

# Manual - Concrete Genie

## DANGER MEANS:

Severe bodily or death can occur to you or other personnel if the DANGER statements found on this machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all DANGER statements found in this Owner's Manual and on your machine.

## WARNING MEANS:

Injury can occur to you or to other personnel if the WARNING statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all WARNING Statements found in this Owner's Manual and on your machine.

## CAUTION MEANS:

Damage can occur to the machine or other property if the CAUTION statements found on your machine or in this Owner's manual are ignored or not adhered to. Read and observe all CAUTION statements found in this Owner's Manual and on your machine.

## DANGER



1. Failure to read the Owner's manual prior to operating or attempting any service or maintenance procedure to your machine could result in injury to you or other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If your operator(s) can not read English, have this manual explained fully before attempting to operate this machine.



2. To reduce the risk of fire, use only commercially available detergent intended for machine application. Do not use with flammable liquids.



3. Risk of explosion. Floor sanding can result in an explosive mixture of fine dust and air. To reduce risk of explosion, use floor sanding machine only in well ventilated area.



4. Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine until it is completely assembled. Inspect the machine before operation.



5. Electrocution could occur if maintenance and repairs are performed on a unit that is not disconnected from the power source. Disconnect the power supply before attempting any maintenance or service. Always remove the electrical plug from the electrical outlet before changing the brush, pad or other attachment and before leaving the machine.



6. Using a machine with a damaged power supply cord could result in an electrocution. Do not use the machine if the power supply cord is damaged. Do not use the electrical cord to move the machine.



7. Maintenance and repairs performed by unauthorized personnel could result in damage or injury. Maintenance and repairs must be performed by authorized personnel only. Keep all fasteners tight, Keep adjustments according to specifications.



8. Electrical components of this machine can "short-cut" if exposed to water or moisture. Keep the electrical components of the machine dry. Wipe the machine down after each use. For storage, keep th machine in dry building.



9. Always use a four core electrical system connected to the electrical ground. For maximum protection against electric shock, use a circuit that is protected by a ground fault interrupter. Consult your electrical contractor.



10. To prevent damage to the power supply cord, do not let the pads, pad holders or wheels touch the power supply cord when the machine is running Always lift the cord over the machine. Do not pull the power supply cord to move the machine.

## WARNING



1. Operating a machine without observing all labels and instruction could result in injury or damage. Read all machine labels before attempting to operate. Make sure all of the labels and instructional information are attached or fastened to the machine. Get replacement and decals from your authorized distributor.



2. Use of this machine as a stair or furniture could result in injury or damage. Do not sit on the machine.



3. To prevent accidental injury, place your hands, feet and loose clothing away from moving parts of machine.



4. Injury to operator or bystanders could occur in an abrupt change in floor surface texture is encountered when using this machine. Abrupt change in floor surface can cause a sudden pulling motion by this machine. This sudden pulling motion can result in loss of control of the machine which could injure the operator or bystanders. Avoid motions that could allow the machine to come in contact with low obstacles, such as floor electrical outlets, door stops or entry molding, etc.



5. Water solutions or grinding and polishing materials used with the machine if adopting wet polishing can leave wet areas on the floor surface. These areas can cause dangerous condition for the operator or other persons. Always put CAUTION signs near the area being.



6. Any alterations or modifications of this machine could result in damage to the machine or injury to the operator or other bystanders. Alterations or modifications not authorized by the Manufacturer voids any and all warranties and liabilities.

## NOTE

1. The machine is heavy. Get assistance before attempting to transport or move it.
2. This appliance is not suitable picking up hazardous dust.
3. This machine is intended for commercial

# Manual - Concrete Genie

## Function Code Form

Parameter	Description	Function, Scope	Original Data	Setting Data
E-01	Control way	0. Keyboard Control 1. Terminal Control 2. RS485 COM Port Control	0	1
E-02	Frequency given selection	0. Keyboard Number Setting 1. Keyboard Potentiometer 2. Voltage signal or terminal VS1	1	2
E-13	Speedup Time	0.1-6500.0 second	30	20
E-18	Rotation Speed	0.1% - 25%	3	Concrete 12-15 Marble 10-12 Granite 8-10
E-34	Stop Mode	0. Deceleration stop motor 1. Stop motor at once	0	1
E-63	Parameter change protection	0. All parameters changeable 1. Keyboard number settings changeable 2. All parameters prohibit changeable	0	2
E-64	Parameter format	0. Without operation 1. Restore original setting 2. Remove malfunction recording	0	

### Parameter Input Resetting

1. Unlock firstly, resume original setting  
Press PRC, press "<<" key, adjust to E-64 on the first line of LED screen, press SET key, adjust to 1 (restore Original Setting), press SET key again.
2. Press "<<" key, adjust to E-63, press SET key, the second line of LED screen flashing, adjust to 0 (all parameter can be changeable), press SET key again.
3. The first line of LED screen shows E-63, press "<<" key, adjust to E-34, press SET key again, the second line of LED screen flashing, adjust to 1, press SET key again.
4. The first line of LED screen shows E-34, press "<<" key, adjust to E-18, press SET key again, the second line of LED screen flashing, adjust to 12-15 for concrete, 10-12 for marble, 8-10 for granite, press SET key again.
5. The first line of LED screen shows E-18, press "<<" key, adjust to E-02, press SET key, the second line of LED screen flashing, adjust to 2, press SET key again.
6. The first line of LED screen shows E-02, press "<<" key, adjust to E-01, press SET key, the second line of LED screen flashing, adjust to 1 (Terminal control such as buttons), change number to 0 (control panel keyboard control), press SET key again.



Inverter Programming A

2T-2

**Note:** If terminal buttons are broken, change number to 0 and the machine can be operated by control panel keyboard.

Inverter B type

Fault Code	Fault Type	Possible Fault Reason	Troubleshooting
S.C.	System Fault	<ol style="list-style-type: none"> <li>1. Acceleration time is set too short</li> <li>2. Frequency inverter output phase of grounding short circuit</li> <li>3. Module failure</li> <li>4. Disturbance</li> </ol>	<ol style="list-style-type: none"> <li>1. Lengthen acceleration time</li> <li>2. Check the peripheral device, reset after troubleshooting.</li> <li>3. Ask for technical support</li> <li>4. Check peripheral device, grounding line, shield line grounding condition, distance condition of terminals and control motor.</li> </ol>
O.L1	Motor Overload	<ol style="list-style-type: none"> <li>1. V/F curve setup or torque boost is not suitable</li> <li>2. Network voltage is relatively low</li> <li>3. Motor overload protection parameter is set improperly</li> <li>4. Motor block rotor operation or heavy duty load</li> <li>5. Universal motor low speed with heavy load works for a long time</li> </ol>	<ol style="list-style-type: none"> <li>1. Reset V/F curve or torque boost value</li> <li>2. Check the input power</li> <li>3. Check [E-67] setting</li> <li>4. Adjust load or select and use frequency inverter with matching capacity grade</li> <li>5. When requiring long term low speed work, please use special motor for frequency inverter</li> </ol>
O.L2	Frequency Inverter Overload	<ol style="list-style-type: none"> <li>1. Heavy Load</li> <li>2. Acc time is set too short</li> <li>3. Restart the motor in running when momentary stop occurs</li> <li>4. V/F curve setup or torque boost is not suitable</li> </ol>	<ol style="list-style-type: none"> <li>1. Select frequency inverter with proper capacity</li> <li>2. Lengthen acceleration time</li> <li>3. Restart after the motor completely stop or set [E-30] as "2"</li> <li>4. Reset V/F curve or torque boost value</li> </ol>
O.H.	Frequency Inverter Overheat	<ol style="list-style-type: none"> <li>1. Too High ambient temperature</li> <li>2. Damaged fan</li> <li>3. Blocked air duct</li> <li>4. Carry wave frequency is too big</li> </ol>	<ol style="list-style-type: none"> <li>1. Ameliorate periphery environment</li> <li>2. Replace fan</li> <li>3. Clear air duct, improve the frequency inverter periphery ventilation and dissipation environment</li> <li>4. Check [E-20] and [E-21] setting</li> </ol>
LU2	Over Voltage of supply power at running	<ol style="list-style-type: none"> <li>1. Supply power is too low</li> <li>2. Capacity of power network is too small or instantaneous surge current inside power network is too big</li> <li>3. DC main contactor inside the frequency inverter not close</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the supply voltage and troubleshooting</li> <li>2. Improve power supply system</li> <li>3. Ask for technical support</li> </ol>

Inverter B type

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# Xtreme Polishing Systems

## Xtreme Hard Densifier

### Number 1 Brand for Hardening, Protecting & Cleaning Concrete Floors

Xtreme Hard is a highly reactive Colloidal Silica-based densifying agent. The Colloidal Silica molecule has more reactive sites, so it goes to work quickly, within 1-2 minutes. Spray it on the concrete until the surface is saturated, then agitate with a soft bristle broom. Wait until dry (45-60mins). Xtreme Hard is a green, clean and safe material. Its low pH formula (pH approx 8.7, only slightly higher than baking soda) is safer for you to handle. Xtreme Hard emits no Volatile Organic Compounds (VOCs) and eliminates the hazardous-material disposal, so it's better for the job site and friendlier to the planet. Xtreme Hard is shipped as a concentrate. One gallon of concentrate makes five gallons of ready-to-use product. Xtreme Hard is the lowest cost densifier per square foot. New Improved Nano Technology Formula, penetrates deeper into the concrete. (Mix 1 part Hard to 4 parts potable water)

#### Easy to Apply On Concrete Floors:

- Low Maintenance
- Fortifies Concrete Floors
- Stops Dusting
- Reduces Energy Cost
- Wear Resistance
- Improves Traction
- Eliminates Mold
- LEED Compliant

#### From Slabs to Malls, it works for all.

- Offices
- Schools
- Factories
- Residences
- Warehouses
- Shopping Malls

Coverage: 400-600 square feet per gallon of working solution.



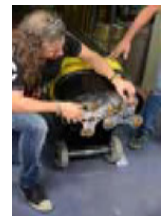
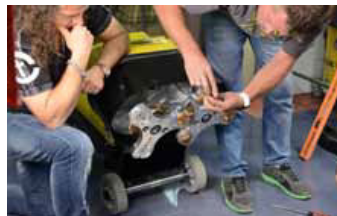
### \*Up-graded - XPS Magnetic Plates Installed

#### Attaching Grinding & Polishing Tools to Genie Magnetic Plates

1. Round Metals & Traps easily snap in place and stay locked due to magnets
2. To remove use a thin blade flat screwdriver place in slot between segment and plate and push outward.

#### Attaching Diamond Polishing Pads, Velcro Backed

1. Snap Velcro backed spacers (Hockey Pucks) onto plates, magnets hold in place
2. Attach Velcro backed diamond resin pads on top of spacer. The Velcro locks the pads in place. To change simply peel off old pad and place new pad on spacer.



Tools on magnetic plate, simply snap on, and snap off



XPS Magnetic Plates For Quick Tool Changes



All Concrete Genies equipped with MorFlex couplers for even floor grinding



Adapter Hockey Puck For Attaching Pads & Resins

## Parameter Input Resetting

1. **Unlock**  
Press PRG, NO. 00000 showing , then press SET, change the number to 12345 (from left to right), then press SET again, PO will show on screen.
2. **Restore Factory Settings**  
Press SET, P0.00 showing, change it to P0.17, press SET, change the number to 1, then press SET, P0.00 should show on the screen.
3. **Speed Control Mode Chosen (changed)**  
Press SET, choose the number to 0 under P0.00 item, then press SET, P0.00 showing again
4. **Operation Instruction Channel**  
Change P0.00 to P0.01, press SET, then change the number to 1, press SET again, PO.02 showing
5. **Hz Setting**  
Change P0.02 to P0.03, press SET, then change the number to 60Hz, press SET again, PO.04 showing
6. **Frequency Channel**  
Change P0.04 to P0.07, press SET, then change the number to 2, press SET again, PO.08 showing
7. **Acceleration Time**  
Change P0.08 to P0.11, press SET, then change the number to 0030.0, press SET again, PO.12 showing
8. **Stop Manner**  
Press PRG once, P0 showing on the screen, change to P1. Press SET, P1.00 showing, change to P1.06. Press SET, change the number to 1, then press SET, P1.07 showing.
9. **Terminal Choose**  
Press PGR once, P1 showing on the screen, change to P5, press SET, P5.00 showing, change to P5.01. Press SET, change the number to 1, press SET, P5.02 showing. Press SET, change the number to 2, Press SET, P5.01 showing.
10. **Torque Boost**  
.Press PGR, P5 showing on the screen, change to P4, press SET, P4.00 showing, change to P4.01, press SET, then set the number to 3.  
.Press SET, P4.02 showing, \*Note: if set number 3 under P4.01 item, the machine cannot back normal, please try to number 2, the point under item P4.01 can change from 1-9.
11. **Locking**  
Change P5.03 to P5.01, press PRG, showing P5 change to P7, press SET, P7.00 showing, press SET, 00000 showing, change it to 12345 (left to right) press SET, P7.01 showing.
12. **Final**  
Press PRG two times.

## Cable Connection



### Note:

1. Machine electrical system must be in strict accordance with parameters marked on the plate (voltage, frequency), Before connected to the input supply. Ensure the input power supply voltage and frequency comply with voltage a
2. Machine must be connected to the power systems which have grounding connection to prevent the operator of electrical shock.
3. The machine (3 phase) power cord with three leading cable and ground wire. The plug must be connected to a suitable outlet. Green, yellow stripes wire is ground wire which is strictly prohibited to connect to the non-socket.



### Warning:

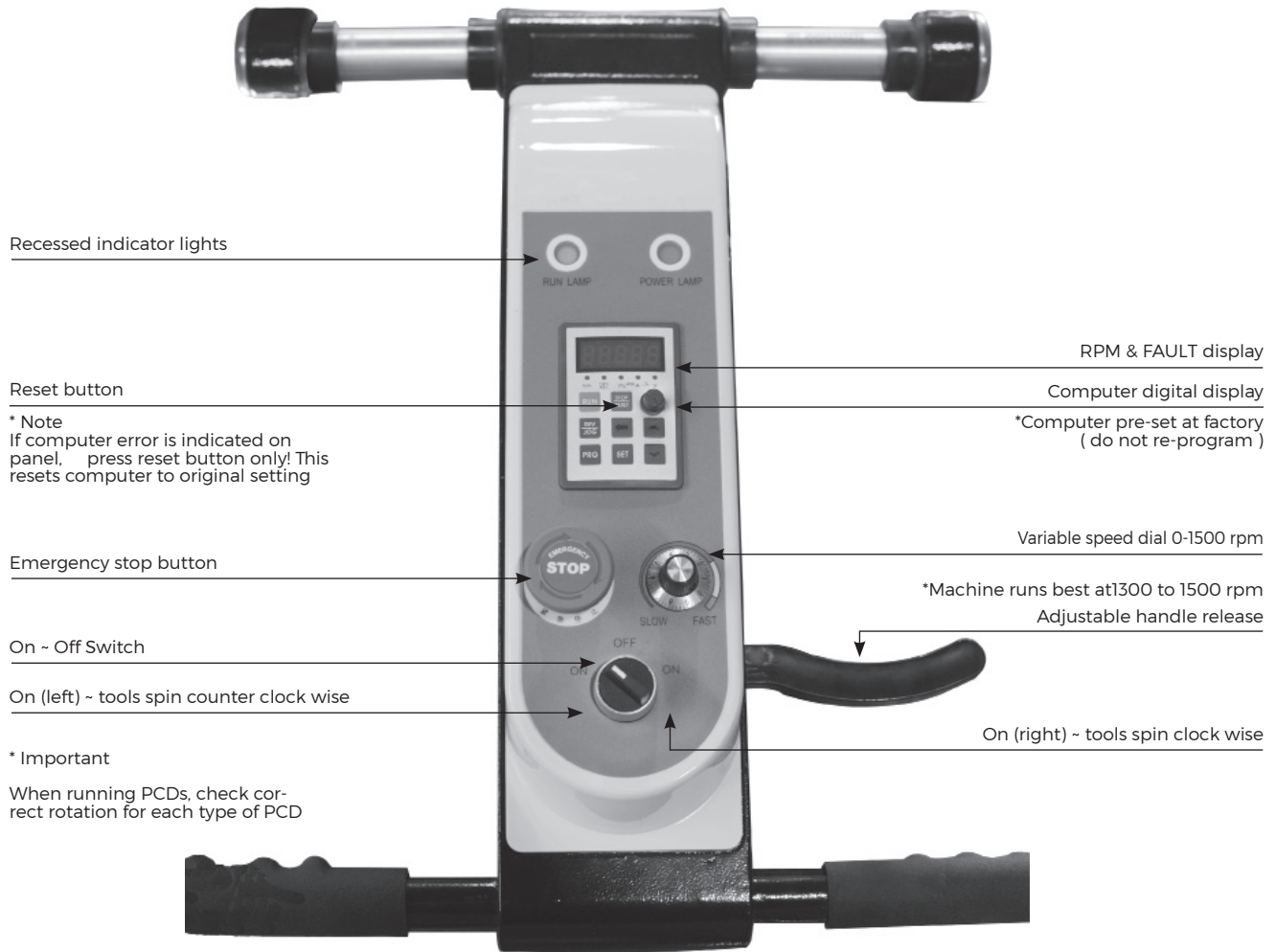
1. Plug must be connected
2. Make sure the power plug is connected
3. Three phase voltage
4. To use an extension cord
5. Prohibit removing, cutting or damaging



### Connection Way:

1. One phase power connect terminal R, T; Three phase power connection R, S, T terminals, and pay attention to the machine model.
2. Terminal U, V, W connect motor
3. Potentiometer connects VCC, VIN, GDN terminals.

# Manual - Concrete Genie

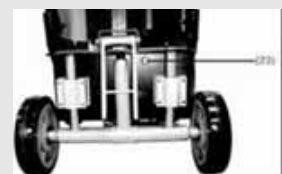
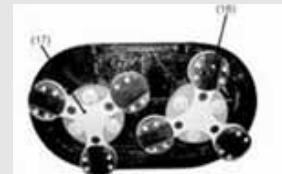


## 2T Series Introduction (picture 1)



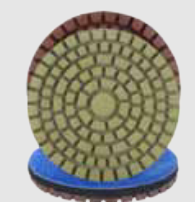
## 2T Structure

Item	Description
1.	Handle
2.	Control Panel
3.	Handle Adjuster
4.	Veer/Halt Switch
5.	Operating Light
6.	Power Light
7.	Socket
8.	Handle Axes
9.	Side Arm
10.	Water Controller
11.	Motor Cover
12.	Place for Weight Iron
13.	Inlet of Water Tank
14.	Water Tank
15.	Gear Box Base
16.	Lever Sheath
17.	Pad Holder
18.	Clip
19.	Level Adjuster
20.	Motor Fix Crew
21.	Motor
22.	Level Measurer
23.	Belt Tighten Screw



**WARNING:** Machine has rotation parts, ensure power off before any maintenance service to avoid damage and or injury.

\*Up-graded - XPS Magnetic Plates Installed



Xtreme Diamond Polishing Pads



Xtreme Resin Pads



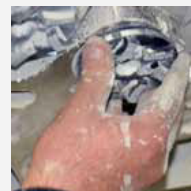
Xtreme Ceramic Pads



PCD



For best results use genuine XPS resin pads



For best results use genuine XPS round metals or traps



For best results use genuine XPS round metals or traps



Metal Bond Diamonds - 6 seg



Metal Bond Diamonds - 8 seg



Metal Bond Diamonds - 10 seg

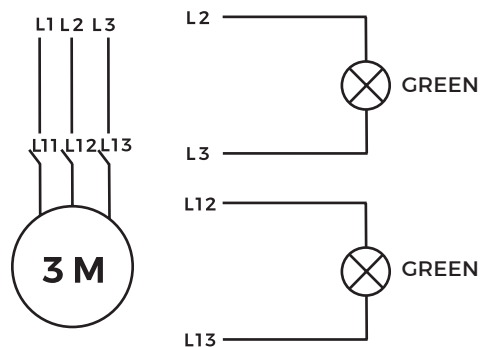


Diamond Traps

Do Not accept imitations: Use only genuine XPS MAGNETIC PLATES

## Electrical Diagram

2T-1 Electrical Diagram

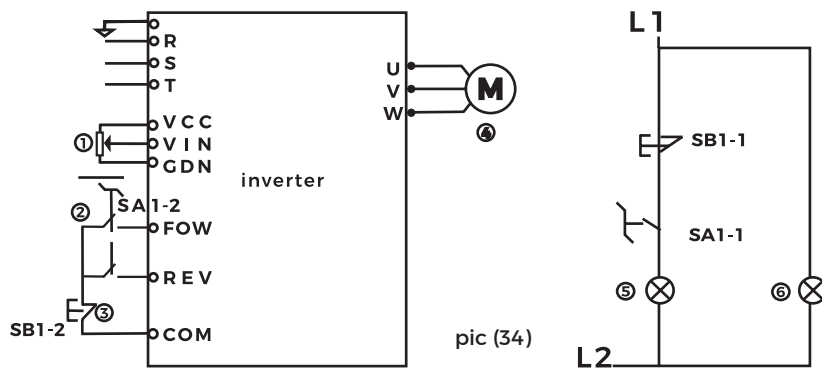


Note: Power entering lines must be equipped with residual; current circuit-braker

pic (33)

## Electrical Diagram

2T-2/2T-3/3T-420/3T-530/4P12T-40 Connection Sketch



1. Speed Adjuster
2. Veer/reverse rotate button
3. Emergency stop button

4. Motor
5. Operation light
6. Power light

# Manual - Concrete Genie

## Adjust the handle position (for 2T series)

1. Pull handle adjuster as picture (8), adjust handle to suitable position and release handle adjuster, the handle will be locked up as picture (9)
2. Grip handle to operate machine



pic (8)



pic (9)

## Water Controller

1. Ensure water controller is off before water injection as picture (10), counterclockwise rotation is off, clockwise rotation is opening the water controller
2. Input water as picture (11)
3. Adjust the water amount according to operation requirements



pic (10)



pic (11)



### Warning

Before motor starts, do prepare control of the machine, after start the machine, move the machine back and forth or right and left to avoid damaging the floor



### Note

1. During operation, be careful of the pads wearing condition to change pads in time if the pads wearing out.
2. Take off the weight iron if grinding soft surface otherwise will speed up the wearing pads
3. After operation, remove convertible adaptors and keep in dry place to avoid damage

## Move the machine

Insert lever sheath, adjust handle to horizontal position, and lift machine.



pic (2)

## Change the diamond pad

Tip over the machine as picture (3), and (4)



pic (3)



pic (3)

## Change the diamond pad

Change diamond pads



pic (5)

## Pad holder rotation



pic (6)

## Multi-functional under prop



pic (7)



Troubleshooting

MACHINE INSTRUCTION

The Genie Series are floor maintaining machines that can be used for grinding, polishing, buffing and stripping. The machines can be used on concrete, terrazzo, marble, granite, wood or vinyl floors. With the suitable pad, the machines can be used to remove epoxy on the floor. The machine is suitable for industrial and commercial use for example in hotels, schools, hospitals, factories, shops, offices and rental businesses

ACCESSORIES (OPTIONAL)

1. Adaptor—used for renovating and polishing stone
2. Metal adaptor A—used for grinding concrete floor and epoxy flooring.
3. Metal adaptor B (strong magnet)—used for grinding concrete floor, epoxy flooring and stone surface
4. Waterproof cover
5. Waterproof plug
6. Metal segments (Diamond alloy segments)
7. Concrete grinding pad
8. Stone grinding pad
9. Extended cable
10. Distribution box
11. Lever

**WARNING:** Use only accessories supplied by the manufacturer.

SPECIFICATIONS

Model Description	2T-1	2T-2	2T-3	3TX-420	3TX-530	4P12T-480	4P16T-580	4P16T-680
Voltage (V/Hz)	3 phase	1 phase	3 phase	1 phase	1/3 phase	3 phase	3 phase	3 phase
Working Width (mm)	560	560	560	420	530	480'480	580'580	680'680
Rotation Speed (Rpm)	900	0-1500	0-1500	0-1500	0-1500	0-1500	0-1500	0-1500
Transmission	gear belt	gear belt	gear belt	two stage planetary gear box	two stage planetary gear box	gear	gear	gear
Power (HP)	5.5 / 7.5	5.5 / 7.6	5.5 / 7.7	5.5	5.5 / 7.5	7.5 / 10	15	20
Power Cord (mt)	15	15	15	15	15	15	15	15
Water Tank (L)	36	36	36	35	35	35	45	45
Weight (KG)	165	165	165	135	180	210	350	430

Specification may be amended without notice

- Description.....Concrete Genie (2T-2)
- Voltage.....220V - 1Ph
- Working width.....560mm - 22 inch
- Sweep.....635mm - 25 inch
- Rotation speed (Rpm).....0-1500
- Transmission.....Gear
- Power (HP).....belt 5.5
- Power cord (mt).....15
- Water tank.....36L - 9.5 gal
- Weight.....165Kg - 363 lbs

Err 1	Open-phase at input side	Open-phase in frequency inverter three phase input power phase	Check three phase input power and three phase input power wiring
Err 2	Output grounding	Frequency inverter has device grounding short circuit at the output side	Check peripheral device, grounding line, motor insulation
Err 6	Keyboard communication fault	1. Keyboard wiring fault 2. Keyboard communication component damaged	1. Check the keyboard wiring 2. Ask for technical support

## Troubleshooting

### SWIRLS ON THE FLOOR AFTER GRINDING

- Moving the machine too fast or machine stay still too long
- Adopt inappropriate pad

### SCRATCH ON THE FLOOR

- Machine standing still while the pad is running
- Grinding method is not correct
- Adopt inappropriate pad
- Incorrect operation

### MACHINE WOBBLER DURING OPERATION

- Check ground level is very serious or not, if level difference is very serious (2mm above). First with the angle grinder machine repair, and then grinding slowly from high place to lower place with constant speed and shape moving
- Check the pad holders is loose or not, whether in the same level
- Check adopting same pads or not
- Check pads are in same level or not
- Adjust connector between machine frame and machine base, keep the pad holders and wheels in the same level

### SUDDENLY STOP RUNNING (OVER CURRENT PROTECTION)

- Tap the STOP button, Tap RUN button after 5 seconds to restart. Gently press the handle when restarting to make pad holder smaller friction, which will restart easier.

### PAD

- Remove iron weight
- Adjust machine frame, keep the pad holders and wheels in the same level

### MACHINE CANNOT RUN

- Check plug for proper connection—on machine and at wall outlet
- Check building circuit breaker
- Call for Mendel service center or distributor