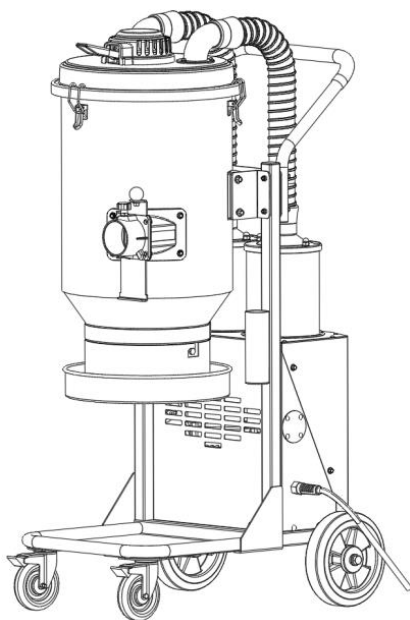




Operating Manual

Dust Extractor **G18/G22**



Read all instructions carefully before use

Dear Valued Customer,

Thank you for your choosing the TUSK single phase, 2 stage HEPA dust extractor!

We hope the machine will be to your satisfaction and meet your expectations.

Our team is committed to supplying the construction industry with the best quality products & service via continuous improvement and technical innovation.

This manual provides all the information and instructions needed to use and to service the machine. Please keep this manual with the machine and make sure that users read it prior to operating the vacuum. In case of loss of or damage to the manual, please do not hesitate to contact us for a new copy.

We would be glad to receive any suggestion to improve our products and service. For any question, please contact ISL Danyang Co., Ltd or email sales@islimport.com.

Notice!

- These instructions are for single phase, 2-stage HEPA dust Extractors G18/G22 only.
- The machines are designed to clean construction area and can be connected to powered hand tools, small/medium size grinders, etc. for dust extraction.
- Please pay attention to the safety regulations.
- Read the complete operating manual prior to using the machines.
- All repairs must be performed by a qualified service person. Use only the replacement parts supplied or specified by TUSK.
- Tusk shall not be held liable for any damage, loss, or injury resulting from the use of the machine for purposes other than those for which it is intended, as specified in this manual.

ISL Danyang Co., Ltd

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1 Unpacking

When unpacking the machine, make sure that the following accessories are included:

1) D38 floor cleaning tools kit, for G18 (P/N: 01-00029)



POS.	P/N	Description	Qty
1	21-00026	EVA hose D38x5m with hose cuffs	1
2	12-00062	D70/D38 reducer, zinc plated	1
3	12-00004	D38 2-pc wands, chrome	1
4	12-00005	D38x400 floor brush	1
5	69-00002	Brush strips, replacement	1

2) D50 anti-statics floor cleaning tools kit, for G22 (P/N: 01-00046)



POS.	P/N	Description	Qty
1	21-00217	EVA hose D50x7.5m with cuffs, anti-statics	1
2	12-00061	D70/D50 reducer, zinc plated	1
3	12-00088	D50 S wand, aluminum	1
4	12-00007	D50x430 floor brush, aluminum	1
5	69-00004	Brush strips, replacement	2
6	12-00036	D50 crevice tool, aluminum	1

If any of the above-mentioned parts is missing, please contact your local distributor or our sales representative.

Please dispose of packaging materials and used machine components in accordance with the local environmental disposal law or regulations. Always remember to recycle.

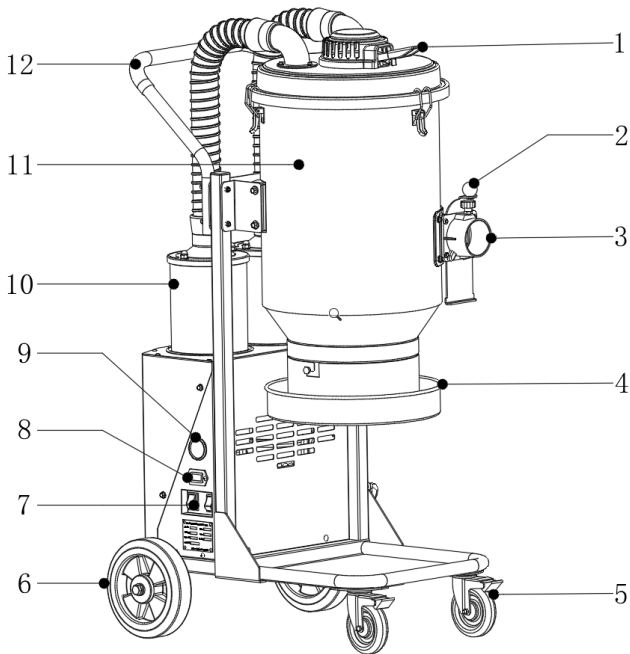
2 Intended use

The machine is designed for vacuuming and separating dry, non-combustible dust with an explosion limit value of 0.1mg/m³.

Notice!

- Do not use the machine outdoors or on wet surface, this machine is designed for indoor and dry use only.
- Do not expose machine to rain or moisture, store indoors only.
- Do not use to pick up any type of liquids.
- Do not use to pick up any flammable or combustible substances, or the substances which could cause explosions (fuels, solvents, etc.), don't use in an area where they may be present.
- Do not use to pick up any substances that is burning or smoking substances, such as cigarettes and matches, or hot ashes.
- TUSK shall not be held liable for any damage, loss, or injury resulting from the use of the machine for purposes other than those for which it is intended, as specified in this manual.

3 Identification of main parts



- | | | | |
|---|-----------------------------------|----|---------------------|
| 1 | filter purge handle | 7 | power switch |
| 2 | inlet open/close plate | 8 | hour meter |
| 3 | die-casting inlet unit | 9 | vacuum meter |
| 4 | continuous fold bag assy.. | 10 | HEPA chamber |
| 5 | 4" front swivel casters, lockable | 11 | main filter chamber |
| 6 | 8" wheels | 12 | ergonomic handle |

4 Technical data

data	unit	G18	
voltage	v	120	230
max. power	kw	1.7	1.7
	hp	2.2	2.2
current	A	13.8	7
max. air flow	m3/h	300	300
	cfm	176	176
max. vacuum	mbar	340	345
	inch	140	140
noise level	dB(a)	70	
dimensions with carton	cm	65x42x107	
	inch	25.6x16.5x42	
weight	kg	40.5	
	lbs	89	

data	unit	G22	
voltage	v	120	230
max. power	kw	2.4	2.4
	hp	3.2	3.2
current	A	16	8
max. air flow	m3/h	400	400
	cfm	236	236
max. vacuum	mbar	240	220
	inch	100	90
noise level	dB(a)	70	
dimensions with carton	cm	65x57.5x126	78x59x146
	inch	25.6x22.6x49.6	30.7x23.2x57.5
weight	kg	50.0	61.5
	lbs	110	136

5 Safety precautions

- Use of the machine by untrained and unauthorized persons is strictly forbidden.
- Read the complete instruction manual before operating your dust extractor. Pay particular attention to the safety regulations. Failure to observe the safety regulations could cause serious accidents and injuries.
- This machine is not intended for use by children or the persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
- Make sure the work area is firm, so the machine does not tip over. Risk of personal and material injury.
- Pay extra attention when using on slopes, ramps, or stairs.
- Make sure the parked machine remains stable by using the wheel brakes.
- Risk of pinching when handling the toggle fasteners.
- Keep children and unauthorized persons away from machine when in use.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts (except during a filter cleaning procedure).
- Make sure all the guards and protection devices are in place and that all the safety devices are in place and working properly.
- Do not open the vacuum container with the machine running.
- Do not wear loose or hanging clothing such as ties, scarves or torn garments that could become trapped and be sucked up by the cleaner.
- Do not use without dust bag and/or filters in place. Replace collection system and/or filters as described in manual.
- Do not modify machine from its original design.
- All repairs must be performed by a qualified service person. Use only manufacturer supplied or specified replacement parts.
- Do not operate the vacuum while under the influence of alcohol, drugs or any substance that may impair judgement or the ability to operate the machine safely.

6 Electric safety

- Improper connection of the equipment-grounding conductor can result in a risk of electrical shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded.
- Do not modify the plug provided with the machine. If it will not fit the outlet, have a proper outlet installed by a qualified electrician. (eg. 15 Amp plug).
- Before using the machine, make sure that the power & voltage corresponds with the voltage shown on the machines rating plate.
- Do not leave machine when plugged in. Unplug cord from outlet when not in use and before cleaning or servicing machine.
- Cables damaged through crushing or splitting can be dangerous if used and should be replaced immediately. Risk of personal injury.
- Do not use with a damaged cord or plug. If the machine is not working as it should, has been dropped, damaged, left outdoors or dropped in water, make sure it is repaired by a qualified person.
- Do not pull or carry by the cord, use the cord as handle, close a door on the cord, or pull the cord around sharp edges or corners. Do not run the machine over the cord. Keep the cord away from heated surfaces.
- Do not unplug by pulling on the cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or machine with wet hands.
- Regularly inspect the cord and plug for damage. If the cord is damaged, it must be replaced by a qualified person to avoid personal injury.
- Turn off all controls before unplugging.
- If using an extension cord, make sure the cord rating is suitable for this machine.
- Connect to a properly grounded outlet only. See grounding instructions.

7 Grounding instructions

The dust extractor must be grounded. If a dust extractor malfunctions or breakdowns, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. The dust extractor is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

8 Service

- When cleaning and servicing the machine, you must switch off the machine and remove the plug from the outlet.
- Don't clean the machine with a high-pressure cleaner.
- Before moving the machine from the work area, the machine must be cleaned.
- Proper personnel protective equipment must be used while replacing the main filter or the HEPA filter. If possible, use a special suitable room.
- All parts which are contaminated after service must be properly disposed of in plastic bags according to all regulations.
- If the machine must be used for other purposes, it is extremely important that the machine is cleaned, to avoid the spread of hazardous dust.
- Do not puncture the HEPA filter. Risk of dust dispersion.

9 Operating Instructions

1) Vacuuming process

Before starting a vacuuming process,

- make sure the machine is properly connected to a grinder or a floor tool via the provided hose and fittings.
- check the power cable and the plugs are in a good condition.
- make sure the power voltage corresponds to that on the rating plate and correctly connect the power plug to a power socket

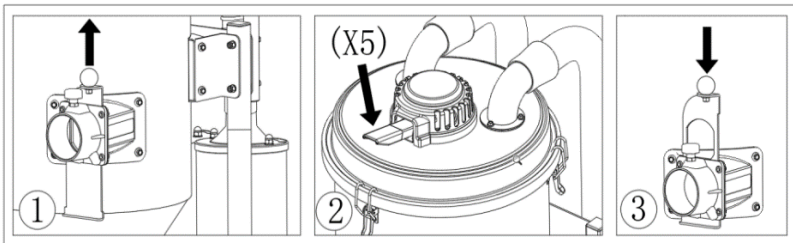
Turn on the **power switch** to start a vacuuming process.

During the vacuuming process, dust-laden air is sucked through the flexible hose and inlet at a high speed. The air is then slowed down by the cyclone, and coarse dust particles are separated out partly by centrifugal force and partly by gravity. Air and finer particles pass through the main filter at the first and the HEPA filter at the final stage where separation is made.

2) Filter cleaning process

The machine is designed for filter cleaning by reverse air "jet-pulse".

The filter must be cleaned from time to time. This must be done before changing the bag collection system and should also be done when work is completed or whenever there is a poor suction.



Filter cleaning procedure:

- Cover the inlet by lifting the inlet open/close plate and let the machine build up vacuum for 4 to 5 seconds,
- Quickly push down the filter cleaning handle and release it. Repeat the procedure five times. It is important to let the machine rebuild the vacuum in between every repetition,
- Open the inlet again by pushing down the inlet open/close plate.

If suction remains poor, the conical main filter needs to be replaced. If suction remains poor afterwards, the HEPA filters need to be replaced. See instructions in chapter 10 **Filter change**.

3) Dust storage and release

The separated dust accumulates in the conic bottom during the vacuuming process, and it drops through the bottom flap into the plastic bag when the machine is switched off. In some extreme cases the adhesive ability of the dust must be broken manually. This can be done by hitting the dust through the bag or tapping the tank using i.e. a rubber hammer.

4) Dust collecting and bagging

The machine is equipped with a continuous fold bag system for effective dust collecting and bagging. The supplied fold bag is a 22 m long plastic tube that will be divided into individual bags using the zip ties attached with the machine.

To assemble a new fold bag:

- Release the belt holding the last bag and take off the bag holder.
- Put in a new fold bag & pull out the inner end upwards.
- Assemble the holder onto the machine and strap the opening facing upwards with the belt.
- Pull down the outside end and close it by using a zip tie.

Before changing a fold bag or a regular bag, make sure the filter cleaning cycle has been completed.

10 Filter change

Unhealthy dust can be spread during filter change. Accordingly, the user should wear protective glasses, protective gloves, and a breathing mask conforming to protection class FFP3.



WARNING! Remember to switch off the machine and pull the plug out of the outlet before servicing.

1) Change of main filter

- Loosen the 3 hooks and remove the top cover. Take out a new filter from its bag. Lift out the used filter from its chamber and place it gently into the filter bag. This bag must be closed and disposed properly.
- Insert a new filter.
- Put back the top head and close the 3 hooks properly.

IMPORTANT! If you are removing the main filter to clean it. Hitting the filter with force or use of compressed air will destroy the filter. It can handle water, but high-pressure water cleaning will destroy it.

2) Change of HEPA filter

- Loosen the 2 nuts on each filter cover. Take out a new filter from its bag. Lift out the used HEPA filter from its chamber and place it gently into the filter bag. This bag must be closed and disposed properly.
- Insert a new filter to the filter chamber.
- Put back the filter cover and close the 2 nuts properly.

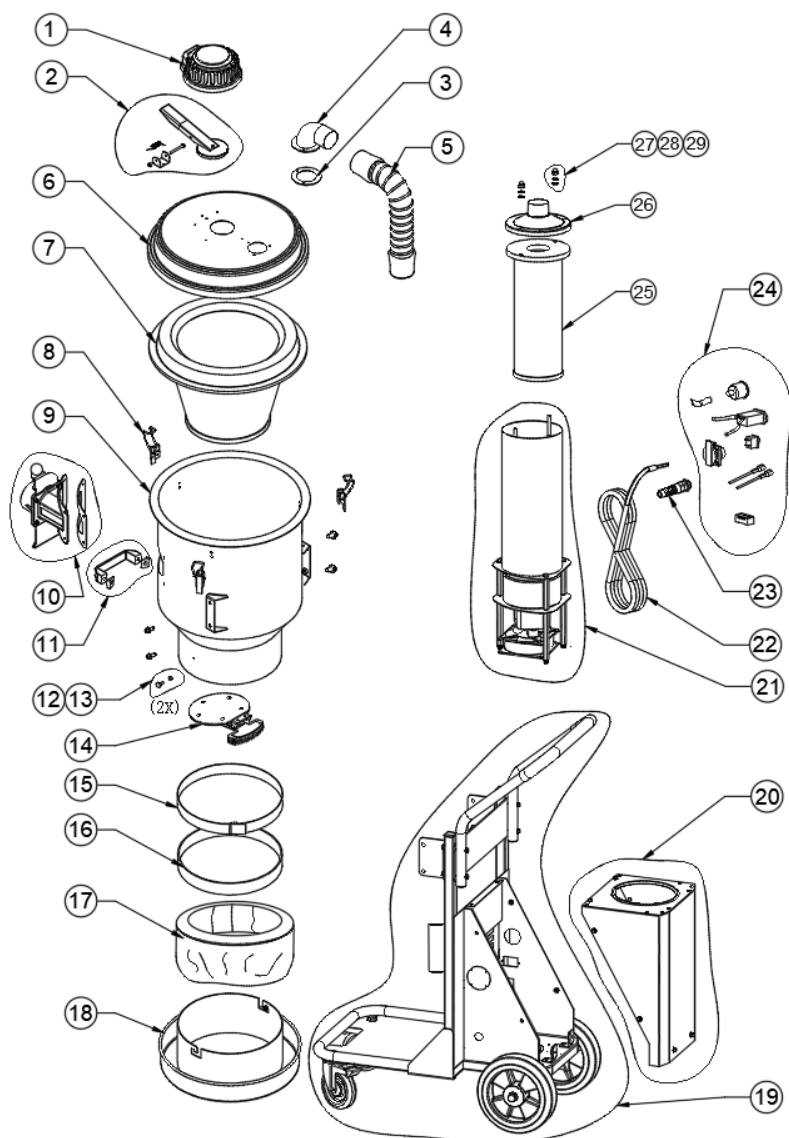
IMPORTANT! HEPA filters can't be cleaned, trying this might destroy it. When installing the replacement filter, make sure not touch the inside of the filter. Any kind of force/damage on the inside of filter media will destroy the new filter.

11 Problem solving

The machine is designed and manufactured specially for concrete dust extraction. Its filter, seals, attachments, and fittings are customized or selected specifically for the applications. Please note that the machine must be protected from knocks and blows. The operator and service personnel must treat the machine with care for it to work correctly for an expected life span.

problem	cause	solution
Motor fails to start	No power	Check power supply. Make sure power cable and plugs are in a good condition and properly connected. Check the power switch is in a good condition and properly connected.
Motor stops shortly after start	Circuit breaker	Connect to a correct amperage circuit breaker
	Short circuit in cable/machine	Contact electrician
Motor runs but with no suction	Hose not connected	Connect hose
	Hose clogged or blocked	Clean hose
	No dust collection bag	Fit dust collection system
Motor runs but with a poor suction	Hole in hose	Replace hose
	Filter clogged	Clean filter or replace filter
	Loose top cover	Make an adjustment of hooks or top cover
	Defective seals or gaskets	Replace defective seals or gaskets
Dust leaks out	Hole in hose	Replace the defective hose
	Damaged filter	Replace the damaged filter
	Poor sealed filters	Readjust the filter seating and seals.
Machine is extra noisy	various causes	Consult the technical support agent or order a service

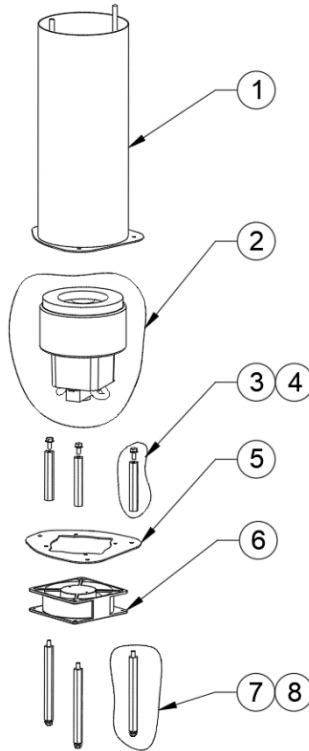
12 Exploded view and part list G18



POS.	P/N	Description	Qty
1	01-00050	Cover kit	1
2	01-00049	Purge handle kit	1
3	63-00004	Bend connector seal	1
4	31-00027	D50 bend connector	1
5	69-00005	D50x360 hose with fittings, anti-statics	1
6	31-00018	Top cover	1
7	61-00001	Conical filter G18	1
8	01-00009	Hook 95 kit	3
9	31-00004	Main filter chamber	1
10	01-00008	D70 inlet assy.	1
11	01-00062	Hand holder kit	1
12	51-E0020	Key M6	2
13	51-B0032	Anti-skid nut M6	2
14	01-00010	Flap assy.	1
15	59-00006	Packing belt	1
16	63-00007	Anti-skid ring	1
17	64-00002	Drop-down fold bag	1
18	31-00019	Fold bag holder	1
20	01-00005	Motor chamber cover kit	1
21	01-00025	G18 motor complete assy, 120v**	1
21	01-00026	G18 motor complete assy, 230v**	1
22	69-00056	Power cord 14AWGx8m, NEMA5-15P (G18/120v)	1
22	69-00067	Power cord 3G1.0x8m, plug 16A (Europe)	1
22	69-00070	Power cord 3G1.0x8m, pug 10A (Australia)	1
23	52-00008	Cable fix PG11	1
23	52-00009	Cable fix PG13.5 (for power cord 69-00056 only)	1
24	01-00004	Electronic components kit**	1
25	61-00004	HEPA filter	1
26	31-00017	HEPA cover	1
27	51-B0007	Semi-dome nut M8	2
28	51-C0005	Seal washer M8	2
29	51-C0017	Flat washer M8x16	2

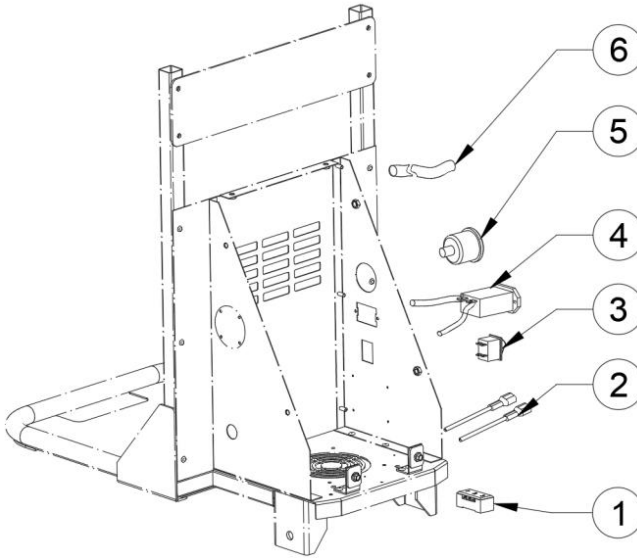
** refer to the followings for a breakdown of part list

- 1) G18 motor complete assy,120v (P/N: 01-00025)
G18 motor complete assy,230v (P/N: 01-00026)



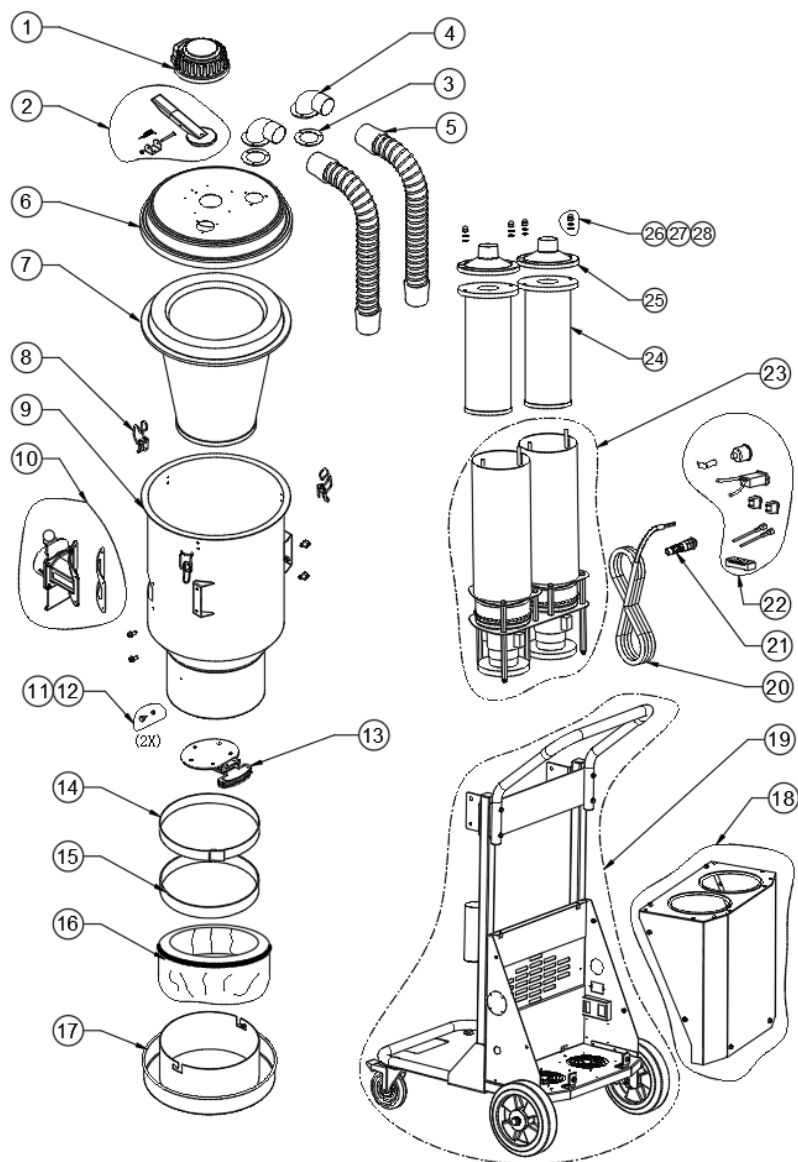
POS.	P/N	Description	Qty
1	31-00002	HEPA chamber	1
2	21-00290	Motor kit 120v 1.7kw	1
2	21-00291	Motor kit 230v 1.7kw	1
3	62-00009	Female spacer L84	3
4	51-A0008	Bolt M6x12	3
5	31-00003	Motor support	1
6	01-00028	Cooling fan kit	1
7	62-00008	Male spacer L128.5	3
8	51-B0002	Nut M6	3

2) Electronic components kit (P/N: 01-00004)



POS.	P/N	Description	Qty
1	01-00019	Terminal block TB1503 kit	1
2	n/a	Wiring cable kit	1
3	52-00003	Power switch	1
4	52-00004	Hour meter	1
5	01-00022	Vacuum meter kit	1
6	44-00017	Air pipe PVC D6x130	1

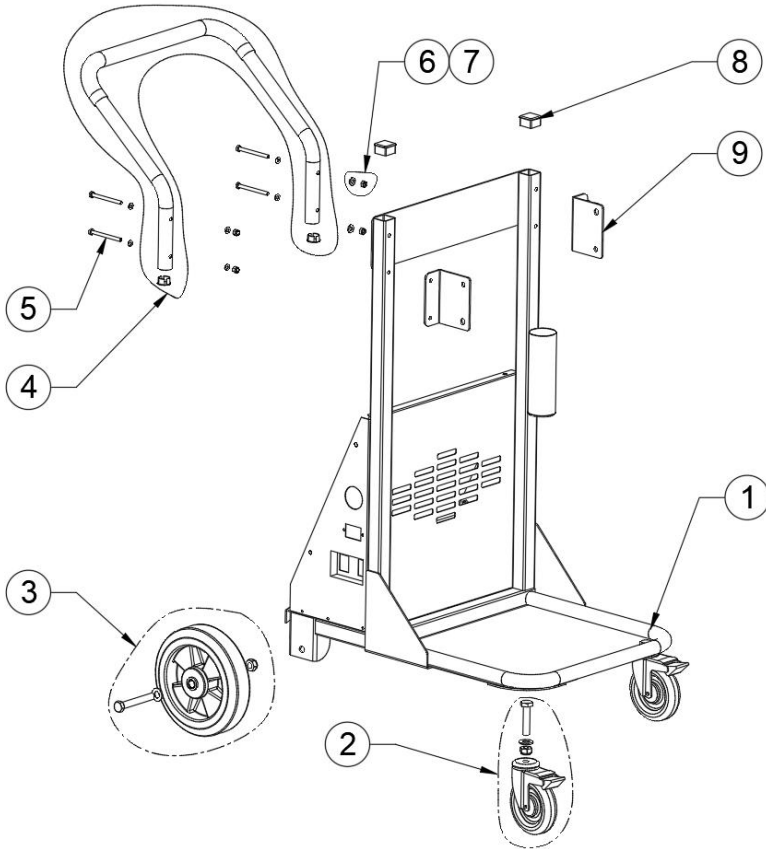
13 Exploded view and part list G22



POS.	P/N	Description	Qty
1	01-00050	Cover kit	1
2	01-00049	Purge handle kit	1
3	63-00004	Bend connector seal	2
4	31-00027	D50 bend connector	2
5	69-00006	D50x550 hose with fittings	2
6	31-00053	Top cover	1
7	61-00002	Conical filter G22	1
8	01-00009	Hook 95 kit	3
9	31-00041	Main filter chamber	1
10	01-00008	D70 inlet assy.	1
11	51-E0020	Key M6	2
12	51-B0032	Anti-skid nut M6	2
13	01-00010	Flap assy.	1
14	59-00006	Packing belt	1
15	63-00007	Anti-skid ring	1
16	64-00002	Drop-down fold bag	1
17	31-00019	Fold bag holder	1
18	01-00069	Motor chamber cover kit	1
19	21-00031	G22 wagon frame assy.**	1
20	69-00067	Power cord 3G1.0x8m, plug 16A (G22/Eur.)	1
20	69-00070	Power cord 3G1.0x8m 10A (G22 Australia)	1
20	69-00073	Power cord 14awg NEMA5-20P (G22 US/CA)	1
21	52-00008	Cable fix PG11 (for 69-00067&69-00070 only)	1
21	52-00009	Cable fix PG13.5	1
22	01-00060	Electronic components kit**	1
23	01-00064	G22 motor complete assy, 120v**	1
23	01-00065	G22 motor complete assy, 230v**	1
24	61-00004	HEPA filter	2
25	31-00017	HEPA cover	2
26	51-B0007	Semi-dome nut M8	4
27	51-C0005	Seal washer M8	4
28	51-C0017	Flat washer M8x16	4

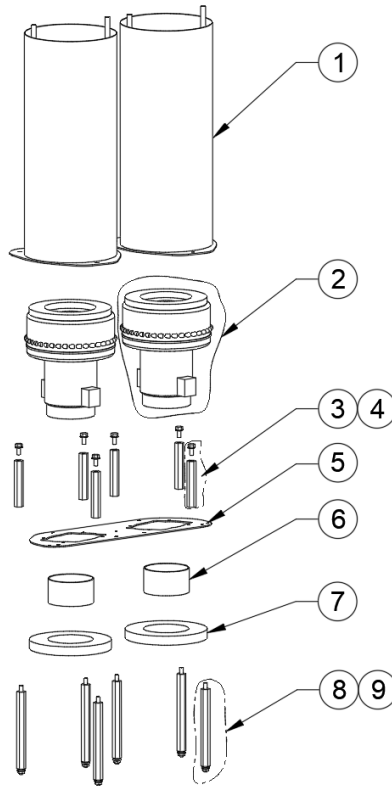
** refer to the followings for a breakdown of part list

1) G22 wagon frame assy. (P/N: 21-00031)



POS.	P/N	Description	Qty
1	31-00040	Wagon frame	1
2	01-00012	4" front wheel kit	2
3	01-00011	8" rear wheel kit	2
4	21-00018	Handle G22	1
5	51-A0001	Hex Bolts M6x70	4
6	51-B0032	Anti-skid nut M6	4
7	51-C0004	Flat washer M6	8
8	59-00001	Plastic insert 30x30	2
9	31-00052	Tank holder	2

- 2) G22 motor complete assy,120V (P/N: 01-00064)
G22 motor complete assy,230V (P/N: 01-00065)



POS.	P/N	Description	Qty
1	31-00002	HEPA chamber	2
2	21-00288	Motor kit 120v 1.2kw	2
2	21-00289	Motor kit 230v 1.2kw	2
3	51-A0008	Bolt M6x12	6
4	62-00007	Female spacer L76.5	6
5	31-00051	Motor support	1
6	64-00005	Acrylic tube	2
7	63-00011	Foam disc adhesive	2
8	62-00008	Male spacer L128.5	6
9	51-B0002	Nut M6	6