

EDHE

## Assembly manual



Spare part list + Assembling guideline

**EDHE**

Exhaust fan

# EDHE

## Assembly manual

Revision 1.3

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## WARNING

*All the components and spare parts MUST be stored in dry and clean environment.*

# Spare part list

# 1.

ED36HE

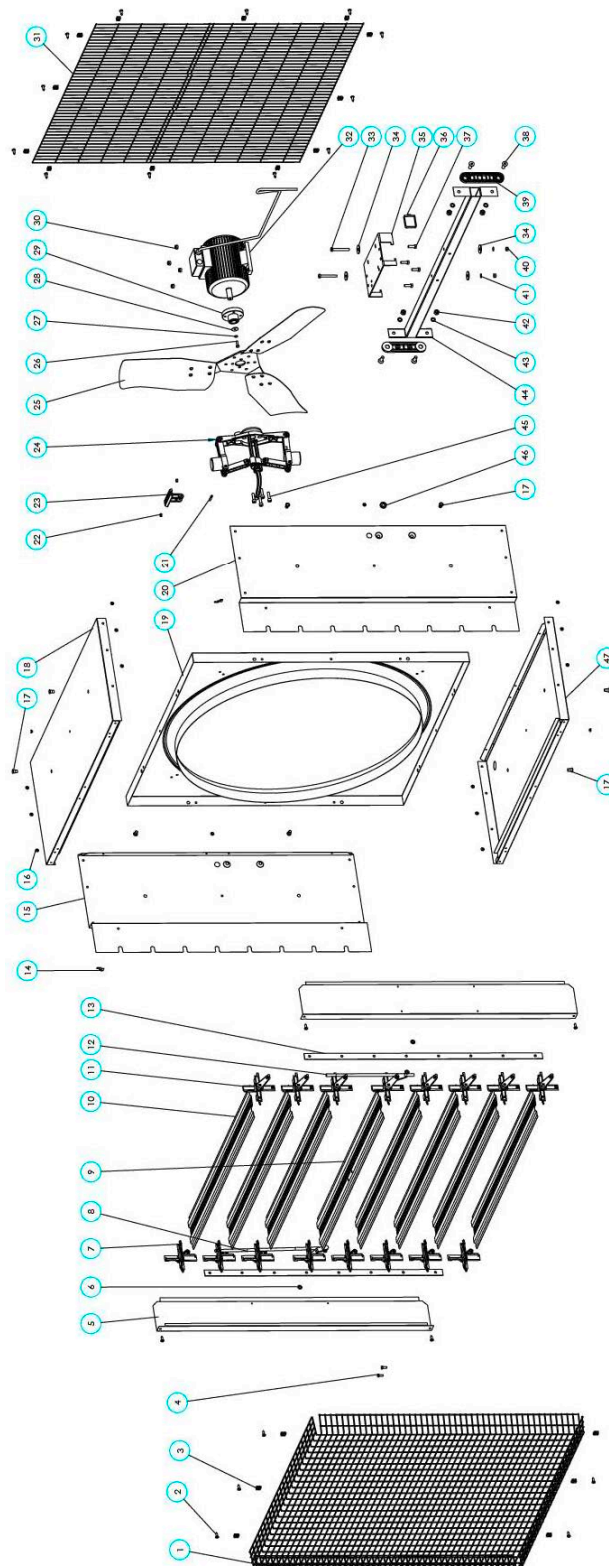
















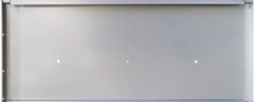


fig. 1

## Spare parts

Ref.	Picture	Description	Q.ty
1		PYRAMIDAL SAFETY MESH GUARD	1
2		Ø6,3×19 SELF-TAPPING SCREW	22
3		CLIP FOR SAFETY MESH GUARD	18
4		M6X16 HEX SCREW	2
5		COVER PLATE	2
7		LEFT BEARING	7
8		LEFT CENTRAL SHUTTER BEARING	1
9		CENTRAL SHUTTER BLADE	1

10		THIN SHUTTER BLADE	7
11		RIGHT BEARING	7
12		RIGHT CENTRAL SHUTTER BEARING	1
13		PLASTIC TIE ROD	2
14		HOOK FOR SPRING	2
15		LEFT SIDE PANEL	1
16		Ø6.4x8 POP UP RIVET	16
17		M8x17.5 THREADED BUSH	8
18		TOP PANEL	1

19		ORIFICE	1
20		RIGHT SIDE PANEL	1
21		KNURLED AXLE	1
22		M6 THIN HEX NUT	2
23		PLASTIC FORK	1
24		CENTRIFUGAL SYSTEM	1
25		3 BLADES PROPELLER	1
26		M6×20 HEX SCREW	1
27		Ø6 SPRING WASHER	1

28		Ø6×24 WASHER	1
29		MOTOR HUB	1
30		M8 SELF-LOCKING NUT	4
31		SAFETY MESH GUARD 22×89	1
32		0.55KW/0.75HP 6 POLES MOTOR	1
33		M8X65 HEX SCREW	2
34		Ø8X32 WASHER	4
35		MOTOR PLATE	1
36		CLIP FOR MOTOR CABLE	1



37		M8×25 HEX SCREW	4
38		M10×30 SCREW	4
39		OVAL PLATE	2
40		M8 HEX NUT	2
41		Ø8 EXT THOOTED WASHER	2
42		M10 HEX NUT	4
43		EXT TOOTHED WASHER D10,5X18	4
44		CENTRAL SUPPORT	1
45		M8×30 HEX SOCKET CAP SCREW	4

46		RUBBER FOR CABLE	1
47		BOTTOM PANEL	1
48		EUROEMME STICKER 24.6X180	2
49		WARNING STICKER A-1997 35X210	1
50		WARNING STICKER B-1997 70X105	1
51		PRODUCT LABEL G-1998 95X115	1
52		NO HIGH PRESSURE STICKER 42X118	2
53		MUNTERS PROTECT STICKER 70X46	1

# Assembling tools

## 2.

Ref.	Picture	Description	Q.ty
1		RIVETING MACHINE RAC171	1
2		INSERTING MACHINE KJ 45	1
3		PNEUMATIC SCREWDRIVER	1
4		17mm SPANNER	1
5		8mm LONG SPANNER	1
6		10mm LONG SPANNER	1
7		13mm LONG SPANNER	1

8		6mm LONG ALLEN SPANNER	1
9		PHILLIPS SCREW HEAD ADAPTOR	1
10		13mm RING SPANNER	1
11		SMALL HAMMER	1
12		8mm COMBINATION SPANNER	2
13		10mm COMBINATION SPANNER	2
14		SCREWDRIVER	1
15		RATCHET DRIVE EXTENSION	1

16		17mm COMBINATION SPANNER	1
17		6mm ALLEN KEY	1

# Assembling guidelines

## 3.



### WARNING

*Pictures and spare parts identification numbers are referred to ED36HE fan. For ED30HE and ED24HE consider proper exploded views and bills of material on pp. 24-29.*

### HOUSING ASSEMBLING



Take the bottom panel (ref.47), the side panels (ref.15-20) and place them taking care that the slot for the plastic bearing is downward.



Before fixing the bottom and the side panels make sure that these pieces are in the right position as in the following pictures.

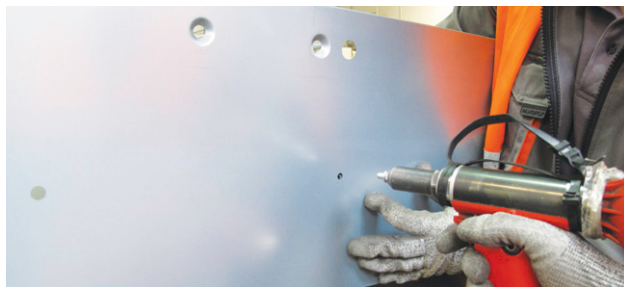


Join bottom panel to side panels and fix qty. 3 pop rivets (ref.16) for each edge by using the riveting machine (ref.1/Assembling Tools).



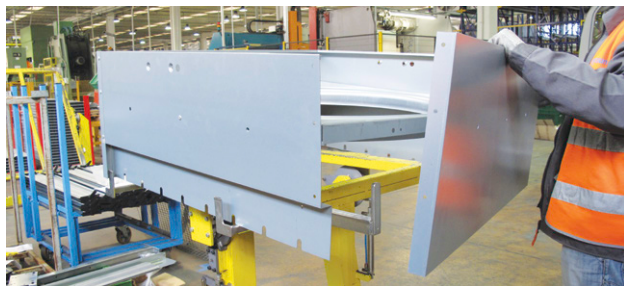


Insert orifice (ref. 19) into the housing on the right side as in the picture.



Fix orifice to bottom panel and then to side panels with:

- qty. 1 pop rivets for each side for ED36HE;
- qty. 3 pop rivets for each side for ED30HE;
- no pop rivets required for ED24HE, M8x17.5 threaded bushes (ref. 17) must be used only - see below (#)



Place the top panel (ref. 18) and fix it to side panels with qty. 3 pop rivets for each side and to orifice with:

- qty. 1 pop rivets for each side for ED36HE;
- qty. 3 pop rivets for each side for ED30HE;
- no pop rivets required for ED24HE, M8x17.5 threaded bushes (ref. 17) must be used only - see below (#)



(#) Place M8x17.5 threaded bushes (ref. 17) in correspondence of proper holes around the housing. Qty. 2 long threaded bushes for each panel. Make sure that orifice and each panel are properly joined by the bushes. Use the inserting machine (ref. 2/ Assembling Tools).



The propeller central support (ref. 44) shall be fixed to side panels by means of qty. 4 screws (ref. 38), qty. 2 oval plates (ref. 39), qty. 4 toothed washers (ref. 43) and qty. 4 nuts (ref. 42).





Place the oval plates between propeller central support and panels.



Place the oval plate over support frame and then start to screw the nuts.



Tighten the nuts by using the screwdriver (*ref.3/ Assembling tools*) in order to fix the propeller central support to the top and bottom panels.

#### PROPELLER AND MOTOR TO CENTRAL SUPPORT ASSEMBLING



Place the motor plate (*ref.35*) on the central support and fix it by means of q.ty 2 M8X65 hex screws (*ref.33*), q.ty 4 Ø8X32 washers (*ref.34*), q.ty 2 Ø8 ext thooted washers (*ref.41*) and q.ty 2 M8 hex nuts (*ref.40*).







Tighten the nuts by using the screwdriver (ref.3/ Assembling tools).



Place the hub (ref.29) on the shaft of the motor (ref.32) and fix it by using:

- q.ty 1 M6×20 hex screw (ref.26), q.ty 1 Ø6 spring washer (ref.27) and q.ty 1 Ø6×24 washer (ref.28) for ED36HE and ED30HE;
- q.ty 1 M5×16 hex screw, q.ty Ø5 spring washer, q.ty Ø5×20 washer for ED24HE.

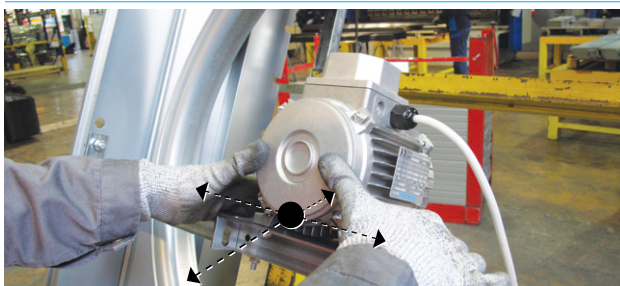
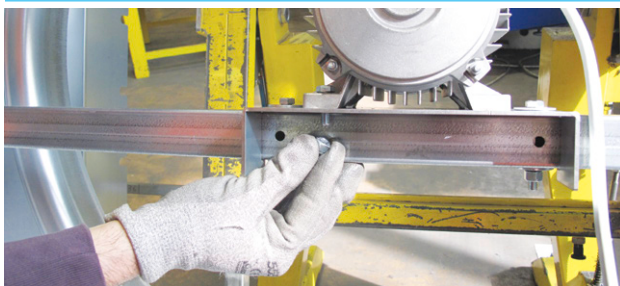


Tighten the screw by using the screwdriver (ref.3/ Assembling tools).



Place the motor on the motor plate and fix it by using:

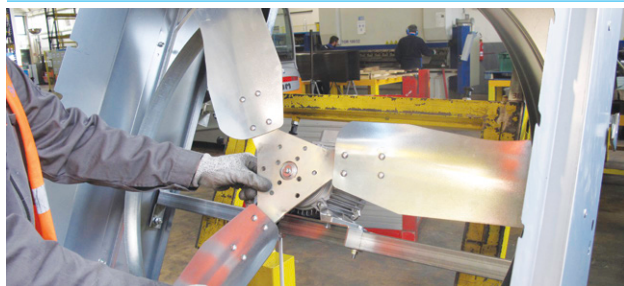
- q.ty 4 M8×25 hes screws (ref.30) and q.ty 4 M8 self-locking nuts (ref.37) for ED36HE and ED30HE;
- q.ty 4 M6×30 hes screws, q.ty 8 Ø6×18 washers, q.ty 4 M6 self-locking nuts for ED24HE.



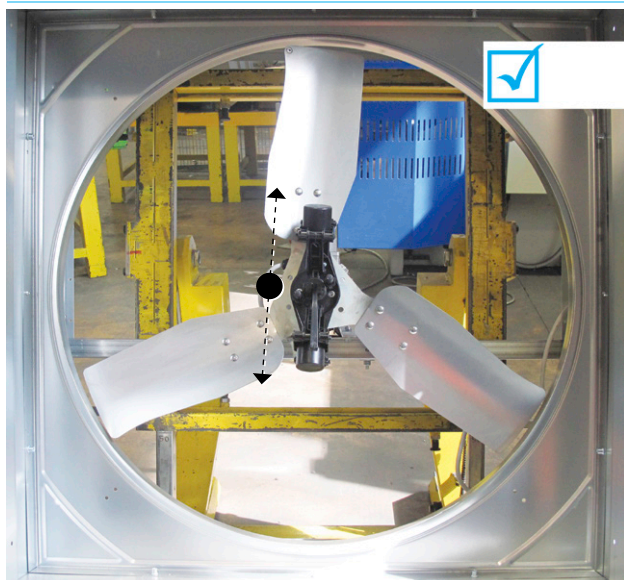
Make sure that the engine is properly centered on the plate and positioned fully forward.



Tighten the nuts by using the screwdriver (ref.3/ Assembling tools).



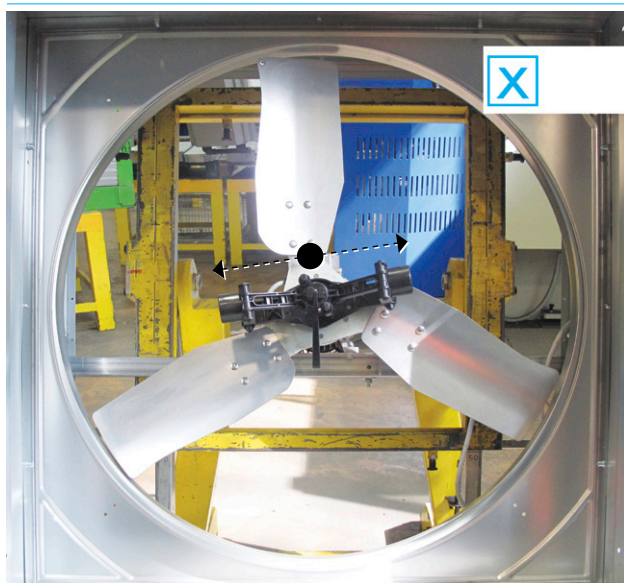
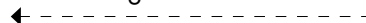
Place the propeller (ref.25) on the hub.



Place the centrifugal system (ref.24) on the propeller (ref.25) and on the shaft of the hub making sure that it is properly oriented .

For ED36HE the arm of the centrifugal system must be aligned with the blade. In this way interference with the propeller is prevented.

Correct alignement for ED36HE.



Uncorrect alignement for ED36HE.

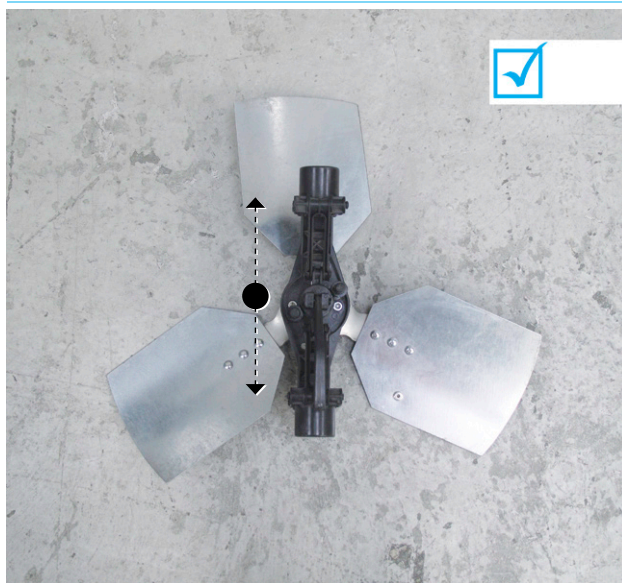




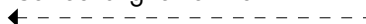


For other models of fan (ED30HE, ED24HE) always take care to assemble the centrifugal system in the correct position, in order to avoid interference.

Correct alignement for ED30HE.



Correct alignement for ED24HE.



Fix the centrifugal system, the propeller and the hub by q.ty 4 M8×30 hex socket cap screws (ref.45).



Tighten the screw by using the mm 6 allen key (ref. 17/ Assembling tools).

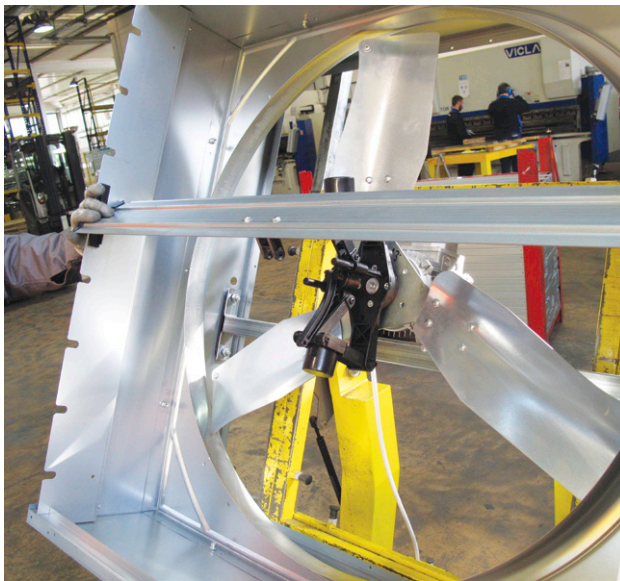
## SHUTTER BLADES ASSEMBLING



Insert plastic bearings (ref.7-11) on thin shutter blades (ref.10) and plastic bearings with spring (ref.8-12) on central shutter blade (ref.9 - for ED36HE only).

- for ED30HE plastic bearings with spring must be inserted on the shutter blade with notch, positioned right under central shutter blade;
- for ED24HE on thin shutter blade, positioned right under central shutter blade.

Both plastic bearings are marked with SX for left side and with DX for right side (looking at the fan from the shutter side).



Fix the plastic fork (ref.23) with qty. 2 M6×16 hex screws and qty. 2 M6 thin hex nuts (ref.4-22) on the central shutter blade. Fit central shutter blade on:

- fourth slot from the top on the housing for ED36HE;
- central slot on the housing for ED30HE and ED24HE.

For ED30HE and ED24HE please note that shutter blade with springs has to be mounted on the slot just under the central shutter blade.

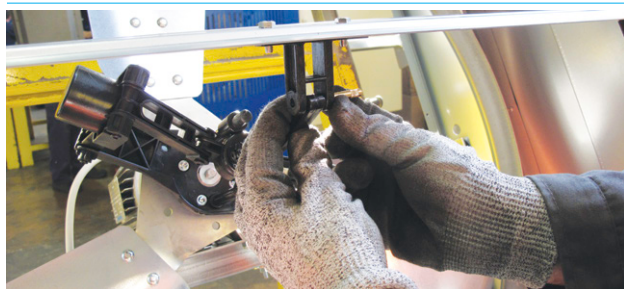


Insert the hooks for spring (ref.14) in the holes of the side panels (ref.15-20).



Insert the free terminal of the spring on the hook. Repeat this operation for the other side.





Insert knurled axle (ref.21) by the smooth side on the plastic fork, then take plastic shutter rod on the centrifugal system and fix them together by using a small hammer (ref.11/Assembling tools).

Please note that the connecting rod of the fork has to be positioned as follows:



ED36HE



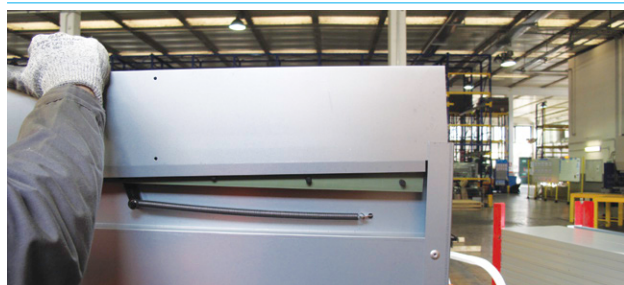
ED30HE/ED24HE



Insert all the shutter blades on the fan housing and then place the fan horizontally.



Place the pvc tie-rod (ref.13) on plastic bearing pivots. Repeat this operation for the other side.



Put cover plate (ref.5) over the plastic bearing mechanism.



By means of a screwdriver (ref.14/Assembling tools) insert cover plate over the fan housing.



Fix the cover plate on each side by using q.ty 2 Ø6,3×19 screws (ref.2) with the screwdriver (ref.3/ Assembling tools).



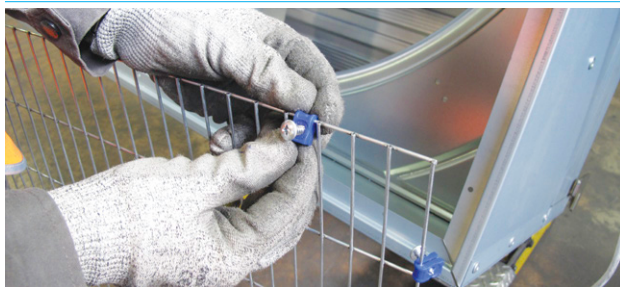
Place the rubber grommet (ref.46) for electric cable protection on the side panel in correspondence with the motor slot.



Insert the electric cable into the proper hole placed on the side panel.



Fix the electric cable to the central support with the clip for motor cable (ref.36).



Insert q.ty 12 clips (ref.3) and q.ty 12 Ø6,3×19 screws (ref.3) on the safety mesh guard (ref.31), according to the position of the holes for fixing on the housing.

- for ED24HE q.ty 8 clips and q.ty 8 screws are needed only.

(see exploded views of the fans)



Fix the safety mesh guard to the housing with the screwdriver (ref.3/Assembling tools).



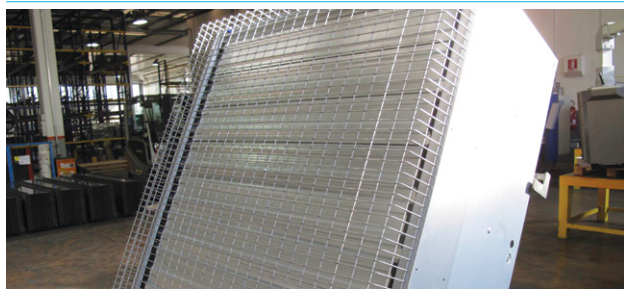
#### FRONT PYRAMIDAL SAFETY MESH GUARD ASSEMBLING (OPTIONAL)



Put the pyramidal safety mesh guard (*ref.1*) on the fan as in the picture. The rectangular holes must be positioned horizontally.



Insert q.ty 6 clips (*ref.3*) and q.ty 6 Ø6,3×19 screws (*ref.2*) on the pyramidal safety mesh guard (*ref.1*), according to the position of the holes for fixing on the housing, and fix by using the screwdriver (*ref.3/ Assembling tools*).



- For ED30HE q.ty 12 clips and q.ty 12 screws are needed;
- for ED24HE q.ty 8 clips and q.ty 8 screws are needed only.

## ED30HE

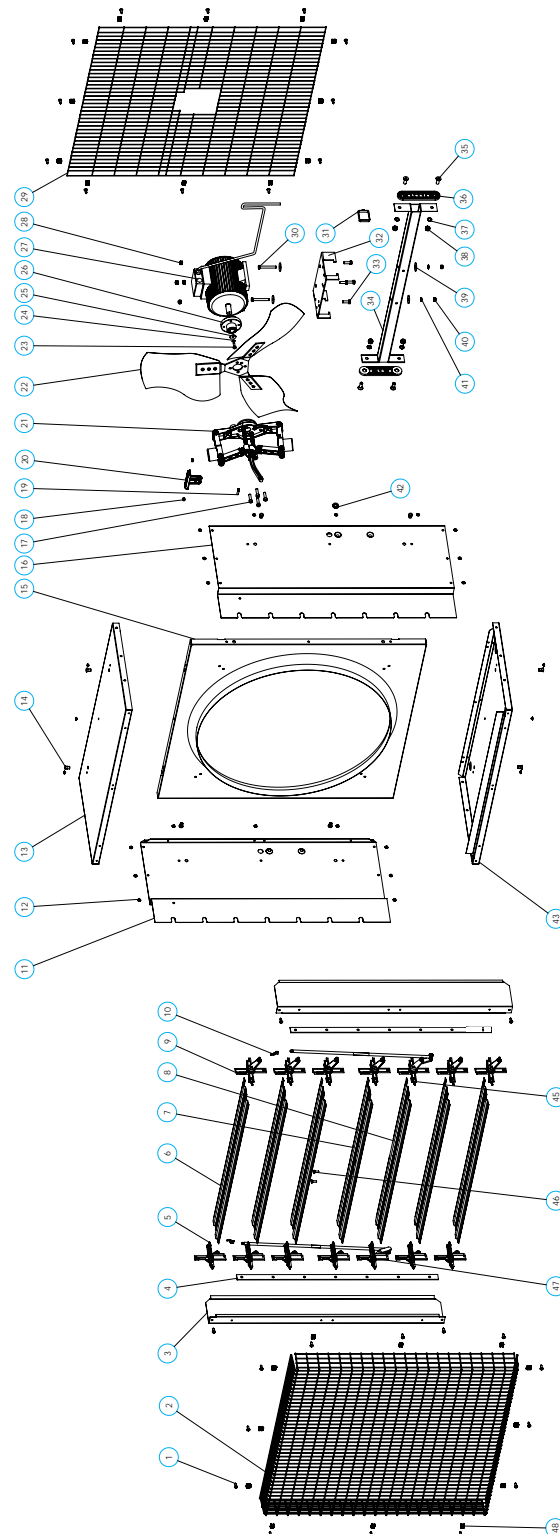


fig.2



REF.	DESCRIPTION	QUANTITY
1	Ø6,3×19 SELF-TAPPING SCREW	28
2	FRONT SAFETY MESH	1
3	COVER PLATE	2
4	PLASTIC TIE ROD	2
5	LEFT BEARING	6
6	THIN SHUTTER BLADE	5
7	CENTRAL SHUTTER BLADE	1
8	SHUTTER BLADE WITH NOTCH	1
9	RIGHT BEARING	6
10	HOOK FOR SPRING	2
11	LEFT SIDE PANEL	1
12	Ø6.4X8 POP UP RIVET	24
13	TOP PANEL	1
14	M8×17.5 THREADED BUSH	8
15	ORIFICE	1
16	RIGHT SIDE PANEL	1
17	M8×30 HEX SOCKET CAP SCREW	4
18	M6 THIN HEX NUT	2
19	KNURLED AXLE	1
20	PLASTIC FORK	1
21	CENTRIFUGAL SYSTEM	1
22	3 BLADES PROPELLER	1
23	M6×20 HEX SCREW	1
24	Ø6 SPRING WASHER	1
25	Ø6×24 WASHER	1
26	MOTOR HUB	1
27	0.37KW/0.5HP 6 POLES MOTOR	1
28	M8 SELF-LOCKING NUT	4
29	SAFETY MESH GUARD 22×89 W/HOLE	1
30	M8X65 HEX SCREW	2
31	CLIP FOR MOTOR CABLE	1
32	MOTOR PLATE	1
33	M8×25 HEX SCREW	4
34	CENTRAL SUPPORT	1
35	M10×30 SCREW	4
36	OVAL PLATE	2
37	EXT TOOTHED WASHER D10,5X18	4

38	M10 HEX NUT	4
39	Ø8X32 WASHER	4
40	M8 HEX NUT	2
41	Ø8 EXT THOATED WASHER	2
42	RUBBER FOR CABLE	1
43	BOTTOM PANEL	1
45	RIGHT CENTRAL SHUTTER BEARING	1
46	M6X16 HEX SCREW	2
47	LEFT CENTRAL SHUTTER BEARING	1
48	CLIP FOR SAFETY MESH GUARD	24

ED24HE

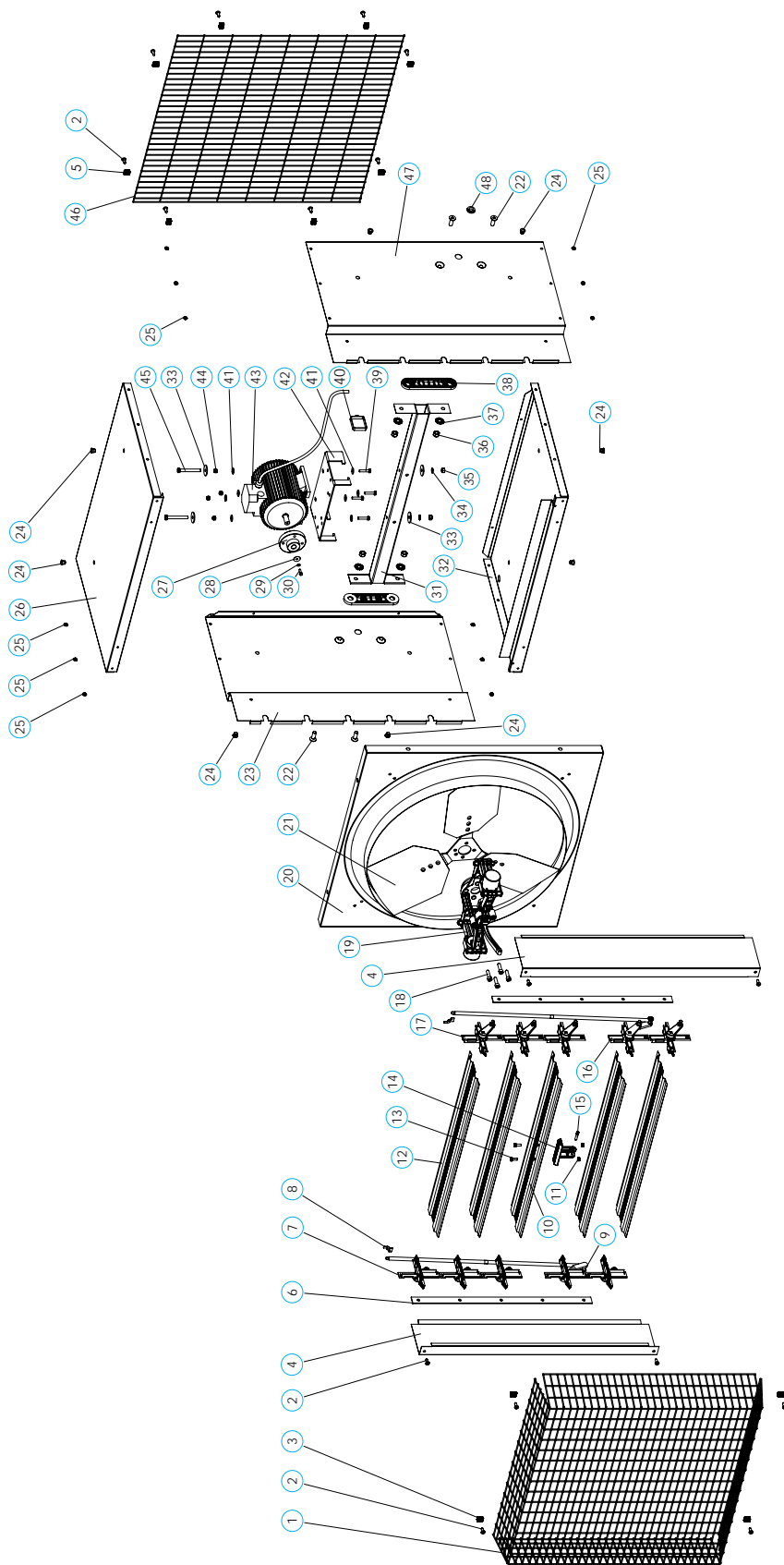


fig.3

REF.	DESCRIPTION	QUANTITY
1	PYRAMIDAL MESH 44×22	1
2	Ø6,3×19 SELF-TAPPING SCREW	20
3	METAL CLIP FOR SAFETY MESH GUARD	8
4	COVER PLATE	2
5	PLASTIC CLIP	8
6	PLASTIC TIE ROD	2
7	LEFT BEARING	4
8	HOOK FOR SPRING	2
9	LEFT SHUTTER BEARING W/SPRING	1
10	CENTRAL SHUTTER BLADE	1
11	M6 THIN HEX NUT	2
12	THIN SHUTTER BLADE	4
13	M6X16 HEX SCREW	2
14	PLASTIC FORK	1
15	KNURLED AXLE	1
16	RIGHT SHUTTER BEARING W/SPRING	1
17	RIGHT BEARING	4
18	M8×30 HEX SOCKET CAP SCREW	4
19	CENTRIFUGAL SYSTEM	1
20	ORIFICE	1
21	3 BLADES PROPELLER	1
22	M10×30 SCREW	4
23	LEFT SIDE PANEL	1
24	M8×17.5 THREADED BUSH	8
25	Ø6.4X8 POP UP RIVET	12
26	TOP PANEL	1
27	MOTOR HUB	1
28	Ø5×20 WASHER	1
29	Ø5 SPRING WASHER	1
30	M5×16 HEX SCREW	1
31	CENTRAL SUPPORT	1
32	BOTTOM PANEL	1
33	Ø8X32 WASHER	4
34	Ø8 EXT THOOTED WASHER	2
35	M8 HEX NUT	2
36	M10 HEX NUT	4

37	Ø10.5 EXT THOOTED WASHER	4
38	OVAL PLATE	2
39	M6×30 HEX SCREW	4
40	CLIP FOR MOTOR CABLE	1
41	Ø6×18 WASHER	8
42	MOTOR PLATE	1
43	0.37KW/0.50HP 4 POLES MOTOR	1
44	M6 SELF-LOCKING NUT	4
45	M8X65 HEX SCREW	2
46	SAFETY MESH GUARD 22×89	1
47	RIGHT SIDE PANEL	1
48	RUBBER FOR CABLE	1

Munters EDHE extraction fans are developed and produced by Munters Italy S.p.A., Italy



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