

from forest to final form®

OPERATING INSTRUCTIONS

MES303EH4S-S (FM350)
5HP DUST COLLECTOR
WITH THREE COTTON FILTER BAGS,
4560 m3/h, 3PH x 400 V, 50 Hz





Please keep this instruction manual for future reference.

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TECHNICAL DATA

Motor power	3750 Watt		
Motor speed	2950 rpm		
Voltage	3x 400 V, 50 Hz, 6 A		
Fan diameter	356 mm		
Inlet diameter	180 mm		
Number and diameter of intake holes	4x 100 mm		
Filter bag size diameter X height	500 mm x 1200 mm		
Collection bag size diameter X height	500 mm x 850 mm		
Filter bag area	2,302 x 3 m ²		
Collection bag volume	0,459 m ³		
Pressure drop (kPa) @50HZ	2,4 kPa (50Hz)		
Maximum capacity	4560 m ³ /h		
Noise	94,5 dB LpA		
Overall dimension	2184 mm x 582 mm x 2355 mm		
Packing size	1180 mm x 860 mm x 710 mm		
Weight net/gross	85/128 kg		

READ THIS MANUAL CAREFULLY BEFORE ASSEMBLY, TESTING AND OPERATING.

WARNING: DO NOT OPERATE THIS UNIT UNTIL THE PVC HOSE IS INSTALLED ONTO THE DUST INLET PORT



STANDARD SAFETY INSTRUCTIONS

- 1. Thoroughly read the instruction manual before operating your machine. Learn the applications, limitations and potential hazards of this machine. Keep manual in a safe, convenient place for future reference.
- 2. **Keep work area clean and well lighted.** Clutter and inadequate lighting invite potential hazards.
- 3. **Ground all tools.** If a machine is equipped with a three-prong plug, it must be plugged into a three hole electrical outlet or grounded extension cord. If using an adapter to aid in accommodating a two hole receptacle, ground using a screw to a known ground.
- 4. **Wear eye protection at all times.** Use safety glasses with side shields or safety goggles, meeting the national safety standards, while operating this machine.
- 5. **Avoid dangerous environments.** Do not operate this machine in wet or open flame environments. Airborne dust particles could cause an explosion and severe fire hazard.
- 6. Ensure all guards are securely in place and in working condition.
- 7. Make sure switch is in the "OFF" position before connecting power to machine.
- 8. **Keep work area clean;** free of clutter, grease, etc.
- 9. **Keep children and visitors away.** All visitors should be kept a safe distance away while operating unit.
- 10. **Childproof workshop** with padlocks, master switches or by removing starter keys.
- 11. Disconnect machine when cleaning, adjusting or servicing.
- 12. **Do not force tool.** The machine will do a safer and better job at the rate for which it was designed.
- 13. **Use correct tool.** Do not force machine or attachment to do a job for which it was not designed.
- 14. Wear proper apparel. Do not wear loose clothing, neckties, gloves, jewelry, etc. Indicates an imminently hazardous situation which, if not avoided, WILL result death or serious injury. Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury. It may also be used to alert against unsafe practices. This symbol is used to alert the user to useful information about proper operation of the equipment.



ADDITIONAL SAFETY INSTRUCTIONS FOR DUST COLLECTOR

- 1. **Do not use dust collector for anything except wood dust.** Materials such as liquids, metal shavings, metal dust, screws, glass, plastic or rock can cause sparks when coming into contact with any part of the collection system.
- 2. Ground your dust collector along all plastic components.
- 3. Do not place your hands, lumber or tools near inlet opening while machine is running or connected to power.
- 4. Always wear a respirator and safety glasses when removing, emptying or replacing collection bags. Secure bags tightly to dust collector to avoid bags from "blowing off".
- 5. Be aware that certain woods may cause an allergic reaction in people and animals, especially when exposed to fine dust. Make sure you know what type of wood dust you will be exposed to, the possibility of a allergic reaction and always wear an approved respirator.
- 6. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Then contact our service department or ask a qualified expert how the operation should be performed.
- 7. **Never use tools that are in poor condition.** Inspect dust collector for bent fins, dents, ripped bags and unusual sounds before connecting machine to power and operating. Correct any problems before use.
- 8. Never allow steel to come into contact with impeller. Impact with any hard material may result in sparks which may cause fire. Be mindful of any situation that results in a risk of fire.
- 9. **Habits good and bad are hard to break**. Develop good habits in your shop and safety will become second-nature to you.
- 15. **Remove adjusting keys and wrenches.** Before turning the machine on, make it a habit to check that all adjusting keys and wrenches have been removed.
- 16. Use proper extension cord.
- 17. **Keep proper footing and balance** at all times.
- 18. **Do not leave machine unattended.** Wait until it comes to a complete stop before leaving the area.
- 19. **Perform machine maintenance and care.** Follow lubrication and accessory attachment instructions in the manual.
- 20. **Keep machine away from open flame.** Operating machines near pilot lights and/or open flames creates a high risk if dust is dispersed in the area. Dust particles and an ignition source may cause an explosion. Do not operate the machine in high risk areas, including but not limited to, those mentioned above.



ASSEMBLY INSTRUCTIONS

1. Fit 4 support feet (1) to bottom of support legs using hex nut (2), put cross brace between these two support legs, fixing them by 4pcs hex bolt M8x12 and 4pcs washer. See Fig 1.

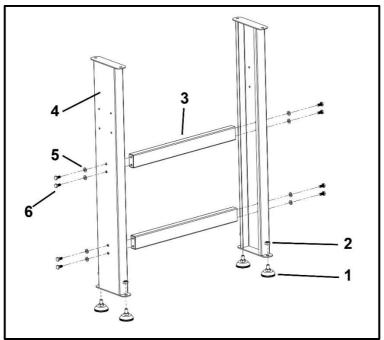


Fig. 1

2. Fix impellor housing (1) to two support legs (2) using 4pcs hex bolt M8x16 (4) and 4 washer (3). Remove 4pcs screws on switch box, mount on side surface of support legs using 4pcs cap screws M5X60(6) and hex nut M5 (7), then secure the switch. See Fig2

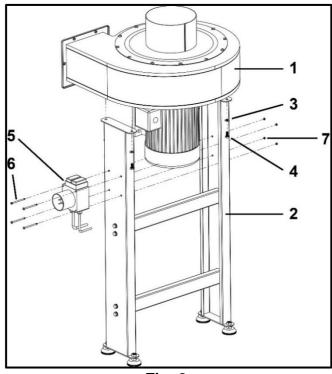


Fig. 2



3. Put front separator (1), middle separator (2) and rear separator (3) together, make sure gasket (4) are in correct position between separators, then fixing by using 8pcs hex bolt M8x16 and 8pcs washers. See Fig 3.

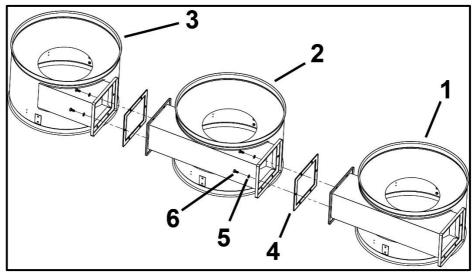


Fig. 3

4. Put connecting tubes (5) on two sides of connected separators (1), fixing front connecting tube using hex bolt M8X35 and washers, then fixing rear connecting tube together with upper bag support using hex bolt M8x35 and washers. See Fig 4.

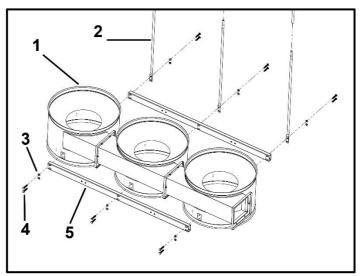


Fig. 4



5. Put 4 support tubes (5) on connecting tubes fixed on two sides of well assembled separators (7) using 8pcs hex bolt M8x65 (6) and 8pcs hex nut M8. Connect 4 support tubes by 2pcs cross braces (2) using 8pcs hex bolt M8x35 and washers.

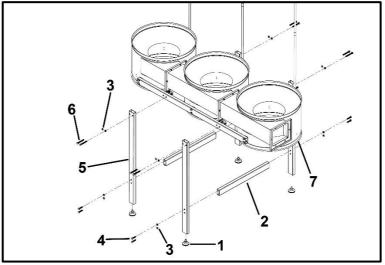


Fig. 5

6. Put the well fitted separators assembly together with well fitted impellor housing assembly using hex bolt M8X16 and washer. Make sure gasket (3) is in correct position before securing these two parts. Put inlet (6) on inlet cover. See Fig 6.

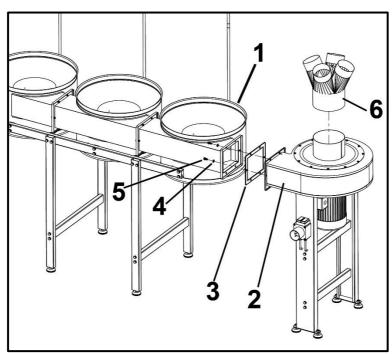


Fig. 6



7. Hang 3pcs filtration bags on upper bag support, and secure bags on separators with belt clamps. Hang 3pcs collection bags down on three separators securing by 3pcs belt clamps separately.

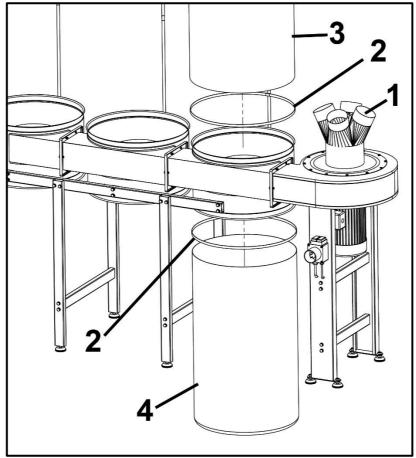


Fig. 7

8. After finishing all above-mentioned steps, check if all relevant bolts, nuts and screws are in correct position and then fix securely.

OPERATIONS

Once assembly is complete and adjustments are done to your satisfaction, you are ready to test run the machine.

Warning: Always wear safety glasses when operating Dust Collector. Failure to comply may result in serious personal injury.

Make sure the starting switch is off. Make sure all the fasteners and bag clamps are tight. Plug in the power cord. Push the start button. The dust collector should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises require that you turn off the machine, wait for it to stop working, unplug the machine, investigate and correct the problem before further operation.



Bag Changes

The lower bags on the dust collector should be emptied when it becomes 2/3 to 3/4 full.

- 1. Always wear a dust mask when removing and installing dust collection bags.
- 2. Shake the upper bags and let the dust inside settle for a few minutes.
- 3. Loosen the belt clamps holding the bags.
- 4. Take the bags off of the collector body and close up the opening.
- 5. Place a garbage bag over the opening of the collection bag. Invert three bags to empty.

MAINTENANCE

Warning: Disconnect power to the machine when performing any maintenance or repairs. Failure to do this may result in serious personal injury.

Regular periodic maintenance on your Dust Collector will ensure its optimum performance. Make a habit of inspecting your Dust Collector each time you use it. Check for the following conditions and repair or replace when necessary.

- 1. Loose mounting bolts.
- 2. Worn switch.
- 3. Worn or damaged cords and plugs.
- 4. Ripped or worn dust collection bags.
- 5. Any other conditions that could hamper the safe operation of this machine.

Lubrication

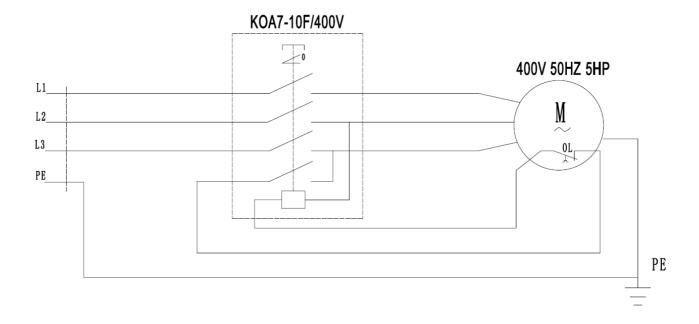
Since all bearings are shielded and permanently lubricated, simply leave them along until they need to be replaced. Do not lubricate them.

Cleaning

Make sure the dust collector motor remains clean and free of dust build up. Dust can cause heat to build up in the motor, reducing the life of the motor. It should be cleaned daily or every time the collection bags are emptied.

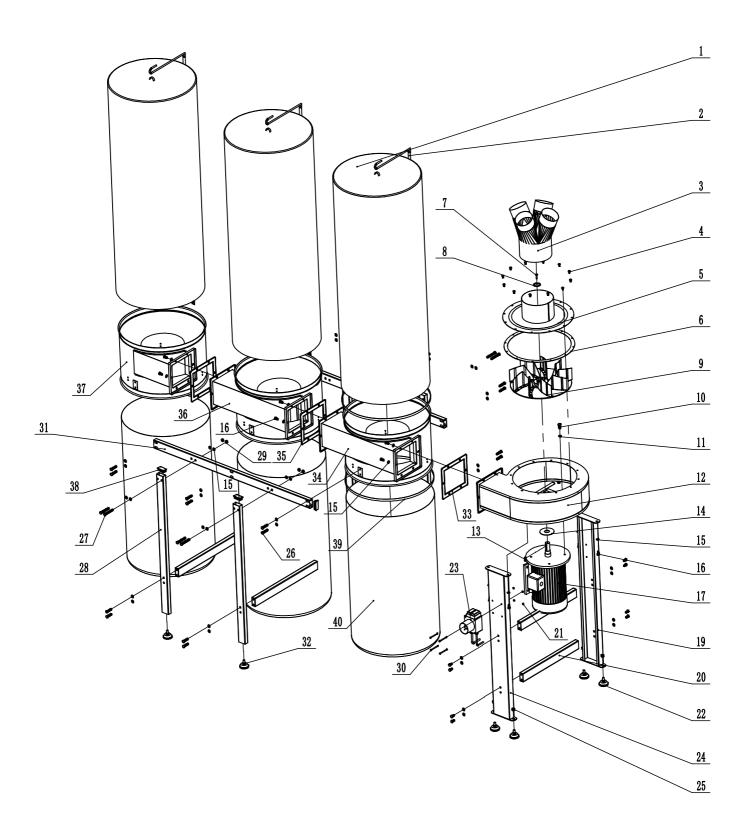


WIRING DIAGRAM





PARTS DIAGRAM





PARTS LIST

Part No.	Description	QTY	Part No.	Description	QTY
1	Filtration bag	3	21	Hex bolt M5	4
2	Upper bag support	3	22	Support foot	8
3	Inlet	1	23	Switch	1
4	Cap screw M6x12	12	24	Front support leg	1
5	Inlet cover	1	25	Hex nut M10	8
6	Gasket	1	26	Hex bolt M8x35	20
7	Screw M6x20	1	27	Hex bolt M8x65	8
8	Flat washer	1	28	Support tube	4
9	Impellor	1	29	Hex nut M8	8
10	Hex bolt M10x20	4	30	Screw M5x16	4
11	Lock washer 10	4	31	Connecting tube	2
12	Impellor housing	1	32	Hex nut M10	8
13	Pin 6x20	1	33	Gasket	1
14	Gasket	1	34	Front separator	1
15	Flat washer 8	54	35	Gasket	2
16	Hex bolt M8x16	18	36	Middle separator	1
17	Motor	1	37	Rear separator	1
18	Screw ST4.2x13	4	38	Rubber insert	8
19	Rear support leg	1	39	Clamp belt	6
20	Cross brace	1	40	Collection bag	3

EC declaration of conformity

according to EC Machinery Directive 2006/42/EC, Annex II, 1.A

Manufacturer: Laizhou Planet Machinery Co., Ltd.

Yutai West Street

Laizhou, Shandong 261400

P.R.C.

We, the undersigned, hereby declare that

- Commercial Name: Dust Collector
- Function: Suction Cleaning Device
- Item Number: MES103EH1S-S (FM300BC), MES203EH2S-S (FM300), MES303EH4S-S (FM350)
- No. of Manufacturer: FM300BC, FM300, FM350
- Serial Number:

the above-mentioned devices are in conformity with the following EC directives:

- EC Machinery Directive 2006/42/EC Annex I
- EC Electromagnetic Compatibility Directive 2014/30/UE Annex III

and meet the requirements of the following Harmonized Standards:

- EN 55014-1:2006+A1+A2
- EN 55014-1:2017
- EN 55014-2:1997+A1+A2
- EN 55014-2:2015
- EN 61000-3-2:2014
- EN 61000-3-11:2000
- EN 60335-1:2012+A11+A13+A1+A14+A2
- EN 60335-2-69:2012
- EN 62233:2008

We hereby confirm that a sample of the above-mentioned technical equipment has been tested and found to be compliant with the relevant requirements.

Notified Body: TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

EC type - examination certificate No.: AM 50460777; AE 50398634 0001

Place / Date / Authorized Person Signature

Tifle: