

METEOR 250 Generation3

SAFETY & OPERATORS MANUAL

& PARTS LISTING

CAUTION: Read the instruction manual before using the appliance.



Meteor 250 G3

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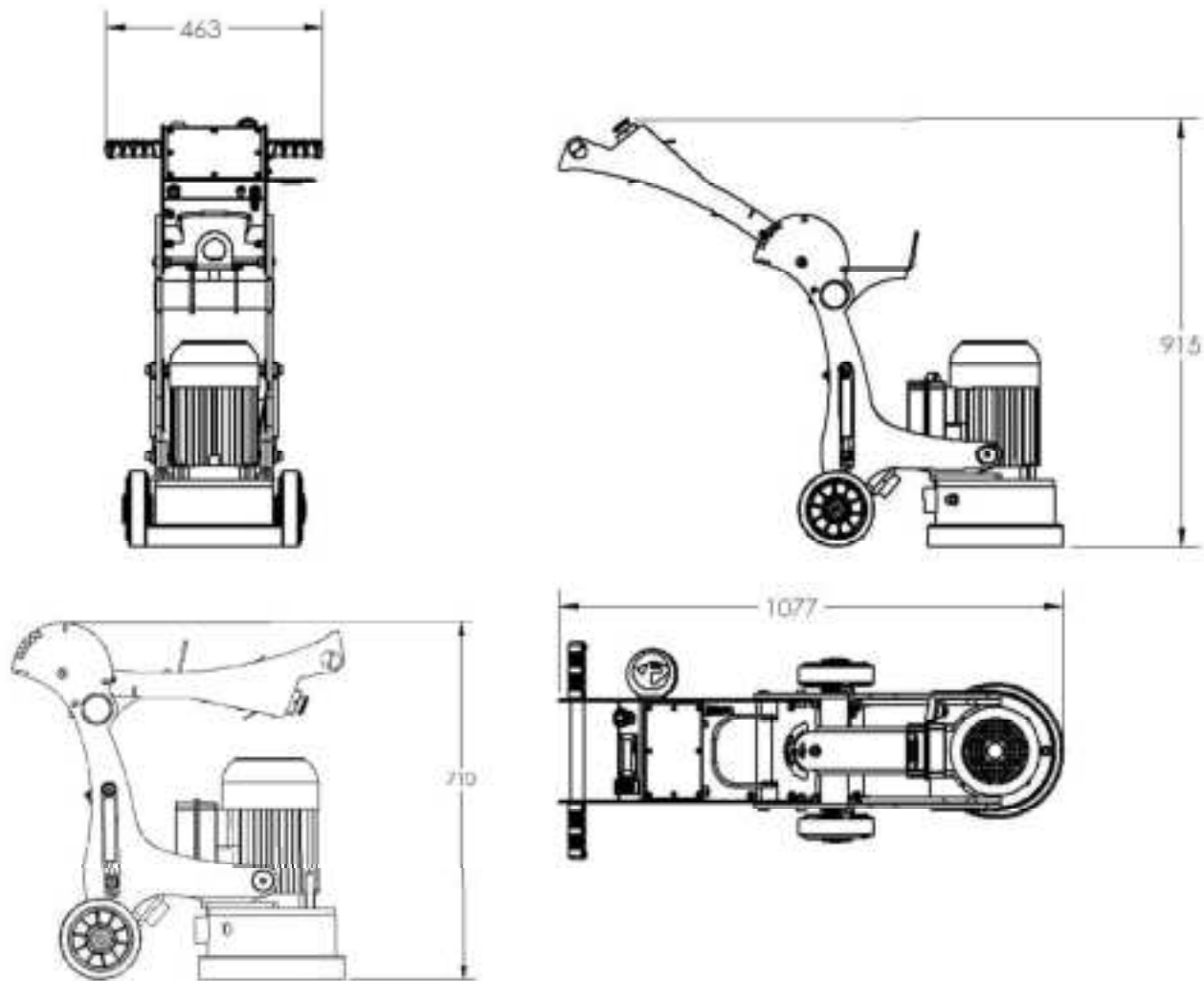
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This machine is designed to operate with the wheels in contact with the floor at all times.
Do not operate with the wheels off the floor.

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Specifications

Meteor 250	
Weight	61kg
Dimensions	463 x 915 x 1077 (Width x Height x Length)
Rated Voltage	230 Volt 50 Hz
Rated Watts	2200W
Grinding Path	250mm



Meteor 250 G3

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.

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Safety instructions

12. Do not modify machine in any way. Only use genuine METEOR 250 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. (other than under the shroud)
16. Do not operate METEOR 250 with any guards, shrouds, 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.
21. **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.

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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 and using the spanner (supplied) to loosen the nut on the shaft, **(Do not engage this button when shaft is rotating).**
8. Install appropriate tooling into the machine. Only use genuine METEOR 250 tooling. Failure to comply could result in bodily injury.
9. Tighten the Blade using the Spanner and the Lock button as above. Tighten firmly.
10. Spin the blade by hand to double check it is fitted properly and spinning true.
11. Tooling fitted to this machine must not exceed 35mm 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.

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Operating instructions

12. Tilt machine back onto the disk and lock handle into the best position in the operate mode for the operator comfort. (See Handle Positions)
13. 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).
14. 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.
15. 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. Alternatively, water spray using the supplied water connection point can be used to suppress dust.
16. 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.
17. Ensure machine is on a level surface and handle is not folded (see Handle Positions).
18. Switch on the dust extractor or water spray.
19. Hold the handles firmly and switch the machine on by pushing the green button.
20. 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 when constant tripping occurs, VOIDS THE WARRANTY!**

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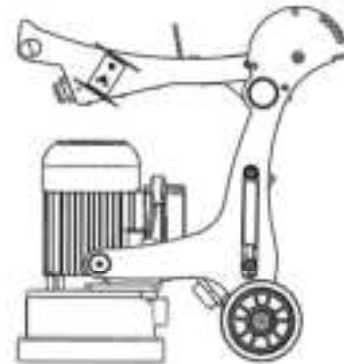
Operating instructions

21. 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.**
22. 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.
23. 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.
24. See the chart on page 10 for tips on how to grind faster on tough concrete and other ways problems can be rectified.

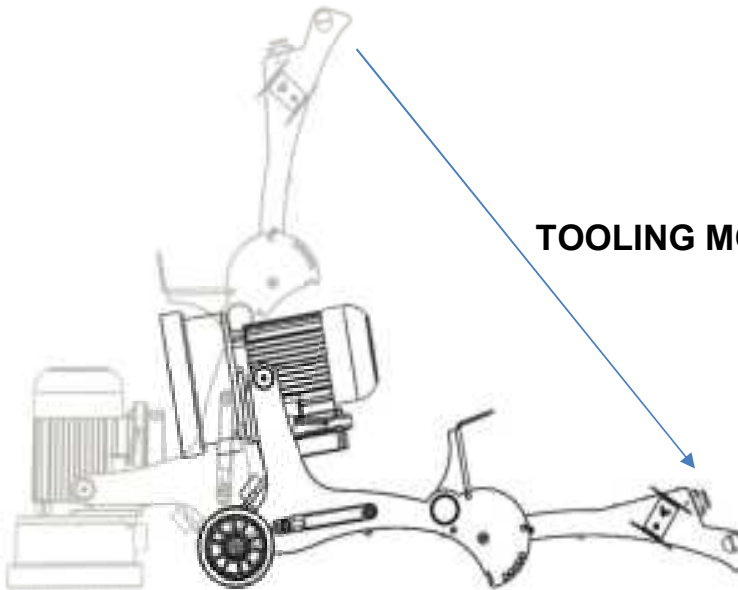
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Handle positions

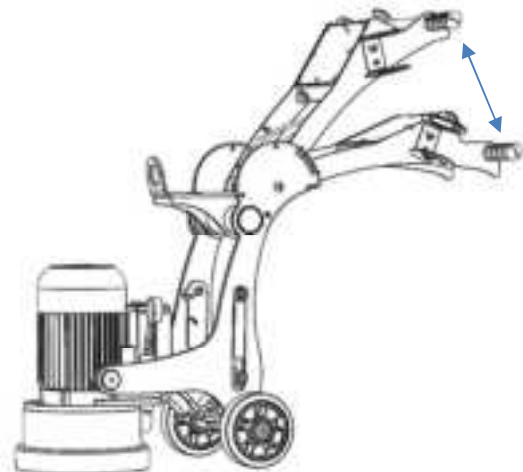
STORAGE AND LIFTING MODE



TOOLING MODE



OPERATING MODES



Meteor 250 G3

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 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 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.

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Problem solving

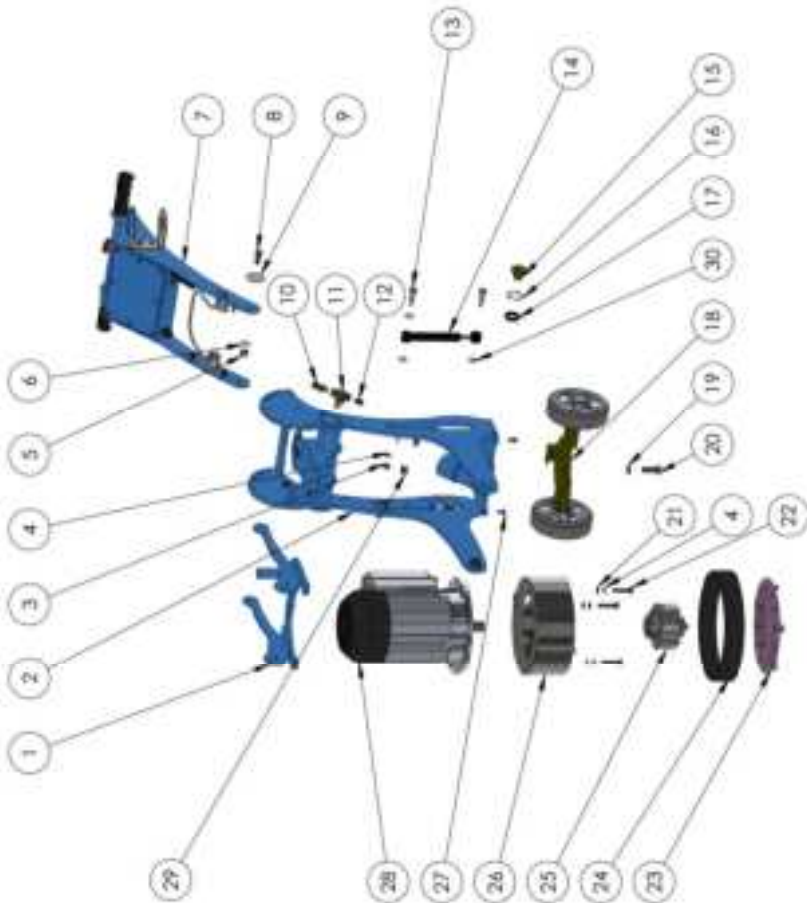
Diamond Grinding has many variables. When you understand some of these, you can solve many problems without a lot of bother and expense.

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.

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Parts Diagram – Main

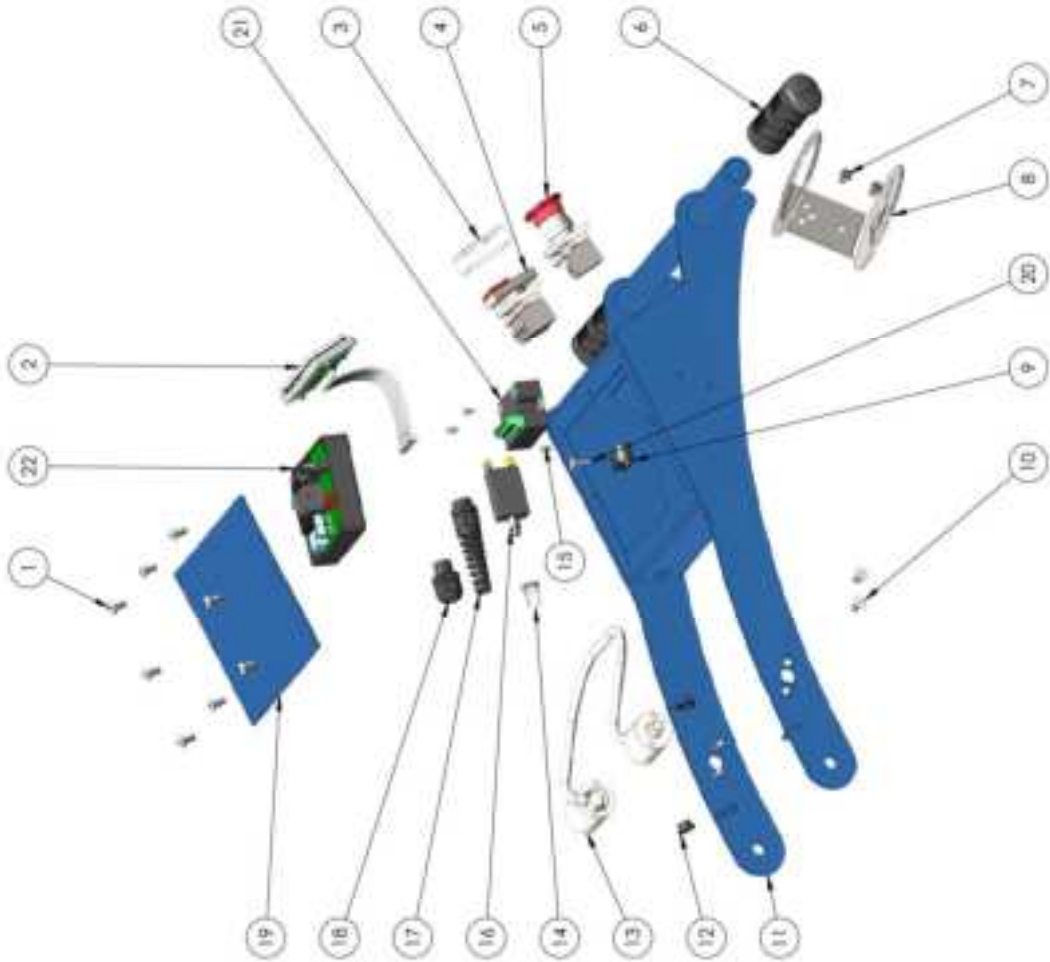
ITEM NO.	PartNo	DESCRIPTION	QTY
1	MET-302	Motor G3 Motor Chassis	1
2	MET-301	Motor 250 G3 Main Chassis	1
3	PS-345	M10 Standard Nut	2
4	PS-317	M10 Spring Washer	5
5	PS-366	M12 Nylon Nut	2
6	PS-333	M12 Standard Washer	6
7	See Detail	Motor Generation3 Handle Complete	1
8	PS-223	12 X 30 Button Head	2
9	MET-364	Motor Gen3 Handle Spacer Stem 50X12X1mm	2
10	MET-063	Brass Tap adapter	1
11	G3-153	Ball Valve 1/4 Butterfly	1
12	G3-154	1/4" male X 6mm Push in Fitting for Nylon Tube	1
13	PS-021	M10 Shoulder Bolt 12x25mm	4
14	G3-271	Damper For Motor G3	2
15	MET-342	Motor Chassis Pivot Nut	2
16	MET-340	Motor 250 Generation3 Pivot Spacer Washer	2
17	MET-343	Motor 250 Generation3 Pivot Bush	2
18	See Detail	Motor 250 G3 Axle Assembly	1
19	PS-319	M14 Spring Washer	1
20	PS-308	M14 X 40 Hex Head Set Screw	1
21	PS-332	M10 Standard Washer	3
22	PS-288	M10 X 45 Hex Head Set Screw	3
23	5710-X06016	ST 10 Inch X 6 X Segment	1
24	MET-330	Motor 250 G3 Shroud 48mm Deep	1
25	See Detail	Motor Generation3 Coupling	1
26	See Detail	Motor 250 G3 Shroud Assembly	1
27	PS-236	M8 X 12 Socket Head Cap Screw	2
28	MET-032	Motor Ravel 4 Pole 2.2 Kw Complete	1
29	PS-367	M14 Nylon Nut	1
30	PS-318	M12 Spring Washer	2



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Parts List – Handle

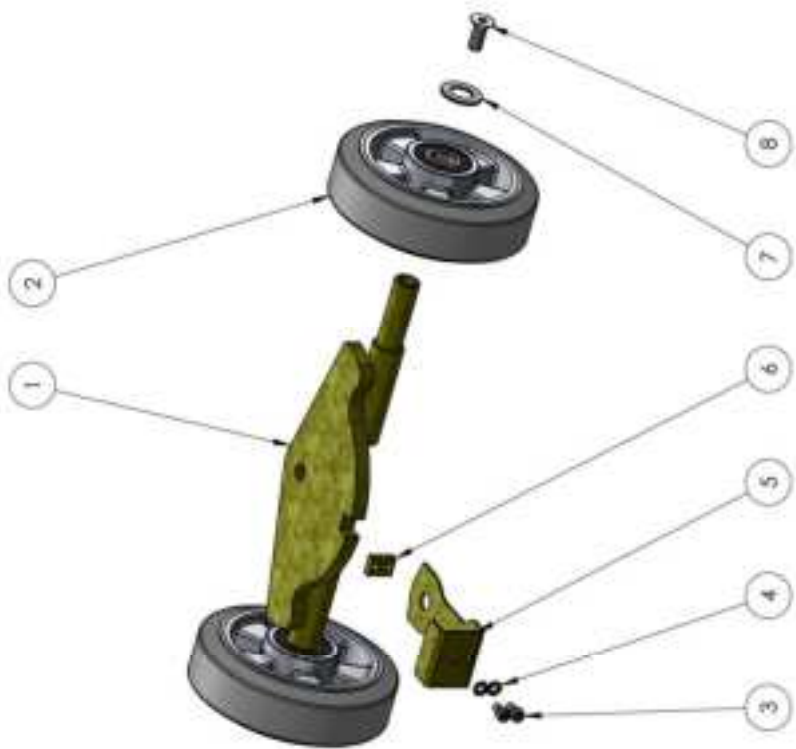
ITEM NO.	Part No	DESCRIPTION	QTY.
1	FS-365	Screw Fan Head M6 X 12 Phillips	8
2	See Detail	HVA Meter Screen Assembly	1
3	G3-029	Protective Boot for Start Stop Switch	1
4	G3-030	Start Stop Switch Complete	1
5	G3-031	Emergency Stop Switch Complete	1
6	G3-050	Rubber handle Grip	2
7	FS-230	M6 X 10 Socket Head Cap Screw	2
8	G3-199	Drink Holder	1
9	G3-034	Plastic P Clip 10mm	1
10	FS-495	Screw Countersunk Phillips M6 x 16 2P	4
11	MET-304	Meteor 250 G3 Handle Frame	1
12	MET-027	Rubber Grommet Quick Fit 12mm	2
13	See Detail	Meteor 250 Lock Mechanism Complete	1
14	G3-049	Overload Boot	1
15	FS-549	M4 X 6 Screw Fan Head Phillips	3
16	MET-003	Overload 13A	1
17	MET-005	Gland With Support PG11	1
18	G3-364	Nylon Cable gland M16	1
19	MET-305	Meteor 250 G3 Control Box Lid	1
20	FS-359	M5 x 16 Screw Fan Head Phillips	1
21	G3-032	SSR 80 A 240V	1
22	G3-440	HVA Version4	1



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Parts Diagram – Axle

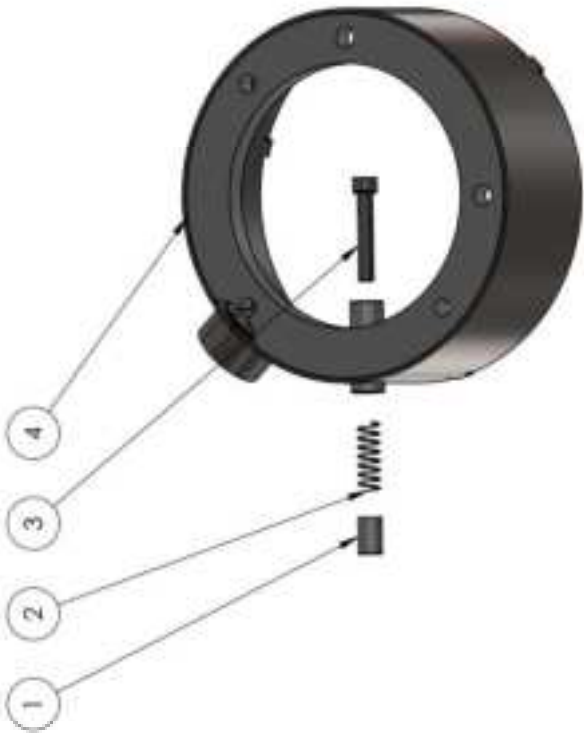
ITEM NO.	PartNo	DESCRIPTION	Default/ QTY.
1	MET-307	Meteor 250 G3 Axle Welded Assembly	1
2	MET-016	Wheel 160mm Grey Rubber 20mm ID	2
3	FS-230	M4 X 10 Socket Head Cap Screw	2
4	FS-315	M4 Spring Washer	2
5	MET-350	Meteor 250 Generation3 Swivel Lock Foot Plate	1
6	MET-306	Meteor 250 Generation3 Axle Lock Block	1
7	FS-335	M18 Standard Washer	2
8	FS-268	M10 X 25 Socket Head Countersunk Screw	2



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Parts Diagram - Shroud

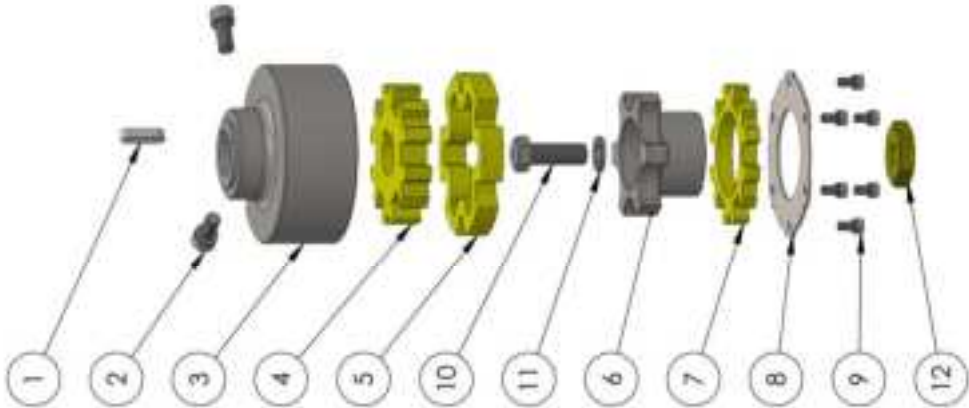
ITEM NO.	PartNo	DESCRIPTION	Default/ QTY.
1	MET-019	Plunger Lock Button	1
2	MET-020	Plunger Lock Spring	1
3	FS-251	10 X 60 Socket Head Cap Screw	1
4	MET-308	Meteor 250 G3 Shroud Stainless	1



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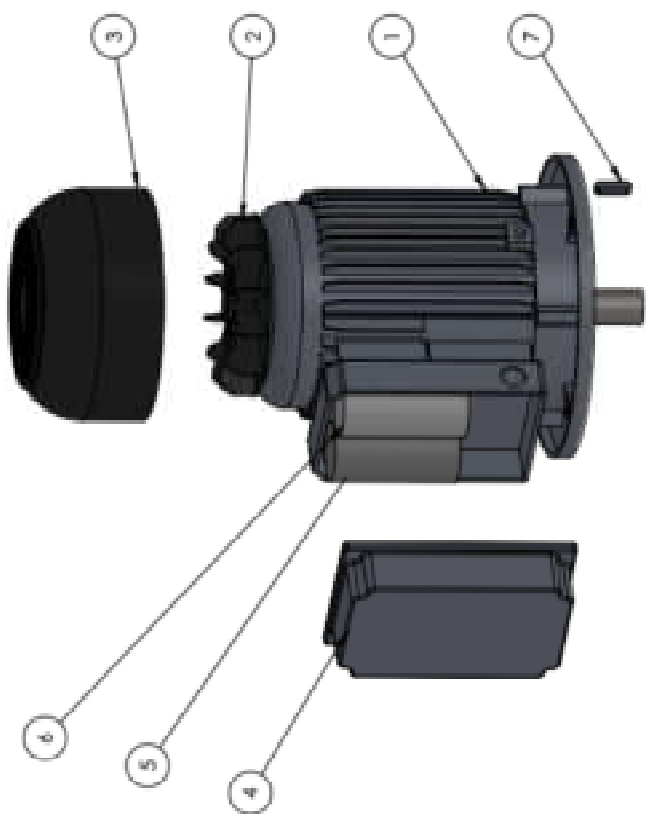
Parts Diagram – Coupling

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	MET-066	Key For Keyway 7X8 X 23mm	1
2	FS-245	10 X 20 Socket Head Cap Screw	2
3	MET-090	Spider Coupling Outer Stainless	1
4	MET-093	Spider Coupling Element 3	1
5	MET-094	Spider Coupling Element 2	1
6	MET-091	Spider Coupling Inner Stainless	1
7	MET-095	Spider Coupling Element 1	1
8	MET-092	Spider Coupling Stainless Retainer Plate	1
9	FS-230	M6 X 10 Socket Head Cap Screw	6
10	FS-308	M14 X 40 Hex Head Set Screw	1
11	FS-319	M14 Spring Washer	1
12	MET-024	Meteor 250 Blade Nut	1



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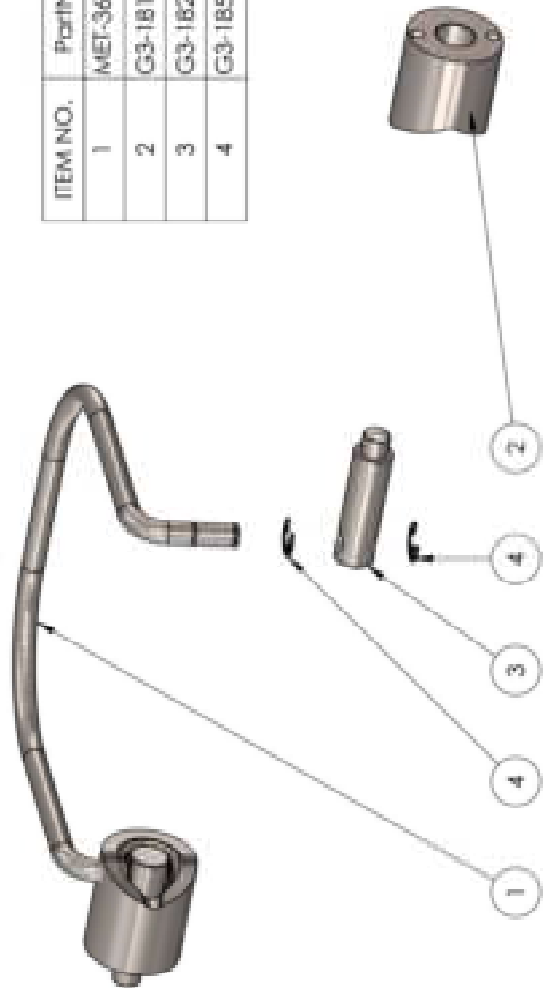
Parts Diagram – Motor



ITEM NO.	PartNo	DESCRIPTION
1	MET-032	Motor Ravel 4 Pole 2.2 Kw Complete
2	MET-124	Ravel 100 Frame Motor Cooling Fan
3	MET-125	Ravel 100 Frame Motor Cooling Fan Cover
4	MET-126	Ravel 100 Frame Motor Capacitor Box Lid
5	MET-120	Starting Capacitor 60uF For Ravel (with 3 Second Timer)
6	MET-122	Run Capacitor 45uF For Ravel 4 Pole Motor
7	MET-066	Key For Keyway 708 X 23mm

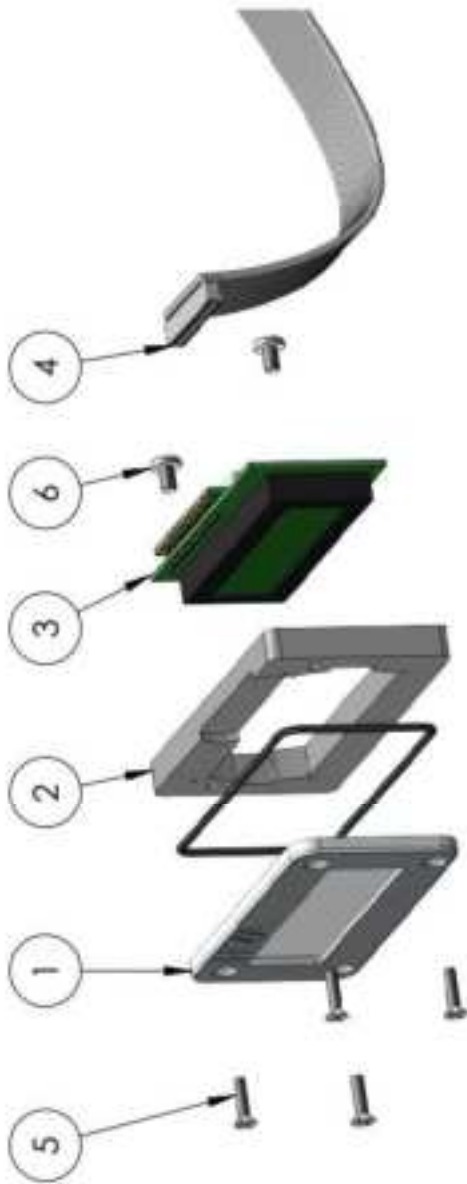
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Parts Diagram – Handle Lock

ITEM NO.	PartNo	DESCRIPTION	QTY.
1	MET-360	Meteor 250 Spring Handle with Circlip Grooves	1
2	G3-1B1	Lock Mechanism Cam	2
3	G3-1B2	Lock Mechanism Pin	2
4	G3-1B5	Circlip 8mm	4



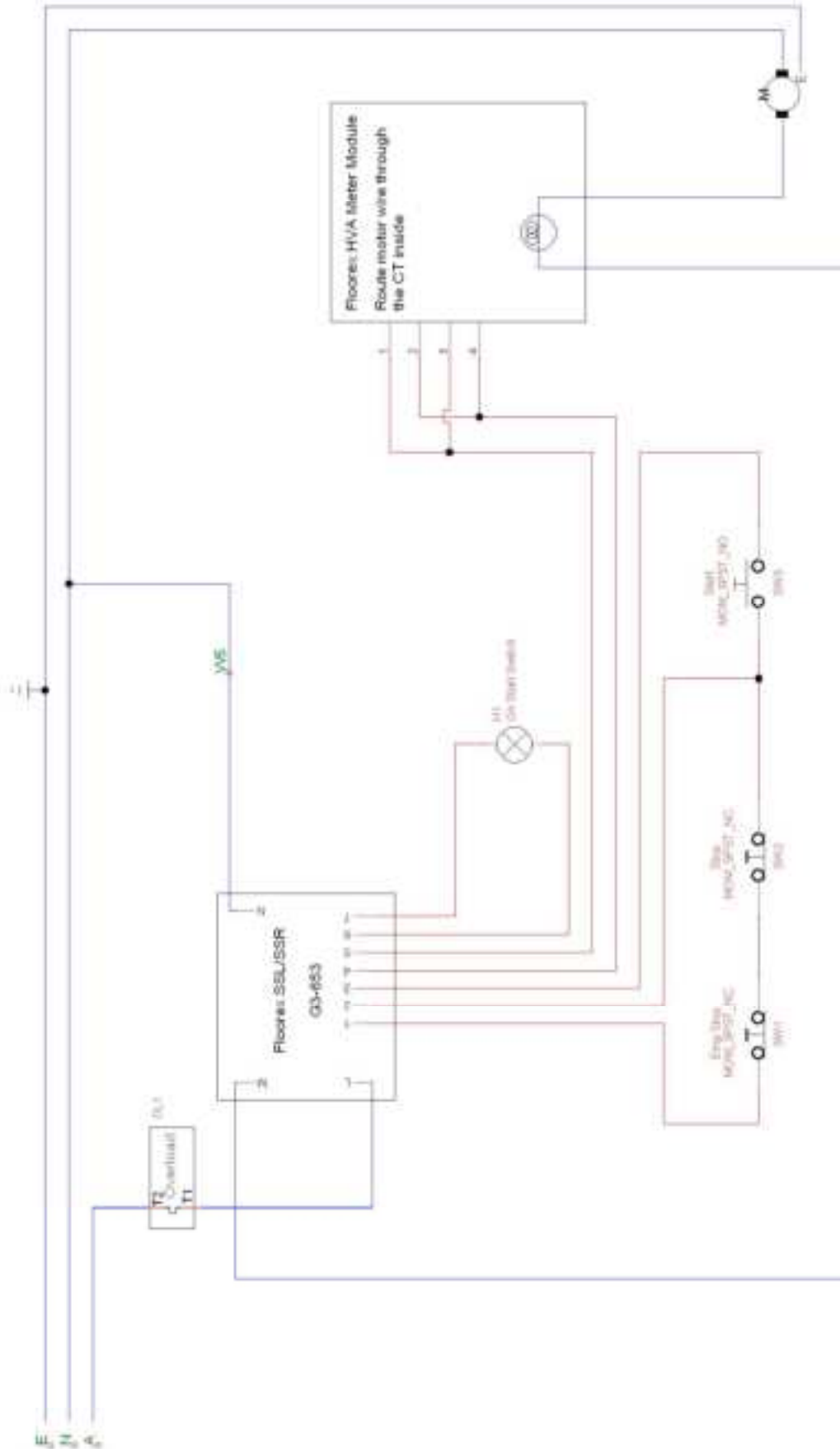
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Parts Diagram – Screen



ITEM NO.	PartNo	DESCRIPTION	RevisionC/QTY.
1	G3-445	HVA Meter Screen with Bezel & Seal	1
2	G3-045	Screen Mount Block PC	1
3	G3-046	HVA Display Screen	1
4	G3-039	HVA Meter Ribbon Cable	1
5	FS-265	M3 x 12 Flat head screw	4
6	FS-549	M4 X 6 Screw Pan Head Phillips	2
7	G3-444	HVA Meter Screen 2mmOD Sealing Ring	1

Meteor 250 G3 Wiring Diagram



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