

# OPERATOR'S MANUAL MINIBEAST

### MAGNETIC DRILLING MACHINE



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### Read Operator's Manual before starting

#### 1. GENERAL INFORMATION

Model	MINIBEAST
Weight	10kg
Cutter Capacity	35mm Ø x2" depth of cut
Twist Drill Capacity	12mm with twist drill set
Motor	1010 watts
Height Min/Max	Min 307 / Max 377
Length	240mm
Width	166mm
RPM	Single Speed 350 RPM
Magnetic Base Dimensions	80mm x 160mm
Magnet Deadlift (on 25mm plate)	980kg
Noise Level	Does not exceed 95dB
Vibration Level	Does not exceed 2,5m/s2
Voltage	110v or 240v

#### 2. SAFETY PRECAUTIONS

- 1. Before starting, read this Operator's Manual and complete proper occupational safety and health training.
- 2. Machine must be used only in applications specified in Operator's Manual.
- 3. Machine must be complete and all parts must be genuine and fully operational.
- 4. Power supply specifications must conform to those specified on rating plate.
- 5. Power supply socket must be equipped with grounding pin.
- 6. Never carry machine by cord or yank it to disconnect plug from socket. It may cause power cord to break and result in electric shock.
- 7. Untrained bystanders must not be present near machine.
- 8. Before starting, check condition of machine and electrical installation, including power cord, plug, control panel components, and milling tools.
- 9. Keep machine dry. Exposing it to rain, snow, or frost is prohibited.
- 10. Keep work area well lit, clean, and free of obstacles.
- 11. Never use machine near flammable fluids or gases, nor in explosive environments.
- 12. Never use blunt or damaged tools.
- 13. Use only tools recommended by manufacturer and specified in Operator's Manual.
- 14. Before every use, inspect machine to ensure it is not damaged. Check whether any part is cracked or improperly fitted. Make sure to maintain proper conditions that may affect machine operation.
- 15. Always use safety goggles, hearing protection, gloves, and protective clothing during operation. Do not wear loose clothing.
- 16. Do not touch moving parts or metal chips formed during drilling. Prevent objects from being caught in moving parts.
- 17. After every use, remove metal chips from machine, particularly from drilling arbor. Never remove metal chips with bare hands.
- 18. Maintain machine and tools with care. Cover steel parts with thin grease layer to protect them against rust when not in use for a longer period.
- 19. Perform all maintenance work only with power cord unplugged from power socket.
- 20. Perform all repairs only in service center appointed by seller.
- 21. If machine falls on hard surface, from height, is wet, or has other damage that could affect technical state of machine, stop operation and immediately send machine to service center for inspection.





### WARNING! Safety rules must be closely observed.

**Minibeast** drilling machine must be connected to "protected power source" which is properly grounded. Improperly connecting the grounding wire can result in the risk of electrical shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the tool. Never remove the grounding prong from the plug. Do not use tool if the cord or plug is damaged, have it repaired before using. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician. The Minibeast must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. If in doubt of proper grounding, call a qualified electrician.

#### 3. STARTUP AND OPERATION

## WARNING! Read safety precautions before starting.

#### 3.1 Operating instructions (Before you begin)

Remove all contents from the packaging and inspect to ensure no damage was incurred during shipping. Your Minibeast package should include the following;

Cooling System set	Qty 1
Spoke Handles	Qty 3
Safety Chain	Qty 1
4mm Allen Key	Qty 1

#### 3.2 Before you Cut

Before positioning the machine on work piece always make sure that:

- Work piece is made of steel
- Thickness of steel is at least (10mm)
- Surface of Steel under the Magnet is flat



- Wipe, brush or sand down clean surface where you intended do use the drilling machine, so that you remove rust, paint, dirt etc which would reduce adhesive power of the electromagnetic base.
- Install Turbo-cutter in the machine before plugging it into mains, then plug in and position where you wish to use it.
- Place the machine so that the tool is over the centre of the hole you intend to make and turn the Magnetic Base ON.

#### 3.3 Ready to Make the Cut

 Insert the annular cutter in to the machine arbor, lining up the flats on the cutter shank drive with the set screws on the arbor. Secure the set screws making sure the screws are recessed in Arbor body.

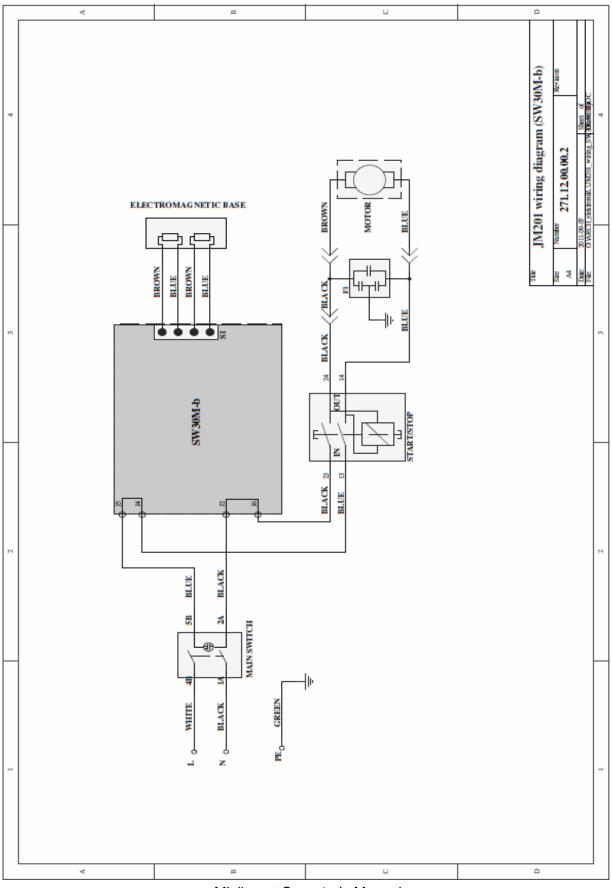
The surface you are working on should be clean and level, free from rust, scale, dirt and chips.

- 2. When using the annular cutter arbor fill coolant reservoir with a water-soluble coolant.
- 3. Position the Minibeast on the work piece.
- 4. Lower cutter / drill to surface of materiel. When using cutter tool holder, coolant flow starts when pilot pin is depressed. Lifting pilot pin off work surface will stop coolant flow.
- 5. Place the drilling machine on the work piece, with pilot pin over the centre of the hole to be cut.
- 6. Move the rocker switch located on the panel to the ON position. The switch will illuminate to indicate DC power is going to the magnet.
- 7. Depress motor ON switch to start drill.
- 8. To start a cut, apply pressure until the cutter has established an external grove. Then apply steady pressure through the remainder of the cut (Note: Do not peck drill when using annular cutters). The tools are designed to evacuate chips when drilling.

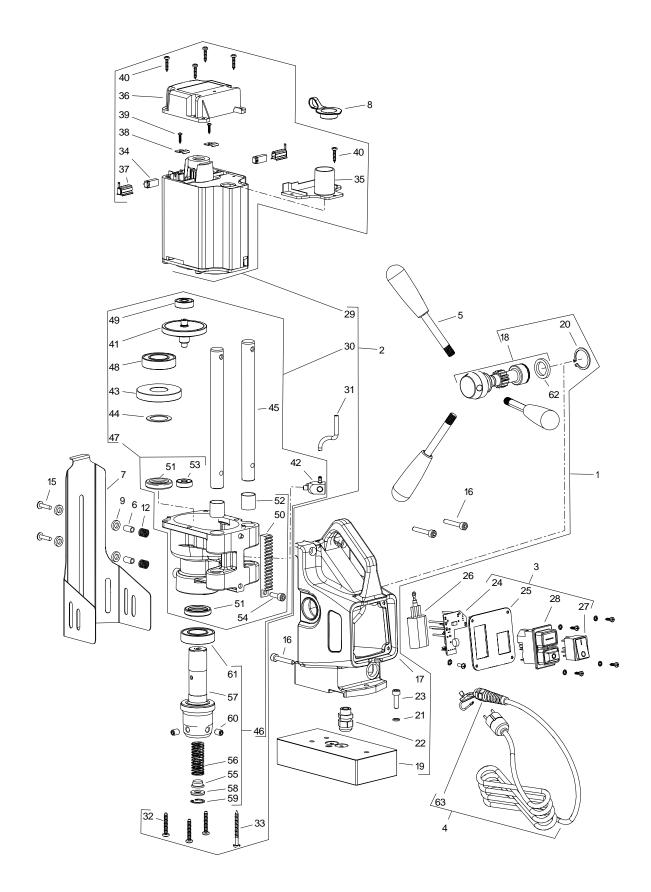
### 3.3 After the cut

- After the cut has finished, the slug should be expelled on the down stroke, if the slug is not expelled after the cut, disconnect the machine from the power source and remove the cutter from the arbor body, then expel the slug. (Caution: the pilot should not be used to do this.
- After the cut is finished return motor to the full upright position, depress motor OFF button wait until motor fully stops. Move magnet switch to the OFF position to release the magnetic base from the material.

#### 4. WIRING DIAGRAM



#### 5. SPARE PARTS DIAGRAM



#### 6. SPARE PARTS LIST

7. ITEM	PRODUCTION PART NUMBER	JEI PART #	DESCRIPTION	Q-TY
1	STJ-0271-01-00-00-3	JM201.1	FRAME ASSEMBLY	1
2	NPD-0271-30-20-00-7	JM201.2/2	MOTOR COMPLETE - 230V	1
2	NPD-0271-30-20-00-6	JM201.2/1	MOTOR COMPLETE - 120V	1
3	PNL-0271-04-00-03-1	JM201.04-220V	CONTROL PANEL ASSY - 230V	1
3	PNL-0271-04-00-03-0	JM201.04-110V	CONTROL PANEL ASSY - 120V	1
4	SZN-0212-10-02-00-2	0014200	POWER CORD 230V 3x1.5 WITH STRAIN RELIEF ASSY	1
4	SZN-0075-00-51-00-5	0012180	POWER CORD 120V 3x2.08 WITH STRAIN RELIEF ASSY	1
5	DZW-0212-12-00-00-0	MB2.10	SPOKE HANDLE INCLUDING KNOB (ASSY)	3
6	TLJ-0399-06-00-00-0	MB4.6	BOTTOM SLEEVE	2
7	OSL-0440-04-00-00-0	HM40.15	SWARF SHIELD ASSY	1
8	KRK-000003	06320	COOLANT BOTTLE PLUG	1
9	PDK-000151	MB4.17	NYLON WASHER 8.1x14x3	4
10	PDK-000161	MB4.22	EXTERNAL TOOTH LOCK WASHER 3.7	4
11	PDK-000060	MB4.15	EXTERNAL TOOTH LOCK WASHER 4.3	1
12	SPR-000030	MB4.12	PUSH SPRING	2
13	WKR-000415	MB4.21	CROSS RECESSED PAN HEAD SELF- TAPPING SCREW 3.5x13	4
14	WKR-000183	MB4.13	CROSS RECESSED PAN HEAD SCREW M4x10	1
15	WKR-000395	MB4.18	HEX SOCKET ROUND HEAD SCREW WITH FLANGE M5x20	2
16	SRB-000123	JM201.16	HEX SOCKET HEAD CAP SCREW M6x35	4
17	KRP-0271-01-01-00-3	JM201.17	MAIN BODY ASSEMBLY	1
18	WLK-0271-01-02-00-1	JM201.01.02	PINION SHAFT ASSY	1
19	PDS-0378-02-00-00-2	JM201.01.04	ELECTROMAGNETIC BASE ASSEMBLY	1
20	PRS-000019	MB4.14	EXTERNAL RETAINING RING 28z	1
21	PDK-000048	HM40.1.4	SPRING WASHER 6,1	3

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7. ITEM	PRODUCTION PART NUMBER	JEI PART #	DESCRIPTION	Q-TY
22	DLW-000005	HM40.4	SNAP BUSHING	1
23	SRB-000113	HM40.1.5	HEX SOCKET HEAD CAP SCREW M6x20	3
24	STR-0257-04-11-00-2	JM201.SW30M- 110V	ELECTRONIC CONTROLLER - 120V	1
25	MSK-0300-04-01-00-1	JM201.04P	PANEL PLATE ASSY	1
26	FLT-000001	JM201.49	INTERFERENCE ELIMINATOR	1
27	PNK-000013	35708	MAGNET SWITCH	1
28	WLC-000008	35707.3-220V	SWITCH START-STOP - 230V	1
28	WLC-000006	35707.3-110V	SWITCH START-STOP - 120V	1
29	SLN-0271-14-00-00-1	JM201.29/2	MOTOR ASSEMBLY - 230V	1
29	SLN-0271-14-00-00-0	JM201.29/1	MOTOR ASSEMBLY - 120V	1
30	RDK-0271-15-00-00-0	JM201.30	GEAR BOX ASSEMBLY	1
31	WAZ-000004	JM201.02.05	PLASTIC HOSE 4MM	1
32	WKR-000302	JM201.31	SELF-TAPPING SCREW 5x30	3
33	WKR-000237		SELF-TAPPING SCREW 5x50	1
34	SCZ-000008	JM201.03.11	MOTOR BRUSH 6x9x17	2
35	PKR-0271-03-01-03-1	JM201.35	CONTAINER COVER	1
36	PKR-0271-03-01-05-1	JM201.36	FIELD FRAME COVER	1
37	SCT-0271-03-06-00-0	JM201.03.10	BRUSH HOLDER	2
38	PLY-0271-03-07-00-0	JM201.03.12	BRUSH HOLDER PRESSURE PLATE	2
39	WKR-000326	JM201.39	CROSS RECESSED COUNTERSUNK HEAD SHEET METAL SCREW 2.9x13	2
40	WKR-000083	JM201.40	PAN HEAD SELF-TAPPING SCREW 3.9x19	5
41	WLK-0271-02-03-00-1	JM201.02.03	PINION SHAFT ASSEMBLY	1
42	ZWR-0271-02-04-00-3	JM201.42	COOLANT VALVE	1
43*	KOL-0271-02-05-00-1	JM201.11	GEAR - 52	1
44*	PRS-0271-02-06-00-0	JM201.44	DISTANCE RING	1
45	PRT-0271-06-00-00-2	JM201.02.07	GUIDE	2
46	WRZ-0272-02-02-00-0	JM201.46	MOTOR SPINDLE ASSEMBLY	1
47*	KRP-0440-02-01-00-3	JM201.47	GEARCASE ASSY	1
48*	LOZ-000047	HM155	BALL BEARING 25x47x12	1

7. ITEM	PRODUCTION PART NUMBER	JEI PART #	DESCRIPTION	Q-TY
49	LOZ-000072	JM201.02.10	BALL BEARING 9x26x8	1
50	LST-0271-02-01-02-1	JM201.02.01.02	GEAR RACK	1
51*	PRS-000070	JM201.1.5	SEAL 25x37x7	2
52	TLJ-000031	JM201.28	SLIDE BUSHING 18x20x20	4
53	LOZ-000053	04544	BALL BEARING 8x22x7	1
54	SRB-000111	JM201.54	HEX SOCKET HEAD CAP SCREW M6x18	1
55	WYP-0139-00-02-00-1	JM201.02.02	PLUNGER	1
56	SPR-0271-02-02-03-0	JM201.02.02.03	SPRING	1
57*	KRP-0272-02-02-01-0	JM201.57	MOTOR SPINDLE	1
58	USZ-0279-02-01-06-0	JM201.02.02.05	SEAL	1
59	PRS-000009	0215067	INTERNAL RETAINING RING 19w	1
60	WKR-000059	JM201.60	HEX SOCKET SET SCREW WITH FLAT POINT M8x10	2
61*	LOZ-000048	07122	BALL BEARING 25x47x12	1
62	PRS-000259	JM201.62	SEAL	1
63	DLW-000007	0151064	CABLE GLAND WITH STRAIN RELIEF PG11	1



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8. DECLARATION OF CONFORMITY

### EC Declaration of Conformity

We

.

JEI Solutions Ltd Unit 30, Newhallhey Business Park Newhallhey Rd, Rawtenstall Rossendale, Lancashire, UK, BB4 6HR

Declare with full responsibility that product:

### MINIBEAST DRILLING MACHINE

which the declaration applies to is in accordance with the following standards:

EN 50144-1, EN 55014 and satisfies safety regulations of guidelines: 2004/108/EC, 2006/95/EC, 2006/42/EC.

Rossendale, 10 November 2011

1d

David McFadden Managing Director

#### 9. WARRANTY CARD

#### WARRANTY CARD No.....

..... in the name of Manufacturer warrants the Minibeast Drilling Machine to be free of defects in material and workmanship under normal use for a period of 12 months from date of sale.

This warranty does not cover cutting tools, damage or wear that arise from misuse, accident, tempering or any other causes not related to defects in workmanship or material.

Date of production .....

Serial number .....

Date of sale .....

Signature of seller.....

#### 1.05 / 1 February 2013

#### WE RESERVE THE RIGHT TO MAKE CORRECTIONS AND MODIFICATIONS IN THIS MANUAL WITHOUT PRIOR NOTICE