cutter for proper tooth geometry.  Use sufficient steady pressure to slow the drill down. This will result in optimum cutting speed and chip load.

## 7) WIRING DIAGRAM



### 8) EXPLODED DIAGRAM OF THE MACHINE

MODEL : CM705 Magnetic core drill



## 9) PARTS LIST

No.	Parts Name	Part number	Qty	No.	Parts Name	Part number	Qty
1.)	INTERNAL CIRCLIP	RD49000	1	46.)	CRANK HUB	RD49049	1
2.)	ARBOR WASHER	RD49001	1	47.)	SPRING	RD49050	1
3.)	O-RING	RD49212	1	51.)	CRANK LEVER	RD49054	1
4.)	COOLANT SEAL	RD49002	1	52.)	GRIP	RD49055	1
5.)	SPRING	RD49003	1	53.)	SOCKET CAP SCREW	RD49056	2
6.)	SPINDLE	RD49213	1	54.)	SPRING WASHER	RD49057	3
7.)	INTERNAL CIRCLIP	RD49214	1	55.)	SCREW	RD49067	11
8.)	OIL SEAL	RD49215	1	56.)	SUN WASHER	RD49074	1
9.)	OIL SEAL	RD49216	1	57.)	SOCKET CAP SCREW	RD49072	1
10.)	INTERNAL CIRCLIP	RD49015	1	58.)	SCREW	RD49234	2
11.)	BEARING	RD49016	1	59.)	CABLE CLIP	RD49062	1
12.)	SPINDLE GUIDE	RD49017	1	60.)	MOUNTING PLATE	RD49235	1
13.)	EXTERNAL CIRCLIP	RD49018	3	61.)	MOTOR SWITCH 110V	RD49236	1
14.)	GEAR CASE	RD49217	1	61.)	MOTOR SWITCH 230V	RD49237	1
15.)	COOLANT CONNECTOR	RD49218	1	62.)	MAGNET SWITCH	RD49066	1
16.)	BUSHING	RD49020	1	63.)	LED LAMP	RD49058	1
17.)	QUILL GEAR	RD49021	1	64.)	FLAT HEAD SCREW	RD49059	1
18.)	BEARING	RD49219	1	65.)	SCREW	RD49238	1
19.)	BALL BEARING	RD49023	3	66.)	MAGNET BASE	RD49060	1
20.)	FLAT WASHER	RD49220	1	67.)	SCREW	RD49239	2
21.)	BEVEL GEAR	RD49024	1	68.)	OVERLOAD UNIT 110V	RD49240	1
22.)	PARALLEL KEY	RD49025	1	68.)	OVERLOAD UNIT 230V	RD49241	1
23.)	INTERMEDIATE GEAR	RD49026	1	69.)	SWITCH BRACKET	RD49242	1
24.)	SCREW	RD49027	2	70.)	POWER SUPPLY CABLE	RD49243	1
25.)	SCREW	RD49028	2	71.)	WIRE CONNECTOR	RD49244	2
26.)	GEAR COVER	RD49221	1	72.)	POST WRAP	RD49245	2
27.)	SCREW	RD49222	4	73.)	BELT	RD49246	1
28.)	BEARING	RD49031	1	74.)	CONNECTOR	RD49247	1
29.)	ARMATURE 110V	RD49223	1	75.)	SAFETY BELT	RD49248	1
29.)	ARMATURE 230V	RD49224	1	76.)	COOLANT TUBE	RD49249	1
30.)	SCREW	RD49033	2	77.)	COLLANT TANK	RD49250	1
31.)	STATOR 110V	RD49225	1	78.)	HEX. WRENCH	RD49251	1
31.)	STATOR 230V	RD49226	1	79.)	STRAP COVER	RD49252	1
32.)	MOTOR HOUSING	RD49227	1	80.)	SCREW	RD49253	2
33.)	BRUSH HOLDER	RD49228	2	81.)	WIRE CONNECTOR	RD49254	2
34.)	CARBON BRUSH	RD49229	2	82.)	POST WRAP	RD49255	2
35.)	BRUSH CAP	RD49230	2	83.)	SCREW	RD49256	4
36.)	NUT	RD49231	1	84.)	VALVE PLATE	RD49257	1
37.)	MOTOR TAIL COVER	RD49232	1	85.)	RUBBER PLUG	RD49258	1
38.)	SCREW	RD49233	4	86.)	Screw M8 x 7	RD49259	2
39.)	CRANK SPINDLE	RD49044	1	87.)	PLUNGER	RD49260	1
40.)	CRANK BUSHING	RD49045	2	88.)	CHIP GUARD	RD49261	1
41.)	WASHER	RD49075	2	89.)	SCREW	RD49262	2
42.)	THRUST WASHER	RD49046	2	90.)	FLAT WASHER	RD49263	2
43.)	BALL SEAT	RD49047	1				
44.)	CHECK BALL	RD49048	1				
45.)	E-CLIP	RD49234	1				

## 10) TIPS FOR KEEPING YOUR MACHINE IN CORRECT WORKING ORDER

In order to 'get the best life' out of your Rotabroach™ machine always keep in good working order.

A number of items must always be checked on Rotabroach™ machines.

Always before starting any job make sure the machine is in good working order and that there are no damaged or loose parts. Any loose parts must be tightened.

**Before proceeding with any maintenance work; be certain that the power supply is disconnected.**

Description	Every operation	1 week	1 Month
Visual check of machine for damage	X		
Operation of machine	X		
Check brush wear		X	
Check magnetic base	X		
Check alignment of the machine			X
Check grease			X
Check Armature			X

### Visually check the machine for damage.

Machine must be checked before operation for any signs of damage that will affect the operation of the machine. Particular notice must be taken of the mains cable, if the machine appears to be damaged it should not be used as failure to do so may cause injury or death.

### Check operation of the machine.

The machines operation must be checked to ensure that all components are working correctly.

**Machine Brushes** - should be checked to make sure there is no abnormal wear present this should be checked at least once a week if used frequently. If the brush has worn more than 2/3 the original length the brushes should be changed. Failure to do so may cause damage to the machine.

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 2 brush caps
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.

**Carbon Brushes**

Due to the brush design, if the machine comes to a stop without any reason, the brushes have to be checked. The brush design stops the machine before the carbon brushes are worn past a fully functional level and protects the motor.

**Magnetic base** – before every operation the magnetic base should be checked to make sure that the base is flat and there is no damage present. An uneven magnet base will cause the magnet not to hold as efficiently and may cause injury to the operator.

**Check machines grease.**

The gearbox grease should be checked once a month to ensure all moving components are covered to prevent wear. The grease should be changed at least once a year to ensure you gain the best from the machine.

**Check Armature of the machine.**

This should be checked at least 1 per month to check that there are visual signs of damage to the body or to the commutator. Some signs of wear will be seen on the commutator over a period of time this is normal as this is the part that comes in contact with the brushes but any signs of abnormal damage and the part should be replaced.

## 11) TROUBLE SHOOTING

Magnet and motor do not function	<ul style="list-style-type: none"> <li>- The magnet switch is not connected to the power supply</li> <li>- Damaged or defective wiring</li> <li>- Defective fuse</li> <li>- Defective magnet switch</li> <li>- Defective Control Unit</li> <li>- Defective power supply</li> </ul>
Magnet does function, the motor does not	<ul style="list-style-type: none"> <li>- Damaged or defective wiring</li> <li>- Carbon brushes are stuck or worn out</li> <li>- Defective magnet switch</li> <li>- Defective On / off switch</li> <li>- Defective Control Unit</li> <li>- Defective armature and/or field</li> <li>- Defective magnet protective switch</li> </ul>
Magnet does not function, the motor does	<ul style="list-style-type: none"> <li>- Defective magnet</li> <li>- Defective Control Unit</li> </ul>
Hole cutters break quickly, holes are bigger than the hole cutter	<ul style="list-style-type: none"> <li>- Play in the guide</li> <li>- Bent spindle</li> <li>- Defective Magnet causing movement</li> <li>- Shaft extending from the motor is bent</li> <li>- Uneven work surface causing lack of magnetic adhesion.</li> <li>- Bent pilot</li> </ul>
Motor running roughly and/or seizing up	<ul style="list-style-type: none"> <li>- Bent spindle</li> <li>- Shaft extending from the motor is bent</li> <li>- Triangular guide not mounted straight</li> <li>- Dirt between spindle and triangular guide</li> </ul>
Motor making a rattling sound	<ul style="list-style-type: none"> <li>- Gear bearing (bottom of the armature) worn out</li> <li>- Gear(s) worn out</li> <li>- No grease in gear box</li> </ul>
Motor humming, big sparks and motor has no force	<ul style="list-style-type: none"> <li>- Armature burned</li> <li>- Field burned</li> <li>- Carbon brushes worn out</li> </ul>
Motor does not start or fails.	<ul style="list-style-type: none"> <li>- Damaged or defective wiring</li> <li>- Dirt in sensor of Speed Control Unit</li> <li>- Defective Speed Control Unit</li> <li>- Defective speed control or its wiring</li> <li>- Defective or loose magnet on top of armature</li> <li>- Damaged or defective brushes</li> </ul>
Guiding takes a great deal of effort	<ul style="list-style-type: none"> <li>- Guide is set too tight</li> <li>- Guide is dry</li> <li>- Guide/gear- rack/rotation system dirty or damaged</li> </ul>
Insufficient magnetic force	<ul style="list-style-type: none"> <li>- Damaged or defective wiring</li> <li>- Bottom of magnet not clean and dry</li> <li>- Bottom of magnet not flat</li> <li>- Work piece is not bare metal</li> <li>- Work piece is not flat</li> <li>- Work piece is too thin less than 10mm</li> <li>- Defective Control Unit</li> <li>- Defective magnet</li> </ul>
Motor only runs at maximum rpm	<ul style="list-style-type: none"> <li>- Defective speed switch</li> <li>- Damaged / defective wiring</li> <li>- Defective Control Unit</li> </ul>
Frame under voltage	<ul style="list-style-type: none"> <li>- Damaged / defective wiring</li> <li>- Defective magnet</li> <li>- Motor seriously dirty</li> </ul>

Fuse blows when magnet switch is turned on	<ul style="list-style-type: none"><li>- Damaged or defective wiring</li><li>- Wrong value fuse</li><li>- Defective magnet switch</li><li>- Defective Control Unit</li><li>- Defective magnet</li></ul>
Fuse blows when motor is started up	<ul style="list-style-type: none"><li>- Damaged or defective wiring</li><li>- Wrong value fuse</li><li>- Motor running roughly</li><li>- Defective Armature and / or Field</li><li>- Carbon brushes worn out</li><li>- Defective Control Unit</li></ul>
Rotation system free stroke too long	<ul style="list-style-type: none"><li>- Loose or defective gear-rack</li><li>- Defective rotation system</li></ul>



## WARRANTY STATEMENT

Rotabroach™ warrants its machines to be free from faulty materials, or workmanship under normal use for a period of 12 months from initial date of purchase and 90 days for all other parts (excluding cutters), provided that the warranty registration card (or online registration) has been completed and returned to Rotabroach™, or its designated distributor within a period of (30) days from the purchase date, failure to do so will void the warranty. If the stated is adhered to Rotabroach™ will repair or replace (at its option) without charge any faulty items returned.

### This Warranty does not cover:

1. Components that are subject to natural wear and tear caused by the use in accordance with the operators instructions
2. Defects in the tool caused by non-compliance with the operating instructions, improper use, abnormal environment conditions, inappropriate operating conditions overload or insufficient servicing or maintenance.
3. Defects caused by using accessories, components or spare parts other than original Rotabroach™ parts.
4. Tools to which changes or additions have been made.
5. Electrical components are subject to manufacturer's warranty.

Your online registration can be submitted on [www.rotabroach.co.uk](http://www.rotabroach.co.uk)

The warranty claim must be lodged within the warranty period. This requires the submission or sending of the **complete** tool in question with the original sales receipt which must indicate the purchase date of the product. A complaint form must also be submitted prior to the return.

This can be found online at [www.rotabroach.co.uk](http://www.rotabroach.co.uk) Failure to complete this form will result in the delay of your claim.

All goods returned defective must be returned pre-paid to Rotabroach™, in no event shall Rotabroach™ be liable for subsequent direct, or indirect loss or damage.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, (EXPRESSED OR IMPLIED) INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ROTABROACH™ RESERVE THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE

**Known and Trusted Worldwide for Quality, Performance and Reliability**