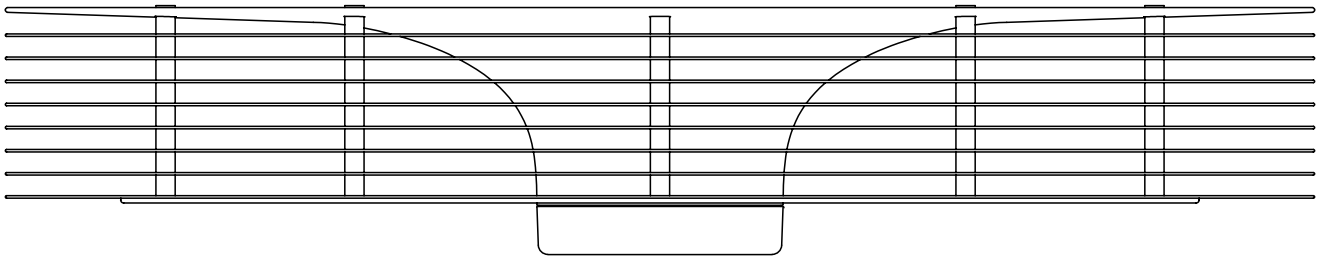
GB

V5.1

exhale FANS MODEL EF34



Owner's Guide & Installation Manual

Please read this manual before installing
and using your Exhale fan to avoid injury and product damage.

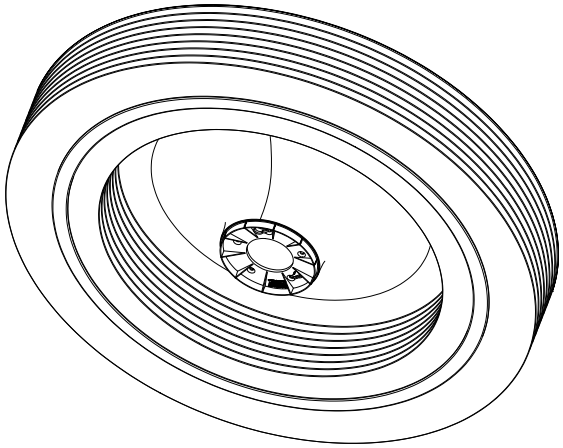
We recommend to ask for a qualified electrician
to install the fan for you.

Keep this manual in a safe location for future reference.
The manual can also be downloaded from our Website.

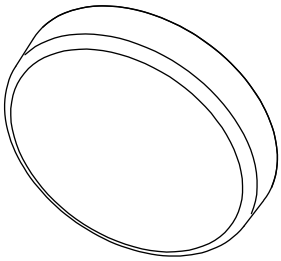
Exhale Europe/Freerise – La Noria 14 – 806 route d'Antibes, 06410 BIOT, France
www.exhale-europe.com – contact@exhale-europe.com

Model: EF34

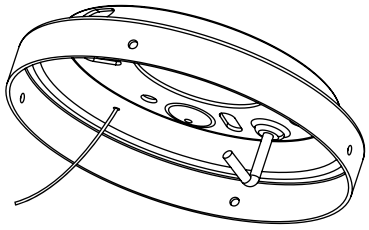
Parts List



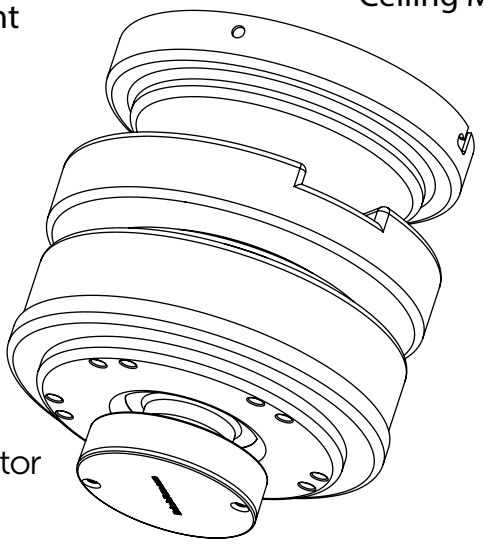
Exhale Fan (Prebuilt)



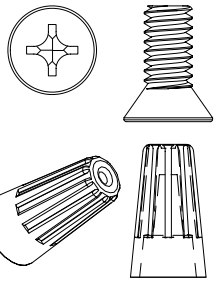
LED Light



Ceiling Mount

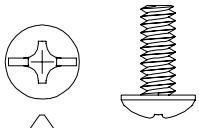


DC Motor

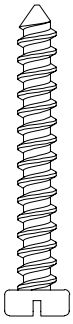


Flat countersunk head screw, **quantity 5,** for fixing the fan on the underside of the motor

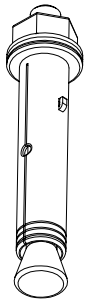
Wire Nuts
Quantity: 3



Screw flat rounded heads, golden color, for mounting the motor on the ceiling mount **quantity 4**



Various screws for fixing the support to the ceiling only on wooden ceiling
Quantity: 4

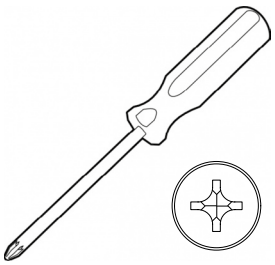


Expanding golden metal anchors for concrete **laying X4**

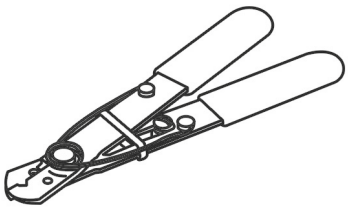
The engine must not be placed directly on an unreinforced Plasterboard (BA 13) ceiling. Ceiling fixing must be able to support at least 25 kg (fan is 11.3 kilos)

Wireless Remote

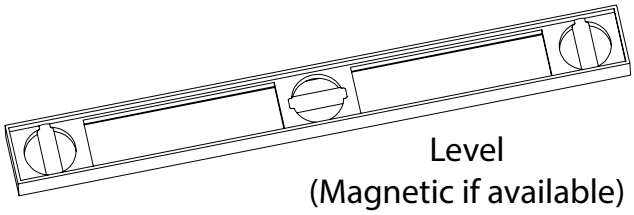
Tools Required



Screw Driver



Wire Strippers



Level
(Magnetic if available)

Installation

Step 1. Determine the location

The preferred location for the EF34 is in the center of the room, this position will provide the best performance of the fan.

If you intend to place multiple fans in the same room you should divide the room into equal sections and place the fans in the center of each section. In both instances of one or multiple fans, the above recommendations will provide air movement coverage to all corners of the space.

Step 2. Remove contents from the package

The 2-part protective foam covers the entire fan. Lift the top cover of the housing. Located at each corner of the protective foam, you will find all the parts located in storage locations.

Do not remove the body of the Exhale™ Fan at this time; that will come later in the installation.

Step 3. Turn off all electrical power

Locate your electrical panel or fuse box and turn off the power to the room where you are installing the fan.

⚠ **WARNING**: Turn off all electrical power prior to making any electrical connections. Failure to do so could result in electrical shock.

If you are unsure how to disconnect the electric power, please consult a licensed electrician for assistance.

Table of electric circuit breakers in the house.

Step 4. Ceiling Mount

a. Pass the electrical wires from the ceiling through the ceiling mount center hole as shown in Figure 1.

b. fix the support to the ceiling with suitable plugs

c. Using a level, make sure the mount is plumb and level to the floor, adjust if necessary.

d. **(We offer a solution for inclined ceilings (up to 45 degrees, contact us or check our online shop)**

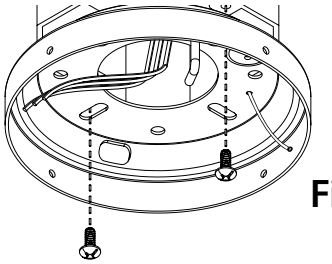


Figure 1.

Running the Exhale out of level can cause it to become unstable or wobble.

Installation to concrete ceilings requires optional mounting hardware. *(See Optional Accessories A)*

Step 5. Electrical Connections

Start by hanging the motor from the ceiling mount hook as shown in Figure 3.

a. Connect the fan neutral wire (black)to the black household supply wire as shown in Figure 4.

b. Connect the phase supply (red) to the red household supply as shown in Figure 4.

c. Connect the Ground fan wire (Green & yellow) to the ground household supply as shown in figure 4. Red = Phase. Black = Neutral. Green/yellow = neutral

d. After connecting all the wiring, spread them apart so that the Green and White wires are located on one side of the electrical box and the Black on the other.

e. Turn the wire nuts upward and push the wires neatly into the electrical box so they are out of the way.

f. Secure the fan safety cable hook through the slot on the ceiling mount that is opposite of the ceiling mount hook.

WARNING: To reduce the risk of electrical shock,
DO NOT use a wall-mounted speed control with this fan.

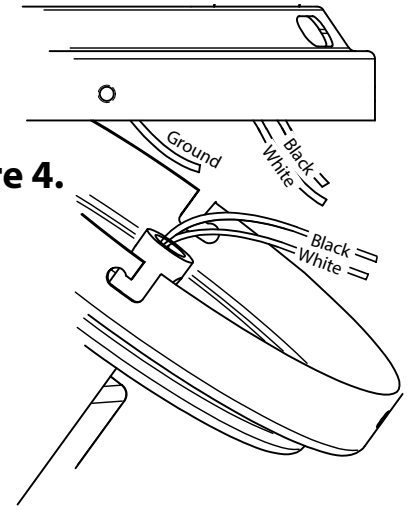


Figure 4.

Use the wire connecting nuts supplied with your fan. Secure the connectors with electrical tape. Make sure there are no loose strands or connections.

Step 6. Mounting the Motor

Pre-install 2 of the included #10-24 screws half-way into the ceiling mount on either side.

Install the motor onto the ceiling mount by sliding the preinstalled bottom mount over the ceiling mount as shown in Figure 5.

Using a clockwise twisting motion, the motor will temporarily lock into the ceiling mount while you install the remaining 2 #10-24 screws and tighten all connections.

Be sure an align the two twist lock channels with the 2 pre-installed screws added first.

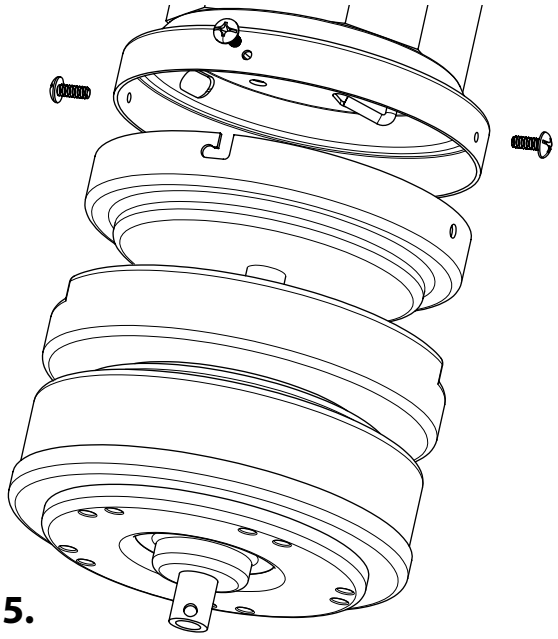


Figure 5.

Step 7. Hanging the Disc Array

a. Using only (2) of the included 1/4-20 flat head motor mount screws, install them (2) full rotations as shown in Figure 7.

Note: These screws will be tightened completely in a later step.

WARNING: Not installing the screws a full (2) rotations could result in them backing out and causing the disc array to fall prior to installing the remaining screws.

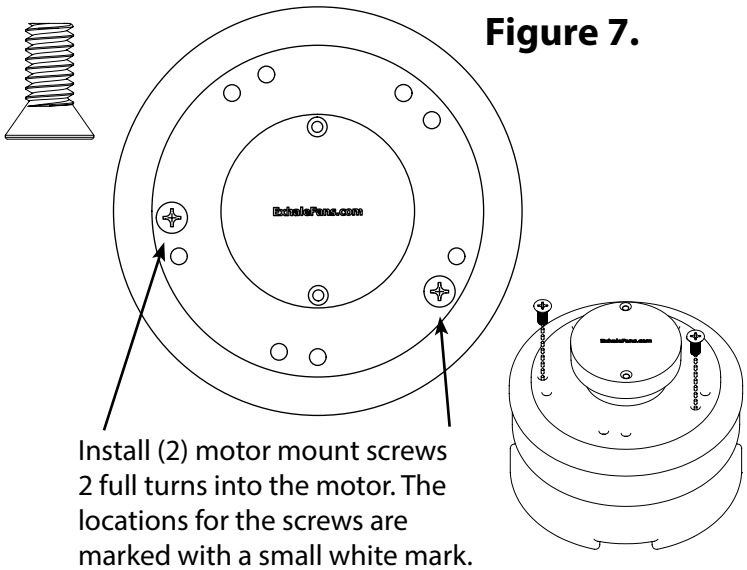


Figure 7.

Install (2) motor mount screws 2 full turns into the motor. The locations for the screws are marked with a small white mark.

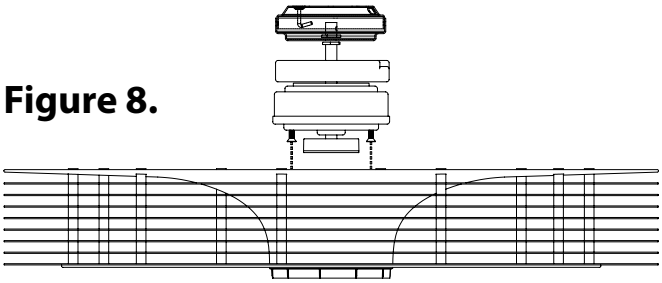


Figure 8.

b. Install the disc array onto the motor by aligning the (2) screws installed earlier to the 'Key Holes' in the disc array as shown in Figure 9.

c. Rotate the entire disc array counter clockwise to lock the screws into the disc array as shown in Figure 9.

Note: The disc array should be free hanging from the (2) mounting screws.

d. Install the remaining (3) screws into the disc array tightening all (5) using an alternating pattern to ensure an even pressure is put on all screws.

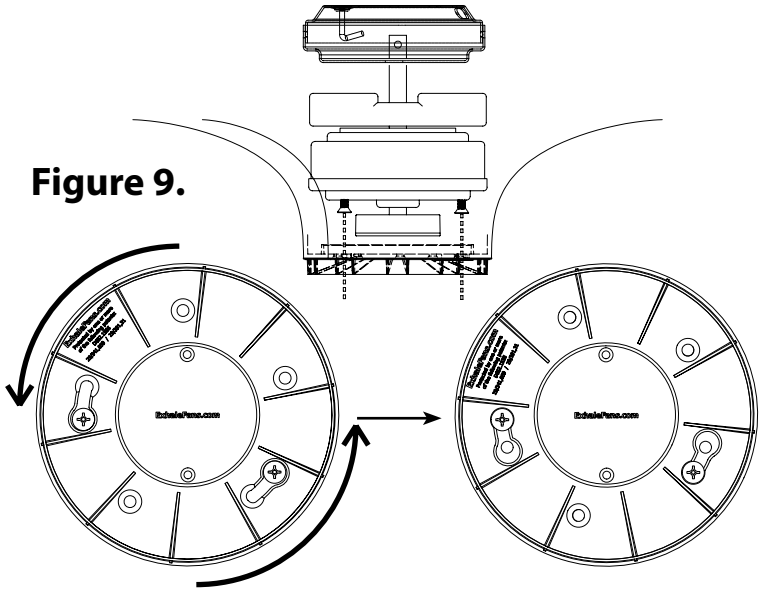


Figure 9.

WARNING: Not tightening the motor mounting screws properly could result in a weak connection of disc array to the motor and cause the fan to become unstable or fall.

Remote Operation

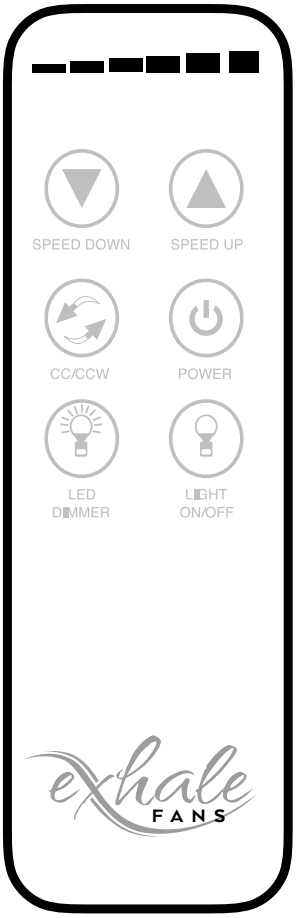


Figure 9a.

BUTTON FUNCTIONS

Upper Left	SPEED DOWN
Upper Right	SPEED UP
Center Left	ClockWise (CW) CounterClockWise (CCW) rotation
Center Right	FAN ON/OFF
Lower Left	LED DIMMER
Lower Right	LED ON/OFF

If you are unsure how to disconnect the electric power, or feel that you do not have enough electrical knowledge, please consult a licensed electrician for assistance.

Remote Operation (Cont.)

Each remote is pre-programed to motor when packaged at the factory. However, we have added instructions below on how to program the remote in the event that it may become necessary.

a. Install the two AAA 1.5 Volt Batteries into the remote transmitter by first removing the battery cover on the back cover. Insert the batteries as indicated with the positive + end of the battery aligned with the + sign on the battery holder.

Operating Functions of the Remote:

The Remote Transmitter has Six Operational Buttons and are depicted (See Figure 9a)

- To turn the fan ON or OFF select the button labeled POWER.
- To Increase or Decrease fan Speed select SPEED UP or SPEED DOWN button. The illuminated scale at the top of the remote will indicate the speed selected, 1 through 6.
    - Please note that the lighted scale on top of the remote will indicate the speed that your fan is operating.
- To change the direction of rotation, Toggle the CW/CCW button for ClockWise direction or CounterClockWise direction. The lighted scale will scroll when the CW/CCW button is depressed, right to left for Clockwise, and Left to right for Counter Clockwise. With your Exhale Fan rotational direction is of personal preference, performance and temperature are not affected.
- Turning on the LED light is made by pressing the LED LIGHT ON/OFF button.
- The LED DIMMER button is used to provide a full-scale dimmer function for your LED. Press and Hold the dimmer button to select the level of illumination that you desire. While holding this button the level of illumination will increase to 100% and then decrease to 20%, just release the button at the level of illumination that you desire.

Remote Programming (Syncing the Remote):

- Turn the power OFF for at least 10 Seconds, if necessary, turn off the Circuit Breaker that routes power to your fan.
- Turn Power to the Fan ON
- Within 60 seconds of turning the power on, press and hold the LED ON/OFF button for 5 seconds. Do not touch any other button during this process, doing so will cause this process to fail.
- Once the Synchronization is completed and detected you will hear an audible "BEEP" which indicates a successful synchronization.
- After completing the steps all fan functions will be available.

Please note that if a Power Failure occurs you may have select the CW / CCW direction button since it is not remembered by the fan.

Tech Specs

Dimensions

Height:	7.5 in / 18.4 cm
Width:	34 in / 86.4 cm
Weight:	25 lbs / 11.4 Kg

Voltage Options

AC Input 100 – 265 Volts,
50 or 60 Hz.

Energy Usage

Level 1:	4 Watts, 120 RPM
Level 2:	6 Watts, 158 RPM
Level 3:	9 Watts, 198 RPM
Level 4:	16 Watts, 236 RPM
Level 5:	36 Watts, 274 RPM
Level 6:	50 Watts, 312 RPM

Sound dB

Level 1:	33-35 dB
Level 2:	35-37 dB
Level 3:	36-38 dB
Level 4:	37-38 dB
Level 5:	38-41 dB
Level 6:	40-45 dB

Optional LED Lighting System

Watts:	15 at 100%
Dimmable:	20% to 100%
Lumens:	850-1050 at 100%

Cool White:	5500K
Warm White:	4000K

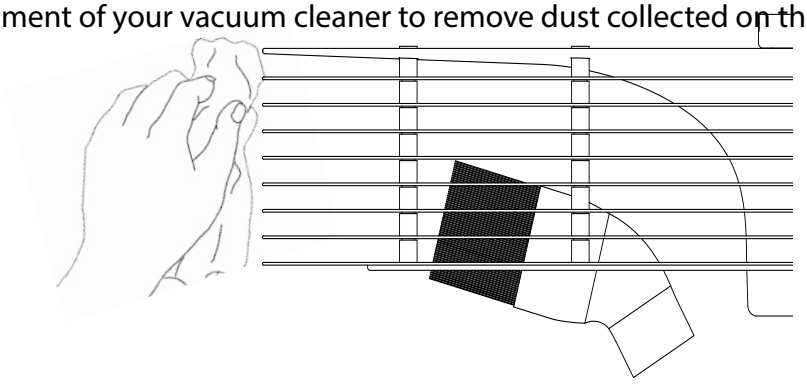
Cleaning and Maintenance

With any fan, dust will collect on the leading edges where the air passes over.

Using a damp cloth with a mild detergent, wipe the dust from the interior and exterior edges of the discs.

Alternatively, you can use the brush attachment of your vacuum cleaner to remove dust collected on the interior and exterior surfaces of the fan.

We recommend cleaning the fan once a month to keep dust to a minimum and keep your fan running at its optimum.



WARNING: Make sure the fan is turned off and is not spinning before attempting to clean with either of the methods listed above.

Optional Accessories

A. Concrete Mounting Hardware

Concrete mounting hardware MUST be used when installing directly to concrete without the use of a junction box.

Installation step 1-3 should be completed prior to installation of the ceiling mount.

a. Place the ceiling mount flush onto the ceiling in the location where the fan will be mounted.

b. Using the mount as a guide, mark the 5 bolt locations onto the ceiling where the expansion anchors will be installed.

Parts List

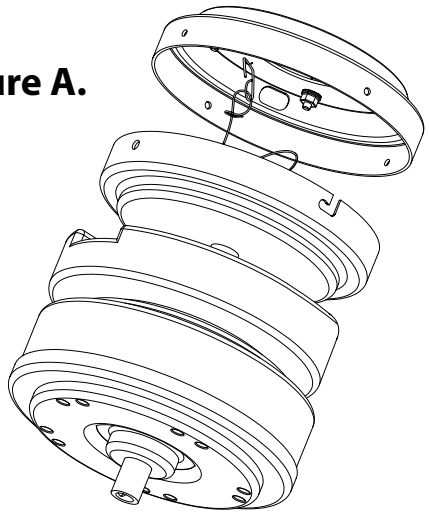
Expansion Anchors

Qty: 4

c. Remove the ceiling mount from the ceiling and check that the 5 locations marked are clear and free from obstacles. *(Note: Use one of the slotted holes in the mount for the anchor with the hook attachment)*

d. Using a 10mm drill bit, drill the 4 bolt locations at least 40mm deep into the concrete ceiling. *(Be sure to clean any remaining dust from the hole when finished.)*

Figure A.



e. Run the supply wires through the center of the ceiling mount and secure the mount to the ceiling using the included 4 expansion anchors that do not include the support hook.

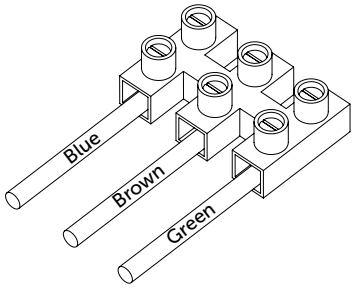
f. [Refer to Installation Step 5. Electrical Connections]

g. Secure the fan safety cable from the motor to the expansion bolt with support hook by sliding the open loop of the safety cable over the hook and sliding the loop collar until it is tight around the shaft of the hook as seen in Figure a.

h. [Return to Installation Step 6. Mounting the Motor]

B. Electrical Terminal Block

If your motor has a pre-installed terminal block on the lower motor bracket, your local code requires its use. Please make all electrical connections within the terminal block according to your local standards and regulations.



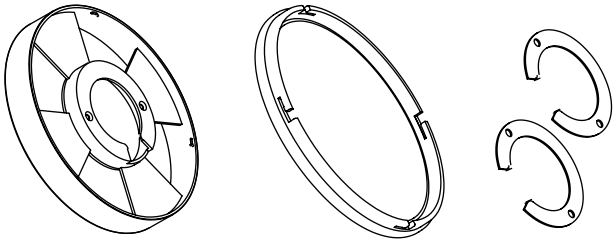
Optional Accessories (Continued)

C. LED Lighting System

WARNING: Turn off all electrical power prior to making any electrical connections. Failure to do so could result in electrical shock, personal injury, or death.

Parts List

Main Housing LED Housing Spacers



a. Turn off all electrical power to the fan while making any electrical connections.

b. Once the disc array has been installed, leveled, and you are happy with its operation, remove the cover from the housing located directly below the fan, shown in Figure A.

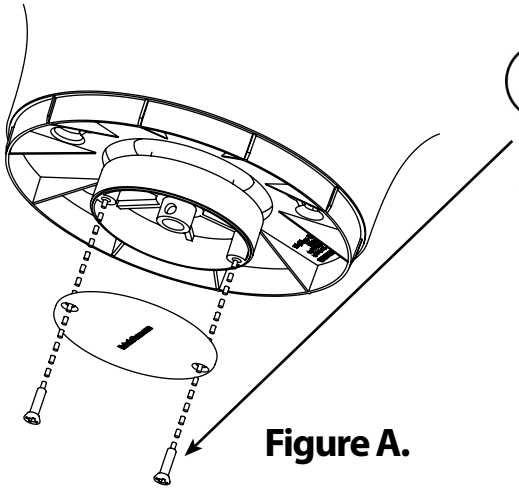


Figure A.

Retain the 2 mounting screws removed from the lower housing, they will be used later.

c. Mount the Main LED Housing to the lower housing using the 2 screws retained from the last step, shown in Figure B.
Note: You may need to use one or more of the included spacers between the lower housing and Main LED Housing to achieve clearance between the fan and the LED lighting system to ensure smooth operation without rubbing.

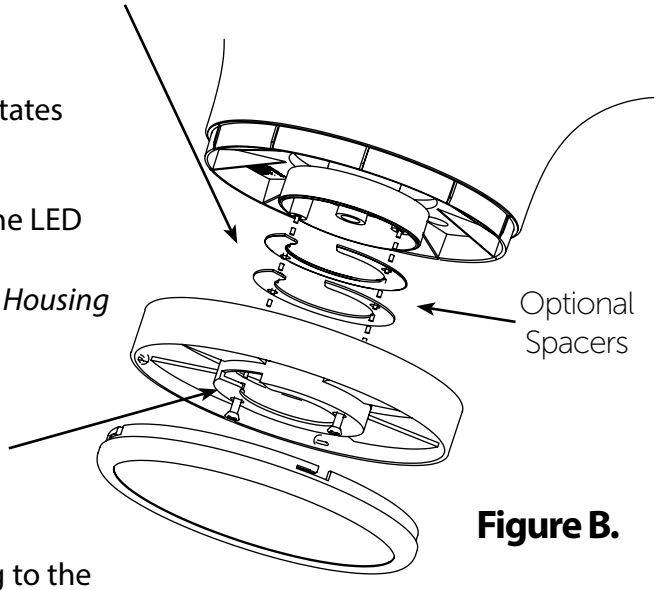


Figure B.

Please take the time to make sure the fan rotates freely with the Main LED Housing

d. Make the appropriate electrical connection from the LED Housing to the motor.
Note: The connectors used from the motor to the LED Housing are Male/Female and can only be installed one way!

e. Take care to tuck the wires into the lower housing using the Main Housings cutaway as a channel to run the wires.

f. You can now line up the tangs of the Main Housing to the retainer clips from the LED Housing and gently rotate clockwise to lock them in place.

Model: EF34

Lexicon

Level 1

Black metal mounting bracket with holes for ceiling mounting.
On the circumference four threaded holes to receive the 4 golden curved fixing screws for connection with the top of the engine and this support.
A hook for engine support the time of the electrical connection with the ceiling wires.

Level 2

Metal cup with 2 round holes and 2 oblong holes for fixing with the screws above.
First fasten the screws 1 and 2 in the floor bracket 1 and then insert the floor 2, turn it to lock the motor and fix and lock the screws 3 and 4. Finish by blocking screws 1 and 2.
We see out of the central axis locked by a pin the 3 wires and the cable of fixation.

Level 3

Protective plastic box Printed Circuit Board (PCB) motor control and lighting by remote control.
This case has a flexible mounting on the central axis of the engine and slightly moved slightly.

Level 4

The engine itself, do not open.

Level 5

Black plastic case for LED lighting support (warm W or C cold light) or replacement cover.