

METEOR 250 MKII

SAFETY & OPERATORS MANUAL

& PARTS LISTING

CAUTION: Read the instruction manual before using the appliance.



Meteor 250 MkII

Table of Contents

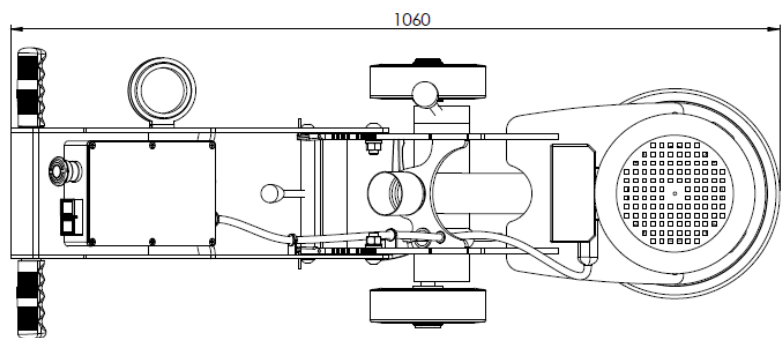
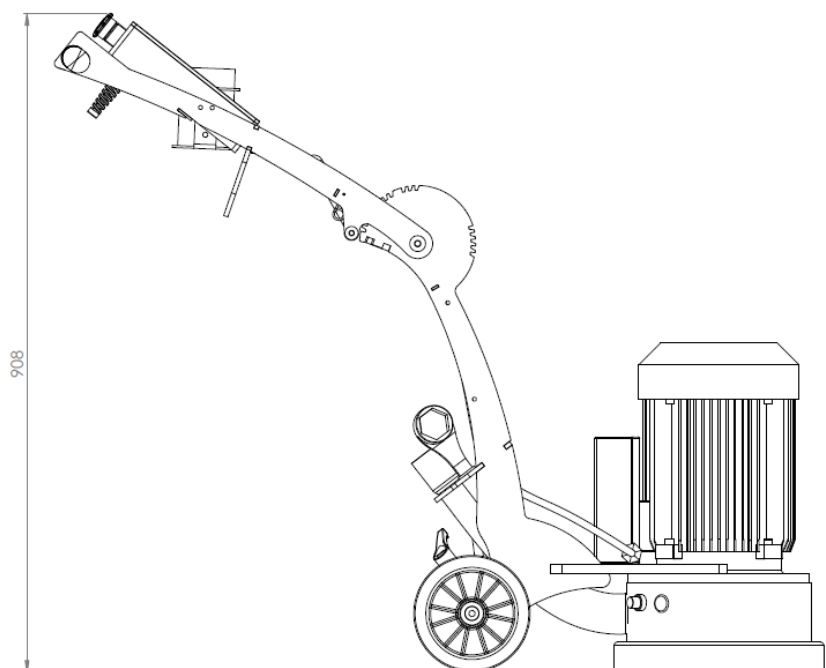
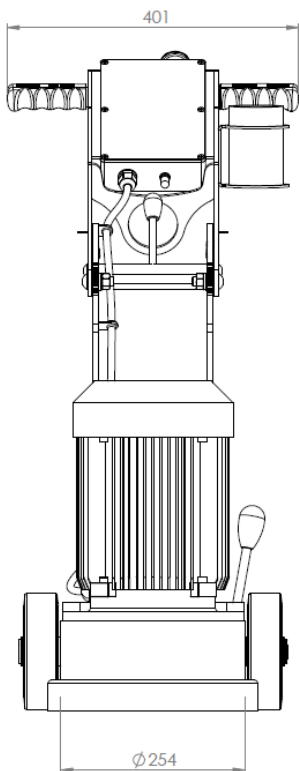
Specifications	2
Safety instructions	3
Safety instructions	4
Operating instructions	5
Operating instructions	6
Operating instructions	7
Handle positions	8
Axle height adjustment	9
Axle height adjustment	10
Axle height adjustment	11
Axle height adjustment	12
Electrical safety	13
Problem solving	14
Diamond tooling selection guide	15
Diamond tooling selection guide	16
Parts Diagram - Electrical	17
Parts Diagram - Main	18
Parts List – Main	19
Items Marked with * are optional extras	19
Parts Diagram - Old Coupling (for older models only)	21
Parts Diagram - Spider Coupling	22
Parts Diagram - Ravel Motor	23
Parts Diagram - Lafert motor (If Fitted)	24
Wiring Diagram	25

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

Meteor 250 MkII

Specifications

Meteor 250 MkII	
Weight	52kg
Dimensions	401 x 908 x 1060 (width x Height x Length)
Rated Voltage	230 Volt 50 Hz
Rated Watts	2200W
Grinding Path	250mm



Meteor 250 MkII

Safety instructions

1. Read and understand the instructions on the machine and in this manual and engine manual (if applicable). Different models may have different parts and controls.
2. Equipment should only be operated by trained personnel, 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. This is a **one person machine**. Maintain a safe operating distance to other personnel. Remember 'one machine, one operator'.
4. This equipment is intended for commercial use.
5. For the operators' safety and the safety of others, always keep all guards and shrouds in place.
6. Never start or run machine when unattended.
7. This machine is intended for use on floor surfaces only.
8. Never start or run machine with handle folded or when disk(s) are not in contact with the surface.
9. Do not lend or rent machine without the operating instructions for the machine (and the engine, if applicable).
10. Wear clothing suitable for the job and for the work place including, safety shoes, hard hat, hearing protection, non-fogging vented safety goggles, and dust mask suitable for dust.
11. Keep body parts or any loose clothing away from moving parts. Failure to comply could result in bodily injury.

Meteor 250 MkII

Safety instructions

12. Do not modify machine in any way. Only use genuine METEOR 250 MKII parts and accessories.
13. Repairs should be performed by qualified persons only.
14. Ensure parts have stopped moving and disconnect power or spark plug when servicing or changing blades or accessories.
15. Never operate machine in rain or if heavy moisture is present.
16. Do not operate METEOR 250 with any covers or doors removed or open.
17. The METEOR 250 can produce sound pressure levels greater than 85db. The operator must wear approved safety ear protection.
18. Do not allow the supply cord to come in contact with the cutting blade/head or other moving parts of this machine.
19. Petrol is extremely flammable and poisonous. Petrol should only be dispensed in well ventilated areas, and only when engine is cool.
20. **WARNING! POISONOUS EXHAUST GASES.** Do not operate petrol powered equipment without adequate ventilation. Carbon monoxide is and invisible odorless gas that can harm or can kill you.

Meteor 250 MkII

Operating instructions

1. Wear clothes suitable for the job and for the work place including, safety shoes, hard hat, hearing protection, non-fogging vented safety goggles, and dust respirator suitable for dust.
2. WARNING! POISONOUS EXHAUST GASES. Do not operate petrol powered equipment without adequate ventilation. Carbon monoxide is an invisible odorless gas that can harm or can kill you.
3. Be sure all equipment is tested and tagged prior to use on any job.
4. Inspect entire area to be ground before grinding and remove any bolts or concrete nails (etc.) that could damage diamond tooling or machine which could cause a hazardous situation.
5. Ensure there are no obstacles or existing structures that could present a hazard to the operator. If so, take necessary action to eliminate the hazard.
6. To change the Disk; Fold handle into the tooling mode (see [Handle Positions](#)) and lock in place using the locking lever, then tilt machine back so handle is resting on the floor.
7. The blade is removed by pushing the lock button located on the right side of the machine on the stainless steel shroud, shown on following page. **(Do not engage this button when shaft is still rotating).**
8. Install appropriate diamond tooling or other available tooling into the machine. Only use genuine METEOR 250 MKII tooling. Failure to comply could result in bodily injury.
9. Tooling fitted to this machine must not exceed 30mm high from Face of segment to the face against the machine boss. Floorex does not warrant the machine against damage resulting from after-market tooling.
10. Tilt machine back onto the disk and lock handle into the best position in the operate mode for the operator comfort. (See [Handle Positions](#))

Meteor 250 MkII

Operating instructions

11. Connect machine to suitable power outlet. Only use heavy duty power lead suitable for high current use (minimum 2.5 mm² cable), no longer than 20 meters. (For petrol powered equipment, refer to engine manual for startup procedure).
12. If no power is available within the specified distance, have a qualified person install a suitable power outlet closer to your work. Alternatively use 4mm² cable for up to 50 meters.
13. Connect a suitable dust extractor to the machine via a 50mm flexible hose. The machine is designed to take the standard FLOOREX 50mm hose ends to make connection of dust extractors easy and hassle free.
14. Keep machine clear of drainage pits and grates or any such hazard. Failure to comply could result in bodily injury and or could damage the machine or property.
15. Ensure machine is on a level surface and handle is not folded (see [Handle Positions](#)).
16. Switch on the dust extractor.
17. Hold the handles firmly and switch the machine on by pushing the green button.
18. If the over-current device trips it indicates a problem. (Undersize power lead or poor power to GPO outlet). Refer above for recommendations on power leads. Rectify problem or decrease load on grinder by using tooling with more surface area. **Continuing to use the METEOR 250 MKII when constant tripping occurs, VOIDS THE WARRANTY!**

Meteor 250 MkII

Operating instructions

19. This machine is designed to operate with the wheels in contact with the floor at all times. **Do not operate with wheels off the floor.**
20. Do not attempt to make any adjustments while the machine is in operation. Any adjustments must only be performed when machine is stopped and power disconnected.
21. In the event of the machine pulling to one side all the time; adjust the axle height to obtain the best result. (See Axle Height adjustment).
22. After a few minutes of grinding check the wear of the diamond tooling. This will pay handsomely if the diamonds are wearing out fast due to soft concrete / abrasive concrete. FLOOREX has a wide range of diamonds to suit every need. See page 12 and 13 for a guide.
23. See the chart on page 11 for tips on how to grind faster on tough concrete and other ways problems can be rectified.
24. **WARNING!** Breathable silica may be generated by use and maintenance of this machine. Silica 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. Silica may be in the air without a visible dust cloud. If air monitoring for silica is not provided by your employer at your work site, you must wear appropriate respiratory protection when operating or maintaining this equipment. Consult your employer for proper respiratory protection.

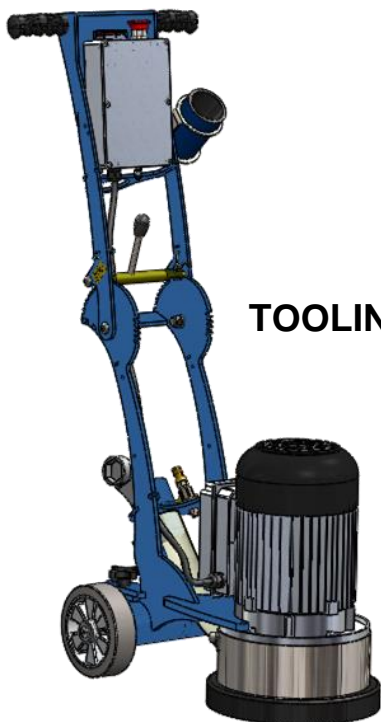
Meteor 250 MkII

Handle positions

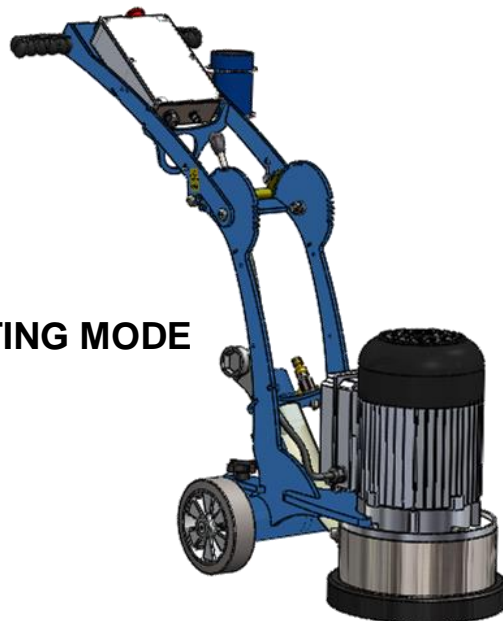
STORAGE AND LIFTING MODE



TOOLING MODE

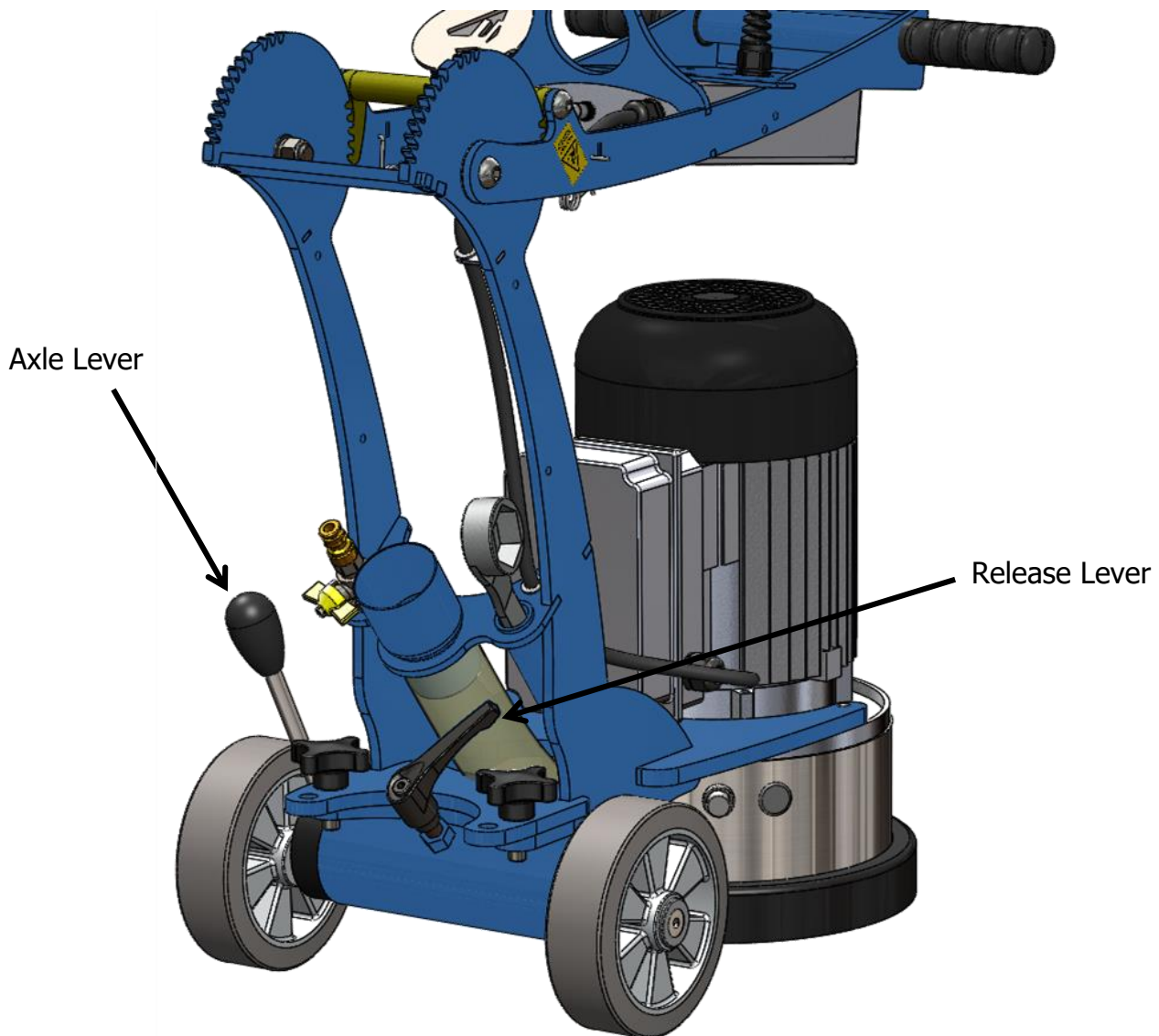


OPERATING MODE



Meteor 250 MkII

Axle height adjustment



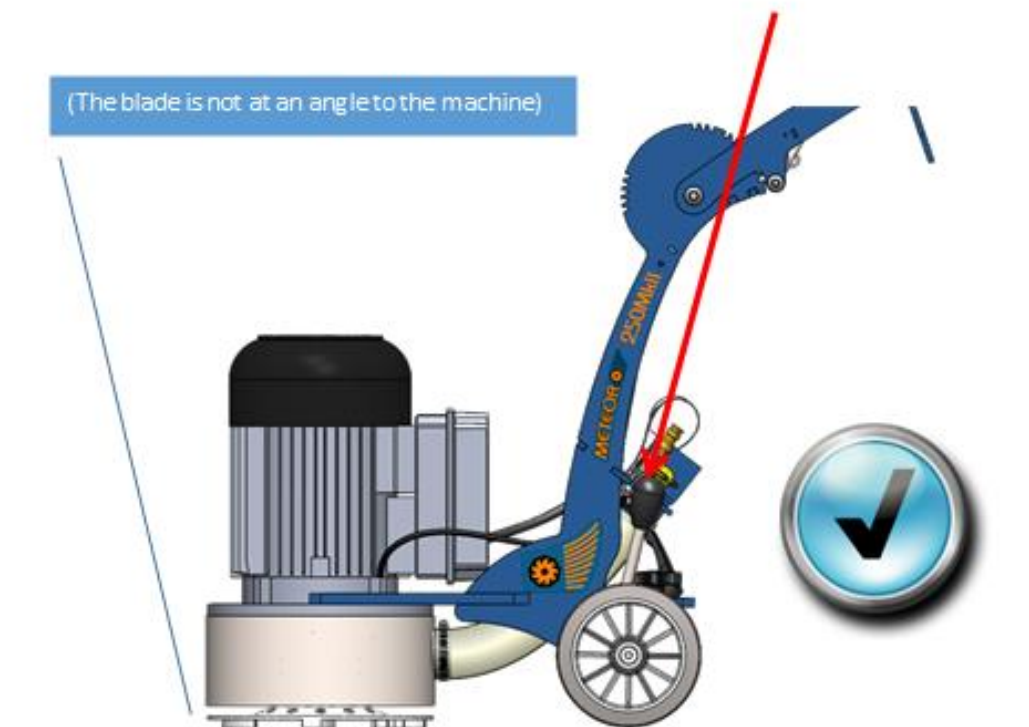
1. This machine is designed to operate with the wheels in contact with the floor at all times. Do not operate with wheels off the floor.
2. The axle lever should be set so the bubble is up to the forward line on the spirit level provided next to the motor. This assures the longevity of the coupling life and gives the nicest position for ease of use. (Assuming the floor is level)

Damage to the METEOR 250 MKII from neglecting this step is easily diagnosed and could VOID THE WARRANTY!

Meteor 250 MkII

Axle height adjustment

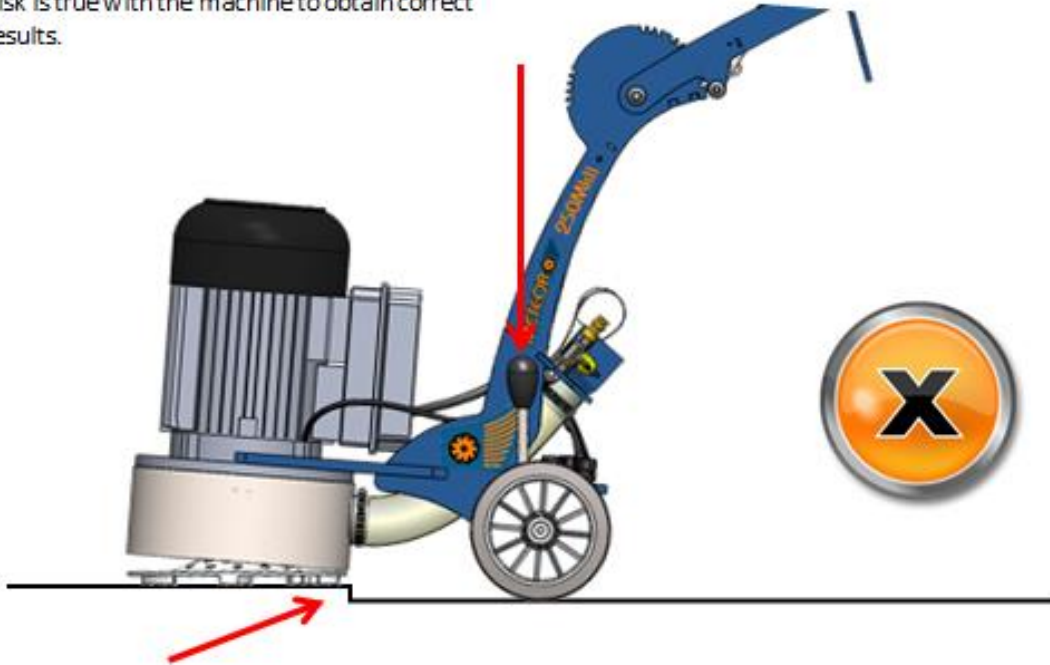
When used on a typical flat floor the Meteor can be levelled using the level bubble to obtain correct results.



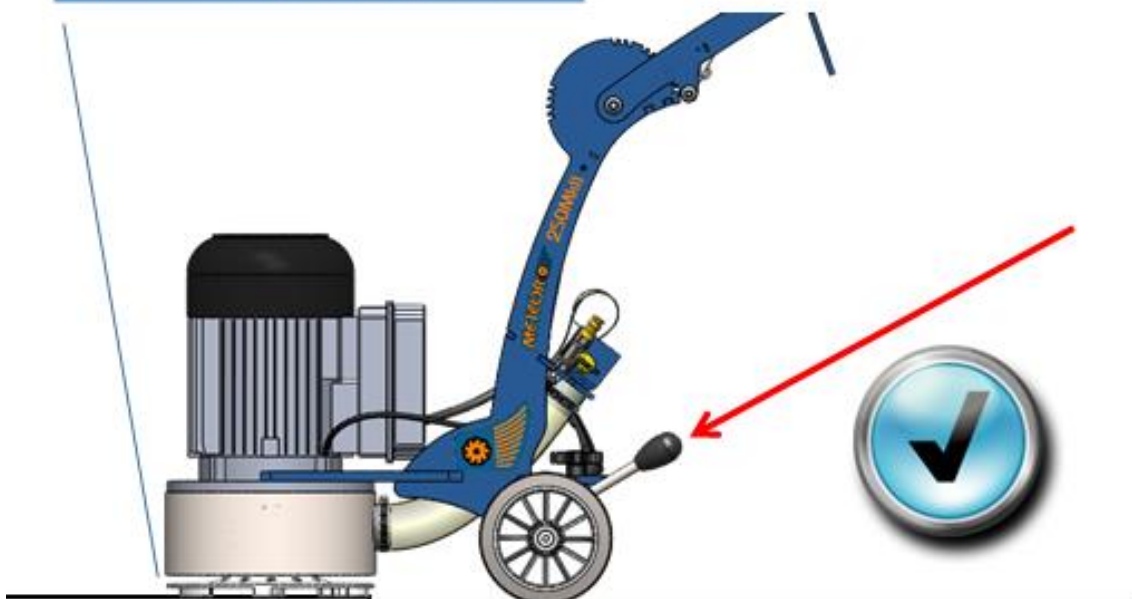
Meteor 250 MkII

Axle height adjustment

When used on a floor with a step the Meteor must be levelled using the level bubble when positioned on the step and then verified that the disk is true with the machine to obtain correct results.



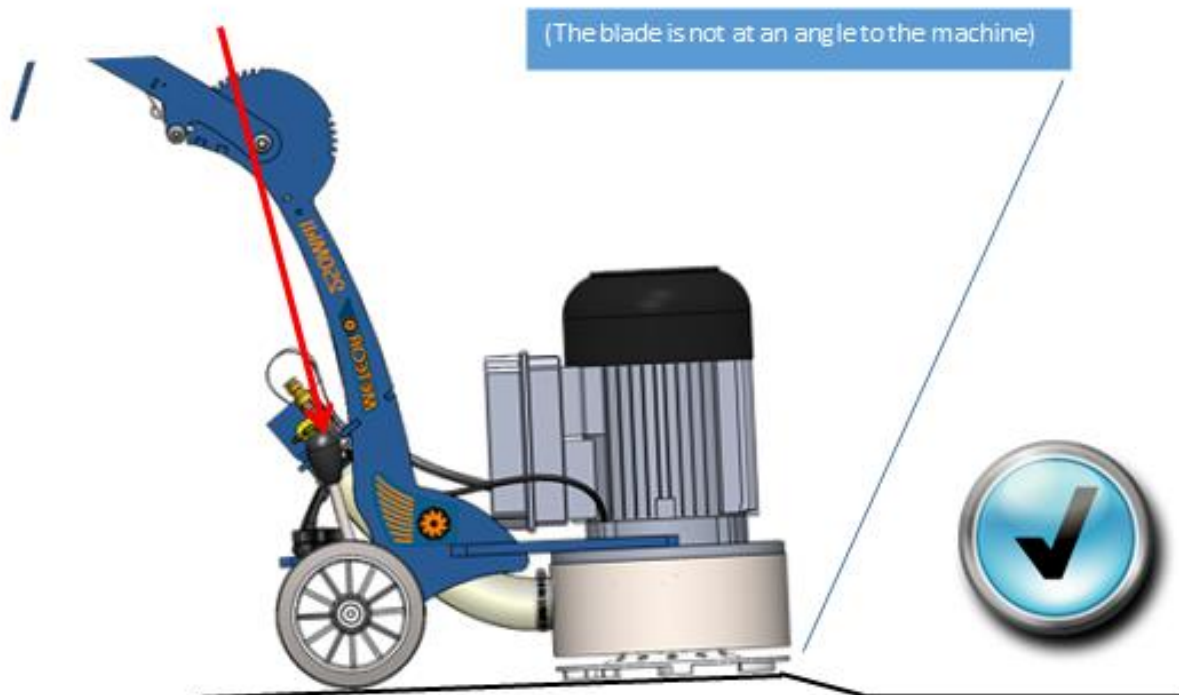
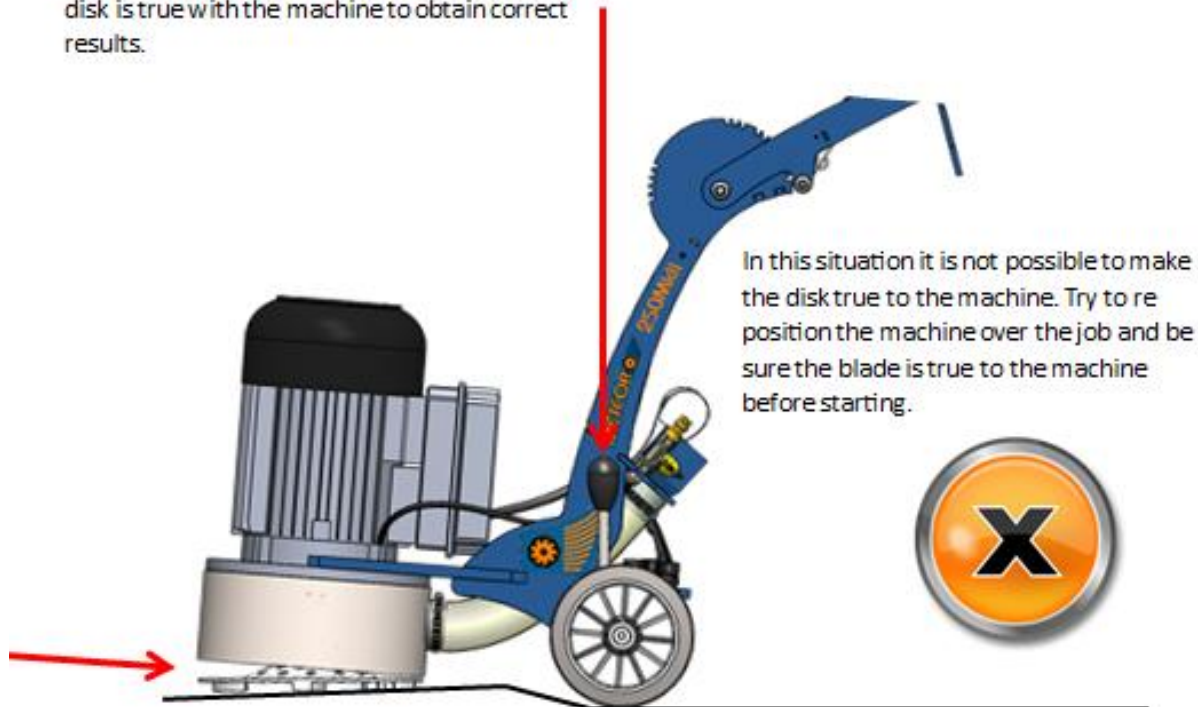
(The blade is not at an angle to the machine)



Meteor 250 MkII

Axle height adjustment

When used on a floor with large undulations the Meteor axle height must be adjusted so that the disk is true with the machine to obtain correct results.



Meteor 250 MkII

Electrical safety

1. All electrical maintenance and repairs to be carried out by qualified persons only.
2. **CAUTION** - Line terminals may be alive when main switch is in the off position. Disconnect all power at source before performing any maintenance or repairs.
3. **WARNING - DO NOT** operate the machine with any electrical panels open.
4. **WARNING** - The METEOR 250 MKII has an overload switch and will trip when under excessive load and will not allow the machine to be switched on if it is overloaded. (Overload will need to be reset when safe to do so). **Continuing to use the METEOR 250 MKII when constant tripping occurs, VOIDS THE WARRANTY!**
5. Never operate machine in the rain or if heavy moisture is present.
6. The overcurrent device is there to protect you and the machine from harm. **DO NOT** alter or adjust the over load in any way. If it is faulty, only replace with original part that is identical to the faulty one.
7. Never bypass over-current devices in this machine.
8. Never connect or disconnect power cables with voltage present or while under load.
9. Disconnect all power connections and observe lock out / tag out procedures before attempting to carry out any maintenance or repair on any equipment.
10. Avoid any contact with any rotating parts or driven parts.
11. Never use equipment that has not been tested and tagged (including cords).
12. Do not operate METEOR 250 with any covers or doors removed or open.
13. Before connecting the machine to power, check the condition of all power leads and cables on, or used in conjunction with the machine. **DO NOT** USE it if any fault(s) cuts; wear marks, Bare wires out of plugs or sockets, etc...
Get qualified persons to repair and re-tag it as required by regulations in your country.

Meteor 250 MkII

Problem solving

Diamond Grinding has many variables. When you understand some of these, you can solve many problems without a lot of bother and expense.

PROBLEM	CAUSE	REMEDY	WHAT IS IT DOING?
Machine will not start / run.	No power is present at cable end.	Check the 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 patch with a scraper and grind into the glue a little at a time.	This means it only tackles a small amount of glue at a time and keeps the glue residue coated with dust, preventing glue build-up on the diamonds.
	Power lead is too small in capacity or too long.	Upgrade the power lead to 2.5mm ² (20 meters) max or 4mm ² (50 meters max).	The long / small capacity cable is too restrictive and can't allow enough power through for the machine to start / run properly.
Machine is not grinding at all.	No blade / accessories in unit.	Fit blade. 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 equivalent 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.	The coarser diamond tooling can get through the hard topping without wearing out the diamonds too fast.
The diamonds are wearing out too fast.	The concrete is: *Soft *Abrasive *Rain Damaged *A rough finish (Scarified).	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 area ² of segment.	The tooling with more segments or area ² doesn't have the same weight on them, reducing wear.

Meteor 250 MkII

Diamond tooling selection guide

	ST10-S08016	8 Segment Diamond Wheel For Hard Concrete / Soft Matrix Color - Black Grit Size - 16# 10mm Segment
	ST10-S03016	3 Segment Diamond Wheel For Very Hard Concrete / Soft Matrix Color - Grey Grit Size - 16 # 10mm Segment
	ST10-H12030	12 Segment Diamond Wheel For Very Soft or abrasive concrete / Hard Matrix Color - Blue Grit Size - 30/40# 10mm Segment
	ST10-H03030	3 Segment Diamond Wheel For Hard Concrete / Hard Matrix Color - Orange Grit Size - 30/40# 10mm Segment
	ST10-S06030	6 Segment Diamond Wheel For Hard Concrete / Soft Matrix Color - Brown Grit Size - 30/40# 10mm Segment

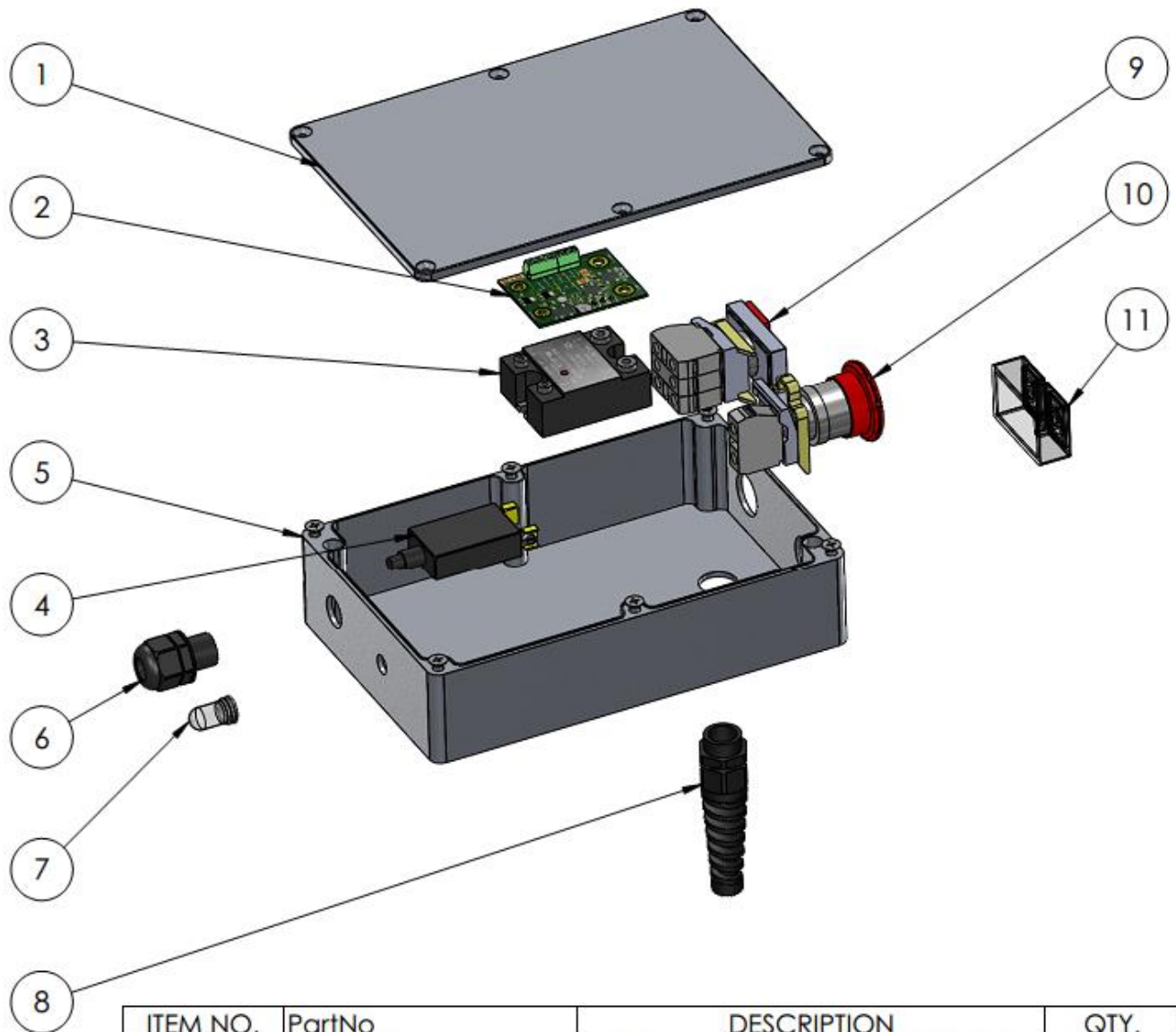
Meteor 250 MkII

Diamond tooling selection guide

	ST10-H09030	9 Segment Diamond Wheel For Medium to Soft Concrete - Hard Matrix Color - White Grit Size - 30/40# 10mm Segment
	ST10-S03030	3 Segment Diamond Wheel For Very Hard Concrete - Soft Matrix Color - Gold Grit Size - 30/40# 10mm Segment
	ST10-H09080	9 Segment Diamond Wheel For Soft to Medium - Medium to Hard Matrix Color - Green Grit Size - 80# 10mm Segment
	ST10-H09150	9 Segment Diamond Wheel For Soft to Medium - Medium to Hard Matrix Color - Red Grit Size - 150# 10mm Segment
	ST10-S09150	9 Segment Diamond Wheel For Hard Concrete / Soft Matrix Color - Yellow Grit Size - 150# 10mm Segment

Meteor 250 MkII

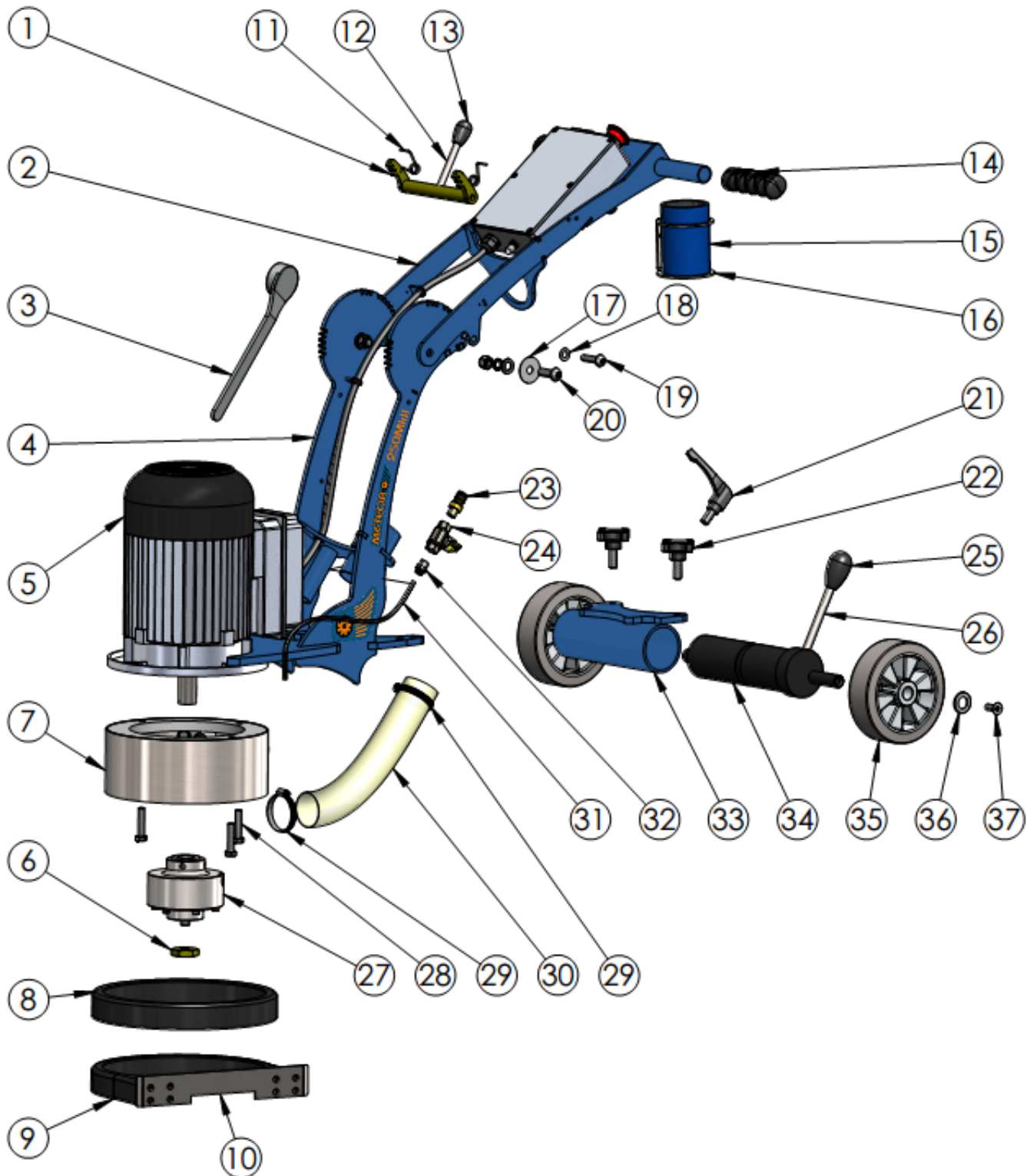
Parts Diagram - Electrical



ITEM NO.	PartNo	DESCRIPTION	QTY.
1	MET-002	Meteor MkII Control Box/Lid	1
2	G3-033	SSL board	1
3	G3-032	SSR 80 A 240V	1
4	MET-003	Overload 13A	1
5	MET-002	Meteor 250 MkII Control Box/Lid	1
6	G3-364	Gland M16	1
7	G3-049	Overload Boot	1
8	MET-005	Cord Grip PG11	1
9	G3-030	Start Stop Switch Complete	1
10	G3-031	EMG Stop switch. Comes With Boot	1
11	G3-029	Protective Boot for Start Stop Switch	1

Meteor 250 MkII

Parts Diagram - Main



Meteor 250 MkII

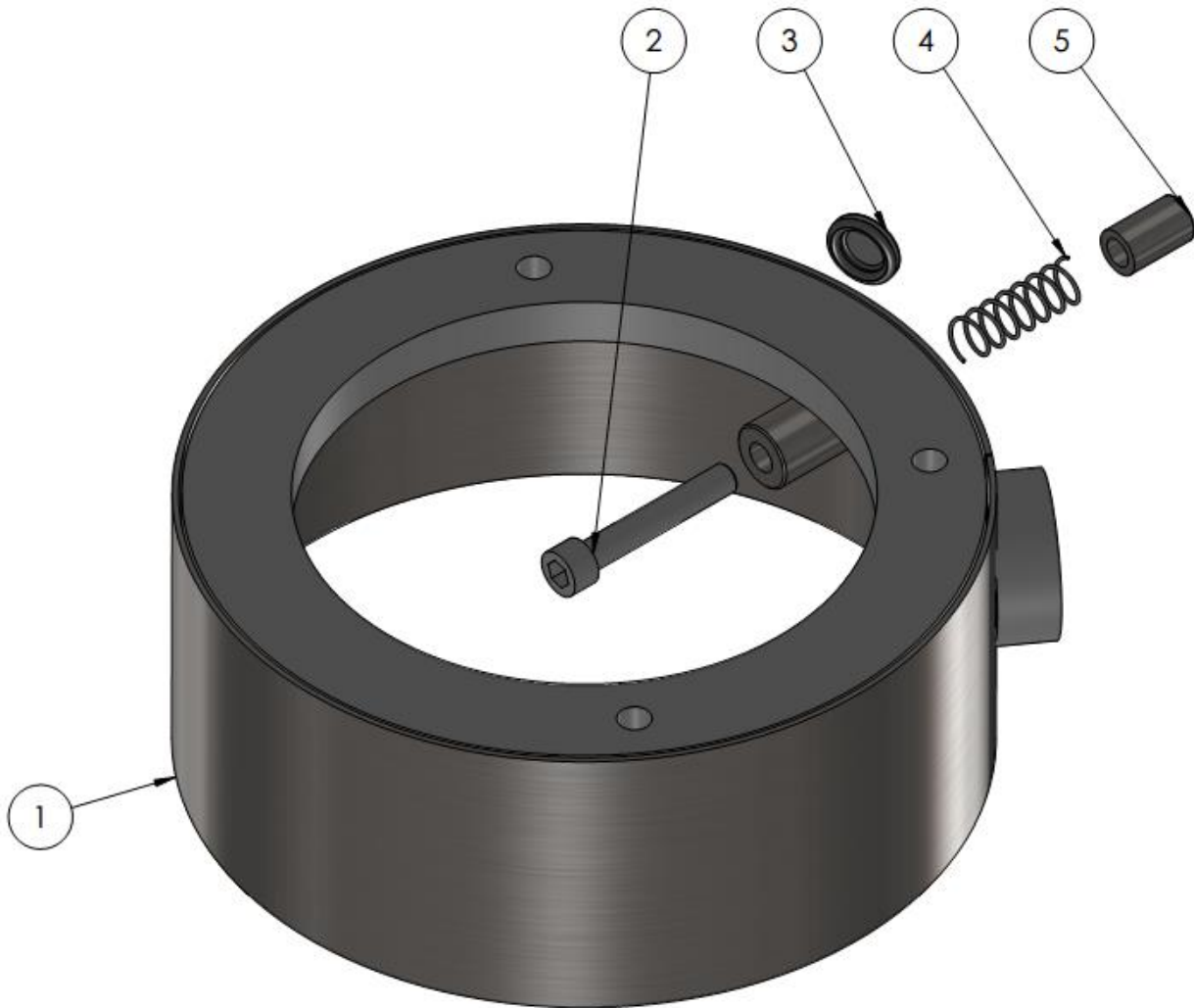
Parts List – Main

Items Marked with * are optional extras

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	MET-022	Meteor Ratchet Lock Mechanism	2
2	MET-006	Meteor MkII Handle Frame	1
3	MET-036	Meteor Hex Spanner	1
4	MET-004	Meteor 250 MkII Main Frame	1
5	MET-032	Motor Ravel 4 Pole 2.2 Kw	1
6	MET-024	Meteor 250 Hex Nut	1
7	MET-031	Meteor 250 Upper Shroud	1
8	MET-030	Polyurethane Shroud	1
9	MET-130	* Meteor 250 Edger Shroud (includes M252331)	1
10	MET-072	Edger Shroud slide Plate	1
11	MET-044 & MET-144	Meteor 250 MkII L/R Spring	1
12	MET-009	Meteor Ratchet Mechanism Lever	1
13	MET-007	Meteor Ratchet Mechanism Knob	1
14	G3-050	Rubber handle Grip	2
15	:-)	Drink Thermal Jacket	1
16	G3-199	Drink Holder	1
17	MET-008	Meteor 250 MkII Handle Spacer 41mm OD	2
18	MET-043	Meteor 250 MkII Mech Spacer	2
19	F3-217	10 X 40 Button Head	2
20	F3-224	12 X 35 Button Head	2
21	MET-067	Ratchet Handle / 'T' Handle	1
22	MET-058	Meteor 250 MkII Cross Knob M12 X 20	2
23	MET-063	* Brass Tap adapter	1
24	G3-153	* Meteor 250 MkII Water Injection Tap	1
25	MET-075	Meteor 250 MkII Axle Lever and Knob	2
26	MET-014	Meteor 250 MkII Axle Lever and Knob	2
27	MET-028	Meteor 250 Spider Coupling Complete	1
28	F3-288	M10 X 45 Hex Head Set Screw	3
29	G3-063	Hose Clamp 40-64mm	2
30	G3-064	Meteor 250 MkII Hose PU 50mm 300mm	1
31	MET-065	* Meteor 250 MkII Water Injection Tube	1
32	G3-154	* Meteor 250 MkII Water injection Push in Fitting	1
33	MET-033	Meteor 250 MkII Axle Tube with bracket	1
34	MET-025	Meteor 250 MkII Axle	2
35	MET-016	160mm Rubber Wheel	4
36	FS-335	Wheel Spacer	2
37	FS-246	M10 X 25 Socket Head Countersunk Screw	2

Meteor 250 MkII

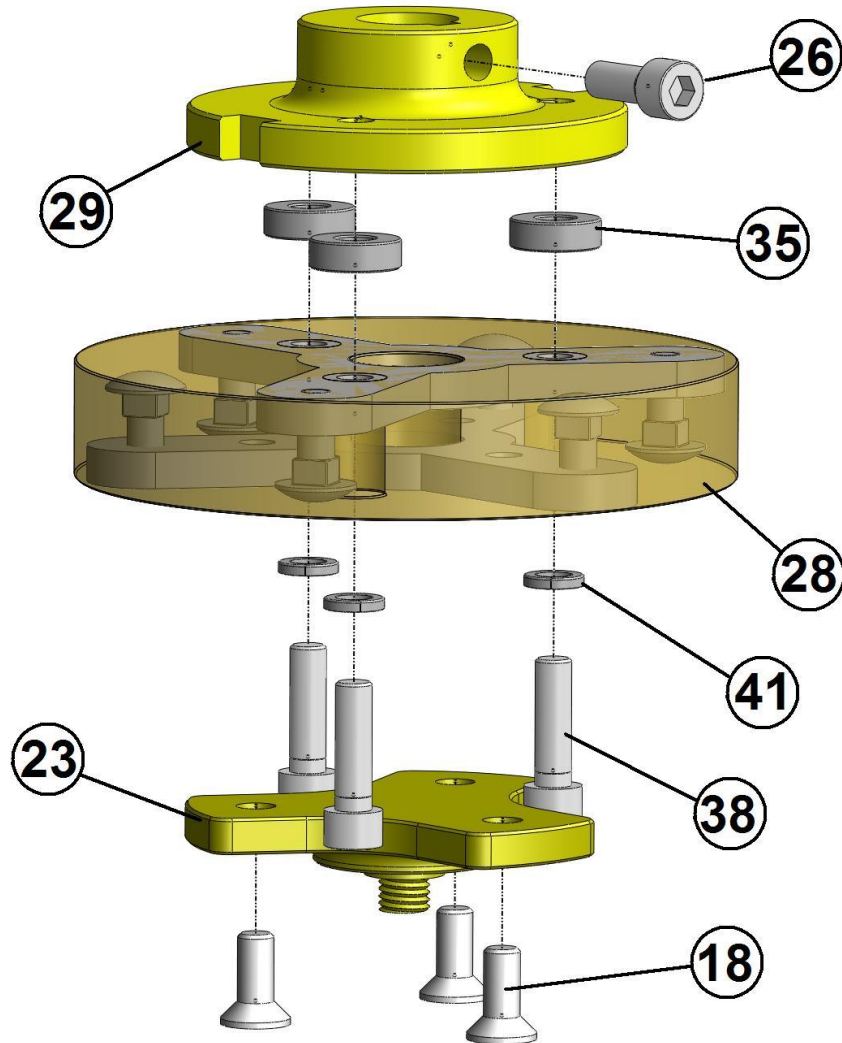
Parts Diagram Shroud



ITEM NO.	PartNo	DESCRIPTION	QTY.
1	MET-031	Meteor 250 Upper Shroud	1
2	FS-252	Meteor 250 MkII Lock Bolt	1
3	MET-034	Meteor 250 MkII Rubber Grommet	1
4	MET-020	Plunger Lock Spring	1
5	MET-019	Plunger Lock Button	1

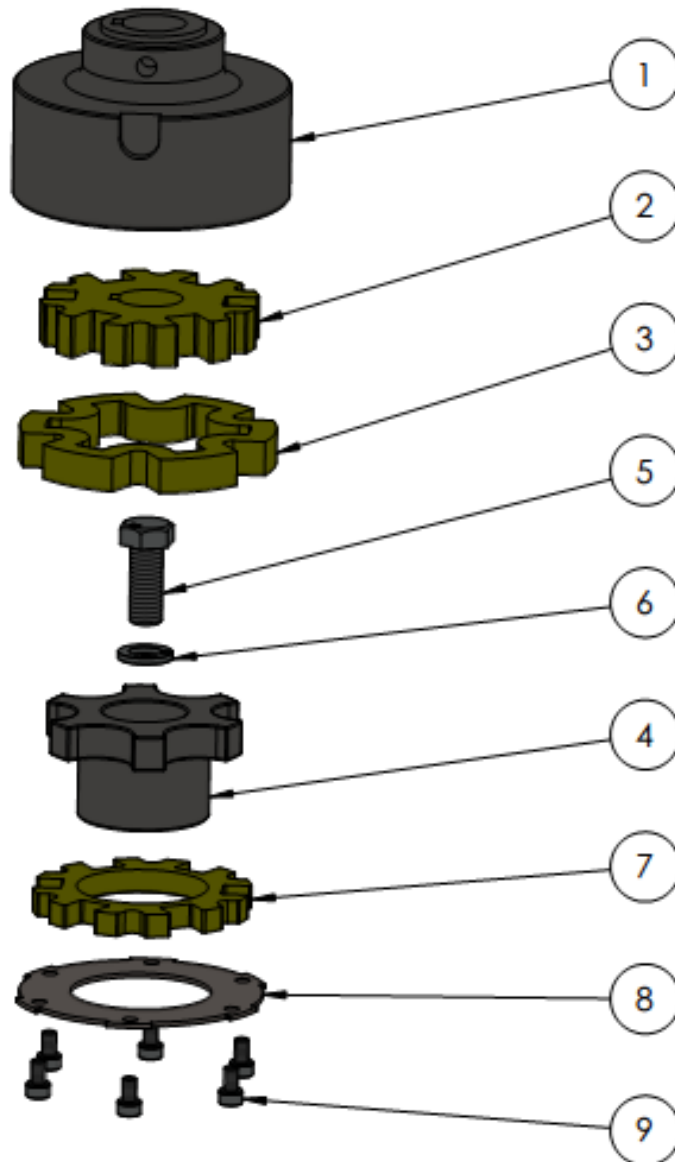
Meteor 250 MkII

Parts Diagram - Old Coupling (for older models only)



Meteor 250 MkII

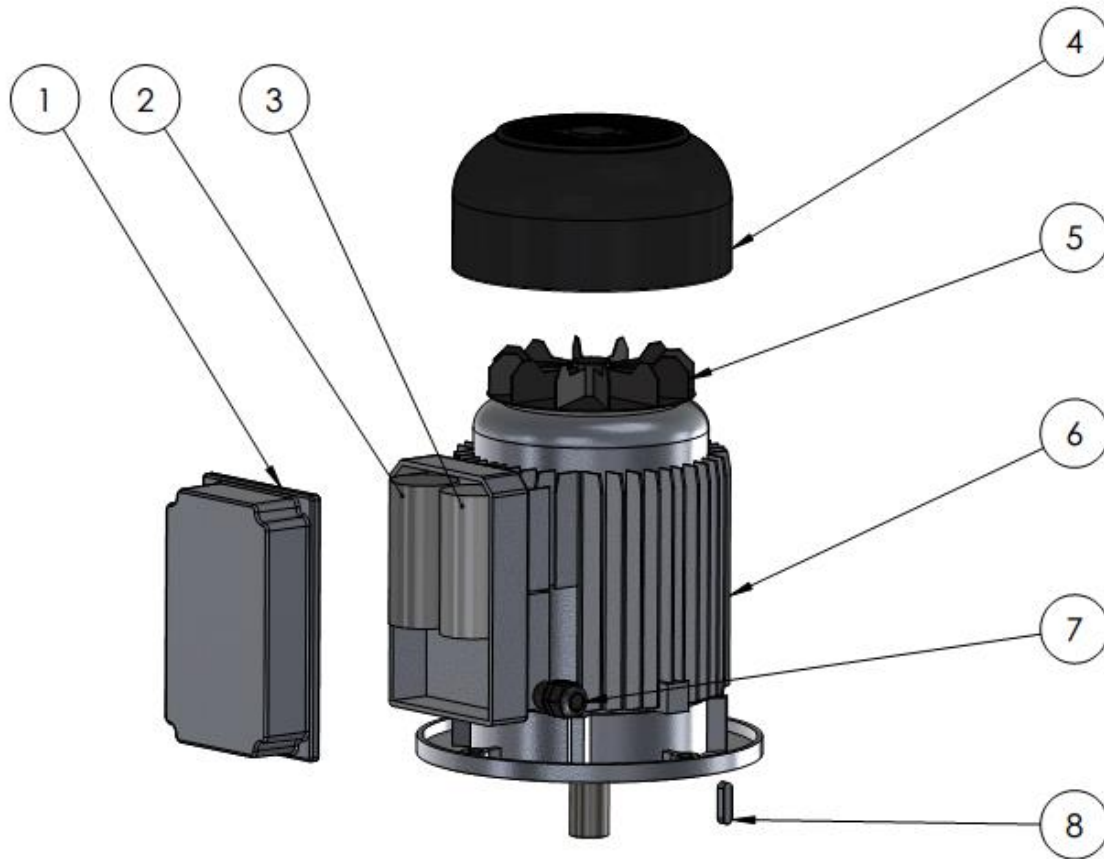
Parts Diagram - Spider Coupling



ITEM NO.	PartNo	DESCRIPTION	QTY.
1	MET-090	Meteor 250 Spider Coupling Main Section	1
2	MET-093	Spider coupling Element 18mm Thick	1
3	MET-094	Spider coupling Element 15mm Thick	1
4	MET-091	Spider Coupling Blade Mount	1
5	FS-308	Bolt M14 X 40 ZP	1
6	F3-319	M14 Spring Washer	1
7	MET-095	Spider coupling Element 10mm Thick	1
8	MET-092	Spider Coupling Stainless Retainer Plate	1
9	F3-230	M6 X 10 Socket Head Cap Screw	1

Meteor 250 MkII

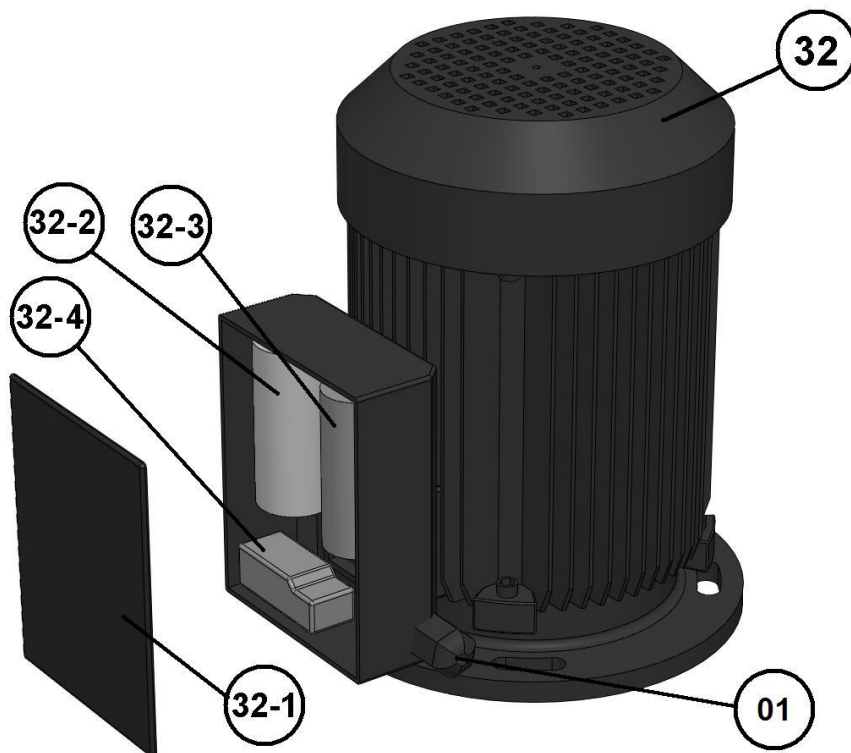
Parts Diagram - Ravel Motor



ITEM NO.	Part Number	Description	QTY
1	MET-126	Motor Capacitor Box Lid	1
2	MET-120	Ravel Motor Start Cap	1
3	MET-122	Ravel Motor Run Cap 65Uf	1
4	MET-125	Ravel Motor Fan Cover	1
5	MET-124	Ravel motor Fan	1
6	MET-032	Ravel Motor 2.2 Kw 4 P	1
7	G3-036	GlandM20	1
8	MET-066	Key Half Length 8X7	1

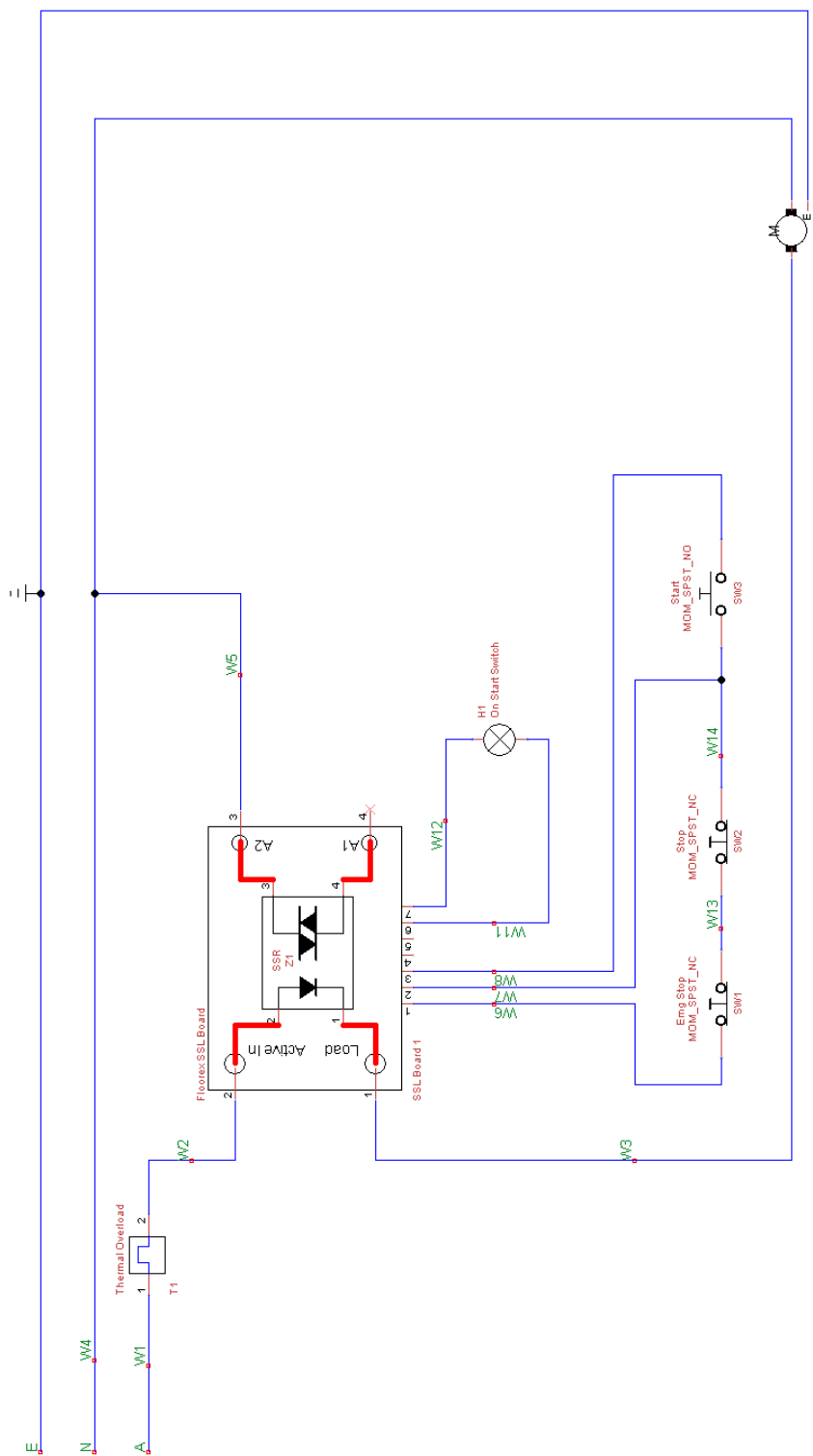
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Parts Diagram - Lafert motor (If Fitted)



Meteor 250 MkII

Wiring Diagram



Title	Meteor 250 MkII Wiring
Author	
File	Floorex Products
Document	
File	Wiring Diagrams\Meteor250MkII Wiring Diagram.dsn
Revision	3.0
Date	07-01-2013
Sheets	1 of 1

Meteor 250 Mkl

Meteor 250 MkII



Floorex Products

Your complete supplier
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- Diamond Tooling
- Floor Scrapers
- Coating application

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