Rubicon 480

Safety, Machine & Operator's Manual + Parts Listing

RUBICON
MACHINERY AUSTRALIA

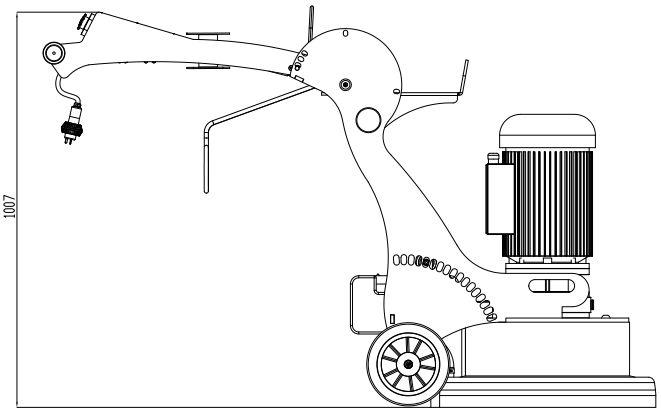
Contents

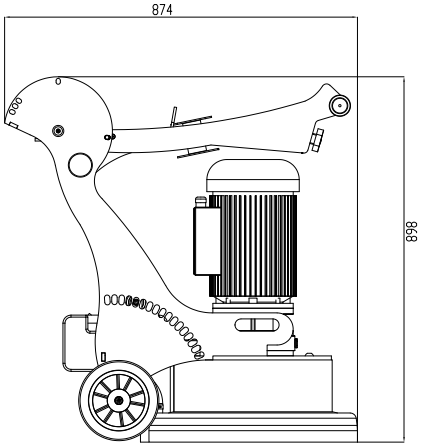
CAUTION:

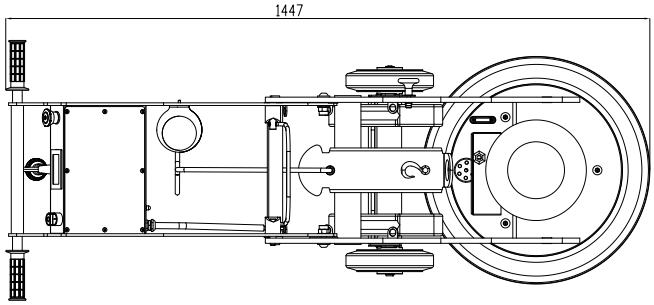
It is important that you read and understand this manual in its entirety before using the machine to mitigate the risk of personal injury or property damage.

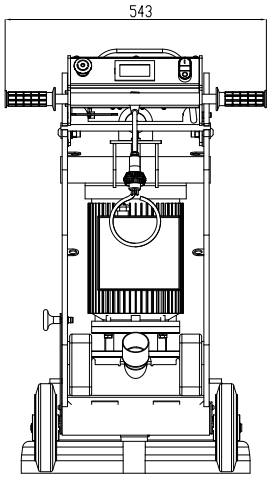
Specifications

RUBICON 480	
Weight	160kg (182kg including weights)
Head Pressure	112kg (134kg with weights on head)
Dimensions	543 x 1007 x 1447 (Width x Height x Length)
Rated Voltage	230 Volt 50 Hz
Rated Watts	2200W
Grinding Path	480mm









Safety Instructions

1. Read and understand the instructions on the machine and in this manual.
2. Equipment should only be operated by trained personnel who are in good physical condition and mental health (not fatigued). The operator and maintenance personnel must physically be able to handle the bulk, weight and power of this machine.
3. The RUBICON 480 must only be used in accordance with the instructions given in this manual. Any other work methods or practices are not approved and could result in serious injury or death.
4. The handle of the RUBICON 480 can be locked into different positions: OPERATE, TOOLING and LIFT/STORAGE. Diagrams of these positions are available in the Handle Positions section of this manual. The appropriate circumstances to use each position is described throughout the manual.
5. This machine is intended for operation only by a single person: 'one machine, one operator'. Always be mindful of people working in the same area and maintain a safe operating distance to avoid injury.
6. This equipment is intended for commercial use.
7. For the safety of the operator and others working in the area, ensure guards and shrouds are always in place and never run the machine without them.
8. There are weights on brackets at the base of the machine' handles to assist operating the machine. The weights must be removed from the handle before the machine is folded to the TOOLING or LIFT/STORAGE position.
9. Never leave the machine unattended when it is operating.
10. The wear and tear on the magnetic plugs must be checked every three hours of use.
11. This machine is only intended for use on hard flooring surfaces such as concrete, terrazzo and other solid surfaces.
12. The handle height position is adjustable for comfortable operation of the RUBICON 480. The height is adjusted at the OPERATE position, next to the lock mechanism.
13. The machine must only be started if the handle is in one of the three OPERATE positions. Never attempt to adjust the handle position when the machine is in operation.
14. Never start or run the machine with the handle folded in the LIFT/STORAGE position or when disks are not in contact with the ground.
15. Do not lend or rent the machine without providing a copy of this Safety, Machine & Operator's Manual + Parts Listing booklet.

16. Wear protective work wear appropriate for the job and for the work environment. In addition to the suitable work clothing, additionally include safety shoes, hard hat, hearing protection, non-fogging vented safety goggles, and proper respiratory protection mask to prevent dust inhalation. Personal safety must always be observed when operating the RUBICON 480.
17. Stay a safe distance from the machine's moving parts when operating and ensure loose clothing is secured and kept away from moving parts. Failure to comply could result in bodily injury.
18. Do not modify the machine in any way. Only use the original manufacturer's parts and accessories.
19. Repairs should only be performed by qualified mechanics, who are familiar with the machine.
20. Before changing diamonds and other accessories or servicing the machine, ensure all moving parts have completely stopped and disconnect the power or spark plugs.
21. Never operate the machine in wet and rainy conditions or if there is heavy moisture present.
22. Petrol is extremely flammable and poisonous. It should only be dispensed when the engine is cool and ensure the area is well ventilated area.
23. **WARNING: POISONOUS EXHAUST GASES.** Do not operate petrol powered equipment, including generators, without adequate ventilation. Carbon monoxide is an invisible, odourless gas that can harm or kill.
24. Do not operate the RUBICON 480 with any of the doors or panels removed, open or not properly secured.
25. The RUBICON 480 can produce sound levels in excess of 85db. The operator must wear approved safety hearing protection.
26. Do not allow the power supply cord to come into contact with the cutting blade, head, or other moving parts on the machine.
27. **WARNING: As with any diamond tooling, breathable silica or other hazardous dusts may be generated by use and maintenance of this machine. The dust can cause severe and permanent lung damage, cancer, and/or other serious diseases. Do not breathe the dust. Do not rely on your sight or smell to determine if dust is in the air, as silica may be present in the air without a visible dust cloud. Appropriate respiratory protection must be worn when operating and maintaining this equipment.**

Operating Instructions

28. Wear protective work wear appropriate for the job and for the job and work environment. In addition to the suitable work clothing, additionally include safety shoes, hard hat, hearing protection, non-fogging vented safety goggles, and proper respiratory protection mask to prevent dust inhalation. Personal safety must always be observed when operating the RUBICON 480.
29. The RUBICON 480 must only be used in accordance with the instructions given in this manual. Any other work methods or practices are not approved and could result in serious injury or death.
30. WARNING: Disconnect the power before moving the handle to the TOOLING or LIFT/STORAGE position.
31. WARNING: POISONOUS EXHAUST GASES. Do not operate petrol powered equipment, including generators, without adequate ventilation. Carbon monoxide is an invisible, odourless gas that can harm or can kill.
32. Be sure all equipment is tested and tagged prior to use on any job.
33. Bolts, concrete nails, or other embedded metal objects could damage the tooling or the machine and potentially cause a hazardous situation. Be sure to inspect the entire grinding area and remove any superfluous objects before starting any job.
34. Ensure there are no obstacles or existing structures that could present a hazard to the operator. Take necessary action to eliminate the hazard or mitigate the risk of personal or property damage.
35. When storing the machine after use, fold the handle to the TOOLING position only after all moving parts have stopped, the cord has been removed from the power supply and the spark plugs have been removed. Ensure the machine is locked in place in the TOOLING position, then tilt it back so the handle is resting along the floor.
36. The machine takes a set of three diamond tools. Be sure the tools installed are of even height.
37. Install the tooling with the machine in the TOOLING position. See the Tooling Position & Magnetic Plugs section for illustrations on how to correctly install and remove the tooling. Only use genuine retailer's genuine diamond tooling with the machine. Failure to comply could result in bodily injury or damage to the machine or property.
38. Once the tooling is installed, tilt the machine back upright and put the handle in one of the three OPERATE positions. Adjust to the position that feels most comfortable for the operator.
39. Never attempt to adjust the handle position while machine is operating.

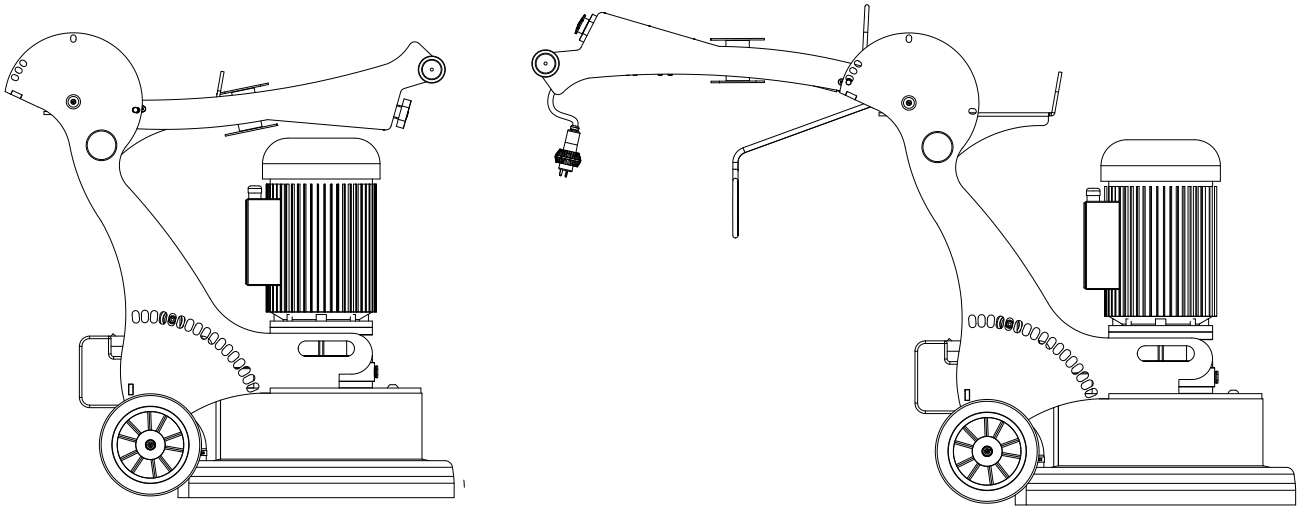
40. Connect the machine to a suitable power outlet. Only use heavy duty power lead suitable for high current use (preferably 2.5mm^2 cable), no longer than 15 metres.
41. If no power is available within the specified distance, have a qualified person install a suitable power outlet closer to your work. Alternatively, use 4mm^2 cable for up to 40 metres.
42. Connect a suitable dust extractor to the machine with a standard 50mm flexible hose or 38mm hose. The machine is designed to make connecting dust extractors easy and hassle free.
43. Keep the machine clear of drainage pits, grates, steps, major lips or similar hazards. Failure to comply could result in bodily injury or could damage the machine or property.
44. Ensure the machine is used on a level surface with the handle in one of the three OPERATE positions.
45. This machine is designed to operate with all wheels in contact with the floor at all times. Do not operate with wheels off the floor.
46. The axle height can be adjusted to ensure the operator is using the most comfortable position to minimise fatigue. As a starting point, adjust the Axle Height lever to the vertical position or midpoint position. After initial operation, the axle can be adjusted to find a position that is set as far back towards the operator as possible without creating excess force during operation.
47. Switch on the dust extractor.
48. Hold the handles firmly and switch the RUBICON 480 on by pushing the green button.
49. The controls on the RUBICON 480 include an overload device to protect the motor from irreparable damage. A problem is indicated if the overload is tripped (ie. undersized power lead or poor power supply). Appropriate power leads are recommended at Points 40 and 41. Address the problem or decrease the load on the machine by using tooling with more surface area or use the weights that have been supplied for this purpose (place them on the brackets at the base of the machine's handles).
50. Continuing to use the RUBICON 480 when constant tripping occurs VOIDS THE WARRANTY.
51. Do not attempt to make any adjustments while the machine is in operation. Any adjustments must only be performed when the machine has fully stopped, and the power has been disconnected.

52. In the event of the machine continually pulling to one side, adjust the axle height to obtain the best result (see Axle Height Adjustment section). This machine is designed to operate with all wheels in contact with the floor at all times. Do not operate with wheels off the floor.
53. It is worthwhile checking for wear on the diamond tooling after a few minutes of grinding, to see if the diamonds are wearing out too fast due to soft concrete / abrasive concrete. There is a wide range of diamonds available to suit every need.
54. Continue to check for wear on magnetic plugs every three hours of use.
55. See the Problem Solving section for tips on how to grind faster on tough concrete and how other problems can be rectified.
56. WARNING: As with any diamond tooling, breathable silica or other hazardous dusts may be generated by use and maintenance of this machine. The dust can cause severe and permanent lung damage, cancer, and/or other serious diseases. Do not breathe the dust. Do not rely on your sight or smell to determine if dust is in the air, as silica may be present in the air without a visible dust cloud. Appropriate respiratory protection must be worn when operating and maintaining this equipment.

Handle Positions

57. The handle of the RUBICON 480 can be locked into different positions for different purposes. These positions must only be used for the intended purpose, as outlined in this manual. Failure to comply could result in bodily injury.
58. The positions are shown on the diagrams below and, additionally, appropriate circumstances to use the various handle positions are described throughout this manual.

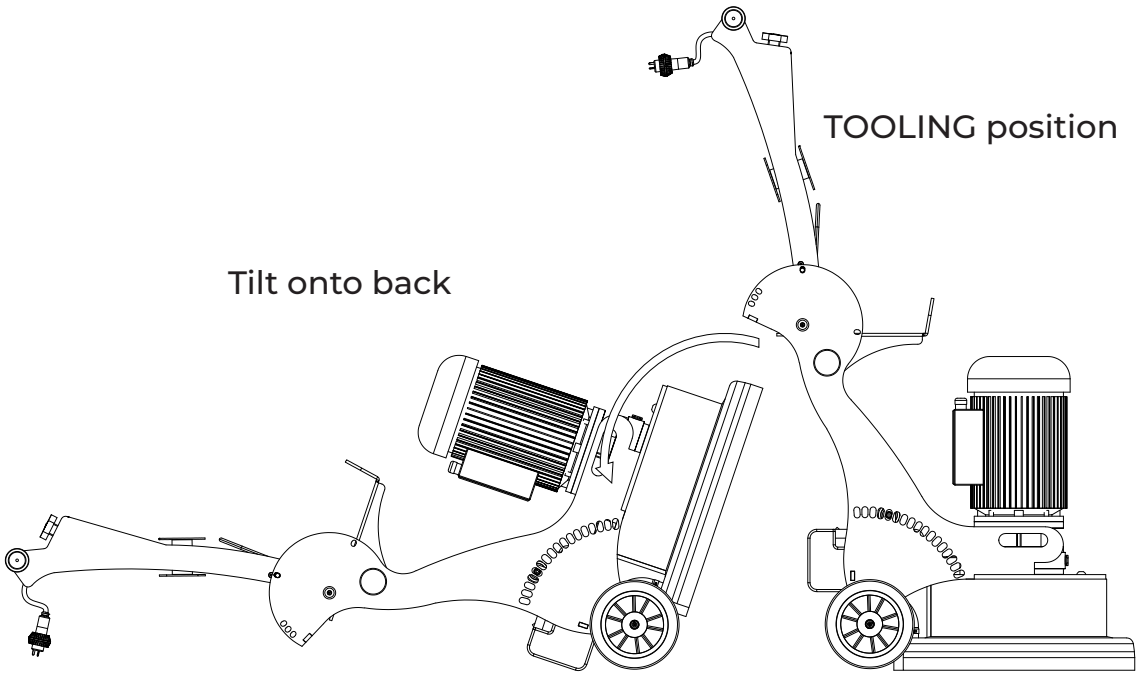
OPERATE position
(3 positions available)



LIFT/STORAGE position

TOOLING position

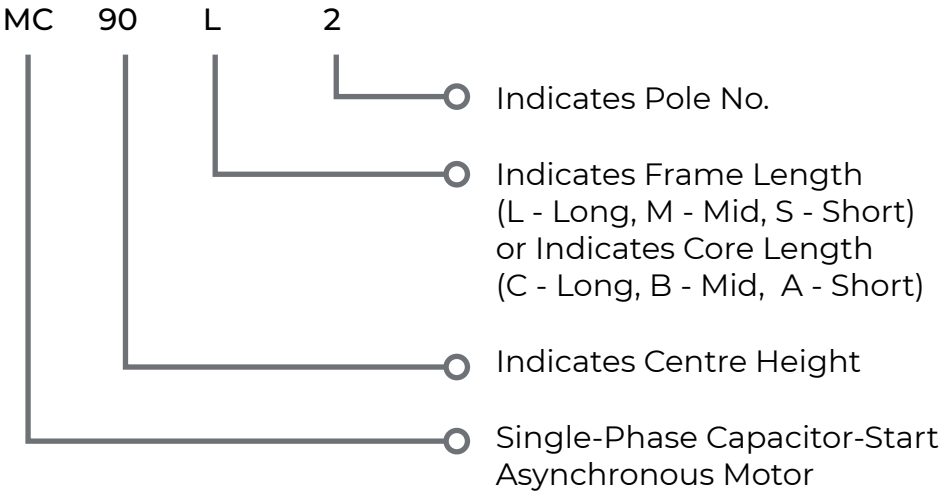
Tilt onto back



Engine Manual

Instructions of Operation and Maintenance for Single-Phase Capacitor-Start Asynchronous Motor

59. Name of model:



60. Transportation and storage of the motor:
1. Transportation : During transportation, the motor must be kept in an upright position and placed on a level surface, without being tipped on its back or side. If it is being moved with a crane, it should be lifted and lowered slowly without jerky movements. Always avoid damp or dirt penetrating the motor: ensure it is kept away from rain.
2. Storage : The motor should be stored in a dry and well-ventilated indoor area and kept away from being stored together with corrosive gases.

61. Preliminary checks before operation:
1. Check the insulation resistance : Before the motor is put into operation, the winding insulation resistance must be measured. The measurement of insulation resistance is carried out by means of a Megohmmeter with 500V applied between the windings and the ground of the motor. The rate of the resistance must be greater than 20 Megohm, otherwise the winding should be treated with heat-baking or, if it is available, a current in the range of ⅓ to ½ of the rated value can be applied to get the motor running at no load for one hour or so, until the dampness is expelled.

WARNING: During the measurement and immediately afterwards, some of the terminals carry dangerous voltages and must not be touched.

2. Check the line voltage : Connect the line voltage in accordance with the value indicated on the nameplate of the motor. To change the direction or voltage of the motor, the connection diagram should be carefully followed.

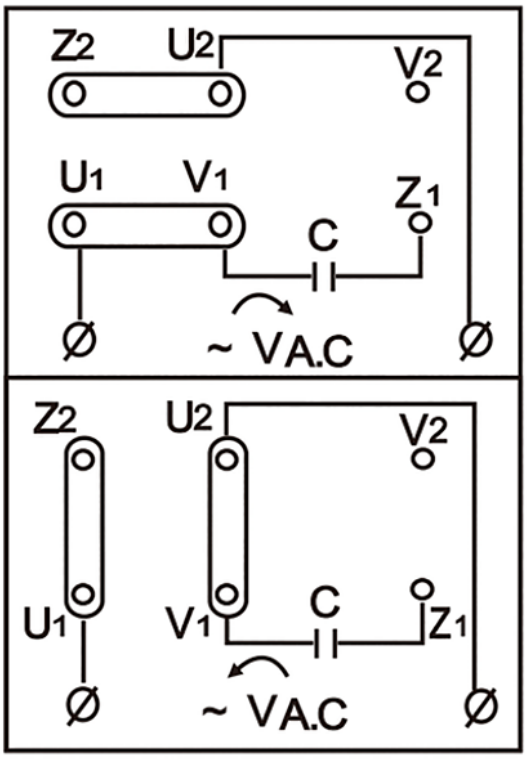
3. Inspection of the switch : The specification and capacity of the control switch used should satisfy the requirements indicated on the nameplate of the motor (such as current capacity, size of fuse, etc.).

4. Inspect the motor enclosure : The motor enclosure should remain free of corrosive gases, while preventing water drips, iron chips and cotton fibres from gaining access into the motor. Ensure the enclosure allows free space around the motor to facilitate ventilation and heat dissipation.

5. Check ground connection : The frame of the motor should be grounded to ensure safety.

6. Rotating condition of the motor : Before the motor is installed, slowly turn the shaft extension by hand to ensure the rotor does not knock against the other parts, but instead allows for easy and swift rotation. After the motor has been installed, check the drive belt or coupler is mounted with good flexibility.

7. Wiring : Check the wiring connections before the motor is started. The motor can be started only when the wiring connections are made in accordance with the wiring diagram given on the terminal box. In order to change direction or voltage of the motor, the following diagram can be followed to change the connection method.



Note: The point direction is indicated to see rotating direction from the shaft extension end.

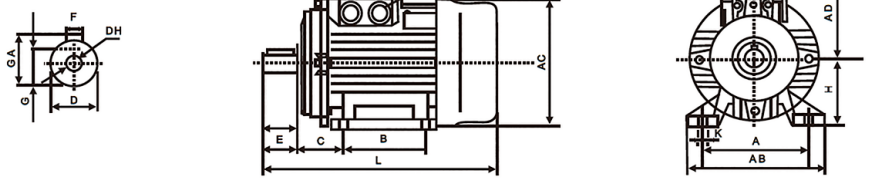
62. Maintenance of the motor

1. Daily cleaning : The motor in use should always be kept clean. Water drops or cotton fibres should not be allowed to get inside the motor.
2. Check on the load current while the motor is in operation. Constant care should be taken to keep the load current below the rated value.
3. Running sound : While the motor is in operation, there must be no rubbing sound, shriek or other random noise. If this should occur, stop the motor immediately and only start again after the situation has been corrected.
4. The front or end shield of the motor base has a quick-break centrifugal switch mounted to it. When the motor is running normally, once it reaches a certain speed after starting, the switch will give a crisp double-click sound, cutting off the power supply to the secondary winding. When the motor fails to start or when it starts and is accompanied by a shock and shriek, instead of the crisp clicks, cut off the power supply immediately and carefully inspect the centrifugal switch and the capacitor.

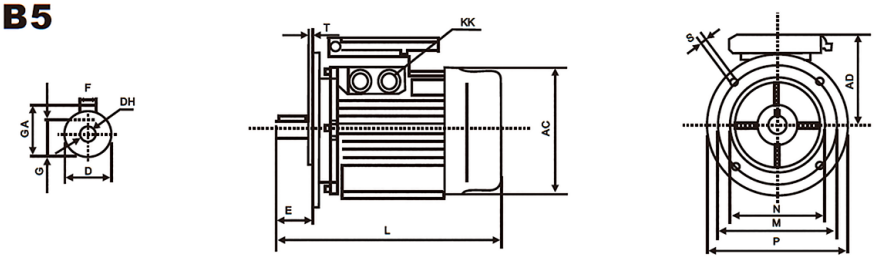
63. Overall : In order to ensure reliable operation of the motor, inspections and service of the motor should be carried out at regular intervals, usually once a year.

MOUNTING & OVERALL DIMENSIONS

B3



B5



Frame	A	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	Flange no.	GA
56	90	110	110	96	71	36	9	M4×12	20	3	7.2	56	7	2-M18×1.5	193	100	80	120	7	3	FF100	10.2
63	100	122	122	99	80	40	11	M4×12	23	4	8.5	63	7	2-M18×1.5	218	115	95	140	9	3	FF115	12.5
71	112	136	138	110	90	45	14	M5×12	30	5	11	71	7	2-M18×1.5	251	130	110	160	9	3.5	FF130	16
80	125	154	157	152	100	50	19	M6×16	40	6	15.5	80	10	2-M20×1.5	286	165	130	200	12	3.5	FF165	21.5
90S	140	174	175	158	100	56	24	M8×19	50	8	20	90	10	2-M20×1.5	335	165	130	200	12	3.5	FF165	27
90L	140	174	175	158	125	56	24	M8×19	50	8	20	90	10	2-M20×1.5	350	165	130	200	12	3.5	FF165	27
100L	160	194	196	177	140	63	28	M10×22	60	8	24	100	12	2-M20×1.5	377	215	180	250	15	4	FF215	31
112M	190	224	220	184	140	70	28	M10×22	60	8	24	112	12	2-M20×1.5	395	215	180	250	15	4	FF215	31

Tooling Position & Magnetic Plugs

64. It is very important to remove all the plugs from the machine before installing standard diamond disks, this includes the magnetic plugs.
65. To remove the insert pin from the middle of the magnetic plugs, tilt the machine to the TOOLING position (as per directions in the Operating Instructions section of this manual), grasp hold of the diamond disk and give it a sharp pull away from the magnetic plug.
66. To remove the plug from the main black disk, strike the black disk beside the magnetic plug, as shown on the picture below.
67. 
68. Every time you change the satellite disks, dust and other debris must be cleaned from the magnetic plugs The insert pin should be loaded all the way into the magnetic plug.

69. If the insert pin is showing signs of wear on the top, it is likely because there is debris in the insert hole or hard-packed dust against the magnet.

70.

71. The next steps would be to clean out the hole in the plug where the insert pin goes. Ensure there are no particles or pieces of metal/steel (such as staples, etc.). The hole for the insert pin can be cleaned with a screwdriver to remove packed dust, etc.

72. Ensure the insert is not worn to less than 20mm diameter where the blade runs on the insert. This is equivalent to the diameter of the section above it.

73.

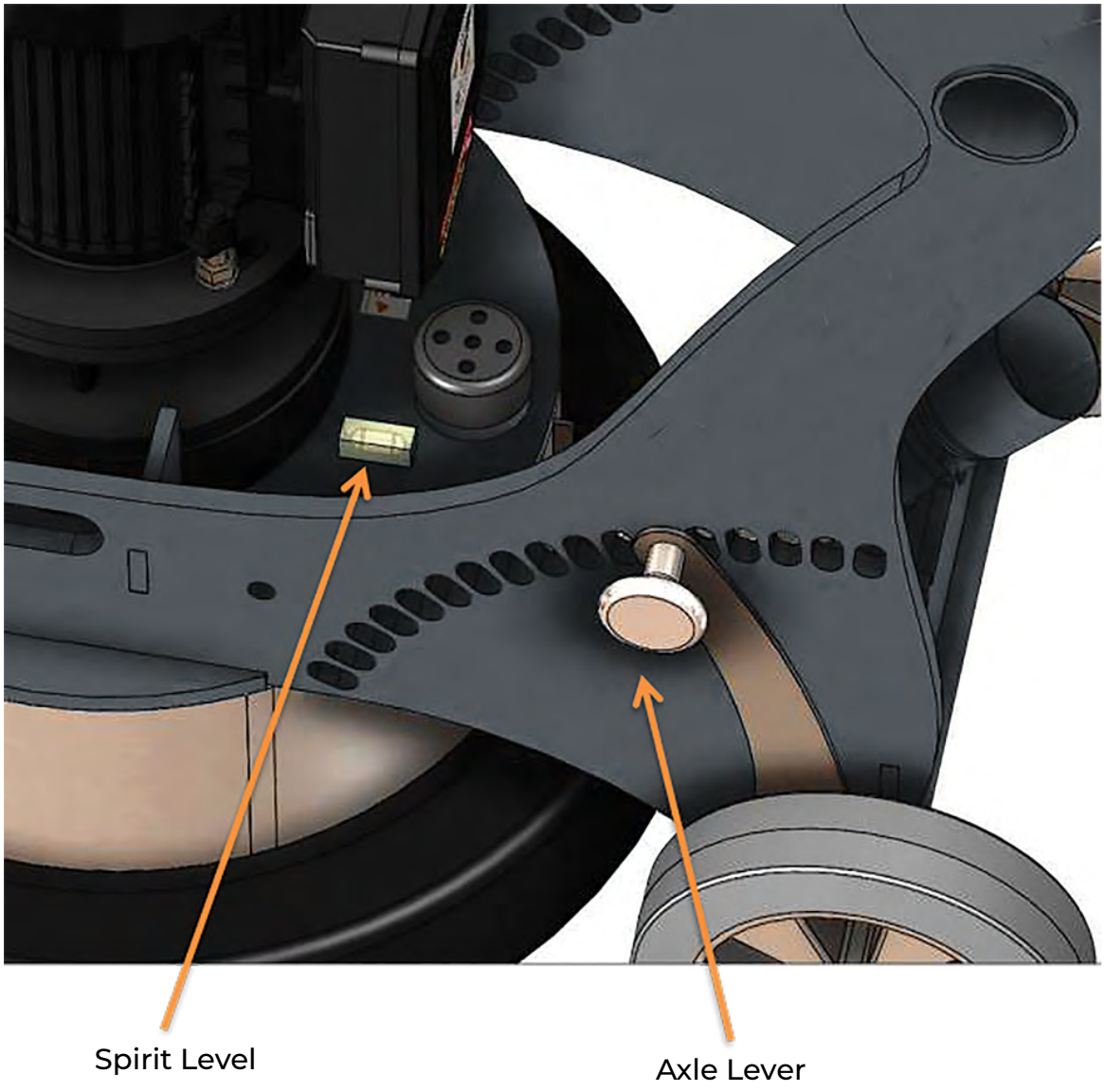
74. Put the insert pin through the diamond disk and install the two parts onto the plug ensuring the insert pin goes completely into the magnetic plug.

Axle Height Adjustment

75. This machine is designed to operate with all wheels in contact with the floor at all times. Do not operate with wheels off the floor.

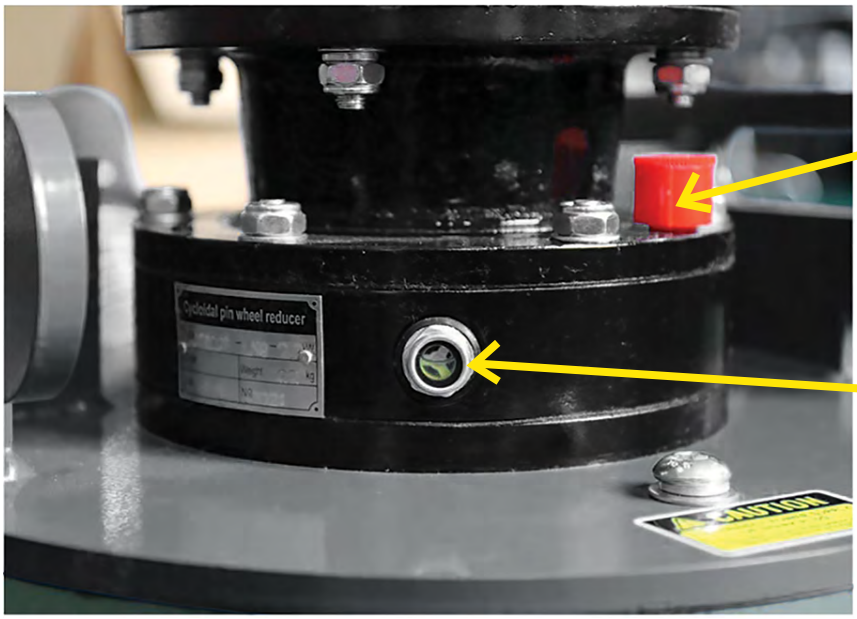
76. There is a spirit level provided (located behind the motor) for levelling the machine, to ensure best user experience and coupling life. It does not change the grinding results in any way.

77. The axle lever should be set so the bubble is up to the forward line on the spirit level. This assures the longevity of the coupling and ensures the best position for ease of use, assuming the floor is level.



Gearbox Maintenance

78. Check the gear oil every time the machine is to be operated.



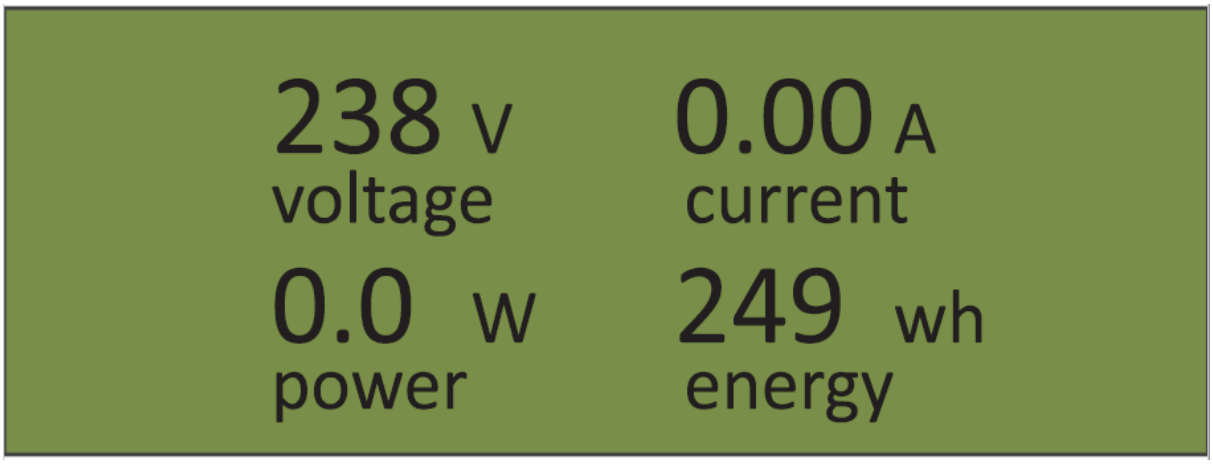
If the gear oil is running low, please open the cap on the oil filler hole and pour in around 150ml of gear oil at a time. Gear Oil 80W-90 is recommended for use in the gearbox.

79. Every six months, clean the gearbox with a special detergent, and then replace the oil in the gearbox with new gear oil.

Display Functions

80. The RUBICON 480 Machines feature a backlit display screen. This is a new feature that greatly enhances the user experience by displaying the machine's function for the operator, taking a lot of the guess work out of the job.

81. When you plug the machine in, the display shown will be similar to the illustration of the screen below.



82. There are four measurements shown on the display:
    a. Voltage (Volts)
    b. Current (Amps)
    c. Output Power (Watts)
    d. Energy (Watt-Hours)

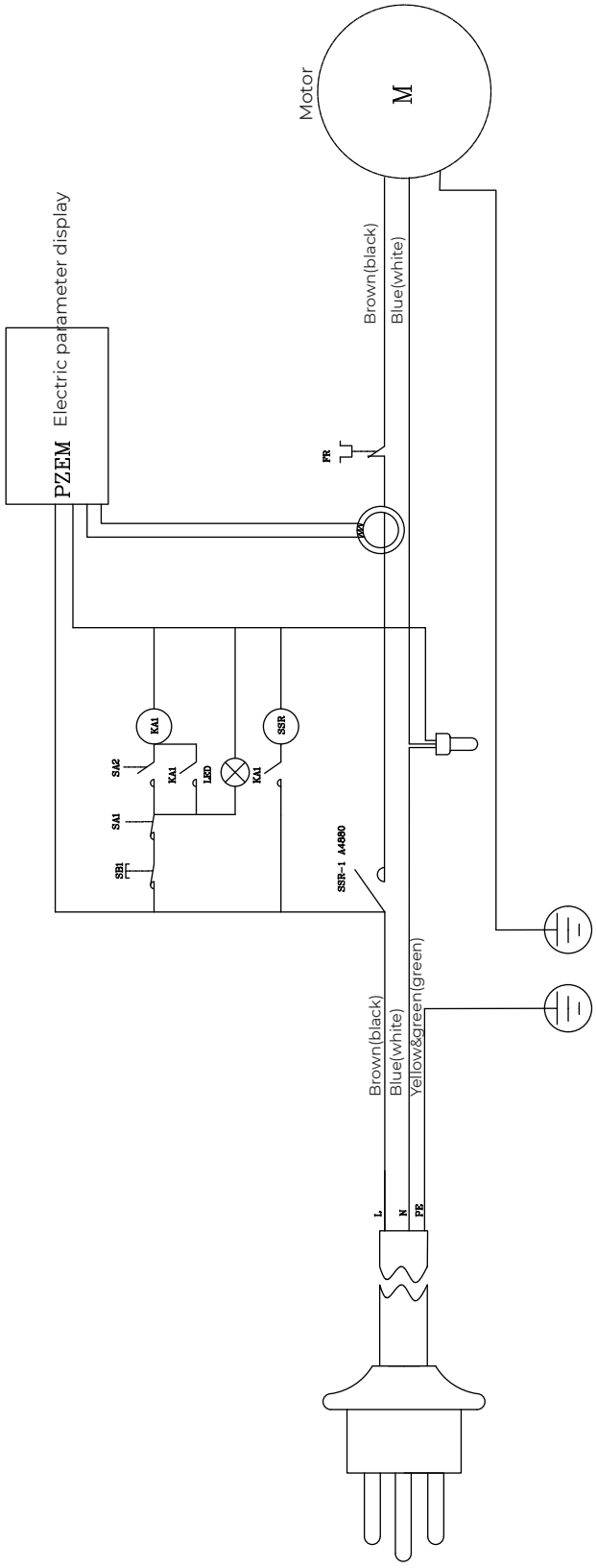
83. From the moment the machine is in operation, real-time figures will display, until the power supply ceases.

84. If there are power issues with the machine, this display allows an electrician to check several causes of problems. Common issues that can be identified are:
    a. Voltage dropping when the machine is under load from too-long or under-sized extension leads. This often causes the Amps to increase in proportion to the Voltage loss.
    b. High Amps when Voltage is still within 10% of normal can be caused by high-load jobs like aggressive diamonds or when polishing.

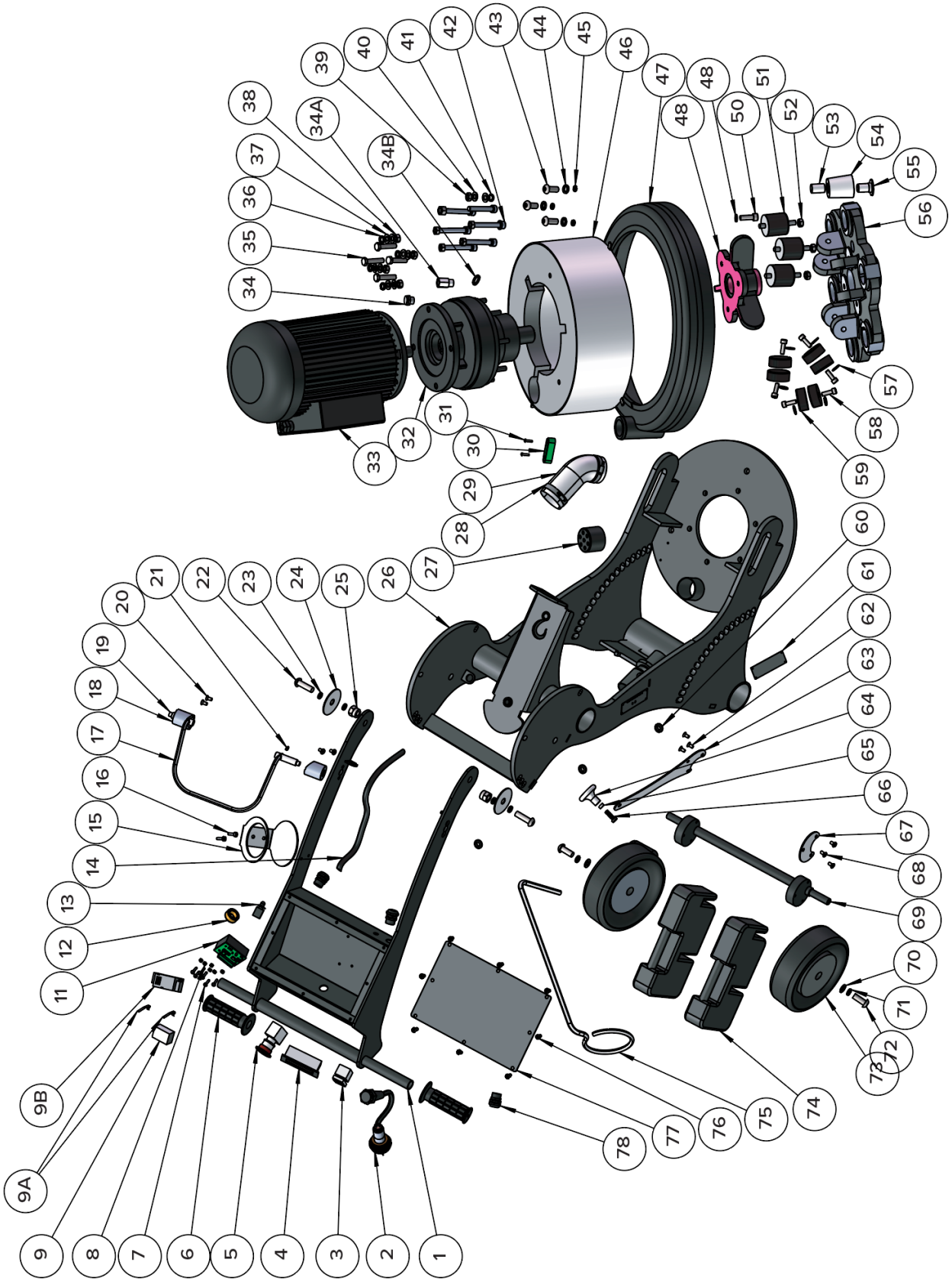
Electrical Safety

85. All electrical maintenance and repairs are to be handled by qualified persons only.
86. **CAUTION:** Line terminals may be live when the main switch is in the off position. Disconnect the machine from the power supply before performing any maintenance or repairs.
87. **WARNING**: DO NOT operate the machine with any electrical panels open.
88. **WARNING:** The controls on the RUBICON 480 include an overload device to protect the motor from irreparable damage. A problem is indicated if the overload is tripped (ie. undersized power lead or poor power supply). Appropriate power leads are recommended at Points 40 and 41. Address the problem or decrease the load on the machine by using diamond tooling with more surface area or use the weights that have been supplied for this purpose (place them on the brackets at the base of the machine's handles).
89. Continuing to use the RUBICON 480 when constant tripping occurs VOIDS THE WARRANTY.
90. Never operate the machine if there is moisture present or in wet and rainy conditions.
91. The overload is there to protect the operator from harm and the machine from damage. DO NOT bypass or adjust the overload in any way. If it is faulty, only replace with the original manufacturer's part that is identical to the faulty one.
92. Never bypass the over-current devices in this machine. They are there for the safety of the operator.
93. Never connect or disconnect power cables with voltage present or while the machine is under load.
94. Disconnect all power connections and observe Lockout/Tagout procedures before attempting to undertake any maintenance or repairs on the machine.
95. Avoid any contact with rotating parts or driven parts.
96. Never use equipment that has not been tested and tagged (including cords).
97. Before connecting the power, check the condition of all power leads and cables on the machine or used in conjunction with the machine. DO NOT USE if there are any faults, cuts, wear marks, etc. Arrange for an electrician to repair and re-tag the machine and cables as required by Australian Standards.
98. Connect the machine to an appropriate power outlet. Only use heavy duty power leads suitable for high current use (preferably 2.5mm^2 cable), no longer than 15 metres.
99. If no power is available within the specified distance, have an electrician install a suitable power outlet closer to your work. Alternatively use 4mm^2 cable for up to 40 metres.
100. Do not operate the RUBICON 480 with any of the covers or doors removed or open.

Wiring Diagram



Main Machine Breakdown



Parts List

Seq.	Part Name	Qty	Seq.	Part Name	Qty
1	Upper bracket	1	39	Lock nut M10	6
2	Power plug	1	40	Flat washer Φ10	6
3	Start button	1	41	Spring washer Φ10	6
4	LED display	1	42	Hexagon socket screw M10x90	6
5	Emergency stop button	1	43	Hexagon socket button head cap screw	3
6	Handle	2	44	Spring washer Φ12	3
7	Hexagon socket button head cap screw M4X16	6	45	Flat washer Φ12	3
8	Spring washer M4	6	46	Dust cover	1
9	Current relay	1	47	Dust shroud	1
9A	Relay latch	2	48	Flange	1
9B	Relay base	1	49	Spring washer Φ10	1
11	Solid state relay	1	50	Hexagon socket head cap screw M10x30	1
12	Current sensor	1	51	Vertical Shock absorber	3
13	Overload protection switch	1	52	Lock nut M10	3
14	Power line	1	53	Magnet Φ20x30	3
15	Cup holder	1	54	Fixing plate retaining sleeve	3
16	Hexagon socket button head cap screw	2	55	Fixing plate retaining pin	3
17	Upper bracket position adjust handle	1	56	Grinding tools fixing plate	1
18	Adjustment handle retaining sleeve	2	57	Spring washer Φ10	6
19	Adjustment handle retaining pin	2	58	Hexagon socket screw	6
20	Hex socket countersunk headcap screw M4	4	59	Horizontal shock absorber	6
21	External circlip Φ8	4	60	Grommet	3
22	Hexagon screw M14x40	2	61	Nameplate	1
23	Flat washer Φ14	4	62	Hexagon socket button head cap screw	3
24	Washer, Φ64xΦ14.3x2mm	2	63	Level adjustment plate	1
25	Lock nut M14	2	64	Level adjustment handle	1
26	Bottom bracket	1	65	Round nut	1
27	Vent hood	1	66	Hexagon socket screw M8x35	1
28	Stainless steel band clamp Φ40-63	2	67	Axle block	1
29	Wired hose, 1D50x200mm PU	1	68	Hexagon socket button head cap screw	3
30	Spirit level	1	69	Axle	1
31	Cross recessed screw with flat washer	2	70	Flat washer Φ10	2
32	Gearbox	1	71	Spring washer Φ10	2
33	Motor	1	72	Hex socket button head cap screw M10x16	2
34	Pressure balance cartridge	1	73	Wheel	2
34A	Balancer adapter	1	74	Weight block	2
34B	Adapter washer	1	75	Vacuum hose supporting bracket	1
35	Hexagon screw M10x40	4	76	Hex socket button head cap screw	8
36	Spring washer Φ10	4	77	Control panel cover plate	1
37	Flat washer Φ10	8	78	Nylon waterproof joint	3
38	Lock nut M10	4			

Problem Solving

101. Diamond grinding has many variables. With understanding, many of the potential issues or problems can be solved simply, without additional expense or time.

PROBLEM	CAUSE	REMEDY	EXPLANATION
Machine will not start / run.	No power is present at cable end.	Confirm whether power is present with another tool.	Using another tool confirms power is present.
	Machine is trying to start on glue or other sticky substance.	Clear a section at a time with a scraper and grind into the glue, section by section.	This means it only tackles a small amount of glue at a time and keeps the glue residue coated with dust, preventing glue sticking and building up on the diamonds.
	Power lead is too small in capacity or too long.	Upgrade the power lead to 2.5mm² (15 metres max) or 4mm² (40 metres max).	The long / small capacity cable is too restrictive and can't allow enough power through for the machine to start / run properly.
		Use weights on the brackets at the base of the handle.	The weights reduce the load on the machine, thus reducing the current.
Machine is not grinding at all.	No blades / accessories in unit.	Fit blades. **Note: check wear on machine.**	
	Very hard concrete or glazed topping on concrete.	Turn dust extractor down / restrict flow. Only just control the dust from escaping.	The extra dust accumulating on the floor acts as an abrasive between the segments and the floor thus exposing the diamonds better.
		Place river sand or cement on the floor.	The sand is an abrasive as described above.
		Use softer grade of diamond tooling.	The softer grade will expose the diamonds better.
		Use coarser diamond tooling.	Coarser diamond tooling can get through hard toppings without wearing out the diamonds too fast.
		Reverse the rotation of the machine (switch on the bottom of the motor box).	The tooling exposes the diamonds when reversed. This works best when using plugs.
The diamonds are wearing out too fast.	The concrete is: - Soft - Abrasive - Rain Damaged - A rough finish (Scarified or shot blasted).	Use a powerful dust extractor to remove as much dust as possible.	The dust, as described, acts as an abrasive between the segments exposing the diamonds prematurely, wasting them.
		Use harder diamond matrix.	The harder segments don't expose as easily.
		Use tooling with more segments or surface area on segment.	Tooling with more segments or surface area doesn't have the same weight, reducing wear.
	The diamonds are too soft or too few.	Use weights on the handle.	This reduces the weight on the diamonds thus reducing the wear on them.

NOTE: THIS IS A GUIDE ONLY

Warranty

102. This Warranty covers the RUBICON 480 for periods noted in the table below.

Machine / Item	Period	Notes
Rubicon 480	1 Year	
Inverters or Speed Controllers	1 Year or 500 Hours*	*whichever comes first
Petrol Motors	1 Year	

103. Rubicon Machinery Australia offers a 1-year Limited Warranty against defective parts. The warranty covers against manufacturing fault(s) only. If the product is found to be misused or neglected, the product warranty will not apply.

104. The Rubicon 480 may require replacement parts through the service life of the machine. There are some parts which are normal replacement items, and the wear is not a fault of manufacture. The hour metre on the machine is for the consumer's reference and not necessarily to measure warranty periods. We, or our nominated repairers, will assess any problem irrespective of the hour metre at our discretion.

105. It is assumed on ordering Goods that the customer has the necessary skills to perform assembly and installation or will engage a qualified professional to perform such tasks.

106. Rubicon Machinery Australia is not liable for any damage caused resulting from misuse of our products.

107. Return of goods will be in accordance with ACL 263 (3).

108. If there is an issue with the machine within the warranty period or if the customer wants to return the machine for any reason, they will need to send it back to the designated location at their own expense. Once the machine reaches the base, the manufacturer or seller will assess the claim and take appropriate action, such as repairing or replacing the machine.

109. If no manufacturing fault is found with the returned product the customer will be liable for a minimum $100 inspection fee to cover the technician's inspection time. Any additional costs associated with the warranty inspection will be charged to the customer.

110. Goods found to have a valid warranty claim for minor fault will be repaired or replaced.

111. In some instances, returned goods will need to be returned to Company's supplier or the manufacturer for warranty assessment. In these cases, claims may take longer to resolve than normal. Rubicon Machinery Australia is not accountable for any delays in warranty processing caused through this process.

112. All returned goods must be accompanied by a Warranty & Returns form as well as the original proof of purchase. Goods returned without proof of purchase and a completed Warranty & Returns form will not be assessed.

113. Any form or tampering, disassembly, or attempted repair without prior written consent from Rubicon Machinery Australia will void the warranty for the Rubicon 480.

114. Our technical advice is provided to the best of our best knowledge and experience, free of charge. The customer is obliged to apply due diligence in verifying applicability of our advice to their special conditions of production or application. Concerning our technical advice, we accept no liability for damage or loss caused by Goods supplied and technical advice given.

115. No exceptions will be made to the Warranty & Returns policy stated here. Consumer Guarantees are a contract between the seller and the consumer. For this reason, if goods are purchased to be resold or to be transformed into a product that is sold, the Consumer Guarantees between us and the re-sellers will not apply.

116. Compensation – Rubicon Machinery Australia is not responsible for problems with goods beyond their control. For this reason, we will not be held liable for:

116.1 An act, default, omission, or representation made by some other person (excluding an employee or agent of Rubicon Machinery Australia).

116.2 Contract penalties such as promises for completion date of jobs. These are at the risk of the parties involved.

116.3 A cause independent of human control that occurs after the goods left Rubicon Machinery Australia's control.

117. The Consumer Guarantees require you to return goods to the place where they were purchased unless it is not reasonable for you to do so. For example, it would be reasonable to expect you to return an item if you would be able to easily take it away with you when you purchased it. However, if the item is large, heavy, or bulky or needed to be delivered, the seller should arrange for this to be returned.

118. This manual is to provide information on the goods based on current knowledge. The quality of the goods is guaranteed under our General Conditions of Sale. The information, and the recommendations relating to the application and end-use of Rubicon products, are given in good faith based on Rubicon's current knowledge and experience of the goods when properly stored, handled and applied under normal conditions in accordance with our recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. All orders are accepted subject to our current terms of sale and delivery. The user is responsible for checking the suitability of goods for their intended use and for ensuring that the application and use of the goods is in accordance with the manufacturer's guidelines and recommendations.

RUBICON
MACHINERY AUSTRALIA

Rubicon Machinery Australia Pty Ltd

6 Giffard Street
SILVERWATER NSW 2128

www.rubiconmachinery.com.au